

# **Freetalk version 4.1**

---

User/Developers guide, 24 November 2016

**Harshavardhana** [harsha@harshavardhana.net](mailto:harsha@harshavardhana.net)

---

Copyright © 2005-2014 Freetalk Core Team

This is the first edition of the Freetalk documentation.

Permission is granted to make and distribute verbatim copies of this manual provided the copyright notice and this permission notice are preserved on all copies.

Permission is granted to copy and distribute modified versions of this manual under the conditions for verbatim copying, provided that the entire resulting derived work is distributed under the terms of a permission notice identical to this one.

Permission is granted to copy and distribute translations of this manual into another language, under the above conditions for modified versions, except that this permission notice may be stated in a translation approved by the Free Software Foundation.

# Table of Contents

<b>Freetalk! 4.1</b> .....	<b>1</b>
<b>1 Overview</b> .....	<b>2</b>
<b>2 Invoking</b> .....	<b>3</b>
<b>3 Freetalk commands</b> .....	<b>4</b>
3.1 Freetalk command - connect .....	4
3.2 Freetalk command - disconnect .....	4
3.3 Freetalk command - server .....	4
3.4 Freetalk command - jid .....	4
3.5 Freetalk command - add .....	5
3.6 Freetalk command - allow .....	5
3.7 Freetalk command - deny .....	5
3.8 Freetalk command - quit .....	5
3.9 Freetalk command - restart .....	5
3.10 Freetalk command - prompt .....	5
3.11 Freetalk command - pipe .....	6
3.12 Freetalk command - port .....	6
3.13 Freetalk command - shell .....	6
3.14 Freetalk command - date .....	6
3.15 Freetalk command - who .....	6
3.16 Freetalk command - status .....	7
3.17 Freetalk command - whoami .....	7
3.18 Freetalk command - version .....	7
3.19 Freetalk command - logout .....	7
3.20 Freetalk command - history .....	8
3.21 Freetalk command - load .....	8
3.22 Freetalk command - setup .....	8
3.23 Freetalk command - login .....	9
3.24 Freetalk command - help .....	9
3.25 Freetalk command - repl .....	9
3.26 Freetalk command - urlview .....	9
3.27 Freetalk command - freetalk .....	10
3.28 Freetalk command - greet .....	10
3.29 Freetalk command - burst .....	10
3.30 Freetalk command - burst-of-romance .....	10
3.31 Freetalk command - broadcast .....	11
3.32 Freetalk command - proxyserver .....	11
3.33 Freetalk command - proxyport .....	11

<b>4</b>	<b>Customizing freetalk</b> .....	<b>12</b>
4.1	freetalk.scm .....	12
4.2	init.scm .....	12
4.3	Default Scheme extensions .....	12
<b>5</b>	<b>Tips and Tricks</b> .....	<b>13</b>
<b>6</b>	<b>Extension language</b> .....	<b>14</b>
<b>7</b>	<b>Variables</b> .....	<b>15</b>
<b>8</b>	<b>Procedures</b> .....	<b>16</b>
8.1	General procedures .....	16
8.2	Configuration procedures .....	17
8.3	Hook related procedures .....	17
8.4	Utility procedures .....	17
<b>9</b>	<b>Hooks</b> .....	<b>18</b>
<b>10</b>	<b>Learning further</b> .....	<b>19</b>
<b>11</b>	<b>Authors</b> .....	<b>20</b>
11.1	Contributors .....	20
11.1.1	Active .....	20
11.1.2	InActive .....	20
11.1.3	Documentation .....	20
11.1.4	Contact/Queries .....	20
<b>12</b>	<b>URLs</b> .....	<b>21</b>
<b>13</b>	<b>Guidelines for submitting a patch</b> .....	<b>22</b>
<b>14</b>	<b>Portability</b> .....	<b>23</b>
14.1	Freetalk License .....	23
14.1.1	Preamble .....	23
14.1.2	TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION .....	24
14.1.3	Appendix: How to Apply These Terms to Your New Programs .....	28
14.2	Freetalk Documentation License .....	29
14.2.1	ADDENDUM: How to use this License for your documents ..	35
	<b>Concept Index</b> .....	<b>36</b>

<b>Command Index .....</b>	<b>37</b>
<b>Procedure Index .....</b>	<b>38</b>

## **Freetalk! 4.1**

This file documents Freetalk version 4.1. Freetalk is a freely available console based Jabber client-cum-bot powered by GNU Guile, GNU Readline and Loudmouth.

# 1 Overview

Freetalk is a freely available console based Jabber client-cum-bot. It has many features, but to highlight,

- Highly extensible through ‘Scheme’ language. (see Chapter 4 [Customization], page 12) (see Chapter 6 [Extension language], page 14)
- Console based client with Readline interface featuring command line editing, history, context sensitive autocompletion etc . . . (see Chapter 5 [Tips and Tricks], page 13).
- Most of the features in Freetalk are fully customizable, either through command line arguments (see Chapter 2 [Invoking], page 3), or startup file (see Section 4.1 [freetalk.scm], page 12)
- With a new concept called ‘dynamic-commands’, a command can appear and disappear dynamically, based on the context.
- `history` feature records all your conversions in `~/.freetalk/history/login-id/buddy-name`.
- Finally, Freetalk is free software. This means that everyone may use it, redistribute it and/or modify it under the terms of the GNU General Public License, as published by the Free Software Foundation (see Section 14.1 [Freetalk License], page 23)

## 2 Invoking

Invoking Freetalk at command prompt is very simple. The following are the possible command-line arguments supported,

freetalk [*options*]

where *options* are,

- `-j=Jabber-id | -jid=Jabber-id`  
*Jabber-id* is your Jabber ID.
- `-s=SCRIPT-FILE | -script=SCRIPT-FILE`  
Invoke script/bot mode with *SCRIPT-FILE* as the source.
- `-V | -version`  
Gives the current version of Freetalk. This option does not accept any argument.
- `-? | -help | -usage`  
Gives a brief help on the above options. This option does not accept any argument.

## 3 Freetalk commands

### 3.1 Freetalk command - connect

`/connect` [command]

Connect to the configured jabber server (see `/server`).

```
~\~/ /connect
Connecting...
~\~/
```

If server is not configured, it displays an error message and stops

```
~\~/ /connect
Server not set
~\~/
```

### 3.2 Freetalk command - disconnect

`/disconnect` [command]

Disconnect from the currently connected server.

```
~\~/ /disconnect
Disconnected from server. Reason (0): User request
~\~/
```

### 3.3 Freetalk command - server

`/server [servername]` [command]

Specify the servername which you want to connect, or display the currently set server.

```
~\~/ /server
Current server:
~\~/ /server jabber.org
~\~/ /server
Current server: jabber.org
~\~/
```

### 3.4 Freetalk command - jid

`/jid [user@domain[/resource]]` [command]

Specify the Jabber ID which you want to use, or display the currently set Jabber ID.

```
~\~/ /jid
Current JID:
~\~/ /jid harsha@jabber.org
~\~/ /jid
Current JID: harsha@jabber.org
```

This command is meant to be used when changing accounts and quick logins.

### 3.5 Freetalk command - add

```
/add user@domain [command]
  This command sends a buddy add request to user@domain into your buddy list.
  ~\~ /add harsha@jabber.org
  ~\~
```

### 3.6 Freetalk command - allow

```
/allow user@domain [command]
  Allow the user to see (“subscribe to”) your status. Note that this command does not
  add the user to your buddy list; if you must do that, use /add.
  ~\~ /allow haddock@marlinspike.org
```

### 3.7 Freetalk command - deny

```
/deny user@domain [command]
  Deny the user permission to see (“subscribe to”) your status.
  ~\~ /deny cacafonix@village.gl
```

### 3.8 Freetalk command - quit

```
/quit message [command]
  Quits Freetalk with a banner.
  ~\~ /quit
  shell$
```

### 3.9 Freetalk command - restart

```
/restart [command]
  This command restarts Freetalk.
  ~\~ /restart
  Loading dictionary [/usr/share/dict/words]... [38619] words
  Jabber ID:
```

### 3.10 Freetalk command - prompt

```
/prompt [type] [command]
  This command sets the prompt with specified type
  ~\~ /prompt ~qp~
  ~qp~
```

### 3.11 Freetalk command - pipe

`/pipe buddy command [options]` [command]

Pipe the output of *command* to *buddy*. *options* are passed to *command*.

```
~\/~> /pipe harsha@jabber.org ls -alh
~\/~>
```

### 3.12 Freetalk command - port

`/port [port]` [command]

`/port` command sets the specified TCP *port* to be used for the next `/connect`.

Example:

```
~\/~> /port 995
~\/~>
```

### 3.13 Freetalk command - shell

`/shell [command] [args ...]` [command]

`/shell` command executes the specified *command* with its *args*. With no arguments, `/shell` escapes to shell. You can also chat with shell as if shell is your buddy. Just type `shell` without `/` prefix.

Example:

```
~\/~> /shell ls -lh /tmp
total 12k
drwxr-xr-x   3 root  root   4.0k Jan  1 00:53 emacs-terminfo
-rw-r--r--   1 root  root    1 Jan  1 05:04 emacs0dVut8
drwx-----  2 root  root   4.0k Jan  1 00:13 xdvi7GIKqr
~\/~> /sh
press C-d to return to freetalk
$ rm -f /tmp/xdvi7GIKqr
C-d RET
~\/~>
```

### 3.14 Freetalk command - date

`/date [arguments]` [command]

This command displays the system date. Try '`--help`' for complete list of *arguments*.

### 3.15 Freetalk command - who

`/who` [command]

This command displays the buddy list as well as their current buddy status.

Example:

```
~\/~ /who
* friend_1@jabber.org (friend)
```

```
* guy@jabber.org -> [Away] (on metarnity leave)
...
...
~\~/
```

### 3.16 Freetalk command - status

`/status` [*online|away|chat|xa|dnd*][*/PRIORITY*] [*MESSAGE*] [command]

Sets or displays your current status. Optionally also sets the resource priority.

Example:

```
~\~/ /status online Using Freetalk
~\~/ /status
Current status: online Using Freetalk
~\~/ /status away/5
~\~/
```

### 3.17 Freetalk command - whoami

`/whoami` [command]

This command displays the currently logged in buddy info.

Example:

```
~\~/ /whoami
~\~/ /whoami
Jabber ID: harsha@jabber.org
Jabber Server: jabber.org
Status: hacking
~\~/
```

### 3.18 Freetalk command - version

`/version` [command]

This command displays the version information of the installed freetalk package.

Example:

```
~\~/ /version
freetalk (Freetalk) 4.1
Copyright (C) 2005-2014 FreeTalk Core Team
...
~\~/
```

### 3.19 Freetalk command - logout

`/logout` [command]

This command works same as `/disconnect` but looks more meaningful.

Example:

```
~\~/ /logout
Disconnected from server, reason(0): User request
~\~/
```

### 3.20 Freetalk command - history

`/history [BUDDY]` [command]

This command displays paginated history with *BUDDY*. If *BUDDY* is not specified, it displays paginated history of only the current session.

Example:

```
~\~/ /history harsha@jabber.org
```

Prints the history of messages with harsha@jabber.org paginated by less.

```
~\~/ /history
```

Prints this history of messages of the current session.

```
~\~/
```

### 3.21 Freetalk command - load

`/load [SCM]` [command]

This command loads the Scheme Extension file and executes it. *SCM* is the extension Scheme file written in Guile. This command helps for the better customization of the software.

*SCM* is first looked for in the current directory, followed by `~/.freetalk/extensions` followed by the global `prefix/share/freetalk/extensions`.

*SCM* can also be an absolute path.

Example:

```
~\~/ /load beep.scm
~\~/
```

### 3.22 Freetalk command - setup

`/setup` [command]

This command prepares a fresh `~/.freetalk` directory with backing up the older one.

Example:

```
~\~/> /setup
'/root/.freetalk' -> '/root/.freetalk-backup-0'
Creating fresh state /root/.freetalk
```

NOTE: Archived previous state to `/root/.freetalk-backup-0` !!!

```
~\~/>
```

### 3.23 Freetalk command - login

`/login` [command]

This command is the better interactive login than the normal login. This command should be followed by `/disconnect` if you are logged in.

Example:

```
~\~/ /login
Jabber ID: harsha@jabber.org
Password:
Enable TLS/SSL (Y/N)? [Y]: y
Port [5223]: 443
Connecting...
~\~/
```

### 3.24 Freetalk command - help

`/help [freetalk-command]` [command]

This command prints help information on *freetalk-command* commands interactively in a sorted way. If no argument is given it prints the help for all the commands.

Example:

```
~\~/ /help /history
/history - /history [BUDDY]
          Display history page by page
~\~/
```

### 3.25 Freetalk command - repl

`/repl` [command]

This command helps in debugging. Invokes the guile interpreter resulting in the better debugging of the freetalk Scheme extension.

Example:

```
~\~/ /repl

guile>(define ft-get-jid "anonymous@yourchoice.com")
```

### 3.26 Freetalk command - urlview

`/urlview [BUDDY]` [command]

This command helps in viewing URL's in the message archive or message coming from a particular *BUDDY*. More precisely this command catches URL or URL's in the message and launches the browser to open the URL.

Example:

```
~\~/ /urlview friend@jabber.org

friend: https://www.gnu.org/software/freetalk/

~\~/
```

### 3.27 Freetalk command - freetalk

`/freetalk BUDDY` [command]

This command helps in checking whether the other *BUDDY* is using freetalk or not.

Example:

```
~\~/ /freetalk maxcohen@jabber.org

Yes maxcohen@jabber.org is using freetalk.

~\~/
```

### 3.28 Freetalk command - greet

`/greet BUDDY` [command]

Send IRC style greeting message to your *BUDDY*.

Example:

```
friend@jabber.org> /greet harsha@jabber.org
```

On the other side harsha@jabber.org gets a message  
 ‘‘ssssssssssccccrrrrrrreeeeeeeeaaaaaaammmmm’’.

### 3.29 Freetalk command - burst

`/burst BUDDY MESSAGE` [command]

Explode *MESSAGE* in to multiple charactest (IRC style greeting) and send it to *BUDDY*.

Example:

```
friend@jabber.org> /burst harsha@jabber.org harsha
```

On the other side harsha@jabber.org gets a message  
 ‘‘ssssssssssccccrrrrrrreeeeeeeeaaaaaaammmmm’’.

### 3.30 Freetalk command - burst-of-romance

`/burst BUDDY COUNT MESSAGE` [command]

Send *COUNT* number of *MESSAGE* to *BUDDY* with random delays in between. This command is useful to simulate multiple hand-made kisses.

Example:

```
friend@jabber.org> /burst hackergirl@jabber.org 45 :-*
```

### 3.31 Freetalk command - broadcast

```
/broadcast MESSAGE [command]
```

Send *MESSAGE* to all the buddies

Example:

```
harsha@jabber.org> /broadcast "Hello All, I am back"
```

### 3.32 Freetalk command - proxyserver

```
/proxyserver [proxyservername] [command]
```

Specify the *proxyservername* which you want to connect, or display the currently set proxyserver.

```
~\~/ /proxyserver
Current ProxyServer:
~\~/ /proxyserver tc.vip.org
~\~/ /proxyserver
Current ProxyServer: tc.vip.org
~\~/
```

### 3.33 Freetalk command - proxyport

```
/proxyport [proxyport] [command]
```

*/proxyport* command sets the specified TCP *proxyport* to be used for the next */connect* or display the currently set proxyport

```
~\~/ /proxyport
Current Port (8080 = default): 0
~\~/
~\~/ /proxyport 8080
~\~/ /proxyport
Current Port (8080 = default): 8080
```

## 4 Customizing freetalk

freetalk can be customized to a great extent using Guile interface. User can herself/himself customize or extend new features in freetalk using Scheme as extension language. Most of the features are already written in Scheme.

If you want to extend freetalk yourself, you can further explore freetalk Extension Developer Guide. (see Chapter 6 [Extension language], page 14)

### 4.1 freetalk.scm

Freetalk loads the startup options from `~/.freetalk/freetalk.scm`. Right from custom settings like username, password . . . to complete Scheme programming can be done in this file.

```
;; Sample ~/.freetalk/freetalk.scm
;; It sets connection parameters and tries to connect on
;; starting freetalk
(and (strings=? (ft-get-jid) "")
      (ft-set-jid! "harsha@jabber.org")
      (ft-set-password! "f00b4r")
      (ft-set-sslconn! 1)
      (ft-set-server! "jabber.org")
      ;; Proxy support
      (ft-set-proxyserver! "your.proxy.org")
      (ft-set-proxyport! "8080"))
```

All entries in this file `freetalk.scm` are optional. However there is no limit of customizing this file using Guile Interface. (see Chapter 6 [Extension language], page 14)

### 4.2 init.scm

All system wide policy settings and extensions are loaded through `init.scm`. By default you can find `init.scm` at `/usr/share/freetalk/extensions/`. To override this system wide `init.scm` file, copy it to `~/.freetalk/extensions/init.scm`. You must be aware of what you are doing, before you mess up anything here.

(see Chapter 6 [Extension language], page 14)

### 4.3 Default Scheme extensions

Most of the freetalk features are available through Scheme extensions. To override these extensions, copy them from `/usr/share/freetalk/extensions/` to `~/.freetalk/extensions/` and edit them.

(see Chapter 6 [Extension language], page 14)

## 5 Tips and Tricks

You are free to use complete Readline keys inside freetalk. Frequently used Readline keys inside freetalk are,

### Cursor motion

character	C-b	C-f
word	M-b	M-f
line up/down	C-p	C-n
line start/end	C-a	C-e

### Editing

delete char	C-d
delete char backwards	C-h
delete word	M-d
delete word backwards	C-w
kill line	C-k
kill line backwards	C-u
character swap	C-t
word swap	M-w
paste	C-y
undo	C-_
repeat prefix	M-number

### Case change

uppercase word	M-u
lowercase word	M-l
capitalize word	M-c

If you want to do further stunts, jump to Readline manual, See Section “Readline” in *Readline*.

1

---

<sup>1</sup> When you press *TAB* twice at freetalk prompt you can see all the possible commands and buddy names.

## 6 Extension language

An *extension language* is a programming language interpreter offered by an application program, so that users can write macros or even full-fledged programs to extend the original application. Extension languages have a C interface (it is usually C, but it could be any other compiled language), and can be given access to the C data structures. Likewise, there are C routines to access the extension language data structures.

This uses GNU extension language - *Guile* (which can stand for *\_GNU Ubiquitous Intelligent Language Extension\_*). Guile started out as an embeddable Scheme interpreter, and has rapidly evolved into a kitchen-sink package including a standalone Scheme interpreter, an embeddable Scheme interpreter, several graphics options, other languages that can be used along with Scheme (for now just *\_ctax\_* and *\_Tcl\_*), and hooks for much more.

## 7 Variables

Freetalk avoids sharing of variables between C and Scheme environment. Everything is done through primitive procedures for clarity and control.

## 8 Procedures

The following are the list of freetalk procedures that are exported to Scheme. Now you are able to call the procedures from Scheme that are written in C.

### 8.1 General procedures

- ft-load** *filepath* [primitive]  
 Loads and evaluates *filepath.scm* from mentioned path or from `~/.freetalk/extensions/` or from `/usr/share/freetalk/extensions/`.  
 Example:  

```
(ft-load "beep.scm")
```
- ft-add-buddy!** *buddy* [primitive]  
 Adds *buddy* into your contact list.  
 Example:  

```
(ft-add-buddy! "friend@jabber.org")
```
- ft-get-jid** *jabberid* [primitive]  
 Gets *jabberid* from the console.  
 Example:  

```
(and (string=? (ft-get-jid) "") ...)
```
- ft-set-jid!** *defaultid* [primitive]  
 Set *defaultid* as the Jabber ID to be used on the next connect.  
 Example:  

```
(ft-set-jid! "harsha@jabber.org")
```
- ft-get-conn-status** [primitive]  
 Gets the status of the connection from the server. 0 - Not connected. 1 - Connected, Not authenticated. 2 - Authenticated. (usable for IM)  
 Example:  

```
(display (ft-get-conn-status))
```
- ft-get-password** [primitive]  
 Gets the currently set *password*.  
 Example:  

```
(and (string=? (ft-get-password) ...) ...)
```
- ft-get-server** [primitive]  
 Get the *servername* configured for the next connection.  
 Example:  

```
(and (string=? (ft-get-server) "") ...)
```

**ft-set-sslconn!** *boolean* [primitive]

Set the *value* such that login is in SSL mode or not.

Example:

```
(ft-set-sslconn! #t)
```

**ft-set-tlsconn!** *boolean* [primitive]

Set the *value* such that login is in TLS mode or not.

Example:

```
(ft-set-tlsconn! #t)
```

**ft-send-message** *buddy message* [primitive]

Sends *message* to the *buddy*.

Example:

```
(ft-send-message "harsha@jabber.org" "had breakfast? or was it lunch?")
```

**ft-display** *message* [primitive]

Prints the *message* in the console. Unlike the `display` primitive, this procedure takes care of printing *message* asynchronously keeping the readline state as-is.

Example:

```
(ft-display ("I am proud of freetalk"))
```

**ft-bind-to-ctrl-key** *char command* [primitive]

Binds CTRL+ given *char* to arbitrary scm *command*. Allows for displaying roster or whatever by just pressing a key even during composition of new messages, keeping the readline state as-is.

Example:

```
(ft-bind-to-ctrl-key #\a ("/who \"all\""))
```

## 8.2 Configuration procedures

## 8.3 Hook related procedures

<sup>1</sup>

**ft-hook-return** [primitive]

Makes the calling procedure return immediately after running the hooks.

Example:

## 8.4 Utility procedures

These are general purpose utility procedures written completely in Scheme.

<sup>2</sup>

---

<sup>1</sup> Info awaiting coming soon...

<sup>2</sup> utility procedures are loaded through `/DATADIR/freetalk/extensions/` and you are free to hack for cool undocumented procedures

## 9 Hooks

Through Hooks facility Freetalk lets you steal its control at various important junctures during execution.

**ft-message-send-hook** *buddy message* [hook]

Hook procedure is called with *buddy* and *message* as arguments on every send message operation.

Supporting primitives:

see [ft-hook-return], page 17,

Example:

**ft-message-receive-hook** *buddy message* [hook]

Hook procedure is called with *buddy* and *message* as arguments on every receive message operation.

Supporting primitives:

see [ft-hook-return], page 17,

Example:

**ft-presence-receive-hook** *buddy message timestamp* [hook]

Hook procedure is called with *buddy*, *message* and *timestamp* receive the presence.

Supporting primitives:

see [ft-hook-return], page 17,

Example:

**ft-disconnect-hook** [hook]

Supporting primitives:

see [ft-hook-return], page 17,

Example:

## 10 Learning further

The following are the URLs where you can find useful manuals for Guile and Scheme.

<http://www.gnu.org/software/guile/>  
<http://www.schemers.org/>  
[ftp://ftp.cs.utexas.edu/pub/garbage/cs345/schintro-v14/schintro\\_toc.html](ftp://ftp.cs.utexas.edu/pub/garbage/cs345/schintro-v14/schintro_toc.html)  
<http://www.informatik.uni-kiel.de/~scheme/>  
<http://freespace.virgin.net/david.drysdale/guile/tutorial.html>  
[http://nis-www.lanl.gov/~rosalia/gnudl-doc/learn\\_libguile\\_toc.html](http://nis-www.lanl.gov/~rosalia/gnudl-doc/learn_libguile_toc.html)  
[http://theoryx5.uwinnipeg.ca/gnu/guile/guile-user.html#SEC\\_Top](http://theoryx5.uwinnipeg.ca/gnu/guile/guile-user.html#SEC_Top)  
[http://www.nada.kth.se/~mdj/guile-ref/guile-ref\\_toc.html](http://www.nada.kth.se/~mdj/guile-ref/guile-ref_toc.html)  
<http://www.red-bean.com/guile/guile/old/3540.html>  
<http://nis-www.lanl.gov/~rosalia/mydocs/guile-user.html>  
<http://www.cs.utexas.edu/users/lavender/courses/scheme/>  
[http://www.cstr.ed.ac.uk/projects/festival/manual/festival\\_8.html#SEC24](http://www.cstr.ed.ac.uk/projects/festival/manual/festival_8.html#SEC24)  
<http://www.cs.ccu.edu.tw/~dan/tutorials.html>  
<http://www.wcug.wvu.edu/~randyman/COMPUTERS/SCHEME/start.htm>  
<http://www.dmoz.org/Computers/Programming/Languages/Lisp/Scheme/Teaching/>  
<http://www.cs.caltech.edu/~cs181/doc/>  
<http://cis.csuohio.edu/~hysocckel/Links/Documents.html>

## 11 Authors

We believe in Software Freedom and Ethics, the GNU's way.

### 11.1 Contributors

#### 11.1.1 Active

1. Anand Babu            `aperiasamy@gmail.com`
2. Harshavardhana      `harsha@harshavardhana.net`
3. Anis Elleuch         `vadmeste@gmail.com`
4. Nikola Bene          `nikola.benes@gmail.com`

#### 11.1.2 InActive

1. Anand Avati          `avati@gluster.org`
2. Vikas Gorur          `vikas@twitter.com`

#### 11.1.3 Documentation

1. Harshavardhana      `harsha@harshavardhana.net`

#### 11.1.4 Contact/Queries

1. FreeTalk             `harsha@harshavardhana.net`

## 12 URLs

Homepage [URL]

<https://www.gnu.org/software/freetalk/>

Download [URL]

<https://ftp.gnu.org/gnu/freetalk/>

Bugs [URL]

You are welcome to send bug reports about freetalk to [freetalk-dev@gnu.org](mailto:freetalk-dev@gnu.org). The bugs that you think are of the interest to the public (i.e. more people should be informed about them) can be Cc-ed to the above mailing lists.

Before actually submitting a bug report, please try to follow a few simple guidelines.

1. Please try to ascertain that the behavior you see really is a bug. If Freetalk crashes, it's a bug. If freetalk does not behave as documented, it's a bug. If things work strange, but you are not sure about the way they are supposed to work, it might well be a bug. Don't predict that there is a Bug try to find it and report.
2. Try to repeat the bug in as simple circumstances as possible.
3. Find where the bug is, fix it and send the patches. :) (see Chapter 13 [Guidelines for submitting a patch], page 22)

Send your specific queries to [freetalk-dev@gnu.org](mailto:freetalk-dev@gnu.org)

## 13 Guidelines for submitting a patch

1. Copy the latest GIT version of `freetalk` directory as `freetalk-hack`.
2. Make changes in your `freetalk-hack` directory.
3. Create patch using

```
# diff -pruN freetalk freetalk-hack > freetalk-patch-title
```
4. Mail the patch file `freetalk-patch-title` to the mailing list with subject prefixed with 'PATCH:'.  
Please send only text mails with patch as a part of the message body. Don't update `ChangeLog` file, instead add your comments at the beginning of the body.

## 14 Portability

Since freetalk uses GNU Autoconf for building and configuring, and avoids using ‘special’ ultra-mega-cool features of any particular Unix, it should compile (and work) on all common Unix flavors.

Various freetalk versions have been compiled and tested under GNU/Linux. However freetalk can be easily ported to any POSIX complaint platform with Guile and Readline ports. If you compile it on an architecture not listed here, please let us know so that we can update it. (see Chapter 12 [URLs], page 21)

### 14.1 Freetalk License

Freetalk licensed under GNU General Public License v3 or later.

Version 2, June 1991

Copyright © 1989, 1991 Free Software Foundation, Inc.  
59 Temple Place - Suite 330, Boston, MA 02111-1307, USA

Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

#### 14.1.1 Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation’s software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author’s protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by

someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

### 14.1.2 TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
  - a. You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
  - b. You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
  - c. If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is

interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
  - a. Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
  - b. Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
  - c. Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or

distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.
6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.
7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
9. The Free Software Foundation may publish revised and/or new versions of the General

Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and “any later version”, you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

## **NO WARRANTY**

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## **END OF TERMS AND CONDITIONS**

### 14.1.3 Appendix: How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the “copyright” line and a pointer to where the full notice is found.

```
one line to give the program's name and a brief idea of what it does.
Copyright (C) yyyy name of author
```

```
This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2 of the License, or
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License
along with this program; if not, write to the Free Software
Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19yy name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type 'show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type 'show c' for details.
```

The hypothetical commands ‘show w’ and ‘show c’ should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ‘show w’ and ‘show c’; they could even be mouse-clicks or menu items—whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a “copyright disclaimer” for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
signature of Ty Coon, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

## 14.2 Freetalk Documentation License

Freetalk documentation licensed under GNU Free Documentation License 1.2 or later.

Version 1.2, November 2002

Copyright © 2000,2001,2002 Free Software Foundation, Inc.  
59 Temple Place, Suite 330, Boston, MA 02111-1307, USA

Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

### 0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document *free* in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or non-commercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of “copyleft”, which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

### 1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The “Document”, below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as “you”. You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A “Modified Version” of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A “Secondary Section” is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document’s overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The “Invariant Sections” are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released

under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none. The “Cover Texts” are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A “Transparent” copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not “Transparent” is called “Opaque”.

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The “Title Page” means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, “Title Page” means the text near the most prominent appearance of the work’s title, preceding the beginning of the body of the text.

A section “Entitled XYZ” means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as “Acknowledgements”, “Dedications”, “Endorsements”, or “History”.) To “Preserve the Title” of such a section when you modify the Document means that it remains a section “Entitled XYZ” according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

## 2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and

that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

### 3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

### 4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.

- B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.
- C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
- D. Preserve all the copyright notices of the Document.
- E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- H. Include an unaltered copy of this License.
- I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.
- J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
- K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.
- L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.
- M. Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.
- N. Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.
- O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled “Endorsements”, provided it contains nothing but endorsements of your Modified Version by various parties—for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

## 5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled “History” in the various original documents, forming one section Entitled “History”; likewise combine any sections Entitled “Acknowledgements”, and any sections Entitled “Dedications”. You must delete all sections Entitled “Endorsements.”

## 6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

## 7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called

an “aggregate” if the copyright resulting from the compilation is not used to limit the legal rights of the compilation’s users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document’s Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

## 8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled “Acknowledgements”, “Dedications”, or “History”, the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

## 9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided for under this License. Any other attempt to copy, modify, sublicense or distribute the Document is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

## 10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See <http://www.gnu.org/copyleft/>.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License “or any later version” applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation.

### 14.2.1 ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

```
Copyright (C) year your name.  
Permission is granted to copy, distribute and/or modify this document  
under the terms of the GNU Free Documentation License, Version 1.2  
or any later version published by the Free Software Foundation;  
with no Invariant Sections, no Front-Cover Texts, and no Back-Cover  
Texts. A copy of the license is included in the section entitled ‘‘GNU  
Free Documentation License’’.
```

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the “with...Texts.” line with this:

```
with the Invariant Sections being list their titles, with  
the Front-Cover Texts being list, and with the Back-Cover Texts  
being list.
```

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.

## Concept Index

### A

AUTHORS ..... 20

### C

Command line arguments ..... 3

Customization ..... 12

### E

Extension language ..... 14

### F

FDL, GNU Free Documentation License ..... 29

Features ..... 2

freetalk URLs ..... 21

freetalk.scm ..... 12

### G

Guile ..... 14

### I

init.scm ..... 12

Initialization ..... 12

### O

Overriding extensions ..... 12

### P

Portability ..... 23

### R

Readline in freetalk ..... 13

### S

Startup ..... 12

Submitting patches ..... 22

## Command Index

### A

add..... 5  
allow..... 5

### B

broadcast..... 11  
burst..... 10  
burst-of-romance..... 11

### C

connect..... 4

### D

date..... 6  
deny..... 5  
disconnect..... 4

### F

freetalk..... 10

### G

greet..... 10

### H

help..... 9  
history..... 8

### J

jid..... 4

### L

load..... 8  
login..... 9  
logout..... 8

### P

pipe..... 6  
port..... 6  
prompt..... 5  
proxyport..... 11  
proxyserver..... 11

### Q

quit..... 5

### R

repl..... 9  
restart..... 5

### S

server..... 4  
setup..... 9  
shell..... 6  
status..... 7

### U

urlview..... 10

### V

version..... 7

### W

who..... 7  
whoami..... 7

## Procedure Index

ft-add-buddy! .....	16	ft-load .....	16
ft-bind-to-ctrl-key .....	17	ft-message-receive-hook .....	18
ft-disconnect-hook .....	18	ft-message-send-hook .....	18
ft-display .....	17	ft-presence-receive-hook .....	18
ft-get-conn-status .....	16	ft-send-message .....	17
ft-get-jid .....	16	ft-set-jid! .....	16
ft-get-password .....	16	ft-set-sslconn! .....	17
ft-get-server .....	17	ft-set-tlsconn! .....	17
ft-hook-return .....	17		