Linux IRC mini−HOWTO

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Revision History

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This document aims to describe the basics of IRC and respective applications for Linux.

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1. Introduction

This document is still WIP, and should be treated as such. I'll do my best to keep it updated and accurate.

The following bibles shouldn't be ignored:

- RFC1459 by Jarkko Oikarinen and Darren Reed was the first about the Internet Relay Chat Protocol. It can be found at http://ftp.isi.edu/in−notes/rfc1459.txt.
- RFC2811 by Christophe Kalt updates RFC1459 and describes the Channel Management of the Internet Relay Chat. It can be found at http://ftp.isi.edu/in−notes/rfc2811.txt.
- RFC2812 by Christophe Kalt updates RFC1459 and describes the Client Protocol of the Internet Relay Chat. It can be found at http://ftp.isi.edu/in−notes/rfc2812.txt.
- RFC2813 by Christophe Kalt updates RFC1459 and describes the Server Protocol of the Internet Relay Chat. It can be found at http://ftp.isi.edu/in−notes/rfc2813.txt.

Also be sure to check the following links:

http://www.irchelp.org/.

1.1. Objectives

Among others, the objectives of this mini−HOWTO are:

- Link important resources about IRC;
- Avoid common misuses of IRC by writing an IRC Etiquette;
- List popular clients, servers, bots, and bouncers, along with their maintainers, #channel, small description, download location, homepage, and hints;
- List IRC tools available in the latest release of all major distributions.

1.2. Miscellaneous

The latest version of this document is available at http://www.pervalidus.net/docs/IRC−mini−HOWTO/.

A WIP of the next draft may be available at http://www.pervalidus.net/docs/IRC−mini−HOWTO/WIP/.

All drafts are archived at http://www.pervalidus.net/docs/IRC−mini−HOWTO/old/.

You can e−mail me (in English, French, or Portuguese) with suggestions about the mini−HOWTO. I know this is far from finished, but hope you find it useful. Just don't ask me to add your application or site. Most likely I won't. Also don't ask for technical support. I have no time to help everyone.

BTW, someone to work on the protocol and server sides would be very welcome to join the project.

Frédéric L. W. Meunier (`<linuxdoc @ pervalidus.net>`)

1.3. Translations

Proposed translations will be linked here. Although I can write in Brazilian Portuguese and French, I'm not going to translate this document in the near future, so feel free to make them.

2. About IRC

Excerpt from RFC2810:

The IRC (Internet Relay Chat) protocol is for use with text based conferencing. It has been developed since 1989 when it was originally implemented as a mean for users on a BBS to chat amongst themselves.

First formally documented in May 1993 by RFC 1459 [IRC], the protocol has kept evolving.

The IRC Protocol is based on the client−server model, and is well suited to running on many machines in a distributed fashion. A typical setup involves a single process (the server) forming a central point for clients (or other servers) to connect to, performing the required message delivery/multiplexing and other functions.

This distributed model, which requires each server to have a copy of the global state information, is still the most flagrant problem of the protocol as it is a serious handicap, which limits the maximum size a network can reach. If the existing networks have been able keep growing at an incredible pace, we must thank hardware manufacturers for giving us ever more powerful systems.

3. Beginner's guide on using IRC

The standard IRC client is the original ircII client. It's part of most Linux distributions.

3.1. Running the ircII program

It's easy to use ircII. Let's say you want to connect to irc.openprojects.net as mini−HOWTO.

At the command line, type:

$ irc mini−HOWTO irc.openprojects.net

You can also export variables, so you won't need to use them at the command line:

$ export IRCNICK=mini−HOWTO IRCSERVER=irc.openprojects.net

Add them to your shell profile (e.g. ~/.bash_profile or ~/.zprofile) when you're done.

Other common variables are IRCNAME and IRCUSER, to respectively set the ircname part of a /whois and username as seen at the first line 'mini−HOWTO is ~username@hostname (ircname)'. Keep in mind that IRCUSER won't work if you run an ident daemon (default on most distributions). If you still need to change your username (not recommended, and I hope you're not using IRC logged as root !), install oidentd from http://ojnk.sourceforge.net/, create /etc/identd.spoof with a list of users allowed to spoof their ident, and ~/.ispoof with their reply (e.g. reply). Finally run '/usr/local/sbin/oidentd −g nobody −N −s −u nobody'. Add this to your startup scripts (e.g. /etc/rc.d/rc.local) when you're done.

If not set, IRCNICK, IRCUSER, and IRCNAME will be retrieved from /etc/passwd .

3.2. Commands

Use /help to get a list on all available commands (/help help is a good start). Replace *nick* by any IRCNICK.

- First, /set NOVICE off
- /nick IRC−mini−HOWTO changes your IRCNICK to *IRC−mini−HOWTO*
- /set realname The Linux IRC mini−HOWTO changes your IRCNAME to *The Linux IRC mini−HOWTO* (doesn't change on the same connection)
- /j #LinPeople joins channel *#LinPeople*
- /j #Slackware joins channel *#Slackware*
- /j #LinPeople changes the active current channel to *#LinPeople*
- /msg *nick* Hi. sends a private message to *nick* containing *Hi.*
- /notice *nick* (or #LinPeople) Hi. sends a notice to *nick* (or #LinPeople) containing *Hi.*
- /query *nick* starts a private conversation with *nick*. /query ends the private conversation
- /me loves *Linux.* sends an action to the current channel or query containing *IRC−mini−HOWTO loves Linux.*
- /dcc chat *nick* starts a chat with *nick*. Use /msg =*nick* (notice the =) to send messages over the chat
- /dcc send *nick* /etc/HOSTNAME sends the given file to *nick*

- /dcc get *nick* receives the file offered by *nick*
- /part leaves the active current channel
- /part #Slackware leaves channel #Slackware
- /discon disconnects from current IRCSERVER
- /server irc.dal.net connects to IRCSERVER irc.dal.net
- /quit Bye. quits your IRC session with a reason *Bye.*

3.3. IRC Etiquette

WARNING WARNING WARNING WARNING WARNING

- Never use IRC logged as root or any user with excessive privileges. Bad things may happen sooner or later. You were warned. It's safe if you create 2 users, one of them to only use IRC.

$ man adduser

On Linux channels you shouldn't:

- Act as an idiot. If you want to be respected, then first respect each other.
- Use colors (^C). Most Linux users don't tolerate such mIRC crazes, and ircII doesn't really support them. The same should apply for ANSI.
- Use full CAPS, bold (^B), reverse (^V), underline (^_), blink (^F), and bell (^G). The first 4 are here to emphasize words, not the whole text. The last 2 are just very annoying.
- Ask if you can ask a question. Just ask, but first read all documentation available on the subject. Start looking at /usr/doc/ , otherwise go to http://www.linuxdoc.org/ or http://www.ibiblio.org/pub/Linux/docs/. And don't repeat your question immediately. Wait at least 10 minutes. If you don't get any answer it's because nobody knows or wants to help. Respect their choice, they're not your personal assistant. Also never send mass private messages. It's like SPAM.

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4. Console IRC Clients

4.1. ircII

Maintainer: ircII project (`<ircii @ eterna.com.au>`)

IRC Channel: #ircII (official channel ?) on EFNet

Originally written by Michael Sandrof, ircII comes with most Linux distributions. It uses termcap and shouldn't be a choice for most users, but is a standard. Mathusalem and other gurus will use it. Less ventured will regret to have it installed.

You can get the latest version of ircII from ftp://ircftp.au.eterna.com.au/pub/ircII/. Homepage at http://www.eterna.com.au/ircii/.

4.2. EPIC

Maintainer: EPIC Software Labs (`<ircii-epic @ concentric.net>`)

IRC Channel: #EPIC on EFNet

Based on ircII, EPIC (Enhanced Programmable ircII Client) is meant for real scripters and users searching freedom. When you start it for the first time you'll notice that you should really learn the basics of scripting.

You can get the latest version of EPIC from ftp://ftp.epicsol.org/pub/epic/. Homepage at http://www.epicsol.org/.

4.3. BitchX

Maintainer: Colten Edwards (`<edwards @ bitchx.dimension6.com>`)

IRC Channel: #BitchX on EFNet

Based on ircII and EPIC, BitchX could be compared to the Pine MUA. Bloatware (doesn't mean you shouldn't use it) and widely used. The choice for users that want a client with built−in facilities. It can be built with the GNOME libraries by using the configure option −−with−gtk. Don't be surprised if all you get is a XTerm−BitchX instead.

You can get the latest version of BitchX from ftp://ftp.bitchx.com/pub/BitchX/source/. Homepage at http://www.bitchx.com/. Homepage of gtkBitchX at http://www.bitchx.org/gtk/.

4.4. irssi

Maintainer: Timo Sirainen (`<tss @ iki.fi>`)

IRC Channel: #irssi on OPN and IRCnet

Timo released yagIRC ~3 years ago. It was a GUI client using the GTK+ toolkit. The army called on him, and the new maintainers wouldn't do the job. yagIRC passed away and he started irssi as a replacement. It used GTK+. GNOME and curses versions would appear later. As of 0.7.90 it's only a modular text mode client. Supports Perl scripting.

You can get the latest version of irssi from http://irssi.org/?page=download. Homepage at http://irssi.org/.

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5. X Window IRC Clients

5.1. Zircon

Maintainer: Lindsay F. Marshall (<`Lindsay.Marshall @ ncl.ac.uk`>)

IRC Channel: None ?

Written in Tcl/Tk, uses the native network communications of Tcl.

You can get the latest version of Zircon from ftp://catless.ncl.ac.uk/pub/. Homepage at http://catless.ncl.ac.uk/Programs/Zircon/.

5.2. Sula PrimeriX II

Maintainer: Tano Fotang (<`fotang @ yahoo.com`>)

IRC Channel: None ?

Uses GTK+ or XForms, and Guile.

You can get the latest version of Sula PrimeriX II from http://spx.linuxatwork.at/#where−to−get−it. Homepage at http://spx.linuxatwork.at/.

5.3. xIrc

Maintainer: Robert Borrell (<`borrell @ pobox.com`>)

IRC Channel: None ?

Using the Qt toolkit, xIrc is less featured than KVIrc. As an advantage, it's faster.

You can get the latest version of xIrc from http://www.linuxlots.com/~xirc/download.html. Homepage at http://www.linuxlots.com/~xirc/.

5.4. KVIrc

Maintainer: Szymon Stefanek (<`stefanek @ tin.it`>)

IRC Channel: #KVIrc on OPN

Also written with the Qt toolkit, KVIrc is a beast. Supports DCC Voice, built−in scripting language, and plugins.

You can get the latest version of KVIrc from http://www.kvirc.net/download.html. Homepage at http://www.kvirc.net/.

5.5. X−Chat

Maintainer: Peter Zelezny (`<zed @ linux.com>`)

IRC Channel: #Linux on ChatJunkies

Using GTK+ and optionally GNOME, supports Perl and Python scripting.

You can get the latest version of X−Chat from http://xchat.org/download.html. Homepage at http://xchat.org/.

5.6. QuIRC

Maintainer: Patrick Earl (`<quirc @ patearl.net>`)

IRC Channel: #QuIRC on DALnet

Using Tk, supports Tcl for scripting.

You can get the latest version of QuIRC from his Homepage at http://quirc.org/.

6. IRC Servers

6.1. IRCD

Maintainer: ircd developers(`<ircd-dev @ irc.org>`)

IRC Channel: #ircd on IRCnet

The original IRC daemon, mainly used by IRCnet.

You can get the latest version of IRCD from ftp://ftp.irc.org/irc/server/. Homepage at http://www.irc.org/.

6.2. IRCD−Hybrid

Maintainer: (`<ircd-hybrid @ the-project.org>`)

IRC Channel: None ?

Mainly used by EFNet.

You can get the latest version of IRCD−Hybrid from ftp://ftp.blackened.com/pub/irc/hybrid/. Homepage at http://www.ircd−hybrid.net/.

6.3. ircu

Maintainer: Undernet Coder Committee (`<coder-com @ undernet.org>`)

IRC Channel: #ircu on Undernet

Mainly used by Undernet.

You can get the latest version of ircu from ftp://ftp.coder−com.undernet.org/ircu/. Homepage at http://coder−com.undernet.org/.

6.4. Bahamut

Maintainer: DALnet Coding Team (`<bahamut @ bahamut.net>`)

IRC Channel: #Bahamut on DALnet

Based on DreamForge and Hybrid, Bahamut is the DALnet server.

You can get the latest version of Bahamut from http://bahamut.dal.net/download/. Homepage at http://bahamut.dal.net/.

7. IRC Bots

7.1. eggdrop

Maintainer: (`<eggdev @ eggheads.org>`)

IRC Channel: #eggdrop on Undernet

eggdrop is the most known Tcl enabled application on the Net. It's a channel robot for IRC that can be tailored to any situation.

You can get the latest version of eggdrop from ftp://ftp.eggheads.org/pub/eggdrop/source/. Homepage at http://www.eggheads.org/.

8. IRC Bouncers (IRC Proxy)

8.1. bnc

Maintainer: None ?

IRC Channel: None ?

bnc is the original bouncer.

You can get the latest version of bnc from LinuxBerg.

8.2. muh

Maintainer: Sebastian Kienzl (`<zap @ riot.org>`)

IRC Channel: None ?

muh is a smart and versatile irc−bouncing tool that will also go on IRC as soon as it's launched, guarding or attempting to get your nick.

You can get the latest version of muh from http://mind.riot.org/muh/download.rt. Homepage at http://mind.riot.org/muh/.

8.3. ezbounce

Maintainer: Murat Deligönül (`<druglord @ freelsd.org>`)

IRC Channel: None ?

ezbounce's basic features include password protection, remote administration, logging and listening on multiple ports.

You can get the latest version of ezbounce from his Homepage at http://druglord.freelsd.org/ezbounce/.

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9. Installation

9.1. Clients

All popular clients use *GNU* autoconf and *GNU* automake, thus come with a configure script. Read the installation instructions after you unpack the sources. Be sure you have the required libraries in order to build. Doing cd sources;mkdir objdir;cd objdir; ../configure −−help;../configure *your_options_here*;make;make install (or make install_strip) > ~/sources_install.log is the right procedure. Also note that for ircII, EPIC, and BitchX you should really edit include/config.h to suit your needs.

9.2. Servers

Do you really need help to set up a server ?

~$ vim ircd.conf

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10. But what's already included in my distribution ? (Linux on x86)

10.1. Debian

IRC Channel: #Debian on OPN

Debian includes too many IRC tools to list. You can find them at the following places:

- Debian stable.
- Debian unstable (didn't receive enough testing).
- Also be sure to check the proposed updates. It may have IRC clients as well.
- Debian non−free (applications with a restrictive license) contains cIRCus.

10.2. RedHat

IRC Channel: #RedHat on OPN (not official)

RedHat 7.1 includes the following clients:

- ircII 4.4Z.
- KSirc from KDE Network 2.1.1.
- X−Chat 1.6.3.

- RedHat Powertools (what's worth but they don't want to include or can't) 7.1 includes the following clients:
- BitchX and gtkBitchX 1.0c17.
- EPIC4 2000.
- KVIrc 2.1.0.
- tkIRC 2.43.

- RedHat RawHide (current development)
- ftp://rawhide.redhat.com/pub/redhat/linux/rawhide/. Use at your own risk.

10.3. Slackware

IRC Channel: #Slackware on OPN

Slackware 8.0 includes the following clients:

- BitchX 1.0c18
- EPIC4 1.0.1
- KSirc from KDE Network 2.1.1.
- X−Chat 1.6.4.

* Slackware −current (current development)
* ftp://ftp.slackware.com/pub/slackware/slackware−current/. Use at your own risk.

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11. Hell and Paradise

11.1. Gods

- Thanks to all authors. Without their hard and volunteer work I'd never write it, and we'd never get our hands on Linux (and IRC).

11.2. Saints

- Put your name here.

11.3. Angels

- Put your name here.

11.4. Devils

- Khaled Mardam−Bey must be stopped *:)*
- 'If idiots could fly, IRC would be an airport'. I don't know who wrote that, but it makes sense. For those of you using IRC to annoy and piss off I ordered a /kill for Christmas.

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12. Revision History

- 20010701 – v0.2, third draft