Table of Contents

Tables and Fields	8.3
Table Import Order	8.3
The steps for importing data	8.4
Creating an Import File	8.4
Field Types	8.5
Field Delimiters	8.5
Database	8.6
Spreadsheet	8.7
Word Processor	8.7
Creating a new Import Format	8.8
Import Flelds	8.9
Add to Import Field List	8.9
Re-ordering the import fields	8.11
Deleting a field from the field import list	8.11
Selecting an import file	8.11
No. of Records	8.12
Using an import file to update records	8.12
Preferences	8.14
No. of Errors allowed	8.14
Categories	8.15
Character Translation	8.15
Importing Contacts	8.15
Record Numbers	8.17
Companies Table	8.17
Products Table	8.17
Contacts Table	8.18
Product Details Table	8.18
Importing the Data	8.18
An Example	8.18
Import Error Messages	8.21

You can import data into the Companies, Products, Contacts, Product Details and Category Entries tables. In order to have access to the Import menu selection, you must log on to the database as either the Administrator or as a User with Data Entry 1 access privileges (see Chapter Two for an explanation of User Access Privileges).

The data that you import can come from just about any source — another PC application, a minicomputer or a mainframe. There are just two basic requirements: It must be in ASCII (plain text) format, and the records and fields must be delimited in a consistent way – you need to know what the field and record delimiters are. (Delimiters are explained later in this section.)

When you import data into the database, you can either create new records or update existing records with new data. A typical use for updating existing data would be updated prices supplied to you from the company's main accounting system.

ALWAYS MAKE A BACKUP OF YOUR DATA FILE BEFORE IMPORTING DATA!

Tables and Fields

First of all it's important to have a proper understanding of the structure of the database and how the import file is handled as it is imported.

A database consists of a number of tables. Each table stores a specific type of information, such as company details, personnel details, or product information. The data in each table is broken down into fields, with each field holding a specific piece of the data. For example, in the Companies table, there is a field for the Company Name, another field for the first address line, another for the phone number, and so on. It is important to make sure that your data is split up into the appropriate fields as this makes it possible to do such things as sort in a certain way (by name or by post code, for example), search for certain records (for example, you might want to find all companies in a certain state or county), and format the parts of the data in specific ways when it is published (for example, you might want to use a certain type style for company names, a different one for addresses, and so on).

When you import data into the database, you must make sure that the data you import is split up into appropriate fields, and that each field in the import file is matched with an appropriate field in the CatBase database.

The table import order

If you are going to import data into more than one table, the order in which you import the files is important. Follow this order:

- 1. Companies
- 2. Products
- 3. Company contacts
- 4. Product details
- 5. Category Entries

Steps for importing data

The steps for importing data are:

- 1. Create your import file using another program
- 2. Create a new Import Format record in CatBase
- 3. Choose the table into which to import the data
- 4. Specify the field and record delimiters
- 5. Choose the fields into which the data should go, and the order in which those fields will be imported
- 6. Specify some other import settings such as what to do if a record has no category number
- 7. Name the import format
- 8. Select the file containing the data you want to import
- 9. Import the data

If any of the records being imported have errors, a log entry will be made and the record will be rejected. You can specify how many erroneous records to allow before aborting the import. At the end of the import, the error log will be printed. Once you have created an import format, it can be saved and used again as is or modified. You can create as many different import formats as you need.

Creating an import file

The import file is a delimited text file. This means that it consists of plain, unformatted text divided up into fields and records which are delimited in a specific way. You can create an import file using a database, spreadsheet, or word processor on any computer system (as long as it is capable of saving the data in ASCII plain text format).

The general rules for successful importing are:

- 1. Format of the data must be consistent. For example, if you are importing into a numeric field, all the data destined for that field must be numeric.
- 2. Each table has at least one mandatory field. Generally, the other fields are optional.
- 3. Each record must have a record number. Record numbers for Companies and Products must be unique. You can either import the record numbers or have CatBase assign them as the records are imported. Each Company Contact record must have a record number that matches a Company record number, and each Product Detail record must have a record number that matches a Product record. Additionally, if you require that each Product be related to a Company, then each Product record must contain a valid company name or number.
- 4. Each record MUST contain the correct number of fields, in the correct order, even if some of them are completely blank in some records.
- 5. If there are Tab or Return characters used within the text of the data, be sure to change the field and record delimiters in both the export file and the Import Format in CatBase from the default settings of Tabs for field and Returns for record delimiters.

Field Types

It's important that you make sure you import the correct type of data into fields. You may find it useful to have the Table and Field Setup screen open when you are setting up an Import Format, as this screen lists all the fields in each table and shows you the type and size of each field. (Choose **Table and Field Setup** from the **Admin** menu.) The field types are described below:

Туре	Comments
String	Any alphanumeric character. Can be a maximum of 80 char- acters. The maximum length of the field is shown in the
	Table and Field Setup screen.
Integer	A whole number (i.e., no decimal points) in the range ±32,767.
Long Integer	A whole number in the range ±2,147,483,647
Real	Any number in the range $\pm 1E1022$. Calculations on real numbers retain accuracy to 19 digits; however, they are always displayed in CatBase with two digits after the decimal point.
Text	Any alphanumeric characters, up to a maximum of 32,767. Text fields are used when the data is too big to fit into a String field, such as with product descriptions and com- ments.
Boolean	A logical data type that can contain one of two values: TRUE or FALSE. CatBase will import Boolean fields in the following formats: True/False; Yes/No; 1/0. If a Boolean field being imported does not contain either True, Yes, or the numeral 1, the field will be saved as False.
Date	Date fields can accept any date value in the format DD/MM/YYYY (MM/DD/YYYY in the US version). A date can be between the year 100 and the year 32,767.
Time	Time data.

Here are some general directions for creating import files using various types of application. Note that it is not necessary to sort the records before exporting them from your existing program.

Tab Characters

You cannot embed a Tab character in a CatBase field. If you try to type a Tab when you are entering data manually, this will have the effect of moving the cursor to the next field. To combat this, you can type a special code (\tab) into a field and, when the data is exported, the code will be replaced by a proper Tab character. Therefore, when you are preparing a file for importing into CatBase, you should replace any tab characters with the \tab code prior to importing the file.

Field Delimiters

A field delimiter is a special character that determines where one field ends and another begins. CatBase supports the three most common field delimiters: Tab Comma Fixed-Length <u>Tabs as field delimiters</u> A Tab character (ASCII 9) is inserted at the end of each field.

Comma as field delimiter

A comma is inserted at the end of each field. Usually, the comma is surrounded by double quote marks, like this: ","

Fixed-Length

In this format, there is no special character at the end of each field, but each field is always the same length in every record. If the field does not contain enough characters, it is padded with spaces or (for numeric data), zeros. The text therefore looks like one continuous stream of characters broken up only by (usually) Return characters which signify the end of a record. If you are using this format, you will need to know exactly how many characters comprise each field.

When data is imported into CatBase from a fixed-length file, the spaces and zeros used for padding are removed.

Database

- Compare the fields in your source database with those in the CatBase table into which you will import the data. Determine which fields you want to transfer and in what order. Make sure that the data types in the source database match up with the CatBase fields.
- 2. Find the records you want to transfer.
- 3. Follow the instructions in your database program's manual to create an ASCII (plain text) text file (usually there will be an option such as "Export" or "Save As ..." to accomplish this). Make note of what the field and record delimiters are. On most Macintosh systems, the delimiters are generally Tabs for the fields and Returns for the records, and on Windows, the default is usually commas for the fields and returns for the records. BUT WATCH OUT! If the record delimiter is a return character, you must make sure that your data does not have any returns embedded within its text this will surely spoil your import. For example, if there is a field in your existing database for the product description, the data in the field might be broken up into paragraphs in other words, there would be Return characters within the description text. When the data was imported into CatBase, if the Return character had been used as the record delimiter, CatBase would think that each paragraph of the description field was supposed to be a new record. There are two solutions to this:

A) Use a line feed for the record delimiter, or

B) Replace all Return characters embedded in the fields with some temporary character (such as a tilde ~) and then, after the data has been imported into CatBase, you can use the Search & Replace facility to convert those characters back into Returns.

Spreadsheet

- 1. Think of each column in the spreadsheet as a field in CatBase, and each row as a record. Compare the fields (columns) in your spreadsheet with those in the CatBase table into which you will import the data. Determine which fields you want to transfer and in what order. Make sure that the data types match up.
- 2. Delete any rows that do not contain data (e.g., column headers).
- 3. Save the file as Text, taking care to select an appropriate field delimiter (e.g., Tab or Comma).

Word Processor

- 1. Determine into which fields you want to import data into CatBase, and in what order.
- 2. Open a new file in your favourite word processor.
- 3. Set up one Tab stop for the number of fields required, minus one. For example, if you are going to import five fields into the Products table, you will set up four Tab stops in the word processor document. It doesn't matter how far apart the tabs are; make them the width you need in order to be able to enter the data and proof it properly.
- 4. Enter the data, using a Tab between each field. End each record with a Return. For example, let's suppose you are creating a file for importing Product data. You have determined that the fields you want to import are:

Product name Description Price numeric Price text

Entries in your word processor would look something like this:

Product one	<tab>A neat product.</tab>	<tab>£123</tab>	.45 <tab> <return></return></tab>
Product Two	<tab>A</tab>	<tab></tab>	<tab>£4-£10 <return></return></tab>

Note that you MUST have the correct number of Tabs entered for each record, even if there is nothing between two tab stops. But make sure that all mandatory fields have an entry for each record!

- 5. Proof the document and, if appropriate, use the spelling checker.
- 6. Save the document as Text.
- 7. When you create the CatBase import format, the field delimiter will be Tab, and the record delimiter will be Return.

A good way to check your import file is to view it using a spreadsheet program. This will organise the fields into columns, so that you will quickly be able to check that all the data is organised correctly.

Extra Fields

Sometimes you do not have complete control over the fields contained in the import file, and there may be some fields that you don't want to import. Not to

worry — CatBase has got you covered. You can instruct CatBase to ignore the extra fields during the import procedure. This is explained below.

Creating a new Import Format

To create a new import format:

- > Choose Import from the File menu.
- > Click on New Record at the search dialogue.

You will notice a short delay as CatBase sets up the new Import Format. The Import Format screen looks like this:

Import Formats 🛛 🗧			
Main Updates Prefe	rences		
Name :	Field Delimiter : Tab	Record Delimiter : Return	ור
	Fields : Extra Field	Add to Import Field List	
Companies			
🗌 🔾 Co's & Contacts			
🛛 🔾 Products			
🗌 🔾 Contacts			
🛛 🔾 Product Details			
🗌 🔾 Category Entries		Import Now	
		No. of Records	
Sample Import Text:			
			וה
			1

<u>Name</u>

Type in a name for this Import Format. Use something descriptive such as Price Update.

Import Table

If you are going to import into a table other than Companies, click on the appropriate radio button:

-Import Table:
Companies
© companies
🔘 Co's & Contacts
Products
🔘 Contacts
O Product Details
O Category Entries

Field Delimiter

The default field delimiter is Tab; choose a different one if appropriate. The choices are:

Tab Comma Fixed-Length Record Delimiter

The default record delimiter is a Return character. Choose a different one if appropriate; the choices are:

Return Tab Line Feed

Import Fields

A pop-up menu lists the fields available for the selected import table:

Fields:	Extra Field	

The first field in the list is always Extra Field. This is a "dummy" field that you can use to pad your import format when there are more fields in the import file than you know what to do with. For example, suppose your import file came from the company's accounting system, and it includes the following fields:

Product Name; Price; Qty On Hand; Manufacturer; Description

Perhaps you don't need the *Qty On Hand* data in CatBase, so you would use an Extra Field in place of the *Qty On Hand* field. You can have as many Extra Fields as you need.

To select an import field, choose it from the pop-up menu and then click on the Add to Import FIeld List button.

Add to Import Field List

Click on this button to add the selected field to your list of import fields. If this is the first field you've added, the screen will change quite dramatically when you click on this button:

Import Formats			
Main Updates Preferences			
Name :	Field Delimiter : Tab	Record Delimiter : Return	
Import Table	Fields : Company Name	Add to Import Field List	
© Companies	Field Name		
🔾 Co's & Contacts	company Name	Delete Selected Field	
O Products		Undate Sample Text	
🔘 Contacts			
🔘 🔾 Product Details			
🖉 🔾 Category Entries		Timport Now	
Sample Import Text:		No. of Records	
Company Name			
		<u>^</u>	
		•	

The selected field is added to the list of import fields. If your field delimiter is either Tab or Comma, the list of fields appears as shown in the above illustration. If the field delimiter is Fixed-Length, the list of fields looks like this:

Field Name	Length	
Company Name	70	
		Ŧ
N	P	

The Field Length is set as follows, depending on the field type:

Default Field Length
Size of the field
256
10
5
10

You will probably need to modify the field lengths for most or all of your import fields, so that they exactly match the lengths of the fields in the import file.

As each field is added to the field list, it is also added to the Sample Text area at the bottom of the screen. When you select an import file, this area will display a few records from the file so that you can make sure you've got all the fields set up correctly.

Choose the next field from the pop-up menu and click on Add to Import Field List again to add it; repeat this process until all the fields have been added. At this point your screen should look something like this:

Import Formats 📃			
Main Updates Preferences			
Name: Tab-delimited exampl	Field Delimiter : Tab	Record Delimiter : Return	
	Fields : Extra Field	Add to Import Field List	
Companies	Field Name Company name		
🔘 Co's & Contacts	MailingAddress1	Delete Selected Field	
O Products	County	Update Sample Text	
🔘 Contacts	PostCode Phone		
🔘 Product Details	Fax		
🔘 Category Entries		Timport Now	
Sample Import Text:		No. of Records Select a File 5	
Company name Maili	ngAddress1 City M	County PostCo Phon	
		<u>^</u>	
		*	

This example is the *Tab-Delimited Example* Import Format, which you will find in the Demo database.

Re-ordering the import fields

If you need to change the order of the fields in the field list, you can do so by dragging a field name up or down in the list.

Deleting a field from the import list

To delete one of fields, click on it once and then click on the **Delete** Selected Field button.

Selecting an Import file

When you are satisfied that the correct fields have been set up in the field list, click the **Select a File** button. You will be prompted to choose the file you want to import. Note: If, after selecting your import file, you see an error message telling you that the file is already open, that's probably because you have opened

it up in some other application to look at it. The file must be closed before you can import it into CatBase.

No. of Records

When you select an import file, CatBase scans the first few records and displays them in the **Sample Import Text** area so that you can check your field setup. The number of records it scans depends upon the number specified in **No**. **of Records**; the default is 5 but you can change this if you want to view more records.

When you have selected your import file, the Sample Import Text area displays the first few records:

Sample Import Text:	Tab-delimited	example	Selec	taFile 5
Company name	MailingAddress1	City M	County	PostCo Phon
Apple Computer UK	6 Roundwood Ave.	Usbridge	Surrey	UB11 1BE 0181 5 👞
CatBase Software Ltd.	50 The Maltings	Stanstead Abbotts	Herts	SG12 8HC 0700 C
Connectix	Orlyplein 85	Amsterdam		1043 DS 31-20-9
Dell Computers	Milbanite House	Bracinell	Berlis.	RG12 1RE 01344
Extensis	1800 SW First Avenue	Portland	Oregon	97201 1-800-1
				T
4				•

You should check the sample records to make sure that the data is being imported into the correct fields.

You can change the widths of the columns displayed in this area by clicking on the little line between two column headings and dragging it to the left or right.

If you make any changes to the import field list at this point, click on the Update Sample Text button to update the sample records.

Using an import file to update records

You can use imported data to update existing data. To set this up, click on the Updates tab at the top of the screen. The Updates page looks like this:

		Import Formats	
Main Updates Prefer	ences Cont	acts	
During import:			
	O Bop't III	ndato Rocorde	
Dreinsonn Kon Sield			
Primary Key Field:			
Secondary Key Field:	None		
Update selected	Fields Uniy	Update HII fields	
Import Fields:			
Field Name Update?			
Our item num No		A	
Product Name No Drice Numeric Ves			
Ship info No			
		v	

In the example shown here, we are using a data file that has come from our minicomputer to update the product prices. We want CatBase to locate a matching Product record in the database for each record that is imported, and update the product's price using the imported data. We did not have complete control over which fields were going to be included in the import file, so we need to make sure that only the Price field gets updated. On the Main Import Formats page, we have already selected the fields that are in the import file.

Select the Update Records radio button to let CatBase know that we want it to update our existing information.

CatBase needs to know which field or fields to search to find a matching record. That is what the Primary and Secondary Key Field pop-up field lists are for. These pop-up lists contain all the fields that were selected as import fields. The first field in the list is selected by default for the Primary Key Field, and None is selected for the Secondary Key Field. We have provided two Key Fields so that you are covered in the event that there is more than one matching record for the Primary Key Field. For example, your Primary Key Field might be Company Name, but if you have four Company records for IBM, then CatBase needs to know which of those IBM records should be updated. You could choose a field such as General Phone or City as the Secondary Key Field. If you have specified a Secondary Key Field. If it finds more than one match, it will then search those records for a matching Secondary Key Field.

In this example, the primary key field is Our Item Num, and that is selected by default as it is the first field in the list; so we don;t need to change that.

We do not want to update all the import fields; the new prices are all we're interested in right now.

> Select the Update Selected Fields Only radio button.

Now to tell CatBase which fields we DO want to update:

> Double-click on Price Numeric in the list of fields.

"No" is changed to "Yes" for Price Numeric in the field list. The screen should look like this:

Primary Key Field: Secondary Key Field:		Our item None	num		• •
🖲 Update S	elected F	ields Only	ΟU	pdate f	 All fie
Import Field	S: Undate?				
Our item num	No				
Product Name	No		H		
Price Numeric	Yes				
Ship info	No				

This is what will happen when the file is imported:

For each record in the import file, CatBase searches the database to see if there is a record having an exactly matching Primary Key Field. If one is found, the Price Numeric field will be updated with the new price. If none are found, a new record will be created and all the data in the import file (not just the selected update fields) will be copied into the new record. If more than one is found, and no Secondary Key Field has been specified, all matching records will be updated with the information in the update record. If more than one is found, and a Secondary Key Field has been specified, CatBase will search the found records for any matching the Secondary Key Field. All records having a matching Primary and Secondary Key Field will be updated.

Preferences

There are three sets of Preferences on the Preferences tab. <u>No. of Errors Allowed</u>

No. of Errors	Allowed: 7
🔾 No Limit	
◉ Limit To:	20

If any records in the import file contain errors, CatBase will reject those records, and keep a log of all rejected records. If the error log grows bigger than the limit specified in this area, the import will be aborted. A list of possible errors is included at the end of this chapter.

Categories



As each Company or Product record is imported, you can, if you wish, have each of them assigned to a category. If you want to do this, type the appropriate category number into this area.

Character Translation

-Character Translation:
Iranslation
O Convert Mac to PC Character Set
O Convert PC to Mac Character Set

Some special characters are represented differently on Macintosh and Windows systems. Normally, as you are working with CatBase, you don't need to be concerned with this since CatBase will automatically convert special characters, where necessary, so that they display correctly on the screen, even in a mixed network situation where you are using the multi-user version of CatBase. However, if you are importing data on one type of system which has been exported from a program on another type of system, you'll want to make sure that those special characters are correctly interpreted.

For example: You have been given an import file that was created on a Windows system, but you are working on a Macintosh. You should choose the **Convert PC to Mac Character Set** radio button. Conversely, if you are working on a Windows system and you are importing a file that was created on a Macintosh system, you'll need to select the **Convert Mac to PC Character Set** radio button.

Importing Contacts

If your import file includes Company AND Contact information, choose the Co's & Contacts radio button on the Main page. The Contacts tab will then be added to the tabs at the top of the screen.

Notice that the field list still shows the list of Company file fields. Since you are going to import data into two tables simultaneously, you must set up two separate import field lists. On the Main page you'll set up the import field list for the Companies file. Click on the Contacts tab to go to the page in which you can set up the import field list for Contacts:

FieldsTypeLengthOrderField nameField lengExtra Field00▲CompanyNumberLong Integer±2,147,483,647▲First nameString30▲Last nameString30↓SalutationString15PhoneString18ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	<u>h</u>
Extra Field0•CompanyNumberLong Integer±2,147,483,647First nameString30Last nameString30SalutationString80SalutationString15PhoneString18ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	4
CompanyNumberLong Integer±2,147,483,647First nameString30Last nameString30TitleString80SalutationString15PhoneString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
First nameString30Last nameString30TitleString80SalutationString15PhoneString18ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
Last nameString30TitleString80SalutationString15PhoneString18ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
TitleString80SalutationString15PhoneString18ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
SalutationString15PhoneString18ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
PhoneString18ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
ExtensionString6NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
NotesText32KPrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
PrimaryBoolean5Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
Company NameString60OrderInteger±32,767EMailString60RecordNumberLong Integer±2,147,483,647	
Order Integer ±32,767 EMail String 60 RecordNumber Long Integer ±2,147,483,647	
EMail String 60 RecordNumber Long Integer ±2,147,483,647	
RecordNumber Long Integer ±2,147,483,647	
JobFunction String 35	
Initials String 5	7

Choose the import fields for Contacts by clicking on each field and dragging and dropping it into the Import Order area.

The format of the import file is very flexible, as long as one basic rule is followed: The Company information must precede the contact information in each record. There can be any number of contacts for each company, from 0 on up.

You do not need to include the company name field for each contact.

For example, if you were going to import the company name, phone number, and a variable number of contacts (first name, last name) for each company, your import file might look something like this:

- A Company <tab>071-0987654<tab>John<tab>Jennings<tab>Pat<tab>Robbins<return>
- B Company <tab>071-9875456<return>

C Company <tab>071-6789034<tab>Mike<tab>Jones<return>

A Company has two contacts: John Jennings and Pat Robbins; B Company has no contacts; and C Company has one contact.

There can be any number of contacts, but you must make sure that the same number for fields are included for each Contact.

Of course, you must also make sure that the correct number of fields has been included for each company.

Record Numbers

Each record that you import MUST have a record number. For the Companies and Products tables, each record number must be unique.

Following are specific record number rules for each file:

Companies

During the import, CatBase will check to make sure that each record's record number is unique. If it is not (i.e., there's already a Company record in the database with the same record number), the record will be rejected. **BEWARE**, though! If you are also planning to import Product or Company Contact records, each record may contain a Company record number to which it will be related. If CatBase finds duplicate Company record numbers and creates new numbers for the duplicates, some of the Product or Company contact records will be related to the wrong Company record.

If there is no record number in the imported record, CatBase will create one.

Products

During the import, CatBase will check to make sure that each Product record's record number is unique. If it is not (i.e., there's already a Product record in the database with the same record number), the record will be rejected.

If there is no record number in the imported record, CatBase will create one.

If your database is set up so that each Product record must be linked to a Company record (explained in Chapter 2, Setting up Your Database), each Product record must contain either a record number or a name for a Company that is already in the database. CatBase checks for this during the import procedure. This is what happens, depending upon what CatBase discovers:

- If a company record number is present in the import file, CatBase checks to make sure that a Company record with that record number exists. If it does not find a match, the Product record is rejected.
- If no Company record number is present in the Product record but there is a Company name, CatBase checks to see if a Company record with that name exists. If it finds one, the Company record number is copied into the Product record. If it does not find a matching Company record, the Product record is rejected. Note that the Company name in the Product record and the Company name in the Company record must match EXACTLY, except that upper and lower case are not significant. Here are some examples of what is considered a match and what isn't:

Name 1	Name 2	Match?
A Company	A Company	Yes
A. Company	A Company	No
A Company Inc.	A Company, Inc.	No
A Company Inc.	a company inc.	Yes

Look out for extra spaces! A space IS considered a character, even if it is at the end of a word.

- If there is no Company number and no Company name in the Product record, the Product record is rejected.
- If there is more than one Company record with exactly the same name as the Company name in the Product record, CatBase will assume that the first Company record it finds is the correct one.

Company Contacts

During the import, CatBase will check to make sure that each Company Contact record contains a Company record number. If it does not, CatBase tries to match the Contact record's Company Name with a company name in the Companies file. If a Company number is present in the Company Contacts record, CatBase checks to see if a Company record with a matching record number is present in the database. If no matching Company record is found, the Company Contacts record is rejected. You don't need to worry about this if you are using the Co's & Contacts import option.

Product Details

During the import, CatBase will check to make sure that each Product Details record contains a Product record number. If it does not, the record is rejected. If a Product number is present in the Product Details record, CatBase checks to see if a Product record with a matching record number is present in the database. If no matching Product record is found, the Product Details record is rejected.

Import The Data

When you are ready to import your data, click on the **Import Now** button. If you have not already selected an import file, you will be prompted to choose one.

Any changes you have made to the Import format are automatically saved when you click on this button.

CatBase imports the data, and when it is finished (assuming there are not too many errors), it lists the imported records in a new window.

To show you how to create and use an Import Format, we'll step through the actual creation and use of one.

Importing: An Example

Important Note! We strongly recommend that you always make a backup of your database before importing any data. It's much easier to revert to a backup if you accidentally put data into the wrong fields than it is to try to fix all the records!

Let's suppose we want to import some Product records. An import file has already been created, and it contains these fields:

- 1. Product name
- 2. Company name
- 3. Reference Number

- 4. Product description
- 5. Price (numeric amount)

Reference Number is an extra field that we don't need to use in CatBase. For this example, let's suppose that the field delimiter is a comma, and the record delimiter is a Return character.

> Choose Import ... from the File menu.

> Click on **New Record** at the Search dialog.

A new Import Format record opens up.

Type in a suitable name for the Import.

> Click on the **Products** radio button.

CatBase asks you to confirm that you want to change the import table. Click on OK (or press the Enter key).

There's a brief delay while CatBase changes the list of fields.

We need to tell CatBase into which fields we want our import data to go, and in what order.

Choose Product Name in the pop-up list of fields (your field names may have been modified, in which case, choose the equivalent field name).

> Click on the Add to Import Field List button.

The screen changes somewhat.

> Choose Company Name in the list of fields and add it to the import field list.

The next field in the import file is Reference number, which we do not want to use in CatBase.

- Choose Extra Field in the list of fields and add it to the import field list. During the import procedure, this field will be ignored.
- > Do the same for Description and Price Numeric.

At this point, your screen should look like this:

	Import F	ormats
Main Updates Prefe	rences	
Name: Product Import	Field Delimiter : Tab	Record Delimiter : Return
Invested Table	Fields : Price Numeric	Add to Import Field List
	Field Name	
O Co's & Contacts	Company Name	Delete Selected Field
Products	Extra Field	
O Contacts	Price Numeric	Update Sample Text
O Product Details		
O Category Entries		Import Now
		No. of Records
Sample Import Text:		Select a File 5
Product Name	Company Name	Extra Field Description Price Nur
		<u> </u>
•		•

The next step is to specify the field and record delimiters.

> Select **Comma** from the Field Delimiter pop-up menu.

The record delimiter is a Return character, so we don't need to change that. You might have noticed that we have not included a record number in our

import file. We will let CatBase create record numbers for us.

Click the Select a File button.

Locate the file called *Product Info*, which you will find in the Examples folder, and double-click on it.

CatBase reads the first five records. The Sample Import Text area should now look like this:

Product Name	Company Name	Extra Field	Descriptio
Apple Multiple Scan 720 Display	(Apple Computer UK		The Apple Mul
hspiron 3000	Dell Computers		A great price a
Apple 20"" Colorsync Display	Apple Computer UK		The Apple Cold
LaserWriter 8500	Apple Computer UK		Excpetional pri
Dimension XPS & Series	Dell Computers		 Atab New Pen

Check each column to make sure that you've got the correct data going into the selected fields -- i.e., that the Product Name column actually contains product names, etc. If anything is wrong, you can correct it by moving fields up and down in the field list, or adding and deleting fields if necessary. Then click on the **Update Sample Text** button to re-parse the records.

You can change the widths of the columns in the Sample Import Text area by clicking in the divider between column headings and dragging to the left or right.

When you are sure that all the fields are correctly mapped to the import file, you are ready to import the data.

If you want to go ahead and import the data into your database:

> Click on the Import Now button.

CatBase imports the data. If any errors are encountered during the import, an entry is made into the Error Log and the offending record is rejected.

When the records have been imported, they are displayed in a new window. If the Limit To: radio button is selected in the Maximum number of errors allowed box, the import will be aborted if more than x erroneous records are found in the import file (x being the number that you entered; 20 is the default).

You'll have to fix the errors and try the import again. A list of error messages and explanations for each one is included at the end of this section.

You can modify an Import Format any time you like. Suppose we decide to change the import file by adding an additional field: Version. We'll need to change the Import Format to reflect this.

> Choose Import ... from the File menu.

Click on All Records at the Search dialogue.

A list of Import Format records will appear. If no other Import Formats have already been created in your database, there will be just one item listed: the Sample Import you just created.

> Double-click on the Import Format you want to modify.

➤ Make whatever modifications are needed.

➤ Save the Import Format record.

Import Error Messages

During the Import procedure, CatBase checks each record to make sure that it contains certain mandatory information. If the information is not present, and it cannot be created by CatBase, the record is rejected and an entry is made into the error log. At the end of the import, the error log is printed if one or more errors have been found. Each log entry consists of a message describing the error, and the record number in which the error was found. The record number is not the same thing as a Company or Product record number; it denotes the erroneous record's location in the import file. For example, if the record number is 4, the fourth record in the import file is the one that has the error.

Following is a list of error messages, and what they mean.

Companies Company name is missing: record #: xxx

There was no entry for the Company Name field in this record.

Duplicate record number; record # xxx

You have tried to import a Company record containing a record number that is already in use by another Company record in the database.

Products

Company name and number are missing; record # xxx

Your database is set up to require that a Company Name or Number be entered for each product record, and there was neither a Company Name nor a Company record number entered for this record. One or the other must be present, and must match up to an existing Company record. If you do not need to link Product records to Companies, then you should change this setting in the Setup screen (please refer to Chapter Two for more information).

Company name does not match; record # xxx

CatBase found a Company record to match the Company number in this Product record, but the Company Name entry in the Product record did not match the Company Name in the Companies record.

Duplicate record number; record # xxx

You have tried to import a Product record containing a record number that is already in use by another Product record in the database.

No matching company found; record # xxx

The company name in the Product record does not match a Company name in the Companies file. This might occur if there is no entry for Company Number; if a Company Number exists in the Product record, a matching Company record is found, but the Company Name in the Product record does not match the Company Name in the Companies record, the following error message will be seen.

No matching Company number found; record # xxx

CatBase could not locate a Company record with a record number to match the Company Number entry in the Product record.

Product name is missing; record # xxx

There was no entry for the Product Name field for this record.