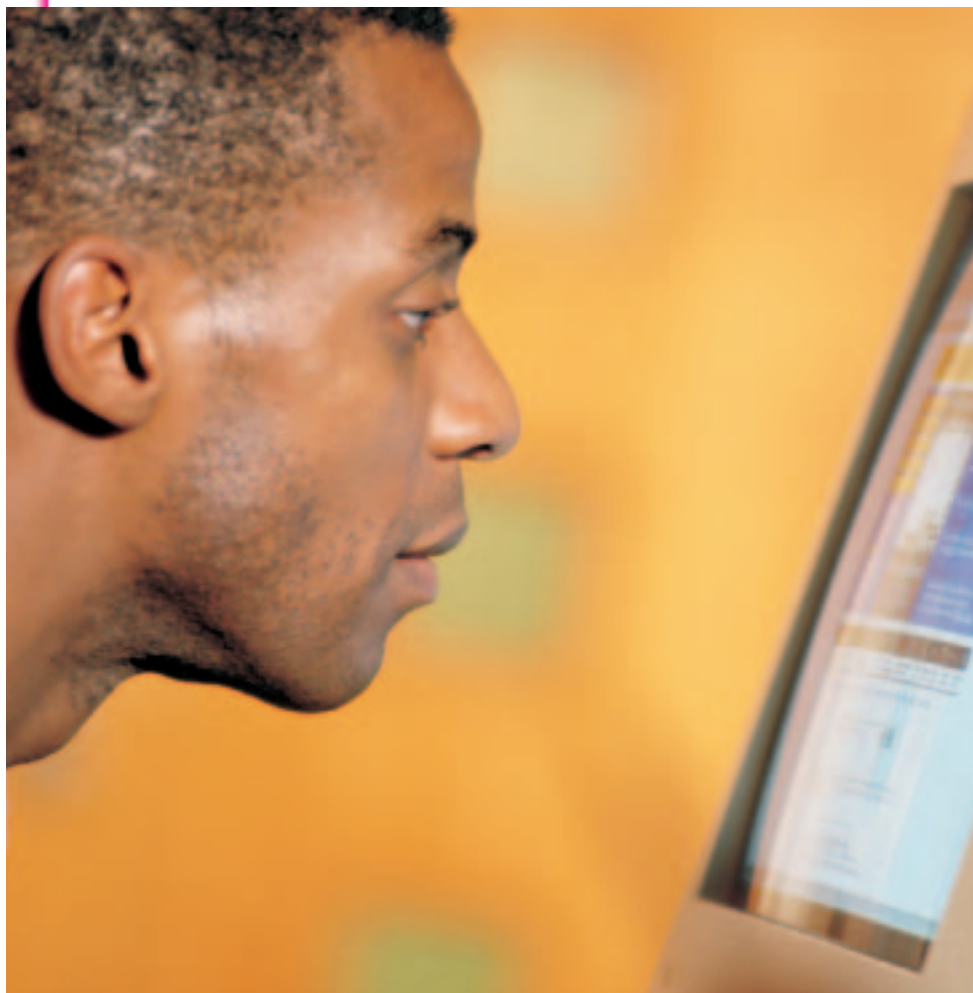


At home in the IRC

X-CHAT

HANS-GEORG ESSER



Internet Relay Chat (IRC) is a world-wide chat system, consisting of a large number of linked chat servers, which any user with the appropriate client software can log onto.

Participants can then meet in chat forums (rooms) and put the world to rights there. X-Chat is an easy-to-use client, which we will be presenting at length in this article.

between the participants, in principle you need no graphics program for this task; with X-Chat, though, chatting is much easier – the mouse helps.

Installation

If X-Chat is not yet installed, there are as usual two ways of getting the program onto your computer:

- As an RPM or Debian packet it is played in by the `root` system administrator with the usual commands (`rpm -i xchat-1.6.2-1.i586.rpm` or `dpkg -i xchat_1.4.3-0.1.deb`).
- If it is in the form of a source packet, the usual three-step installation `.configure; make; make install` takes place (see *Installation from sources* boxout).

Speak my language

X-Chat uses the Gtk library and (like all GNOME programs) can be used with various languages in menus and dialogs by setting the environmental variable `$LANG`.

Please note that setting the variable via the start file only comes into effect when you have restarted the shell (or the terminal program), for example with `..bashrc` or `xterm &`.

There are lots of ways to go astray in a chat forum (in IRC-talk: on a **Channel**), because IRC offers this kind of conversation channel on all conceivable topics. Do you have a question about Linux kernel compilation or would you like to talk about the latest concert by your favourite group? Simply look for the appropriate IRC channel, and there you will meet other people with the same interests.

Since, when chatting, only text is transmitted

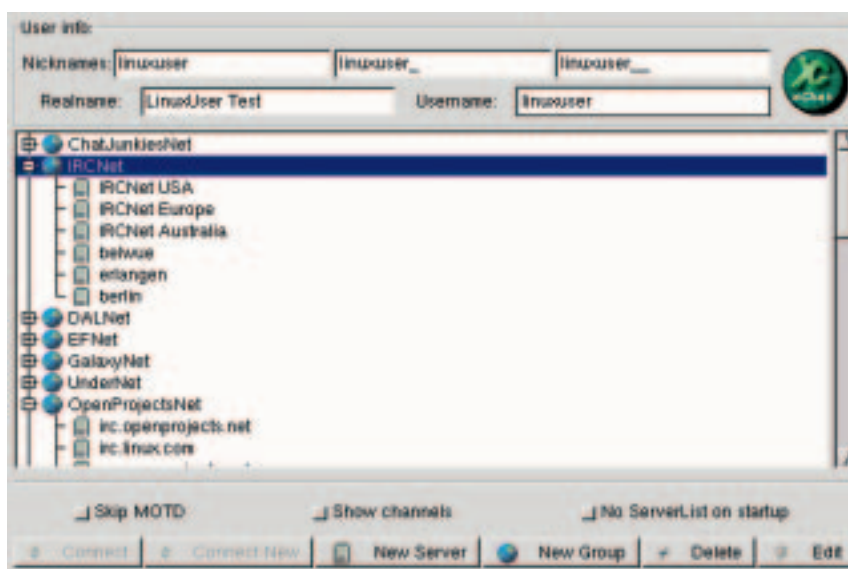
Channel: *A channel in the IRC is a discussion forum, which you can join with the command `ljoin #channel`. Everything you write in the input line after joining the channel appears not only in front of you, but is also visible to all the other users who are on this channel. So it's possible to have a conversation with a very large circle of people.*

First contact: Making the connection

Before making contact with other chatters, there first has to be a connection between your chat program and one of the IRC servers on the Internet. For this purpose, at every program start a window opens immediately with a selection of these servers and the option of selecting your own so-called **Nickname**. X-Chat's server list is divided up by networks here; a few of these networks are IRCnet, UnderNet and OtherNet. Click in the server list on the plus sign in front of one of the networks to display the associated server. By double-clicking on one of the servers, X-Chat now makes a connection to this IRC server – the window with the server list is closed, and all you see now is the actual chat window.

IRCnet is the classic; in most cases you will therefore want to connect to one of the IRCnet servers. None of the servers specified in the list of X-Chat under *IRCNet* are unfortunately reachable any more, however you can always try any of the following:

- *lineone.uk.eu.dal.net*
- *chat.btinternet.com*
- *irc.u-net.com*
- *eris.bt.net*
- *chat.bt.net*
- *irc.warwick.ac.uk*
- *ircnet.demon.co.uk*
- *irc.easynet.co.uk*
- *irc.netcom.net.uk*



If you want to add additional servers, click on the *New Server* button (this whole mask has obviously not been localised) and under *Server* and *Port*, enter the address of the IRC server. The port is usually 6667, which is why X-Chat also sets this as default; but the value can differ. Under *Name* state what the new server is to be called in the list.

Figure 1: Selecting the IRC server - the pre-defined entries for the IRCnet do not work; instead, use *lineone.uk.eu.dal.net*, *chat.btinternet.com*, *irc.u-net.com*, *eris.bt.net* or *chat.bt.net*

Which channels?

Using the command

```
/LIST
```

It is possible at any time to call up a list of all open (and visible) channels on the IRC server, although in

Installation from sources

In order to compile and install X-Chat yourself from the source texts, proceed as follows: Change to the directory */usr/local/src/*, where you can turn into the root system administrator (with the command *su*) and unpack the source text archive with the command

```
tar xIf /cdrom/LinuxUser/xchat/xchat-1.6.2.tar.bz2
```

Then change to the new subdirectory *xchat-1.6.2* and there execute the command

```
./configure
```

configure is a script which searches your system for existing compilers, libraries and other things necessary to the creation of the executable X-Chat program. At the end of the script execution, a summary appears in the form

```
xchat 1.6.2
Building interfaces: GTK+ TEXT
gnome-libs ..... : yes 1.2.0
gnome panel ..... : no
zvt shell tab ..... : yes
gdk-pixbuf..... : yes
perl ..... : yes
```

```
python ..... : yes 1.5
plugin interface ... : yes
link with socks5 ... : no
link with openssl ... : no
nls/gettext ..... : yes
translation tables... : yes
glib replace ..... : no
hebrew support ..... : no
The binary will be installed in /usr/bin
configure complete, now type 'make' and pray.
```

As you can now see from the last line the next step is to enter

```
make
```

This step will take somewhat longer: The program source texts are now being compiled. If this has gone through without any error message, you should now enter

```
make install
```

to copy all the program files into the right directories. That completes the installation, and you can leave and delete the directory *xchat-1.6.2*:

```
cd .. ; rm -rf xchat-1.6.2
```

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Nick(name): This is issued only once per IRC server. When starting X-Chat the program offers you your login name from your own computer. If the name has already been taken by another user, the next option is to add an underscore, etc. You can of course modify and adapt the entries as you wish. In most cases these nicknames must not exceed nine characters in length.

larger networks this is so long that X-Chat takes several minutes to download and display it – and nor is the listing especially informative. What is more interesting, though, is the use of a search function, such as the one offered for the IRCnet by the site <http://www.ludd.luth.se/irc/list.html>. Figure 3 shows the results from a query using the search term `#*linux*`: the current Channel topic is displayed next to the channel name. In the IRCnet you will always find Linux users on the channel `#linux`

Before you get stuck in, maybe you should start with a few tests: Think up the name of a channel

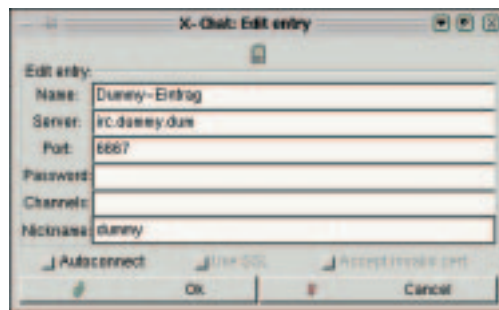


Figure 2: Entering new servers

which definitely does not exist, such as a combination of your forename and surname... in the input line, enter

```
/join #forename.surname
```

channel names always begin with “#” and may include a few special characters such as “.”, “-”, “+”, “/” etc. Spaces and quotation marks are not allowed.

So now you are (alone) on your test channel. X-Chat displays all users who are on the channel in the right hand column – in this case, therefore, just your own nickname. To the left of your nickname you will see a green spot: This indicates that you are the operator, “Op” for short, on the channel. Channel-ops have certain special rights, some of which you can try out now.

As a rule, every user has the right to write in the channel. Try it: Type a line of text in (which must not begin with a slash “/”), and press [Return], to send off the line. The text then appears in the black area, and your nickname is placed before your line in pointed brackets, like so:

```
<linuxuser> A little test
```



Figure 3: Searching for Linux channels

If there were more users on this channel, then the line would also be displayed to them in the IRC program, and they could reply to your contribution. If you want to express an action, such as the fact that you are about to leave the channel or think something over, then you can use the IRC command */me*. Enter something like */me is writing an article*, and it will appear as

```
* linuxuser is writing an article
```

The asterisk expresses an action; other IRC programs may show this slightly differently. BitchX for example also mentions (unless configured otherwise) the channel name.

Private query

If you shy away from the openness of a channel, you can also meet another user of IRC in the so-called 'query': If you know the nickname of the desired conversational partner, simply enter

```
/query nickname
```

and a new tab will open. This is not a channel, but a one-to-one conversation: No-one can listen to you here, unless someone is eavesdropping on the connection to the IRC server...

Op is top!

A lot of fuss is made in the IRC about op status: As *Channel Operator* you have certain special rights compared with non-privileged users on the channel; this is comparable to the *root* account on your Linux system. As op you have, among other things, the following options:

- You can set a topic, such as specify a theme for the channel. The topic then appears in the top line (right under the menu line). The command is

```
/topic title
```

- You can make other users on the channel into op or take away their op status; the commands for this are

```
/op nickname  
/deop nickname
```

- Troublemakers can be kicked off the channel (literally: leave the room). Since something like this should not be done without good reason, you can announce any message you like when throwing out a user, which he then receives as a kick message.

```
/kick nickname reason
```

The kick reason can contain several words and does not have to be in special brackets or quotation marks. For example: */kick*

idiot28 Let's have some peace. After a kick the user can come back onto the channel, which is why kicks are usually only in the nature of a warning; sometimes, too, one comes across ops who like to kick people out just for 'fun'.

- If you are really feeling hassled, you can also ban someone. To do this, use the command

```
/ban nickname
```

You will receive a confirmation in the form

```
Linuxuser sets ban on *!*@192.168.1.*
```

What has happened here? A so-called **Hostmask** is being used here, which is entered in the ban list of

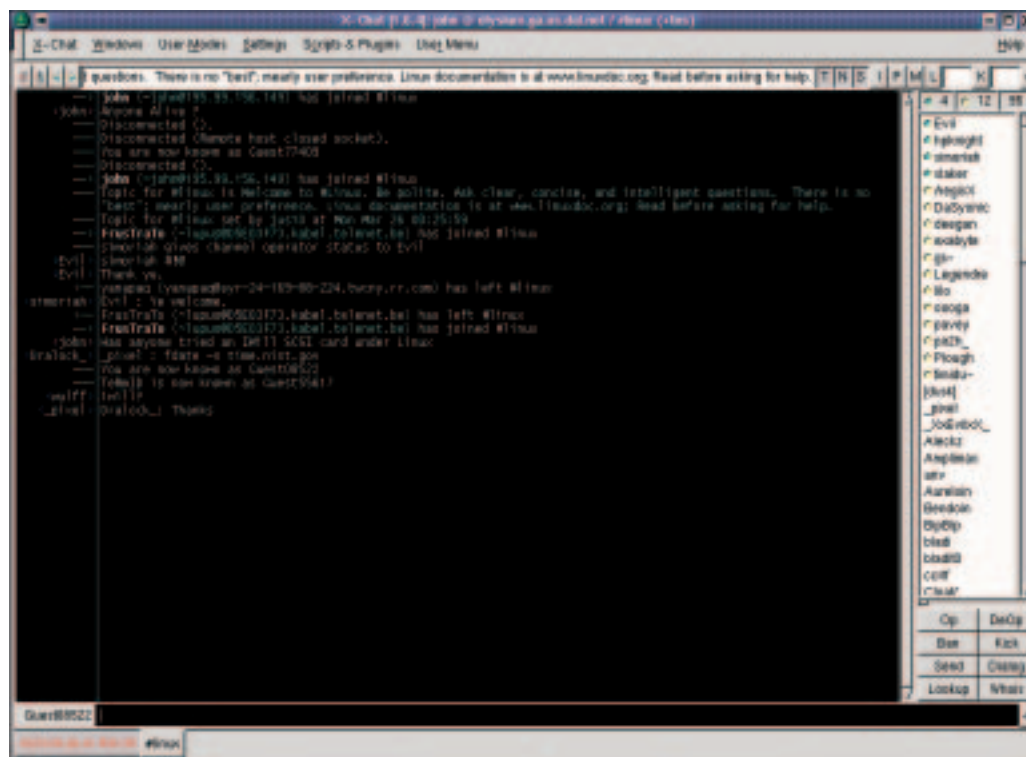


Figure 4: Chatting in the channel. Black background: the actual chat zone; right column: Display of nicknames on this channel; below: text input and tabs for selection of channel or query

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the channel. To ban the user permanently, X-Chat proceeds in a very rigid fashion here: Assuming that the troublemaker has been recognised by the IRC system as *idiot@192.168.1.26*, all users with any username whatsoever (* after the !) and any nickname whatsoever (* before the !) are barred, who are on line via a computer whose IP address matches the first three parts – so in this case 192.168.1.1 to 192.168.1.254. This ensures that the user cannot simply change his nickname or change his user name in his IRC program. To lift a ban, in some versions of X-Chat there is the command */unban*, but not in the latest one. As a matter of fact */ban* is really just a macro: X-Chat evaluates this and (in the above example) sends the following command to the IRC-Server:

```
/mode #channel +b *!*@192.168.1.*
```

To cut a long story short: */mode* is a very general command, with which various modes (operating methods) of the channel can be set. This stipulates that a new ban (+b) should be entered into the ban list. This can be revoked with *-b*:

```
/mode #channel -b *!*@192.168.1.*
```

You can take a look at the current ban list with the (obvious) command */banlist*.

- As a rule a ban is always accompanied by a kick: The combination of the two commands in X-Chat is called a */kickban* and is called up in exactly the same way as */kick*:

```
/kickban nickname reason
```

In this case the ban is executed before the kick, since a fast IRC client, which is set to **Auto-Rejoin**, would otherwise immediately bring the user back onto the channel – even before the ban came into effect.

Hostmask: *The hostmask serves to identify an IRC user. Obviously the nickname is little suited to this, as this can be changed with a simple Inick abcde... at any time into any currently unused nickname. Therefore the IP address (or if recognisable the non-numeric name) of the computer and the username used there are used as well. A Hostmask looks like an extended email address and has the structure*

```
nick!user@host
```

Asterisks () can be used here, which have the same meaning as in file names: They stand for any character. So something like *!*esser@*.linuxmagazine.co.uk stands for users with any nickname, a log-in name ending in *esser*, and a computer name which belongs to the domain *linuxmagazine.co.uk*. In the case of numeric IP addresses the asterisk comes last, as with these the first parts of the address are identical if there are several computers on a network.*

Auto-Rejoin: *Many IRC programs can be configured in such a way that after a kick one can return to the channel immediately. This is known as auto-rejoin and is selected in X-Chat via the menu item Usermodes/Auto Rejoin after kick. On many channels there are **Bots**, which react to this behaviour and reward every auto-rejoin with a ban for several minutes.*

Bot: *A bot, short for robot, is a program which logs in like a normal user to the IRC, usually obtains channel op-privileges and then oversees compliance with certain rules on this channel (or in the simplest case just gives its owner op-status, when he comes onto the channel). The bot program Eggdrop is very popular. Be careful: Many networks do not allow the implementation of bots. So you should check first whether you are allowed to use a bot, if you are playing with this idea. The configuration of an Eggdrop does, however, require advanced knowledge and is also really only useful if you have a permanent Internet connection (dedicated line; not flat rate, where the connection is regularly broken).*

DCC: *Direct Client to Client is a special protocol which was developed for IRC clients. This can be used to get round a few restrictions to which IRC is subject. DCC uses the TCP connection (Transmission Control Protocol) to transfer data between two clients. Data packets can be sent and received in this way at the maximum possible rate. There are two different ways to make intelligent use of DCC: *Idcc chat nickname* and *Idcc send nickname file*. One of the two parties involved has to submit an offer, such as *Idcc chat nickname*. The other party receives a message with information about the user, his IP number and a port number and can now make the connection using the command *Idcc chat other_nickname*. The advantage of this is that the connection is now no longer running via the IRC server, there are none of the minor hesitations caused by the server, and the transmission continues after leaving a server. You can leave the DCC with the command *Idcc close chat other_nickname*. The commands for transferring files are similar: *Idcc send nickname file*, make a connection with *Idcc get other_nickname*.*

Login, logout? Log it all!??

One interesting feature of X-Chat is that you can make logfiles. This is deselected by default and can be selected using the menu item *Settings/Settings/IRC/Logbooks*: To do so, click on the dialog in the *Logbooks* boxout. Under *Mask for logbooks* enter how the filenames of the logfiles are to be constructed. The pre-set here is "%s,%c.xchatlog" – when using the IRC server *chat.bt.net* (which logs on using the name "bt.net") you will then receive logfiles in the form *bt.net,#channel.xchatlog* for channel logs and *bt.net,nickname.xchatlog* for the logs of private dialogs (queries or **DCC** chats).

All logfiles are stored in the directory *~/xchat/xchatlogs/*, which is not made until a first logfile is created. But when using logfiles be aware that your partner in conversation may not appreciate it if you record everything: Apart from potential legal considerations (data protection) it is also a question of courtesy, to ask for permission before logging.

The window on the world of IRC...

Behind the *Window* menu there are some additional functions hidden, the value of which you may only appreciate when you have worked with X-Chat for some time.

- The *URL grabber window* contains all URLs, email addresses or names of other IRC servers which have been given by other participants – addresses named by you do not end up in here. With this feature, you therefore have no need to scramble to save the sources of data mentioned by the other party in URL form via copy and paste, but after the conversation you simply switch over to

the URL grabber window and there select Save to keep the URL list.

- Using the Raw Log window (unformatted log) you can see what communication is actually taking place between X-Chat and the IRC-Server – practical, when something unexpected happens or you would simply like to take a peek behind the scenes.
- The Notify and Ignore windows help you to configure lists with nicknames, about whose logging on and off you wish to be informed, or whose messages you no longer wish to read. There are a large number of options for adaptation of the last point. So it is possible to prohibit just private messages to you, or you can completely screen out a user and thereby also no longer see any messages which they write in the channel.

Documentation

The documentation supplied with the X-Chat sources is still at the 1999 stage and identifies itself



as belong to X-Chat 1.2. The HTML files are located, after unpacking the program sources, in the subdirectory `doc`, when installing the RPM packet in `/usr/doc/xchat-1.6.2` and with the Debian packet, in `/usr/doc/xchat/html`.

The next article will be about IRC clients for the command line, especially BitchX, a really easy-to-use representative of this category. ■

Figure 5: The URL grabber remembers all the URLs mentioned by other parties in the conversation

Configuration files

X-Chat stores the user-specific configuration files in the subdirectory `.xchat/` of your home directory, where you will find the following files:

- `buttons.conf` contains the functions assigned to the buttons displayed in the right hand part of a channel window (under the information zone).
- `commands.conf` contains user-defined IRC commands: for example, the command `/chat` is defined here as an abbreviation for `/dcc chat`.
- `ctcpreply.conf` specifies the answers which X-Chat should give when it receives a CTCP signal from other IRC programs (CTCP = Client To Client Protocol).
- `ignore.conf` contains your own personal Ignore lists: These are the entries for other IRC users whose personal messages or postings on the channel you no longer wish to see. The entries are made using `/ignore mask`.
- `keybindings.conf` defines key combinations; it is easiest to change these settings in X-Chat itself.
- `notify.conf` contains all the entries from users about whose joining or leaving of the IRC network you wish to be informed. If a user listed here logs on to the IRC, you receive a message in the form `Notify: user is online (Server)`. New Notify-entries are made using the command `/notify nickname`, but cannot be removed in this way – to remove them select the menu item `Windows/Notify window`, there select the entry to be removed and click on `Remove`.
- `palette.conf` saves the colour settings.
- `events.conf` saves the formulations by which X-Chat informs you about events.
- In `popup.conf` you can define which menu items the context menu contains, which you obtain by a right mouse click on an entry in the user list.
- `replace.conf` contains the automatic replacements; pre-sets here are just `teh/the`, `rlare` and `ulyou` – these have been specially set up for the English language.
- `serverlist.conf`: In this file, X-Chat stores the server definitions – apart from server name and port the nickname to be used on this server, any password, the **Flags** to be set and all channels which are to be entered automatically are stored.
- `urlhandlers.conf`: X-Chat recognises standard URLs of the form `http://www....`, `ftp://ftp....` or `name@computer` – here, too, programs can be configured, which are to be started when such a URL is clicked on.
- `usermenu.conf` defines the entries in the User Menu in the menu list.
- `xchat.conf` is the main configuration file – here, among other things, your user data (real name, standard nickname) are stored.

Flag: Special properties or attributes which can be set for a channel or nickname. If the channel-op executes the command `/mode #channel +i` (invite only), only users can come onto the channel who have been invited to do so by the Op with `/invite nickname`. This `+i` flag can also be set for your own nickname: `/mode nickname +i` – in this case it stands for 'invisible'. This means you are now only 'visible' for participants who know your nickname precisely.

Info

X-Chat homepage:
<http://www.xchat.org>
 Info about IRC (incl. FAQ):
<http://www.irchelp.org>