

## **IMAGINE MAILING LIST**

<b>COLLABORATORS</b>
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	<i>TITLE :</i> IMAGINE MAILING LIST		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		July 20, 2024	

<b>REVISION HISTORY</b>
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NUMBER	DATE	DESCRIPTION	NAME

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## Chapter 1

# IMAGINE MAILING LIST

## 1.1 IMAGINE MAILING LIST NUMBER V51

This GUIDE File was generated by the  
 "IMAGINE MAILING LIST PROCESSOR"  
 Written By Neil "Tex" Miller  
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|                               |
|      neil@triode.apana.org.au |
|                               |
| This is the Imagine Mailing List (imagine@email.sp.paramax.com) Archive #51 |
|      covering messages from Jun. 01. 1994 to Jul. 03. 1994. |
|                               |
| If you have any questions or problems with this file, E-mail Nik Vukovljak |
|                               |
|      at: nvukovlj@extro.ucc.su.oz.au |
|                               |
| To join the IML, send email to: imagine-request@email.sp.paramax.com and |
|      in the subject line type in: subscribe |
|                               |
+-----+

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Click--> 134 MSG- 134 Subject: Re: DEMs and converters...

Click--> 135 MSG- 135 Subject: Re: States function

Click--> 136 MSG- 136 Subject: Mobeius strip

Click--> 137 MSG- 137 Subject: Re: States function

Click--> 138 MSG- 138 Subject: Re: HOW to print in a Postscript printer a ←  
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Click--> 139 MSG- 139 Subject: Re: A proposition... For redirecting IML to new ←  
 Media..

Click--> 140 MSG- 140 Subject: PC AutoCAD into Amiga Imagine

Click--> 141 MSG- 141 Subject: Re: Amiga disks in PCs

Click--> 142 MSG- 142 Subject: Re: How can I run Imagine under OS/2??

Click--> 143 MSG- 143 -----=> Sorry NO Subject!

Click--> 144 MSG- 144 -----=> Sorry NO Subject!

Click--> 145 MSG- 145 -----=> Sorry NO Subject!

Click--> 146 MSG- 146 -----=> Sorry NO Subject!

Click--> 147 MSG- 147 -----=> Sorry NO Subject!

Click--> 148 MSG- 148 Subject: World octovolume

Click--> 149 MSG- 149 Subject: Moebius strip - the hard way

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Click--> 151 MSG- 151 Subject: mobius strip

Click--> 152 MSG- 152 Subject: Re: HOW to print in a Postscript printer a RENDER ←  
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Click--> 153 MSG- 153 Subject: Best Imagine pix?

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Click--> 155 MSG- 155 Subject: States function, Texture morph

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Click--> 166 MSG- 166 Subject: Particle Help

Click--> 167 MSG- 167 Subject: re:[....printing Q&A....]

Click--> 168 MSG- 168 Subject: Re: PC AutoCAD into Amiga Imagine

Click--> 169 MSG- 169 Subject: Re: HOW to print in a Postscript printer a RENDER ←  
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Click--> 170 MSG- 170 Subject: Re: Mobeius strip

Click--> 171 MSG- 171 Subject: Re: Conform to Path

Click--> 172 MSG- 172 Subject: Importing DXFs

Click--> 173 MSG- 173 Subject: Re: Particle Help

Click--> 174 MSG- 174 Subject: Imagine 3 object and Texture format docs  
Click--> 175 MSG- 175 Subject: Imagine3.0  
Click--> 176 MSG- 176 Subject: Re: Bones & Textures  
Click--> 177 MSG- 177 Subject: Re: HOW to print in a Postscript printer a RENDER ←  
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Click--> 178 MSG- 178 Subject: Imagine2 and 3 Bug ?????  
Click--> 179 MSG- 179 Subject: Re: Particle Help  
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Click--> 184 MSG- 184 Subject: Re: World octovolume  
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Click--> 187 MSG- 187 Subject: beveling  
Click--> 188 MSG- 188 Subject: Re: Mobius strip  
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Click--> 190 MSG- 190 Subject: Re: Particle Help  
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Click--> 194 MSG- 194 Subject: Re: Particle Help  
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Click--> 196 MSG- 196 Subject: Imagine.fp  
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Click--> 199 MSG- 199 Subject: Re: What about ~anim5~ and Imagine?  
Click--> 200 MSG- 200 Subject: beveling  
Click--> 201 MSG- 201 Subject: Limiting Fog some places  
Click--> 202 MSG- 202 Subject: Conform to Path in Stage  
Click--> 203 MSG- 203 Subject: Stage Paths  
Click--> 204 MSG- 204 Subject: Re: Imagine 3 object and Texture format docs  
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Click--> 206 MSG- 206 -----=> Sorry NO Subject!  
Click--> 207 MSG- 207 -----=> Sorry NO Subject!  
Click--> 208 MSG- 208 Subject: Re: 2 rows of buttons?  
Click--> 209 MSG- 209 -----=> Sorry NO Subject!  
Click--> 210 MSG- 210 Subject: Pissed off at Imagine 3.0 integer (Amiga)  
Click--> 211 MSG- 211 Subject: Pffft...  
Click--> 212 MSG- 212 Subject: Re: PC AutoCAD into Amiga Imagine  
Click--> 213 MSG- 213 Subject: Motion Blurring  
Click--> 214 MSG- 214 Subject: more < Pffft.....  
Click--> 215 MSG- 215 Subject: MPEG makers  
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Click--> 226 MSG- 226 Subject: Re: Pffft...  
Click--> 227 MSG- 227 Subject: Re: Pissed off at Imagine 3.0 integer (Amiga)  
Click--> 228 MSG- 228 -----=> Sorry NO Subject!

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Click--> 229 MSG- 229 -----=> Sorry NO Subject!  
Click--> 230 MSG- 230 -----=> Sorry NO Subject!  
Click--> 231 MSG- 231 Subject: Re: Pfffft...  
Click--> 232 MSG- 232 Subject: Re: Imagine Updates  
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Click--> 235 MSG- 235 Subject: Motion Blurring  
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Click--> 237 MSG- 237 Subject: Re: Real3D Object-Imagine Converter  
Click--> 238 MSG- 238 Subject: RELAY BOUNCE (fwd)  
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Click--> 241 MSG- 241 Subject: Re: Motion Blurring  
Click--> 242 MSG- 242 Subject: RE: Motion Blurring  
Click--> 243 MSG- 243 Subject: Re: Shield effect  
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Click--> 252 MSG- 252 Subject: particles help  
Click--> 253 MSG- 253 Subject: Re: Shield effect  
Click--> 254 MSG- 254 Subject: Re: particles help  
Click--> 255 MSG- 255 Subject: INTERLACE  
Click--> 256 MSG- 256 Subject: Particle Probs with Imagine 3.0 for PC.  
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Click--> 258 MSG- 258 Subject: Particle AGAIN.  
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Click--> 267 MSG- 267 Subject: genlock objects / Matte Painting  
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Click--> 273 MSG- 273 Subject: Movies - Render Size  
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Click--> 284 MSG- 284 Subject: re: transparant background  
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Click--> 300 MSG- 300 Subject: MPEG  
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Click--> 304 MSG- 304 Subject: Solid Cubes  
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Click--> 306 MSG- 306 Subject: FX: Balloon, Spike & Sway?  
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Click--> 313 MSG- 313 Subject: 3DS vs Imagine (stop the flame please)  
Click--> 314 MSG- 314 Subject: Re: Transparent background  
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Click--> 318 MSG- 318 Subject: RE: Missed the StarField Stuff  
Click--> 319 MSG- 319 Subject: Re: Solid and Drills.  
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Click--> 321 MSG- 321 Subject: Yeah!!!  
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Click--> 323 MSG- 323 Subject: PC DXF's or 3DS files into Amiga Imagine V2.  
Click--> 324 MSG- 324 Subject: Re: Hollow or Solid?  
Click--> 325 MSG- 325 Subject: Re: Melt  
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Click--> 335 MSG- 335 Subject: New version of ESSENCE ??  
Click--> 336 MSG- 336 Subject: Re: Imagine NewLook Please  
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Click--> 341 MSG- 341 Subject: Re: particles help (fwd)  
Click--> 342 MSG- 342 Subject: re Essence and Imagine 3.0

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Click--> 374 MSG- 374 Subject: Staging Language  
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Click--> 381 MSG- 381 Subject: Wave Lenght of colors.  
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Click--> 385 MSG- 385 Subject: Thanks to all with UUdecode problem!  
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Click--> 437 MSG- 437 Subject: Imagine.fp for 68040  
Click--> 438 MSG- 438 Subject: Re: Imagine.fp for 68040  
Click--> 439 MSG- 439 Subject: RE: Magnifying Glass  
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Click--> 441 MSG- 441 Subject: Imagine 3.0, A3000 and AmigaDOS 3.1  
Click--> 442 MSG- 442 Subject: magnifying lenses  
Click--> 443 MSG- 443 Subject: EGS Animations and Magic Lantern  
Click--> 444 MSG- 444 -----=> Sorry NO Subject!  
Click--> 445 MSG- 445 Subject: Re: T3DLIB pc ported  
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Click--> 454 MSG- 454 Subject: RE: Magnifying Glass  
Click--> 455 MSG- 455 Subject: FTP'ing to Avalon.chinalake  
Click--> 456 MSG- 456 Subject: RE: Magnifying Glass

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Click--> 465 MSG- 465 Subject: Re: Genlocking  
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Click--> 469 MSG- 469 Subject: re: Imagine 3.0, A3000 and AmigaDOS 3.1  
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Click--> 472 MSG- 472 Subject: Re: FTP'ing to Avalon.chinalake  
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Click--> 477 MSG- 477 Subject: PAL DPS PAR users?  
Click--> 478 MSG- 478 Subject: Re: HELP - ANIMATED TEX'S!!!  
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Click--> 495 MSG- 495 Subject: Seamless bumpmap repeat...  
Click--> 496 MSG- 496 Subject: Re: Imagine.fp for 68040  
Click--> 497 MSG- 497 Subject: stars  
Click--> 498 MSG- 498 Subject: IML Landfill?  
Click--> 499 MSG- 499 Subject: re: seams in bumpmaps  
Click--> 500 MSG- 500 Subject: EGS Spectrum & Imagine  
Click--> 501 MSG- 501 Subject: Re: PC 32k viewer  
Click--> 502 MSG- 502 Subject: Re: Imagine.fp for 68040  
Click--> 503 MSG- 503 Subject: Spotlights - again...  
Click--> 504 MSG- 504 Subject: Re: Spotlights - again...  
Click--> 505 MSG- 505 Subject: Re: Seamless bumpmap repeat...  
Click--> 506 MSG- 506 Subject: Hello friends of rendering  
Click--> 507 MSG- 507 Subject: Re: Imagine on SGI / 3DS ??  
Click--> 508 MSG- 508 Subject: AZTEC  
Click--> 509 MSG- 509 -----=> Sorry NO Subject!  
Click--> 510 MSG- 510 Subject: Imagine Mapping Bug  
Click--> 511 MSG- 511 Subject: Re: Cycle objects  
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Click--> 514 MSG- 514 Subject: AARC,EDLE, Efects.doc  
Click--> 515 MSG- 515 Subject: RE: SEAM  
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Click--> 517 MSG- 517 Subject: Essence PolkaDots  
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Click--> 521 MSG- 521 Subject: How do I make a wood shingle roof  
Click--> 522 MSG- 522 Subject: Re: Essence PolkaDots  
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Click--> 527 MSG- 527 Subject: Fire Tutorial  
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Click--> 529 MSG- 529 Subject: Re: Fire Tutorial  
Click--> 530 MSG- 530 Subject: looking for answers  
Click--> 531 MSG- 531 Subject: Imagine 3.0 for the PC  
Click--> 532 MSG- 532 Subject: No lensflare toggle bug

### 1.3 MSG-1 Subject: What about ~anim5~ and Imagine?

Subject: What about ~anim5~ and Imagine?  
Date: Wed, 1 Jun 1994 10:52:41 GMT+2  
From: SZULD@ucinvl.uci.agh.edu.pl

Lately, I tried to create an animation using ~anim5~ format.  
It is built-in in Imagine, but up to now it seems to work wrong.  
I played my ~anim5~ format of the animation using DP IV.  
The first frame was O.K. but others.....were damaged (colours palette  
was not correctly set by Imagine).  
Any suggestions?

Krzysztof Korski  
SZULD@ucinvl.uci.agh.edu.pl

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### 1.4 MSG-2 Subject: TrueSpace on WUARCHIVE

Subject: TrueSpace on WUARCHIVE  
Date: Wed, 1 Jun 1994 11:17:39 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

Hi TrueSpacers,  
the following message was posted to comp.graphics  
newsgroup, I hope thi can Help Ya:

>From: erich@eye.com (Eric Haines)  
>Subject: Truespace Demo available at wuarchive (was Re: Truespace Info)

---

>Date: 31 May 1994 14:12:36 GMT  
 >Summary: wuarchive.wustl.edu:pub/msdos\_uploads/demos/tsdemo.zip  
 >  
 >I've uploaded the TrueSpace demo from Caligari to:  
 >  
 >          wuarchive.wustl.edu:pub/msdos\_uploads/demos/tsdemo.zip  
 >  
 >It's a fully functional demo, except for saving. Pretty cool looking package  
 >(though I wish they used Arcball for rotations). I recommend more than an 8  
 >bit display, though it's still semi-usable on one.  
 >  
 >You're welcome,  
 >  
 >Eric Haines

```

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||                                     ae(-_^)ue
\/_      _ _ _ _ _ Wizard signing off

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## 1.5 MSG-3 Subject: Imagine 4 Everybody - The campaign goes on!

Subject: Imagine 4 Everybody - The campaign goes on!  
 Date: Wed, 25 May 94 21:37:27 +0200  
 From: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)

```

*****
****          Imagine 4 everybody!          ****
**** Your chance to make your suggestions in the next release! ****
*****

```

Greetings Imagineers!

Imagine 3.0 is shipping and it's time to evaluate it. See whats there and whats not and to look forward in what we, the users, want in the next release.

I thoght of a way to do it, and if you read along, you'll find out how your ideas can be in the next release. No promises though :-)

In a note from Mike Halvorson some time ago. (Mike is the president of Impulse), regarding the shipping status of Imagine 3.0 for both the Amiga and the PC platforms he said: (The message below is in an shorted edited form)

-----

TO all Imagine users on Planet Earth as well as all outposts where from time to time it seems some of you live. 8'). (some not all)

As of today, April 29th 1994 all US and Canada order for Imagine PC and Amiga are on their way to you.

Now the challenge begins: Imagine has had an interesting history and exciting future. I have said on this forum many times that it is not the software that makes great users it is great users that make the software, so I am depending on each of you to dig and find out what we have done.

I realize that there will be those who try and find the mistakes or bugs first, thats cool, we want to know what we missed and we more importantly want to make sure we fix the problems as fast as we can.

Some things were left out, but not for long. WE have already begun to start the next rev of the software. So if you miss something that you felt you could not live without, hang in there, we know about it and will add these and more features than you can IMAGINE.

Our success depends on your satisfaction with Imagine, and this is a two way street. You need to tell us what you want and we need to do our best to make it happen. However we want things in the code as well. Things that you never mentioned you wanted or needed. Try out the deformation tools, they are so full of cool that they deserve several sleepless nights all unto themselves, I know I have had a few.

In closing this note, I want to als challenge each of you to see the positive in what you find, we really dont work well with blatant negative comments. Dont get me wrong, we like a good flaming just as much as the next guy. But from time to time it gets very personal here on the IML and we arent much for that kind of backward activity. Impulse is not on some high mountain in an Ivory Tower. WE are users just like you, we are lucky that we get to make some of the products that you use, and we appreciate your support,.

-----  
Ok, Impulse wants us to tell them what we want. Let's do it!

If you have ideas and/or find bugs you like to see implemented/fixed in the next release, send a message about it to me and I'll put a list together with everybodys messages and after that, mail it out so everybody can read it and vote which things you find most important. Yes, I said vote!

Why? Because without some statistics Impulse will have a BIG list and no clue to what we think are the most important things to fix first. I will collect the votes. Put everything together and see to that the results comes out on the nets and of course also reaches Impulse.

Why I'm doing this?

Well, I have the time for the moment and I have acces to Internet, Fidonet and AmigaNet. So we can reach everybody using Imagine. And also because I came up with the idea for this baby!

How to do it?

First, I want this so easy as possible (I'm lazy ;-). This means only one bug report/idea per message. But you can of course send as many messages as

---

you want. I will ignore messages with more than one subject from now on. I spent 40 minutes in cutting one message up and that was the last one.

I want the header in the following format:

-----  
From: (that's your name)  
To: Anders Lattermann (Yep, that's me!)  
Subject: Imagine 4 everybody!

You can use one of the following addresses:

-----  
FidoNet: 2:201/411.24  
AmigaNet: 39:164/100.24  
InterNet: Latte@p24.anet.bbs.bad.se

I want the text in the following format:

-----  
In the text I wan't you to write the following as start:

"Imagine 4 everybody! + path."

Where the path tells me where to put your message. Path goes like this:  
(Upper/Undercase doesn't matter)

1. What?

Choose from:

- \* Idea
- \* BugPC
- \* BugAmiga
- \* NewProduct

("NewProduct" is for totally new products you'll like to see from Impulse.)

- \* Hi

("Hi" is for Mikes request of some positive feedback. Short things like "Best 3D-program i ever used! / Anders Lattermann" is what I'm thinking of here).

- \* Wanted Textures/Attributes

2. Where?

Choose from (you don't need to write the word "editor"):

- \* Project Editor
- \* Detail Editor
- \* Forms Editor
- \* Cycle Editor
- \* Stage Editor
- \* Action Editor
- \* Spline Editor
- \* Misc (Use Misc for everything you don't find a good headline for).

3. Finally. The text that describes the matter as short as possible. Try to keep it under 3-5 lines. This is important this thing is already beginning to be very big. Think twice before sending the message of, if it isn't a shorter way to say it. The "I would like" part can definatly be kept out, we already know that you want this feature, otherwise you wouldn't have sent it

---

to the list :-)

Example for a bug in the Amiga version:

-----  
Imagine 4 everybody!/bugamiga/detail

"Whenever I use the quit command in the meny. My computer explodes."

Example for an idea:

-----  
Imagine 4 everybody!/idea/project

"Built in "count the sheeps" game when Imagine renders."

I think you got the grip of how to do it? If not email me. Speaking of email, I get my email on disk from sweden where I normally live (I'm in France to sept 31), so email takes about 1-2 weeks (on occasion with bad timing more) to go to and from me.

Closing date for suggestions and bugreports are june 31. I will there after put the complete list together and mail it out. Voting will be done to august 31. Anyone who could put together a good program or ARexx script that could automate the counting for me? Would be extremly helpfull. I still haven't heard from anybody. Come on!

This finally gives that I can send a list to Impulse and mail it out on the net just when the gang at Impulse are done with their summer vacations and comes back to cook the next release of Imagine together. And this time, with your help, it could be Imagine 4.0 with all the features everybody wants to see. In other words: Imagine 4 everybody!

/Anders Lattermann

FidoNet: 2:201/411.24 ! PointBreak - Bg-St-Maurice - France  
AmigaNet: 39:164/100.24 ! A3000/14/105 + SQ88C & 17xSQ800  
InterNet: Latte@p24.anet.bbs.bad.se ! I feel the need, the need 4 speed!

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## 1.6 MSG-4 Subject: Re: Texture Example Pictures?

Subject: Re: Texture Example Pictures?  
Date: Wed, 1 Jun 1994 08:31:19 +0200  
From: christian boetker ho/j <cbho91@control.auc.dk>

Don H wrote:

> Many people who have gotten Imagine 3.0 would like to see examples of

---

> pictures of all the default textures included. It would have been nice  
> if something like this was included with the disks. It is very time con-  
> suming to have to render each of the texture just to see what they are and if  
  
> they are useful. If anyone has rendered all the textures to let say a sphere  
> object, could they produce a set of maybe 20 images per page and upload them  
> to a ftp site or here? Everyone would greatly appreciate this. Thanks in  
> advance.  
>  
> Don  
>

You can find most of the rendered textures on Aminet in a file called im3tex.lha

Hope this helps.

Regards,  
Christian Hoj

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## 1.7 MSG-5 Subject: Math Libraries

Subject: Math Libraries  
Date: Wed, 1 Jun 94 08:38:31 BST  
From: c9251116@zeus.hud.ac.uk (MR. R.L.COLLIER)

I get the feeling that all you guyz are finding no improvement on render times f  
or Imagine? Has anyone tried something like AIBB for FULL function test?

Just a thought.....

Rich.

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## 1.8 MSG-6 Subject: neon tubes

Subject: neon tubes  
Date: Tue, 31 May 1994 22:27:42 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

Hey guys, and guyas,

Thanks for that post the other day, about how to make neon  
tubing. I tried it with very satisfactory results. Uploaded a frame to  
aminet, under pix/trace, called NeonCool.lha. Lemme know what you think.

---



What I'm still blundering with is trying to set up a background plane, for the neon tubes to actually glow against. So far, I can't seem to get that nice soft glow of color that neon gives surrounding objects. The tubes themselves are way cool, especially in the dark.

Mike H's suggestion for extruding along a path was perfect, but I can't make Gerard's trick of that reflective background plane work for me. Thanks anyway, both of you, for posting your ideas.

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## 1.9 MSG-7 Subject: Re: Is it possible?

Subject: Re: Is it possible?  
Date: Wed, 1 Jun 1994 01:13:20 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> How to get motion blurring in animation?  
> How to get soft shadows?  
> How to use Boing effect? (What does ~Boing~ mean? I was not able to

motion blur, you need to use an image processing program like ImageFX, or ADPro.

soft shadows, not really sure yet, been trying but haven't gotten it yet, Ive been playing with falloff lights and the softlite texture on lights and objects to see if that would do it but it hasn't yet. Am still going to try afew other things as time permits. If I get it I'll post it.

Boing effect, the boing effect will let you squish an object. you can have a ball bounce off the ground and give it a more realistic look when it hits the ground than if the balls shape stayed perfectly round. Or have a logo fly into the middle of the screen and as it stops suddenly, the logo could be squeezed a bit and then go back into shape, this could give the logo a more flexible look and not so stiff of a feeling. Im sure theres a better explanation, but this is the type of thing I use it for. Kind of like when a cartoon character stops suddenly and he gets a bit out of shape..

=RRW=

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## 1.10 MSG-8 Subject: Re: Brushmaps and textures

---

Subject: Re: Brushmaps and textures  
Date: Wed, 1 Jun 1994 02:10:08 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> How does one do the trick to put a brush upon a surface that already has  
> texture on it? My brushes "drown" in the texture.

well, if your using the Amiga version Essence does a great job.If not then  
try using the priority button along with full scale value  
at maybe 150-200 if your using 3.0. Set the priority to a lower number  
than your textures...Not sure if this will work but the best I can do

=RRW=

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## 1.11 MSG-9 Subject: Re: Texture Example Pictures?

Subject: Re: Texture Example Pictures?  
Date: Wed, 1 Jun 94 11:22:29 +0100  
From: "Steve Essery" <sessery@uk.oracle.com>

In-Reply-To: PYR2:imagine-relay@email.sp.paramax.com's message of 05-31-94 13:31

> Many people who have gotten Imagine 3.0 would like to see examples of  
> pictures of all the default textures included. It would have been nice  
> if something like this was included with the disks. It is very time con-  
> suming to have to render each of the texture just to see what they are and if  
> they are useful. If anyone has rendered all the textures to let say a sphere  
> object, could they produce a set of maybe 20 images per page and upload them  
> to a ftp site or here? Everyone would greatly appreciate this. Thanks in  
> advance.

Try:

pub/aminet/gfx/3d/im3tex.lha

on Aminet, the readme is:

This archive contains pictures of all of the regular textures that come  
with Imagine 3.0. (Pictures of the light and fog textures, as well as  
the animated textures, are not included.) You may upload these pics to  
other online services as long as the archive is kept intact.

Steve Langguth  
s.langguth@genie.geis.com

---

Steve created pages 1-7. I added page 8 with these textures:

veneer, beammeup, dancsprk, crumpled, dripdrop, fakely, filnoiz, fireball  
spark, nebula, tiedie, and twinkle.

To make the collection complete we need:

fogpaint, fogtop, ghost, metals, refnoiz2, zbuffer

Ed Totman  
etotman@gort.ucsd.edu

```
=====
Steve Essery      Unix Support, Oracle UK      Hello, my name is Inigo Montoya,
                                                    you killed my father, prepare to die.
```

```
Tel: +44 (0)344 860066 ext 4572      What you don't know is that I too
Tel: +44 (0)344 860222                am not left-handed!
=====
```

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## 1.12 MSG-10 Subject: CYCLE RELATED PROBLEM...PLEASE \*\*\*HELP\*\*\*

Subject: CYCLE RELATED PROBLEM...PLEASE \*\*\*HELP\*\*\*  
Date: Wed, 1 Jun 1994 14:40:34 +0300 (EET DST)  
From: Foivos Kourendas <foivos@theseas.ntua.gr>

TO ALL,

I have lately made a cycle object that consists of a number of smaller objects grouped together .Whenever I would like to MORPH a specific object item of that Cycle group , I have to CREATE a new Cycle OBJ that has the new specific item in the place of the old one -in order to morph between them in the action editor (By morphing the whole Cyclegroup)-.

As you understand this is a little bit disk space hassle because I have to use the same object twice . IS there another way to do so (preferable \*IN\* the Cycle editor) without having to loose disk space for NO apparently reason ??

I am looking forward hearing a solution .

\*\*\*\*\* PLEASE HELP ! ! ! \*\*\*\*\*

Yours sincerely,

```
_____/
      /      '      _
     ,-/-,  o \   _ _ (
      (_/   <___\/_ (_)_)
```

Email:foivos@phgasos.ntua.gr

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### 1.13 MSG-11 Subject: SIGGRAPH in Orlando

Subject: SIGGRAPH in Orlando  
Date: Wed, 01 Jun 94 13:50:18 +0100  
From: H.Heberle@trier.fh-rpl.de

Hi all,

What's with a meeting at Siggraph in Orlando. I think I will come from Germany to the Siggraph.  
Let's have a date for this.  
Horst Heberle  
heberle@trier.fh-rpl.de

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### 1.14 MSG-12 Subject: Re: Simulating clouds

Subject: Re: Simulating clouds  
Date: Wed, 1 Jun 94 04:27:52 PDT  
From: 01-Jun-1994 0622 <leimberger@marbls.enet.dec.com>

Andrew,

All this talk about clouds got me thinking. I went home and pulled Leo Martins(SP?) Pro Textures out of the closet. There is a 24 bit (ham also) pic of clouds, bricks, marble(2 types), rock, water, and gold, and flagstone. The Gold, and Clouds are ment to be used as background or reflection maps and as such won't wrap seamlessly. The others were designed to be wrapped without seams showing. Well the clouds liiked great reflected off a chrome sphere, and as a background .  
bill

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### 1.15 MSG-13 Subject: Re: FMath Libs . . .

Subject: Re: FMath Libs . . .  
Date: Wed, 01 Jun 1994 08:09:56 -0400 (EDT)  
From: "Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU>

On Tue, 31 May 1994, Jason B Koszarsky wrote:

> Maybe we should file the FMath libraries away with the SoftAGA prg.

---

> Both have accomplished the same thing.  
>  
Actually, these math libraries \_DO\_ speed up operations that use them...

Imagine, VistaPro, and some others do \_not\_ use these libraries, which is why there is no noticable speed-up when using them.

The libs are 100% compatible, with no loss in accuracy or anything, so why not drop them in and let the programs that use them - use them?

=====

Drew Vogel: Admissions Officer at University of Cincinnati Undergraduate Admissions (call 800-827-8728), SysOp of The Cafe' BBS (513-232-4895) FidoNet 1:108/245, Actor, director, Amiga fan, Imagine 3.0 user, head of BowTie Productions, documentation author, single guy, and much, much more! FINGER ME FOR MY PLAN... "The only way OUT is THROUGH."

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## 1.16 MSG-14 Subject: Re: neon tubes

Subject: Re: neon tubes  
Date: Wed, 1 Jun 1994 07:47:56 -0700 (PDT)  
From: Gerard Menendez <gpm@netcom.com>

I'll look at that scene at work today and send more specifics about how it's set-up. As I mentioned it wasn't quite the diffuse glow that I wanted but more like it was on a bumpy shiny thing.

Gerard

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## 1.17 MSG-15 Subject: Re: Is it possible?

Subject: Re: Is it possible?  
Date: Wed, 1 Jun 1994 07:47:04 -0700 (PDT)  
From: Ed Totman <etotman@gort.ucsd.edu>

On Wed, 1 Jun 1994, Randy R. Wall wrote:

> soft shadows, not really sure yet, been trying but haven't gotten it yet,  
> Ive been playing with falloff lights and the softlite texture on lights  
> and objects to see if that would do it but it hasn't yet. Am still going  
> to try a few other things as time permits. If I get it I'll post it.

The softlite texture is for the edge of the light beam as it appears on the object or ground. An object's shadow is sharp. I don't think that soft

---

shadows have been programmed.

Ed Totman  
etotman@gort.ucsd.edu

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## 1.18 MSG-16 Subject: Re: Math Libs (fwd)

Subject: Re: Math Libs (fwd)  
Date: Tue, 31 May 94 19:50:13 CDT  
From: wilks@lbn.com (Stephen Wilkinson)

Udo K Schuermann <walrus@wam.umd.edu> said:

[snip]  
> Nice one. I would have guessed that the .fp version won't use the libs.  
> The integer version, though, might use them. Try that and let us know,  
> please. It would certainly be an interesting result if the integer version  
> with fmath libs ran quicker than the .fp version, eh? ;-)

Nope! Those libs are only for floating point use. The integer version uses fixed point arithmetic (I assume) and so Impulse probably have their own routines built-in to Imagine that operate on these fixed point numbers. Imagine.int should use no libraries for math either.

> > Can anyone tell me how these libs are used or are they redundant?  
>  
> If you wanted to write only one single version of a program but the math  
> portion was not important enough to make you want to maintain separate  
> co-processor versions, then you'd use the math libraries and THEY will  
> either emulate the calls or go to the co-processor, depending on what you  
> have inside your box.

This paragraph is correct. This is also why Impulse have placed the math calls inline. Otherwise every time you wanted to do some math function, it would go through the library to find how to multiply rather than just using the appropriate FPU instruction. This may seem like a tiny bit of overhead, but realize that Imagine does MILLIONS of multiplications/sines/cosines/etc then the little tiny overhead adds up :)

> Any program, like Imagine, that wants to squeeze every last gram of speed  
> out of the math will probably want to go directly to the co-processor.  
> That is why there are two copies of Imagine, one .fp version and one  
> without. I would wager that the .fp version will go down in flames if you  
> run it on a machine that doesn't have a math co-processor.

This is also correct :) You will get an illegal instruction trap GURU.

Cheers,  
Stephen

---

---

Stephen Wilkinson      wilks@lbm.com  
Software Engineer  
LB&M Associates

---

"Programming is like pinball. The  
reward for doing it well is the  
opportunity to do it again."

---

#define OPINION              (myown)  
#define COMPANYOPINION (~myown)

---

This message created using 87% recycled neuro-transmitters

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## 1.19 MSG-17 Subject: new on IML

Subject: new on IML  
Date: Wed, 01 Jun 1994 16:45:51 +0100 (CET)  
From: Joop=van=de=Wege%Medew%ENTO.WAU@VINES.WAU.NL

Hello fellow Imagineers,

I'm new on the list, so I will introduce myself first.

I'm a graduated PlantBreeder here at the Agricultural University Wageningen  
and at the moment I'm working on a malaria simulation model and trying to  
incorporate a Geographical Information System or its output data. Any help is  
ofcourse welcomed :).

Ofcourse, I here people think, hee this is the IML, yes I do use Imagine. I  
use it a lot. I own a A3000 with 2Mb Chip, 12Mb Fast, 105 and 240 Quantum  
drives, and soon 270 Syquest, I hope. Further a Merlin GFX-card. My hobbies  
are 3D graphics, C programming, reading (almost everything).

I'll try to read all IML post I get and also post answers aswell as  
questions, I have many.

Greeting Joop van de Wege

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## 1.20 MSG-18 Subject: Sorry Could Not Find Subject!

Date: Wed, 01 Jun 1994 17:05:18 +0100 (CET)  
From: Joop=van=de=Wege%Medew%ENTO.WAU@VINES.WAU.NL

ImagineFP uses inline FPU code so nobody will ever notice any speed  
improvement. Or in simple words :) ImagineFP doesn't use any system math  
libraries.

The integer version of Imagine DOES use the system math libraries, but who is

---

using the INT version when you have a 68882 in your computer.

Greetings Joop

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## 1.21 MSG-19 Subject: Object/texture format docs

Subject: Object/texture format docs  
Date: Wed, 1 Jun 1994 10:38:18 -0500 (CDT)  
From: kirvan@SSESCO.com

Greetings all,

The Object format (TDDD) and texture format docs have been uploaded to Compuserv - amiga vendors / Impulse section. If anyone wants to ftp them around, feel free.

The file is im3docs.zip and contains tddd.doc and texture.doc. Hope this gets you the info your looking for.

later... sk....

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## 1.22 MSG-20 Subject: Re: Slicing Xtraveganza/ISL

Subject: Re: Slicing Xtraveganza/ISL  
Date: Wed, 1 Jun 94 8:57:01 PDT  
From: grieggs@jpl-devvax.jpl.nasa.gov (John T. Grieggs)

>  
> Your first message described what I was doing and then saving one good  
> slice segment at a time. I gave up pretty quickly because it was taking  
> quite awhile to accumulate a useful number of slices and then set up a  
> scene to render for each slice.  
>  
> I must have been unconscious when people talked about ISL before. That's  
> a shareware/PD package?  
>

Yes, ISL, the Imagine Staging Language, is a shareware package that lets you convert stages to and from an easy-to-manipulate ASCII format. It's currently available only for the Amiga, and not yet for 3.0. If you have Imagine 2.0, you can use ISL and Imagine 2.0 to set up what you're describing, then import the final stage into 3.0 and render (or just render in the older version if you don't need 3.0 features).

It's available on Aminet or most of the online services. The current

---



version is 2.0. It's not protected or anything. Get it and try it, and register if it suits your needs.

There will be a version for Imagine 3.0, once I get the file format info from Imagine. Assuming there is interest, that is. :)

> Gerard  
>  
\_john

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## 1.23 MSG-21 Subject: Re: HALVE the time to render! (fwd)

Subject: Re: HALVE the time to render! (fwd)  
Date: Wed, 1 Jun 1994 09:55:47 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

Forwarded message:

> From imagine-relay@email.sp.paramax.com Tue May 31 18:49:44 1994  
> From: Kees Pronk <pronk@stc.nato.int>  
> Message-Id: <199405300745.AA04970@stc.nato.int>  
> Subject: Re: HALVE the time to render! (fwd)  
> To: imagine@email.sp.paramax.com  
> Date: Mon, 30 May 1994 09:45:56 +0200 (MET DST)  
> X-Mailer: ELM [version 2.4 PL23]  
> Content-Type: text  
> Content-Length: 1608  
>  
> Forwarded message:  
> > From imagine-relay@email.sp.paramax.com Sun May 29 01:53:18 1994  
> > Date: Sat, 28 May 1994 13:55:03 -0700 (PDT)  
> > From: Mike McCool <mikemcoo@efn.org>  
> > Subject: Re: HALVE the time to render!  
> > To: "Randy R. Wall" <rrw@ecst.csuchico.edu>  
> > Cc: Matthew O'Reilly <mor@mod.dsto.gov.au>, imagine@email.sp.paramax.com,  
> > mor@mod.dsto.gov.au, cheng@sun.mech.uq.oz.au, m\_berndt@tron.gun.de  
> > In-Reply-To: <Pine.3.87.9405281202.A24642-0100000@corpse.ecst.csuchico.edu>  
> > Message-Id: <Pine.3.89.9405281338.A10187-0100000@efn.efn.org>  
> > Mime-Version: 1.0  
> > Content-Type: TEXT/PLAIN; charset=US-ASCII  
> >  
> >  
> > Hey Randy,  
> >  
> > Matthew posted a couple of days ago, about some shareware libs.  
> > They're rewritten versions of all the math libs, for 030 and 040 systems,  
> > and they're great. Delicious increases in speed.  
> >  
> > Check back over your mail, and if you can't find the ftp site for  
> > nabbing them, I'll email them to you, as a binary attachment. (This  
> > uuencode stuff truly bites).  
> >

---

>  
> I have downloaded the libs and installed them on my a4000 (040), but I  
> am not getting the supposed increase in rendering speed with imagine!!  
>  
> In scanline-mode it renderes exactly the same, and (major bummer..)  
> in trace-mode it even renderes +/- 1% slower!!  
>  
> I red al the hype about the libs being great and very effcient, but it  
> just doesn't show on my machine.  
>  
> The installation went o.k. and yes the install-program recognized my  
> 040.  
> I don't know what I am doing wrong, or maybe the speed increase will  
> only show when very specific calculation are being done...  
>  
> HELP PLEASE!  
>  
> Kees.  
>

Yesterday, I had psted results that confirmed that imagine.fp does not use the m  
ath libs at all. Imagine.int may well use these libs, but if it did, it was stil  
l 50% slower (apx) on my 040. Too bad, it was nice to dream.

D. Rudd

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## 1.24 MSG-22 Subject: Lights and objects (fwd)

Subject: Lights and objects (fwd)  
Date: Wed, 1 Jun 1994 09:59:28 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

Forwarded message:

> From imagine-relay@email.sp.paramax.com Tue May 31 23:56:12 1994  
> Date: Wed, 25 May 94 12:07:17 +0200  
> From: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)  
> Subject: Lights and objects  
> Message-Id: <OA92-901-231p24\_2de39374@piraya.bad.se>  
> Fidonet-Flags: private  
> To: imagine@email.sp.paramax.com  
> Reply-To: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)  
>  
> I've been trying to get lights "in" objects. I'm using a box and in the  
> Atributes requester i tell it to be a light. I want this for spotlight on a  
> car I've made. It lights up the surroundings in scanline but it doesn't give  
> any light at all in raytrace.  
>  
> The object sends light out, but it is dark if you look at it from the front (  
> like a black object sending light out). Strange...  
>  
> Anybody care to light me up?  
>

> /Anders Lattermann  
>  
> FidoNet: 2:201/411.24 ! PointBreak - Bg-St-Maurice - France  
> AmigaNet: 39:164/100.24 ! A3000/14/105 + SQ88C & 17xSQ800  
> InterNet: Latte@p24.anet.bbs.bad.se ! I feel the need, the need 4 speed!  
>  
The object you picked is a light, just like any other light in the stage, it does not appear as a light. I'm not the expert here, but I suggest you use a cone with fog settings and set the face of the floodlight to bright. Hope it works.  
  
D. Rudd

--> RETURN TO CONTENTS!<==

## 1.25 MSG-23 Subject: Re: Math Library

Subject: Re: Math Library  
Date: Wed, 1 Jun 1994 09:43:37 -0700 (PDT)  
From: Steve <link@u.washington.edu>

On Mon, 30 May 1994, Mikael Ostergren wrote:

> >> With the new FMath403-libs.  
> >> 2 min and 32 sec  
>  
> >> With the original libs.  
> >> 2 min and 32 sec.  
>

There is a new program on Aminet called SnoopLibs (I think), which supposedly watches whenever a library is used, so you could use that to see if Imagine does in fact use the new libs...

--> RETURN TO CONTENTS!<==

## 1.26 MSG-24 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re: What about ~anim5~ and Imagine?  
Date: Wed, 1 Jun 1994 09:46:44 -0700 (PDT)  
From: Steve <link@u.washington.edu>

On Wed, 1 Jun 1994 SZULD@ucinvl.uci.agh.edu.pl wrote:

> Lately, I tried to create an animation using ~anim5~ format.  
> It is built-in in Imagine, but up to now it seems to work wrong.  
> I played my ~anim5~ format of the animation using DP IV.  
> The first frame was O.K. but others.....were damaged (colours palette was not correctly set by Imagine).  
> Any suggestions?

---

The probelm is with DP4, not Imagine. DP still doesn't support different palettes per frame for Anims, whereas Imagine (and most other programs) do. Use View/Viewtek/Mainactor/Biganim to view the ANIM.

--> RETURN TO CONTENTS!<==

## 1.27 MSG-25 Subject: Bones & brushmap tacking

Subject: Bones & brushmap tacking  
Date: Wed, 01 Jun 94 07:48:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

I have uploaded an animation called JollyRoger.lha to the aminet under gfx/anim. It is a test animation using bones and brushmap tacking to create a flag of the Jolly Roger waving in the wind. It only took one evening to do and could definitely be improved but it shows how bones can be used to deform a flat plane into things like rippling flags, drapes, etc. I have found out how to assign my big and small subgroups better since doing this animation, so it is possible to have more fluid motion.

I found that brushmap tacking should be locked to the initial state chosen for the morph object since choosing the default makes the brushmap "lock" to that default shape, i.e. it doesn't move with the object. I think the default state is meant to act as an absolute reference state which defines the primary object and any shape, brushmap, texture, etc. change is applied only to following states.

I have found bones will articulate all my once static objects, and once all the subgrouping assignments are determined, it is much easier to animate compared to the cycle editor. Not only that, the motion is much more fluid.

However, the making of the subgroups is very critical in defining how the object will move.

--> RETURN TO CONTENTS!<==

## 1.28 MSG-26 Subject: RE: Imagine 4 Everybody...YEAH???..FOR WHAT??

Subject: RE: Imagine 4 Everybody...YEAH???..FOR WHAT??  
Date: Wed, 1 Jun 1994 19:40:02 +0300 (EET DST)  
From: Foivos Kourendas <foivos@theseas.ntua.gr>

To ALL,

IT is really good idea to do so . A REQUEST from IMAGINE's users to the MAMA IMPULSE . This is really good idea....YEAH...SURE IT IS...\*BUT\* FOR WHAT ????

Don't get me wrong !! Finding IMAGINE's problems and giving suggestions to Impulse to REdebug the program OR EVEN make OTHER functions works is a way in progress . BUT isn't that waht ALL we - THE layal AMIGA-Imagine users DID

(I say AMIGA because this is the majority of the people in this list including me)- . As we were waiting for IMAGINE 3 to come along , we were talking about our thoughts , wishes , DREAMS !!! BECAUSE , that is what they DID remain!

NO , I feel that IMAGINE is MY place to live , it is really my best choice programm ...BUT I am a little dissapointed!!!

SURE , Imagine 3 includes some good functions . IS IT WORTH the wait JUST IMAGINE , we were waited for 1 +1/2 years for the programm to arrive(or maybe longer) since the firsts announments of this version . THEN , there were TOO much talk about it .SO many good features ...SO MANY DREAMS!!

AT last Imagine 3 is out , UP AND RUNNING , with some MAJOR drawback WHICH Impulse seemed that ignored them . I don't want argues .ONE is true. AND I am afraid that NOONE can tell that I am wrong .THOSE patches that fixes some BUGS in Imagine (and I think that they will follow) IS A FACT!!

I am sure that there were PLENTY of time to USE their TESTusers to do that work , and if those users where SO S\*U\*ID NOT to see the MAJOR bugs that Imagine 3 HAD and there are still to come....THEN that was THEIR fault!! A company that wants to be PROFFESIONALs they would do so...

SO , to get in the subject , what is the reall meaning of such a mail , in ordre to say our thoughts about Imagine 4 - which will doughtly come ..since the C= is dead...and NO reall company will develop I AM F\*CKING afraid p roffessional software for the AMIGA - . JUST to spare our time ??? AT least the previous thoughts were NOT heard by IMPULSE!! .IT seems to want to be 2 clones patterns and THAT is where it is wrong . AT LEAST it should USE its platform's ADVANTAGES to take UP the IMAGINE!!

Sorry for any bad words...JUST thoughts!!!

/   '   \_  
, - / - , o \   \_ \_ (     
  ( \_ /   < \_ \_ \ / ( \_ ) \_

Email:foivos@phgasos.ntua.gr

--> RETURN TO CONTENTS!<==

## 1.29   MSG-27 Subject: Re: FMath Libs . . .

Subject: Re: FMath Libs . . .  
Date: Wed, 1 Jun 94 12:42:24 CDT  
From: wilks@lbm.com (Stephen Wilkinson)

Jason B Koszarsky <kozarsky@cse.psu.edu> remarked:

> Maybe we should file the FMath libraries away with the SoftAGA prg.  
> Both have accomplished the same thing.

Not true! For apps that use the libraries my '40 is about twice as fast as before! That's useful.

Stephen

---

Stephen Wilkinson      wilks@lbm.com

"Programming is like pinball. The

---

Software Engineer  
LB&M Associates

reward for doing it well is the  
opportunity to do it again."

---

```
#define OPINION      (myown)
#define COMPANYOPINION (~myown)
```

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--> RETURN TO CONTENTS!<==

### 1.30 MSG-28 Subject: Re: Lights and objects

Subject: Re: Lights and objects  
Date: Wed, 01 Jun 1994 13:40:47 -0400 (EDT)  
From: "Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU>

On Wed, 1 Jun 1994, Randy R. Wall wrote:

```
> > Anybody care to light me up?
> >
> Sure, click bright in the attributes requester for the object as well as
> light. But if your looking for a beam of light to shine from the light
> let me know and I'll send a tutorial I wrote for someone on how to make a
> really cool spotlight, one which raytraces well too.
>
Hi Randy. Send that tutorial up!
```

```
=====
Drew Vogel: Admissions Officer at University of Cincinnati Undergraduate
Admissions (call 800-827-8728), SysOp of The Cafe' BBS (513-232-4895)
FidoNet 1:108/245, Actor, director, Amiga fan, Imagine 3.0 user, head of
BowTie Productions, documentation author, single guy, and much, much more!
FINGER ME FOR MY PLAN... "The only way OUT is THROUGH."
```

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### 1.31 MSG-29 Subject: Re: AHD

Subject: Re: AHD  
Date: Wed, 1 Jun 94 12:49:34 CDT  
From: wilks@lbm.com (Stephen Wilkinson)

setzer@comm.mot.com (Thomas Setzer) stated:

```
[snip]
> Is Andrew Denton here on the list? I was checking out some of his pics from
> aminet (in /pub/aminet/pix/guard for those ftp by mail people). They
> are done with Imagine and done very nicely, I might add. Check 'em out.
[snip]
```

---

> BattleJPG.lha is my favorite. What texture(s) did you use for the red dragon?  
[snip]

Yeah, there's a really nice "light-through-the-trees" effect in the file  
jpgAwakening.lha too. I just saw them yesterday on the Aminet CD. Excellent  
work. Another good one is jpgGutterWar.lha for the ftpbymail dudes :)

Stephen

---

Stephen Wilkinson      wilks@lbm.com  
Software Engineer  
LB&M Associates

"Programming is like pinball. The  
reward for doing it well is the  
opportunity to do it again."

---

#define OPINION            (myown)  
#define COMPANYOPINION (~myown)

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## 1.32 MSG-30 Subject: math libs

Subject: math libs  
Date: Wed, 1 Jun 1994 13:20:13 -0500  
From: Kent Miller <wolfman@camelot.bradley.edu>

While I haven't seen much of a difference in rendering times in Imagine  
when using these new libs, I'd still recommend keeping them on your  
system. A 3D renderer like Imagine uses highly intensive math operations  
and probably bangs the FPU directly. I know I would as an assembly  
programmer myself. It doesn't make sense to try and get as much speed  
as possible into a program and then resort to calling inefficient  
C library routines nearly every other CPU cycle during rendering.

Since the new libs were optimized in pure assembly, they should  
give faster results when used. The benchmarks that came with it may  
be inaccurate or they may be true, but if you use another program  
that uses the math libs directly, you probably will see that speed  
increase that is promised. Something like ADPro's JPEG conversion  
routine uses the libs I believe. But anyways, I'd recommend trying  
different programs out before dumping the libs. The libraries certainly  
aren't hurting anything or are inaccurate (at least no gurus here  
:-)

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## 1.33 MSG-31 Subject: Re: Texture Example Pictures? -Reply

---

Subject: Re: Texture Example Pictures? -Reply  
Date: Wed, 01 Jun 1994 13:41:36 -0600  
From: Matt Mower <MATTMO@WordPerfect.com>

Hi all,

Could some one please tell me the full address for the Aminet site that people keep refering too?

eg. "pub/aminet/gfx/3d/im3tex.lha"

Thanks

Matt

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### 1.34 MSG-32 Subject: Re: Lights and objects

Subject: Re: Lights and objects  
Date: Wed, 1 Jun 94 14:22:35 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

>  
> I've been trying to get lights "in" objects. I'm using a box and in the  
> Attributes requester i tell it to be a light. I want this for spotlight on a  
> car I've made. It lights up the surroundings in scanline but it doesn't give  
> any light at all in raytrace.  
>  
> The object sends light out, but it is dark if you look at it from the front (  
> like a black object sending light out). Strange...  
>  
> Anybody care to light me up?

Hmm, I've done this before....ah here it is. Also, you may want to try adding an axis sepearate from your object and make that the light source(I haven't tried it, but it might work)

-----Include from old post-----  
The best setting I got for a lightbulb was as follows.

Make the bulb glass(transparency 200, 200, 100 or what ever, I used the settings from Understanding Imagine 2.0) Not sure if you need this since you are going to be setting fog. I need to play some more.

Make the object a light source by clicking on the light box in the attributes requestor. No need to set the bright box. In light requestor select spherical and put the light to 400 400 250, kindof yellow. Select cast shadows if you like.

---



Put the object axis of the bulb where the filament of the bulb would be.  
(shift-M to move the axis)

Set the fog length as suggested by another Imagineer. You will have to play with this as it depends on the distance from the object axis to the edge of the bulb. My bulb was 40 units across(turn on coords and measure) and my fog length was 10 or 15, can't recall which. The smaller the setting, the more opaque the bulb will be. The fog will be the color of your object. My bulb was white.

Some weirder results occurred when the object was not transparent. It still seemed to emit light, but the bulb was completely black. Turn on "bright" and the bulb turned white(but it didn't look right, kindof flat looking"). I makes sense to make the bulb transparent and this seems to work the best.

-----  
Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

--> RETURN TO CONTENTS!<--

### 1.35 MSG-33 Subject: Re: Object/texture format docs

Subject: Re: Object/texture format docs  
Date: Wed, 1 Jun 1994 18:03:46 -0400  
From: Jason B Koszarsky <kozarsky@cse.psu.edu>

Could someone with a Compuserv account grab these docs and place them on the nearest Aminet FTP site. Thanx.

Jason K.

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### 1.36 MSG-34 Subject: Soft Shadows RE: Is it Possible?

Subject: Soft Shadows RE: Is it Possible?  
Date: Wed, 1 Jun 94 13:52:25 EDT  
From: jgoldman@acs.bu.edu (Jeffrey Goldman)

>  
> > How to get motion blurring in animation?  
> > How to get soft shadows?  
> > How to use Boing effect? (What does ~Boing~ mean? I was not able to  
>

---

> motion blur, you need to use an image processing program like ImageFX, or  
> ADPro.

Anyone know how well this works?

> soft shadows, not really sure yet, been trying but haven't gotten it yet,  
> I've been playing with falloff lights and the softlite texture on lights  
> and objects to see if that would do it but it hasn't yet. Am still going  
> to try a few other things as time permits. If I get it I'll post it.

Soft shadows is easy but a real pain...

Think about how lights work in pretty much every ray-tracing/rendering environment. Lights are point sources. Nothing in reality is a point source.

A point source can only cast a sharp shadow. To simulate soft-shadows you have to create multiple point-sources which are closely grouped around a central axis. All of the individual light sources that make up the larger bundle of lights must all have intensities that are a fraction of the main bundle is supposed to be.

I'll give an example of a soft-shadows 'real' light source that I've created...

I'll assume that the intensity of this packed bundle will ultimately be 255,255,255. I've had decent results with packed bundles consisting of 21 light sources or more. There are several ways of creating the packed bundle of light sources. This is just one method.

#### CREATING A SOFT SHADOW LIGHTSOURCE

1. Figure out how many light sources you will have in the final packed bundle. In this case it will be 21 (not exactly arbitrary and you'll see why).

2. Figure out the final intensity of the packed bundle. In this case it will be 255, 255, 255 (the default value for an Imagine light source). The packed bundle (with all its light sources) must emit as much light as a similar single light source otherwise you get too hot a light source.

3. Divide the final intensity by the number of light sources (step #2 divided by step #1). This gives the individual intensity for any light source that makes up the packed bundle. In this case  $255/21 \approx 12.1$ .

4. Add a primitive disk with radius of 100 and 10 sections.

5. Add an axis and place it at the center of disk. If you're using defaults the axis will automatically appear at the center of the disk (world center of 0,0,0)

6. Select the axis you just added and enter the Attributes requester.

7. Make the axis a Light source with Light Intensity settings of the number you got in step #3. In this case it's 12.1, 12.1, 12.1. Have the axis Cast Shadows. If you're using 3.0 and like Lens Flare disable the feature for now.

---

8. This bundled source will act the same as point source. With that in mind determine whether the light should fall off. For these purposes have no light fall-off. Exit the Atributes requestor.

9. Copy the axis (R-Amiga C), paste it (R-Amiga P), and move it (m) to the top of the disk where the the edge of the disk and the section parts meet.

10. Copy and paste the axis at every section around the outer rim of the disk. This will result in 10 axes at every section and one axis in the center. Delete the disk to get it out of your way.

11. Group the outer axes to the center axis by selecting first the center axis then every outer axis (using shift), and finally grouping the with (R-Amiga G).

12. Copy this entire array of 11 lightsources and paste it.

13. Select one array and scale it by .5. This should bring the outer axes closer to the center.

14. Rotate the same array by 18 degrees. This causes a stagger of the inner array as compared to the outer array.

15. Enter Pick Objects Mode and delete the center axis out of one of the arrays (you only want one center axis). Group the non-grouped axes to the center so that every axis is grouped to the center axis.

16. Enter Pick Groups Mode and save the entire bundle.

A word for Imagine3.0 users. If you want Lens Flare to operate for this bundle select the center axis and enable the flare. Having all 21 axes Flare would be tediously slow, and it wouldn't look good.

=== Using the Bundle in the Stage Editor ===

A warning. This bundle object is made of 21 lightsources. Rendering times will decrease with its use for obvious reasons.

The bundle only works in Trace Mode (obviously) because it needs to cast shadows.

The current bundle only works in "Studio Situations" or situations where the bundle only has to work in a near perpendicular fashion. I.E. The pyramid of spheres on a flat plane would be a studio situation. You can aim a lightsource as if you were in a studio or soundstage.

The bundle must always be perpendicular or near perpendicular to the subject. You can track the Y-Axis to the subject to achieve this.

Each of the axes on the bundle emmits a bit of light. It's the multiple shadows cast by each of these lights that creates the soft shadow. You must be prepared to experiment with the scale of the bundle. Scales should always be done (L)ocally. It's pretty easy to figure out how large the bundle should be if you understand how the bundle works. This I leave up to you as it is next to impossible to

---

explain the 'right' scale setting...

Always remember that the more lightsources you use in your bundle the better the results, and sadly the longer the rendering times. You have to make a trade off between how large your soft-shadow fall-off will be compared to how many lightsources you have in your bundle. If your soft-shadow area is too large, and you don't have enough lightsources, you'll see many clearly defined sharp shadows.

This the only way to created a soft-shadow lightsource in Imagine, I believe. It may be a pain in a\$\$ but it works. It should only be used for stills for obvious reasons. Only use the bundle where necessary. For instance, in a conventional three point lighting setup you only really need the bundle for the Key and Back lights. The Fill doesn't cast too noticable shadows and can therefore be a point source.

Good luck...

Oh, one other thing. Specular hits look way cool with light bundles. I mean much more realistic...

J.---->

E-Mail: jgoldman@acs.bu.edu

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## 1.37 MSG-35 Subject: Re: Is it possible?

Subject: Re: Is it possible?  
Date: Wed, 1 Jun 94 18:16:33 CDT  
From: wilks@lbn.com (Stephen Wilkinson)

Hello!

> The softlite texture is for the edge of the light beam as it appears on  
> the object or ground. An object's shadow is sharp. I don't think that soft  
> shadows have been programmed.

Don't know if this merits a post to IML, but you seem to be correct. I messed around with the FrenchWindows texture and the edge of the shadow on the ground was soft, but the shadow of the object was sharp. A very odd effect :) BTW, the FrenchWindows texture asks for a number of horizontal and vertical panes, yet it makes an infinite number of these "light squares" on the ground. Have you run into the same thing?

Cheers,  
Stephen

---

---

Stephen Wilkinson      wilks@lbm.com  
Software Engineer  
LB&M Associates

---

"Programming is like pinball. The  
reward for doing it well is the  
opportunity to do it again."

---

#define OPINION                (myown)  
#define COMPANYOPINION (~myown)

---

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### 1.38    MSG-36 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re:    What about ~anim5~ and Imagine?  
Date:    Wed, 1 Jun 1994 14:59:09 -0400  
From: Jason B Koszarsky <kozarsky@cse.psu.edu>

>The first frame was O.K. but others.....were damaged (colours palette

If you are using Imagine 2.0, maybe even 2.9(I deleted it from the HD  
already so can't check), the palette locking option does not work.  
So each frame of the anim has its own palette. DPaint only supports  
single palettes so it really can't work with multipalette anims.

You could use something like ADPro to process the images & have them  
use a single palette.

One question I've had is why does imagine make my anim width 384 when  
I only told it to do 368? Very annoying.

Jason K.

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### 1.39    MSG-37 Subject: Re: new on IML

Subject: Re: new on IML  
Date: Wed, 1 Jun 1994 22:04:06 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Hello fellow Imagineers,  
>

> I'll try to read all IML post I get and also post answers aswell as  
> questions, I have many.

>

Welcome..this is a nice place, but I hope your up to alot of mail.  
Because you'llle get it here..

=RRW=

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## 1.40 MSG-38 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re: What about ~anim5~ and Imagine?  
Date: Wed, 1 Jun 1994 22:11:49 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> One question I've had is why does imagine make my anim width 384 when  
> I only told it to do 368? Very annoying.  
>  
> Jason K.

Hmmm go check your prefs rendering presets, maybe its set wrong?

=RRW=

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## 1.41 MSG-39 Subject: Imag3.0 IS in Oz. (minimal tehcnical content)

Subject: Imag3.0 IS in Oz. (minimal tehcnical content)  
Date: Thu, 2 Jun 1994 12:27:57 +1000 (EST)  
From: MiKE <cheng@sun.mech.uq.oz.au>

For those in OZ,

I got my copy of Imagine 3.0 yesterday. I ordered directly from Impulse about a month ago.

MiKE

cheng@sun.mech.uq.oz.au The Uni of Queensland. Brisbane. Australia  
"I don't stand on ceremony; he never stood on me."

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## 1.42 MSG-40 Subject: Re: SIGGRAPH in Orlando

---

Subject: Re: SIGGRAPH in Orlando  
Date: Thu, 2 Jun 94 12:44:27 +1000  
From: JOHN ROWE <jrowe@ozemail.com.au>

Hi Horst!  
you wrote:  
>What's with a meeting at Siggraph in Orlando. I think I will come from  
>Germany to the Siggraph.  
>Let's have a date for this.

24 July - 29 July  
Party! Party! Party!

Wish I could come too! :-)

Best Regards from Down Under, John

John Rowe Animation	-> Christian <-
Toowoomba Qld.	Reg.CBM Developer, 3D Animator, Programmer
AUSTRALIA	Aussie Amiga Keyboard Overlays
EMail:jrowe@ozemail.com.au	

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## 1.43 MSG-41 Subject: Re: Lights and objects

Subject: Re: Lights and objects  
Date: Thu, 2 Jun 1994 03:03:18 -0500 (CDT)  
From: Michael Halleen <halleen@MCS.NET>

> > I've been trying to get lights "in" objects. I'm using a box and in the  
> > Attributes requester i tell it to be a light. I want this for spotlight on a  
  
> > car I've made. It lights up the surroundings in scanline but it doesn't give  
  
> > any light at all in raytrace.  
>

---

> To the no light in trace: I don't know, why.

This may not be what you're talking about but, when you make an object a light, the light comes from the point of the axis, not the faces. So if the axis is at the center of a box, in trace mode the box itself would be blocking the light (it should be well lit on the inside).

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## 1.44 MSG-42 Subject: Re: Lights and objects

Subject: Re: Lights and objects  
Date: Wed, 1 Jun 1994 21:27:34 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> On Wed, 1 Jun 1994, Randy R. Wall wrote:  
>  
> > > Anybody care to light me up?  
> > >  
> > Sure, click bright in the attributes requester for the object as well as  
> > light. But if your looking for a beam of light to shine from the light  
> > let me know and I'll send a tutorial I wrote for someone on how to make a  
> > really cool spotlight, one which raytraces well too.  
> >  
> Hi Randy. Send that tutorial up!

OK, I'll try to get it here by the end of the week for all to see..its a bit long though..I am also going to try and send one or two of the lights to the net, but this may not be till next week some time..

=RRW=

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## 1.45 MSG-43 Subject: 3d rocks

Subject: 3d rocks  
Date: Thu, 2 Jun 1994 08:26:19 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

```

____
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ Wizard logged in"
|   |      .CODE

```



```
| O | MAILING    PROC FAR
|/\_|
```

Yaba daba doo fellows,

after clouds, sea-shell and undersea shadows (hey nobody reply this message), my next question is about how realize 3d rocks, cliff & reef: 3d modeling (forms, detail or vista?) and texture/brush mapping.

Remember also that PC users cannot use essence nor other Amiga facilities, please.

```
/\_|
| O |      RET
|   | MAILING    ENDP                      T-H-A-N-X
| O |      STACK  200H                      ae(_^)^ue
|___| END      MAILING      _ _ _ _ _ Wizard signing off
```

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## 1.46 MSG-44 Subject: Re: Is it possible?

Subject: Re: Is it possible?  
 Date: Wed, 1 Jun 1994 20:48:55 -0700 (PDT)  
 From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

```
>
> > soft shadows, not really sure yet, been trying but haven't gotten it yet,
> > Ive been playing with falloff lights and the softlite texture on lights
> > and objects to see if that would do it but it hasn't yet. Am still going
>
> The softlite texture is for the edge of the light beam as it appears on
> the object or ground. An object's shadow is sharp. I don't think that soft
> shadows have been programmed.
>
> Ed Totman
```

Yes, I am aware of this, but I felt it couldn't hurt to see if it might work on an objects shadow as well..it didn't give me any errors when I renderd it this way, and sence we were promised soft shadows in the newsletter, I thought maybe it was just not documented and the only way to find out shuch things is to experiment..which basically is all I am doing..and basically hoping I might get lucky..after all if I figured out a way to do it you would probably like to know about it..wouldn't you?

This is how I find out how to do alot of things, by trying anything and everything I can think of..

=RRW=

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## 1.47 MSG-45 Subject: Re: Sticky Stars

Subject: Re: Sticky Stars  
Date: Wed, 1 Jun 1994 20:38:36 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> > Does he then need to add particles to this or a brush map? I can't quite see  
> > how it works otherwise. Just wondering?  
> >  
>  
> Nothing at all. I guess I forgot to say to make it a bright object, colored  
> white. There won't be any shading, and with the faces so far away, it'll  
> render as points. But there's no need for either particles or a brushmap,  
> although the exact same thing MAY be possible with particles, but it may  
> not appear random enough. The faces will just be out there, not connected in  
> any way, and in the general shape of the giant sphere (which would encircle  
> your 'universe.')

>  
> Dan

Hmmmm? OK that sounds better, I'll have to give it a try and see how well  
it work...Does seem like it might be a bit of a RAM hog though,  
considering the size it would have to be, and how far away you would have  
to place it for the stars to become small enough to become little  
dots..but then thats only if you had a thick congestion of stars...But  
as I haven't tried it yet, I'm only geussing about it...does seem like it  
might work nice though..I'll have to try it out some time...

=RRW=

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## 1.48 MSG-46 Subject: Re: CYCLE RELATED PROBLEM...PLEASE \*\*\*HELP\*\*\*

Subject: Re: CYCLE RELATED PROBLEM...PLEASE \*\*\*HELP\*\*\*  
Date: Wed, 1 Jun 1994 21:46:29 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

>  
> I have lately made a cycle object that consists of a number of  
> smaller objects grouped together .Whenever I would like to MORPH a specific  
> object item of that Cycle group , I have to CREATE a new Cycle OBJ that has  
> the new specific item in the place of the old one -in order to morph  
> between them in the action editor (By morphing the whole Cyclegroup)-.  
> As you understand this is a little bit disk space hassle because I  
> have to use the same object twice . IS there another way to do so

> (preferable \*IN\* the Cycle editor) without having to loose disk space for  
> NO apparently reason ??  
> I am looking forward hearing a solution .

Well, if I understand you correctly you can start the cycle at any point by using the Initial Cycle phase, you will still have to load it twice because there isn't Transitions anymore, but you shouldn't have to save different versions to disk..just the one, unless your morphing attributes and textures..Intial Cycle phase works like this..if the cycle object is say 100 frames then to start at frame 50 you would use 0.5000.

Hope this is what your looking for?

=RRW=

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## 1.49 MSG-47 Subject: Melt

Subject: Melt  
Date: Thu, 2 Jun 94 00:32:35 GMT  
From: "Glenn M. Lewis - ICD ~" <glewis@pcocd2.intel.com>

Hi, all.

A few months back I talked about a program I wrote in C++ called "Melt", and showed some examples of chess pieces melting, etc. I couldn't give out source because I was writing an article on it.

Well, the article has been published in the July 1994 "Annual Graphics Issue" of Dr. Dobbs Journal, and is the lead article. It's called "Morphing 3D Objects using C++". I believe that I'm still not supposed to e-mail out source, but Dr.Dobbs has made the source code available on their FTP site. I'm afraid I don't have their site address now, but wanted to let everyone know anyway because I'm about to go on yet another business trip.

So anyway, I hope you enjoy the article. I enjoyed writing the program. Feel free to e-mail questions & comments to me, but I can't promise that you'll get a fast response because of my travel. In fact, it may be on the order of weeks that I will be able to reply. Sorry about that. I don't like it either. :-)

-- Glenn

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## 1.50 MSG-48 Subject: Wizard excuse: atts & /\|V flame

Subject: Wizard excuse: atts & /\|V flame  
 Date: Thu, 2 Jun 1994 08:27:44 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

____
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Yaba daba doo again,  
     first I must thanx all for the replyes to my "Simulating clouds"  
 and "3d sea-shell" messages.  
     Now a fast reply to John Foust and Peter:

>I and certainly a lot of other imagineers would appreciate you,  
 >not using /\|V in normal text parts. When you have to skip  
 >through hundreds of mail a day it's difficult to distinguish  
 >text from signatures, and so you tend to miss important info.

ok guys, I'll not use /\|V in normal text parts, excuse me.

    Last but not least, a note about my little executable (PC and  
 now also Amiga) to convert PC -> Amiga, Amiga -> PC attributes files:

    Ya all know the problem occuring in Imagine 2.0PC trying to load  
 into attriibs requester a previously saved Amiga .atr file: my first step  
 was email to IML but noone would reply.

    So, I wrote down a piece of code and executable for my PC:it was  
 usefull (I hope) to convert Amiga -> PC.

    Yesterday I've added the reverse option (PC -> Amiga) to my util  
 and I've also made a ported version for the Amiga: now I've AMIGA and PC  
 executable (FULL PC-2-AMIGA, AMIGA-2-PC CONVERSION), if both Amy or PC  
 imagineers think that this can help their, then email me to

TESI2@NOVELL.DIMA.UNIGE.IT

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(_^)^ue
|_| END          MAILING          _ _ _ _ Wizard signing off

```

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## 1.51 MSG-49 Subject: 3d sea-shell: scallop

Subject: 3d sea-shell: scallop  
 Date: Thu, 2 Jun 1994 08:28:27 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>



the proper 'conform to sphere' (or what?) to show it much realistic?

P.S.: hey listers, time is money so I've uuencoded what I've obtained after 10th step, see Ya 18r.

P.P.S.: thanx goes to all who reply my previously '3d seashell' message

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(-_^)ue
|___| END          MAILING      _ _ _ _ _ Wizard signing off

```

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## 1.52 MSG-50 Subject: Re: Is it possible?

Subject: Re: Is it possible?  
 Date: Thu, 2 Jun 1994 08:25:25 -0700 (PDT)  
 From: Ed Totman <etotman@gort.ucsd.edu>

On Wed, 1 Jun 1994, Stephen Wilkinson wrote:

```

> Don't know if this merits a post to IML, but you seem to be correct. I
> messed around with the FrenchWindows texture and the edge of the shadow
> on the ground was soft, but the shadow of the object was sharp. A very
> odd effect :) BTW, the FrenchWindows texture asks for a number of
> horizontal and vertical panes, yet it makes an infinite number of these
> "light squares" on the ground. Have you run into the same thing?
>

```

Select round shape (X) or rectangular (X, Z) in light options. The size of the axes determines the size of the spot or "window".

Ed Totman  
 etotman@gort.ucsd.edu

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## 1.53 MSG-51 Subject: TrueSpace Demo Sites

Subject: TrueSpace Demo Sites  
 Date: Thu, 2 Jun 1994 8:50:09 UTC+0200  
 From: Manuel Perez Ayala <mayala@ba.unex.es>

I have search by Archie, sub: tsdemo , and this is that I have got.

tsdemo16.zip 109k 13/10/93 ftp.sunet.se

---

```
/pub/pc/mirror/SimTel/msdos/screen/tsdemo16.zip
tsdemo16.zip 110k 8/10/93 garbo.uwasa.fi
/pc/ts/tsdemo16.zip
tsdemo16.zip 109k 13/10/93 plaza.aarnet.edu.au
/micros/pc/oak/screen/tsdemo16.zip
tsdemo16.zip 110k 9/10/93 plaza.aarnet.edu.au
/micros/pc/garbo/pc/ts/tsdemo16.zip
```

Hope this help.

Manuel Perez Ayala  
Educational Technology Dptm.  
Educational Sciences Institute  
University of Extremadura  
Badajoz (Spain)

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## 1.54 MSG-52 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re: What about ~anim5~ and Imagine?  
Date: Wed, 1 Jun 1994 21:16:09 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

```
> Lately, I tried to create an animation using ~anim5~ format.
> It is built-in in Imagine, but up to now it seems to work wrong.
> I played my ~anim5~ format of the animation using DP IV.
> The first frame was O.K. but others.....were damaged (colours palette
> was not correctly set by Imagine).
> Any suggestions?
>
> Krzysztof Korski
```

Did you render one frame that had all or most of the colors needed in the anim and then use "Specify File" from the Pallete method requester and select the frame with all the colors needed as I mentioned above. This has worked great for me and Ive had no problems as of yet..This is of course only possible with 2.9 and 3.0...if your using 2.0 you need to send them to an image processor, Brilliance, or for HAM PhotonPaint works great..and is fast at playback too..

=RRW=

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## 1.55 MSG-53 Subject: RE: Imagine 4 Everybody...YEAH???..FOR WHAT??

Subject: RE: Imagine 4 Everybody...YEAH???..FOR WHAT??  
Date: Thu, 2 Jun 94 09:40:02 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

>  
> To ALL,  
>  
> IT is really good idea to do so . A REQUEST from IMAGINE's users to  
> the MAMA IMPULSE . This is really good idea....YEAH..SURE IT IS...\*\*BUT\*\* FOR  
> WHAT ????  
[Impulse bashing(from what I could tell) deleted]

I'm sorry, but... I can't agree with you bashing Impulse like this. I think they have really done a good job in listening to our requests. They have come a long way in listening to the customer. They just released texture info(YEA!!!!!!), they included lens flares(even though they don't work perfectly, I get a feeling this was a last minute item due to overwhelming user requests here on this list), they are releasing bug fixes to the net (even though there are no revision numbers:). They are more active with us than ever. I think its great!

And the new features in 3.0 are wonderful. Have you used them yet? All of them? I know I barely have enough time to skim the surface and I have been continually amazed. Bones implimented in a more powerful manor than Lightwave (from what I understand) with a promise to make them easier to use. Particles! Deformation tool a la Caligari! Textures out the butt!! etc etc etc.

If you have a complaint, as Impulse has stated, make a specific one, and they will probably try and correct it. General comments like "Impulse stinks" isn't gonna get you what you want. I don't think anyone cares if you critisize Impulse(I do it all the time), just do so constructively(who am I to talk?).

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

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## 1.56 MSG-54 Subject: SPOTLIGHT BEAM

Subject: SPOTLIGHT BEAM  
Date: Thu, 2 Jun 1994 02:09:10 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

I have had many requests for the Spotlight tutorial I meantioned here, so here it is for all to read and use.

I will explain a persice method for 2.9/3.0 and a fairley persice method for 2.0 and 2.9/3.0.

---



Now this takes a bit of work but once its done you can reuse this light many times and it will leave shodows as well as light up whatever it hits.( The Persice Example works only in 2.9/3.0 ). But the fairley persice method works in both 2.0 and 2.9/3.0 so if you don't need a persice spotlight you may want to skip ahead to the 2.0 version as it takes a bit less work to make.

-Persice 2.9/3.0 version

Heres ONE way to do it, make a cone with an open bottom and size, and shape it to how you would like your spotlight to appear in the sceene, then move the axis of the cone to the very top point of the cone making sure that the axis center matches up axactly with the top point of the cone. Use shift M and shift Z and move the mouse to do this.

Then make the cone the color of the light you are planning to use and then make it BRIGHT, now go and set the Filters to 180,180,180 or 240,240,240 depending on how translucent you want the beam. This will make it so that when you render it you can see threw it. Now select the object if its not already and use the Transformation requester to move it to Position Z 100 and leave the rest of the positions at 0. Now we can save this object.

Now you nead to make a test project to set the light up in so we can get the proper setting for our light. Once you have done this load the cone into the STAGE, now add a light and use the Transformation requester to move the light to position Z 100 and leave the other positions at 0 as we did with the cone in the Detail Editor. Save this and goto the Action Editor, find the light and set it to Conical, Cast Shadows (2.9) or Point Sourse, Round Shape, Cast Shadows (3.0) and set the color to whatever you set the cone to. Save this and go back to the Stage Editor.

Once your back in the Stage Editor Go up to the Display Menu and select Light Lines then use FIND to select the light.

Now use the Transformation Requester and Align X to -90, Y to 0, and Z to 0. Now the light should be lined up with the cone pointing down. So hit the S key to size it, and size it till the center light line in the Right View reaches the bottom of the cone. While still in size mode go to the Front View and Zoom in on the bottom of the cone as much as you can while still being able to see the outer edges of the cone. Now hit Shift X and then just the L key. This will put you in local size mode of X, now size the light lines till they match up perfictally with the outer edges of the cone. Now do the same thing with the Z size using the Right View and Shift Z then L keys. You need to do them seperately as they will not match up otherwise. Whew! almost done, This may sound hard but its really quite easy. You could actually use this as is in the stage, but just make sure that if you move or rotate either of them you select them both together. Sence it is only a simple matter to make them into a group I will continue.....

OK, I hope someone gets some use out of this? if so let me know...

Now that we have this all set up go to the Transformation Requester and select size, write down the sizes of X, Y, and Z exactly as they are and hit OK and after all this work why not save it..

---

Now go to the detail editor and load in the cone object.  
Now add an axis and select it, use the Transformation requester and select Alignment and set X to -90, Y to 0, Z to 0, then select Size and type in the numbers you wrote down, and then select Position and type in X 0, Y 0, Z 100. and select OK. Now set the Attributes of the axis to a Light and set the light to Conical, Cast Shadows (2.9) or Point Source, Round Shape, Cast Shadows (3.0) and set the color to whatever you set the cone to . Now group the axis and cone together and save it. You can now move this object freely around in the Stage and Action Editors as one object.

If you want the light to have transparency of the cone linearly over it's length ( basically Fade Out at the end ) you will need to size the cone maybe twice as large while leaving the Axis Light the same size and then use the Linear Texture on the cone and rotate the Textures Z axis so that it is pointing down and drag the Texture axis down to slightly above the Axis Lights Y axis line. If you made the cone twice the size this would be halfway down the cones length. Then set the color of the texture to that of the light and the Transition Z Width to whatever looks good for your particular light, I like 100 or 150, for a 500 unit tall cone, then set the Filters for the Texture to 255, 255, 255. You would also have to set your Axis Light's Attribute to Diminish Intensity 2.9 or Controlled Falloff for 3.0 to pull off the full effect. You may need to play with this to get it just right though.

-Fairley Persice 2.0 and 2.9/3.0 version.

Make a cone with an open bottom and size, and shape it to how you would like your spotlight to appear in the scene, then move the axis of the cone to the very top point of the cone making sure that the axis center matches up exactly with the top point of the cone. Then make the cone the color of the light you are planning to use and then make it BRIGHT, now go and set the Filters to 210,210,210 so that when you render it we can see threw it. Now COPY the cone and align the X axis to -90 locally in the Transformation requester by using Transform Axis Only and Alignment. Now resize the Y axis locally till the axis line not letter reaches the bottom of the cones Bounding Box, then resize X axis locally till the axis line reaches the very end of the Bounding Box, and then do the same with the Z axis. Now change the Attributes, turn off Bright, set Filters back to 0,0,0 and set the object to a light and set it to Conical, Cast Shadows (2.9) or Point Source, Round Shape, Cast Shadows (3.0) and set the color to whatever you set the cone to. Now go into Edit Points mode and delete all the points in this object. You can now PASTE the old copy and group the two objects and save them out as a Spotlight This method is easier than the other one and produces good results as well, I just feel the other method is more precise if you plan to zoom up on something like a logo and have the spotlight moving acrossed it.

If you want the light to have transparency of the cone linearly over it's length ( basically Fade Out at the bottom ) you can use the same method as I mentioned above with the Persice Spotlight.

Whew! Now theres a SpotLight!

While even this is not a perfect SpotLight it is a very good one, the only problem with it is that if you shine it threw something the Bright Cone object will still show through the other side, you maybe able to limit

---

this by making the cone more transparant with the Filters, but I think 220's or 240's work pretty good..Or buy making it a fading SpotLight. It also doesn't have edge transparency but I haven't tried to figure out how to do that yet. I imagine you could use multiple cones at different Filter rates and sizes to get something close to it, in 2.0/2.9 or use the global HAZE effect and the SOFTEDGE texture in 3.0.

Once you set up the basic object in Imagine you could just use it and make changes to it as needed.

I do think if you try this SpotLight you will like it as it works great for RayTracing when you want an object in the middle of the SpotLight and yet have other lights coming from other directions, the Spotlight will still light up the object and leave its beam and shadow and works fine in Global Fog unlike a Cone set to FOG as I have seen others suggest.

Sorry for the huge totutorial, but I couldn't think of any other way to explain the spotlight.

If you try it let me know what you think of it?

You can make this spotlight work so that you can see the light it is coming from as with a car headlight, but that is another Tutorial in its self, so I will upload one that is already made in such a fashoin to the net soon.

Hope I didn't mess this up when I edited it for IML, but I read it a few times and it looks fine, if you have any problems let me know.

Enjoy!

Randy R. Wall  
=RRW=

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## 1.57 MSG-55 Subject: 3d sea-shell: scallop

Subject: 3d sea-shell: scallop  
Date: Thu, 2 Jun 1994 09:09:05 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

- \* This message contains the file 'SCALLOP.LZH', which has been
- \* uuencoded. If you are using Pegasus Mail, then you can use
- \* the browser's eXtract function to lift the original contents
- \* out to a file, otherwise you will have to extract the message
- \* and uudecode it manually.

begin 660 SCALLOP.LZH

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MB\*^NE1Y:/5BAYU` (/ , S2/#\\_6) W) G\_M=LXR/!MY@; ^\; 817G@D>&8K0G<5IP  
MMQ; J6\_1\*-`UX! `A>LV) W!QH77=D+?Y5&^ (KTRCO\ .X"=9L\$%UKE\$>.GUPYK  
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M%-E [WZCW!W6J13-WT&ZH&, 1/O=2WY91OBMA\\$=V7VHW60FQ\$^/\*H\5CQXYK [  
M>A!5.512T7' \$YY, . (FC [J.XNTPX%PJ1%8"] (I>=3B<\T: ?A#J\$>' B8, <V) .F  
MYSS (I>C@Q.?!?`Y7%HB] J1P' :; \$. [P2.WHJT) R:=PMI\TCOMGR%\$RM@, 7R  
M4=F\_P8W-3V`M; BCM1W<\$X\_ [ `+?/@\$=F!0.#; L. ( ; ] &E' 81\_ (W/C>PL\_5D+W  
MU11, CD ('KQ".Q%5L; GE' [ ?YF] %OSXX+8?K+W&71257WC<X"4\$3\*5\*. [ [ZX\*+  
M9T8@8CL (ZRO4B; 7VP1+W1HI ('ZC@\_66\$18\JCK\*MH) M5=A\$T+Z6^ [BBE^ ( --  
M5, :\*. JQ@W' R90LUF [1206R' !15"&NF511W [ (C<<EN"R/<44N>R@YSVX#32>P  
M1TNGMQ-.KR%CKST?Q\^-^Q; ' `+, O\*HZS!\_0X=EF1"P; \*6.%\$TZ' \_' ] Y".ESX  
MD36"7S\A\_31TMQCC-76/\$2KRJ.=7 (P; C&+1\$62; 1T?=\$C; ^GW" (J\*\BB=^: )  
MDQ^ (U=R1160%"9NC@ (B3944/Z:P3\$:Y" (TMX&\$FL2+3DWL0WN9QA/YHQ: ; >=  
M9\^9#IEKX+3K[X (6EQ (PG.V`M-JQPAN [ .AVO-\*+7\&L0'E5C!>?"#6RU `AVE  
MC%] U+X+JTL@7>6U!Q^63#7".PBK', BZYEVR\_.; \$8P=\$.VB80V6R (\$!#-HP%  
MM`LN1@A#NM&&Z2B! ]UHFA' \_? , B\_ [6/%V/!OA] /BR] [L7\*> [0BOPWH<O7=!9-  
M@S" `>^>+G, N`P; .SB.AO<7N3' W61Y\$7; `H8CQT`MU@H! `=J@#C\Y4->E7Q"V  
M2: %JSLJ, ; R& (2+S2\$M.; ; Q; P (V (\ `N [=##"6NE"S] O, , 5WZ8?; <3] 1] NM`M>  
M><Q@<WB0MX [\$+?] LX' "56B) KEE#E [I0622:Q!VMO#; "YX8] Y>A ( ; F6%EP [&'  
ME [<Q&6E@#IOGH7FY; , 0 [SQ`\-] 0& [6VH0.1G1==3HQ9/<] ' @3^H.7O:Q9) '=  
MB"QC"&JHI1G-/+"2K^` ) ?&&<C\ \$ [ (8R8L7/D1FW[U"-P\H' &WK0ZZ' /!9RIT  
M6] 9B1D+AJA%K7PS?1J3>1\ /D.LXA36<@S [ , ZS6J:SC/BV" T6/YC. ] `DB1CK:

M8GZE (G) 0K&' 3\M"+S>#\_R/P:H/#:=3 [+F"\$/^`[K]NZFIUF0J1>N5LPT4W\*\$  
 M!OV0,UVZ8@XYF\$C)Y<ESH@UUX\$=\$>8?9YU\06[HQ&X5Z];TH7(^&".L[4'5\_  
 MWHC/=0AXMV) #,=,1XAG#B"YQ<N' IAM'B]S-BU3<`,,]!0'C/?0!C7I<9IH:1) (  
 M81866+&+VST)+464-,PUB\_\_\_<PB0]MM#7P=Z+?\Y<1S\*U"\0^S#/KZ,0%I;`T  
 MP.@\$) \$N`D;?+"N/YX?>TY@DG3YAXFZ@7VSYX\_3NS#&\'V"X\WV"%ZS2+9C98  
 M--%+!:10\$)\$!GV.]\$+LHL,,;8YC3SMR\$?2Y4EMPT\WT1&W-V#%-N(T);.IV=)  
 M>A4+D&MC%:SO) \$E?/' ) # -O (<Z/!##3EJ\$7GM`,AK7 (75PZ8A9/Q'=\,'JO>@  
 M1^EZ@MWZ/HS\_NNOC;DWAJU\0 (6M?`1MIZ) UG"\*:SC=R[G\#MZGX'C><ZG\#L  
 MJGX'C.8UAIW44\_`Z[52?\_P/%690#@>\*VRP9Z\$: ]P!>(+P!GF>,(?H<`6"6  
 MY0U&;?A' ZKGG4\ :IJ>,R4R,96W<7U=5"" :YT9#WMPNNHZ@N%0BV8[+J?A.%  
 MOSV' %3897[C"\*7Y4,/ [QXVOPF1&>AB)<:-K[3Q:]KH`P,#N-K"/06[C"\$O'  
 M\*%QK5+A5WLN)?Q':^\*IB7BU"UO9:Q@S]^>&^O=\$37;:,B\>076I^ (TVR=1>O  
 MBTA[F%8CG7!' \ /O@S]0M\$A+/P:^MI1#?:PB-S\V+#CXL:CG/@C+!DP+;\*B1V  
 MLH(R/ )P5\_\*5\$!1SXC?' 90P7\* @&9L#& (ZS>(5SG'\_ :>/RXC;I3"OT6[%^/ZSB  
 M[0?Q/<KD&Y?J!%=9]#;&O@9&K5"\*PV0%=BY4;:%,?GY-'UX>\_SOI?8%OTTH>  
 MNGO!RJG80&S9']6?P" [?] F&FD6X-`J@SGXDX:XR@;8QA#)8[P(:N4%9S;ZOF  
 ME\_[R]ZSEOU?\* [J^4O\_O)S&'C'88GKG[HYIR&3L>0%]TF]&FR. ]% [W\J'OQ'C  
 M?Y^VC[\1.B\4FC&FA^2'!C>0^KUT\$?^>' /Y#T8AF^E\$AI3\_A>B:A)S52 (S+  
 M(KWA<1MC\_E-;PCRT\=X1+Y\$ \_#/' +Z\*K,X,2,#Y! (;3I@=+B" `EW`26L=0O2C  
 MV' SH.XT^:EOP; [9AX5=H:=HF@Q6^RB\_.3V) &8/3[1U!]JS\*B.^6A#:N[09+9  
 MH1!06^J^C75]\*>KZ\*?\_W1'\_ ]T%\_\_\_\_HCU?;/;K.@O5\ .KYR?^ \[</='RB\_`N:  
 M\$-[\_,,G] \>+[V.B (#I^RKZK=7SMPRW>\ "Q?QI0N^8%IH7L5^5A! !;?%C\$WI^  
 M&\*V3>%T (PC\*7V6%>) T0S/W1?]=4#\*70]/MZ<@X;OS!]O1[H^-P; &>(\$/^W  
 M&\$?RJ,\_HMG\$G.9`1 [%\1]DOHQ,9H [C8<35]?>LZ\$?RD^V)=O?A&PW=1\^]N!  
 M(WWD"OG'Q%3!1 (@,1\!)3-\*BJR\*X/F8>1IX2='AK:'>\$LHT]X80K\E0'&5DQ  
 M(\ )U%:V-, &WA>H1]R?18\_?@A7<- \$" "ZLR+/8945Z7^)^;M:,O [7L81FZXAX>7  
 MRAE\*AF#EK8H0RNU5?:KJ^E.&' 8N`9NWI1%\_ =X@T>[!B\_<\#^]MXRT6W#!.E  
 MZ\$+WY09C.\_\$.CY)B%XEE&!K^E&4ZO8\$;P:097'G[ [ \%EQ"U% (+K/9':%BBPN  
 M6O(;);%B' ]\$: (OP\_`61E6C4]O9B.7,!\_>0\$QG7\$1CO\*U? =3K.H\_\;AN1+V-  
 ME\$7<\FCY6>! \$C:>Z (WYM:/GBG@0#?E3\A]>1].+D0^7KA"0K>V1] <O@ [NC&  
 M(\_\*-2\$83^`XGX:XW5^@\*LYSPVG@#KM<V\F\;\&\*T[ `17;=ACI?5#&2/N"S0<  
 MRK[ ] ]7UBPO=!O#-#OHB7: ^"P6=U%<=L ( (KR`9C300='CB#2PT>'7#MXS!\_ \*\  
 M9]K6+MYN8-# (8D1[Y:@V\R? \$3CCPS\ (S"R0\_"&IJ;:(NU],6&M>'3.%X@B\_3  
 MU\*N@\_UG7KI\ V? \3UO6A<JY\*\*?8^\$2-<TXC=-.HI\_EY1`5T\_2\_4^A%1\$\*@^,>  
 M`\$=@`C^ [AMP[V!?\$;F< (CXKV=#BS,XB\Y:\$?)>OX;6B""R]T@8N(QBMU1[6\_  
 MCU0S\$#!TQLH' [PW08[:\_ -3\#P;<\U=\$SK.S' \[GF`S62["&XP%<8785O;^8  
 M1) [# [KAUJF^X?;WP7VPSXTE@>1'73V#[>EQA\$`2J\$?,=T-?B;QJZ\_#!=NHH6  
 M% [FA,Y3F!;7.35T9.L[6\_PK5Q\$NO3HC='>\$>\_L:X2) [J<A+/J/?TOZ\$`O\_\$2  
 M6M84>\_OVL/E:EQI\_PUJ/A8>^'= @=AI [= (" ^&7UP<6#XB1\_1S1\ /XN8;:V>47  
 M;=&\*UJ (\5N\, `A=4K#"J<A6] (PB (7^\$,S@+T?F790\_=B\$&2U\4,=[94;:>OU  
 M92:\_ ]I+]9W.Z?;, \,S#D!%W]^"MS/VC^:4\$)O)T9GI0@Q.!E0\_4<6,2OR@S/  
 M(/S=X8'\ / [Y3\ /Q6@=PX4^@"S>P0CN\*^"ST\$V-6]' ]CK/ (&? [ /`'-O;I\$J\_C5  
 MTP>L[W\_MP#^)=B]@C?;=D>S (0XD6.O"1N+4CUPF6\$!8)P:>^[U'JG,""RQ48  
 MU%LQ\*/3WI`. [5L!I\_8YH]-J[ (<;0PB2UU (CT:&PAMMK>) "ON2/I9\_6&`Z7@O  
 MW@AF?K@ABM!O0\_4K75TZ/\_U'?\_V@)^?H98,UP9A&71U1\I'.A@PSX(7`9P7\_  
 MW.H?W+L")/T!N%/B5-WK-]\*GHYVH2G6QPC>LP!GXO8&WRKL(Q4S5=0GK\*"WZ  
 MZ6QFFU'DSKWL1ZM=]XD;"? \-\_K2( ).+CA`-1XB^ (FD>BO\X/EJE1' [\_3H\U#  
 MKP[MYY?:UG\$>59K`XWE]\$;:./,CR8#]@VN>5" [ [ /0BGILV&"'\_O-SR^C^@J#  
 M!;V`1\$3\ZRI\$ \_[4VZRAI^-?B0S8QO\$1NKTCW;VM' @/^P+\* [ ]BZL,T%V6B!%>  
 M;U'<;,IN-9 (-7\_U5?K\* (?Z;):1+V^H" [OZ%'G:/S\$BX^(1NN]"/\*KR(@'A:(  
 M]IC4>+^L0'S/-HC) (X (\ \$M9P[QC> ( [=0"\*;#0X<9OT",XO(1W/+MPV) (\_97J  
 M]4CS\_AQ0P<O" 'N=NU96!\_]K#]91>^W!X\$,WTJA\$6!^1Y?V>'P?SI1\$Q%\$+<[  
 M28UME/P;T[-5UF>LHS\_GXD8)=S8Q&FEQ^7 (VL2.2/' [N,4CQ=I>\$!"9,25>X  
 MB/!@<:'S:MODN3U\$=Z-WX=^??! )8UE12[ [ ^PXU3F) #CQZ.SR;^/MO/"\$;Y\.  
 MCQ7SZ"ML[8(3PQ]77,ZRCYTG%\_ \$6\*!9PMXUE13='9"MYP"\$XDY5UX>LI%\_D=  
 MOSO(' \_-]-+ (\ "\$>?@GF1' TW=1WH<\_F<] \*^1G)=';YOO&9=HH26\$]B/ZI=N'  
 MB89Q(\101UJ"%#E7.B (^IJ\$?QH+8&Z' W8C\*EJ1V?5=PPYK1B\$RT`BE]RP5OJ

M+XA(K%U=@CK\*4?5TH/G^ET#16N,%DG+H[#/QPP\EJ\$,Z-=92C\_'L5X2^P-\$G  
M^%J1X+1'"1/+SC'ZO([OX7D0-ET(C>)\$([4/IAF=\$?G\_HS1`\'?>0\4;R(S)J  
M!'5I]6')T/W%Q'"1TLE]X;N=R!\$\_VX(Z\_:\(KFD[0B<UHZREQT4IQPT9=M\$)  
M]:-'4/?#%LNB(EDQ=92[^\_\$\_XT;5H[077!A12^Q\_\$\_E\$RPC-R\_([#C1!\*MZ(  
MWQ:5%'T/W&:V%M\$;Z^`CI7W[!C,QQB,Y<RCFXSTC`'6:[]4:/VLMD%P8GD1.  
MTY\*\*)8\_BO=3.'"(U6"1T?0\_BNO'\*\$12<2LII\_&V/Y!J:>2(3']U'-RND%?N#F  
M(5X8\*RFMTW5QXVMUS@C,W2HI6:'\$E-4PC\#2(I/IRQ!739B0[-\1U8SY#-4E  
M())&\_Q".APU@QFQY@D'WGH\_?57\$8"%VPCLGBT?K8NV+A\$2P74]>10V;-BO[23  
M\$#1["LIU\_\$P\_-#5-&D[U6'1R->T!DEZ8\_?%UE.[[GXV\;6@<!&5QK1\_7.N`  
MT^9UHCN6P(ZO`6"#N3,)"]TB.A<H\$9RT=02&BVR.9?\*V,;?5\1^>ET4'6\_48  
M\*)Z8C6>J1P6'<BX\_%["W(,".(L0+#;#:#[9S\_\_5'\/\_:@WO+]'BS;7F"%9IE'  
M#L64%AYV5\$'C^!65!ON?C=5--K-;:CINNJ;7<>B.F\,IIN+V>E.F[ZIIN+P  
M38CF70N\*;;6S7D.F\_Z4TW\$T\$RC@US)\*;;A<[X\$<)TNH9KT>X>S/2.%VOR%A\  
M5H\$'TM!65'O>7ZOJ;?;?NT;UB^X-/:91"8Q@K\*D/VF3QC;9?B!8W>Q'6C\&  
M-0Z2H77)W1T86N"\$>\(%WC9\$<SRW'9W;LH78\_3HH.GIAC[:[!9"O:.!>->' /  
MP'YG\ )@D3UJV@NE-[!!Q[TB>F\_J&ITPYKM\S65-N99,L+3FO,-)MX]\$].V\~  
M6&XP?^\_R\*RIS]ID\_I31\6>\$ /UH\_)\*/CKO'''1]W4T?'P]'='Y)31\>LE#H^,  
M4T?'./).C\4IH^+U^<1/6G4J:/BM&9O^=N%H[]2-)O[0B>GMB&IX]P?HC2UE  
M5'F63\3IN=&DY'P1NLU^0LG'P@?L(W5E53I#\_F^8M'F\$7:=VC^,9=Q)X></+  
MW8D<UX7"%X'8\$=.RZ.1/^,9\_,L@CG[GHX,0T#(O?7\$9X&Y\$]PK6'28F0M[\H  
MB99\_" +3HN((.QLG\_JL?\_M6GF,U("`7D\$0>3G5U9ND^Q>\$P[+XBI5@1TX36"  
M37,@6OH10NVD\$,JGPM\T>C]('7#/\NA"VPQ2.!7UX9'^6H1/=FT3K%?0ZWW-  
M"&O7J1,>6MBTZWGB#L-'65>/:P?I%X/^8X#O^9&QU5C#:#G;@E2VLJ]\_5\_'Z  
M"9B[\* (GJFJ1[J'&J-+=69UB1^MO^IU?1G\_<^71P/>@/LZ: !7DG9\$ZP[(9\*)F  
MA#[S#HE]'&##\_N:'^FW)&QQ\$D&WWFSC\_\*AK\*QO\*2\*X.,7GAI.5UT;#X20^W%  
MR8@+\_UE9#ZOXOXF5CD%MF:444Y\AJKJZB+9L@=!Y01%!^W\_HG0=Y#[-G\_8  
M=%)HG:W(#)0AX\*+ET2^AZPPY[F</K>HC7\_NZ!N\_+0#1R?4K\*T7\*2'%#C\$<(  
M]BO?(UD7ZQ<8TL=F]U96E^E%\X;?AP'6/<,CE\FR#5]J""YFP".\*W]D16ADS  
M].] \*C><YX&BAXL+;'@D3\$S\_8RUA'B<3R\$;WF;D/%V@!"4#FB3M\$@+RP]<:\*3  
MZZ-539D73>UX;+G&LK;]76]X[GV(8)W;0\_Y2[(D[7IA>:W?'\_3&+\_]6]XS\*  
M#;\8\_/FS:,Z;XHU?<Z8BL\_%(XMPU@BG()B\*=J-&\Y^#&B6<\1&]/^;YK'C+-  
M%\'(5=R4:VA)8>+W.B'U?71'LOC&!UU,'\_,\I\$G;/U%Y8LX-\*X\_"LKJ\=S[Z=  
M'WH/^!Y"()PP8P+Q>'\_YS'5E=OJZZOR+5;QK:\_H1\$VAA1/XSEG@7T8B-=T4;  
MC;K'\_WWNB&@K\*C86H\!NAC1!3&>1'4>!&"R4B-#X7[\_U>K\_\_5Y]\$BV5H8]AA  
M!I-%4HCI'=#[K'UQH>]JD1>5\8P[1IQH=KX\$+ME8@[]B\*&AXD;@W-TP8#52L  
M!'!'"HXK.)\_EXEI%?)Z^3ZT<7CC'4:1K92ULHS=C5!KA2UP,2BMB.)5UTXPG\*  
MX<KQ4I&OE6D3V)2-?\*.OC[#B7-D\*%D\*&P%&D64XE782KL)4V\$GV'BS%&S\$FQ  
M\$M(LY-9S394EM!%I)K23;&34BT AJ4]M1&R'DFV4FI&S%'9BCLP:U#VLC9R;  
M9R;:"D;24=I\*&TBU\*'VHC:R;:R:V\$U(VPHTC;2EMHMRB.W\$6TI4C;2A^TH4  
MBW%.W%W"WJ'V\BWDUO)MP)J1<"C<"A<!<5#[B1N1-N1-N9-2-T\*.Z%#!=5  
M#[J1NQ-NQ-NY-2-X\*.\%#>!>5#[R1O1-O1-O9-2-\\*.\%#>ZZH??2+B37\$FW  
MXFI\*R\*-(W\I;^,'HCP!'`G\$I\\$\_<<B-\_\*G[B12+F5Z1/\_%2.\$41X0BZ'',H7,  
MH74H4CA2GPI3X4.RA[L1PQ-PQ-PY-2.(\*/\$%#B!B5#\21Q1-Q1-=R:D7@HTC  
MBREQ8QBB/&\$7DI4CBRAQI0I'%' /CBEQPQZA^/(Y'FY'FY\$FI%Z\*-Z\*Z'WJ'  
M\_>1>R:]DW)\$U(Y,H\F4.3&44/RA'\*DW\*DW+\$U(Y<H\N4.7&84/S!%)KX3<R  
M34CFBC2.;\*7-C.\*(\X1SIS-%#FBASQ0I'/E/GRGSXT"A^@(\_@3?P)KZ34C^)  
M1\_B4/XC0J'Z\$CHB;HB;HR:D=(4>D\*'2!^4/?B+^37\FZ4FI'3%&D8'I8'0\*B  
M.! (P1S3%#IBA@RA2,(4YJ>)&%4/A2,,388FPY-2,04<04,0(E0^)(Q1-/U\*A  
M834BM\*-:4\*T+E#UQ\$2216",)J1-^%(FF\_B.4/CB,>38\FR!-2,B4:1DBEDA  
MIU\$>G(Z@I4C)%#)E"D=24^I\*74C5\*ZHCJR;JR;\*\$U(ZPH]84.L&M4/UI'7\$  
MW7\$V5)J1UY1Z\H=>-@H?L".Q)NQ)LL34CLBC2.S\*79C:\*(]H1ERE2.S\*' :E"  
MD=L4^V\*7;"84/F",R39DF[<FI&:\*,TO4CN%#]P1FR;-DW<DU(SA1SA0S@W2A  
M^Z(SI-G2;/\$U([LHTCO"EW@WJB/>D?R\*5(I1[XG[XF[XE\_F?/YB?),^?>\_\_[  
MYX!\'^^"<3[X1]\(<,<0<50>&<XQ)XPXZAO'(T!-H#[\_0XD\_D'\*'E\_J2\_U'  
M)\*/]#YY!+Y'\_8XE7RB;RARR3RRK\_4<PJTCA^Y7\_N4M"<Y1SFE7S2QT)9:(^Z(  
MLO-' .4:<<<\_<J>>6=([J>@6/HG\*\$^D<HBCZ9;4C\_!;TCU"Z]0L/5.<\YT#  
ME&6>C'6+SUE(#U1UR^\L^>F4\_\`S\_\*CW\_)&D+[2%A\_HO:1[!?!TCV2T]DO\_..

M) @\_7/GMG.J4]\*8"D>X8\*D>Z82D4P?O'/Z.=@YV3E,6^F'?,%[ZD-[8\!A?6/  
MGMEII2K[A\]T^?"I'\\_"1\1A/B\*WQF#I'R&%I'RF'I'S%U\QA\_G.=HPOT\$OT\$  
MGTG.V24QOU'.\6?UF.I'V&0I'VF2I'W&4I'WF7^\RWWEM^!SQG/(<\ISS'\*<  
MP.G%0934\*3'TC^U)?\_9)3(\_@8[3F,^LQ7V&(^T?%2+\_SC\C%?D6'YF)I'Z&+  
MI&I,;2/U,?2-48#5&/H.><=]4!4\$?.J/\ /223\*U2M4K3+U2\J7C\$: =4OCUJ#  
M6A[%!8![5!K8]R@L(^\*@UP>%06(? (C\%5=55TZ+^9T/)#H.I, \_^IG=4JKQB=  
M>55\((G1)G3&IH=C)G:9N7M?+'6CY8#YK9\L)\\_8I)\_L(LARN\*F(C755@'S  
M4%E'T4&PBI4%F'U4&Q&9I%G,19U5?5-"IH.\_:A4TDMI,\_L9Q434S]J.)T'9#  
MB=#V4Y72[V8Z)2+6=&I&SG2\*1M!TJD;2=/I&U'4:1M9U':SJ.UE];#E@.,IR  
MPG&8Y8CC.<MAC=L56TZ3MJFF;=&#VXDVDIT6G0Z=!MAGML,YLQFK69C9S+;  
M093:53:I+VTC]IEOVJFXREN+?;S+;>2V\S%O)=P,UN!+<#.7`EW\$SVXDNY&+  
MW(EVU5<SC09W="7="3=3EC)]V.)T?=SB=W@XG2]Y.)TW>CC88+>SIU(WPZA  
M2-].I4BXG5\*1OQU:D7(ZQ2-\_M4C@#KO''7.'.M\"<L\"K!\$G!\*;#^XXRE';S  
ML-S.)V7@SB=GX0XS\*G0DNBFUW4Y8E6%).%4V^[ '<H[B=OX8XG<^'. ,ZK\$'=  
M.(4WC=3NF[\*L2IO/\$DU.XT[?3MN]\*L4=!XH^W<[7=R\_WP^[Z?+B?-^/ER/F\_  
MGR\\*;'>".+.Q<67/!'6^#.EW,Z+PAT/AS/W<S/&' +F96\DMY).-.74DIG>..  
M)G^/.)T'D#B=#Y\$Y>E3T8J]\*: +^Y>SCV=\$I')'1J1R9TBD<H=\*I'\*G3\*1RQ  
MTZD<N=0I', '4Z1?#JE\A\R=)I'&JLTII?-\$E.BTZ'3H/(JLV9OFU//;T9WG#  
ME[(09FKV9CDC<+F93E#)<J9#EE6=4D^=(YXRE(OBK/J2G/JM'I\*)'1\_'XF9O  
MI4OI)\_\$XF;Z\$XF=Z(XF?Z,YD56D,]TA]YQ4\_'\_'LX\_F<I'2F>I'3'0\*1@#H5(  
MP)T2D8(Z-2,&=(I&\$EX0Z5A#HU]50IT3"G1\\*IH).@TS],[T:J&,OAE/>D,  
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M@-P,<7\$F0?CC@./,?^Y&/WD3@-T,C/) #O)F/G=C%MRH[RQC1WAL>&MCJWIL  
M=7,F+;>S&9S;<!SC<!SK<!SS<!S[<!T#<!T)C\*Z,X+I#%=AS#<48S>E,5?&G  
M"] ,V6#IVRO]0#B2]2W!=4W!=6W!=8W!=:W!=<W!8<5\_80;\$X7LC@?TP?4<#  
M^N#[#@?VP?<<#V<'WG'\_P@\_X'^4&T.!\_G!M8-L<'TD&W@\_2#<0;DX;NC@\_Z  
MP;N#>'#=[!OCAN@X[PW]H."<-U,' "@X9P?B0<4X/QH..<'Y\$') .#J#]S@\_  
M\0?R<'Y<' ,.%\V#^C[G'\$^?!T#B?]G\$^C!\_D'2. ,]XST(/)@ZAQ\_JG'^M!U  
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M!IA!?A4PPSPZ8@^Q([M0=Q28L7XQ/<&>+3&BVW)CA;<4QXMN:>Z+;JF0&.13  
MWA?D\$R29,9^^,<F,\HS/\*LSRS,\_@9GEV9\_"S/, )\2?&F9'. ,3Y\$S29M,X+\Z  
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MU1#UDZXE["=D0]I)! .V)^XG=\$\_"30"?B)WQ/QD\'GY">\$5R\*>(4^~) )8Q.6L



MF3F' ] \U8 (5JI" M585JNA6J^%: LGA6K\*%E\*^0LJA9K\*QG (++%EJRY8T: ] P\_&7  
 MK, %F\*=U?) 69) WEF: S1. ^LU6; ) X%FXO\ \*^4DBLX6<K. EDRP+. U\M46>+ /559\  
 ML\_5RT! : "KUH2^8LG6AKYHOHB^<, Z\*M&/J. .Z0 (8U:2\*:4M+\$\Q7SQ/, E] `3S  
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 M; 6N". NK' ". O+7Q' 8` [85L01IRQZV, .U%; (ME" ] F7U0OZRV<+VA; 2% [4MK" ] L  
 M7UPO; 5MP; ] A; >' [ @MQ6Y! NM+<PW7%N@; CENH?NRW<. WA; RMZ#=[ #-Z#=\8W?  
 M6-^RQN\_, ; O [ &\_ : 8W [ : X! <"N" 9#@Q#A%PHCPRX<1X@0XE<4% [JN+\$>, 7W%QH=  
 MOBXY<>%\_=7 (! ? (K [P7R2Y, +^N4"^57+! ?X%RX; ^%<P??\$ (\_C"N%7, AGY`SF  
 MES: YP. YE<Z%\VN>7/AO0!G/AO0L; T3&] &QO2, ; ^5C?S, ; TJ\_. NF73B' 4+J0 [   
 MJ@OJUUBZT"Z%=<OT%\_7KL" \_L5V1?^E?J+\_UK] A?^U?N+^S7 [P' ^" \_B??D"] H  
 M! \_S7: @7: +MEVX) \_0# [ <\$ [AA. Y83NF\$\_JPG=L) WC"=ZN^7?KP `?^P%X\*\ ) >&7  
 M] PO\$7BEGC+QRSR%Y) 9Y2\_N6?X7^2SRUYA9YJ\_T7><O/ ` /07^UZ) ?\_Q>DO3 `?  
 M^@' J ` /JL#ZS `^NP/L, # [ + `^TP. 07MKW% [K"> \ ">^6>FO@7P@7JK (KXB\_XUDE  
 MZ [HQTF7L. @<B] ERN<O: <] TG60=\*' 2E>V [R' 2H^E: ] QTL=+5\+I<LB?WXG1L-  
 MUTOANNF\$-UTQANN\F&ZZ90W73-TT=-738!S=WE. ESHUTX=. 2G.G3LI^6Z>%.  
 M>NGQ3G [J `4Z"ZA%/S' 4, K^: ZB%OSG45U&=1R [2"W1R [26NTIKM+: [Y [7?0: [   
 M3&NTUWHN) ) U. 8' 3P' 4' 5\$OTEU2=Z99J; JH6: JZK%FKNK! 9K+O4+-: =6RS7' 5  
 MTNQSJ\ ?5 \ "V! UA+MB+=A+L>UVQM=LC7; \*UVS--=] 5KOK. L [K0ZT@. U. M99CW6  
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 M6?==D"SD7> \6<D [ ) EWWW90 `Y5V6=#LN7?A+>7+N8: [ \37?C: [F6N\_ (UW--=  
 MS; LX [ .NSS ` \ ` ` ` ` [OE\_, .T3M&6= ( [Y2S\SM\*6?G=IBSIW: @LZEVJ+. K=K" [K  
 M7: X^@^ "Z] VP+NQ+>P+NR: [ ] +7?J: [ ] ; 7?L: [ ] I=^YVS ` /WN\_ `! \_B [ \BSLG; 1  
 MWYE/ : NVQ3V [OT\* >X=N2GNG?J4] V [ > .WKM \6=^ [ @%W] G<\$O\ ) W#+O\$+?# +O%:  
 M [QFN\=KO ( : [R6N\HO\_N [ ^ ` ' P' ?R [E@' ENYCN: [ ^B\_Q7<YW/+ /0=\_99Z+O\+/  
 M2=TRS\_KNH6>J [K. Z [NP7^R [M%&0) \_; \* /<: CW6H] YJ/? : CX&H^%TB?> (L^, F]  
 MITD^, +/<?) GP. [KT>KN\] SWN [ [Y. ^4. \#Y2\_R' >% \J? \*WRQ\M=XGRY\ : ^, ?+  
 MR?&O@?, ( : +YC#1?Y, -% \RAHOF; 49H^: E6; /F [ \_\*?. "G, ' SE\Z) L [ ?Y9-GCYZ  
 M39\ ^?DV@/H) -H3\_, \*-#?YI] 1"OYSZ\*5Z, 5: \*5Z. U>D-7I+5Z4U>EM7\ ] \_H/I  
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 MUWVTFVY\_L%&WON! 5N+ [D^YONA7NI5NQ7N [5 [PU> \M7O35 [V5 [X^EOV7WYKM  
 M\_+OM%. Z/ ] M^ `+ ] W?@7X (LX-^\$+. %?ABSAWX@LXE^\*?BWXPO^X\_&@/' /QX%] U  
 M^0\*^1\*N0\*\_O-7R35 \FU?WVKY0LY5^6+N-? \# \N6 \N\_X7YA\_Q%GXWYDKY) \_R/  
 MS13S; \X4 \Z\_ /% / /OT#] " \_1%G1OTA+TC\_E) OS/ TI1 ^<GZ8HZ=J. H: CJ6HZI^K  
 M/M86=: 0=\* \_7/ ^@\_77/U [ ] @\_8OV3] ?5K! ' 1Y\_H\$5DI\*2C (^L5F. A\_, \_ [ &62/J  
 ME?\_ [ ^=CL-6I/\_?SJT=8 [ ) &1DKEJPT8O1>B] %Z+T7HO1>B] %Z+T7O\_>C\_\_ : "L  
 M9%Z+T7HO1>B] %Z+T7HO1>B] \_] ZR1: "L7HO1>B] %Z+T7HO1>B] % [ \_\_UAC [ #23  
 / ^I1) -^LFC+ ) 8\*K7 (?Q ` `

end

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## 1.58 MSG-56 Subject: Re: SIGGRAPH in Orlando

Subject: Re: SIGGRAPH in Orlando  
 Date: Thu, 02 Jun 94 13:00:50 EDT  
 From: Mark Thompson <mark@westford.ccur.com>

> What's with a meeting at Siggraph in Orlando. I think I will come from  
 > Germany to the Siggraph.  
 > Let's have a date for this.

The Siggraph organizers have not started setting up the schedule for the Special Interest Groups yet. When they do, I will set up the meeting. I am shooting for Wednesday, 7/27/94, at 1pm (I think that is the same time I chose last year). I am looking for any interested party (preferably someone in the Orlando area) that could tote a vcr and monitor to the meeting. I will be bringing a Hi-8 deck, but we could really use a VHS unit. Any volunteers?

```
%~~~~~%
%      '      '      Mark Thompson      CONCURRENT COMPUTER %
%  ---* RADIANT *---  mark@westford.ccur.com      Principal Graphics %
%      ' Image '      ...!uunet!masscomp!mark      Hardware Architect %
%      Productions      (508)392-2480 (603)424-1829      & General Nuisance %
%~~~~~%
```

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## 1.59 MSG-57 Subject: light through trees

Subject: light through trees  
 Date: Thu, 2 Jun 1994 13:33:30 -0400  
 From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

Hey, everybody.

Someone recently mentioned a JPG out on AmiNet with light streaming through the trees. I also recall a Toaster-created animation on something like Unsolved Mysteries, where the UFO lifted off from behind some trees and wonderful beams of light streamed out from the holes in the foilage, changing as the ship moved. I want to re-create this effect.

The closest thing I can think to do is render a scene without the beams, then use that to create an inverse picture, import the IFF to Imagine, and extrude it, scaling the end-point. I'm not certain, though, if this would allow for movement.

I'm hoping somebody out here has tried this before and knows how it's done. Any tips would be appreciated.

Jude Anthony

-----  
 ASCII a silly question, get a silly ANSI.  
 -----

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## 1.60 MSG-58 Subject: And now, a word of appreciation...

Subject: And now, a word of appreciation...  
 Date: Thu, 02 Jun 94 09:21:00 PDT

From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

I just wanted to take this opportunity to thank Dave Wickard for being the moderator of this mailing list and his continued sponsorship. I remember reading something awhile back about where the list was residing, the request and granting of permission to devote server space for the list, and other interesting tidbits of information regarding this list.

I want to thank Dave personally for being patient with all my accidental bounce backs. Dave, you are doing a great job and maybe it might be automatic to you, but this list seems to run much better than other ones.

It has much fewer relay bounces than other lists and bounce nodes are quickly taken care, not like some lists, where bounces start bouncing off each other in some kind of chain reaction.

So, Dave, thanks and keep up the good work!

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## 1.61 MSG-59 Subject: Re: Lights and objects

Subject: Re: Lights and objects  
Date: Thu, 2 Jun 1994 10:51:31 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

Hey y'all,

There was a great tutorial in one of the FAQ's on this subject of making a light that is visible as a cone object in the editors and can be pointed and aimed, but which is invisible when rendered.

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## 1.62 MSG-60 Subject: Altitude States Maps

Subject: Altitude States Maps  
Date: Thu, 2 Jun 94 20:44:13 GMT  
From: Andrew Nunn <apn@moby.demon.co.uk>

A few weeks back, I posted an article about using Altitude maps with states. To summarize, the alt map is applied to a flat state of the object and subsequently wraps around the full width version. I managed to use this method successfully a couple of times, but have now encountered an anomaly. I have managed to create an object which appears to only alt wrap in the -X part of the object. I can't decide if it is due to something I've done wrong, a bug or whether I'm just 'pushing the envelope'. If anyone wants to take a look and give their tuppence worth (two cents), then I could mail a uuencoded object and map to them.

Thanks in advance

Andrew

---

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### 1.63 MSG-61 Subject: RE: Imagine 4 Everybody...YEAH???..FOR WHAT??

Subject: RE: Imagine 4 Everybody...YEAH???..FOR WHAT??  
Date: Thu, 02 Jun 1994 17:36:32 -0400 (EDT)  
From: "Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU>

On Thu, 2 Jun 1994, Thomas Setzer wrote:

> They just released texture info(YEA!!!!!!), they included lens

Hi Tom... If you've got the texture info, can you please post it to the IML or put it on one of the AmiNet sites?

I really want to see the texture info!

--> RETURN TO CONTENTS!<==

### 1.64 MSG-62 Subject: Imagine books for beginner.

Subject: Imagine books for beginner.  
Date: Fri, 3 Jun 94 11:25:50 EST  
From: ganga@abc.gov.au (Ganga Varatharajan)

Which books or video on ImaginePC 3 would you recommend for a beginner ?  
I'd like the book to be a good source of tips and hints for a year or so.

Thanks,  
Ganga.

--> RETURN TO CONTENTS!<==

### 1.65 MSG-63 Subject: Re: Soft Shadows RE: Is it Possible?

Subject: Re: Soft Shadows RE: Is it Possible?  
Date: Thu, 2 Jun 1994 18:31:58 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

Thanks Jeff for the intensive tutorial, I'll have to give it a try soon, to bad soft shadows wasn't easier, but once the light group is made it should be nice to have for special projects.. Thanks again!

Check out the Spotlight with beam tutorial I wrote, maybe it will come in to use for you...be a nice trade of tutorials...hehehe.. its a nice

---

spotlight too...it should be on the IML now..

=RRW=

--> RETURN TO CONTENTS!<=

## 1.66 MSG-64 Subject: Re: 3d rocks

Subject: Re: 3d rocks  
Date: Thu, 2 Jun 1994 19:11:29 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Yaba daba doo fellows,  
> after clouds, sea-shell and undersea shadows (hey nobody reply  
> this message), my next question is about how realize 3d rocks, cliff &  
> reef: 3d modeling (forms, detail or vista?) and texture/brush mapping.  
> Remember also that PC users cannot use essence nor other Amiga  
> facilities, please.

well, I like to model my mountains and find the linear and pastela textures in combinations work really well. Use a linear for snow, near the top and and one at the bottom for grass and different pastela settings for them both as well as one inbetween, you will have to play with them to get what you want..for cliffs crumpled and dirt might work nice together..can't give you any specifics as this is all up to what you want.

=RRW=

--> RETURN TO CONTENTS!<=

## 1.67 MSG-65 Subject: Preset Selection

Subject: Preset Selection  
Date: Thu, 2 Jun 1994 23:26:37 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

Hope you don't mind me putting this here Jason but I thought others might get some use out of it..

Jason K. wrote

> Well, actually I do have it as a preset but it is done on the list.  
> Impulse's method of choosing a preset SUX. MORE, MORE, MORE, damn

---

> missed it, wish I could go back..... Anyway, it is a preset but it  
> is quicker to type in the numbers.

Ya, this is true, but need not be, all you have to do is load the configs into a text editor and rearrange them so that the ones you use the most come up first, basically customise them in the order you would like them. Then you can have your favorite one at the very first position and when you click the preset button it will be the very first one on the first requester and your other favorites will be right below it. I actually think this is easier than typing them in myself.

> But the anim turns out to be  
> 384 width instead of 368. I think the single pics are 368 but get  
> changed to 384 when an anim is built.  
>  
> Jason K.

Hmmm? well I don't know how to solve this one for you. I could try it myself but am sure if you have the presets right and it is still doing it then its something in the programing for the animations. sorry?

Does anyone else maybe know why Imagine is changing the screen sizes when Jason has it build an animation?

I'm sure Jason would like to know why.

=RRW=

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## 1.68 MSG-66 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re: What about ~anim5~ and Imagine?  
Date: Fri, 3 Jun 1994 02:53:24 -0400 (EDT)  
From: Wes Parham <parham@phoenix.cs.uga.edu>

> > The first frame was O.K. but others.....were damaged (colours palette  
> > was not correctly set by Imagine).  
> > Krzysztof Korski  
>  
> anim and then use "Specify File" from the Pallete method requester and select  
  
> the frame with all the colors needed as I mentioned above. This has  
> =RRW=  
>

I also recall building one in REND24 and copying that representative frame into a file with 'xxx.000' tacked onto it. Makes it the first and REND's Lock Palette function will lock to that one. Nifty!  
wes~

---

--> RETURN TO CONTENTS!<==

## 1.69 MSG-67 Subject: Re: Melt

Subject: Re: Melt  
Date: Fri, 3 Jun 1994 02:05:07 -0600 (MDT)  
From: kholland@polaris.unm.edu (Kiernan Holland)

as Glenn M. Lewis - ICD ~ said,  
<  
<Hi, all.  
<  
< A few months back I talked about a program I wrote in C++  
<called "Melt", and showed some examples of chess pieces melting, etc.  
<I couldn't give out source because I was writing an article on it.  
<  
< Well, the article has been published in the July 1994 "Annual  
<Graphics Issue" of Dr. Dobbs Journal, and is the lead article. It's  
<called "Morphing 3D Objects using C++". I believe that I'm still not  
<supposed to e-mail out source, but Dr.Dobbs has made the source code  
<available on their FTP site. I'm afraid I don't have their site  
<address now, but wanted to let everyone know anyway because I'm about  
<to go on yet another business trip.  
<

No problem...  
The FTP site is  
ftp.mv.com  
in /pub/ddj

It is mentioned contents page of all thier journals I think...  
I suspect your article will be in the July edition because I  
have the graphics edition from last year which was published in July..  
That was the "morphing" issue.. Is this code directed at the PC users,  
Amiga users, or just general coding...

I guess I can go fishing for it..  
Thanks for the lead Glenn..

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## 1.70 MSG-68 Subject: Lens Flares

Subject: Lens Flares  
Date: Fri, 03 Jun 1994 10:42:30 +0100  
From: Martin Ian Wood <mnw3@aber.ac.uk>

I downloaded flare.lha from Aminet but the 'radial' texture which was essential  
for the effect to work wasn't present! Could anyone tell me where to find it!

---

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## 1.71 MSG-69 Subject: Imagine Literature

Subject: Imagine Literature  
Date: Fri, 03 Jun 1994 10:40:41 +0100  
From: Martin Ian Wood <mnw3@aber.ac.uk>

Dear All coverdisk Imagine 2.0 users!,  
I wrote to Impulse asking for the user manual ages ago, and ↵  
heard no r  
eplly! Please could anyone tell me how to get hold of :- 1) The manual or 2) Any  
other suitable guide to Imagine!

>From Martin (mnw3@aber.ac.uk) at Aberystwyth Uni.

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## 1.72 MSG-70 Subject: Re: And now, a word of appreciation...

Subject: Re: And now, a word of appreciation...  
Date: Fri, 3 Jun 94 8:25:56 CDT  
From: drrogers@camelot.b24a.ingr.com (Dale R Rogers)

| I just wanted to take this opportunity to thank Dave Wickard for being the  
| moderator of this mailing list and his continued sponsorship. I remember  
| reading something awhile back about where the list was residing, the  
| request and granting of permission to devote server space for the list, and  
| other interesting tidbits of information regarding this list.

personal gratitude stuff deleted...

| So, Dave, thanks and keep up the good work!

yeh... everyone together... THANKS DAVE!!! ;-)

< hats fly in the air, party poppers are popping, bottles of  
champagne are opened, thousands of new parents name their new  
borns Dave >

Seriously, thanks for the time and effort. I learn a lot from  
this list. < Thank God I don't have to pay by the message >

Dale

\_\_\_\_\_  
dale r. rogers

Intergraph Corporation

---



Building Design & Management  
 drrogers@camelot.b24a.ingr.com

MailStop: LR24A3  
 Tel: (205) 730-8294

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## 1.73 MSG-71 Subject: Re: SIGGRAPH in Orlando

Subject: Re: SIGGRAPH in Orlando  
 Date: Fri, 3 Jun 1994 08:18:11 -0400  
 From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

----- Received message begins Here -----

```
> From root Thu Jun  2 18:19:59 1994
> To: imagine@email.sp.paramax.com
> Subject: Re: SIGGRAPH in Orlando
> In-Reply-To: Your message of Wed, 01 Jun 94 13:50:18 +0100.
>             <9406011150.AA21145@pcserver.trier.fh-rpl.de>
> Date: Thu, 02 Jun 94 13:00:50 EDT
> From: Mark Thompson <mark@westford.ccur.com>
>
> > What's with a meeting at Siggraph in Orlando. I think I will come from
> > Germany to the Siggraph.
> > Let's have a date for this.
>
> The Siggraph organizers have not started setting up the schedule for
> the Special Interest Groups yet. When they do, I will set up the meeting.
> I am shooting for Wednesday, 7/27/94, at 1pm (I think that is the same
> time I chose last year). I am looking for any interested party (preferably
> someone in the Orlando area) that could tote a vcr and monitor to the
> meeting. I will be bringing a Hi-8 deck, but we could really use a VHS
> unit. Any volunteers?
> %~~~~~%
> %      '      '      Mark Thompson      CONCURRENT COMPUTER      %
> % ---* RADIANT *--- mark@westford.ccur.com      Principal Graphics      %
> %      ' Image '      ...!uunet!masscomp!mark      Hardware Architect      %
> %      Productions      (508)392-2480 (603)424-1829      & General Nuisance      %
> %
> ~~~~~
>
```

Hi. I'm stationed right here in Orlando, so I might be able to help you out. Give me some more information on the Siggraph meeting, like where it is and how much it'll cost me.

Jude Anthony

-----  
 ASCII a silly question, get a silly ANSI.  
 -----

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## 1.74 MSG-72 Subject: STARS

Subject: STARS  
Date: Fri, 03 Jun 94 05:47:33 -0300  
From: greg.tsadilas@hofbbs.com

Come on guys! Why all the gyrations to get a good looking starfield!?

Summary of a post I made long ago...

Take the CSG sphere. Color it BLACK. Make it BRIGHT. Add the CONFETTI texture (Im3.0), set the V1 and V2 numbers to .54 and .55 so as not to have a ton of stars. Set the two colors to 200,200,200 and 240,240,240 (or whatever turns you on. Scale the Im3.0 CONFETTI texture to get the "stars" the size you want them, render to see how they look and adjust if need be. Place scene INSIDE the sphere. Voila....instant gorgeous stars. You can even add the NEBULA to a sphere fog object in the distance somewhere. :)

-GreG

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## 1.75 MSG-73 Subject: Re: States function

Subject: Re: States function  
Date: Fri, 3 Jun 94 9:01:06 CDT  
From: drrogers@camelot.b24a.ingr.com (Dale R Rogers)

|> Hi Paul. The States function currently doesn't support texture  
|> morphing... Impulse knows about this limitation, and said that they will  
|> fix it.

This will be fixed in next of the quarterly upgrades? Hmmm?

Dale

\_\_\_\_\_  
dale r. rogers

Intergraph Corporation  
Building Design & Management  
drrogers@camelot.b24a.ingr.com

MailStop: LR24A3  
Tel: (205) 730-8294

.

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**1.76 MSG-74 Subject: Re: Melt**

Subject: Re: Melt  
 Date: Fri, 3 Jun 94 14:18:29 GMT  
 From: "Glenn M. Lewis - ICD ~" <glewis@pcocd2.intel.com>

Kiernan> No problem... The FTP site is ftp.mv.com in /pub/ddj

Cool. Thanks for the reference.

Kiernan> Is this code directed at the PC users, Amiga users, or just  
 Kiernan> general coding...

It is specifically for manipulating Imagine objects, and I  
 have compiled the code on a UNIX workstation, the Amiga, and a PC with  
 just slight modifications.

Kiernan> I guess I can go fishing for it.. Thanks for the lead  
 Kiernan> Glenn..

No problem. I hope you all like it.  
 -- Glenn

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**1.77 MSG-75 Subject: MELT programm WHERE??**

Subject: MELT programm WHERE??  
 Date: Fri, 3 Jun 1994 19:10:47 +0300 (EET DST)  
 From: Foivos Kourendas <foivos@theseas.ntua.gr>

To ? (Sorry I have deleted the mail "melt" .I don't know your name..SORRY)

I have read recently a mail about the Melt.lha programm in an ftp site.  
 To be specific ftp.mv.com at pub/ddj . I have tried to find it there BUT in the  
 specific drawer I haven't . PLEASE be more specific . Where is it ??

By the way does it contain ONLY the source code ? .I am intrested in  
 an executable program .PLEASE HELP.

Yours sincerely

/ ' \_  
 , - / - , o \ \_ \_ (   
 ( \_ / < \_ \_ \ / ( \_ ) )

Email:foivos@phgasos.ntua.gr

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## 1.78 MSG-76 Subject: Re: MELT programm WHERE??

Subject: Re: MELT programm WHERE??  
Date: Fri, 3 Jun 94 17:45:50 GMT  
From: "Glenn M. Lewis - ICD ~" <glewis@pcocd2.intel.com>

Foivos> To ? (Sorry I have deleted the mail "melt" .I don't know your  
Foivos> name..SORRY)

That was Kiernan Holland, by the way.

Foivos> I have read recently a mail about the Melt.lha  
Foivos> programm in an ftp site. To be specific ftp.mv.com at pub/ddj  
Foivos> . I have tried to find it there BUT in the specific drawer I  
Foivos> haven't . PLEASE be more specific . Where is it ??

I personally have not yet looked there, and 2 others have told me that the code is not yet there. Maybe if Dr.Dobbs gets some calls they will put the code on their ftp site.

Foivos> By the way does it contain ONLY the source code ? .I am  
Foivos> intrested in an executable program .PLEASE HELP.

Yes, what you will find on the Dr.Dobbs site is SOURCE ONLY.  
I have personally compiled it on a UNIX workstation, an A3000, and a 486PC, and all work fine with only slight modifications in order to passify the quirks of the respective C++ compiler.

However, I am currently 800 miles away from home, and do not have access to the executables... sorry. Sometime within the next month (yes, sorry... Month) I will hopefully be home and have a chance to create and distribute executables.

-- Glenn

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## 1.79 MSG-77 Subject: Re: FMath Libs . . .

Subject: Re: FMath Libs . . .  
Date: Fri, 3 Jun 94 12:38:10  
From: MJBrown@cryo.cryogenic.com (Michel J. Brown)

In <Pine.3.89.9406010837.A26660-01000000@ucunix.san.uc.edu>,  
"Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU> writes:

> On Tue, 31 May 1994, Jason B Koszarsky wrote:  
>  
> > Maybe we should file the FMath libraries away with the SoftAGA prg.  
> > Both have accomplished the same thing.  
> >  
> Actually, these math libraries \_DO\_ speed up operations that use them...  
>  
> Imagine, VistaPro, and some others do \_not\_ use these libraries, which is  
> why there is no noticable speed-up when using them.

>  
> The libs are 100% compatible, with no loss in accuracy or anything, so  
> why not drop them in and let the programs that use them - use them?  
>  
Seems like a logical choice -- nawww, wouldn't work, \*too\* reasonable! In fact, I got around a 20% increase in speed with Scenery Animator 2.06, using 368X482 - 32 colors - detail on, 12min 4sec vs. 15min 22sec.  
Virtually yours,  
Michel

This space intentionally left blank -- make of it what you will...

Generic sig -- enter your own sig in the space provided

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## 1.80 MSG-78 Subject: Re: Melt

Subject: Re: Melt  
Date: Fri, 03 Jun 1994 15:46:36 -0400 (EDT)  
From: "Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU>

On Fri, 3 Jun 1994, Glenn M. Lewis - ICD ~ wrote:

> Kiernan> No problem... The FTP site is ftp.mv.com in /pub/ddj  
> Cool. Thanks for the reference.  
>  
> No problem. I hope you all like it.  
> -- Glenn  
WAAH! It's not up there yet! Ah well, guess it will be soon enough...

Thanks for letting us know where to find your useful program, Glenn! I look forward to melting all sorts of things. (evil grin)

BTW, wanted to let you & Steve know that I demoed Forge and Imagine 3.0 at my user group meeting this past Tuesday, and they LOVED them both! Forge got a lot of attention from the LightWave folks in the group...

=====

Drew Vogel: Admissions Officer at University of Cincinnati Undergraduate Admissions (call 800-827-8728), SysOp of The Cafe' BBS (513-232-4895) FidoNet 1:108/245, Actor, director, Amiga fan, Imagine 3.0 user, vice-president of Ohio Valley Amiga Users' Group, documentation author, single guy, and much, much more!

"The only way OUT is THROUGH."

---

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## 1.81 MSG-79 Subject: Boney Flags

Subject: Boney Flags  
Date: Fri, 3 Jun 94 13:54:40 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

Well, Teds anim inspired me to continue my experimentation with bones and flags. I followed Scotts suggestions and got the results I was looking for. I will upload the animation to aminet at lunch today(I started turning it into an anim before I left for work today.) It will be called USFlag.lha and will eventually make it to /pub/aminet/gfx/anim

This was just a quick and dirty test I did in about 2 hours (including painting the flag). I need to add a couple more layers of bones. This one only used 6. I did more with the flag then Ted did with the Jolly Roger. I was trying to get the look of a flag blowing in a weak wind instead of a stiff wind. Some things to notice: The stripes get stretched, but it is hard to notice since they are stretching in the direction of the stripes. The more noticable stretching takes place along the edge of the star field. With some work I think I can get a flag to behave nicely.

Some other neat effects I noticed while experimenting was what happens when you move the bones(instead of rotating). I got a kind of crumpling effect. Try twisting(rotate) the bones around all the different axes. I haven't tried scaling yet...hmmmm....

These things are VERY powerful. I think we could come up with some very interesting uses for these other than the obvious character anims. Any suggestions? You Lightwave people(who've had bones for a while now) come up with any good uses yet?

BTW, I will include the flag object in the USFlag.lha if you want to look at the setup of the subgroups and bones. You will have to supply your own image, however.

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

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## 1.82 MSG-80 Subject: RE: 3d sea-shell

Subject: RE: 3d sea-shell  
Date: Fri, 03 Jun 94 12:35:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

---

There is a program called Shelly that will do this, generate several types of seashells: ammonites, nautilus, etc. It is available on aminet under gfx/3dobj, I believe or gfx/misc, can't remember exactly which subdirectory it is under. I have used it to generate all the default shells and it also allows for customized shells but I have not investigated how to do this. There was also some obscure step to get it into Imagine format, also, since it produces seashell objects directly for POV, Real 3D, and .DXF if I remember correctly. It doesn't directly produce Imagine format but it was some small step to get an Imagine object out.

-----

From: imagine-relay  
To: imagine  
Subject: 3d sea-shell  
Date: Monday, May 30, 1994 8:02AM

```
/\      Hello evrywhere,  
||              can anybody explain me how make 3d sea-shell in Imagine?  
\/  
  
/\                                              T-H-A-N-X  
||                                              ae(-_^)ue  
\/              _ _ _ _ _ Wizard (NOT TESI2) signing off
```

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## 1.83 MSG-81 Subject: Mike H. in Amiga World

Subject: Mike H. in Amiga World  
Date: Fri, 03 Jun 94 12:46:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

Hey, our good buddy Mike Halvorsen got himself quoted in the July issue of Amiga World. In the Overscan section, in the article titled "Vendors Pledge Support for Amiga ... With or Without Commore", in the last paragraph:

A more down-to-earth -- but perhaps even more refreshing -- comment came from Mike Halvorsen of Impulse, the developer of Imagine. When asked about the significance of Commodore's departure, the ever-forthright Halvorsen said, "Who gives a #\*!#\*? They've been dead for 10 years!" Exaggeration aside, that might just be the point: The Amiga community -- Amiga users, developers, vendors, publications -- is, and always has been, us!

Also, in the same issue, in the Digital Canvas section, are two images from people using Imagine including one that is a single frame from a 40-minute music video animation. So, it appears a few people are using Imagine professionally.

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## 1.84 MSG-82 Subject: Re: MELT programm WHERE??

Subject: Re: MELT programm WHERE??

Date: Fri, 3 Jun 94 15:52:38 CDT

From: setzer@comm.mot.com (Thomas Setzer)

>  
> To ? (Sorry I have deleted the mail "melt" .I don't know your name..SORRY)  
>  
> I have read recently a mail about the Melt.lha programm in an ftp site.  
> To be specific ftp.mv.com at pub/ddj . I have tried to find it there BUT in the  
> specific drawer I haven't . PLEASE be more specific . Where is it ??  
> By the way does it contain ONLY the source code ? .I am intrested in  
> an executable program .PLEASE HELP.  
>

It hasn't been put up there yet. When it is, I suspect it will be in the 1994.07 directory since this is in the July issue of Dr. Dobbs(07 is the month of July).

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

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## 1.85 MSG-83 Subject: Unhook & Bones fish problem and a fix.

Subject: Unhook & Bones fish problem and a fix.

Date: Sun, 5 Jun 1994 02:41:42 -0700 (PDT)

From: Jeremy White <jwhite@efn.org>

Does anyone know what the unhook function does? I thought that it might affect the groups (after selected, the group structure changes -- or does it?) After you do a refresh the bone structure is restored. It never visually changes..... Any clue what this does?

I am working on my fish using bones still and have come up yet another brick wall. The fish is composed as such ----

- 1.) Main axis - everything is grouped to this. Especially the non-moving (not boned) parts of the fish. (like fins)
- 2.) Body axis - This axis contains the body-mesh of the fish (not including head or tail.) This axis has the main axis as a parent and bone axes (first one only) as children.
- 3.) Bone axes - This is a chain of axes (5 of them) grouped properly for bones. The first axis has the body axis as a parent.

Ok... My problem. When I have the main axis selected and choose update

---



bones, ( and have moved the bones axes) nothing happens. (ok, no problem, that object has no bones) so I select the body axis only. Ok, it works now. (as I had expected.)

So, I bend the fish and create a state (right tail flip.) I check the grouping box only (not the shape box, as the instructions suggest to avoid adding extra info to the object) I then animate it using bones anim. The backbone animates fine, but the body is not updated (it stays unbent.)

Is this because it is a second level group in the object???? Do I have to click the shape box?? If I click the shape box will the object morphs linearly!!!! (see below.) DOES THIS MEAN THAT WE ARE LIMITED TO HAVING BONE OBJECTS WITH THE BENDABLE FACES ONLY AS THE ROOT OF OUR OBJECT????

:-(

---

Fix to problem.... Watch for this one....

---

When you morph from between the DEFAULT state to another state (using bones) The object will not behave properly. It might look ok, but it will morph linearly ( the points will travel in a straight line rather than bending. You should create another state (called normal perhaps?) to morph between.

This is because the shape box is checked in the state requestor.(see above)

This is documented in the manual, but only briefly in very small print.

---

Thanks to all the people who have helped me in this first bones effort. I will donate this object to aminet when done, as it IS a good example of bones.

-Jeremy White

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## 1.86 MSG-84 Subject: Q for Lightwave

Subject: Q for Lightwave

Date: Fri, 3 Jun 1994 23:02:54 -0500 (CDT)

From: Cyrus J Kalbrener <kalb0003@gold.tc.umn.edu>

I know this is a bit out of place, but I have two questions:

1) Is the Lightwave mailing list still down, or has it been re-established somewhere else. If so please e-mail me the details.

---

2) I heard that Foundation Imaging has a site where they put some of their objects from Babylon 5. If anybody knows where this site may be, please e-mail me.

Thanks.

Cyrus J. Kalbrener

Sillicon\_Cel Digital Motion

"...To Render: By Any Means Necessary!!..."

Finger me for PGP pub key:

29BA61 1994/03/07 94 55 FC 98 23 E7 1B 6E 3E B7 BA 28 E8 FB 14 F5

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## 1.87 MSG-85 Subject: Brushmap tacking

Subject: Brushmap tacking

Date: Thu, 2 Jun 1994 23:58:05 -0700 (PDT)

From: Jeremy White <jwhite@efn.org>

How does the brushmap tacking feature work???? I just created a fish using bones and applied a brushmap. When the fishes tail bends it leaves the brush and turns the base color. Any idea how I could fix this?

-Jeremy White

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## 1.88 MSG-86 Subject: Constrain

Subject: Constrain

Date: Fri, 3 Jun 1994 19:16:40 -0700 (PDT)

From: Jeremy White <jwhite@efn.org>

How exactly does constrain and hook work?? Could it be the solution to my problem? (below)

I have a chain of axes for bones like this.

```

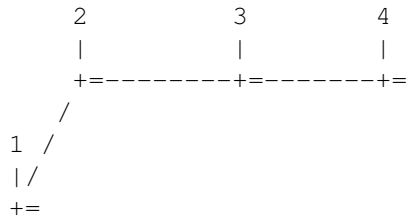
1           2           3           4
|           |           |           |
+=-----+=-----+=-----+=

```

Where axis 1 is the parent of 2, 2 of 3, and 3 of 4.

(i.e. select axis 1 in the group mode and they all get selected.)  
(select 2 - 3 and 4 also get selected.)

OK ----- If you are still with me this is what I want to do....



I want to move the first axis without moving the others at all.

Ok. No problem, I just select axis 1 in object pick mode and move it.

Here is the catch --- I want to keep the distance between axis 1 and 2 exactly the same as in the first picture. If it was grouped the other way (2 parent, 1 child), I could just rotate axis 2, but this way I cant.

Will the new feature of hook and constrain help me in any way????????

-Jeremy White

P.S. If anyone wants the fish when I am done I will upload it to aminet with texture maps. The fish is articulated with bones and moves very realistically. (Thanx Impulse!!!!!!)

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## 1.89 MSG-87 Subject: Completely transparent how ??

Subject: Completely transparent how ??  
Date: Sat, 4 Jun 1994 20:53:14 +0200  
From: Hannes Heckner <hecknerh@informatik.tu-muenchen.de>

Hi,

I want to emulate shadows with mapping the silhouette of an object onto a plane. By now I didn't succeed in making the rest of the plane completely transparent. Any tips?

Thanks  
Hannes

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## 1.90 MSG-88 Subject: Venitian Blind Lighting Texture....WHY?

Subject: Venitian Blind Lighting Texture....WHY?

Date: Mon, 06 Jun 94 00:25 EDT

From: "Ryan Johnson"

<SSARPJ@MVS.SAS.COM>

Primitive Plane Object with a clouds brush map, I've made it a light, it's also bright, It's rectangular, pointed and is 455,455,455 intense, I've placed this object outside a window in a room and tracked it to the desk.

RESULTS:

-----  
Scaline - shadowing slats appear evenly throughout the room, beautiful!  
Trace - What? where is it?....I can see the the object outside the window, but no gloriously stunning Venitian Blind Lighting Texture.

WHY???

Tanks in a trance.

Ryan.

wright%merlin.etsu.edu@ricevml.rice.edu \X// ETSU HPUX Systems Helper

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## 1.91 MSG-89 Subject: Bonus feature is bones anim.....

Subject: Bonus feature is bones anim.....

Date: Sun, 5 Jun 1994 22:40:34 -0700 (PDT)

From: Jeremy White <jwhite@efn.org>

Found something out when using the bonesanim feature.....

If you set up a bone animation in the detail editor, then press "cancel" during the generation of the animation, the bones are left at the point you pressed cancel. This can be usefull if you are trying to generate "tween" states between two already defined states.....

Is this a bug or a "feature"???

Has anyone figured out how to use bones on a second level object?? (in the group hierarchy.)

-Jeremy White

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---

**1.92 MSG-90 Subject: Re: Imag3.0 IS in Oz.**

Subject: Re: Imag3.0 IS in Oz.  
 Date: Mon, 6 Jun 94 19:11:37 +1000  
 From: JOHN ROWE <jrowe@ozemail.com.au>

>For those in OZ,  
 >  
 >I got my copy of Imagine 3.0 yesterday. I ordered directly from Impulse  
 >about a month ago.  
 >  
 >MiKE  
 > cheng@sun.mech.uq.oz.au The Uni of Queensland. Brisbane. Australia

Anyone else have such luck???

I'm still waiting :-(

I ordered directly from Impulse around August last year. :-(

Altogether now

I want my, I want my, I want my Imagine Threeeeeeeeeee...

John Rowe Animation	-> Christian <-
Toowoomba Qld.	Reg.CBM Developer, 3D Animator, Programmer
AUSTRALIA	Aussie Amiga Keyboard Overlays
EMail:jrowe@ozemail.com.au	

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**1.93 MSG-91 Subject: Re: Constrain**

Subject: Re: Constrain  
 Date: Sat, 4 Jun 94 13:19:06 EDT  
 From: jgoldman@acs.bu.edu (Jeffrey Goldman)

>  
 > OK ----- If you are still with me this is what I want to do....  
 >  
 >                   2           3           4  
 >                   |           |           |  
 >                   +=====+=====+=====

```

>      /
>     1 /
>    | /
>    +=
>
> I want to move the first axis without moving the others at all.
>
> Ok. No problem, I just select axis 1 in object pick mode and move it.
>
> Here is the catch --- I want to keep the distance between axis 1 and 2
> exactly the same as in the first picture. If it was grouped the other

```

Okay, since Kinematics is hardly explained I'll offer my limited info...

Enter Pick Objects Mode.

Select axis 2 and use the Freeze menu option. Depending on what the entire object will ultimately do select all of the World and Local translations. This keeps the number 2 axis from moving physically in space.

I'm a bit iffy on the differences between World and Local freezes, so I'll give you my best guess.

By selecting the World freeze your locking the axis (from moving) in the world. That axis will stay where it is no matter what the rest of the object is doing.

By selecting Local translation you lock the local position of the axis. If the entire object is going to be swimming/moving through the world then you just want Local translation and no World translation locks selected. You'll have to experiment with the differences between World and Local Translations, however.

Again, depending on what you ultimately want to happen you want to freeze the rotations on the axis(2). Enter the axis' Freeze requester and lock out the Local Rotations.

With the previous Freezes set up select Constrain.

This is where it gets weird. Since you're using the parent axis of another axis you can't move it. You have to rotate it. Select axis 1, Rotate, and the axis you want to rotate on (X,Y,Z).

You'll notice that axis one stays the same distance away from the frozen axis 2. Also note that axis 3 and 4 stay in their respective positions as well.

Depending on what orientation you want for axis 1 manually reorient axis 1 with Rotate and CONSTRAIN OFF.

If you had been working on the CHILD axis of a group then you would have had to do things differently.

1. The PARENT axis would have had to be Translationally Locked but Rotationally freed.

2. The PARENT of the original PARENT axis would have had to have been Joint Locked and Translationally Locked.

3. Rotations of the CHILD axis would have had to be done with Rotate.

4. Movement of the CHILD axis (keeping the distance relation between PARENT and CHILD) would have had to be done with Move.

Suffice it to say, Kinematically moving CHILD axes is a hell of a lot easier and more predictable. If you don't know what I mean take the rotation locks off of your axis 2, and rotate (with Constrain) your axis 1.

Kinematics is tricky. Your best bet is just to toy with it. I am still unclear on the exact the use of Joint Locks. The difference between World and Local eludes me in the Freeze sense. When dealing with a PARENT axis and little Freeze control what the hell exactly will happen? I don't know. Maybe something totally random. Well, maybe not, but it looks random...

Hope some of the above works and/or helps...

Above all, have fun! It's Imagine!!

J.---->

E-Mail: jgoldman@acs.bu.edu

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## 1.94 MSG-92 Subject: Re: Completely transparent how ??

Subject: Re: Completely transparent how ??  
Date: Sat, 4 Jun 1994 15:13:17 -0500 (CDT)  
From: Michael Halleen <halleen@mcs.net>

On Sat, 4 Jun 1994, Hannes Heckner wrote:

> I want to emulate shadows with mapping the silhouette of an object  
> onto a plane. By now I didn't succeed in making the rest of the  
> plane completely transparent. Any tips?

I assume you've mapped a black and white image onto the plane and made it a transparency map, right? Try negating the image (reverse the black and white), and choose 'inverse video' on the map attributes box.

In other words, when using a transparency map, or alpha channel, the white portion of the image should be the part you want to show, while the black is that part that will not show. Imagine does this the other way, but doesn't make the transparent part fully transparent. It seems to work if you reverse everything. (They may have fixed it in 3.0, I discovered this in 2.0 and have just kept doing it that way because every other program

---

and standard I've seen uses white as the 'show through' and black as the 'transparency'.)

Hope this helps.

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## 1.95 MSG-93 Subject: Importing Amiga Graphics into WordPerfect 5.1 on a PC

Subject: Importing Amiga Graphics into WordPerfect 5.1 on a PC  
 Date: Sat, 04 Jun 1994 17:13:35 -0500 (EST)  
 From: "JOSEPH F. HART" <VISHART@ubvms.cc.buffalo.edu>

Greetings....

I am trying to import some IFF format files from Imagine into a WordPerfect 5.1 graphics box on a PC. WordPerfect steadfastly refuses to understand anything the Amiga sends it. I have tried converting the IFF files using ADPro to PCX, BMP, and GIF. WordPerfect refuses to accept everything but PCX, and prints only a black patch when it gets that. Any suggestions ?

---

		Internet: VISHART@ubvms.cc.buffalo.edu
Joe Hart		/// Plink: OSS542
Niagara Falls, NY		\\/// Ham call: WA2SND
		\XX/ AMIGA - Computers for REAL MEN

---

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## 1.96 MSG-94 Subject: Re[1]: Sticky Stars

Subject: Re[1]: Sticky Stars  
 Date: Sun, 5 Jun 94 09:08:42 +1000  
 From: JOHN ROWE <jrowe@ozemail.com.au>

On Mon, 30 May 1994, Ryan Johnson wrote:

```
>> Every thing works fine including the lens flare...BUT.....when I move
>> the camera the stars are stuck! (don't pan with the camera)
>>
>> Why???
>> Ryan.
>>
>You're going to have to create the stars manually as objects. Imagine
>doesn't pan global stars.
```

Oh yes it does, or has in the past.  
 If the camera is changing its alignment Imagine 2.0 moves the stars correctly.

---



If the camera is merely moving in space without changing its alignment it doesn't.

Best Regards from Down Under, John

John Rowe Animation	-> Christian <-
Toowoomba Qld.	Reg.CBM Developer, 3D Animator, Programmer
AUSTRALIA	Aussie Amiga Keyboard Overlays
EMail:jrowe@ozemail.com.au	

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## 1.97 MSG-95 Subject: Iris texture causing crash?

Subject: Iris texture causing crash?  
Date: Sat, 4 Jun 1994 19:14:09 -0500 (CDT)  
From: Michael Halleen <halleen@mcs.net>

Hello,

I've got three cone objects, each with the Iris texture (Imagine 3.0 Amiga) applied with slightly different settings. When I try rendering them overlapping, my Amiga crashes. This doesn't happen if only two are intersecting, but add the third and GURU.

I tried isolating them in a new project with no other objects, and it still crashed every time.

Has anyone else had something like this happen?

Michael Halleen	"When you're on target, you're catching flak"
Chicago, IL	-- Lt. Col. Bo Gritz
halleen@mcs.com	
finger me for PGP	resist Clipper... to learn more read comp.org.eff.talk

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### 1.98 MSG-96 Subject: A letter to Steve Worley

Subject: A letter to Steve Worley  
Date: Mon, 6 Jun 1994 11:22:23 GMT+2  
From: SZULD@ucinvl.uci.agh.edu.pl

How much does your "Understanding..." book costs?  
How to get it?  
I've never seen that book in our bookshops.  
I even tried to borrow it from our University Library but there  
wasn't it. None of my friends have it.  
Help me please....

Krzysztof Korski  
SZULD@ucinvl.uci.agh.edu.pl

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### 1.99 MSG-97 Subject: How can I run Imagine under OS/2??

Subject: How can I run Imagine under OS/2??  
Date: Mon, 6 Jun 1994 15:40:00 -0400  
From: roy.park@CANREM.COM (Roy Park)

Ok, here's a question: Is there ANYWAY that I can run Imagine PC 3.0 under OS/2??

I called up Impulse, but the guy tells me "NO YOU CAN'T!" Now, I know it's possible to write OS/2 friendly DOS applications and there are patches that sometimes enables rough DOS apps to run under OS/2.

How can I run Imagine PC under OS/2? ANY idea??

Roy

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### 1.100 MSG-98 Subject: Re: moebius strip (was .fli ftp site?)

Subject: Re: moebius strip (was .fli ftp site?)  
Date: Mon, 6 Jun 94 14:25:54 PDT  
From: davem@micom.com (David Monachello)

> Just an Imagine related thought: Has anyone been able to successfully

---

> create a moebius strip? I have attempted this using Intergraph's  
> Microstation but just can't get it to look right. I was thinking of  
> trying to animate the Escher print that shows three ants walking on a  
> moebius strip. I'd have settled for getting a sphere to follow the  
> strip, but for the life of me I can't generate one (the moebius strip).  
>  
>  
There is a PD program called uvsurf which can be used to mathematically create i  
magine objects.  
I think one of the example equations is a moebius strip. The program is up on am  
inet.  
  
later,  
dave

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### 1.101 MSG-99 Subject: anims

Subject: anims  
Date: Mon, 6 Jun 1994 13:24:34 +0200  
From: perkins@ensinfo.uvsq.fr (Sebastien PERKINS)

i've used the advice about starfields to create a simple yet neat anim  
  
it's just a close up of a gas giant turon around it and face the sun from its da  
rk side, applying lens flare all the way !!!  
  
i have a question : how do i upload it to aminet ? i DON'T have ftp !!! only ftp  
-mail  
  
and another one : what do you what the anim in : ham or ham8 ?

PS the idea about confetti for starfield is great, i've added the nebula texture  
which makes the background look very nice !

Seb

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### 1.102 MSG-100 Subject: Re: Imagine.fp

Subject: Re: Imagine.fp  
Date: Mon, 6 Jun 94 9:00:35 EST  
From: quarters@expert.cc.purdue.edu (Jeff Hanna)

---

>  
> Does anyone know where I can get hold of a copy of Imagine2.0.fp, as I've just  
> ordered a 68882 FPU?  
>  
> BYE BYE from Martin at Aber!  
>

Any place that sells Imagine (either 2.x or 3.0) will have the .fp version  
since the package ships with both the integer and the floating point  
versions.

--

---

Jeff Hanna		"Albert Einstein nailed space-time, but the
quarters@expert.cc.purdue.edu		Wild Thing had him stumped."
quarters@genie.geis.com		-Thomas Dolby

---

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### 1.103 MSG-101 Subject: Amiga disks in PC's?

Subject: Amiga disks in PC's?  
Date: Tue, 7 Jun 1994 8:51:43 +1000 (EST)  
From: Leo Hamulczyk <LEHAM1@vcp.monash.edu.au>

Is there any utility or anything that lets you use Amiga disks in PCs as I  
have to use 720K disks at the moment and they don't fit enough?

Leo H

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### 1.104 MSG-102 Subject: Re: Q for Lightwave

Subject: Re: Q for Lightwave  
Date: Mon, 06 Jun 94 10:23:00 EDT  
From: Mark Thompson <mark@westford.ccur.com>

> 1) Is the Lightwave mailing list still down  
  
The list that was run by Bob is gone for good.  
  
> has it been re-established somewhere else.

There is a new replacement list. It is unclear whether this will be the  
permanent site for the new LW list, but it is up and running now.  
Subscribe via sending a one line message:

---

subscribe lightwave

to mailserv@acs.eku.edu

Send mail to lightwave@acs.eku.edu for distribution to the list!

\*\*\*\*\*DO NOT TRY TO SUBSCRIBE BY POSTING TO lightwave@acs.eku.edu \*\*\*\*\*

Even with all these caps and stars, I know some idjot is going to do it anyway.

> 2) I heard that Foundation Imaging has a site where they put some of  
> their objects from Babylon 5. If anybody knows where this site may be,

No such site. Bab 5 objects are proprietary and definitely not available to the public. There is an early test ship that has been distributed with the LW software and a few people have been modeling ships that look like those in Bab5, but the Foundation objects are not available.

```
%~~~~~%
%      '      '      Mark Thompson      CONCURRENT COMPUTER %
% ---* RADIANT *--- mark@westford.ccur.com      Principal Graphics %
%      ' Image '      ...!uunet!masscomp!mark      Hardware Architect %
%      Productions      (508)392-2480 (603)424-1829 & General Nuisance %
%~~~~~%
```

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## 1.105 MSG-103 Subject: Brightness

Subject: Brightness

Date: Mon, 6 Jun 94 08:03:00 PDT

From: KEN\_ROBERTSON@robelle.com

In regards to Ryan Johnson's problem with his venetian blinds,

I don't have Imagine 3.0 yet, but it seems to me that the max brightness of anything is 255,255,255. Setting it to 455,455,455 \_should\_ make it wrap to 200,200,200 - but in TRACEMODE, maybe it's getting set to zero.

Why not try setting the brightness to 255,255,255 and get back to us!

\KenR

-----  
Romulans, Klingons and Borgs, oh my!  
-----

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## 1.106 MSG-104 Subject: Re: anims

Subject: Re: anims  
Date: Mon, 6 Jun 1994 09:01:59 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

Hey guys, guyas,

I, too, have been starfielding. And I must be missing something. The only one I can get to work and look realistic is the cool one that one of you suggested in which a small object was replicated onto a sphere-shaped path. It's the hugest, of course, but it's the only one in which the stars actually pan with the camera.

The confetti method looks GREAT, but only seems to work for me with stills. If I animate anything inside it, the stars flicker on and off, new ones appear and old ones disappear as the camera moves. Kind of cute and twinkly, but not quite a starfield.

Not that realism is such a must. I have to confess to some dismay at all the fuss to create realistic effects of things that can be so easily photographed, like waving flags and such. I video frames like this when I need them, and dub them into the background. I understand the challenge of it, but not the point. I prefer to concentrate my Amiga's power and Imagine's scope on things that can't be photographed, like Maralyn Monroe piloting a flying saucer.

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## 1.107 MSG-105 Subject: Sorry Could Not Find Subject!

Date: Mon, 6 Jun 94 10:26:23 CDT  
From: Allen=Richard%sysadmin%eci@larry.ssc.af.mil

Is it possible to expand the default max world size for trace mode in Imagine 3.0? I'm working on a space scene with a scale of 1 unit=1 meter and can't fit everything I need into a world that only goes out to +16000 units.

Actually, this might not be a world SIZE problem, as the error message I'm getting says my "world octovolume" is too large. Is there a way to allow for more of whatever this is???

I'm running Imagine 3.0 on an A4000/040 with 2mb video ram and 8mb fast ram.

Rich - rallen@cdsar.ssc.af.mil

P.S. - If you want to reply via E-mail, send to the above, not the address that appears in the FROM line. We're testing a new Vines lan and haven't quite got the new mail system to recieve mail correctly.

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## 1.108 MSG-106 Subject: Re: .fli ftp site?

Subject: Re: .fli ftp site?  
Date: Mon, 6 Jun 1994 18:38:39 -0400  
From: Jason B Koszarsky <kozarsky@cse.psu.edu>

>Has anyone been able to successfully create a moebius strip?

Nope. But here's a start for you. Basically, the moebius strip is a skinny rectangle. Bend the two ends up to meet each other & flip one end 180 degrees to get the twist.

So, in Imagine, I'd start with a simple two point open path. Bend the path so that the endpoint meet each other & the shape of the path is a loop. Do the bending about the x-axis. Place the endpoints exactly on top of one another. Use the transformation requester to get/set exact location coordinates. Then take one point and rotate it 180 degrees on the local y-axis.

With the path created, you are almost done. Now just make a single line consisting of 2 pointer & one edge connecting the points. Make sure that the axis is placed on the center of the line & that the y-axis is perpendicular to the line itself.

You could add a primitive plane, delete 2 points, move & rotate the axis, it may be quicker this way. If you start with this plane, only use 1 vertical & 1 horizontal section. Hmm. I wonder what imagine would say if I were to try 0 vertical sections?

Now extrude your line object along the moebius path. Use enough sections to get it as smooth as you desire. Also, set it so that the y is aligned to the path. Otherwise, it won't twist.

What has been created is a flat moebius strip. If you want to have some thickness, you could extrude a 4point plane along the path(the y-axis for the plane should be perpendicular to the plane's surface).

You may also want to add a 3rd point to the path by fracturing or splitting it. This will give you more control over the shape. If you add the 3rd point after doing the initial steps above, then you won't have to worry about rotating it on its local yaxis.

Jason K.

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## 1.109 MSG-107 Subject: DirtTile texture

Subject: DirtTile texture  
Date: Mon, 6 Jun 94 19:19:16 GMT  
From: Andrew Nunn <apn@moby.demon.co.uk>

This texture was in the 2.9 set, but not the 3.0 set. Even more weird, it was not mentioned in the docs for 2.9 either.

Andrew

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## 1.110 MSG-108 Subject: Max world size

Subject: Max world size  
Date: Mon, 6 Jun 1994 13:13:21 -0500  
From: ceverett@prairienet.org (Chris L. Everett)

> Is it possible to expand the default max world size for trace mode in  
> Imagine 3.0? I'm working on a space scene with a scale of 1 unit=1 meter and  
> can't fit everything I need into a world that only goes out to +16000 units.  
> Actually, this might not be a world SIZE problem, as the error message I'm  
> getting says my "world octovolume" is too large. Is there a way to allow for  
> more of whatever this is???

> I'm running Imagine 3.0 on an A4000/040 with 2mb video ram and 8mb fast  
> ram.  
>  
> Rich - rallen@cdsar.ssc.af.mil

In the Action Editor, set the Size of Globals to 0,0,0. This dynamically autosizes the Imagine world at the start of each frame. You can also set it to any specific size you wish. In 2.0, you had to Add the Global Size, and it defaulted to 0. I assume that 3.0 works the same way.

- Chris

--

Chris Everett	This is an emergency, this is not a test.
Spectronics Int'l USA, Inc.	Had this been an actual test, you would
Champaign, Illinois	have been instructed to bring a #2 pencil.

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## 1.111 MSG-109 Subject: Easy Moebius Strip

Subject: Easy Moebius Strip  
Date: Tue, 7 Jun 1994 13:57:42 GMT +1200  
From: "Paul Batten" <BATTENP@scicol.chchp.ac.nz>

> Has anyone been able to successfully create a moebius strip?

Easy, try this;

---



In the detail editor:

1. Add a closed path
2. Add a primitive plane, say 40x20 1 section
3. select the plane, choose Extrude: Along Path (the closed path in 1.), Align Y to Path, Sections = 100, Y Rotation = 180 ( to give the Moebius loop). Perform extrude.
4. You may need to edit the 8 faces where the 1st and last planes join, the seem to get twisted.

Cheers  
Paul.

---

Paul Batten	Science & Computing Dept.	Christchurch Polytechnic
battenp@scicol.chchp.ac.nz	Christchurch	New Zealand

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## 1.112 MSG-110 Subject: Re: Max world size

Subject: Re: Max world size  
Date: Mon, 6 Jun 1994 17:27:18 -0400  
From: Jason B Koszarsky <kozarsky@cse.psu.edu>

>> Is it possible to expand the default max world size for trace mode in

>In the Action Editor, set the Size of Globals to 0,0,0. This  
>dynamically autosizes the Imagine world at the start of each frame.

The OctVolume problem may still be encountered if the world is too big. autosizing will probably not help. I have 18 megs and have had this problem with space scenes. I usually use a very large sphere with the essence polka-dot texture(very good resultst). But this large sphere make the octvolume too big.

To get around that, I've had to select everything & scale it all down.

Jason K.

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**1.113 MSG-111 Subject: .fli ftp site?**

Subject: .fli ftp site?  
Date: Mon, 6 Jun 94 12:42:30 PDT  
From: kontos@clipper.clipper.ingr.com (Thorne Kontos)

Anyone know of a .fli site? I'm working on some software and could use a pointer to where either .fli's are available or how .fli's are formatted.

Thanks,  
Thorne K. Kontos

Just an Imagine related thought: Has anyone been able to successfully create a moebius strip? I have attempted this using Intergraph's Microstation but just can't get it to look right. I was thinking of trying to animate the Escher print that shows three ants walking on a moebius strip. I'd have settled for getting a sphere to follow the strip, but for the life of me I can't generate one (the moebius strip).

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**1.114 MSG-112 Subject: RE: Brightness**

Subject: RE: Brightness  
Date: Mon, 06 Jun 94 16:19:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Monday, June 06, 1994 8:03, KEN\_ROBERTSON@robelle.com wrote:  
>In regards to Ryan Johnson's problem with his venetian blinds,  
>  
>I don't have Imagine 3.0 yet, but it seems to me that the max brightness  
>of anything is 255,255,255. Setting it to 455,455,455 \_should\_ make it  
>wrap to 200,200,200 - but in TRACEMODE, maybe it's getting set to zero.  
>  
>Why not try setting the brightness to 255,255,255 and get back to us!

I have to disagree here. I do have 3.0 now, but even with 2.0 I would consistently set Brightness levels higher than 255,255,255 to get a good strong light. And it worked both in Scan and Trace.

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**1.115 MSG-113 Subject: Re: .fli ftp site?**

Subject: Re: .fli ftp site?  
Date: Mon, 6 Jun 94 19:16:55 PDT  
From: ual97@freenet.victoria.bc.ca (Christopher Stewart)

>Just an Imagine related thought: Has anyone been able to successfully

---

>create a moebius strip? I have attempted this using Intergraph's  
 >Microstation but just can't get it to look right. I was thinking of  
 >trying to animate the Escher print that shows three ants walking on a  
 >moebius strip. I'd have settled for getting a sphere to follow the  
 >strip, but for the life of me I can't generate one (the moebius strip).

What'd you know, I'm working on it right now and having the same problems you are. I think I can do it with a doublesided ribbon and a bit of a cheat (you'd only have limited animation capability...). If you figure out anything be sure to give the list a dingle (gosh, I haven't had an accent for years and I still use terms like that..).

Christopher

--

"I wish there was a knob on the TV  
 to turn up the intelligence.  
 There's a knob called 'brightness',  
 but it doesn't work." -- Gallagher

ual97@freenet.victoria.bc.ca  
 cs833@cleveland.freenet.edu

Join the Animation Sig!

--> RETURN TO CONTENTS!<--

## 1.116 MSG-114 Subject: Re: Boney Flags

Subject: Re: Boney Flags  
 Date: Mon, 06 Jun 94 17:01:57 EDT  
 From: Mark Thompson <mark@westford.ccur.com>

Thomas Setzer <setzer@comm.mot.com> writes:

> You Lightwave people(who've had bones for a while now) come  
 > up with any good uses yet?

Nope, none at all. We have had this super powerful tool for about 1.5 years now, and we still have no idea what to use it for ;-}  
 Seriously, LW bones have been used for zillions of things. And because LW allows you to save the current translation/deformation as a new object, bones can be used as a modeling tool as well. Here are a couple less common uses for bones:

- 1) map an image to a tessellated plane and use bones to warp and twist the image (this is rather cool when animated).
- 2) use bones to distort the point locations in a particle field to yield a psuedo random variation

```
%~~~~~%
%      \      /      Mark Thompson      CONCURRENT COMPUTER  %
%  ---*  RADIANT  *---  mark@westford.ccur.com      Principal Graphics  %
%      ' Image '      ...!uunet!masscomp!mark      Hardware Architect  %
%      Productions      (508)392-2480 (603)424-1829  & General Nuisance  %
%~~~~~%
```

--> RETURN TO CONTENTS!<==

## 1.117 MSG-115 Subject: Re: Importing Amiga Graphics into WordPerfect 5.1 on a PC

Subject: Re: Importing Amiga Graphics into WordPerfect 5.1 on a PC  
Date: Sat, 4 Jun 1994 17:14:29 -0700 (PDT)  
From: Ed Totman <etotman@gort.ucsd.edu>

On Sat, 4 Jun 1994, JOSEPH F. HART wrote:

> Greetings....  
>  
> I am trying to import some IFF format files from Imagine  
> into a WordPerfect 5.1 graphics box on a PC. WordPerfect  
> steadfastly refuses to understand anything the Amiga sends it.  
> I have tried converting the IFF files using ADPro to PCX, BMP,  
> and GIF. WordPerfect refuses to accept everything but PCX,  
> and prints only a black patch when it gets that. Any suggestions ?

Been there, done that. This may not help you much, but WP51 doesn't do a good job with these types of files. Try changing brightness and contrast before importing to WP and don't edit the pic while in WP, just print it. At work I now use Imagine PC which outputs targa, and WP60 which handles targa files without problems. I render B&W in Imagine and print to 600dpi printer with ASTOUNDING results. Using this combination I can render and print just about anything with high quality results. Yet another use for Imagine.

Ed Totman  
etotman@gort.ucsd.edu

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## 1.118 MSG-116 Subject: Re: Iris texture causing crash?

Subject: Re: Iris texture causing crash?  
Date: Sun, 5 Jun 1994 03:31:25 +0200  
From: christian boetker ho/j <cbho91@control.auc.dk>

> Hello,  
>  
> I've got three cone objects, each with the Iris texture (Imagine 3.0  
> Amiga) applied with slightly different settings. When I try rendering  
> them overlapping, my Amiga crashes. This doesn't happen if only two are  
> intersecting, but add the third and GURU.  
>  
> I tried isolating them in a new project with no other objects, and it still  
> crashed every time.

---

Do you run out of memory??

>  
> Has anyone else had something like this happen?

Nope, haven't had the time to try Imagine much.

>  
> Michael Halleen | "When you're on target, you're catching flak"  
> Chicago, IL | -- Lt. Col. Bo Gritz  
> halleen@mcs.com |  
> finger me for PGP| resist Clipper... to learn more read comp.org.eff.talk  
>

Regards,  
Christian Hoj

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## 1.119 MSG-117 Subject: Re: Re[1]: Sticky Stars

Subject: Re: Re[1]: Sticky Stars  
Date: Sun, 5 Jun 1994 14:24:34 +1000 (EST)  
From: "" <williamp@triode.apana.org.au>

> >You're going to have to create the stars manually as objects. Imagine  
> >doesn't pan global stars.  
>  
> Oh yes it does, or has in the past.  
> If the camera is changing its alignment Imagine 2.0 moves the stars correctly.  
  
> If the camera is merely moving in space without changing its alignment it does  
n't.

John's right here, the stars certainly used to pan in 1.1 and 2.0. Maybe  
this is yet another "bug" in 3.0<sigh>. I hope it's as John suggests and  
just the camera's alignment not being changed.

William John Porter

williamp@triode.apana.org.au

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---

**1.120 MSG-118 Subject: Re: Importing Amiga Graphics into WordPerfect 5.1 on a PC**

Subject: Re: Importing Amiga Graphics into WordPerfect 5.1 on a PC  
Date: Sun, 5 Jun 1994 03:55:14 +0200  
From: christian boetker ho/j <cbho91@control.auc.dk>

> Using this combination I can  
> render and print just about anything with high quality results. Yet  
> another use for Imagine.

Definitely \*NOT\* for WP....

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**1.121 MSG-119 Subject: EYES THAT FOLLOW**

Subject: EYES THAT FOLLOW  
Date: Sun, 05 Jun 94 01:11:31 -0300  
From: greg.tsadilas@hofbbs.com

I've been using the HUMANOID data set extensively recently, and really got tired of having to rotate the eyes to look at the camera every time I moved the head. So I thought about it, and came up with a great way to color the eyes ONCE, and then have the eyes ALWAYS look at the camera no matter how the face was pointing with no need to ever touch the eyes again!

Solution for Imagine 3.0 users:

Apply the FAKELY texture to the eye, have it affect COLOR only. Set transition T to .8, set the back color to -1,, (objects color), set the front color to 0,0,255 (The Iris color).

Apply the FAKELY texture to the eye again, have it affect COLOR only. Set the transition T to .95, set the back color to -1,, (objects color), set the front color to 0,0,0 (The pupil color).

Voila! Instant eye that will follow and point to the camera without the need to manually reposition the eye. Try this on a default sphere. Render it from different angles....the eye follows...OOOooooohh! Scary, eh keedz?

-GreG

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**1.122 MSG-120 Subject: Re: Iris texture causing crash?**

Subject: Re: Iris texture causing crash?  
Date: Sun, 5 Jun 1994 00:54:14 -0500 (CDT)  
From: Michael Halleen <halleen@mcs.net>

On Sun, 5 Jun 1994, christian boetker ho/j wrote:

> > I tried isolating them in a new project with no other objects, and it still  
> > crashed every time.  
>  
> Do you run out of memory??

No. Plenty of memory left, I checked while it was rendering to see if any strange 'memory eating' was going on.

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### 1.123 MSG-121 Subject: Re: Boney Flags

Subject: Re: Boney Flags  
Date: Mon, 6 Jun 94 20:43:28 PDT  
From: DonD@cup.portal.com

> You Lightwave people(who've had bones for a while now) come

Is the shark in the Sea Quest Credits/Logo a Lightwave object? If it is I assume it uses bones.

Don DeCosta	The nice thing about sanity is	VM/Nomad2
DonD@cup.portal.com	you can lose it more than once	Amiga/Imagine

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### 1.124 MSG-122 Subject: DEMs and converters...

Subject: DEMs and converters...  
Date: Mon, 6 Jun 1994 22:08:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi All!

I'm working on an Imagine animation that'll require some landscape of Ireland. Specifically, I'd like to use a bunch of DEM landscapes. Could someone point me to a site with this specifically, or a general site that I'll weed through. Thanx in advance!

Also, I've heard some people say that they can't load in the USGS DEMs directly into Vista. Is there a converter out there, and where?

As I'm sure that this has all been asked before, please email me so as not to tie up bandwidth. Thanx.

-Dave  
david.wyand@canrem.com

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## 1.125 MSG-123 Subject: Cache RAM

Subject: Cache RAM  
Date: Tue, 07 Jun 94 01:13:14 EDT  
From: CaptKurt@aol.com

This is to all IBM-compatible users out there.

I am going to upgrade my Cache RAM to 256K, from my current 64K. Does anyone know how much this will speed up rendering?

Thanks,

Kurt

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## 1.126 MSG-124 Subject: Help needed converting 2D slice into 3D object.

Subject: Help needed converting 2D slice into 3D object.  
Date: Tue, 7 Jun 94 1:52:10 EDT  
From: Marvin R McCreary <mmccreary@magnus.acs.ohio-state.edu>

Hello,

I'm working on a project where I will be taking 2D cross-sections and building a series of these cross-sections into 3D objects. I'm going to be picking up the project where someone else left off. The previous person used Sculpt4D, and its "Unslice" feature. Unslicing seems to work similar to the skinning feature in Imagine but does NOT require that each slice be made up of an equal number of points. Is there some way Imagine can Unslicing? The requirement of needing to have equal number of points is too limiting, as the slices I will be working with will vary in size and shape through out the series of cross-sections.

Any help will be appreciated (since I would rather continue the project on Imagine 3.0 rather than Sculpt4D).

---



McCreary.14@osu.edu

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## 1.127 MSG-125 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re: What about ~anim5~ and Imagine?  
Date: Mon, 6 Jun 1994 23:21:53 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> >  
> I also recall building one in REND24 and copying that representative  
> frame into a file with 'xxx.000' tacked onto it. Makes it the first and  
> REND's Lock Palette function will lock to that one. Nifty!  
> wes~  
Ya, I do like this new feature very much, compared to the way we use to  
have to do it, basically with another program..that was one thing that I  
always hated having to do, I always needed extra HD space just to convert  
frames..but not anymore...cool!

=RRW=

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## 1.128 MSG-126 Subject: Re: States function

Subject: Re: States function  
Date: Mon, 6 Jun 1994 23:37:03 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

On Fri, 3 Jun 1994, Dale R Rogers wrote:

> |> Hi Paul. The States function currently doesn't support texture  
> |> morphing... Impulse knows about this limitation, and said that they will  
> |> fix it.  
>  
> This will be fixed in next of the quarterly upgrades? Hmmm?  
>  
>  
> Dale

does this mean we have to pay our \$100.00 for the yearly upgrade program,  
just so we can get something that should be in this upgrade.

=RRW=

---

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### 1.129 MSG-127 Subject: Re: Bonus feature is bones anim.....

Subject: Re: Bonus feature is bones anim.....  
Date: Mon, 6 Jun 1994 23:40:15 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> If you set up a bone animation in the detail editor, then press "cancel"  
> during the generation of the animation, the bones are left at the point  
> you pressed cancel. This can be usefull if you are trying to generate  
> "tween" states between two already defined states.....

Actually you can use the TWEEN button in the STATES requester to get your  
inbetweens. But I geuss you could do it the way you mentioned as well.

=RRW=

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### 1.130 MSG-128 Subject: Re: Brushmap tacking

Subject: Re: Brushmap tacking  
Date: Mon, 6 Jun 1994 23:51:51 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> How does the brushmap tacking feature work???? I just created a fish  
> using bones and applied a brushmap. When the fishes tail bends it leaves  
> the brush and turns the base color. Any idea how I could fix this?  
>  
> -Jeremy White

did you type the in the name of your Defualt STATE in the textures  
LockState location? This should fix the problem.

=RRW=

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### 1.131 MSG-129 Subject: Re: .fli ftp site?

Subject: Re: .fli ftp site?  
Date: Mon, 6 Jun 1994 22:15:11 -0700 (PDT)  
From: Jeremy White <jwhite@efn.org>

On Mon, 6 Jun 1994, Thorne Kontos wrote:

> Just an Imagine related thought: Has anyone been able to successfully  
> create a moebius strip? I have attempted this using Intergraph's  
> Microstation but just can't get it to look right. I was thinking of  
> trying to animate the Escher print that shows three ants walking on a  
> moebius strip. I'd have settled for getting a sphere to follow the  
> strip, but for the life of me I can't generate one (the moebius strip).

I recreated the same idea with ladybugs. Make a round path, then extrude  
a line, rotating it 180 degrees.... Use the path (and rotation) as a path  
for your following objects....

-Jeremy White

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### 1.132 MSG-130 Subject: Amiga Disks in PC's

Subject: Amiga Disks in PC's  
Date: Tue, 7 Jun 94 02:51:44 PDT  
From: 07-Jun-1994 0445 <leimberger@marbls.enet.dec.com>

>Is there any utility or anything that lets you use Amiga disks in PCs as I  
>have to use 720K disks at the moment and they don't fit enough?  
Well actually the disks Amiga 880k, dos 720k are the same. The difference  
comes when they are formatted for the respective file systems. If you format  
a 880k disk as a dos disk on the Amiga it turns out as a 720k disk. Even less  
if you were to format it as a Mac disk. So the answer is NO! I use HD's on the  
Amiga they format out at around 1.7 meg(not sure of exact size) and as 1.4meg  
Dos compatible disks. Just another limitation of Dos you have to deal with.  
I have a utility that comes with ADPro that allows you to split binaries  
across several disks. It is supplied for Amiga, DOS, and Mac systems.

bill

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### 1.133 MSG-131 Subject: On-line Object Converter

Subject: On-line Object Converter  
Date: Tue, 7 Jun 1994 05:15:42 -0600  
From: beeton@SEDSsystems.ca (Gary Beeton, beeton@SEDSsystems.ca)

Greetings,

I received the following message from the I-AMIGA list (be patient - there is Imagine specific stuff at the end):

From: GEORGE::"owner-i-amiga@UTARLVM1.UTA.EDU" 6-JUN-1994 08:20:27.86  
To: Multiple recipients of list I-AMIGA <GEORGE::"I-AMIGA@utarlvml.bitnet">  
CC:  
Subj: 3-D Object converter on-line.

```
*****  
**  NEW INTERNET SERVICE CONVERTS YOUR AMIGA SCULPT-4D  **  
**                OBJECTS TO RAYSHADE FORMAT FOR FREE !    **  
*****
```

A new InterNet server is ready to convert your Amiga  
Sculpt-4D Objects (.scene) to RayShade (.ray) format.

Note that this is \*NOT\* a simple dumb filter. Check these out:

- \* PHONG TRIANGLES SUPPORTED !!!  
Your object will be examined topologically with a rather complex  
algorithm , for the CORRECT ESTIMATION OF THE PHONG NORMALS.  
In simple words: Yes ! You can have smooth triangles converted  
for RayShade. (...this is not a trivial task believe me !).
- \* SURFACE PROPERTIES ARE SUPPORTED.  
(Glass,Dull,Metal... etc.)
- \* BAD FACES ELIMINATION.  
Duplicate or degenerate triangles will be removed  
from your object.
- \* LAMPS AND OBSERVER SUPPORT.

To use this service follow these simple steps:

-----

- 1) SAVE your object in SCULPT-4D .scene format (NOT SCRIPT).  
Attention : be sure that you saved OBSERVER and at  
least one LAMP , OTHERWISE YOUR OBJECT WILL NOT BE CONVERTED !!!
- 2) COMPRESS your file via the standard UNIX compress(1) program.
- 3) UUENCODE(1) the compressed file.
- 4) MAIL this file (AND NOTHING ELSE) to:

akra@zeus.di.uoa.ariadne-t.gr

with Subject:

---

## SCULPT\_TO\_RAY\_CONVERT

BE SURE THAT YOU HAVE A CORRECT SUBJECT OTHERWISE YOUR  
OBJECT WILL NOT BE CONVERTED !!!

This is all...Wait for a while and you will be \*automatically\*  
mailed back your RayShade object.

Miscellaneous functions of the server  
-----

- To receive this file send an empty mail to:  
akra@zeus.di.uoa.ariadne-t.gr with Subject:CONVERTER\_HELP
- Send bug-reports,suggestions,problems etc. to:  
akra@zeus.di.uoa.ariadne-t.gr with Subject:CONVERTER\_SUGGESTIONS

PLEASE USE THIS SUBJECT LINE OTHERWISE YOUR SUGGESTIONS WILL BE DISCARDED !

Some IMPORTANT additional information  
-----

- 1) Please DO NOT send E-mails greater than 60 Kbytes.
- 2) If the server is not responding , be patient and DO NOT  
resent again and again the same file.
- 3) DO NOT include in your mails anything else (human messages ,  
comments , etc ) except the file itself.The conversion is  
done automatically by a computer program.
- 4) To avoid errors , write a small shell script that will  
automate the process of sending an object.This will  
save you time and effort.
- 5) The converter software is still beta.
- 6) I reserve the right to discontinue this service at  
any time.

```
*****
*                                *
*          IMPORTANT DISCLAIMER  *
*                                *
*  THIS SERVICE IS OFFERED "AS IS" AND WITHOUT WARRANTIES AS TO  *
*  PERFORMANCE OR MERCHANTABILITY. ANY STATEMENTS MADE ABOUT THE *
*  USES OF THIS SERVICE DO NOT CONSTITUTE WARRANTIES AND SHALL  *
*  NOT BE RELIED ON BY THE USER IN DECIDING TO USE THIS SERVICE. *
*  THE AUTHOR RESERVES THE RIGHT TO DISCONTINUE THIS SERVICE AT  *
*  ANY TIME.                                                         *
*                                *
*****
```

\*\*\* END OF FILE \*\*\*

---

/	\	/	\
/ Argiris A. Kranidiotis _/\	/ E-mail (Internet): _/>\		
/ University Of Athens /\	/ /\		
/ Informatics Department /\	/ akra@zeus.di.uoa.ariadne-t.gr /\		
/ <hr/> /\	/ <hr/> /\		
\hr/>\	\hr/>\		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		

Ok, back to the IML...

I sent off a message to the CONVERTER\_SUGGESTIONS server asking if he would consider expanding to other formats (ie Imagine format) and got the following reply:

```
>hi Gary !
>
>Yes I'd like to expand it to read TDDD format (Imagine) , but I do not
>have the specifications. If you send me the details of the format
>(by mail/ftp/fax/conventional mail , whatever) , I'll write the converter ...
>
>Regards,
>
>Argiris.
```

Its just a good thing I can still type while my foot wedged is in my mouth. Can anyone help me out by sending him the TDDD (and maybe Lightwave) format specs? Thanks.

Gary  
beeton@SEDSys~~tems~~.ca

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**1.134 MSG-132 Subject: HOW to print in a Postscript printer a RENDERfile ???**

Subject: HOW to print in a Postscript printer a RENDERfile ???  
Date: Tue, 7 Jun 1994 15:51:27 +0300 (EET DST)  
From: Foivos Kourendas <foivos@theseas.ntua.gr>

To all,

I have recently bought a laserprinter (HP4L) and I am trying to print a renderfile created from imagine . I only managed to get in the printed output a picture consisted of DOTS . Is it possible to convert/manipulate the picture in such a format/way in order to be printed like the Postscript letters do ???

I am looing forward for any suggestions about it . It would be really appricated!!

Yours sincerely,

$$\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) \delta(x-a) dx = f(a)$$

(\_/ <\_\_\ / ( )\_)

Email:foivos@phgasos.ntua.gr

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### 1.135 MSG-133 Subject: Re: Boney Flags

Subject: Re: Boney Flags  
Date: Tue, 7 Jun 1994 09:07:54 -0400  
From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

> From: DonD@cup.portal.com  
> Subject: Re: Boney Flags  
>  
> Is the shark in the Sea Quest Credits/Logo a Lightwave object? If it  
> is I assume it uses bones.  
>  
> Don DeCosta |The nice thing about sanity is| VM/Nomad2  
> DonD@cup.portal.com |you can lose it more than once| Amiga/Imagine  
>

When I was a NewTek dealer, I received a brochure from them which (among other things) said that the SeaQuest shark was included as a tutorial on Deformation Maps (kinda like bump maps, but actually deforms the object).

Jude Anthony

-----  
We've secretly replaced the Enterprise's dilithium with new Foldger's crystals! Now let's watch them go to warp...  
-----

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### 1.136 MSG-134 Subject: Re: DEMs and converters...

Subject: Re: DEMs and converters...  
Date: Tue, 7 Jun 1994 09:19:13 -0400  
From: Jason B Koszarsky <koszarsky@cse.psu.edu>

>I'd like to use a bunch of DEM landscapes  
>Could someone point me to a site with this specifically,  
  
spectrum.xerox.com

>I've heard some people say that they can't load in the USGS DEMs  
>directly into Vista. Is there a converter out there,

---

Yes. I found one called 'Mcnv'. I don't recall where it came from but it does convert USGS DEMs to a VISTA DEM format.

Jason K.

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## 1.137 MSG-135 Subject: Re: States function

Subject: Re: States function  
Date: Tue, 7 Jun 1994 09:14:31 -0400 (EDT)  
From: Robert Frederique <romulus@escape.com>

On Mon, 6 Jun 1994, Randy R. Wall wrote:

>  
>  
> On Fri, 3 Jun 1994, Dale R Rogers wrote:  
>  
> > |> Hi Paul. The States function currently doesn't support texture  
> > |> morphing... Impulse knows about this limitation, and said that they will  
  
> > |> fix it.  
> >  
> > This will be fixed in next of the quarterly upgrades? Hmmm?  
> >  
> >  
> > Dale  
>  
> does this mean we have to pay our \$100.00 for the yearly upgrade program,  
> just so we can get something that should be in this upgrade.  
>  
> =RRW=  
>  
>  
>  
Is this true? I hope it isn't. I thought that It was a feature of IM3.0.  
  
PS. I love Imagine.

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## 1.138 MSG-136 Subject: Mobelius strip

Subject: Mobelius strip  
Date: Tue, 7 Jun 1994 09:18:27 -0400 (EDT)  
From: Robert Frederique <romulus@escape.com>

---



On Mon, 6 Jun 1994, Jeremy White wrote:

> On Mon, 6 Jun 1994, Thorne Kontos wrote:

>

> > Just an Imagine related thought: Has anyone been able to successfully  
> > create a moebius strip? I have attempted this using Intergraph's  
> > Microstation but just can't get it to look right. I was thinking of  
> > trying to animate the Escher print that shows three ants walking on a  
> > moebius strip. I'd have settled for getting a sphere to follow the  
> > strip, but for the life of me I can't generate one (the moebius strip).

>

> I recreated the same idea with ladybugs. Make a round path, then extrude  
> a line, rotating it 180 degrees.... Use the path (and rotation) as a path  
> for your following objects....

>

> -Jeremy White

>

>

I'm reading all these messages about "Mobeius Strip" and have no idea  
what it is. Can someone explain.

Thank You.

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### 1.139 MSG-137 Subject: Re: States function

Subject: Re: States function

Date: Tue, 7 Jun 1994 09:25:52 -0400

From: Jason B Koszarsky <kozarsky@cse.psu.edu>

>> |> Hi Paul. The States function currently doesn't support texture

>> This will be fixed in next of the quarterly upgrades? Hmmm?

>does this mean we have to pay our \$100.00 for the yearly upgrade program,  
>just so we can get something that should be in this upgrade.

Who told you it should have been in this upgrade? I can think of lots  
of changes/additions that I could say 'should have been' but really  
it is more like 'wish it had been, hope it will be nexxt time'.

I'm sure that we'll see more than just that one item for the 100\$ too.  
Or you could wait another couple years.

Jason K.

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### 1.140 MSG-138 Subject: Re: HOW to print in a Postscript printer a RENDERfile ???

Subject: Re: HOW to print in a Postscript printer a RENDERfile ???  
Date: Tue, 7 Jun 1994 10:35:33 -0400 (EDT)  
From: Udo K Schuermann <walrus@wam.umd.edu>

Foivos Kourendas <foivos@theseas.ntua.gr> wonders:

> I have recently bought a laserprinter (HP4L) and I am trying to print a  
> renderfile created from imagine . I only managed to get in the printed  
> output a picture consisted of DOTS . Is it possible to convert/manipulate  
> the picture in such a format/way in order to be printed like the Postscript  
> letters do ???

If you mean you'd like continuous lines, edges and perfectly smooth shades of grey that do not consist of halftone dithered patterns, you probably won't find that in a consumer-grade printer, if anywhere. Your images consist of pixels, and each of these pixels will be mapped to multiple pixels on the paper. The printer/software is responsible for selecting a pattern of pixels that best approximates the color of the original image. The result will not look too impressive when held 10cm from your nose.

Different printers are capable of different print resolution, so that you can get finer halftone dither patterns. 300 dpi printers don't fare so well, but 600 dpi with resolution enhancement are capable of very tight dither patterns. Not all software will make use of that, however, so it comes down to what software you use to convert/print the image.

You can also improve the looks of an image on paper if you render it at higher resolution. Printing a 320x200 image will be recognizable at best, a waste of toner and paper at worst. Render an image at perhaps 1/2 or 1/3 the spacial resolution of your printed image: 10in x 8in would be 6000x4800 pixels. Try 2000x1600 to start with, or 3000x2400 to experiment further. I have had good results using ADPro with a 256 color 1024x768 image on a 600 dpi LJ 4Si.

.\_. Udo Schuermann  
( ) walrus@wam.umd.edu

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## 1.141 MSG-139 Subject: Re: A proposition... For redirecting IML to new Media..

Subject: Re: A proposition... For redirecting IML to new Media..  
Date: Tue, 7 Jun 1994 11:45:44 -0300 (ADT)  
From: the Shockwave Surfer <shockwav@jupiter.sun.csd.unb.ca>

Yup. I vote for a MUD. So who has time/machine/ability to run it? It could be a very popular place, ESPECIALLY if it had areas for LW and other 3D programs.

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## 1.142 MSG-140 Subject: PC AutoCAD into Amiga Imagine

Subject: PC AutoCAD into Amiga Imagine  
Date: Tue, 07 Jun 94 16:03:17 +0100  
From: "T.Charalambous" <T.Charalambous@cs.ucl.ac.uk>

Hi.

Basically, I have a friend who is using AutoCAD to design lighting rigs, and he wants to animate them. He doesn't have access to any ray-tracing software.

I want to transfer his PC's AutoCAD DXF format files for use in Imagine on my Amiga.

What I want to know is: Is there a program that converts DXF -> Imagine Object Files? Since the DXF file seems to contain all the details for the 'setting of the scene', would I have to import all the objects in the 'scene' separately?

I know my questions seem a bit vague, but I'm fairly new to Imagine, I am running Imagine v2 on an Amiga A500(!?), with 1Mb Chip, 4Mb Fast, and W.B. 1.3 - 2.0. I also have an 80Meg HD. I got Imagine3D from the Amiga Format coverdisk, and have been learning how to use it from there, and with a bit of trial and error, but I'm getting the hang of it now.

Thanks,  
Tele.

_____	And to my despair, I was soon to discover,
_T.Charalambous_	The failures of mine, were the triumphs of another,
_@uk.ac.ucl.cs_	There was a time to live, until a time to die,
_____	It was time to love, it's now time to cry. -Spirit-

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## 1.143 MSG-141 Subject: Re: Amiga disks in PCs

Subject: Re: Amiga disks in PCs  
Date: Tue, 7 Jun 1994 15:30:32 +0100 (BST)  
From: Mark Stephen Hennessy-Barrett <ph93msh@brunel.ac.uk>

Hi there...

Getting an Amy disk to work in a PC is virtually impossible... myself and some colleagues have been pluggin vainly away at such a project for about two yerars and haven't come up with an acceptable kludge without some nasty programs working at the interrupt level and a small hardware hack. Howeverr, if you just use Dos2Dos or even better CrossDOS (supplied with WB3) then you can dump to 720Kb MS-DOS floppy with impunity. It's a lot less hassle, too, as you just can shove icons around instead of messing around with DomesDOS's shell... ugh...

All in all, you're better off with the Amiga... B^)

---



> have to do it, basically with another program..that was one thing that I  
> always hated having to do, I always needed extra HD space just to convert  
> frames..but not anymore...cool!  
>  
> =RRW=  
>  
>  
>  
>  
>  
Curious to know if you--or any--folks have actually confirmed that this  
fixed pallet tool works any better in 3.0 than it has in earlier  
versions. It hasn't for me.

I, too, was tickled to see that ability to set the pallet to a  
specified one--but it doesn't work. At least not consistently. In a 240  
frame anim I've been working on, I do the frames in Imagine, in ram, have  
rend24 save them out and then load them into DPaint4. (I do this cause  
it renders so much faster to ram than to my hd). I want them in DPaint4  
to make a big animbrush, which I use to stamp pix into the vuport of a  
ship that's bound for earth. (TotallyOddsomelha, up on Aminet in the  
gfx/anim section).

Things go fine up till about frame 123, then the pallet starts  
swooping all over the place--even though it's still set to one I  
specify--and DPaint4 has to start doing its remap thing. Thank goodness  
DP4 is so forgiving and flexible, cause Imagine still plays hell with  
pallets.

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## 1.146 MSG-144 Subject: Sorry Could Not Find Subject!

Date: Wed, 8 Jun 1994 12:45:26 +1000  
From: imagine-relay@email.sp.paramax.com

On Mon, 6 Jun 1994, Thorne Kontos wrote:

> Just an Imagine related thought: Has anyone been able to successfully  
> create a moebius strip? I have attempted this using Intergraph's

There is a tutorial on this subject in the July 1990 issue of Amiga World.  
The title of the article is "Object Lessons" and is based on Silver, but  
works just the same for Imagine.

See ya,  
Roger

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**1.147 MSG-145 Subject: Sorry Could Not Find Subject!**

Date: Wed, 8 Jun 1994 13:03:01 +1000  
 From: imagine-relay@email.sp.paramax.com

On Tue, 7 Jun 1994, Robert Frederique wrote:

> I'm reading all these messages about "Mobeius Strip" and have no idea  
 > what it is. Can someone explain.  
 >  
 > Thank You.

A Mobius strip is a piece of paper with one side. You take a long piece of paper, make it into a loop, but before you tape the two ends together, you flip one over. If you could walk on one, you would walk on the whole surface area, because it has only one side.

See ya,  
 Roger

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**1.148 MSG-146 Subject: Sorry Could Not Find Subject!**

Date: Wed, 8 Jun 1994 13:40:55 +1000  
 From: imagine-relay@email.sp.paramax.com

Jude Anthony - DMC <janthony@greatwall.cctt.com> writes:  
 > > Is the shark in the Sea Quest Credits/Logo a Lightwave object? If it  
 > > is I assume it uses bones.

> When I was a NewTek dealer, I received a brochure from them which  
 > said that the SeaQuest shark was included as a tutorial on Deformation  
 > Maps (kinda like bump maps, but actually deforms the object).

Well here is the scoop. I supplied NewTek with a shark and scene file that used displacement mapping to make a whole school of them swim by the camera. This was included in the early 3.0 releases sent to dealers but not in the final release. There was another shark that was included (probably from Amblin) in the later release. Amblin used a chain of bones rather than displacement mapping to do their shark. The nicest solution uses a combination of both. But I believe I remember hearing John Gross (Amblin animator) say that the shark in the seaQuest logo was a real shark composited in with the CG logo.

```
%~~~~~%
%      \      /      Mark Thompson      CONCURRENT COMPUTER  %
%  ----* RADIANT *---- mark@westford.ccur.com      Principal Graphics  %
%      / Image \      ...!uunet!masscomp!mark      Hardware Architect  %
%      Productions      (508)392-2480 (603)424-1829  & General Nuisance  %
%~~~~~%
```

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## 1.149 MSG-147 Subject: Sorry Could Not Find Subject!

Date: Wed, 8 Jun 1994 13:47:37 +1000  
From: imagine-relay@email.sp.paramax.com

Hello all,

I downloaded a rather nice lens-flare archive (AnimFlare.lha) with the planet Mars and a starfield included, but they didn't include the 'radial' texture. Is this because I own the coverdisk Imagine2.0? If it is so then I think it's a shame I'm missing out on this texture! (Could someone mail me a copy please..) Also I was going to buy Imagine3.0 (which was announced when the coverdisk was released but turned out to be 2.9 - a bit of a con!) but when I saw the price (595 quid) I sighed a bit! Could I (as a humble student) upgrade

for 100 pounds or so?

On a different note, does anyone know where I can find information on GIF, TIFF,

PCX, BMP, etc. file formats, as my good friend needs this and he isn't on Internet!!

Thank you very much,  
Martin.

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## 1.150 MSG-148 Subject: World octovolume

Subject: World octovolume  
Date: Tue, 7 Jun 94 14:33:39 CDT  
From: Allen=Richard%sysadmin%eci@larry.ssc.af.mil

I guess I wasn't very clear in my last post, comes from being a programmer I guess!! I knew about the autosizing of the world size by putting 0,0,0 in the global actor size bar. That didn't solve the problem.

It sounds like I'm running out of memory, which seems wierd considering I have ten freekin megs, but I'll test it by deleting a few of the objects. Is there a watchdog type program that will tell me the memory usages of a program I'm running in the foreground? Anyway, didn't 2.0 go ahead and render a scene even if you ran out of ram, just not rendering random part of the scene? Does this mean Impulsd squashed that "feature" or is this something that happened in 2.0 as well?

Also, this problem only occurs in trace mode, scanline renders my scene just fine (except for the lights and shadows, of course). Are objects stored in memory differently in trace mode?

Someone suggested scaling the whole scene down, but my objects have parts on 'em that give floating point errors if I scale them down much smaller than

---

they are now.

I hope I'm doing something wrong, and someone out there knows how to fix it, 'cause I'd hate to have to modify my objects for a larger scale.

FYI, the objects in question are: 3x3 km spacestation, 1km long space freighter, several smaller space craft, a planet created with Essence II, and a "world sphere" for the stars. I can delete the star sphere, but I still get the error about world octovolume too big. Also, none of the objects extend beyond the 16000 unit limit.

Hope someone can help :>

Rico - rallen@cdsar.ssc.af.mil

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## 1.151 MSG-149 Subject: Moebius strip - the hard way

Subject: Moebius strip - the hard way  
Date: Tue, 7 Jun 94 22:10:28 GMT  
From: Jason Jack <jay@tyrell.demon.co.uk>

Greetings all!

I uploaded mobicogs.lha to Aminet some time ago. It's an animated bunch of cogs, twisting, turning, spinning, loads of chrome, and most non rendering people go 'wow' (briefly, and sometimes in uppercase).

You could use the same technique to model a pure strip, and use snapshot to grab it. Touch it up in the detail editor by merging the end points..

I'll upload the mobicogs project at some point.

Now then, anybody fancy doing a Klein (sp?) bottle?

Jay

Aminet:gfx/anim/mobicogs.lha - HAM version  
" " mobicflc.lha - FLC version (good for PCs)

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## 1.152 MSG-150 Subject: Re: What about ~anim5~ and Imagine?

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Subject: Re: What about ~anim5~ and Imagine?  
Date: Tue, 7 Jun 1994 15:49:33 -0600  
From: beeton@SEDSysystems.ca (Gary Beeton, beeton@SEDSysystems.ca)

>...  
>Curious to know if you--or any--folks have actually confirmed that this  
>fixed pallet tool works any better in 3.0 than it has in earlier  
>versions. It hasn't for me.  
>  
> I, too, was tickled to see that ability to set the pallet to a  
>specified one--but it doesn't work. At least not consistently. In a 240  
>frame anim I've been working on, I do the frames in Imagine, in ram, have  
>rend24 save them out and then load them into DPaint4. (I do this cause  
>it renders so much faster to ram than to my hd). I want them in DPaint4  
>to make a big animbrush, which I use to stamp pix into the vuport of a  
>ship that's bound for earth. (TotallyOddsomelha, up on Aminet in the  
>gfx/anim section).  
>  
> Things go fine up till about frame 123, then the pallet starts  
>swooping all over the place--even though it's still set to one I  
>specify--and DPaint4 has to start doing its remap thing. Thank goodness  
>DP4 is so forgiving and flexible, cause Imagine still plays hell with  
>pallets.

If your fixed pallet is optimized for a specific scene (say the blue/greens of planet Earth) and then your animation swung around to a radically different scene (say the orange/reds of Mars) then this might explain your problem. Just a guess.

Gary

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### 1.153 MSG-151 Subject: mobius strip

Subject: mobius strip  
Date: Tue, 7 Jun 94 16:13:15 PDT  
From: "Steve McLaughlin" <stevemcl@VNET.IBM.COM>

Hi, does anybody have VERTEX? I remember Vertex having a rexx script that creates a mobius strip.

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### 1.154 MSG-152 Subject: Re: HOW to print in a Postscript printer a RENDER file ???

Subject: Re: HOW to print in a Postscript printer a RENDER file ???  
Date: Tue, 07 Jun 94 16:34:00 EST

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From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

> [...Printing Q&A...]

Ok, yes we now understand that we need professional output to get good looking printed results. Now I have some problems which some of you might be able to help with:

Recently I was commissioned to produce a 3-D masthead for a magazine after having demonstrated some of Imagine's capabilities on screen. I had a final product within a week and everyone was quite satisfied with it. The problems began when I had to output the damn thing. Ok, is it just where I live or are most service bureaus completely ignorant as to what "raster graphics" are? The first one I dealt with was Mac only equipped and they were insisting that I supply them with a Postscript file. The final image having a resolution like 4800x1800, it was not exactly easy to "fit it through the door". I asked if they could support any other raster graphics format (what's that? they say) like .PCX (What?), JPEG (Huh?) (Like I'm even going to mention ILBM) or how about TIFF!?: Oh yeah TIFF... nope we can't use that it can only be used for on screen previews. Right. Ok. So I generate a POSTSCRIPT file with AdPro. Jeez! it's a 30+ Megabyte file! I don't have a Syquest drive, so I need to transfer the whole thing on disk with AdPro's Splitz&Joinz and supply them with Splitz&Joinz.HQX for the MAC. Of course they don't understand what to do with an .HQX file and bitch about me supplying them IBM formatted disks!

I see that I'm rambling on and making a long story long, so I'll speed up here. This particular service bureau spent a whole day on trying to convert and read my Postscript file and in the end told me it didn't have a "preview" and that they could not manipulate it. And they were billing me for their time! Arrg! So I went to another bureau which could handle IBM compatibles. I first supplied them with a TIFF file. Corel PAINT! (the software they were using) read the file as garbage. I checked the TIFF file with another PC software and it was fine. Corel Paint! also read as garbage a .PCX file! It seemed very large files are not read properly by Corel Paint in those file formats. Finally the .BMP format worked but it was hell getting them to use Splitz&Joinz so I finally ZIPped the file (thank God ZIP's now available on the Amiga!). Anyhow, they read the file and finally output it on film, color separated but then I had to generate a black and white "mask" which also needed to be printed on film so that the printing bureau could use it to determine what was supposed to be transparent in the image (around the letters). I guess that what I would have needed is some sort of Alpha channel imbedded with the image which TIFF supports, I think, but they wouldn't have been able to read it anyhow. That's the short version of the story. Needless to say I didn't make any money on this! However, it has been printed finally.

Ok, enough boring you all with my problems. Anybody have some definite fullproof tips on how to get professional output from Imagine via service bureaus? Hopefully with the above and some helpful tips, other people can avoid all of this hassle.

Also: With the dismantling of the Boing archives at wuarchive, does anybody know where the IML Landfill is moving?

Maybe an answer to my problems can be found in the IML archives?

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Thank you,  
Ducharme.Alain@istc.ca

p.s.: Sorry to everyone for when I wanted to get onto the IML, I finally asked everyone on the list how to join. Recommendation: Whenever you quote some text or an extract from the IML, please be sure to mention the imagine-requests@ address and not the imagine@ address in your quote. The IML archives could also make use of this recommendation.

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### 1.155 MSG-153 Subject: Best Imagine pix?

Subject: Best Imagine pix?  
Date: Tue, 7 Jun 94 18:00:35 PDT  
From: das@ceti.csustan.edu (David Alan Steiger)

There are many Imagine-rendered pictures on ftp sites these days. Too many, unfortunately. I'd like to see some, but I don't have time to download them all. I'd like to get an idea of what is considered great in the community.

So what are some of the really good ones? Which ones are outstanding examples of imagineering?

Thanks,  
Dave

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### 1.156 MSG-154 Subject: Re: PC AutoCAD into Amiga Imagine

Subject: Re: PC AutoCAD into Amiga Imagine  
Date: Tue, 7 Jun 1994 18:07:25 -0800 (PDT)  
From: colinayo@hurricane.seas.ucla.edu

> Hi.  
> Basically, I have a friend who is using AutoCAD to design lighting  
> rigs, and he wants to animate them. He doesn't have access to any  
> ray-tracing software.  
> I want to transfer his PC's AutoCAD DXF format files for use in  
> Imagine on my Amiga.  
> What I want to know is: Is there a program that converts DXF ->  
> Imagine Object Files? Since the DXF file seems to contain all the  
> details for the 'setting of the scene', would I have to import all the  
> objects in the 'scene' separately?

I am very interested in knowing how to transfer AutoCAD DXF files to,

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say, Imagine 3D V3.0 PC directly. I have AutoCAD R12 right now.

Also, does anyone use 3D Studio as well? Is there a mailing list for 3D Studio or even a newsgroup?

Many thanks.

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### **1.157 MSG-155 Subject: States function, Texture morph**

Subject: States function, Texture morph  
Date: Wed, 8 Jun 94 01:49:00 UTC  
From: w.graham6@genie.geis.com

You can morph a tacked texture now, by simply using two objects with the same Lockstate. Just change the texture parameters in the second object. If, in the future, Impulse makes it possible to do so by having the current State lock the texture, it will have the advantage of saving disk space by needing only one copy of the object.

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### **1.158 MSG-156 Subject: Bonus feature in bones anim**

Subject: Bonus feature in bones anim  
Date: Wed, 8 Jun 94 01:46:00 UTC  
From: w.graham6@genie.geis.com

The Tween command in the States menu works pretty well too. It also works from any axis downward in the hierarchy. So that in a human object, by selecting (in group mode) a shoulder axis, and Tweening to another State, only the arm would be tweened.

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### **1.159 MSG-157 Subject: Printing on POSTSCRIPT printers etc.**

Subject: Printing on POSTSCRIPT printers etc.  
Date: Wed, 8 Jun 1994 13:44:10 +1000 (EST)  
From: Leo Hamulczyk <LEHAM1@vcp.monash.edu.au>

I printed a 1680X1188 24bit colour file on a 400dpi colour bubblejet on an A2 page (cost me a packet to print as I had to take it to a bureau) and it came out really good. There are about 3 pixels per millimetre. Depends on the size, a smaller render might look good too. As for a HP laser, the quality will be

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## 1.161 MSG-159 Subject: Re: States function

Subject: Re: States function

Date: Tue, 7 Jun 1994 22:52:47 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

```
> >
> > > |> Hi Paul. The States function currently doesn't support texture
> > > |> morphing... Impulse knows about this limitation, and said that they wil
1
> > > |> fix it.
> > >
> > >   This will be fixed in next of the quarterly upgrades?   Hmmm?
> > >
> > >
> > >   Dale
> >
> > does this mean we have to pay our $100.00 for the yearly upgrade program,
> > just so we can get something that should be in this upgrade.
> >
> > =RRW=
> >
> >
> >
> Is this true?  I hope it isn't.  I thought that It was a feature of IM3.0.
```

I don't know if this is true, thats why I asked. Yes I agree it should be part of 3.0 and a free fix..not a part of another upgrade, but I hope Impulse will treat us right and fix up a patch or something for us all to use..As of right now it does not work..

But then this is only my view.

=RRW=

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## 1.162 MSG-160 Subject: Conform to Path

Subject: Conform to Path

Date: Wed, 8 Jun 94 03:01:03 EST

From: mtucibat@cris.com (Mike Tucibat)

I.M.L.

Hi All!

I've been trying to use the Align to Path and Conform Object to Path functions, as described on p. 270. (An example could be a tube object, Aligned and Conforming, becomes a snake as it folllows the path. (Look, Ma, no bones!) While this works surprisingly well and deforms objects quite nicely, I have not been able to use them as described in the sidebar.

---

The sidebar says that you can move the path and leave the object still, and get the deformation. The only way I can get it to work is if I move the object along the path, or if I move both object and path.

Lot's could be done with this, if it works. It sounds like boneless, stateless deformations in the stage/action editors.

-mikeT

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### 1.163 MSG-161 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re: What about ~anim5~ and Imagine?  
Date: Tue, 7 Jun 1994 23:15:27 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Curious to know if you--or any--folks have actually confirmed that this  
> fixed pallet tool works any better in 3.0 than it has in earlier  
> versions. It hasn't for me.  
>  
> I, too, was tickled to see that ability to set the pallet to a  
> specified one--but it doesn't work. At least not consistently. In a 240  
> frame anim I've been working on, I do the frames in Imagine, in ram, have  
> rend24 save them out and then load them into DPaint4. (I do this cause  
> it renders so much faster to ram than to my hd). I want them in DPaint4  
> to make a big animbrush, which I use to stamp pix into the vuport of a  
> ship that's bound for earth. (TotallyOddsomelha, up on Aminet in the  
> gfx/anim section).  
>  
> Things go fine up till about frame 123, then the pallet starts  
> swooping all over the place--even though it's still set to one I  
> specify--and DPaint4 has to start doing its remap thing. Thank goodness  
> DP4 is so forgiving and flexible, cause Imagine still plays hell with  
> pallets.  
>

Well, I have done two or three 300 frame anims and it has worked fine for me..one thing you must do is render a specific frame that has all the objects, colors in it, if you must load them all into the detail editor and quickrender them all together, and use this picture as your pallet pic. If you don't then when you do render it it will pic whatever color in the pallet pic is closest, and this can still make an anim come out funny, but the pallet should still stay the same..I didn't think DPaint would remap while loading in frames of an anim..it will tell you if the frame uses a different pallet, but you must remap them manually..at least thats what I always have to do..

I think maybe you are having the problem I mentioned above, but the pallet is fixs as it should be. But then you could be right as I have only done a few anims with it and they have seemed to work OK for me, but not you...?

=RRW=

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## 1.164 MSG-162 Subject: Re: Mobeiuss strip

Subject: Re: Mobeiuss strip  
Date: Tue, 7 Jun 1994 21:45:23 -0700 (PDT)  
From: Jeremy White <jwhite@efn.org>

On Tue, 7 Jun 1994, Robert Frederique wrote:

> I'm reading all these messages about "Mobeius Strip" and have no idea  
> what it is. Can someone explain.  
>  
> Thank You.  
>

It is a ribbon with a half twist put into the ends, and then seal them together. Has some very interesting properties. Make one out of paper and cut down the middle of the ribbon (down the length of it-- you have to crease it to get the scissors started.)

- Jeremy White

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## 1.165 MSG-163 Subject: Re: States function

Subject: Re: States function  
Date: Tue, 7 Jun 1994 23:57:17 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> >> |> Hi Paul. The States function currently doesn't support texture  
>  
> >> This will be fixed in next of the quarterly upgrades? Hmmm?  
>  
> >does this mean we have to pay our \$100.00 for the yearly upgrade program,  
> >just so we can get something that should be in this upgrade.  
>  
> Who told you it should have been in this upgrade? I can think of lots  
> of changes/additions that I could say 'should have been' but really  
> it is more like 'wish it had been, hope it will be nexxt time'.

The manual told me so...page 137 STATES MENU, reads"An object STATE is a configuration of that object in terms of its surface attributes, geometry, and the assignments and orientation of its procedural textures

---



and image maps". Now this could be taken a few ways but I thought the assignments of textures was more than just what the texture is, but also what you have set it to...obviously this is not true, but surely you can see why one might take it this way..especially when below this they mention a fleck pattern which changes color between STATES..I guess this pattern was made from the object faces as this is the only way this could work from within one STATE object with two states..It will work with two State objects with different settings so I guess I will learn to live with it. But this is a bit misleading...I don't set the rules but I do hope I still have a right to speak my opinion, which is basically all I was doing, sorry if it offended you? I wasn't trying to start anything.

>

> I'm sure that we'll see more than just that one item for the 100\$ too.

> Or you could wait another couple years.

>

> Jason K.

>

I sure hope so...hey why are you so upset..I would love to get the yearly upgrades too, (that is if I can convince my wife that I need it more than the baby needs diapers) which I will...and I LOVE Imagine very, very much, so don't treat me like I'm the enemy...I just feel it should have these capabilities now and thought from the manual it did...and was only wondering if we will have to pay for it, seems to me it wouldn't have been too hard to have made it work in this version, but I guess instead we will all have to wait for the upgrade, and then delete all these extra STATE objects from our HD's? FINE if you can live with it till then, so can I.

=RRW=

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## **1.166 MSG-164 Subject: Re: HOW to print in a Postscript printer a RENDER file ???**

Subject: Re: HOW to print in a Postscript printer a RENDER file ???

Date: Tue, 7 Jun 1994 22:21:54 -0700 (PDT)

From: Mike McCool <mikemccool@efn.org>

Hey guy,

This is in response to your query about how to get a production house to output your amiga graphics to print. I can't tell by your string where you live, but is there a Kinko's within driving distance?

The kinko's here in Eugene has a Canon color laser printer hooked to a huge Mac by some interface called Fiery. It all runs from PhotoShop, one of the few mac programs capable of wowing an amiga graphics sig. Photoshop is great, cause it'll accept AmigaIff's in 24bit. Only catch is they have to be on msdos formatted floppies. No

biggy, really.

Realizing that the above paragraph hinges on the availablilty of a KINKO's, and that if you ain't got one, you're ready to hit the delete key, here's another way I've managed to get my stuff printed professionally. Go into AdPro and invoke that lovely color separation routine. Seems like you have options as to how many colors you want, three or four or five, something like that.

This worked fabulously for silkscreening t-shirts. Seems like again, it was exported to a mac, which actually created the different color modules needed to create the three-four-five different silkscreen stencils. And again, I believe photoshop was the tool, in mac.

You see what I'm meandering towards, anyway? You actually have three-four-five (whatever it is) separate color files for your single graphic, and they can be fed accordingly into most commercial printers.

Hopefully someone who's done this more regularly than I will fill in the specifics, as I realize I may be muddying instead of clarifying.

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## 1.167 MSG-165 Subject: Bones & Textures

Subject: Bones & Textures  
Date: Wed, 8 Jun 1994 03:33:56 -0700 (PDT)  
From: Jeremy White <jwhite@efn.org>

Does anyone know what the unhook function does? I thought that it might affect the groups (after selected, the group structure changes -- or does it?) After you do a refresh the bone structure is restored. It never visually changes..... Any clue what this does?

I am working on my fish using bones still and have come up yet another brick wall. The fish is composed as such ----

- 1.) Main axis - everything is grouped to this. Especially the non-moving (not boned) parts of the fish. (like fins)
- 2.) Body axis - This axis contains the body-mesh of the fish (not including head or tail.) This axis has the main axis as a parent and bone axes (first one only) as children.
- 3.) Bone axes - This is a chain of axes (5 of them) grouped properly for bones. The first axis has the body axis as a parent.

Ok... My problem. When I have the main axis selected and choose update bones, ( and have moved the bones axes) nothing happens. (ok, no problem, that object has no bones) so I select the body axis only. Ok, it works now. (as I had expected.)

So, I bend the fish and create a state (right tail flip.) I check the grouping box only (not the shape box, as the instructions suggest to avoid adding extra info to the object) I then animate it using bones anim. The backbone animates fine, but the body is not updated (it stays unbent.)

---

Is this because it is a second level group in the object???? Do I have to click the shape box?? If I click the shape box will the object morphs linearly!!!! (see below.) DOES THIS MEAN THAT WE ARE LIMITED TO HAVING BONE OBJECTS WITH THE BENDABLE FACES ONLY AS THE ROOT OF OUR OBJECT????

:-(

---

Fix to problem.... Watch for this one....

---

When you morph from between the DEFAULT state to another state (using bones) The object will not behave properly. It might look ok, but it will morph linearly ( the points will travel in a straight line rather than bending. You should create another state (called normal perhaps?) to morph between.

This is because the shape box is checked in the state requestor.(see above)

This is documented in the manual, but only briefly in very small print.

---

Thanks to all the people who have helped me in this first bones effort. I will donate this object to aminet when done, as it IS a good example of bones.

-Jeremy White

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## 1.168 MSG-166 Subject: Particle Help

Subject: Particle Help  
Date: Wed, 8 Jun 1994 21:23:23 +0000  
From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

Hi everyone!, My first message to the list WOW!...

I would first like to apologise for posting my subscribe message in here a couple of days ago..Pretty silly mistake there.:)

Anyway,

My problem is not having received 3.0 yet I'm a little stuck with particles. I have a 70 frame animation I am trying to do that has letters exploding slowly with the particles effect. I have fiddled and tweaked and fiddled some more but no matter what I do at the last frame there are still particles hanging in the air. I am using Delayed and

---

Bounce buttons and have the effect starting at frame 2 going to frame 70.  
and the following parameters..

Travel Distance 450  
Tri Scaling .0001  
Min # rot 0.2  
Max # rot 0.8  
time to terminal H 25  
Grav constant 1.0  
random # 76576  
Elasticity 50%  
Time to Z10.  
Ground -87.4961  
Speed 0.5  
Min Angle Z 20  
Max angle Z 70.  
Min Angle X -60.  
Max Angle X 60.

with non of the wind setting set at all.

Is there something blatantly obvious that i'm missing out on here. During the anim the particles slowly explode out until all the letters are particles and they start floating down and bounce but at the end there is too many left "hanging".

Hopefully I should see 3.0 this week as Nik (IML archivist) posted a message saying that he received it in Aus...let's hope :)

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## 1.169 MSG-167 Subject: re:[....printing Q&A....]

Subject: re:[....printing Q&A....]  
Date: Wed, 8 Jun 94 02:49:55 PDT  
From: 08-Jun-1994 0446 <leimberger@marbls.enet.dec.com>

> Ok, enough boring you all with my problems. Anybody have some definite  
>fullproof tips on how to get professional output from Imagine via service  
>bureaus? Hopefully with the above and some helpful tips, other people can  
>avoid all of this hassle.

I think I would have used ADPro to process the 24bit file into a 4 color  
seperation and then taken or modemed this to a service bureau to be printed  
on a linotronic. I think the color seps arw postscript. Another route would  
be to output the file from ProPage as a color sep.

bill

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**1.170 MSG-168 Subject: Re: PC AutoCAD into Amiga Imagine**

Subject: Re: PC AutoCAD into Amiga Imagine  
Date: Wed, 08 Jun 94 08:43:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Tuesday, June 07, 1994 18:07, colinayo@hurricane.seas.ucla.edu wrote:  
>> Hi.  
>> Basically, I have a friend who is using AutoCAD to design lighting  
>> rigs, and he wants to animate them. He doesn't have access to any  
>> ray-tracing software.  
>> I want to transfer his PC's AutoCAD DXF format files for use in  
>> Imagine on my Amiga.  
>> What I want to know is: Is there a program that converts DXF ->  
>> Imagine Object Files? Since the DXF file seems to contain all the  
>> details for the 'setting of the scene', would I have to import all the  
>> objects in the 'scene' separately?  
>  
> I am very interested in knowing how to transfer AutoCAD DXF files to,  
>say, Imagine 3D V3.0 PC directly. I have AutoCAD R12 right now.

Am I missing something here? Doesn't Imagine 3.0 directly support .DXF files? Otherwise, if you are using 2.0 on the Amiga a good program to convert .DXFs is Pixel 3D Professional from Axiom Software. I'm not sure how it will handle 'scenes' as compare to objects however?

Alain.

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**1.171 MSG-169 Subject: Re: HOW to print in a Postscript printer a RENDER file ???**

Subject: Re: HOW to print in a Postscript printer a RENDER file ???  
Date: Wed, 8 Jun 1994 10:54:11 -0300 (ADT)  
From: the Shockwave Surfer <shockwav@jupiter.sun.csd.unb.ca>

The best way I found to output 3D graphics for print is to use a desktop publishing program (ProPage, PageStream) on your Amiga to create the postscript file. Then zip it, splitz&join it, whatever to get it onto floppy disks for the service bureau. The service bureau then need merely copy your PS file to the printer port to print your artwork....something not necessarily beyond their small cranial capacity.

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**1.172 MSG-170 Subject: Re: Mobeius strip**

---

Subject: Re: Mobeiuis strip  
Date: Wed, 8 Jun 1994 09:33:30 -0400 (EDT)  
From: Mike Bandy <bandy@aplcomm.jhuapl.edu>

On Tue, 7 Jun 1994, Jeremy White wrote:

> On Tue, 7 Jun 1994, Robert Frederique wrote:  
> > I'm reading all these messages about "Mobeius Strip" and have no idea  
> > what it is. Can someone explain.  
>  
> It is a ribbon with a half twist put into the ends, and then seal them  
> together. Has some very interesting properties. Make one out of paper  
> and cut down the middle of the ribbon (down the length of it-- you have  
> to crease it to get the scissors started.)

Repeat: cut the resulting strip down the middle and see what happens!

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### 1.173 MSG-171 Subject: Re: Conform to Path

Subject: Re: Conform to Path  
Date: Thu, 9 Jun 1994 00:40:19 +1000 (EST)  
From: Nikola Vukovljak <nvukovlj@extro.ucc.su.OZ.AU>

On Wed, 8 Jun 1994, Mike Tucibat wrote:

>  
>  
> I.M.L.  
> Hi All!  
>  
> I've been trying to use the Align to Path and Conform Object to Path  
> functions, as described on p. 270. (An example could be a tube object,  
> Aligned and Conforming, becomes a snake as it follows the path. (Look,

I was wondering, can you tell me if the object has to have its axis  
pointing a certain way before this function works properly ? I can't seem  
to get it to work like I thought that it should...

Nik.  
nvukovlj@extro.ucc.su.oz.au

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### 1.174 MSG-172 Subject: Importing DXFs

---

Subject: Importing DXFs  
Date: 08 Jun 94 10:45:30 EDT  
From: John Foust - Syndesis Corporation <76004.1763@CompuServe.COM>

To: Imagine

On the Amiga, you can use InterChange Plus to convert between DXF and Imagine. It handles many other conversions, too. It performs a much better translation than Pixel Pro. Pixel's manual spends two sentences explaining its entire DXF translation, while the InterChange manual has more than twenty pages describing the many ins-and-outs of handling the often peculiar DXF format.

InterChange for Windows will be released in a few weeks, too.

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## 1.175 MSG-173 Subject: Re: Particle Help

Subject: Re: Particle Help  
Date: Thu, 9 Jun 1994 00:50:10 +1000 (EST)  
From: Nikola Vukovljak <nvukovlj@extro.ucc.su.OZ.AU>

On Wed, 8 Jun 1994, David Shaw wrote:

> Hi everyone!, My first message to the list WOW!...  
>  
> I would first like to apologise for posting my subscribe message in here  
> a couple of days ago..Pretty silly mistake there.:)  
>  
> Anyway,  
>  
> My problem is not having received 3.0 yet I'm a little stuck  
> with particles. I have a 70 frame animation I am trying to do that has  
> letters exploding slowly with the particles effect. I have fiddled and  
> tweaked and fiddled some more but no matter what I do at the last frame  
> there are still particles hanging in the air. I am using Delayed and

Hi Dave, welcome to the IML! :-)

Anyway, I found this problem as well a while back... Haven't had the chance to try 3.0 but it is probably the same. What I did was to scale the particles down as they moved apart (scaled down to 10% or less of original) and then, I just made them dissapear in the last few frames by deleting the object from the last few frames. It looks pretty good if you do it this way, but it may not be what you need...

Nik.  
nvukovlj@extro.ucc.su.oz.au

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### 1.176 MSG-174 Subject: Imagine 3 object and Texture format docs

Subject: Imagine 3 object and Texture format docs  
Date: Thu, 9 Jun 1994 01:02:00 +1000 (EST)  
From: Nikola Vukovljak <nvukovlj@extro.ucc.su.OZ.AU>

Ok, I've just uploaded the Imagine 3 Object and texture format docs onto Aminet.

They should appear in gfx/3d in a couple of days...

The filename is: im3texdoc.lha.

For those not familiar with Aminet, the common FTP sites are:

wuarchive.wustl.edu

wcarchive.cdrom.com

ftp.luth.se

look into /pub/aminet/gfx/3d

Nik.

nvukovlj@extro.ucc.su.oz.au

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### 1.177 MSG-175 Subject: Imagine3.0

Subject: Imagine3.0  
Date: Wed, 08 Jun 1994 16:43:30 +0100  
From: mnw3 <mnw3@aber.ac.uk>

Dear Friends & Imagineers,

I've just ordered Imagine3.0 (wow!) but it will take a month (aaggh)! Can anyone tell me more about the animation system i.e Motion blurring, inverse kinematics, the different types of forces?

Martin.....

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### 1.178 MSG-176 Subject: Re: Bones & Textures

---



Subject: Re: Bones & Textures  
Date: Wed, 8 Jun 94 10:41:43 CDT  
From: oxleyd@logica.co.uk (David Oxley)

>When you morph from between the DEFAULT state to another state (using  
>bones) The object will not behave properly.

As I understand it, you should use the DEFAULT state just to set up the object, and then create individual states that you are going to morph between. For example, you might set up 'flip right' and 'flip left' states based in DEFAULT but bent accordingly, and a middle 'rest' state that looks very much like the DEFAULT state. Then, you'd morph between flip left, rest, flip right, avoiding using the DEFAULT state.

I mistakenly used the DEFAULT state in a morph and got weird results. When I created a new state based on DEFAULT and morphed using that, the morph worked as expected. Hope this helps and that I haven't misunderstood :-)

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### **1.179 MSG-177 Subject: Re: HOW to print in a Postscript printer a RENDER file ???**

Subject: Re: HOW to print in a Postscript printer a RENDER file ???  
Date: Wed, 8 Jun 1994 09:38:00 -0700  
From: Tim Salazar <grover@cyber.net>

Mike Cool,

You mentioned using Kinko's and Adobe Photoshop for printing:

Mike, my last experience with Photoshop is that it only reconized BW or HAM IFFs, not 24bit IFFs. Has your experience been different? If so what was the ver of PhotoShop?

Thanks,  
Tim

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### **1.180 MSG-178 Subject: Imagine2 and 3 Bug ?????**

Subject: Imagine2 and 3 Bug ?????  
Date: Wed, 08 Jun 94 11:49:47  
From: "Richard Willkomm" <richard@hell.hacktic.nl>

Hello Fellow Rayers.

---

I noticed that the new Imagine 3.0 still has a bug that I've come to live with in Imagine 2.0

Whenever I add 2 equal brushmaps to an object I get an file not found error when initialising. If I clone and rename the brushmap and change the Attributes to the new filename for one of the brushes the error disappears.

Does anybody have a sollution for this problem.

Greetings

```
*****
*                               | Richard Willkomm  ----- The Ray Freak----- *
*                               |                               -- *
* #####  #####  | A500/GVP-HD+/030-33/882-50/9Mb/213MB  -- *
*   #   #   | Gfx Co-Sysop The Hell BBS The Hague Holland *
*   #  #  #  | +31-70-3468783                               -- *
*   #   #   | e-mail : richard@hell.hacktic.nl  --  -- *
*   #   #   | NLA_net: 14:101/103.2                -- -- *
*                               | AMY_net: 39:153/108.2        --- *
*                               |                               *
*                               | The Amiga isn't dead yet....Stay tuned..... *
*****
```

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## 1.181 MSG-179 Subject: Re: Particle Help

Subject: Re: Particle Help  
Date: Wed, 8 Jun 1994 11:13:18 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

Hopefully, you'll get oodles of responses to your query more helpful than mine--but what I've always done to eliminate all particles from the frame is increase the travel distance to a place beyond the focal range of the camera.

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## 1.182 MSG-180 Subject: Re: PC AutoCAD into Amiga Imagine

Subject: Re: PC AutoCAD into Amiga Imagine  
Date: Wed, 08 Jun 94 10:17:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

JFYI, the .DXF importer in Imagine V3.0 Detail Editor is a lot like the PostScript font importer in the Spline Editor; it only recognizes one type

of .DXF. .DXF is a lot like PostScript in that it is an UN-standardized "standard". The 2D .DXF standard is a standard but 3D .DXF came later and there are several reasons why it is not a standard. If you want to find out more about it, Syndesis (InterchangePlus) will sell you a very detailed brochure for \$10US (last time I checked) explaining what you will be dealing with when you try to use .DXF. To make a long story short, the Imagine V3.0 (as well as the Pixel3DPro, InterChangePlus and Caligari) .DXF importers will ONLY import Release 9 entity objects (maybe Release 12 entities are OK also, can't check since I don't have AutoCAD) and they won't recognize/handle layers, polyline, color objects/scenes. Believe me, I have messed with this for over a year and a half, and I could fill several pages about all the things I have tried but I am bored with the whole thing and I have found a route (not a method or single program but a route) to convert .DXF to Imagine.

BTW, both InterChangePlus and Pixel3DPro have some problems with their Imagine Savers that will result in bad edges and missing faces. Vertex 2.0 has the best Imagine saver, often saving object attributes (but that is a whole 'nother story).

Just so this post is not entirely worthless, the best method I have found is import the .DXF into 3DStudio, save out as a 3DStudio scene or object, import into Lightwave as 3DStudio, save out as Lightwave, import into Vertex 2.0, save out as Imagine. There, easy!

-----

From: imagine-relay  
To: 'IML'  
Subject: Re: PC AutoCAD into Amiga Imagine  
Date: Wednesday, June 08, 1994 8:43AM

On Tuesday, June 07, 1994 18:07, colinayo@hurricane.seas.ucla.edu wrote:

>> Hi.  
>> Basically, I have a friend who is using AutoCAD to design lighting  
>> rigs, and he wants to animate them. He doesn't have access to any  
>> ray-tracing software.  
>> I want to transfer his PC's AutoCAD DXF format files for use in  
>> Imagine on my Amiga.  
>> What I want to know is: Is there a program that converts DXF ->  
>> Imagine Object Files? Since the DXF file seems to contain all the  
>> details for the 'setting of the scene', would I have to import all the  
>> objects in the 'scene' separately?  
>  
> I am very interested in knowing how to transfer AutoCAD DXF files to,  
> say, Imagine 3D V3.0 PC directly. I have AutoCAD R12 right now.

Am I missing something here? Doesn't Imagine 3.0 directly support .DXF files? Otherwise, if you are using 2.0 on the Amiga a good program to convert .DXFs is Pixel 3D Professional from Axiom Software. I'm not sure how it will handle 'scenes' as compare to objects however?

Alain.

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**1.183 MSG-181 Subject: Re: What about ~anim5~ and Imagine?**

Subject: Re: What about ~anim5~ and Imagine?  
Date: Thu, 9 Jun 1994 04:26:42 +1000 (EST)  
From: "" <williamp@triode.apana.org.au>

> > specify--and DPaint4 has to start doing its remap thing. Thank goodness  
> > DP4 is so forgiving and flexible, cause Imagine still plays hell with  
> > pallets.  
> >  
> funny, but the pallet should still stay the same..I didn't think DPaint  
> would remap while loading in frames of an anim..it will tell you if the  
> frame uses a different pallet, but you must remap them manually..at least  
> thats what I always have to do..

No,I've had the same problems with 2.9 at least not locking the palette throughout an animation,even when requested to,and DPaint having to remap the frames.I'd hoped this had been fixed in 3.0...BTW later versions of DPaint will autotmatically remap frames.From v4.1 onwards I think.

William John Porter

williamp@triode.apana.org.au

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**1.184 MSG-182 Subject: Re: HOW to print in a Postscript printer a RENDER file ???**

Subject: Re: HOW to print in a Postscript printer a RENDER file ???  
Date: Wed, 8 Jun 1994 11:24:08 -0700 (PDT)  
From: Mike McCool <mikemccoo@efn.org>

Hey Tim,

I must admit, I was a little surprised myself, to see 'Amiga IFF's' as one of the load options in PhotoShop. I'm not used to having other platforms be anything but hostile towards the Amiga.

And I actually did all the loading and testing on a friend's Mac, at home, before we took it up to KINKO's, where his wife is queen of DTP. Lemme check with him, OK, and see what his version number is . . .

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**1.185 MSG-183 Subject: RE: Imagine3.0**

Subject: RE: Imagine3.0  
Date: Wed, 08 Jun 94 15:42:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Wednesday, June 08, 1994 16:43, mnw3 wrote:

> I've just ordered Imagine3.0 (wow!) but it will  
take a  
>month (aaggh)! Can anyone tell me more about the animation system i.e  
Motion  
>blurring, inverse kinematics, the different types of forces?

Motion blurring? I haven't found it, it's more like image blurring, it gives a hazy look to anything sporting a specific color. It's a post-processing effect which is applied AFTER the image is rendered, and therefore has nothing to do with motion. Different types of forces? Hey, this isn't Real 3D 2! Even Imagine's particles don't obey the laws of physics. They just follow some general guidelines on speed and bounciness, sort of a sophisticated explode effect. Don't expect them to spin based on the friction caused by the floor they are hitting. Inverse kinematics?

Yes, that's there. It's part of the cool new "States" animation system whereby objects can behave like skin (the actual polygons) over bones (the axis'). the inverse kinematics will let you move "child" bones while being constrained (?) by it's "parent" bones. Useful when you get the hang of it.

Actually although I'm winning about the first two I must admit that this "States" system is quite nice and one of the most important new feature of Im3.0 (along with the new textures and spline editor). You could have hours of fun with it!

Hope this answers your question?

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## 1.186 MSG-184 Subject: Re: World octovolume

Subject: Re: World octovolume  
Date: Wed, 8 Jun 94 21:30:22 GMT  
From: Andrew Nunn <apn@moby.demon.co.uk>

> I hope I'm doing something wrong, and someone out there knows how to fix  
> it, 'cause I'd hate to have to modify my objects for a larger scale.  
>  
> FYI, the objects in question are: 3x3 km spacestation, 1km long space  
> freighter, several smaller space craft, a planet created with Essence II, and  
  
> a "world sphere" for the stars. I can delete the star sphere, but I still  
> get the error about world octovolume too big. Also, none of the objects  
> extend beyond the 16000 unit limit.

I just did a set of test with a scene comprising a 'world sphere', camera and a light. The largest sphere size that works appears to be 8190, so you might try picking all the objects in the stage and scaling to fit that dimension.

---

Hope this helps

Andrew

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## 1.187 MSG-185 Subject: Re: HOW to print in a Postscript printer a RENDER

Subject: Re: HOW to print in a Postscript printer a RENDER

Date: Wed, 8 Jun 1994 13:54:44 -0700

From: peterj@netcom.com (Peter Jennings)

>  
 > Ok, enough boring you all with my problems. Anybody have some definite  
 > fullproof tips on how to get professional output from Imagine via service  
 > bureaus? Hopefully with the above and some helpful tips, other people can  
 > avoid all of this hassle.  
 >  
 Around here, the service bureaus are also Mac based. They can take  
 postscript (huge), or PageMaker files (merely large).

PageMaker can import graphics in TIFF format and even do some manipulation  
 before printing the postscript output film. If the bureau has time, they  
 might let you import your TIFF into a new PM file on their machine. More  
 likely, you will have to find a friend with a Mac, or go to Kinko's or some  
 such place that rents Macs with PageMaker by the hour to do the conversion  
 yourself. The advantage of PageMaker is that you will get crop marks and  
 color separations, etc automatically. If you can get your hands on Photo  
 Shop, it can do all sorts of conversions and image manipulation, too.

Now a final caveat, I am new to Imagine, so I have never tried this with  
 Imagine files from Amiga or PC, but I have done this with TIFF scans  
 generated on a PC and placed in ad copy created on PM.

Peter

```
--                finger whitehouse.gov and make a secret
      _\|//_       service agent come
        o o
-----uuu--U--uuu-----                peterj@netcom.com
```

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## 1.188 MSG-186 Subject: Re: PC AutoCAD into Amiga Imagine

Subject: Re: PC AutoCAD into Amiga Imagine

Date: 08 Jun 94 18:40:09 EDT

From: John Foust - Syndesis Corporation <76004.1763@CompuServe.COM>

To: Imagine

Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil> writes:

> of .DXF. .DXF is a lot like PostScript in that it is an UN-standardized  
> "standard". The 2D .DXF standard is a standard but 3D .DXF came later and  
> there are several reasons why it is not a standard. If you want to find out

DXF is documented. It is a standard. Every time they release a new AutoCAD, they enhance DXF, and there is a new standard. Just like TIFF. Autodesk does this about every two years, since the early 80s. It wasn't until the late 80s that they had a clear method of representing something that acted like a polygon. They are still limited to 3- and 4-sided polys, though; and there are un-standard ways that attempt to represent multi-sided polygons.

Why so many problems with DXF? Any given 3D program usually only handles a subset of DXF. Properly handling DXF takes years of coding. I know several CAD companies who have people working full-time on it. Even Autodesk puts several people on the task. Any given 3D program that exports DXF will also choose a certain subset to represent their 3D data. There are many ways to do this. Unfortunately, many of these methods are incompatible with the subsets that many programs choose to implement on the import side. There are so many programs that either import or export DXF, and there's no way to meet all of them.

For InterChange, we carefully document what we handle, exactly, in terminology that any AutoCAD-head or any 3D-head would understand.

> more about it, Syndesis (InterchangePlus) will sell you a very detailed  
> brochure for \$10US (last time I checked) explaining what you will be dealing  
> with when you try to use .DXF. To make a long story short, the Imagine V3.0

We don't have that offer any longer, the DXF Primer has been folded into the InterChange manual. However, I may have posted the Primer to the net once upon a time, you might want to check the Imagine and LightWave archives.

> (as well as the Pixel3DPro, InterChangePlus and Caligari) .DXF importers  
> will ONLY import Release 9 entity objects (maybe Release 12 entities are OK  
> also, can't check since I don't have AutoCAD) and they won't  
> recognize/handle layers, polyline, color objects/scenes. Believe me, I have  
> messed with this for over a year and a half, and I could fill several pages  
> about all the things I have tried but I am bored with the whole thing and I

You're wrong. InterChange does recognize and handle layers, polylines, and pen numbers. DXF files have no color info, no hierarchy, and lame object names. Axiom may be out of business by now, I have no idea, but their DXF support is much poorer than InterChange's. They only handled "entities only 3DFACE" DXFs. InterChange handles much more than that.

> BTW, both InterChangePlus and Pixel3DPro have some problems with their  
> Imagine Savers that will result in bad edges and missing faces. Vertex 2.0  
> has the best Imagine saver, often saving object attributes (but that is a  
> whole 'nother story).

---

Have you reported this as a bug to Syndesis? Can you send an example of a model that results in these bad and missing edges? This may be a case of garbage in, garbage out - where did this data come from?

> Just so this post is not entirely worthless, the best method I have found  
> is import the .DXF into 3DStudio, save out as a 3DStudio scene or object,  
> import into Lightwave as 3DStudio, save out as Lightwave, import into Vertex  
> 2.0, save out as Imagine. There, easy!

I would suggest using InterChange to go straight from 3DS to Imagine. This would preserve any sub-objects that 3DS made. There's no reason to go through LightWave, the converter that we wrote for NewTek is several years old compared to the more feature-laden converter in InterChange.

Yes, Autodesk can write a very good DXF converter. They wrote the standard. If you have a PC, they have a freely distributable DXF to 3DS converter that does not require the \$3,000 3D Studio. We also include a copy of that on the disks with InterChange when you buy it.

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## 1.189 MSG-187 Subject: beveling

Subject: beveling  
Date: Wed, 8 Jun 1994 16:27:05 -0700 (PDT)  
From: Mischa David Goldberg-Lockton <mischa@cats.ucsc.edu>

Yo, IML, I don't post often, but I just thought of a feature I would love to see in future versions of Imagine, and would like the best techniques to do it in 3.0.

The idea is fairly basic and simple: beveled extrusion. Say for a font to have a curved or striaght indented area to make it look \*sweet\*.

I have tried this in Pixel Pro 3D but we all know the saving problems. Also, this seemed to create an insane number of triangles.

So, will someone send this to the Imagine 4 Everybody! or whatever? It would be an AWESOME feature.

Note: I know that I could create multiple sections in the extrude and perhaps scale x and z down, but this is not exactly what I am looking for. I want curved and highly adjustable beveling featurews!!!

So, does anyone have a cool tip for me as I long to make wicked letters and such????? Help!

-----  
Mischa Goldberg-Lockton

mischa@cats.ucsc.edu

1-800-208-6344

---



---

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### 1.190 MSG-188 Subject: Re: Mobeiuis strip

Subject: Re: Mobeiuis strip  
Date: Wed, 8 Jun 94 21:54:49 GMT  
From: Andrew Nunn <apn@moby.demon.co.uk>

I've mislaid the original post but Amiga World collectors can find an article written by Brad W. Schenck on how to create a Mobeiuis Strip using Turbo Silver in the July 1990 edition.

Andrew

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### 1.191 MSG-189 Subject: Re: Conform to Path

Subject: Re: Conform to Path  
Date: Wed, 8 Jun 1994 19:35:09 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> I was wondering, can you tell me if the object has to have its axis  
> pointing a certain way before this function works properly ? I can't seem  
> to get it to work like I thought that it should...

yes you do...line the axis so that the Y axis points in the direction you want it to extrude along the path, and remember to select "align Y to path" and set "sections" to a desent amount if its going to follow a curved path. if it looks to jaggy then hit RghtAmiga-U and try a higher number, there are tricks to making thes ojects take less memory but basically it involve some manual editing. Hope this helps.

=RRW=

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### 1.192 MSG-190 Subject: Re: Particle Help

---

Subject: Re: Particle Help  
 Date: Thu, 9 Jun 1994 09:42:55 +0000  
 From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

> ..... What I did was to scale the particles down as they moved apart  
 (scaled down to 10% or less of original) and then, I just made them dissappear  
 in the last few frames by deleting the object from the last few frames. It  
 looks pretty good if you do it this way, but it may not be what you need...

hi everyone who replied...

What I ended up doing was pretty much as what Nik described  
 above, except I changed the particle scaline so that it was scaling to  
 nothing. I have since remember that you will still see the damn  
 particles in the stage editor when they are supposed to be .0001. Do a  
 render and what do you know, they're not there. I must have spent about  
 2 hours playing with settings in the fx and then tried a render. talk  
 about red in the face...

Does the 3.0 manual describe the particles fx better than the 2.9  
 documentation(;).

see ya  
 David Shaw

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## 1.193 MSG-191 Subject: Imagine Coded textures format.

Subject: Imagine Coded textures format.  
 Date: Wed, 8 Jun 94 17:48:50 GMT  
 From: David Southwell <David@flevel.demon.co.uk>

```
*****
*                               IMAGINE TEXTURE FORMAT                               *
*****
; This is an example piece of code for coded textures on imagine2
; on the Amiga.
;
; It might work on imagine3, if anyone can test it then please let
; me know.
;
; I have done this texture in 68000 because the interfacing would
; be a little tricky in C. Imagine starts up the texture as an
; executable (LoadSegment) and then passes some initialisation
; stuff on the stack - the texture must respond with the correct
; data block returned in d0 or zero for fail. You need to set up
; either the FP code or the integer code depending on the version
; of imagine running: Please code BOTH versions if you release any
; textures otherwise you will find them crashing on other machines!
;
```

```

; Imagine passes the x,y and z coord relative to the objects axis
; to the texture for each intersection point, we then can alter the
; objects colour,reflect and filter or leave them as the users base
; settings.
;
; You can alter which parameters are requested in the texture setup
; by altering the text below and then setting the colselect data
; to tell imagine which numbers are to be displayed as red,green and
; blue colours in the sample box.
;
; axispar sets the default axis for the texture mapping, I have set
; them to be aligned with the worlds axis, if you change these then
; make sure that the axis size is nearly 1 ( $\sqrt{x^2+y^2+z^2}=1$ ).
;
; Setting the objpar will alter the default numbers for the objects
; parameters on the setup screen, set these to appropriate values
; for your texture.
;
; The integer math format is number/65536 eg 1.0=65536 etc.
; When reading the colour information from the texture parameters
; always divide them by 256 because imagine uses colours in the range
; of 0-1 red, 0-1 green and 0-1 blue.
;
;
; For more information or comments contact me:
;
;   trefor@flevel.demon.co.uk
;
;
; N.B. Ive been a bit lazy - the integer version of this texture uses
; 68020 and above code! If you want me to change this then mail me.
;
; The examples in this code are mixed! The FP code example produces a
; mandelbrot set rendered against the final orbital position of points
; not inside the set. I am using a log palette and the red green and
; blue scale control the amount of palette tinge.
; The integer example is a bog standard chequer board.
;
; To use this file assemble it on Devpac or any other 68000 series
; assembler (You may need to make changes for some assemblers). Don't
; forget to select FPU and 68020 or above. Assemble the file to disk
; and load it into Imagine as a texture. Following this text is the
; executable version which has been uuencoded.
;
; I am also currently working on an Imagine coded object generator
; for doing all those nice objects you just couldn't do by hand. If
; you have any suggestions or want an algorithm including then mail
; it to me.
*****
rsreset
par_scale:  rs.l  1 ;The data structure for
par_red:     rs.l  1 ;the custom texture.
par_grn:     rs.l  1 ;Ive have used rs.b's so it can
par_blu:     rs.l  1 ;be easily accessed without messy
par_refred:  rs.l  1 ;offset numbers.
par_refgrn:  rs.l  1
par_refblu:  rs.l  1

```

---

```

par_filred: rs.l 1
par_filgrn: rs.l 1
par_filblu: rs.l 1
par_iters:  rs.l 1
par_break:  rs.l 1
par_spare3: rs.l 1
par_spare4: rs.l 1
par_spare5: rs.l 1
par_spare6: rs.l 1

    rsreset    ;this data comes from Imagine
cord_x:  rs.l 1 ;it is relative to the wrap axis.
cord_y:  rs.l 1
cord_z:  rs.l 1

    rsreset
obj_unknown: rs.l 6 ;the texture can write back to these
obj_colour_red: rs.l 1 ;parameters or leave them to pass
obj_colour_grn: rs.l 1 ;the base settings through.
obj_colour_blu: rs.l 1
obj_reflect_red: rs.l 1
obj_reflect_grn: rs.l 1
obj_reflect_blu: rs.l 1
obj_trans_red: rs.l 1
obj_trans_grn: rs.l 1
obj_trans_blu: rs.l 1
*****
init:
    cmp.w #$50,4(sp)
    beq Start
    clr.l d0
    rts
*****
Start:  tst.w 6(sp)    ;check for integer/fp version
        bne startup_fpCode
        bra startup_intcode
*****
startup_intcode:
    move.l #intcode,codeaddr
    move.l #intobjpar,objparaddr
    move.l #intaxispar,axisparaddr
    move.l #pointers,d0
    rts
*****
startup_fpcode:
    move.l #fpcode,codeaddr
    move.l #fpobjpar,objparaddr
    move.l #fpaxispar,axisparaddr
    move.l #pointers,d0
    rts
*****
intcode:
    move.l 4(a7),a0    ;texture parameters
    move.l 8(a7),a1    ;object parameters
    move.l 12(a7),a2 ;coord structure

    move.l cord_x(a2),d0

```

---

```

move.l  cord_y(a2),d1
move.l  cord_z(a2),d2

move.l  par_scale(a0),d3
beq skip

divs.l  d3,d0    ;<<<020+
divs.l  d3,d2    ;<<<020+
divs.l  d3,d3    ;<<<020+

add.l  d2,d0
add.l  d3,d0
btst  #0,d0
beq skip    ;pass through base settings

move.l  par_red(a0),d0
move.l  par_grn(a0),d1
move.l  par_blu(a0),d2
lsr.l  #8,d0
lsr.l  #8,d1
lsr.l  #8,d2
move.l  d0,obj_colour_red(a1)
move.l  d1,obj_colour_grn(a1)
move.l  d2,obj_colour_blu(a1)
intload_rest:
    lea  obj_reflect_red(a1),a1
    lea  par_refred(a0),a0

    move.w  #6-1,d0
intcopymats:
    move.l  (a0)+,d0
    lsr.l  #8,d0
    move.l  d0,(a1)+
    dbf  d0,intcopymats
    rts
*****
fpcode:
    move.l  4(a7),a0    ;texture parameters
    move.l  8(a7),a1    ;object parameters
    move.l  12(a7),a2 ;coord structure

    fmove.s  cord_x(a2),fp0  ;x
    fmove.s  cord_y(a2),fp1  ;y
    fmove.s  cord_z(a2),fp2  ;z

    fmove.s  par_scale(a0),fp3
    fmove.s  par_iters(a0),fp4
    fmove.l  fp4,d0    ;iters
    tst.l  d0
    beq skip
    fmove.s  par_break(a0),fp5

    fmove  fp2,fp1

    fdiv  fp3,fp0    ;/scale
    fdiv  fp3,fp1    ;/scale

```

---

```
fmove fp0,fp4    ;lx
fmove fp1,fp7    ;ly

fp_loop:
fmove fp0,fp2
fmove fp1,fp3
fmul  fp2,fp2    ;x*x
fmul  fp3,fp3    ;y*y
fmove fp2,fp6    ;x*x+y*y
fadd  fp3,fp6    ;>break?

fcmp  fp5,fp6
fbgt  fp_break

fmul  fp0,fp1    ;xy
fmul.s #2,fp1    ;2xy
fmove fp2,fp0    ;x*x
fsub  fp3,fp0    ;x*x-y*y

fsub  fp4,fp0    ;-lx
fsub  fp7,fp1    ;-ly

subq.l #1,d0
bne fp_loop
bra skip
fp_break:
fmove.s #16777215,fp0
fddiv  fp5,fp0
fddiv  fp5,fp0
flogn fp6
fddiv  fp6,fp0
fmove.l fp0,d0

clr.l d1
move.b d0,d1
fmove.l d1,fp0
fddiv.s #256,fp0

fmove.s par_red(a0),fp1
fmul  fp1,fp0
fmove.s fp0,obj_colour_red(a1)
lsr.l #8,d0

clr.l d1
move.b d0,d1
fmove.l d1,fp0
fddiv.s #256,fp0
fmove.s par_grn(a0),fp1
fmul  fp1,fp0
fmove.s fp0,obj_colour_grn(a1)
lsr.l #8,d0

clr.l d1
move.b d0,d1
fmove.l d1,fp0
fddiv.s #256,fp0
fmove.s par_blu(a0),fp1
```

---

```

fmul    fp1,fp0
fmove.s fp0,obj_colour_blu(a1)

lea obj_reflect_red(a1),a1
lea par_refred(a0),a0

move.w  #6-1,d0
fpCopyMats:
fmove.s (a0)+,fp0 ;divide down the settings from a scale
fddiv.s #256,fp0   ;of 0-256 to a scale of 0-1
fmove.s fp0,(a1)+

    dbf d0,fpCopyMats
SKIP: rts
*****
Pointers dc.l  'ITXT',0
        dc.l  0
CodeAddr dc.l  0
        dc.l  textblock,ColSelect
objparAddr dc.l  0
axisparAddr dc.l  0
*****
textblock:
dc.l  TITLETXT,Text1
dc.l  Text2,Text3
dc.l  Text4,Text5
dc.l  Text6,Text7
dc.l  Text8,Text9
dc.l  Text10,Text11
dc.l  Text12,Text13
dc.l  Text14,Text15
dc.l  Text16,blank
*****
ColSelect:
dc.l  $08010204    ;4 bits per parameter
dc.l  $01020401    ;$0=don't color,$1=red,$2=green
dc.l  $02040000    ;$4=blue,$8=scale
dc.l  $00000000

;
; Above colselect says: scale,r,g,b,r,g,b,r,g,b
;      n,n,n,n,n,n,n
;
;r=red/g=green/b=blue/n=none
*****
fpobjpar:
dc.s  32,1        ;inital values
dc.s  1,1         ;these corispond to the default
dc.s  0,0         ;settings for the textures
dc.s  0,0         ;parameters.
dc.s  0,0
dc.s  128,4
dc.s  0,0
dc.s  0,0
*****
Intobjpar:
dc.l  32<<16,1<<16    ;and integer inital values
dc.l  1<<16,1<<16     ;number<<16

```

---

```

dc.l 0,0
dc.l 0,0
dc.l 0,0
dc.l 128<<16,4<<16
dc.l 0,0
dc.l 0,0
*****
fpaxispar:
  dc.s 0,0,0      ;default offset of axis

  dc.s 1,0,0      ;x axis
  dc.s 0,1,0      ;y axis
  dc.s 0,0,1      ;z axis

  dc.s 32,32,32    ;default axis size
*****
intaxispar:
  dc.l 0,0,0      ;int default axis offset

  dc.l 1<<16,0,0   ;int x axis
  dc.l 0,1<<16,0   ;int y axis
  dc.l 0,0,1<<16   ;int z axis

  dc.l 32<<16,32<<16,32<<16 ;int default axis size
*****
TITLETXT: dc.b "MandleBrot",0
Text1:    dc.b "Scale",0
Text2:    dc.b "Red Scale",0
Text3:    dc.b "Green Scale",0
Text4:    dc.b "Blue Scale",0
Text5:    dc.b "Reflect Red",0
Text6:    dc.b "Reflect Green",0
Text7:    dc.b "Reflect Blue",0
Text8:    dc.b "Filter Red",0
Text9:    dc.b "Filter Green",0
Text10:   dc.b "Filter Blue",0
Text11:   dc.b "Iterations",0
Text12:   dc.b "Breakpoint",0
Text13:   dc.b 0
Text14:   dc.b 0
Text15:   dc.b 0
Text16:   dc.b 0
blank:    dc.b 0
even
*****
;
; This is the exectutable!
;

begin 777 ImagineTexture
M #\P ! $" #Z0 0(,;P!0 1G &0H!.X
M=4IO 9F L8 B/\ 9@ @PC_ K@ (8(_P ,T "' " \X
M " $YU(_P #0 "#"/\ "> A@C_ O@ (<(#P ( 3G4@X
M;P $(F\ ""1O P@B(J 0D*@ ( )A!G %^3$, ( $Q#* ),0S@#T(+0@P@ X
M !G %F("@ !" (H @D* ,X(C@B>"*(T &"-! !PC0@ @0^D )$'H ! PX
M/ %(!C@B"+ 4<C_ ^$YU(&\ !" )O @D;P ,\A)$ /(J1( !/(J10 "/(0X
M18#R*$8 "CR &( 2H!G $ \BA&@ L@ (@/( #"#R R@@" /(!X#RX

```



```

M $ @ %@/( "2/R VC@ + /( #R+R !<X\I( )O( */R/$2C0 /( X
M" #R PH@ 0*/( ' *A3@&; 8 HO(\1 !+?___@ 4/( %"#R !L4@ 8X
M(/( 8 !"@1( @% /(\1"!#@ \BA$@ $@ $(_I9 &."(0H$2 /(!X
M0 #R/$0@0X /(H1( "/( !"/R*60 !S@B$*!$@#R 4 \CQ$($. #RX
M*$2 SR 0C\BED @0^D )$'H ! P/ %\AA$ /(\1"!#@ \AED %'(X
M_^Y.=4E46%0 (@ " : #< WL X
M .! #BP Y< .B #K@ [P /) #U ^$ /M #^ X
M! , 0$ $!0 ! 8 0'" $"! $"! $"! $( _@ /X X
M #^ !# 0( X
M ( $ ! 0 X
M ( $ /X X
M #^ _@ 0@ $( !" X
M $ ! 0 X
M " @ ( 36%N9&QE0G)O= !38V%L90!2960@4V-A;&4 1W)E96X@X
M4V-A;&4 0FQU92!38V%L90!2969L96-T(%)E9 !2969L96-T($=R965N %)EX
M9FQE8W0@0FQU90!&:6QT97(@4F5D $9I;'1E<B!'<F5E;@!&:6QT97(@0FQUX
M90!)=&5R871I;VYS $)R96%K<&]I;G0 /L (@ <X
M ( "8 J , #0 Z 0@ $8 !, 4 %8 X
M !: 8 A (4 "( B0 (H "+ C (T ". X
M CP ) "1 D@ ), "4 E0 )8 "7 F )D X
% _ ) X
X
end

```

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## 1.194 MSG-192 Subject: service bureaus

Subject: service bureaus  
 Date: Wed, 8 Jun 1994 16:41:28 -0700 (PDT)  
 From: Mischa David Goldberg-Lockton <mischa@cats.ucsc.edu>

I went through hell last summer trying to get files from amiga to a service bureau.

The best solution for reasonably low res at that time was to use the TIFF saver in adpro and just modem the file in with ZMODEM or something. Other bureaus seems to all recognize JPG which really should be for video.

Other dudes that had worked on it before said a 44mb mac formatted syquest was the way to go; but I dont have AMAX and consider this to be too far to go.

Another option which I havent fully explored is sending your work to an amiga freindly slide printing service, to make a hires slide for pretty cheap which should be able to be printed by a photographic press. (which will be expensive)

As other people said, spltz and jnz is probably a good solution.. ASDG has some of the bombest cross platform tools.

Remember, if you cant convert it directly, convert it more than once...  
just like 3d objects.

-----  
Mischa Goldberg-Lockton

mischa@cats.ucsc.edu

1-800-208-6344  
-----

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## 1.195 MSG-193 Subject: Re: beveling

Subject: Re: beveling  
Date: Wed, 8 Jun 1994 21:09:26 -0500 (CDT)  
From: Michael Halleen <halleen@MCS.NET>

On Wed, 8 Jun 1994, Mischa David Goldberg-Lockton wrote:

> Yo, IML, I don't post often, but I just thought of a feature I would love  
> to see in future versions of Imagine, and would like the best techniques  
> to do it in 3.0.  
>  
> The idea is fairly basic and simple: beveled extrusion. Say for a font  
> to have a curved or striaght indented area to make it look \*sweet\*.

> So, does anyone have a cool tip for me as I long to make wicked letters  
> and such????? Help!

Do you have Im 2.9 or 3.0? It's in there. Look closely in the spline  
editor.

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## 1.196 MSG-194 Subject: Re: Particle Help

Subject: Re: Particle Help  
Date: Thu, 9 Jun 1994 09:51:19 +0000  
From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

Hi Mike,

--but what I've always done to eliminate all particles from the  
> frame is increase the travel distance to a place beyond the focal range

---

> of the camera.

I tried doing this with the thing i'm working on, but the effect started looking pretty weird. I had to set the Travel Distance to just over the whole length of the object.(450) This object was a bunch of letters grouped together from the Spline editor. When they are grouped together in this way, the effect gives a pretty neat explosiomb starting from wherever you point the parent axis.

Now what I would like is to be able to use the gravity, delayed, bounce etc on an individual object, not just the particles.(ala Real3D I suppose...)(you know having whole objects bouncing at Z Ground etc ;) Hopefully this will make it into one of the 1st yearly upgrades, although I believe it will be the full 3D Spline editor first.

I'm off to play with some more particles....again and again...:)

See Ya  
David Shaw

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## 1.197 MSG-195 Subject: Re: PC AutoCAD into Amiga Imagine

Subject: Re: PC AutoCAD into Amiga Imagine  
Date: Wed, 8 Jun 1994 17:35:21 -0800 (PDT)  
From: colinayo@hurricane.seas.ucla.edu

> Just so this post is not entirely worthless, the best method I have found  
> is import the .DXF into 3DStudio, save out as a 3DStudio scene or object,  
> import into Lightwave as 3DStudio, save out as Lightwave, import into Vertex  
> 2.0, save out as Imagine. There, easy!

How well does 3DStudio import .DXF files as well as importing 3DS files to lightwave? Can practically any .DXF file be imported into 3DS since the two programs are from the same company. Any loss of data during this "AutoCAD to 3DS to LightWave to Vertex to Imagine" path?

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## 1.198 MSG-196 Subject: Imagine.fp

Subject: Imagine.fp  
Date: Thu, 09 Jun 94 09:28:00 PDT  
From: Richard Morris <RichardM@agby1.agric.wa.gov.au>

>Does anyone know where I can get hold of a copy of Imagine2.0.fp, as I've  
just  
>ordered a 68882 FPU?

---

> BYE BYE from Martin at Aber!

Did you get Imagine 2.0 from a coverdisk? I thought both versions were supplied with the retail package. I got my copy of Imagine from Amiga Format and they would supply the FP version if you sent them your original coverdisk. I still have the details somewhere if you need them.

Richard

(Bunbury, Western Australia - richardm@agbyl.agric.wa.gov.au)

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## 1.199 MSG-197 Subject: Moving Amiga files <> PC's

Subject: Moving Amiga files <> PC's

Date: Thu, 09 Jun 94 09:26:00 PDT

From: Richard Morris <RichardM@agbyl.agric.wa.gov.au>

I have to move files regularly back and forth between my Amiga at home and a 486 at work. I have found the easiest solution to be an AT Bridgeboard. It comes with a 1.2mb drive and you can add a 1.44FDD cheaply if you need the extra space they provide. Then use Backup and Restore (DOS 5 and under) or MSBackup with DOS 6.x to split large files across multiple floppies. The Commodore bridgeboards are dirt cheap now (What else can you do with an AT these days?) second-hand and quite a few retailers still seem to have a few collecting dust out the back which they just want to shift.

Richard

(Bunbury, Western Australia - richardm@agbyl.agric.wa.gov.au)

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## 1.200 MSG-198 Subject: Re: Particle Help

Subject: Re: Particle Help

Date: Wed, 8 Jun 1994 20:11:18 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> My problem is not having received 3.0 yet I'm a little stuck  
> with particles. I have a 70 frame animation I am trying to do that has  
> letters exploding slowly with the particles effect. I have fiddled and  
> tweaked and fiddled some more but no matter what I do at the last frame  
> there are still particles hanging in the air. I am using Delayed and  
> Bounce buttons and have the effect starting at frame 2 going to frame 70.  
> and the following parameters..

69 frame animation particle effect try setting terminal setting to amount of frames to animate..H and Z this may help..Try the fix below. The main thing I see is your speed is too slow for the height the particles need to

---

fall. and you before you change what you have, make a copy of your original staging file in the project so you can get it back if these settings don't help you..

```
> Travel Distance 450          OK
> Tri Scaling .0001           OK
> Min # rot 0.2               OK
> Max # rot 0.8               OK
> time to terminal H 25       reset to 69
> Grav constant 1.0          FINE
> random # 76576             OK
> Elasticity 50%             GOOD
> Time to Z10.               reset to 69
> Ground -87.4961           OK if this is were the ground is
> Speed 0.5                  TRY 15. I think 0.5 maybe to slow
> Min Angle Z 20             SHOULD be OK but if not try 0
> Max angle Z 70.            FINE
> Min Angle X -60.           OK
> Max Angle X 60.            OK
>
> Is there something blatantly obvious that i'm missing out on
> here. During the anim the particles slowly explode out until all the
> letters are particles and they start floating down and bounce but at the
> end there is too many left "hanging".
```

your speed is to slow..this is obviuos to me and the terminal H & Z are to short to let it play all the way threw the full effect.

Let me know if this fixes the problem..

=RRW=

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## 1.201 MSG-199 Subject: Re: What about ~anim5~ and Imagine?

Subject: Re: What about ~anim5~ and Imagine?  
 Date: Wed, 8 Jun 1994 19:56:18 -0700 (PDT)  
 From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

```
> No,I've had the same problems with 2.9 at least not locking the palette
> throughout an animation,even when requested to,and DPaint having to remap
> the frames.I'd hoped this had been fixed in 3.0...BTW later versions of
> DPaint will auotmatically remap frames.From v4.1 onwards I think.
>
> William John Porter
```

Hmm? well like I said, I have only tried it with a few animations and it has worked so far for me, bumber.....I geuss I'll have to upgrade my Dpaint though I thought I already had. I could have just been wrong though..and

haven't needed to remap anything for a while in Dpaint. Usually I use something other than Dpaint to remap images anyways. Creature of habit.hehhe

=RRW=

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## 1.202 MSG-200 Subject: beveling

Subject: beveling  
Date: Wed, 8 Jun 1994 21:13:37 -0700 (PDT)  
From: Mischa David Goldberg-Lockton <mischa@cats.ucsc.edu>

Thanks to all who replied to my bevel question, Ill have to play with the spline editor.

BTW has pixel pro been updated to do tddd correctly?

-----  
Mischa Goldberg-Lockton

mischa@cats.ucsc.edu 1-800-208-6344  
-----

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## 1.203 MSG-201 Subject: Limiting Fog some places

Subject: Limiting Fog some places  
Date: Thu, 9 Jun 1994 00:12:34 -0400 (EDT)  
From: "Mr. Scott Krehbiel; ACS (PC)" <scott@umbc.edu>

Hi Folks

I'm playing with using a foggy blob to simulate a blurry effect surrounding a glowing object, (like the blue glow that surrounds the glowing parts of the warp nacelles on the new Enterprise)

It looks absolutely fantastic when looking directly at the fog object, but around the edges, where you're looking along the rim of my hamburger patty - shaped fog object, it becomes opaque. I remember something about 2 fog objects canceling each other out if they overlap, but I couldn't get this "feature" to work in quickrender. Is there something about a feature in globals that could help??

Basically, I have a dull hull-metal grey shape that resembles a hamburger bun. I have a bright green shape resembling the hamburger patty (green

---

since the background is blue - I'll have to change that someday) and a larger patty shape that's a green fog object. The shape of the fog object is a bit taller than the solid glowing green hamburger patty, so that it gradually recesses into the bun. This creates a BEAUTIFUL glow, as long as you don't look along the rim, where the glow becomes unconvincing. Any suggestions you could offer???

By the way, I'm using Imagine 2.0. Thanks muchly  
Scott Krehbiel  
scott@umbc7.umbc.edu

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## 1.204 MSG-202 Subject: Conform to Path in Stage

Subject: Conform to Path in Stage  
Date: Thu, 9 Jun 94 01:16:03 EST  
From: mtucibat@cris.com (Mike Tucibat)

I.M.L.

Responding to my post on conform/align to path in Stage Editor, Nik asks:

: I was wondering, can you tell me if the object has to have its axis  
: pointing a certain way before this function works properly ? I can't seem  
: to get it to work like I thought that it should...  
:  
=====

Hey Nik,

Well, the two easy things it could be first:

The axis will orient the object on the path. The positive Y axis points it down the path.

The other easy thing it could be is making sure there are enough faces for a smooth deform. It's analogous to extruding to a path-- you need to specify enough sections for it to follow the path.

If it's not something easy like these, we could try something else.

Has anybody gotten this to work with the object still and the path moving?

-mikeT

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## 1.205 MSG-203 Subject: Stage Paths

Subject: Stage Paths  
Date: Thu, 9 Jun 94 01:31:03 EST  
From: mtucibat@cris.com (Mike Tucibat)

I.M.L.

On 6-8 Randy Wall responded to Nik Vukovljak thusly:

```
: > I was wondering, can you tell me if the object has to have its axis
: > pointing a certain way before this function works properly ? I can't seem
: > to get it to work like I thought that it should...
:
: yes you do...line the axis so that the Y axis points in the direction you
: want it to extrude along the path, and remember to select "align Y to
: path" and set "sections" to a desent amount if its going to follow a curved
: path. if it looks to jaggy then hit RghtAmiga-U and try a higher number,
: there are tricks to making thes ojects take less memory but basically it
: involve some manual editing. Hope this helps.
=====
```

Hey Randy,

We were talking about the align and conform to path in the Stage Editor. The processes are analogous in some ways, but it's a different thing.

The functions are discussed on p.270 of the manual, and it's extremely cool to have a stateless object be deformed by a path in the Stage Editor. Example - a straight tube (no states or bones) becomes a wriggling snake by aligning and conforming to an "S" shaped path, and moving along it. It really works.

I have not been able to get the function described in the sidebar to work, however. That is, the same deformation should take place if the object remains stationary in Stage, and the Path moves through the object. You \*could\* have a flag as a stationary object, and make a wavy path move through it, and create a rippling flag.

I haven't been able to get it to work, however! Check it out!

-mikeT

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## 1.206 MSG-204 Subject: Re: Imagine 3 object and Texture format docs

Subject: Re: Imagine 3 object and Texture format docs  
Date: Thu, 9 Jun 94 04:22:23

---



From: djm2@ra.msstate.edu (Dan Murrell Jr.)

Hey, Nikola, you said on Jun 9 :

>  
> Ok, I've just uploaded the Imagine 3 Object and texture format docs onto  
> Aminet.  
> They should appear in gfx/3d in a couple of days...  
>  
> The filename is: im3texdoc.lha.  
>

Thanks Nik, the info looks very good. I'll be playing with this some.  
Steve Worley, look out! :) But seriously, Steve, can you post relevant  
info to make our custom textures work fine with Forge?

Thanks a ton,  
Dan

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## 1.207 MSG-205 Subject: SQ shark

Subject: SQ shark  
Date: Thu, 9 Jun 1994 09:36:00 -0300 (ADT)  
From: the Shockwave Surfer <shockwav@jupiter.sun.csd.unb.ca>

On Wed, 8 Jun 1994 Mark Thompson wrote:

> Well here is the scoop. I supplied NewTek with a shark and scene file  
> that used displacement mapping to make a whole school of them swim by  
> the camera. This was included in the early 3.0 releases sent to dealers  
> but not in the final release. There was another shark that was included  
> (probably from Amblin) in the later release. Amblin used a chain of bones  
> rather than displacement mapping to do their shark. The nicest solution  
> uses a combination of both. But I believe I remember hearing John Gross  
> (Amblin animator) say that the shark in the seaQuest logo was a real shark  
> composited in with the CG logo.

Well, when I was at the WOC in Toronto I talked to a fellow who claimed  
to have made that anim. He was showing the scene file at the time, and  
the wireframe preview looked exactly like the anim on TV. He used 13  
bones to deform a shark object...the object looked like a digitized shark  
model that had been lovingly touched up, but might have been made  
entirely by hand. I can't remember his name. Of course, who knows what  
the real story is...

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**1.208 MSG-206 Subject: Sorry Could Not Find Subject!**

Date: Fri, 10 Jun 1994 04:46:50 +1000  
From: imagine-relay@email.sp.paramax.com

>Hey Lesk! Pass this along to the IML, will ya?!  
>  
>The May 1994 issue of Computer Graphics World contains a very  
>interesting article on digital Matte Painting. It's well worth a look  
>to both 2D and 3D artists.  
>  
>Thanks!  
>Paul

Sure; your welcome.

Render Ho!  
Lesk

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**1.209 MSG-207 Subject: Sorry Could Not Find Subject!**

Date: Fri, 10 Jun 1994 05:59:02 +1000  
From: imagine-relay@email.sp.paramax.com

Ok, this is for those that have had Imagine 3 longer than I have (2 days and having to go to work!)...

I thought that one could now have 2 rows of user buttons on the bottom of the screen. Is this possible ? I can't seem to be able to find any reference to this in the manual....

If someone can either help or direct me to a relevant page number ?

Also, while I'm here... What Anti-alias values have people found to be as good or better than the 'old' value of 30 and that will render either a bit quicker (wishful thinking) or at least, just as quick as the old mode ?

Nik.  
nvukovlj@extro.ucc.su.oz.au

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**1.210 MSG-208 Subject: Re: 2 rows of buttons?**

Subject: Re: 2 rows of buttons?  
Date: Fri, 10 Jun 1994 09:50:20 GMT +1200  
From: "Paul Batten" <BATTENP@scicol.chchp.ac.nz>

> I thought that one could now have 2 rows of user buttons on the bottom of  
> the screen. Is this possible ? I can't seem to be able to find any  
> reference to this in the manual....

Just keep adding user buttons, they wrap to the next line automatically.

> Also, while I'm here... What Anti-alias values have people found to be as  
> good or better than the 'old' value of 30 and that will render either a  
> bit quicker (wishful thinking) or at least, just as quick as the old mode ?

I've found that an AA value of 25 - 35 give they same quality as the old  
30, but by lowering the Max Rays to 20 - 50 speeds up the render without  
sacrificing to much.

One thing i don't recommend is trying to render a detailed pic with AA set  
to zero and Max Rays = 255 .... my 040 took 9 hrs to render 3% ! .... I  
reset it to 10 and 100, and rendered the whole pic in the same time.

Cheers  
Paul.

---

Paul Batten	Science & Computing Dept.	Christchurch Polytechnic
battenp@scicol.chchp.ac.nz	Christchurch	New Zealand

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**1.211 MSG-209 Subject: Sorry Could Not Find Subject!**

Date: Fri, 10 Jun 1994 10:10:35 +1000  
From: imagine-relay@email.sp.paramax.com

To ALL,

I have lately seen a film in TV that had some special effects like  
lightning OR something like electricity . I am sure that the majority of you  
have sen Terminator II . I am intrested in the electric effect that the film  
had at the very begging .

How that would be possible ?? ATTENTION. I would like to make an effect that is  
going to be held betwween TWO points in order one main electric flame  
to desort and maybe others to go through on the air too that are less powerfull.

I am lloking forward in hearing any good suggestions about the above mentined e  
ffect . I just hope I have described what I want to achive in order not  
to be any misunderstandings .

---

EFFECT wanted :

```

      \      /~~~~~      ~~~\      ~      ~
      ~ /~=      =      =      |      ~
~      0 = =      = == =      == 0~~ ~
      ~ \      ===      = =      |
      ~ | ~\      =      ~ ~ \~~ ~
      \      ~~~~~      ~
      ~
      ~

```

O : The Points that the effect is going to held between

\,~,~,/,/,| : Electricity "flames" >:')

= : The MAIN electricalfield !

Yours Sincerely,

```

      /      '      -
      , - / - , o \      _ _ (
      ( _ /      < _ _ \ / ( _ )

```

Email:foivos@phgasos.ntua.gr

/

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## 1.212 MSG-210 Subject: Pissed off at Imagine 3.0 integer (Amiga)

Subject: Pissed off at Imagine 3.0 integer (Amiga)

Date: Fri, 10 Jun 1994 10:59:07 +1000 (EST)

From: Leo Hamulczyk <LEHAM1@vcp.monash.edu.au>

To Mike and everyone else at Impulse.

I just received Imagine 3 yesterday and I am pretty pissed off. When Imagine 2.9 came last year, none of the new textures worked on the integer version. But I understood that they would work on the integer version on Imagine 3. But alas, Imagine 3 comes yesterday, finally arrives in Australia after coming through Amsterdam (it really did, it had a sticker on it) 10 months after ordering it and I am told on a one page insert "If you are installing the integer version of the software, don't bother with the HAZE and LENSFLAR F/X they only work in the floating point version. Also note that the new textures will not install if you choose the integer version of Imagine because they only work in the floating point version. The old textures will be loaded when you install the integer version." Now WHAT THE HELL DID I BUY IMAGINE 3 FOR? I am a first year university student, and I cannot afford to buy myself an accelerator, 32 bit RAM and an FPU. By the time I finish my course and get a job, Imagine will probably be up to version 25 and anyway, I

don't want to wait a couple of years before I can use the new textures. I mean what's the problem, how hard is it to write a very short bit of code so that the new textures will work on integer machines. I mean I waited 10 months for this and I can't even use half the good stuff. Same with lensflare and haze. I can put up with the extra time these new features will take, I'm used to that, but at least they should work. So come on guys at Impulse, be reasonable. Don't forget that there are some of us out there who simply cannot afford any upgrades at the moment. I can barely afford to buy a new wheel for my bike at the moment.

If someone replies to this between June 17 and July 25, please also send direct to me because I will be off the IML during that time. My address is

LEHAM1@vcp.monash.edu.au

Leo Hamulczyk, Victorian College of Pharmacy, Monash University,  
Melbourne, Australia

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### 1.213 MSG-211 Subject: Pffft...

Subject: Pffft...  
Date: Thu, 9 Jun 1994 16:40:12 -0500 (CDT)  
From: kirvan@SSESCO.com

Greetings,

David Shaw:

> Is there something blatantly obvious that i'm missing out o  
> here. During the anim the particles slowly explode out until all the  
> letters are particles ad they start floating down and bounce but at the  
> end there is too many left "hanging".

Crank up the Gravitational constant.

-Jeremy White:

> Ok... My problem. When I have th main axis selected and choose update  
> bones, ( and have moved the bones axes) nothing hppes. (ok, no problem,  
> that object has no bones) so I select the body axis only. Ok, it works ow.  
> (as I had expected.)  
>  
> So, I bend the fish and create a state (right tail flip.) I check the  
> grouping box only (not the shape box, as the instructions suggest to avoid  
> dding extra info to the object) I then animate it using bones anim.  
> The backbone animates fine but the body is not updated (it stays unbent.)

All the axes in your object heirarchy have to have bone subgroups associated to them. Make a subgroup of all the faces - call is ALL - and assign that to all the unused bone subgroups. Using "check object" will help spot unassigned bones.

As a side note, it sounds like you have the head and fins of the fish grouped to the body - if this is the case, you may have trouble keeping the head and fins attached. Bones is ment to be used with contiguous objects. You may want to slice the objects together, delete the extraneous parts, join whats left, pick all the points in the seams, use snap to grid in point mode with a small grid size, and merge the object to get a contiguous object. (those of you out there that have humanoid may be able to do the same thing to get the grouped figures contiguous. We all know slice is iffy, so good luck.

>Is this because it is a second level goup in the object????

yes.

>Do I have to click the shape box??

If it's boned properly, shape needs only be clicked in the DEFAULT state. (this goes for brush/texture tacking too)

>If I click the shape box willthe object morph linearly!!!!

the points will move on a straight line path, but the timing won't be linear.

Dave:

>There are many Imagine-rendered pictures on ftp sites these days. To  
>many, unfortunately. I'd like to see some, but I don't have time to  
>download them all. I'd lke to get an idea of what is considered great in  
>the community.

>

>So what are some of te really good ones? Which ones are outstanding  
>examples of imagineeering?

I just saw a pic on compuserve called "shellac" (or something like that) by Greg Tsadalis (sp) - excellent pic. Don't know if it's on any ftp sites - yet.

Martin.:

> I downloaded a rather nice lens-flare archive (AnimFlare.lha) wit  
>the planet Mars and a starfield included, but they didn't include the 'radial'

>textur. Is this because I own the coverdisk Imagine2.0?

probably.

>If if this is so then I think it's a hame I'm missing out on this texture!  
> ... (Could someone mail me a copy please..)

The textures are not public domain - you need the proper version to get the textures.

>Also I was going t buy Imagine3.0 (which was announced when the coverdisk  
>was released but turned out to b 2.9 - a bit of a con!)

Not! - anyone that got 2.9 gets 3.0 automatically

>but when I saw the price (595 quid) I sighed a bit! Could I (as humble  
>student) upgrade for 100 pounds or so?

If you've got the coverdisk version, there should also be a coupon for  
an upgrade that's real reasonable. I don't know the pricing - call us  
- Impulse - 612-425-0557

later... sk...

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## 1.214 MSG-212 Subject: Re: PC AutoCAD into Amiga Imagine

Subject: Re: PC AutoCAD into Amiga Imagine  
Date: Fri, 10 Jun 94 08:53:33 +1000  
From: JOHN ROWE <jrowe@ozemail.com.au>

Hi T.Charalambous!

You wrote:

>What I want to know is: Is there a program that converts DXF ->  
>Imagine Object Files? Since the DXF file seems to contain all the  
>details for the 'setting of the scene', would I have to import all the  
>objects in the 'scene' separately?

I use InterChange Plus Ver 3.0 for this. It does a good job too, on the  
whole. If you have trouble converting DXF to Imagine with it (I sometime  
get strange triangles lancing out in all directions), converting to Turbo  
Silver 3.0 format usually does the trick in such cases.

I've been converting AutoCAD houses using it and it keeps all the  
information of object grouping, naming and colouring intact through the  
transfer.

Hope this helps.

Best Regards from Down Under, John

John Rowe Animation  
Toowoomba Qld.  
AUSTRALIA  
EMail:jrowe@ozemail.com.au

-> Christian <-  
Reg.CBM Developer, 3D Animator, Programmer  
Aussie Amiga Keyboard Overlays

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## 1.215 MSG-213 Subject: Motion Blurring

Subject: Motion Blurring  
Date: Fri, 10 Jun 1994 12:37:26 +1000 (EST)  
From: Leo Hamulczyk <LEHAM1@vcp.monash.edu.au>

How come Renderman could do proper motion blur? If the rendering speed would be a problem, I'm sure the real diehards wouldn't mind for the effect. Anyway, for certain types of anims you really need it. Picture blurring isn't good enough. Sculpt 4d's wasn't either.

Leo H

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## 1.216 MSG-214 Subject: more < Pffft.....

Subject: more < Pffft.....  
Date: Thu, 9 Jun 1994 18:00:10 -0500 (CDT)  
From: kirvan@SSESCO.com

Greetings,

Nik.:

>Ok, I've just uploaded the Imagine 3 Objectand texture format docs onto  
>Aminet.  
>They should appear in gfx/3d in a couple of days..

thanx.

Ducharme, Alain:

>On Wednesday, June 08, 1994 16:43, mnw3 wrote:  
>>I've justordered Imagine3.0 (wow!) but it will take a month (aaggh)!  
>>Can anyone tell me more about the nimation system i.e Motion blurring,  
>>inverse kinematics, the different types of force?  
>  
>Motion blurring? I haven't found it, it's more like image blurring, it  
>gives ahazy look to anything sporting a specific color. It's a  
>post-processing effect which is appliedAFTER the image is rendered, and  
>therefore has nothing to do with motion.

um... Thats the anti-aliasing, man. If you pix look blurry - it means  
your pixels are too big - render at a higher resolution to see what I mean.  
- And - What makes you think its post processed ?

---



Motion blur isn't in 3.0. We couldn't find a way to do motion blur that could get done in a reasonable amount of time. Some renderers just render a bunch of interum frames and composite them into something that looks sort of like motion blur, but if you look closely you can usually see artifacting - This isn't good enough. We've gt some ideas, but it won't be put in until we can do it in a way that won't quadruple rendering times and won't look digital.

People are doing motion blur with Imagine using this image compositing method. It works well for stills, but is too time/labor intensive for animations. I suppose we could have put this compositing into Imagine and called it "Motion blur," but it isn't true motion blur and we didn't think it fair to call it so.

John Fout and Ted Stethem :

```
>> BTW, boh InterChangePlus and Pixel3DPro have some problems with their
>> Imagine Savers that wil result in bad edges and missing faces. Vertex 2.0
>> has the best Imagine saver, often saving bject attributes (but that is a
>> whole 'nother story).
```

>

```
>Have you reported this as a ug to Syndesis? Can you send an example
>of a model that results in these bad and missin edges? This may be
>a case of garbage in, garbage out - where did this data come from?
```

My guess is it's garbage in - garbage out. I don't know what modeler people are using to create these flakey models. The bad models seem to be primarily public domain stuff - could have been exported or converted using cheezy converters from something like POV, DKB, or any of a zillion DXF automatic object creation tools.

```
>> Jut so thi post is not entirely worthless, the best method I have found
>> is import the DXF into 3DStudio, save out as a 3DStudio scene or object,
>> import into Lghtwave as 3Studio, save out as Lightwave, import into Vertex
>> 2.0, save out as Imagine. There, easy!
```

>

```
>Iwould suggest using InterChange to go straight from 3DS to Imagine.
>This would preserve ny sub-objects that 3DS made. There's no reason
>to go through LightWave, the converter hat we wrote for NewTek is
>several years old compared to the more feature-laden converter in
>IntrChange.
```

Imagine should read any DXF with ENTITIES/3DFACE data - all colors and sub-object info will be lost though. I haven't used 3DS, but rather than saving DXF scenes, save just the object(s) - I don't know what Imagine does with the scene info.

=RRW=:

```
>...[in responce to David Shaw's particle FX prob]...
>your speed is to slow..this is obviuo to me and the terminal H & Z are
>to short to let it play all the way threw the full effect.
>Let me know if this fixes the problem..
```

Sorry to be contradictory, but I thought I should hit this again to avoid any confusion. This FX isn't documented well, if at all, so I hope this help:

---

"Speed" is used to control how fast an object comes apart when using a "delayed" particle explode. This is the speed the object comes apart, not how fast the particles move.

The "Terminal H and Z" are a bit tougher. The particles, sort of, accelerate away from the exploding object. These params control how many frames the particles will be accelerating through.

Again, I suggest cranking up the gravity. This way the particles will fall faster and stick to the ground sooner.

Many of these parameters and the effects they have on the particle motion are inter-related. This really complicates explaining this FX - If I can come up with a representative equation of what's going on (if I find the time and motivation that is) I'll post it.

Scott Krehbiel:

>I'm playing with using a foggy bob to simulate a blurry effect  
>surrounding a glowing object, (like the blue glow that surrounds  
>the glowing parts of the warp nacelles on the new Enterprise)  
>  
>It looks absolutely fantastic when looking directly at the fog object,  
>but around the edges, where you're looking long the rim of my hamburger  
>patty - shaped fog object, it becomes opaque. ... Any suggestions you  
>could offer???  
>  
>By the way, I'm using Imagine 2.0. Thanks muchly

You may not like this, but I gotta suggest getting 3.0. There is a texture called Ghost that makes the edges of fog objects disappear. Beyond that - sorry can't help.

Nik.:

>I thought that one could now have 2 rows of user bttons on the bottom of  
>the screen. Is this possible ? I can't seem to be able to find ay  
>reference to this in the manual....  
It's automatic - just add more buttons.

Hope this isn't getting too long and dull... sk...

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## 1.217 MSG-215 Subject: MPEG makers

Subject: MPEG makers  
Date: Fri, 10 Jun 1994 13:25:59 +1000 (EST)  
From: Leo Hamulczyk <LEHAM1@vcp.monash.edu.au>

---

What is the nicest (least fuss) MPEG maker and where can I get it?

Leo H

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### 1.218 MSG-216 Subject: Re: Pissed off at Imagine 3.0 integer (Amiga)

Subject: Re: Pissed off at Imagine 3.0 integer (Amiga)  
Date: Fri, 10 Jun 1994 14:47:19 +1000 (EST)  
From: Leo Hamulczyk <LEHAM1@vcp.monash.edu.au>

I sort of agree, but I am studying at uni so I don't have as much time to use my computer as I used to. I could leave something rendering for a couple of days and come back to see it finished. I have done a couple of half-day renders even one 3.5 day render (all single pictures) so I have no problem with the time. When I finally get out of uni I'll get something faster but that's another 2.5 years, and in the mean time I want to have something to do.

Leo H

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### 1.219 MSG-217 Subject: Re: Motion Blurring

Subject: Re: Motion Blurring  
Date: Fri, 10 Jun 1994 00:37:54 -0400  
From: Jason B Koszarsky <koszarsky@cse.psu.edu>

Does anyone have time comparisons for packages that support motion blur? How much longer does it take for those programs to render when using motion blur compared to not using motion blur?

Jason K.

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### 1.220 MSG-218 Subject: T3Dlib PC porting

Subject: T3Dlib PC porting  
Date: Fri, 10 Jun 1994 07:44:49 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

```
_____  
| O |      .MODEL SMALL  
|   |      .DATA  
| O |      LOGIN    DB "          _ _ _ _ _ Wizard logged in"
```

```
|  | .CODE
| O | MAILING    PROC FAR
|/\_|
```

Yaba daba doo fellows,

I'm wondering if anybody (hey Glenn You are the right guy!!!) could realize the PC porting of T3Dlib by Glenn Lewis: it uses m68881 code (t3dlib.h I suppose).

```
/\_|
| O | RET
|  | MAILING    ENDP                      T-H-A-N-X
| O | STACK     200H                      ae(_^)^ue
|_| END      MAILING      _ _ _ _ _ Wizard signing off
```

--> RETURN TO CONTENTS!<==

## 1.221 MSG-219 Subject: Fishes wanted

Subject: Fishes wanted  
Date: Fri, 10 Jun 1994 07:44:11 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

```
| O | .MODEL SMALL
|  | .DATA
| O | LOGIN    DB "      _ _ _ _ _ Wizard logged in"
|  | .CODE
| O | MAILING    PROC FAR
|/\_|
```

Yaba daba doo Imagineers,

I'm serching for fishes objects of any format (iob, lwod, 3ds, dxf, dwg, sculpt, pov, etc.....): does anybody help me? FTP sites or uuencoded files welcome! Where can I find FISH pov scene by M. Miller?

```
/\_|
| O | RET
|  | MAILING    ENDP                      T-H-A-N-X
| O | STACK     200H                      ae(_^)^ue
|_| END      MAILING      _ _ _ _ _ Wizard signing off
```

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## 1.222 MSG-220 Subject: Re: MPEG makers

Subject: Re: MPEG makers  
Date: Fri, 10 Jun 1994 15:21:42 +1000 (EST)

---

From: MiKE <cheng@sun.mech.uq.oz.au>

On Fri, 10 Jun 1994, Leo Hamulczyk wrote:

> What is the nicest (least fuss) MPEG maker and where can I get it?  
If you have ImageFX, Michael Van Elst (sp?) has written an arexx script to  
do all the nasty work. Else you just have to do the really tiresome yuv  
splitting. Look under aminet. gfx/misc probably.

later

MiKE

cheng@sun.mech.uq.oz.au The Uni of Queensland. Brisbane. Australia  
Television: a medium. So called as it is neither rare nor well done.

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## 1.223 MSG-221 Subject: Re: Limiting Fog some places

Subject: Re: Limiting Fog some places

Date: Thu, 9 Jun 1994 23:07:39 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> It looks absolutely fantastic when looking directly at the fog object,  
> but around the edges, where you're looking along the rim of my hamburger  
> patty - shaped fog object, it becomes opaque.  
> unconvincing. Any suggestions you could offer???

>

> By the way, I'm using Imagine 2.0. Thanks muchly

> Scott Krehbiel  
> scott@umbc7.umbc.edu

Hmmm? well I think the problem with the fog getting opaque is because the fog is denser at the edges, if you think about it this is normal because you are actually applying it to an object, and looking at the edge there would be more faces in this area..I don't really know how to explain this, but hopefully you understand what I mean...anyways perhaps if you apply the Radial Texture to this object and set the filters to something like 200,200,200 ( you'll probably have to experiment with this ) and set the color to whatever your fog is and size it in the Z axis as well as move it so that it fits your burger better, this will give you the effect you are looking for.. Hope it help? let me know what happens..

=RRW=

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## 1.224 MSG-222 Subject: Re: Stage Paths

Subject: Re: Stage Paths  
Date: Thu, 9 Jun 1994 23:23:02 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Hey Randy,  
>  
> We were talking about the align and conform to path in the Stage  
> Editor. The processes are analogous in some ways, but it's a  
> different thing.

Oh... I saw that part of his meesage but also thought he was asking about  
path extrutions in the Detail Editor..sorry to interfer.

>  
> The functions are discussed on p.270 of the manual, and it's  
> extremely cool to have a stateless object be deformed by a path  
> in the Stage Editor. Example - a straight tube (no states or  
> bones) becomes a wriggling snake by aligning and conforming  
> to an "S" shaped path, and moving along it. It really works.

Yes I saw this..sounds really neat, I did see in the manual were it tells  
about how an object will change shape as it follows a path, but not the  
side note you mentioned..I'll have to check it out...

> I have not been able to get the function described in the sidebar  
> to work, however. That is, the same deformation should take place  
> if the object remains stationary in Stage, and the Path moves  
> through the object. You \*could\* have a flag as a stationary object,  
> and make a wavy path move through it, and create a rippling flag.  
>  
> I haven't been able to get it to work, however! Check it out!  
>  
> -mikeT

Hmmm? Well I'll try to take a look at it tonight and see if I can figure  
it out..if I do I'll let you know what I did..

=RRW=

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## 1.225 MSG-223 Subject: Re: MPEG makers

Subject: Re: MPEG makers  
Date: Thu, 9 Jun 1994 23:19:36 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

On Fri, 10 Jun 1994, Leo Hamulczyk wrote:

> What is the nicest (least fuss) MPEG maker and where can I get it?  
>

---

> Leo H

>

Good luck! I've been asking the same question for six months. MPEG is a fabulous compression algorithm, but so far all the converters are documented by people with marginal communication skills. No offense to you droids out there, but it's the god's own truth.

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## 1.226 MSG-224 Subject: Re: Stage Paths

Subject: Re: Stage Paths

Date: Fri, 10 Jun 1994 00:18:24 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> > I have not been able to get the function described in the sidebar  
> > to work, however. That is, the same deformation should take place  
> > if the object remains stationary in Stage, and the Path moves  
> > through the object. You \*could\* have a flag as a stationary object,  
> > and make a wavy path move through it, and create a rippling flag.

> >

> > I haven't been able to get it to work, however! Check it out!

> >

> > -mikeT

>

> Hmmm? Well I'll try to take a look at it tonight and see if I can figure  
> it out..if I do I'll let you know what I did..

>

> =RRW=

Mike, I went and tried it and got it to work just fine..it is really cool.

Basically I don't think it will work with all paths but it might with some calculations of x,y and z, heres how I did get it to work...

Make a default plane and Align the X axis to 90 in the Tranformation Requester, make sure you have Axis Only set when you do this , then make a path, say with 10 axis points, move every other points Z axis up to make some smooth curves, then save these objects seperatley, make a test project and go to the Action Editor and set it to 25 frames load in the objects... set the plane to follow the path. Save this and go to the Stage, now set your camera view on and position it so you can see the plane object, Now heres one of the important parts hit RghtAmiga-P to see what your paths length is, write it down and go to frame 25 of the animation RghtAmiga-C. Now select the path and use RghtAmiga-T to get to the Tranformation Requester, click position and set Y to - (minus) whatever the number you wrote down is, hit return then OK. Now hit RghtAmiga-7 to save the position as with Position Bar. OK we're almost done, Save this and go back to the Action Editor and select the paths NEW Position timeline bar and set it to Discontinuous Knots, click OK, now select the plane and set its Alignment to Conform Object to Path, click OK. If this were a grouped object you would use Conform Group to Path...Now save this and go to the Stage and Use Make in the Animate Menu to make a preview

---

animation...Wala! a Flag Waving!

=RRW=  
Enjoy!

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## 1.227 MSG-225 Subject: Textures and resizing objects.....

Subject: Textures and resizing objects.....  
Date: Fri, 10 Jun 1994 01:47:02 -0700 (PDT)  
From: Jeremy White <jwhite@efn.org>

I have a states object (using bones) created with tacked brushmaps. When I save the object in the detail editor and move to the stage editor any resizing I do of the object is not reflected in the brushmaps. The brushmaps stay the same size, but the object gets bigger. Very annoying. Is this normal or a bug???????

-Jeremy White

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## 1.228 MSG-226 Subject: Re: Pffft...

Subject: Re: Pffft...  
Date: Fri, 10 Jun 1994 01:38:49 -0700 (PDT)  
From: Jeremy White <jwhite@efn.org>

On Thu, 9 Jun 1994 kirvan@SSESCO.com wrote:

> Greetings,  
>  
> -Jeremy White:  
> >So, I bend the fish and create a state (right tail flip.) Icheck the  
> >grouping box only (not the shape box, as the instructions suggest to avoid  
> >adding extra info to the object) I then animate it using bones anim.  
> >The backbone animates fine but the body is not updated (it stays unbent.)  
> All the axes in your object heirarchy have to have bone subgroups  
> associated to them. Make a subgroup of all the faces - call is ALL -  
> and assign that to all the unused bone subgroups. Using "check object"  
> will help spot unassigned bones.

Can I use the axis that the faces are associated with as a bone object??? I mean the axis that I have to first select before I can enter "pick faces" mode to define my subgroups. Is this what you are suggesting?

> As a side note, it sounds like you have the head and fins of the fish

---



> grouped to the body - if this is the case, you may have trouble keeping  
> the head and fins attached. Bones is ment to be used with contiguous

It doesn't seem to be a problem... I just move the grouping for each state. The fins are wrapped with different brushes anyway.....

Thanks for the help....  
-Jeremy White

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## 1.229 MSG-227 Subject: Re: Pissed off at Imagine 3.0 integer (Amiga)

Subject: Re: Pissed off at Imagine 3.0 integer (Amiga)  
Date: Fri, 10 Jun 1994 03:41:59 -0700 (PDT)  
From: Mischa David Goldberg-Lockton <mischa@cats.ucsc.edu>

On Fri, 10 Jun 1994, Leo Hamulczyk wrote:

> features will take, I'm used to that, but at least they should work. So  
> come on guys at Impulse, be reasonable. Don't forget that there are some  
> of us out there who simply cannot afford any upgrades at the moment. I

I think Impulse is reasonable, at least about this one. :)  
FPU's are not that expensive, and unfortunately, 3d rendering, while now more accessible, is not really feasible without money.

And so, you should be happy to play with such crazy toys! Start out with the integer version, but no-one professional would use that version...

-----  
Mischa Goldberg-Lockton

mischa@cats.ucsc.edu 1-800-208-6344  
-----

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## 1.230 MSG-228 Subject: Sorry Could Not Find Subject!

Date: Sat, 11 Jun 1994 02:00:05 +1000  
From: imagine-relay@email.sp.paramax.com

To all single-minded Imagineers!,

I've just ordered I3.0 (only 28 days to wait!)  
and I'd like to know what Impulse's policy is on updates. We all know that I3.0 has a number of shortcomings, Inverse Kinematics (like R3D V2) and

---

motion blurring being the most complained about topic, so how often are updates? And how much will they cost? Finally do the complaints which arrive at IML go to Impulse?

Thank you all,

Martin Wood (Aberystwyth Uni)

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## 1.231 MSG-229 Subject: Sorry Could Not Find Subject!

Date: Sat, 11 Jun 1994 04:21:11 +1000

From: imagine-relay@email.sp.paramax.com

Hello again,

In experimenting with the world octovolume error I've been having, I think I've found a bug in the stage editor...

I started with a 15000 unit radius sphere, a light source and the camera inside the sphere, and tried to quick-render the scene in Trace mode. I got the world octovolume error as expected (Any help on this IMPLUSE?) but here's where it gets weird. I gradually reduced the radius of the sphere, keeping the

light and camera inside the sphere, and got down to about 1000 unit radius when

I decided something was wrong. I deleted the sphere altogether, then tried to quick-render, and got the same world octovolume error!!!

Let me restate this: after starting with a huge sphere that generated an error, deleting the sphere and having a scene with one light, the camera, and NOTHING ELSE, I was getting a world octovolume too large error!! I had to leave the stage editor and go back to clear it up.

Back to the volume error: I turned GigaMem on to see if it worked with 3.0 better than it did with 2.0 and the new memory menu option shows all 25 megs of

memory free! I'm starting to think the "octovolume" is a hardcoded limitation of Imagine, not a memory problem!! Why does this only show up in Trace mode??

I'm putting the spacestation animation on a back shelf until I get this figured out. A nice, SMALL, still life sounds pretty good right now!

How about a nice game of chess? -Rico / rallen@cdsar.ssc.af.mil

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## 1.232 MSG-230 Subject: Sorry Could Not Find Subject!

Date: Sat, 11 Jun 1994 04:53:52 +1000

From: imagine-relay@email.sp.paramax.com

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On Thursday, June 09, 1994 18:00, kirvan@SSESCO.com wrote:

>[...]

>Ducharme, Alain:

>>[...]

>>Motion blurring? I haven't found it, it's more like image blurring, it

>>gives a hazy look to anything sporting a specific color. It's a

>>post-processing effect which is applied AFTER the image is rendered,

>>and therefore has nothing to do with motion.

>

>um... That's the anti-aliasing, man. If you pix look blurry - it means

>your pixels are too big - render at a higher resolution to see what I mean.

No, I was actually dispelling some rumor that was put here before 3.0 was actually released. Quote:

On Tue, 04 Jan 94 19:24:55, greg.tsadilas@hofbbs.com wrote:

>>[...]

>>is here to placate us for now. 3.0 Features a Global FX, post-processing

>>facility that will add motion blur, lens flares, AFTER the images are

>>rendered. In the future additional effects could be plugged in.

>>[...]

It turns out this was nothing more than the Global Haze effect, which is what I was referring to in the above. ...disappointing.

> - And - What makes you think its post processed ?

That's what it says at the top of the screen when it's being applied ;^)

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### 1.233 MSG-231 Subject: Re: Pffft...

Subject: Re: Pffft...

Date: Fri, 10 Jun 1994 23:38:19 +1000 (EST)

From: Nikola Vukovljak <nvukovlj@extro.ucc.su.OZ.AU>

On Thu, 9 Jun 1994 kirvan@SSESCO.com wrote:

> Greetings,

>

> David Shaw:

> > Is there something blatantly obvious that i'm missing out o

> >here. During the anim the particles slowly explode out until all the

> >letters are particles ad they start floating down and bounce but at the

> >end there is too many left "hanging".

>

> Crank up the Gravitational constant.

This doesn't really solve the problem completely. I've had the constant way up (like 20+) and some particles will still stay. What will happen though is that the majority will drop really quickly. The only way that seems to work is to scale the particles down to nothing.

---

Nik.  
nvukovlj@extro.ucc.su.oz.au

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## 1.234 MSG-232 Subject: Re: Imagine Updates

Subject: Re: Imagine Updates  
Date: Fri, 10 Jun 1994 11:00:19 -0400 (EDT)  
From: "Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU>

On Fri, 10 Jun 1994, mnw3 wrote:

> I've just ordered I3.0 (only 28 days to wait!)  
> and I'd like to know what Impulse's policy is on updates. We all know that  
> I3.0 has a number of shortcomings, Inverse Kinematics (like R3D V2) and  
> motion blurring being the most complained about topic, so how often are  
> updates? And how much will they cost? Finally do the complaints which arrive  
> at IML go to Impulse?  
>

Hiya Martin. Imagine 3.0 is an awesome piece of software. Even so, there are a few bugs and shortcomings in it, and Impulse seems to be responsive to these... They've already issued a patch file that fixed a bug, and there may well be more in the future.

They advertize a new support program, called CONSTANT UPDATE, which will allow you to get at LEAST 4 updates of the program per year, for a \$100 annual fee. This is similar to programs offered by other software companies. I've talked to Mike Halverson at Impulse, and I think that the CONSTANT UPDATE program is a sound one. I'm planning on signing up next month.

However, there has been no discussion about bug fixes (to which all users are entitled, even if they don't do the CONSTANT UPDATE) and new features (only for those in the CONSTANT UPDATE program). I'm curious about that... But, since I am planning on doing the CONSTANT UPDATE, I am not as curious as someone who may NOT be doing that might be...

As to the discussions here on the IML - Impulse does monitor this group, and have been very responsive and visable in the IML. So, as Impulse has said before, they ARE listening...

=====

Drew Vogel: Admissions Officer at University of Cincinnati Undergraduate Admissions (call 800-827-8728), SysOp of The Cafe' BBS (513-232-4895) FidoNet 1:108/245, Actor, director, Amiga fan, Imagine 3.0 user, vice-president of Ohio Valley Amiga Users' Group, documentation author, single guy, and much, much more!

"The only way OUT is THROUGH."

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### 1.235 MSG-233 Subject: Re: T3Dlib PC porting

Subject: Re: T3Dlib PC porting  
Date: Fri, 10 Jun 94 15:14:01 GMT  
From: "Glenn M. Lewis - ICD ~" <glewis@pcocd2.intel.com>

Wizard> Yaba daba doo fellows, I'm wondering if anybody (hey Glenn You  
Wizard> are the right guy!!!) could realize the PC porting of T3Dlib  
Wizard> by Glenn Lewis: it uses m68881 code (t3dlib.h I suppose).

Well, Wizard, I haven't done this myself, but it should be an  
absolute breeze with a real 32-bit compiler such as Watcom or Symantec  
(maybe even djgpp), and just remove that include of "m68881.h" (that was  
only for in-lining FPU instructions anyway.

Have fun and good luck!  
-- Glenn

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### 1.236 MSG-234 Subject: RE: T2 Lightning effect

Subject: RE: T2 Lightning effect  
Date: Fri, 10 Jun 94 11:17:14 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

> From: imagine-relay@email.sp.paramax.com

Make sure you are mailing to imagine@email.sp.paramax.com NOT imagine-relay.  
Otherwise your name gets dropped from the header.

>  
> I have lately seen a film in TV that had some special effects like  
> lightning OR something like electricity . I am sure that the majority of you  
> have sen Terminator II . I am intrested in the electric effect that the film  
> had at the very begging .

I would guess that is done as an after effect, possibly hand painted.

> How that would be possible ?? ATTENTION. I would like to make an effect that  
is going to be held betwwen TWO points in order one main electric flame  
> to desort and maybe others to go through on the air too that are less powerful  
1.

BUT, if you want to do it in Imagine....BTW, I think this may be in the FAQ.

-----begin old post include -----

Sure I'll tell. I took this idea from someones suggestion on how to make one  
of those Frankienstien lab things where the spark runs up the two poles. Here  
is that quote:

3. I used Essence to make an electrical arc between two rods, like something out of Frankenstein's lab. Start with a plane with 255 R,G,B on Color and a light blue (or whatever color you want the arc) in Filter. Then use Ringfract (with the cylinder pointing out of the plane) with a color of 0 on R,G,B and turn off the filter and reflect values. Put the axis of Ringfract in the middle of the bottom edge of the plane. Now use Swapcrf to swap the color and filter values. Now when rendered, there should be something similar to an electrical arc (or maybe some sort of plasma). To have the arc grow, rotate the Ringfract axis up or down so that the plane and cylinder do not intersect at 90 degrees. If you animate this it looks like the arc gets taller until the arc breaks (i.e. the plane no longer intersects Ringfract's cylinder in a curve, but instead in two lines).

--from Peter Garza --

instead of using Ringfract (from Essence, BTW) I used Bandfract (also from Essence). It allowed a straight line. The high and low start parameters indicate the thickness of your lightning. You'll have to play with this. I used 40 for low 45 for high. The other high and low I set to 5. It seemed to make the lightning really jaggy if I set these to the same number as the width (I think). The other params I left on default. In Swapcrf, set everything to 0 except Color -> N Filter, Filter -> N Color and Reflect -> N Reflect which should be 100.

To animate it, I morphed from a thin version of this plane to a full sized version of this plane. I also rotated my texture axis around Z in order to get the lightning to jiggle and change as its being sent from the source.

I played with this in low res with just the plane and a light source until I got the effect I wanted. Then I added my Ti-fighter (from Star Wars) and had it shoot a bolt of lightning/plasma ray across the sky. Cool!

Tom Setzer  
-----end old post-----

Hey, thats me ^^^^ :)

So, you can use several planes to achieve several bolts of electricity, or paint it in after its rendered.

Any other ideas?

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

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**1.237 MSG-235 Subject: Motion Blurring**

Subject: Motion Blurring  
Date: Fri, 10 Jun 94 10:14:00 PDT  
From: KEN\_ROBERTSON@robelle.com

It would be great if motion blur could be implemented for scanline modes!

\KenR

-----  
If you're like me, and I know \_I\_ am...  
-----

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**1.238 MSG-236 Subject: Shield effect**

Subject: Shield effect  
Date: Fri, 10 Jun 94 14:05:20 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

I would like to create a shield effect like the one in the BattleJPG from /pub/aminet/pix/guard (I think thats where it is). Anyone have any luck animating these? Here are some previous posts about the subject. Any luck with this Christopher?

-----begin include-----

From: Dretch@cup.portal.com

I've got a 500 frame animation of a fighter (the sci-fi variety) firing upon another ship. I have a shield appearing (a primitive sphere) when the blasts hit it (mostly transparent with blobf for texture). Problems arise when I try to use shellturb to show the blast hitting a portion of the shield. I want to create a ring sweeping from the impact point to the opposite side of the sphere. Nothing seems to show up on the damned sphere! I tried using a very narrow "solid" texture and have it morph from one side of the sphere to the other, no go, it just turned the whole shield red ;-(. If anyone has any suggestions, I'd appreciate it.....

Christopher

-----and-----

From: Peter Garza <pmgarza@ccwf.cc.utexas.edu>

I guess I'll try my 2 cents worth. How about using bandturb or bandfract to do the ring. You could then morph the Low and High Trans Start or morph the position of the texture axis to have the ring move across the sphere. From what it sounds like, this might be what you want.

-----thats it-----

Tom Setzer

---

setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

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## 1.239 MSG-237 Subject: Re: Real3D Object-Imagine Converter

Subject: Re: Real3D Object-Imagine Converter  
Date: Fri, 10 Jun 94 14:56:48 CDT  
From: wilks@lbm.com (Stephen Wilkinson)

Ducharme, Alain <Ducharme@FOB.ISTC.CA> asked:

> On Friday, June 10, 1994 17:23, Marco Beretta wrote:  
> >I would to know if exist a program that can convert DIRECTLY Real3D  
> >objects format to Imagine format (and viceversa).  
>  
> The big problem here is that most Real 3D objects are composed of  
> mathematical primitives or 3D splines contrary to Imagine in which all  
> objects are composed of triangles (well, ok, a sphere and ground primitive,  
> but they don't really count). A converter program would have to internally  
> map the surface of all primitives into triangles to enable Real 3D objects  
> to be used in Imagine. The same problem exists with using great POVray  
> scenes in Imagine. The inverse is not as complex, however, because Real 3D  
> and Povray support triangles.

There is a really nice modeller on aminet called FreeForm3D that models using splines. It can decompose the spline surface to triangles and save them as an Imagine object if you register the software. I find it extremely easy to use and the example Imagine object worked fine. It can also load/save R3D objects. I think the registration fee was US \$60.00 but I am not sure.

Stephen

---

Stephen Wilkinson      wilks@lbm.com  
Software Engineer  
LB&M Associates

"Programming is like pinball. The reward for doing it well is the opportunity to do it again."

---

#define OPINION            (myown)  
#define COMPANYOPINION (~myown)

This message created using 87% recycled neuro-transmitters

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**1.240 MSG-238 Subject: RELAY BOUNCE (fwd)**

Subject: RELAY BOUNCE (fwd)  
Date: Fri, 10 Jun 1994 11:43:41 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

Hey Nik,

The return string is weird here, so if you get this, my faith is restored. The user button query of yours is addressed in the preferences section.

Another IML'ster pointed out what a fabulous feature preferences was, and he was right. You can now have two rows of user buttons. And if you abbreviate, as I do, you can just about hang your whole pulldown menu across the bottom as buttons. It is GREAT.

You asked about anti-aliasing, too. I haven't gotten any conclusive speedups so far. Hopefully someone else has optimized this function for best reduction of jaggies with least increase in rendering times.

Another of you Southern Star droids posted a couple of weeks ago about anti-aliasing and rays, and said that with an A A setting of 10, he could still get reduced jaggies with no particular increase in rendering times if he lowered the maximum number of Rays to 30. I haven't had time to confirm this, but give it a shot and see if it helps.

(And btw, thanks, to Dave Wickard, for salvaging this post. It bounced off Pluto, and would have been lost in e-space, if you hadn't snagged it and sent it back to me).

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**1.241 MSG-239 Subject: RE: Motion Blurring**

Subject: RE: Motion Blurring  
Date: Fri, 10 Jun 94 16:48:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Friday, June 10, 1994 10:14, KEN\_ROBERTSON wrote:  
>It would be great if motion blur could be implemented for scanline  
>modes!  
Scanline modes? Why not Trace as well? At least if we were doing some particle effects with spherical particles we could have actual blurred moving perfect spheres and not some ugly blurred dodecahedrons ;^)

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## 1.242 MSG-240 Subject: RE: Update Policy

Subject: RE: Update Policy  
Date: Fri, 10 Jun 94 17:06:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Fri, 10 Jun 94 15:51:49 EST, Martin Wood (Aberystwyth Uni) wrote:  
> I've just ordered I3.0 (only 28 days to wait!)  
> and I'd like to know what Impulse's policy is on updates. We all know that  
> I3.0 has a number of shortcomings, Inverse Kinematics (like R3D V2) and  
> motion blurring being the most complained about topic, so how often are  
> updates? And how much will they cost? Finally do the complaints which arise  
> at IML go to Impulse?

Ok here's the Update Policy deal as described in Impulse Graphics World newsletter (which I guess you are not receiving yet):

1 year of updates = \$100 US

Can be purchased at the beginning of the year, where they will be sending you small (?) regular (??) updates of new features(/fixes) and additions.

Or, can be purchased at the end of the year (same price) in one package.

And about the receiving the constructive criticism (complaints), apparently they do, on a regular basis. They will even be helpful and address problems/questions directly on the IML.

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## 1.243 MSG-241 Subject: Re: Motion Blurring

Subject: Re: Motion Blurring  
Date: Fri, 10 Jun 1994 18:30:10 -0700 (PDT)  
From: Gerard Menendez <gpm@netcom.com>

Although this is not as good as a built in function you can composite frames to achieve the same result. If you have an animation you want to do this to, start you anim a frame or 2 or 3 early. Then for frame 3 you would composite frame 2 with it at 25% and frame 1 at 10%. Play with your percentages.

This works okay, don't yell at me if it's too obvious or your point of view is moving or you don't want it applied to all moving objects.

Gerard

On Fri, 10 Jun 1994, Leo Hamulczyk wrote:

> How come Renderman could do proper motion blur? If the rendering speed would

---

> be a problem, I'm sure the real diehards wouldn't mind for the effect. Anyway,  
> for certain types of anims you really need it. Picture blurring isn't good  
> enough. Sculpt 4d's wasn't either.  
>  
>  
> Leo H  
>

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## 1.244 MSG-242 Subject: RE: Motion Blurring

Subject: RE: Motion Blurring  
Date: Fri, 10 Jun 94 19:24:00 PDT  
From: KEN\_ROBERTSON@robelle.com

I previously said, "It would be great if motion blur could be implemented for scanline modes!". Of course this is in addition to Trace as well - I often get good enough results for my projects just using scanline modes, and since I'm tracing on an A1000 (with Lucas/Francis hack to include 020 and 881 to 16 MHz) speed is of the essence.

My point is, I wouldn't want to restrict Motion Blur to just Trace mode.  
\KenR

-----  
One day, when I get rich, I'm going to buy a taxi and drive around downtown with the light on on top. When people wave at me, I'll just wave right back and keep on driving!  
-----

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## 1.245 MSG-243 Subject: Re: Shield effect

Subject: Re: Shield effect  
Date: Fri, 10 Jun 94 19:59:12 PDT  
From: ual97@freenet.victoria.bc.ca (Christopher Stewart)

>I would like to create a shield effect like the one in the BattleJPG  
>from /pub/aminet/pix/guard (I think thats where it is). Anyone have  
>any luck animating these? Here are some previous posts about the subject.

>Any luck with this Christopher?

Wow, that quote was from awhile ago. Yes I got it figured out and it worked well (so well it was used for a live performance ;-). The actual project is somewhere on a floppy backup and I'll cough it up if anyone REALLY needs it. Take some time to fiddle with ringfract or shellturb (basically anything energy-like and morphable) on a primitive sphere. I believe I had to use one of the "swap" textures to make it stick to a

---

transparent surface but it WAS a long time ago. I'll de-archive the project and take a look at it.

Christopher

ps. bones certinally do take some planning, don't they.....

--

"I wish there was a knob on the TV  
to turn up the intelligence.  
There's a knob called 'brightness',  
but it doesn't work." -- Gallagher

ual97@freenet.victoria.bc.ca  
cs833@cleveland.freenet.edu

Join the Animation Sig!

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## 1.246 MSG-244 Subject: Re: Pfffft...

Subject: Re: Pfffft...

Date: Fri, 10 Jun 1994 23:24:06 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> This doesn't really solve the problem completely. I've had the constant  
> way up (like 20+) and some particles will still stay. What will happen  
> though is that the majority will drop really quickly. The only way that  
> seems to work is to scale the particles down to nothing.

Nik,

Did you try the settings I gave you, what did they do..did you set the Min Angle from Z to 0, I believe you had it at 20 and this maybe keeping your particles 20 units from the ground at the end of the effect... and why they stay hanging...the reason there falling so fast is because you have the Terminal Z Velocity at 30 or something like that set it to the amount of frames the effect last..I believe it was 93 or something.. this should slow them down.. same goes for Terminal H Velocity this will slow the expansion of the Particles on the Horizontal axis's.. Did you get see my last message repling to this, What happen when you tried it?

=RRW=

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---

**1.247 MSG-245 Subject: PARTICLES**

Subject: PARTICLES  
Date: Fri, 10 Jun 94 22:52:02 -0300  
From: greg.tsadilas@hofbbs.com

Regarding not all particles reaching the ground plane.....I assume that these are triangles that are higher than the travel distance that is set. Try increasing the travel distance to get the particles to go further. This may help.....may not.

-GreG

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**1.248 MSG-246 Subject: Re: Shield effect**

Subject: Re: Shield effect  
Date: Sat, 11 Jun 1994 00:13:55 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Christopher  
>  
> ps. bones certinally do take some planning, don't they.....

Ya, they do...Christopher...did you do that Frankenstien Animation that won First Amiga World Animation Contest...if so I rember seeing that at a show a few years ago..really nice stuff! Excellent considering it was with Turbo Silver..at least thats what I thought it was done with..

=RRW=

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**1.249 MSG-247 Subject: Re: RELAY BOUNCE (fwd)**

Subject: Re: RELAY BOUNCE (fwd)  
Date: Fri, 10 Jun 1994 23:52:15 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

>  
> Another IML'ster pointed out what a fabulous feature preferences  
> was, and he was right. You can now have two rows of user buttons. And  
> if you abbreviate, as I do, you can just about hang your whole pulldown  
> menu across the bottom as buttons. It is GREAT.

This may have been me, and I'm glad to see that it influenced someone to go and check it out..It really is one of the most user friendly parts of

---

Imagine and from what I have seen Impulse put in some Newsletters, one of the least used..Glad you have discovered it! As you use it more you can refine your working enviroment to help in the speed of developement of objects and animations.. Though I don't now if having everything in the Menus is actually neccesary, there are many Function keys you can set as well, and I personally find them faster than the gadgets for some things. and don't forget to memorize all the Hot Keys as well, by doing things this way you can keep you gadgets less clutered and easier to find, which will also help you speed up developement..Just a sugestion, if you like it the way you have it then this is probably fine for you...but as you use Prefs more and learn the many HotKeys you may find you agree with me?

=RRW=

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## 1.250 MSG-248 Subject: Imagine Texture format

Subject: Imagine Texture format  
 Date: Sat, 11 Jun 94 15:49:47 GMT  
 From: David Southwell <David@flevel.demon.co.uk>

```
*****
*                               IMAGINE TEXTURE FORMAT                               *
*****
; This is an example piece of code for coded textures on imagine2
; on the Amiga.
;
; It might work on imagine3, if anyone can test it then please let
; me know.
;
; I have done this texture in 68000 because the interfacing would
; be a little tricky in C. Imagine starts up the texture as an
; executable (LoadSegment) and then passes some initialisation
; stuff on the stack - the texture must respond with the correct
; data block returned in d0 or zero for fail. You need to set up
; either the FP code or the integer code depending on the version
; of imagine running: Please code BOTH versions if you release any
; textures otherwise you will find them crashing on other machines!
;
; Imagine passes the x,y and z coord relative to the objects axis
; to the texture for each intersection point, we then can alter the
; objects colour,reflect and filter or leave them as the users base
; settings.
;
; You can alter which parameters are requested in the texture setup
; by altering the text below and then setting the colselect data
; to tell imagine which numbers are to be displayed as red,green and
; blue colours in the sample box.
;
; axispar sets the default axis for the texture mapping, I have set
```

```

; them to be aligned with the worlds axis, if you change these then
; make sure that the axis size is nearly 1 (root(x^2+y^2+z^2)=1).
;
; Setting the objpar will alter the default numbers for the objects
; parameters on the setup screen, set these to appropriate values
; for your texture.
;
; The integer math format is number/65536 eg 1.0=65536 etc.
; When reading the colour information from the texture parameters
; always divide them by 256 because imagine uses colours in the range
; of 0-1 red, 0-1 green and 0-1 blue.
;
;
; For more information or comments contact me:
;
;   trefor@flevel.demon.co.uk
;
;
; N.B. Ive been a bit lazy - the integer version of this texture uses
; 68020 and above code! If you want me to change this then mail me.
;
; The examples in this code are mixed! The FP code example produces a
; mandelbrot set rendered against the final orbital position of points
; not inside the set. I am using a log palette and the red green and
; blue scale control the amount of palette tinge.
; The integer example is a bog standard chequer board.
;
; To use this file assemble it on Devpac or any other 68000 series
; assembler (You may need to make changes for some assemblers). Don't
; forget to select FPU and 68020 or above. Assemble the file to disk
; and load it into Imagine as a texture. Following this text is the
; executable version which has been uuencoded.
*****
rsreset
par_scale:  rs.l  1 ;The data structure for
par_red:     rs.l  1 ;the custom texture.
par_grn:     rs.l  1 ;Ive have used rs.b's so it can
par_blu:     rs.l  1 ;be easily accessed without messy
par_refred:  rs.l  1 ;offset numbers.
par_refgrn:  rs.l  1
par_refblu:  rs.l  1
par_filred:  rs.l  1
par_filgrn:  rs.l  1
par_filblu:  rs.l  1
par_iters:   rs.l  1
par_break:   rs.l  1
par_spare3:  rs.l  1
par_spare4:  rs.l  1
par_spare5:  rs.l  1
par_spare6:  rs.l  1

      rsreset ;this data comes from Imagine
cord_x:  rs.l  1 ;it is relative to the wrap axis.
cord_y:  rs.l  1
cord_z:  rs.l  1

      rsreset

```

```

obj_unknown:  rs.l  6 ;the texture can write back to these
obj_colour_red: rs.l  1 ;parameters or leave them to pass
obj_colour_grn: rs.l  1 ;the base settings through.
obj_colour_blu: rs.l  1
obj_reflect_red: rs.l  1
obj_reflect_grn: rs.l  1
obj_reflect_blu: rs.l  1
obj_trans_red:  rs.l  1
obj_trans_grn:  rs.l  1
obj_trans_blu:  rs.l  1
*****
init:
    cmp.w  #$50,4(sp)
    beq  Start
    clr.l  d0
    rts
*****
Start:  tst.w 6(sp)    ;check for integer/fp version
        bne startup_fpCode
        bra startup_intcode
*****
startup_intcode:
    move.l  #intcode,codeaddr
    move.l  #intobjpar,objparaddr
    move.l  #intaxispar,axisparaddr
    move.l  #pointers,d0
    rts
*****
startup_fpcode:
    move.l  #fpcode,codeaddr
    move.l  #fpobjpar,objparaddr
    move.l  #fpaxispar,axisparaddr
    move.l  #pointers,d0
    rts
*****
intcode:
    move.l  4(a7),a0    ;texture parameters
    move.l  8(a7),a1    ;object parameters
    move.l  12(a7),a2 ;coord structure

    move.l  cord_x(a2),d0
    move.l  cord_y(a2),d1
    move.l  cord_z(a2),d2

    move.l  par_scale(a0),d3
    beq  skip

    divs.l  d3,d0    ;<<<020+
    divs.l  d3,d2    ;<<<020+
    divs.l  d3,d3    ;<<<020+

    add.l  d2,d0
    add.l  d3,d0
    btst  #0,d0
    beq  skip    ;pass through base settings

    move.l  par_red(a0),d0

```

---



```

move.l  par_grn(a0),d1
move.l  par_blu(a0),d2
lsr.l  #8,d0
lsr.l  #8,d1
lsr.l  #8,d2
move.l  d0,obj_colour_red(a1)
move.l  d1,obj_colour_grn(a1)
move.l  d2,obj_colour_blu(a1)
intload_rest:
    lea  obj_reflect_red(a1),a1
    lea  par_refred(a0),a0

    move.w  #6-1,d0
intcopymats:
    move.l  (a0)+,d0
    lsr.l  #8,d0
    move.l  d0,(a1)+
    dbf  d0,intcopymats
    rts
*****
fpcode:
    move.l  4(a7),a0      ;texture parameters
    move.l  8(a7),a1      ;object parameters
    move.l  12(a7),a2 ;coord structure

    fmove.s  cord_x(a2),fp0  ;x
    fmove.s  cord_y(a2),fp1  ;y
    fmove.s  cord_z(a2),fp2  ;z

    fmove.s  par_scale(a0),fp3
    fmove.s  par_iters(a0),fp4
    fmove.l  fp4,d0      ;iters
    tst.l  d0
    beq  skip
    fmove.s  par_break(a0),fp5

    fmove  fp2,fp1

    fdiv  fp3,fp0      ;/scale
    fdiv  fp3,fp1      ;/scale

    fmove  fp0,fp4      ;lx
    fmove  fp1,fp7      ;ly

fp_loop:
    fmove  fp0,fp2
    fmove  fp1,fp3
    fmul  fp2,fp2      ;x*x
    fmul  fp3,fp3      ;y*y
    fmove  fp2,fp6      ;x*x+y*y
    fadd  fp3,fp6      ;>break?

    fcmp  fp5,fp6
    fbgt  fp_break

    fmul  fp0,fp1      ;xy
    fmul.s  #2,fp1      ;2xy

```

---

```
fmove fp2,fp0    ;x*x
fsub fp3,fp0     ;x*x-y*y

fsub fp4,fp0     ;-lx
fsub fp7,fp1     ;-ly

subq.l #1,d0
bne fp_loop
bra skip
fp_break:
fmove.s #16777215,fp0
fddiv fp5,fp0
fddiv fp5,fp0
flogn fp6
fddiv fp6,fp0
fmove.l fp0,d0

clr.l d1
move.b d0,d1
fmove.l d1,fp0
fddiv.s #256,fp0

fmove.s par_red(a0),fp1
fmul fp1,fp0
fmove.s fp0,obj_colour_red(a1)
lsr.l #8,d0

clr.l d1
move.b d0,d1
fmove.l d1,fp0
fddiv.s #256,fp0
fmove.s par_grn(a0),fp1
fmul fp1,fp0
fmove.s fp0,obj_colour_grn(a1)
lsr.l #8,d0

clr.l d1
move.b d0,d1
fmove.l d1,fp0
fddiv.s #256,fp0
fmove.s par_blu(a0),fp1
fmul fp1,fp0
fmove.s fp0,obj_colour_blu(a1)

lea obj_reflect_red(a1),a1
lea par_refred(a0),a0

move.w #6-1,d0
fpCopyMats:
fmove.s (a0)+,fp0 ;divide down the settings from a scale
fddiv.s #256,fp0  ;of 0-256 to a scale of 0-1
fmove.s fp0,(a1)+

dbf d0,fpCopyMats
SKIP: rts
*****
Pointers dc.l 'ITXT',0
```

---

```

dc.l 0
CodeAddr dc.l 0
dc.l textblock,ColSelect
objparAddr dc.l 0
axisparAddr dc.l 0
*****
textblock:
dc.l TITLETXT,Text1
dc.l Text2,Text3
dc.l Text4,Text5
dc.l Text6,Text7
dc.l Text8,Text9
dc.l Text10,Text11
dc.l Text12,Text13
dc.l Text14,Text15
dc.l Text16,blank
*****
ColSelect:
dc.l $08010204 ;4 bits per parameter
dc.l $01020401 ;$0=don't color,$1=red,$2=green
dc.l $02040000 ;$4=blue,$8=scale
dc.l $00000000
;
; Above colselect says: scale,r,g,b,r,g,b,r,g,b
; n,n,n,n,n,n,n
;
;r=red/g=green/b=blue/n=none
*****
fpobjpar:
dc.s 32,1 ;inital values
dc.s 1,1 ;these corispond to the default
dc.s 0,0 ;settings for the textures
dc.s 0,0 ;parameters.
dc.s 0,0
dc.s 128,4
dc.s 0,0
dc.s 0,0
*****
Intobjpar:
dc.l 32<<16,1<<16 ;and integer inital values
dc.l 1<<16,1<<16 ;number<<16
dc.l 0,0
dc.l 0,0
dc.l 0,0
dc.l 128<<16,4<<16
dc.l 0,0
dc.l 0,0
*****
fpaxispar:
dc.s 0,0,0 ;default offset of axis

dc.s 1,0,0 ;x axis
dc.s 0,1,0 ;y axis
dc.s 0,0,1 ;z axis

dc.s 32,32,32 ;default axis size
*****

```

```

intaxispar:
    dc.l  0,0,0      ;int default axis offset

    dc.l  1<<16,0,0   ;int x axis
    dc.l  0,1<<16,0   ;int y axis
    dc.l  0,0,1<<16   ;int z axis

    dc.l  32<<16,32<<16,32<<16 ;int default axis size
*****
TITLETXT: dc.b  "MandleBrot",0
Text1:    dc.b  "Scale",0
Text2:    dc.b  "Red Scale",0
Text3:    dc.b  "Green Scale",0
Text4:    dc.b  "Blue Scale",0
Text5:    dc.b  "Reflect Red",0
Text6:    dc.b  "Reflect Green",0
text7:    dc.b  "Reflect Blue",0
text8:    dc.b  "Filter Red",0
text9:    dc.b  "Filter Green",0
Text10:   dc.b  "Filter Blue",0
Text11:   dc.b  "Iterations",0
Text12:   dc.b  "Breakpoint",0
Text13:   dc.b  0
Text14:   dc.b  0
Text15:   dc.b  0
Text16:   dc.b  0
blank:    dc.b  0
    even
*****
;
; This is the exectutable!
;

begin 777 ImagineTexture
M  #\P      !          $"  #Z0  0(,;P!0  1G  &0H!.X
M=4IO  9F    L8      B/\    9@    @PC_   K@    (8(_P    ,T    "' " \X
M  "  $YU(_P  #0    "#"/\    ">    A@C_   O@    (<(#P  ( 3G4@X
M;P  $(F\  "'1O  P@$(B(J  OD*@( )A!G  %^3$, ( $Q#*  ),0S@#T(+0@P@ X
M  !G  %F("@  !" (H  @D*  ,X(C@B>"*(T  &"-!  !PC0@  @0^D )$'H  ! PX
M/  %(!C@B"+  4<C_ ^$YU(&\  !" )O  @D;P  ,\A)$  /(J1(  !/(J10  "/(OX
M18#R*$8  "CR &( 2H!G  $ \BA&@  L@  (@/(  #"#R  R@@"  /(  !X#RX
M  $ @  %@/(  "2/R  VC@ +  /(  #R+R  !<X\I( )O(  */R/$2C0  /(  X
M"  #R  PH@ 0*/(  '*A3@&; 8  HO(\1  !+?____@ 4/(  %"#R  !L4@ 8X
M(/( 8  !"@1(  @%  /\1"!#@  \BA$@  $@  $(I9  &."(0H$2  /(!X
M0  #R/$0@0X  /(H1(  "/(  !" /R*60  !S@B$*!$@#R 4  \CQ$($  #RX
M*$2  SR  0C\BED  @0^D )$'H  ! P/  %\AA$  /\1"!#@  \AED  %'(X
M_ ^Y.=4E46%0  (@  ":  #<  WL X
M  .!  #BP  Y<  .B  #K@  [P  /)  #U  ^$  /M  #^  X
M!  ,  0$  $!0  ! 8  0'"  $"!  $"!  $"!  $(  _@  /X  X
M  #^  !#  0(  X
M  (  $  !  0  X
M  (  $  /X  X
M  #^  _@  0@  $(  !"  X
M  $  !  0  X
M  "  @  (  36%N9&QE0G)O=  !38V%L90!2960@4V-A;&4 1W)E96X@X
M4V-A;&4 0FQU92!38V%L90!2969L96-T(%)E9  !2969L96-T($=R965N %)EX
M9FQE8W0@0FQU90!&:6QT97(@4F5D $9I;'1E<B!'<F5E;@!&:6QT97(@0FQUX

```

```

M90!)=&5R871I;VYS $)R96%K<&]I;G0          /L      (@          <X
M      (      "8      J      ,      #0      Z      0@      $8      !,      4      %8 X
M !:      8      A      (4      "(      B0      (H      "+      C      (T      ".      X
M CP      )      "1      D@      ),      "4      E0      )8      "7      F      )D      X
%      _ ) X
X
end

```

```

-----
!Email David@flevel.demon.co.uk
+-----+
|Fourth Level Developments - Amiga,PC,Apple,SCSI and Magneto Opticals|
\-----+

```

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## 1.251 MSG-249 Subject: Imagine on SGI???

Subject: Imagine on SGI???

Date: Sat, 11 Jun 1994 14:00:00 -0400

From: yosi.leiba@canrem.com (Yosi Leiba)

I would like to know if there is a version of Imagine for the SGI (Indy) or the Mac? I have all the platforms available to me...

PS> On the PC version dos Imagine run from DOS or Windows and hows does it compare to 3D Studio???

Thanks

Yosi.Leiba@canrem.com

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## 1.252 MSG-250 Subject: soft shadows a priority

Subject: soft shadows a priority

Date: Sat, 11 Jun 1994 16:50:03 -0400 (EDT)

From: Derek Hardison <derekjh@noel.pd.org>

Hi - Derek Hardison here -- new to the list. Amiga since '85; Imagine since version 1.0; two 4000's and a 2500.

I earn my living with Imagine -- for last two years.

I have read the posts on requested improvemnets and suggest that we somehow let Impulse know what our priorities are.

I want some control over the firecracker ( more than now)

I want soft shadows --- my top rendering need.

ThanYOU,ThankYOU to impulse for the Set Zone!!

In Detail editor -- browsers everywhere  
upper & lower limits on textures -- I mean - give us a clue, please.  
then show us a pic as we make changes -- a la "forge" (love it)

Currently working on a blockbuster project using Imagine  
tell you about it in a few months when the wraps come off.  
Nice to finally be hooked up to the list.

--

Derek Hardison        Imagine on Amiga 4000s  
                         New Intelligence on Video  
                         SGIwannabe

Domain: derekjh@pd.org  
UUCP: ...!emory!pd.org!derekjh

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## 1.253    MSG-251 Subject: Re: Shield effect

Subject: Re: Shield effect  
Date: Sat, 11 Jun 94 16:25:16 PDT  
From: ual97@freenet.victoria.bc.ca (Christopher Stewart)

>Ya, they do..Christopher...did you do that Frankenstien Animation that  
>won First Amiga World Animation Contest...if so I rember seeing that at a  
>show a few years ago..really nice stuff! Excellent considering it was  
>with Turbo Silver..at least thats what I thought it was done with..

Nope, not me. I don't even think I've seen the piece. Back then I was  
probably still playing with chekered floors and shiny balls <grin>.

--

"I wish there was a knob on the TV                    ual97@freenet.victoria.bc.ca  
to turn up the intelligence.                    cs833@cleveland.freenet.edu  
There's a knob called 'brightness',  
but it doesn't work." -- Gallagher                    Join the Animation Sig!

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## 1.254    MSG-252 Subject: particles help

Subject: particles help  
Date: Sun, 12 Jun 1994 12:56:19 +0000  
From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

>  
> Did you try the settings I gave you, what did they do..did you set the

---

> Min Angle from Z to 0, I believe you had it at 20 and this maybe keeping  
> your particles 20 units from the ground at the end of the effect... and  
> why they stay hanging...the reason there falling so fast is because you  
> have the Terminal Z Velocity at 30 or something like that set it to the  
> amount of frames the effect last..I believe it was 93 or something.. this  
> should slow them down.. same goes for Terminal H Velocity this will slow  
> the expansion of the Particles on the Horizontal axis's.. Did you get see  
> my last message repling to this, What happen when you tried it?  
>

Hi Randy,

I was the one with the particles prob. I used the settings today  
(been sick) and they seemed to work better by the end of the last frame.  
there was still a couple of particles still there, but the using the  
scaling thing in the requester made them disappear.

Thanks for the numbers. I received 3.0 on Friday and have been  
reading a bit more about the effect now. Still needs to have more info  
on it I think...

see ya  
David

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## 1.255 MSG-253 Subject: Re: Shield effect

Subject: Re: Shield effect  
Date: Sun, 12 Jun 1994 00:34:43 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> >Ya, they do..Christopher...did you do that Frankenstien Animation that  
> >won First Amiga World Animation Contest...if so I rember seeing that at a  
> >show a few years ago..really nice stuff! Excellent considering it was  
> >with Turbo Silver..at least thats what I thought it was done with..  
>

> Nope, not me. I don't even think I've seen the piece. Back then I was  
> probably still playing with chekered floors and shiny balls <grin>.

O'well...I'm sure some of these other guys remember it..it was quite nice.

=RRW=

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## 1.256 MSG-254 Subject: Re: particles help

Subject: Re: particles help  
Date: Sun, 12 Jun 1994 00:48:47 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Hi Randy,  
> I was the one with the particles prob. I used the settings today  
> (been sick) and they seemed to work better by the end of the last frame.  
> there was still a couple of particles still there, but the using the  
> scaling thing in the requester made them disappear.

OK, sorry to hear they didn't solve your problem..I did a similar animation and it worked fine for me, the particles bounce twice or was three times and all landed on the ground fine..Hmmm? Are you sure the distance to the ground matches the distance they are to fall. Doesn't seem like this is your problem as this, I would think would be obvious.

>From the settings you had;

Travel Distance 450  
Ground -87.4961

your actual object would have to be at global Z 362.5039. Is this were you have it? If not this maybe the problem..

Did you try 0 in the Min Angle from Z?

I know you said that scaling them made them disappear, and if that's good enough for you then that's cool. But If you want them to stay on the ground after they fall, then this will not do. Just trying to figure out why I got it to work OK and these figures didn't help you. Hmmm?

> Thanks for the numbers. I received 3.0 on Friday and have been  
> reading a bit more about the effect now. Still needs to have more info  
> on it I think...

Yes, they are a bit unpredictable, and take a lot of testing to get the desired effect some times.

Good Luck!

=RRW=

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## 1.257 MSG-255 Subject: INTERLACE

Subject: INTERLACE  
Date: Sun, 12 Jun 94 00:37:10  
From: "Mario Rhynsburger" <mario@hell.hacktic.nl>

---



Is it true ??  
That IMAGINE 3.0 can only work in "interlace"

^^^^Bubbles^^^^

Boys & Girls you should know by know, Its live to the fullest  
Sing > 'Happy Happy Joy Joy'. Repeat until death sets you free.

The Dutchables

mario@hell.hacktic.nl

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## 1.258 MSG-256 Subject: Particle Probs with Imagine 3.0 for PC.

Subject: Particle Probs with Imagine 3.0 for PC.  
Date: Sun, 12 Jun 1994 14:11:19 +0100 (MET)  
From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

Hello!!

Just got my copy of Imagine 3.0 for the PC, and just got hooked to this list.

When i use the Particle Generator, 30 % of the times it crashes my PC, WHY ???(Yeah, i know buy an Amiga, well i just sold my old 2000 a year back :)  
I think it crash when i use Random Particles and try to change the size of the particle to under 1.

What do i do now.

Are there a fix for this prob, or will i just have to ignore it??  
(Its not a big problem right now, but might give me some gray hairs in the future)

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

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## 1.259 MSG-257 Subject: Particles part II.

Subject: Particles part II.  
Date: Sun, 12 Jun 1994 14:55:02 +0100 (MET)  
From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

Hello Again.

Have pin pointed the problem.

If i apply Particles to a ground plan, it will crash.

Right now i dont know how i would ever use that, but still  
could make pretty nice efx.

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

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## 1.260 MSG-258 Subject: Particle AGAIN.

Subject: Particle AGAIN.  
Date: Sun, 12 Jun 1994 15:13:37 +0100 (MET)  
From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

Hello AGAIN !!

Just to inform you, i have tried to do the same thing on an  
Amiga 4000/40 (12mb) with the same result, the Amiga Crashes..  
BUMMER!!!

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

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## 1.261 MSG-259 Subject: helmet.lha uploaded

Subject: helmet.lha uploaded  
Date: Sun, 12 Jun 1994 12:04:16 -0400  
From: "Paul Wehner" <usr9110a@TSO.UC.EDU>

I've uploaded a jpeg to wuarchive in systems/amiga/aminet/new called

---

helmet.lha. Its a 800x600 pic of a skull/helmet with roses. My first contribution to the IML. If there is enough demand I'll post the objects as well.  
enjoy, paul wehner usr9110a@tso.uc.edu

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## 1.262 MSG-260 Subject: Re: Particle AGAIN.

Subject: Re: Particle AGAIN.  
Date: Mon, 13 Jun 1994 00:17:19 +0100 (MET)  
From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

On Sun, 12 Jun 1994, Jason B Koszarsky wrote:

> Ground is a special object. Particles have to be used with normal objects  
> that have faces. I would expect them NOT to work with a ground, perfect sphere,  
> or plain axis.

I guessed that much, but it would be nice if imagine just wrote back and told us, "You fool, think about it", or something like that. Not just "You fool, i just crashed you computer:)"

Well it would be nice, would it :)

But thanx for you prompt answer.

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

P.S Well it might work with plains ?

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## 1.263 MSG-261 Subject: State

Subject: State  
Date: Sun, 12 Jun 1994 23:43:01 -0400 (EDT)  
From: "ElectroSURFER))))))>" <romulus@escape.com>

My understanding of using states in the stage editor is as follows:

we have three states: 1. wingleveled  
2. wingup  
3. wingdown.

---

1. Load the object in into frame 1 of 33 for example.
2. Info requester pops up. I select state wingleveled.
3. In action editor I change object time bar to five
4. select add and add same object on 6-11. requester pops up, select wingup
5. add 12-17 in time line, then select state wingleveled
6. add 22-27 in time line, then select state wingdown
7. add 28-33 in time line, then select state wingleveled

Is this the correct use of states.

The only thing that the manual mentions concerning the use of states in animation is on page 244. Actually there is another area, the detail editor, but there your not required to reload the object.

If the above assumption of the usage of the states with animation is correct still leave a message explaining your version of it's usage.

Thank You

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## 1.264 MSG-262 Subject: Path Deforms in Stage

Subject: Path Deforms in Stage  
Date: Mon, 13 Jun 94 00:16:05 EST  
From: mtucibat@cris.com (Mike Tucibat)

Hey Randy!

Nice Solution!

The problem, of course, was:

=====

> That is, the same deformation should take place  
> if the object remains stationary in Stage, and the Path moves  
> through the object. You \*could\* have a flag as a stationary object,  
> and make a wavy path move through it, and create a rippling flag.  
>

(Details of solution omitted for brevity...)

=====

As the path moves in a -Y direction, the plane moves +Y. Kinda like a treadmill. Nice!

I wonder if you checked for a small change in the end position of your plane, though. For a while, I kept getting one.

Like you found, to hold the plane's position, the distance it travels must equal the distance between the endpoints of the path. The "length of path" in Stage is not that distance, however, but rather the length

---

of the curved path. I had to go to Detail to make a path of known distance between endpoints, and use that distance, to get it "stationary."

I \*guess\* this is what p. 270 sidebar means. Although the object \*is\* moving, it's not too apparent. It doesn't seem to work without the object following the path, and that creates change in position. And even though the start and endpoints are the same, using the distance I describe, the plane still changes position as it begins to follow the path-- it just ends up back where it started. I also checked and this was possible with 2.9, also.

But, anyway, cool effect! Thanks for the input!

-mikeT

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## 1.265 MSG-263 Subject: Re: State

Subject: Re: State  
Date: Mon, 13 Jun 1994 01:59:27 -0700 (PDT)  
From: Jeremy White <jwhite@efn.org>

On Sun, 12 Jun 1994, ElectroSURFER))))))> wrote:

>  
> My understanding of using states in the stage editor is as follows:  
>  
> we have three states: 1. wingleveled  
> 2. wingup  
> 3. wingdown.  
> 1. Load the object in into frame 1 of 33 for example.  
> 2. Info requester pops up. I select state wingleveled.  
> 3. In action editor I change object time bar to five  
> 4. select add and add same object on 6-11. requester pops up, select wingup  
> 5. add 12-17 in time line, then select state wingleveled  
> 6. add 22-27 in time line, then select state wingdown  
> 7. add 28-33 in time line, then select state wingleveled  
>  
> Is this the correct use of states.

This does not seem right unless you want the object to remain perfectly still for the first 5 frames. Set the first object to 1-1 (wingleveled). Then set the second object for 2-6 (wingup) In frames 2-6 the wings will start at leveled, and by frame 6, be completely up.

-Jeremy White

---

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## 1.266 MSG-264 Subject: Imagine

Subject: Imagine  
Date: Mon, 13 Jun 1994 12:50:06 +0100  
From: mnw3 <mnw3@aber.ac.uk>

TO all imagine fans,

Does anyone know when these updates are coming out, i.e building up to Imagine4.0 (or just 3.9 will do!)? As I realized that the promised beta-spline objects will take up far less disk space (a sphere may contain 400 faces, whereas a geometric primitive sphere may only have a few parameters) and also the wireframe view would look less cluttered. I think we owe it to ourselves, my good friends, to make sure these important issues are addressed! Is this too much to ask??

From Martin Wood..

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## 1.267 MSG-265 Subject: Solid and Drills.

Subject: Solid and Drills.  
Date: Mon, 13 Jun 1994 14:11:06 +0100 (MET)  
From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

Hi ...

Can i get Imagine 3.0 to think that an object is solid.  
(A nice glass cube)

And can i make a drill efx, putting a small sphere inside the cube??

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

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## 1.268 MSG-266 Subject: Streamer-Tape-Transfer PC->Amiga

Subject: Streamer-Tape-Transfer PC->Amiga  
Date: Mon, 13 Jun 1994 16:17:38 +0200  
From: Peter Bugla <bugla@informatik.tu-muenchen.de>

---

Hi fellow imagineers!

First excuse me wasting bandwidth, but it may be of concern for all those working on different platforms.

I want to transfer data from PC to Amiga with a Streamer-Tape (Typ 6150) (The big cartridges).

The Problem: I need a programm which is existent on both platforms and can write on a streamer-device.

Any help appreciated,  
Peter

```
-----
#include <disclaimer.h>                                | "If architects built buildings the way
                                                         | programmers write programs the first
                                                         | woodpecker that came along would
Peter Bugla                                           | destroy civilization"
e-mail: bugla@informatik.tu-muenchen.de              | -- Murphy's Law of Computers
snail-mail: Peter Bugla, Morsering 26,                |
              80937 Muenchen, Germany                |
-----
```

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## 1.269 MSG-267 Subject: genlock objects / Matte Painting

Subject: genlock objects / Matte Painting  
Date: Mon, 13 Jun 1994 10:01:19 -0400  
From: "rob (r.d.) hounsell" <hounsell@bnr.ca>

Folks,

I've discovered (perhaps belatedly) that although the attributes requestor screen capture printed in the Im3.0 manual has a "genlock" button, the manual doesn't mention it and it doesn't exist in the requestor on my screen. In fact, I don't see anything about genlock in the index.

So, how do I accomplish what I believe is called matte painting? I have a scene in which there is only a small area that is animated, while the rest is static. To save rendering time (2.5 hours / frame) I want to render the whole screen for the first frame just once, and have the area that the action takes place in genlocked (i.e. black); there is an object that masks it nicely. Then, I would render the rest of the frames using only the objects that are moving by using layers in the stage editor (so I can get the right reflections on the animated objects - at least I think that's the way it works...) and then composite them in ADPro. (sounds like a good REXX application...)

Since I don't have the option of using a genlock object, I could make it

bright and force the colour to be black, but then (according to "Understanding Imagine 2.0) that would cause reflections of the object in the matte scene to be black rather than the real colour.

I can't just render the mask object alone and use it as an alpha channel because it is clipped by other objects. The only thing I can think of is to have a copy of the scene in which objects that clip the mask object are black and the mask object is white, and then render it in colour shaded mode to get an alpha channel mask. I suppose touching up a copy of the overall scene in DPaint would work, but I was hoping that there was a genlock workaround.

Thx

Rob

--

```
+-----+
| Rob Hounsell                               BNR WAN:  HOUNSELL@BMERHB63      |
| Team Leader: UNIX                         INTERNET: HOUNSELL@BNR.CA      |
| DMS System Performance Development        PHONE:  (613) 765-2904          |
| Dept. 7D23                               ESN: 395-2904                    |
| Bell Northern Research                    |                               |
+-----+
```

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## 1.270 MSG-268 Subject: Re: State

Subject: Re: State

Date: Mon, 13 Jun 1994 10:12:47 -0400 (EDT)

From: "ElectroSURFER))))))>" <romulus@escape.com>

On Mon, 13 Jun 1994, Jeremy White wrote:

```
> On Sun, 12 Jun 1994, ElectroSURFER))))))> wrote>
> >
> > Is this the correct use of states.
>
> This does not seem right unless you want the object to remain perfectly
> still for the first 5 frames. Set the first object to 1-1 (wingleveled).
> Then set the second object for 2-6 (wingup) In frames 2-6 the wings will
> start at leveled, and by frame 6, be completely up.
>
> -Jeremy White
>
```

Thanks Jeremy for your prompt response. As soon as I was done I realized my error in the post. In anycase, using your correction above, is this the proper way to use the states command in the action editor?



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### 1.271 MSG-269 Subject: EDLE, AARC-ANTIALIASING

Subject: EDLE, AARC-ANTIALIASING  
Date: Mon, 13 Jun 1994 10:23:51 -0400 (EDT)  
From: "ElectroSURFER))))))>" <romulus@escape.com>

In the preference editor, you will find a discription mentioning EDLE on page 315; however, there is no explanation on AARC.(if there is let me know)

Will someone please explain AARC.

Thankyou.

:)  
Robert Frederique

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### 1.272 MSG-270 Subject: transparent background

Subject: transparent background  
Date: Mon, 13 Jun 1994 11:42:00 -0400 (EDT)  
From: MCADOO <MCADOO@vax.edinboro.edu>

Is there a way to use Imagine to overlay it over another source(camera, video tape etc) like credits. If I make the background black which is transparent (like in DPaint) I get the black background with the object. I want to just the objects to be overlayed on the video like credits on a video tape. Any help will be greatly appreciated. I'm using 3.0.

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### 1.273 MSG-271 Subject: Imagine

Subject: Imagine  
Date: Mon, 13 Jun 1994 11:04:58 -0500  
From: William E Costello/Focal Point Software <bill@sugar.NeoSoft.COM>

Date: Mon, 13 Jun 1994 12:50:06 +0100  
From: mnw3 <mnw3@aber.ac.uk>

> TO all imagine fans,  
> Does anyone know when these updates are coming out, i.e  
> building up to Imagine4.0 (or just 3.9 will do!)? As I realized that the  
> promised beta-spline objects will take up far less disk space (a sphere may

---

> contain 400 faces, whereas a geometric primitive sphere may only have a few  
> parameters) and also the wireframe view would look less cluttered. I think  
> we owe it to ourselves, my good friends, to make sure these important issues  
  
> are addressed! Is this too much to ask??  
>  
> From Martin Wood..

I called Impulse last week, to ask about the \$100 interim upgrade program. What  
I was told was to hold off on buying it until the first upgrade is available. I  
was also told the first upgrade would probably be a new 3d spline editor to go  
with or replace the current 2d spline editor in 3.0. The person I talked to said  
it would probably be a month or two before this was ready.  
  
bill

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## 1.274 MSG-272 Subject: re: transparant background

Subject: re: transparant background  
Date: Mon, 13 Jun 94 11:27:26 PDT  
From: 13-Jun-1994 1319 <leimberger@marbls.enet.dec.com>

>Is there a way to use Imagine to overlay it over another source(camera,  
>video tape etc) like credits. If I make the background black which is  
>transparent (like in DPaint) I get the black background with the object.  
>I want to just the objects to be overlayed on the video like credits  
>on a video tape. Any help will be greatly appreciated. I'm using 3.0.

I am not sure if Imagine can do what you want. If you set the Genlock  
function I think it only makes the background color zero, and does not  
take in consideration the object. The problem is that if color zero  
is used in the rendered object it is transparant also. What you could do  
is move the pic into dpaint alter the pallette to make color zero really  
stand out, fill the occurrences of color zero in the pic with another color  
and then reset color zero to it's original setting.

bill

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## 1.275 MSG-273 Subject: Movies - Render Size

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Subject: Movies - Render Size  
Date: Mon, 13 Jun 94 15:30:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

Anybody have an idea as to what sort of resolutions are used in computer generated renders for movies? Not TV movies, big screen movies (70mm) like the ones playing at a theatre near you. I realize most computer generated imagery is often mixed in with live footage or traditional animation and therefore don't take up the whole screen, but what kind of resolution does the industry currently use to generate frames that fill the screen without having noticeable pixelization. Regardless of software/hardware used.

Anyone here have this information? Thanks.

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## 1.276 MSG-274 Subject: Trees

Subject: Trees  
Date: Mon, 13 Jun 1994 12:45:04 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

Hey y'all,

Been having some fun--and earthside, for a change--generating trees. The new deformation tools are sublime. My foliage is a little other-worldly, but the trees still come out pretty cool. I stuck a 24bit ham up on aminet, under pix/trace, called smoketrees.lha.

Any advice on foliage would be grapely excruciated.

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## 1.277 MSG-275 Subject: PC Imagine 2.0

Subject: PC Imagine 2.0  
Date: Mon, 13 Jun 1994 18:22:03 -0700  
From: peterj@netcom.com (Peter Jennings)

I recently purchased the book, 3D Modeling Lab with its accompanying copy of Imagine 2.0 for the PC. I am finding the software to be extremely fragile, regularly collapsing points together, hanging and crashing to the "abnormal termination, please call Impulse" message.

I know I didn't pay much for this copy, so I don't expect any support from Impulse on it, but I have some questions.

Is there a bug fix version of this program around that doesn't crash quite so often? Is anyone using this version of the program successfully?

---

Is there a reference manual or equivalent for the features which are not discussed in the accompanying book?

All I was after when I purchased the book was the forms editor portion of the program in order to create simple objects for use in stereograms. Is there an inexpensive PC or Mac program that anyone knows of with a similar interface for editing 3D shapes. I like the way Imagine lets me create objects, but I just wish it would keep running.

Peter

--

peterj@netcom.com

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## 1.278 MSG-276 Subject: Re: Path Deforms in Stage

Subject: Re: Path Deforms in Stage  
Date: Mon, 13 Jun 1994 18:28:00 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Hey Randy!  
>  
> Nice Solution!  
>  
> The problem, of course, was:  
> =====  
> > That is, the same deformation should take place  
> > if the object remains stationary in Stage, and the Path moves  
> > through the object. You \*could\* have a flag as a stationary object,  
> > and make a wavy path move through it, and create a rippling flag.  
> >  
> (Details of solution omitted for brevity...)  
> =====  
>  
> As the path moves in a -Y direction, the plane moves +Y. Kinda like a  
> treadmill. Nice!  
>  
> I wonder if you checked for a small change in the end position of your  
> plane, though. For a while, I kept getting one.

Ya, I did notice this but thought if I could get you aimed in the right direction you could get it to work properly with some more testing. I did'nt have the time to get it perfect, and just wanted to see if I could get close to what the manual says.

> Like you found, to hold the plane's position, the distance it travels  
> must equal the distance between the endpoints of the path. The "length  
> of path" in Stage is not that distance, however, but rather the length  
> of the curved path. I had to go to Detail to make a path of known  
> distance between endpoints, and use that distance, to get it "stationary."

Great! I geuss I should have checked the path there instead of in the Stage, but I just wanted to get things in the Stage and start testing them out so that I could report something to you before I

had to go to sleep. Thanks for figuring out the small glitch in it,  
Looks like it was a good team effort..hehehehe

> I \*guess\* this is what p. 270 sidebar means. Although the object \*is\*  
> moving, it's not too apparent. It doesn't seem to work without the object  
> following the path, and that creates change in position. And even though  
> the start and endpoints are the same, using the distance I describe, the  
> plane still changes position as it begins to follow the path-- it just  
> ends up back where it started. I also checked and this was possible with  
> 2.9, also.

Ya, I'm sure it is as there was no other way I could get it to work, and  
it does a fine job of it. Though it maybe a bit limited to certain types  
of paths it is a good effect to have in our arsenal.

> But, anyway, cool effect! Thanks for the input!

No problem, glad to help.

=RRW=

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## 1.279 MSG-277 Subject: effects.doc

Subject: effects.doc  
Date: Mon, 13 Jun 1994 23:34:59 -0400 (EDT)  
From: "ElectroSURFER))))))>" <romulus@escape.com>

On page 272 of the Imagine book it informs us that "for a complete list  
of effects refer to the Effects.doc found in the Imagine directory. I  
can't find it anywhere in the disks.

Has anyone else experienced the case of the missing effects.doc file.

I really need the docs. The manual does not mention anything about some  
of the effects.

Thankyou

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## 1.280 MSG-278 Subject: Re: Solid and Drills.

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Subject: Re: Solid and Drills.  
 Date: Mon, 13 Jun 1994 23:52:27 -0700 (PDT)  
 From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

>  
 > Can i get Imagine 3.0 to think that an object is solid.  
 > (A nice glass cube)  
 >  
 > And can i make a drill efx, putting a small sphere inside the cube??

I believe so, just make a cube and a sphere and put the sphere inside the cube, give them both a class attribute and raytrace it. Of course you may want some things for it refract.

=RRW=

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## 1.281 MSG-279 Subject: Re: Imagine on SGI

Subject: Re: Imagine on SGI  
 Date: Tue, 14 Jun 1994 08:55:47 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Yosi Leiba: (Imagine on SGI???)

> I would like to know if there is a version of Imagine for the SGI (Indy)  
 > or the Mac? I have all the platforms available to me...

Not yet.

> PS> On the PC version dos Imagine run from DOS or Windows and hows does  
 > it compare to 3D Studio???

You have to consider that 3DS is a really shitty rendering prg  
 (nice user interface and editing, after all; shitty boolean just like  
 Imagine slice perhaps!); otherwise You must use Imagine v3.0 coz 2.0PC  
 is really a buggy shitty program.

Last but not least, remember: NO ESSENCE, NO FREEFORM,  
 NO PIXEL3D, NO VERTEX!!!!

```

/\_
| O |      RET
|   | MAILING      ENDP          T-H-A-N-X
| O |      STACK    200H        ae(_^)^ue

```

|\_\_\_\_| END MAILING \_ \_ \_ \_ \_ Wizard signing off

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## 1.282 MSG-280 Subject: Re: helmet.lha

Subject: Re: helmet.lha  
Date: Tue, 14 Jun 1994 08:55:14 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

```

| O | .MODEL SMALL
|   | .DATA
| O | LOGIN DB " _ _ _ _ _ Wizard logged in"
|   | .CODE
| O | MAILING PROC FAR
|/\_|

```

Paul Wehner (helmet.lha uploaded)

> I've uploaded a jpeg to wuarchive in systems/amiga/aminet/new called  
> helmet.lha. Its a 800x600 pic of a skull/helmet with roses. My first  
> contribution to the IML. If there is enough demand I'll post the  
> objects as well.

Hi Paul,  
I'm waiting for your future (hopefully) upload to Aminet of Your  
helmet object, DEMAND:=DEMAND+1.

```

.BLKW DEMAND ;word reserved
MOV (SP)+ R0 ;pop
MOV #0 R1
...
MOV R1 DEMAND ;use R1
...
...
INC R1 ;R1:=R1+1
MOV DEMAND R1
MOV R0 -(SP) ;push

```

```

/\_
| O | RET
|   | MAILING ENDP T-H-A-N-X
| O | STACK 200H ae(_^ )ue
|____| END MAILING _ _ _ _ _ Wizard signing off

```

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## 1.283 MSG-281 Subject: Re: transparent background

Subject: Re: transparent background  
Date: Tue, 14 Jun 1994 00:21:30 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Is there a way to use Imagine to overlay it over another source(camera,  
> video tape etc) like credits. If I make the background black which is  
> transparent (like in DPaint) I get the black background with the object.  
> I want to just the objects to be overlayed on the video like credits  
> on a video tape. Any help will be greatly appreciated. I'm using 3.0.

Well there use to be a Genlock button in the Global requester, but not  
any more...? Hmmmm..maybe you could try typing -7 in all spaces for Horizon,  
+Zenith and -Zenith. Other than that I don't know off hand.

=RRW=

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## 1.284 MSG-282 Subject: Missed the StarField Stuff

Subject: Missed the StarField Stuff  
Date: Mon, 13 Jun 1994 22:34:52 -0700 (MST)  
From: N1886505944@amuc.mtroyal.ab.ca (Kelly O'Hara)

Hello ALL!

I have been playing A LOT with imagine lately, and signed  
up a little while ago to this mailing list, but I think  
I just missed the one thing I was hoping to find the most.

How do I do Star Fields (animatable)?

I have tried the confetti texture, but the generation is  
closer to tuned snow on my TV than stars, not keeping a  
consistant "starmap" texture if the camera moves at all.

I would greatly appreciate it if someone would be able to  
send me the re-hash of the stream about creating star fields  
or just some info. If you prefer EMAIL, send to

Kelly.O'Hara@amuc.mtroyal.ab.ca

Thanks in advance.

=====  
Kelly O'Hara =: ^)  
-----

"Everybody, everybody's dead, everybody's dead Dave." \* Holly

=== IceIQle v2.0 ===

---



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## 1.285 MSG-283 Subject: Re: transparent background

Subject: Re: transparent background  
Date: Tue, 14 Jun 1994 21:54:18 +0000  
From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

Hi again,

>  
> Well there use to be a Genlock button in the Global requester, but not  
> any more..? Hmmm..maybe you could try typing -7 in all spaces for Horizon,  
> +Zenith and -Zenith. Other than that I don't know off hand.

What has me frustrated is that the 2 options are still in the preferences but there seems to be now way to activate it...bit of a bummer as I do the majority of my rendering this way...lots of compositing to save render times....

If anyone finds out what happened to it please let us all know :)

See ya  
David Shaw  
(Soon to be 3D expert)

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## 1.286 MSG-284 Subject: re: transparant background

Subject: re: transparant background  
Date: Tue, 14 Jun 1994 08:31:34 -0400  
From: mbc@po.CWRU.Edu (Michael B. Comet)

>  
> I am not sure if Imagine can do what you want. If you set the Genlock  
> function I think it only makes the background color zero, an does not

What genlock does is as follows:

Suppose you have a brushmap of a logo or something and you want to 'decal' it onto your object. ie: perhaps you have a name and you want to make it look stenciled on a wood crate object.

Normally you would make 2 objects, the crate and the decal, and for the decal object 2 maps. A color map and a filter map.

---

However, genlock will take color 0 of the brushmap and leave the object at that point untouched. Thus you can directly map the brush onto the box with any color you want, so long as the bkg section is color 0.

I don't think this helps with what you want to do.

--

```
+-----+
| Michael Comet, mbc@po.CWRU.Edu - CWRU, Software Engineer/Graphics Artist |
| Computer Graphics/Animation! - Liquid Vision SIG (go liquid), Freenet    |
+-----+
```

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## 1.287 MSG-285 Subject: Re: Help!

Subject: Re: Help!

Date: Tue, 14 Jun 1994 07:07:41 -0700

From: Lesk@cc.snow.edu (Lesk)

>Hey Lesk! I'm having the worst time with VelScal in the action editor.

>

>I want to have an object standing upright, then falling over. So the

>object's alignment should change from 0 to 90 degrees along the x axis.

>But I want it to accelerate towards the ground. Know how to do this

>exactly? I'm still getting a constant speed, even though the manual

>says I shouldn't. Thanks!

>

>Paul

Sorry to answer so late I just got back from being sick. I am finally done with school! Yea!!!

anyway I have not used the parameters you are describing. What I have done in the past is just decrease the amount of time in the action editor to make an increase in speed then more time to slow it down. In fact I usually use Aworks for my final anim because I can then add music and fluctuate the speed on a frame by frame basis, overlay text, and access imagefx tools and macros to modify to my hearts content.....

I will check out velscal when I get back tonight and see what more I can find out.

Render Ho!

Lesk

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**1.288 MSG-286 Subject: Farewell IML**

Subject: Farewell IML  
 Date: Tue, 14 Jun 94 10:42:10 EDT  
 From: Mark Thompson <mark@westford.ccur.com>

Well, the time has come for me to exit the Imagine Mailing List. I've been here since its inception 3+ years ago, and was once its most frequent posters (even more than Steve W who ran the list back then :-). But I find that I just don't have enough time to deal with all the mail that comes through here anymore. Anyway, I'll still be hanging out on the LightWave list (there is a new one now on netcom) and ofcourse there is always email. As far as Siggraph is concerned, I will still post an update to this list informing you when the Amiga 3D meeting will be held (I just won't see any follow-up discussion unless its directed to me personally). Hope to see you all then. But now I've got a graphics chip to design and imagery to render. Take care.

```
%~~~~~%
%      '      '      Mark Thompson      CONCURRENT COMPUTER  %
%  ---* RADIANT *---  mark@westford.ccur.com      Principal Graphics  %
%      ' Image '      ...!uunet!masscomp!mark      Hardware Architect  %
%      Productions      (508)392-2480 (603)424-1829  & General Nuisance  %
%~~~~~%
```

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**1.289 MSG-287 Subject: Particle animation thoughts...**

Subject: Particle animation thoughts...  
 Date: Tue, 14 Jun 94 08:53:36 CDT  
 From: Allen=Richard%sysadmin%eci@larry.cdsar.af.mil

I was thinking about the recent posts about how some particles were left hanging in the air at the end of an animation. Could it be that the animation needed more frames in which to finish the effect? If you give the special effect parameters that would require, say, 100 frames to complete, and then tell Imagine to render 80 frames, some of the particles would be hanging in mid flight at the 80th frame.

I've only played with particles once (the tutorial in the manual) but I don't remember there being a TIME parameter like in animated textures, where you can specify that the texture animates from 0 to 1 in however many frames you set for it in the action editor. If I remember right, special effects don't work the same, frame-wise.

Now that I think about it though, there IS a parameter or two that accept values as a number of frames, but I think it was distance traveled or wind speed or something along those lines; nothing for the entire special effect itself.

Can anyone shed more light on this? If I'm wrong, sorry for waisting bandwidth.

-Rico (rallen@cdsar.ssc.af.mil)

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## 1.290 MSG-288 Subject: Rendering portions

Subject: Rendering portions  
Date: Tue, 14 Jun 1994 16:48:21 +0100  
From: mnw3 <mnw3@aber.ac.uk>

Does Imagine3.0 allow you to render a portion of an image, like Real3D does? If it does it would be nice if you only changed something little and you only wanted to render that change, i.e a user-defined box or something.

On a different note, I like the sound of all the peripherals for Imagine which will be released e.g The Object Digitizer and a few months ago I had the idea of transforming a pair of stereoscopic images into a 3D scene using image processing. I realise this does have it's problems but does anyone have some useful information which would help me?

Thank you all,  
Martin Wood

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## 1.291 MSG-289 Subject: RE: Missed the StarField Stuff

Subject: RE: Missed the StarField Stuff  
Date: Tue, 14 Jun 94 07:54:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

<stuff deleted>

>How do I do Star Fields (animatable)?

>I have tried the confetti texture, but the generation is  
>closer to tuned snow on my TV than stars, not keeping a  
>consistant "starmap" texture if the camera moves at all.

I have also found the confetti texture unsuitable for animation. Actually, I don't think the Imagine starfield is that bad for animation but it would be better if there were some option for different star sizes, intensities and colors.

This has been a topic on the IML off and on for the past couple years that I know of (from reading the IML archives). Has anybody actually been able to put together a good, animatable starfield, especially one that you can fly through ala Star Trek Next Generation? I tried Steve Worley's suggestion in Understanding Imagine, which would probably be OK if you had all the stars at a fixed distance away from the foreground object but doesn't really work if the stars are at varying distances and the object is traveling amongst the stars. If the basic star is a fixed size and copied numerous times, and moved off into the distance, they tend to get smaller

---

and less bright which is what would be expected.

I think the primary problem is that trying to achieve a real-universe effect is not achievable with this level of a program and desktop computer without resorting to some artistic license. If everything is modeled to scale, the program's limitations are exceeded on one end of the scale or the other. The maximum octvolume allowed by Imagine is about 16,000 units. If we place ourselves at the center of this "universe", and use real life dimensions and say that the radius to this limit is where the closest star to us would be (Alpha Proxima ~ 4 light years), then scale that 8000 units to be 4 light years ( $(6 \times 10^{12} \text{ miles/ly} \times 4 \text{ ly}) / 8000 \text{ units}$ ), we get approximately  $3 \times 10^9$  or 3 billion miles per Imagine unit (sorry for the English dimensional units). And this is just to model the distance from Earth to the nearest star (other than our own star). So, if we model a 1-mile long starship, it would end up being 1/ 3 billionth of an Imagine unit long. If you try to model all the stars within a 40 light year radius, then the dimensional scales become even larger.

The bottom line to all this is that no one from Earth (as far as I know) has actually achieved light speed or faster-than-light-speed travel yet and traveled among the stars. So all the flying starfield, doppler-compression, dimensional compression/expansion effects we are so familiar with are pure fantasy. And 3D modeling/animation tools are perfect for portraying these fantasies. These fantasies tend to be visually stimulating but scientifically inaccurate. For example, the flying starfield effect would require one to be traveling at many times the speed of light, to have stars whizzing by you, which would require light doppler compression to go well past the blue end of the spectrum, which would probably mean that they would not be visible at all to the bandwidth of the human eye.

So, to achieve the desired visually stimulating effects, we have to develop work-arounds. I think the best starfield would consist of multiple "shells" of different size "star" objects. The "shell" furthest out would consist of the largest star objects, then progressively become smaller as they got closer to the center. In the center area, there would be a dense cluster of smaller star objects to achieve the flying starfield effect.

This does work as I have been working on a simple version (limited number of stars) but the redraw times get to be really long. So, to develop a convincing model is going to take awhile. If somebody has already done this, and would be willing to share the model, it would be appreciated.

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## 1.292 MSG-290 Subject: Re: Rendering portions

Subject: Re: Rendering portions  
Date: Tue, 14 Jun 1994 11:10:22 -0700 (PDT)  
From: Ed Totman <etotman@gort.ucsd.edu>

On Tue, 14 Jun 1994, mnw3 wrote:

> Does Imagine3.0 allow you to render a portion of an image, like Real3D does?  
> If it does it would be nice if you only changed something little and you only  
> wanted to render that change, i.e a user-defined box or something.  
>

Yes. It's called 'set zone'. You can render any portion of the perspective window. Once set, can also be used in the project editor.

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## 1.293 MSG-291 Subject: Imagine NewLook Please

Subject: Imagine NewLook Please  
 Date: Tue, 14 Jun 94 21:04:39 GMT+1  
 From: izi@scala.ping.dk (Soren Wind)

Will it EVER be possible that Imagine/Impulse will use the KS 2/3 Userinterface ?

I close to become sick of the slow/no promotable Imagine screens...

NO I WILL NEVER GO FOR REAL 3D INSTEAD....

I Just need a more userfreindly interface in Imagine..

Soren Wind - IZI/ImPACT  
 GFX / 3D Design / Raytrace  
 E-MAIL izi@scala.ping.dk  
 A2K/030/882/9MB/345MB/33MHz.  
 HiVision 15" Digital / Picasso 2MB

...

```

                -----_
Wir haben das Problem eingekreist: / Intel \
                                   \inside! /
                                   -----

```

-- Via Xenolink 1.90

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## 1.294 MSG-292 Subject: Maybe we need a new texture

Subject: Maybe we need a new texture  
 Date: Tue, 14 Jun 94 13:47:00 PDT  
 From: KEN\_ROBERTSON@robelle.com

Perhaps the people that make Essence can come up with something interesting mapped to the inside of a sphere or on a plane, or perhaps just an arc. Hmmm?

\KenR

-----  
 If the stakes are high, bring a ladder for the bar b que.  
 -----

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**1.295 MSG-293 Subject: Re: Solid and Drills.**

Subject: Re: Solid and Drills.

Date: Tue, 14 Jun 1994 23:30:39 +0100 (MET)

From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

> > Can i get Imagine 3.0 to think that an object is solid.  
> > (A nice glass cube)  
> >  
> > And can i make a drill efx, putting a small sphere inside the cube??  
>  
> I believe so, just make a cube and a sphere and put the sphere inside the  
> cube, give them both a class attribute and raytrace it. Of course you may  
> want some things for it refract.

Will the object be solid, or will i just end up with a glass shell cube  
with a glass shell sphere inside with air in rest of the space.

Well more like vacuum(?), i want glass not vacuum(?).

The light will bend when traveling through glass.

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

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**1.296 MSG-294 Subject: RE: Missed the StarField Stuff**

Subject: RE: Missed the StarField Stuff

Date: Tue, 14 Jun 1994 17:56:16 -0500 (CDT)

From: Michael Halleen <halleen@Mcs.Net>

On Tue, 14 Jun 1994, Stethem Ted 5721 wrote:

> >How do I do Star Fields (animatable)?  
>  
Here's how I've done this a few times in the past. It works pretty well,  
with only one drawback, but that should be fixed with Im30.

- Get an IFF of a starfield. I used Distant Suns. If anyone wants, I can upload the pics I've used (if I still have them).
- Create a sphere primitive. You can use a few less sections than the defaults, but not too many less.
- In Pick Points mode, chop off all the bottom points, you you only have a dome.

OLD WAY:

---

- Map the IFF onto the dome, using the default alignment.

NEW WAY: (untested)

- Make a state called DEFAULT
- Scale the object so it's totally flat.
- Make this a state called FLAT.
- Map the IFF onto the flat dome, but realign it from above.
- Lock the state to FLAT
- Reset to DEFAULT state

BOTH WAYS (continued):

- Make the object bright and phong shaded.

Voila!

Put this object in your scene and scale it so it surrounds everything. If you stars both above and below (I've only used this for the sky, not space), but another one (with a different IFF) below.

In the OLD WAY, you can only look at parts of the sphere, because the stars will be smeared at the edges (although I worked around this by pulling around some of the points, but it's still somewhat limiting). Now with brush tacking, this shouldn't be a problem.

This has worked great for me, and even allows for 'real' stars. I can place my favorite constellations wherever I want them. Distant suns does a good job. With only a 4-16 color IFF, you get different brightnesses and sizes, very realistic.

For 'warp speed' effects of stars whizzing by, try this.

- Open DPaint if 4 or 8 colors, lo-res or interlace, not hi-res (experiment. It all depends on how far and how long you want your whizzing stars)
- Make a ten frame (or 20 or 30) animation.
- Create a gradient from pure white to pure black.
- Make a small brush filled with that gradient, like this: (0=black, 7=white)

777777  
666666  
555555  
555555  
333333  
333333  
333333

---





- Drop a few of these around your scene, pointing from the distance and nearby the camera.

Play with the length of the anim, the size of the gradient, width of the tube, etc. to adjust the effect.

If you want to reposition them, there's only one position, not a beginning and an ending, and the tube itself will show you where the star is going to whiz and how big it will be when it gets there.

It's worked very well for me.

good luck

Mike Halleen

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## 1.297 MSG-295 Subject: INTERLACE

Subject: INTERLACE

Date: Tue, 14 Jun 94 16:34:57

From: "Mario Rhynsburger" <mario@hell.hacktic.nl>

Is it true ??

That IMAGINE 3.0 can only work in "interlace"

^^^Bubbles^^^

Boys & Girls you should know by know, Its live to the fullest

Sing > 'Happy Happy Joy Joy'. Repeat until death sets you free.

The Dutchables

mario@hell.hacktic.nl

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## 1.298 MSG-296 Subject: Re: Solid and Drills.

Subject: Re: Solid and Drills.

Date: Tue, 14 Jun 1994 17:31:30 -0700 (PDT)

From: Gerard Menendez <gpm@netcom.com>

On Tue, 14 Jun 1994, Mads Storm Andersen wrote:

---

>  
> Will the object be solid, or will i just end up with a glass shell cube  
> with a glass shell sphere inside with air in rest of the space.  
> Well more like vacum(?), i want glass not vacum(?).  
> The light will bend when traveling though glass.  
>

Light refracts at surface transitions only. You would have to create a box with outside and inside faces intentionally to have the effect your concerned about.

I think.

Gerard

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## 1.299 MSG-297 Subject: Re: Imagine on SGI

Subject: Re: Imagine on SGI  
Date: Tue, 14 Jun 1994 22:45:54 -0400  
From: kingb@echonyc.com (Andrew McDonald)

> You have to consider that 3DS is a really shitty rendering prg  
>(nice user interface and editing, after all; shitty boolean just like  
>Imagine slice perhaps!); otherwise You must use Imagine v3.0 coz 2.0PC  
>is really a buggy shitty program.

Since there is no other way to determine your actual experience using either 3DS or Imagine, I must say that the general tone of your message reeks of a total lack of information about either program.

Imagine/PC 2.0 worked fine for me, as does v3.0. I don't miss Essence, Pixel or Vertex. The v3.0 textures have provided me with a lot of new options. As have some of the new tools.

3DS is more mature program than Imagine, with great renderings, booleans work better than Imagine, excellent support, and plenty of 3rd party developers producing new IPAS products. The manuals and tutorials are thorough, the program is incredibly stable, and yes the price is out of the reach of most hobbyists. Tough. 3DS and Imagine do have similar function, each takes a different route to the same end, however I actually prefer my 3DS output for everything except certain raytrace effects that Imagine can do, if I have the time to kill waiting.

Andrew.

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**1.300 MSG-298 Subject: Re: Solid and Drills.**

Subject: Re: Solid and Drills.

Date: Tue, 14 Jun 1994 20:37:22 -0700

From: Lesk@cc.snow.edu (Lesk)

```
>> > Can i get Imagine 3.0 to think that an object is solid.
>> > (A nice glass cube)
>> >
>> > And can i make a drill efx, putting a small sphere inside the cube??
>>
>> I believe so, just make a cube and a sphere and put the sphere inside the
>> cube, give them both a class attribute and raytrace it. Of course you may
>> want some things for it refract.
>
>Will the object be solid, or will i just end up with a glass shell cube
>with a glass shell sphere inside with air in rest of the space.
>Well more like vacum(?), i want glass not vacum(?).
>The light will bend when traveling though glass.
>
>
>/Mads Storm.
>           Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,
>           Real Life Hero, WarpSpeed Moderator.
```

mmm Just a suggestion and I don't know if it will give exactly what you want but have you tried the thicken command in vertex? it may give the illusion of what you want.

Render Ho!  
Lesk

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**1.301 MSG-299 Subject: 3D-glasses**

Subject: 3D-glasses

Date: Mon, 6 Jun 94 10:38:39 +0200

From: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)

I've been reading old IML-archives. I'm currently on number 25, puh! There was a lot of talk about Imagine and 3D-glasses.

How is the status today on this subject? Which to buy and rought prices?

Anyone know?

/Anders Lattermann

FidoNet: 2:201/411.24

! PointBreak - Bg-St-Maurice - France

AmigaNet: 39:164/100.24 ! A3000/14/105 + SQ88C & 17xSQ800  
InterNet: Latte@p24.anet.bbs.bad.se ! I want a Samsung sticker & backdrop!

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### 1.302 MSG-300 Subject: MPEG

Subject: MPEG  
Date: Mon, 6 Jun 94 12:07:59 +0200  
From: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)

I want to put my Imagine animations on video and was thinking of using MPEG, the results I've seen so far looks good enough.

I can see to options. The "peggy" MPEG card or a CD32 with MPEG card and the newly released computeradd on with IDE-harddisk interface.

I think there is a software out that compresses MPEG (If i remember correctly, it's not the fastest thing around, but works).

Anybody who has more info?

/Anders Lattermann

FidoNet: 2:201/411.24 ! PointBreak - Bg-St-Maurice - France  
AmigaNet: 39:164/100.24 ! A3000/14/105 + SQ88C & 17xSQ800  
InterNet: Latte@p24.anet.bbs.bad.se ! I want a Samsung sticker & backdrop!

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### 1.303 MSG-301 Subject: IFF24 faster than RGB8 under Vmem?

Subject: IFF24 faster than RGB8 under Vmem?  
Date: Mon, 6 Jun 94 12:03:36 +0200  
From: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)

First, I'm sorry that you all have to read all my stupid questions in a long row :-) It is simply because I send my email on disk about ones a week. So till I come back to sweden, you'll have to live with it. Okey, here we go with the first message of this weeks batch:

When I'm running under VMem, I sometimes get faster results with IFF24 mode than RGB8.

Anybody else experienced this?

/Anders Lattermann

FidoNet: 2:201/411.24 ! PointBreak - Bg-St-Maurice - France  
AmigaNet: 39:164/100.24 ! A3000/14/105 + SQ88C & 17xSQ800

---

InterNet: Latte@p24.anet.bbs.bad.se ! I want a Samsung sticker & backdrop!

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### 1.304 MSG-302 Subject: Re: Solid and Drills.

Subject: Re: Solid and Drills.  
Date: Tue, 14 Jun 1994 22:28:23 -0500 (CDT)  
From: Michael Halleen <halleen@Mcs.Net>

On Tue, 14 Jun 1994, Mads Storm Andersen wrote:

> > > Can i get Imagine 3.0 to think that an object is solid.  
> > > (A nice glass cube)  
>  
> Will the object be solid, or will i just end up with a glass shell cube  
> with a glass shell sphere inside with air in rest of the space.  
> Well more like vacuum(?), i want glass not vacuum(?).  
> The light will bend when traveling though glass.

If you turn up the refraction value, you should be able to get the effect you want. None of the objects are truly 'solid'.

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### 1.305 MSG-303 Subject: Re: Lights and objects

Subject: Re: Lights and objects  
Date: Thu, 9 Jun 94 18:23:31 +0200  
From: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)

In a message of 01 Jun 94 Peter Bugla wrote to me:

>> I've been trying to get lights "in" objects. I'm using a box and in the  
>> Attributes requester i tell it to be a light. I want this for spotlight on  
>> a car I've made. It lights up the surroundings in scanline but it doesn't  
>> give any light at all in raytrace.

>> The object sends light out, but it is dark if you look at it from the  
>> front ( like a black object sending light out). Strange...

PB> Now this one's easy: Assigning the light attribute does not effect the  
PB> color of the light-object, the object-color is changed (like on any  
PB> other object) with the RGB-value-sliders in the attributes-requester.  
PB> The light-color is changed in the pop-up-requester which appears when  
PB> you click on the light button.

Yeah, making it white and bright worked.

---

PB> Why do you want to see this object anyway? I thought you wanted it for  
PB> a spotlight, and not for a lamp?

When you look into a spotlight it is very white and not dark which mine  
turned up. Solved now with the bright + white attributes.

PB> If you want an invisble spotlight, why don't you try using a normal  
PB> light-source close to the objects surface to highlight the area you want  
PB> (but don't forget to have at least one light far away, or your scene  
PB> will be dark). If you want a spotlight like a "real" spotlight-object  
PB> from a photo-studio try to add these little panels which direct the  
PB> light in the exact direction you like.

PB> To the no light in trace: I don't know, why.

I found out why. In scanline the light goes through objects (which probably is  
why there doesn't exist any shadows), but in trace mode, the light was trapped  
inside the box. The fix is to use just an axis or make the box a fog object.

Thanks for your help!

/Anders Lattermann

FidoNet: 2:201/411.24 ! PointBreak - Bg-St-Maurice - France  
AmigaNet: 39:164/100.24 ! A3000/14/105 + SQ88C & 17xSQ800  
InterNet: Latte@p24.anet.bbs.bad.se ! I want a Samsung sticker & backdrop!

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## 1.306 MSG-304 Subject: Solid Cubes

Subject: Solid Cubes  
Date: Wed, 15 Jun 94 01:01:11 EST  
From: mtucibat@cris.com (Mike Tucibat)

On 6-14, gerard Menendez wrote:

: On Tue, 14 Jun 1994, Mads Storm Andersen wrote:  
: >  
: > Will the object be solid, or will i just end up with a glass shell cube  
: > with a glass shell sphere inside with air in rest of the space.  
: > Well more like vacuum(?), i want glass not vacuum(?).  
: > The light will bend when traveling though glass.  
: >  
:  
: Light refracts at surface transitions only. You would have to create a  
: box with outside and inside faces intentionally to have the  
: effect your concerned about.  
:  
: I think.  
:  
: Gerard  
:

=====

Hi, Guys!

If you don't mind MBI, the cube will appear solid by simply increasing the index of refraction in the Attributes requester. Glass is around 1.5, and diamonds are around 2.5. See what you think!

I'm not sure what you meant by a "drill effect," though.

L8R

-mikeT

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### 1.307 MSG-305 Subject: Star Field Musings Continued

Subject: Star Field Musings Continued  
Date: Wed, 15 Jun 1994 01:33:16 -0400 (EDT)  
From: Wes Parham <parham@phoenix.cs.uga.edu>

As I recall reading somewhere, there is a simple way to make a virtual star field by replicating a tetrahedron along a sphere object as a path. I have a friend who recently (poor fellow) hand-positioned hundreds of such stars. The effect was adequate, but a little regular. I suppose the next step to the 'stars-replicated-along-a-sphere-as-path' would be to introduce some irregularity to their relative positions. Like someone said recently, though: Sky's the limit, so take full advantage of your creative liscence..... ( THIMK! ) ;-)

I particularly like the idea of concentric spheres with either mapped or virtual, replicated 'stars', to exaggerate some parallax in motion.  
wes~

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### 1.308 MSG-306 Subject: FX: Baloon, Spike & Sway?

Subject: FX: Baloon, Spike & Sway?  
Date: Wed, 15 Jun 94 15:54:16 +1000  
From: JOHN ROWE <jrowe@ozemail.com.au>

Hi All!

Anyone have any docs on how the effects Baloon, Spike & Sway work?

They ain't in the manual and the file Effects.doc promised on page 272 isn't on

---



the release disks.

Is Scott Kirvan or any of the other members of the Impulse team out there????

Quizzical Regards from Down Under, John

John Rowe Animation

-> Christian <-

Toowoomba Qld.

Reg.CBM Developer, 3D Animator, Programmer

AUSTRALIA

Aussie Amiga Keyboard Overlays

EMail:jrowe@ozemail.com.au

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## 1.309 MSG-307 Subject: Re: transparent background

Subject: Re: transparent background

Date: Tue, 14 Jun 1994 22:51:16 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> > Well there use to be a Genlock button in the Global requester, but not  
> > any more..? Hmmm..maybe you could try typing -7 in all spaces for Horizon,  
> > +Zenith and -Zenith. Other than that I don't know off hand.

>

> What has me frustrated is that the 2 options are still in the  
> preferences but there seems to be now way to activate it...bit of a  
> bummer as I do the majority of my rendering this way...lots of  
> compositing to save render times....

>

> See ya

> David Shaw

> (Soon to be 3D expert)

ya I saw it in the prefs and think maybe it not -7 but -1 across all of  
them, if you go and click in the black box it will reset it to 000000, if  
you move all the sliders up one its 101010, but at default it is 010101,  
which I believe maybe -1? heck I really am only geussing and have no  
idea, but it can't hert to try.

=RRW=

---

--> RETURN TO CONTENTS!<==

### 1.310 MSG-308 Subject: Where did veneer and twinkle textures come from?

Subject: Where did veneer and twinkle textures come from?

Date: Wed, 15 Jun 94 15:54:20 +1000

From: JOHN ROWE <jrowe@ozemail.com.au>

Hi all!

I just checked out the great sample 3.0 texture pics in Im3tex.

Thanks to Steve and Ed for making this available.

One question though: I noticed a couple of textures in there whose names do not appear in the texture.txt file accompanying my Imagine 3.0 nor in its texture directory.

For example Veneer and Twinkle, although there were others as well.

Where did you get these additional textures? Or am I missing something here???

Thanks in advance.

Best Regards from Down Under, John

John Rowe Animation

-> Christian <-

Toowoomba Qld.

Reg.CBM Developer, 3D Animator, Programmer

AUSTRALIA

Aussie Amiga Keyboard Overlays

EMail:jrowe@ozemail.com.au

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### 1.311 MSG-309 Subject: Re: Solid and Drills.

Subject: Re: Solid and Drills.

Date: Tue, 14 Jun 1994 23:09:07 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> > I believe so, just make a cube and a sphere and put the sphere inside the  
> > cube, give them both a class attribute and raytrace it. Of course you may

---

> > want some things for it refract.  
>  
> Will the object be solid, or will i just end up with a glass shell cube  
> with a glass shell sphere inside with air in rest of the space.  
> Well more like vacuum(?), i want glass not vacuum(?).  
> The light will bend when traveling though glass.

I believe it will, but you may need to join the two objects as one. I have done crystal balls this way and they look like crystal balls not vacuum glass balls as you put it. heheh The only way to find out is try it. If it looks good then thats all that should matter.

=RRW=

--> RETURN TO CONTENTS!<=--

### 1.312 MSG-310 Subject: Re: Solid and Drills.

Subject: Re: Solid and Drills.  
Date: Tue, 14 Jun 1994 23:18:51 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> > Will the object be solid, or will i just end up with a glass shell cube  
> > with a glass shell sphere inside with air in rest of the space.  
> > Well more like vacuum(?), i want glass not vacuum(?).  
> > The light will bend when traveling though glass.  
> >  
>  
> Light refracts at surface transitions only. You would have to create a  
> box with outside and inside faces intentionally to have the  
> effect your concerned about.  
>  
> I think.  
>  
> Gerard

Ya this is how Wavefront does it, and probably LightWave too, so you maybe right. I am not sure if Imagine will actually do it or not, but have gotten shperes and cubes to look like they were working correctly with single objects and boolean objects that were joined together.

=RRW=

--> RETURN TO CONTENTS!<=--

---

### 1.313 MSG-311 Subject: Spray & foam

Subject: Spray & foam  
 Date: Wed, 15 Jun 1994 09:11:19 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

____
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Hi Imagineers,

I need some explanation about doing 3d (possibly) or 2d "spray" effect: just like a vaporization; also welcome tips about simulating 3d/2d foam, froth, lather (I know this requests sound strange but nothing concerning 3d traced world can be considered normal!).

P.S.: Particles? No thanx! I've Im2.0PC, no essence, no particle!  
 (Perhaps your particles tips could be usefull for other users)

P.P.S.: DO NOT CUT P.S. (cut this!)

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(_^)^ue
|___| END          MAILING          _ _ _ _ Wizard signing off

```

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### 1.314 MSG-312 Subject: Imagine PC 2.0

Subject: Imagine PC 2.0  
 Date: Wed, 15 Jun 1994 09:08:55 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

____
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Peter (PC Imagine 2.0):

> I recently purchased the book, 3D Modeling Lab with its accompanying copy  
 > of Imagine 2.0 for the PC. I am finding the software to be extremely  
 > fragile, regularly collapsing points together, hanging and crashing to the

> "abnormal termination, please call Impulse" message.

> I know I didn't pay much for this copy, so I don't expect any support from  
> Impulse on it, but I have some questions.

> Is there a bug fix version of this program around that doesn't crash quite  
> so often? Is anyone using this version of the program successfully?

Sorry but there isnt a bug fixed version of Imagine2PC (except  
buying new 3.0 release): the only known bug fixed is the conversion  
A <-> PC of the attributes files (just ask me for AttsConv for PC or  
Amiga system: a little command line util).

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(_^ )ue
|___| END          MAILING      _ _ _ _ _ Wizard signing off

```

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### 1.315 MSG-313 Subject: 3DS vs Imagine (stop the flame please)

Subject: 3DS vs Imagine (stop the flame please)  
Date: Wed, 15 Jun 1994 09:32:40 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

```

____
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "      _ _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

John Faust:

> Maybe you saw bugs because you used a cracked copy. Their copy  
> protection introduces bugs into the rendering when the dongle isn't  
> found, and there's layer upon layer of checks that attempt to  
> confound pirates. For example, some of the bugs are time- or  
> event-based, meaning they only show up as rendering bugs after 150  
> mouse clicks.

I havent got any bug except boolean functions, You havent understood  
my message, I think. Please note: I USE ORIGINAL COPY AT UNI (I can  
not buy my personal original one!).

> No Essence? They're called IPAS plug-ins, and there's more IPAS  
> routines than anything for Imagine, and Essence may be ported to IPAS  
> before you know it. No Freeform? No Pixel3D? No Vertex? Well,

> we'll release InterChange for Windows very soon, and then you'll be  
 > able to translate to your heart's content, including any of the  
 > zillions of RAW triangle utilities for POV.

I say no essence for Imagine PC users, not 3DS users!

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(-_^)ue
|___| END          MAILING      _ _ _ _ _ Wizard signing off

```

--> RETURN TO CONTENTS!<==

### 1.316 MSG-314 Subject: Re: Transparent background

Subject: Re: Transparent background  
 Date: Wed, 15 Jun 1994 09:10:21 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

____
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

MCAD00 (Transparent background):

> Is there a way to use Imagine to overlay it over another source(camera,  
 > video tape etc) like credits. If I make the background black which is  
 > transparent (like in DPaint) I get the black background with the object.  
 > I want to just the objects to be overlayed on the video like credits  
 > on a video tape. Any help will be greatly appreciated. I'm using 3.0.

I hope this extract of Carmen Rizzolo's "Imagine Organizer Guide"  
 could help Ya, bye.

#include ---- Signing Your Animations (Chap11)-----

If you want to put your name on your projects, here's a quick and  
 easy way to do it. This technique will not work effectively if you  
 alter your camera's focal length during the animation (read: Changed  
 your camera's size bar). It allows you to put things like "+1992  
 Carmen Rizzolo" in the lower-right hand corner of your animations.  
 But if you put my name in your animations, I get royalties! :) The  
 following steps will be the last thing you do in your animation.  
 Just before you do your final rendering; do as follows.

Boot up DPaint. Make your screen resolution Hi-Res, 2 Colours.

Make your background colour (Colour 0) anything but black. Make your foreground colour (Colour 1) Black or a shade of grey. The lighter the grey, the more transparent your text will be. Type out what you wish and grab it as a brush. As you grab your text with the box, give about 3-8 pixels space away from the edges of the text on all sides. Don't come in too close because it might get chopped off when Imagine performs it's 'auto image-mapping' feature. Save your brush. Kill Dpaint.

Boot up Imagine. Enter the detail editor. Add a PRIMITIVE; PLANE. 1x1 section is all you'll need. Scale your plane so that it's closely the shape of your brush. You might need to come back here and fix the size after a few test renderings if the perspective is thrown off by your plane being too wide or something. But don't worry about that too much right now. Enter the plane's attributes. Make the COLOUR whatever you want the colour to be when rendered. Make the REFLECTIVITY 0,0,0 unless you feel artsy. Give the FILTER guns all the way up. SHININESS and everything else, 0. Make the object a BRIGHT object by clickin on the BRIGHT button. Now Click on the BRUSH 1 button and load up your IFF bush. Make it a FILTER MAP and tell it to USE GENLOCK. This mean that Imagine will disregard the background colour of your IFF brush. Hit OK and back out of your attributes requestor. Here comes the tricky part.

Add an axis. In the TOP VIEW, move your axis below, and to the left of your PLANE object.. By the way, Your plane object should look like a straight line from the TOP VIEW. Your axis' Y axis should be pointing north if you haven't changed it (Still, TOP VIEW). Click on the Axis, and then SHIFT-CLICK on the PLANE. Now select GROUP. Click on your axis again and enter ATTRIBUTES, and give your group a name if you wish. Exit Attributes and SAVE your GROUP.

Enter the ACTION EDITOR. Go to the bottom of the pile, and select the ADD BUTTON to enter the ADD mode. Double-click on the POSITION BAR of the bottom-most entry; which is was blank. After you've double- clicked on the POSITION BAR, frame 1 of the blank slot, load up your Signature object. Click on RENAME, then click on your new object. If your Signature object it named SIG, call it AA.SIG. Now select SORT in the pull downs. Your signature object should be up at the top of the list now, just below GLOBALS.. This make it easy to do the next step. Go through your script and make the POSITION and ALIGNMENT BARS mimic the POSITION and ALIGNMENT BARS of your CAMERA. Now your Signature object will follow the camera, and appear to not be part of your animation, but a superimposed graphic. Save and enter your STAGE EDITOR. In the STAGE EDITOR, Pick the Signature object. Since it's in the same place as the CAMERA, you might need to use FIND BY REQUESTOR to access it. Once it's blue (or purple), SCALE it down, down, down. Make it very tiny so that it's very close to the CAMERA, and nothing will come between your signature object and the CAMERA. You might need to now SAVE, and go back to the DETAIL EDITOR to MOVE and SCALE the SIGNATURE's PLANE object (NOT the whole GROUP! -just the PLANE child object!) so that the size and position of the text is in the lower- right hand corner of the screen, and nice'n small. You might have to go back and forth from the STAGE and DETAIL EDITORS to get it just right. Remember, if you just pick the whole group and SCALE and MOVE, you won't see any changes back in the STAGE EDITOR. You must Select the

---

PLANE when you perform your changes.. Important point here. When you've got everything just right, it's time to render.

This series of steps is actually much less complicated than it seems. Once you do it a few times it'll be like second nature. And it's much easier than editing each and every rendered image; putting your name in. Of course, it's also cheaper than using a Choma or Luminance Key system to super-impose text onto video. Have fun!!

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(_^ )ue
|___| END          MAILING      _ _ _ _ _ Wizard signing off

```

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### 1.317 MSG-315 Subject: 3DS vs Imagine (stop the flame please)

Subject: 3DS vs Imagine (stop the flame please)  
 Date: Wed, 15 Jun 1994 09:33:51 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

___
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "      _ _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Peter Bugla <bugla@informatik.tu-muenchen.de>:

>Hi there!

>

>In his last letter "Wizard" wrote:

>> You have to consider that 3DS is a really shitty rendering prg  
 >> (nice user interface and editing, after all; shitty boolean just like  
 >> Imagine slice perhaps!);

>

>I worked with 3DS and I don't know what you mean with shitty rendering.

You say the word guy: RENDERING, and not R A Y T R A C I N G!!!

>The quality you get is great and it is MUCH (!) faster than imagine  
 >(and not half as buggy)!

Same as above: rendering (3DS) is equivalent to scanline mode in Imagine.  
 You are right, 3DS haven't many bugs.



>You're right about the slice problem, but it is a little better than  
 >in imagine, because the first boolean operation works almost every  
 >time (in fact I experienced no time the first one caused an error).  
 >Biggest advantage of 3DS: If you want a good looking scene QUICK,  
 >take advantage of the materials you have!  
 >Biggest disadvantage: The Price!

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(-_^)ue
|___| END          MAILING      _ _ _ _ _ Wizard signing off

```

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### 1.318 MSG-316 Subject: Re: Missed the StarField Stuff

Subject: Re: Missed the StarField Stuff  
 Date: Wed, 15 Jun 1994 03:30:35 -0500 (CDT)  
 From: Michael Halleen <halleen@Mcs.Net>

On Wed, 15 Jun 1994, Foivos Kourendas wrote:

> Mr Halleen,  
 >  
 > Your TIP is really usefull !! BUT it has one MAJOR drawback .It uses  
 > a pic to simulate stars!! This means that if one -like me- hasn't a pic of  
 > stars available in at high resolution mode -in order NOT to show stars as  
 > blocky spheres- then isn't going to get the perfect effect that you have  
 > described .ANY HELP with that ??

Oh yeah, I forgot a step. The star pic has to be really big. In Distant  
 Suns, set the pointer tool to 'centering' (as opposed to 'info' or 'name'  
 or whatever). This recenters the picture wherever you click. Find the  
 portion of the sky you want to start with. Save that as iff.1. Click on  
 the center of the right edge of the screen (DS will recenter). Click on  
 the right edge again. You should now have the next 'sector'. Save that  
 as iff.2. Click on the bottom center twice. Save as iff.4. Click on the  
 left edge twice, save as iff.3.

Composite these quadrants together using ADPro.

I used 4 sections in this example to make it simpler, I think when I did  
 this for real, I used 9 sections.

This does require that you have enough memory, but if you render the pic  
 to 4 colors in ADPro, it should be reasonable (certainly don't use  
 24-bit). The advantage is that you get a very realistic looking sky,  
 with real world star information.

I'll upload a star pic when I get a chance. I've moved my modem to  
 another computer, (an old Mac w/o superdrive) so I can't do it till I  
 move it back to the Amiga (which is rendering). Give me a couple weeks,

unless someone needs it right now.

(I've never uploaded to Aminet before, how do you do it?)

Mike Halleen

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### 1.319 MSG-317 Subject: Hollow or Solid?

Subject: Hollow or Solid?

Date: Wed, 15 Jun 1994 11:14:38 +0100

From: mnw3 <mnw3@aber.ac.uk>

TO all inquizative minds,

How do you tell Imagine you want to create a hollow object as opposed to a solid one and vice versa?

From

Martin...

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### 1.320 MSG-318 Subject: RE: Missed the StarField Stuff

Subject: RE: Missed the StarField Stuff

Date: Tue, 14 Jun 1994 21:03:01 -0700 (PDT)

From: Mike McCool <mikemcoo@efn.org>

Hey Mike,

Thanks, for this GREAT tutorial. Very thoughtful of you to share it with us.

And I wonder if that's why the stars work so much better in animations rendered in VistaPro: it's made by the same people who developed DistantSuns.

I've tried and I've tried all the starfield suggestions, and almost invariably end up backdropping VistaPro animated starfields.

I want to give your suggestions a shot now. Thanks, again.

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### 1.321 MSG-319 Subject: Re: Solid and Drills.

Subject: Re: Solid and Drills.  
 Date: Wed, 15 Jun 1994 08:19:25 -0400  
 From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

My understanding of solidness in polygon programs:

With a normal, solid object in the real world, light refracts thusly:

```

-----
|   |_____ (Cheesy ASCII drawing)
|  /|
| / |
| / |
|  |
|  |
-----

```

You can see how the light bends at the interface between the solid and the air only. In polygon based programs, a similar effect takes place. When a light ray reaches a polygon, it bends depending on the index of refraction of that polygon. So, a box constructed of polygons (like above) would bend light exactly the same way as a solid box. This makes it look solid.

To create the cube-with-sphere-vacuum effect you originally asked about, you would need to create a cube, put a sphere inside it, `_join the objects_`, and give the resultant object a refractive index, like of crystal or glass. Since the light bends only at the polygons -- just like light through solids -- you'll get the illusion of a solid cube with a spherical space in the middle.

Incidentally, this is the same sort of thing you have to do with bottles. If you make a bottle shape, it will appear to be entirely solid. Therefore you would need to make a bottle shape with a bottle-shaped hole in it, using the same techniques described above. (In any case, that's what I had to do with my ship-in-a-bottle render.)

Although I'm not certain about this, grouping the objects might do the same job. That way, if you needed to move the bubble around, you could create a second group to morph to. (Just a weird thought that came up.)

Hope this helps!

Jude Anthony

```

-----
We've secretly replaced the Enterprise's dilithium with new Foldger's
crystals! Now let's watch them go to warp...
-----

```

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## 1.322 MSG-320 Subject: Re: Hollow or Solid?

Subject: Re: Hollow or Solid?  
 Date: Wed, 15 Jun 1994 08:59:15 -0400  
 From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

----- Received message begins Here -----

```
> Subject: Hollow or Solid?
> From: mnw3 <mnw3@aber.ac.uk>
>
> TO all inquizative minds,
>     How do you tell Imagine you want to create a hollow
> object as opposed to a solid one and vice versa?
>
> From
>     Martin...
>
```

Essentially, you create the outer AND inner shells of the object. For instance, a cube shell would look like:

```
TT-----TT          (Damn cheesy ASCII drawing)
||           || |
||           ||
||_____|__||
LL_____|__]]
```

Well, you get the idea. I had a better discussion in the "Solids and Cutting" question. (I think that was it's name...)

Jude Anthony

-----

We've secretly replaced the Enterprise's dilithium with new Foldger's crystals! Now let's watch them go to warp...

-----

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### 1.323 MSG-321 Subject: Yeah!!!

```
Subject: Yeah!!!
Date: Wed, 15 Jun 94 22:13:17 EST
From: matt@mefong.apana.org.au (Matt Jackson)
```

AlllllllRiiiiigggghhhhtttt!!! Imagine 3.0 has finally arrived.

Now I can try all the things I have been hearing about ...

Matt.

--

```
Matt Jackson          "The truth is out there"
matt@mefong.apana.org.au  -- F. Mulder
Bendigo,Victoria,Australia
```

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### 1.324 MSG-322 Subject: Re: 2 rows of buttons?

Subject: Re: 2 rows of buttons?  
Date: Wed, 15 Jun 1994 14:26:56 +0000  
From: calumb@logcam.co.uk (Calum Benson)

At 1:42 am 10/6/94 +1000, Nikola Vukovljak wrote:  
>Ok, this is for those that have had Imagine 3 longer than I have (2 days  
>and having to go to work!)...  
>  
>I thought that one could now have 2 rows of user buttons on the bottom of  
>the screen. Is this possible ? I can't seem to be able to find any  
>reference to this in the manual....  
>  
>If someone can either help or direct me to a relevant page number ?

Didn't come across it in the manual, but you don't seem to get any control  
over it. When your first row of gadgets fills up, they spill over onto a  
second row, and that's that.

Slainte,  
Calum.

```
+-----+-----+
|Calum Benson                               | email: calumb@logcam.co.uk |
|Logica Cambridge (User Interface Div.) | Tel: (+44) 223 66343 x4825 |
|Betjeman House      +-----+-----+-----+
|104 Hills Road      | " I just wouldn't know a single word to say |
|Cambridge CB2 1LQ   | If I flattened all my vowels and I threw   |
|UK                  | the R away." (The Proclaimers)           |
+-----+-----+-----+
```

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### 1.325 MSG-323 Subject: PC DXF's or 3DS files into Amiga Imagine V2.

Subject: PC DXF's or 3DS files into Amiga Imagine V2.  
Date: Wed, 15 Jun 94 15:59:53 +0100  
From: "T.Charalambous" <T.Charalambous@cs.ucl.ac.uk>

Hi everyone!

I know I sent this request before, and I would like to express my  
gratitude to everyone that replied. I have another request:

Is there any Public\_Domain program that converts DXFs or 3DS files

---

into Amiga Imagine V2 format. Being a student at college, funds are hard to come by. I was fortunate enough to get Imagine V2 from Amiga Format coverdisk, so those who have already sent me information about Interchange (and the others ones that slip my mind that moment), please understand why I send this request.

I have access to the following Software: (PC) AutoCAD, 3D Studio (Not sure what versions though), (AMIGA) Imagine V2, and thats about it.

Thanks  
Tele.

P.S. Also for those who seem to be getting a bit wrapped up the cuurent flame over 3DS vs Imagine, don't mail-bomb me for this, but please would you remember that some of us have enough problems handling all the IML mail already, and our Sysops are getting a bit stropy over our bulging accounts! Thanks for understanding.

_____	And to my despair, I was soon to discover,	
_T.Charalambous_	The failures of mine, were the triumphs of another,	
_@uk.ac.ucl.cs_	There was a time to live, until a time to die,	
_____	It was time to love, it's now time to cry. -Spirit-	
!_____!	!_____!	!

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### 1.326 MSG-324 Subject: Re: Hollow or Solid?

Subject: Re: Hollow or Solid?  
Date: Wed, 15 Jun 94 10:36:52 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

```
>
> TO all inquizative minds,
>     How do you tell Imagine you want to create a hollow
> object as opposed to a solid one and vice versa?
>
> From
>     Martin...
```

Well, Imagine is a surface modeler(is that the right term) as opposed to a solid modeler. This means that only the surfaces of object effect the rays of light. So if you have a sphere with glass attributes, Imagine will make it appear solid(full of glass). (Why would it do this if it is a surface modeler? Tell us uncle Tom.) This is because Imagine didn't bother to look inside of the object to see what it is made of, and just assumed that it was made completely of glass.

To make a hollow glass sphere in a solid modelers, you would just cut out the center of a solid glass sphere.

In Imagine(heres where I start making this up, ie not sure if this will work), you might want to try putting a sphere with complete transparency and default

index of refraction(air) inside a glass sphere. But then you won't even see it. So maybe the transparency of the glass with the refractive index of air. Hmm, probably still won't model the real world correctly. Its really hard to do with Imagine and just spheres.

But...heres a way that I guarantee(money back) to work(maybe). It requires that

your glass sphere has a small hole in it. First, think about when you 'spin' a wine glass in the detail editor. It looks better if you have an inside of the glass.

ie your outline looks like this

```
\
 |
 =
```

so you wind up with this

```
\//
 ||
 ==
```

not this

```
\
 |
 -
```

not this

```
\ /
 ||
 --
```

and your wine glass is completely inclosed, has an inside surface and an outside surface.

Do this with a sphere...

% = axis of rotation

```

  _____ %
 /  _____ %
 /  /  _____ %
 |  |  _____ %
 |  |  _____ %
 \  \  _____ %
  \  _____ %
      %
      %
```

Now spin it.

There may be a better way. Two spheres inside of each other may work(I haven't tried it). But I know the above will work.

Well, I'm done rambling.

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

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**1.327 MSG-325 Subject: Re: Melt**

Subject: Re: Melt  
Date: Wed, 15 Jun 94 11:44:04 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

> <  
> < A few months back I talked about a program I wrote in C++  
> <called "Melt", and showed some examples of chess pieces melting, etc.  
> <I couldn't give out source because I was writing an article on it.  
> <  
> < Well, the article has been published in the July 1994 "Annual  
> <Graphics Issue" of Dr. Dobbs Journal, and is the lead article. It's  
> <called "Morphing 3D Objects using C++". I believe that I'm still not  
> <supposed to e-mail out source, but Dr.Dobbs has made the source code  
> <available on their FTP site. I'm afraid I don't have their site  
> <address now, but wanted to let everyone know anyway because I'm about  
> <to go on yet another business trip.  
> <  
> <  
> No problem...  
> The FTP site is  
> ftp.mv.com  
> in /pub/ddj  
>

The morph code is finally there. It is in 1994.07

Tom

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### 1.328 MSG-326 Subject: Re: Hollow or Solid?

Subject: Re: Hollow or Solid?  
Date: Wed, 15 Jun 1994 13:46:31 -0600 (MDT)  
From: Roger Straub <straub@csn.org>

On Wed, 15 Jun 1994, mnw3 wrote:

> TO all inquizative minds,  
> How do you tell Imagine you want to create a hollow  
> object as opposed to a solid one and vice versa?  
>  
> From  
> Martin...

Recipe for a hollow glass sphere is as follows:

Create a primitive sphere. Copy, paste, and scale it down so that there is a little space between them. Give the larger sphere the attributes of glass, and make the smaller one transparent. Group, render and serve with drinks(Preferably tequila, but marguiritas will do.).

Voila! A hollow glass sphere.

---



See ya,  
Roger

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### 1.329 MSG-327 Subject: Re: Imagine NewLook Please

Subject: Re: Imagine NewLook Please  
Date: Wed, 15 Jun 1994 13:27:39 -0700  
From: kkalnasy@bvu-lads.loral.com (Kent Kalnasy)

At 9:04 PM 6/14/94 +0000, Soren Wind wrote:

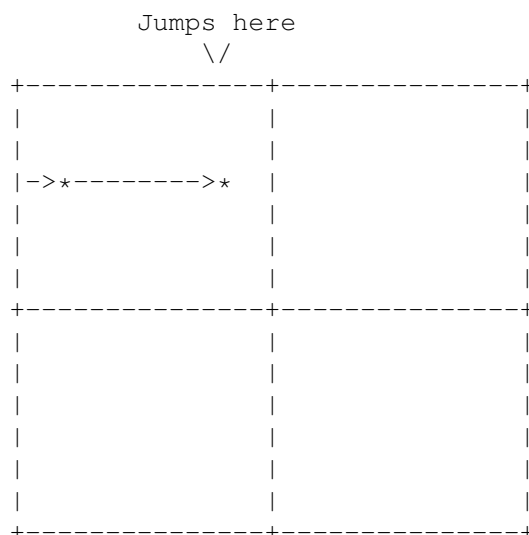
>Will it EVER be possible that Imagine/Impulse will use the KS 2/3 Userinterface

>?

>I close to become sick of the slow/no promotable Imagine screens...

I know what you mean, since Imagine, in its current incarnation, doesn't support the display database, but I can say that it promotes pretty well using the Retina promotion utility. I'm currently running Imagine at 1280x1024. Everything appears to work as before with the exception that mouse tracking wraps at the right edge of a view when moving an object.

For example, when I grab an object in the top view and drag it toward the right, it (and the cursor) pop to the left side of the view. I can release the object, grab the object at a point farther to the left and continue to push it right off the view. This anomaly doesn't show up when a view occupies the whole screen. I can work around it, but it would be nice to have a modeling tool without the glitch.



Also note that the jump occurs farther to the left if I use the version of Imagine that I've patched to run at 716x480. Starting with a virgin copy of Imagine produces the best results, so far.

Do other boards present the same problem with running at 1280x1024?  
Will a new version of the Retina libraries help? Experiences welcomed.

```
>...
>      Wir haben das Problem eingekreist:  / Intel  \
>                                           \inside! /
>                                           -----
```

eigenkreist? Translation please.

```
-----
Kent Kalnasy (speaking only for me)          kkalnasy@bvulads.loral.com
Loral Advanced Distributed Simulation, Inc.    Bellevue, Washington
-----
```

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### 1.330 MSG-328 Subject: Essence and Imagine 3.0

Subject: Essence and Imagine 3.0  
Date: Wed, 15 Jun 1994 17:51:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi All!

I'm surprised that this hasn't been mentioned before. Essence I and II Vol. 3.0 doesn't work with Imagine 3.0! Now, before you all panic, I have the solution. Just use the new super Dave-o-Matic(TM), and possibly a wordprocessor that can load/save ASCII and has a Find/Replace function :)

Here's the problem: Take for example the bump texture from Essence I. To get it to work with Imagine 3.0, you have to get the installer to save the .ITX extension (just like for 2.9). The bump texture is then saved as:

```
bump.ITX
    ^^^(Remember this upper case ITX. Its important later on :)
```

This is what Imagine 3.0 would seem to expect:

```
bump.itx
```

All of Imagine 3.0's textures have a lower case itx, and it doesn't seem to like the upper case ITX (the textures don't show up in the load texture requesture). This is very un-Amiga of Imagine. It should not matter, but it does.

Here's the fix (you had to wait a long time for this, didn't you :)  
Copy the Essence installer script and icon from disk one to RAM:. Load up you Wordprocessor (I use TransWrite) and open the Installer script. Do a Find/Replace from ITX to itx (make sure that you have CASE

SENSITIVE turned on). Then save the script (and make sure that you don't save over the original icon). Now, with disk one in the drive, double click the NEW installer icon in RAM:. Everything should work fine, and all of the textures should be reinstalled with the lower case itx.

The alternative to all this is to manually rename all 100 textures :)

Discliamer: I am not responsible for any damages that may occur by taking any or all of my advice. USE A BACKUP! To make you feel better, it works for me!

Maybe something like this belongs in the FAQ...

-Dave  
david.wyand@canrem.com

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### 1.331 MSG-329 Subject: Re: New Modules? - Montage24

Subject: Re: New Modules? - Montage24  
Date: Thu, 16 Jun 1994 11:48:46 GMT +1200  
From: "Paul Batten" <BATTENP@scicol.chchp.ac.nz>

> Both the reviews I read stated that once the titles were committed to a  
> background there was no turning back, ie., no easy way to change either the  
> background or the titles. One of the reviews went so far as to compare the  
> process to digital painting, which without "layers" becomes increasingly  
> difficult to edit certain elements later...

This is partially true in the sense that once you have arranged the background elements (excluding text) you must save the b/g which fixes the elements (as with a painting package). The b/g can be saved as a 24bit iff at this stage. The text can now be edited/created over the fixed b/g, or more elements added such as boxes, other brushes etc. As you say it would be ideal to edit the imported brushes at any stage ie through layers.

PB> The only problem I've encountered is to do with the black level produced  
PB> by Montage24 when genlocking, it's no where near as clean as genlocking  
PB> with the opal individually or even with DPaintIV. The background black  
PB> is set at 0,0,6 and although there is a input box to change this value  
PB> it does not seem to function. Has anyone had any luck in changing this  
PB> value ?

> Is that to say you cannot change the value, or that changing it appears to  
> have no effect?

The value can be changed in the input box say to 0,0,0 but when you leave the input box the value is reverted to 0,0,6 ! This is very frustrating. When genlocking through the opal without Montage all is fine. With Montage through the opal there is a slight milkyness when genlocking.

Has anyone else had this problem ?

> I may be way off beam here but I believe ECS Amigas require the Blue  
> element of the system palette (and I presume Montage's) to be an odd value  
> for clean genlocking.

I presume the opal genlock colour is 0,0,0 I'll have a look when i get home, but there is definately a difference between what opal normally uses and what montage forces opal to use as colour 0.

Can anyone shed any light (preferably colour 0) ?

Paul.

---

Paul Batten	Science & Computing Dept.	Christchurch Polytechnic
battenp@scicol.chchp.ac.nz	Christchurch	New Zealand

---

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### 1.332 MSG-330 Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.

Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.  
Date: Wed, 15 Jun 1994 11:32:17 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.org>

Hey y'all,

This is an echo, of Mr. T's request. I just locked onto an amazing 3ds object of an Aztec city that I'd love to import into Imagine. I've got Pixel3dPro, and it won't touch 3ds files. Maybe there's no way to translate them to TDDD, but I'd love to render this Aztec city of gold . . .

Jeez, I also got a great model of Stonehenge, down at avalon.chinalake, but it, too, is 3ds.

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### 1.333 MSG-331 Subject: Re: Solid and Drills.

Subject: Re: Solid and Drills.  
Date: Wed, 15 Jun 1994 16:50:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi!

---

On Tue, 14 Jun 1994, Mads Storm Andersen wrote:

```
>
> Will the object be solid, or will i just end up with a glass shell
cube
> with a glass shell sphere inside with air in rest of the space.
> Well more like vacum(?), i want glass not vacum(?).
> The light will bend when traveling though glass.
>
```

Light only bends where there is an interface. I believe that the object you want to make is a glass box that has a big air bubble (the sphere) inside of it. If this is so, a box with a sphere in it would work correctly. Set the index of refraction to that of glass.

```

      |Light Beam
      |
-----\-----
|      \      |
|      --|--- |
|      /  | \  |
|      |  |  |
|      \  | /  |
|      --\--- |
|      \      |
-----\-----
      |
      |
      | Light Beam

```

In the above, we have the box and sphere. The lights comes in from the back (it doesn't matter which directio), refracts at the air/glass interface, and travels in the box. Then refracts at the glass/air interface of the box/sphere. Then again at the air/glass, and finally at the glass/air at the front of the box. It does not matter that this is not "a true solid" as refraction only happen at the interface. Hope all this helps!

-Dave  
david.wyand@canrem.com

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### 1.334 MSG-332 Subject: Here's a uuencoded star pic

Subject: Here's a uuencoded star pic  
Date: Wed, 15 Jun 1994 16:47:55 -0500 (CDT)  
From: Michael Halleen <halleen@Mcs.Net>

I put together a star pic as described in my star backdrop posts. It's 1920x1200x2bits, and is about 17K in size, much smaller than I thought it would be. It took about 12Meg to create (I could have done it in less if I covertred all the sectors to 2 bit images first and composed on a gray backdrop rather than a color one).

I apologize to the guy from Germany who's been asking for this. I haven't been saving your messages, so I don't have your Email address. Hopefully this will get to you in time.

The star info is not scientifically accurate, the click-center technique is not perfect. But you can find the constellation Orion in the center bottom of the pic.

Good luck!

Mike Halleen

```
begin 644 star.pic
M1D]230`0KY)3$)-0DU(1`!!!0'@'2P`!!!!('8`!!!$!'N'!XD%.3D\`X
M`!()%%94CH@5W)I='1E;B!B>2!!4T1')W,@07)T($1E<&%R=&UE;G0@4')O`
M9F5S<VEO;F%L($E&1C,N,"XT("@Q-2XP-BXY-"D'0TU!4`!!!P`!!M;6V6\
MEI;=W=U#04U'`!!!D'1$4$D@`!!!`$L'2Q"3T19`!!"&H$'D0"K`!!'6
MDP`!M<'@0"1'($'D0"[`!!!@0#8'($'D0#='`'0@0"V'($'E0`!!/X'@0#&Z
M`!$S0"!')$'@0"1'($'D0#&`!!!B@`!,(4'@0"1'+L`!!!3;`!!!Z`!!!+D'/
M`!B'($'D0"!')$'@0"1'($'X@`!K$'GP`!@($'J)`N`!@0#E'($'D0"!*
M')$'@0"1'($'D0#&`!$@0#-`+4'@0'0)H`!#H`!(X@"!')$'RP`!8$'S
MR`!')$'@0"2`!0@0"1'/8`!BZ`!@0#E'($'F`!'/L'I`!,"H`!$#PK
M`!N0"!')$'@0"1'($'D0#:`!(@0#A`!(V@"!')$'FP`!0($'^`!')$'-
M@0"1'($'D0#J`!@0"1'($'D0"9`!@0#Z'($'D0#\`!@0"7'-@`!B!G
M'+L'HP`!@($'\`"C`!@0#P`+4`!#!`!@P@`!M\F`!$($'^P"!')$'B
M@0"G`!@`!(/P'I0'!0+X`!""R'($'D0"!')$'@0"1'($'D0"!')$'@0"18
M'($'D0"N`!@0#E'($'D0"!')$'NP`!0(P`!+.`*@`!"O`!@O@"!'.`$'0
M'(#V`!@O@#&`!0@0#-`($'V0`!";H'Q0`!,"0`!+=`!0P@`!0/$'@0"12
M')T`!B!'/8'@0"1'+P`!""!`!-<'M0'!@($'W@"!')$'@0"1'($'D0"!')$'^
MV@`!($'N0#:`!(@0"Y'+(`!&B`!0P0"!')$'@0"1'($'D0"!')$'@0"1X
M'($'R`!@,L'@0"1'($'D0#8`!@0"[`!($'ZP`!0*@`@0#K`!J`!Z`!N
M@0#Q`!$Z@"!'.`$`!&R`!4`!(!'.X'@0"1`!$`!(/<`!BQ`!@X0`!N\`>
M`!C`!*0`!""!'.\`^P`!0*T`!+,`!HP"!'/`!`!C`!X`!X`!NP`!1
M'?4`!+@`!Q0"!')$'N@`!8\`!+,`!($'D0"D`!@0#O'($'D0#U`!""\
M@`!0($'K@"!'.`($'#$<`!(UP#V`!$!P+D`!""!'.<`]0`!@+0`!2!'.P`2
M]0`!@/$`!&`!*\`@0"1'($'D0"!')$'@0"]`!U@"!')$'Q`!H$'SP"!+
M')$'K@`!((($'Y0"!',@`!3+-0`!2!`-`!3Q'($'D0"O`!@`!T`!(<
MM`!')$'J`!$($'ZP"H`!0@0#K`!-T`!!"!'+8`!S`!($'QP#=`!X@0"VR
M`!-T`!!"!'+8`!W0`!$.P`!(!',P`!P`!($'I`#O`!@0`!#`!8$'N`#ON
M`!PO0`!((($'Z0#E`!@0"1`!@`!>\`!""!`!*0`!@0"K`!$`!@`!>P`_
M@0"1`!-X`!+["`!S@`!!(D`!3I'($'D0"!`!*(`!Q'($'D0"J`!$@0#I(
M'($'D0"!`,X`!#%`!($'J'@`!!)T'@0"1'($'W0`!'+8`!Y`!@($'KP"!')$'N
MWP`!+`!B&`!($'D0"!`,H`!["`!0_@`!!.`,`!#S'($'R@`!`?<`!349
M`!-X`!""!`!+4`!X`!((($'LP"!`,\`!3$'($'RP`!0,@`!YP`!H$'Z@`!#`!@`!Z
MQ@`!`,`!3$'($'H`!#`!$@`!$`!0`!B@`!$($'R0`!!($'R@`!')$'@0"1I
M'($'D0#*`!""@0#`,`!((`!""!')$'@0"1'($'D0"!')$'@0"1`.X`!2!`*4`G
M[@`!($'I0`!')$'@0"1'($'D0"!')$'@0"?`!""!')$'@0"1'($'D0"F8
M`!H`!""!`!+V`!@W`!F`!@0#M'($'D0"!')$'@0"1'($'D0#+`!`!@0#(-
M')4`!""!`!/X`CP`!!(0`!""!')($'@0"1'($'Y`!J\`@0"1'/<`!B!')P`D
M]P`!H$'G`!')$'D`!`!-H`!""K'($'Z`!(*L`VP`!($'N`!')$'P@`!
M0)`!3#`!-L`!2!`!+@`T0`!($'TP`!0/,`!1`!@0"3`!$0`!+P`!(!`!-<`9
M[P`!@($'I`!I`!@0#J'($'D0"!')$'@0"1'/D`!C[`!$@0#F`!""O0#Y=
M`!(`!""!($'Z0`!KT`RP`!0-\`!+C`!0B@`!')$'@0"1'($'D0"!')$`>
```

M@0"1"/@""\*A"!`X0""IT`@0"1`-T""B;""`I0""!/H`@0#V""!`G0"G=  
M""@0#L`(\$`D0#K""!`@0"H`(\$`D0#/""0@0#9""([0#/""0@0#\$`,`H`\$  
M""!`,`D`X0""0(\$`L@""\""(E""!,4`@0"1`(\$`D0"!`.`L""BH`(\$`D0"!`R  
M`)`\$`G@""\$)8""(#A`(\$`D0#Q""""@0"B`(\$`D0"!`)`\$`@0"1`/0""+9""!`B  
M@0#(`,,`&!`-""@0"1`(\$`D0#G""(@0"L`(\$`D0"!`)`\$`@0#4""OP"C  
Y M""!`@0#P`(\$`D0"!`,`P""C`(\$`D0"T""!)0""8\$`[""!`)`\$`@0"1`(\$`N  
MD0#O""!`[@""H\$`N`#;""""@0"X`.0""B!`\*\`Y""(\$`KP"!`)`\$`@0"1;  
M`+""#1""@E""!)`\$`@0"1`(\$`N""@-L`U@""!),""+<""^0""@.D`\`  
M`+T`(\$`N0"!`<#;`.X""2!`\*4`@0"X""VP"!`,`X""+%(`\$`D0"/""0X  
MC""!)`\$`VP""0""(@0"Z`(\$`D@""(\$`LP""@.``@0"S""X`#N""@0"E5  
M`(\$`D0"!`)`\$`@0"1`(\$`T@""-<""+L`+""!`#Q""@0#T`(\$`J0``(.H`0  
M@0"1`(\$`D0#::""0@0"Y`(\$`D0"!`)`\$`O@""MT""&;""X0"!`)`\$`SP""I  
M(/<""CR""0`P""0-L`("5`,`0""B!`,`\`\_@""(\$`E0#7""!`@0"\`(\$`I  
MD0"!`-`\`""T`(\$`OP""0-0`@0"1`(\$`D0"!`)`\$`@0"8""(^P"!`)`@""C[  
M`/0""2!`)`\`@0"1`/<""\*!`.`@""#C""!`U0"!`-""#`(\$`ZP""!`-`Y  
M`\$#::`(\$`D0"!`.`L""ZH`(\$`ZP""!\*@`P""!`.H""2H`(\$`S0`0,8`@0"1I  
M`(\$`D0"0""\$I""(.`\$`@0"1`\*X""2!`.4`@0"1`(\$`U@""+T`@0"1`.4`:  
M`2(`""J""!)`\$`F""0.@""#B""\$M0"!`/X""5`/""#\*""@0#;M  
M`/""#\*""@0#;`,`(\$`D0"!`)`\$`Z0`\$`,8`\$"!`.`8`@0"1`(\$`D0"!`)`\$`X  
M@0"1`,`\`!`#P""!`@0#6`(\$`D0"!`)`\$`@0"1`(\$`D0"!`)`\$`@0"1`-D""B!`&  
M`-8""#F`(\$`D0#7""V""8\$`Y@`8""!`@0#[`(\$`D0"!`)`\$`^P`@-<`/  
M`("!,`,`@0"^""U0"!`/0""?"`(\$`D0"!`)`\$`@0"3`\$`\$.(`"+)]""(R  
M)0`@`(\$`PP"!`)`\$`O0""IT""\*`[`(\$`D0"?""!`@0#T`(\$`D0"!`)`\$`@0"1!  
M`/<""\*!`)P`@0"1`/<"">W""^P""H\$`[@#W""@0"<`/T""+`\`""<  
M@0"<`(\$`D0"U""J0`\$`+<`@0"1`(\$`D0"!`/4`""\*>`(\$`D0"!`/X`\$`"5V  
M`,`,,`BJ""!`J""!`.`L`\$`H`)`\`B!`/0`@0"1`(\$`ZP`@\*`X@`0`(\$`6  
M\_0`!`+8`@0"G""([`"!`\*`<""CL""Y0`0`(\$`KP`@.4`\$`"!`\*\`@0"1K  
M`(\$`D0"!`\*`(\$`\$#Q`(\$`D0"!`)`\$`@0#+""@R""!)`\$`@0"1`(\$`D0"!`\$`!`V  
M`),`J@`0`(\$`Z0"!`)`\$`\_@""@""E0""HT`(#^""\_0"!`)`\$`@0"1`\*0`B  
M`2!`.`\`I0""(\$`[@""!)`\$`@0"1`(\$`D0"!`)`\$`@0"1`,`\`!`!`,`0`@0"1@  
M`(\$`[`""\$\*<`RP""(\$`R""!)`\$`@0"1`+\$`""+Q`""0@0#S`(\$`D0"?""!`(%  
M@0#T`(\$`D0"!`)`\$`JP""!`(\$`Z""I""(T@`\$)L`B+""0B""!)`\$`@0"1N  
M`,`0""2!`-0`(#)`(\$`D0"!`)`\$`D@`\$`(\$`B`()),`,`(#Z`(\$`D0"!`+H`C  
M`"#9`(\$`D0#6""@0"]`(\$`D0#=""LP""L`(!`#S""U""!)`\$`KP`?`  
M@`(\$`Y""!)`\$`Z@`0-4""!`#P""(^0""OT""!"!`/8`G0`(\$`])@L""M  
MX0`\$`-\`""\*K`(\$`D0""""!`@0"4`(\$`D0"1""@00"!`)`\$`@0"1`(\$`D0"!`B  
M`)`\$`@0"1`)0`\$`"\`!`Q0"!`,`X""%/X""\*!`)4`@0"1`-4`("!"!`+X`\*  
M@0"1`(\$`D0"!`)`\$`P@`(\$`T0#F""(@0"M`/L`@`\$`<@`""+Y""@0#=&  
M`/L`""M`<@0"M`(\$`Z0""JH`Y@`"/,`B!`+P`@0#I`""J@"!`.`D`T  
M`\*J`/<""BX""O@""JH`@0"1`\*\`("!"!`/T`\$`#I`(\$`D0"!`),`0@`F  
M@0"1`,`X`B!`,`4`@0"1`(\$`D0"!`)`\$`@0"1`(\$`D0"/""C""!`,`\`!`!`#\$\_  
M`(\$`D0"0""@P"!`)`\$`@0"1`(\$`D0"!`)`\$`("!)X`\$`#V`)L`!`!`!`/`@`&  
M\`""L`!`!`!`/H`@0"1`/0""B!`)`\`@0"1`(\$`D0"!`)`\$`@0"1`(\$`I0`#  
M\$.X`@0#L`""IP"!`)`\$`XP`(\$`S0`(.4`XP`0`(\$`M@`(/P`@0"1`(\$`#  
MD0#Z`""0)]""(/H`""+I`""@0#(`.0`1(0@0#W""(NP#C""L`B@-T`O  
M`\$`G`(\$`D0"!`)`\$`@0"1`,`T""#V""0@0#2`,`T""!`,`8`[`\$`+T`&!`2  
M`.P`@0"1""(@0"2`(\$`D0"!`)`\$`@0"1`(\$`D0"!`)`\$`J`(`,<`(#V""Z  
M)P`\$`+T`A`""0`(\`@P`"")`@0"1`/P`""/""!`Q0`!`,`\`@0"1`.@`""\*!\`  
M`\*L`@0"1`P`!`!`!`(\$`P`!`!`-,`^0`!`+X`B!`-X`M0`""(\$`W@"!`)4`,`  
M`\*^`(\$`JP`0)P`@0"U""\$W@"!`)`\$`L`0.`\`("!"!`/8`@0"1`(\$`D0"!`X  
M`)`\$`@0"1`(\$`D0#K""!`@0"H`(\$`D0#\*""@Z0`@`(\$`X@#\*""@0#)`(\$`  
MD0"!`)T`""#V`(\$`D0"!`)`\$`@0"1`(\$`D0"!`)`\$`@0"1`-D`""22`""@J@#M7  
M`""@0#F`(\$`@`""90`@0""""!`E`#<""@0"W`(\$`D0"!`),`4`@0"1`\$  
M`(\$`D0"!`)`\$`@0"1`,`H`2!`.`8`\$`#E`/X`\$`"!`\*8`CQ`(\$`H@`"/`\$`\*  
M@0"1`(\$`D0"!`)`\$`@0"1`/8`""!`)T`@0"1`)@`&!`/L`@0"1`.T`""+Q5  
M`""H0`\$)@`@0"1`\*D`""!`.H`@0"1`/4`""!`)X`@0"1`(\$`W@`!`+4`!  
M[`\$`(\$`IP#L`!`!`@0"G`(\$`D0";""!`@0#X`.\\`!`!`!`\*0`[P`\$`(\$`I`#O6

'X@0'D'('0#''('\_'@-'@'[P]\$( '\$I'!' )\$ '@0'1'/'\$'2!'\$.8'G  
 M'\$\$\_'('\$U'''+\`['@!'('!'\*8'@0#/' '\$Q'!' )\$ '@0'1'('\$D0'!' )\$ '1  
 M@0'1'.X''0&'@0'F'('\$D0'!' )\$ '\P'!('\$H'!' '-4''''^'.T'!'!' '\*8']  
 MQ0''8\$S@E''0[0'!' (,'@0'1'('\$D0#L''!'@0'G'/0''3] '\$\$@0'D5  
 M'('\$D0'!' )\$ '@0'1'('\$D0'!' )\$ '[0'(' (X''C+'''T0'!' )\$ 'DP' '\$ (\$ '/  
 M''#\'' ('@0'7'\*0 '\$\$!'.'.\'@0'1'(T''&&'('\$D0#\''!' (@0#U''0I''!'7  
 M')\$ '@0'1'\$ '\$!('\$DP'!'2!' '\*H'' (#K'' '\$#H\$'DP'!' '\$ '9,' '0'\$@0'3I  
 M'('\$D0'!' )\$ 'K0'' '\$Y@!' )\$ '@0'1'('\$OP' '\$-0'@0'1'('\$D0#P'' '(D  
 M@0'C'('\$D0'!'.'.0'''+6''''^''''N4'@0'1'('\$D0'!' )\$ 'C@'!' (4'IP' '&  
 M!('\$['!'')\$ '@0'1'('\$D0'!' )\$ 'I''''OX'!'#\'''0OP' '''+P'B0'' '>'!'  
 M''\*L'('\$D0'!' )\$ '@0'B''!' \0'!' )\$ ']' !!! (\$HP' '\$/X'@0'1'('\$D0'!' )  
 M')\$ '@0'1'('\$D0'K''!'\_'' '\$ (\$['@G''''@0'L'('\$D0'!' )\$ 'X'' '@ (\$'U  
 MM0'!' ''''!)\$ '@0'1'('\$D0'C'' '@0#P'('\$D0#P''!'S0'!'!.H'' '#E''!' \'  
 M\_@'')\$ 'HP'' (\$'\`#Z''!'JP'' (\* (' '\$#0')4'' '&'!'/X'^P'!'@.'!'!.',3  
 M''''X'/H'' '\$\$!' )D'^@' '0/L''B'!'.'.@'' '\*Z'('\$V0'' 'KH'@0#3'' ''U''',  
 M\$.X'JP''!('\$Z''''^'' '\$@0#5'\*L''2!'.'.@'@0#'' '0S''?'''!J@' '\$,P'0  
 M@0'1'\*<'!'!#R'' '\$@0#\''('\$D0'!' )\$ '\_0'(' (\$T'' '\$,@'@0'1'('\$X'' '9  
 M@+, '@0#K'' ''J''!' )\$ '@0'1', ''!'+'''R@'!' )\$ 'QP'' (-H'' '+[ ''@'  
 M@0#[ '('\$D0#K'' ''@0I'' ''P0'!' )\$ '0' 'KP'' '8T'' '+; '('\$D0#K'' '0D  
 M@0'H'/', ''B'!' '\*''@0'1'('\$D0#5''!'@0'^' (\$K'' '(<'@0'L'' 'eYP'!'F  
 M'\*P'' '#G' (4''!'.'. ' ' ' ' &G'' '0J0'' (<'@0'1'('\$D0'!' )\$ '@0#C'' 'eH  
 ML'#[ '' '\$U0'' 'H\$'Q0'!' ), '0' ('\_@'!' (\$E0'!' )\$ '@0'1'/', '' '#N'' '00  
 MR@' 'H\$' ['''2'' ''@0'!' )\$ 'V0'' '\$'N@'!' )\$ 'T0' '0+H'' 'CV'' ''^P' '4  
 M0. \ '\$\$'P' (D''B\*',0'' '\*!' ,\'@0'1'('\$D0'!' )\$ '@0'1'('\$D0#Z'' '\*F  
 M'!'!'.'.@'' ''U' (\$W@' ' (+4'@0'1'('\$D0'!' )\$ '@0'1'('\$D0'!' )\$ '@0#0\_  
 M'' '@ZP'' (-H'@0#Y'' '0F@#&' '@0#-'('\$D0'!' /<' 'B<'('\$D0'!' )\$ 'O  
 MZ'' '0 (\$JP'H'' ''')0' '\$ (\$^' '; ''0@0#X'' '0@0'2'\*X'' '2!'\$.4'\_@' ';  
 M'0'\$@0#Z''!'GP#\'' '\$@0#1'' '0R''B'' '@0#Q'\* ('('!'!/\$'\_0'' 'H\$'R  
 MF0'' (' '@0'1'/T'' '>'!)8'\_0'' 'OD'!'!'!) \'\_@'!'0\*!'-P'' '\*\ '\$'N  
 MD0#^'' '\$#@/H''B'!' /H'' ('V'' '\$@#^''!'@0'5'/X''P\$\$( '!' )@'@0'1^  
 M'/H'' '3; ''0@0#/'!'!' \P'!' '\*'' '\$S'\*@'' ('!'.'.L'@0'1'('\$'\_@'' '>@'.  
 M'01'L''!'.'.0'' '20' (\$V0'' '=8''!'#F'('\$D0'H'' ''J0''',L'' '3['/T'F  
 M'!'M'' ''@0#K' (\$P0''M\'' 'U' (\$P0''M\'' 'U' ('\$D0'!' )\$ 'R0'' ('  
 M' (\$'\'' '(-P'@0'1'('\$D0'!' )\$ 'L@'!'!/, '' '&'!'/''@0#K''!'J'#U'' '\$4  
 MR@' 'e+''' ''#M''!'R@'!'! /4'00' '@ (\$'\_@' 'MH'@0'1'('\$D0'!' )\$ '@0'1K  
 M',4''!'') '' ''QP'!' )\$ 'U0'' '\$' ]'' (' ,P'@0'1'('\$D0'!' )\$ '\P' '@ (\$'A  
 MH''!'!,T'' ' &' /, '\$\$!' /P'''+. ''@V@#S''!'@0#\'' ''I@#7'' 'eE0' '3  
 M!\*D'UP'' (\$'O#P''!'@0'C'('\$D0#B'' ''@0'Q' (\$'He' ' (/ '\$X@'!'! \0'^  
 M''2!'.'. \X@' 'H\$'L0#B'' ''Q'' 'H\$' [P'D'' '\$@0#O'\*0'' '2!'.'. \ '@0'1R  
 M'/' 'B'' ''HP'!'!. , '''+U'' '@00#P'' '<QP'' (\$'\P'' '>T'\'' ' ',<'1  
 M''B'!'-X'\'' ' '. ('3G'' '<@0#>'-' '3G'' '<\_' '@ (\$'Y''U'' (' ('&'!@  
 M'. ''M0'' ''''!@0#@',H'' '2!'!,D'@0'1'('\$E0'' (/X'@0'1'('\$SP' '0,0%  
 M@0'1'('\$D0'!' )\$ '@0#<' '@R'' (/ '\$@0'1'('\$XP'' '; '@0'1'/T'' '#^@  
 M'' [ ]'' '@ (\$'J'#K'' ''@0'H'/D''!RH'' ''@0#T'/D'' 'B\$'' 'F'#Y'' (' )  
 M@0#8'' ''Q''!' )\$ '@0#V'' ''G0'!' )\$ '@0#A'' '(L@'!' )\$ '@0'1'('\$D0'!'J  
 M')\$ '@0'1'\*@'' ''!'.'.L'J'' (' (\$ZP'!' /H'' '\$'9' ('\$D0'!' )\$ '@0'1' )H'0  
 M''3V''!'XP' '@\*0'@0'1'/'@''B'!)L'@0'1'-D'' '\$!' /T'' '\*\_'-D'' '\$!'!T  
 M'+H'@0'!'!'3' (\$D0'!'.'. \'' ''D' (\$' [P'' (\*0'@0#X''!'Y@' '0/T'' '3[T  
 M'' '0PP'!'-P'' '\$W' (\$V0'' 'N, '' (#9' ('\$D0'!'.'.L' 'D' '@. \'' '!' )\$ ('\  
 MZP' '0\*@'00''8\$'U@'!' )\$ '@0#N'' '\$K@' (/D'@0#M''!'I@'!'!.X'' 'BEE  
 M'('\$D0'!'!'+T'' '6' ('\$D0'X'' '@0#^'' '@WP'!' )\$ '@0'1'('\$D0#C'' '\$L  
 M@0#O'' ''VP''!.H'XP''! (@'!'J' ('\$D0'!' )\$ '@0#:' '\$N0'!' )\$ 'N'' 'H  
 M'8\$'VP'!' )\$ 'N''!'X''!'-P'N'' '8\$'\'' '0.T'Z@' '0-' '' '&+''' (T@#J  
 I'!'@0'I' ('\$D0'!'!'+P'' '+7' ('\$D0'!' )\$ '[P'' '\$/ (' '\*!'\$.4' 'D' 'M, 'F  
 M@0'1'('\$D0'!' )\$ 'IP' '@/8'' '&'J'' '@Y0'' 'NT'@0'1' )H'' '2) '' '@'!'F  
 M'\*\$'' 'CR' (\$'\'' ' (.P'' 'CC'' ''\_'' 'MX'@0#P'' '@HP'!' /D'' ''': '\$' '\*  
 MD0'!' )\$ '@0'1'('\$D0'!' /0'' '\$\$?' (\$'WP'' (/X'' '\*X' ('\$D0'!' '\$\$ [P'' '



MO/L`'\*L`(\$`E0`'@/X`BP`'!\*4`'1`'(Z@`'@/X`L0`'0`(\$`YP`'!`<#`^`(\$`  
MD0"!`)4`'`(#`^`(\$`D0"?`'`\$@0#T`'(\$`D0"!`)`\$`U`'`'0)4`'`\$`L`'(\$`D0#9S  
M`'`'F0`'!`-H`'`'#+`'`(\$`D0"!`.P`'`'2`'`!V`'`'0`(\$`QP`'`!,P`@0"K`'`\$5  
MZ`'!`)`\$`R@`'`\$/P`'`&!`,`\`@0"1`'(\$`D0"C`'`'0@0#P`'(\$`J0`'`@.H`@0"1/  
M`)T`'`'#\*`'`@QP`'!`<#J`'(\$`J0`'`@.H`@0"I`'`'[P`'`!/T`@0"1`'+`,`'\$"!.  
M`'`'@0"1`'(\$`D0"!`)`\$`LP`'`@+`,`'\$#8`'`'@V0"S`'`'@0#@`'(\$`D0"!`. \$`5  
M`'\*R`'(\$`D0"!`)`\$`@0":`'`'0^0"!`)`\$`UP`'`!(\$`W0`'`(. \$`@0"1`'-`,`'2#T  
M`'\$V0`'`\$.@`@0"1`'+X`'`B`,`'\$RP"!`)`\$`UP`'`'<4`'`("!"`'`'`'\`-<`.  
M`'`&!`+P`@0"1`'(\$`W@`'`'+4`@0"1`'(\$`W@`'`'+4`@0"1`'(\$`W@`'`'+4`L@`'`.  
M@-P`'`(#R`'`\$H`'`\$/D`@0"M`'`'(Y@"Z`'`'@0#9`'(\$`D0"!`)`\$`@0"1`'(\$`B  
MR`'`'LL`@0"1`.P`'`&!`\*`<`'[`'`'8\$`IP"!`'+X`'`'+5`'(\$`D0#[`'`'(K@`'`J  
M`H\$`'`['`'!`)`\$`@0"1`'(\$`D0"S`'`!`@0#@`'+`,`'\$"E`'`'\$00"!`)`\$`@0"1`'(\$`W  
MD0"!`)`\$`^P`'`'H4`'`'#`\$`'`'TP"!`)`\$`@0"1`'(\$`D0"!`)`\$`@0"1`'(\$`Y@`'`?  
M!-@`'`'C7`'(\$`D0`'`'`!`@0"H`'`'\$[@`'!`\*4`'`'3N`'(\$`D0"!`)`\$`@0"@`'`'(0  
M`P"!`,`'`,`'4`'`\*`'`'!`)`\$`@0"1`'`'(\$`\$4`'`'\$@0#"`'-`\$`'`'2!`'-P`'`!#HX  
M`'(4`'`&`,`'\$]0"!`)`\$`@0"1`'(\$`D0"!`'-D`'`'2Z`')P`'`'\*\_`'`'\$N@`'!`)`\$`5  
M@0"1`'(\$`T`'`'`<`,`'@0"1`'(\$`\_0`'`')8`@0"1`'-`\$`'\$"!`,`'`,`'(T0`'`'0`(\$`P@#U\$  
M`'`'(@0">`'(\$`E0`'`@/X`@0#J`'`'J0"!`)`\$`M0`'`'(\$`\`'`'@/`'M0`'`'(\$`M  
MW@"U`'`!P]`'`!(\$`['`'U`'`!P@0#V`'`'(Z@"U`'`'@@0#>`'+4`'`'!"`'-X`@0"5T  
M`'!`\_@`'!`)`\$`@0"1`'\*`<`'`'2!`.P`I`'`'`,`'`,`'("\_`'`'`^P`'`!/@`@0#I`'`'`-  
MJ@#Y`'`!`@0":`'/D`'\$"!`)H`@0"N`'`!`Y0"!`)`\$`@0#0`'`!`U`'`'@/\$`L`'`'^  
M!+`,`'`"R`'(\$`D0"Q`'`'0@0#B`'`'<`'`'2!`'-0`'`'C:.`'<`'`'2!`'\*P`@0#F`'`'\$D  
MK0"!`)`\$`O0`'`'0+\`'`'\*9`'(\$`GP`'`'/0`@0"1`'(\$`D0"!`'+X`'`'+5`'(\$`D0"!`\_  
M`/T`'`'`6`'(\$`D0#\*`'`'\$@0#I`'`'X@`'!`\*X`'`'E`'(\$`G0`'`!/8`@0"N`'`'!\`  
MY0"!`)`\$`@0#T`'`'`GP"!`'/D`'\$":.`'(\$`D0"!`)`\$`@0"1`'(\$`J`'`'(.L`@0"1`=  
M`'(\$`J@`'`'N`'`'("`\_`'(\$`D0"!`)`\$`@0"1`'.0`'`'(#`#`'`'@0#N`'(\$`D0"!`'+D`R  
M`\$#F`'`'@]@`'!`)`\$`@0"E`'`'`[@`'!`)`\$`F`'`'`(\$`^P`'!`)`\$`@0#F`'`'0K0"!`'  
M`)`\$`@0"1`'(\$`D0"!`'-L`'`'X`'(\$`D0#>`'`'(@0"U`'-X`'`'B!`'+4`@0"1`'(\$`&  
MD0"!`)`\$`@0"1`'(\$`D0"!`)`\$`A`'`'@.P`'`'BL`'`'(^P`'!`)`\$`T`'`'\$(\$`V@`'`-  
M`NL`T`'`'\$(\$`PP`'!`)`\$`@0"1`'+@`'`'("!"`'-L`N`'`'@(\$`VP`"1`'`'0U@`'`,`'0`X  
M`'(#V`'`'!`^`'!`\*`<`'`'`(#L`'+(`'`&T`'`'0S`'`'N4`@0#R`'`!'H0#?`'`'(EP`'`\_  
M")\`WP`'`')<`'`'B?`'(\$`D0"!`'-8`'`'\*]`'(\$`D0"!`)`\$`DP`'`'I`'`'3P`'(\$`T  
MD0#Z`'`'\$@0#E`'`!'M@#Z`'`'\$@0"9`'(\$`D0"!`)`\$`C@`'`'`'(4`@0"1`. \$`'`'!"!&  
M`'+(`@0"1`'(\$`Y`'`'`\*`'\`@0"1`'(\$`D0"!`)`@`'`'`(#[`'(\$`D0"!`)`\$`@0"1`'\*8`T  
M`'2!`.T`@0#6`'`'(O0"G`'`'\$@0#L`'/T`'`'CO`'`'\$@0"I`'(\$`D0"!`. \`'\$"DN  
M`'(\$`D0"!`)`\$`@0"1`'-8`'`'`!`'+T`@0"1`'(\$`D0"!`)`\$`@0"X`'`'0VP`'!`)`\$`6  
MP`'`'\*L`'`'`\`'`'`\`'`'!`)`\$`@0"1`'(\$`D0#1`'`'F`'`'`(\*P`@0#G`'`'@K`'`!A  
M`',D`'`'`(#@`'`'`['`'!`)`\$`G@`'`'\$(\$`J]0"!`)`\$`'0`'`'@0"3`'(\$`D0"!`)`\$`@0"1L  
M`'(\$`G@`'`'?4`@0"1`'\*X`'`'`"Q`'`'!`]@`'`'`<(`@0#1`'`'!P@#W`'`'0@0#^`'`'!`[  
MH`'`'!`)`\$`@`'`'\$(\$`E`'`'!`)`\$`@0"1`'(\$`D0"!`)`<`'`'#`\`'(\$`D0"!`\*`'`'\$#SI  
M`'(\$`D0"!`,`'P`'`'+`'(\$`K`'`'\$<`'00`#@`'`'`(\$`V0"!`)`\$`TP`'`'`.T`'`'\$Y!  
M`'`!G@#3`'`'`(@0#`'`'`'`(#@`'`'#@N0`'!`X"?`'+X`'`'\$Y`'`'!G@`'^`'`!'N0`'`\$  
M`9X`@0"1`'(\$`D0"!`)`\$`@0`\_`'`'0U`'`'!`+\`'`'!#4`'-8`'`'2!`'+T`@0"1`'/'T`\$  
M`'2!`'/H`'`'!`">`'(\$`D0"!`)`\$`@0"1`'`,`'`,`'+T`'`'G@`,`'`'!AP"!`'-D`'`'2ZH  
M`'(\$`D0"P`'`'\$K0`'`!`+@`@0"1`'(\$`OP`'`!`-0`@0"1`'(\$`E`'`'`'`'`'J0`'`'`'(\$`L  
MZ@`'!`\*`'`'`'+S`'(\$`D0#F`'`'`'`'^`'`'@(\$`P0`'`'0/@`Y@`'`'H\$`K0#K`'`'\$RP`'\`  
M\$(\$`'0`'`'X0#K`'`'\$RP`'`'\$(\$`WP`'!`.4`'`'`(#\$`'`'!`['`'!`)`\$`^0`'`'8\$`\_@`'`  
M`=\$`'`'`'/`'(\$`Q`'`'`'`<\`@0#[`'`'!Y0`'`'!+4`@0"1`'-`,`'`"E`'`'!G0#3`'`'@-  
M@0#`'`'(\$`N@`'`'@-D`@0"1`'(\$`D0"!`)`\$`@0"1`'(\$`D0#@`'`!'G@`'`'`(\*\$`'`'XG  
M`'(\$`D0#Y`'`'`H@`'`'0-D`'`'`("C`\*X`'`'2!`.4`O`'`'`I4`'`'#`\$`+P`'`'`\*\`'!`T  
MG0"L`'`'!`@0#G`'(\$`D0#Y`'`'`'`'`'`\$-8`'`'!`'!`.D`'`'`M`.L`'`'!`!`\*`@`@0"1]  
M`'(\$`D0"!`)`\$`@0"1`'(\$`D0"!`)`\$`@0"1`'(\$`D0"!`)`\$`@0"1`'+\`'`'`#G`'`'`J  
MR0`'`'J@`@0#D`'`'`@KP#C`'`'0W@`'`'<(\$`V@`'`'`/P`OP`'`'`'(\$`U`'`'`\_`'`'@O@`'`8  
M()@`KP`'`'`'(\$`Y`'`'!`,`'4`'`'`'`. `'(\$`D0#X`'`'`QP`'`'`'(\$`U@`'!`)`\$`@0#Z`'`'0F  
MN@`'`'0.`\$`@0"1`'(\$`D0"!`)`\$`@0"1`'(\$`D0"!`)`\$`@0"1`'(\$`\0`'`'@\*(`@0`WE  
M`'!`W`'`'0`'`'`(@P`'!`)`\$`@0"1`'(\$`D0#`'`'`'`'I`'`'`JX`@0"1`'(\$`R`'`'`LL`N  
M@0#!`'`'\$T@`'!`.4`'`'`&N`'(\$`D0`'`'`'`'\$PP`'`'+\$`'`'`<`'`'`R@`'!`. \`'`'`&DW

M`(\$`[0`J8`@0";`!`^`"!`!)@`'`[`(\$`F0`"/H`^P`@(`,`'\*U`'(8  
MY`"!`L`BH`(\$`D0"!`!)\$`@0"1`(\$`D0#X`\$U0`@`H`(#`'"^P`!`H  
M`,`'"#3`(\$`I`">\`@0"1`(\$`D0"!`!)\$`@0"1`(\$`D0"!`!)\$`@0"1`(\$`  
M[@`@\*4`@0"1`+X`'"!`!-4`O@`'`(+`\$`\$F`+8`"!`!-T`M@`'\$`(\$`W0"Y/  
M`'`@K`';`N0`'`(+X`'2>`(\$`D0"!`!)\$`@0"1`(\$`D0"6`'`(@#)`(\$`;  
MD0"!`!)\$`@0"1`(\$`D0"!`!)\$`@0"1`(\$`4`'\*.`'`A@`'HX`A0`'!XX`@0"1\$  
M`(\$`4`'\*.`'(P`'!'`'(\$`D0"!`!H`'2I`(\$`D0"!`!)\$`@0"1`(\$`D0"!`!)\$`\  
M@0"1`(\$`D0"!`!)\$`@0"1`'(P`'!'`'(\$`D0",`'XX0`'',0`'CF`'(P`'!'`\_  
M`'(P`'!'`'(\$`D0#3`'!`@0#`'`(\$`D0"!`!)\$`@0"1`(\$`D0"!`!)\$`V@`'':H`H  
M`B1`-H`'`&J`'(D0#G`'`@0"L`(\$`D0"!`!)\$`@0"1`(\$`D0"!`!)\$`@`'\$`T`@0#V<  
M`'0G0"!`!)\$`@0"1`(\$`G@`'04`@0"1`(\$`D0"!`!)\$`[`'!'!`\*D`'\$"!`'W  
M@0"1`(\$`^0`'\$-T`'B\_`(\$`U`''+\`@0"1`(\$`D0"!`!)\$`@0"C`'`@`'\`#Z`  
M`'`'(A0`'\$\*H`'+N`(\$`D0"!`!)\$`@0"1`/,`'!'!`!`\*`'@0"1`(\$`D0"!`!)\$`  
MN`'`H\$`VP`X`'`@0#;`(\$`[@`'L8`'CA`(\$`D0#8`'`(@0"[`-@`'B!`;  
M`+L`WP`'+T`'\*,`'`(\$`!`#Q`'-\`'B!`'+0`O0`'@/(`'2!`'.8`@0"C`'!`/  
M\`'!`!)\$`@@`'@I`\$`LP`'+8`'""L`(\$`D0#5`'`\$@0"^`(\$`D0#\*`'`\$@0#00  
M`'!`!`^P`"!`!)\$`@`'`[`(\$`D0"!`!)\$`[`'`'`(\$`IP`L`'`(@0"G`(\$`Y@`'`\*T`)  
M@0"1`(\$`X`'`@+,`@0"1`(\$`D0"!`!)\$`@0"1`(\$`D0"%`'`'P@`'!,X`@0#%A  
M`'\$S@`'!`!)\$`@0"1`.D`'`("!/`@`'`&T`(\$`D0"!`!/4`'!">`(\$`D0"!`!)\$`G  
M@0"1`(\$`@`'J`\$`@0#G`'`K`"@`'`@0#S`(\$`F`'0/L`@0"8`'!`^P`"!`\_  
M`)@`'`.#[`',`'+)`'!`C0`'"/X`BP`'!(\`'\$#[`(\$`D0"!`!)\$`@0"1`(\$`D  
MD0"#`'`R@`'`=@`'\$`#R`(\$`D0"!`'F@`'"/H`@0"1`.`'2A`'\$WP`'4  
M`+<`@0"1`.`'Z!`+,`X`'!`(\$`LP#@`'`\$@0"S`(\$`D0#@`'`\$@0"S`(\$`.  
MD0`'`'`'(S0`'!`(\$`R0#\*`'\$J@`'':`\$`@0"1`(\$`D0"!`'`(''\$"4`(\$`D0"&C  
M`'!`Z`'`@\*`<`@0"1`/0`'!"!`!)\`]'`'\$`(\$`GP",`'&`'O`'2`:`(P`'`('`:  
M`(\$`D0"!`!)\$`N0`'0`H`'2`(\$`D0"@"`'!`@0#S`(\$`D0"@"`'\$`#@-8`'`"@M  
M`\*`'5`'`@H`"@"`'!`@0#S`(\$`F0`"/H`@0"1`(\$`D0"!`!)\$`@0"1`)\`.  
M`'&!`/0`@0"1`.T`'`&!`\*8`'[0`'8\$`J`'!(`"!`!`H`'I`(\$`\_0`'98`\_  
MI@`'`(\$`[0"7`'`@Z`'!`X"7`(\$`JP`'`>@`@0#)`'!`Q`'`@-0`K@`'@(\$`Q  
MY0"!`!)\$`@0"1`(\$`D0#=`'`(@0"V`-T`'B!`'+8`@0"1`(\$`D0"X`'`@@0#;K  
M`(\$`D0"B`'`D@`'`>\$`@0"R`'!`X0"!`!,8`'`'-`(\$`D0"!`!`-(`'`+!`(\$`#  
MD0"Y`'`'[`'8\$`'\`'!`!)\$`HP`'!`X"!`!/\$`HP`'8\$`'\`"C`'!`WP`'I,`"  
M@0`'!`'3`(\$`D0"!`!)\$`N`'`@.X`'\$`A`'\$T`"X`'`@0#;`'(0`'!`#E`'`E  
MK`'!`!)\$`@0"1`(\$`D0";`'`@0#Z`'`%`(\$`D0"!`!)\$`@0"1`/`@`'!"!`!`!`L`3  
MKP`'`@(\$`Y`'!`!)\$`@0"1`(\$`D0"!`!)\$`@0"1`(\$`D0"!`!)\$`@0"1`(\$`RP`'P  
M`<@`@0"1`\*\$`'CH`'`R`'`@,8`GP`'!`(\$`]'`'!`!)\$`@0"1`(\$`D0"!`!)\$`B  
M[P`'\$`(\$`JP`'`(/L`[P`'\$`(\$`I`'!`!)\$`@0"1`(\$`D0"!`!)\$`@0#I`'`J@`'!`'  
M`)`\$`S0`'8\$`Q@`'!`!)\$`]'`'`'`(\$`GP`'!`!)\$`@0#P`'`'(IP`'`(/X`@0"K`'`2  
MZ`'#W`'!`S@`'!`!`P`'!`V`,`',`'3B`'`@SP`'`,H`'3;`-T`'\$".`'!`J@`'!`S  
M`/`'`'`\*C`-T`'`. "<`'`G`#=`'!`@0"V`-T`'\$"5`'`HHP`'!`/`'`'`"C`(\$`0  
MD0"!`!)\$`NP`'8\$`V`'[`'!`N`'':`(`NP`'!`X#8`'0@P`'[`'\$`#@(\$`V0#8J  
M`'-`'!`!`Z`'8\$`V`'[`'!`@0#8`(\$`MP`'MP`@0"1`/L`'`(#[`'`@@0"?Y  
M`(\$`D0"!`!`+P`'`#7`(\$`D0"!`!)\$`@0"1`(\$`Q0`'`,X`@0#(`'0RP`%'`'!  
MC@`'!`!)\$`A@`'!`<".`(\$`4`'`(".`(\$`4`'`(#+`'`Q0"!`!`P`'!`#W`-T`'`'!`'+8`^  
M@0"1`.`,`'\$`#V`'`@0"\`,`'\$`#V`'`@0"\`\*H`'2!`.D`@0"1`(\$`D0"!`\_  
M`)`\$`@0"1`(\$`D0"+`'!`B`'!`!)\$`HP`'':8`'`'[`'!`!`\_0`'\$/4`'3E`/L`&  
M`'`<`'`@0#M`'!`TP`F`'\$`@0#M`(\$`D0#J`'`(@0"Z`'`@`0"!`!)\$`@0"1L  
M`(\$`D0#[`'`@@0"8`(\$`D0".`'`@G0`'`@.H`@0"1`(\$`DP`'!`('!'!`!)\$`@0#>%  
M`'\$U@`'`@.\$`@0"R`'`'X0"!`!.(`'`&Q`(\$`D0"!`!)\$`@0"1`(\$`D0"!`!`-\\`  
M`BT`'+<`'\$`#C`'!`@0#[`]'@`'\$"!`/L`@0#/`'`@RP`'`@/L`@0"1`(\$`D0"!`!  
M`)`\$`C`'0`(<`@0"1`(\$`D0"!`!)\$`@0#Q`'`'H@`'!`!)\$`IO`'`L\\`'`&A`\*4`]  
M`'+/`'!`!`H0`'!`/(`'0A`H@`'!`/(`'0A`H@`'!`/(`'`&A`(\$`@`'`(\*\$`XP`'`[  
M0`(\$`^`'!`!`+H`@0"1`'!`!`@0"3`'!`@0"1`/X`'`+Q`'\$`@0"F`/X`'`\*!`!`4`B  
MD`'`I0`'`Q`(\$`D0#L`'`'\$`@0"M`'`'`\_`'!`!)\$`Z0`'`H\$`S`'`.`'`@0"F?  
M`'0[0#^`'!`!`@0"0`8`@0"1`.`,`'\$"9`'\$Q@`'`(-4`@0"1`(\$`D0"!`!)\$`6  
ME`'`'`'`@@0"4`'`(`'`'!`!.0`'`&8`'!`!`UP`'`<0`@0"1`+T`'!`#+`'!`!`C0"!`1  
M`\*`\\`'!`!`#D`(<`'`(#P`'0G@`'!`!)\$`H`'0\*L`'!`!`#\*`\*`'\$"!`!`/,`@0"1`,`(\$`G

M`\$"!`-\$`''`2#`''`\$D0"!`!`)\$`@0#7`''`R0`''0/4`@0"1`.,`''`&!`'/@`''!`#?T  
M`''`'(W0"!`'-D`''!`"Z`'/D`''`&Y`''''W`''''N`''''K`'(H`''`\*F`''!`'Y0"!`',L`'J  
M`\$#N`''`'(W`''!`')\$`@0#K`''`'(J`''!`')\$`@0"1`'(\$`D0"=``'@W0`''9L`'G0`''`  
M((\$`']@`''!`')\$`@0"1`'(\$`X`''`&%`'(\$`D0#/`''!`'R`''`@/T`''`2#`'(\$`D0"!`')\$`@  
M@0"1`'(\$`D0"!`')\$`@0"1`'(\$`D0#!`''!`'JP`''`\$\*D`'P0`''8\$`'T@`''!`')\$`@0"1Y  
M`. \$`''`('!'`'+(\$`@0"1`'(\$`^@`''')T`''''^`'(\$`^@`''')D`'@0"1`',<`''`2!`',P`'+  
MO@`''`8\$`'U0"!`')\$`@0#/`''''Q`''!`')\$`B`''`@-\$`''`\$`\`'(\$`UP`''0+P`'U`''',  
M`8\$`'OP`''!`')\$`I@`''`(\$`'[0"!`')\$`@0"1`'(\$`D0#F`''!`'@0"M`'(\$`D0"U`'''';  
MQ@`''`\$)H`'@0"1`'+\$`''`\*3`''`@T0"Q`''''@0#B`'(\$`G`''`\$/<`'@0"1`'\*L`''`\$#>.  
M`''!`]`''!`'H";`'(\$`^`''`@)L`'@0"1`'(\$`D0#V`''!`'@0"=``'(\$`D0"!`')\$`@0#7<  
M`''`'O`''!`')\$`@0"1`'.H`''`2!`'\*D`'@0"1`'(\$`\_@`'#!`''0)@`'@0#^`'',`\$`''!`'N  
MF`"A`''''^0`''`04`''''U`'',.``#@F`"A`''''WP`'##@`''X)@`'F`''!`^@`'!`'0`\$  
M`\$`!F0"8`''''Z`''#!`''0)@`'F`''''N0`''!"9`'(\$`D0"2`''`\$@0"!`')\$`TP`''P  
M(\*L`'A`''`9D`'TP`''(\*D`''`&9`'(\$`^@`''ID`'@0#Z`''''F0`''(0`''!"0`'(\$`&  
MD0#;`''0^`''''?@`''!`"T`'\$0`'9L`'^P`''!`'(\$`'@`''`>8`''!"W`'/L`''3.`''X3  
MO0`''')\$`^P`''#LX`''!"7`''XMP#/'`''0@0#,'/L`''2!`',.``!"W`'(\$`H`''R  
M(/,`'@0"1`',<`''`B!`',P`'@0"1`')\$`''`3L`''''F`''!`')\$`@0#Y`''`0F@`''!`')\$`V  
M@0"1`'+0`''!`"!`'-\`'@0"1`'(\$`D0#W`''`0G0`'''.\`''!"4`'/<`''!`"!`')P`'@0"1/  
M`'(\$`D0"!`')4`''`C^`'(\$`D0"!`')\$`@0"4`''("''!`')\$`@0"1`'(\$`D0"!`')\$`S  
M@0`'!`'B3`'(\$`D0`'!`'(#X`''''@0"=``'(\$`D0#N`''`\$]P`''`KL`'P0`''('!'`'/H`''  
M@0"1`'(\$`E`''`('`'@0#4`''''OP#K`''`L0`''`H\$`'^0":`''''@0#Y`''`\$`!`'(\$`3  
M[P`''!`-<`''`#R`''`'(X0"!`',('`'#R`''`'(X0"-`''!`'B`''!`'@`''!`')\$`\_`''`\$`('`\`  
M`'&7`'(\$`DP`'!`\$`''!`'/,`''!`"@`',0`''`BQ`''`0H`''!`')\$`@0"1`'(\$`D0"!`')\$`6  
MI`''`H\$`'[P`''!`')\$`@0"1`'(\$`D0#V`''`'@0"=``'(\$`D0"!`')\$`@0"1`'(\$`D0"!`'I  
M`')\$`@0"1`'(\$`D0"!`')\$`@0"1`'(\$`D0"!`')\$`@0"1`'(\$`D0"!`')\$`TP`''`\$`'(\$`7  
MP`''!`')\$`@0"1`'(\$`D0"!`')\$`@0"X`''''VP`''!`')\$`@0`''''`'\_@`''')@`'@0"1C  
M`'(\$`D0`'!`'\$`''!`'),`'VP`''@,`''`CR`''`@B@#;`''`L`''`'(H`'@0#D`''''S`''`.  
M`>4`'@0"1`')`''`\*#`'(\$`D0#R`''!`'F0`'`\$.4`''`\*G`'(\$`['`''`J<`'B@`''`8D`'R  
M@0"1`'(\$`']@`''!`')X`''`2!`')\$`HP`''`'(\$`'\`''!`')\$`K0`''0(\$`Y@`"M`''!`'@0#F7  
M`\*0`''''<`''!`'^@`''`(/<`''''H`'(\$`ZP`''`(\*@`'@0#F`''`@K0"!`')\$`@0"1`'(\$`G  
MD0"!`')\$`@0"L`''!`'YP`''!`')\$`@0"1`\*,`''('!'`'/`'HP`''@(\$`'\`"U`''`YP`''?  
M@(\$`^0"!`')\$`@0"8`''''^P`''!`')\$`Q`''`H\$`'UP`''`(/H`'@0"1`',0`''`>!`'-T`'E  
M`\$#T`',0`''`\*!`'-T`'\$`#T`',0`''`+,`''`0A0".``'0A0"7`''`0^0`''.(4`'C@`''!  
M.(4`'OP`'#\$`''!`!`-0`''!`"%`'(X`''!`"%`'(\$`D0"!`')\$`@0#^`''`@VP`''`(-T`'\$`#A;  
M`'(\$`\_@`''`())4`'@0"1`'(\$`D0"!`'-T`''`\*V`'(\$`D0#M`''''G`''''HP`''[0`''`H\$`')  
MI@`''`''`V@`'@-(`'`(#D`'(<`''`\*,`'(<`''`\*,`'(\$`D0"!`')\$`@0"1`'(@`''!`"'+  
M`'(\$`D0"!`'/,`''''@`'-4`'\$`"@`''`@H`''!`')\$`O@`''`H\$`'U0#H`''`0W0`''@+T`'U  
M`'("5`'(\$`\_@`''@)4`'@0#.``'0Q0"!`')\$`L0`''0(\$`X@`''!`')\$`I@`''`(+X`''`+P[  
M`''`'\_0`''!`',@`'I@`''`'(\$`'[0`'F`''!`P@0#M`'\*8`''''!`'.T`'I@`''`'(\$`'[0`'F`''`@\_  
M@0#M`'(\$`D0#)`''`0@0#\*`'/X`''`2!`')4`'@0"1`''`@E@`''`'(\$`\_@`''!`')\$`'@0"\_=  
M`''`0U`''!`')\$`@0"1`'(\$`D0"\*`''`0B0"!`')\$`WP`''0(\$`M`''!`')\$`@0#F`''''<  
M\`''`(.4`'\$`#<`'(\$`Y@`''@,\$`''`3N`',(`'`&!`'-`\$`@0"1`'-H`''('!'`'+D`'@0"1X  
M`'(\$`X0`''\$`'+(\$`@0"1`'(\$`D0"!`')\$`@0#J`''''[P`''`>4`'\$`#9`'(\$`D0"/`''`0>  
MC`''!`')D`''!`#Z`'(\$`XP`''!`+`'@0#C`''`\$L`''`\$`''`\$CP`''!`')\$`T0`''`H\$`'U0`''R  
M!.`'\LP`''`H\$`'X`''!`')\$`@0"1`')L`''`+F`''`0E`''!`'('!'!"4`'(\$`J0`''!`.H`3  
M@0"1`'+,`''`CZ`''`'(@0#H`'+0`'\$`''!`'-\`'@0"1`'(\$`D0#>`''-`''''M`''`@/P`'#  
M`'&`,`'(\$`D0"!`'\$`'`,`'@0"1`'(\$`D0"!`')\$`T`'''';T`''`B(`'(\$`D0#5`''!`0  
M@0#>`''`X@`''!`')\$`M@`''`'(\$`W0"!`')\$`'\`''`@(\$`HP`''!`')\$`@0#9`''`@N@`"!`T  
M`')\$`@0"1`'(\$`M0`''`MX`'@0"1`'(\$`D0"!`')\$`@0#;`''`'(N`''')`''''@0#6`'(\$`B  
MD0"!`'.T`'\$`\$F`'(\$`D0"!`')\$`@0"1`'(\$`X@`''\$`+\$`@0"1`'(\$`^@`''!`')D`'@0"1[  
M`'+(`'`C8`''!`'BP`'('!'`'BP`'&`''`\$C0"!`')\$`@0"1`'(\$`D0#T`''`@K@`''0)T`'<  
M`'38`'(\$`D0"!`')\$`@0"1`'(\$`D0"!`')\$`T`'''';L`'8`\$H@`''`(.L`'@0"1`'(L`1  
M`@\$!P+`''!`!`#<`.P`''`&?`''`B@#C`''`0J`''`@`'(H`'@0"1`'(\$`D0"!`')\$`JP`''\`  
M!(\$`Z`''!`')\$`@0"1`'+@`''`\*!`'-L`'U@`''`'+<`''`&(`'(\$`D0"+`''`\$#@`'(D`'BP`''2  
M`8@`BP`''8@`'@0"1`'(\$`D0"!`')\$`A@`''@`'(T`'A@`''@\*4`''!`#J`'/H`''!`"!`'+,`'  
M`''`H`'(\$`D0"\*`''`0G`''''N\`'B@`''\$)P`''`+O`'(\$`D0"!`')\$`E`''`\$`'(\$`'0`'3  
MW`''!`'(\$`MP`''/'`''`@Y`''`'(\$`@0"1`\*P`''''!`'.@`''`B!`')\$`@0#]`''`0E@`"!`S

M`)\$`@0#[`\$\$\$F`"!`/L`\$\$28`(\$`S`\$\$\$`,<`@0"1`(\$`D0"!`!`)\$`J@`\$\$`(\$`^`  
MZ0"!`!`\*`<`\$\$#L`(\$`D0"!`!`)\$`@0"1`(\$`D0"O`"!`!`@0#D`\*\`\$\$"!`!`.0`H`\$\$\$`/  
M!`\$\$@0#U`(\$`D0"!`!`\*,`\$\$\$#P`(\$`D0"!`!`)`(\$`\*`!`!`)\$`PP`\$\$`(\$`T`"!`!`)\$`/  
MB0`\$\$`((H`])`\$\$\$0`(\$`GP`"!`!`)\$`@0"1`,`@`\$\$`\$\`\$\$\$D0`""`\$\$\$W@`\$\$`(+4`NP`\$\$P`  
MO+,`\$\$!"G``,`,\$`\$\$B!`+`\$\$\$@0`""`\$\$\$E`\$\$\$]`\$\$\$(@0#6`-@`\$\$`("!"`+L`@0"1`(\$`D`  
MD0"!`!`)\$`@0"1`(\$`D0")`\$\$\$PT`\$\$\$`.H`\$\$\$C4`\$(D`""`\*`\$\$\$(`\$\$\$!`#K`\$\$\$@0"K`:  
M`.@`\$\$\$""!`\*L`DP`\$\$!`(\$`\$\$\$3`\$\$\$@0`\$\$\$(\$`D0"!`!`)\$`@0"1`(\$`D0"!`!`)\$`^`  
M@0"1`(\$`D0"!`!`)\$`NP`\$\$\$LP`\$\$\$3R`\$\$\$@G@`%`\$\$\$SC@`6`\$\$\$@0#`]`8`\$\$\$""!`U`  
M`/T`T`\$\$\$!`+P`\$\$!`#Y`\$\$\$`E0`""`@`\$\$\$@0"1`,`@`\$\$!`#`\$\$\$!`BP`"!`!`)\$`@0"1`(\$`3`  
MD0"!`!`)\$`@0"1`-<`\$\$\$2A`\$\$\$OG0"!`!`)\$`A@`\$\$\$@`@`\$\$\$#W`(\$`G`\$\$\$0`/<`@0"1K`  
M`(\$`D0"\$`\$\$\$0CP`\$`\$\$\$0CP`\$`\$\$\$XOP`\$\$\$=(`A`\$\$\$`.\`TP`\$\$\$@+,`\$\$!"`/`\$(0`\$`:  
M`!"`/`(\$`P`\$\$\$08`\$\$\$!`#?`(\$`D0"!`!`)\$`@0"1`(`,\$\$\$\$20`(\$`D0"!`!`)\$`@0"1\*`  
M`(\$`Z0`\$\$0`H`@0"1`(\$`Y@`\$\$\$`T`@0#F`\$\$\$!`K0"!`!`)\$`\$\$`("!"`!`!`)(`@0"1`(\$`(`  
MD0"!`!`.T`\$\$\$BF`(\$`[0`""`\*8`I@`\$\$\$0`.@`\$\$\$""`/\$`\*8`\$\$`#H`\$\$\$@AP`"!`!`)\$`@0"17`  
M`/T`\$\$\$+T`\$\$\$@@`\$\$\$\*0`@0#O`\$\$\$0P@`\$\$\$!`.0`@0">`\$\$\$]0"!`!`)\$`@0"F`\$\$\$`H`  
M[0"!`!`)\$`L@`\$\$`(\$`8`\$\$\$B`=\$`(\$`D0#T`\$\$\$!`@0"?`(\$`TP`\$\$\$L`\$D`\$\$\$8`,`@0"1?`  
M`(\$`D0"!`!`)\$`L@`\$\$`(\$`X0"!`!`)\$`@0"1`(\$`D0"!`!`)4`\$\$\$C^`(\$`D0"!`!`)\$`.  
M@0#`\$\$\$`\$SP`"!`!`)\$`@0"1`(\$`M0`\$!"`(#?`(\$`E`\$\$\$`\$\$\$\$@0"1`(\$`D0"\$`\$\$\$`"K`  
MCP`"!`!`)\$`@0"1`(\$`D0"<`\$\$\$FP`\$\$`(-X`@0"1`(\$`\\`\$\$\$"/4`\$\$\$BP`(\$`D0"!`!`)  
M`)\$`@0"1`(\$`\$\$\$\*2`(\$`V`\$\$\$0`/D`\$\$\$#`\$`.@`\$\$\$5`\$\$\$@0#8`(\$`D0"[`\$\$\$`;  
M^`\$\$\$(\$`X@`\$[`\$\$\$@0#8`+L`\$\$\$++`\$\$\$`U@`\$\$\$+L`@0"1`(\$`R@`\$\$\$>`(\$`+I5`  
M`(\$`D0"L`\$\$\$`\$VP`\$\$`@`X`@0"1`(\$`D0"!`!`)\$`@0"1`(\$`D0"Y`\$\$\$!`O`\$\$\$`\$`<`B`  
M`\$#[`(\$`\\P`\$\$\$`\$`@0"1`(\$`D0"!`!`.\$`\$\$\$!`R`(\$`D0"!`!`)\$`@0"1`.L`\$\$\$BOP`  
M`\$\$!`^`\$\$\$(-@`\$\$\$!`O`\$(X`\$\$\$""`%/P`\$\$\$\*`\$\$\$""EP`"!`!`/P`\$\$\$\*7`(\$`WP`\$\$\$K0`G`  
M@0"1`-@`\$\$`("!"`+L`@0"1`\*0`\$\$\$""!`!`.\\`@0"1`\$(P`\$\$\$B`\$`\$(P`\$\$\$B`\$`\$`\$\$\$`("#`/  
M`(\$`D0"!`!`)\$`@0"1`(\$`D0"!`!`)\$`@0"1`/`(\$`2!`\*\$`\$`@`\$\$\$!`.4`\$\$`("!"`+X`>`  
M@`\$`#H\$`H0">`\$\$\$Q@`\$\$`(+`\$`@`\$\$\$!`(\$`H0"!`!`)\$`@0"1`(\$`X0`\$\$@`+`@0"1[`  
M`+D`\$(#U`\$\$\$A`\$\$\$0.4`@0"1`+`(\$`""#4`\$\$\$`H@`\$\$@`.\`A`\$\$\$`(\`L0`\$\$\$H\$`\$[`  
MX@`"!`!`)\$`D`\$\$\$`(\$`,`@0"1`!`D`\$\$`("!"`/H`F0`\$\$@`(\$`^@`\$`\$`\$!`P`(\$`^@`#`\$\$\$`@`<`  
MV`\$\$\$!`<`"!`/H`F0`\$\$@`+L`\$\$`(#!`!`D`\$\$`("!"`/H`@0"[`\$\$\$V`\$\$\$!`!`)\$`G`\$\$\$!`(\$`-`  
M]P`"!`!`)\$`\_`\$\$\$@`+D`\$\$`("N`\$\$\$@M`\$\$\$!`!`)\$`PP`\$\$`(\$`T`\$\$\$!`!`)\$`@0"1`(\$`D0"!`!`M`  
M`)\$`@0"1`!`0`\$\$\$#W`\$\$\$!`NP`\$\$\$M\$`B0`\$\$\$8H`R@`\$\$\$@,P`\$\$\$!`!`\$`\$\$\$!`0`\$\$\$""!`N`  
M`\$`\$\$\$!`0`\$\$\$""!`!`\$`\$\$\$(\$`D0"8`\$\$\$@0#[`(\$`U@`\$\$`(-P`\$\$\$C`(\$`H0`\$\$\$?`(\$`K`  
M@0"A`\$\$\$!`@`I`\$\$\$@0#J`(\$`D0"!`!`)\$`@0"1`(\$`Y0`\$\$\$\*X`@0"1`(\$`D0"!`!`L`  
M`)\`\$\$\$#T`\*\$`\$\$\$""!`!`/T`\$\$\$W`(\$`D0#`\$\$\$!`V0`\$\$\$0`(\$`\_`\$\$\$7`\$\$\$!`@0#\\`(\$`G`  
MF0`\$\$\$?`H`@0"1`\*H`\$\$\$`\$!`!`.D`U`\$\$\$0`(\$`OP`\$\$\$@`+0`\$\$\$!`#,\$\$\$\$!`E@`\$\$\$@`(\$`D@`"!`!`)  
M`,`\$\$\$34`\$\$\$@0"1`(\$`D0"!`!`)\$`@0`\$\$\$0`)(`@0"1`/H`\$\$`("C`\$\$\$`H@`\$\$\$M@`\$T`  
M@0"1`/`(\$`2!`!`-D`\$\$\$C`\*`(\$`R0`\$\$\$`,H`@0"1`(\$`D0"!`!`.\$`\$\$\$\*R`(\$`D0#E`!  
M`\$\$\$I0`\$\$\$8L`\$S0`\$\$\$0`+T`\$\$\$&+`\$(T`\$\$\$2&`\$(T`\$\$\$2&`(\$`D0"!`!`)\$`Y0`\$\$\$`\*,`I`  
M`\$2I`\$\$\$@`]0`\$\$\$\$/`\$Y0`\$\$\$`(\$`K@`"!`!`.<`\$\$\$+=`\$\$\$!`T0#`(\$`\$\$\$0@0#+`,`L`\$\$\$B!`Q`  
M`,`@`@0"1`(\$`D0"!`!`)\$`@0#O`\$\$\$L@`\$\$\$"/O`@0"1`(\$`[`\$\$\$\*`<`@0#L`\$\$\$(!`  
MIP`"!`!`D`\$\$\$3Z`(\$`D0#B`\$\$\$!`@0"Q`\$.`(\$`&!`!`+\$`\$]@`\$\$\$X`\$\$`("1`\$`(\$`("1S`  
M`-8`\$\$\$+/`\$\$\$0Z@`\$\$\$0`@`BP`\$\$\$0`@`@0"1`(\$`M@`\$\$\$0`-T`\\`\$\$\$8\$`\$\_`\$\$\$\*`<`!`  
M@0"1`(\$`D0"!`!`)\$`V@`\$\$\$0`/@`\$\$\$39`\$\$\$!`@`\$\$\$<P`\$\$\$!`#8`\$\$\$0W`\$\$\$!`!`)\$`H@`\$\$\$L`  
M\$`(\$`\\0"!`!`)\$`P@`\$\$\$`\$;`(\$`\$\$\$H`\$\$\$!`XP`\$\$\$MH`@0"1`!`!`)(#Y`\$\$\$@0#`]`(\$`>`  
MD0"!`!`)\$`@0"S`\$\$\$!`X`\$\$\$!`!`)\$`@0"1`!`P`\$\$`(#`/\$\$\$@J@`<`\$\$\$@0#W`(\$`\$]`\$\$\$9`  
M0\*P`\$\$\$+U`(\$`D0";`\$\$\$!`@0#X`!`!`L`\$\$\$&!`!`/`@`@0"1`(\$`D0"I`\$\$\$`@0#J`\*\$D`\$`(  
M`\$B!`!`.H`H`\$\$\$8\$`\$P`"!`!`T`\$\$\$`(#V`(\$`\$P`\$\$\$`(\$`\$\$\$@0"1`(\$`LP`\$\$\$@`.\$`\$\$\$0"1`(  
M`\*8`\$\$\$\\`\$\$\$!`@0#S`\*\$`\$\$\$&!`!`.T`@0"1`(\$`D0"!`!`)\$`@0"1`\*\$`,\$\$\$\$!`!`/`\$\$\$!`  
M@0"1`(\$`D0"!`!`)\$`@0"1`(\$`D0"!`!`)\$`@0"1`\*4`\$\$\$!`!`!`.X`@0"1`(\$`LP`\$\$\$H`  
M!`.\$`@0"1`!`X`\$\$\$8`@0#V`(\$`D0"`)`\$\$\$X@`\$\$\$<`(\$`\$]@`\$`\$\$\$@0#V`!`!`T`\$\$\$""!`X`  
M`/8`@0"1`!`X`\$\$\$`("!"`/4`G@`\$\$\$@`(\$`\$]0"C`\$\$\$0@0#P`\*\$`,\$\$\$\$!`!`/`\$\$\$0`\$`\$\$\$3`  
M^0"!`!`)\$`@0"1`(\$`D0"!`!`)<`\$\$\$C`\$.`\$\$\$!`!`!`+`,`\\0`\$\$`(\$`0`\$\$\$CH`\$\$\$@\$0#`!`!`  
M`.\`\$\$\$!`!`!`\*0`@0"1`(\$`D0#`\$\$\$!`!`@0#3`(\$`D0#E`\$\$\$!`!`S0`\$\$\$O\$`\$\$\$P\$`\$\$\$&!`!`:  
G`/`<`Y0`\$\$\$@`+D`\$\$\$&!`!`/`<`P`\$\$\$!`!`/\$`\$\$\$B!`!`.0`@0"1`(\$`D0"!`!`)\$`F`  
`\$`  
`\$`

end

size 17094

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### 1.335 MSG-333 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Wed, 15 Jun 1994 20:05:11 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

Well, it was mentioned that Essence doesn't work with Imagine 3.0 ... it should be rephrased to Essence v1.0 doesn't work with Imagine 3.0, as v3.0 works just fine. If you EVER plan on upgrading to Forge, you will NEED Essence 3.0 (2.0 was skipped). Essence 3.0 installs itself with .itx extensions ... of course, this was covered in the newsletter by Apex. Also, I'll use this time to announce my review of Forge in Amiga Report 2.19 (ar219.lha on aminet)

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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### 1.336 MSG-334 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Wed, 15 Jun 94 20:40:51 PDT  
From: ual97@freenet.victoria.bc.ca (Christopher Stewart)

>Here's the problem: Take for example the bump texture from Essence I.  
>To get it to work with Imagine 3.0, you have to get the installer to  
>save the .ITX extension (just like for 2.9). The bump texture is then  
>saved as:

>All of Imagine 3.0's textures have a lower case itx, and it doesn't seem  
>to like the upper case ITX (the textures don't show up in the load  
>texture requesture). This is very un-Amiga of Imagine. It should not  
>matter, but it does.

The installer for the new version of Essence includes the ability to change the extentions to something that works correctly. It's worth the money (IMHO) to get the alpha-channel utility. It's a wonderful boon although it often takes some thought to implement (Forge helps a lot).

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"I wish there was a knob on the TV to turn up the intelligence.  
There's a knob called 'brightness', but it doesn't work." -- Gallagher

ua197@freenet.victoria.bc.ca  
cs833@cleveland.freenet.edu

Join the Animation Sig!

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### 1.337 MSG-335 Subject: New version of ESSENCE ??

Subject: New version of ESSENCE ??  
Date: Thu, 16 Jun 1994 07:58:13 +0300 (EET DST)  
From: Foivos Kourendas <foivos@theseas.ntua.gr>

To ALL<

Is there a new version of essence textures ?? What are the goodies that it provides ?? How much does it worths ? Is it faster ? Are there new textures??

Where can I order it from ??

Yours sincerely,

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Email:foivos@phgasos.ntua.gr

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### 1.338 MSG-336 Subject: Re: Imagine NewLook Please

Subject: Re: Imagine NewLook Please  
Date: Thu, 16 Jun 1994 09:13:53 +0300 (EET DST)  
From: Foivos Kourendas <foivos@theseas.ntua.gr>

Mr Kent wrote some time in the past:

>I know what you mean, since Imagine, in its current incarnation, doesn't  
>support the display database, but I can say that it promotes pretty well  
>using the Retina promotion utility. I'm currently running Imagine at  
>1280x1024. Everything appears to work as before with the exception that  
>mouse tracking wraps at the right edge of a view when moving an object.

I have a Merlin graphics accelerator that lets me promote ANY program (Since it uses wb 2.4 or above) at resolutions UP to 2048x2048 . Such a case promoting Imagine in any resolution from the range : 2048x2048 , 1600x1200 , 1280x1024 , 1024x768 , 800x600 ..it doesn't have a hitch!! NO problem at all Moving , Scaling , Bending , Scretching and ALL the other functions that IMAGINE provide are running in EXELENT speed without ANY problem at all . Like running it in amiga resolution WITH ONE DIFFERENCE!! Higher resolution modeling!

i

In fact , IMAGINE has a problem !! Just try to promote Imagine and go to Action, Project ,Preferences editor! Bliahh!!!!. NO using of the extra space . No centered screen!!! Sure it is a program that it wasn't ment to use higher graphics card!! \* BUT WHY?? \* WHY other editors works and they don't?? WHY Impulse doesn't follow the market needs ?? It is like C= when developed the AGA chips the other clones had already forward to 24Bit cards!! GREAT lose od interest!! (BTW Who is the new MAMA for the AMIGA?? ANY NEWS??)

Yours sincerely,

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Email:foivos@phgasos.ntua.gr

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### 1.339 MSG-337 Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.

Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.  
Date: Thu, 16 Jun 1994 09:05:47 +0100 (CET)  
From: Joop.vandeWege@MEDEW.ENTO.WAU.NL

Hi Mike,

There are a couple of ways to do this:

- Lightwave will import 3ds, Save it as Lightwave, use Pixel3dPro
- Use InterChange, it might have a 3ds converter ??
- Use T3DDD lib, it might also have a 3ds converter.

The first suggestion I know it will work but the others I'm not sure. Can't you use a pc program to convert 3ds to DXF ??

BTW how to get and where are those objects

Greetings Joop :-)

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**1.340 MSG-338 Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.**

Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.  
Date: Thu, 16 Jun 1994 16:12:51 +1000 (EST)  
From: "" <williamp@triode.apana.org.au>

> Hey y'all,

G'Day

> This is an echo, of Mr. T's request. I just locked onto an  
> amazing 3ds object of an Aztec city that I'd love to import into  
> Imagine. I've got Pixel3dPro, and it won't touch 3ds files. Maybe  
> there's no way to translate them to TDDD, but I'd love to render this  
> Aztec city of gold . . .

Interchange 3.0 should be able to handle this(as John Foust on here will probably add),It does convert 3DS files...BTW,how large is this Aztec City model,filesize-wise?

William John Porter

williamp@triode.apana.org.au

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**1.341 MSG-339 Subject: Amiga**

Subject: Amiga "Melt" executable and Farewell  
Date: Thu, 16 Jun 94 05:01:03 GMT  
From: "Glenn M. Lewis - ICD ~" <glewis@pcocd2.intel.com>

Hi, All!

I promised to many people on this list that I would create an Amiga executable for my "melt" program that appeared in the July '94 issue of Dr. Dobbs Journal.

It turns out to be so small that I decided to attach it to the end of this message. I hope this does not upset anybody, and if it does, I apologize.

Usage is: "melt 10 normal.iob norm" for example, to create 10 extra melted frames of "normal.obj", using the file root "norm", thereby creating "norm000.iob", "norm001.iob", etc. I highly recommend that you run this program from a RAM: disk so that your drives don't get thrashed too much. :-) It is heavily I/O-oriented. Also, I compiled it to work on the broadest range of Amigas, so it is not a speed demon. Be patient.

I, too, was one of the original subscribers to the IML when

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Steve Worley got it started many years ago. This is, in fact, how we met, and started tossing cool ideas back and forth for Essence and a number of other projects. Thanks, Steve, for starting the IML!

But it is time for me to (temporarily) say "good-bye" as I am under a great deal of pressure at my full-time job to crank out a lot of [working] code in short order or I may not be able to take a trip I've planned on for a long time. Therefore, I must have no distractions and am signing off of the IML for the first time. Hopefully I will be back within a month or two. Have fun, all, and keep on rendering!

-- Glenn Lewis

```
begin 644 melt.lha
M&N8M;&@U+>ES "X[@ W:K/' !&UE;' 24Q25HC>]??=HDK-U2_^88XY#F
MAD63II'&\[FY&B.1A,3"6:N&(!Y8CB."L+UZW@^EF".*9$+I,=' 2$K7EK$S
MK/+7MR>W'MU[1UZ]=>DTD]=?7KUUXIUGU]=86:E%Z=)UUVE$4_WW[YYF8 )
M,3UVVU^!?GCRY?OAWPK^ ._"WN[61QQQLBB/]B3_*U/:HBQDX181^+ODFIH\
MBJZ3-%F7@U\TJ"63@HQ3ZF)!L [W4E<A[F4W-W=8G)Q>WQ+J*IY#0*F*&*
M+7O5_Q5Z#="1*5^*O26H1>H_,4NRB[" MJQ@T#$S$79V.O7;VBRJ#1=O5L ]
MFWBM0R; @53KU[N7<P' I*K06>G@WL79[T"+(E^@)F3'/QHNZ_$S$56V&OBM1
M,6\5 0JW7K]%FDKDV[C7Q?!?D,++4)UZ_2WAB3R%RJ\M^*O1X(%W[Q:_HDB+
ME8G/%JXO?N?S KR*J0SQ:_?;G?;EE1DP_?^W]_[4%=,49_1B?!B]SO:O-P%;
M<'*WBJE'D-V\,IYWB*U;F \7/V+4@6.'0;@#J$%<_ W]7VNP(A1K!H_\G:[0
MD#4Q[9(*^U_0@2"K*;J[YS 5VJY)S,?P+- JX"GO3@(^"U)FW0DB9O8UH^BG
MZ#=#E(D#!N_2%WOV1J-8@^ *N1?13Y"C)GB:,ED7N75EF: $BO=66C7OR26(-
M26,WT7M^Z/MZII[&.=?%0'J\VF^8U\57FTYDW*#2+W;U8@W=:@8'C$&D5J'J
M]D^BM.87&6R;D:KO4#$6R:1>_>FL_54NZED")!;UR48:Q W4O5P&Z@PN/;\7
M><0[F=XFDJG6AHJ7QI-]G<Y34--XY;6WB[/Q"\=PZT*E&61Y"I9)E)(N=-,6
MZ_725?.\1" ZT(0[V@0'7[#7G!8P K&3*0\ $P.\C)C^)+I*O-Y99%^JH2_GK
MD,MD+=?JT/*G>)(G'<I5IC-1P8./P0%#"S\![$F&SC-$AA<M >+4,D*>'3SM
M"+S$'Q3'=9F,G)U]!D[[$:Z&6+QA#(DV&W;2&0_4,6HG?F,58<;6)F+A[,P[
M$[#YS&C+TQ3 , (Q5AQG6PS%P\)!SN"._V;_IEBIFIAGI:.'F?4+'^S67Q8QP
M%6!QMABD26F]J%R,Y'O3BQ6GQ6T0SY+1B_M]0R_[]N$9<(#A"Z)\'*[6PC?8
M&K]O[<,W^W?X!OZ+FWAOQO4*,V ]&P3QGI<J%E<G>E'U#[T6MO,5-M7$GQ6)
M?JO._:"%8IX?T;8^G^Z_E@>9^;?%3!4]-V.\4P7TX>"R,/!6"F"L<QD[![T(
M>#M427H3XPFJ9-T*4EY\5J%,5G;W%;],70V=\BB -,3NMQ"UYB3X7,P]>>V^
M3!./OZ+IZ3K3DRM3TG[:W4(NF/D_J]72?0XOYM)U,%3TG[;U5,%:0\%ZFD]/
M;_/I.I@'2?MLO#TG[:>4//@7N*W^D]/J[[2?U86D]% "TG.B;VT?#TGC-Y@G
M'3NKS2<RI,8<F8Q1*6,3TOC-HH=+)1)W@=73&G+YEF>GAZ>G,8^4*^TO</ZF
MG?C6/3T[D>IB)]0\B,3C(>H<8O4Q^FO\?O]1?&=]-?/@0=1^A;0M1XPU?M=_
M#U'[6NP%Z?&B8>H:8_VM/):]5M' 'YRD,'26FX29IG-%P,CFSFC-J&C-SA])T
M.T>CF!25^=^T^(RZA,^D8JT->JLSDV0XE:C XRZ;1WIKWH7VL:I@JZ$;\V:N
MPYL,WV'J_06<A>%G+ 7QQRSQTX?@UORK8>8GDO/SB&6&>[<ZVHSWI;S *GQ=
M[#3'O0E@_3P'G;R$4^./C,[*#>+Z6"4_BU73*>7.4\O.'6UORGB^.H4[X^>[
MDZFIBGD/F*>1OBGA!,7N5"GMX13RY\9]2\*?+IE.FPLO[5'D2A3OQE$ $O'E>
M3&A)+1OHD,CZ]DU)@&2E6RB)WB$OA".O^<11I?H$0UPG4]38)W]-K;HF$ (=C
MV;9O_<W+1 M_PRK-MC^*1Z:5TB:]7-9@^/@'ISV_A_#^+;3*M&L1VR"NA+,8
M@X*P. KCD.P WO*$J")%Z4/&_Q/C$7:C.8)@TO*AJ/R7L$OQ5*3 E@\L27#S
M&GL8\C-*2!;,W2VEL4>03$R_>*R(S7B2)0KG5-?YAL;V\EX<*QK3V/=ACYA
MV;^"/A0FQ"K^SD-<3$++[9/"X;*G2S<$)=B] ;LZ'5,N[+;;!"XC,]768IN6
MS>+C#;CSDf)K,-T+&0\HUBDL?QN^Z])_0?(-=UDDC._Q&E]P/*\N.-4]:# =
MA;LZ"TO />' ]P -]#V;S&GO@_T[P/M3A_ >VO _-7P?3?00:^\#VE'\N# :
M@G#>.;4-1$U!/2'0,PB;&X)8YO<P\1H.$=">/ORCS?JW@#LS@+%1),I *7T'
```

MJ' LUX2#31A8J6^G.C2O& Y=JJ:@==8Z>R9BS"&\;"7[@)K2Y^L!0C?' "RID:  
MW#2\*^?>>\_B<2W)MHU5EIGQ%MT,) \4!#0KBC&"-6C[F0M\+^U=WA\*XTGK!JN  
MH2I]28+H,F'974P0E\_W=BP>2"#[MV&0MR1H2PVR983XJL.@^AC01^&UR#<6^  
M9%'6I9MR,S>1D\$9R%0%>?&<%Y=)38M^??6\_//;R:F\*O .I#\$<L/= ?#] \*\*H  
M4;G#2@HYI\_=I\$KSCOR4BNY=?KSOD+;/[8V6O=H;&WNR?^108%"43\ (=JW\*"Y  
MZP0<FSTW%'>+B@Y25^;N<2B3<9>O-;@)Y9\GL!1XZ#XF[61+=#[N\$&X0AGCW  
M?I"[W1KN3UQ<(?? /=RI[OU!=^NI=H7?' /=QI[O7"[L%&NT%WO#7>;NCW>O  
M%WHE+OC"[M3W?%/=V(N\RI= \P7=P>[VY[O8B[QR9>A8LHG%M6Y2I@L,2>9DZ  
MMJ0[^98!NJ-IGVET &14#=Z\*:P!LLF&W5<H&M@&T9\;MZ\$NTXP 6R@#J5 \$V  
M>S9P'E@!LP MU &T4 9D +,X#S0 ZW)\_&32I+::\FP1I])3=OG"YK1 @UH]N  
MS! :H<E\_:4R>U\_:2HQ5 0&5B-\_1C9MK\=;C&4)!% )7\_?^YEALO9S) (P\$;-&H+  
M&HOE2 ^L#\*#Z2R06F8]8CE2=<'WGGBWDD3FKX-\$AD<A\9BG\#X02,>AD0R0Q  
MX036OQSCX\_UW=<\$1<T?=-\$0 V#;ZI^4[Q&G%"J[\R\_.44Y%Z23RF3A=(+.#T  
M\_Y7FI]&#;'\LB-T<TP)/,V9[^/%\_OST0JCF=:;H-GLG@<)N=X%\_U-G#V8XD  
M= ^7/RIB"P-<GCIL9S%!>:#SH.N9'W&&T'JM@<?:#\*7!R3C81)QYR3:'M4#@  
ML:?)4\*\$LON3VK1!LW7&R\$]N,#S'2'VY!?F.-@-/6\$/K+4+^4+\_\*J% ^L-U"L  
MB^#RJS\Y+'D4.C-<S5?!Y=;^<E[W1"JL3XR9\_ ;7G'" ;D;7\*6\_K0>.' ,4Z?'#  
MX.:0.1^1@ZXY?#SONDO3Y6P\*TZ/NE\$)X/!USGTD3UX7(\_#+->F6='G+S<MB.  
M9&WW>[D&V[W[\_S ZRZFZ,'&:"V 7\_KZ'H2#;T/0]#64) .D@ [6N[>#O/0;\*  
M&PBIJ2\_\ ;0;MWN.F@&HQ/O;2^(\^A[O67I#J\$&;'Z)/1U'' )L0]]?AB)H)DQ  
M[P<E@I>O7Z>OWP:"WH, .GJNGE8S5G!.O+W&?3UY8PB]/M3!98^HF2]7P4R;[  
M)0B;X5C>,F<+(<K.F,EJU\*-/)'";;7J6Z@ [&@=IK]' ]/KK56:~76\U6MNE7I  
M(\CO#LJ\Q\ :K\*FX.^;S9CXRYQZ/\*%'T3T>\*94\^9J?1<ZLUS\F<0PM"63F3Y  
M\_(H-" ;#;T%OD\6>QE+Q(\$=0L\_J3VJ2>[ORQQ[=\*A\*>3+^@0.B>R41/GK1/%3  
M8BH([ XC(B[V36E"\ "(T07-,#SR@'Y@:1R38)Y[4?-@+\W+N--913Z\_-]#F  
M:[. \$Y4Y7TZ: (\G9MK[54<CN7CT[<8JW4#X3\$SEN8>[F3V[8XB.>WZ) [6=/  
M:T1[7\*C<7<9=1L=' \$CIAQ&T@^Y=J.4G1H)E;\_OSO@KX%7> M> '3C[3F!?'N  
M1N[.IA/R:OIA/E %V ^ZHX3O<34[4&'%YO\$U)HW[%YQ#)#G?';+\_O'F0A<^P  
M6K>DKI%,U]511^E+5SN)!&HH\_EF9[> H"V-X"VUZWHY5-P-KU >VZ8.PA ^  
M\_/<ZA0'7WB=.H@&>4S@V?9G^IIXYHWTX31C;6BD\_8)\&C/8ZD6/&%B;=-]!  
M"Q]RIOIP\$,1]U( !K18P(. \_IA^%@>O-! 1HG,BQJ5/M.I]-9IITU XFT!@^G  
M%C7J86;[0&^G :T.Z/2.8KX-. \*X]GM (F#:T\*>ABIY\_,3/GFXPX.+&?V)P>Q  
M4MW1[<,5<^FA\_LU+?5'M[,6]:>WLQJWN0QXK&K 8[LU/JB;/.J!>\-\$;CG-6  
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M3F\\_X:Y\_0IN@)#+P71&AE.Q(!Z&)Z@'NZKK2 =+>]>0#AFGA0\$>[BL"0#I6  
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M?;(!\_#QWW2 ?H[\*&;\_1H\ W\W;\_2 ?-ZKZI /T5\_8D ^;=]>0#B.Z\_\_T@'S  
M:\_ZY /=:\*'F[I\_]<@'\_%L^S(![IM^UYZ%Q@G'^+0?5(!^A\ /8D \_XI+KR ?  
MH:WL2 ?-?#]<@'TF[AZ3]!'ZY /FM1V9 /T&, /2>YW&"<>:F^Q(![G8]F0#\_  
MAYW9D ]S1=F0#\_AUWVR >JKX>H=RL[\$@'\_ "Y^R0#\\_=P]1^?58"/X5>!(!^  
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MB/MD \_ .KKV0#JXGZ9 /F-S>QU^&\$^18]60#\Z\E\_\_R\_1+\_ \QHOMD \_RVM[(!  
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MK2 ?PO,P) /X53U) /X5']D@'\+'?]R ?+W&# '@YS57L=WR^ZP8ZK.44/9N8  
MK;X/UF#(!YR\DZ<QE;X/I/H(-9>![.^#Y?ZI /EX\_K2 >;LX>(M[3!D \WK;  
MP!L>I(!V\_H]60#MZV##)9MTG"! \9C+V0#WZ=^6T9H/KWJR2\ \$=" ;\$[E[W BE  
M,O5%B&I=Q"KR2&%)^!3#HX+N(%7)E"MXSJVNZYNO[=IA31=/' +6;;'<M,T<?:  
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MN%H.+=5S/Y6\_"Z=OA3+@SV3P.9F?X9^\LW .GG\_T'NJKL\$]U3\_J'NJS6 >ZI  
MR;.:."^B! ,@KKN=>4R]9H9)D&"OI6TE 4HVH777\*4[04V"4BG5Z/J&BM:E/  
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M+6\$%]'UQ78M80?T=:G\$'9&^?/7< /F], 'VFF3?:8M^=^5XIWVG17[[2[RH?6

MZ8[[3HE'VG10A&U.^T^\*9\7\_+J3>=K0)\#;O\$0>"5VQ[#XWE+CKOC?+SG6?&M\IL>N^-\MO#[6\_CYF ^-Y31=1\;RF<^]\;RDCUWQO24?6?&YZXZ[XWI\$;PQ6MF THSUC][XW/:+LOC=5Z\_VOC<R^Y\;JJ.&;]Q.X!OY/>\_ ^/C>3T?U/C?X]IMV'QO)XSKOC?X]\%QMUR\_K?&\_X,-RO\_&A];XVZ]'LOC=3<0]>;>TP3C=.\_JM?&ZG4]A\;=177?&ZEUUV'QO);GZWQM\_8P])\_(YUWOC>2I^R^--^1N(>D\_\ /6P3MCR4EV'QOR\*+LOC<[P^R^--^0Q[+XW.Z?[7QNE?0]0]'L>P^--SLG]CXWHZJ'J/MRLY@+TY'CX#XWRIX/C?F=9\;R.R^Y\;\?C=-\;L/I?&CE^F^--P@O/MNJ^--^M/K89O\FL^@LU?VOC?CXR^?&]5]+XVYU]\YP@E]J>J^--U'R0RGMN%@E.YS/VMOC=1YE\^--ZSZ7QMRLOBGA!.>M^J^--U#J\\*?%WKO;X-EU'NG&Y?ZGQOP:\_YQ%MGV'QOP776?&Y5A#<J\;P>J^--RUG>OC?>7."^--XWUJ\$I0.M\_><.'C>,1P'QM'M<?>^--HZ?K/C:--@/C:\*74?&T9W['QM%E\_V^--SEI@O2\MH[UZ+G/7P7FF61A[M-XNCO@JP7QN6C;P/EKX/(=8)!];7@>NO@\_?\$4^--SA=9\;[\_U(>())YLL%\;[M^LO '4]1\;[R!U7QOO\*."^--]BTWQO^J.O7QMED\_.N@4+/\])R\_F\V;HMB)5H MJ,C7(9)GDO=W#7(A'E"-/Z-U1(/Q/\*SS:U3Z9<'HYL.-<;Q/8)BEP9WB-+.@MANZ<>FOW-K@>Z]'D=\_\*P>H5!M,;TT]W.Z0RP1QECT9\$49\$]&-%&-"C.M/5;BMJW/1E!1E#T4''GA#=8/ID45X^L\$,B'FO%4)?[:!^3!J6\*"--ZR%9YD#\*Q1Z!QM4"KOKO'?W;+!NTOK.&9M\$3.-G0E2946J^@R9W<N\*,'TPUOF9Z2@)24'!^9PMDR3#RC!L=RAV\/%Q;ONW89"W5N:\$O@ID&Z';T):&-0;BQRXL4A1N=!H\*\$O&]M)#MV16E7:0.15R2I#" "[BF;=!R@N>Q3+"(.7XTUZ31!RDK\W<A:UCE[.9(SWMRC4%BT7RO0#[G#('YC5F>(:DMIY)\$2N@06[V!O:[D0 LFWUF9Y!Y?PG,TE3M2]NV2/[[-#M:\$N[DSI+C\*^]X;Y>>QCU-M\ -Q)+J\$FG2.'B<J][KWT4I9\I3M2?/J"(Y%VF[.(RP\$=&<1-9[-1"\_YR1:>B</&RO>N:4Y(M\$WW)#^1(OCA\H ^.MI8)(T"B,?5)&7.(B>1XNVI258A2U9II0I\$J7X O.[XHB#I/B]B^B<5E"C<5GM26%'\_,\$\_D\_0FII'BZ]\O .N\*1'E>33Z UA!T?Q>9.&L"EAY8DV\_X(4:-XN3IM3\$\*@<A6?\_) "C1?%JZ5,A90Y"RM^A'.VT(@QHCWG 71@@VX\L2F7=<D71]4<M!MN.&5?>P%>8NC,+I^D\\*3N&Z+?BU]Y!GS-0NX@W/3M\_7-;\_,&ZM^4V5F.FM%8UQDN7@@J?S!;XX7Y\\*OFJHO;\^BC4,\*#9TUZG[<.W>F2^%1C#ON2&8;?=RM0\YM\_QROJ-TK<-?%QD+D=[:2@8K/#:\$\_&Z\*\*]3C?Z:\_/\$8X"\_-WE?H7Y\0+MZUH^U!E^<L>\$-G7=<'7\_T> @.TSQ,?>LV6JZ? J+7]]G^ R"\*[\!D;V WELS MX#+8(2AYOX#(RK(0B#%3%\_P&2G8@=V\ [Q'W%O4'<?:B\$WU0A4-4I"H:DVG]K MCCPJ&LOX5#C]@ (4G5'A4-8I"H:R\$(MCPJ\$0IG\W+?T\*?<WCZR#W2X^H[\$\*;QM[OKPIO/V'6A3>/C>O"F\_\30VMOWLO@0IO'<+J0IO';C[X4WCM/UX4V^W?6A3M>.=]>%-OM?#;7AZC =T<CQ^%-\_U^+LPIM]&?;"F\_ZZ[[H4WGKR;FZ2XP#?\_MKE?\_(4VVM?JA3>>0[\$\*;;:SKPINDEX78A3;;\*\_7"F\_#;0X!?!25OUPIML79A3=M([AZ\U5/@G'X&R^J%-YWG=B%-^!3=>%-YW8=B%-^ T^N%-YMC#TGSN:^N%-RM\_![,\*;\*SLE#TG\_'.X)QR\_F=B%-T>Y[,\*;\*EV\_9A3='4=F%-XWE\_;"F\UO8>H='M&]B%-XVP^R%-O>-#U'J5F O3C7.! "F\_#LY+7Q''ZT\*;QL=]T\*;>S=\_ "FXCE?M3"FY:ROX4W#\SZ75A3;U7#-\_R&>"6<L\^V%-O-9>PIN(N/IA3<LPO8/G#"<MQSNK"FWF9AE/HZG!\*?O\_;\V%-^)S+V%-Q',^F%-]\_1WQ3P@G,3W5A3?B;"&4M\_C[^]@MO?XCJ0FF0ILOJA3>,M\_G\$: \_L0IO&;#K0IO\%/#@%?]3;JPIN09WL\*;M[G-X,\*;\_JBJ\$LO'H\_N6\/\_&\_Z=?@0IO&27WPIOON7UH4WWW P(4WWWVWZD\*:[ZMQ^R%-]]7?)PIOOL9@PA?NK6]A!?!?1F#!Z>ZU\ /9ON=W>A\KQL&%-]U4W@?Z-M'\[#Z"#G;P/?7P?6?5"FY6BZT\*:[I=>8C'8,\*;9\>& XCG=2%-XCX>K"F\1NMX,\*;9ZI.%-L:J^A3:::\_;--:7O=LG"18B\$Z3G:3P\*]#AU)'<\]F/NQ'VQ<=V2M3](04'CJ.D,>' /WBC[:H.1U1E354V,\_R=E/9--TODJ]XT4@O\_&\$CX\*#<SP+MXV]/!?[@4=P:"\_YH4<X@D40;JG299%A\_>71N -::0.[0.LZP9#<M1 2<99!MUC7N8#UD;%3X76FPN(!6^--HSX7Z="5#OTB5\,^ SQ\_+F'@\1ASX/3\*8.VO+FM//<T'S9"R/D+(48T^0A^7H:89#H[P;<'&X],;>+3.JY3)L[PF\&%DKCQIS9WM@>B8/[ZW4RN.O+ET>YM%,)7'P/RTMC> .5.V\*@W'WESF3W.J4&R5>B\_1H2IMY=JW)!,:AEAWZ@PV0X/3;O\_PV [^4%'M?9WCVOWXPLOM&(2,AW-[@ [VO^<KM%Y%&6\_@H%G7-V+(R\I="O@W+FN>49J:\$B4:RD23A7NX/>T92)> >6A<)2O+^MQQY;%RE\*Z!;P>696BE>4\*U'F5+C\*5VY7 \S)<RI5)%TO3-:M1D8^QK7NRW0^MA5?G[R'F<GKB:"]D1<\ (?0JGS[\$][P%+UL+V6%SRA]"O/L#WO'4068O4!<VM@^[P7OJGO=XI>RHO907/&'VU%[7GO;52]F1>MQ<\P?0F\_SZ0][<#4N=\$' #XYMMUR<"CP\4.6,:7FV;0"J+)E/-,HR=#[/-711K3\*>=<\$L%W'H>"\_5M!MRZU0?MW;.#!\_S^-:] /AK:\X[/NL.UO\_&6^"6.JJBQ#4L-"KUR&%4BC>&@5<F4\*WT'\MK?+W]NNPI!CU=Z8=V^F"\*\*\*^\$#R:5N;J!,T4],DZ+YB35FX7Q%L\,9&VA+\4G

M?E' 3<;IW\5U2;IK\*\_!\UQ\_Y ]ATP?V\_^C3CX00F>F+UR7#Z9QR\*9QR<!-@Q+  
M&&Y/S<C[\_<\*<CYG+5(\*DU(^Z-DB(2:IR1N=5><D>,3Y(XBJH2T!EZ4AO>Q.M  
M.&+70>F?A\_\L4=6;A\_\(Q%\P11>D,3XQ?5C[JAR^S&]@4)>"P"/ZRA++ZF>R  
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M\SY'ZKVX\$-S3SY)ND,/=2FQ%9?+\$67\M2++UYA?1<T\67\R\_BR\E'"+"\$^6>  
M++^8I%E\_,A".@Q9?:\Y\_OC2%8.#M<U#^N\$TS.&YIA2)SCCY62I2J\$?CB"\*4  
MG/C++..X']J5 /J6'NA+^\_8)\\_NQKG.BQHQ5HJHI(IXXREA3GDGPQF4\$MO84  
MR&HJ\^7P B+VK[-[UO\*> 2UUT!&E90G8\_RQ\_,/\_ (CZ@>BW[FI)4662Q!\_>7  
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M.GDC >Q8/(YE/T'G,^U:N"?/ETR##[EN66-@:2\<Y;X-B.RWRF(@NY.Q5/'!  
MKU^<?L6#R-0 ^@P,>[Y:F?YQW#@=G0.U#0GBT: SJ2SWA;@HT"\\*%H7.ZBK>  
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M\$<A&DM%,USD(105X0AQH.T3F))DY:EEX5CBA8L!8T\$\*Q0\*6JE2"TRNL?6F97  
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MN:D.\*="^@\*8OQ5)90&W?>+S;@C:4V[,VPC\*9 :/KZ?%6\*MZMI^[L5;S%N=-GI  
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M%\*"+7UQ\$<@U\$Q<GW92-G;;,JVKK8)6R;DGDEL--GV!H?6;<-\*'BJ9&]^NEGM  
MN?%?7/UHV]IS),O)%@%JV;Q Z7=;2QOH!#%)>HB"S=6#NM.B'<'X@3);]VE  
M' '2A-3Q244?AUB88>?%>QAL@-@:PYYN!RCHTMDTHX<X^:??&QN42BI\_39\\*  
MQL.X7MW\HADG5@8T7UJ;ASP+DV#F0K<P\*3X3G&M/P8X<^)]7!^4D160N5X0M  
MQIR?EH-\_)F GXQ?\$"TJVF>CC#6/\_\$%-02/I#'OW;JP'93FCKXXIU85.&GZX  
MZ9,30DAM'\I:0.YJZ.6A6/K#;G-/^T"A?!!YIY:)"=2F5W&=RE'=FQE\_AMI  
M S\_4[K<0IK/ASZSWFPJG FU\*2#+;=M5G76ADI\*2=9:=G4)[]^"ZRLT[%8C  
M="ZP=FJ[(;UWZ"&4=^@P#)OE,F:14N/[QV:K N\*Q:M28S%S=VH[I0U-RNL->  
MSV3<,\$/YYX,XKKQ8.!F;-V1.\_/#;2N0[5WYO<5:Y>A\_09B]5EGV-,J]R8#-B  
MO9'=-Y/<B),GBA>MNE:\#-\*K8A6=>/JQKDB7(TJN/:M5<,>W]89N(; '\*L@[D  
MB,JO6!\) #3N9E[&\$U2[NQS\]P\7#VL+N WJW8C.H).2\U&-AG;#-.@P\$<!6  
M!G/6/\_P#:-D&??AG9]X)=WC.&U-%^U[4T7[8-31?MBU-%^Q\$78A./=I]'/^;  
M1<[KD%IHG'(-PXJK60:>\_Z=ID;>+U,E\_\DOW!%5C)?Z&\_BB@G1#2/J1)\$Z<-  
MM\*Z=MRB(O7I+3Q%\$2-61LS:EYC)S :78BZDZ\~Q?CBCSG6H.Y4L06I&;-4P'  
M";D \*Z" T! ]APT]LS1T\<#<I'\E5GL!AE7!\''5&JHSY+\*)QSN\*MGS)K\$-59  
M\_K404\$?9BY#\$Z:<BFAK<:!'&)B(BC/+3BC,5L!#)1'RS/8(\$94WT;"RE"2N1  
M/%'XT!&XW]@VQN?[2-' )# 'T)=IZPL^%KOI!L5AN\_EH2B] <)0/C<:>\*>H  
M4)+XT7.5DZMJ2<5[ W&O^D'J\_<GKLQ7D4XL?!D,.&XYZ+,""?>Q:^%?B%/Q:  
MLV(O[L8/ 1@Y>GG:\AF.&\$3!BK6\$!YH'NQ3)T,))%BGL<"[X\_I:V0;/-)X'^

M8ZP[4<3\*9TFXW9&D5NX'&@,VH5"5-1(@RCC1?L\A;9NM#XWBTU.1'4;7@"FD  
MY\$RBWER5S6DY;P71Z-VYFA37.:L<A? 1Y\$2&]\*4PGZ)EU986C\_6WB0()C\$9X  
M<4\BF&KTQM,/]64P@!V(O=:W>\V6]M-<\*E)7G2+0: BJ9F:=S2^:+OJ4/0  
M<DLE@UXP"=62VMD<(!.D1FC8G +V6Z,T;\*46X"V!@O%DX;HMT9A8\*YK/07#)  
MQ\*ERJ/E:/E9W]#C]4Q3E^LWU8S[1Q->RW&\$H7F-S9\;BE\UA;M];<G)#&V\  
MDN/!R0J^U7?/H/022>@\_DPC7E4]!\_9F?UMQB\*5]H/BTPU?Y)\$<=BG-687#,>  
M""-H>M6'IX<^B-I[(\&?Q5DUC^+;32+=EX:/^3+R9)<ZT(U^GKOC.LH0GZ.D  
ME&=&.\*^.91CK]9%1Q[C.DN'U:Y</'[4M+^1Y2"\_CY"1)?/Z5 R?N7AUU<#27  
M=W=P#\$&Q?W;&Z+P1]T#':\$\\!L!3=#[0BNZ?]("L:XL'+BD5S]@\*;%Q5XO\$D  
MM1]QG5SO\$7])UF'5 ZT\*]PL)[Z3MQWK@<O)O\*YQ-RN)#(/FJ2,R[C/1L2X\*(  
M]W.FY/RZ20?MU4F[!4I1E.L4M;8?;B?;7L#;/;<>UGP>5\&H2YCAPXFS&6]"C  
M9;QS-O%Z]P2IXM,\$I6ZU:4IVU<A\$NW M6.>W^B5,P;KG7\$P>Q-0JWX Y]QGI  
M>H8B]C'V+EE<=WB&&6X0L(OPA8VE9=MM Z[X9WWB\$2+>)GW%);&).?R&C\*R-  
M@ (8G3:7SG^LI\$H+'J\$\_,XQ8LR R59/MZCMF/^F4W=W=.<AGEPTGE,I^Z[N5-  
M)1L&]\_YTGXU?QO-GW#SG.M#4D;CQ-)CS'3\&J3\VFUWU91\$2QW7)UTYC^U5T  
MY8]L3<]G8 S8G/KEE8%ZXEWS\_A/+8< \*MGW(Y29Z[YJ:#=5\*&Y/^];D;ZK'  
MU8/HY\55:O&F;Q<6=0&2I7 J]V:K -56BKBG@V-59LP+G\</.-T\$LF%)[-E\$  
MM@9\_&=)6U)7^0<KA/5HTQ5I"-W>+%W\$JPSWE%VE<XKM)7);, #LF'!D:IO,  
MX?>WU18S3TV2^(\\$+)+G&R]ZO.0<26=8\$= GC'SN4/G<E+XDB^#DI\_?],ZG[  
M5S91?O"FOSL7=D6?W?&%FES,>\$;5?AH\$\B3Z]V 3'KPD"2=NP\$7!F7'NG+L(  
MFYGO:DL>1!&N)-JF\$31@(\*E6]OSS\$Z29IU?E1]S,^8X1(%^E4G.O=TY0\5@  
M]6+ML7<B+LV;JRPDS.\0<^@0'9V;.K,0K,T-%5/RE,2::RKZI- -H'?)[\$\_@  
MJ2-^"Z:/ (NN\* U@ZL&P@\_&%QXUI73^N)>;9=<-\$W6A3RT-R:NINS< 9D.=%=  
MLR#M[+X&U&Q7B\$6;1Y%G9HCM7\$ JLL)H\* <Z<0%]2FS!L@V,O><16N]+\_C  
M1;RI\*W&DY?ZFZQQC^7GQQ!I\I-LX6!4D<P<I,N/AUSFLSQ%CA@;8SQ>6,OLA  
M7IY";A9\*/"2>&T'%\_3 ^+9\_%^7], "QTN<W[FL&5K)F FF"1,B1F%<P.0&8(0  
M,TF:>8TD!\,=X!\7 \_N!-K8\$L,8 &:!RX7C^@ZT(Y4[E'D-B1;I\TLNVQN]?  
M@!=608%>(39UH>/ \*!I.7?BH\$6]0=@[\*@TSQH>5!'KI9M \*9@!G9":05G82  
M[:80&'QL[Q%8P^#T?R[9P:U5IVI\$\_->\_K%R;'5- 53JR61\*>@)E:>G>C1^(M  
MU-'VQN?'];>F\*^ 5@ =U! =)\_J0P-UH10;\$ J<1? OJ)@JZ 40NLQ HV^DY9  
M\);HS.C8'AL\* U'PYBWE%3@=?;HD[7/V[B9-10(7ZWWZ^>F46[EN.??;R=70  
M3-260N2;1\_->\$7\=GP9M^NT5<G\O) ]O],W[3?DSNLF38Z.=6#CLK>XZ^MAJV\  
MPBR(B%8\_\*E/Q=/)HBOL[R%YG>0#UKX!6?Q;/@.\$6[-5R/R\BR\_2X\_4WY.1UF  
M0"#\*]%OO9J!,F..9FK;),RY6NY5EROR\_HK/U5:+=/6<ZX:Q<W+N3:HX\36\R  
MKZNZ=: %L-W\<V-I"BXEBW,W^MONW'M./:F;&<&,NK%P/+0Q+WC\$:M=7/2K]B  
M:\_CE]9"N=\*&F),T:B]I'-8+->YTKQ,-;#[]'\$9/^0C+&FKH\$:M01B75ST>=+  
MENIP5XZ\_N^CZCJRZ4J-45WLG8+ ]XX%O(7^8]&![CC]F0\_=.)B4Z)@\_:"N"<\$  
MP#!'R^%.4:@.BWDU7OU\_O^5[\_Y/TSFU&@<G\$>\_Y?O\_V^\_3\_&<VKB3)&<WG[  
M&BM&;W?N6M<XG.) .(SB,PT5;O;.)M&;M:Y'(- (C=V:E,#;0MWMQ9VNET1>]  
MI=MMK6K][2F7#D%:.0L\_V;?W RCA2W?&4O'=):UF^KMM^RTTU.6^K'5S\$#CW  
M9DFPQIMY-.'\_A%PCMK9PKK(!86[6.(B['6J?E]RFZN[D)L]R;K!#>R;=NF'\$  
M+ACSMU4XJQ30-TXW?%'3CBW;@W:'QO.@V+RX5Z7BFX.<@OTI%\_.#0.P=U=%  
M\$NX"6ZGW!L?"JK%[S5HS&EQ"]P&=^25P"B[N[Y+G'JW#A%Q6^&BX@5D@=\$LK  
M-JV37=)H./..A6(71\*.E#(LN( 2U<-QVYK#<]XX:=N9V+Q+=@S?JTBD-NZ\7  
M\_\_23?]9)/H<TZ,. (ZJ,/OX ^[\$Z\$LD="5G"X,XAU97;\_!X>P(T\_\_6)C;GH8=  
M1\*62.E+'G2EP]^D;T G\_-<W#JRZ%5]26HB8>@@I:]#\*WJ6L29+6<Q\_%UBB6MS  
MNC): \FOY/E<F\$EK4X;^/K?Q\_-\_' :F2W1F9;" ,ID:[[:6)/B%1<2ZO=;'(-H  
MC=CSCHC>;=&<M9M&<,EW[WDV&F\VN'.VNGYDS\*:XR",RT(PZ,MC7\$R@ML-\*B  
MX\VL@:(.)2AXNV5[O;R<0%)QB/#G\$9MQ.>\/\*F(QB>(^)"QN%B[%Q- (+47&  
MH<XJ,38RY\3/B/^6H,.Q4\_-;TPVM-[1FE!D/^<N0C7^\$D>TEU@Y<[DH!V)<  
M=[ ]^T% ^P[P^PZ1]6<ROK#<RPHSSK0V)]<=E5C%S; RP[-3=V>(%-H<-D#C\*  
M"^H)X=UH=B?A\_V&E G%/#L+\S=&8AQY(W/FK 2\$)6!E9W,T.;^=!GQ)G5,4  
MVYN9.@,[.XT\* TQ3JYYUQ>NNN@YBT>;WFS3=<X/-RS\*VK[;66WE7MSO9I>.M/  
MQ@PNS@]HYU/XY-3^\_5-7. RWA".JJFJB9+7V3JK[QQM7%D9,'BJ/.<D=6&  
M,DR\ PVA,5)J\_,O\$^=YFTF15JA1>'>T1T[CS(GTU'%B=VI-J.NW,VZN?EYQA  
M5%O[3?:IE.:\_Q![^-,</LGM:IAK F+M3(%N#XZSL# ,3YM8=3\_0^:;==,U;  
M>!+!/WG>B,7X9D34V)4%6Q-KS5%^\_3;[3+3O9.DXOB'4I^7TH?8V&:,\_07^V

M;\_='. '>,PS9N3'OCCDJP.2L3!)/@:7W:PYOR"+>TJ]\)-R3\*\_ZA\_EH!]@&6;1  
M<)M!>MFIN<MIP;JH+YPI49?B##(IA\2)"0#DFL%.X\_-3F9:Y4Q4PR= \*9^1B  
ML8.BTW&+ E@RFVBNX]:X]NX\_-^JN]K2M.TVDR,Y;&/DPV8\X6@,3!L4]!3H1  
M@XS+JIX^ZN?DU/Y--YVE\V%IKTME,Z:T TU46^TQA>\_(W,9.3@4)?[U0@=Y&1  
M)GLF9\_9\$. \_HC0QF2#T?.K3-\$:J=G/C5]J)-#W2M@AEJ\$I;5CH[B7J\UJ[\_M-  
M\*K5?:GMX MUSU8)HC\_2:OWVGDR;/T8MU[Q8YTSV,:X5%]A?1:X:A+^!YXG\_]  
MLS@,V.GLHXGLNL/\$77LL;VM)ZV4KRZE>04KXA2O\$J5UR4>,U>I8<>9Q)@/+Q  
M\*)'GQ\$C\$;-..V0RQIO?+64F0B0M2;Z(DC&B\*&B%J\KBFG>K0G.FI5>MKAYD3  
M\$GW^P!:JGD>)WV\*N-CS3' ]!4:='XW8B/)Z8(3\<2JW)"FL!\$S;8"Z@7+<N\  
M"Z^\$%BJYQR'\QH@R(F/1""AM(O9"=A[ ]2=A[\$Q0T\$H>=AV1HF6)U3LB00C. ]  
M>]ZMIQSM[\_^30DFA-" :7H]>L>F^BBB'\$\*-O2.. '%./J:' '\$(<;(F!KA9TGF:  
M1\*0&,56D...?)D!A"\$FD)-+-EE,,F3)337#7KLZ684Q\R<4TAI2D\*4TTXI#  
M2@0A& ::<9\*:0?[\_?WO\_WFR%F[/MRYV9?@7KG?([X%\_#MW#NNC;D;9WK?<)O  
M6^X:!:0L^J<W\*%U9,7&<LM6Y;N#;NM^MXEEL\*E%K>#XCZR=A+Y/UQ;P<9RUG  
M-24X2'P: \*2);XSG+JS5>#[8O=\_AQ=,AO#S=EM\\*IB9A:BE\Z/>8SG6/Q>4"^  
M56/.JUNGWZ)?86=6D\ZJ^>'990"ZL&SG.[+<4/S.\*Y%6\_W047IK4+[ ]/\_;X)  
M?7COMA]ZR\_X%(1]L/@H;5R'+ ?S=;\_A]7]K[ ]6=\_6^!DO]UMGON9\_R9;(\_  
MXEG!L\B0[C'\_['W'YVME]3\$&\_.\*M;H0S?OQ+LK0I\$X; PU'CX3I;H>>]EM)\*  
MI^D/J5N#)HJ9XA%#<\*PE.9=<+4\\*ZDT\$MOPIZ\_\*V, ]?D0;I9UL-=: "6A;O":  
MRK5M=@NN'WDA]3C\_K!\^L/>2&Q/8[R1C,&NP7SP>^Q'O' SP8>#WDBAKQJ#\P  
M^[H?]+W@FSY]'C.F?M^&0?ND?/HMN]FC7/=DQM4RDF\QG%F++6^,XHHTJTRD  
M@B[P0A!2T'1 'RAP/%M31[W\7]-=@T/5@R)/UQ6K\_. ]/>PJ&;50:\$8?Z[VKI  
M42X.8ZZDLR2@@DK>6B%\$H; >^&S6W^'K5K=[I'GE"\*\$5\D<<:'DX9+X?G+"  
MIYO=3#C!\$7\$TK:NJMF,L#>)^-\$\*,M1"T)R2KB/S]0?7#(XQ0"\D8\_@XOMIF  
MMF!6"]V\$1ZLM[7=='"@NF<EU@H;8S]?I\_ .;?5YD\N0,\*-9;?L\9:-W.@0Z1  
M[(#=#!&3>@G2D"[YO+C#)US)'? -UZL?'?\$42U++!&?-9&4@JIGW--"JN<O\*  
M\$5WN3>4,B6X\*(+GHCWCKIP4(KD\*=Y7.L&</-\_"1&1'[R-009S8?6L'Q%( [L?  
MBMQ +V?F:2;YA5@W+V.3#T@^Y62L6\*^@%BWJUHM#E+9%6Y 4E\?[X7J=X=  
MB?PEZ3(6)#E!46\_U[KVQ"Z^V+ (^+ )K-05DW%9;(CXN#(AY==:NP7/P"S]P'5  
M6+^L&<Y,49JPY/MR^-)NI,"7QUJ&'Y#'=.@<\$PU<^Y\$MWU.O"FN, %T76.E6  
M%E!V'MBG:08/>HI]U7+: (F58JT>;' >GBQ+>AKPQ!JXH!9+B8\_=.\$-Y;RK<R,  
M! :W?+66P7+!;#B;WJ'2=A>/^\*(QO?V/Q+X#-HK%B?>%9<\_%LY'Q\_:K:E2\$@6  
MO6G)Q\_0\8N\*M#L\$5:0<Q=ZZR GK7,MZ70E'Q8S@S2K,-\,7%(<S'LC3(;+-  
MIP9QJ>]:V8Q7 Q7T%S=-DT\_H>-"(DTT'((=0J\*&Y2BO!%JEGS/&647N(;N%1  
M;+4EGLY8R8XW\_\?9^:8JZTJA8L22,>(+5^H1;!9GCFJ[EX'TED K<4<ND3] ]  
M0-Q^#;(IO18W/' \_7D\SHD=K0?Q!H/D:V&I^/0<6W461-UP2M++J[B\$G[R;2  
M)X'BY8CAJ\*-'+5/0\_DEH>UE[, ,2>###JK+8&%BTH'Q"OO<M7\$0U"1&W%XW\*V  
M:C3.6W6<+^- "S' ]F\FT5[\$\$S>[ (AFO?\$6CP7\$VB"&Z]8(;,QWA<Y"B[Q] G4  
MON?+9]@2O/\_FWWD],CO%=>OYX"Z8NY+KQR#3\*X<([#SPO=CAW"\+VFVYEP%[  
MXK\FLG@2+,VYX1<!W.M-?7;2^YPU?<6GFFK[.N=^6YLM^RK[6A]0LXF.Q;]2  
M\_WB],LY7I%E.#K%WQ#ND1#;;,CX Y-[ \[%\$7D?&HXJ1Q-<YE9R/+@T!\*XHV,U  
M4=)6\Y]>W13Q9=JU\E)&">;4]KGF-47(Y"NAT]%RW^MOAU5>"^6B-]<\T=OV  
MY,%UY Y0I\CXZJMB:-\$6Y0(151&/%SMGAQ:-\_W'!ACK;"S G%W\$+,2KJ'\*6Q<  
MQQ)\_#\$?TUL7+J9H[+T+=/2=X&OMW' ]..,T<DW'>9BAKWD:%Y\2+0QI09=O(T  
M13#;JK.I0AQ76]Q\80L;Z<\[RN&ELPM.01:];PX.A0\?\67V)M!@?C15S'HT  
M]63\_05Z<F?[ET>2?9]1[<J+N+EL\ C7- +900([X4E'\J,4/FX1D3^;@?/%)^  
M;D[:WD9DF#1:3LITOO(HAKQCMAC TL\$P,'VIM&6X:VA+3]Q?#FS>#/4&>XCU2  
M,>NX=?C(BL!:2C4P:)AR:RW\_J\$3,R&K-C83YW3\_EGB\_EX^96 #0,NP7B13;X  
MNG\*%)CT\$%N1;/#P0!N,0AO,?X2&^/KQ JXI>'VNZJV09W5</@Z7'5>DVK7>7  
MJL\3RC,UHKZ%:3]%#.H#XJWQW!C5?[PD\*\_V ZNC-/\$/ )L\$7=\_N2'VKN7F1!+  
MUHJ+NJFH)WC9;?Y^+\$8WO%G%4#YO&;T-VZC"PEE!\$ITKR,\_XMI/\_S\_7C^!2TO  
MW]]%\,79NE\$"[XQ5772?\\_2WO#U.EJ ]YS\_A8-#I@[]DR+' "5E<L1.!Q(BU  
MII+;[FA6L]+Y,Z7;Z/\_BM\$B(1X-KE\TA'EW&D\SR])Y>CN\*FW\O/3K:=\_R\$Z  
MV)7W'5\^3=#V\K[H.)5J^ZLO,'NEKYY?'\$R7%?/\*R^R\*ZL4.8/\$W+ (%Q1\*CO  
MZK=5;8JZ\*?N/D6S%\*]TKXJV\_GRJ>?X/\$RSRN=%697'R?@4?-8\_GS/P9O+2:  
MX3T;C^[\%IEJQ'-VI4S\_F[:1EI^ZK45;:LH)%=N]UL"M HM1?!NIR,C02,M\  
M?O2(VZKH9TR,J\_\_\_-\$SE,6\$MVWCSUZ6&C>;J1'W>Z(D\34R\*[ W14J'@^: \*Y\*

M] . (OBXS=MXRG5J8PJ1:YQ5;<I0F[;,,;9G&5Z-#X0X]0\c200?=Q.6#2'K3J\$  
M>>G.=CSSWW<3+\*=!05)=0N]&?<'Q<200D]Q,>F'C)F-Y\*)?+&"M\*]!>G+%F/  
MS([PR.X(CR^<,]Q\*!G7]8<7:@:D[V4<(OS)\Y05]O;X63\$%S5L<\*W'#5\*^#  
MZ.K"\*^<^H\_J16C!|NS1>UE>=#RZWGVNM7R0"21^IE><(%FC#?E[.\'871(.7  
ME=]'@+YD2EN-7=#R[>1J3X97G#S^@"[\*C[F31BX ^< G6K? P??\5-HQW9^N  
M\*77GR4T0LHBCPXU"8AH;%MD;#K%(PKH<.ZIZ:WTDf\?5<Q)\*GP0!L1")22,7  
MR&7+XZ?YJ1\?@5I=):E&H13CI/-L]S/T;:\*A9P.E^/P^E\_E8\_T\_@8()1\*(C4  
M;R%&F62T1%YS)ZT:)4(R4MN.A>TDZN9DA ,\&#BA \*LO70Z/E>;]G<H=^5CQ  
MUQQY9;.2Q"QEL#\&'<?V?\.X[S\$S]P0V.UMYB=K<H.UNT\'!H?<'>'>Q?#+  
MMG:1IG:%=5S-8'&-)EL%S[/=:W3\$%VX([EYH^Y>;^[Y,Y:NSVCG:1:5Y/\'F  
M>3]W2>3GS[HY:SLLE[+-^"(KZ/9RLTB( R/.\FVT.36^KO.?.B@H)[S]NM  
M"XO@Y/T3N;0FSI%:-\*(37;VEU\$S<FZT;<0]/5'^[2^#0\@\$@.Q%5U3T5K]?I>  
M<G6?@%/?U:)E15AWO!MW/N?D^"93K4(>LMXOD+H[,>/>!8QU=@HW5=9>E:V9  
M;LG,MB W\*\$WM+K0M[VEE\_-:2)5T=%[;^EO5G3 &<T. ,<L7UI/?TM)]<73\<  
MC[2?H.H4X/<!]C9>9-4.VGLS68#X+I=N^\_1,\$UOG\_F7<1Z4N#JRF)-KF!R9^  
MCI/R?!Y+S^O ^' H^Y\$[3UUW#[!]>R"V)O^6V#]V>+9OD8,7<Y,5W28SCV/  
MQ6(MA,&NO;K1OX2G#"ANX\*\_JWNIMVR[J"+HC,X:\_)AJ.!7@T/KWS=%O)C^  
M%EH^IK(B&VAW',UW\$U-KYJ\_.A1A]T:#;.ML(&=\$?S:T9K;+?],+F>?)T !XW  
MA=3)-Y(:-&MCZK)9 9=>,O7\7S;75<O7VOFC);: !N+=\COZ\!K^ (WYFOK,C  
M(;MH\]&NC]\_JY#<"H+RQYFOK)5X74D=@R7E6"7S-?'U>3(W^""GZ'%U=KJK  
M7S>7KR.[!3\##\*??.E/P 4\_S\_A0ZABZ\_^[>.=I</!=UEY.3^\$&6L#57G+1K  
MX=#%\%XO%!I?+"KH7VU%5GZW<^65L#6 NX)YVJSWG8U'+DV74=G5TMVY'QY7  
M(YP70L63+L![>IA=@4W'WKTCA%#!K#.G:P<M>A ;@MG>3??A\$(/4>#@I]  
M<K0OC7M.F-[JM'3,??0NN9K\_!ZDANOQX9;1RX.67OW7/+7WPNHZ;Q]7>ZJ9E  
M(K?UY\_BW8B[Q,R\OT4Z(V\$2]\_+)]#P+!#;P!UQ[\_P4-M.WDV&A>LZXZ^/W]W  
M(;@JNME/V6K[K+#C2[M102['4#N\*@DWT#=:\*YVE0AC0\$DQ3H+DRC&S7MYC..  
MOOX,8E#[H4:M".\R^,YW=5Z&X^O)0\AM]EJYE1XOFS(1%\_PNI:M^\_U!\$SE^@  
M2'DB+\_]&6&W>6%>95CC1E.?KV>\$N&B?BV80W:AN&H\*@\*(P,4K4J-;L+6S#1  
ME^&6(CO6UK-5M?O+H^;ENZ[/7&CG:\*VMUIL[1S)UMHEM)Y,[1>7<6Q,8W8G\$  
M?X&\*-6LZF0ZG6AP\_"M]L.:WQ39HFR:!TB7@K?;#:UO;(Z.=+>\_,X<=.WJ4!  
MC[QURC9P@)S,\_56<V/Q+\*K+\_-Y3!;98%AAF^\$WO615\*\$E\$F[AY>)(N\*19S.K\  
M"Z\42#N)\*O^T([UL)Y6D\$>VK,?)GHW3\$X3V(;4'\\_\*4\B\*E#D?%UDQU.RFSN  
MIE(O3NN@0V)B5;(2! #@@KRAAN \CPY,6.([^H\*7=^>O.:=:A,3]O[ALI\_\8H  
M/\+,9"2\* W)0^R%@,<-Z8N QH.L=\*\_[D:%S<\*\_GQ) YNZF=W7OA&[0(C.\:P  
M4+YZ2-P]3?:F7+!-OC&NA)!CR:SB2E<XV,A9>22WRU2G->EGPTY=@+Q2,:\$#  
MJRU?@A?\_Y=[+>B3+%6Q&+39H\$7+= (#XEIK8.]6<OI\K\ \$VY6&];5,T)\]?  
MZ,IY^@ZQ%5F6=#7]': ZK%P\N /)G+ED7V\Z.FHA^1V@,0KZI;<KO2F7T04A  
M+L<?L#4?GEHO4(P)%RE7Z!N3\_W[/A(QDZNX5U\$D%H;+>-\*VA3,S>^8H?LQ>  
M;8V""^<X5]L2\JH!5\$8TM\2W]&RK=?\*#34#(D^R&U9MPD1N+!3\_(1=G,5B6A  
M1S2F![T:RV^1+5&4-/STU :<'C1"ON[\3+I;!N!;;1/.H1MA.?CRG:VI,MB  
MC-SE! 8XP=%R<^ZZ85%><LX\$M;/GL/C5\^>Z:Q\$\_H;#Z-T[5A%<@E"\$I1?  
M1&><5OHJ&%'\_U27%;,TE\*?C<"2+<K\*#?O .3[T;\$^RHWB2/Y\%]62Z\0YN2  
MC;GJ#3!ONRHHK[?1[-2C1N[E&.JD8L:KPQ6G725#<,)G<EK>]M!UYT3YE%R8  
M4C1OKW/?< ;!S5+^?,R;//&;&X,\.4U4\>](ES\*<^\.^+M\_.H[^ZF.,/@.C  
MW\$ZPUY9H0G01<,QW9CCV,WU/H2W,A+724MTV(E>@3L+GL/J7@TOT:[V+!/<B  
M>\*!FJPPQ7Z'9&QKH%5^2PLJ^#"^7I<0OI(YI#A,,Z6=:Y'QN1K3IT KTLMW.H  
M3GU<)>X.I7MBY1E,^SVS&V)!S=.H\*9RH:JCLWT=1:V8:+XJ7E#H7=-,@D@8I  
M[I=].=WU+]O KT2)\E\$QM::P<8;L=;>< E0NA/('!E=OLR3<D1Y/AIV\$7)  
MKJR'F?Y<UMN9\S.%1/Q/2A(WUT21B%<CQ')\PS2?"B>M/)CCN)]O\$)?\$A\_H\_  
M)T\$/O)QW\0-I:BS?ZB;"FF>-F9V;V""H:XDS?IB(LLZ@+V>7R)XM.A\ZV6WY  
M;KI%W# O5.#V3%'UZ%Q\*&JYL6W3!A)BR2LL,BV5;\*55+G'C'Q\*^\*=NJLX(?\_  
M5M0RE1IA:'Q\*!W8E@Q)<J.SJ6.-\$8W7<&?@?B-D+I\%2M^^"&00XC9"^.;(   
M7\6(R%<4V\*?XAWWT\*V/)BGDV"7,,LHO39"\_B:9"O\,1Q^A)<UW9?,PO5"D@  
MJR[\$#Y.XZ\FH\_R:4<H<FTA:X6%5]2BD"MW\^4\*2B/]Y::N5JB5\Y:UZ=5E+<  
MD#JGKE1![T%6W;R=7<>\_)U>CI#Q]4,>G@XHB:+9C2<6>+Z-&^EU['XG738G  
M+\_ \=2ZRI1%4DZR'EX4C\$T]J&-6>G914:=\$VK);6%]4>S;EA?1<=VS&HHX>UD  
MWQOVZBDP'R!L!Z0]"^&-%76)L'N\_YB93NF&4Z-V>E-2G2F&2I\ZQ&E-/B".Q

MS'RAO<VKP97\=I\_':7<K5@3=\$FMQS9-WH] D;<;D\$G1PST/<+21H: ^DW>@2>  
M5Z^]N[=P/F\$7XT]>M9WC,-R XHZ\$F#\_R<BH1;LB+^3JI;I@17<%2F1.MXHM'  
M>CLQ +XFK;#7T68E"-H?'4G?'<4F.) /MX.]C\_@+H\*)G' 9Z\$CIRU /A7]><('  
M7DX?T ;OY"N-SV\F5':L#O.8?9LN@7E] [94Q=AECA]<QMF1]?]OKF-18;\$R\*  
M^ISN38PYCP^\_>-:VUSA' #J\YAG7VU7N4!67!L[R[4QDL7V&&XJX<UX9Q>FH  
M:8;\_J2PA96.4KN+22B[/SR@S13>T,&%J"/.M-ER/A"MKE ZW\*(L6A#6&3MBX  
M]EN/A:8.@18G9V0%\$/@SJT>29<N%X.HC?I]&=D+X;\_L-.9&!\$0N\TZDVVO1A  
MRVVH05FKG6QT4VC'FF\_?GS(2);)U><P)RFQ\$\THZU]U<QOT\_>7AGAHV(\_:^Z  
M#@W# 1\_MBPP\ '7U%4\*G35.\*H5Z7Y-M4#8\KY7++)SPH6K@JKRO5\_4<Z9>F\*R  
M@C/46;DX)YTZULQ5SU!5SVPLYN,EE5M<9Z6]S'/0^B;V)O>[KT4\_=CD^/]X/  
M]U\$\*\_L[+CKVH:<NXZ\*JRJD>1NN(:)O"S#5:\_I1=B<7+B38(V-KX;%==0O4"  
MCGTY5KE]3E6N5LQ-[F<A]NO\$WN%V!:X2I7I-QPC8-:&7>>'M./+Y@[J\*CYTH  
M/)1\$]9-[N\_0.W89\WKX4V?\8CCZ6JQ=51"11#)7W\UF;;\_N!)CJB1%S T?<  
MV7WR#<=2DSMDN98L#<=0T]CJGL%FCM^)]^BRHHV[\$6J7\$?#I0;\$E'H7\$UU?S]  
M&W%TCL%G/,GB3;]GX<")(@YLJ'V\*'O4BA[B2+#?MV+<&MF.OT\*]=UF.O\F\%  
M>WS8H:H[LB]J<K.8\*++[ ]K9L\J6#&47.5&?B2",)]/T;BKU&%A+O^9=\$9RI#  
M\*TV1W7H4H=W%1B3HY[Fil,E3IE\_=:\*3-T]\_/N!>B:'!?:O3(7R<VML\$7\\_M  
M15<UX7L\N4G+QSS6(0I5:)4\_?VK<LM5C+"XJI^RP7RE:R1<;/O"MOHF\*:&J  
M=#ITK(MRF' ])]%\*E571^KW++S\*[ [HI4Y3!JU1W?W>\6EVWEVXI4\_EW"TL?!  
M;MN\_NK6VD6M+\_N!\_L^Q,7Q7V5%3WRH\*XF)7V4FCEGX\$4J8F^CE(HV@RQJ;%?1P  
M\_]>CZQV@5^QO'SF-Y"V;RV"[OEO.\*T/B5S&SMLBE];-ZR6<\$\_%OV-8\_H#?:6  
M\Y;PP#[E9RD5<&\*Y]H5UJ6(<44\$J\?24I'(^UNM-([)\*1R32.R2D=DT"W'^  
M^MB1\_6ZS1MIFC;G ;<XDVYHR/3&;<ZDVYPS;G4FW.M J&)/M&]YZK1O=&;[MD  
M^WY#;?5HG]\*.VK0;J/\ W1(< /OUO.3IOKCU+OFM2WQC)\*T/Y1I7<\%=SR5=7  
M)-^\_RAJ[+2KN>-79:5=EM L'Z=2\_I5NDVS)MB<#ZE;WW[=[W9BND:%?5:2.X  
M"1W"4CMR/M9ZII'.2D=P:1SDI'..!;G\_VD;AHVQ/]=?^XXK(;WG8\_VU\_[CU6  
M^\_<\_XC\_\$3HGM6A=^8NNT+ZIK1/3C1/3IT3TQ+;WVJ/1.Y3HGIST3N4Z)W+0+  
M^MH.UHG\$O,7DB,.+C-&"DPU"(9F>[!GNTF?5&0:<S/KDF>[,SZY)GUS0\*V\_TU  
M[5US)SJ-O\_KKVKXS0;/\_VU[5IVA^-VQ\!:QB 7>4:<<P P9%=\B'Y5O?M&M  
M:Q=B>S\*!R[ (THPM\*T:\J7W@7K)Q\_#>VOV(U'V\*=1]@6D/VN&>H^R3J/L3U  
M'V2=1]DT"[@L^JHHD@E=1&0VJA'GE\_VR/\_[JF]A)\_"[6S8W%DEGK9N(\*&K)  
M!-V8.>S2<\_7,FKF<\_82<]F9S]A)S]AH%L"S\_%LX,BI#T]YM8.M)]'\_GN6\_OV  
M5QA^IA<23\$JJ"0# \$#9VVO61<GD\_BV99Y5.\$AVG]\$;!KB([AQ/([9I&M<TV#(  
M17%<E.MNF[>MK^T>Y;.[+85(DH\*,"6F^5B:V\$7MV5@[]>+P9"TD AFCZ\*2C  
M^FNV:<+/#5^E+\_6!7@B2; ;;\_E"-QCW)VPU5VR=5=J0?5NSU5VZ=5=L>JNW3J  
M^MKMV06JZ;#@\_/\_5?Z>>M'+95ON]=^W5=OAZKD+\_NU7QM:-5]-\_EJOKSZ6A%V^  
M^MM;JODR^[ [GM'M[\_EJODTZKN.WJN^V7T:KM&G]VJ\_SU&)]JO[HU7]U.J\_N\$'U  
M^->J^X3JO[IZK[A.J^X:!!?58U73TC?X?1\_\*</M]'W43#Z/T<0\$OWP<??2<<  
M^MR7&,X[Q)Q]\SCO\$G'>- L,L\7,F'G\$R/YI\_P 3> DF[@?O>H9-X22;P#)O"  
M^M23>\$T"\7Z\$\_%:Y\_W\_M)JYTF&FK[2 @\8&?C),\_%,@ZXS/R\$F?C&9^0DS\AH  
M^M\$F\_09W8\*JF' I7^]M>WI6X[. &=<9V03^:#KS4G7EF3U3.O/2=>:9UYZ3KSV06  
M^M+U\_K\$M[.9X[P=E\_\8E\_Y]/WL-HER?H);QKI^5\5Q.H/\_IRJC"L3YJ[#MN5Z  
M^M+=LF'N>=]!A?\$ Q-:\*.8[V>R8[/:]L7#,[/NW/UM0.W/!^KMRPY\_XZ7/Z\$;  
M^M]/6F2TBM@:\*U+2\*ROJ[=V1 ["-GV\_]OM^XB2K6\_2;\+.\_3W![&NQ.X/4'"  
M^M/J)X1],@^TSX1]9/" /J'PCZR>\$?6:!)>)VX)-Y&!7]@ICLE!R?'80UMZ[\*IK  
M^M7+3U7L@X]E)Q[!DNY(XT;9)Q[]' &C;,' &C;- N?8Z%^)9R/SJ\*3<([70%HW<  
M^MJ\HW;!-HW1@]69->L\$VC=F37J2:]!::0L\0F-/L-JBE,DT@)-(DDJD!]YS3)  
M^M-,DDTADFF22:9H\$WZ;-O4"VYD1X( (\%)'6,!V9D>&DCP3(\-)'AM NJ8(^S\$  
M^MP24]K4H@YF'Y:'PG=Z?TOD0J& /214"HC^)\OGPYR)GX;+TQAJYFS\$][["@^  
M^M)!XL'BY'BE//E,FV7F DO@::D(?4I0^\*9I>FA^1FH .^8!PA-2:+Y%\*+Y%D-  
M^MJ,%D'-&Z4:^T .HU?G80WAZY?,'^G9/X"V-3\F#ODTG?)&2=D9WRJ=!\F9OR  
M^MJ3?E6@748;/,=@\_!!>EQ!4X;%\$9\$ZOA'/;Q:.P!AL\$F&O,,K#, ,E)AL#, ,E  
M^M)ADM M-VN7==@NY,36R>]1"F%:HVXNO(NK?V. SRY^QNV>7-'\*!OE)-^9(DX  
M^M\_=F;\XDWR-^<2;XT"[9/&ML9%\<\$7QTD7QCSV.?^>21?',BYY)%SS0+GVN  
M^M,[HR:/R^/RJ?FE8YHGY;E&%K>6+!#B%EF!%8S\_H ?] D\_ ^419A]DS\_<)/^  
M^M@,\_W"3\_<- O+8/YQL@RC%#H]\*"7I4DO2&"F\_H].DEZ4R7ITDO3M OJM\*6\  
M^M7]@EZD\$O4I)<\P669+NTDO4F2[M]+NV@6Q[6B\U3 ,GS<L\*NZQ\8[/Q#\_UU]



MO\$?^T?H@X^BDXZ\B7W?5,X(%)Q]\$SCL4G'8M O&8>/U,^KW\*%.YKA?WF&1?K  
 M G^LDG^J83( )D\_9I)\_K&3]FDG[-H%.67^':ENC\++(WV@2\_:22\_9,%M3)>V2  
 M2\_:E(9)+VS0+E64;CYF/M6D90@3;Y)-O3!SB\_Z/W4DV^,F^ZDF^ZR"PDQ?\  
 M%%6.-/VJY#Y.G-^"??I) ^Y,)W!D\_WTD^\_,G^DG^T"[1/=MW"D"L:MY:TF(  
 MCNY=,M\*^4C,\_,?YR,TM)LO23>Q0]S\*H>PF.]>^!QWR3CO3)<@SCP\$G'?&<>  
 MDX\!H%J2SUT?/TQF\0\$/B)(?#/-;F0^,DA\0R'QDD/C,@O=' "7EH"E?>4"/R  
 MDD?DF [DR/S4D?E&1^:DC\UH%]A+'<-VR?JB@2\X/,7Q0W?)]\_OK1A4SRM\$]0  
 MM1\$W#,T]\$&GHI-. "9#E&:>HDT]\$S3U\$FGJ- N2[34-\$Y:B)IB7UFNQ!4[A:-  
 MENOA<L2S\+\$R0+\_6VC'W!3ZX//72>?F++@4SSV4GGKF>>RD\]EH%OV%C1"\*  
 M'=MD?-SX,9;Q(7E(=>GSA9\*\O9;\$E=AS\$T/BOW\$J\?N&#&\_;F.Z0C&\_=L&-^X  
 M(QOW;!C?NV@7.L<XQJ35EJ3"D+1\$/MAMD/!5G:8:BZ!#QY&?\_^+2?G^NLY\*Q  
 M+)]CV5G\*['&7)#C+E\*J2AY"RXRQ5CX.8LMC8\_\$\8K:<5^\_)OTHF^(V)SR31.  
 MD2B;\T3I\$HG2- IR/\% 9"T@8(TADO' EXY)+IS! ?4,EP4DO'&2X\*27!::!3:  
 M>ETC6"D\_D\$AG\E\:=U 3N\*72%=\63\*"XOI\Y#]"RC'25\_\$!QB).-09+@F<:E  
 M)QB&<:E)QJ6@5TTU#83FM!'K4D>L(!6XQD?)I(]:9'R:2/DV@7 :@PWU4[6S  
 M-LCK,[\_OAO^)'VJ0MEYR-U7""]=66Q\$!V\." ]I68#V%Y&'!)@PQP@=\=#QC,  
 M)\\_W]AVX+M'\_-#[!\*\V#0;5X<%V;-4,PU6.XK^R!;LDENQ(-^SUC<+I\*QV1  
 ME.4DIRF@7CLM\$WU0A\_1UR'YDW.@FYU)-M3!]J9-\=)-SIDWQTDWQV@7T2SR)  
 M)D66"++21<^>?GC(N@2199D70)(N@:!9':[WT\$=+4\$6\_DI@MMDV.Z;^<"[.2  
 M79IBYL\_W^E279QEW2I+NE9!<=SVNMPYF(H<=6&6]\*7=\_R['']R)0-TLH5CA  
 M% ?D%WA69ZGW(.=RDYZ@R;L#.>I2<[DSGJ4G/4M NE8.;,K"4T/\$UI\*?:>7  
 M1]AQAPWIX^B13,0VZM(S#;JO&8;=\_K@>N2@>M,NO#0/T4H'KC0/T4H'Z+(+  
 M)@VLM5BX>7LO3AG,SH5)MNMF[+TS;1L,Q=D"[LDEWU#%]N9=]9)=V1EWUDEW  
 MUF@7U,/;,) ^\R N#J;4C%?^P"G["2GM##<Z93]I)3]@RG[22G[30+&8\*>QF  
 M(5-\_MP1]NDCWA@+R/?) (^W,CWR2/?,@M/\V&^G%R5%"YF.PQQ%Z=?/EWILB  
 MZL,BZPF1:6/.\!IW"33[QD-CG\_?I-.X,TWZ33?M I[!VR,9),B[P\$7>)(N[/  
 M/8Y\_[Y]%WAD7?)(N^:!9&'\$GF1^\$/PDD?@F G9\_W\_\$21^\$9'XB2/Q&@5JS\_  
 MDZ\_MD?JY)7-5;-DM\+PV5QE3YCT;8TLKVV-\$2DD6G:?(!YY"3SQR\*>-VAGGE  
 M)//(, \I)YY30+=L:#O=N9%YX(O/21><>>QO\_T4D7GF1>BDB]%H%C-6K]J!C  
 M\_64#/'4ET1\_4':\RD+X\_KX<Y"T9^^';/1(AVR.)P8\_\D?^1;P\_3^ 4KOV<S9P  
 M7\*V8@C)FJ!\$KHX\4&WK!\$^LE\$^J1MIMX:)]\*=)]8T3ZZ43Z[0+>?N1/IZT(  
 M36FA,E:-2;#\$/L/,V<U076U6N^5"D\$S:74\$TAX\_6E3UZ07C%\_^U&^.S"6P&T  
 MJ@-F\$A@,(,]PB2& X82& V)(8#AA(8#AH%=LS!Y(WTL&26[X1OJ;=C25>M8T  
 MEXL>IOEJS%#%=B2-\$C(53H2LH"W%QC?"1\$,5TS KF;-91ED# >A&7J49>\$<\_  
 MKG3\_X#]\*,O31E^E&7[0+-[3=?J8YG<GI2&=R>H[ [>Y/]CC#U+Q7&"!Z(J4>N  
 MC^UP"\_3!::9\*"TIE\\_\#')06F-!<<E!<<R"TIM\_S?II; &CB7L2TEQ#7<"I%  
 MZ-%.(LVJ1CB.LX#/Z%5WX?QTX#)]( =A(6%\\$RG+YS?ZMT).T9[MB@E]3;E\  
 MUWY"/:@\$XB8!,(W#"@PTJ#"&-XYJ#2H,,U!B)4&(T"U#4\$O2R/CH#<<Q5\*J  
 MN0!KIB >IP"U-Z>Y[:JM\_5"JW<Q\_:7<QP7^NZU"B[C4-GD;4(\$3.X3P7\*BN  
 MTY\$D\$'E,K/PXPQ7!8HB>>TMKYA;?U8!?,+/48=&Y6P&:)[ R(6G(I6FK...;  
 M7\_@5J5IR)K36I6FM!:<JG:MY(\_/0\*'^FT1@94\$\*\_I)YW\_WZSHR?'23\J9/C  
 MI)\=D%I.CVJ)6./ /K,@'\=L@^E=]OD'PM3AZ@T&<'(-R6.70M=' "E@RR0A  
 M<E\*%G([TFH-"( ))\*%R30NR2A=DT"Y[\_!"WK2%Y)E"^CU^VA?P];#OMMO@Q;PK  
 M^?,?L(B\$IZ:>Y[PL=BDNK.6NVN<"3YQ\*3YHD![@[\_ \_ SJ4GSAI/G4I/G6@7<  
 M,) /O)9WZA"XWS?8TD?ZL0../7\$J[W.LT6"LX#+DXHN +^C 3?T8!WZON- 9I3  
 M?T8!W]& F\_HP);0+F66K;G\$-9&?^\_\*Q RKF.J3^C\$-?),UB\_,P\$WYF =]S5.  
 MC\_P\$WYF =^9@)OS,"<T"\OM,B^GE078\D/ 0\?[U#R96U0\ALNWJJ%;PUWI?  
 M4?]\*\*SCY1,+U+(V1=+^3H(I\^[ [3SEB#Q@""^P\$WQN =[U5\HT53?&X!WQN  
 MF^~P+EH%LOIB)RIYL<4\T?\_=EOS-06\_:F=C\_PL<!46L?^%G@BCWLS9L5ZT%L  
 M7S6 F^:P#OA\ ZO\_ 3?-8!WS6 F^:P-<T"[J\$K\$7^M0B\$I=S&\_\_7X,^V\$S#  
 MORVWW]]W(AV1\_NNYDH?,0EL 7EF F\LP#O<#3F:TWEF =Y9@)O+,#9- J[-  
 MR/\$%#6 WTL/1BL,Y<5B-XMBTGG\p/.8/ZT4QO\_/^;[C:(/K+;\_?WW\7].6\$L  
 M'!\_I@\_F@[X5\_] "5W%YQ@)O., [R6(&4D+3><8!WG& F\XP/8:!!>&SQ[65A'Q  
 M[^FJANM=D,P/G5(?0<7L+K(1D+8V.B%)NA8(^)OMH&XLE:PY\*G7-8 NT,!-V  
 MA@'=>W[\_Z;M# .[0P\$W:&!MV@6R8OM<\$,\$1R-;G;#<B-A17F[Z?]QZME\_AW  
 M54Z+HCA6MK9L[[J]G-8? /L^X.3\*:'K %S/@)N9\ [E31\HT%3<SX!W,^ FYG  
 MP~PT"[UJ#C2R;Z&.2Q9R815X.D80'GS1-^IZ'\_/PK5ED6(\_L=%7V?=#HJ\6<

MOIZSF<BP4P+IID.+GG 3<\X!W,VCL315-SS@'<\X";GG WC0+D6-&Q1VXWQZ  
MT04>V\*X6K1GD8[1NZ-'WTCRVR&+-;V:T(FHG0D71F FZ,P#N>;XZ/\_ 3=&8!  
MW1F FZ,P.\$T"WZ7/]/(^.J5/LFM4D)IA2=8S5>QATY3'?2V+I"\*\$;8UP8#VT  
M5\$YWZ]U\$4D\_C1E);P\^<,]Q,,;:<Z9#TL^/KBA]74UX"#62=9+RLW%E\?LZA%  
M6COEZP/D<5;(\_;5"B?CM\*E%I^-%9X0>Q\_GZ2\*R;0^]/N&\VK#>-QP=523P0  
M=^MFR37I<NH1"JD4\4;0#2.PG//5NN\*!F3=RS/?1YP;/N8XDZF6VM-5AI#T>  
M",=S,I)K[<#>W-ZI=XMBO\$#\_5(/JM'5F"[[:<[P+J7"\$\$. /KS.+#C%[Z;QBC<  
MK"GY]%59N ^?+Y @;3+/,OEHTWO6!'HZ SZ\_!5>GE[(9>0'&/D8B\$V!H3(-"  
M8I@LT M6 7WC^N>8.O1QR=<[4:YZ9;;,+O\_\$U<O#+.42)M)WT.B ^@F,IW3L\$  
M7I9G#30H6K\*=ED\OKG!HU2\*S^O=:1YZET>];84!D1 >#9-%7U055&2KR]XE&  
M^OB%5LR50PAZH@Q:<^2HOH\!-]'@'? (7K\$/^F^CP#OH\!-]'@<AH%J,2=K(\_  
MTH/)]\$Q<J\_ES1X+@8+V8"NZZP@->+78-#2CWP4]#1?28";Z3 .^1T6^,[IOI,  
M [Z3 3?28'/:;!;WM'<K#^;) ^D\$/Z(=%>C>G]5BL+IWS^ UUY%V1@)NR, [K71  
M>.9K3=D8!W9& F[(P.LT"U\_TL@^(4/,F@]4@2F86GL: O/9[%K9L4:\$S:+L;  
M 3=C8!W6=X=W\_53=C8!W8U5-V-5;- J;O\_BF364DW#DZS]]/>.8XB.:\_5O(T  
M1S'\_D@XHC0^S!,^W\*3[M"/JHNWJJ;MZJ=V7>3C/J;MZJ=V]53=O57K0+:X;P  
M>@K(DB'EZK+H5!]=]4(\*A&P8[JX+VIOMF)-++[%IK?2\_-%=2=9HVVSNQY/D'\  
MJI<@V>RO\*CPCY!X.E3R#%8UY]R+)]#K&>;/\*6%>A<%7H?D(ALB[M(OE<07L&A  
M<+C^<^O);XN P]M5%YE53>9530'^+GFN\*;S\*J=YE53>95:9H%ELTX,HE4M<?G  
MO#607,+7\L&\*B8VM+N3=L\*[SZWM\*[^G/L=8?E]7#ZP\_)M%A)ILJ[^F.FGCOC  
MIX[X9\$MD?A)']7\$'UVA\N+?M'3\$65E%\#53? U3O;KOU65-\#5.^!JIO@  
M:L-H%G]KF&5 'S[8;AN;9'\_) \$\*5/>2;SN(0[;V\_<0K+8+40:TC[A 4\SP=8  
MJ3#%EMP8:M-(7."/W6G,!K\$@-88#DL.IMQ) -;':44#%="3)UDQ[;(Y,,NT  
M/Q<.\_GZ.D-A7ZS/;OH; LGXWX<DRB^\_.P!KJB98%\\_BZ99>#?KF\$\_%RC[RKP  
M43<\*^ [78+GX'56B@I42^3\*NBI,=LC^[\*HC(4/B;&.)SJ8=5'5\$M^JF6\_5.6  
M9H3M?ZJ9;]4Y;]5,M^K':!E-P/UI\$=FI@D\_MPG@)K\^8>\!W;'N\_O5X9I;6  
M&G?7@E0[V /V !T!@?LO(U)=#?;/;8=4#5\$NBJF715.6K=;8T=3+HJG+HJ1ET  
M5;)]H%V#/<?R/]FW:1^&TC]0PC\_(]0T?SN(C[9I'V\_U(^)<E5,N2J<M&Z.Y\_  
MJIER53ER54RY\*N=9!7/3[;5-;-Y;!>>JMYUH\*H>\*0"Z))\_DTK-9Q^?UF.0K\*  
MFL,G24\_P<%6V(G\_.&3\L^(?Z93\*I\_-%QK4TQ?/FSS@XW\$UU#GL+3S;@X0-Q  
M-?#! /A+S?&&"W&"[ASWD:/Z98?]NJ/B[\*J43LA>B-?F]Z)LVD!USWU\_"5MC  
M<\>\*GDCJK5C+DJ\_E/%-SW\>^ O:F+Z89<%:!,<3GU[=2Z57\HH<Y \ (P?V .  
MD@[V3Z8B.PD>H4\*B\$G]0AJTD20ZLU]>^G+67?,&'C\QGRJE">>+G3(E\>3  
M=-\_0"[LP6.T"MC!84UT 7'- NS,%IV%#T3B;X [(\N.\_#\*)7\F^EY&2XEU)\  
MO>LSJWSOFE:QC6\_XN4SU;YW+-T/XS/6%ILR\*SVJFL]JG.NXHY?]5-9[5.L]J  
MIK/:N^:!=^SPCH\*PN\$>@;7\*+^>>SHR] ^VC':\*WBN95VLXYD\ / ZC#C@8<B<  
M+V&N\_64YD\K%\_\.!DP>+\*NK777Q"O.\$I'CH\*.9='E[J"YV,^5=\$%S@F[ [= '  
M<VVK'K^Q;(6",<)6VFYFL,/\_\*LZ)635<5PM5-<+5.MRXIZ:KIK:IUPM5-<+  
M5XC(\*WZK"KSERDBWD\,V-IGT\*6/!C5?[R'%E^Q#=2P4WBEVV<\*9Q3B\*;)M2\*  
M2U.:I[3:&II5.LI[K:M4LE. IZ+9ZIXZG(4V;;'7"G14V[:I4N5.RI?MLJI  
M\_^-K!MN&UVVY[;.-MXVV3;K-I;;A-O8H&S;2MN0VV] ];63; ;>BVZ;;QVV  
M\_>NV[#:X;<5MM:!TVN6W+;>Y0\*BU=WH[\,>[X]>^/?N#WNQ[ ]T>]R/?O#W  
M[@][@>[P>]R/?LCW?CWZX]X ]^H/?OCWKQ[W8]ZH>]X/>H'O?#WI![WX]VX]  
M\ >\^/?!'OQA[X0]YH>^&/=B/?\$'NO'OC#WE![XX]U@]\D>XH]\L>X0]\X>Z  
M<>]\\$>R4?ICV';;SJC5V5NK^8//>P/?8'OJUV#1\$]-P1[;CWRQ[=#WQQ[>#V%\_  
MHGP]A?Z)4>PO]%2CV%\_HJ<>PO]\$L/87^BA#V%\_HJ@>PO]%%'L+\_158]A?Z\*L  
M'L+\_19)<+[191<7,.BC+S1YKUQ=+:\*0N%]HK%<77^BS\*]J/.:7%W9HK5<+[1  
M>,N+QS1+KQAYSZSO:M%Y2X7VBMUQ?\*:\*:O4#SI%Q?IZ+3+A?:+4+B\_\_T4]<=  
M6:+5+NQYUHK7N#1:]8[;ZJ+06JFT%JG9Y5#O\_ZJ;06J=H+53:"U>4T"G?\_\_\$  
M.EIR.DV49N?L3R,S9L.75J\$F699XN&I44=T5#)\_N]T3XZP<MRQ[\$W\_\4X>W  
M:;QRI@H@Q^R FF'\_CF)&E46F55-IE5.T?HZIH^FTRJG:954VF57HM O&8@4X  
M,BIGDC,'6LH:"6;Q>)K0\9Y#+RTC;B9K<\W +-=-WWT9KP9KL\U'\*#JY\WGP'  
M6-\*!/!MU][VPWV[O2C/&'%F.>Z6(P&,D \*U3CC!2Q\$ A 6F=2I-)(0L-W;  
MIHAAC3 <,%KCG5!\$Y1&<,1B,0@ (1 HSAB\T2D%(!%97'#CFN"5ICQ>YXK2M)  
M\_\_OWOV() \$6MZYV7X.^BY;\-^"\_! ?D[XK\_"6]W:VR)QQM\*@2=FJB\ /JT5IZB  
M\_DY2J+8JHMD]150QM6A%3.E4T7^[X,/MH>S&CN%3H#TBLC!>^20R>-]#,YBE  
M]U\^B\VFS%]&6^7+?I\_HX+S]/,JM6E\_\*^?(FJ?;0]EE-M.<^LR4BA\*#FTZIF

MMQ\*NNEPJ>N;=[G(\V:NDHKO)+O<I;VD%M?J@NJE\$WA%HT^7#4LYSRR>@630)  
 MGI=[9/R]&^LGGJJ!=!\_I9/1YLRR>@63T7K)^6WOK)M;VR< J3G]'D\_79-C, LG  
 MHFM5?KLG0;ZR=#U; )U\_UV3G)=DN/TIQ6EE3QV0^W(CVL& N%KW'Y\$I:%W-\$D  
 MK3(2YLDG.9GZ;Q>81#/N)#\_+ZX]L1W-3U-/YG6\_VH83X<+7SG1/+B55/Q/TU  
 M.<34SRKQBJ@3RAY]:5GH3\*SW?\_59Y\RLSQ\_%9=H8>RDHW.JJ6,T'.7A1\_/ \*  
 M'S+V%\$P(FS)FKGYT09ZO<A&;'Y3OF\[X\*^WEG;.3.V[IE:\*=PEXKB9>\*,GYQ  
 M4UA\_SQR<VKA+KW&E=^;D/T]^1Y LX0!UR:=\_K5\_YKAOO7\$JWU;V=]S"5E 6>2  
 M^M3,>9T\,RP^C3/=KUP\_/S'M 6%DVO.&[AR?2SA /0+LF@3M2W\*&9NHU+K>  
 MWR?M>&F6#D1I') ,UV2'R,0OMPJ4&^WCC>?IYTD]!UVI7@:.\*?5VSQ L33JSQ  
 MI\*<#=#YK5&CK5 P?<]V ER2GK]VVIUVNCWU5- IN,GIX^^'.GNU>.\$%?!IZ;K  
 MX.G\*%][R1NR3<,\*N\_?K-UPG@;=&3-7.RGF]<:M=Z<WQ4<"1>RDWF=\1C=-  
 MQXTNUX:XFA0JJ]X[CYJ74[;G;G6528/KBU>NL7<-4[CZ707EX1@@&/Q>OG  
 M,PLXKG;)JE?YZA%M:WNJ?<)@BXN8(N\*E]?^6340=<P1<5,\$7%\$!%SLYE%H7E  
 M=I9@P.S3NXTPY,4V.\*>)SIBF\_>%-HF\*;XB1'<\_ 2%UW<^!' =3V\C9@A%'X\*^  
 M4? [= .E1[ZP4INAEJ/?>53^&\$+TBC68K2-S]T1OF@H<MY7,10NY>1>&1]2>>  
 M!7RTH\O@9Q24;G0E/IU=-10HL-2JS9YY&]SEYX8XX'WDZO^]47R^<2]E' U-  
 M3@G>YXW!GH\$Q/=O<ZPP/] %UHX\_,K WT,IJ=" \_I]3\&I-AW/7U@VE,E0/<RT\_  
 MU\_\*IDI\_5??'X+RU^/90 /CV+V!WC[.C11MO+!Y9.\_Y#ZV)#C?X5=YC54>3TL  
 M!]#AT;G6?P>KDGU+JJ7U23ANUO7\*HN/>2\_.7R7^1^82\_CM\_X%2]0>N^J@W)0  
 M9U7M00V>]]JH;GR-TZRHEO802 AN+@(;BH [\_BJ?\_N+@(;BH"&XN AN9"71?  
 MF^-<UW[-,)WX=M+P9HNK!FC@J77A9F97>)[^-G)> 7CSG^^ 6VK):B?AWSV  
 M 7VJHN?/JL/)FZ??#4?I);M>4KUX(2W,7?O[FB4JGC(>5#<\_,O!J08OC>Q1S  
 M5'!%6D\*[^&W)^OX'I'\_5\$[\_7EL'1%JHHNX0-%Q<#1<5 J\_\%2/]Q<#1<5 T7  
 M%P-%S+S+P%S?L17J#OXR8HOA/]CKZ<A5^Y-(</).OV2;,UKWEII;+NYPO39=  
 M[N>J,O?H)W>Z5183QSXJSGQ?C2U1EXT8J/Z+5 [&+Q;M?OX:??;:JJ?ZB\O<@  
 M\_]EDF?7B!5;CMP@F(BX)NXJ"(\\_CJ0\*N";N\*@F(BX)NY]V91=\QS)0/-FDW  
 MGWM,7%1PM2F#I]M^5!%WY-X#.V3UU=&4A^:G\MXW,)8#E,OK<HG(K-DPYGDF  
 M&26CO.'4)JXRSXNI'OZCONM\_/ (K9U/7(XOJ[5&#OK7JE6NPFHDB/G9[,SUW/  
 M7>)N\K^.?02\$N;46R>YN+GN;BM^3^CGJ+:Y[FXJ>YN+GN;E9,HOOS"V2N/K)  
 M]+NFA3\*X9LNV>30;GOTI?]C7K-<X\&\$^+<IZZB-U37K![[K\*UI/VHFN^?5#7?  
 M/TP54E8;3QG]),N'G4VZ9%>\_EGWT>4G,.GRD6COT!X=-WU">L/M)?'VWER4E  
 MR,'V,L^JG[\_R\_,H^R5GV,H^R5GV3,HO)EQ\$^0^>AV+XC1Z=;;%1P;\$Q=JRG^  
 MSJ4P.<=YUYI&VDMF<^Z8L<32Z)&\*EZB7\G"3("2"&Y:HR6MX50\5;\*2^\*R\_2  
 MV)>FV\]W\*J7LI<^]Y6QO9MSRNA3+L%[5!FIK>S=Z<+>G66],H:SJBWJ%EO3J  
 M+>H66]1,HK];.=<=AXFU>RH\2RWMO5&8F0)5]JH5X=?+S(U&45WZM.LC3T\_U  
 M6BL]Z?'XB66<?I,L]S-7N6GE8U.6E/G2-ZA&XRLP?ZP'^L6/]6D,\_GSJA\_X2  
 MQ\_K%#\_PEC\_PIE%R"V/>+>'\_]!.!F/W:#I:7E0?]KOICZ^"GON+>7I/^%<O2?  
 MW'\$EL@[BQZ;(.TL.GI/]Q1\*HO@O(QN)3S&.XK.FR#]\*DO3\_^/&O:3^X[, \$JG  
 M;]QE%U6EO)(WR=J\X/N+H9?P\*=>&&X3\*T\?-ZJGUD@?2U\*G@/#Y=^]GW>F5I  
 M=[RHPZO7\CUM\F]\*V\J]/A1P20U5+/-Z&9N:X4#KEJ!\1\*6\_[>4H'8+4#K  
 ME\*!V"U ["91;>9&S]2]N9]\U+V?:<D>4VZ,\*;/OA34 FJ;\$U[!\$D8\$G[%OJN  
 MZ " =K!V]9;ZH<%V1TU!XTI+1E)?1=LG:ZQ.T-5S:SZ=L\*TF4T[R:7[T1?#=  
 M@UKW;-5%8<V:RH=@CCT4294W1T:)P^SHP['?MYH:;,'IPM;CBCOZW!DWS1)  
 M?C%&L+7@WK\$M72Q)0E5OH>YU/7#(IZA[9DB"; 1?8+1?LDH)YRH\_^Y8K1?8\*  
 M1?8K1?8S\*+?1\_^]8GX=["G<G'\_%\_,6F\_DOJ)]FM56-?OC\$&HG)&/^+P2=\$\  
 MF\_BI+K:GY<Z,-?8S7@=VN9!O,/R->]X+E?3,KMF"NS6\*]JJ?^]%0KM%BNS4\*  
 M[18KM)E%&7%YTNSR4FVJM?OU&YJ]\$W(/7-\$%I)7?4-)YID1<^J1%N;PO\_>+  
 MO^U5;.H5?^\_7?^5?^\_7?^\_F46J>O\GQW-->K.(5^SWA(1F=TA&-PB\$8;3GT  
 MBT^\$ICZZ?<2?3SX2(?<Z?:\$^Y(^Y0^Y\^X4^]H?2R\W9]QQ:#1]? (1G2MYW  
 M&GTK^=FUW?!>O/K/S'WXS[Y,\_W%5C'=%5U\JBJ:FA[UW\$47:NXCM>UQ='28B  
 MCQ&).K&8K%8S%?O.UM?5Z6NT;O;Z:1+ZI]=E+\_U&\_CC1]+&=CR)5='C8QWL  
 M\$=@[75L:/)JZJB@H[K1Q:VKQCJ'?X<;&TFBSU9)BZ\*KT>.\_B=KHU975]6['T  
 MDI///28\>4AW01=&[ELAD'8]8[0&ELOK[ANRONLOH8\$Z9W01Y--IX\ :5%KW9  
 M,6JKM)H\_N&@LT\$>/HZZ-6NZ\*/)D: !VIJXTJKDNQ95\_9<&"C(R:N+\*31E MW]  
 MQ"\*B!OC-Z\*1F,\_H:NIE.\_: ^X[2(1ENWRN;HLCG,XA'7Z/KZ3%55%71Q.\J/  
 M(STE-!Q%TJ'CUH-S>8IL]3]MDDT'(9C-IZK^BZ\*+71H^?T/98[05==6Z"50  
 M8;JW7,H.BBZ;///%KZJ\*A#?,/MT=?=6I9<B/71IBS,1U%F8GM,9BZ2\_68I8

MO3L5"%6/7UVC\_YL:GJP3B4\*Z,+G4!=&)20A[J>'F5[C-+'?^OE\_2"XZE(RP;  
MB\_H!O:XS]WM/U8H<C%C=A\*,2]6D+UD>2""1I)5\$C)YBGRQA'\*1&CRG8L9WN,  
MGDW4XAOM"O\EDA6/;=M39B^H+J?\*Z6 4M/J73'J+F,AE#"SDNWS610BFR^;S  
M2\$=WV]/FT(J=)DF():NRB]OD9AK\_4&\_K]9DE>]G\_=U\_0E<4"=/\G\$'91MZ/  
M%MT(W\_WD(M\NA&MN4(\T8A^+.H1ZEHA%G9H1Y(@WQSU[7GH1Y%DA&QP:\$>45  
M\_:;)"/X2\$>=J"/V79[ ]R.^/70CS+!"/8JBM5".-K\$(Y!<' ,F]T,C\_<\*7<  
MC./V<"A'%!K=? .A%W]TL\_WBOE#V(>NSKV/M(18;\W2A9\_N@'V'S'O?H1'^@  
M ?\*\_M"MZ\\*.S\*7:R4(W!W^8"/TOM^6"/<X(ZQJ/N@VVA9>WUQSQ9X\_?0CQ@#  
M^6- ]G/H18VJ\$?@]8^Y,W>'>GG 7:\E"-["+C&F\_I:%"-WSBQ\_D.9Z["@/&=  
M^] 'K1L?L]>!LN.SZ\*\$7 UK]0J=B'OT"S]MOBG@;] 0OYX'\_6.OT^6><I>V&  
MU?F\_)WZ"\$< M?7'?< WX W/\_\$-W\_. [, )X2[+3%#"7Z8F\_T!/@O\_,BT\_MBL  
M\ -UR\$?9M7L)V>4=Y5\_MCEO,@/D4I<.:OX)7RR[+QRSS!OYPXG\_\$%/@#\*RX\$  
MKZ[O#K\$[ ^F#NR8\*F=^W+7MC 'ZPC/SY1>Y@3L#KVPN/T!3]B6\_ZAACN\$F<I>  
MPV@<< ^M%W[W9B1Q =@7\_NQV?NQUW:I2..Y]H5/>B,[4/\_EGKWFP\$[QC[ \!:  
M:5EF&>Q,"\_C#NOT3 O:" ,]N/&[03WNBX\_1D"UPE^7P3K"7YA6]P!^U WLQ(^  
MO^4N,[ \_- ' ^\$6'M<.A'WS%7[HO\_@B:[!.%<LN[\*7L3\$OM>\_,.YUW8"\_; ,=\_%  
M\*W[(\WN20^X8P[H \_' \*'R!=?&%-V=>8UP]^88@[(L\_:B%[8Q+^<4OSS+#M+8  
ML\3?L18?D C\3\_XX(\_ )3D+X8C, \_BF'OS1]OK3"' ;GKWXH/Q17?"%OR@OR#  
M\*\_G+0I6C1=>59"7W27Y\S\^ON=[ ]=E\_J!/YWJ\_J6;Z?[5S/R\_!JE?GWU?GO?  
MWZOS\_ZOR?:ZC\_]U@HO[ KN:Y\_ZZ3@,' ^R[W]]UIGKR(=Y>'&(?[ \KQL' ]7  
M[3F'? 4W4>RF4>96]13\_36U#GP^GX]1&^FCZC32Z;1Q=)\*CT=37Q]'5T>EB  
MUTI/CJ3308BDHSYBL324?:4E&>-EME?![!'Z!@H#,-F;\_:?OV?VV67[."9Z[  
MLL]:RS.PX</K>M51W[- ^>NO9U2^:P+^#QWN9!9U?MY2+Y[Y[GN]D]SW7KK[  
MU^ ^PG7N>]RMZ==;L5ZMD\_:Z;4:WNOWY>2(RB^%>ZN'7IMO IZ?&7K9]PNB[E  
M;WO<:] [GZ\*]-INWK:2GN>W7Y]O=+H\_B=,\*P3-FWDGN>P.:,<]W\_0]IE]\_W]  
MTNA]3SI[\_ (2-<9)/G\_\ [ ]DE\*.3Z?G^K:O#>YMWN?'VCW/C<)[GR+-[G[>->Y  
M\5:'[BV>Y^SFWN=UWSW/W>@]S^B\_[]]"\_O.W2F^:7E7&<=G/)Z),S\_%1I5?4  
M\_Y/8H7VI^R4:7L4+XQ4^F^YR>ISZOOS\_3^Q3[I;[G+^R>QS\_2\OFFIZ4]<O  
MG%31[ [G]ZG/Z/>G3,\*8"HELH):#\_V8%\_\_N^3]>I3\_78:=WN^66(1B/A#"&\$/  
M\*X1GYA&C7A#D:\$>^\$9JX0ON\$FTQNFWSKZR]6NSTH3\*NV5=LJ[95VRKME7;2C  
M<J\ \$J\ 'F/)#@^X?1\ '!'W<\$S%P1^?!'&\*L\$T'<\$8<P1\_!/!- /!"U!-(\_!%&03  
M3+P1L/!- \*O@^"\ 9.\ #/ #P J> 9(X!BG@>?&1\_O // ,6\$ R1P!L' &)<  
M!-'-!O !G &D\*9G] -"O &0\ RIP#51P!BG-)? "G &.\ S!P!"\ U5\ ,<  
M T!\ ,\ U5\ -< 95P WP!FW #G \$40 [P!HK 2TH&N+0VC2'M" VA.[0@=  
MHT6;0@MH::M&G+: "FT:,-HV [OP':&&[08VC/FT-I6C3IM&J[:VQ]%7M##-H  
M>OM#5UH0.T']H/[0?V@\_M!\_:#^T']H/[0?R,>(:#^T']H/Z9>0T']H/[0?V@  
M\_M!\_:#^T']H/[0?V@\_M!\_:#^T']H/[0?V@\_M!\_:#^T']H/[0?V@\_M,/.)&0\_  
MLA\_9#^R']D/[ (?V0\_LA\_9#^R']D/[ (?V0\_LA\_9#VR'MD/;(>V0]LA[9#VR'M  
MD/;(>V0]LA[9#VR'MD/;(>V0]LA[9#VR'MD/;(>V0]LA[9#VR'MD/;(>V0]L  
MA[9#VR'MD/;(>V0]LA[9#VR'MD/;(>V0]LA[9#VR'MD/;(>V0]LA[2^(8#VP  
M'M@/; >V ]L![8#VP'M@/; >V ]L![8#VP'M@7VP']@/[ ?V \_L!\_8#^P']@  
M/[ ?V \_L!\_8#^P']@/[ ?V \_L!\_8#^P']@/Y\$UD,!\_8#^P']@/[ ?V \_L!\_8  
M#^P']@/[ ?V \_L!\_8#^P']@/[ ?V \_L!\_8#^P']@/[ ?V \_L!\_8#^PP]H%.L  
M^=[4#HU3SC>(7W\$+[B%]Q"^XA?<0ON(7W\$+[B#R>)D#Z/FX@^#B%[Q"]XA>\  
M0O>(7O\$+WB%[Q"]XA>\0O>(7O\$+WB,\*;7(AE[PR]X8G>&)WAB=X8G>&)WAB=  
MX8G>&)WAB=X8G>&)WAB=X8G>&)WAB=X8G>&)WAB=X8G>&)WAB=X8G>)\$OA";  
MX0F^\$)OA";X0F^\$)OA";X0F^\$)OA";X0<X0<X0<X0<X0<X0<X0<X0F^\$)  
MOA";VP/MI<Q@3;!&V!=L"[8%VP+M@7; NV!=L"[8%VP+M@7; NV8#VS >V!]  
ML#[8\$VP]M@3;!6V!=L!;8"VP/M@/; >V ]L![:0&!-L7NV+WP!<> E/:\.:  
M5S7\$7\$K\_D7\$LS>?OQMN\_-QV\_&W;@6[\4 \_-\*&\_,\_C\URCX'[X'[X'[ZVEQ/  
", #&

end

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your actual object would have to be at global Z 362.5039. Is this were you have it? If not this maybe the problem..

Did you try 0 in the Min Angle from Z?

I know you said that scaling them made them disapear, and if thats good enough for you then thats cool. But If you want them to stay on the ground after they fall, then this will not do. Just trying to figure out why I got it to work OK and these figures did'nt help you. Hmmm?

> Thanks for the numbers. I received 3.0 on Friday and have been  
> reading a bit more about the effect now. Still needs to have more info  
> on it I think...

Yes, they are a bit unpredictable, and take alot of testing to get the disired effect some times.

Good Luck!

=RRW=

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### 1.344 MSG-342 Subject: re Essence and Imagine 3.0

Subject: re Essence and Imagine 3.0  
Date: Thu, 16 Jun 94 02:53:25 PDT  
From: 16-Jun-1994 0448 <leimberger@marbls.enet.dec.com>

> The installer for the new version of Essence includes the ability to  
> change the extentions to something that works correctly. It's worth the  
> money (IMHO) to get the alpha-channel utility. It's a wonderful boon  
> although it often takes some thought to implement (Forge helps a lot).

Well ALL REGISTERED users got Essence II with the newsletter for FREE so only Essence I needed to be updated. You can't beat that for a great deal. If someone missed their free update they should contact Steve!

bill

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### 1.345 MSG-343 Subject: re Essence and Imagine 3.0

Subject: re Essence and Imagine 3.0  
Date: Thu, 16 Jun 94 02:44:23 PDT

---

From: 16-Jun-1994 0437 <leimberger@marbls.enet.dec.com>

>Hi All!

>I'm surprised that this hasn't been mentioned before. Essence I and II  
>Vol. 3.0 doen't work with Imagine 3.0! Now, before you all panic, I  
>have the solution. Just use the new super Dave-o-Matic(TM), and  
>possibly a wordprocessor that can load/save ASCII and has a  
>Find/Replace function :)

Well it has been discussed a long time ago. The ver 3.0 of Essence  
works fine with 3.0 on my system. I have the update for Essence I,  
and II working with 3.0 on my 4000. What do you mean by Vol. 3.0 ?  
I only got 2 disks in both my ver 3.0 disk sets.(3 WERE mentioned in  
the manual.

>Here's the problem: Take for example the bump texture from Essence I.  
>To get it to work with Imagine 3.0, you have to get the installer to  
>save the .ITX extension (just like for 2.9). The bump texture is then  
>saved as:

>bump.ITX

The Installer asks if you want to have the proper extension required added  
to the files. What mode did you install in ? I always select expert mode  
to make sure I get a chance to make all the decisions.

bill

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### 1.346 MSG-344 Subject: bones again

Subject: bones again

Date: Thu, 16 Jun 94 04:20:42 PDT

From: 16-Jun-1994 0616 <leimberger@marbls.enet.dec.com>

Well I spent three nights trying to get bones to work with my  
butterfly object. I seemed to have misplaced Lesk's tutorial. The  
butterfly is actually only the left, and right wing surfaces. There  
is a space between them for the body, but the two sides are joined  
as one object.(could this be the problem). I could tie them physically  
together if it would help. Also how do you set the axis for the bones if  
you have two parts pointing in seperate directions ?

bill

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### 1.347 MSG-345 Subject: Re:PC DXF's or 3DS files ...

---

Subject: Re:PC DXF's or 3DS files ...  
Date: Thu, 16 Jun 1994 07:42:14 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

I found DXF versions of the Aztec city and Stonehenge. The unzipped Aztec city is about 3mb. The bad news is that I could not convert either file to anything else. I used Interchange and the pc version of a DXF to 3DS converter that Syndesis includes with interchange. All this in an attempt to get something I could translate to iob. Nothing. It is most likely that the DXFs were incorrectly produced and are a loss. Too bad.

If anyone has had luck with these (or can get them in 3DS?) please let me know.

Doug Rudd  
rudd@plk.af.mil

-----  
The Amiga Guide to the Galaxy refers to Commodore's management as  
"A bunch of mindless jerks who will be the first to be lined up  
against the wall and shot when the revolution comes."  
-----

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### 1.348 MSG-346 Subject: Re: Solid and Drills.

Subject: Re: Solid and Drills.  
Date: Thu, 16 Jun 94 10:02:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Wednesday, June 15, 1994 16:50, David Wyand wrote:

>[...]  
>at the glass/air at the front of the box. It does not matter that this  
>is not "a true solid" as refraction only happen at the interface. Hope  
>[...]

That's what I thought as well.

Ok, then why is it that apparently you cannot build a true magnifying glass with Imagine as you can with Real 3D? Or at least that's what seems to be the consensus amongst some of the reviewers of these products.

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### 1.349 MSG-347 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0

---



Date: Thu, 16 Jun 1994 13:51:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi Christopher!

> The installer for the new version of Essence includes the ability  
to  
>change the extentions to something that works correctly. It's worth the  
>money (IMHO) to get the alpha-channel utility. It's a wonderful boon  
>although it often takes some thought to implement (Forge helps a lot).  
>

I have and use Essence 3.0. Do you have a later version? I know all about the alpha-channel, and have used it a lot. My point of the post is that Essence \_3.0\_ produces texture files with .ITX (note, its in capitals) and that Imagine 3.0 does not like this extension to be in caps. It must be lower case for Imagine 3.0 to recognize this.

-Dave  
david.wyand@canrem.com

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### 1.350 MSG-348 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Thu, 16 Jun 1994 13:47:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi Kelly!

>Well, it was mentioned that Essence doesn't work with Imagine 3.0 ...  
it  
>should be rephrased to Essence v1.0 doesn't work with Imagine 3.0, as  
>v3.0 works just fine. If you EVER plan on upgrading to Forge, you will  
>NEED Essence 3.0 (2.0 was skipped). Essence 3.0 installs itself with  
>.itx extensions ... of course, this was covered in the newsletter by  
>Apex. Also, I'll use this time to announce my review of Forge in Amiga  
>Report 2.19 (ar219.lha on aminet)

Essence 1.0 DEFINATELY does not work with Imagine 3.0, but its WAS  
Essence 3.0 that I was talking about, and is what I have.

Yes, Essence 3.0 does put the .ITX extension on the texture siles if you want it to. The problem, and the whole point of my post was that it puts a capital .ITX and not a lower case .itx. My copy of Imagin 3.0 does not accept a texture if it has an uppercase .ITX, only a lower case one. That's why I suggested using a wordprocessor to change the install file.

Does your copy of Essence put .ITX or .itx, and if its the upper case, does your Imagine 3.0 read it just fine?

-Dave

---

david.wyand@canrem.com

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### 1.351 MSG-349 Subject: RE: Re:PC DXF's or 3DS files ...

Subject: RE: Re:PC DXF's or 3DS files ...  
Date: Thu, 16 Jun 94 10:11:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

The Aztec city is not "incorrectly produced" and is not a loss. Contrary to John Foust and Scott Kervin, the .DXF converters in InterchangePlus and Imagine 3.0, as well as Pixel3DPro, are far from being completely compatible with AutoCAD .DXF output. It is NOT because these objects are inferior because they are on the 'net. 3D Studio reads all these objects just FINE!

InterchangePlus and Imagine 3.0 will NOT! If these guys ever get off their arrogant high horses, they might find out for themselves.

The Aztec city takes over 20 Megabytes of RAM to render in Imagine. .DXF usually does not have color or texture attributes and this is the case for this group object. It could probably be edited to be a really awesome object but it will take a lot of work to apply all the brushmaps and textures to get there. The guy that made it deserves a lot of credit for all the work he put into it.

-----  
From: imagine-relay  
To: imagine  
Subject: Re:PC DXF's or 3DS files ...  
Date: Thursday, June 16, 1994 7:42AM

I found DXF versions of the Aztec city and Stonehenge. The unzipped Aztec city is about 3mb. The bad news is that I could not convert either file to anything else. I used Interchange and the pc version of a DXF to 3DS converter that Syndesis includes with interchange. All this in an attempt to get something I could translate to iob. Nothing. It is most likely that the DXFs were incorrectly produced and are a loss. Too bad.

If anyone has had luck with these (or can get them in 3DS?) please let me know.

Doug Rudd  
rudd@plk.af.mil

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-  
  
The Amiga Guide to the Galaxy refers to Commodore's management as "A bunch of mindless jerks who will be the first to be lined up against the wall and shot when the revolution comes."

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---  
-

---



Having it all doesn't necessarily mean having it all at once.  
\KenR

-----  
Having it all doesn't necessarily mean having it all at once.  
-----

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### **1.354 MSG-352 Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.**

Subject: Re: PC DXF's or 3DS files into Amiga Imagine V2.  
Date: Thu, 16 Jun 1994 10:30:07 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.efn.org>

Thanks, Joop, for your response to my conversion query. And it turns out that aztec.zip file is actually a DXF--but Imagine still choked on it. Couldn't find ENTITIES file, it said. Whatever ENTITIES are.

I found it down on avalon.chinalake.navy.mil in the pub/objects/ section. I almost wish it had turned out to be a 3DS object: I might have had better luck converting it.

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### **1.355 MSG-353 Subject: Re: Solid and Drills.**

Subject: Re: Solid and Drills.  
Date: Thu, 16 Jun 1994 10:48:17 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.efn.org>

Hey guy,

You CAN make a magnifying lens with Imagine. I believe the tutorial was in one of the early FAQ's. It's all in the difference between a sphere that's just a glass bubble, and a sphere that's solid glass. Index of refraction, if any of us passed our high school physics class . . .

On Thu, 16 Jun 1994, Ducharme, Alain: FOB wrote:

>  
> On Wednesday, June 15, 1994 16:50, David Wyand wrote:  
> >[...]  
> >at the glass/air at the front of the box. It does not matter that this  
> >is not "a true solid" as refraction only happen at the interface. Hope  
> >[...]  
>  
> That's what I thought as well.  
>  
> Ok, then why is it that apparently you cannot build a true magnifying glass  
> with Imagine as you can with Real 3D? Or at least that's what seems to be

> the consensus amongst some of the reviewers of these products.  
>

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### 1.356 MSG-354 Subject: RE: Re:PC DXF's or 3DS files ...

Subject: RE: Re:PC DXF's or 3DS files ...  
Date: Thu, 16 Jun 1994 14:11:12 -0700 (PDT)  
From: Gerard Menendez <gpm@netcom.com>

Ted,

If you have been able to make an .iob out of the Aztec city would you be willing to put it someplace others could grab it.

THanks,

Gerard

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### 1.357 MSG-355 Subject: re: essence and Imagine 3.0

Subject: re: essence and Imagine 3.0  
Date: Thu, 16 Jun 94 15:10:13 PDT  
From: 16-Jun-1994 1705 <leimberger@marbls.enet.dec.com>

>Does your copy of Essence put .ITX or .itx, and if its the upper case,  
>does your Imagine 3.0 read it just fine?

Dave,

I just checked and my essence textures all have a lower case  
.itx . I wonder what is happening here ? I ordered my essence well  
after some of the other users, Maybe the install has been updated.

bill

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### 1.358 MSG-356 Subject: RE: Re:PC DXF's or 3DS files ...

Subject: RE: Re:PC DXF's or 3DS files ...  
Date: 16 Jun 94 19:25:20 EDT  
From: "Stethem Ted 5721 <76004.1763@CompuServe.COM> writes:" <76004.1763@CompuServe.COM>

To: Imagine

---

> The Aztec city is not "incorrectly produced" and is not a loss. Contrary  
> to John Foust and Scott Kervin, the .DXF converters in InterchangePlus and  
> Imagine 3.0, as well as Pixel3DPro, are far from being completely compatible  
> with AutoCAD .DXF output. It is NOT because these objects are inferior  
> because they are on the 'net. 3D Studio reads all these objects just FINE!  
> InterchangePlus and Imagine 3.0 will NOT! If these guys ever get off their  
> arrogant high horses, they might find out for themselves.

Gee, Ted, I'm sorry I'm so "arrogant" because I take the time to explain my understanding of DXF to the readers of this mailing list. Let's see, the list has lost Glenn Lewis and Mark Thompson in the last few days, and even Impulse doesn't like to read this drivel on a regular basis...

3D Studio is made by Autodesk, the people who foisted this DXF "standard" on the world. It's a poor standard because it is subject to free and loose interpretation. I can think of several ways to represent something as elementary as a polygon: SOLIDs, TRACES, LINES with thickness and elevation, closed POLYLINEs in the shape of the outline of the polygon, 3DFACEs for triangles and quads, polyface meshes with hidden internal edges, and I'm sure I'm forgetting a method or two.

That's not getting into topics like the mapping between layers, line types, pen numbers, blocks, inserted blocks, blocks within blocks, text, etc. that are all subject to interpretation by any 3D developer who decides to import or export DXF.

There's plenty of DXF files that will cause 3DS to woof, too. What do you expect a triangle-based program like 3DS or Imagine to do with a lone polyline hanging in space? At least InterChange handles those. 3DS in fact ships with two different DXF translators, one inside the program, and one external, and they behave differently. Yes, I do expect that a \$3,000 program from Autodesk will do what it claims to do.

I've never said that InterChange's DXF translator was perfect. I've never said "it'll eat anything from the Internet and spit out a ready-to-wear Imagine object" either. In fact, I go to great lengths to explain \*exactly\* what it handles and when.

And don't flame Kervin because he's had no troubles with the converter, either. It's perfectly possible for two people to have completely different experiences with the translator. On the other hand, if you're really working with AutoCAD and RTFM, our translator will do what we say it will do.

Please, compare the translation and the manual and the tech support and the price of InterChange to any other 3D translator.

What really irks me is the fact that Pixel gets mentioned when DXF comes up. Please, go ahead and quote the entire two or three sentences from their manual that explain how they handle DXF.

Is that the kind of support you like? I'm not even sure if the phone will be answered if you call Axiom for tech support on Pixel Pro.

---

And they've even referred \*their\* customers to \*us\* because they know their DXF support really bites.

Meanwhile, 3D magazines ask to reprint the explanation of DXF from InterChange's manual, and it's in the Toaster manual, and even one of our other competitors \*plagiarized\* vast sections of our manual until we caught them.

Oh, and I'm sorry that I haven't examined, converted and reviewed every object on Avalon for your personal pleasure.

I'm going to give you a free clue: Smart, nice, intelligent people drop out of this mailing list because of all the whiners who know the price of everything, and the value of nothing.

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### **1.359 MSG-357 Subject: Glenn's MELT won't decode properly!**

Subject: Glenn's MELT won't decode properly!  
Date: Thu, 16 Jun 94 20:06:30 EDT  
From: "Steve J. Lombardi" <stlombo@eos.acm.rpi.edu>

Is anyone else having trouble uudecoding Glen's Melt program. I've tried uudecodex as well as 2 versions of UUxT (2.2 being the newest I've got) and both fail. UUxT ends with a message 'Unexpected end of input.' Anybody have this working. It sounds like a great program.

steve

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### **1.360 MSG-358 Subject: RE: Re:PC DXF's or 3DS files ...**

Subject: RE: Re:PC DXF's or 3DS files ...  
Date: Thu, 16 Jun 1994 21:02:35 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.efn.org>

Thanks, Stethem, for your post. And I was hoping it was something on my end that was lacking. I read the txt file that came with that zip'd Aztec model, and it sounds like the creator has done an amazing job. I also held onto the object file, in hopes I'll be able to get it to load.

Someone else suggested I try the -a option when I unzip the file, since Imagine claims it can't find the ENTITIES file when I try to unload the version I unzipped with just the straight unzip command.

I'm going to give it a try soon as a I log off.

---

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### 1.361 MSG-359 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Thu, 16 Jun 94 21:31:51 PDT  
From: ual97@freenet.victoria.bc.ca (Christopher Stewart)

>  
>Hi Christopher!  
>  
>  
>I have and use Essence 3.0. Do you have a later version? I know all  
>about the alpha-channel, and have used it a lot. My point of the post  
>is that Essence \_3.0\_ produces texture files with .ITX (note, its in  
>capitals) and that Imagine 3.0 does not like this extension to be in  
>caps. It must be lower case for Imagine 3.0 to recognize this.  
>

Essence 3.0, Imagine 3.0 and Forge all work correctly with proper  
installation (for me). Perhaps try installing it again.

--  
"I wish there was a knob on the TV  
to turn up the intelligence.  
There's a knob called 'brightness',  
but it doesn't work." -- Gallagher

ual97@freenet.victoria.bc.ca  
cs833@cleveland.freenet.edu  
  
Join the Animation Sig!

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### 1.362 MSG-360 Subject: Melt.lha uploaded to aminet!

Subject: Melt.lha uploaded to aminet!  
Date: Thu, 16 Jun 1994 23:12:04 -0600 (MDT)  
From: Roger Straub <straub@csn.org>

Well, I finally got around to uploading that "melt" program that was put  
here a couple days ago to aminet, but I seem to forget the uploader's name -  
Glenn, that was it!

Anyway, it should be appearing in gfx/3d in a few days.

See ya,  
Roger

---



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### 1.363 MSG-361 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
 Date: Fri, 17 Jun 1994 02:03:50 -0400 (EDT)  
 From: "ElectroSURFER))))))>" <romulus@escape.com>

Can you explain alpha channels please.

Thanks

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### 1.364 MSG-362 Subject: DXF or 3DS to TDDD

Subject: DXF or 3DS to TDDD  
 Date: Fri, 17 Jun 1994 08:07:38 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN      DB "          _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Mike McCool (PC DXF's or 3DS into Amiga Imagine v2.0):

```

> Hey y'all,
>
>      This is an echo, of Mr. T's request. I just locked onto an
> amazing 3ds object of an Aztec city that I'd love to import into
> Imagine. I've got Pixel3dPro, and it won't touch 3ds files. Maybe
> there's no way to translate them to TDDD, but I'd love to render this
> Aztec city of gold . . .

```

Hi Mike,

I think I can help Ya in rendering "Aztec city" meshes Ya got,  
 just uuencode it to me and I'll repost Ya a .TGA .TIF (or what You want)  
 output picture.

```

>      Jeez, I also got a great model of Stonehenge, down at
> avalon.chinalake, but it, too, is 3ds.

```

I've got it and I dont think it was a "great model", just a simple one.

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(-_^)ue
|___| END          MAILING      _ _ _ _ _ Wizard signing off

```

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### 1.365 MSG-363 Subject: Genlock button in stage

Subject: Genlock button in stage  
 Date: Fri, 17 Jun 1994 17:13:21 +0000  
 From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

Hi everyone,

Well i still haven't found a button to activate this but i'm not 100% sure that it's need anymore.

I tried a few quick tests by setting making sure the 2 entries in the prefs were both on 000 (default i think). Rendered a picture with a ground and a couple of objects with the 'sky' parameters in globals all set to 000. I then rendered another picture with no ground and the same settings and was able to composite the 2 in adpro and dpaint as well.

I don't reallt know if this was possible on 2.0/9 as I have always automatically set the Genlock flag.

Anyway thayt's just what i tried. Let me know if anyone finds out anything else ...

bye  
 David Shaw

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### 1.366 MSG-364 Subject: Re: re Essence and Imagine 3.0

Subject: Re: re Essence and Imagine 3.0  
 Date: Fri, 17 Jun 1994 00:42:04 -0700 (PDT)  
 From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Well ALL REGISTERED users got Essence II with the newsletter for FREE  
 > so only Essence I needed to be updated. You can't beat that for a great  
 > deal. If someone missed their free update they should contact Steve!

---

ALL REGISTERED users got Essence II with the newsletter for FREE? Do you mean registered users of Essence II, or all regestered user..I have Essence I and haven't gotten the update or any free Essence II. I think I must misunderstand this message. Because my newsletter said that Essence I users have to pay for the update but Essence II users get the UPDATE for free..is this what you meant? There was also a special deal if you buy the Essence I update and Essence II together..at least I believe this is what it said, but it was quite a while ago when I read it and don't have it in front of me at the moment..

=RRW=

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### 1.367 MSG-365 Subject: re essence and 3.0

Subject: re essence and 3.0  
Date: Fri, 17 Jun 94 02:50:39 PDT  
From: 17-Jun-1994 0448 <leimberger@marbls.enet.dec.com>

> Well ALL REGISTERED users got Essence II with the newsletter for FREE  
> so only Essence I needed to be updated. You can't beat that for a great  
> deal. If someone missed their free update they should contact Steve!

OOPS! Sorry about that. You are correct I should have said all registerd users of Essence II got the update to essence II with the newsletter.

>>ALL REGISTERED users got Essence II with the newsletter for FREE? Do you  
>>mean registered users of Essence II, or all regestered user..I have  
>>Essence I and haven't gotten the update or any free Essence II. I think I

bill

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### 1.368 MSG-366 Subject: Re: re Essence and Imagine 3.0

Subject: Re: re Essence and Imagine 3.0  
Date: Fri, 17 Jun 1994 07:39:24 -0400 (EDT)  
From: "Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU>

On Fri, 17 Jun 1994, Randy R. Wall wrote:

> > Well ALL REGISTERED users got Essence II with the newsletter for FREE  
> > so only Essence I needed to be updated. You can't beat that for a great  
> > deal. If someone missed their free update they should contact Steve!

---

> ALL REGISTERED users got Essence II with the newsletter for FREE? Do you  
 > mean registered users of Essence II, or all regestered user..I have  
 > Essence I and haven't gotten the update or any free Essence II. I think I  
 > must misunderstand this message. Because my newsletter said that Essence  
 > I users have to pay for the update but Essence II users get the UPDATE  
 > for free..is this what you meant? There was also a special deal if you  
 > buy the Essence I update and Essence II together..at least I believe this  
 > is what it said, but it was quite a while ago when I read it and don't  
 > have it in front of me at the moment..  
 >

Hi there. My understanding of the upgrade for Essence is as follows:

If you own Essence I, you would have to pay for the I & II 3.0 upgrades  
 (since you don't own II, how could you upgrade it?)

If you own Essence II, you get the II upgrade free. You'd have to pay for  
 the I 3.0 upgrade (since you don't own I, how could you upgrade it?)

If you own Essence I & II, you get II 3.0 for free, but have to pay for  
 the I 3.0 upgrade...

Hope that helps...

=====

Drew Vogel: Admissions Officer at University of Cincinnati Undergraduate  
 Admissions (call 800-827-8728), SysOp of The Cafe' BBS (513-232-4895)  
 FidoNet 1:108/245, Actor, director, Amiga fan, Imagine 3.0 user, vice-  
 president of Ohio Valley Amiga Users' Group, documentation author, single  
 guy, and much, much more! "The only way OUT is THROUGH."

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## 1.369 MSG-367 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
 Date: Fri, 17 Jun 1994 07:45:58 -0400 (EDT)  
 From: "Andrew P. Vogel" <vogelap@ucunix.san.uc.EDU>

On Fri, 17 Jun 1994, ElectroSURFER))))))> wrote:

> Can you explain alpha channels please.  
 >  
 Hiya. Alpha channels are a special way of handling textures. For example,  
 by using alpha channels, you could have a chessboard where the black  
 squares are, say, veinedmarble, and the white squares are wood or  
 something. Alpha channels is the tool that allows you to do this sort of  
 thing.

Hope this helps!

=====

Drew Vogel: Admissions Officer at University of Cincinnati Undergraduate  
 Admissions (call 800-827-8728), SysOp of The Cafe' BBS (513-232-4895)

FidoNet 1:108/245, Actor, director, Amiga fan, Imagine 3.0 user, vice-president of Ohio Valley Amiga Users' Group, documentation author, single guy, and much, much more! "The only way OUT is THROUGH."

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### 1.370 MSG-368 Subject: T3D4DOS

Subject: T3D4DOS  
Date: Fri, 17 Jun 94 15:09:24 +0100  
From: H.Heberle@trier.fh-rpl.de

Hello all,  
today, 06.17.1994, I had an I was ftp'ed to avalon.chinalake.navy.mil.  
In the /pub/misc directory I saw the following directory listing:

```
-rw-r--r--  1 ftpadmin archive          707 Mar 28 21:46 t3d4dos.txt
-rw-r--r--  1 ftpadmin archive    402690 Mar 28 21:46 t3d4dos.zip
```

Is this the TDDD lib from Glenn Lewis that all the PC-users of Imagine want to get?

Interested users should have a ftp session to that side and try it out.  
Horst Heberle  
heberle@trier.fh-rpl.de

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### 1.371 MSG-369 Subject: Re: Glenn's MELT won't decode properly!

Subject: Re: Glenn's MELT won't decode properly!  
Date: Fri, 17 Jun 94 9:31:43 CDT  
From: drrogers@camelot.b24a.ingr.com (Dale R Rogers)

|Is anyone else having trouble uudecoding Glen's Melt program. I've tried  
|uudecodex as well as 2 versions of UUxT (2.2 being the newest I've got)  
|and both fail. UUxT ends with a message 'Unexpected end of input.'  
|Anybody have this working. It sounds like a great program.

I decoded it on my Intergraph workstation (clix-Ingr version of unix). While I haven't tried the program yet, I did not receive any errors. It seemed to decode fine. I just typed in uudecode <file name>. It produced another file melt.lha. The file is a data file; not a uencoded file. I stripped the email stuff out of the file before I decoded it.

Dale

\_\_\_\_\_  
dale r. rogers

Intergraph Corporation  
Building Design & Management  
drrogers@camelot.b24a.ingr.com

MailStop: LR24A3  
Tel: (205) 730-8294

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## 1.372 MSG-370 Subject: Re: AZTEC

Subject: Re: AZTEC  
Date: Fri, 17 Jun 1994 08:47:25 -0700  
From: Lesk@cc.snow.edu (Lesk)

>DXF "standard"). There is a route that you can take to convert most any DXF to  
>a DXF format that will be read by Imagine. But no-one tries.  
>  
>Like I always say...those that can DO, those that can't BITCH.  
>  
>  
>-GreG

I downloaded aztec city and when decompressed it has the dxf extension. I  
have always had trouble with dxf formats, however I can always get the  
object!  
some of my tricks are thus....  
I don't just convert directly to imagine. convert to another format then Pov, LW

or something. then I usually have some clean up to do so I use Vertex.  
Vertex imports very well and has some very nice clean up features, the face  
counts etc. give you a lot of detail on how close you are to a clean  
object. then I export from vertex to imagine. Viola a very good object that  
at first would not convert to imagine. One last thing there are very few  
objects I have not been able to convert directly from within  
interchangeplus. I usually just double click on the converter and size  
things up a bit then convert, this gives a bit more accuracy and detail.

Aztec city is the one dxf out hundreds I have not had any luck  
with. I would like to get it converted so John if you have a chance let me  
know any secrets you might have to get this thing converted.....

Render Ho!  
Lesk

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**1.373 MSG-371 Subject: re:magnifying glass**

Subject: re:magnifying glass  
Date: Fri, 17 Jun 1994 07:35:50 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

After reading the posts on this yesterday, I just had to try it. Well, after all Imagine supports RI then it must support magnification. It does. I constructed a simple paper-weight magnifying glass and it seems to follow the laws of simple geometric optics. Plenty of distortions, just like the real thing.

Doug Rudd  
rudd@plk.af.mil

---

The Amiga Guide to the Galaxy refers to Commodore's management as  
"A bunch of mindless jerks who will be the first to be lined up  
against the wall and shot when the revolution comes."

---

--> RETURN TO CONTENTS!<==

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---

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Render Ho!  
Lesk

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### 1.375 MSG-373 Subject: RE: Magnifying Glass

Subject: RE: Magnifying Glass  
Date: Fri, 17 Jun 94 11:02:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

RE:

> >at the glass/air at the front of the box. It does not matter that this  
> >is not "a true solid" as refraction only happens at the interface. Hope  
> >[...]  
>  
> That's what I thought as well.  
>  
> Ok, then why is it that apparently you cannot build a true magnifying  
glass  
> with Imagine as you can with Real 3D? Or at least that's what seems to be  
  
> the consensus amongst some of the reviewers of these products.

Allright, here is the status on the "magnifying glass" issue up to now as far as I understand it. Thanks to everyone who replied on this. It does seem, however, that most people are convinced that you can actually build a fully functional magnifying glass in Imagine.

My verdict: There is definitely a difference between the way Imagine and Real 3D handle a magnifying glass. Real 3D does appear to render a more real (pun) magnifying glass than Imagine IMO. I have done some tests with Imagine and PovRay with similar "lenses" and scenes (and so has Andy Jones with Imagine and Real 3D, thanks for the great example Andy!). I don't have Real 3D, but PovRay is similar in the sense that it has CSG objects. The CSG lenses seem to actually correctly concentrate the light (it doesn't burn the object behind it however ;-)) whereas the Imagine lens will cause a bright "shadow" with a dark border. As well, even though the Imagine lens will magnify the "image" behind it, it doesn't seem to be able to correctly "reverse" the image as the Real (double-meaning) lens. Andy has a simple little example image (10K) which shows some differences, however subtle (but effective) due to the closeness of the lens to the object being magnified.

These differences do seem to be linked to the fact that the Imagine lens is a glass shell whereas the CSG lens is a glass volume. I'll let the physics experts explain the details however.

---



Please don't get upset and flame me if you don't agree, present your arguments, I'm opened minded. I did see a difference however!

regards,  
Alain.

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### 1.376 MSG-374 Subject: Staging Language

Subject: Staging Language  
Date: Fri, 17 Jun 1994 12:49:08 -0300  
From: MEURER@vortex.ufrgs.br

Hi. I'm new on Aminet and recently I' saw a Imagine Staging Language in the gfx/3d directory. Does it really works? Is it usefull? Does anyone use it? I am curyous about that.  
Thanks, Rodrigo.

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### 1.377 MSG-375 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Fri, 17 Jun 1994 10:13:20 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

On Thu, 16 Jun 1994, David Wyand wrote:  
> Does your copy of Essence put .ITX or .itx, and if its the upper case,  
> does your Imagine 3.0 read it just fine?  
>

Well, I got my newest version of Essence II with the newsletter, and it has lower-case .itx extensions. The upper-case COULD be a bug with the "super-first" disks. It all installed fine for me, but I checked my install script just the same, and it has lower case also.

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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### 1.378 MSG-376 Subject: Wave Lenght of colors.

Subject: Wave Lenght of colors.  
Date: Fri, 17 Jun 1994 19:16:46 +0100 (MET)  
From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

Hi All.

Do Imagine 3.0 know that colored light bend differntely then non colored light. (Well non colored light is colored to, i know) Well the color red have another wave lenght the green.

The magnify glass made me think, if we can make a magnify glass, can we make a prism??

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

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## 1.379 MSG-377 Subject: Re: Magnifying Glass

Subject: Re: Magnifying Glass  
Date: Fri, 17 Jun 1994 10:51:26 -0600  
From: beeton@SEDSsystems.ca (Gary Beeton, beeton@SEDSsystems.ca)

> Allright, here is the status on the "magnifying glass" issue up to now as  
> far as I understand it. Thanks to everyone who replied on this. It does  
> seem, however, that most people are convinced that you can actually build a  
> fully functional magnifying glass in Imagine.

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> Real 3D handle a magnifying glass. Real 3D does appears to render a more  
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> burn the object behind it however ;-)) whereas the Imagine lens will cause a  
> bright "shadow" with a dark border. As well, even though the Imagine lens  
> will magnify the "image" behind it, it doesn't seem to be able to correctly  
> "reverse" the image as the Real (double-meaning) lens. Andy has a simple  
> little example image (10K) which shows some differences, however subtle (but  
> effective) due to the closeness of the lens to the object being magnified.

>

> These differences do seem to be linked to the fact that the Imagine lens  
> is a glass shell whereas the CSG lens is a glass volume. I'll let the  
> physics experts explain the details however.

What does 'CSG' stand for? Are the Real 3D lenses parabolic or spherical? I read one post which described how to make a lens in Imagine using a slice from a sphere. If we are comparing this spherical lens with a parabolic lens it

---

could explain the differences. Has anyone tried to make a parabolic lens with Imagine? Shouldn't be too tough:

- Use a plane to slice a cone - the intersection should be a parabala
- Spin the parabala to get a parabolic dish
- Copy, rotate 180 deg., join and Voila (BTW, how do you spell 'voila')

Gary  
beeton@SEDSsystems.ca

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### 1.380 MSG-378 Subject: melt decoded

Subject: melt decoded  
Date: Fri, 17 Jun 1994 12:08:46 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

Hi everyone,

Just decoded the melt file. No problems. Used UUxT-GUI (got it off aminet) and it produced melt.lha which I unpacked. Runs as advertized from the cli. Melted the cow.obj and got a very flat cow which regains its shape. Nice. Thanks Glenn, even if you are no longer reading IML.

Doug Rudd  
rudd@plk.af.mil

-----  
The Amiga Guide to the Galaxy refers to Commodore's management as  
"A bunch of mindless jerks who will be the first to be lined up  
against the wall and shot when the revolution comes."  
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### 1.381 MSG-379 Subject: Re: AZTEC

Subject: Re: AZTEC  
Date: Fri, 17 Jun 1994 11:14:08 -0800  
From: bmolsen@bvulads.loral.com (Brad Molsen)

) . There is a route that you can take to convert most any DXF to  
>a DXF format that will be read by Imagine. But no-one tries.  
>  
>Like I always say...those that can DO, those that can't BITCH.  
>  
>  
>-GreG

Cryptic to say the least! At the risk of sounding thick could some more explanation to the "route" be forthcoming. I have run across many DXF files that I have wanted to give or take from other imaging software. I don't have a copy of Vertex, I use Freeform3D for any outside object support for Imagine. Incidentally, Freeform3D is quite impressive, what with it's rail morphing functions and its "bones", now in both the horizontal and vertical axes. The authors support is both timely and he is highly receptive to enhancement suggestions. But, I digress, has anyone been able to get DXF to and from Wavefront?

later,

xx  
JUST SAY NO, TO GUNS!!!

Brad Molsen c/o LORAL

bmolsen@bvu-lads.loral.com

13810 SE Eastgate Way Suite 500  
Bellevue, Wa 98005

(206) 957-3230  
Fax: (206) 746-1335

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## 1.382 MSG-380 Subject: Animated brush map problems

Subject: Animated brush map problems  
Date: Fri, 17 Jun 1994 12:57:41 -0500 (CDT)  
From: Michael Halleen <halleen@Mcs.Net>

Hello,

I remember hearing someone asking about this on this list a while back, but I don't remember hearing the answer.

With the 'transistion frames' removed from the action editor, I've been having trouble using animated brushmaps in Im30Amiga.

Here's what I'm doing. I've got a scene with a small video monitor in a room. I've got three different three second clips of digitized video that I want to appear in the monitor at different times, seperated by intervals where the monitor is off.

The video clips are in the directory ac:s/v/ and called video1.0001-.0090, video2.xxxx, and video3.xxxx.

First I tried creating three different states for the monitor object STATE:1 used video1, etc. The screen portion of the monitor is a seperate object that is a child in a group. I tried both updating the object and the group, choosing the 'properties' button both when creating and updating, but when I changed groups using 'set to', it didn't change the map.

So then I created three seperate objects, screen.1, .2, & .3, each with a different map. In the action editor, I put .1 in place, but because of

---

the 'no transition frames', I had to enter two actor bars for the second and third screens. IOW, one actor bar lasting one frame, another lasting 89, otherwise I would get a morph.

Screen .1 worked fine, but when it got to .2, it gave me 'error opening ac:s/v/video2'. It was looking for the filename with no number extension on it, and yes I \*did\* set the max sequence number in all the objects.

What I had to do was render the first sequence, then delete the .1 actor bar altogether, then make one single actor bar for .2 and render that sequence. Ditto for .3. I suppose I could also have created two cloned objects, one for each .x.

Is this the way it's supposed to work?

```
Michael Halleen | "When you're on target, you're catching flak"
Chicago, IL | -- Lt. Col. Bo Gritz
halleen@mcs.com |
finger me for PGP| resist Clipper... to learn more read comp.org.eff.talk
```

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### 1.383 MSG-381 Subject: Wave Lenght of colors.

Subject: Wave Lenght of colors.

Date: Fri, 17 Jun 1994 14:32:16 -0500

From: William E Costello/Focal Point Software <bill@sugar.NeoSoft.COM>

Date: Fri, 17 Jun 1994 19:16:46 +0100 (MET)

From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

Mime-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All.

Do Imagine 3.0 know that colored light bend differntely then non colored light. (Well non colored light is colored to, i know) Well the color red have another wave lenght the green.

The magnify glass made me think, if we can make a magnify glass, can we make a prism??

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the middle earth,  
Real Life Hero, WarpSpeed Moderator.

This question was discussed to great length about a year ago, and I believe

---

the answer was no. Imagine does not take into account the fact that light is made up of different wavelengths, and that those different wavelengths bend at different angles when passing through objects. Of course this was when 2.0 was out, maybe it has changed, but I seriously doubt it, this would probably make rendering times increase exponentially.

William Costello  
bill@neosoft.com

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### 1.384 MSG-382 Subject: RE: Aztec OOPS!

Subject: RE: Aztec OOPS!  
Date: Fri, 17 Jun 1994 13:56:04 -0700  
From: Lesk@cc.snow.edu (Lesk)

I just read my message to the IML and I was not very clear about a couple of things (School is out and so is my bRaIn.....). To those who pay a fee for mail I apologize for having to make this correction.

1. Interchange plus has worked on hundreds of DXF's, aztec is the first I have not been able to convert.
2. Since DXF is at best flaky, converting frequently leaves extra faces points etc. that need to be cleaned up. That is where vertex comes in handy.
3. Converting a dxf to say Lightwave then pov then wavefront then Imagine, really allows interchangeplus to do some cleaning of its own.

I wanted to make sure it was clear about interchangeplus. I have found it to be very usefull, and in my original post it sounded as though I was saying the oppisite.

Sorry for the confusion.

Render Ho!  
Lesk

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### 1.385 MSG-383 Subject: ToolManager Buttons (BINARY)

Subject: ToolManager Buttons (BINARY)  
Date: Fri, 17 Jun 94 13:51:08 -0600  
From: (Matthew J. Feifarek) feifarek@students.wisc.edu

Here are some ToolManager DOCK icons that I've been using. It occurred to me that some of you might like them. I don't have AGA, so I'm running an 8 color

---

WB, so they're limited in that respect. I hope you like the palette... or that you can easily switch to one you do. Basically it's similar to the 4 standard colors plus a monochrome ramp of 4.

They are in Dpaint's animbrush format, which ToolManager handles in a very cool way. I have more I've made, but they're not Imagine related :)

Have fun.

PS. I \_USED\_ imagine in their creation even, so they're totally legit. ;o)

Later

```
-----8<-----
begin 644 AnimBrushes.lha
M(3HM;&@U+<D#`!!D!P`''FW1'`''T9O<F=E+F%N8G)UY1L#=#VN[UK37^_[W&
MWK?7%IK<HB.;I;+!6FS-CA,)M&;MI1J2:FK7PYRLA5632.70D9ER)CW0:(8F(
M4J.A&,@-18NV+MB/'8K#10`9%D.`BPCP%2(*Z&>"VX`U]36WW_?6JO`'?@>R/[
MRUV09Q-RO>!P8T0`4\B!<6\2IK+^UOP(,2#\$&`$`!7!W8/A6"14)K&Y3DDVLU
M2!%`98/8^8`6>D.2;N3*F1X\HQC07L>'&@01/3#M0VUK&N(8ZVP_;$0E(46!M
M<,[T@1$2VL")#9:R24X/!A<,00,!D!@<7"IC2@&]E@=H%M%!93+$<NRUR-`#^
MI9A7X@H:>V7VC+'&ZD6J"$X._5`];-3F@LY0"KKASQ8U%MB+5!?!+EZ$(#MVT
M-7Y:H-SU_P^<6-XPAC>(!K%O/Z:8'<L:JX+8K+'Q_D^[X$`TO%J@[I;1S18]2
MXQV!8^D@'PZ<_S>6%_-8I78<F:@%XQT_R3#W=1ECU$`K4I^R/:<)BA_0+'`4(
M4PH\1ECPJ@+"_,#]1-Y`70$J@SDPR4F)ZX>7K,@S6)RH3NY8FC)>PA(L>DF$!
MPFQJ]'ZZ"$^C-8H*A?NNC]0@T>C^:)ZQI.`.7?70ZZ>^67"\RV+]4,%601$Z;K
M*=&F?00.^;K(B;<0>-SZ=)4/9N?0Q4`ZR$\)BB/C'XJQ)`*$]X/KM4/M!Z00F
M:B1!S0.#0RX&92@'7$S$JT$`"4`T0E!78GMA'92\9!TB6RN&$=E-U48\;R[I^
MZ$=E._J,=CC<R2$=E-6#JWC<T([*:@)P_O*M=>[177`N&:ZW[0/YKMJX0B$9
ME#_<A<!6`)FJ.HP_=,=?J!_V*$PZXIBP'X619#6QW)DN6GM!KYKD>#P,FH3UY
MY=ST,[WX?.F;T_O!C)8;H'183YH<OK%[ATH0I%"8OI2.MUM/JU_2[Z]/R'>VC
M3:X!"-)!C\+BD:$Q\_RHIL^SL_FT,WSGSC&+NW.2F[O;U+";./$R5^J<C00MY
M'2!FQGX/QT#Z.;']2D20=/6H)-\<CQ:]=^2XAWEW5XN2V*0A$B2FB2E:DW[.
M=R\W['7Q[[:T]O2T^TB;E/U4W>RM?<GQ\H8WB9DO[,ZZR=UH>-*:XM9X7T_O)
MKX>\O'-SN,K['\:(%+%F3#?7922Y2;5,&SHUI*`Z#H\;8R_QXLL8%['^C
M<>.-Y<@V?:6!`4;X!0+@I.XZ7(;8(L)3B:Z]#6UI^HLM=/*^OOO<VK6E6[51N
MRU23L-7T^SQ,G*5`,`\RG`[:IQ)LSQ)+G=3X2*)8!C.)#HSTY<2<:71OM'.^
M1P9+<59MV:->S1K_]&HC.2UL:#4M&@<`'#8/'`#];-$<`'-:6UA9VEN92YA;
M;F)R==@5!D1SH^[1)NF?O_W_[N[MP=F\IT2&%[FUFIBW9?!O'<3NX>06J'<\S
M]\%S*B9UOA)DI+G+V<=WW;N&8*TT%USI6NF+8S7CX%,LVPRM$Z6Z3:::3,F6_
MFF%`\`31&BLF&7'=WW_]^[X"MFw@T]^\>`&@Z:GOVW9UJ.2RLA1*X`UWTHM
M%?NZZAU19>[WM775==NH('%('SP\<5@5)"7%$E())>[BN@OQ[*5[9_H'-OE#RH
M]MKV^F6=G?/W\AZ]LZV)`JQ?IAL`=;B)7UH];<?^U%DV@PX%>QWE"C%='N(%^
M=6L"R7J=7"@_5&O_0!A@<>&"ARU6]EW%BOFRP58;J]<$L%`.?#98VBT1`N
MZVF#?A1>ZACGOP57*@'+>Z@/OVHL8S\F<ACV`!7+OWQ@J;IHP#T4`\=IDF#=#
MB@&`P#BB#P[?O"#!TIYXL>ZM?'K7S;$P*`E[:`<_SA!VLW#$'(ANK@6.%W9`R
M1^L;S#!%`GL(!KC,,?(+CF"HVBBGP@==98`C8D_M&"&%1G(!XVO88YP@VBD`5
M9IT5NJ`7&)/[9@?A=YB`=O3"#JI^88'KM3>C0^:MTM(J`<^0#B>F+&\GW@@,
MW47[`T/W<#E"QZ,[B"#;D[F>!_B7I!@_LD[@@U%/Z"#66&ZN/VIXQ"#CJ8W7R
M`_@@U#$KXQ@:0=_TL$-`J8.ZTII"3-A00/&3'<KRYL(P.H%XP0[O5O\H6/<
MOV[P0;TE4-Z>2O,1;.0;9U-\]6P06Z&2,5JZ#T;BV_N$SX(?%N9R&+%U[M3(W
M6YP9JSU#%B]-+"/UTPGHP_LL5+'16N0&ZS38N,4\%,/_U&*$S@D!J<9QU^6K
MC`7`KV,==0T#2QVL\('14@_OR#08L`7G?'J14?]AZ_2#_G"DOG0.P=I*42E3D
M%J5/HQ:K@QN#`LE>,K:JU/V[2-4_:(-3RE.KON=O\OM8>1S<3IU4N\ONO=K
M>A4TDG]DN"M#EOR-">O9`5*G?A;YNA+2E]B7Q9<.6$M_+!Z65M`:)#0N;/6S7
MUG?J04O&J7]T$L/9`@_-*%>^4IU$52)42<L+X;*O&`$4/]O#J(?3AFA]/SC?*
M<,0['`U&@.@4;B6<$*Y]9B@@=-U`$&3>[ [W%,*QQ2-222`G^01*4,BE0I=J-
```

```

M<^*13J;^;8$>ER0*<B9.90G93`4]MU["F=`S*Z\XG<Q\;#A/'P-4`.1#EL5RK
M8:Y!V-=MB`X5X\>/&C7`)QI,>.%$J06A3W:^AEXXV/];('N)>56)>='L]JUMZ
M>7[^7H+@F<GS&`9=K?M+>;-,4&L^5.)/'LVYMQ@]'%H,C'_&^R>]8X?F8_:ST
MWNF9WR084@/1@"A@S#F_+@S"S9[GX?]X4DE55X*3G_PDQGFEC7#!UHCMOCB/-
MA:L1E&([D*3KL)*PDZ$F-LA?IC@>IQ3."GU,Q8?PUHSO68OL1__=\5K#24G1%
M-*856V^ZU,5K)?Y5,AJ!54-)_>R4*BF["%'?/*9#HS`*4V>/F.XZ"\Q!?!2E/X
M-UI3Z#,I_7'_^^'5E*B&V=V5OQV])P.9T$=%U8<[L4Z.COTNWMO/=C[9FX)JRU
M8X4@L\7A/N$JAXO///.CHUU;^#<2AZ`:&=L4:1VFW^^J.3%AHP#[YC3ISO4G\
M'X-:<>8S./UA_R-6<?FRAS6.BN;G&W>-,0NP6B>TA?+M/:X;H0#F4/CVUXL%G
M3JG%P,EH?/Y#^0P^!,NFUTDKNM.7?YZTN\UF7>&/_[VK+KJY*,O.17_7I=[^"
M2%Q$B'00\ [BLSW-`$-XNN0R'1%KBN2_D:X;YW2,RI`HRNAE5S02AHN.82C__;
MF#LOC\(^Y@=\?; ;^-9)!N/1+W^!-[*.C/NJ7;WS=A[*=D(X%2DN&X88#*-I
M$F.)H\E5\ (L<22",XQN_E-].4_UZTI\9F4U!_ ^CXI3II-,V:BFLY"$S`:Z39P
M\=#*,U8[7C`0Y],(S'LS6CVY9CVP'_:^*/:=^O)+3RIP)%+LY,BA58L"O"E$
M%1SOD*,;+@TJ!LQ'UF1[C6D?_WLMTN,Z>W=?+`:5&S`^>(CDZMI7AT)H_>W
M78_4LKBR5_SI[5,*PQ>!]/])MO,_TI\)]";3-YF1,#(PMRQI[2D_,C3V\4W6`
M7]W@QMFNKH_!HQ+\X;`LV=6<B=M$M33W*6GZ:9[P*?9VCCAMG%;G^"ZV6W_56
M[PU]@?ZT]S4<KZMS''R9-O#I]TT:5#\JX^Q-CT9QS\8_FOJ]L_HMS)T]0&-/5
MKG.6*,3?#/YZZV,M;K,Q,.H%"9..C2[>00U2WF\[708E*[XA/1<N6=+PG*F"`
M!;$]7PQ*#DTFE!*52FH0Y1JRH\<?4?!RQJ"DSW2\W+_ =T>3MMH!:OU?>J_3V
MK_(?)D\GMSIJX^!LC=@#CV&C=IIMIP-4I15TAT1UU=KY(["`:O&DVI^4^>84Y
9+)]OD^1L-C\[8?9_%L?)VT+%$[*?'T]02`!5T?
`

```

end

size 2860

-----8<-----

---

Matthew J. Feifarek "So give me some wood and I'll build you a cabinet!"  
 feifarek@students.wisc.edu -Beasties

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## 1.386 MSG-384 Subject: compile MELT for ibm-pc?

Subject: compile MELT for ibm-pc?  
 Date: Fri, 17 Jun 1994 13:54:01 -0700 (PDT)  
 From: Ed Totman <etotman@gort.ucsd.edu>

Could someone compile Glenn's melt program to run on an ibm? (isn't it written in 'C'?) I would greatly appreciate it!

Thanks,

Ed Totman  
 etotman@gort.ucsd.edu

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**1.387 MSG-385 Subject: Thanks to all with UUdecode problem!**

Subject: Thanks to all with UUdecode problem!  
Date: Fri, 17 Jun 94 17:59:27 EDT  
From: "Steve J. Lombardi" <stlombo@eos.acm.rpi.edu>

Well, I never did get it to decode on my Amiga. (tried 4 decoders) must have garbled on it's way to my machine, although I did go through it with an editor and it looked fine. Finally I decoded it on the Unix machine I connect to. All is fine. Cool utility. Many thanks to Glenn for providing it.

steve

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**1.388 MSG-386 Subject: Re: Magnifying Glass**

Subject: Re: Magnifying Glass  
Date: Fri, 17 Jun 94 23:08:42 GMT  
From: Andy Jones <andy@activa.demon.co.uk>

Hi Gary,

> What does 'CSG' stand for? Are the Real 3D lenses parabolic or spherical? I

Constructive Solid Geometry. These are primitive objects such as a Sphere, Cube etc which are described using a mathematical formula and are truly volumetric. They can't be point edited like the polygonal surfaces found in Imagine, LW, etc. You can stretch, size, shear, them etc and use BOOLEAN operations on them to create more complex shapes. They render very quickly and no matter how close you get to them you'll never see any facets, it's a bit like Postscript fonts compared to bitmap. They suit some applications extremely well and suck for others which is why Real also has phong shaded freeforms as well as cubic b-splines.

In the lens example I created I used a spherical lens. The reason Real can make a 'true' lens is because CSG objects are volumetric and the BOOLEAN operations are considered when calculating the refraction through the volume. Unless you really need to make an accurate lens I wouldn't worry about the differences, refraction alone will give a good enough effect.

Andy  
Computer Artist, Real 3D Beta Tester  
Technical Support for all Aactiva International Products  
Real 3D, TVPaint, BroadcastPaint, MediaPoint, OBI, Powerfonts

-----  
| andy@activa.demon.co.uk 2:254/516.1@fidonet |  
Tel: +44 81-402-5770 Fax: +44 81-402-5780

The views expressed do not necessarily reflect those of my employers

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## 1.389 MSG-387 Subject: RE: AZTEC

Subject: RE: AZTEC

Date: Fri, 17 Jun 94 12:48:00 PDT

From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

>Regarding the Aztec City DXF file....I have downloaded the file from  
AutoDesk's  
>forum on Compuserve. The descriptive file and the text file were very  
>promissing. Upon unzipping the file, I discovered that it was not in DXF  
>format but rather in AutoDesk's DWG format. This may be the problem that  
many  
>people are finding. To date I have found no converter or any application  
that  
>will read DWG.

The file on avalon.chinalake is in .DXF. .DWG is AutoCAD Release 12  
binary format. AutoCAD will read these in, otherwise you are out of luck,  
AFAIK.

>With regards to the DXF to 3DS converter that Syndesis included on their  
disks,  
>and on compuserve...it's incredibly efficient. I have been able to  
>successfully convert AutoCad DXF release 12, AME SOLMESH files. And if you  
>never ran into that format...you're lucky. I have found nothing else that  
>would accurately read it.

I agree, InterChangePlus is an excellent product. However, the .DXF  
importer is far from totally compatible with all .DXF, and if the .DXF  
belches on Imagine V3.0, Pixel3DPro and Caligari, it will belch on  
InterChangePlus. Also, InterChangePlus has some kind of problem with its  
.iob saver but the TurboSilver saver is just fine and loads into Imagine  
smoothly. The nice feature of Pixel3DPro's Imagine saver is that it would  
save the object as a grouped object (nice for editing) which InterChangePlus  
won't. Too bad that the Pixel3DPro's Imagine saver also has a problem with  
generating bad edges, duplicate points, etc.

>"Imagine's DXF import is broken." Give me a break....no program handles  
every  
>aspect of DXF....including AutoDesks 3D Concepts (and they wrote the  
friggin  
>DXF "standard"). There is a route that you can take to convert most any  
DXF to  
>a DXF format that will be read by Imagine. But no-one tries.

Please, 3D Concepts is REALLY BAD! It may have come from AutoDesk but  
it must have been written by somebody that was completely disassociated with  
AutoDesk. The version for Windows is so slow as to be almost completely  
unusable. And its .DXF importer is equally as bad. Also, to add fuel to  
the .DXF discussion, when .DXF was established as a graphics standard way  
back when ( BTW, .DXF stands for Drawing eXchange Format), you could get  
AutoCAD for \$70US and it only supported 2D drawings. So, the 2D format is

---

rock standard. Every program I know of that uses .DXF importers will import a 2D .DXF, no problem. Now, AutoCAD is somewhere around \$7000 but it has 3D CAD capability. 3D CAD has been steadily evolving and so has the .DXF standard. It also depends on how the CAD 3D model was saved out. Even AutoCAD users have difficulties bringing .DXF back into AutoCAD without knowing how they were saved.

Also, regarding your last statement, "But no-one tries". Can't disagree with you more about this. I have tried and tried and tried (but maybe I am no-one?). Have you heard of DXFer, ACAD, DXFto3DS, etc. etc.? There are lots of people trying everything to find a smooth way to convert .DXF to Imagine. I just don't think there is a really smooth method of doing this.

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### 1.390 MSG-388 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Fri, 17 Jun 1994 14:38:55 +1000 (EST)  
From: "" <williamp@triode.apana.org.au>

> I have and use Essence 3.0. Do you have a later version? I know all  
> about the alpha-channel, and have used it a lot. My point of the post  
> is that Essence \_3.0\_ produces texture files with .ITX (note, its in  
> capitals) and that Imagine 3.0 does not like this extension to be in  
> caps. It must be lower case for Imagine 3.0 to recognize this.

Hi, my versions of the Essence 3.0 upgrades installed with a lowercase .itx extension.

Imagine 3.0 has had no problem recognising the textures. I haven't tried renaming any to a .ITX extension, why spoil a working solution? :)

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### 1.391 MSG-389 Subject: Re: Thanks to all with UUdecode problem!

Subject: Re: Thanks to all with UUdecode problem!  
Date: Fri, 17 Jun 1994 17:45:51 -0700  
From: Lesk@cc.snow.edu (Lesk)

> Well, I never did get it to decode on my Amiga. (tried 4 decoders) must  
> have garbled on it's way to my machine, although I did go through it with  
> an editor and it looked fine. Finally I decoded it on the Unix machine I

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>connect to. All is fine. Cool utility. Many thanks to Glenn for  
>providing it.  
>  
>steve

The problem has to do with line feed carriage return and those other unseen characters. The pc handles text differently as well as many of the servers that transfer your mail. I beleive there is a text converter out on the net that takes care of this conversion PC, Mac etc.to amiga but I don't remember the name.

Render Ho!  
Lesk

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### 1.392 MSG-390 Subject: RE: AZTEC

Subject: RE: AZTEC  
Date: 17 Jun 94 23:37:28 EDT  
From: John Foust - Syndesis Corporation <76004.1763@CompuServe.COM>

To: Imagine

Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil> writes:  
> belches on Imagine V3.0, Pixel3DPro and Caligari, it will belch on  
> InterChangePlus. Also, InterChangePlus has some kind of problem with its  
> .iob saver but the TurboSilver saver is just fine and loads into Imagine

"Some kind of problem"? Would you care to describe this problem in more detail?

> smoothly. The nice feature of Pixel3DPro's Imagine saver is that it would  
> save the object as a grouped object (nice for editing) which InterChangePlus  
> won't.

Huh? You've got that backwards: InterChange translates sub-objects, while Pixel doesn't. And InterChange also creates Imagine "groups" (a very different Imagine concept than sub-objects) from collections of faces with the same material attributes.

> AutoCAD for \$70US and it only supported 2D drawings. So, the 2D format is  
> rock standard. Every program I know of that uses .DXF importers will import  
> a 2D .DXF, no problem. Now, AutoCAD is somewhere around \$7000 but it has 3D

No, even 2D DXF isn't standard, and plenty of CAD companies have trouble with it. DXF is a poor standard for 2D and 3D, for the same reasons. I have never heard that AutoCAD once cost \$70 and today AutoCAD sells for about \$2800. You tempt me. You make me want to stand up and scream "You have no idea what you're talking about."

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### 1.393 MSG-391 Subject: The List

Subject: The List  
Date: Fri, 17 Jun 94 21:17:55 PDT  
From: kevink@ced.berkeley.edu (Kevin Kodama)

hi,  
not to jump on(off :-) the bandwagon...but....  
i too was among the first participants of the IML, just  
not as famous as Mark or Glenn :-)  
i have been spending almost all of my time with Lightwave tho',  
and the mail traffic is just too heavy-but i wanted to thank  
the list for all of the great info-esp. Steve Worley and Glenn Lewis,  
Mark T.(who you can blame for many LW defectors like me :-)),  
and Dave (Sam\_Malone) Wickard for their hard work, plus the rest  
of you dogs who are sticking with imagine :-) except those  
who kept sending uuencoded stuff, age queries, and PC users (whoops,  
just kidding :-)  
thanks,  
kevin

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### 1.394 MSG-392 Subject: Re: Staging Language

Subject: Re: Staging Language  
Date: Fri, 17 Jun 1994 21:23:42 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

> On Fri, 17 Jun 1994 MEURER@vortex.ufrgs.br wrote:  
> > Hi. I'm new on Aminet and recently I' saw a Imagine Staging Language in the  
> > gfx/3d directory. Does it really works? Is it usefull? Does anyone use it?  
> >  
> Imagine Staging Language works great if you are doing animations or  
> algorithmic scenes. I have used it to randomly place 300 sphere objects  
> in a spherical space in NoiseSphere.jpg and have created some interesting  
> motion paths for an animation or two. If you want to duplicate objects  
> quickly, you can convert a staging file to ISL, do mass duplication and  
> placement with a text editor and then convert back to a staging file.  
> Pretty cool.  
>  
> Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
> Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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**1.395 MSG-393 Subject: Animated textures...**

Subject: Animated textures...  
Date: Sat, 18 Jun 1994 22:43:55 -0600 (MDT)  
From: Roger Straub <straub@csn.org>

How does one go about using the animated textures included with 3.0? I tried creating an object, giving it an animated texture, and importing it into stage and rendering, but I get a still image of the texture when it is first applied.

See ya,  
Roger

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**1.396 MSG-394 Subject: VistaPro ?**

Subject: VistaPro ?  
Date: Sat, 18 Jun 1994 19:58:49 +0100 (MET)  
From: Mads Storm Andersen <mstamads@inet.uni-c.dk>

Hello....

How do i get Imagine 3.0 to read the DXF files from Vistapro ??

All i get is an Axis, no errors just a Axis.

/Mads Storm.

Demi-God, SubGenius, Penguin Lover, Pope of the Middle Earth,  
Real Life Hero, WarpSpeed Moderator.

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**1.397 MSG-395 Subject: No prefect reflection**

Subject: No prefect reflection  
Date: Mon, 20 Jun 94 01:00:53 GMT+1  
From: izi@scala.ping.dk (Soren Wind)

Why doesens a mirror object reflect other objects if it has a reflecion brush applied to it ?

Soren Wind - IZI/ImPACT  
GFX / 3D Design / Raytrace  
E-MAIL izi@scala.ping.dk

A2K/030/882/9MB/345MB/33MHz.  
 HiVision 15" Digital / Picasso 2MB

... I own Seagates, want to make something of it?

-- Via Xenolink 1.90

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## 1.398 MSG-396 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
 Date: Sun, 19 Jun 1994 14:59:00 -0400  
 From: david.wyand@canrem.com (David Wyand)

Hi Christopher!

> Essence 3.0, Imagine 3.0 and Forge all work correctly with proper  
 > installation (for me). Perhaps try installing it again.

Lesk just confirmed that he has had the same problem. It would seem  
 that early copies of Essence had capital .ITX until Imagine 3.0 was  
 finally released. Then the Essence install was changed to .itx to  
 accomodate Imagine 3.0.

-Dave  
 david.wyand@canrem.com

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## 1.399 MSG-397 Subject: T3DLIB pc ported

Subject: T3DLIB pc ported  
 Date: Mon, 20 Jun 1994 08:37:06 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

____
| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Hi PC fellows,

Wizard is proud to announce T3D4DOS, T3DLIB pc ported package  
 by \*#?!#?, FTP to Avalon.chinalake.navy.mil\pub\misc\t3d4dos.zip or  
 ask me for a uuencoded copy (about 400k pc executables).

/\ \_

```
| O |      RET
|   | MAILING  ENDP                      T-H-A-N-X
| O |      STACK  200H                  ae(-_^)ue
|___| END      MAILING      _ _ _ _ _ Wizard signing off
```

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## 1.400 MSG-398 Subject: STAGING LANGUAGE- 3.0 Compatable??

Subject: STAGING LANGUAGE- 3.0 Compatable??  
 Date: Sat, 18 Jun 94 13:52:47 EDT  
 From: "Steve J. Lombardi" <stlombo@eos.acm.rpi.edu>

Does anyone know if the Imagine staging language will work with 3.0?  
 I never used it with 2.0, but would like to try it out now. It seems  
 that since the staging file has changed in 3.0 that the staging language  
 would have to be upgraded. If there is a 3.0 compat version out there-  
 what is the name on aminet?

thanks

stlombo

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## 1.401 MSG-399 Subject: CD Object WANTED...

Subject: CD Object WANTED...  
 Date: Sun, 19 Jun 94 00:10:02 GMT+1  
 From: izi@scala.ping.dk (Soren Wind)

I Need a CompactDisc/LaserDisc Imagine object...ASAP..  
 And some tips about how to make a perfect reflection, like a CD...

Silver or Gold does not matter...

PLEASE... ;-|

I Need it for a commercial presentation ASAP.....

Soren Wind - IZI/ImPACT  
 GFX / 3D Design / Raytrace  
 E-MAIL izi@scala.ping.dk  
 A2K/030/882/9MB/345MB/33MHz.  
 HiVision 15" Digital / Picasso 2MB

... And remember kids, DON'T try this at home!

-- Via Xenolink 1.90



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## 1.402 MSG-400 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Sun, 19 Jun 1994 15:19:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi!

>Well, I got my newest version of Essence II with the newsletter, and it  
>has lower-case .itx extensions. The upper-case COULD be a bug with the  
>"super-first" disks. It all installed fine for me, but I checked my  
>install script just the same, and it has lower case also.

Well, it would seem that you're right. The first disks that went out  
would seem to have upper case, and the later lower case. Imagine 3.0  
really shouldn't care, but it does (probably the reason for the change  
in Essence).

-Dave  
david.wyand@canrem.com

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## 1.403 MSG-401 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Sun, 19 Jun 1994 14:42:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi Lesk!

>Bless You!  
> I have made two files one for Essence and one for Imagine, of  
each  
>texture. using the uucoded program that was on the IML, the textures  
>worked. DUH! I don't know why I didn't realize the upper lower case  
stuff.  
>Thanks!

Glad I could help. That's what the Imagine Mailing List is all about  
(even with the low signal-to-noise ratio).

Bones are cool!

-Dave  
david.wyand@canrem.com

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## 1.404 MSG-402 Subject: No Caligari. IMAGINE 3!!!!!!

Subject: No Caligari. IMAGINE 3!!!!!!  
Date: Sat, 18 Jun 1994 11:58:59 -0400 (EDT)  
From: Lamar Milligan <lamarm@moe.coe.uga.edu>

I have been thinking long and hard about Caligari trueSpace, and have decided not to accept delivery when it arrives. (yes, it still has not gotten here, after 3 weeks!! It was shipped 2 weeks ago via UPS - I checked with Caligari.)

Lately, I have decided to look into getting Imagine 3.0 for my IBM. How much is it for the PC? And how long should I expect to wait before receiving it?

Oh, and most importantly, how do I get it???????

Thanks y'all  
Benjamin Milligan  
lamarm@moe.coe.uga.edu

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## 1.405 MSG-403 Subject: DXF files

Subject: DXF files  
Date: Sat, 18 Jun 94 18:25:04 EDT  
From: CaptKurt@aol.com

Everyone has to keep in mind the DXF files are only as standard as anything else in the computer industry. Hundreds of different programs use DXF for thousands of different things. Some use polygon, some, solid, some don't use faces, some don't even use 3D space to represent 3D objects, and I haven't even touched on the 2D aspect of DXF that many programs use. To expect any one company to handle all of the possible formats of DXF is silly.

But enough DXF flames.

Here is a possible solution for you PC users. There is a program for Windows called 3D Design Plus, made by CompuEasy. (I think) It is basically a 3D CAD program, but I have found that if I import a DXF, that gives Imagine trouble, into the program and then export it out as a DXF, it does not give Imagine problems anymore.

This is a good 3D CAD program for around \$75, that has some good DXF translation built in. It will also import 2D DXFs, for extrusion into the 3D world.

Kurt

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## 1.406 MSG-404 Subject: Wave Lenght of colors.

Subject: Wave Lenght of colors.  
Date: Sun, 19 Jun 1994 15:24:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi!

>Do Imagine 3.0 know that colored light bend differntely then  
>non colored light.(Well non colored light is colored to, i know)  
>Well the color red have another wave lenght the green.  
>  
>The magnify glass made me think, if we can make a magnify glass,  
>can we make a prism??

Why not try it?

Here's what I think: it won't be possible. While Imagine can model a magnifying glass, and other lenses to distort an imagine, it cannot bend a light source. You cannot build a lens to concentrate a light to a point (such as to burn 3D ants :) This also means that it doesn't work the other way. You can't focus a light, or, as far as I know, reflect a light (ie: you can't have a light point in one direction and reflect it in another to light up an object. I think that would take something like radiosity).

-Dave  
david.wyand@canrem.com

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## 1.407 MSG-405 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Sun, 19 Jun 1994 14:49:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi Lesk!

>Hi Dave;  
>  
> I was wondering, how well does forge read Imagine textures?  
> I have not had real good luck.

I don't believe that FORGE was really written to open Imagine textures. At least, that's my understanding. Essence textures contain an extra IFF chunk that helps FORGE along. Also, there's the database of texture info that FORGE comes with.

---

I just tried the included BATHTILE texture from Imagine 3.0. The two usual requesters came up (the one about the texture missing the IFF chunk and the missing database). If you wanted to not have the second requester pop up, you could always edit the FORGE database to include the Imagine textures. As for the first requester, the only for that to go away would be to patch the Imagine textures.

I wonder what that RNGS chunk does anyway?

-Dave  
david.wyand@canrem.com

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## 1.408 MSG-406 Subject: Re: Genlock button in stage

Subject: Re: Genlock button in stage  
Date: Sun, 19 Jun 1994 19:19:43 +1000 (EST)  
From: Nikola Vukovljak <nvukovlj@extro.ucc.su.OZ.AU>

On Fri, 17 Jun 1994, David Shaw wrote:

> Hi everyone,  
>  
> Well i still haven't found a button to activate this but i'm not  
> 100% sure that it's need anymore.  
>  
> I tried a few quick tests by setting making sure the 2 entries in  
> the prefs were both on 000 (default i think). Rendered a picture with a  
> ground and a couple of objects with the 'sky' parameters in globals all  
> set to 000. I then rendered another picture with no ground and the same  
> settings and was able to composite the 2 in adpro and dpaint as well.  
>  
> I don't realit know if this was possible on 2.0/9 as I have always  
> automatically set the Genlock flag.

This however, will not work well if you have reflective objects that you want to render, especially if you want them to reflect the background, and yet render on a black screen. This is where the genlock option was so useful!

Nik.  
nvukovlj@extro.ucc.su.oz.au

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## 1.409 MSG-407 Subject: Re: Genlock button in stage

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Subject: Re: Genlock button in stage  
 Date: Mon, 20 Jun 1994 16:51:43 -0400  
 From: Jason B Koszarsky <kozarsky@cse.psu.edu>

>This however, will not work well if you have reflective objects that you  
 >want to render, especially if you want them to reflect the background,  
 >and yet render on a black screen. This is where the genlock option was so

Why not use Global or Localized reflection maps if you want background  
 reflection? These don't show up as part of the background but will give  
 reflections.

Jaeson K.

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## 1.410 MSG-408 Subject: Lense tutorial

Subject: Lense tutorial  
 Date: Mon, 20 Jun 1994 08:37:33 GMT+1  
 From: "Wizard" <TESI2@novell.dima.unige.it>

```

| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _  _  _  _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR
|/\_|

```

Hi PC fellows,

this is just an extract from an italian computer magazine,  
 Commodore Gazette, about doing lense with Imagine:

```

-enter the detail editor
-add primitive sphere (not add sphere, add primitives and then sphere):
  circle=48, vertical sections=24
-pick sphere, pick points, drag box pick method
-multiple select all points except for the first (top) 5 lines (sections)
-delete selected points (functions menu)
-pick object (pick method menu)
-move ONLY the axis (shift-m) to the bottom line of points/section
  (looked from front view): do this step more accurate, use zoom in
-copy selected obj and paste it
-invoke transformation req, scale it -1 to z axis
-select the two objs and merge them
-invoke atts req:
  color and filer=255,255,255    harness=100 to 130    index=1.2 to 2.0

```

This method is much realistic one, positioning lense above a  
 plane (e.g a brush mapped one) and moving lense far from it, Ya get also  
 the tipically effect of getting an upset image.

PLEASE NOTE: do not use spin or sweep function (drawing profile) coz so  
 Ya cannot manually draw a perfect shape (as sphere primit.)&  
 Ya get an increment of rendering time.

```

/\_
| O |      RET
|   | MAILING      ENDP                      T-H-A-N-X
| O |      STACK    200H                      ae(_^ )ue
|___| END          MAILING      _ _ _ _ _ Wizard signing off

```

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### 1.411 MSG-409 Subject: Re: MPEG

Subject: Re: MPEG  
 Date: Sun, 19 Jun 94 14:02:04 EST  
 From: Imagine@bknight.jpr.com (Yury German)

Hi Anders (Anders Lattermann), in <OA92-901-231p24\_2df365ff@piraya.bad.se> on Jun 6 you wrote:

: I can see to options. The "peggy" MPEG card or a CD32 with MPEG card and the  
 : newly released computeradd on with IDE-harddisk interface.

Well the best option is to go get yourself a PC with an MPEG card... they come out a bit cheaper and the software is 2000% better then the Amiga stuff... and cheaper! An MPEG card goes for something like \$500 or so on the PC with speakers and all.

```

-----
Yury German                      yury@bknight.jpr.com
Blue Knight Productions          blue-Knight@genie.geis.com
Graphics Design, 3D Animation    blueknight@online.apple.com
CD-ROM Development              (718) 321-0998

```

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### 1.412 MSG-410 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
 Date: Sun, 19 Jun 1994 15:09:00 -0400  
 From: david.wyand@canrem.com (David Wyand)

Hi!

>Can you explain alpha channels please.

Do you mean alpha channels in general, or Essence alpha channels?

Generally, an alpha channel is used when you wish to merge two or more

pictures together. Let's say you want to put an airplane from one picture on the sky of another. An alpha channel is a grey-only picture that tells the software what part of the airplane picture you want to paste onto the sky. What you would do is make a white picture of the plane on a black background (some programs use the reverse: black on white). Then, when you merge the picture of the plane on top of the sky, the software uses the alpha channel of the plane to paste ONLY the plane, and not the other crud in the plane picture.

You don't have to just use black and white in an alpha channel. Using greys tells the software to only partially (transparently) paste parts of one image on top of another. In the above example, if you used a mid level grey, instead of white, the plane would be partially transparent, showing some of the sky through it (almost ghost like. A ghost plane!).

Essence alpha channels work the same way, but use the reflection of Imagine objects to tell an Essence texture where to apply itself. Sort of like restricting a texture to a subgroup of faces, but you are able to fade the texture out (remember those greys?). I don't think I can explain how to go about this any better than the Essence 3.0 manuals.

-Dave  
david.wyand@canrem.com

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## 1.413 MSG-411 Subject: Particle Trace Times

Subject: Particle Trace Times  
Date: Mon, 20 Jun 1994 23:43:10 +0000  
From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

Hi Mike,

When you asked me about the length of time it was taking you to trace that animation with the tofu block i hadn't had a chance to trace anything for a long time. Well I have a couple of things you might like to try to speed your trace times up..here goes :)

Preferences Editor....

EDLE 50 (Depends which one your using)  
AARC 50 ( " " " " " and how many jaggies)  
RSDP 1 (pretty good speed improvement)

Of course this all depends on whether you need reflections or not too. I had a 320x256 image that scanlined in 11.4 and traced in 15.5.

Something to note though, with the above things changed in the Prefs editor, scanline will only produce a black image. I had to reload my normal prefs. Could you rety this out on your machine and let me know whether it does the same?

See ya

---

David Shaw

(ps...thanks to everyone else for the particle help (Randy), I finally managed to get the result I wanted by making the adjustments that you all recommended)

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## 1.414 MSG-412 Subject: Rectangular, Parallel Lights--BUG!

Subject: Rectangular, Parallel Lights--BUG!  
Date: Sun, 19 Jun 1994 16:05:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi All!

Could someone please confirm this:

In Imagine 3.0, you can have parallel rectangular light sources (yay!). I think that I have found a bug with them. In the detail editor, make a plain axis. Edit its attributes and click on light. Make the light parallel and rectangular. Also click on NO Lens Flare (we don't want this light to flare for this example). Rotate the axis so it points down and raise it in the world Z-axis to some height. Adjust its size so that it reaches the ground (zero Z) and has some width and height. Save it. Make a ground (dark colour) and save that too.

Oh ya, the reason for making the light in detail is so that a texture can be added to it. Add the default French Windows, if you'd like (it doesn't matter, the bug works with or without it).

Go into Stage, and load in the light-axis and ground. Be sure that the light is pointing at the ground and that the camera is pointing at the place where the light will be shown. Make this lighted area take up about 1/3 of the rendered screen. Now quickrender.

Here's the bug: the rectangular light source goes off into infinity in one direction, and is limited (as it should be) in the other.

Go back into detail (save the stage!) and turn off the 'No Lens Flare' button (ie: allow the light to flare if we used the global texture, but don't use it for this). Save the axis.

Go back into Stage and quickrender. The rectangular light source is limited on both axes!

The bug: The parallel, rectangular light source is limited by its axes, as it should be, when you do not choose the 'no lens flare' button in the light requester. If you do choose this, the light goes on for infinity.

Thanx for checking this out...

-Dave

---



david.wyand@canrem.com

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## 1.415 MSG-413 Subject: Re: Magnifying Glass

Subject: Re: Magnifying Glass  
Date: Mon, 20 Jun 94 10:44:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Friday, June 17, 1994 23:08, Andy Jones wrote:

>[...]  
>are considered when calculating the refraction through the volume.  
>Unless you really need to make an accurate lens I wouldn't worry  
>about the differences, refraction alone will give a good enough effect.  
>[...]

Agreed. Imagine's refraction is accurate and therefore realistic. I did not mean to insinuate that an Imagine "lens" is no good, in fact it's quite good, it just gives a slightly different result from a CGS lens because it is different in nature. I wouldn't worry about the differences either... unless you are simulating the burning of an ant with a magnifying glass ;-).

This is my last post on this thread... promise!  
Alain.

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## 1.416 MSG-414 Subject: Imagine 2.9

Subject: Imagine 2.9  
Date: Mon, 20 Jun 1994 15:50:23 -0500  
From: christopher arthur <amadaeus@ccwf.cc.utexas.edu>

Hello, Imagine list people. I've got a simple question I was hoping someone could help me with. I've got Imagine 2.0 and Lightwave < 3.0, and I need to do some particle-animation stuff...more specifically, I need to model an ideal gas. Basically, the animation will consist of a bunch of bouncing particles inside a container. Does Imagine 2.9 have this capability? I d/l'ed an animation from the aminet that clamed to have been using the 'particle animation' feature of Imagine 2.9. The animation seemed impressive. Could someone verify if Imagine 2.9 does ideed have the capability to groups of particles???

What about Imagine 3.0? Please respond to amadaeus@ccwf.cc.utexas.edu.  
Thanks.

Chris

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## 1.417 MSG-415 Subject: RE: Magnifying Glass

Subject: RE: Magnifying Glass  
Date: Mon, 20 Jun 94 09:33:14 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

> My verdict: There is definitely a difference between the way Imagine and  
> Real 3D handle a magnifying glass. Real 3D does appear to render a more  
> real (pun) magnifying glass than imagine IMO. I have done some tests with  
> Imagine and PovRay with similar "lenses" and scenes (and so has Andy Jones  
> with Imagine and Real 3D, thanks for the great example Andy!). I don't have  
> Real 3D, but PovRay is similar in the sense that it has CSG objects. The  
> CSG lenses seems to actually correctly concentrate the light (it doesn't  
> burn the object behind it however ;-)) whereas the Imagine lens will cause a  
> bright "shadow" with a dark border. As well, even though the Imagine lens  
> will magnify the "image" behind it, it doesn't seem to be able to correctly  
> "reverse" the image as the Real (double-meaning) lens. Andy has a simple  
> little example image (10K) which shows some differences, however subtle (but  
> effective) due to the closeness of the lens to the object being magnified.  
>  
> These differences do seem to be linked to the fact that the Imagine lens  
> is a glass shell whereas the CSG lens is a glass volume. I'll let the  
> physics experts explain the details however.

Hmm, kinda what I guessed. This really has little to do with whether an object is solid or just a surface. As you can see by the magnifying effect, Imagine does calculate the lens correctly even though it is only calculating at the surface. That is because that is how it works in the real world. Light only refracts at the border of two mediums, and the middle of the glass has little effect on the light (OK, so speed and color and other things may be effected, but let's not be anal. I'm not a physicist, after all.)

The reason you can't burn ants in Imagine (this is a guess), has to do with the way Imagine "casts rays". When projecting the ray from the object to the lightsource, it seems like something isn't being done "right" (not that this is a bug, just the way they did it) Perhaps Real cast their rays from the lightsource (is this possible?). Or perhaps when (in Real) a ray encounters a transparent object with a different index of refraction, multiple rays are cast from the hit point back to the transparent object to determine if it is focusing light. Hmm, interesting problem. Anyone know how this is handled?

In any case, it has little to do with the object being solid modeled or surface modeled (I think:)

Maybe I'll post this to rec.comp.graphics.???? and see if someone knows.

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery

---

intellect. Their admiration overwhelms their envy!" - Calvin

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## 1.418 MSG-416 Subject: Re: VistaPro ?

Subject: Re: VistaPro ?  
Date: Mon, 20 Jun 1994 12:55:20 -0400  
From: changc9@rpi.edu (Cedric Georges Chang)

On Jun 18, 7:58pm, Mads Storm Andersen wrote:  
> How do i get Imagine 3.0 to read the DXF files from Vistapro ??  
>  
> All i get is an Axis, no errors just a Axis.

VistaPro has the option of saving landscapes as a TurboSilver Object, which can then be loaded directly into Imagine. TurboSilver is a much earlier version of Imagine.

Cedric

--

-----  
Cedric Chang                      Mechanical Engineer                      // Amiga 3000 '040  
changc9@rpi.edu              Rensselaer Polytechnic Institute              \X/    EGS Piccolo  
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## 1.419 MSG-417 Subject: re:vp2Im30

Subject: re:vp2Im30  
Date: Mon, 20 Jun 1994 13:16:56 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

That you are using dxf from vp says you are using msdos, I assume for both programs. The Amiga version of vp exports turbo silver which is .iob compatible, much easier. Imagine 3.0: pc and Amiga both seem to balk at most dxf files, in my experience. I don't know if vp can adjust its dxf output, but if you can, try varying the settings to see what happens. Imagine 3.0 seems to like entities. Good luck.

Doug Rudd

-----  
The Amiga Guide to the Galaxy refers to Commodore's management as  
"A bunch of mindless jerks who will be the first to be lined up  
against the wall and shot when the revolution comes."  
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## 1.420 MSG-418 Subject: Re: No prefect reflection

Subject: Re: No prefect reflection  
Date: Mon, 20 Jun 94 13:13:06  
From: djm2@ra.msstate.edu (Dan Murrell Jr.)

Hey, Soren, you said on Jun 20 :

> Why doesens a mirror object reflect other objects if it has a reflecion brush  
> applied to it ?  
>

Because a reflection brushmap is just that. It's a brushmap. It doesn't know anything about the other objects, unless you say, render a picture of the object s and use that as your reflection map. Reflection maps are most useful if you hav e chrome objects. Just make a map with a black background, and a lot of squiggly white lines and white puffy areas, with smooth gradation to the black. Then app ly that to your chrome object. If you want real-world reflections, I believe you must use ray-tracing. Scanline rendering will only let you reflect the ground a nd sky colors, I believe.

Dan

---

Sent from Danimal's AmiTCP-ing Amiga 500// Amigas!/Saturday morning Wrestling/  
Dan Murrell Jr. IRC's Danimal /// James Taylor/Pink Floyd/Roger>Dave!/  
djm2@ra.msstate.edu \\\\/ Imagine/Essence/AmiTCP/AMosaic/3Dgfx/  
http://www.msstate.edu/~djm2 \XX/ ImageMasterRT/Wavefront under-achiever

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## 1.421 MSG-419 Subject: Aztec & Gigamem

Subject: Aztec & Gigamem  
Date: Mon, 20 Jun 94 14:17:08 CST  
From: Jeff Niebergall <jnieber@unibase.Unibase.SK.CA>

I decided with all the posts about the Aztec city DXF that I want to have a look at it. I converted it with AccuTrans 3D directly and without a problem got it to load into Imagine. It is pretty

---

impressive and the person who did all the work deserves a lot of credit for an astounding piece of work. I used Gigamem to render it but had a few problems. Can someone report the best setup for Imagine & Gigamem. The only way I could get it to work was to use only virtual memory. If I tried use normal memory first it would tick off all the chip & fast and only a little of virtual and eventually when it ran out of chip & fast would crash. I was using 5MB buffer with 300k cache with a 40MB partition. In the meantime I better search for my Gigamem manual because it might help.

later, jnieber@unibase.unibase.sk.ca

Jeff

--

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## 1.422 MSG-420 Subject: Re: Lense tutorial

Subject: Re: Lense tutorial  
Date: Mon, 20 Jun 1994 17:32:03 -0400  
From: Jason B Koszarsky <kozarsky@cse.psu.edu>

>PLEASE NOTE: do not use spin or sweep function (drawing profile) coz so  
> Ya cannot manually draw a perfect shape (as sphere primit.)&  
> Ya get an increment of rendering time.

Ah, so that's what GM did wrong when they made the HUBBLE lense. Well, I'll not be making their mistake.

Jaeson K.

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## 1.423 MSG-421 Subject: particles question

Subject: particles question  
Date: Mon, 20 Jun 94 14:41:08 PDT  
From: DDuberman@cup.portal.com

David Shaw was asking about a problem with particles hanging at the last frame of a 70-frame animation. David, did you try just setting the effect to end at frame 69? I'd be curious to know if that helps.

- David Duberman

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### 1.424 MSG-422 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Mon, 20 Jun 1994 15:42:39 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

On Sun, 19 Jun 1994, David Wyand wrote:

<snippage>

> I wonder what that RNGS chunk does anyway?

>

>

-Dave

>

david.wyand@canrem.com

>

It appears the RNGS chunk sets the min/max limits to the textures, for the sliders, that is. I haven't experimented with it directly, but I probably will for some bigger or smaller ranges that I want to experiment with easier than typing it in.

Of course, this is my GUESS.

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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### 1.425 MSG-423 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Mon, 20 Jun 94 22:59:36 +0100  
From: "Steve Essery" <sessery@uk.oracle.com>

In-Reply-To: PYR2:imagine-relay@email.sp.paramax.com's message of 06-19-94 14:49

>Hi Lesk!

>

>>Hi Dave;

>> I was wondering, how well does forge read Imagine textures?

>> I have not had real good luck.

>I don't believe that FORGE was really written to open Imagine textures.

>At least, that's my understanding. Essence textures contain an extra

>IFF chunk that helps FORGE along. Also, there's the database of

>texture info that FORGE comes with.

>

>I just tried the included BATHTILE texture from Imagine 3.0. The two

>usual requesters came up (the one about the texture missing the IFF

>chunk and the missing database). If you wanted to not have the second

>requester pop up, you could always edit the FORGE database to include  
 >the Imagine textures. As for the first requester, the only for that to  
 >go away would be to patch the Imagine textures.

>  
 >I wonder what that RNGS chunk does anyway?

>  
 >  
 > -Dave  
 > david.wyand@canrem.com

RNGS = Ranges? ie I guess it sets the min and max values for each  
 parameter's slider.

If I wasn't 6000 miles from my machine (about 10 miles away from Steve Worley)  
 I'd continue to mess about with them...

```
=====
Steve Essery      Unix Support, Oracle UK      Hello, my name is Inigo Montoya,
                  Working on Orainst with      you killed my father, prepare to die.
                  Unix Base Development.
OP400 Room 718
Tel: +1 (415) 506 4419
                  What you don't know is that I too
                  am not left-handed!
=====
```

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## 1.426 MSG-424 Subject: Re: CD Object WANTED...

Subject: Re: CD Object WANTED...  
 Date: Mon, 20 Jun 94 18:40:12 EDT  
 From: jgoldman@acs.bu.edu (Jeffrey Goldman)

>  
 > I Need a CompactDisc/LaserDisc Imagine object...ASAP..  
 > And some tips about how to make a perfect reflection, like a CD...

> Silver or Gold does not matter...

>  
 > PLEASE... ;-|

>  
 > I Need it for a commercial presentation ASAP.....

It's virtually impossinle to get an accurate, perfect  
 reflection like the kind you're looking for with most renderers. Read  
 the other posts about magnifying glasses/prisms/wavelengths. The  
 reflective nature of a compact disc relies on a sort of primastic  
 effect. Something that can't be done with a ray-tracer.

You can simulate it fairly well by modelling a CD and giving  
 it highly reflective attributes (like chrome). The rainbow reflection  
 would come from the interaction between the object and a custom global  
 reflection map. If you create a global reflection map that looks like  
 a rainbow of colors you'll probably get good results with the CD

reflection thing.  
Hope it helps...

J.---->

E-Mail: jgoldman@acs.bu.edu

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## 1.427 MSG-425 Subject: Re: Wave Lenght of colors.

Subject: Re: Wave Lenght of colors.  
Date: Mon, 20 Jun 94 18:34:04 EDT  
From: jgoldman@acs.bu.edu (Jeffrey Goldman)

> >  
> >The magnify glass made me think, if we can make a magnify glass,  
> >can we make a prism??  
>  
> Why not try it?  
>  
> Here's what I think: it won't be possible. While Imagine can model a  
> magnifying glass, and other lenses to distort an imagine, it cannot bend  
> a light source. You cannot build a lens to concentrate a light to a  
> point (such as to burn 3D ants :) This also means that it doesn't work  
> the other way. You can't focus a light, or, as far as I know, reflect a  
> light (ie: you can't have a light point in one direction and reflect it  
> in another to light up an object. I think that would take something  
> like radiosity).

Correct. Mainly, I believe, because you're not tracing a photon from a light source to the camera. It goes the other way. A "photon" or ray is emitted from the camera. What it hits determines what you see.

I'm not sure, but I think radiosity is just a more complex simulation of "real world" conditions. Instead of tracing a ray to an object and finally to a light a radiosity rendererer would trace a ray to an object, determine what should happen at that point and then shoot more rays out of the object itself. One ray could turn into hundreds as soon as it hits another object. Of course, this is just speculation...

Even if you could manipulate light in a "real world" manner a prism would still not be possible unless the nature of the electromagnetic spectrum were taken into consideration with the renderer.

Light, as we all know, is made up of different wavelengths. White light (255,255,255) in Imagine is not a combination of every wavelength in the visible EM spectrum. It is 100 percent of red, green, and blue. So, it's not "white" light in the real sense.

To do a prism effect you have to tell the renderer that every color is made up of different wavelengths of light, and that your refractive materials are made up of physical substances capable of

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manipulating the colors on the basis of their wavelengths. Etc, etc., etc...

Needless to say, it would take a lot of calculation...

J.---->

E-Mail: jgoldman@acs.bu.edu

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## 1.428 MSG-426 Subject: RE: Magnifying Glass

Subject: RE: Magnifying Glass  
Date: Mon, 20 Jun 94 18:06:26 CST  
From: johnm@bbs.xnet.com (John Machacek)

I've just joined this group and have little to no experience with rendering in either Imagine or Real3D. But I do know this much.....

As stated earlier, the light is only effected where an air/glass interface is met. In the case of the Real3D object which is modeled as a solid there are two air/glass interfaces (one on each side of the lens), just as a REAL lens would have.

But in the case of the Imagine lens which is modeled as a lens "shell", with two thin glass shells stuck together, there are really FOUR air/glass interfaces. One on EACH side of EACH glass shell. IMH(and unresearched)O, this would signifigantly affect the way the rays would travel.

Just my 2 copper/zinc discs worth.

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## 1.429 MSG-427 Subject: RE: Magnifying Glass

Subject: RE: Magnifying Glass  
Date: Mon, 20 Jun 94 23:57:12 GMT  
From: Andy Jones <andy@activa.demon.co.uk>

> Hmm, kinda what I guessed. This really has little to do with whether an  
> object is solid or just a surface. As you can see by the magnifying effect,

Yes and no. A 'magnification' in Imagine isn't optically correct whereas in Real you can be because it considers the resultant volume of the object after the boolean operation. As I said before, the results aren't very different. But you can see one object magnifying correctly whilst the other distorts the image and shows more of the background in the lens. Refraction alone also turns to rotate the image at the edges - a chequered pattern being a good example, a true lens won't take the background to the east of the lens and rotate it north and south, it will just bend it a bit... This is hard to explain.. I'll try and

---

get an image on aminet in the next couple of days...

> The reason you can't burn ants in Imagine (this is a guess), has to do with

My guess is that Real considers refraction through the object when calculating shadows. You can burn ants in Real...

> In any case, it has little to do with the object being solid modeled or  
> surface modeled (I think:)

True... Real does it with b-splines no problem...

Andy

Computer Artist, Real 3D Beta Tester

Technical Support for all Aactiva International Products

Real 3D, TVPaint, BroadcastPaint, MediaPoint, OBI, Powerfonts

---

	andy@activa.demon.co.uk	2:254/516.1@fidonet	
	Tel: +44 81-402-5770	Fax: +44 81-402-5780	

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	The views expressed do not necessarily reflect those of my employers	
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## 1.430 MSG-428 Subject: Re: Aztec & Gigamem

Subject: Re: Aztec & Gigamem

Date: Mon, 20 Jun 1994 21:56:42 -0400 (EDT)

From: Udo K Schuermann <walrus@wam.umd.edu>

Jeff Niebergall <jnieber@unibase.Unibase.SK.CA> writes:

> I decided with all the posts about the Aztec city DXF that I want  
> to have a look at it. I converted it with AccuTrans 3D directly  
> and without a problem got it to load into Imagine.

Any chance to make this available on some ftp site in Imagine format  
or is it available somewhere already? Hints by email appreciated!

> Can someone report the best setup for Imagine & Gigamem. The only way I  
> could get it to work was to use only virtual memory. If I tried use normal  
> memory first it would tick off all the chip & fast and only a little of  
> virtual and eventually when it ran out of chip & fast would crash.

I use it with "Virtual Memory First." This is because Imagine makes lots  
of relatively small allocations (I think I have things set to ... let's see  
... start GigaMemPrefs ... Min.Size 512) to make sure that MOST allocations  
go to virtual memory. You could tweak that if you only want larger chunks  
in VM but a Min.Size of 512 work pretty well for me and overall penalty  
with speed is something I can live with.

.\_. Udo Schuermann  
( ) walrus@wam.umd.edu

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### 1.431 MSG-429 Subject: Re: Genlock button in stage

Subject: Re: Genlock button in stage  
Date: Tue, 21 Jun 1994 15:02:48 +0000  
From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

Hi Jason,

> >This however, will not work well if you have reflective objects that you  
> >want to render, especially if you want them to reflect the background,  
> >and yet render on a black screen. This is where the genlock option was so  
>  
> Why not use Global or Localized reflection maps if you want background  
> reflection? These don't show up as part of the background but will give  
> reflections.  
>

I think it was Nik that was asking about the reflective objects here.  
I mainly use the genlock button in the stage for those horrible little  
title animations that need to be genlocked. I also use it to render a  
background and then render the objects that are going to move on it. I  
wonder why it was taken out?

Are you in Australia. I think I've seen your name in Fido. CD32 Developer?

See Ya  
David Shaw  
(QLD)

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### 1.432 MSG-430 Subject: Custom Palettes

Subject: Custom Palettes  
Date: Mon, 20 Jun 1994 23:45:43 -0600  
From: beeton@SEDSsystems.ca (Gary Beeton, beeton@SEDSsystems.ca)

Greetings,

I recently tried to render a scene in Imagine 3.0 (Amiga) using a custom  
palette. When I punched the Generate button I was presented with the  
Palette\_Method requestor. I selected Specify\_File and selected a palette  
file. When I hit Ok, Imagine gave me an Error\_opening\_palette\_file error. I  
tried numerous palette files created using DPaintIV and ADPro with the same  
results. I can't seem to find a reference to custom palettes in the manual so  
I don't know if I'm doing it right. Has anyone had any success in this area or  
should I be sending Impulse a bug report?

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Gary  
beeton@SEDSsystems.ca

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### 1.433 MSG-431 Subject: Staging has bad IFF

Subject: Staging has bad IFF  
Date: Tue, 21 Jun 1994 01:32:46 -0500 (CDT)  
From: Michael Halleen <halleen@Mcs.Net>

Hello,

Has anyone else had this problem:

I was preparing to render some test frames (400x250), before going to bed (it was about 1am). I rendered one, 'show'ed it, selected the rest, and pressed generate (not Make) when Imagine (3.0/Amiga) tells me that the staging file has a bad or malformed IFF structure, or something like that.

This is VERY bad, because I was supposed to meet with a client tomorrow at 8:30 AM and show him that rendering. Now I've got to reconstruct my last week's work (from my last backup), and I'm not going to do it tonight cause I have to work all day tomorrow and I need to sleep.

On a related front, I think, has anyone had a problem where if you render a scene as an Moive, and don't delete files after using them, using the default directories, Imagine tries to write both the pix and the anims to the same location on the hard drive? I can not, since 2.9, generate a Movie on the same hard disk as the pix, it always generates errors that I need QBTools to fix, and the fix is to delete some files. I always redirect the Movie to my syquest.

Is this a hard drive problem? I have a Seagate 345 MG and an IVS Trumpcard Pro SCSI controller.

The bad iff problem seemed to generate similar errors on the hard drive, although as I mentioned, I was not doing a movie when this error happened, it immediately followed a still render (one that worked perfectly, btw).

Thanks for any help.

Michael Halleen | "When you're on target, you're catching flak"  
Chicago, IL | -- Lt. Col. Bo Gritz  
halleen@mcs.com |  
finger me for PGP| resist Clipper... to learn more read comp.org.eff.talk

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**1.434 MSG-432 Subject: Re: Genlock button in stage**

Subject: Re: Genlock button in stage  
Date: Tue, 21 Jun 1994 01:08:00 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> > I tried a few quick tests by setting making sure the 2 entries in  
> > the prefs were both on 000 (default i think). Rendered a picture with a  
> > ground and a couple of objects with the 'sky' parameters in globals all  
> > set to 000. I then rendered another picture with no ground and the same  
> > settings and was able to composite the 2 in adpro and dpaint as well.  
> >  
> > I don't reallt know if this was possible on 2.0/9 as I have always  
> > automatically set the Genlock flag.  
>  
> This however, will not work well if you have reflective objects that you  
> want to render, especially if you want them to reflect the background,  
> and yet render on a black screen. This is where the genlock option was so  
> useful!  
>  
> Nik.

Nik, what if you used a Global Brush Map in the Global Requester? That  
would not show in the background, but would render on the object. I would  
think this would solve this problem and make it work fine..What do you think?

=RRW=

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**1.435 MSG-433 Subject: Re: Animated textures...**

Subject: Re: Animated textures...  
Date: Tue, 21 Jun 1994 00:31:12 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> How does one go about using the animated textures included with 3.0? I  
> tried creating an object, giving it an animated texture, and importing it  
> into stage and rendering, but I get a still image of the texture when it  
> is first applied.

You need to make another object with some changes made to the texture and  
then load it into the frame you want your texture to animate to. This  
should give you a time line bar to the new object, which will be your  
animation sequence for the texture. Theres more to this, but this should  
give you a good start and work for a basic texture animation or morph on  
a simple object.

=RRW=

---

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### 1.436 MSG-434 Subject: Re: VistaPro ?

Subject: Re: VistaPro ?  
Date: Tue, 21 Jun 1994 00:38:39 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> How do i get Imagine 3.0 to read the DXF files from Vistapro ??  
>  
> All i get is an Axis, no errors just a Axis.

I don't own Vista Pro, but have used it at club meetings. There is a Turbo Silver saver which lets you grab a section of land to save as an object. Then just load it into Imagine 3.0..Works great! unless your talking about a PC version. That I wouldn't have any idea on, though I did see some people mention scaling the axis to 1000, worked on some DXF files?

Hope this helps?

=RRW=

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### 1.437 MSG-435 Subject: Re: CD Object WANTED...

Subject: Re: CD Object WANTED...  
Date: Tue, 21 Jun 1994 00:53:15 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> I Need a CompactDisc/LaserDisc Imagine object...ASAP..  
> And some tips about how to make a perfect reflection, like a CD...  
>  
> Silver or Gold does not matter...

Don't have the object, but the best I can think of is use a brushmap with a CD patterns on it and apply it to a chrome disk, then make a disk and extrude it to the thickness of the CD and give it a Glass attribute with an Index of Refr of maybe 1.50 to 3.55. quite a margin but I'm not really sure of this, You'llle need to experiment. Then fit the first disk inbetween the glass one. Should be halfway desent.

=RRW=

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**1.438 MSG-436 Subject: Re: Custom Palettes**

Subject: Re: Custom Palettes

Date: Tue, 21 Jun 1994 01:32:17 -0700 (PDT)

From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> I recently tried to render a scene in Imagine 3.0 (Amiga) using a custom  
> palette. When I punched the Generate button I was presented with the  
> Palette\_Method requestor. I selected Specify\_File and selected a palette  
> file. When I hit Ok, Imagine gave me an Error\_opening\_palette\_file error. I  
> tried numerous palette files created using DPaintIV and ADPro with the same  
> results. I can't seem to find a reference to custom palettes in the manual so  
  
> I don't know if I'm doing it right. Has anyone had any success in this area o  
r  
> should I be sending Impulse a bug report?  
>  
> Gary

I would think this would work, But maybe you should use Generate First  
and then use the palette from that picture. Also you should try and find  
a frame that has all the objects you are going to use in your  
animation as the First one...Though I have heard from others that there is  
still a problem with this keeping the palette locked throughout the animation.  
But I have not experienced this problem yet as I haven't been able to render  
as many anims as I would normally have by now.

=RRW=

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**1.439 MSG-437 Subject: Imagine.fp for 68040**

Subject: Imagine.fp for 68040

Date: Mon, 20 Jun 94 22:57:04 +0200

From: Mikael\_Ostergren@p36.anet.bbs.bad.se (Mikael Ostergren)

68040 compiled Imagine? Why not? No gain in speed?

/micce

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**1.440 MSG-438 Subject: Re: Imagine.fp for 68040**

Subject: Re: Imagine.fp for 68040

Date: Tue, 21 Jun 1994 05:10:45 -0700 (PDT)

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From: Kelly Petlig <kpetlig@halcyon.com>

On Mon, 20 Jun 1994, Mikael Ostergren wrote:

>

> 68040 compiled Imagine? Why not? No gain in speed?

>

The .fp version of Imagine is already 040 optimized, and I would suspect it autodetects an '040 if you have the '040 libraries installed. Of course, at this point, that might be expecting too much from Impulse. I know when I got version 1.1 the speed increase was two fold over 1.0 because they optimized it for the '040 ... I don't know how much that holds anymore, since they use PeeCeess for development now.

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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## 1.441 MSG-439 Subject: RE: Magnifying Glass

Subject: RE: Magnifying Glass

Date: Tue, 21 Jun 1994 09:13:34 -0400

From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

> From: johnm@bbs.xnet.com (John Machacek)

> Subject: RE: Magnifying Glass

>

> As stated earlier, the light is only effected where an air/glass interface is  
> met. In the case of the Real3D object which is modeled as a solid there are  
> two air/glass interfaces (one on each side of the lens), just as a REAL lens  
> would have.

>

> But in the case of the Imagine lens which is modeled as a lens "shell", with  
> two thin glass shells stuck together, there are really FOUR air/glass  
> interfaces. One on EACH side of EACH glass shell. IMH(and unresearched)O,  
> this would significantly affect the way the rays would travel.

>

> Just my 2 copper/zinc discs worth.

>

Actually, the shell of an Imagine object is infinitesimally thin, so it bends light only once at the shell... not twice. This makes for an equivalent number of refractions (2), so an Imagine lens is pretty close to a CSG lens. I've got a nice version of one, and I think I've found the problem everybody is experiencing. Essentially, in order to get good refraction out of an Imagine lens, you need to pump up the polygon count. My low-count lens does magnify, but it introduces anomalies, probably related to the low number of polygons and the calculations necessary to do Phong shading on them. My high-count lens does a beautiful job of magnifying.

Jude Anthony

-----  
The Ultra Grim-Fast diet: I have a disgusting shake for breakfast, a

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disgusting shake for lunch, and by dinner I've lost my appetite...

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### 1.442 MSG-440 Subject: Re: CD Object WANTED...

Subject: Re: CD Object WANTED...  
Date: Tue, 21 Jun 1994 09:41:49 -0400 (EDT)  
From: Mike Bandy <bandy@aplcomm.jhuapl.edu>

> > I Need a CompactDisc/LaserDisc Imagine object...ASAP..  
> > And some tips about how to make a perfect reflection, like a CD...  
>  
> It's virtually impossinle to get an accurate, perfect  
> reflection like the kind you're looking for with most renderers. Read  
> the other posts about magnifying glasses/prisms/wavelengths. The  
> reflective nature of a compact disc relies on a sort of primastic  
> effect. Something that can't be done with a ray-tracer.  
> You can simulate it fairly well by modelling a CD and giving  
> it highly reflective attributes (like chrome). The rainbow reflection  
> would come from the interaction between the object and a custom global  
> reflection map. If you create a global reflection map that looks like  
> a rainbow of colors you'll probably get good results with the CD  
> reflection thing.  
> Hope it helps...

How about making one of those lighting bundles talked about a few weeks ago - with each light in the bundle having a different color?

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### 1.443 MSG-441 Subject: Imagine 3.0, A3000 and AmigaDOS 3.1

Subject: Imagine 3.0, A3000 and AmigaDOS 3.1  
Date: Tue, 21 Jun 1994 10:01:38 -0400 (EDT)  
From: Mike Bandy <bandy@aplcomm.jhuapl.edu>

Anybody running Imagine 3.0 with their A3000 and AmigaDOS 3.1? Any problems? How about other supporting programs and 3.1 - DPaint, ADPro, VistaPRO, etc.... I don't have a 24bit card (just DCTV) but it looks like they busted 3.1 loose and I'm thinking about an upgrade.

Thanks.

Mike

--

Mike Bandy           bandy@aplcomm.jhuapl.edu  
Johns Hopkins University / Applied Physics Laboratory

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## 1.444 MSG-442 Subject: magnifying lenses

Subject: magnifying lenses  
Date: Tue, 21 Jun 94 10:31:18 EST  
From: mtucibat@cris.com (Mike Tucibat)

I.M.L.

By 6-21, lots of folks have discussed:

: The reason you can't burn ants in Imagine (this is a guess), has to do with

=====

You guys need to check out the prefs editor. There's a switch called "abl" -- set it to true. It's for "ant-burning-lenses."

Hope this helps.

-mikeT

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## 1.445 MSG-443 Subject: EGS Animations and Magic Lantern

Subject: EGS Animations and Magic Lantern  
Date: Tue, 21 Jun 1994 12:23:49 -0500  
From: changc9@rpi.edu (Cedric Georges Chang)

Previous posts have asked about animations on EGS cards. I mentioned that Magic Lantern can create anims (as well as sync sounds to them). I went ahead and did some tests with Magic Lantern so that people can have a better idea of what it can do.

The Animation

-----

The animation used in the testing is part of an old Imagine Project of mine. It consists of a space station; the first 40 frames of the 120 frame anim has the camera panning and moving towards the station, the last 80 frames show the internals of the station in motion. Overall the deltas (changes between frames) aren't bad; the black background negates the the large deltas usually associated with camera pans, and the station in action just consists of a two plates crushing the external tank of the space shuttle into a thin

---

sheet of metal.

I hope to do this same type of test again but with an animation with more complicated motions. I'm sure a more complicated anim would give higher file sizes and slower framerates.

#### The Results

-----

Resolution	Dithering	File Size	FrameRate
-----	-----	-----	-----
320x240x24	-	3.9 MB	28 frames/s
640x480x24	-	14.2 MB	14 frames/s
640x480x8	none	3.6 MB	28 frames/s
640x480x8	random	3.9 MB	28 frames/s
640x480x8	floyd	9.5 MB	27 frames/s
640x400 DCTV	-	1.8 MB	30 frames/s

The 120 640x480x24 images used to make the anim are 36.7 MB.

#### The Testing

-----

I chose the Spectrum output format, which also happens to work on my Piccolo card. For some reason double buffering doesn't work correctly with EGS cards, so all of the anims except the DCTV one were played single buffered. The anims were set to play at a maximum of 30fps. They were compiled in 'Super Charged' mode, the equivalent of long word compression. Anims play faster, but are slightly larger than the byte or word compression options.

The 8bit conversion and dithering was done with Art Department Professional. The 8bit anims used a fixed palette. For dithering, floyd looks the best, but isn't well suited for anims. Random is meant specifically for animations.

I timed the anims by having them play five times in a row and dividing 600 frames by the time. I rounded down the results.

The testing was done on an A3000 with a 28MHz 68040 and an EGS Piccolo. All of the anims were played from ram.

#### My Opinions

-----

The 320x240x24 format seems the best use of Magic Lantern with EGS. The file size is reasonable and it has a high framerate. Though the animation appears small on the screen, it looks very good. At 14.2 MB, the 640x480x24 is too large to be practical. It is also slow which tends to compound the problem of single buffering; you really notice the screen redrawing. Double buffering should help in smoothing out the anim.

After looking at the 24bit anims, the 8bit stuff just doesn't cut it. With no dithering, you get the banding effect instead of smooth shades of color. Random dithering looks okay, but the images are much grainier; they have that dithered look to it. Floyd works well in this case, but the file size balloons upwards. All of the 8bit anims played fine single buffered; the higher framerate smoothes out the animation. If you look for it, you can see parts

of the screen being redrawn, but it's no big deal.  
DCTV comes out ahead with its highly compressed format and high framerate.  
The negatives of DCTV are that certain items don't come out well, such as  
sharp text, color gradients, or images with fine detail. I still see DCTV as  
my main staple for anims.

Cedric

--

-----  
Cedric Chang                      Mechanical Engineer                      // Amiga 3000 '040  
changc9@rpi.edu      Rensselaer Polytechnic Institute      \X/    EGS Piccolo  
-----

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## 1.446    MSG-444 Subject: Sorry Could Not Find Subject!

Date: Tue, 21 Jun 1994 11:46:00 -0400  
From: fraser.goodmurphy@onlinesys.com (Fraser Goodmurphy)

Hi all, I'm trying to add bones to a tube without much success. I want  
the tube to smoothly bend at the midpoint like a Slinky, but when I  
Update Bones, my tube fractures around the bones.

Could some kind soul please email me the recent bones thread, or even  
better, an object that I can compare mine to. I'm working with a  
default tube - radius 50, length 100, 24 sections. I've got 5 axes for  
bones, and 10 bones subgroups. I think I might either have the bones  
subgroups assigned wrong, or my bones aren't "knitted" together  
properly, hence the fracturing. What does "knit" mean anyway (Imagine  
manual p. 142)??

Thanks,  
Fraser

Fraser Goodmurphy  
<74010.2715@compuserve.com>  
<fraser.goodmurphy@onlinesys.com>

---

p CMPQwk #1.4p UNREGISTERED EVALUATION COPY

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## 1.447    MSG-445 Subject: Re: T3DLIB pc ported

Subject: Re: T3DLIB pc ported  
Date: Tue, 21 Jun 94 11:22:44 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

> [cheezy ascii drawing removed]  
> Hi PC fellows,  
>        Wizard is proud to announce T3D4DOS, T3DLIB pc ported package  
> by \*#?!#?, FTP to Avalon.chinalake.navy.mil\pub\misc\t3d4dos.zip or  
> ask me for a uuencoded copy (about 400k pc executables).  
>

You almost make it sound as if you did the port. Credit goes to Thomas Scheermesser who apparently doesn't even use Imagine. He ported it so he could convert some shareware objects to PovRay format.

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery intellect. Their admiration overwhelms their envy!" - Calvin

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## 1.448 MSG-446 Subject: Refraction: 2.9 vs 3.0

Subject: Refraction: 2.9 vs 3.0  
Date: Tue, 21 Jun 1994 12:19:03 -0400 (EDT)  
From: Curcio Nicholas <curcion@db.erau.edu>

Hi, all! I just recently traced a scene with I3.0 that I previously did with I2.9. The reason was to use the better anti-aliasing. Well, after 33 hrs of rendering (compared to 18 hours with 2.9) I got to view my 1280x960 trace of a glass top table. The refraction by the tabletop was VERY different from 2.9. It looks like my index of ref. value was about doubled. I'm only using  $n=1.10$ . Not much refraction, but 3.0 makes it look huge! All of the settings in preferences were the same for both traces. (Except for the new aa of course.) Has anyone else noticed a difference??? This 'higher' refraction would also explain the much greater rendering time.

Now, on the magnifying glass thread. (I can't resist.) I'm an engineering student, and I have a STRONG physics background. (I also have my Encyclopedia of Physics handy. :) Light rays refract at different angles depending on whether they are going from less dense to more dense or more dense to less dense mediums. For instance, if a light ray goes from air to glass, (entering the lens) it bends towards the normal, BUT when a light ray goes from glass to air, (exiting the lens) it bends away from the normal or closer to the surface. Since imagine doesn't have solid objects, I guess it always assumes it is going from less dense to more dense. Some of you say you can make realistic lenses with know problem. I tried your techniques to no avail. Try looking at a real lense sometime, Imagine's don't come out even close. The best results I can get are by using only HALF of the lens. Just make the other half have  $n=1.00$  and it looks pretty good.

Later

---

Nick

curcion@erau.db.erau.edu

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### 1.449 MSG-447 Subject: Re: T3DLIB pc ported

Subject: Re: T3DLIB pc ported  
Date: Tue, 21 Jun 1994 12:01:35 -0500 (CDT)  
From: Cliff Lee <cel@tenet.edu>

I've FTP'ed the program and was able to get it to work. NJOW that I have an ASCII version of the object, I presume that I can make modifications to it and bring it BACK into Imagine? Is this correct. How does one do this?

Cliff Lee                    cel@tenet.edu  
"You can always make up a class,  
  You can never    make up a party!"

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### 1.450 MSG-448 Subject: RE: Magnifying Glass

Subject: RE: Magnifying Glass  
Date: Tue, 21 Jun 1994 12:28:49 -0500  
From: ceverett@prairienet.org (Chris L. Everett)

[stuff we've all seen over and over deleted]

>>     These differences do seem to be linked to the fact that the Imagine lens  
>> is a glass shell whereas the CSG lens is a glass volume. I'll let the  
>> physics experts explain the details however.  
>

>Hmm, kinda what I guessed. This really has little to do with whether an  
>object is solid or just a surface. As you can see by the magnifying effect,  
>Imagine does calculate the lens correctly even though it is only calculating  
>at the surface. That is because that is how it works in the real world.  
>Light only refracts at the border of two mediums, and the middle of the glass  
>has little effect on the light(OK, so speed and color and other things may  
>be effected, but let's not be anal. I'm not a physicist, after all.)

[lots o' stuff deleted]

>In any case, it has little to do with the object being solid modeled or

---

>surface modeled (I think:)

Comparing a solid lens to a empty shell is comparing apples with oranges. This is pretty easy to verify: Look through an empty round drinking glass. You'll see that things on the other side are a different sizedue to the lens effect, but are still right-side up. Now, fill the glass with water and look through it again. Everything is now upside down.

I haven't played with lenses in Imagine for a long time now, but I do recall having everything flipped upside down when using a 'real world' lens (with Imagine 2.0, I think). I think that someone needs to model a 'real' lens in Imagine and try things out rather than just speculate. Hmmmm...maybe I'll give it a try. I might even still have that old object somewhere.

- Chris

--

Chris Everett		This is an emergency, this is not a test.
Spectronics Int'l USA, Inc.		Had this been an actual test, you would
Champaign, Illinois		have been instructed to bring a #2 pencil.

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## 1.451 MSG-449 Subject: Re: Imagine.fp for 68040

Subject: Re: Imagine.fp for 68040  
Date: Tue, 21 Jun 94 14:42:00 EST  
From: "Ducharme, Alain: FOB" <Ducharme@fob.istc.ca>

On Tuesday, June 21, 1994 5:10, Kelly Petlig <kpetlig@halcyon.com> wrote:  
>[...]  
>The .fp version of Imagine is already 040 optimized, and I would suspect  
>[...]

I don't think so. The .fp version is simply a 68020/68881 version, it hasn't been compiled in order to be optimized for the 68040, instruction scheduling, 68882 and whatever else the 68040 boasts. It may not sound like much, but I have compiled the PovRay tracer under SAS 6.5x using these optimizations and I got quite a performance boost over the standard 68020/68881 fp version.

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## 1.452 MSG-450 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Tue, 21 Jun 1994 14:31:00 -0400  
From: david.wyand@canrem.com (David Wyand)

---

Hi!

>It appears the RNGS chunk sets the min/max limits to the textures, for  
>the sliders, that is. I haven't experimented with it directly, but I  
>probably will for some bigger or smaller ranges that I want to  
experiment  
>with easier than typing it in.

I thought that that was what the database was for. I guess I'll have to experiment myself.

Steve Worley: Is it possible for you to release this info so that when we make our own textures they'll work with FORGE?

-Dave  
david.wyand@canrem.com

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### 1.453 MSG-451 Subject: Cycle objects

Subject: Cycle objects  
Date: Tue, 21 Jun 1994 14:38:23 -0500  
From: christopher arthur <amadaeus@ccwf.cc.utexas.edu>

Hello. I have another question about Imagine. I am using 2.0, and I want to know if there is an easy way to string a bunch of poses of an object into a convenient cycle-type object when each pose is not just a change in orientation, but also a change in the arrangement of points; for example, say I create a series of objects which when view sequentially would give the impression of a wave passing over the surface of a single object. Is there a better way to enter this into the action editor than setting the whole chain up as a single object entry, then changing the object path in each frame of the action bar. That seems so tedious.

Also, I'll ask my other question again. Can you do particle-animation with Imagine 2.9?

...with Imagine 2.9?

Chris

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### 1.454 MSG-452 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Tue, 21 Jun 1994 14:45:00 -0400  
From: david.wyand@canrem.com (David Wyand)

---



Hi Lesk!

>I am actually hoping That since Impulse released the information Apex will  
>be able to make that jump. I am finding forge a real time saver and with  
>the use of the Imagine textures I could really have some fun!

I too hope that Apex releases the FORGE info. Once I start making my own textures, I'd like them to work with FORGE.

Steve, you there?

-Dave  
david.wyand@canrem.com

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## 1.455 MSG-453 Subject: Custom Palettes

Subject: Custom Palettes  
Date: Tue, 21 Jun 1994 14:49:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi Gary!

>file. When I hit Ok, Imagine gave me an Error\_opening\_palette\_file error.  
>tried numerous palette files created using DPaintIV and ADPro with the sam  
>results. I can't seem to find a reference to custom palettes in the manua  
>I don't know if I'm doing it right. Has anyone had any success in this ar  
>should I be sending Impulse a bug report?

I don't think that Imagine is looking for a stand alone palette file, but a palette in an actual picture. I've used this function successfully by specifying a picture that has the palette that I want. I'd suggest saving a small brush that has your palette in DPaint and trying using that for the Imagine requester. Let us know if it works!

-Dave  
david.wyand@canrem.com

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## 1.456 MSG-454 Subject: RE: Magnifying Glass

---

Subject: RE: Magnifying Glass  
Date: Tue, 21 Jun 1994 14:40:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi John!

>But in the case of the Imagine lens which is modeled as a lens "shell",  
wi  
>two thin glass shells stuck together, there are really FOUR air/glass  
>interfaces. One on EACH side of EACH glass shell. IMH(and  
unresearched)  
>this would significantly affect the way the rays would travel.

I'd have to disagree on this point. It is my understanding that you get the effect of having four interfaces only when you actually have four faces (huh?). What I mean is, Imagine's surfaces are only two dimensional. For them to have an inner and outer face (so that each face counts as two) the face would need to have thickness. If what you said was true, it would be impossible to model refraction as soon as the ray enters the solid and gets bent, it would instantly unbend as it leaves the surface. As the faces are super thin, you would not see ANY refraction. As this is not the case (there is refraction), a lens with two faces (one at the front and one at the back of the lens) only bends light at two points: where the light enters the lens, and where the light exits the lens.

-Dave  
david.wyand@canrem.com

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### 1.457 MSG-455 Subject: FTP'ing to Avalon.chinalake

Subject: FTP'ing to Avalon.chinalake  
Date: 21 Jun 94 15:36:38 EST  
From: HUERTA@mu-support.acs.muohio.edu

Can anyone tell me what to type in when FTP'ing to avalon.chinalake.navy.mil? It does not seem to accept things like "anonymous" or my email address. Any help will be appreciated. Also, what the heck is t34dos? I know it is a series of PC executables, but what do they do?

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### 1.458 MSG-456 Subject: RE: Magnifying Glass

Subject: RE: Magnifying Glass  
Date: Tue, 21 Jun 1994 16:20:42 -0500

---

From: ceverett@prairienet.org (Chris L. Everett)

[I wrote (before drinking my morning coffee):]

>I haven't played with lenses in Imagine for a long time now, but I do  
>recall having everything flipped upside down when using a 'real world'  
>lens (with Imagine 2.0, I think). I think that someone needs to model a  
>'real' lens in Imagine and try things out rather than just speculate.  
>Hmmm...maybe I'll give it a try. I might even still have that old object  
>somewhere.

Oops. That's what I get for posting messages first thing in the morning  
before my brain is active. The 'real' lens I was referring to was  
actually a 'Real' lens...I'm getting my ray-tracers confused. Sorry for  
the clutter.

- Chris

--

Chris Everett	This is an emergency, this is not a test.
Spectronics Int'l USA, Inc.	Had this been an actual test, you would
Champaign, Illinois	have been instructed to bring a #2 pencil.

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## 1.459 MSG-457 Subject: Re: Aztec & Gigamem

Subject: Re: Aztec & Gigamem  
Date: Tue, 21 Jun 1994 13:05:34 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.efn.org>

Jeff,

This is going to seem like an awfully mercenary post, since I  
can't really help you yet with Gigamem (just got it myself two weeks ago  
and haven't even loaded the disk)--but is there any chance you might  
(PRIVATELY of course--I appreciate the beef about attaching and  
uuencoding files to the IML--) e-mail those of us who are interested a  
copy of the object?

Or maybe better yet, upload it to aminet in a tddd form that we  
can all play with? I think I started this whole aztec string, when I  
downloaded the not-really-DXF file from avalon.chinalake, and mentioned  
all the trouble I was having getting Imagine to accept it. So I have paid  
at least some of my dues for this object.

Thanks, Jeff.

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**1.460 MSG-458 Subject: Re: Custom Palettes**

Subject: Re: Custom Palettes  
Date: Tue, 21 Jun 1994 13:18:50 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.efn.org>

Hey guys, and guyas,

The pallet requestor isn't really looking for a palette, it's looking for a picture done in a specific palette. So do one in the palette you want everything locked to, and save it as a Pic, then choose that pic as your custom palette.

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**1.461 MSG-459 Subject: RE: Magnifying Glass**

Subject: RE: Magnifying Glass  
Date: Tue, 21 Jun 94 16:44:28 CDT  
From: setzer@comm.mot.com (Thomas Setzer)

>  
> > Hmm, kinda what I guessed. This really has little to do with whether an  
> > object is solid or just a surface. As you can see by the magnifying effect,  
  
>  
> Yes and no. A 'magnification' in Imagine isn't optically correct whereas in  
> Real you can be because it considers the resultant volume of the object after  
> the boolean operation.

Imagine doesn't do boolean operations at render time. Real has to since there are only the primitives to work with(if you are working with primitives). As you said below, it works the same in Real with the B-splines(I assume when you use B-splines, no booleans are being done)

Volume isn't so much the effect as the angle of incidence(in fact, I don't see how volume plays into this at all)((AND I AM NOT TALKING ABOUT AN AIR FILLED LENS)). Remember, once inside of an object, light will travel in a straight line. Unless that medium isn't perfect in its content. In a ray tracer, the glass would be perfect. This means that Imagines logic of only needing to calculate at the surface holds true.

> As I said before, the results aren't very different. But  
> you can see one object magnifying correctly whilst the other distorts the image  
> and shows more of the background in the lens. Refraction alone also turns to  
> rotate the image at the edges - a chequered pattern being a good example, a  
> true lens won't take the background to the east of the lens and rotate it north  
> and south, it will just bend it a bit...

Hmm, not sure if thats true. I am looking through a lens right now and it has bent a straight line into an S shaped curve and rotated it 180 degrees.

---

> This is hard to explain.. I'll try and  
> get an image on aminet in the next couple of days...

Tell me about it. I was considering an ascii drawing but...  
I do want to see your images.

>  
> > The reason you can't burn ants in Imagine (this is a guess), has to do with  
> My guess is that Real considers refraction through the object when calculating  
  
> shadows. You can burn ants in Real...

I am very curious as to how this is done. I posted to comp.graphics.algorithms.  
Hopefully someone can explain it.

>  
> > In any case, it has little to do with the object being solid modeled or  
> > surface modeled (I think:)  
>  
> True... Real does it with b-splines no problem...  
>  
This was my main point. If Imagine or Real3Ds refraction model is off a bit  
(hard to say which one), so it is. The point was that if Imagine implemented  
the casting algorithm to burn ants, it could be done with surface  
modeled objects instead of needing solid objects.

One reply I got on my post suggested the need to cast rays from the light  
source to get "caustics". These caustics would then be applied to the plain  
where the ants were getting burned. Not sure if I understand it completely,  
but I suspected that casting rays from the camera to the lightsource and  
still burning ants would be tricky at best. Can you get the programmers of  
Real to give you a clue as to how they did it?

(if anyone wants us to take this offline, just shout. I'm not sure how many  
people are interested in this)

And one last thing, as Jude suggested, try increasing the number of polygons  
in the lens in Imagine. Maybe they(the two images) will look more alike.

Tom Setzer  
setzer@ssd.comm.mot.com

"And of course, I'm a genius, so people are naturally drawn to my fiery  
intellect. Their admiration overwhelms their envy!" - Calvin

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## 1.462 MSG-460 Subject: Genlocking

Subject: Genlocking  
Date: Wed, 22 Jun 1994 11:08:08 GMT +1200

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From: "Paul Batten" <BATTENP@scicol.chchp.ac.nz>

Hi all,

I'm finding that my animations that are to be genlocked over another video source ( using 0,0,0 as the background colour ) have a dark edge from the antialiasing around the objects where they converge with the genlocked video signal.

I was wondering what the correct procedure was for getting clean edges that will blend with a genlocked background.

I could be over-looking the obvious, can anyone help please.

Thanks  
Paul.

---

Paul Batten	Science & Computing Dept.	Christchurch Polytechnic
battenp@scicol.chchp.ac.nz	Christchurch	New Zealand

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### 1.463 MSG-461 Subject: Re: magnifying lenses

Subject: Re: magnifying lenses  
Date: Tue, 21 Jun 1994 20:10:04 -0400 (EDT)  
From: Wes Parham <parham@phoenix.cs.uga.edu>

> : The reason you can't burn ants in Imagine (this is a guess), has to do with  
> called "abl" -- set it to true. It's for "ant-burning-lenses."  
> Hope this helps.

And don't forget- Never place your sun object from last month's discussions directly opposite the lens from your camera position! Severe retinal damage!(of course, depending on your Indices of Refraction!)

wes~

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### 1.464 MSG-462 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Tue, 21 Jun 1994 17:00:34 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

---

Theoretically someone could add their own RNGS iff chunk to each Imagine texture with some sort of patch file. Unfortunately someone (the programmer) would have to get all the practical limits from the manual (or readme file) and put them in the RNGS database. A quick glance at the Forge database only shows the "loading defaults" for the textures, not the ranges. This does seem slightly redundant as the textures themselves also have defaults ... but it does allow easy changing by an end-user. So, the patch would have to set the color ranges to 0..255 and maybe there is some way to "notify" the color window that this is a color. The patch would have to set the fade values and the like to 0..1, and the rest to logical ranges also. (I'm rambling a bit) I think Steve should publish the RNGS chunk somewhere (maybe upload it to aminet). I haven't been able to get ahold of him through E-Mail (Apex address) for almost a month, hopefully he's still reading this.

One other note, I have in my archives (Ok, on my BBS) the texture and objects format for Imagine 3.0 in "PC" cr/lf format. If anyone wishes I could e-mail them a copy.

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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## 1.465 MSG-463 Subject: Re: Genlock button in stage

Subject: Re: Genlock button in stage  
Date: Wed, 22 Jun 1994 10:53:50 +1000 (EST)  
From: Nikola Vukovljak <nvukovlj@extro.ucc.su.OZ.AU>

On Mon, 20 Jun 1994, Jason B Koszarsky wrote:

> >This however, will not work well if you have reflective objects that you  
> >want to render, especially if you want them to reflect the background,  
> >and yet render on a black screen. This is where the genlock option was so  
>  
> Why not use Global or Localized reflection maps if you want background  
> reflection? These don't show up as part of the background but will give  
> reflections.

Localized reflections will probably work. I guess I forgot this feature.  
It wasn't documented in 2.9 and I haven't played with 3.0 much.  
Still, it would be nice to have the Genlock sky option still there.

Nik.  
nvukovlj@extro.ucc.su.oz.au

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## 1.466 MSG-464 Subject: Cloud formations

Subject: Cloud formations  
Date: Tue, 21 Jun 1994 18:10:36 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

Someone (I can't remember who) was asking about how to make fractal cloud formations for use in Imagine. I have a suggestion that may or may not work for your application.

First of all, Imagine doesn't seem to "shade" fog objects ... so the bottom of a cloud doesn't get darker than the sides or top. This may look OK if the clouds are few, as the land will reflect light to the bottom of a real cloud, but if the entire sky is cloudy the clouds should be darker on the bottom than the sides or top (you probably won't render the top, so it may not matter).

What I did was go into VistaPro (everyone has it, right?) and make a random landscape, set fractal to four or eight and do it as "island". Set sea level to about how you want the cloud percentage to be (in other words, make water level high for fewer clouds). Then enter -1.0 in VScale, to make a negative landscape. Now you can do yet another sea level, but this would be for the maximum variation of the cloud thickness (keep reading if I lost ya).

Background info: Clouds usually sit in "ranges" of altitudes, although thunderheads usually go through several ranges. By setting the upper and lower sea level, the clouds still appear to have a top and a bottom to them.

Save the clouds as an Imagine object (set your poly to 2 or 4 ... 8 for a quick and rough test) Ha, now comes the tricky part: VistaPro saves the landscape as 256 separate objects, you need to combine them all! If you saved the landscape with poly at 4, it may not be a problem. With poly at 2, there may be too many points to join ... for now.

In Imagine, with the landscape loaded, pick a handful of objects and join them. At this point, you can either add a plane on the top of the landscape just a few units higher than the highest points, or you can mirror the object on top of itself. If you want to mirror it, try deleting all the points past a certain level (the "top" sea-level) and then extruding it (using "mirror")

I have not tried this, and it really isn't meant as a tutorial, just a "hmm, why haven't I thought of that" jump-start.

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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**1.467 MSG-465 Subject: Re: Genlocking**

Subject: Re: Genlocking  
Date: Tue, 21 Jun 1994 18:33:27 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

On Wed, 22 Jun 1994, Paul Batten wrote:

> I'm finding that my animations that are to be genlocked over another video  
> source ( using 0,0,0 as the background colour ) have a dark edge from the  
> antialiasing around the objects where they converge with the genlocked video  
> signal.

>

> I was wondering what the correct procedure was for getting clean edges  
> that will blend with a genlocked background.

>

Ahh, yes, I dare say I have a bit of experience in this. Since Imagine  
doesn't have alpha channel support (3.1 maybe?) yet, you really can't do  
that. Here's a work around ... render your image with no anti-aliasing.  
Looks jaggy you say? If the other video source is a collection of  
stills, you can do the following:

Scale images to double size.

render Imagine pics at double size, no anti-aliasing

combine images

halve images

simple, eh?

You can try doubling the width only, but you'd have to change your  
Imagine aspect ratio, etc. I usually just go for the double route.

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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**1.468 MSG-466 Subject: Re: CD Object WANTED...**

Subject: Re: CD Object WANTED...  
Date: Tue, 21 Jun 1994 20:17:08 -0400 (EDT)  
From: Wes Parham <parham@phoenix.cs.uga.edu>

> > It's virtually impossinle to get an accurate, perfect  
> > reflection like the kind you're looking for with most renderers. Read  
> > Something that can't be done with a ray-tracer.

OF COURSE! That's why we LIKE to render. The challenge! And, of  
course, we like to find sneaky alternatives to emulating  
real-world physics otherwise, we'd have all taken up photography  
and had plenty of pictures with nice reflections, shadows,  
highlights, refractions, even inter-object 'radiosity' effects.

Seriously, though: the suggestion of a prismatic global reflection  
sounds like a real good idea to me. I tried to make one using two or  
more of Impulses 'Angular' texture mapped onto a disc-shaped object

---

within a certain 'subgroup' of the object. Seemed to do the trick but I imagine that it wouldn't look as good animated as would the global reflect map. Ah, perhaps rotate the angular texture about as it changes from one set of settings to another.... anyone?  
wes~

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## 1.469 MSG-467 Subject: Re: Essence and Imagine 3.0

Subject: Re: Essence and Imagine 3.0  
Date: Tue, 21 Jun 1994 21:04:55 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

Back to the RNGS again ... there doesn't seem to be a valid RNGS IFF chunk at all in any of the Essence textures. It seems that this is data tagged onto the end of the ITXT chunk ... I'm not totally sure. This REALLY requires a bit more investigation.

Whew ... I guess I've been quite busy posting to IML today ... suppose I'd better wait for responses ;-)

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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## 1.470 MSG-468 Subject: LENSE

Subject: LENSE  
Date: Tue, 21 Jun 94 23:55:03 -0300  
From: greg.tsadilas@hofbbs.com

Ok guys & gals...I've been sitting idly by reading all the post regarding making a lense in Imagine it Real 3D, and how each handles light as it passes through it.

SOME people mentioned that Real 3D uses CSG "solid" objects and treats them like solids...(whatever that means). They also compared POV's CSG objects as also creating realistic lenses because it's objects are treated as being solid.

Well, POV's objects are treated as solid when they are being created and when they are CSG'd. However, when they are traced, only the surfaces of the objects are known by the renderer...just as in Imagine. I assume the same is true for Real 3D...only because to calculate every single position within an object would take forever to render.

The noticeable differences in lenses rendered in Imagine & Real 3D most

---

assuredly come from differences in the lense construction, as well as differences in the rendering engines. If you want to create better looking lenses in Imagine, try using more triangles, and try upping the number of internal reflexions allowed in the preferences editor.

-GreG

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### **1.471 MSG-469 Subject: re: Imagine 3.0, A3000 and AmigaDOS 3.1**

Subject: re: Imagine 3.0, A3000 and AmigaDOS 3.1  
Date: Wed, 22 Jun 1994 08:27:45 +0100 (CET)  
From: Joop.vandeWege@MEDEW.ENTO.WAU.NL

Hi Mike,

I also have an A3000 and I'm running 3.1 and I'm having no problems at all. In fact release 3.1 is much faster in handling graphics drawing. AIBB gives me a WRITEPIXEL score of 2.48 faster than an A3000 with release 2.04. Besides that only 3.0 and up allow 256 color Workbench when using a graphics card like my Merlin.

Greetings Joop

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### **1.472 MSG-470 Subject: Re: FTP'ing to Avalon.chinalake**

Subject: Re: FTP'ing to Avalon.chinalake  
Date: Wed, 22 Jun 1994 01:26:02 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Can anyone tell me what to type in when FTP'ing to  
> avalon.chinalake.navy.mil? It does not seem to accept things like  
> "anonymous" or my email address. Any help will be appreciated.

Try ncftp...that gets me in with no fuss.

=RRW=

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**1.473 MSG-471 Subject: Re: Genlocking**

Subject: Re: Genlocking  
Date: Wed, 22 Jun 1994 01:29:05 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

>  
> I'm finding that my animations that are to be genlocked over another video  
> source ( using 0,0,0 as the background colour ) have a dark edge from the  
> antialiasing around the objects where they converge with the genlocked video  
> signal.  
>  
> I was wondering what the correct procedure was for getting clean edges  
> that will blend with a genlocked background.

Don't think you can, I use to use the color I thought was closest to what I might be genlocking over, but you can't do that now. So the best I can give ya is to turn of anti-aliasing. or set it to a minimum and use your genlock to fade those colors down a bit..

=RRW=

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**1.474 MSG-472 Subject: Re: FTP'ing to Avalon.chinalake**

Subject: Re: FTP'ing to Avalon.chinalake  
Date: Wed, 22 Jun 1994 08:32:15 -0400  
From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

> From: HUERTA@mu-support.acs.muohio.edu  
> Subject: FTP'ing to Avalon.chinalake  
>  
> Also, what the heck is t34dos? I know it is a series of PC  
> executables, but what do they do?  
>

t34dos is a series of PC executables based on the Amiga TDDDD package. Essentially, it allows you to convert Imagine TDDD format objects to a textual format, easily editable by hand or by computer, and change the textual descriptions back into Imagine TDDD objects. Could be great for minor modifications, computer-generated objects, etc.

TDDDD stands for "Textual Three-Dimensional Data Description."

Jude Anthony

-----  
The Ultra Grim-Fast diet: I have a disgusting shake for breakfast, a disgusting shake for lunch, and by dinner I've lost my appetite...  
-----

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### 1.475 MSG-473 Subject: Re: Imagine 3.0, A3000 and AmigaDOS 3.1

Subject: Re: Imagine 3.0, A3000 and AmigaDOS 3.1  
Date: Wed, 22 Jun 1994 09:44:19 -0300 (ADT)  
From: the Shockwave Surfer <shockwav@jupiter.sun.csd.unb.ca>

On Tue, 21 Jun 1994, Mike Bandy wrote:

>  
> Anybody running Imagine 3.0 with their A3000 and AmigaDOS 3.1? Any  
> problems? How about other supporting programs and 3.1 - DPaint, ADPro,  
> VistaPRO, etc... I don't have a 24bit card (just DCTV) but it looks like  
> they busted 3.1 loose and I'm thinking about an upgrade.

We have a 3000 here running 3.1, and have no probs with Imagine, ADPro,  
or Vista....no probs with anything that ran under 2.x as far as I recall.

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### 1.476 MSG-474 Subject: Re: CD Object WANTED...

Subject: Re: CD Object WANTED...  
Date: Wed, 22 Jun 1994 09:03:50 -0400  
From: janthony@greatwall.cctt.com (Jude Anthony - DMC)

----- Received message begins Here -----

> From: Wes Parham <parham@phoenix.cs.uga.edu>  
> Subject: Re: CD Object WANTED...  
>  
> Seriously, though: the suggestion of a prismatic global reflection  
> sounds like a real good idea to me. I tried to make one using two or  
> more of Impulses 'Angular' texture mapped onto a disc-shaped object  
> within a certain 'subgroup' of the object. Seemed to do the trick but  
> I imagine that it wouldn't look as good animated as would the global  
> reflect map. Ah, perhaps rotate the angular texture about as it  
> changes from one set of settings to another.... anyone?  
> wes~  
>

Well, since you asked for \_anyone\_...

I took a disastrous try at this once. Absolutely ugly. I decided I'd just  
digitize stuff from now on, but since then I got \_an\_idea!\_

Looking at my CD collection, I see that there's a gray-looking disk, with a

---

plastic coating. When I move the CD, I get angular-looking ranges of color that move in opposite directions around the CD.

If I were to model this, I'd try making a gray, partly-reflective CD disk, with two or three thin, transparent disks on top, and a plastic, non-refractive, lightly reflecting disk \_enclosing\_ the whole bit. To each of the thin, transparent disks, I'd give one or two angular textures, and I'd set up a second object to morph the textures in different directions.

This would be really easy if Imagine did diffraction, but this is as close as I can get, I think. If you're really desperate, give it a shot. Hell, I might try it tonight. I like that comment someone made on "less speculation, more effort."

Just my two cents.

Jude Anthony

-----  
The Ultra Grim-Fast diet: I have a disgusting shake for breakfast, a disgusting shake for lunch, and by dinner I've lost my appetite...  
-----

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## 1.477 MSG-475 Subject: Re: Imagine 3.0, A3000 and AmigaDOS 3.1

Subject: Re: Imagine 3.0, A3000 and AmigaDOS 3.1  
Date: Wed, 22 Jun 94 11:15:53 CDT  
From: wilks@lbm.com (Stephen Wilkinson)

Mike Bandy <bandy@aplcomm.jhuapl.edu> asked:

> Anybody running Imagine 3.0 with their A3000 and AmigaDOS 3.1? Any  
> problems? How about other supporting programs and 3.1 - DPaint, ADPro,  
> VistaPRO, etc... I don't have a 24bit card (just DCTV) but it looks like  
> they busted 3.1 loose and I'm thinking about an upgrade.

Hello!

I am (was?) a C= developer and I've had 3.x up and running on my A3000 for many months. Imagine 2.0 and 3.0 work just fine on it as well as VistaPro 3.05, ADPro, and DeluxePaint 4.1. The DCTV stuff works fine except that I have the old 1.0 version of the software and the screen must \_not\_ be overscanned or you will not be able to see the image screen, just the toolbar. The only problem with Imagine is that if you click on a quickrender screen (rather than type esc) then the system will slow to a CRAWL and hang for about 45 seconds. This mostly happens when I run arq, but I haven't really tracked it down yet. Everything else seems to work fine. Drop me a line if you have any other questions.

Stephen

-----  
S. Wilkinson wilks@lbm.com "Programming is like pinball. The reward for  
Software Engineer LB&M Assoc doing it well is the opportunity to do it again.

---

```
#define OPINION      (myown)  GCS/S -d+(--) p+(---) c++++ !l- u++ e+(*) m@
#define COMPANYOPINION (~myown) s+/- n-(---) h++(*) f-- !g w+ t+ r(+) y?
    This message created using 87% recycled neuro-transmitters
```

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## 1.478 MSG-476 Subject: HELP - ANIMATED TEX'S!!!

Subject: HELP - ANIMATED TEX'S!!!  
Date: Wed, 22 Jun 1994 17:12:02 -0600 (MDT)  
From: Roger Straub <straub@csn.org>

I would like to know how tu use the animated textures such as BeamMeUp and Rain. HELP!

See ya,  
Roger

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## 1.479 MSG-477 Subject: PAL DPS PAR users?

Subject: PAL DPS PAR users?  
Date: Thu, 23 Jun 94 14:47:48 +1000  
From: JOHN ROWE <jrowe@ozemail.com.au>

Hi All!

This is not directly Imagine or LightWave related, but...

Are there any PAL DPS PAR users out there?

If so, are you happy with it and what sort of drive do you use with it?

Is this still the best way to go? Or are there better animation playback solutions just around the corner using MPEG, on the Amiga or perhaps the PC?

Thanks in advance...

Best Regards from Down Under, John

John Rowe Animation	-> Christian <-
Toowoomba Qld.	Reg.CBM Developer, 3D Animator, Programmer
AUSTRALIA	Aussie Amiga Keyboard Overlays
EMail:jrowe@ozemail.com.au	

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## 1.480 MSG-478 Subject: Re: HELP - ANIMATED TEX'S!!!

Subject: Re: HELP - ANIMATED TEX'S!!!  
Date: Thu, 23 Jun 1994 01:55:32 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> I would like to know how tu use the animated textures such as BeamMeUp and  
> Rain. HELP!

well for rain you need to rotate the Z axis of the texture so that it faces away from what polygons you want it on, so if you had a default plan you you would have to rotate the the plan X 90 and then rotate the axis only back to 0, then you would load the texture onto it and it will be facing the right direction Z would be up. To fit it to the plan so that it rain on all of it, as rain only works within the distance of your axis size box, you would select rain in the tecture box and select info and then Tranform Axis, now set the size of x, y,and z to 50.00. Then go and set the texture settings to what you like. But to animate it you need to set Dist Travelled to 0.000000 and then save this object as rain.obj1. Now go back in the texture and set the Dist Travelled to .999999 and then save this object as Rain.obj2. Now after setting up a project load Rain.obj1 in the first frame of the animation in the Action Editor and then load Rain.obj2 in the next frame buy clicking it once and then moving to the last frame and click it once. When you get the requesters for the objects you may want to use Discontinuous Knots for both objects. The beam me up texture would work in a similar way except the Z axis is not as critakle as with the rain, its as simple as that..the .999999 is actually only if you want it to loop so you could actually make the rain fall faster by adding more of these object sequences together during the animation length. If you just need it to sprinkle throught you could probably set the Dist Travelled in the texture to 1.000000.

=RRW=

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**1.481 MSG-479 Subject: Re: your mail**

Subject: Re: your mail  
Date: Thu, 23 Jun 1994 02:23:53 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

>  
> Hi all, I'm trying to add bones to a tube without much success. I want  
> the tube to smoothly bend at the midpoint like a Slinky, but when I  
> Update Bones, my tube fractures around the bones.  
>  
> better, an object that I can compare mine to. I'm working with a  
> default tube - radius 50, length 100, 24 sections. I've got 5 axes for  
> bones, and 10 bones subgroups. I think I might either have the bones  
> subgroups assigned wrong, or my bones aren't "knitted" together  
> properly, hence the fracturing.

Hmmm? when you say 24 sections, do you mean Verticle sections or circle sections...I think you may need to add some verticle sections. It won't bend an actual polygon which sounds like what your trying to do..you need to make 11 verticle sections and size the section apart and then set your axis's starting from the second section up, every other one so that your tube will bend at these points. Then make your subgroups for all the sections. Just so I don't have to go threw the whole process, if you want. I'll uunicode one for you and send it to you not the IML.

=RRW=

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**1.482 MSG-480 Subject: Imagine vs. 3D Studio**

Subject: Imagine vs. 3D Studio  
Date: Thu, 23 Jun 94 08:01:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

3D Studio has motion blur, field rendering, alpha channel, soft shadows, extremely good anti-aliasing, almost total .DXF compatibility, runs under OS2 and Windows, is networkable, promotes to higher resolution screens dependant on the graphics card, uses JPEG, Targa, GIF, FLC (animated) for brushmaps and textures (uses brushmaps to create textures), uses any size bitmap for backgrounds regardless of the render resolution, tweens morphs, has camera sizing with actual lens sizes (as well as multiple cameras), multiple 3rd party routines for single point dynamic particles, explosion and other effects, has a built-in Materials editor that renders preview textures about 10 times faster than Forge and renders scenes about twice as fast as Imagine (on equivalent clock speed platforms). It is being used as the main rendering tool for the games Rise of the Robots, 11th Hour plus at least a dozen more. The price has been reduced to about \$1800.

Imagine is primarily a moderately priced artists rendering tool, not a high-end CAD rendering tool. As such, it is probably unrealistic to expect

---

the same performance with all the features at the same price. However, 3D Studio performs many additional functions that Impulse has said they have found "impossible" to do without severe time penalties, while rendering at twice the speed of Imagine (of course render time is dependant on several variables but this comparison is with equivalent scenes, objects and additional effects). There is more than one way to skin a cat and they don't all have to be messy.

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### 1.483 MSG-481 Subject: MELT Wanted

Subject: MELT Wanted  
Date: Wed, 22 Jun 94 23:29:25  
From: "Mario Rhynsburger" <mario@hell.hacktic.nl>

COULD SOMEONE SEND ME THE UUENCODED FILE OF THE MELT\_PROG>  
For Amiga ,I DON'T HAVE FTP

C^&Y

^^^Bubbles^^^

Boys & Girls you should know by know,Its live to the fullest

Sing > 'Happy Happy Joy Joy'. Repeat until death sets you free.

The Dutchables

mario@hell.hacktic.nl

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### 1.484 MSG-482 Subject: re: Imagine vs 3D studio

Subject: re: Imagine vs 3D studio  
Date: Thu, 23 Jun 94 20:40:07 PDT  
From: 23-Jun-1994 1959 <leimberger@marbls.enet.dec.com>

From: 3049::"TedS@ms70.nuwes.sea06.navy.mil" "Stethem Ted 5721" 23-JUN-1994 13:20:26.95  
To: IML <imagine@email.sp.paramax.com>  
CC:  
Subj: Imagine vs. 3D Studio

ted Stethem said

---

Stuff deleted

>least a dozen more. The price has been reduced to about \$1800.

> Imagine is primarily a moderately priced artists rendering tool, not a  
>high-end CAD rendering tool. As such, it is probably unrealistic to expect  
>the same performance with all the features at the same price. However, 3D

Well at \$1800 dollars it is out of my price range, and so does not exist.  
I can't understand why people keep posting this sort of message to the IML.  
Fist Imagine runs on amiga and Dos boxs. I own only an Amiga, and could by  
Lightwave standalone for half the cost of 3D studio. LW's credits make 3D studio

look pretty sick for the money. Does 3D studio Ray Trace? I have seen things  
done in Imagine that really stand up to most of the other renderers. It boils  
down to the users creative ability. All programs have strength and weak points.  
At a recent LW users group a very skilled 3D creator stated it was not as user  
friendly as LW, and Imagine. One could compare 3D studio with Renderman also,  
but to what end. I use the Amiga and have all types of support software. How  
many 3rd party programs are currently running under OS2. Imagine 3.0 offers  
many features for the buck, and I doubt that any other package offers this  
balance of features for the dollars spent. As for high end cad rendering,  
How do we define this? My first thought is many that post these comparisons  
don't really know enough about Imagine to get the best possible results from  
it. I read most of the graphics mags(many dos related) and so see the reviews  
of the other 3D products. recently I saw an article on a soda can ad done  
with 3D studio. nice but nothing really special. Does 3D studio support  
procedural textures ? If not then it is sorry lacking. LW has them coming  
and bitmap wraps are nothing new. I can scan at 800dpi 24bit and save  
the image as .tiff,bmp,gif,targa,and many others. Of course I use ADPro  
to convert to IFF24. I try to keep all my images in one format anyway  
so listing a bunch of formats a program supports does not impress me.  
So we all know that many programs vary greatly in features, and some  
feature are more usefull than others. Imagine's Procedural textures  
mean more to me than Motion blur(There are AREXX programs that will do  
this as a post process). BTW many of the finished products we see have  
had post processing on one kind or another done. Very few go from  
render to finished products. Forgive the typos ect, Im at home and very tired.

bill

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## 1.485 MSG-483 Subject: Melt Site?

Subject: Melt Site?

Date: Thu, 23 Jun 1994 23:58:18 -0500 (CDT)

From: garner@aug3.augsburg.edu (Joe Garner)

Could someone please send me the site where I can get that Melt program?

Thanks

Joe

?

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## 1.486 MSG-484 Subject: re:Performance

Subject: re:Performance  
Date: Fri, 24 Jun 1994 07:49:52 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

>One of the things that has made me sad is that I have just gotten of a new  
>Silicon Graphics Extreme which I have just obtained here at my work.  
>Jeees I am depressed.... Real time render rotation, Animations done by script  
>s. Fantastic 64bit CPU Grunt Sigh...

>I can only wait and look to the A5000 ... My only hope for a computer with  
>the Graphics and CPU to get near the SGI I have used..

>Graeme Mc Donough,

Take heart. If you REALLY want to get depressed, REALLY, just price one of those  
SGIs with a Reality Engine and the R4400 to back it up, tack on a minimum of 64  
mb memory and a two gig drive. NOW, lets buy some software. These prices would  
shock Mac users. A good SGI rendering package will cost you what most people pay  
for a car. That's without the maintenance agreement. If time is money, most of  
us have a LOT more time than money. Sort of like complainng that your Miata jus  
t can't keep up with a formula 1 race car. Different league, different game. Som  
etimes their paths cross but mostly not.

For what it's worth, if the Amiga is still being developed and manufactured in t  
he years beyond 2000, it will probably out perform your SGI of today, but not th  
e SGI of its day.

Doug Rudd  
rudd@plk.af.mil

-----  
The Amiga Guide to the Galaxy refers to Commodore's management as  
"A bunch of mindless jerks who will be the first to be lined up  
against the wall and shot when the revolution comes."  
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## 1.487 MSG-485 Subject: Aztec to Imagine

Subject: Aztec to Imagine  
Date: Fri, 24 Jun 94 18:56:54 CST  
From: Jeff Niebergall <jnieber@unibase.Unibase.SK.CA>

---

To those of you that have asked me to upload the Aztec city object I must report bad news. At the present time my internet connection only allows ascii transfers. I have tried every way I can think of to upload this thing and I am stumped. I would try sending it uuencoded to some one who could upload it but my experience with uuencoding is limited. The encoded file is 1.1 meg by the way. What is the max size a ascii mail msg to send it as part of one? If need be how do I break up the complete file into smaller one that can be sent?

(this part is Imagine related at least)  
The other option is use what I did to convert it. Accutrans 3D.

Here is the contact and pricing for it.

MicroMouse Productions  
847 Athol Street  
Regina, Saskatchewan  
Canada  
S4T 3B6  
Phone: (306) 522-6077

Canada - CDN \$74.95 plus CDN \$5.00 for shipping  
United States and other Countries - US \$59.95 plus  
US \$5.00 for shipping

The object is very impressive but be forwarned that you need more than 20MB of ram to render it or VM.

Jeff

--

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## 1.488 MSG-486 Subject: RE: re:Performance

Subject: RE: re:Performance  
Date: Fri, 24 Jun 94 14:48:00 PDT  
From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

Actually, things may develop faster than you think. Sega, Nintendo, and Sony all have next generation consoles in development and will be previewing them at the Consumer Electronics Show this week in Chicago. The Nintendo console will actually use a Silicon Graphics R4400, possibly a WindowsNT operating system, and is expected to cost about \$250 (that is the price being promised right now). And from an article in EE Times about the new Sony machine:

Sony Corp.'s month-old Computer Entertainment division demonstrated a prototype of its 32-bit Playstation videogame system last week and revealed that the heart of the machine is a single chip from LSI Logic Corp. that integrates the ASIC vendor's R3000 MIPS processor core, graphics transformation engine (GTE) and video decompression engine (VDE).

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Production of the half-micron, 3.3-V, 1-million transistor Playstation CPU is now ramping in Japan and Santa Clara. The chip has a multitasking architecture that allows for simultaneous operation of the 34-MHz CPU, GTE and VDE, which combine for a total of 220 Mips. When the performance of Sony's separate graphics processing unit (GPU) is added in, the Playstation is rated at 500 Mips, according to Sony.

Brian Halla, executive vice president of LSI's Products group, said the GTE can calculate up to 1.5 million transforms/second. That enables Sony's GPU to generate 360,000 polygons/second, Sony said. Using JPEG compression, the system can deliver 30-frame/s video.

While a lot of people denigrate video games, it is a well known fact in the electronics industry that video games push the envelope of technology, are able to change more rapidly than desktop computers, and bring the price of once exotic technology down to the consumer level. In case you haven't noticed, 3D animated graphics is very hot in video games. If you consider that a fairly complicated 3D object, maybe 60,000 polygons, takes several minutes to render on your current platform, and then consider that the Sony console will be able to render 60 times that amount (360,000 polygons) in one second, then you should be able to see where this is going. The current 3D rendering methods on desktop computers rely on software calculations for the rendered image. These new, low-cost hardware rendering engines will eliminate the need to do all of these calculations in software. Already, 3DO and Atari Jaguar are being redesigned to become plug-in boards for PC's.

These video game consoles will become incredibly fast graphics accelerator cards for PC's. Modeling, at least without a digitizer, will still be mostly manual but with almost instantaneous screen redraws and near real-time test renders, will be speeded up considerably. So, the era of desk top near real-time ray tracing may not be that far off and not that unaffordable.

-----

From: imagine-relay  
To: imagine  
Subject: re:Performance  
Date: Friday, June 24, 1994 7:49AM

>One of the things that has made me sad is that I have just gotten of a new  
>Silicon Graphics Extreme which I have just obtained here at my work.  
>Jeees I am depressed.... Real time render rotation, Animations done by  
script>s. Fantastic 64bit CPU Grunt Sigh...

>I can only wait and look to the A5000 ... My only hope for a computer with  
>the Graphics and CPU to get near the SGI I have used..

>Graeme Mc Donough,

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---

For what it's worth, if the Amiga is still being developed and manufactured in the years beyond 2000, it will probably out perform your SGI of today, but not the SGI of its day.

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rudd@plk.af.mil

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The Amiga Guide to the Galaxy refers to Commodore's management as  
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## 1.489 MSG-487 Subject: RE: re:Performance

Subject: RE: re:Performance  
Date: Fri, 24 Jun 1994 22:35:22 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.efn.org>

Hey Stethem, et al,

Your post made my mouth water. And I have to say that I think we with our 24bit Imagin-ations are already equal to if not superior to Silicon Graphics in quality of imagery. I have a friend here in Huge Eeen named Paul Scott who works with SGI machines all day long, and he was the first high-end user I got to admit--and hell, not even admit, he volunteered the statement--that 24bit is 24bit, and he'd seen stuff done on our Amiga's that was at least as good as the best they'd ever done.

What we lack in hardware/software capability, we make up for with ingenuity--and patience. That's the only place we fall way behind, SPEED. And with the Screamer, or Raptor or SpeelWeenie or whatever NuTek's calling that mips monster they're unleashing, combined with existing Toaster capabilities, and hooked to the new Flyer--hey y'all, beta versions are already on their way to Oregon--I think we're about to pass SGI even in the speed department. And though prices are going to up the ante a little even for the most serious 'hobbyist's' budget, they'll still be beans on the dollar compared to what it costs to enter the SGI realm.

Excuse these overlong paragraphs, but listen: the twenty-first century is here . . .

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## 1.490 MSG-488 Subject: Re: HELP - ANIMATED TEX'S!!!

Subject: Re: HELP - ANIMATED TEX'S!!!  
Date: Fri, 24 Jun 1994 23:37:12 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> I would like to know how tu use the animated textures such as BeamMeUp and  
> Rain. HELP!

well for rain you need to rotate the Z axis of the texture so that it faces away from what polygons you want it on, so if you had a default plan you you would have to rotate the the plan X 90 and then rotate the axis only back to 0, then you would load the texture onto it and it will be facing the right direction Z would be up. To fit it to the plan so that it rain on all of it, as rain only works within the distance of your axis size box, you would select rain in the tecture box and select info and then Tranform Axis, now set the size of x, y, and z to 50.00. Then go and set the texture settings to what you like. But to animate it you need to set Dist Travelled to 0.000000 and then save this object as rain.obj1. Now go back in the texture and set the Dist Travelled to .999999 and then save this object as Rain.obj2. Now after setting up a project load Rain.obj1 in the first frame of the animation in the Action Editor and then load Rain.obj2 in the next frame buy clicking it once and then moving to the last frame and click it once. When you get the requesters for the objects you may want to use Discontinuous Knots for both objects. The beam me up texture would work in a similar way except the Z axis is not as critakle as with the rain, its as simple as that..the .999999 is actually only if you want it to loop so you could actually make the rain fall faster by adding more of these object sequences together during the animation length. If you just need it to sprinkle throught you could probably set the Dist Travelled in the texture to 1.000000.

=RRW=

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## 1.491 MSG-489 Subject: Aztec to Imagine

Subject: Aztec to Imagine  
Date: Sat, 25 Jun 1994 11:42:14 -0400 (EDT)  
From: Udo K Schuermann <walrus@wam.umd.edu>

Jeff Niebergall <jnieber@unibase.Unibase.SK.CA> writes:  
>

---



> To those of you that have asked me to upload the Aztec city object  
> I must report bad news. At the present time my internet connection  
> only allows ascii transfers. I have tried every way I can think of to  
> upload this thing and I am stumped. I would try sending it uuencoded  
> to some one who could upload it but my experience with uuencoding  
> is limited. The encoded file is 1.1 meg by the way. What is the  
> max size a ascii mail msg to send it as part of one? If need be  
> how do I break up the complete file into smaller one that can  
> be sent?

I would be willing to try having you send the whole thing to me in one huge uuencoded chunk. PLEASE contact me directly by email so I can tell you to what account to send it, as the account from which I'm posting here is unable to handle that volume and would bounce the whole mess back to you.

I am very well connected and could send this to Aminet quite easily, so be sure to send me a bit of .readme info (description, origin, how converted, etc.)

.\_. Udo Schuermann  
( ) walrus@wam.umd.edu

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## 1.492 MSG-490 Subject: Re: Aztec to Imagine

Subject: Re: Aztec to Imagine  
Date: Sat, 25 Jun 1994 11:49:12 -0700 (PDT)  
From: Mike McCool <mikemcoo@efn.efn.org>

Hey Udo,

Your offer to receive this uuencoded aztec object--and rebound it to all of us via aminet--is very generous, and makes me glad I still subscribe to this list.

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## 1.493 MSG-491 Subject: Altitude Map Bug

Subject: Altitude Map Bug  
Date: Sat, 25 Jun 94 20:16:01 EDT  
From: mtucibat@cris.com (Mike Tucibat)

I.M.L.

On 6-21, Dave Duberman wrote:

: Here's a funny little Imagine bug. It's in Amiga versions 2.0 and  
: 3.0 (I never noticed it before) but not in PC version 3.0.

---

: 7. Change the brush map to Altitude. Leave all else the same.

: 8. Render again. Note right side is blank (!).

: The only way I was able to fix this was by deleting all of the  
: cube's faces and edges, then re-connecting the remaining points into  
: new faces--pretty easy.

=====

Hi Dave,

I've been checking out your bug, and found some interesting stuff.

The blank sides occur even if you put the Altitude map on directly,  
without changing from a Color map. I got it when rotating the  
Perspective view to the left or the right.

It's not an object construction bug, but rather a Perspective Window  
problem. You can see that all sides are correct by rotating the  
object without changing the Perspective view. Also, the blank sides  
occur irrespective of the orientation of either the object axis or  
the brush axis -- it's always the side viewable when rotating the  
Perspective view to the left or right.

It doesn't occur 100% of the time.

Interesting stuff!

mikeT

P.S. I have Imagine Companion. Liked it a lot!

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## **1.494 MSG-492 Subject: Re: Imagine 3.0, A3000 a**

Subject: Re: Imagine 3.0, A3000 a  
Date: Sun, 26 Jun 94 23:48:00 -0700  
From: jeff.saffold@lookout.com (Jeff Saffold)

SW> screen, just the toolbar. The only problem with Imagine is that if you  
SW> click on a quickrender screen (rather than type esc) then the system  
SW> will slow to a CRAWL and hang for about 45 seconds. This mostly happens  
SW> when I run arq, but I haven't really tracked it down yet. Everything  
SW> else seems to work fine. Drop me a line if you have any other questions.

---

Well, I have run Imagine 3 on my 3000 with OS 3.1, and am also running ARQ, and my system doesn't hang at all when clicking the button on a QRender.. (I have version 1.78 of Arq if it matters.)

Also, just outa curiosity, whats the highest revision of OS 3.1 (Kickstart and workbench)

Thanks.

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## 1.495 MSG-493 Subject: Re: Imagine.fp for 68040

Subject: Re: Imagine.fp for 68040  
Date: Sun, 26 Jun 94 23:52:00 -0700  
From: jeff.saffold@lookout.com (Jeff Saffold)

KP> > 68040 compiled Imagine? Why not? No gain in speed?

KP> >

KP> The .fp version of Imagine is already 040 optimized, and I would suspect KP> it autodetects an '040 if you have the '040 libraries installed. Of KP> course, at this point, that might be expecting too much from Impulse. I KP> know when I got version 1.1 the speed increase was two fold over 1.0 KP> because they optimized it for the '040 ... I don't know how much that KP> holds anymore, since they use PeeCees for development now.

Personally, I don't believe that Imagine is optimized for the 040 at all. Not totally certain, but I think Imagine 1.1 was out long before the 040 was around... Besides, from what people have said before, that have to turn the writeback caches off on the 040, or Imagine will crash.. I wonder if they were using F-Line instructions when they "Optimized" it.

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## 1.496 MSG-494 Subject: PC 32k viewer

Subject: PC 32k viewer  
Date: Mon, 27 Jun 1994 08:35:44 GMT+1  
From: "Wizard" <TESI2@novell.dima.unige.it>

```

| O |      .MODEL SMALL
|   |      .DATA
| O |      LOGIN    DB "          _ _ _ _ Wizard logged in"
|   |      .CODE
| O | MAILING      PROC FAR

```

|/\\_|

Hi everyone (da Ya like it Jason?),

Jason B Koszarsky <kozarsky@cse.psu.edu>:

>Hi PC fellows,

>

>> gak! How's about just 'hi everyone' or 'everyone high?'.

>> Even though PC does mean personal computer it's sorta just an IBM thing

>> Geez, I feel left out ;-)

I'm wondering if PC users could show me how get a 32k color viewer (I get a silly ET4000 32k card) via FTP, with at least .TGA support (damn I cannot read IFF-ILBM pics: Impulse should compile a set of utils for PC users like a good viewer/converter for IFF, HAM8,.... & RGB8!!)

P.S.: FTPing to Avalon

> Can anyone tell me what to type in when FTP'ing to

> avalon.chinalake.navy.mil? It does not seem to accept things like

> "anonymous" or my email address. Any help will be appreciated.

I use ANONYMOUS or FTP or GUEST and got no problem!!!

|/\\_|

| O | RET

| | MAILING ENDP

T-H-A-N-X

| O | STACK 200H

ae(\_^)^ue

|\_| END MAILING \_ \_ \_ \_ \_ Wizard signing off

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## 1.497 MSG-495 Subject: Seamless bumpmap repeat...

Subject: Seamless bumpmap repeat...

Date: Mon, 27 Jun 94 02:12:36 +0200

From: Mikael\_Ostergren@p36.anet.bbs.bad.se (Mikael Ostergren)

I've been trying to tile(repeat) a bumpmap over a simple plane. The bump map I'm using is a brick tile with some irregularities applied to it. Can't get a seamless tile!!! I get dark line between the tiles. Does any one has a solution to this?

When applying the brush with ordinary color mapping I can't see any seams between the tiles.

Using Imagine3.0 fp. The brush I'm using is saved from ImageFX, DPaint or ADpro.

- - - - -<>- - - - -

FidoNet: 2:201/411.36

InterNet: Mikael\_Ostergren@p36.anet.bbs.bad.se

InterNet(work): micce@aktiv.se

- - - - -<>- - - - - Amiga -

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## 1.498 MSG-496 Subject: Re: Imagine.fp for 68040

Subject: Re: Imagine.fp for 68040  
Date: Mon, 27 Jun 1994 05:51:34 -0700 (PDT)  
From: Kelly Petlig <kpetlig@halcyon.com>

On Sun, 26 Jun 1994, Jeff Saffold wrote:

> Personally, I don't believe that Imagine is optimized for the 040 at  
> all. Not totally certain, but I think Imagine 1.1 was out long before  
> the 040 was around... Besides, from what people have said before,  
> that have to turn the writeback caches off on the 040, or Imagine will  
> crash.. I wonder if they were using F-Line instructions when they  
> "Optimized" it.

As I recall, when Imagine 2.0 was released, there was a huge increase in speed for '040 owners, and only a slight increase for '030 owners. How huge? I seem to remember something like 2 to 3 times the speed. The only version I think that had to have the copyback cache turned off was TurboSilver ... Lightwave worked with '040s but not with 2.0, so Lightwave users had to hack their '040 software to run at 1.3 and I at first copyback had to be turned off with everything while loading.

Official word is "It's been '040 optimized since 1.0" Take that how you want.

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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## 1.499 MSG-497 Subject: stars

Subject: stars  
Date: Mon, 27 Jun 94 09:09:05 GMT  
From: Kevin Bonifield <kevinb@spacecom.com>

I am using Imagine2.0/PC and trying to create a starfield. When I use the value "0.02" in the action | global actor requestor it gives a nice star field but it appears in front of my solid objects. What am I doing wrong?

Just out of curiosity, does anyone know if Imagine3.0/PC is shipping yet? Any info

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on upgrade pricing, features, etc.?

Thanks for any help,

//Kevin

```
.....SpaceCom Systems.....
:: Down-to-Earth satellite solutions ::
.....
::      Kevin Bonifield      ::
::      Software Design Engineer      ::
::                               ::
::      Inet :kevinb@spacecom.com      ::
::      Phone:918-488-4823      ::
::      Fax   :918-488-4848      ::
.....
```

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## 1.500 MSG-498 Subject: IML Landfill?

Subject: IML Landfill?  
Date: Mon, 27 Jun 94 09:18:50 GMT  
From: Kevin Bonifield <kevinb@spacecom.com>

The Imagine Mailing List Guide mentions a ftp directory on wuarchive.wustl.edu with the path /pub/amiga-boing/video/... but this directory doesn't exist on wuarchive.

Has the IML landfill moved? If so, can anyone direct me to it?

Thanks,

//Kevin

```
.....SpaceCom Systems.....
:: Down-to-Earth satellite solutions ::
.....
::      Kevin Bonifield      ::
::      Software Design Engineer      ::
::                               ::
::      Inet :kevinb@spacecom.com      ::
::      Phone:918-488-4823      ::
::      Fax   :918-488-4848      ::
.....
```

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**1.501 MSG-499 Subject: re: seams in bumpmaps**

Subject: re: seams in bumpmaps  
 Date: Mon, 27 Jun 1994 08:19:49 -0600 (MDT)  
 From: rudd@plk.af.mil (Douglas Rudd)

Mikael Ostergre wrote:

```
>I've been trying to tile(repeat) a bumpmap over a simple plane. The bump map
>I'm using is a brick tile with some irregularities applied to it. Can't get a
>seamless tile!!! I get dark line between the tiles.
>Does any one has a solution to this?
>
>When applying the brush with ordinary color mapping I can't see any seams
>between the tiles.
>Using Imagine3.0 fp. The brush I'm using is saved from ImageFX, DPaint
>or ADpro.
>- - - - -<>- - - - -
> FidoNet: 2:201/411.36      InterNet: Mikael_Ostergren@p36.anet.bbs.bad.se
>                               InterNet(work): micce@aktiv.se
>- - - - -<>- - - - - Amiga -
```

In the attributes requestor, save the attributes to ram: after setting up your color map the way you want it. Now load the attributes back in immediatly. You now have a second color map defined. Enter that map and change it to bum (altitude), but do not edit it. The altitude and filter maps must have identical settings to the color map when you are using tiles. Hope this helps.

Doug Rudd  
 rudd@plk.af.mil

```
-----
The Amiga Guide to the Galaxy refers to Commodore's management as
"A bunch of mindless jerks who will be the first to be lined up
against the wall and shot when the revolution comes."
-----
```

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**1.502 MSG-500 Subject: EGS Spectrum & Imagine**

Subject: EGS Spectrum & Imagine  
 Date: Mon, 27 Jun 94 08:16:00 PDT  
 From: Stethem Ted 5721 <TedS@ms70.nuwes.sea06.navy.mil>

To whom it may concern:

Several times in the past, people have left questions about how various graphics boards worked with Imagine and which was the best one to get. It seems that these messages never got many responses and I was always one of those people that would have been interested in hearing more about this.

Well, the price of the GVP EGS 2Meg Spectrum board came down a couple of hundred dollars so I got one.

---

I am finding that Imagine screen redraws with the Spectrum are about twice as fast as with the normal Amiga ECS. This is really nice for modeling and editing. At this time, I don't think there is any increase in rendering speed and I wouldn't expect there to be one. Also, the Spectrum will promote Imagine with no problems so far. I have a 1950 monitor so 800x600 is about the maximum for me but it is very workable (and so much better than 600x400). I have only had the board over the weekend so this is no in-depth review but I am very excited and happy with it so far. Also, this is not an endorsement for the Spectrum, just some info you might find useful if you are looking for a 24-bit graphics board to enhance your Imagine work.

The only problem I had is that Creative Computers is shipping the board with EGS V6.0. I had several nerve-wracking hours installing that and eventually being locked out of my computer and having to boot from Workbench floppies to get any kind of screen back before remembering somebody saying EGS V6.0 is full of bugs and there was an EGS V6.2 out. So, if you get this board and find it is coming with EGS V6.0 install disks, don't even try to use them. GVP has the V6.2 available on their BBS for free downloading on the first log-in. BTW, EGS is great when it is working right.

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### 1.503 MSG-501 Subject: Re: PC 32k viewer

Subject: Re: PC 32k viewer  
Date: Mon, 27 Jun 1994 16:12:12 -0500 (CDT)  
From: Cliff Lee <cel@tenet.edu>

On Mon, 27 Jun 1994, Wizard wrote:

> I'm wondering if PC users could show me how get a 32k color viewer  
> (I get a silly ET4000 32k card) via FTP, with at least .TGA support (damn  
> I cannot read IFF-ILBM pics: Impulse should compile a set of utils for PC  
> users like a good viewer/converter for IFF, HAM8,.... & RGB8!!)

There are several bitmap viewing utils available in various places. Specifically VPIC, DISPLAY, and CSHOW are among the most popular. They support a wide array of graphic cards and should do what you need (ie display more than 256 colors...)

Cliff Lee cel@tenet.edu  
"You can always make up a class,  
You can never make up a party!"

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### 1.504 MSG-502 Subject: Re: Imagine.fp for 68040

Subject: Re: Imagine.fp for 68040  
Date: Mon, 27 Jun 1994 16:14:01 -0700 (PDT)

---



From: Kelly Petlig <kpetlig@halcyon.com>

On Mon, 27 Jun 1994, Kelly Petlig wrote:

> Official word is "It's been '040 optimized since 1.0" Take that how you  
> want.

This sentence wasn't properly worded ... sorry for those who took it a different way than it was meant. Reworded: Official word is "It's been '040 optimized since 1.0" Take that how you want COMING FROM A USER, not an official Impulse spokesperson.

I can only say what I've been told, and if others don't believe me, don't take it out on me. I didn't own Imagine 1.0 or even have an '040 until 2.0 was out, so I don't know anything about how it was programmed.

I guess I'll be walking on eggshells for a few months!

Image Runner, sysop of Amiga Images // /Words you say never seem to live\  
Mr.Kelly Petlig<kpetlig@halcyon.com> \X/ \ up to the ones inside your head/

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## 1.505 MSG-503 Subject: Spotlights - again...

Subject: Spotlights - again...

Date: Tue, 14 Jun 94 20:17:24 +0200

From: Anders\_Lattermann@p24.anet.bbs.bad.se (Anders Lattermann)

In a message some time ago, rrw@ecst.csuchico.edu, wrote:

RRW> I have had many requests for the Spotlight tutorial I meentioned here, so  
RRW> here it is for all to read and use.

RRW> I will explain a persice method for 2.9/3.0 and a fairley persice method  
RRW> for 2.0 and 2.9/3.0.

Thanks for the tutorial. Looks good as long as two spotlights doesn't intercept, because then the intercepting area goes black and not whiter. Looks very strange.

Any way around this?

/Anders Lattermann

FidoNet: 2:201/411.24 ! PointBreak - Bg-St-Maurice - France

AmigaNet: 39:164/100.24 ! A3000/14/105 + SQ88C & 17xSQ800

InterNet: Latte@p24.anet.bbs.bad.se ! I want a Samsung sticker & backdrop!

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**1.506 MSG-504 Subject: Re: Spotlights - again...**

Subject: Re: Spotlights - again...  
Date: Tue, 28 Jun 1994 02:05:43 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

>  
> RRW> I will explain a persice method for 2.9/3.0 and a fairley persice method  
> RRW> for 2.0 and 2.9/3.0.  
>  
> Thanks for the tutorial. Looks good as long as two spotlights doesn't  
> intercept, because then the intercepting area goes black and not whiter. Looks  
  
> very strange.  
>  
> Any way around this?

Yes, as this article was originally written for Imagine 2.0 and some one wanted me to send it to them I did, and made the mistake of not conferming how well the effect Controlled Falloff had on the light, in the lights requester for 3.0 when I added this part to the tutorial. It does work but not quite as nice as Diminishing Intesity as there seems to be more Falloff than Diminishing Intesity gives, and makes it harder to set the Liner texture to the falloff length.

I have sense been trying to get some spotlights done to send to the net and found this in the proccess. Sorry for my error, but to correct it all you need to do is use Diminishing Intesity instead of Controlled Falloff. This will give you the effect you want. Also make sure that you set Ambient in your globals to about 80, 80, 80 as this will help stop Imagine from rendering black within your beam and try setting the Filter of the Bright cone to 180, 180 ,180, or 200, 200, 200 as this will help as well. Sorry for any trouble this may have caused you. I have also found that these spotlight don't work as well as they seamed to have in 2.0 and 2.9. Not sure why but they seam to get some weird dithering with the Controlled Falloff and Diminishing Intesity setups when hitting the ground then when I used them in 2.0 & 2.9. Its not a perfect spotlight but the best I have come up with in Imagine that will also work in fog.

I am also not sure as of yet if it is possible to get the Softedgelite to work or GlobalHaze textures, as I have had trouble getting them to look properly, and have not had the time I would like to devote to experimentation of such a spotlights. I have not given up but, am not making great progress at the moment do to other pending projects. If any one else has time for this type of experimentation I would appreciate any input. THANKS in addvance.

=RRW=

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**1.507 MSG-505 Subject: Re: Seamless bumpmap repeat...**

Subject: Re: Seamless bumpmap repeat...  
Date: Tue, 28 Jun 1994 21:14:34 +1000 (EST)  
From: Nikola Vukovljak <nvukovlj@extro.ucc.su.OZ.AU>

On Mon, 27 Jun 1994, Mikael Ostergren wrote:

>  
> I've been trying to tile(repeat) a bumpmap over a simple plane. The bump map  
> I'm using is a brick tile with some irregularities applied to it. Can't get a  
> seamless tile!!! I get dark line between the tiles.  
> Does any one has a solution to this?  
>  
> When applying the brush with ordinary color mapping I can't see any seams  
> between the tiles.  
>  
> Using Imagine3.0 fp. The brush I'm using is saved from ImageFX, DPaint  
> or ADpro.

Well, that answers my question as to whether this problem was fixed in 3.0.  
Obviously not. This bug was present in 2.0 and 2.9..

Nik.  
nvukovlj@extro.ucc.su.oz.au

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**1.508 MSG-506 Subject: Hello friends of rendering**

Subject: Hello friends of rendering  
Date: Tue, 28 Jun 1994 15:58:16 BRA3EST  
From: "Daniel 'Mega'" <MEGA@maracana.lci.ufrj.br>

My name is Daniel Bracher and I study computer science in Federal University of Rio de Janeiro. This is my frist mail to IML. My main interst is computer graphics, so I own Amiga since 21 apr 1989. I use Imagine since Turbo Silver 3.0 (that's a joke). I really love Impulse. I'am starting to program CG in C++, and I have some information in graphic formats and CG routines. So if some wants to exchange some info, please feel free to contact me. After the University finishes the period, I'll organize my routines and list them to you.

I have some impressions about all I've read in IML.

- I think that Impulse doesn't make Imagine with 'Amiga Look' because to get the easiest way to port to PC (argh ...). Besides, CBM is a task held company.

- Imagine on SGI ... Impulse has to remake it's interface from the ground. It's very dumb comparing to Wavefront, TDI, Alias, etc ... And add a lot of features on Imagine, too.

- Why don't Impulse hire Steve Worsley to write Imagine manuals.

---

So back to rendering

BTW, I am attending to a course in my university ministrated by Allan Watt, author of excellent '3D Computer Graphics' among others, the course talks about everything in 3D that u ever want to know but have afraid of ask, from polygon clipping to Radiosity, including Cook & Torrance, Ray Trace, Texturing, CSG, Animation effects, etc ...

Daniel Bueno Bracher  
Universidade Federal do Rio de Janeiro  
Internet E-mail: mega@lci.ufrj.br

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## 1.509 MSG-507 Subject: Re: Imagine on SGI / 3DS ??

Subject: Re: Imagine on SGI / 3DS ??  
Date: Tue, 14 Jun 1994 11:30:19 +0200  
From: Peter Bugla <bugla@informatik.tu-muenchen.de>

Hi there!

In his last letter "Wizard" wrote:

> You have to consider that 3DS is a really shitty rendering prg  
> (nice user interface and editing, after all; shitty boolean just like  
> Imagine slice perhaps!);

I worked with 3DS and I don't know what you mean with shitty rendering. The quality you get is great and it is MUCH (!) faster than imagine (and not half as buggy)!  
You're right about the slice problem, but it is a little better than in imagine, because the first boolean operation works almost every time (in fact I experienced no time the first one caused an error).  
Biggest advantage of 3DS: If you want a good looking scene QUICK, take advantage of the materials you have!  
Biggest disadvantage: The Price!

CU Peter

```
#include <disclaimer.h>                                | "If architects built buildings the way
                                                         | programmers write programs the first
                                                         | woodpecker that came along would
Peter Bugla                                             | destroy civilization"
e-mail: bugla@informatik.tu-muenchen.de                | -- Murphy's Law of Computers
snail-mail: Peter Bugla, Morsering 26,                 |
              80937 Muenchen, Germany                  |
-----
```

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### 1.510 MSG-508 Subject: AZTEC

Subject: AZTEC  
Date: Fri, 17 Jun 94 05:55:46 -0300  
From: greg.tsadilas@hofbbs.com

Regarding the Aztec City DXF file....I have downloaded the file from AutoDesk's forum on Compuserve. The descriptive file and the text file were very promissing. Upon unzipping the file, I discovered that it was not in DXF format but rather in AutoDesk's DWG format. This may be the problem that many people are finding. To date I have found no converter or any application that will read DWG.

With regards to the DXF to 3DS converter that Syndesis included on their disks, and on compuserve...it's incredibly efficient. I have been able to successfully convert AutoCad DXF release 12, AME SOLMESH files. And if you never ran into that format...you're lucky. I have found nothing else that would accurately read it.

"Imagine's DXF import is broken." Give me a break....no program handles every aspect of DXF....including AutoDesks 3D Concepts (and they wrote the friggin DXF "standard"). There is a route that you can take to convert most any DXF to a DXF format that will be read by Imagine. But no-one tries.

Like I always say...those that can DO, those that can't BITCH.

-GreG

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### 1.511 MSG-509 Subject: Sorry Could Not Find Subject!

Date: Mon, 20 Jun 1994 22:46:28 +1000  
From: imagine-relay@email.sp.paramax.com

Hi people, someone could tell me how to make a nice water effect in Imagine 2.0 (in HAM mode)? Is it possible to do something like the real world?  
Thanks a lot, Rodrigo.

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### 1.512 MSG-510 Subject: Imagine Mapping Bug

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Subject: Imagine Mapping Bug  
Date: Tue, 21 Jun 94 23:59:46 PDT  
From: DDuberman@cup.portal.com

Here's a funny little Imagine bug. It's in Amiga versions 2.0 and 3.0 (I never noticed it before) but not in PC version 3.0.

1. Make a cube. Add a 1 x 1 plane primitive and extrude using the default settings. You could use the default plane settings too. In fact, it even works if you make a cube by sweeping a bracket.
2. Set the cube's axis in its center. This isn't necessary but results in more uniform brush mapping.
3. Select Attributes and turn Phong off. This is important!
4. Add a brush map, Wrap X and Wrap Z. Use defaults for all other settings. Use a nice uniform bumpy image.
5. Change Perspective view Angle so that you're looking down at the upper front right corner of the cube. You can see front, top and right sides.
6. QuickRender and note expected results.
7. Change the brush map to Altitude. Leave all else the same.
8. Render again. Note right side is blank (!).

The only way I was able to fix this was by deleting all of the cube's faces and edges, then re-connecting the remaining points into new faces--pretty easy.

Guess I'll drop a note to MH.

- David Duberman

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### 1.513 MSG-511 Subject: Re: Cycle objects

Subject: Re: Cycle objects  
Date: Wed, 22 Jun 1994 00:56:56 -0700 (PDT)  
From: "Randy R. Wall" <rrw@ecst.csuchico.edu>

> Hello. I have another question about Imagine. I am using 2.0, and I  
> want to know if there is an easy way to string a bunch of poses of an object  
> into a convenient cycle-type object when each pose is not just a change in  
> orientation, but also a change in the arrangement of points; for example,  
> say I create a series of objects which when view sequentially would give the  
> impression of a wave passing over the surface of a single object. Is there  
> a better way to enter this into the action editor than setting the whole  
> chain up as a single object entry, then changing the object path in each frame

> of the action bar. That seems so tedious.

Well, If I understand what you want, you could make several morph groups of your wave and other objects, and make time line bars between them in the action editor, Then you would only have to morph the one group. The most important thing to remember is when you make the object group is to keep all of the objects in the same order, you can check this with the FIND command. And also when you move the points of an object in this group you must leave the axis in the exact position and alignment as the first group or you will get unexpected results. If you have textures or wraps on this object you will have to calculate any rotations or movement you will do to the points and move the texture/wrap axis accordingly to match. This is how I made a scuba diver, jelly fish, shark and stingray as well as other assorted fish swim in an animation I did called Treasure Hunt that is on the Amigamations Videotape. I had to morph all of the different movement of all the groups..Wish we had bones and States back then..

> Also, I'll ask my other question again. Can you do particle-animation with  
Imagine 2.9?  
> ...with Imagine 2.9?

Yes. just like 3.0

=RRW=

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## 1.514 MSG-512 Subject: Re: Seamless bumpmap repeat...

Subject: Re: Seamless bumpmap repeat...  
Date: Wed, 29 Jun 94 00:46:25 +0200  
From: Mikael\_Ostergren@p36.anet.bbs.bad.se (Mikael Ostergren)

Cc: nvukovlj@extro.ucc.su.OZ.AU

NV> On Mon, 27 Jun 1994, Mikael Ostergren wrote:

>> I've been trying to tile(repeat) a bumpmap over a simple plane. The  
>> bump map I'm using is a brick tile with some irregularities applied to  
>> it. Can't get a seamless tile!!! I get dark line between the tiles.  
>> Does any one has a solution to this?

NV> Well, that answers my question as to whether this problem was fixed in  
NV> 3.0. Obviously not. This bug was present in 2.0 and 2.9..

I would really like to hear something about this from Impulse. Have this been pointed out to them? Should I write a letter to them explaining the problems with altitude mapping? How come a bug that seems to be well known from 2.0 and 2.9 still be in the release version of 3.0.... :-(

A Way around the bug, from Doug Rudd:

---

DR> In the attributes requestor, save the attributes to ram: after setting up  
DR> your color map the way you want it. Now load the attributes back in  
DR> immediatly. You now have a second color map defined. Enter that map and  
DR> change it to bum (altitude), but do not edit it. The altitude and filter  
DR> maps must have identical settings to the color map when you are using  
DR> tiles. Hope this helps.

DR> Doug Rudd  
DR> rudd@plk.af.mil

Thanks Doug!

/micce

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### 1.515 MSG-513 Subject: Re: Imagine 3.0, A3000 3.1

Subject: Re: Imagine 3.0, A3000 3.1  
Date: Mon, 27 Jun 1994 13:31:11 +0100 (CET)  
From: Joop.vandeWege@medew.ento.wau.nl

Jeff Saffold asked

>Also, just outa curiosity, whats the highest revision of OS 3.1  
>(Kickstart and workbench)

As far as I know Kickstart 3.1 (40.68) and WB 3.1 (40.42)

BTW The germans are selling 3.1 upgrades for around DM 200==\$100

Greets Joop

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### 1.516 MSG-514 Subject: AARC,EDLE, Efects.doc

Subject: AARC,EDLE, Efects.doc  
Date: Wed, 29 Jun 1994 21:09:40 -0400 (EDT)  
From: romulus <romulus@escape.com>

The imagine manual does not mention what the AARC is used for as aposed to EDLE. I know that it has something to do with antialiasing; however I do not know it's main usage. I would really appreciate if one can let me know the differences.

On page 272 of the Imagine 3.0 manual, it is stated that there are many

---



effects. Some of which should be found in a text file called Effects.doc. Unfortunately I have not found this file in any of Im30's diskettes.

I have asked this question several times and hope that someone will be able to help me with this most recent post.

Thank you

Rob.

P.S. I love Imagine.

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### **1.517 MSG-515 Subject: RE: SEAM**

Subject: RE: SEAM  
Date: Thu, 30 Jun 94 01:45:58 -0300  
From: greg.tsadilas@hofbbs.com

The seam in the tileable altitude map is NOT a bug. Imagine adds a 1 pixel border (color values 128,128,128) to the brush when tiling it. That is how it is implemented. Therefore, it is not a bug. No attributes settings or wild contortions will get rid of it.

-GreG

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### **1.518 MSG-516 Subject: digitizer**

Subject: digitizer  
Date: Thu, 30 Jun 94 08:11:26 EDT  
From: Mjourdan@aol.com

Has anyone received any more info from Impulse on the new 3d-digitizer?

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### **1.519 MSG-517 Subject: Essence PolkaDots**

Subject: Essence PolkaDots  
Date: Thu, 30 Jun 1994 11:04:26 -0500 (CDT)  
From: Michael Whitten <mw@lenti.med.umn.edu>

Just got the EssenceI+II/Forge bundle. Worley did a fantastic job. However, I noticed that the EssenceI Polkadots texture will not load into Imagine3.0. I get the error msg: Incompatible texture format. All the other textures load fine. Both Essence sets are Version 3.0. The file does not seem to be messed up, since it readily loads into Forge and Imagine2.0.

And don't ask me what I planned to do with polkadots.

Michael

```
+-----+  
+   M.D. Whitten   mw@lenti.med.umn.edu   Sentience is overrated.   +  
+-----+
```

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## 1.520 MSG-518 Subject: Lighting BUG

Subject: Lighting BUG  
Date: Thu, 30 Jun 1994 13:49:00 -0400  
From: david.wyand@canrem.com (David Wyand)

Hi All!

Wow, not a lot of mail these past couple of days. Are you guys on vacation , or something (you don't have to answer if you are :) ?

As no one has responded to my lighting bug, here we go again:

The bug would appear to be when you choose a rectangular, parallel lightsource. In detail, add an axis and make it a parallel, rectangular lightsource. Also, set it so it doesn't flare. Make the x-axis something like 20 and the z-axis 40 (ie: rectangular). Save it off. Now create a ground with a dark colour, and save it too.

Now goto stage and load in the axis and ground. Place the axis above the ground with the axis' y-axis pointing towards the ground. Move the camera so that it is pointing at the ground where the light hits. Render.

Here's what happens to me: along one of the lights axis (I forget which one), the light on the ground is not constrained, but extends to infinity (as if the size of the light along that axis is infinite).

After playing around, I found that setting the light to not flare causes this bug. If you do set the light to flare, then the light behaves normally.

---

Anyone else confirm this? Mike? Scott?

-Dave  
david.wyand@canrem.com

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## 1.521 MSG-519 Subject: RE: SEAM

Subject: RE: SEAM  
Date: Thu, 30 Jun 1994 14:26:27 -0400 (EDT)  
From: Udo K Schuermann <walrus@wam.umd.edu>

greg.tsadilas@hofbbs.com writes:

> The seam in the tileable altitude map is NOT a bug. Imagine adds a 1 pixel  
> border (color values 128,128,128) to the brush when tiling it. That is how  
> it is implemented. Therefore, it is not a bug. No attributes settings or  
> wild contortions will get rid of it.  
> -GreG

If they chose to implement it that way, or not, it's still a bug, because it serves no purpose, could be easily supplied by my own brush map, and I get no choice to rid myself of the unwanted border. A bug is a bug by any other name.

.\_. Udo Schuermann  
( ) walrus@wam.umd.edu

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## 1.522 MSG-520 Subject: re: 3D Digitizer

Subject: re: 3D Digitizer  
Date: Thu, 30 Jun 1994 13:45:42 -0600 (MDT)  
From: rudd@plk.af.mil (Douglas Rudd)

>sender: "Mjourdan" <Mjourdan@aol.com>  
>To: imagine@email.sp.paramax.com  
>Date: Thu, 30 Jun 94 08:11:26 EDT  
>Subject: digitizer  
>  
>Has anyone received any more info from Impulse on the new 3d-digitizer?

I was able to place an advanced order for the 3D digitizer with Impulse. They stated that we will have 30 days from the date of their next news letter mailing to order the digitizer at the \$500 price. That means less than 30 days from the time you get the news letter. Impulse seems willing to take advanced orders and they stated that they will not charge your card until the product ships. They also stated that the digitizer will ship with the Amiga and PC S/W included (implied)

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s same unit works on both platforms). If you decide to place your order now, you should confirm what I've said here, and not go on my word alone. This is not an endorsement of this product, only information.

The number for Impulse is 1(800) 328-0184  
(Sorry, I don't have any info for anyone calling from outside the US)

Doug Rudd  
rudd@plk.af.mil

-----  
The Amiga Guide to the Galaxy refers to Commodore's management as  
"A bunch of mindless jerks who will be the first to be lined up  
against the wall and shot when the revolution comes."  
-----

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### 1.523 MSG-521 Subject: How do I make a wood shingle roof

Subject: How do I make a wood shingle roof  
Date: Thu, 30 Jun 94 13:08:08 PDT  
From: "Steve McLaughlin" <stevemcl@VNET.IBM.COM>

Hi, what's a good way of making a shingle roof?

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### 1.524 MSG-522 Subject: Re: Essence PolkaDots

Subject: Re: Essence PolkaDots  
Date: Fri, 1 Jul 1994 07:16:27 +1000 (EST)  
From: "" <williamp@triode.apana.org.au>

> However, I noticed that the EssenceI Polkadots texture will not load into  
> Imagine3.0. I get the error msg: Incompatible texture format. All the  
> other textures load fine. Both Essence sets are Version 3.0. The  
> file does not seem to be messed up, since it readily loads into Forge  
> and Imagine2.0.

I noticed this as well so it's not just you, my texture gave the same  
error in Imagine 3.0. I meant to leave Steve email about it, hopefully he's still  
reading the list.

> And don't ask me what I planned to do with polkadots.

Okay, Polkadots have many and varied uses... :)

---

....William John Porter....  
williamp@triode.apana.org.au

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## 1.525 MSG-523 Subject: Re: AARC,EDLE, Efects.doc

Subject: Re: AARC,EDLE, Efects.doc  
Date: Fri, 1 Jul 1994 07:30:58 +1000 (EST)  
From: "" <williamp@triode.apana.org.au>

> On page 272 of the Imagine 3.0 manual, it is stated that there are many  
> effects. Some of which should be found in a text file called  
> Effects.doc. Unfortunately I have not found this file in any of Im30's  
> diskettes.

There was supposed to be a doc on the disk about the new textures. It was  
neither installed on my system nor is it present on any of the disks...

Anyway the Spike.FX makes your object go all spiky by pushing out points  
in a random pattern (that can be repeated), it'll do this in a number of  
cycles if you want. Balloon.FX sort of scrunches up your object and will  
return it to its original shape if you want... By scrunches I mean like  
the effect you get when crushing up a paper bag or something similar.

Hope that helps, hey why not just experiment with them, that's what  
working with Imagine is all about... usually. :)

William John Porter

williamp@triode.apana.org.au

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## 1.526 MSG-524 Subject: Knowlage exchange

Subject: Knowlage exchange  
Date: Thu, 30 Jun 1994 10:35:54 BRA3EST  
From: "Daniel 'Mega'" <MEGA@maracana.lci.ufrj.br>

All CG programmers, let join our knowlage !!!!

I want to exchange CG algorithms with IML subscribers, When I  
finished this semester in UFRJ, I'll organize my CG routines and as

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soon as I learn new ones I will attach them on list.  
I intend to make it as famous Amiga C enciclopedia, ie, one text  
file with an explanation of the algorithm and some example(s). I hope  
the people that will exchange with do in a similar fashion.  
I want to exchange graphic formats, in this case I'll keep the  
original documentation I got.

[]'s

Daniel Bueno Bracher  
Universidade Federal do Rio de Janeiro  
Internet E-mail: mega@lci.ufrj.br

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### 1.527 MSG-525 Subject: waves.itx

Subject: waves.itx  
Date: Thu, 30 Jun 1994 14:13:09 -0700 (PDT)  
From: Ed Totman <etotman@gort.ucsd.edu>

Waves.itx texture crashes my machine whenever I set 'distance traveled'  
to anything other than zero. Anybody else have this problem?

Ed Totman  
etotman@gort.ucsd.edu

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### 1.528 MSG-526 Subject: Re: How do I make a wood shingle roof

Subject: Re: How do I make a wood shingle roof  
Date: Thu, 30 Jun 94 17:43:48  
From: djm2@ra.msstate.edu (Dan Murrell Jr.)

Hey, Steve, you said on Jun 30 :

> Hi, what's a good way of making a shingle roof?  
>  
>

Essence II. There is a 'shingles' texture that looks incredible. If you  
don't have Essence, and you need the texture, maybe you can get someone to  
send you a bitmap. Of course, only if you promise to buy Essence soon... :-)

Dan

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## 1.529 MSG-527 Subject: Fire Tutorial

Subject: Fire Tutorial  
Date: Thu, 30 Jun 94 17:30:59 PST  
From: sworf@terapin.com (Sam Worf)

Could someone please email me Steve Worley's Fire tutorial from a few Apex newsletters back - or tell me where I could find it (perhaps in the new site for the IML archives? wuarchive.wustl.edu doesn't seem to carry it anymore)?

Thanks!

```
+-----+
|I'm sorry, but on my world I had a nice home, and a good|
|job with prospects, and I get angry at the thought that|
+-----\ my life suddenly /-----+
|  A4000/40/1.2GB  \-----/  PAR/TBC-IV/U-220  |
| sworf@terapin.com > SAM  J. WOLF < samwolf@netcom.com  |
|  GENie:S.WOLF   /-----\  Cmpu$rv:72411,3573  |
+-----+
|consists of sitting in sewage-filled models of my|
|own ear, being patronized by a lot of demented birds!|
+-----+
```

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## 1.530 MSG-528 Subject: Re: How do I make a wood shingle roof

Subject: Re: How do I make a wood shingle roof  
Date: Thu, 30 Jun 1994 21:41:45 -0700 (PDT)  
From: Gerard Menendez <gpm@netcom.com>

There is a shingles texture with 3.00 also. I'm sure the essence .itx is killer.

By the way, I used the shingles texture to simulate bevel siding by setting the Y of the shingle to the same size as my wall and the offset to 0.

Gerard

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**1.531 MSG-529 Subject: Re: Fire Tutorial**

Subject: Re: Fire Tutorial  
Date: Fri, 1 Jul 1994 19:17:41 +0000  
From: David Shaw <dshaw@michael.slip.cc.uq.oz.au>

Hi,

On Thu, 30 Jun 1994, Sam Worf wrote:

> Could someone please email me Steve Worley's Fire tutorial from a few Apex  
> newsletters back - or tell me where I could find it (perhaps in the new  
> site for the IML archives? wuarchive.wustl.edu doesn't seem to carry it  
> anymore)?  
>  
> Thanks!

If somebody does have this info available could you please send it  
to me as well. I asked Steve if he had any old copies but alas they were  
all gone. :(  
Thank you  
David Shaw  
dshaw@michael.slip.cc.uq.oz.au

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**1.532 MSG-530 Subject: looking for answers**

Subject: looking for answers  
Date: Fri, 1 Jul 1994 13:27:13 PDT  
From: xxx <bcollin@mpi.nl>

Hi,

At the moment I am looking into buying a 3D package for  
animation. Imagine is one of the candidates, but I need more  
information. Could someone supply me with the address and  
faxnumber of the makers of Imagine (Impuls?).  
I am a kind of superuser in a group of anthropologists. Some of  
them need short films of for instance balls rolling through a  
chamber. We have got some 3D software on a Mac (Swivel,  
Stratavision and LifeForms), but even something 'simple' like a  
ball rolling is impossible to do (easily) with it.  
There are 4 programmes that might fit our purposes that I know  
of: Imagine, 3dStudio, Real3D and ElectroGIG. The platform we  
will probably be using is PC, preferably Windows. If there are  
people on this list who have extensively used more than one of  
the aforementioned programmes, I would greatly appreciate it if  
you could send a comparison.  
These are the three main things I am looking for.  
-Ease of use: some rather computer-illiterate people should be  
able to use it

---



-Modelling speed: I do not want to animate a rolling ball by rotating it frame by frame. Rotate and Boing effects like in Imagine would be great

-Future: We are not sure yet if we will be using the possibilities of 3D software in the future (visualisation, etc.), so it should be able to do more than just the two aforementioned things.

Please keep in mind that I am not a subscriber, so send your answers to me personally (bcollin@mpi.nl). If there are no objections I will send a digest of your answers to the list.

Thanx in advance,

---

Branko Collin	u249026@vm.uci.kun.nl	//	'Sum!'	
Nijmegen	bcollin@mpi.nl	\X/	-I-	

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### 1.533 MSG-531 Subject: Imagine 3.0 for the PC

Subject: Imagine 3.0 for the PC  
 Date: Fri, 1 Jul 1994 09:24:03 -0500  
 From: Frank Kang <fkang@bsginc.com>

I'm considering purchasing Imagine 3.0 for the PC after having used version 2.0 that came with the 3D Modeling Lab book. One thing that is not clear to me is the video resolution 3.0 supports during editing. 2.0 seems to support only VGA and I find that a bit hindering. Does the current version support higher resolutions - ideally at least 1024x768?

If not Imagine, I'll probably get Caligari Truespace. That depends, however, if it supports ray tracing. It wasn't clear from the crippled demo I have whether it does more than scan line rendering.

Frank  
 fkang@bsginc.com

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### 1.534 MSG-532 Subject: No lensflare toggle bug

Subject: No lensflare toggle bug  
 Date: Sun, 3 Jul 1994 08:17:11 +1000 (EST)  
 From: "" <williamp@triode.apana.org.au>

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Hi,

I've also just encountered the bug with the no lensflare button in the lights requester. As has been mentioned on the IML beforehand when you activate this all your lights work at full strength, even if you have diminish intensity set...and even if only one light has this flag set all the lights are affected in the scene!

I hope Impulse can squash this bug quickly by the time they redo the global lensflare FX.

William John Porter

willliamp@triode.apana.org.au

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