



# Ærk Scripting and Commands

*A guide for using Ærk commands, and writing scripts*

Version 0.831

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## Summary

Θrk functions much like other popular graphical IRC clients, such as mIRC (for Windows), Textual (for OSX), or HexChat (for Linux). If you've used any of these, much of the functionality of Θrk will feel familiar.

In this document, the area where chat text or server information is displayed to the user, and allows users to enter chat or commands, is referred to as a “window” (for more details, see **The Θrk Interface** on page 5). Θrk features three kinds of “windows”: server consoles, channels, and private chat. The most common kind of window is the channel window; it features a chat display, a graphical user list, and a text input. This is the window where channel chat (called “public chat”) will occur. Text entered into the text input of a channel window will be sent to the channel as chat, unless it contains a command (see **IRC Commands** on page 7 and **Θrk Commands** on page 10). Private chat windows work the same way, and look almost the same; the only thing missing is the graphical user list. Text entered into the text input of a private chat window will be sent to the user being chatted with, unless it contains a command. Server console windows look like private chat windows, but are not used for chatting with the server. Consoles will display messages from the server; text entered into the text input of a server console will *not* be sent as chat to the server, and any text not containing a command will be ignored. Commands entered into the text input of *any* window will either be processed locally or sent to the server associated with that window.

To execute multiple commands, one after the other, without having to enter them manually, Θrk also features a scripting engine. Multiple commands (one per line) can be entered into a text file, and Θrk will execute the commands in that file. Scripts can either be executed directly by using the **/script** command (see page 14), or can be executed automatically on connection to a specific server.

If a script contains a line without a command, and only contains text, the text will be sent as a message to the window that was used to call the script; if it's a channel window, it will be sent as a public message to the channel, and if it's a private chat window, it will be sent as a chat message to the user you're chatting with. If the script is called from a server console window (or executed with the editor or by clicking the “Run Script” button) the text will *not* be sent as a message. Macros that “resolve” to plain text (that is, if the macro does not execute a command) will also be sent as a message if called from a channel or private chat window, and will *not* be sent if called from a server console window.

## Connection Scripts and “Callable” Scripts

Θrk uses two different kinds of scripts: connection scripts (which can be automatically executed upon connection to a server, and are set in the connection dialog) and “callable”

scripts (scripts that are executed by the **/script** command or the “Run Script” button on non-chat windows).

Connection scripts are executed with *no* arguments, and, thus, can’t use the **/argcount** command (if this command is called, it is simply ignored). Connection scripts also can’t use the **/msgbox** command. Other than these two exceptions, they function just like other scripts.

“Callable” scripts are executed with whatever arguments are passed to the **/script** command; scripts executed with the “Run Script” button are executed with no arguments (calls to **/argcount** will be executed, however, any script using the command to look for anything other than zero (0) arguments will stop execution).

## Comments

Comments can be inserted into any Ɖrk script by containing them between **/\*** and **\*/**, much like in the C, Java, and Javascript programming languages. Comments can span multiple lines. Anything in between **/\*** and **\*/** will be ignored by the Ɖrk scripting engine.

```
/*
    This is an example comment.
    Comments can span multiple lines.
*/

/alias $GREETING Hello world!    /* This is a comment, too! */

/* The following command will not be executed:
/connect localhost 6667
*/
```

*Examples of Ɖrk script comments, as they would look in the **Script Editor***

## Miscellany

Ɖrk will always execute the commands on the server associated with the window that called the script (and connection scripts will always execute on the server being connected to); to execute scripts on any server the client is connected to, use the **Script Editor**, accessible with the **/edit** command (see page 6).

Ɖrk scripts have the **“.erk”** file extension. When using the **/script** command, the file extension does *not* have to be included; when looking for the file, Ɖrk will append the file

extension if necessary. Scripts saved with the **Script Editor** will *always* have the “.erk” file extension.

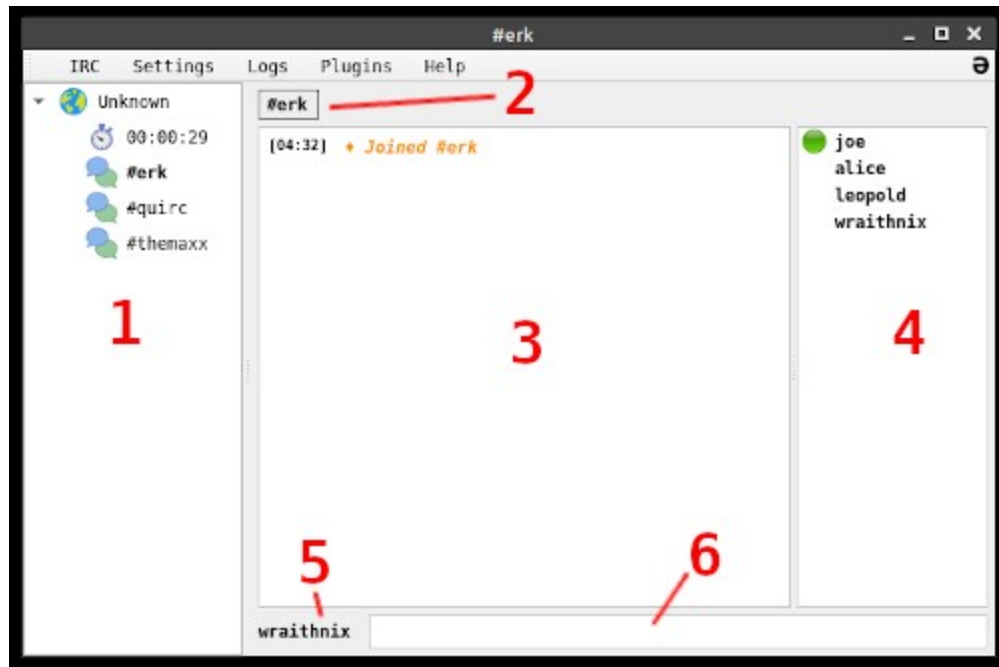
By default, Ərk will look for scripts in the ‘scripts’ subdirectory in the ‘settings’ directory. If Ərk is launched with the **--scripts** command-line flag (with a different directory name as an argument), Ərk will use this directory instead of the default. This will also change the default save directory for the **Script Editor**, as well as where it looks for installed scripts.

Macros created with the **/macro** command (see page 12) can be optionally saved and reloaded every time Ərk is ran; this behavior is enabled by default. To turn this off (that is: do not save macros or reload them on start), uncheck the “Save macros” option in the “Preferences” dialog.

All commands are preceded by a backslash, /. This is the default, but it can be changed in the Ərk configuration file, which is **settings/settings.json** by default (this can be changed with the **--config** command-line flag). To use a different character (or characters), change the “**input\_command\_symbol**” setting in the file to the character (or characters) you wish to use. Aspects of the GUI (such as the syntax highlighter in the connection dialog and the **Script Editor**), as well as the built-in help system, will be altered to use the new character(s); scripts using the “old” character will no longer function as intended. There is no way to change this setting in the GUI, and changing this setting is unsupported.

All aliases (and other symbols for interpolation) are preceded by a dollar sign, \$. This symbol is used with the **/alias** command, as well as with **/script** and **/macro** (for more information, see the entry for **/alias** on page 10). This is the default, but, like the command symbol, it can be changed in the Ərk configuration file. To use a different character (or characters), change the “**script\_interpolation\_symbol**” setting in the file to the character (or characters) you wish to use. Aspects of the GUI will be altered to use the new character(s); scripts using the “old” character will no longer function. There is no way to change this setting in the GUI, and changing this setting is unsupported.

## The Ɔrk Interface

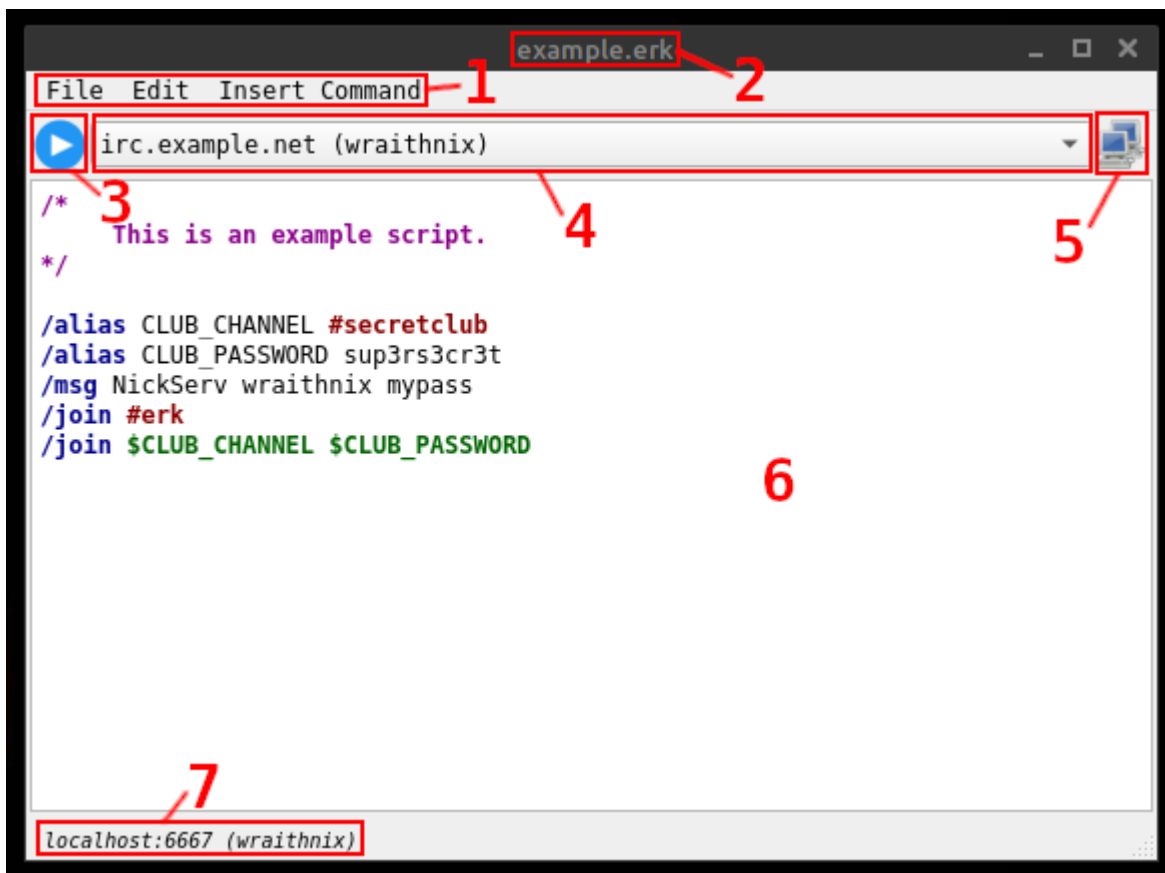


*A channel chat window.*

1. **Connection display.** Displays what servers the client is currently connected to, as well as what chats the client is “active” in, like channels or private chats. Click an entry to switch to that server console, channel, or private chat window.
2. **Chat name.** Displays the name of the channel chat. For server consoles, the hostname (if set) of the server is displayed; for channels, the name and topic of the channel is displayed; private chats display the nickname of the user being chatted with.
3. **Chat.** This is where any chat text, or miscellaneous server messages, are displayed.
4. **User list.** Displays a list of users, and their status, in the current channel. This is not displayed on server console windows and private chats.
5. **Nickname.** Displays the current nickname being used, and if displayed on a channel window, the current channel status.
6. **Text input.** This is where users can enter chat text and commands.

## Script Editor

Ərk features a built-in script editor. It can open, edit, and save scripts, execute them on any server Ərk is connected to, and features syntax highlighting. To open the editor, use the `/edit` command, or click on the “Script Editor” entry in the “Settings” menu.



1. **Menu bar.** Here you can select scripts to open, save any new scripts or edits, and the normal tools you'd expect to find in a text editor. The “Insert Command” menu contains shortcuts to insert commonly used commands.
2. **File name.** The name of the script being edited.
3. **Execute.** Clicking this button executes the script in the editor on the selected Ərk client connection.
4. **Client selector.** This contains a list of all the servers that Ərk is connected to, allowing you to select which connection you want to execute the script on. The hostname of the server, followed by the nickname in use on that server, is displayed.
5. **Open connection script.** This will load the connection script for the currently selected client. If one does not exist, the editor will be set up to edit and save a new one.
6. **Editor.** Here, you can type your script, or edit any script you open. It features syntax highlighting (comments, commands, channel names, and alias variables are colored differently from the rest of the text). Currently, there is no option to customize the colors used; this will change in future versions.
7. **Client details.** This displays the hostname/IP address used to connect to the currently selected client, as well as the nickname in use.

## IRC Commands

These commands are for controlling the IRC connection (for example, joining and leaving channels, sending chat messages, etc); these commands should be familiar to users of other IRC clients such as mIRC or HexChat. Three commands (**/invite**, **/part** and **/topic**) will behave differently depending on where the command is entered; it will behave one way if it is entered into a chat window (for private chat or channel chat) or if it's entered into a console window (the window which displays data sent by the connected IRC server). One command, **/me**, cannot be entered into a non-chat window.

### Called from any window

#### **/away [MESSAGE...]**

Sets the client to **AWAY**. If **MESSAGE** is included, **MESSAGE** will be sent to any user that sends a private message to the client.

### Called from any window

#### **/back**

Sets the client to status to "back", and disables **/away** functionality.

### Called from a chat window

#### **/invite [CHANNEL] NICKNAME**

Invites **NICKNAME** to the current channel if **CHANNEL** is omitted; invites **NICKNAME** to **CHANNEL** if a channel is included.

### Called from any other window

#### **/invite CHANNEL NICKNAME**

Invites **NICKNAME** to **CHANNEL**.

### Called from any window

#### **/join CHANNEL [KEY]**

Joins **CHANNEL**. If **KEY** is included, it will be passed to the server as part of the join request.

### Called from any window

#### **/list [TERMS]**

Displays a list of all channels on the server if **TERMS** is omitted; displays a list of channels matching **TERMS** if **TERMS** is included. **TERMS** can contain wildcards such as **\*** or **?**.

### Called from a chat window

#### **/me TEXT**

Sends **TEXT** to the current chat as a CTCP action message. The command can *only* be called from a chat window.

### Called from any other window

Called from a chat window	Called from any other window
<b>/mode [TARGET] MODE [ARGUMENTS]</b> Sets a <b>MODE</b> on the current channel if <b>TARGET</b> is omitted; sets a channel or user <b>MODE</b> if <b>TARGET</b> (which can be a channel or nickname) is included.	<b>/mode TARGET MODE [ARGUMENTS]</b> Sets a <b>MODE</b> on <b>TARGET</b> (which can be a channel or nickname).
Called from any window	
<b>/msg TARGET MESSAGE...</b> Sends a private message to <b>TARGET</b> (which can be a channel or a nickname).	
Called from any window	
<b>/nick NICKNAME</b> Changes <b>NICKNAME</b> . If someone is already using <b>NICKNAME</b> , an error is displayed to the client.	
Called from any window	
<b>/notice TARGET MESSAGE...</b> Sends a <b>NOTICE</b> to <b>TARGET</b> (which can be a channel or a nickname).	
Called from any window	
<b>/oper USERNAME PASSWORD</b> Logs into a server operator account using <b>USERNAME</b> and <b>PASSWORD</b> .	
Called from a chat window	Called from any other window
<b>/part [CHANNEL] [MESSAGE]</b> Leaves the current channel if <b>CHANNEL</b> is omitted; leaves <b>CHANNEL</b> if a channel is included. <b>MESSAGE</b> is the message displayed to other users when leaving; <b>MESSAGE</b> is optional.	<b>/part CHANNEL [MESSAGE]</b> Leaves <b>CHANNEL</b> . <b>MESSAGE</b> is the message displayed to other users when leaving; <b>MESSAGE</b> is optional.
Called from any window	
<b>/quit [MESSAGE...]</b> Disconnects from the current server. If <b>MESSAGE</b> is included, this will be sent to any channels the client is in before it disconnects.	
Called from any window	
<b>/send MESSAGE</b> Sends <b>MESSAGE</b> to the server as a raw text; the outgoing message will not be altered. This is to allow the client to send messages to the server that the client doesn't normally support.	



**Called from any window**

**/time [SERVER]**

Displays local time for the server currently connected to, or the **SERVER** specified.

**Called from a chat window**

**/topic [CHANNEL] TEXT...**

Sets the topic for the current channel if **CHANNEL** is omitted; sets the topic for another channel if **CHANNEL** is included.

**Called from any other window**

**/topic CHANNEL TEXT...**

Sets the topic for **CHANNEL**.

**Called from any window**

**/version SERVER [SERVER...]**

Requests server software version information from one or more **SERVERS**.

**Called from any window**

**/who TEXT**

Displays a list of users who's nickname matches **TEXT**.

**Called from any window**

**/whois NICKNAME**

Displays information about a specific user using **NICKNAME**.

**Called from any window**

**/howas NICKNAME [MAXIMUM ENTRIES] [SERVER]**

Displays information about users with a **NICKNAME** that no longer exists.

## Ərk Commands

The rest of the commands control the Ərk client software itself. Most of these commands can be entered into *any* window; however, the **/help** command will display slightly different output depending on what kind of window the command is called from. Five commands, **/argcount**, **/alias**, **/\_alias**, **/msgbox**, and **/wait**, can't be called by any window, and can only be called from scripts. If called with no arguments, the **/connect**, **/reconnect**, **/ressl**, and **/ssl** commands will open the “Connect” dialog with the appropriate options pre-selected.

If a “script only” command is called with the incorrect number of arguments or an argument in incorrect type (for example, calling **/wait** with a non-number argument), script execution will stop immediately and an error message with the reason for the error will be displayed.

### Available only for scripts

#### **/alias NAME MESSAGE...**

Creates a new alias (called an “alias variable” in this document). Any script or command ran after this one (including the commands that follow the **/alias** command) that contains a dollar sign followed by **NAME** (**\$NAME**) will have that instance replaced with **MESSAGE**. If the interpolation symbol (\$) is included in **NAME**, it will be stripped, allowing for use of the alias variable normally (thus, if the command **/alias \$EXAMPLE My message** is executed, using the alias variable would be referenced with **\$EXAMPLE**, not **\$\$EXAMPLE**). This command is *only* available for use in scripts; however, alias variables are interpolated into *any* input, including the text typed into the text input widget. Alias variables are “global”; once created, they are usable in any script or command input. Alias variables can also be overloaded (or overwritten) by any other script.

### Available only for scripts

#### **/\_alias NAME MESSAGE...**

Creates a new alias (called an “alias variable” in this document). Unlike the **/alias** command, this alias variable is *not* exported for use in other scripts/commands (thus, it is not “global”); this alias will only be interpolated for the script that it is defined in.

### Available only for scripts

#### **/argcount NUMBER MESSAGE...**

Checks to make sure that a script is called with the proper **NUMBER** of arguments; if not enough or too many arguments are passed to the script, **MESSAGE** is displayed and script execution stops immediately. This command cannot be called from connection scripts.

**Called from any window**

**/clear**

Clears the current chat display. If settings that alter the display of the chat text (such as adding/removing/changing timestamps or changing the chat's style) the clearing will be "undone", and previous chat will again be viewable. If called from the script editor, or the "Run Script" button, the server console will be cleared.

**Called from any window**

**/connect [SERVER] [PORT]**

Causes the client to connect to an IRC **SERVER**. If **PORT** is omitted, a default of 6667 is used. If **SERVER** and **PORT** is omitted, the connection dialog is displayed. The client's current nickname, username, and real name is used.

**Called from any window**

**/connectscript SERVER [PORT]**

Opens the connect script for **SERVER** and **PORT** and executes it. If **PORT** is excluded, a default port of 6667 is assumed. Alternately, the **SERVER** and **PORT** can be passed to this command in the "**SERVER:PORT**" format.

**Called from any window**

**/edit [FILENAME]**

Opens up the built-in script editor; if a **FILENAME** is passed as an argument, the **FILENAME** is loaded into the script editor. If a complete path to **FILENAME** is not provided, the client will look in the scripts directory (in **settings\scripts**, or set by the **--scripts** command-line flag) for the file; the **".erk"** file extension can be omitted.

**Called from any window**

**/exit**

Disconnects from all servers and exits the client.

**Called from a chat window**

**/help**

Displays a list of commands useful in channel and private message sessions, as well as all macros.

**Called from any other window**

**/help**

Displays a list of all commands and macros.

### Called from any window

#### **/macro NAME ARG\_COUNT MESSAGE...**

Creates a macro<sup>1</sup>, allowing for new, custom command creation. **NAME** is the command that will trigger the command (in the form **/NAME**), **ARG\_COUNT** is the number of arguments that the macro will accept, and **MESSAGE** is the output of the macro, which will be processed like a command. If **ARG\_COUNT** is set to **\*** (asterix), the macro will accept any number of arguments (including zero). If a macro is called with an incorrect number of arguments, an error is displayed, and the macro will not run.

Macros *cannot* have the same **NAME** as an existing command.

Arguments passed to the macro are interpolated into **MESSAGE** much like arguments to the **/script** command: instances of **\$1** will be replaced with the first argument, **\$2** with the second, and so on. There are other optional symbols that can be interpolated into **MESSAGE**:

SYMBOL	REPLACED WITH
<b>\$+</b>	All arguments
<b>\$-</b>	All arguments except for the first argument
<b>\$NICK</b>	The nickname the client is using
<b>\$USERNAME</b>	The username the client is using
<b>\$REALNAME</b>	The real name the client is using
<b>\$HOSTNAME</b>	The hostname of the server the client is connected to; if that is unknown, the server and port, delimited by a colon
<b>\$SERVER</b>	The IP address or hostname used to connect to the server the client is connected to
<b>\$PORT</b>	The port address on the server used to connect to the server the client is connected to
<b>\$WHERE</b>	If the window the macro is called from is a server console, the hostname or server and port of the server. If the window the macro is called from is a channel or private chat, the name of the channel or the user being chatted with

If a macro using **NAME** already exists, it will be overwritten with the new macro.

For example, many IRC clients have included a macro called **/trout**, which, when called with a nickname as an argument, sends a CTCP action message to the current chat describing the user “hitting” the targeted nickname with a trout. To create this macro, you would issue this command:

```
/macro trout 1 /me slaps $1 with a trout
```

To call this macro (and “slap” your friend Bob with said trout), you could issue the command **/trout Bob**, which would send the command **/me slaps Bob with a trout**.

For more example usage, see **Macro Examples** on page 15.

---

1 “A macro...is a rule or pattern that specifies how a certain input should be mapped to a replacement output.” [Wikipedia](#)

Called from any window

**/macrohelp NAME MESSAGE...**

Sets the text displayed for the **NAME** macro when the **/help** command is used.

Called from any window

**/macrousaage NAME MESSAGE...**

Sets the argument description for the **NAME** macro when the **/help** command is used or when the macro is called with an incorrect number of arguments.

Available only for scripts

**/msgbox MESSAGE...**

Displays a message box with a custom **MESSAGE**.

Called from any window

**/preferences**

Opens the “Preferences” dialog.

Called from any window

**/print MESSAGE...**

Displays **MESSAGE** in the client’s current window. If **/print** is called from a window, the **MESSAGE** will be displayed in that window; if **/print** is called by any other method (like via the “Run Script” button, or from the **Script Editor**), the **MESSAGE** will be displayed in the server’s console window.

Called from any window

**/reconnect [SERVER] [PORT]**

Causes the client to connect to an IRC **SERVER**, with the option to reconnect upon disconnection turned on.. If **PORT** is omitted, a default of 6667 is used. If **SERVER** and **PORT** is omitted, the connection dialog is displayed. The client’s current nickname, username, and real name is used.

Called from any window

**/refresh**

Requests a new list of channels from the server, and stores the new list in an internal cache.

Called from any window

**/ressl [SERVER] [PORT]**

Causes the client to connect to an IRC **SERVER** via SSL/TLS, with the option to reconnect upon disconnection turned on. If **PORT** is omitted, a default of 6697 is used. If **SERVER** and **PORT** is omitted, the connection dialog is displayed. The client’s current nickname, username, and real name is used.

Called from any window

**/script FILENAME [ARGUMENT ...]**

Opens **FILENAME**, reads its contents into memory, and executes it as a list of commands; each additional **ARGUMENT**, is passed to the script. Any errors found in the script are displayed to the current window. **ARGUMENTS** can be used in the script much like **/alias** variables: **\$1** is replaced with the first argument, **\$2** with the second, and so on. To interpolate all **ARGUMENTS** as a single string, use **\$0**. **ARGUMENTS** are interpolated into the script before **/alias** variables. If a line in a script doesn't contain a valid command, it will be sent to the current window as chat text, just as if the user entered it as chat text; if the current window is a non-chat window, the text will be ignored. If a complete path to **FILENAME** is not provided, the client will look in the scripts directory (in **settings\scripts**, or set by the **--scripts** command-line flag) for the file; the **".erk"** file extension can be omitted.

Called from any window

**/settings**

Opens the client's settings dialog.

Called from any window

**/ssl [SERVER] [PORT]**

Causes the client to connect to an IRC **SERVER** via SSL/TLS. If **PORT** is omitted, a default of 6697 is used. If **SERVER** and **PORT** is omitted, the connection dialog is displayed. The client's current nickname, username, and real name is used.

Called from any window

**/style FILENAME**

Loads a style file (created with the "Style Editor", accessible from the "Preferences" dialog) into the current chat. If a complete path to **FILENAME** is not provided, the client will look in the styles directory (in **settings\styles**, or set by the **--styles** command-line flag) for the file.

Called from any window

**/switch [WINDOW\_NAME]**

Switches the current displayed channel. If **WINDOW\_NAME** is omitted, a list of available channels/private chats is displayed.

Called from any window

**/unmacro NAME**

Deletes a macro.

Available only for scripts

**/wait TIME**

Causes a script to pause for **TIME** seconds. This command is *only* available for use in scripts.

## Macro examples

### Greeter macro

<b>Command</b>	<code>/macro hi 1 /msg \$WHERE Welcome to \$WHERE, \$1!</code> Creates a macro to welcome someone to whatever channel you're in. Pass the nickname of whoever you want to welcome to the channel as the first argument, and it will send a public message to channel welcoming them. For example, if you were in a channel named <b>#erk</b> , and you wanted to welcome a new user named Alice to the channel, you'd execute: <code>/hi Alice</code>
<b>Description</b>	Which would send the following public message to <b>#erk</b> : "Welcome to #erk, Alice!"

### Trout macro

<b>Command</b>	<code>/macro trout 1 /me slaps \$1 with a trout.</code> Creates a macro to send the old classic message. Pass the nickname of the user you'd like to slap, and it will send a CTCP action message to the current channel or private chat. For example, to slap a user named Bob: <code>/trout Bob</code>
<b>Description</b>	Which would send the following CTCP action message to the chat: "[your nickname] slaps Bob with a trout."

### Special attention trout macro

<b>Command</b>	<code>/macro trouts * /me slaps \$1 with a trout, and \$- too</code> Creates a macro to send a new classic message. Pass the nickname of the main target, and a short list of other targets to the macro to send the new CTCP action message. For example, to slap Bob, Alice, and Dave: <code>/trouts Bob Alice and Dave</code>
<b>Description</b>	Which would send the following CTCP action message to the chat: "[your nickname] slaps Bob with a trout, and Alice and Dave, too"