

A short IRC primer

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Abstract

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Have you ever wanted to talk with other computer users in other parts of the world? Well guess what... You can! The program is called IRC, (Internet Relay Chat), and it is networked much over North America, Asia Europe, and Oceania. This program is a substitution for 'talk', and many other multiple talk programs you might have read about. When you are talking on IRC, everything you type will instantly be transmitted around the world to other users that might be watching their terminals at the time, they can then type something and respond to your messages, and vice versa. I should warn you that the program can be very addictive once you begin to make friends and contacts on IRC, especially when you learn how to discuss in 14 languages...

Topics of discussion on IRC are varied, just like the topics of Usenet newsgroups are varied. Technical and political discussions are popular, especially when world events are in progress. IRC is also a way to expand your horizons, as people from many countries and cultures are on, 24 hours a day. Most conversations are in English, but there are always channels in German, Japanese, French, Finnish, and occasionally other languages.

IRC gained international fame during the late Persian Gulf War, when updates from around the world came across the wire, and most people on IRC gathered on a single channel to hear these reports.

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### 1. GETTING STARTED

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#### 1.1 Clients and Servers

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IRC (original code was written by Jarkko Oikarinen) is a multi-user, multi-channel chatting network. It allows people all over the internet to talk to one another in real-time. It is a functional replacement and improvement to 'talk'; 'talk' is an old, primitive, atrocious, minimalist sort of keyboard/screen conversation tool, using a grotesque, machine-dependent protocol (blah!). IRC does everything 'talk' does, but with better protocol, allowing more than 2 users to talk at once, with access across the aggregate Internet, and providing a whole raft of other useful features.

There are two ways to enter IRC from a Unix system. If you are using the emacs (editor from Richard Stallman and the Free Software Foundation) lisp client, you just have to type "M-x irc", (if this doesn't work you may need to load the client into your emacs session). If you are using the C client, (easier for beginners), then you usually type "irc". Non-Unix boxes have special clients, each of which has to be configured using a special procedure. Check the manual or help screen for

more information.

If you wish to be known by a nickname which is not your login name, type "irc nickname" instead. Each IRC user, ("client"), chooses a nickname. All communication with another user is either by nickname or by the channel that they or you are on (more information about channels later on).

The most important thing to remember about IRC is that you have to be willing to explore and learn to use it... Take your time, try not to get flustered, enjoy yourself, and you will soon be making new friends all over the world!

IRC is based on a client-server model. Clients are programs that connect to a server, a server is a program that transports data, (messages), from a user client to another. There are clients running on many different systems, (Unix, emacs, VMS, MSDOS, VM...), that allow you to connect to an IRC server. The client which will be spoken of here is the most widespread: ircII, (originally designed by Michael Sandrof). Other clients are similar, and often accept ircII commands.

## 1.2 How to behave on IRC

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The most widely understood and spoken language on IRC is English. However, as IRC is used in many different countries, English is by no means the only language. If you want to speak some other language than English, (for example with your friends), go to a separate channel and set the topic to indicate that. On the other hand, you should check the topic before you move to a channel to see if there are any restrictions about language. On a non-restricted channel, please speak a language everybody can understand. If you want to do otherwise, change channels and set the topic accordingly.

It's not necessary to greet everybody on a channel personally. Usually one "Hello!" or equivalent is enough. And don't expect everybody to greet you back... On a channel with 20 people that would mean one screenful of hellos. It's sensible not to greet, in order not to be rude to the rest of the channel. If you must say hello to somebody you know, do it with a private message. The same applies to goodbyes.

Also note that using your client facilities, (ircII "ON" command for instance), to automatically say hello or goodbye to people is extremely poor etiquette. Nobody wants to receive autogreets. They are not only obviously automatic, but even if you think you are polite you are actually sounding insincere and also interfering with the personal environment of the recipient when using autogreets. If somebody wants to be autogreeted on joining a channel, he will autogreet himself.

Remember, people on IRC form their opinions about you only by your actions, writings and comments, so think before you type. If you use offensive words, you'll be frowned upon. Do not "dump" to a channel or user, (send large amounts of unwanted information). This is likely to get you kicked off the channel or killed off from IRC. Dumping causes

network "burps", connections going down because servers cannot handle the large amount of traffic anymore. Other prohibited actions include:

- \* Harassing another user. Harassment is defined as behavior towards another user with the purpose of annoying them.
- \* Annoying a channel with constant beeping.
- \* Any behavior reducing the functionality of IRC.

### 1.3 Privacy on IRC

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You should always keep in mind that messages you send to someone over IRC are passed along all the servers between you and the person you are writing to. When you're sending a letter to someone, any postman on the way could open it and read its contents...

Well, it's the same on the network. Any IRC-Admin could compile its server in "debug" mode and log whatever messages are transmitted through his node, (it has already been done), so a good thumb rule is not to trust the servers.

```
+-----+
| IRC IS NOT A SECURE WAY OF COMMUNICATION! |
+-----+
```

How to establish direct communications between clients will be explained later, (see DCC CHAT in section 2.5). This should be used when you wouldn't want anybody else on IRC to intercept your private messages.

### 1.4 First Steps

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Note: ircII, the client most people are using, has most of this information online. If you are stuck, type "/HELP" and hit <return>. To escape from HELP mode, keep pressing <return> until your edit line, (the line at the bottom of the screen), is empty. Most of the information in this file can be found typing these commands: "/HELP INTRO" or "/HELP NEWUSER".

```
+-----+
| All ircII commands begin with a "/" character. |
+-----+
```

The slash is the default command character. Commands are not case sensitive, and can be abbreviated to their first letters: "/SI" and "/sign <text>" stand for /SIGNOFF and will both end your IRC session, (more in section 2.1).

Anything that does not begin with "/" is assumed to be a message to someone and will be sent to your current channel, or to a person you are QUERYing, (the QUERY command will be detailed later on, maybe even section 2.2).

If you are not sure about the spelling of an ircII command, type the prefix of that command, and press the ESCape key twice; ircII will give you a listing of commands and aliases that start with that prefix. Don't forget the "/" in front of the command though.

```

/W <ESC><ESC>
*** Commands:
***      WAIT                WALL                WALLOPS            WHICH
***      WHILE              WHO                WHOIS              WHOWAS
***      WINDOW
*** Aliases:
***      W

```

This is an example. Your screen may show more aliases, and less commands than shown here, or less aliases and more commands - in other words "your mileage may vary"...

### 1.5 Screen and Keyboard activity

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IRC is a full-screen utility. It takes over the screen, with the bulk of activity happening in the top (N-2) lines, a status line, (vaguely emacs-like), on the next to last line, and your input being entered on the last line. When typing commands at ircII, you have a minimalist line-editing facility in an emacs style.

Table 1: Editing keys

-----

| Key | Effects                                       |
|-----|-----------------------------------------------|
| ~~~ | ~~~~~                                         |
| ^P  | recalls previous command line                 |
| ^N  | recalls next command line                     |
| ^F  | moves forward one character                   |
| ^B  | moves backward one character                  |
| ^A  | moves the cursor to the beginning of the line |
| ^E  | moves the cursor to the end of the line       |
| ^D  | deletes the character under the cursor        |
| ^K  | kills from the cursor to the end              |
| ^Y  | reinserts the last stretch of killed text     |
| ^U  | clears the whole line                         |
| ^L  | redraws the screen                            |

Table 2: Editing commands

-----

| Keyword | Action |
|---------|--------|
| ~~~~~   | ~~~~~  |

```

!           recalls previous commands for re-editing
HISTORY    displays the command history
LASTLOG    lists the most recent messages
CLEAR      puts some white space on your screen

```

The ! command is used to recall previous commands in your command history for re-execution. The ! command is unique in that when it is used, it leaves the matching history entry in the input line for re-editing. You can specify a history entry either by its number in the history list, or by a match with a given wildcard expression. For instance, "/!10" will put entry 10 in the history list into the input line. "/!/MSG" will search the history for a line beginning with a /MSG, (a "\*" is implied at the end).

```

/![<history number>|<history match>]
Recalls previous commands for re-editing.

```

The command history can be dumped using:

```

/HISTORY [<number>]
Displays the command history on the screen. You can specify the
number of history entries you wish to view as well.

```

Almost everything happens in the upper bulk of the screen. This includes both messages from other users, as well as the output of the control commands. Normal messages from other users appear with the originating nickname in <angle brackets>. Private messages arrive with the originating nickname in \*asterisks\*. Messages you send to everyone appear with a preceding "> " whereas messages you send privately to another user appear with "-> \*nickname\*". Other output (invitations from other users to join channels, and so forth), appears interspersed with other activity on the screen.

Table 3: Simple screen activity

| What is displayed     | What you typed       | Sender      | Recipients         |
|-----------------------|----------------------|-------------|--------------------|
| > Morning people      | Morning, people      | You         | Channel            |
| <someoneelse> hello   |                      | someoneelse | Channel            |
| -> *someoneelse* hi!  | /msg someoneelse hi! | You         | someoneelse (only) |
| *someoneelse* wassup? |                      | someoneelse | You (only)         |

Last ircII outputs can be recalled with:

```

/LASTLOG [<number of entries>|<text> [<from entry>]]
Displays the contents of the lastlog. This is a list of the most
recent messages that have appeared on the screen, useful if you
inadvertantly miss messages. If no arguments are given, the entire
lastlog is displayed. If the first argument is a number, it determines
how many log entries to show. Otherwise it is searched for in every

```

lastlog entry. The second argument determines how many lines back to start display from.

Example:

```
/LASTLOG
> Public message I send to all in the channel
<someelse> Public message from someelse
*someelse* Private message sent to me by someelse
-> *someelse* Private message I send to someelse
```

Finally, if your screen gets garbage from a 'talk', 'write', 'wall' or any other form of primitive communication (smirk), hit ^L to redraw it, or CLEAR it.

```
/CLEAR
```

Clears the screen.

## 2. LET'S GO!

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### 2.1 General Commands

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Table 4: General commands

-----

Keyword	Action
~~~~~	~~~~~
NICK	changes your nickname
QUIT	exits your IRC session, (same as BYE, SIGNOFF and EXIT)
HELP	prints help on the given command
WHOIS	displays information about someone
WHOWAS	displays information about someone who just left
AWAY	leaves a message saying you're not paying attention

```
/NICK [<nickname>]
```

Changes your nickname to whatever you like.

Everyone who wants to talk to you sees this name - also, at the moment, nicknames are limited to 9 characters max. Your nickname will be the same as your login name by default. You can also set an environment variable, IRCNICK, the value of which will be used instead. Nickname clashes are not allowed; this is enforced by the servers. If your intended nickname clashes with someone else's as you enter IRC, you will not be able to enter until you change it to something else.

```
/NICK Nappy
```

```
*** Nap is now known as Nappy
```

/QUIT [<reason>]

Exits your IRC session. You can also use BYE, SIGNOFF and EXIT. If a reason is supplied, it is displayed to other people on your channels.

```
/QUIT Lunch Time!  
poly ~ >
```

/HELP [<command>]

Shows help on the given command.

```
/HELP HELP
```

```
Usage: HELP [command]
```

```
Shows help on the given command. The help documentation is set  
up in a hierarchical fashion. That means that certain help  
topics have sub-topics under them.
```

```
[boring stuff deleted]
```

/WHOIS [<nickname>]

Shows information about someone.

```
/WHOIS Nap
```

```
*** Nap is pioch@poly.polytechnique.fr (Klein bottle for sale...  
inquire within.)
```

```
*** on channels: @#Twilight_Zone @#EU-Opers
```

```
*** on via server poly.polytechnique.fr (Ecole Polytechnique,  
Paris, FRANCE ! )
```

```
*** Nap has a connection to the twilight zone (is an IRC operator)
```

```
*** Nap has been idle 0 seconds
```

```
/WHOIS Nappy
```

```
*** Nappy: No such nickname
```

Sometimes WHOIS won't help you much, because the person you want to know more about just left IRC or changed nick. However, you can use WHOWAS to get this information for a while:

/WHOWAS [[<server>] <nickname>]

Shows information about who used the given nickname last, even if no one is currently using it.

```
/WHOWAS Nappy
```

```
*** Nappy was pioch@poly.polytechnique.fr (Artistic ventures  
highlighted. Rob a museum.) on channel *private*
```

```
*** on irc via server poly.polytechnique.fr (Signoff: Mon Jun 22  
20:15:23)
```

Very often, an unsuccess call to WHOIS will lead you to try WHOWAS. That's why ircII allows you to "/SET AUTO\_WHOWAS ON"; that way, a "\*\*\*<nickname>: No such nickname" message will automagically generate a "/WHOWAS <nickname>". Try typing "/HELP SET AUTO\_WHOWAS" for more information on this topic.

/AWAY [<away message>]

Leave a message explaining that you are not currently paying attention to IRC. Whenever someone sends you a MSG or does a WHOIS on you, they automatically see whatever message you set. Using AWAY with no parameters marks you as no longer being away.

```
/AWAY Gone to get a cup of coffee.  
*** You have been marked as being away
```

```
/AWAY  
*** You are no longer marked as being away
```

## 2.2 Communication and Private Conversation

~~~~~

Table 5: Private conversation commands

| Keyword | Action  |
|---------|---|
| MSG     | sends a private message                             |
| QUERY   | starts a private conversation                       |
| NOTICE  | sends a private message                             |
| NOTIFY  | warns you of people logging in or out IRC           |
| IGNORE  | removes output from specific people off your screen |

You can use the MSG command, (usually "M" is an alias for it), to send someone a message that only that person can read.

```
/MSG <nickname>|<channel> <text>  
Send a private message to specified nickname.
```

```
/MSG Nap This message is for Nap only.  
-> *Nap* This message is for Nap only.
```

On my screen will appear:

```
*YourNick* This message is for Nap only.
```

If you want to send a private message to more than one person, you can specify a list of nicknames separated by commas, (no spaces).

```
/MSG Nap,Sorg This message for both Nap and Sorg.  
-> *Nap* This message for both Nap and Sorg.  
-> *Sorg* This message for both Nap and Sorg.
```

Two special case nicknames are defined. If the nickname is "," (a comma), the message is sent to the last person who sent you a MSG. If

the nickname is "." (a period), the message is sent to the last person to whom you sent a message.

You can have a private conversation by only using /MSG. However, typing "/MSG <nick> <text>" or "/MSG . <text>" gets cumbersome. That's where the /QUERY command comes in handy.

```
/QUERY [<nickname>|<channel>]
  Starts a private conversation with <nickname>.
```

All text you type that would normally be sent to your channel now goes to the supplied nickname in the form of MSGs. To cancel a private conversation, use QUERY with no arguments.

```
/QUERY Nap
*** Starting conversation with Nap

Blahblahblah
-> *Nap* Blahblahblah

/QUERY
*** Ending conversation with Nap
```

There is also another command to send messages, called NOTICE. Unlike MSGs, NOTICEs are surrounded by '-' when printed, and no automated responses, (such as generated by IGNORE or an automaton), will be sent in reply. Services, (robots), on IRC often use this form of interaction.

```
/NOTICE <nickname>|<channel> <text>
  Sends a private message to the specified <nickname>.
```

```
/NOTICE Nap Better use /MSG instead of /NOTICE.
-> -Nap- Better use /MSG instead of /NOTICE.
```

On my screen will appear:

```
-YourNick- Better use /MSG instead of /NOTICE.
```

As you begin to make new friends over IRC, you'll want to mark certain nicknames such that you will be warned when they signon or off.

```
/NOTIFY [[-]<nickname>]
  Adds or removes <nickname> to the list of people you'll be warned when they enter or quit IRC (in ircII versions prior to 2.2, too many people in the NOTIFY list cause excessive slowness).
```

```
/NOTIFY Nap Nappy
*** Signon by Nap detected

/NOTIFY
*** Currently present: Nap
```

\*\*\* Currently absent: Nappy

Eventually, you may wish some day not to see messages from a specific user on your screen. This may happen when someone is dumping large amounts of garbage, or if someone is harassing you. The proper response to such a behavior is to IGNORE that person. IGNORE is a very powerful command, and can be used in many ways. However the basic usage of this tool is the following.

```
/IGNORE [<nickname>|<user@host> [[-]<message type>]]
```

Suppresses output from the given people from your screen. IGNORE can be set by nickname or by specifying a userid@hostname format. Wildcards may be used in all formats. Output that can be ignored includes MSGs, NOTICEs, PUBLIC messages, INVITEs, ALL or NONE. Preceding a type with a "-" indicates removal of ignoring of that type of message.

```
/IGNORE *@cheshire.oxy.edu ALL
*** Ignoring ALL messages from *@CHESHIRE.OXY.EDU
```

```
/IGNORE
*** Ignorance list:
***      *@CHESHIRE.OXY.EDU      ALL
```

```
/IGNORE *@cheshire.oxy.edu NONE
*** *@cheshire.oxy.edu removed from ignorance list
```

### 2.3 Channels and Public Conversations

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On IRC, there are a lot of places where you can "hang out"; those places are called 'channels', (most of the information in this section can also be obtained by issuing "/HELP CHANNEL"). You can compare conversations on a channel to a conversation among a group of people: you see/hear everything that is said, and you can reply to anything that's said. What you type is received by everyone who's willing to listen - and everyone who is late will not hear what was said before, unless repeated by one of the ones who were there. (Who said "real life" ?)

All channels on IRC have names: a "#" sign followed by some kind of text-string, like "#C++" or "#Asians" or "#EU-Opers". Usually, the name of the channel will indicate the type of conversation that's going on in there. Don't count on it, though.

Table 6: Channel commands

Keyword	Action
LIST	lists channels, number of users, topic
NAMES	shows the nicknames of the users on each channel

```

JOIN      sets your current channel, (same as CHANNEL)
WHO       gives a listing of users
INVITE    sends an invitation to another user
LEAVE     leaves a channel, (same as PART)
KICK      gets rid of someone on a channel
TOPIC     changes the topic of the channel
ME        sends anything about you to a channel or QUERY
DESCRIBE  sends anything about you to a person or channel

```

Every channel has certain characteristics, called channel modes. These will also be explained below. Recall the NAMES and LIST commands; they will show you the names of the existing channels.

```
/LIST [[<flags>] <channel mask>]
```

Lists all current "channels", number of users, and topic. The displayed list may be quite long, so you can limit it using flags. "/LIST -MIN n" for instance removes channels with less than 'n' users of the output.

Example:

```

/LIST -MIN 5
*** #aussies      5
*** #amiga        5      Daily Amiga Silence...join&enjoy
*** #hottub       21     Imagine sky, high above...
*** #tuebingen   11     Happy Borthday CHUCK!!!
*** #Christian    6      Jesus!
*** #Twilight_   15     The Oper Bar & Grill
*** #initgame     5      More players needed!!!!!!!!!!!!!!
*** #Taiwan       8      Welcome good friends.
*** #espanol      6      EMERGENCIA SE Necesitan Mujeres!
*** #sherwood     7
*** #francais    6      on apprend le japonais (japanese welcome)

```

```
/NAMES [[<flags>] <channel mask>]
```

Shows the nicknames of all users on each "channel", (these may be very long. Remember to filter them with "-MIN n" or "-MAX n").

```

/NAMES -MIN 5
Pub: #twilight> Mycroft @sojge scorpio @Troy @Avalon @Nap phone
  Merlinus Lumberjak @tzoper
Pub: #espanol   Cacique Bonjovi leopardo Carina Miguel Cisco r2
Pub: #amiga     @gio @Radix @xterm @mama @AmiBot
Pub: #aussies   @Bleve @GrayElf @Insomniac @Morkeleb @titus
Pub: #hottub    baby @Aldur KnightOrc @Toasty Gwydion @Belkira
  @Aiken Edge @Spockobot @Nada @ZBot @Aurik @anna @RedBaron
  @Katzen @esashi IceWolf @Eniigma @Digger @TheHeck

```

To join in the conversation on a certain channel you may use the JOIN command.

```
/JOIN [<channel>]
```

Sets your current channel to the supplied channel.

```
/JOIN #Twilight_Zone
*** Nap has joined channel #Twilight_Zone
*** Topic: The Gernsback Continuum
*** Users on #Twilight_Zone: Nap msa tober phone @julia @SirLance
    igh @Daemon @Avalon @Waftam @Trillian @tzoper
```

The CHANNEL command has the same effects. Note that if no parameters are given, your current channel is displayed.

Upon entering a channel, you are given useful details about it: list of users talking in that channel, topic... Joining a channel does not cause you to leave your previous channel unless NOVICE is set to ON. See "/HELP SET NOVICE".

Once in a channel, you may wish to get a detailed list of the people IRCing inside. That's where the WHO command comes in handy:

```
/WHO [<channel>|<wildcard expression>]
```

Gives a listing of users. "/WHO \*" for the list of users in your current channel.

```
/WHO #Twilight_Zone
Channel  Nickname      S      User@Host (Name)
#Twilight_Nap      H*     pioch@poly.polytechnique.fr
    (Quidquid latine dictum sit, altum viditur)
#Twilight_msa      H      msa@tell.tel.vtt.fi (Markku Savela)
#Twilight_tober    H      ircuser@kragar.eff.org (tober)
#Twilight_phone    H      mrgreen@munagin.ee.mu.OZ.AU (Third
    row seats to the Cure? WHO ME? nah.. *grin*)
#Twilight_julia    G*@    julie@turing.acs.Virginia.EDU
    ( Future graduate of ACME Looniversity)
#Twilight_SirLance G*@    lancelet@tdsb-s.mais.hydro.qc.ca
    (Sir Lancelot)
#Twilight_igh      G      igh@micom1.servers.unsw.EDU.AU (igh)
#Twilight_Daemon   G*@    frechett@spot.Colorado.EDU
    (=-Runaway Daemon=-)
#Twilight_Avalon   H*@    avalon@coombs.anu.edu.au (Avalon...)
#Twilight_Waftam   G*@    danielce@munagin.ee.mu.OZ.AU (Daniel
    Carosone)
#Twilight_Trillian G*@    hrose@rocza.eff.org ( I turn to
    stone when you are gone )
#Twilight_tzoper   H*@    tzoper@azure.acsu.buffalo.edu (/msg
    tzoper help)
```

The first field is the current channel, then nickname, status, real name (in internet user@host form), and a small witty comment you can set yourself with the environment variable IRCNAME, (this will be detailed in section 2.8). Status indicates if a user is "H"ere or "G"one, (see AWAY), if IRCop ("\*"), and/or chanop ("@").

It is also possible, when you are already on a channel, to ask someone

to join your channel. The command is called INVITE.

```
/INVITE <nickname> [<channel>]
```

Invites another user to a channel. If no channel is specified, your current channel is used.

```
/INVITE Nap  
*** Inviting Nap to channel #Twilight_Zone
```

If you receive an INVITE message, you can type `"/JOIN -INVITE"` to join the channel to which you were last invited, or simply `"/JOIN <channel>"`.

To leave a channel, just issue a LEAVE command, (PART has the same effects):

```
/LEAVE <channel>  
Leave a channel.
```

```
/LEAVE #Twilight_Zone  
*** Nap has left #Twilight_Zone
```

Well, you guessed it, if there is a way to invite someone on a channel, there's also the possibility to KICK someone out of it, for example if this person is behaving like a jerk, annoying people or flooding the channel with unwanted information:

```
/KICK [<channel>] <nickname>
```

Kicks named user off a given channel. Only 'channel operators' are privileged to use this command.

```
/KICK #Twilight_Zone Target  
*** Target has been kicked off channel #Twilight_Zone by Nap
```

Channels have topics, that indicate the current topic of conversation. You can change this topic on a channel with the TOPIC command.

```
/TOPIC [[<channel>] <topic for channel>]
```

Changes the topic for the channel.

```
/TOPIC The silent channel.  
*** Nap has changed the topic on channel #EU-Opers to The silent  
channel.
```

At times, you may want to send a description of what you are doing or how you are feeling or just anything concerning you to the current channel or query. It is absolutely good style to not forget the period at the end of the sentence!

```
/ME <action description>
```

Tells the current channel or query about what you are doing.

```
/ME opens up the fridge.  
* Nap opens up the fridge.
```

You can also use your own nickname as command, i.e. you can type the line with a leading slash:

```
/Nap reaches out for the orange juice.  
* Nap reaches out for the orange juice.
```

The same goal can be achieved towards a specific nickname using:

```
/DESCRIBE <nickname>|<channel> <action description>  
Sends anything concerning you to the <nickname> or <channel> you pass  
as first argument.
```

(Note: The look of the result depends on each client version, and might not be exactly the same as in the examples shown here.)

These commands make use of CTCP, a client-to-client protocol crafted to perform specific actions, but not understood by all clients, (more about CTCP in section 2.5). If you get an error message, your description may not have arrived properly.

## 2.4 Channel and User Modes

~~~~~

Channels can have additional constraints, which can be set by the MODE command, (most of the information in this section can also be obtained by issuing "/HELP MODE"). To understand this, recall that the first person to JOIN a channel effectively creates it and is initially "in charge" of the channel, ("Channel Operator" or "chanop"). He/She can subsequently add those constraints, make other people chanops at leisure.

Table 7: Mode commands

| Keyword | Action                       |
|---------|------------------------------|
| ~~~~~   | ~~~~~                        |
| MODE    | changes channel or user mode |

Public is the default mode for a channel. When someone is on a public channel, he can be seen by all other users, (if his own user mode permits this). Anyone can notice users on a public channel and join such a conversation.

Private means that, although anyone can see members of such a channel, you can't tell what channel they are on unless you are already on that channel with them. They just appear as "Prv: \*" in LIST or NAMES. Since the number of potential channels is in the billions, this is quite

some security - all you give away is the acknowledgement that you're IRCing.

If you are on a secret channel, someone who is not on the same channel can't even see that you are there. Your name does not show up in a LIST of active users. The only indication of your presence is that, when entering IRC, all new users are told that there are "NNNNN users on XXX servers". If someone checks on all users and finds less than NNNNN of them, he knows that other people are hiding on secret channels. But a secret channel user still cannot be found except by brute-force checking through all channels, a hopeless proposition in the face of the huge number of possible channel names. Security through obscurity finally means something.

```
/MODE <channel>|<nickname> [[+|-]<modechars> [<parameters>]]
```

Allows channel operators to change channel mode, or any user to change their personal mode, (don't use this command too often, it floods the net with worthless information).

```
/MODE #Twilight_Zone +m
*** Mode change "+m" on channel #Twilight_Zone by Nap
```

```
/MODE Nap -i
*** Mode change "-i" for user Nap by poly.polytechnique.fr
```

And this is how to give 'chanop' status to someone on the channel

```
/MODE #Twilight_Zone +o sojge
*** Mode change "+o sojge" on channel #Twilight_Zone by Nap
```

A + or - sign determines whether the mode should be added or deleted. Try typing "/HELP MODE" to get further information. Channels can be moderated (only chanops can talk), secret, private, with a limited number of users, anonymous, invite-only, topic-limited, with a list of banned users...

The MODE command also allows you to modify your personal parameters, your "user mode". You can check your usermode with the command "/MODE <YourNick>" or sometimes "/UMODE". Note that user mode +i may be the default on some servers, in order to protect privacy of users. This should not be seen as a problem, since any user can change his/her personal mode whatever defaults a server may set.

Table 8: Channel modes

| ModeChar   | Effects on channels                             |
|------------|---|
| b <person> | ban somebody, <person> in "nick!user@host" form |
| i          | channel is invite-only                          |
| l <number> | channel is limited, <number> users allowed max  |
| m          | channel is moderated, (only chanops can talk)   |
| n          | external /MSGs to channel are not allowed       |

```

o <nick>      makes <nick> a channel operator
p             channel is private
s             channel is secret
t             topic limited, only chanops may change it

```

Table 9: User modes

```

-----
ModeChar      Effects on nicknames
~~~~~
i             makes yourself invisible to anybody that does
              not know the exact spelling of your nickname
o             IRC-operator status, can only be set
              by IRC-ops with OPER
s             receive server notices
w             receive wallops (abused and deprecated)

```

## 2.5 Client to Client Protocol

```

/CTCP <nickname> <command> [<argument>]
Allows you to perform certain client specific actions on the network.

```

```

/CTCP Nap VERSION
*** CTCP VERSION reply from Nap: ircII 2.2 *IX
    :ircII 2.2, SL0 The one you thought you'd never see.

```

This can be used to get information about how long a person has been idle:

```

/CTCP Nap FINGER
*** CTCP FINGER reply from Nap: PIOCH Nicolas - Nap on IRC, X90,
    (pioch@poly.polytechnique.fr) Idle 0 seconds

```

Table 10: Client to Client Commands

```

-----
Keyword      Action
~~~~~
CTCP         performs certain client specific actions
DCC          handles direct connections to remote clients
DCC SEND     initiates a file transfer
DCC GET      accepts a file transfer
DCC CLOSE    ends a DCC connection or offer
DCC LIST     shows current DCC connections
DCC CHAT     initiates a secure chat between two clients

```

There are many other CTCP commands, and new ones are introduced all the time. There is a mechanism for you to find out what you can use: CTCP CLIENTINFO. To find out about your own client services, execute a CLIENTINFO on yourself.

```
/CTCP Nap CLIENTINFO
*** CTCP CLIENTINFO reply from Nap: SED VERSION CLIENTINFO
USERINFO ERRMSG FINGER TIME ACTION DCC UTC PING :Use
CLIENTINFO <COMMAND> to get more specific information
```

If you are interested in this powerful CTCP mechanism, have a look in the various ircII help files. "/HELP CTCP" might tell you more... However the client-to-client protocol has a very powerful feature: Allowing two people to exchange files.

To send small text files, electronic mail is probably the best solution, (don't rely on the user@host given by the WHOIS command to send mail. For people registered on NickServ, you can "/MSG NickServ@Service.de WHOIS nick" to get their E-mail address). However, ircII provides you a way to establish Direct Client Connections ("DCC") to perform functions like sending and receiving files.

If NickA wants to send a file to NickB, then NickA should type:  
/DCC SEND NickB filename

On NickB's screen will appear:  
\*\*\* DCC SEND (filename) request received from NickA

If he, (NickB), wants to get the file, he just needs to type:  
/DCC GET NickA filename

A few seconds later  
\*\*\* DCC GET connection with NickA established  
\*\*\* DCC GET filename connection to NickA completed  
will inform both users that data transfer has been successfully completed.

Here's a quick overview of the subject:

```
/DCC <function> [<arguments>]
Handles direct connections to remote clients. The behavior of DCC is
determined by the specified <function>.
```

```
/DCC SEND <nickname> <filename>
Initiates a file transfer by direct client connection.
```

```
/DCC GET <nickname> <filename>
Accepts a file transfer by direct client connection. The sender must
first have offered the file with DCC SEND.
```

```
/DCC CLOSE <type> <nickname> [<arguments>]
Ends an unwanted DCC connection or offer. The <type>, <nickname> and
<arguments> must be the same as those shown by "/DCC LIST". If the
arguments are not supplied, the oldest connection of the specified type
```

is closed.

#### /DCC LIST

Shows current /DCC connections with their types, status and nicknames involved.

More details can be found in ircII online help: try "/HELP DCC"... for more information.

However, if someone asks you to send him a file, DON'T do it unless you EXACTLY know what you are doing. For instance, NEVER send the password file of your system to anybody. This could grant crackers illegal access to your machines, and put you and your system administrator in much trouble.

DCC also allows two clients to establish a direct client connection for chat. This is a secure form of communication, since messages are not sent through the IRC network.

#### /DCC CHAT

Initiates a direct client connection chat to the given nick, who must repond with DCC CHAT. Once established, messages are sent over with "/MSG =Nickname ...".

## 2.6 Network Related Commands

~~~~~

If you encounter any problem, contact your local IRC-Administrator or an IRC-Operator. An IRC-Admin is a person who has access to all files concerning 'ircd' (the server program). An IRC-Operator or "IRC-op" is a person who has privileges given to him by an IRC-Admin and tries to maintain a fast reliable IRC network. Information on how you can find out who he/she is, can be found below.

Each time you are prompted for a server name, remember you can supply the nickname of someone being connected on that server instead. This may be useful at times...

Table 11: Network related commands

Keyword	Action
ADMIN	displays information about a server
LINKS	shows the servers on the IRC network
SERVER	switches your primary server
MOTD	displays the server message-of-the-day
USERS	prints users logged on the server machine
DATE	shows server current date and time

TIME shows server current date and time  
LUSERS gives a brief listing of users, servers and operators  
TRACE shows the server connections of the given server  
STATS shows some irc server usage statistics  
INFO shows useless information about IRC  
VERSION shows client and server version number

/ADMIN [<server>]

Displays the administrative details about the given server. If no server is supplied, the server you are connected to is used.

```
/ADMIN
### Administrative info about poly.polytechnique.fr
### Ecole Polytechnique, Palaiseau, FRANCE
### IRC-Administrator Nicolas Pioch (Nap@IRC)
### <pioch@poly.polytechnique.fr>
```

/LINKS [[<server>] <wildcard expression>]

Shows a list of servers currently connected to the IRC network. If <wildcard expression> is given, /LINKS asks the given <server> for a list of servers matching the given expression, (this list can get very long!).

```
/LINKS *po*
*** nova.unix.portal.com 7 Cupertino California, USA
*** poe.acc.Virginia.EDU 6 University of Virginia 2.7.1f
*** polaris.utu.fi 9 University of Turku, Finland
*** polaris.ctr.columbia.edu 6 Columbia University, New York City
*** csd.postech.ac.kr 4 POSTECH Computer Science Dept.
*** cdc853.cdc.polimi.it 2 Polytechnic of Milan, Italy
*** poly.polytechnique.fr 0 Ecole Polytechnique, Paris, FRANCE
```

/SERVER [<server>|<server number> [<port number>]]

Switches your primary server to the supplied <server> at the specified <port number>. If no port number is given, the default port number is used (normally 6667).

```
/SERVER poly.polytechnique.fr 6667
*** Connecting to port 6667 of server poly.polytechnique.fr
*** Welcome to the Internet Relay Network, Nap
*** Your host is poly.polytechnique.fr, running version 2.7.2g.ID
*** This server was created Sat Jan 16 1993 at 12:16:10 MET
```

Occasionally, you can switch servers faster than the IRC network can send out the information that you have left your previous server. So don't be surprised if you are told your nickname is already in use... Just wait a moment and set it with /NICK again.

/MOTD [<server>]

Gives the Message-Of-The-Day for the named server. If no server is given, your server is used.

```

/MOTD
MOTD - poly.polytechnique.fr message of the day -
MOTD -
MOTD - /\
MOTD - \_|      Bienvenue sur le serveur      |
MOTD - |      Internet Relay Chat      |
MOTD - |      de l'Ecole Polytechnique, FRANCE      |
MOTD - |_____|_____|_____|_____|_____|_____|
MOTD - \_/
MOTD -
MOTD -      |      |      |      En cas de probleme,
MOTD -      )_ )_ )_      tapez / admin
MOTD -      )__ )__ )__ \
MOTD -      )___ )___ )___ \\\      Nicolas PIOCH
MOTD -      _____ \\\_\      Nap sur IRC
MOTD - --\ Welcome on IRC ! /-----
MOTD -      ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
* End of /MOTD command

```

/USERS [<server>]

Shows the users logged into the machine where the server is running, (it's up to the server administrator to implement this feature or not. It may not work on some machines).

```

/USERS
*** UserID Terminal Host
*** pioch tty9 rotule.polytechn
*** pioch ttyc rotule.polytechn
*** pioch ttyq0 rotule.polytechn
*** pioch ttyq1 rotule.polytechn

```

/DATE [<server>]

/TIME [<server>]

Shows the current time of day and date. If a server is specified, the time of day and date are reported from that server. DATE and TIME are identical.

```

/DATE
*** poly.polytechnique.fr Saturday June 20 1992 -- 02: 35 +01:00

```

/LUSERS

Gives a brief listing of the number of servers, operators and users matching the given <wildcard expression>, as seen from the specified <server>.

```

/LUSERS
*** There are 1008 users and 291 invisible on 135 servers
*** 72 users have connection to the twilight zone
*** There are 458 channels
*** I have 16 clients and 4 servers

```

\*\*\* 22 maximum connections, 19 clients

/TRACE [<server>]

Shows the server connections of the given <server>.

/TRACE

```
*** Serv Class[9] ==> 134S 1331C eff.org[192.88.144.3]
*** Serv Class[8] ==> 1S 6C Julia.Enst.FR
*** Serv Class[8] ==> 1S 6C Eurecom8.Cica.FR[192.70.34.208]
*** Serv Class[1] ==> 2S 0C athina.cc.uch.gr[147.52.80.102]
*** Serv Class[8] ==> 1S 5C dafne.mines.u-nancy.fr[192.70.66.2]
*** Serv Class[8] ==> 1S 0C cnam.cnam.fr
*** Class 0 Entries linked: 16
*** Class 9 Entries linked: 1
*** Class 8 Entries linked: 4
*** Class 1 Entries linked: 1
```

/STATS c|i|k|l|m|u|y [<server>]

Shows some irc server usage statistics.

/STATS u

```
*** Server Up 12 days, 12:28:44
```

/INFO [<server>]

Shows information about the IRC creators, debuggers, slaves and a lot of other people who no longer have much to do with IRC.

/VERSION

Shows the ircII version number and the version number of the server.

/VERSION

```
*** Client: ircII 2.2
*** Server poly.polytechnique.fr: ircd 2.7.2g.Nap+6(privacy).
```

## 2.7 Quick Reference Panel

~~~~~

| Keyword | Action  |
|---------|---|
| -----   | -----   |
| !       | recalls previous commands for re-editing            |
| ADMIN   | displays information about a server                 |
| AWAY    | leaves a message saying you're not paying attention |
| CLEAR   | puts some white space on your screen                |
| CTCP    | performs certain client specific actions            |

|          |   |
|----------|---|
| DATE     | shows server current date and time                    |
| DCC      | handles direct connections to remote clients          |
| DESCRIBE | sends anything about you to a person or channel       |
| HELP     | prints help on the given command                      |
| HISTORY  | displays the command history                          |
| IGNORE   | removes output from specific people off your screen   |
| INFO     | shows useless information about IRC                   |
| INVITE   | sends an invitation to another user                   |
| JOIN     | sets your current channel                             |
| KICK     | gets rid of someone on a channel                      |
| LASTLOG  | lists the most recent messages                        |
| LEAVE    | leaves a channel                                      |
| LINKS    | shows servers on the IRC network                      |
| LIST     | lists channels, number of users, topic                |
| LUSERS   | gives a brief listing of users, servers and operators |
| ME       | sends anything about you to a channel or QUERY        |
| MODE     | changes channel mode                                  |
| MOTD     | displays the server message-of-the-day                |
| MSG      | sends a private message                               |
| NAMES    | shows the nicknames of users on each channel          |
| NICK     | changes your nickname                                 |
| NOTICE   | sends a private message                               |
| NOTIFY   | warns you of people logging in or out IRC             |
| QUERY    | starts a private conversation                         |
| QUIT     | exits your IRC session                                |
| SERVER   | switches your primary server                          |
| STATS    | shows some irc server usage statistics                |
| TIME     | shows server current date and time                    |
| TOPIC    | changes the topic of the channel                      |
| TRACE    | shows the server connections of the given machine     |
| USERS    | prints users logged on the server machine             |
| VERSION  | shows client and server version number                |
| WHO      | gives a listing of users                              |
| WHOIS    | displays information about someone                    |
| WHOWAS   | displays information about someone who just left      |

## 2.8 Further into ircII Wizardry

~~~~~

Note: This part should be reserved for experienced IRC'ers.

Because ircII is not a simple client program, but an Operating System, its programming language is just as simple as you could expect (it's horrendous), but if you want to get into it, here's a little note for you...

There are a few Unix environment variables you can set in your shell configuration file, but you need to find out your shell name before that. "echo \$SHELL" should give you a hint.

Table 12: Setting environment variables

Shell type	Shell name	Command
Bourne shells	sh	\$ VARNAME="value" ; export VARNAME
	ksh	\$ export VARNAME="value"
	bash	\$ export VARNAME="value"
C-shells	csh	% setenv VARNAME "value"
	tcsh	> setenv VARNAME "value"

Table 13: Environment variables

Name	Effects
HOME	where your home directory is
IRCNAME	any lunacy you want instead of your real name (text that appears between parentheses in a WHOIS)
IRCNICK	your default IRC nickname
IRCPATH	a directory path to LOAD scripts
IRCRC	a file to use instead of your \$HOME/.ircrc
IRCSERVER	a default server list for ircII
TERM	your terminal type

The command character, (usually "/"), is only necessary when you type commands interactively, when you program things it is no more needed, it used to be though.

Table 14: Advanced commands

Keyword	Action
#	same as COMMENT except for the lenght
@	performs variable expressions
ALIAS	creates command aliases
ASSIGN	creates user variables (expandable with \$)
BIND	binds a keystroke sequence to a function
CD	changes ircII working directory
COMMENT	does nothing, but very useful. Strange, uh?
ECHO	displays all of its arguments
EXEC	allows you to start subprocesses
FLUSH	flushes all pending output from the server
IF	standard boolean expression checker
LOAD	loads an ircII command script file
ON	sets up actions to occur when certain events happen
REDIRECT	forwards the output from a command
SAVE	saves all ircII settings into a file

SAY	same as sending text to a channel
SEND	same as sending text to a channel
SET	sets a variable to a given value
SLEEP	suspends ircII for a few seconds
TYPE	simulates keystrokes
WAIT	waits for all server output to finish
WHILE	another control command to make loops
WINDOW	lets you manipulate multiple "windows" in ircII
XECHO	like ECHO, but takes flag arguments

If you want to type to the channel from within an ALIAS or on BINDing, you have to use SAY or SEND.

The ";" has a special meaning in ALIASes, BINDings and ONs: it's treated as command separator, that means you can execute multiple commands in a row separated by semicolons. The semicolons are not considered separators when you use them interactively, (to be able to type ";-)" , and within an ircII script file. You can escape the meaning of ";" in an ALIAS with "\;".

When you use ircII on a (semi)regular basis, you will discover that every time you start the program you will issue the same initialization sequence. If that is the case, I have good news for you: you don't have to do that anymore! ircII will, at startup, load a file called ".ircrc", (full path: \$HOME/.ircrc). It will treat each line in that file as if you typed it manually.

For example, if the content of your .ircrc file is:

```
JOIN #Twilight_Zone
```

then each time you will start IRC, you will join this channel.

Advanced commands may come in handy if you need them. Feel free to browse in ircII online help to find out more about them. A few of them are probably worth learning...

## 2.9 Sample .ircrc

~~~~~

As a sample, here's part of my .ircrc file. Since ircII2.2, this file can be found in the "script" directory, and loaded with "/load ircprimer"

```
# Sample .ircrc script, from the IRCprimer v1.1
# -----
# IRCII sample configuration file (~/.ircrc) (Nicolas Pioch)
```

```

# -----
# The aim of this file is to shorten all useful commands to 1 letter.

set NOVICE off
set INPUT_ALIASES off
set AUTO_WHOWAS on
set SHOW_CHANNEL_NAMES on
set SHOW_AWAY_ONCE on

# Speeds up ircII display 2 times
set SCROLL_LINES 2

# Put Hack notices down under
on ^SERVER_NOTICE "\*\*\* Notice -- Hack: *" set status_user Hack: $4-

# Modified killpath script from YeggMan
ALIAS kpath ECHO ### Last received KILL for $nkp.path
@ nkp.path = [<empty>]
ALIAS nkp.msg ECHO ### $Z -- KILL by $1 for $0 $2-
ALIAS nkp.idx @ FUNCTION_RETURN = RINDEX(! $0) + 1
ALIAS nkp.srv @ FUNCTION_RETURN = INDEX(. $MID($nkp.idx($0) 512 $0))
ON ^SERVER_NOTICE "\*\*\* Notice -- Received KILL*" {
#     if (index(. $mid(${rindex(! $11) +1} 512 $11))
#         IF ( nkp.srv($11) > -1 )
#             { nkp.msg $7 $9 }
#             { nkp.msg $7 $9 $12- }
#         @ nkp.path = [$7-]
}

# Function to strip the less significant part of an internet hostname
# $userdomain(username@host.subdomain.dom) returns username@subdomain.dom
# This eliminates the hostname which may change frequently
alias userdomain {
@ function_return = LEFT($INDEX(@ $0) $0)##[@]##MID(${1+INDEX(. $0)} 99 $0)
}

# Who is that ?
on ^msg * echo *$0!$userdomain($userhost())* $1-

# /w [<nickname>]           get info on someone
# /q [<nickname>]           query someone
# /m <nickname> <text>       send a message
# /n <nickname> <text>       send a notice
# /r <text>                   reply to last message I got
# /a <text>                   followup on my last message

alias w whois
alias q query
alias m msg
alias n notice
alias r msg $,
alias a msg $.

# /j <channel>               join a channel
# /l <channel>               list people in a channel
# /ll                        list in the current channel
# /i <nickname> [<channel>] invite someone

```

```

# /hop                leave the current channel

alias j join
alias l who
alias ll who *
alias i invite
alias hop part $C

# /o <nickname> [<nickname> <nickname>] give channel op status
# /d <nickname> [<nickname> <nickname>] remove channel op status
# /k <nickname>                kick someone
# /mo [+|-]<modechars>        change current channel mode

alias o mode $C +ooo
alias d mode $C -ooo
alias k kick $C
alias mo mode $C

# the "wrong person" alias! /oops <nickname> to resend message to
alias oops {
    @_whoops = [$B]
    msg $. Whooops ! Please ignore, that wasn't meant for you.
    msg $0 $_whoops
}

alias unset set -$*
alias unalias alias -$*
alias NickServ msg NickServ@Service.de
alias NoteServ msg NoteServ@Service.de

# -----

```

## 2.10 Writing automatons

~~~~~

An automaton, (also called robot or service), is a program that is connected to the IRC network to provide services. Many people try to set that up with a few ircII commands like:

```
on ^msg "% help" notice $0 This is LameBot 1.0
```

However, you should know that setting up an automaton using ircII ON facilities is quick and dirty, and should be reserved for robots that rely on ircII specific features such as DCC (file servers for instance). Writing a program in C, perl or any decent programming language should take longer in the beginning, but your efforts will be rewarded. You can download skeletons of such programs on some ftp sites that keep IRC related stuff (check in the Frequently Asked Questions part).

Although most robots-writers believe they have created a "smart thing", 99% of the robots online happen to be a nuisance to the IRC community, because a few simple rules were not respected by their owners.

The main idea is that robots should neither be seen nor heard:

- \* automatons should be clearly identified as such, having "bot", "serv" or "srv" in their nickname.
- \* they should use NOTICES to communicate with the rest of the world, and not reply to NOTICES they get.
- \* they should be able to always be killed (craziness is a frequent disease among robots).
- \* they should be able to be killed remotely by their owner via IRC.
- \* they should not give access to their owner's real files, (bandits have already been able to crack people's accounts through their robots).
- \* they should not send messages to channels (unless the channel is dedicated to that robot).
- \* they should not flood channels with MODE changes. Basically, if you have such a command as:

```
on -JOIN "Lamer #BotTub" mode #BotTub +o Lamer
```

then you are wrong. Because this is what you will get:

```
*** Lamer (clueless@where.the.hell) has joined channel #bottub
*** Mode change "+o Lamer" on channel #bottub by LameBot
*** Mode change "+o Lamer" on channel #bottub by StupidSrv
*** Mode change "+ooo Lamer Lamer Lamer" on channel #bottub by FloodServ
*** Mode change "+o Lamer" on channel #bottub by Dumbbot
```

And this will get boring very soon, so don't be surprised if such robots get banned from most channels. A good kludge is to wait until someone asks explicitly the robot to be opped on a channel. This could be:

```
on -MSG "Lamer op me on #BotTub" mode #BotTub +o Lamer
```

If you don't respect rules 2 and 6 above, this may happen too:

```
*** TalkBot (clueless@where.the.hell) has joined channel #bottub
<LameBot> Hi TalkBot!
<TalkBot> Hello LameBot! How are you?
*** Mode change "+o TalkBot" on channel #bottub by LameBot
<LameBot> Fine thanx.
<TalkBot> Thank you for the op, LameBot.
<LameBot> No problem, TalkBot.
*** Signoff: Talkbot (ircserver.irc.edu where.the.hell)
*** TalkBot (clueless@where.the.hell) has joined channel #bottub
*** Mode change "+o TalkBot" on channel #bottub by where.the.hell
*** Mode change "+o LameBot" on channel #bottub by TalkBot
*** Mode change "+o TalkBot" on channel #bottub by LameBot
<TalkBot> Thank you for the op, LameBot.
<LameBot> No problem, TalkBot.
```

...

See? Remember the golden rule:

```
+-----+
| A smart bot won't act unless explicitly asked by someone to. |
+-----+
```

### 3. FREQUENTLY ASKED QUESTIONS

#### 3.1 How do I set up an IRC client?

Here is a list of FTP sites from which you can download a client for your specific Operating System.

Table 15: FTP sites with IRC clients

-----	
UNIX ircII	
~~~~~	
cs.bu.edu	- /irc/clients
ftp.acsu.buffalo.edu	- /pub/irc
slopoke.mlb.semi.harris.com	- /pub/irc
plod.cmbe.unsw.oz.au	- /pub
coombs.anu.edu.au	- /pub/irc
nic.funet.fi	- /pub/unix/irc/ircII
ftp.informatik.tu-muenchen.de	- /pub/net/irc
EMACS elisp	
~~~~~	
cs.bu.edu	- /irc/clients/elisp
slopoke.mlb.semi.harris.com	- /pub/irc/emacs
nic.funet.fi	- /pub/unix/irc/Emacs
lehtori.cc.tut.fi	- /pub/irchat
ftp.informatik.tu-muenchen.de	- /pub/net/irc
VMS	
~~~	
cs.bu.edu	- /irc/clients/vms
coombs.anu.edu.au	- /pub/irc/vms
nic.funet.fi	- /pub/unix/irc/vms
ftp.informatik.tu-muenchen.de	- /pub/net/irc
REXX for VM	
~~~~~	
ftp.informatik.uni-oldenburg.de	- /pub/irc/rxirc

```

ftp.informatik.tu-muenchen.de - /pub/net/irc/VM
cs.bu.edu                     - /irc/clients/rxirc
coombs.anu.edu.au            - /pub/irc/rxirc
nic.funet.fi                 - /pub/unix/irc/rxirc

```

#### MSDOS

~~~~~

```

cs.bu.edu                     - /irc/clients
nic.funet.fi                 - /pub/unix/irc/msdos

```

#### Macintosh

~~~~~

```

cs.bu.edu                     - /irc/clients
nic.funet.fi                 - /pub/unix/irc/mac
sumex.stanford.edu          - /info-mac/comm
ftp.ira.uka.de              - /pub/systems/mac

```

For Unix machines, you either compile the source yourself, or have someone else on your machine compile the source for you. The current "official" ircII release is version 2.2.1. That means that it is said to be quite bugfree (Hehe, you never know...) In addition to this "official" distribution, you may find preversions of the client to come floating around, for people who like to track down bugs and taste things to come. However, you should be aware of that those clients are being worked on, and may not have full features working properly.

Here are the commands to type to setup an ircII client:

```

~ > ftp
ftp> verbose off
Verbose mode off.
ftp> open cs.bu.edu
Name (cs.bu.edu:yourname) : ftp
Password: yourname@yourhost
ftp> cd irc/clients
ftp> bin
ftp> get ircII2.2.1.2.tar.Z "|zcat|tar xf -"
ftp> get ircII2.2.1help.tar.Z "|zcat|tar xf -"
ftp> quit
~ >

```

You now have to go into ircII2.2.1 and read the files explaining how to achieve a successful installation. Have a look at README and INSTALL, edit config.h to define DEFAULT\_SERVER, edit Makefile to define INSTALL\_EXECUTABLE, IRCII\_LIBRARY and the C compiler you will be using, then type make install and wait...

If you can't set up a client on any local machine, you can still use any telnet client:

Table 16: Open telnet clients

Area	Command	login name
------	---------	------------

```

~~~~~      ~~~~~~      ~~~~~~
America    telnet bradenville.andrew.cmu.edu
           telnet chatsubo.nersc.gov           bbs

Asia       telnet cc.nsysu.edu.tw           irc

Europe     telnet ircclient.itc.univie.ac.at 6668
           telnet irc.ibmpcug.co.uk 9999

```

Please only use telnet when you have no other way of reaching IRC, as this resource is quite limited.

### 3.2 Which server do I connect to?

~~~~~

It's usually best to try and connect to one geographically close, even though that may not be the best. You can always ask when you get on IRC. Here's a list of servers available for connection:

Table 17: Open IRC servers

| -----   |           |                       |
|---------|-----------|-----------------------|
| America | Canada    | ug.cs.dal.ca          |
| ~~~~~   | USA       | csa.bu.edu            |
|         |           | ucsu.coloradu.edu     |
|         |           | irc.caltech.edu       |
| Europe  | Finland   | nic.funet.fi          |
| ~~~~~   | France    | poly.polytechnique.fr |
|         | Germany   | noc.belwue.de         |
|         | Sweden    | irc.nada.kth.se       |
| Oceania | Australia | munagin.ee.mu.oz.au   |
| ~~~~~   |           |                       |

This is by no means, a comprehensive list, but merely a start. Connect to the closest of these servers and join the channel #Twilight\_Zone or, if you are in Europe, #EU-Opers. When you are there, immediately ask what you want. Don't say "I have a question" because then everyone will ignore you until you say it a few times, and then they'll jump down your throat and rip your lungs out. No one knows if he can answer your question until you ask it.

### 3.3 What are good channels to try while using IRC?

~~~~~

#Hottub and #initgame are almost always teeming with people. #Hottub is meant to simulate a hot tub, and #initgame is a non-stop game of "inits" (initials). Just join the fun and find out! (German users may try channels named after German university towns...)

Many IRC Operators are in #Twilight\_Zone, while European Operators concentrate in #EU-Opers... So if you join an Operator channel and don't hear much talking, don't worry, it's not because you joined, Operators don't talk much on such channels anyways!

### 3.4 How do I get nifty effects with ircII? ~~~~~

You can highlight messages you send using control chars: parts of text surrounded by control-b (^B) will appear in video reverse to most ircII users for instance. However the appearance of such effects relies on the terminal abilities of the user you're writing to.

In some cases keys are already bound to something. For instance, ^B is normally bound to BACKWARD\_CHARACTER, so you will need to define a "quote-character" key: just enter "/BIND ^W QUOTE\_CHARACTER" then "/BIND ^W^B SELF\_INSERT" and it may work...

Table 18: Highlighting ircII output

Key	Effect
~~~	~~~~~
^B	Video reverse
^V	Underline
^_	Bold

### 3.5 What if someone tells me to type something cryptic? ~~~~~

NEVER type anything anyone tells you to without knowing what it is. There is a problem with typing a certain command with the ircII client that gives anyone immediate control of your client, (and thus can alter your account environment also). Look in the ircII on-line help each time you can.

### 3.6 I get strange characters on my screen, what are they? ~~~~~

IRC has quite a lot of people from Scandinavian countries, }{||[\ are letters in their alphabet (IRC is supposed to support the ISO Latin-1 8-bit character set, but your client must be able to display them...) This has been explained on IRC about a thousand and one times, so read the following, do not ask it on IRC:

Table 19: Nordic countries character translations

---

Character	Description
[, {	'a' with two dots over it
], }	'a' with a small circle above it
\,	'o' with two dots over it, or a dash ("/") through it ("[", "]", and "\" = upper case)

In addition to that, Japanese IRC'ers use a special ANSI escape control sequences to transmit their Kanji alphabet. This may also look funny if you get some of it... Here's a sample: [B\$?\$K\$7[ \$B;\$m\$K# (nice, uh?)

### 3.7 What about NickServ?

To quote from NickServ's help text, NickServ's purpose is to help avoiding nickname confusions on IRC. There's no such thing as "nickname ownership", however NickServ sends a warning to anyone else who signs on with your nickname. If you don't use IRC for 10 weeks, your nickname registration expires for reuse.

Only a NickServ operator can change your NickServ password. To find out which NickServ operators are on-line, send

```
/MSG NickServ@Service.de OPERWHO
```

Nicknames with a "\*" next to them are online at the time.

### 3.8 I'm being flooded or harassed by a jerk. HELP!

If somebody is behaving like a jerk on IRC, like dumping to a channel Mb's of garbage, then he should be KICKed and eventually banned from the channel, (see "/HELP MODE" for details).

If it's a matter of personal harassment, then you should set a proper IGNORE on that person, (preferably on his userid@hostname). Remember you can use wildcard expressions for IGNORE. More about this in section 2.2.

### 3.9 How do I get rid of a ghosted IRC session?

Sometimes you may have a "ghosted" IRC session, a process still

running on your machine you would like to get rid of, but can't control anymore to issue a QUIT command. Going back to a unix shell, try listing your processes: ("ps -ux" or "ps -f" depending on your system)

```
poly ~ > ps -ux
USER      PID  %CPU %MEM    SZ   RSS TT  STAT  TIME  COMMAND
pioch    10410  1.4  0.2   839   402 pf S   0:00 /usr/local/bin/emacs
pioch    25441  0.6  0.9  2888  1908 ?  S   0:32 xterm -ls
pioch    25444  0.4  0.2   550   341 pf S   0:17 -tcsh (tcsh)
pioch    10404  0.1  0.3   897   624 pf S   0:00 irisVx 5 4 10403
pioch    25634  0.0  0.3  1022   678 p6 S   0:22 irc
pioch    25451  0.0  0.2   953   326 ?  S   0:07 xmailbox
pioch    25452  0.0  0.1   386   147 ?  S   0:00 xdaliclock
pioch    25459  0.0  0.3  1109   617 ?  S   0:02 xman
pioch    10403  0.0  0.1   574   124 pf I   0:00 mapleV
pioch    10423  0.0  0.2   614   459 pf R   0:00 /bin/ps -ux
```

Locate the line about your lost IRC session, (irc should appear in the COMMAND field of the line), and its PID, (process number, second field of the line here). In this example the PID is 25634, as shown here:

```
USER      PID  %CPU %MEM    SZ   RSS TT  STAT  TIME  COMMAND
pioch    25634  0.0  0.3  1022   678 p6 S   0:22 irc
```

All you then need to type is "kill -KILL" or "kill -9" immediatly followed by the PID found above: "kill -kill 25634" here.

You can get more details about the commands involved here in the standard unix manual, ("man 1 ps" or "man 1 kill").

If your machine crashed, and your nick is still in use on the IRC network, you'll have to wait 4 to 5 minutes for your server to recognize the fact. Getting an Operator to kill the ghost is almost never necessary, just sign on as another nickname and wait for the "Ping timeout" or "Bad link" message, then you can change your nick back...

### 3.10 About KILL usage.

~~~~~

KILL is a command restricted to IRC-Operators to deal with protocol errors heavily reducing the IRC network functionality. It's to be used with extreme caution, if at all.

```
+-----+
| KILL should never interfere with channel-operator status. |
+-----+
```

If you op someone on a channel, you take the consequences. If someone joins #Whatever, you op them, then they kick everyone and lock the channel with some "Mode change +ib \*!\*@\*", then suffer it: it's your fault, don't go whining to an IRC-op to fix it. If a channel is locked, you should start a new one.

Effective methods to deal with obnoxious people are IGNORE, KICK and various MODEs on channels, such as +i and/or +b.

If you have been abusively killed by an IRC-Operator, abusing his power to gain illegal channel-operator status for instance, yell! Mail a log to his server IRC-Administrator, (see ADMIN), join #Twilight\_Zone or #EU-Opers for European-related problems, and explain what happened.

### 3.11 Where can I find more?

~~~~~

Should your question not be listed above, you may want to check the "Frequently Unasked Questions", (FUQ) list, which will be shipping real soon now, featuring replies to:

<lamer1> Are there any good FTP sites? (1)  
<lamer2> How do I join a channel?  
<lamer3> How do I become an IRCop?

If you have access to Usenet News, (usually through a program called rn, trn, xrn or nn), you may want to join alt.irc debates, flamings and whinings.

You can also join various IRC related mailing lists. "Operlist" discusses current (and past) server code, routing and protocol. Mail operlist-request@eff.org to join. Another mailing list, ircd-three@eff.org exists to discuss protocol revisions for the 3.0 release of ircd, currently in planning. Mail ircd-three-request@eff.org to be added to that. There is also low-traffic mailing-lists for ircII vmsirc and irchat clients.

Table 20: IRC related mailing lists

E-mail for subscriptions	What's being talked about
operlist-request@eff.org	Server code, routing and protocol.
ircd-three-request@eff.org	ircd 3.0 protocol
listserv@grasp1.univ.lyon1.fr	European IRC-Operators mailing list
dl2p+@andrew.cmu.edu	ircII mailing list
vmsirc-request@vax1.elon.edu	VMS IRC mailing list
irchat-request@cc.tut.fi	irchat mailing list

((1) 129.0.0.1 but you already know that.)

## 4. ADMINISTRATIVIA

=====

#### 4.1 Revision history

~~~~~

This is version 1.1 of this paper. Version 1.0 of the IRCprimer was released in postscript form in June 1992 because I was sick of people asking for an IRC or ircII manual (and it was a good way to learn LaTeX!). During summer 1992 Owe Rasmussen did a very nice text conversion of the paper. Due to the support and many remarks I got, a new version is finally completed (special thanks to Olaf Titz !), along with Owe's plain ascii conversion.

The primer is available in 3 formats:

```
IRCprimer.ps.Z:  Postscript version
IRCprimer.txt:   Plain text version
IRCprimer.tex.Z: Source code.
```

#### 4.2 Release sites for the IRCprimer

~~~~~

The latest version of the primer can be found on the following ftp sites, thanks to their admins:

Table 21: IRCprimer release sites

ftp site	location
nic.funet.fi	/pub/unix/irc/docs
cs.bu.edu	/irc/support
coombs.anu.edu.au	/pub/irc/docs

Here's how to get the latest primer postscript version for example:

```
~ > ftp
ftp> verbose off
Verbose mode off.
ftp> open cs.bu.edu
Name (cs.bu.edu:yourname): ftp
Password: yourname@yourhost
ftp> cd irc/support
ftp> bin
ftp> get IRCprimer.ps.Z
ftp> quit
~ > uncompress IRCprimer.ps.Z
~ >
```

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~~~~~

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Free Software Foundation, Inc.,  
675 Mass Ave,  
Cambridge, MA 02139, USA.

#### 4.4 Credits

~~~~~

Interesting informations contained in this paper are due to the work of various people interested in IRC improvement; I'm only responsible for omissions and mistakes :-)

It's impossible to give here a full list, however special thanx are due to (in alphabetical order):

Real life (uh ?)	IRC	E-mail
~~~~~	~~~	~~~~~
Christopher Davis	ckd	ckd@eff.org
Christophe Wolfhugel	Zolf	wolf@grasp.insa-lyon.fr
Darren Reed	Avalon	avalon@coombs.anu.edu.au
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Feel free to bug me with your comments, I hope I'll have enough time

to reply.

Paris, February 21, 1993,  
Ecole Polytechnique,

Nicolas PIOCH.