HexChat Documentation

Release 2.9.5

TingPing

CONTENTS

GETTING STARTED

1.1 Quick Start

The first time you start HexChat you'll see the Network List as seen below:

Here you can specify your global logon details. The *Nick name* will be your name visible in IRC channels (or second/third choice if it's already taken), and the *User name* is how you identify yourself to the server. You can pick a server from the default list, or if it's not there, you can add your own by clicking the *Add* button:

After you named it, click *Edit...* and specify the details of your connection. You need at least the following information to join to a certain group of people:

- · server address
- · server port
- · channel name

You can see an example below:

In this example, the server address is *irc.foo.bar* and the port is 6667. The channel of choice is #lobby. Favorite channels are joined to automatically upon connecting to the network. After you finished editing, click *Close* to return to the *Network List*. Now select the network you want to connect to and click *Connect*. After a successful connection you'll see the following window:

If you don't want to join a channel just yet, leave it as it is. If you know the channel name already, specify it with the second option. In case you want to browse through the channel list, select the third option. Then press *OK* to close this window. After you successfully joined a channel, you should see something like this:

That's it, you're online. Now you can learn more about HexChat and customize it for your needs. This website is a good starting point, but you can find a lot more on the net. Have fun!

1.2 Frequently Asked Questions

1.2.1 Frequently Asked Questions

How do I migrate my settings from XChat?

- Unix
 - 1. Copy ~/.xchat2 to ~/.config/hexchat
 - 2. Rename ~/.config/hexchat/xchat.conf to ~/.config/hexchat/hexchat.conf
 - 3. Rename ~/.config/hexchat/servlist_.conf to ~/.config/hexchat/servlist.conf
 - 4. Rename ~/.config/hexchat/xchatlogs to ~/.config/hexchat/logs
 - 5. Move all your 3rd party addons (plugins/scripts) to ~/.config/hexchat/addons
- Windows
 - 1. Copy %APPDATA%\X-Chat 2 to %APPDATA%\HexChat
 - 2. Rename %APPDATA%\HexChat\xchat.conf to %APPDATA%\HexChat\hexchat.conf
 - 3. Rename %APPDATA%\HexChat\servlist_.conf to %APPDATA%\HexChat\servlist.conf
 - 4. Rename %APPDATA%\HexChat\xchatlogs to %APPDATA%\HexChat\logs
 - 5. Move all your 3rd party addons (plugins/scripts) to %APPDATA%\HexChat\addons

Note that copying a colors.conf without a pevents.conf may result in theming issues.

How do I autoconnect and join a channel when HexChat loads?

In the Network list select the Network you want to auto-connect to and click Edit and turn ON the "Auto connect to this network at startup" checkbox.

List channels in the favorites list to join them on connect.

How do I get Hexchat to reconnect after my computer wakes up from being in sleep/hibernate mode?

Try the following command from a chat window:

/set net_ping_timeout 31

Why does HexChat join channels before identifying?

There are 3 ways to authenticate before joining a channel, all are network dependant but nickserv is common:

- 1. Use a Nickserv password and increase the delay before joining in $Settings \rightarrow Preferences \rightarrow Advanced$
- 2. Use SASL (same password as nickserv and your username) which can be enabled in $HexChat \rightarrow Network\ list \rightarrow Edit\ (2.9.4+)$.
- 3. Use a client cert which requires the most setup.

How do I change what browser is opened?

- Windows: Control Panel \rightarrow Default Programs
- Unix:
- Gnome 3: System Settings \rightarrow Details \rightarrow Default Applications
- XFCE 4: Settings Manager → Prefered Applications

If these do not work or you do not use a DE use the command **gvfs-mime**:

```
gvfs-mime –set x-scheme-handler/http firefox.desktop
```

If you hate gvfs you can manually edit ~/.local/share/applications/mimeapps.list to include:

x-scheme-handler/http=firefox.desktop;

Don't forget to do the same for https.

Now upon launching it will use the *Exec* line in their desktop file replacing %u with the url. If you get a blank window this is where the problem is.

Alternatively you can add an Url Handler

How do I connect through a proxy?

Go to the menus, $Settings \rightarrow Preferences \rightarrow Network\ Setup$ and fill in the requested information there. Authentication (using a username and password) is only supported for HTTP and Socks5.

For information on Tor see our tips page

How do I show @ and + in front of nicknames that are Op and Voice when they talk?

To display @ and + characters next to nicknames as they talk, do the following:

In the menus, open up $Settings \rightarrow Text\ Events$. Find the $Channel\ Message$ event in the list. The \$3 code can be inserted to print the user's mode-character (e.g. @ or +). For example, you might want to change the default:

```
%C18%H<%H$4$1%H>%H%O$t$2
```

То

```
%C18%H<%H$4$3$1%H>%H%O$t$2
```

Don't forget to **press Enter**, so the changes take effect in the list at the top of the window.

How do I set different ban types?

- 1. Right click the nickname in the userlist, and choose a ban type from the "Kick/Ban" submenu.
- 2. You can also do it manually: > /ban nick bantype where the bantype is a number from 0 to 3.
- 3. Or set the default with:

/set irc_ban_type bantype sets the default ban type to use for all bans. The different types are:

- 0 = *!@.host
- 1 = *!*@domain
- 2 = *!user@.host

• 3 = *!*user@domain

Why does the timestamp overlap some nicknames?

Some networks allow very long nicknames (up to 32 letters). It can be annoying to have the separator bar move too far to the right, just for one long nick. Therefore, it has a set limit for the distance it will move to the right. If you use a large font, you may need to adjust this distance. It is set in pixels, for example:

/set text max indent 320

Once you adjust this setting high enough, overlapping timestamps and nicknames should not occur. The adjustment will not take effect immediately, a restart may be needed.

How do I turn on Conference mode where I will not see join or part messages?

Right-click on the tab you want to change. In the submenu of the channel name, there's a toggle-item "Show join/part messages", simply turn this off.

If you want to turn this option on globally go to $Settings \rightarrow Preferences \rightarrow Advanced$.

Then all channels you join after setting this will start with "Show join/part messages" turned off.

Why doesn't DCC send work behind a router (IPNat/ADSL)?

If you are behind a IP-NAT or ADSL router, you will most likely have an address like 192.168.0.1. This address is not usable on the Internet, and must be translated.

When offering a DCC file, HexChat will tell the receiver your address. If it says 192.168.0.1, the receiver will not be able to connect. One way to make it send your "real" address is to enable the "Get my IP from IRC Server" option in HexChat. This option is available in $Settings \rightarrow Preferences \rightarrow File\ Transfers$. When you turn it ON, you will have to re-login to the server before it'll take effect.

You will also need to forward some ports for use in DCC send. You may pick almost any port range you wish, for example, in HexChat set:

First DCC send port: 4990 Last DCC send port: 5000

This will allow you to send up to ten files at the same time, which should be plenty for most people. Lastly, configure your router/modem to forward ports 4990-5000 to your PC's address. You'll have to consult your router/modem's manual on how to do this.

How do I execute multiple commands in one line?

There are three ways to do this:

- /LOAD -e <textfile>, where <textfile> is a full pathname to a file containing commands on each line.
- Separate your commands with CTRL-SHIFT-u-a. This will appear as a little box with numbers on it (or an invisible character).
- You can create two UserCommands, with the same name, and then execute the UserCommand. It will be
 executed in the same order as it's written in the UserCommands GUI.

I get this error: "Unknown file type abc.yz. Maybe you need to install the Perl or Python plugin?"

If you get this error when trying to load a Perl or Python script, it means the plugin for running those scripts isn't loaded.

- The Perl and Python plugins come with HexChat in the same archive.
- During ./configure, it will check for Perl and Python libraries and headers, you should check if it failed there.
- The addons directory can be found by issuing the shell command > hexchat -p
- All .so files are auto-loaded at startup (.dll on Windows).
- If you downloaded a binary package, maybe the packager decided to exclude the Perl or Python plugins.

How do I play sound files on certain events?

In the menus, go to: $Settings \rightarrow Preferences \rightarrow Sound$. Select the event you want to make a sound on, then type in a sound filename (or use the Browse button).

How do I auto-load scripts at startup?

The root of your HexChat config is:

- Windows: %APPDATA%\HexChat
- Unix/Linux: ~/.config/hexchat

Referred to as <config> from now. HexChat automatically loads, at startup:

- <config>/addons/*.pl Perl scripts
- <config>/addons/*.py Python scripts
- <config>/addons/*.dll Plugins (Windows)
- <config>/addons/*.so Plugins (Unix)

How do I minimize HexChat to the System Tray (Notification Area)?

On both Unix and Windows there is an included tray plugin. To enable minimizing to tray on exit go to $Settings \rightarrow Preferences \rightarrow Alerts$.

How do I start HexChat with ...?

To see the various launch options such as setting configdir or minimize level run:

```
hexchat -help
```

Where are the log files saved to?

• Unix

~/.config/hexchat/logs

Windows

%APPDATA%\HexChat\logs

How do I rotate log files every so often?

By default settings, no rotation occurs, your log files will just keep getting larger.

Go to Settings \rightarrow Preferences \rightarrow Logging and change the log filename to any one of these:

```
%Y-%m-%d/%n-%c.log -> 2006-12-30/FreeNode-#channel.log
```

%n/%Y-%m-%d/%c.log -> FreeNode/2006-12-30/#channel.log

%n/%c.log -> FreeNode/#channel.log (no rotation)

%Y, %m and %d represents the current year, month and day respectively. %n is the network name, e.g. "FreeNode" or "UnderNet", and finally, %c is the channel. In these examples, a new log filename and folder would be created after midnight.

The format can also be a full path if you want to save logs to an external drive for example.

For the full list of formatting codes, please refer to the Unix or Windows documentation on strftime.

Where did the Real Name field go?

The Real name field used to be accessible via the Network List, which is the very first screen that a new user sees. Newcomers, who are not familiar with IRC terminology, might be afraid of their personal data. In order to avoid alienating such people, we decided to remove this setting from the Network List. Now you can access this setting under $Settings \rightarrow Preferences \rightarrow Advanced$ instead, or if you prefer the command line, you can use the following command:

/set irc_real_name Stewie Griffin

Why doesn't HexChat beep with beep sound alerts checked?

On Windows, HexChat is using the *Instant Message Notification* system sound for making beep alerts, and if it's unspecified, it attempts to produce a simple beep effect. In case you don't hear beeps when alerts occur, you need to set this system sound to the desired sound effect. To do this, go to *Control Panel* \rightarrow *Hardware and Sound* \rightarrow *Change system sounds*.

How do I type Unicode characters?

Press Ctrl + Shift + U at once. When you release the keys, u will appear in your input box.

Now you can enter the 4-digit code of the desired glyph. When you're done, just press *Space* or *Return*, and the glyph will appear as well.

1.3 Changelog

1.3.1 HexChat ChangeLog

2.9.6 (TBD)

- · redesign edit window in network list
- · rename favorites to autojoin
- improve url detection yet again (this time w/ more ipv6!)
- implement /exec -o on Windows
- improvements to the dcc window
- improvements to sysinfo on unix, including -e to print info instead of saying
- add support for BLOWFISH, AES, and EXTERNAL SASL mechanisms
- add reload command and button in plugingui
- add support for server-time and znc.in/server-time[-iso] capabilities
- add attributes to hook_print/server and emit_print for information such as server-time
- · add support for QuakeNet's challangeauth
- · add chanopt for stripping colors
- add copy option to banlist entries
- add autoconnect option to context menu of networks
- add option for omitting alerts while window is focused
- add python3 support along with various bugfixes
- · add libcanberra support on unix
- · add tracking of users accounts
- add %u to userlist popups for accounts
- add channelkey to channel lists in plugin api
- · add MONITOR support for the friends list
- add QUIET and UNQUIET commands
- add support for the away-notify, account-notify, and extended-join capabilities
- add notifications for friends away status (requires away-notify)
- · add events for quiet, unquiet, and quietlist
- add Ctrl+N (New Server Window) keybinding
- · add ctrl+home/end keybinding for scrolling to top/bottom
- add theme manager to unix build system
- fix compilation on FreeBSD
- fix running as root
- fix splitting ctcps and notices

- fix alerts and scrollback chanopts
- fix crash when attaching/detaching tabs
- fix sending limited channel messages (op messages) to the wrong tab
- · change /load -e to load from config dir
- remove Ctrl+L (Clear Text) keybinding
- remove custom sound applications
- · remove away announce, replaced by away-notify on supported servers. (alternative python script)
- · update network list

2.9.5 (2013-04-01)

- · fix Checksum plugin with DCC download directory set
- fix false positives with Update Checker
- fix sound directory option on Unix
- fix loading custom icons
- fix tray icon not reappearing if the tray crashes
- · fix restoring maximized windows from tray
- fix /QUERY -nofocus
- · fix reconnecting to channels with keys
- · fix compilation on FreeBSD
- fix showing the join dialog when autojoining channels
- fix Plugin-Tray menu not closing on Windows
- fix close dialog minimizing to tray before selection
- fix Python plugin compilation on Ubuntu 13.04
- fix Theme Manager crashing with read-only files
- fix channel tree indentation without server tab or with icons
- add auto-away support to Plugin-Tray
- add Plugin-Tray option to disable blinking
- · add option to always show notices on current tab
- add support for notification filtering in GNOME 3.8
- add support for channel keys in URLs
- add option to color nicks in the user list the same way as in the chat area
- add ability to automatically switch to last activity on change-page hotkey
- · add ability to save divider position between combined user list and channel tree
- add global real name option to Preferences
- add Safe Mode shortcut to the Start Menu group on Windows
- · add helpful links to the setup wizard on Windows

- make the source tree compliant with Debian policies
- · install SVG icon on Unix
- enable Plugin-Tray menu on Windows
- enable IPv6 by default on Unix
- show /WHOIS response on current tab by default
- redesign the Ban List window to show invites, bans, exemptions and quiets
- · make user list icons slightly smaller
- · close all utility windows with the Esc key
- improve URL and username detection in the chat area
- make /JOIN focus the existing channel if already joined
- change default DCC download directory to ~/Downloads on Unix
- allow Plugins and Scripts utility to be opened in a tab
- only beep when the HexChat window is not active
- use the certs subfolder of the config folder for loading custom certificates
- disable tray icon when using Unity
- · remove Lua and Tcl
- · remove HexTray in favor of built-in Plugin-Tray
- · remove installer theming on Windows
- cease support for Perl 5.12 and 5.14 on Windows
- rebuild every dependency with Visual C++ on Windows
- stop using the WDK on Windows and depend on the Visual C++ Redistributable
- update GTK+ to 2.24 on Windows
- update default text events
- · update translations
- update the network list

2.9.4 (2012-11-11)

- fix alerts when omit alerts in away option is set
- fix dialog icon in userlist popup
- fix opening links on Mac
- · fix default network in the Network List
- fix initial folder in file dialogs
- fix positioning the nick change dialog
- fix error message for busy servers
- fix filename encoding errors
- · fix Fedora spec file

- fix Raw Log content being impossible to copy when auto-copy is disabled
- fix rough icon rendering in most windows on Windows
- fix config folder when specified with -d argument
- add built-in support for SASL authentication via CAP
- add support for identify-msg/multi-prefix server capabilities
- add text events for CAP related messages
- add support for the SysInfo plugin on Unix
- add option to change update check frequency and delay for first check
- · add option to change GUI language on Windows
- add Ignore entry to userlist popup
- add Afrikaans, Asturian, Danish, Gujarati, Indonesian, Kinyarwanda and Malayalam translations
- add ChangeLog and ReadMe links to Start Menu during installation on Windows
- add manual page on Unix
- add icon support for 3 levels above op user mode
- · change default colors, text events and user list/channel tree icons
- · make Esc key close the Raw Log window
- use Consolas as the default font where available
- open dialog window for double-clicking in the user list by default
- · variable separation, cleanup and renaming
- check in the installers whether Windows release is supported by HexChat
- display previous value after /SET
- reorganize the Settings menu and add new options
- · redesign the About dialog
- show certain help messages in GTK+ dialogs instead of command line
- disable faulty one instance option
- build system cosmetics on Unix
- reorganize repo file structure
- · rebranding
- · update translations
- · update the network list

2.9.3 (2012-10-14)

- fix various URL detection bugs
- fix default folders for file transfers in portable mode
- · fix Autotools warnings with recent releases
- add /ADDSERVER command

- add option to save URLs to disk on-the-fly
- add option to omit alerts when marked as being away
- · add default icons for channel tree and option to turn them off
- · change certain default colors
- enhance Non-BMP filtering performance
- · accept license agreement by default on Windows
- update the network list

2.9.2 (2012-10-05)

- fix compilation on Red Hat and Fedora
- fix portable to non-portable migrations on Windows
- fix ban message in HexTray
- fix icon in Connection Complete dialog
- fix determining if the log folder path is full or relative
- fix desktop notification icons on Unix
- fix URL grabber saving an unlimited number of URLs by default
- fix URL grabber memory leaks under certain circumstances
- fix URL grabber trying to export URL lists to system folders by default
- fix opening URLs without http(s)://
- add support for regenerating text events during compilation on Windows
- add support for the theme manager on Unix
- add Unifont to the default list of alternative fonts
- add option to retain colors in the topic
- allow the installer to preserve custom GTK+ theme settings on Windows
- use the icons subfolder of the config folder for loading custom icons
- use port 6697 for SSL connections by default
- · install the SASL plugin by default on Windows
- · /lastlog improvements
- build system cosmetics on Unix
- open links with just left click by default
- · enable timestamps and include seconds by default
- make libproxy an optional dependency on Unix
- update German translation
- · update the network list

2.9.1 (2012-07-27)

- fix installing/loading plugins on Unix
- fix restoring the HexChat window via shortcuts on Windows
- fix HexTray icon rendering for certain events
- fix the Show marker line option in Preferences
- fix /lastlog regexp support on Windows
- add support for the Checksum, Do At, FiSHLiM and SASL plugins on Unix
- add option to retain colors when displaying scrollback
- add MS Gothic to the default list of alternative fonts
- · rebranding and cleanup
- · eliminate lots of compiler warnings
- · Unix build system fixes and cosmetics
- make Git ignore Unix-specific intermediate files
- use better compression for Windows installers
- switch to GTK+ file dialogs on Windows
- restructure the Preferences window
- use the addons subfolder of the config folder for auto-loading plugins/scripts
- improve the dialog used for opening plugins/scripts
- remember user limits in channel list between sessions
- remember last search pattern during sessions
- update XChat to r1521

2.9.0 (2012-07-14)

- · rebranding
- migrate code to GitHub
- update XChat to r1515
- fix x64 Perl interface installation for Perl 5.16
- improve URL detection with new TLDs and file extensions

1508-3 (2012-06-17)

- add XChat Theme Manager
- fix problems with Turkish locale

1508-2 (2012-06-15)

- add support for Perl 5.16
- update Do At plugin
- fix drawing of chat area bottom
- avoid false hits when restoring from tray via shortcut
- migrate from NMAKE to Visual Studio

1508 (2012-06-02)

- · remove Real Name from Network List
- search window improvements
- restore XChat-WDK from tray via shortcut if X-Tray is used

1507 (2012-05-13)

- update OpenSSL to 1.0.1c
- FiSHLiM updates

1506 (2012-05-04)

- update OpenSSL to 1.0.1b
- · update German translation

1503 (2012-03-16)

- update OpenSSL to 1.0.1
- URL grabber updates
- FiSHLiM updates

1500 (2012-02-16)

- add option for specifying alternative fonts
- fix crash due to invalid timestamp format
- X-Tray cosmetics

1499-7 (2012-02-08)

- fix update notifications
- fix compilation on Linux
- add IPv6 support to built-in identd

1499-6 (2012-01-20)

• add DNS plugin

1499-5 (2012-01-20)

- built-in fix for client crashes
- update OpenSSL to 1.0.0g

1499-4 (2012-01-18)

• add Non-BMP plugin to avoid client crashes

1499-3 (2012-01-15)

- rework and extend plugin config API
- add ADD/DEL/LIST support to X-SASL

1499-2 (2012-01-11)

• add X-SASL plugin

1499 (2012-01-09)

- fix saving FiSHLiM keys
- update OpenSSL to 1.0.0f

1498-4 (2011-12-05)

- fix updates not overwriting old files
- display WinSys output in one line for others
- use Strawberry Perl for building

1498-3 (2011-12-02)

- add plugin config API
- · add Exec plugin
- add WinSys plugin
- perform periodic update checks automatically

1498-2 (2011-11-25)

- add FiSHLiM plugin
- add option to allow only one instance of XChat to run

1498 (2011-11-23)

- separate x86 and x64 installers (uninstall any previous version!)
- downgrade GTK+ to 2.16
- · re-enable the transparent background option
- · various X-Tray improvements
- · add WMPA plugin
- add Do At plugin
- automatically save set variables to disk by default
- update OpenSSL to 1.0.0e

1496-6 (2011-08-09)

- add option to auto-open new tab upon /msg
- fix the update checker to use the git repo
- disable update checker cache

1496-5 (2011-08-07)

- fix attach/detach keyboard shortcut
- add multi-language support to the spell checker

1496-4 (2011-07-27)

- recognize Windows 8 when displaying OS info
- update OpenSSL certificate list
- fix X-Tray blinking on unselected events
- fix X-Tray keyboard shortcut handling
- cease support for Perl 5.10
- use Strawberry Perl for 5.12 DLLs

1496-3 (2011-06-16)

· add option for changing spell checker color

1496-2 (2011-06-05)

· add support for custom license text

1496 (2011-05-30)

- display build type in CTPC VERSION reply
- add support for Perl 5.14

1494 (2011-04-16)

- update Visual Studio to 2010 SP1
- update OpenSSL to 1.0.0d
- ship MySpell dictionaries in a separate installer

1489 (2011-01-26)

- fix unloading the Winamp plugin
- enable the Favorite Networks feature
- add Channel Message event support to X-Tray
- · add mpcInfo plugin

1486 (2011-01-16)

- fix a possible memory leak in the update checker
- fix XChat-Text shortcut creation
- fix XChat version check via the plugin interface
- add option for limiting the size of files to be checksummed
- add X-Tray as an install option
- disable Plugin-Tray context menu completely

1479-2 (2011-01-10)

- improve command-line argument support
- · add auto-copy options
- enable XChat-Text
- · disable faulty tray menu items

1479 (2010-12-29)

- update GTK+ to 2.22.1
- update OpenSSL to 1.0.0c
- update Python to 2.7.1
- replace X-Tray with Plugin-Tray

1469-3 (2010-10-20)

- · add Checksum plugin
- menu integration for Update Checker and Winamp

1469-2 (2010-10-09)

- fix DCC file sending
- · native open/save dialogs
- · make the version info nicer
- · register XChat-WDK as IRC protocol handler
- add option to run XChat-WDK after installation
- · disable erroneous uninstall warnings
- disable Plugin-Tray, provide X-Tray only
- cease support for Perl 5.8
- replace EasyWinampControl with Winamp

1469 (2010-10-08)

- use Visual C++ 2010 for all WDK builds
- build Enchant with WDK and update it to 1.6.0
- fix SSL validation
- fix opening the config folder from GUI in portable mode
- further improve dialog placement for closing network tabs

1468-2 (2010-10-02)

- update GTK+ to 2.22
- spelling support
- · more config compatibility with official build
- improve dialog placement for closing network tabs
- remove themes from the installer

- disable toggle for favorite networks until it's usable
- disable transparent backgrounds
- hide mnemonic underlines until Alt key pressed
- fix XP lagometer and throttlemeter rendering

1468 (2010-09-19)

- update Perl to 5.12.2
- update Tcl to 8.5.9
- · fix scrollback shrinking
- enable advanced settings pane
- retain emoticon settings
- add /IGNALL command

1464-6 (2010-09-06)

- fix Perl interface breakage
- update checker plugin

1464-5 (2010-08-30)

• primitive update checker

1464-4 (2010-08-30)

- selectable tray icon
- selectable theme for portable
- · selectable plugins

1464-3 (2010-08-29)

• black theme for portable

1464-2 (2010-08-29)

• make Perl version selectable during install

1464 (2010-08-26)

• Perl interface updates

1462 (2010-08-25)

- update XChat to r1462
- build system cleanup

1459-3 (2010-08-23)

• more installer changes (uninstall any previous version!)

1459-2 (2010-08-23)

- · universal installer
- update build dependencies

1459 (2010-08-19)

• portable mode and installer fixes

1457 (2010-08-17)

• disable GUI warnings

1455-2 (2010-08-17)

• unified installer for standard and portable

1455 (2010-08-15)

• support for gtkwin_ptr in the Perl interface

1454 (2010-08-14)

• gtkwin_ptr for plugins introduced

1452 (2010-08-14)

- fix taskbar alerts on x86
- upgrade Perl to 5.12 and make 5.8/5.10 builds available separately

1451-6 (2010-08-12)

• include Lua-WDK with the installer

1451-5 (2010-08-12)

- switch to Inno Setup (uninstall any previous version!)
- add Lua support

1451-4 (2010-08-11)

• enable the XDCC plugin

1451-3 (2010-08-11)

• enable Python support

1451-2 (2010-08-11)

- enable SSL support
- fix simultaneous connections
- re-enable identd by default

1451 (2010-08-10)

- update XChat to r1451
- disable identd by default
- remove DNS plugin

1444 (2010-07-30)

- update XChat to r1444
- downgrade Tcl to 8.5
- add Tcl support to the x64 build

1441 (2010-06-15)

- update XChat to r1441
- enable transfer of files bigger than 4 GB

1439 (2010-05-30)

• update XChat to r1439 (2.8.8)

1431-6 (2010-05-30)

- re-enable the transparent background option
- add branding to Plugin-Tray
- installer updates

1431-5 (2010-05-29)

- fix installer
- add DNS plugin status messages

1431-4 (2010-05-28)

- disable the transparent background option
- downgrade GTK+ to more stable 2.16

1431-3 (2010-05-23)

• add portable build support

1431-2 (2010-05-22)

• replace X-Tray with Plugin-Tray

1431 (2010-05-21)

- update XChat to r1431
- include a lot of XChat translations added since 2.8.6

1412-3 (2010-05-02)

• fix GTK function call

1412-2 (2010-05-02)

• re-enable taskbar alerts on x64

1412 (2010-05-02)

- update XChat to r1412
- update GTK+ and friends
- update Visual Studio to 2010

- fix Perl warning message
- include GTK L10n with the installer

1409-9 (2010-04-18)

• fix loading of scrollback

1409-8 (2010-04-03)

• fix X-Tray on x64

1409-7 (2010-04-02)

• disable taskbar notification options

1409-6 (2010-03-31)

• display version numbers everywhere

1409-5 (2010-03-31)

- add DNS plugin
- add EasyWinampControl plugin
- disable Plugin-Tray settings

1409-4 (2010-03-30)

• add X-Tray

1409-3 (2010-03-29)

• plugin linkage fixes

1409-2 (2010-03-29)

- enable IPv6 support
- enable NLS support
- enable Perl support
- enable Tcl support

1409 (2010-03-29)

· initial release

SETTINGS

2.1 Config Files

Config files are stored as plaintext files (which shouldn't be edited by hand). They are located in:

• Windows: %APPDATA%\HexChat

• Unix: ~/.config/hexchat

Note: Type the path into your file browser to expand them into a full directory.

Custom directories can be set with the -d or --cfqdir command line argument.

On Windows there is a portable mode option which makes HexChat store settings inside of a \config subdir within the main installation folder. Though this option should only be used if you must for a portable drive or if you lack administrative priviliges for installation.

2.2 Network List

The network list contains a list of networks, basic user information, and per network settings. It can be accessed in $HexChat \rightarrow Network\ List$ or by the keyboard shortcut Control-s.

2.2.1 User Information

This is where basic information is set for the user such as nicknames, these will be used as defaults for networks but can be overridden. The Realname field is entirely optional. The username is often used for options like Server and SASL password.

2.2.2 Networks

HexChat comes with a list of default networks but you can easily add your own or edit existing ones. The sorting and names of networks do matter as some commands reference the network by the name here, e.g. /newserver. The order they are sorted in this list also determines the order of auto-connecting. To edit the order just select one and hit Shift-up or Shift-down.

Servers

Per network you can maintain a list of servers in case of one fails. The syntax for these servers *hostname/port*. The port is entirely optional and can be prefixed by + to signify SSL. If no port is given the default port used is 6667 and 6697 for SSL.

Your Details

Unticking *Use global user information* allows unique nicknames or usernames between networks.

Connecting

Ticking Auto connect to this network at startup combined with Favorite channels will allow you to quickly connect and join chats.

The password fields allow you to login to a password protected server or services. They take the syntax *user-name:password* or just the password if username has been set as mentioned above.

See Also:

See the FAQ if you have trouble identifying before join.

2.3 Channel Options

Some options can be specific to channels. To access these you can right click on any tab or use the command **/chanopt**. Any option other than 0 or I is considered *unset* and will use the globally set defaults.

2.4 Preferences

2.4.1 Keyboard Shortcuts

There are two types of keyboard shortcuts in HexChat hardcoded ones which can be found by looking around in the menu, e.g. Control-s, and configurable ones in $Settings \rightarrow Keyboard Shortcuts$. These have help messages to guide you through setting up custom bindings.

2.4.2 Url Handlers

Url handlers add alternative browsers to you your right click menu on urls (they do not set the default). They take the syntax:

!program %s or !C:\PROGRA~1\program\program.exe %s

Note: If HexChat does not find the executable it will not add it to the menu.

2.4.3 Auto Replace

Located in $Settings \rightarrow Auto\ Replace$ this setting allows you to replace text while typing. The Text column is what it is to detect and the Replace with column is what will replace it. This column accepts color codes from Text Events

For Example:

text: → replace: %C8→%O

This will replace that arrow with a green unicode arrow upon pressing enter or space. The keys that check for replace are defined in $Settings \rightarrow Keyboard Shortcuts$. A trick to avoid replacing it Shift-Space since that is not defined by default.

2.4.4 CTCP Replies

Custom CTCP replies can be set in *Settings* \rightarrow *CTCP Replies* and accept the same format as User Commands

Note: To hide the default VERSION reply you must /set irc_hide_version on

2.5 Set Command

The set command can be used to change options. The usage is:

/set option_name < number | string>

Togglable options take 1 for on and 0 for off but as an alternative you can type:

/set toggle_option on

Some options such as gui_tray require running this after changing:

/gui apply

This can be avoided by using the preferences window instead, which is recommended, also using the gui will warn if a setting requires restart.

2.6 List of Settings

away_auto_unmark		Toggle automatically unmarking away before message	
		send.	
away_omit_alerts	away_omit_alerts Toggle omitting alerts when marked as being av		
away_reason	Default away reason.		
away_show_message	Toggle announcing of away messages.		
away_show_once		Show identical away messages only once.	
away_size_max		How many users can be away in userlist before they are	
	not colored.		
away_timeout		How often in seconds to check for max size for colors in	
		userlist.	
away_track	Toggle color change for away users in userlist.		
	Co	ontinued on next page	

2.5. Set Command 25

Table 2.1 – continued from previous page

	Table 2.1 – continued from previous page
completion_auto completion_sort completion_suffix dcc_auto_chat dcc_auto_recv	How may nicks starting with input there should be before all are show (E.g. if you have 'k' and completion_amount is set to 6, and there are 6 more people beginning with 'k' in the userlist, then all of the nicks starting with that are shown in the text box. To always cycle nicks, set to 123456 (or any other high number). Toggle automatic nick completion. Toggle nick completion sorting in "last talk" order. Suffix to be appended to nicks after completion. Toggle auto accept for DCC chats.
	How to accept DCC transfers. 0=Ask for confirmation 1=Ask for download folder 2=Save without interaction
dcc_auto_resume	Toggle auto resume of DCC transfers.
dcc_blocksize	The blocksize for DCC transfers.
dcc_completed_dir	Directory to move completed files to.
dcc_dir	Directory to download files to from DCC. Toggle speed up of DCC transfers by not waiting to
dcc_fast_send	heard if last part was received before sending next (currently disabled on Win32).
dcc_global_max_get_cps	Max file transfer speed for all downloads combined in bytes per second.
dcc_global_max_send_cps	Max file transfer speed for all uploads combined in bytes per second.
dcc_ip	DCC IP address to bind to.
dcc_ip_from_server	Get address from IRC server.
dcc_max_get_cps	Max file transfer speed for one download in bytes per second.
dcc_max_send_cps	Max file transfer speed for one upload in bytes per second.
dcc_permissions	What permissions to set on received files. (It's a CHMOD value in decimal, e.g. to CHMOD a file to 644, which is octal, you need to set dcc_permissions to 420, which is it's decimal equivalent)
dcc_port_first	First DCC port in range (leave ports at 0 for full range).
dcc_port_last	Last DCC port in range (leave ports at 0 for full range).
dcc_remove	Toggle automatic removal of finished/failed DCCs.
dcc_save_nick	Toggle saving of nicks in filenames.
dcc_send_fillspaces	Replace spaces in filenames with underscores.
dcc_stall_timeout	Time in seconds to wait before timing out during a DCC
dog timograf	send.
dcc_timeout	Time in seconds to wait before timing out a DCC transfer waiting to be accepted.
	Continued on next page

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Table 2.1 – continued from previous page

dnsprogram	Program to be used for DNS.
flood_ctcp_num	Number of CTCPs within flood_ctcp_time to be consid-
nood_ctcp_num	_ 1_
	ered a flood.
flood_ctcp_time	Time in seconds for use with flood_ctcp_num.
flood_msg_num	Number of messages within flood_msg_time to be con-
	sidered a flood.
flood_msg_time	Time in seconds for use with flood_msg_num.
gui_autoopen_chat	Toggle auto opening of Direct Chat Window on DCC
	Chat.
gui_autoopen_dialog	Toggle auto opening of dialog windows.
gui_autoopen_recv	Toggle auto opening of transfer window on DCC Recv.
gui_autoopen_send	Toggle auto opening of transfer window on DCC Send.
gui_chanlist_maxusers	Maximum number of users in channels to be listed in
8	List of Channels.
gui_chanlist_minusers	Minimum number of users in channels to be listed in
gui_enamse_mmasers	List of Channels.
gui_compact	Toggle compact mode (more or less spacing between
gui_compact	user list/channel tree rows).
gui_dialog_height	New dialog height in pixels.
gui_dialog_left	The X co-ordinance of dialogs when opened.
gui_dialog_top	The Y co-ordinance of dialogs when opened.
gui_dialog_width	New dialog width in pixels.
gui_hide_menu	Hide or unhide menu bar.
gui_input_icon	Toggle user mode icon in the nick box.
gui_input_nick	Toggle the nick box in the input box.
gui_input_spell	Enable or disable spell checking.
gui_input_style	Toggle use of text box colors and fonts in input box.
gui_join_dialog	Toggle join dialog after connect.
gui_lagometer	Toggle types of Lag-O-Meters. 0=Off 1=Graph 2=Text 3=Both
gui_lang	Set GUI language. Possible values are from 0 to 50 (Win32 only).
gui_mode_buttons	Toggle mode buttons.
gui_pane_left_size	Change size left pane.
gui_pane_right_size	Change size right pane.
gui_pane_divider_position	Saves position of divider when channel switcher and
	user list are on the same side.
gui_pane_right_size_min	FIXME
gui_quit_dialog	Toggle quit dialog.
gui_slist_fav	Toggle showing favorites only in network list.
gui_slist_select	The number of the server to select by default in the
gui_51156_561666	server list starting at 0. (E.g. to select the 67th server,
	set it to 66)
gui_slist_skip	Toggle server list on startup.
gui_tab_chans	Open channels in tabs instead of windows.
gui_tab_dialogs	Open dialogs in tabs instead of windows.
gui_tab_dots	Toggle dotted lines in the channel tree.
gui_tab_icons	Toggle channel tree icons.
	Continued on next page

2.6. List of Settings

Table 2.1 – continued from previous page

Table 2.1 – continued from previous page		
gui_tab_layout	Use treeview or tabs. 0=Tabs 2=Treeview	
gui_tab_newtofront	When to focus new tabs. 0=Never 1=Always 2=Only on requested tabs	
gui_tab_notices	Open up extra tabs for server notices.	
gui_tab_pos	1 1	
8 – –	Set position of tabs. 1=Left-Upper 2=Left 3=Right-Upper 4=Right 5=Top 6=Bottom 7=Hidden	
gui_tab_server	Open an extra tab for server messages.	
gui_tab_small	Set small tabs. 0=Off 1=Small tabs 2=Extra small tabs	
gui_tab_sort	Toggle alphabetical sorting of tabs.	
gui_tab_trunc	Number or letters to shorten tab names to.	
gui_tab_utils	Open utils in tabs instead of windows.	
gui_throttlemeter	Toggle types of throttle meters. 0=Off 1=Graph 2=Text 3=Both	
gui_topicbar	Toggle topic bar.	
gui_tray	Enable system tray icon.	
gui_tray_away	Automatically mark away/back when the tray is toggled.	
gui_tray_blink	Toggle tray icon blinking or using static images.	
gui_tray_close	Close to tray.	
gui_tray_minimize	Minimize to tray.	
gui_tray_quiet	Only show tray balloons when hidden or iconified.	
gui_ulist_buttons	Toggle userlist buttons.	
gui_ulist_count	Toggle displaying user count on top of the user list.	
gui_ulist_doubleclick	Command to run upon double click of user in userlist.	
gui_ulist_hide	Hides userlist.	
gui_ulist_icons	Toggle use of icons instead of text symbols in user list.	
gui_ulist_pos	Set userlist position. 1=Left-Upper 2=Left-Lower 3=Right-Upper 4=Right-Lower	
gui_ulist_resizable	Toggle resizable userlist.	
gui_ulist_show_hosts	Toggle user's hosts displaying in userlist. (requires irc_who_join)	
gui_ulist_sort	How to sort users in the userlist. 0=A-Z with Ops first 1=A-Z 2=A-Z with Ops last 3=Z-A 4=Unsorted	
gui_ulist_style	Toggle use of text box colors and fonts in userlist.	
	Continued on next page	

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Table 2.1 – continued from previous page

	Table 2.1 – continued from previous page
gui_url_mod	How to handle URLs when clicked. (And what to ho 0=Left Click Only 1=Shift 2=Caps Lock 4=CTRL 8=ALT
gui_usermenu	Toggle editable usermenu.
gui_win_height	Main window height in pixels.
gui_win_left	The X co-ordinance of main window when opened.
gui_win_modes	Show channel modes in title bar.
gui_win_save	Toggles saving of state on exit.
gui_win_state	Default state of the main window. 0=Not Maximized
gui_win_swap	Swap the middle and left panes (allows side-by-side userlist/tree).
gui_win_top	The Y co-ordinance of main window when opened.
gui_win_ucount	Show number of users in title bar.
gui_win_width	Main window width in pixels.
identd	Toggle internal IDENTD (Win32 only).
input_balloon_chans	Show tray balloons on channel messages.
input_balloon_hilight	Show tray balloons on highlighted messages.
input_balloon_priv	Show tray balloons on private messages.
input_balloon_time	How long balloon messages should be displayed
• – –	(2.8.8+)
input_beep_chans	Toggle beep on channel messages.
input_beep_hilight	Toggle beep on highlighted messages.
input_beep_priv	Toggle beep on private messages.
input_command_char	Character used to execute commands. (E.g. if set to '[' then you would use commands like '[me jumps around')
input_filter_beep	Toggle filtering of beeps sent by others.
input_flash_chans	Toggle whether or not to flash taskbar on channel messages.
input_flash_hilight	Toggle whether or not to flash taskbar on highlighted messages.
input_flash_priv	Toggle whether or not to flash taskbar on private messages.
input_perc_ascii	Toggle interpreting of %nnn as ASCII value.
input_perc_color	Toggle interpreting of %C, %B as color, bold, etc.
input_tray_chans	Blink tray icon on channel messages.
input_tray_hilight	Blink tray icon on highlighted messages.
input_tray_priv	Blink tray icon on private messages.
irc_auto_rejoin	Toggle auto rejoining when kicked.
irc_ban_type	The default ban type to use for all bans. (requres ire 0=*!*@*.host 1=*!*@domain 2=*!*user@*.host 3=*!*user@domain

2.6. List of Settings

Table 2.1 – continued from previous page

	.1 – continued from previous page
irc_conf_mode	Toggle hiding of join, part and quit messages. (More i 0=Show join/part/quits 1=Hide join/part/quits
irc_extra_hilight	Extra words to highlight on.
irc_hide_version	Toggle hiding of VERSION reply.
irc_id_ntext	\$4 in the channel message, channel message hilight and
irc_ia_niexi	
ine id vitovit	private message events if unidentified. \$4 in the channel message, channel message hilight and
irc_id_ytext	private message events if identified.
irc_invisible	Toggle invisible mode (+i).
	How long to delay auto-joining a channel after connect.
irc_join_delay	
irc_logging	Toggle logging.
irc_logmask	Mask used to create log filenames (strftime details: Win-
99.1.4	dows Unix). First choice nick.
irc_nick1	
irc_nick2	Second choice nick.
rc_nick3	Third choice nick.
irc_nick_hilight	What nicks to highlight when they talk.
rc_no_hilight	Nicks not to highlight on.
irc_part_reason	Default reason when leaving channel.
irc_quit_reason	Default quit reason.
irc_raw_modes	Toggle RAW channel modes.
irc_real_name	Real name to be sent to server.
irc_servernotice	Toggle receiving of server notices.
irc_skip_motd	Toggle skipping of server MOTD.
irc_user_name	Username to be sent to server.
irc_wallops	Toggle receiving wallops.
irc_who_join	Toggle running WHO after joining channel.
irc_whois_front	Toggle whois results being sent to currently active tab.
net_auto_reconnect	Toggle auto reconnect to server.
net_auto_reconnectonfail	Toggle auto reconnect upon failed connection. (Unix
	only command, not available on Windows)
net_bind_host	Network address to bind HexChat to.
net_ping_timeout	How long server ping has to be to timeout.
net_proxy_auth	Toggle proxy authentication.
net_proxy_host	Proxy host to use.
net_proxy_pass	Password to use if proxy authentication is turned on.
net_proxy_port	Port to use for proxy host.
net_proxy_type	
<u>-</u>	Type of proxy to use. 0=Disabled 1=Wingate 2=Socks4 3=Socks5 4=HTTP 5=MS Proxy (ISA)
net_proxy_use	What to use proxies for (if set). 0=All 1=IRC Only 2=DCC Only
net_proxy_user	Username to use if proxy authentication is turned on.
net_proxy_user net_reconnect_delay	How many seconds to wait before reconnection.
net_reconnect_uclay	Continued on next page

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Table 2.1 – continued from previous page

net throttle	Toggle flood protection (to keep from getting kicked).
notify_timeout	How often in seconds to check for users in your notify
nothy_timeout	list.
notify_whois_online	Toggle performing WHOIS on users on your notify list
nothy_whois_omme	when they come online.
perl_warnings	when they come offinie.
peri_warnings	Toggle perl warnings. (Recommended left to OFF).
sound_command	Command to use to run sounds.
sound_dir	Directory where sounds are located.
stamp_log	Toggle timestamps in logs.
stamp_log_format	Format to use for log timestamps (strftime details: Win-
	dows Unix).
stamp_text	Toggle timestamps in text box.
stamp_text_format	Format to use for timestamps in textbox (strftime de-
	tails: Windows Unix).
text_autocopy_color	Toggle automatic copying of color information.
text_autocopy_stamp	Toggle automatic copying of time stamps.
text_autocopy_text	Toggle automatic copying of selected text.
text_background	Sets the background image for text box.
text_color_nicks	Toggle colored nicks.
text_font	All fonts to be used (main and alternative fonts com-
	bined, shouldn't be edited manually).
text_font_main	Primary font to be used.
text_font_alternative	Alternative fonts to be used for glyphs not supported by
	the primary font.
text_indent	Toggle text indentation.
text_max_indent	Max pixels to indent text with.
text_max_lines	Max number or scrollback lines.
text_replay	Reloads conversation buffers on next startup.
text_search_case_match	Toggle performing a case-sensitive search.
text_search_backward	Toggle searching from newest text line to the oldest.
text_search_highlight_all	Toggle highlighting all occurences and underlining of
	the current occurence.
text_search_follow	Toggle search for newly arriving messages.
text_search_regexp	Toggle regarding search string as a regular expression.
text_show_marker	Toggle red marker line feature.
text_show_sep	Toggle separator line.
text_spell_langs	List of languages to have spelling for, by language
	codes, separated by commas.
text_stripcolor_msg	Toggle stripping colors from messages.
text_stripcolor_replay	Toggle stripping colors from scrollback.
text_stripcolor_topic	Toggle stripping colors from topic.
text_thin_sep	Use thin separator line instead of thick line.
text_tint_blue	Tint of blue to use for transparency settings.
text_tint_green	Tint of green to use for transparency settings.
text_tint_red	Tint of red to use for transparency settings.
text_transparent	Toggle transparent background.
text_wordwrap	Toggle wordwrap.
url_grabber	Toggle URL grabber.
	Continued on next page

2.6. List of Settings

Table 2.1 – continued from previous page

url_grabber_limit	Limit the number of URLs handled by the url grabber.
url_logging	Toggle logging URLs to <i><config>/url.log</config></i> .

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COMMANDS

Commands in HexChat are prefixed with / and to escape them you can type it twice e.g. //

HexChat will first try to run plugin commands, then user commands, then client commands, and lastly send it directly to the server.

3.1 User Commands

User commands can be used to create aliases, to run multiple commands at a time, or more complex custom commands. They are set in $Settings \rightarrow User\ Commands$.

An alias is just a shortcut referring to an existing command, for example /j refers to /join &2

Naming two user commands the same thing will run both in the order they are listed.

For more complex commands you can use these codes:

- %c Current channel
- %e Current network
- %m Machine info
- %n Your nick
- %t Time/date
- %v HexChat version
- %<num> Word
- &<num> Word from end of line

3.2 List of Commands

To get a full list of commands and what they do type /help -l.

APPEARANCE

4.1 Theme Manager

The theme manager is a simple external application, which is included with the installer on Windows and buildable on Unix, that helps install themes.

The themes are distributed as .hct files. These are just simply ZIP archives that you can extract manually and install into your config folder. Some themes can be found here.

Note: .NET 4 is required to run the theme manager; You can download it here

4.2 Theming

4.2.1 Colors

Colors are defined in $Settings \rightarrow Preferences \rightarrow Colors$. Text Colors set the palette for events to use. The rest like background color directly affect parts of the UI.

mIRC colors (0-15) are what you refer to when sending colored text over IRC for others to see and vice versa, because of this they should somewhat follow a set of standards so clients can agree 4 is red.

Local colors (16-31) are to be used by HexChat only and can be anything you wish, these are typically what you use in your events.

4.2.2 Text Events

Text events control the look of every event you see. They can be customized in *Settings* \rightarrow *Text Events* using these codes to format it:

- %C<fg>,<bg> Color code
- %U Underlined text
- %B Bold text
- %H Hide text
- %O Normal text
- \$t Text separator

• \$<num> Event information

Note: Always hit enter after editing a field.

4.2.3 Icons

HexChat comes with built in icons for the tray, user list, and channel tree (which can be disabled in Preferences). You can use custom icons by placing icons (16x16 recommended) in an icons subdir, which may need to be created, within your config folder. The icons must be named as follows:

• User List

- ulist_netop.png
- ulist_founder.png
- ulist_owner.png
- ulist_op.png
- ulist_halfop.png
- ulist_voice.png

· Channel Tree

- tree_channel.png
- tree_dialog.png
- tree_server.png
- tree_util.png

· Tray Icon

- tray_fileoffer.png
- tray_highlight.png
- tray_message.png
- hexchat.png

4.2.4 Gtk Theme

To customize more than just text color you can place a gtkrc file in <installdir>\etc\gtk-2.0

4.3 Buttons, Menus, and Popups

4.3.1 Userlist Popup

Popups are shown when you right click on a nickname, either in the userlist or in the main chat itself. These can be edited in $Settings \rightarrow Userlist Popup$

The Name column can take either just the name of the entry (_ characters represent keyboard shortcuts), *SUB/ENDSUB* for submenus, *SEP* for separators, and *TOGGLE* for toggleable options.

The Command column can take any command with text formatted using the same codes as text events and on top of that they also have their own codes:

- %a all selected nicks
- %c current channel
- %h selected nick's hostname
- %m machine info
- %n your nickname
- %s selected nickname
- %t time/date
- %u selected nick's account (2.9.6+)

As a sidenote the **gui_ulist_doubleclick** setting can run a command using these codes when double-clicking a nick in the userlist.

4.3.2 Userlist Buttons

Buttons are shown below the userlist, can be edited in *Settings* \rightarrow *Userlist Buttons*, and take the same syntax as Userlist Popup for commands.

4.3.3 Usermenu

In order to add custom entries to your menu you need to first enable the usermenu with the command /set $gui_usermenu$ on which may require a restart. Once this is enabled you can go to $Usermenu \rightarrow Edit$ this Menu to add any command you would like. For menu entries it supports the same as Userlist Popups.

CHAPTER

FIVE

ADDONS

HexChat ships with a handful of useful plugins that extend the functionality of the client. In order to auto-load custom ones you just place them in an addons subdir within your config folder, manually with /load and /unload, or with $Window \rightarrow Plugins \ and \ Scripts$.

With the included scripting interfaces you can also use easier to create but equally powerful scripts in languages such as Python. These are loaded/unloaded in the same manner as plugins.

5.1 Do At

This plugin can be used to perform an arbitrary command on multiple channels or contexts. List can be specific to networks, or any context on a separate network. Usage:

/doat [channel,list,/network] [command]

To change username on network FreeNode from some other network:

/doat /FreeNode nick ANewNick

5.2 Exec

With Exec you can perform commands as if you ran them in the command line. The output will be printed at once, in the end of execution. If the command takes more than 10 seconds to complete, it gets aborted to avoid locking down HexChat. Usage:

/exec ping google.com

5.3 FISHLIM

Adds FiSH encryption support. You set a password for a conversation/channel, and then all your messages get encrypted. Only those who know the password will be able to read your messages. Usage is simple: first you set the password:

/setkey yoursecretkey

Then you let your fellow chatters know this password. Once they also set the password on their sides, they'll receive messages decrypted and send them encrypted, too.

5.4 Update Checker

Automatically checks for updates available. Can be manually checked via $Help \rightarrow Check$ for Updates or by the command:

/updcheck

5.5 Sysinfo

Prints out basic system information on both Windows and Unix. You can either activate in $Window \rightarrow Display System$ Info or type:

/sysinfo

5.6 Checksum

Automatically calculates the SHA-256 checksum of files sent and recieved via DCC.

5.7 Winamp

Displays your currently playing song via Window

— Display Current Song or by command:

/winamp

Note: Foobar can also be used with the foo_winamp_spam plugin.

TIPS & TRICKS

6.1 Spell Check

6.1.1 Windows

HexChat for Windows uses MySpell for spelling via the Enchant library. The required libraries are included in the installer, but the dictionaries are big so they are distributed in a separate archive. They're from Debian Lenny.

If you want to have spelling, do the following:

- 1. Download the Spelling Dictionaries self-extracting archive
- 2. Specify the languages you wish to have spelling for in *Settings* \rightarrow *Preferences* \rightarrow *Interface* \rightarrow *Input box*. You need to specify their language codes, see %LOCALAPPDATA%\enchant\myspell for hints. By default, HexChat uses the LC_ALL environmental variable, or if it's unset, it falls back to en_US.

Note: For portable installs, you can use the share\myspell\dicts subfolder instead of %LOCALAPPDATA%\enchant\myspell (both will work, but the former one can be carried on a pendrive unlike the latter one).

6.1.2 Unix

Install your spelling dictionaries via your package manager (something like myspell-en-us or hunspell-en for English). Then make sure to enable spelling under $Settings \rightarrow Preferences \rightarrow Interface \rightarrow Input box$.

If you use static spelling (this is the default for manual builds) make sure to specify the languages you wish to have spelling for in $Settings \rightarrow Preferences \rightarrow Interface \rightarrow Input box$. You need to specify their language codes (i.e. de_DE for german), separated by commas. You will also have to manually install the libenchant-dev package for static spelling to work.

Installs using libsexy (most packages *should* use this) should be using your systems default, but it can be overriden by starting HexChat with "LANG=en hexchat"

6.2 Localization

In order to start HexChat in a different language (for which a translation exists here) you can use the regional settings of Windows, or set the LC_ALL user environmental variable. The value of the variable must be the two letter country code for your country. If in doubt, have a look at the sharelocale folder. You have to restart HexChat for the changes to apply.

You can also use a batch file to affect only HexChat:

```
@echo off
set LC_ALL=en
start hexchat.exe
```

This sets the language to English. You may use fr for French, de for German, etc. Save the code above as run.bat, and copy it to the HexChat install folder. You can then start HexChat in the desired language by running the batch file.

6.3 Special Glyphs

There are many symbols which may not be supported by the main font you selected to use in HexChat, especially Asian glyphs and special characters, like a peace sign. In this case, you'll see "lego blocks" instead of them.

To circumvent this, you need to specify alternative fonts for glyphs not supported by your current font. You can specify them in $Settings \rightarrow Preferences \rightarrow Chatting \rightarrow Advanced \rightarrow Alternative fonts$. By default, it is set to $Arial\ Unicode\ MS, Lucida\ Sans\ Unicode, MS\ Gothic, Unifont$, which should fix most rendering errors.

Unifont is freely available, so it is recommended to install it - it should solve most of your rendering problems.

In case you still get lego blocks, you'll need to add additional fonts to the list which support those obscure glyphs. Feel free to extend the list. You only need to specify font names, other info (such as size, weight, style etc.) should be omitted, otherwise those entries will be ignored. All font names must be separated by a comma and there mustn't be spaces before and/or after commas.

Please bear in mind that for some reason certain fonts that can display a certain glyph when used as the main font may not work when specified as an alternative font so you might have to play around it a bit.

6.4 Client Certificates

Client Certificates allows you to identify to networks services using a certificate. Please do not mistake it for server certificate which allows you to connect to network with invalid certificate, right now Hexchat can't do it.

To use one you need to put your certificate file inside certs directory in HexChat's config folder.

Certificate should be named after the network where it will be used, for example if you want to use it on *Rizon*, certificate file should look like this: *Rizon.pem*. If that does not exist every network will try *client.pem*.

6.4.1 Note on Custom Server Certificates

On Windows it is possible to edit *cert.pem* file in Hexchat main installation directory and add custom certificate there. But this method isn't very effective as *cert.pem* is overwritten each time Hexchat installer is used.

6.5 Notice Placement

Other than channel messages and private messages, IRC has a notice type of message. This is intended to be used as a reply, something that will not cause the other client to send any acknowledgement back. When HexChat displays these messages, it shows them in a tab that it figures is appropriate.

6.5.1 Why replies from ChanServ may not appear in the current tab

When HexChat decides where to print a notice, it does so in the following order:

- 1. In a query window you have with that user
- 2. In the front tab, if the tab is a channel, the other user is on that channel, and you are on the correct network
- 3. In the last joined channel you have in common with the other user
- 4. The current tab, if you are on the same network
- 5. The last tab you looked at that shares the correct network with the other user

This means that if you issue a **/cs info #yourchannel** from your channel, the reply may show up elsewhere if ChanServ isn't in your channel, but is in some other channel.

6.5.2 How to make notices show up in a consistent location

The simplest method is to set the location in Settings o Preferences o Channel switcher o Placement of notices, and select "in an extra tab" or "in the front tab". The former will cause all server notices to go into a (snotices) tab, and all user notices to go into a (notices) tab. The latter will always print the notices where you are, this can cause odd positioning of channel notices but you will never miss them.

If you know who will notice you before hand, you can simply query the user before they notice you. This way, all notices from that user will show up in the query tab. In the case of ChanServ, this may allow an easier archive of commands you have done anyway.

For other locations, a separate script would be required. While not currently implemented, it would be possible with a script to treat all notices like private messages (open a new query window when received), or place them in a specific existing tab, such as the server tab. At this point, the choice is up to you (or whoever designs the script).

6.6 Tor

- 1. Find a network that allows tor (most don't). Example: freenode
- 2. Get tor working. Refer to the tutorial from official tor website (instructions for Windows and Linux). For windows Browser bundle is an easy way to test.
- 3. Set up proxy in $Settings \rightarrow Preferences \rightarrow Network Setup$. Example (with defaults):
- 4. Setup the network in *HexChat* → *Network List*. Note the ip from freenode's site (which may change) and for freenode SASL is required. Example:

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CONTRIBUTOR DOCUMENTATION

7.1 How to Help

7.1.1 Translation

Translation is handled by Transifex. Simply register on the site and apply for membership to a translation team for your language. Approval may take some time.

Note: Your Transifex email will be public in the created files.

7.1.2 Documentation

For simple edits of the documentation just go to the page and click *Show/Edit on Github* on the left side, fork the repo, edit it, and submit a pull request.

For more complex additions I direct you to documentation for the projects we use:

- reStructuredText for the markup language.
- Pandoc for converting existing docs.
- · Github and ReadTheDocs for hosting.
- Sphinx for generating the docs.

7.1.3 Bug Reports

We use Github Issues for our bug reports. Be sure to search on there for similar issues before posting your own, if it already exists pointing out you also have the issue never hurts. With the bug report include at minimum the information from *help -> about*.

Note: Issues is not a forum for asking questions, please direct those to IRC for now.

7.1.4 IRC Support

Anybody who enjoys helping others and understands much of whats on this site is welcome to help new users in our official irc channel on freenode, #hexchat.

7.2 Developers

7.2.1 Building

Windows

Software

Download and install (in their default install paths):

- Visual Studio 2012 Express for Windows Desktop + Visual Studio 2012 Update 3
- Inno Setup 5.5 Unicode
- 7-Zip x64
- gendef (extract to c:\mozilla-build)
- msgfmt (extract to c:\mozilla-build)

Source code

Download the HexChat source code and extract it to somewhere. You will work in the extracted *hexchat* folder from now.

GTK+

Create a folder for GTK+, referred to as *YourDepsPath* from now (*C:\mozilla-build\hexchat\gtk* by default). Specify the absolute path to *YourDepsPath* in *win32\hexchat.props* with the *YourDepsPath* property. Download:

- GTK+ x86 bundle
- GTK+ x64 bundle

Extract them to win32 and x64 in YourDepsPath.

See Also:

If you would like to build GTK+ yourself, read this guide.

Language interfaces

You can skip this step, but then you won't be able to generate the installer. Download:

- Perl 5.18 x86 (extract to c:\mozilla-build\perl-5.18\Win32)
- Python 2.7 x86 (install to c:\mozilla-build\python-2.7\Win32)
- Python 3.3 x86 (install to c:\mozilla-build\python-3.3\Win32)
- Perl 5.18 x64 (extract to c:\mozilla-build\perl-5.18\x64)
- Python 2.7 x64 (install to *c:\mozilla-build\python-2.7\x64*)
- Python 3.3 x64 (install to c:\mozilla-build\python-3.3\x64)

You can use other paths, but then you must update the related properties in win32\text{Nexchat.props} accordingly.

Building

Open win32\text{hexchat.sln}, right click on the release/installer (or release/copy if you skipped the language interfaces) project and set it as the startup project. Now you can compile from under the Build menu to your taste.

If everything went fine, the resulting binaries will be found in *hexchat-build\Win32* and/or *hexchat-build\x64*. It was easy, wasn't it?

Unix

First of all, you have to install the build dependencies just like you would for an XChat compilation. Package names differ across distros, so be creative and check your *configure* output if you get an error. Also most package-managers can get the dependencies for you:

- · yum: yum-builddep hexchat
- apt: apt-get build-dep xchat (and these... libnotify-dev libproxy-dev libpci-dev libcanberra-dev)

HexChat has its source code hosted using Git, so you have to install Git as well. When it's ready, you can start the actual compilation, which is basically:

```
git clone https://github.com/hexchat/hexchat.git
cd hexchat
./autogen.sh
./configure
make
sudo make install
```

This will compile with defaults. See ./configure –help for more info about flags.

Building Theme Manager

The theme manager isn't built by default on Unix. To do so install MonoDevelop with your package manager of choice then run this:

```
cd hexchat/src/htm
mdtool --verbose build htm-mono.csproj
mono thememan.exe
```

Mac

Install Homebrew, then install all the build dependencies of HexChat such as GTK+. Be creative and check your *configure* output if you get an error.

Download the testing package which is prepared for Homebrew compilation (basically a clone of Git HEAD with ./autogen.sh ran on Debian 6). Extract it and run the following commands:

```
cd hexchat
./configure --disable-nls --disable-xlib --disable-perl
make
./src/fe-gtk/hexchat
```

See ./configure -help for more info about flags.

7.2.2 Plugin Interface

Introduction

Plugins for HexChat are written in C. The interface aims to keep 100% binary compatability. This means that if you upgrade HexChat, you will not need to recompile your plugins, they'll continue to work. The interface doesn't depend on any structures and offsets, so compiler versions shouldn't have an impact either. The only real requirement of a HexChat plugin is that it define an *hexchat_plugin_init* symbol. This is your entry point function, see the example below. You should make all your global variables and functions *static*, so that a symbol is not exported. There is no harm in exporting these symbols, but they are not necessary and only pollute the name-space. Plugins are compiled as shared objects (.so files), for example:

Most UNIX systems:

```
gcc -Wl –export-dynamic -Wall -O1 -shared -fPIC myplugin.c -o myplugin.so
OS X:
```

gcc -no-cpp-precomp -g -O2 -Wall -bundle -flat_namespace -undefined suppress -o myplugin.so myplugin.c

See the Windows section on how to compile a plugin using Visual Studio.

All strings passed to and from plugins are encoded in UTF-8, regardless of locale.

Sample plugin

This simple plugin auto-ops anyone who joins a channel you're in. It also adds a new command /AUTOOPTOGGLE, which can be used to turn the feature ON or OFF. Every HexChat plugin must define an hexchat_plugin_init function, this is the normal entry point. hexchat_plugin_deinit is optional.

```
#include "hexchat-plugin.h"
#define PNAME "AutoOp"
#define PDESC "Auto Ops anyone that joins"
#define PVERSION "0.1"
                              /* plugin handle */
static hexchat_plugin *ph;
static int enable = 1;
static int
join_cb (char *word[], void *userdata)
                if (enable)
                                /* Op ANYONE who joins */
                                hexchat_commandf (ph, "OP %s", word[1]);
                /* word[1] is the nickname, as in the Settings->Text Events window in HexChat */
                return HEXCHAT_EAT_NONE;
                                               /* don't eat this event, HexChat needs to see it! */
}
static int
autooptoggle_cb (char *word[], char *word_eol[], void *userdata)
                if (!enable)
```

```
enable = 1;
                                hexchat_print (ph, "AutoOping now enabled!\n");
                }
                else
                {
                                enable = 0;
                                hexchat_print (ph, "AutoOping now disabled!\n");
                }
                return HEXCHAT_EAT_ALL;
                                           /* eat this command so HexChat and other plugins can't p.
}
hexchat_plugin_get_info (char **name, char **desc, char **version, void **reserved)
{
                *name = PNAME;
                *desc = PDESC;
                *version = PVERSION;
}
int
hexchat_plugin_init (hexchat_plugin *plugin_handle, char **plugin_name, char **plugin_desc, char **pl
                /* we need to save this for use with any hexchat_* functions */
                ph = plugin_handle;
                /* tell HexChat our info */
                *plugin_name = PNAME;
                *plugin_desc = PDESC;
                *plugin_version = PVERSION;
                hexchat_hook_command (ph, "AutoOpToggle", HEXCHAT_PRI_NORM, autooptoggle_cb, "Usage:
                hexchat_hook_print (ph, "Join", HEXCHAT_PRI_NORM, join_cb, 0);
                hexchat_print (ph, "AutoOpPlugin loaded successfully!\n");
                return 1;
                               /* return 1 for success */
}
```

What's word and word_eol?

They are arrays of strings. They contain the parameters the user entered for the particular command. For example, if you executed:

These arrays are simply provided for your convenience. You are **not** allowed to alter them. Both arrays are limited to 32 elements (index 31). *word[0]* and *word_eol[0]* are reserved and should not be read.

Lists and Fields

Lists of information (DCCs, Channels, User list, etc.) can be retreived with *hexchat_list_get*. All fields are **read only** and must be copied if needed for a long time after calling *hexchat_list_str*. The types of lists and fields available are:

"channels"	list of channels, querys and their se	rvers
Name	Description	Type
channel	Channel or query name	string
channelkey	Channels key or NULL (2.9.6+)	string
chantypes	Channel types e.g. "#!&"	string
context	(hexchat_context *) pointer. Can be used with hexchat_set_context	string
flags	 1 = Connected 2 = Connecting 4 = Marked away 8 = End of MOTD 16 = Has WHOX 32 = Has IDMSG 64 = Hide Join/Parts 128 = unused 256 = Beep on Message 512 = Blink Tray 1024 = Blink Taskbar 	int
id	Unique server ID	int
lag	Lag in milliseconds	int
maxmodes	Maximum modes per line	int
network	Maximum modes per line	int
nickprefixes	Nickname prefixes e.g. "@+"	string
nickmodes	Nickname mode chars e.g. "ov"	string
queue	Number of bytes in the send-queue	int
server	Server name to which this channel belongs	string
type	 1 = Server 2 = Channel 3 = Dialog 	int
users	Number of users in this channel	int

"dcc"	list of DCC file transfers	
Name	Description	Туре
address32	Address of the remote user (ipv4 address)	int
cps	Bytes per second (speed)	int
destfile	Destination full pathname	string
file	File name	string
nick	Nickname of person who the file is from/to	string
port	TCP port number	int
pos	Bytes sent/received	int
poshigh	Bytes sent/received, high order 32 bits	int
resume	Point at which this file was resumed (or zero if it was not resumed)	int
resumehigh	Point at which this file was resumed, high order 32 bits	int
size	File size in bytes, low order 32 bits (cast it to unsigned)	int
sizehigh	File size in bytes, high order 32 bits	int
status	 0 = Queued 1 = Active 2 = Failed 3 = Done 4 = Connecting 5 = Aborted 	int
type	 0 = Send 1 = Recieve 1 = ChatRecv 1 = ChatSend 	int

"ignore"	current ignore list	
Name	Description	Type
mask	Ignore maske.g. *!*@*.aol.com	string
flags	 0 = Private 1 = Notice 2 = Channel 3 = CTCP 4 = Invite 5 = Unignore 6 = NoSave 7 = DCC 	int

"notify"	list of people on notify	
Name	Description	Type
networks	Networks to which this nick applies. Comma separated. May be NULL.	string
nick	Nickname	string
flags	Bit field of flags. 0=Is online.	int
on	Time when user came online.	time_t
off	Time when user went offline.	time_t
seen	Time when user the user was last verified still online.	time_t

Fields are only valid for the context when hexchat_list_get() was called (i.e. you get information about the user ON THAT ONE SERVER ONLY). You may cycle through the "channels" list to find notify information for every server.

"users"	list of users in the current channel	
Name	Description	Type
account	Account name or NULL (2.9.6+)	string
away	Away status (boolean)	int
lasttalk	Last time the user was seen talking	time_t
nick	Nick name	string
host	Host name in the form: user@host (or NULL if not known).	string
prefix	Prefix character, .e.g: @ or +. Points to a single char.	string
realname	Real name or NULL	string
selected	Selected status in the user list, only works for retrieving the user list of the focused tab	int

Example:

Plugins on Windows (Win32)

All you need is Visual Studio setup as explained in Building. Your best bet is to use an existing plugin (such as the currently unused SASL plugin) in the HexChat solution as a starting point. You should have the following files:

- · hexchat-plugin.h
 - main plugin header
- plugin.c Your plugin, you need to write this one :)
- plugin.def A simple text file containing the following:

Leave out *hexchat_plugin_deinit* if you don't intend to define that function. Then compile your plugin in Visual Studio as usual.

Caveat: plugins compiled on Win32 **must** have a global variable called *ph*, which is the *plugin_handle*, much like in the sample plugin above.

Controlling the GUI

A simple way to perform basic GUI functions is to use the /GUI command. You can execute this command through the input box, or by calling hexchat command (ph, "GUI");

- GUI ATTACH: Same function as "Attach Window" in the HexChat menu.
- GUI DETACH: Same function as "Detach Tab" in the HexChat menu.
- GUI APPLY: Similar to clicking OK in the settings window. Execute this after /SET to activate GUI changes.
- GUI COLOR *n*: Change the tab color of the current context, where n is a number from 0 to 3.
- **GUI FOCUS:** Focus the current window or tab.
- GUI FLASH: Flash the taskbar button. It will flash only if the window isn't focused and will stop when it is focused by the user.
- GUI HIDE: Hide the main HexChat window completely.
- GUI ICONIFY: Iconify (minimize to taskbar) the current HexChat window.
- GUI MSGBOX *text*: Displays a asynchronous message box with your text.
- GUI SHOW: Show the main HexChat window (if currently hidden).

You can add your own items to the menu bar. The menu command has this syntax:

For example:

In the example above, it would be recommended to execute *MENU DEL FServe* inside your *hexchat_plugin_deinit* function. The special item with name "-" will add a separator line.

Parameters and flags:

- -eX: Set enable flag to X. -e0 for disable, -e1 for enable. This lets you create a disabled (shaded) item.
- -iFILE: Use an icon filename FILE. Not supported for toggles or radio items.
- -k<mod>,<key>: Specify a keyboard shortcut. "mod" is the modifier which is a bitwise OR of: 1-SHIFT
 4- CTRL 8-ALT in decimal. "key" is the key value in decimal, e.g. -k5,101 would specify SHIFT-CTRL-E.
- -m: Specify that this label should be treated as Pango Markup language. Since forward slash ("/") is already used in menu paths, you should replace closing tags with an ASCII 003 instead e.g.: hexchat_command (ph, "MENU -m ADD "
b>Bold Menu<03b>"");
- -pX: Specify a menu item's position number. e.g. -p5 will cause the item to be inserted in the 5th place. If the position is a negative number, it will be used as an offset from the bottom/right-most item.
- -rX,group: Specify a radio menu item, with initial state X and a group name. The group name should be the exact label of another menu item (without the path) that this item will be grouped with. For radio items, only a select command will be executed (no unselect command).
- -tX: Specify a toggle menu item with an initial state. -t0 for an "unticked" item and -t1 for a "ticked" item.

If you want to change an item's toggle state or enabled flag, just *ADD* an item with exactly the same name and command and specify the -tX -eX parameters you need.

It's also possible to add items to HexChat's existing menus, for example:

However, internal names and layouts of HexChat's menu may change in the future, so use at own risk.

Here is an example of Radio items:

You can also change menus other than the main one (i.e popup menus). Currently they are:

Root Name	Menu
\$TAB	Tab menu (right click a channel/query tab or treeview row)
\$TRAY	System Tray menu
\$URL	URL link menu
\$NICK	Userlist nick-name popup menu
\$CHAN	Menu when clicking a channel in the text area

Example:

You can manipulate HexChat's system tray icon using the /TRAY command:

Icon numbers:

- 2: Message
- 5: Highlight
- 8: Private
- 11:File

For tray balloons on Linux, you'll need libnotify.

Filenames can be *ICO* or *PNG* format. *PNG* format is supported on Linux/BSD and Windows XP. Set a timeout of -1 to use HexChat's default.

Handling UTF-8/Unicode strings

The HexChat plugin API specifies that strings passed to and from HexChat must be encoded in UTF-8.

What does this mean for the plugin programmer? You just have to be a little careful when passing strings obtained from IRC to system calls. For example, if you're writing a file-server bot, someone might message you a filename. Can you pass this filename directly to open()? Maybe! If you're lazy... The correct thing to do is to convert the string to "system locale encoding", otherwise your plugin will fail on non-ascii characters.

Here are examples on how to do this conversion on Unix and Windows. In this example, someone will CTCP you the message "SHOWFILE <filename>".

```
#ifdef _WIN32
                wchar_t wide_name[MAX_PATH];
                /* convert UTF-8 to WIDECHARs (aka UTF-16LE) */
                if (MultiByteToWideChar (CP_UTF8, 0, fname, -1, wide_name, MAX_PATH) < 1)
                                return;
                }
                /* now we have WIDECHARs, so we can _wopen() or CreateFileW(). */
                /* _wfopen actually requires NT4, Win2000, XP or newer. */
                fp = _wfopen (wide_name, "r");
#else
                char *loc_name;
                /* convert UTF-8 to System Encoding */
                loc_name = g_filename_from_utf8 (fname, -1, 0, 0, 0);
                if(!loc_name)
                                return;
                }
                /* now open using the system's encoding */
                fp = fopen (loc_name, "r");
                g_free (loc_name);
#endif
                if (fp)
                                while (fgets (buf, sizeof (buf), fp))
                                                /* send every line to the user that requested it */
                                                hexchat_commandf (ph, "QUOTE NOTICE %s: %s", nick, bi
                                fclose (fp);
                }
}
```

Types and Constants

```
hexchat_plugin
hexchat_list
hexchat_hook
hexchat_context
hexchat_event_attrs
HEXCHAT_PRI_HIGHEST
HEXCHAT_PRI_HORM
HEXCHAT_PRI_LOW
HEXCHAT_PRI_LOW
HEXCHAT_PRI_LOWEST
```

```
HEXCHAT_EAT_XCHAT
HEXCHAT_EAT_PLUGIN
HEXCHAT_EAT_ALL
HEXCHAT_FD_READ
HEXCHAT_FD_WRITE
HEXCHAT_FD_EXCEPTION
HEXCHAT_FD_NOTSOCKET
```

Functions

General Functions

void hexchat_command (hexchat_plugin *ph, const char *command)

Executes a command as if it were typed in HexChat's input box.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- **command** Command to execute, without the forward slash "/".

void **hexchat_commandf** (hexchat_plugin *ph, const char *format, ...)

Executes a command as if it were typed in HexChat's input box and provides string formatting like printf().

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- **format** The format string.

void hexchat_print (hexchat_plugin *ph, const char *text)

Prints some text to the current tab/window.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- text Text to print. May contain mIRC color codes.

void hexchat_printf (hexchat_plugin *ph, const char *format, ...)

Prints some text to the current tab/window and provides formatting like printf().

Parameters

- **ph** Plugin handle (as given to hexchat_plugin_init()).
- **format** The format string.

int hexchat_emit_print (hexchat_plugin *ph, const char *event_name, ...)

Generates a print event. This can be any event found in the *Settings* \rightarrow *Text Events* window. The vararg parameter list **must** always be NULL terminated. Special care should be taken when calling this function inside a print callback (from hexchat_hook_print()), as not to cause endless recursion.

Parameters

- **ph** Plugin handle (as given to hexchat_plugin_init()).
- event_name Text event to print.

Returns 0 on Failure, 1 on Success

Example:

```
hexchat_emit_print (ph, "Channel Message", "John", "Hi there", "@", NULL);
```

int hexchat_emit_print_attrs (hexchat_plugin *ph, hexchat_event_attrs *attrs, const char *event name, ...)

Generates a print event. This is the same as hexchat_emit_print() but it passes an hexchat_event_attrs * to hexchat with the print attributes.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- attrs Print attributes. This should be obtained with hexchat_event_attrs_create() and freed with hexchat_event_attrs_free().
- event_name Text event to print.

Returns 0 on Failure, 1 on Success

New in version 2.9.6. **Example:**

```
hexchat_event_attrs *attrs;

attrs = hexchat_event_attrs_create (ph);
attrs->server_time_utc = 1342224702;
hexchat_emit_print (ph, attrs, "Channel Message", "John", "Hi there", "@", NULL);
hexchat_event_attrs_free (ph, attrs);
```

void hexchat_send_modes (hexchat_plugin *ph, const char *targets[], int ntargets, int modes_per_line, char sign, char mode)

Sends a number of channel mode changes to the current channel. For example, you can Op a whole group of people in one go. It may send multiple MODE lines if the request doesn't fit on one. Pass 0 for *modes_per_line* to use the current server's maximum possible. This function should only be called while in a channel context.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- targets Array of targets (strings). The names of people whom the action will be performed on.
- ntargets Number of elements in the array given.
- modes per line Maximum modes to send per line.
- **sign** Mode sign, '-' or '+'.
- mode Mode char, e.g. 'o' for Ops.

Example: (Ops the three names given)

```
const char *names_to_Op[] = {"John", "Jack", "Jill"};
hexchat_send_modes (ph, names_to_Op, 3, 0, '+', 'o');
```

int hexchat_nickcmp (hexchat_plugin *ph, const char *s1, const char *s2)

Performs a nick name comparision, based on the current server connection. This might be an RFC1459 compliant string compare, or plain ascii (in the case of DALNet). Use this to compare channels and nicknames. The function works the same way as strcasecmp().

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- **s1** String to compare.

• s2 – String to compare s1 to.

Quote from RFC1459: >Because of IRC's scandanavian origin, the characters {}| are considered to be the lower case equivalents of the characters [], respectively. This is a critical issue when determining the equivalence of two nicknames.

Returns An integer less than, equal to, or greater than zero if s1 is found, respectively, to be less than, to match, or be greater than s2.

char* hexchat_strip (hexchat_plugin *ph, const char *str, int len, int flags)

Strips mIRC color codes and/or text attributes (bold, underlined etc) from the given string and returns a newly allocated string.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- **str** String to strip.
- len Length of the string (or -1 for NULL terminated).
- flags Bit-field of flags: 0: Strip mIRC colors. 1: Strip text attributes.

Returns A newly allocated string or NULL for failure. You must free this string with hexchat_free().

Example:

void **hexchat free** (hexchat plugin *ph, void *ptr)

Frees a string returned by **hexchat_*** functions. Currently only used to free strings from hexchat_strip().

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- **ptr** Pointer to free.

hexchat event attrs *hexchat event attrs create (hexchat plugin *ph)

Allocates a new hexchat_event_attrs. The attributes are initially marked as unused.

Returns A pointer to the allocated hexchat_event_attrs. Should be freed by hexchat_event_attrs_free().

New in version 2.9.6.

void hexchat_event_attrs_free (hexchat_plugin *ph, hexchat_event_attrs *attrs)

Frees an hexchat_event_attrs.

Parameters

• attrs - Attributes previously allocated by hexchat_event_attrs_create().

New in version 2.9.6.

Getting Information

const char* hexchat_get_info (hexchat_plugin *ph, const char *id)

Returns information based on your current context.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- id ID of the information you want. List of ID's(case sensitive):
 - away: away reason or NULL if you are not away.
 - channel: current channel name.
 - charset: character-set used in the current context.
 - configdir: HexChat config directory, e.g.: /home/user/.config/hexchat.
 This string is encoded in UTF-8.
 - event_text <name>: text event format string for name.
 - gtkwin_ptr: (GtkWindow *).
 - host: real hostname of the server you connected to.
 - inputbox: the input-box contents, what the user has typed.
 - libdirfs: library directory. e.g. /usr/lib/hexchat. The same directory used for autoloading plugins. This string isn't necessarily UTF-8, but local file system encoding.
 - modes: channel modes, if known, or NULL.
 - **network:** current network name or NULL.
 - **nick:** your current nick name.
 - nickserv: nickserv password for this network or NULL.
 - server: current server name (what the server claims to be). NULL if you are not connected.
 - topic: current channel topic.
 - version: HexChat version number.
 - win_ptr: native window pointer. Unix: (GtkWindow *) Win32: HWND.
 - win_status: window status: "active", "hidden" or "normal".

Returns A string of the requested information, or NULL. This string must not be freed and must be copied if needed after the call to hexchat_get_info().

int **hexchat_get_prefs** (hexchat_plugin *ph, const char *name, const char **string, int *integer)

Provides HexChat's setting information (that which is available through the /SET command). A few extra bits of information are available that don't appear in the /SET list, currently they are:

•state cursor: Current input box cursor position (characters, not bytes).

•id: Unique server id

Parameters

• ph - Plugin handle (as given to hexchat plugin init()).

- name Setting name required.
- **string** Pointer-pointer which to set.
- integer Pointer to an integer to set, if setting is a boolean or integer type.

Returns

- 0: Failed.
- 1: Returned a string.
- 2: Returned an integer.
- 3: Returned a boolean.

Example:

 $\texttt{hexchat_list*} \ \textbf{hexchat_list_get} \ (\texttt{hexchat_plugin} \ *ph, \texttt{const} \ \texttt{char} \ *name)$

Retreives lists of information.

Parameters

• name – Name from the List and Fields Table

Returns hexchat_list to be used by the following functions.

const char* const* hexchat_list_fields (hexchat_plugin *ph, const char *name)
Lists fields in a given list.

Parameters

• name – Name from the List and Fields Table

int hexchat_list_next (hexchat_plugin *ph, hexchat_list *xlist)

Selects the next list item in a list.

Parameters

xlist - hexchat_list returned by hexchat_list_get()

const char* hexchat_list_str (hexchat_plugin *ph, hexchat_list *xlist, const char *name)

Gets a string field from a list.

Parameters

- name Name from the List and Fields Table
- xlist hexchat_list returned by hexchat_list_get()

int hexchat_list_int (hexchat_plugin *ph, hexchat_list *xlist, const char *name)

Gets a int field from a list.

Parameters

• name – Name from the List and Fields Table

```
• xlist - hexchat_list returned by hexchat_list_get()
```

time_t hexchat_list_time (hexchat_plugin *ph, hexchat_list *xlist, const char *name)

Gets a time field from a list.

Parameters

- name Name from the List and Fields Table
- xlist hexchat list returned by hexchat list get()

void hexchat_list_free (hexchat_plugin *ph, hexchat_list *xlist)
Frees a list.

Parameters

• xlist - hexchat_list returned by hexchat_list_get()

Hook Functions

```
hexchat_hook* hexchat_hook_command (hexchat_plugin *ph, const char *name, int pri, int (*callb) (char *word[], char *word_eol[], void *user_data), const char *help text, void *userdata)
```

Adds a new /command. This allows your program to handle commands entered at the input box. To capture text without a "/" at the start (non-commands), you may hook a special name of "". i.e hex-chat_hook_command(ph, "", ...).

Commands hooked that begin with a period ('.') will be hidden in /HELP and /HELP -l.

Parameters

- **ph** Plugin handle (as given to hexchat_plugin_init()).
- name Name of the command (without the forward slash).
- **pri** Priority of this command. Use <code>HEXCHAT_PRI_NORM</code>.
- callb Callback function. This will be called when the user executes the given command name.
- **help_text** String of text to display when the user executes **/HELP** for this command. May be NULL if you're lazy.
- **userdata** Pointer passed to the callback function.

Returns Pointer to the hook. Can be passed to hexchat unhook ().

Example:

hexchat_hook* hexchat_hook_fd (hexchat_plugin *ph, int fd, int flags, int (*callb) (int fd, int flags, void *user data), void *userdata)

Hooks a socket or file descriptor. WIN32: Passing a pipe from MSVCR71, MSVCR80 or other variations is not supported at this time.

Parameters

- **ph** Plugin handle (as given to *hexchat_plugin_init* ()).
- **fd** The file descriptor or socket.
- **flags** One or more of HEXCHAT_FD_* constants tells HexChat that the provided *fd* is not a socket, but an "MSVCRT.DLL" pipe.
- callb Callback function. This will be called when the socket is available for reading/writing or exception (depending on your chosen flags)
- **userdata** Pointer passed to the callback function.

Returns Pointer to the hook. Can be passed to hexchat_unhook().

```
hexchat_hook* hexchat_hook_print (hexchat_plugin *ph, const char *name, int pri, int (*callb) (char *word[], void *user_data), void *userdata)
```

Registers a function to trap any print events. The event names may be any available in the *Settings* \rightarrow *Text Events* window. There are also some extra "special" events you may hook using this function. Currently they are:

- •"Open Context": Called when a new hexchat_context is created.
- •"Close Context": Called when a hexchat_context pointer is closed.
- •"Focus Tab": Called when a tab is brought to front.
- •"Focus Window": Called a toplevel window is focused, or the main tab-window is focused by the window manager.
- •"DCC Chat Text": Called when some text from a DCC Chat arrives. It provides these elements in the word[] array:
- •"Key Press": Called when some keys are pressed in the input box. It provides these elements in the word[] array:

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- name Name of the print event (as in *Text Events* window).
- **pri** Priority of this command. Use HEXCHAT PRI NORM.
- callb Callback function. This will be called when this event name is printed.
- **userdata** Pointer passed to the callback function.

Returns Pointer to the hook. Can be passed to hexchat_unhook().

Example:

```
hexchat_hook_print (ph, "You Part", HEXCHAT_PRI_NORM, youpart_cb, NULL);
```

hexchat_hook* hexchat_hook_print_attrs (hexchat_plugin *ph, const char *name, int pri, int (*callb) (char *word[], hexchat_event_attrs *attrs, void *user_data), void *userdata)

Registers a function to trap any print events. This is the same as hexchat_hook_print() but the callback receives an hexchat_event_attrs * with attributes related to the print event.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- name Name of the print event (as in *Text Events* window).
- **pri Priority** of this command. Use <code>HEXCHAT_PRI_NORM</code>.
- callb Callback function. This will be called when this event name is printed.
- **userdata** Pointer passed to the callback function.

Returns Pointer to the hook. Can be passed to hexchat_unhook().

New in version 2.9.6.

```
hexchat_hook* hexchat_hook_server (hexchat_plugin *ph, const char *name, int pri, int (*callb) (char *word[], char *word_eol[], void *user_data), void *user_data)
```

Registers a function to be called when a certain server event occurs. You can use this to trap *PRIVMSG*, *NOTICE*, *PART*, a server numeric, etc. If you want to hook every line that comes from the IRC server, you may use the special name of *RAW LINE*.

Parameters

- ph Plugin handle (as given to hexchat plugin init()).
- name Name of the server event.
- **pri Priority** of this command. Use <code>HEXCHAT_PRI_NORM</code>.
- callb Callback function. This will be called when this event is received from the server.
- **userdata** Pointer passed to the callback function.

Returns Pointer to the hook. Can be passed to hexchat_unhook().

Example:

chat_event_attrs *attrs, void *user_data), void *user-

Registers a function to be called when a certain server event occurs. This is the same as hexchat_hook_server() but the callback receives an hexchat_event_attrs * with attributes related to the server event.

Parameters

- **ph** Plugin handle (as given to hexchat_plugin_init()).
- name Name of the server event.
- **pri** Priority of this command. Use <code>HEXCHAT_PRI_NORM</code>.
- callb Callback function. This will be called when this event is received from the server.
- **userdata** Pointer passed to the callback function.

Returns Pointer to the hook. Can be passed to hexchat_unhook().

New in version 2.9.6.

hexchat_hook *hexchat_hook_timer (hexchat_plugin *ph, int timeout, int (*callb) (void *user_data), void *userdata)

Registers a function to be called every "timeout" milliseconds.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- **timeout** Timeout in milliseconds (1000 is 1 second).
- callb Callback function. This will be called every "timeout" milliseconds.
- **userdata** Pointer passed to the callback function.

Returns Pointer to the hook. Can be passed to hexchat unhook ().

Example:

```
static hexchat_hook *myhook;
    static int
    stop_cb (char *word[], char *word_eol[], void *userdata)
            if (myhook != NULL)
                             hexchat_unhook (ph, myhook);
                             myhook = NULL;
                             hexchat_print (ph, "Timeout removed!\n");
             }
            return HEXCHAT_EAT_ALL;
     }
    static int
    timeout_cb (void *userdata)
            hexchat_print (ph, "Annoying message every 5 seconds! Type /STOP to stop it.\n");
            return 1;
                            /* return 1 to keep the timeout going */
     }
    myhook = hexchat_hook_timer (ph, 5000, timeout_cb, NULL);
    hexchat_hook_command (ph, "STOP", HEXCHAT_PRI_NORM, stop_cb, NULL, NULL);
void* hexchat_unhook (hexchat_plugin *ph, hexchat_hook *hook)
```

Unhooks any hook registered with hexchat_hook_print/server/timer/command. When plugins are unloaded, all of its hooks are automatically removed, so you don't need to call this within your hexchat_plugin_deinit() function.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- **hook** Pointer to the hook, as returned by **hexchat_hook_***.

Returns The userdata you originally gave to **hexchat_hook_***.

Context Functions

hexchat_context* hexchat_find_context (hexchat_plugin *ph, const char *servname, const char *channel)

Finds a context based on a channel and servername. If *servname* is NULL, it finds any channel (or query) by the given name. If *channel* is NULL, it finds the front-most tab/window of the given *servname*. If NULL is given for both arguments, the currently focused tab/window will be returned.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- servname Server name or NULL.
- channel Channel name or NULL.

Returns Context pointer (for use with hexchat_set_context()) or NULL.

hexchat_context* hexchat_get_context (hexchat_plugin *ph)

Returns the current context for your plugin. You can use this later with hexchat_set_context().

Parameters

• ph - Plugin handle (as given to hexchat_plugin_init()).

Returns Context pointer (for use with hexchat_set_context()).

int hexchat set context (hexchat plugin *ph, hexchat context *ctx)

Changes your current context to the one given.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- ctx Context to change to (obtained with hexchat_get_context() or hexchat_find_context()).

Returns

- 1: Success.
- 0: Failure.

Plugin Preferences

int **hexchat_pluginpref_set_str** (hexchat_plugin *ph, const char *var, const char *value)
Saves a plugin-specific setting with string value to a plugin-specific config file.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- var Name of the setting to save.
- value String value of the setting.

Returns

- 1: Success.
- 0: Failure.

Example:

```
int
hexchat_plugin_init (hexchat_plugin *plugin_handle, char **plugin_name, char **plugin_desc, char
{
    ph = plugin_handle;
    *plugin_name = "Tester Thingie";
    *plugin_desc = "Testing stuff";
    *plugin_version = "1.0";

    hexchat_pluginpref_set_str (ph, "myvar1", "I want to save this string!");
    hexchat_pluginpref_set_str (ph, "myvar2", "This is important, too.");

    return 1;    /* return 1 for success */
}
```

In the example above, the settings will be saved to the plugin_tester_thingie.conf file, and its content will be: >myvar1 = I want to save this string! myvar2 = This is important, too.

You should never need to edit this file manually.

int **hexchat_pluginpref_get_str** (hexchat_plugin *ph, const char *var, char *dest)

Loads a plugin-specific setting with string value from a plugin-specific config file.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- var Name of the setting to load.
- **dest** Array to save the loaded setting's string value to.

Returns

- 1: Success.
- 0: Failure.

int **hexchat_pluginpref_set_int** (hexchat_plugin *ph, const char *var, int value)

Saves a plugin-specific setting with decimal value to a plugin-specific config file.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- var Name of the setting to save.
- value Decimal value of the setting.

Returns

- 1: Success.
- 0: Failure.

Example:

```
static int
saveint_cb (char *word[], char *word_eol[], void *user_data)
{
    int buffer = atoi (word[2]);
```

You only need such complex checks if you're saving user input, which can be non-numeric.

int hexchat_pluginpref_get_int (hexchat_plugin *ph, const char *var)

Loads a plugin-specific setting with decimal value from a plugin-specific config file.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- var Name of the setting to load.

Returns The decimal value of the requested setting upon success, -1 for failure.

int hexchat_pluginpref_delete (hexchat_plugin *ph, const char *var)

Deletes a plugin-specific setting from a plugin-specific config file.

Parameters

- ph Plugin handle (as given to hexchat_plugin_init()).
- var Name of the setting to delete.

Returns

- 1: Success.
- 0: Failure.

If the given setting didn't exist, it also returns 1, so 1 only indicates that the setting won't exist after the call.

int hexchat_pluginpref_list (hexchat_plugin *ph, char *dest)

Builds a comma-separated list of the currently saved settings from a plugin-specific config file.

Parameters

- **ph** Plugin handle (as given to hexchat_plugin_init()).
- **dest** Array to save the list to.

Returns

- 1: Success.
- 0: Failure (nonexistent, empty or inaccessible config file).

Example:

```
static void
list_settings ()
{
    char list[512];
    char buffer[512];
    char *token;

    hexchat_pluginpref_list (ph, list);
    hexchat_printf (ph, "Current Settings:\n");
    token = strtok (list, ",");

    while (token != NULL)
    {
        hexchat_pluginpref_get_str (ph, token, buffer);
        hexchat_printf (ph, "%s: %s\n", token, buffer);
        token = strtok (NULL, ",");
    }
}
```

In the example above we query the list of currently stored settings, then print them one by one with their respective values. We always use <code>hexchat_pluginpref_get_str()</code>, and that's because we can read an integer as string (but not vice versa).

Plugin GUI

void* hexchat_plugingui_add (hexchat_plugin *ph, const char *filename, const char *name, const char *desc, const char *version, char *reserved)

Adds a fake plugin to the GUI in $Window \rightarrow Plugins$ and Scripts. This does not need to be done for your actual plugin and is only used for interfaces to other languages like our python plugin.

Returns Handle to be used with hexchat_plugingui_remove()

void hexchat_plugingui_remove (hexchat_plugin *ph, void *handle)

Removes the fake plugin from the GUI. Again not to be used to remove your own plugin.

Parameters

• handle - Handle returned by hexchat plugingui add()

7.2.3 Scripting

There are multiple scripting languages supported by HexChat but currently only Python (2.7) and Perl (5.16) are officially supported.

HexChat D-Bus Interface

For more help you can see the HexChat plugin interface documentation and see some examples in Python and C.

Warning: The dbus interface may change in the future.

You can use the "/org/hexchat/Remote" object with interface "org.hexchat.plugin", but his context can be changed by other clients at any moment and you may receive signal asked by other clients. So for more complex usage it's better to get your own remote object. Using "Connect" method on interface "org.hexchat.connection"

Available methods on org.hexchat.connection interface:

* gboolean:

1: Success.0: Failure.

```
• "Connect"
        - Parameters:
             * gchar*: filename
             * gchar*: name
             * gchar*: description
             * gchar*: version
        - Returns:
             * gchar*: Your own object's path.
   • "Disconnect"
        - No parameter, no return value. It frees your remote object.
Available methods on org.hexchat.plugin interface:
   · "Command"
        - Parameters:
             * gchar*: the command name without the "/". (e.g. "nick pseudo")
   • "Print"
        - Parameters:
             * gchar*: text to print on the HexChat window.
   • "FindContext"
        - Parameters:
             * gchar*: the server name. Can be NULL.
             * gchar*: the channel name. Can be NULL.
        - Returns:
             * guint: context ID.
   • "GetContext"
        - Returns:
             * guint: current context's ID.
   "SetContext"
        - Parameters:
             * guint: context ID to switch, returned by "FindContext" or "GetContext"
        - Returns:
```

- · "GetInfo"
 - Parameters:
 - * gchar*: ID of the information you want.
 - Returns:
 - * gchar*: information you requested.
- · "GetPrefs"
 - Parameters:
 - * gchar*: Setting name required.
 - Returns:
 - * int:
 - · 0: Failed.
 - · 1: Returned a string.
 - · 2: Returned an integer.
 - · 3: Returned a boolean.
 - * gchar*: the information requested if it's a string.
 - * int: the information requested if it's a integer or boolean.
- "HookCommand"
 - Parameters:
 - * gchar*: Name of the command (without the forward slash).
 - * int: Priority of this command.
 - * gchar*: String of text to display when the user executes /help for this command. May be NULL if you're lazy.
 - * int: Value to returns when the command is catched. See HEXCHAT_EAT_*.
 - Returns:
 - * guint: The ID of the hook.
- · "HookServer"
 - Parameters:
 - * gchar*: Name of the server event.
 - * int: Priority of this command.
 - * int: Value to returns when the command is catched. See HEXCHAT_EAT_*.
 - Returns:
 - * guint: The ID of the hook.
- "HookPrint"
 - Parameters:
 - * gchar*: Name of the print event.
 - * int: Priority of this command.

- * int: Value to returns when the command is catched. See HEXCHAT_EAT_*.
- Returns:
 - * guint: The ID of the hook.
- · "Unhook"
 - Parameters:
 - * guint: ID of the hook to unhook. (the return value of "HookCommand", "HookServer" or "HookPrint")
- "ListGet"
 - Parameters:
 - * gchar*: The list name.
 - Returns:
 - * guint: List ID.
- "ListNext"
 - Parameters:
 - * guint: List ID returned by "ListGet".
 - Returns:
 - * gboolean: says if there is no more item in the list.
- "ListStr"
 - Parameters:
 - * guint: List ID returned by "ListGet".
 - * gchar*: Name of the information needed.
 - Returns:
 - * gchar*: The information requested.

Warning: "context" attribute of "channels" list should be get with "ListInt"

- "ListInt"
 - Parameters:
 - * guint: List ID returned by "ListGet".
 - * gchar*: Name of the information needed.
 - Returns:
 - * guint: The information requested.
- "ListTime"
 - Parameters:
 - * guint: List ID returned by "ListGet".
 - * gchar*: Name of the information needed.
 - Returns:
 - * guint64: The information requested.

- "ListFields"
 - Parameters:
 - * gchar*: The list name.
 - Returns:
 - * gchar**: information names in this list.
- "ListFree"
 - Parameters:
 - * guint: List ID returned by "ListGet".
- "EmitPrint"
 - Parameters:
 - * gchar*: Text event to print.
 - * gchar**: NULL terminated array of string.
 - Returns:
 - * gboolean:
 - · 1: Success.
 - · 0: Failure.
- "Nickemp"
 - Parameters:
 - * gchar*: String to compare.
 - * gchar*: String to compare.
 - Returns:
 - * int: An integer less than, equal to, or greater than zero if s1 is found, respectively, to be less than, to match, or be greater than s2.
- "Strip"
 - Parameters:
 - * gchar*: String to strip.
 - $\ast\,$ int: Length of the string (or -1 for NULL terminated).
 - * int: Bit-field of flags:
 - · 0: Strip mIRC colors.
 - · 1: Strip text attributes.
 - Returns:
 - * gchar*: stripped string.
- · "SendModes"
 - Parameters:
 - * gchar**: NULL terminated array of targets (strings). The names of people whom the action will be performed on.
 - * int: Maximum modes to send per line.

```
* gchar: Mode sign, '-' or '+'.* gchar: Mode char, e.g. 'o' for Ops.
```

Available signals:

- · "ServerSignal"
 - Parameters:
 - * gchar**: word returned by HexChat.
 - * gchar**: word_eol returned by HexChat.
 - * guint: the ID of the hook (the return value of "HookServer").
 - * guint: the ID of the context where the event come from.
- · "CommandSignal"
 - Parameters:
 - * gchar**: word returned by HexChat.
 - * gchar**: word_eol returned by HexChat.
 - * guint: the ID of the hook (the return value of "HookCommand").
 - * guint: the ID of the context where the event come from.
- · "PrintSignal"
 - Parameters:
 - * gchar**: word returned by HexChat.
 - * guint: the ID of the hook (the return value of "HookPrint").
 - * guint: the ID of the context where the event come from.
- · "UnloadSignal"
 - Emitted when the user asks to unload your program. Please exit(0); when received!

HexChat Javascript Interface

Information

The javascript plugin does not come with HexChat, more information on it can be found Here

This page is simply for hosting its API docs and is a work in progress.

Functions

Generic Fuctions

print (object)

Prints text to the current context.

Arguments

• **object** – Object to be converted to a string

```
command (string)
```

Runs a command in the current context.

Hook Functions

hook_print (name, callback[, userdata, priority])

Calls specified callback anytime the specified event happens. The Print Events can be found in $Settings \rightarrow Text$ Figure 1.

Returns Hook handler

hook_server (name, callback[, userdata, priority])

Calls specified callback anytime the specified event happens.

Arguments

• name – IRC numeric or named event

Returns Hook handler

hook_command(name, callback[, userdata, priority])

Calls specified callback anytime the specified command is ran.

Returns Hook handler

hook_special (name, callback[, userdata, priority])

Calls specified callback anytime the specified special event happens.

Special Events:

- · Open Context
- · Close Context
- Focus Tab
- · Focus Window
- · DCC Chat Text
- Key Press

Returns Hook handler

```
hook_timer (timeout, callback | , userdata | )
```

Calls specified callback in your specified interval (in milliseconds).

If you return :obj: 'true' the callback will continue to be called, otherwise it is removed.

Returns Hook handler

hook_unload(callback[, userdata])

Calls specified callback when the script is unloaded.

Returns Hook handler

unhook (handler)

Removes any hook registered above.

Plugin Preferences You can use pluginpref to easily store and retrieve settings.

```
set_pluginpref (name, value)
```

Stores settings in addon_*SCRIPT_NAME*.conf in the config dir.

Returns

False: FailureTrue: Success

get_pluginpref(name)

This will return the value of the variable of that name. If there is none by this name it will return undefined.

Returns String or Integer of stored setting or None if it does not exist.

Note: Strings of numbers are always returned as Integers.

del_pluginpref(name)

Deletes the specified variable.

Returns

· False: Failure

• True: Success (or never existing),

list_pluginpref()

Returns a list of all currently set preferences.

HexChat Perl Interface

Introduction

This is the Perl interface for HexChat. If there are any problems, questions, comments or suggestions please email them to the address on the bottom of this page.

Constants

Priorities

• Xchat::PRI_HIGHEST

• Xchat::PRI_HIGH

Xchat::PRI_NORM

Xchat::PRI_LOW

Xchat::PRI_LOWEST

Return values

• Xchat::EAT_NONE - pass the event along

• Xchat::EAT_XCHAT - don't let HexChat see this event

• Xchat::EAT_PLUGIN - don't let other scripts and plugins see this event but xchat will still see it

• Xchat::EAT_ALL - don't let anything else see this event

Timer and fd hooks

• Xchat::KEEP - keep the timer going or hook watching the handle

• Xchat::REMOVE - remove the timer or hook watching the handle

hook fd flags

- Xchat::FD_READ invoke the callback when the handle is ready for reading
- Xchat::FD_WRITE invoke the callback when the handle is ready for writing
- Xchat::FD_EXCEPTION invoke the callback if an exception occurs
- Xchat::FD NOTSOCKET indicate that the handle being hooked is not a socket

Functions

Xchat::register(\$name, \$version, [\$description,[\$callback]])

- \$name The name of this script
- \$version This script's version
- \$description A description for this script
- \$callback This is a function that will be called when the is script unloaded. This can be either a reference to a function or an anonymous sub reference.

This is the first thing to call in every script.

```
Xchat::hook_server( $message, $callback, [\%options] )
Xchat::hook_command( $command, $callback, [\%options] )
Xchat::hook_print( $event, $callback, [\%options] )
Xchat::hook_timer( $timeout, $callback, [\%options | $data] )
Xchat::hook_fd( $handle, $callback, [\%options ] )
```

These functions can be to intercept various events. hook_server can be used to intercept any incoming message from the IRC server. hook_command can be used to intercept any command, if the command doesn't currently exist then a new one is created. hook_print can be used to intercept any of the events listed in *Setttings* -> *Text Events*. hook_timer can be used to create a new timer

- \$message server message to hook such as PRIVMSG
- \$command command to intercept, without the leading /
- **\$event** one of the events listed in *Settings* -> *Text Events*
- \$timeout timeout in milliseconds
- **\$handle** the I/O handle you want to monitor with hook_fd. This must be something that has a fileno. See perldoc -f fileno or fileno
- **\$callback** callback function, this is called whenever the hooked event is trigged, the following are the conditions that will trigger the different hooks. This can be either a reference to a function or an anonymous sub reference.
- % options a hash reference containing additional options for the hooks

Valid keys for %options:

data	Additional data that is to be associated with the hook. For timer hooks this value can be provided either	
	as Xchat::hook_timer(\$timeout, cb, {data=> data}) or Xchat::hook_timer(\$timeout, \$cb, \$data).	
	However, this means that hook_timer cannot be provided with a hash reference containing data as a key.	
	example: my \$options = { data => [@arrayOfStuff] }; Xchat::hook_timer(\$timeout, \$cb, \$options); In	
	this example, the timer's data will be [@arrayOfStuff] and not { data => [@arrayOfStuff] } This key is	
	valid for all of the hook functions. Default is undef.	
prior-	Sets the priority for the hook. It can be set to one of the Xchat::PRI_* constants. This key only applies to	
ity	server, command and print hooks. Default is Xchat::PRI_NORM.	
help_te	elp_texfText displayed for /help \$command. This key only applies to command hooks. Default is "".	
flags	Specify the flags for a fd hook. See hook fd flags section for valid values. On Windows if the handle is a	
	pipe you specify Xchat::FD_NOTSOCKET in addition to any other flags you might be using. This key	
	only applies to fd hooks. Default is Xchat::FD_READ	

When callbacks are invoked Each of the hooks will be triggered at different times depending on the type of hook.

Hook	When the callback will be invoked
Type	
server	a \$message message is received from the server
hooks	
command	the \$command command is executed, either by the user or from a script
hooks	
print	X-Chat is about to print the message for the \$event event
hooks	
timer	called every \$timeout milliseconds (1000 millisecond is 1 second) the callback will be executed in
hooks	the same context where the hook_timer was called, if the context no longer exists then it will execute
	in a random context
fd hooks	depends on the flags that were passed to hook_fd See hook_fd flags section above.

The value return from these hook functions can be passed to Xchat::unhook to remove the hook.

Callback Arguments All callback functions will receive their arguments in @ like every other Perl subroutine.

Server and command callbacks

- [0] array reference containing the IRC message or command and arguments broken into words example: /command arg1 arg2 arg3 [0] 0 command [0] 1 arg1 [0] 2 arg2 [0] 3 arg3
- [1] array reference containing the Nth word to the last word example: /command arg1 arg2 arg3 [1] [0] command arg1 arg2 arg3 [1] [1] arg1 arg2 arg3 [1] [2] arg2 arg3 [1] [3] arg3
- \$_[2] the data that was passed to the hook function

Print callbacks

[0] - array reference containing the values for the text event, see *Settings -> Text Events* [1] - the data that was passed to the hook function

Timer callbacks

[0] - the data that was passed to the hook function

fd callbacks

[0] - the handle that was passed to hook_fd [1] - flags indicating why the callback was called [2] - the data that was passed to the hook function

Callback return values All server, command and print callbacks should return one of the Xchat::EAT_* constants. Timer callbacks can return Xchat::REMOVE to remove the timer or Xchat::KEEP to keep it going.

Miscellaneous Hook Related Information For server hooks, if \$message is "RAW LINE" then \$cb> will be called for every IRC message that HexChat receives.

For command hooks if \$command is "" then \$cb will be called for messages entered by the user that is not a command.

For print hooks besides those events listed in Settings -> Text Events, these additional events can be used.

Event	Description
"Open Context"	a new context is created
"Close Context"	a context has been close
"Focus Tab"	when a tab is brought to the front
"Focus Window"	when a top level window is focused or the main tab win-
	dow is focused by the window manager
"DCC Chat Text"	when text from a DCC Chat arrives. \$_[0] will have
	these values
	• \$_[0][0] - Address
	• \$_[0][1] - Port
	• \$_[0][2] - Nick
	• \$_[0][3] - Message
"Key Press"	used for intercepting key presses
Rey Fless	• \$_[0][0] - key value
	• \$_[0][1] - state bitfield, 1 - shift, 4 - control, 8 -
	alt
	• \$_[0][2] - string version of the key which might
	be empty for unprintable keys
	• \$_[0][3] - length of the string in \$_[0][2]

Xchat::unhook(\$hook)

• \$hook - the hook that was previously returned by one of the Xchat::hook_* functions

This function is used to removed a hook previously added with one of the Xchat::hook_* functions.

It returns the data that was passed to the Xchat::hook_* function when the hook was added.

Xchat::print(\$text | @lines, [\$channel,[\$server]])

- \$text the text to print
- @lines array reference containing lines of text to be printed all the elements will be joined together before printing
- \$channel channel or tab with the given name where \$text will be printed
- \$server specifies that the text will be printed in a channel or tab that is associated with \$server

The first argument can either be a string or an array reference of strings. Either or both of \$channel and \$server can be undef.

If called as Xchat::print(\$text), it will always return true. If called with either the channel or the channel and the server specified then it will return true if a context is found and false otherwise. The text will not be printed if the context is not found. The meaning of setting \$channel or \$server to undef is the same as find_context.

Xchat::printf(\$format, LIST)

- **\$format** a format string, see "perIdoc -f sprintf" for further details
- LIST list of values for the format fields

Xchat::command(\$command | @commands, [\$channel,[\$server]])

- \$command the command to execute, without the leading /
- @commands array reference containing a list of commands to execute
- \$channel channel or tab with the given name where \$command will be executed
- \$server specifies that the command will be executed in a channel or tab that is associated with \$server

The first argument can either be a string or an array reference of strings. Either or both of \$channel and \$server can be undef.

If called as Xchat::command(\$command), it will always return true. If called with either the channel or the channel and the server specified then it will return true if a context is found and false otherwise. The command will not be executed if the context is not found. The meaning of setting \$channel or \$server to undef is the same as find_context.

Xchat::commandf(\$format, LIST)

- **\$format** a format string, see "period -f sprintf" for further details
- LIST list of values for the format fields

Xchat::find_context([\$channel, [\$server]])

- \$channel name of a channel
- **\$server** name of a server

Either or both of \$channel and \$server can be undef. Calling Xchat::find_context() is the same as calling Xchat::find_context(undef, undef) and Xchat::find_context(\$channel) is the same as Xchat::find_context(\$channel, undef).

If \$server is undef, find any channel named \$channel. If \$channel is undef, find the front most window or tab named \$server. If both \$channel and \$server are undef, find the currently focused tab or window.

Return the context found for one of the above situations or undef if such a context cannot be found.

Xchat::get_context() Returns the current context.

Xchat::set_context(\$context | \$channel,[\$server])

- **\$context** context value as returned from <code>get_context</code>, <code>find_context</code> or one of the fields in the list of hashrefs returned by <code>list_get</code>
- \$channel name of a channel you want to switch context to
- \$server name of a server you want to switch context to

See find_context for more details on \$channel and \$server.

Returns true on success, false on failure.

Xchat::get_info(\$id)

• **\$id** - one of the following case sensitive values

ID	Return value	Associated Command(s)
away	away reason or undef if you are not away	AWAY, BACK
channel	current channel name	SETTAB
charset	character-set used in the current context	CHARSET
configdir	HexChat config directory encoded in UTF-8. Examples: /home/user/.config/hexchat C:UsersuserAppdataRoamingHexCha	t
event_text <event name=""></event>	<pre>text event format string for <event name=""> Example:</event></pre>	
host	real hostname of the current server	
id	connection id	
inputbox	contents of the inputbox	SETTEXT
libdirfs	the system wide directory where xchat will look for plugins. this string is in the same encoding as the local file system	
modes	the current channels modes or undef if not known	MODE
network	current network name or undef, this value is taken from the Network List	
nick	current nick	NICK
nickserv	nickserv password for this network or undef, this value is taken from the Network List	
server	current server name (what the server claims to be) undef if not connected	
state_cursor	current inputbox cursor position in characters	SETCURSOR
topic	current channel topic	TOPIC
version	xchat version number	
win_status	status of the xchat window, possi- ble values are "active", "hidden" and "normal"	GUI
win_ptr	native window pointer, GtkWindow * on Unix, HWND on Win32. On Unix if you have the Glib module installed you can use my \$window = Glib::Object->new_from_pointer(Xchat::get_info("win_ptr")); to get a Gtk2::Window object. Ad- ditionally when you have detached tabs, each of the windows will re- turn a different win_ptr for the dif- ferent Gtk2::Window objects. See char_count.pl for a longer example of a script that uses this to show how	
7.2. Developers	many characters you currently have in your input box.	81
gtkwin_ptr	similar to win_ptr except it will al- ways be a GtkWindow *	

This function is used to retrieve certain information about the current context. If there is an associated command then that command can be used to change the value for a particular ID.

Xchat::get_prefs(\$name)

• \$name - name of a HexChat setting (available through the /set command)

This function provides a way to retrieve HexChat's setting information.

Returns undef if there is no setting called called \$name.

Xchat::emit_print(\$event, LIST)

- **\$event** name from the Event column in *Settings -> Text Events*
- LIST this depends on the Description column on the bottom of Settings -> Text Events

This functions is used to generate one of the events listed under Settings -> Text Events.

Note: when using this function you **must** return Xchat::EAT_ALL otherwise you will end up with duplicate events. One is the original and the second is the one you emit.

Returns true on success, false on failure.

Xchat::send_modes(\$target | @targets, \$sign, \$mode, [\$modes_per_line])

- \$target a single nick to set the mode on
- @targets an array reference of the nicks to set the mode on
- \$sign the mode sign, either '+' or '-'
- \$mode the mode character such as 'o' and 'v', this can only be one character long
- **\$modes_per_line** an optional argument maximum number of modes to send per at once, pass 0 use the current server's maximum (default)

Send multiple mode changes for the current channel. It may send multiple MODE lines if the request doesn't fit on one.

Example:

```
use strict;
use warnings;
use Xchat qw(:all);
hook_command( "MODES", sub {
   my (undef, $who, $sign, $mode) = @{$_[0]};
   my @targets = split /,/, $who;
   if( @targets > 1 ) {
      send_modes( \@targets, $sign, $mode, 1 );
   } else {
      send_modes( $who, $sign, $mode );
   }
   return EAT_XCHAT;
});
```

Xchat::nickcmp(\$nick1, \$nick2)

• \$nick1, \$nick2 - the two nicks or channel names that are to be compared

The comparsion is based on the current server. Either an RFC1459 compliant string compare or plain ascii will be using depending on the server. The comparison is case insensitive.

Returns a number less than, equal to or greater than zero if \$nick1 is found respectively, to be less than, to match, or be greater than \$nick2.

Xchat::get_list(\$name)

• **\$name** - name of the list, one of the following: "channels", "dcc", "ignore", "notify", "users"

This function will return a list of hash references. The hash references will have different keys depend on the list. An empty list is returned if there is no such list.

"channels" - list of channels, querys and their server

Key	Description
channel	tab name
chantypes	channel types supported by the server, typically "#&"
context	can be used with set_context
flags	Server Bits: • 0 Connected • 1 Connecting • 2 Away • 3 EndOfMotd(Login complete) • 4 Has WHOX • 5 Has IDMSG (FreeNode) The following correspond to the /chanopt command • 6 Hide Join/Part Message (text_hidejoinpart) • 7 unused (was for color paste) • 8 Beep on message (alert_beep) • 9 Blink Tray (alert_tray) • 10 Blink Task Bar (alert_taskbar) Example of checking if the current context has Hide Join/Part messages set: • 1 • 2
.,	• 3 if(Xchat::context_info->{flags} & (1 << 6)) { Xchat::print("Hide Join/Part messages is enabled"); }
id	Unique server ID
lag	lag in milliseconds
maxmodes	Maximum modes per line
network	network name to which this channel belongs
nickprefixes	Nickname prefixes e.g. "+@"
nickmodes	Nickname mode chars e.g. "vo"
queue	number of bytes in the send queue
server	server name to which this channel belongs
type	the type of this context - 1 server - 2 channel - 3 dialog - 4 notices - 5 server notices
users	Number of users in this channel

"dcc" - list of DCC file transfers

Key	Value
address32	address of the remote user(ipv4 address)
cps	bytes per second(speed)
destfile	destination full pathname
file	file name
nick	nick of the person this DCC connection is connected to
port	TCP port number
pos	bytes sent/received
poshigh	bytes sent/received, high order 32 bits
resume	point at which this file was resumed (zero if it was not
	resumed)
resumehigh	point at which this file was resumed, high order 32 bits
size	file size in bytes low order 32 bits
sizehigh	file size in bytes, high order 32 bits (when the files is >
	4GB)
status	DCC Status:
	• 0 - queued
	• 2 - failed
	• 3 - done
	• 4 - connecting
	• 5 - aborted
type	DCC Type:
	• 0 - send
	• 1 - receive
	• 2 - chatrecv
	• 3 - chatsend

"ignore" - current ignore list

Key	Value
mask	ignore mask. e.g: /*@.aol.com
flags	Bit field of flags.
	• 0 - private
	• 1 - notice
	• 2 - channel
	• 3 - ctcp
	• 4 - invite
	• 5 - unignore
	• 6 - nosave
	• 7 - dcc

"notify" - list of people on notify

Key	Value
net-	comma separated list of networks where you will be notfified about this user's online/offline statusor
works	undef if you will be notificed on every network you are connected to
nick	nickname
flags	0 = is online
on	time when user came online
off	time when user went offline
seen	time when user was last verified still online

The values indexed by on, off and seen can be passed to localtime and gmtime, see periodc -f localtime and periodc -f gmtime for more details.

"users" - list of users in the current channel

Key	Value
ac-	account name or undef (2.9.6+)
count	
away	away status(boolean)
lasttalk	last time a user was seen talking, this is the an epoch time(number of seconds since a certain date, that
	date depends on the OS)
nick	nick name
host	host name in the form: user@host or undef if not known
prefix	prefix character, .e.g: @ or +
real-	Real name or undef
name	
se-	selected status in the user list, only works when retrieving the user list of the focused tab. You can use
lected	the /USELECT command to select the nicks

[&]quot;networks" - list of networks and the associated settings from network list

Key	Value
autojoins connect_commands	An object with the following methods: • Method - Description • channels() - returns a list of this networks' autojoin channels in list context, a count of the number autojoin channels in scalar context • keys() - returns a list of the keys to go with the channels, the order is the same as the channels, if a channel doesn't have a key, "will be returned in it's place • pairs() - a combination of channels() and keys(), returns a list of (channels, keys) pairs. This can be assigned to a hash for a mapping from channel to key. • as_hash() - return the pairs as a hash reference • as_string() - the original string that was used to construct this autojoin object, this can be used with the JOIN command to join all the channels in the autojoin list • as_array() - return an array reference of hash references consisting of the keys "channel" and "key" • as_bool() - returns true if the network has autojoins and false otherwise
connect_commands	for a network. An empty array if there aren't any
encoding	the encoding for the network
flags	a hash reference corresponding to the checkboxes in the network edit window • allow_invalid - true if "Accept invalid SSL certificate" is checked • autoconnect - true if "Auto connect to this network at startup" is checked • cycle - true if "Connect to selected server only" is NOT checked • use_global - true if "Use global user information" is checked • use_proxy - true if "Bypass proxy server" is NOT checked • use_ssl - true if "Use SSL for all the servers on this network" is checked
irc_nick1	Corresponds with the "Nick name" field in the network edit window
irc_nick2 irc_real_name	Corresponds with the "Second choice" field in the network edit window Corresponds with the "Real name" field in the network
	edit window
irc_user_name	Corresponds with the "User name" field in the network edit window
network nickserv_password	Name of the network Corresponds with the "Nickserv password" field in the network edit window
selected	Index into the list of servers in the "servers" key, this is
86 Server_password	used if the "cycle" flag is false Corresponds with the "Server password" field in the network edit window
servers	An array reference of hash references with a "host" and "port" key. If a port is not specified then 6667 will be

Xchat::user_info([\$nick])

• \$nick - the nick to look for, if this is not given your own nick will be used as default

This function is mainly intended to be used as a shortcut for when you need to retrieve some information about only one user in a channel. Otherwise it is better to use get_list. If \$nick is found a hash reference containing the same keys as those in the "users" list of get_list is returned otherwise undef is returned. Since it relies on get_list this function can only be used in a channel context.

Xchat::context_info([\$context])

• **\$context** - context returned from get_context, find_context and get_list, this is the context that you want infomation about. If this is omitted, it will default to current context.

This function will return the information normally retrieved with <code>get_info</code>, except this is for the context that is passed in. The information will be returned in the form of a hash. The keys of the hash are the <code>\$id</code> you would normally supply to <code>get_info</code> as well as all the keys that are valid for the items in the "channels" list from <code>get_list</code>. Use of this function is more efficient than calling <code>get</code> list("channels") and searching through the result.

Example:

```
use strict;
use warnings;
use Xchat qw(:all); # imports all the functions documented on this page

register( "User Count", "0.1",
    "Print out the number of users on the current channel");
hook_command( "UCOUNT", \&display_count );
sub display_count {
    prnt "There are " . context_info()->{users} . " users in this channel.";
    return EAT_XCHAT;
}
```

Xchat::strip_code(\$string)

• **\$string** - string to remove codes from

This function will remove bold, color, beep, reset, reverse and underline codes from \$string. It will also remove ANSI escape codes which might get used by certain terminal based clients. If it is called in void context \$string will be modified otherwise a modified copy of \$string is returned.

Examples

Asynchronous DNS resolution with hook_fd

```
use strict;
use warnings;
use Xchat qw(:all);
use Net::DNS;

hook_command( "BGDNS", sub {
    my $host = $_[0][1];
    my $resolver = Net::DNS::Resolver->new;
    my $sock = $resolver->bgsend( $host );

hook_fd( $sock, sub {
    my $ready_sock = $_[0];
    my $packet = $resolver->bgread( $ready_sock );
```

```
if( $packet->authority && (my @answers = $packet->answer ) ) {
    if( @answers ) {
        prnt "$host:";
        my $padding = " " x (length( $host ) + 2);
        for my $answer ( @answers ) {
            prnt $padding . $answer->rdatastr . ' ' . $answer->type;
        }
    }
    else {
        prnt "Unable to resolve $host";
    }
    return REMOVE;
},
    {
        flags => FD_READ,
    });
    return EAT_XCHAT;
});
```

Contact Information

Contact Lian Wan Situ at <atmcmnky [at] yahoo.com> for questions, comments and corrections about this page or the Perl plugin itself. You can also find me in #xchat on freenode under the nick Khisanth.

HexChat Python Interface

Features

Here are some of the features of the python plugin interface:

- · Comprehensive, consistent and straightforward API
- Load, unload, reload, and autoload support
- Per plugin independent interpreter state
- Python interactive console
- Python interactive command execution
- Python 2 and 3 support (2.9.6+)
- Full thread support (except for Python2 on Windows)
- Stdout and stderr redirected to HexChat console
- · Dynamic list management
- Nice context treatment
- · Plugin preferences

Python 2 or Python 3 As of HexChat 2.9.6 the plugin supports both so which should you pick:

As a user most older scripts will not be updated for Python 3 so 2 is your best bet.

As a developer I would just recommend you make your scripts compatible for both but do note that Python 2 on Windows does not support threads while Python 3 does.

Commands

The Python plugin comes with a **py** command that takes these arguments.

load <file>

Load a script with given filename. /load will also work.

unload <filename|module name>

Unload module with given filename, or module name. /unload will also work.

reload <filename|module name>

Reload module with given filename, or module name. /reload will also work.

list

List Python scripts loaded

exec <command>

Execute given Python command interactively. For example:

/py exec import hexchat; print(hexchat.get_info('channel'))

console

Open the Python interactive console in a query >>python<<. Every message sent will be intercepted by the Python plugin interface, and interpreted interactively. Notice that the console and /py exec commands live in the same interpreter state.

about

Show some information about the Python plugin interface.

Autoloading modules

If you want some module to be autoloaded together with the Python plugin interface (which usually loads at startup time), just make sure it has a .py extension and put it in the addons subdir of HexChat's config directory.

Context theory

Before starting to explain what the API offers, I'll do a short introduction about the HexChat context concept. Not because it's something hard to understand, but because you'll understand better the API explanations if you know what I'm talking about.

You can think about a context as an HexChat channel, server, or query tab. Each of these tabs, has its own context, and is related to a given server and channel (queries are a special kind of channel).

The *current* context is the one where HexChat passes control to the module. For example, when HexChat receives a command in a specific channel, and you have asked HexChat to tell you about this event, the current context will be set to this channel before your module is called.

Text Formatting

Bold: '\002'
Color: '\003'
Hidden: '\010'
Underline: '\037'
Original Color: '\017'
Reverse Color: '\026'

• Italics: '\035' (currently does nothing)

For example this will print underlined red text:

```
print('\037\00304Text!')
```

• Beep: '\007'

Hello world

Here is the traditional *hello world* example.

```
__module_name__ = "helloworld"
__module_version__ = "1.0"
__module_description__ = "Python module example"
print("Hello world!")
```

This module will print "Hello world!" in the HexChat console, and sleep forever until it's unloaded. It's a simple module, but already introduces some concepts. Notice how the module information is set. This information is obligatory, and will be shown when listing the loaded HexChat modules.

xchat module

The xchat module is your passport to every HexChat functionality offered by the Python plugin interface. Here's a simple example:

```
import hexchat
hexchat.prnt("Hi everyone!")
```

The following functions are available in the hexchat module.

Constants and Attributes

```
hexchat.PRI_HIGHEST
hexchat.PRI_HIGH
hexchat.PRI_NORM
hexchat.PRI_LOW
hexchat.PRI_LOWEST
    Priority given to hooks.
hexchat.EAT_PLUGIN
hexchat.EAT_HEXCHAT
hexchat.EAT_ALL
```

hexchat.EAT NONE

Used as return values for callbacks.

```
hexchat. version
```

Tuple of (MAJOR_VERSION, MINOR_VERSION)

Generic functions

```
hexchat.prnt(string)
```

This function will print string in the current context. It's mainly useful as a parameter to pass to some other function, since the usual print statement will have the same results. You have a usage example above.

This function is badly named because "print" is a reserved keyword of the Python language.

```
hexchat.emit_print (event_name, *args)
```

This function will generate a *print event* with the given arguments. To check which events are available, and the number and meaning of arguments, have a look at the *Settings* \rightarrow *Text Events* window. Here is one example:

```
hexchat.emit_print("Channel Message", "John", "Hi there", "@")
```

With plugin version 1.0+ this function takes Keywords for certain Attributes such as time

```
hexchat.command(string)
```

Execute the given command in the current context. This has the same results as executing a command in the HexChat window, but notice that the / prefix is not used. Here is an example:

```
hexchat.command("server irc.openprojects.net")
```

```
hexchat.nickcmp (s1, s2)
```

This function will do an RFC1459 compliant string comparison and is useful to compare channels and nick-names.

Returns Returns 0 if they match and less than or greater than 0 if s1 is less than or greather than s2

```
if hexchat.nickcmp(nick, "mynick") == 0:
    print("They are the same!")
```

```
hexchat.strip(text[, length=-1, flags=3])
```

This function can strip colors and attributes from text.

Parameters

- length -1 for entire string
- flags 1: Strip Colors 2: Strip Attributes 3: Strip All

Returns Stripped String

```
text = '\00304\002test' # Bold red text
print(text)
print(hexchat.strip(text, len(text), 1)) # Bold uncolored text
```

Information retreiving functions

```
\verb|hexchat.get_info|(type)|
```

Retrieve the information specified by the type string in the current context. At the moment of this writing, the following information types are available to be queried:

•away: Away reason or None if you are not away.

•channel: Channel name of the current context.

•charset: Charset in current context.

```
•configdir: HexChat config directory e.g.: "~/.config/hexchat".
```

•event text NAME: Returns text event string for requested event.

•gtkwin_ptr: Returns hex representation of the pointer to the current Gtk window.

•host: Real hostname of the server you connected to.

•inputbox: Contents of inputbox.

•network: Current network name or None.

•nick: Your current nick name.

•nickserv: Current networks nickserv password or None.

•modes: Current channel modes or None.

•server: Current server name (what the server claims to be) or None if you are not connected.

•topic: Current channel topic.

•win_status: Returns status of window: 'active', 'hidden', or 'normal'.

•version: HexChat version number.

Example:

```
if hexchat.get_info("server") == 'freenode':
    hexchat.prnt('connected!')
```

hexchat.get_prefs(name)

Retrieve the HexChat setting information specified by the name string, as available by the /set command. For example:

```
print("Current preferred nick: " + hexchat.get_prefs("irc_nick1"))
```

```
hexchat.get_list(type)
```

With this function you may retrieve a list containing the selected information from the current context, like a DCC list, a channel list, a user list, etc. Each list item will have its attributes set dynamically depending on the information provided by the list type.

The example below is a rewrite of the example provided with HexChat's plugin API documentation. It prints a list of every DCC transfer happening at the moment. Notice how similar the interface is to the C API provided by Hehexchat.

```
list = hexchat.get_list("dcc")
if list:
    print("--- DCC LIST ------")
    print("File To/From KB/s Position")
    for i in list:
        print("%6s %10s %.2f %d" % (i.file, i.nick, i.cps/1024, i.pos))
```

Below you will find what each list type has to offer.

List Types

channels The channels list type gives you access to the channels, queries and their servers. The folloing attributes are available in each list item:

- channel: Channel or query name.
- channelkey: Channel key. (2.9.6+)

- chantypes: Channel types e.g. #!&.
- context: A context object, giving access to that channel/server.
- id: Unique server id.
- lag: Latency in milliseconds.
- maxmodes: Max modes per line.
- network: Network name to which this channel belongs.
- nickprefixes: Nickname prefixes e.g. @%+.
- nickmodes: Nickname mode chars e.g. ov.
- queue: Number of bytes in the send-queue.
- server: Server name to which this channel belongs.
- users: Number of users in the channel.
- **type:** Type of context.
 - 1: Server
 - 2: Channel
 - 3: Dialog
- flags: Bit field of flags:
 - 0: Connected
 - 1: Connecting
 - 2: Away
 - 3: End of MOTD (Login Complete)
 - 4: Has WHOX
 - 5: Has IDMSG
 - 6: Join/Parts hidden
 - 7: Unused
 - 8: Beep on Message
 - 9: Blink Tray
 - 10: Blink Task Bar

dcc The dcc list type gives you access to a list of DCC file transfers. The following attributes are available in each list item:

- address32: Address of the remote user (ipv4 address, as an int).
- cps: Bytes per second (speed).
- destfile: Destination full pathname.
- file: Filename.
- **nick:** Nickname of person who the file is from/to.
- port: TCP port number.
- pos: Bytes sent/received.

- resume: Point at which this file was resumed (or zero if it was not resumed).
- **size:** File size in bytes.
- status: DCC status:
 - 0: queued
 - 1: active
 - 2: failed
 - 3: done
 - 4: connecting
 - 5: aborted
- **type:** DCC type:
 - 0: send
 - 1: receive
 - 2: chatrecv
 - 3: chatsend

users The users list type gives you access to a list of users in the current channel. The following attributes are available in each list item:

- account: Account name or None (2.9.6+)
- away: Away status.
- host: Host name in the form user@host (or None, if not known).
- nick: Nick name.
- **prefix:** Prefix character, .e.g: @ or +. Points to a single char.
- realname: Real name.
- selected: Selected status in the userlist.

ignore The ignore list type gives you access to the current ignored list. The following attributes are available in each list item:

- mask: Ignore mask (for example, "*!*@*.aol.com").
- flags: Bit field of flags:
 - 0: private
 - 1: notice
 - 2: channel
 - 3: ctcp
 - 4: invite
 - 5: unignore
 - 6: nosave
 - 7: dcc

notify The notify list shows users on your friends list and their status:

• nick: Users nickname

• networks: Networks they are setup to notify on (None for all)

• flags: 0 is offline, 1 is online

Hook functions These functions allow one to hook into HexChat events.

Parameters

callback A callback is the function that will be called when the event happens.

The callback supposed to return one of the EAT_* constants, it is able control how HexChat will proceed after the callback returns. These are the available constants, and their meanings:

- EAT_PLUGIN: Don't let any other plugin receive this event.
- EAT_HEXCHAT: Don't let HexChat treat this event as usual.
- EAT_ALL: Eat the event completely.
- EAT_NONE: Let everything happen as usual.

Note: Returning None is the same as returning EAT_NONE.

userdata The parameter userdata, if given, allows you to pass a custom object to your callback.

attributes If you create a hook with hook_server_attrs() or hook_print_attrs() the last argument in the callback will be an Attribute object.

Attribute

```
Attribute.time
```

The time the event occurred (from server-time) or 0

priority When a priority keyword parameter is accepted, it means that this callback may be hooked with five different priorities which are constants will define the order in which your plugin will be called. Most of the time, you won't want to change its default value (PRI_NORM).

word and word_eol These parameters, when available in a callback, are lists of strings which contain the parameters the user entered for the particular command. For example, if you executed:

/command NICK Hi there!

- word[0] is command
- word[1] is NICK
- word[2] is Hi
- word[3] is there!
- word_eol[0] is command NICK Hi there!

- word_eol[1] is NICK Hi there!
- word_eol[2] is Hi there!
- word_eol[3] is there!

hexchat.hook_command(name, callback, userdata=None, priority=PRI_NORM, help=None)

This function allows you to hook into the name HexChat command. It means that everytime you type /name ..., callback will be called. Parameters userdata and priority have their meanings explained above, and the parameter help, if given, allows you to pass a help text which will be shown when /help name is executed.

Returns New Hook Handler

```
def onotice_cb(word, word_eol, userdata):
    if len(word) < 2:
        print("Second arg must be the message!")
    else:
        hexchat.command("NOTICE @{} {}".format(hexchat.get_info("channel"), word_eol[1])
    return hexchat.EAT_ALL</pre>
```

hexchat.hook_command("ONOTICE", onotice_cb, help="/ONOTICE <message> Sends a notice to all ops")

You may return one of EAT_* constants in the callback, to control HexChat's behavior, as explained above.

```
hexchat.hook_print(name, callback[, userdata=None, priority=PRI_NORM])
```

This function allows you to register a callback to trap any print events. The event names are available in the $Settings \rightarrow Text\ Events$ window. Parameters userdata and priority have their meanings explained above.

Returns New Hook Handler

```
def youpart_cb(word, word_eol, userdata):
    print("You have left channel " + word[2])
    return hexchat.EAT_HEXCHAT # Don't let HexChat do its normal printing
hexchat.hook_print("You Part", youpart_cb)
```

Along with Text Events there are a handfull of *special* events you can hook with this:

- •Open Context: Called when a new context is created.
- •Close Context: Called when a context is closed.
- •Focus Tab: Called when a tab is brought to front.
- •Focus Window: Called a toplevel window is focused, or the main tab-window is focused by the window manager.
- •DCC Chat Text: Called when some text from a DCC Chat arrives. It provides these elements in the word list:
 - Address
 - Port
 - Nick
 - Message
- •Key Press: Called when some keys are pressed in the input box. It provides these elements in the word list:
 - Key Value
 - State Bitfield (shift, capslock, alt)

- String version of the key
- Length of the string (may be 0 for unprintable keys)

```
hexchat.hook_print_attrs(name, callback, userdata=None, priority=PRI_NORM)
```

This function is the same as hook_print() except its callback will have a new Attribute argument.

Returns New Hook Handler

New in version 1.0.

```
def youpart_cb(word, word_eol, userdata, attributes):
    if attributes.time: # Time may be 0 if server-time is not enabled.
        print("You have left channel {} at {}".format(word[2], attributes.time))
        return hexchat.EAT_HEXCHAT

hexchat.hook_print_attrs("You Part", youpart_cb)
```

```
hexchat.hook_server(name, callback[, userdata=None, priority=PRI_NORM])
```

This function allows you to register a callback to be called when a certain server event occurs. You can use this to trap PRIVMSG, NOTICE, PART, a server numeric, etc. Parameters userdata and priority have their meanings explained above.

Returns New Hook Handler

```
def kick_cb(word, word_eol, userdata):
    print('{} was kicked from {} ({})'.format(word[3], word[2], word_eol[4]))
    # Don't eat this event, let other plugins and HexChat see it too
    return hexchat.EAT_NONE
```

hexchat.hook_server("KICK", kick_cb)

hexchat.hook_server_attrs(name, callback[, userdata=None, priority=PRI_NORM])

This function is the same as hook_server() Except its callback will have a new Attribute argument.

Returns New Hook Handler

New in version 1.0.

```
def kick_cb(word, word_eol, userdata, attributes):
    if attributes.time: # Time may be 0 if server-time is not enabled.
        print('He was kicked at {}'.format(attributes.time))
        return hexchat.EAT_NONE

hexchat.hook_server_attrs("KICK", kick_cb)
```

hexchat.hook_timer(timeout, callback, userdata=None)

This function allows you to register a callback to be called every timeout milliseconds. Parameters userdata and priority have their meanings explained above.

Returns New Hook Handler

```
print("Annoying message every 5 seconds! Type /STOP to stop it.")
    return 1 # Keep the timeout going

myhook = hexchat.hook_timer(5000, timeout_cb)
hexchat.hook_command("STOP", stop_cb)
```

If you return a true value from the callback, the timer will be keeped, otherwise it is removed.

```
hexchat.hook_unload(timeout, callback[, userdata=None])
```

This function allows you to register a callback to be called when the plugin is going to be unloaded. Parameters userdata and priority have their meanings explained above.

Returns New Hook Handler

```
def unload_cb(userdata):
         print("We're being unloaded!")
hexchat.hook_unload(unload_cb)
```

hexchat.unhook(handler)

Unhooks any hook registered with the hook functions above.

```
Parameters handler - Handler returned from hook_print(), hook_command(),
hook_server() or hook_timer()
```

As of version 1.0 of the plugin hooks from hook_print() and hook_command() can be unhooked by their names.

Plugin preferences You can use pluginpref to easily store and retrieve settings.

```
hexchat.set pluginpref(name, value)
```

Stores settings in addon_python.conf in the config dir.

Returns

False: Failure True: Success

New in version 0.9.

Note: Until the plugin uses different a config file per script it's recommend to use 'scriptname_settingname' to avoid conflicts.

```
hexchat.get_pluginpref(name)
```

This will return the value of the variable of that name. If there is none by this name it will return None.

Returns String or Integer of stored setting or None if it does not exist.

Note: Strings of numbers are always returned as Integers.

New in version 0.9.

hexchat.del_pluginpref(name)

Deletes the specified variable.

Returns

• False: Failure

• True: Success (or never existing),

New in version 0.9.

```
hexchat.list_pluginpref()
```

Returns a list of all currently set preferences.

Return type List of Strings

New in version 0.9.

Context handling Below you will find information about how to work with contexts.

Context objects As explained in the Context theory session above, contexts give access to a specific channel/query/server tab of Hehexchat. Every function available in the xchat module will be evaluated in the current context, which will be specified by HexChat itself before passing control to the module. Sometimes you may want to work in a specific context, and that's where context objects come into play.

You may create a context object using get_context() or find_context() functions as explained below, or trough the get_list() function, as explained above.

```
hexchat.get_context()

Return type context
```

hexchat.find_context (server=None, channel=None)

Finds a context based on a channel and servername.

Parameters

- server if None only looks for channel name
- channel if None looks for front context of given server

Return type context

```
cnc = hexchat.find_context(channel='#conectiva')
cnc.command('whois niemeyer')
```

context

The context object returned by the functions listed above has these methods:

```
context.set()
```

Changes the current context to be the one represented by this context object.

```
context.prnt (string)
```

Does the same as the prnt () function but in the given context.

```
context.emit_print (event_name, *args)
```

Does the same as the <code>emit_print()</code> function but in the given context.

```
context.command(string)
```

Does the same as the command () function but in the given context

```
context.get_info(type)
```

Does the same as the get_info() function but in the given context.

context.get_list(type)

Does the same as the get_list() function but in the given context.

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7.2.4 Building Perl modules on Windows

Building Perl modules on Windows

CPAN

Software

- Visual Studio 2012 Express for Windows Desktop + Visual Studio 2012 Update 3
- Perl x86 or x64
- MSYS (I'm linking to this version but you can use ANY MSYS, it's possible to use MSYS from MozillaBuild but it's really ancient)
- This script

Setup

You must paste my script to directory above your Perl installation. Script was written for Perl installed in MozillaBuild directory: C:\mozilla-build\perl-5.18\x64 or \x86, so script must be in perl-5.18 dir, if your Perl installation dir is in another place you must edit PATHs in lines 13 & 16.

MSYS can be extracted to any directory you want, you just need to edit PATH in SET MSYS=I:\MSYS\bin, fg. SET MSYS=C:\MSYS\bin

Usage

To use script you must open cmd (Win+R, type cmd), navigate to directory where you pasted cpan.bat. Type *cpan.bat* x86 if you're using 32bit Hexchat & Perl or *cpan.bat* x64 for 64bit version. After that you can use all cpan commands.

Old depreciated method

Software

To start building Perl modules you need to download and install this software (in their default install paths):

- · MozillaBuild or direct link
- Visual Studio 2012 Express for Windows Desktop + Visual Studio 2012 Update 3
- Perl x86 or x64 (Perl MUST be installed to C:\Perl)

Downloading and Extracting

Start MozillaBuild console (it's in C:\mozilla-build) *start-msvc11.bat* (if you're using Hexchat x86) or *start-msvc11-x64.bat* (if you're using Hexchat x64).

Type:

```
mkdir perl; cd perl
```

(we will work in perl directory).

All Perl modules can be downloaded from CPAN site.

Now we can download the module which can be done using wget http://link command. Later we extract it using tar -zxvf module.tar.gz.

In this guide we will build Net::Telnet module. So we are downloading it and extracting:

```
\label{lem:model} $$ wget $ $http://search.cpan.org/CPAN/authors/id/J/JR/JROGERS/Net-Telnet-3.03.tar.gz $$ tar -zxvf Net-Telnet-3.03.tar.gz $$ $$
```

Type cd Net-Telnet-3.03 and we can start building.

Note on Perl module dependencies

This building method isn't perfect so if you're building modue which depends on other module, you need to build it before repeating all steps in this guide.

Building

Fist thing we must do is to configure module and point it to our Perl installation using:

```
c:/perl/bin/perl.exe Makefile.pl
```

Note: It really depends if it is Makefile.pl or Build.pl, just check in folder and read README.

You should get something like this:

```
Checking if your kit is complete...
Looks good
Writing Makefile for Net::Telnet
Writing MYMETA.yml and MYMETA.json
```

It means that module was properly configured. Now we can move to compilation which can be done using:

nmake

After it we can install module using:

```
nmake install
```

Now if you didn't get any error you should have Perl module installed and it can be used with Perl script in Hexchat.

Whole operation should look like this:

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h

hexchat, ??