A short **IRC** primer

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Abstract

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

1.1 Clients and Servers

IRC[1] 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 a 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`[2] lisp client, you just have to "`M-x irc`"[3]. 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 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 to not 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 mainly spoken of here is the most widespread: `ircII`[4]. Other clients are similar, and often accept `ircII` commands.

[1] The original code was written by Jarkko Oikarinen.
[2] Editor from Richard Stallman and the Free Software Foundation.
[3] If this doesn't work, you may need to load the client into your emacs session before.
[4] Originally designed by Michael Sandrof.

1.2 How to Behave on IRC

The most widely understood and spoken language on **IRC** is English[5]. 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[6] 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[7] 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 being 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.

When you enter a new channel, you should listen for a while to get an impression of what is been discussed. Feel free to join in, but do not try to force your topic into the discussion if that doesn't come naturally.

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 "burbs", connections going down because servers cannot handle the large amount of traffic any more. 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.

[5] Don't you hate footnotes ?
[6] What's a "channel" will be explained on page 16
[7] `ircII` "`ON`" command for instance...

- any behavior reducing the functionality of **IRC**.

1.3 Privacy on IRC

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're 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[8], so a good rule of thumb 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` page 24). This should be used when you wouldn't want anybody else on **IRC** to intercept your private messages.

1.4 First Steps

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 those 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 page 11) .

Anything that does not begin with a "/" is assumed to be a message to someone and will be sent to your current channel, or to a person you are `QUERY`ing (the `QUERY` command will be detailed later on, maybe even page 14).

[8]It has already been done...

If you are not sure about the spelling of an `ircII` command, type the prefix of that command, and press the `ESC`ape 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"...

When you first get on **IRC**, you are put into a dead place where nobody is talking. You can either start a private conversation with some people, basically using `MSG`, or `JOIN` a channel for public chat.

1.5 Screen and Keyboard Activity

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.

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-editting. 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 list for a line beginning with `/MSG` (a "`*`" is implied at the end).

`/! [<history number>|<history match>]`[9] ◁ !
Recalls previous commands for re-editing.

[9]The syntax of the commands uses the following conventions: parameters are between `<angle brackets>`, `[square brackets]` surround optional parameters and options are separated by `|`.

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	goes to the end
^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 1: Editing keys

Keyword	Action	Page
!	recalls previous commands for re-editing	8
HISTORY	displays the command history	9
LASTLOG	lists the most recent messages	10
CLEAR	puts some white space on your screen	10

Table 2: Editing commands

The command history can be dumped using:

`/HISTORY [<number>]` ◁ `HISTORY`

Displays the command history to 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.

What is displayed	What you typed	Sender	Recipients
`> Morning, people`	`Morning, people`	You	Channel
`<some1else> hello`		some1else	Channel
`-> *some1else* hi!`	`/msg some1else hi!`	You	some1else (only)
`*some1else* wassup ?`		some1else	You (only)

Table 3: Simple screen activity

Last `ircII` outputs can be recalled with:

`/LASTLOG [<number of entries>|<text> [<from entry>]]` ◁ LASTLOG

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 people in the channel
<some1else> Public message from some1else
*some1else* Private message sent to me by some1else
-> *some1else* Private message I send to some1else
```

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` ◁ CLEAR

Clears the screen. Here are the effects of this command:

2 Let's Go!

2.1 General Commands

Keyword	Action	Page
`NICK`	changes your nickname	11
`QUIT`	exits your **IRC** session (same as `BYE`, `SIGNOFF` and `EXIT`)	11
`HELP`	prints help on the given command	11
`WHOIS`	displays information about someone	12
`WHOWAS`	displays information about someone who just left	12
`AWAY`	leaves a message saying you're not paying attention	13

Table 4: General commands

`/NICK [<nickname>]` ◁ `NICK`

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 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>]` ◁ `QUIT`

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>]` ◁ `HELP`

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 [[<server>] <nickname>] ◁ WHOIS

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 irc 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>] ◁ WHOWAS

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 unsuccessful 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>]` ◁ AWAY

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

Keyword	Action	Page
`MSG`	sends a private message	13
`QUERY`	starts a private conversation	14
`NOTICE`	sends a private message	14
`NOTIFY`	warns you of people logging in or out **IRC**	15
`IGNORE`	removes output from specific people off your screen	15

Table 5: Private conversation commands

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>` ◁ MSG

Sends a private message to the 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>]` ◁ `QUERY`
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 `MSG`s. To cancel a private conversation, use `QUERY` with no arguments.

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

Blahcrap
-> *Nap* Blahcrap

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

There is also another command to send messages, called `NOTICE`. Unlike `MSG`s, `NOTICE`s 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>` ◁ `NOTICE`
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 making new friends over **IRC**, you'll want to mark certain nicknames such that you will be warned when they signon or off.

`/NOTIFY [[-]<nickname>]` ◁ NOTIFY

Adds or removes `<nickname>` to the list of people you'll be warned when they enter or quit **IRC**.[10]

```
/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>]]` ◁ IGNORE

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 been ignored includes `MSG`s, `NOTICE`s, `PUBLIC` messages, `INVITES`, `ALL` or `NONE`. Preceeding 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
```

[10] In ircII versions prior to 2.2, too many people in the `NOTIFY` list cause excessive slowness.

2.3 Channels and Public Conversations

On **IRC**, there are a lot of places where you can "hang out"; those places are called **"channels"**[11]. 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 is 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.

Keyword	Action	Page
`LIST`	lists channels, number of users, topic	16
`NAMES`	shows the nicknames of users on each channel	17
`JOIN`	sets your current channel (same as `CHANNEL`)	17
`WHO`	gives a listing of users	18
`INVITE`	sends an invitation to another user	18
`LEAVE`	leaves a channel (same as `PART`)	19
`KICK`	gets rid of someone on a channel	19
`TOPIC`	changes the topic of the channel	19
`ME`	sends anything about you to a channel or `QUERY`	19
`DESCRIBE`	sends anything about you to a person or channel	20

Table 6: Channel commands

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 existing channels.

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

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:

[11] Most of the informations in this section can also be obtained by issuing "`/HELP CHANNEL`"

```
/LIST -MIN 5
*** #aussies   5
*** #amiga     5      Daily Amiga Silence...join&enjoy
*** #hottub    21     Imagine sky, high above, in Caribbean blue..
*** #tuebingen 11     Happy Birthday CHUCK!!!
*** #Christian 6      Jesus is King of Kings!!!
*** #Twilight_ 15     The Oper Bar & Grill
*** #initgame  5      guess we need some willing players..
*** #Taiwan    8      Welcome, good friends.
*** #espanol   6      EMERGENCIA SE Necesitan Mujeres!!!
*** #sherwood  7      The enchanted Sherwood forest welcomes all...:)
*** #francais  6      on apprend le japonais (japanese welcome)
```

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

Shows the nicknames of all users on each "channel"[12].

```
/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 @Insomniak @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>] ◁ JOIN

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.

[12]These lists may be very long! Remember to filter them with "-MIN n".

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 **IRC**'ing inside. That's where the `WHO` command comes in handy:

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

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@tel1.tel.vtt.fi (Markku Savela)
#Twilight_ tober     H   ircuser@kragar.eff.org (tober@wizvax.methuen.ma.us)
#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*@ lancelot@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 page 30). Status indicates if a person is "`H`"ere or "`G`"one (see `AWAY`), if **IRCop** ("`*`") 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>]` ◁ INVITE

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`
Leave a channel.

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

Well, you guessed it, if there's 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>` ◁ `KICK`
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 the topic on a channel with the `TOPIC` command.

`/TOPIC [[<channel>] <topic for channel>]` ◁ `TOPIC`
Changes the topic for the named 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. The correct convention is to include a period at the end of the sentence.

`/ME <action description>` ◁ `ME`
tells the current channel or query about what you're doing.[13]

[13]Note that the look of the result depends on each client version, and might not be exactly the same as in the examples shown here.

```
/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> ◁ DESCRIBE
Sends anything concerning you to the **<nickname>** or **<channel>** you pass as first argument.

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 page 22). 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[14]. 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 can subsequently add those constraints, make other people chanops at leisure.

Keyword	Action	Page
MODE	changes channel or user mode	21

Table 7: Mode commands

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.

[14] Most of the informations in this section can also be obtained by issuing "/HELP MODE".

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 **IRC**'ing.

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 "NNNN users on XXX servers". If someone checks on all users and finds less than NNNN 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>]]` ◁ MODE

allows channel operators to change channel mode, or any user to change their personal mode[15].

```
/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 personal mode whatever defaults a server may set.

[15] Don't use this command too often, it floods the net with worthless information.

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** talk)
`n`	external `MSG`s to the 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 8: Channel 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)

Table 9: User modes

2.5 Client to Client Protocol

`/CTCP <nickname> <command> [<arguments>]` ◁ CTCP

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, SLO 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
```

Keyword	Action	Page
`CTCP`	performs certain client specific actions	22
`DCC`	handles direct connections to remote clients	24
`DCC SEND`	initiates a file transfer	24
`DCC GET`	accepts a file transfer	24
`DCC CLOSE`	ends a `DCC` connection or offer	24
`DCC LIST`	shows current `DCC` connections	24
`DCC CHAT`	initiates a secure chat between 2 clients	24

Table 10: Client to Client commands

There are many others `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're 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[16]. However, `ircII` provides you a way to establish Direct Client Connections ("`DCC`") to perform functions like sending or 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 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.

[16]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.

Here's a quick overview of the subject:

`/DCC <function> [<arguments>]` ◁ DCC

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

`/DCC SEND <nickname> <filename>` ◁ DCC SEND

Initiates a file transfer by direct client connection.

`/DCC GET <nickname> <filename>` ◁ DCC GET

Accepts a file transfer by direct client connection. The sender must first have offered the file with `DCC SEND`.

`/DCC CLOSE <type> <nickname> [<arguments>]` ◁ DCC CLOSE

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` ◁ 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 will not be sent through the **IRC** network.

`/DCC CHAT` ◁ DCC CHAT

initiates a direct client connection chat to the given nick, who must respond with `DCC CHAT`. Once established, messages are sent over it 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...

Keyword	Action	Page
ADMIN	displays information about a server	25
LINKS	shows servers on the **IRC** network	25
SERVER	switches your primary server	26
MOTD	displays the server message-of-the-day	26
USERS	prints users logged on the server machine	27
DATE	shows server current date and time	27
TIME	shows server current date and time	27
LUSERS	gives a brief listing of users, servers and operators	27
TRACE	shows the server connections of the given server	28
STATS	shows some irc server usage statistics	28
INFO	shows useless information about **IRC**	28
VERSION	shows client and server version number	28

Table 11: Network related commands

`/ADMIN [<server>]` ◁ ADMIN

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>]` ◁ LINKS

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[17].

```
/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.
*** cdc835.cdc.polimi.it  2 Polytechnic of Milan, Italy
*** poly.polytechnique.fr 0 Ecole Polytechnique, Paris, FRANCE !
```

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

Switches your primary server to the supplied `<server>` at the specified `<port number>`. If no port nunmber 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.Nap+6(privacy)
*** 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>]` ◁ MOTD

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 -  /\                                     \
```

[17] This list can get very long!

```
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>] ◁ USERS

Shows the users logged into the machine where the server is running[18].

```
/USERS
*** UserID   Terminal  Host
*** pioch    ttyp9     rotule.polytechn
*** pioch    ttypc     rotule.polytechn
*** pioch    ttyq0     rotule.polytechn
*** pioch    ttyq1     rotule.polytechn
```

/DATE [<server>] ◁ DATE
/TIME [<server>] ◁ TIME

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 [<wildcard expression> [<server>]] ◁ LUSERS

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

[18] It's up to the server administrator to implement this feature or not. It may not work on some machines.

```
/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>] ◁ TRACE

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>] ◁ STATS

Shows some irc server usage statistics.

```
/STATS u
*** Server Up 12 days, 12:28:44
```

/INFO [<server>] ◁ INFO

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

/VERSION [<server>] ◁ 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	Page
!	recalls previous commands for re-editing	8
ADMIN	displays information about a server	25
AWAY	leaves a message saying you're not paying attention	13
CLEAR	puts some white space on your screen	10
CTCP	performs certain client specific actions	22
DATE	shows server current date and time	27
DCC	handles direct connections to remote clients	24
DESCRIBE	sends anything about you to a person or channel	20
HELP	prints help on the given command	11
HISTORY	displays the command history	9
IGNORE	removes output from specific people off your screen	15
INFO	shows useless information about **IRC**	28
INVITE	sends an invitation to another user	18
JOIN	sets your current channel	17
KICK	gets rid of someone on a channel	19
LASTLOG	lists the most recent messages	10
LEAVE	leaves a channel	19
LINKS	shows servers on the **IRC** network	25
LIST	lists channels, number of users, topic	16
LUSERS	gives a brief listing of users, servers and operators	27
ME	sends anything about you to a channel or QUERY	19
MODE	changes channel mode	21
MOTD	displays the server message-of-the-day	26
MSG	sends a private message	13
NAMES	shows the nicknames of users on each channel	17
NICK	changes your nickname	11
NOTICE	sends a private message	14
NOTIFY	warns you of people logging in or out **IRC**	15
QUERY	starts a private conversation	14
QUIT	exits your **IRC** session	11
SERVER	switches your primary server	26
STATS	shows some irc server usage statistics	28
TIME	shows server current date and time	27
TOPIC	changes the topic of the channel	19
TRACE	shows the server connections of the given server	28
USERS	prints users logged on the server machine	27
VERSION	shows client and server version number	28
WHO	gives a listing of users	18
WHOIS	displays information about someone	12
WHOWAS	displays information about someone who just left	12

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 is horrendous[19]), 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...

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 12: Setting 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

Table 13: Environments variables

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.

[19] *When someone says, "I want a programming language in which I need only say what I wish done," give him a lollipop.* — Alan Perlis, Epigrams on Programming (1982), quoted by Donald E. Knuth in the TEXbook.

Keyword	Action
#	same as COMMENT except for the length
@	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

Table 14: Advanced commands

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 is treated as command seperator, 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 or 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 at the beginning, but your efforts will be rewarded. You can even download skeletons of such programs on some ftp sites that keep **IRC**-related stuff[20].

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[21].
- they should be able to be killed remotely by their owner via **IRC**.
- they should not give access to their owner's real files[22].
- 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:

[20] Check the list in the Frequently Asked Questions part.
[21] Craziness is a frequent disease among robots...
[22] Bandits have already been able to crack people's account through their robots.

```
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.

UNIX ircII	cs.bu.edu	/irc/clients
	ftp.acsu.buffalo.edu	/pub/irc
	slopoke.mlb.semi.harris.com	/pub/irc
	plod.cbme.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/msdos
	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

Table 15: FTP sites with **IRC** clients

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**. This means that this is said to be quite bugfree. (Hehe, you never know...) In addition to this "official" distribution, you may find preversions of clients floating around, for people who like to track down bugs and taste things to come. However, you should be aware that those clients are currently been worked on, and may not have full features working properly. Pick your choice !

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
~ >
```

Now you have to go into `ircII2.2c` 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:

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`	

Table 16: Open `telnet` **IRC** clients

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:

America	Canada	`ug.cs.dal.ca`

	USA	`csa.bu.edu`
		`ucsu.colorado.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`

Table 17: Open **IRC** servers

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 get 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 non-stop game of "inits" (initials). Just join the fun and find out[23]!

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

[23]German users may try the channels named after German university towns...

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 else. 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...

`^B`	Video reverse
`^V`	Underline
`^_`	Bold

Table 18: Highlighting `ircII` output

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 `ircII` online 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[24]. This has been explained on **IRC** about a thousand and one times, so read the following, do not ask it on **IRC**...

[24] **IRC** is supposed to support the ISO Latin-1 8-bit character set, but your client must be able to display them...

{	ä	[	Ä	|	ö ø
}	å	]	Å	\	Ö Ø

Table 19: Nordic countries character translations

In addition to that, Japanese **IRC**'ers use special ANSI escape control sequences to transmit characters of their Kanji alphabet. This may also look funny if you get some of it... Here's a sample: "`[$B$?$K$7[$B$;$m$K#[$B$_$B`" (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 is 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 online, send

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

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

3.8 I'm been 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 `KICK`'ed and eventually banned from the channel (see "`/HELP MODE`" for details).

If it's a matter of personnal harassment, then you should set a proper `IGNORE` on that person (preferably on his `userid@hostname`). Remember you can use wildcards expressions for `IGNORE`. More about this page 15.

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 **IRC** lost 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 need to type then is "`kill -KILL`" or "`kill -9`" immediately 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 or 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 `MODE`'s on channels, such as `+i` and `+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 ?[25]
<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`, `nn`, `trn` or `xrn`), you may want to join `alt.irc` debates, flamings and whinings.

[25] 127.0.0.1, but you know that already...

E-mail for subscriptions	What's been 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

Table 20: **IRC** related mailing lists

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 are also low-traffic mailing-lists for `ircII`, `vmsirc` and `irchat` clients.

4 Administrativia

4.1 Revision history

This is version 1.1 of this paper. Version 1.0 of the **IRC**primer 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 I received along with many helpful remarks a new postscript version is finally completed[26], along with Owe's plain ascii conversion.

The **IRC**primer is available in 3 formats:

- `IRCprimer.ps.Z`: Postscript version
- `IRCprimer.txt`: Plain text version
- `IRCprimer.tex.Z`: LaTeX source code.

4.2 Release sites for the IRCprimer

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

Zone	`ftp` site	Location
America	`cs.bu.edu`	`/irc/support`
Europe	`nic.funet.fi`	`/pub/unix/irc`
Oceania	`coombs.anu.edu.au`	`/pub/irc/docs`

Table 21: **IRC**primer release sites

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

```
~ > ftp
```

[26]Special thanks to Olaf Titz !

```
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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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 analphabetical 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>
Greg Lindahl,	Wumpus	<gl8f@virginia.edu>
Helen Rose	Trillian	<hrose@eff.org>
Ian Frechette	Daemon	<frechett@spot.colorado.edu>
Jarkko Oikarinen	WiZ	<jto@tolsun.oulu.fi>
Jeff Trim		<jtrim@orion.cair.du.edu>
Jonathon E. Tidswell	Ernie	<jont@cs.su.oz.au>
Karl Kleinpaste	poptart	<Karl_Kleinpaste@cs.cmu.edu>
Matthew Alderson	thecure	<thecure@mullian.ee.mu.oz.au>
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Ronald van Loon	rvl	<rvloon@cv.ruu.nl>
Troy Rollo	Troy	<troy@cbme.unsw.edu.au>

Feel free to bug me with your comments, I hope I'll have enough time to reply.

Paris, February 28, 1993,
Ecole Polytechnique,

Nicolas PIOCH.

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