

Bungee Command Reference

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Bungee Client

The Bungee client command mode can be entered by pressing the escape string during the first 10 seconds after login. The Unix login session (login shell) is terminated. The escape string is configured as "^" by default and can be changed using the server command [set escape string ...](#).

The input prompt ">" will be displayed. When entering supervisor mode, this prompt changes to "#".

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Client Commands

The following commands are processed by the Bungee client. Input that is not recognized as a client command is sent to the Bungee server as a [server command](#).

<code>c [-nr] sid</code>	Connect to a running session. A list of available sessions can be obtained by the server command show sessions . You can return the command by typing the escape string again (default: "^").
<code>v [-nr] sid</code>	Like "c", but keyboard is locked.
<code>su [username]</code>	Enter supervisor mode. More sessions can be display and connected.
<code>unsu</code>	Leave supervisor mode.
<code>q</code>	Quit the client command mode.
<code>h, ?</code>	Display a short help text on available client commands.

Example Session

```
hugo@kronos:~ > telnet aserver
Trying 192.168.1.4...
Connected to aserver.
Escape character is '^]'.
Welcome to aserver.
```

```
aserver login: auser
Password: password
```

Last login: Tue Oct 14 12:25:17 from kronos

Have a lot of fun...

BUNGEE 2.31.0 (C) 2001 SPF GmbH

auser@aserver:~ > ^

> **show sessions**

SESSION:	USER	TERMTYPE	CONNECTED	FIRST FROM /	TIME	DESIGNATION
920:	auser	xterm	kronos	2001-10-14	12:20:08	kronos
941:	auser	xterm	kronos	2001-10-14	12:25:17	kronos

> **su root**

Password: *password*

show sessions

SESSION:	USER	TERMTYPE	CONNECTED	FIRST FROM /	TIME	DESIGNATION
920:	auser	xterm	kronos	2001-10-14	12:20:08	kronos
941:	auser	xterm	kronos	2001-10-14	12:25:17	kronos
974:	oracle	xterm	kronos	2001-10-14	11:38:58	kronos

c 974

oracle@aserver:~ > **id**

uid=59(oracle) gid=54(oinstall) groups=54(oinstall),55(dba)

oracle@aserver:~ > ^

q

Connection closed by foreign host.

hugo@kronos:~ >

SYNTAX

```
set name [value]
```

DESCRIPTION

Sets a configuration variable value. If no value is given, the variable is deleted.

Only special [configuration variables](#) can be set via this command. Variable values can be displayed by [retrieve_or_show_variable](#), or [retrieve_vvalue](#).

Handling of variables in the bungee server is limited the following configuration variables:

Name	Default	Description
applport_local	telnetN	Service that shall be connected if applhost is not set for the connecting terminal. This is usually the original telnet service, that has been moved to different port number (telnetN).
applport_remote	23	Service that shall be connected if applhost is but applport is not set for the connecting terminal. This is usually a normal telnet service on port 23.
escape_string	^	String to enter command mode after login or to leave a session from a connect or view command. Currently, only one character is allowed.
escape_timeout	10	Maximum number of seconds command mode can be entered after login.
login_cr_timeout	0	Time in seconds for the termination of a login if no CR (return key) is entered. Important for systems without login timeout when waiting for a user name the first time after the telnet connection was established. The value 0 disables this feature.
master_enter		String that is sent to a terminal if someone connects to or views one of its session.
master_leave		String that is sent to a terminal if someone disconnects from or unviews one of its sessions.
master_beep_interval	0	If a session is connected or viewed by another user a beep reminds all affected users. This beep is repeated every n seconds specified by this variable. The value 0 disables this feature.
page_length	24	Number of lines that fit on the screen. Used to prompt for more on long output (command mode of Bungee client).
page_prompt	-- More --	Prompt for more output (command mode of Bungee client).

SYNTAX

```
retrieve/show variable[s] [name]
```

DESCRIPTION

Shows one or all [configuration variables](#). Variables can be set via the command [set](#).

SYNTAX

```
retrieve vvalue name
```

DESCRIPTION

Retrieves the setting of one [configuration variable](#). Internal Use.

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SYNTAX

```
add terminal name \[terminal-attribute ...\]
```

DESCRIPTION

Adds a new terminal to the bungee facility. Special [attributes](#) can be defined here or later by [modify terminal](#).

Terminal attributes are given as options to [add terminal](#) or [modify terminal](#).

OPTIONS

<code>/reconn explicit/implicit/force</code>	Sets automatic reconnect to explicit, implicit, or force.
<code>/sesslimit 1/none</code>	Sets session limit to 1 or unlimited.
<code>/applhost <i>hostname</i></code>	Sets application host .
<code>/applport <i>service</i></code>	Sets application port .
<code>/attach <i>sid</i></code>	Attaches the terminal to the specified session. Used internally for session limit control.
<code>/detach <i>sid</i></code>	Attaches the terminal to the specified session. Used internally for session limit control.

SYNTAX

```
modify terminal name/@group/+ipaddr \[terminal-attribute ...\]
```

DESCRIPTION

Changes [attributes](#) of previously added terminal, or all terminals of a terminal group.

Automatic reconnect makes a broken session reconnect. This is done if a user logs on who owns the session or if someone logs on to a terminal the session is assigned to.

The exact processing is configured by the terminal and user attribute `/reconnect`.

If set to `explicit`, on log on the user gets a list of all broken sessions and can reconnect one of them or start a new session.

If set to `implicit`, a user cannot start a new session as long as broken sessions exist. If there is exactly one broken session, it is reconnected without asking the user.

`force` is similar to `implicit`, but not broken sessions are treated like broken ones. Every user or terminal with `/reconnect force` can have only one session at a time.

Terminals and users can be limited to one session. Any additional login is then rejected.

Normally, user sessions are opened on the host they connected via bungee. But it is possible to make a terminal-dependant redirection to another host and/or port.

SYNTAX

```
delete terminal name/+ipaddr
```

DESCRIPTION

Deletes a terminal from the bungee facility. It can be identified either by name or by IP address.

SYNTAX

```
retrieve/show terminal[s] [name/@group/+ipaddr]
```

DESCRIPTION

Show [attributes](#) of one or all terminals, or all terminals of a terminal group.

SYNTAX

```
create terminal group name
```

DESCRIPTION

Creates a new terminal group. Terminals can be added to the group by [alter terminal group](#).

SYNTAX

```
alter terminal group groupname add/delete termname
```

DESCRIPTION

Adds a terminal to or deletes a terminal from a terminal group.

SYNTAX

```
drop terminal group name
```

DESCRIPTION

Drops a terminal group. The terminals in the group are **not deleted**, only the grouping is removed.

SYNTAX

```
retrieve/show terminal group[s] [name]
```

DESCRIPTION

Shows one or all terminal groups.

SYNTAX

```
add user name \[user-attribute ...\]
```

DESCRIPTION

Adds a new user to the bungee facility. Special [attributes](#) can be defined here or later by [modify user](#).

User attributes are given as options to [add user](#) or [modify user](#).

OPTIONS

<code>/reconn</code> <code>explicit/implicit/force</code>	Set automatic reconnect to explicit, implicit, or force.
<code>/sesslimit 1/none</code>	Sets session limit to 1 or unlimited.
<code>/localize</code> <code>name/@group/+ipaddr</code>	Localizes the user to the specified terminal (by name or IP address) or terminal group.
<code>/attach sid</code>	Attaches the user to the specified session. Used internally for session limit control.
<code>/detach sid</code>	Attaches the user to the specified session. Used internally for session limit control.

SYNTAX

```
modify user name/@group \[user-attribute ...\]
```

DESCRIPTION

Changes [attributes](#) of previously added user, or all users of a user group.

Users can be limited to one terminal or a terminal group. This is called 'localize' a user (in bungee terminology).

SYNTAX

```
delete user name
```

DESCRIPTION

Deletes a user from the bungee facility.

SYNTAX

```
retrieve/show user[s] [name/@group]
```

DESCRIPTION

Shows [attributes](#) of one or all users, or all users of a user group.

SYNTAX

```
create user group name
```

DESCRIPTION

Creates a new user group. Users can be added to the group by [alter user group](#).

SYNTAX

```
alter user group groupname add/delete username
```

DESCRIPTION

Adds a user to or deletes a user from a user group.

SYNTAX

```
drop user group name
```

DESCRIPTION

Drops a user group. The users in the group are **not deleted**, only the grouping is removed.

SYNTAX

```
retrieve/show user group[s] [name]
```

DESCRIPTION

Shows one or all user groups.

SYNTAX

```
kill session sid
```

DESCRIPTION

Kills a session. All front-ends are closed. The running application will terminate due to the lost terminal connection.

SYNTAX

```
retrieve|show session[s] [sid] [option ...]
```

DESCRIPTION

Shows one or more sessions specified by a session id and/or additional filter options as listed below.

OPTIONS

<code>/broken</code>	Selects sessions that lost all front-ends.
<code>/last <i>number</i>{D/H/M/S}</code>	Selects sessions that has been opened within the last <i>number</i> days, hours, minutes, or seconds.
<code>/terminal_name <i>name</i>/+<i>ipaddr</i></code>	Selects sessions that are assign to a specific terminal.
<code>/user_name <i>name</i></code>	Selects sessions that are owned by a specific user.

FOLLOWING OPTIONS RECOMMENDED FOR INTERNAL USE ONLY:

<code>/terminal_reconn explicit/implicit</code>	Selects sessions that are assign to a terminal with explicit or implicit automatic reconnect.
<code>/user_reconn explicit/implicit</code>	Selects sessions that are owned by a user with explicit or implicit automatic reconnect.
<code>/combination and/or</code>	By default, only sessions are selected that match all given filter options, i.e. 'and' operation. By switching to 'or', all sub-sequent filter options are or-connected, i.e. only one of these options must match.

SYNTAX

```
kill frontend sid:fid
```

DESCRIPTION

Kills a front-end of a session. The session itself will not terminate.

SYNTAX

```
retrieve|show frontend[s] sid[:fid]
```

DESCRIPTION

Shows front-ends of a session, specified by session id *sid*. A special front-end can be selected by front-end id *fid*.

SYNTAX

```
signonusernamepassword[option ...]
```

DESCRIPTION

Authorizes a user to the bungee server.

There are different privilege modes that control access to sessions (restricted or full) and functions (normal, supervisor and/or configurator). These modes are selected by options listed below.

Default privilege after signon is restricted mode, i.e. access only to sessions of the same user or terminal. For this mode a terminal must be defined by /terminal, otherwise it will be set to 0.0.0.0. A real password is not required for this mode. It may be replaced by an internal code.

Before signon only signon and termination of the connection are allowed.

Currently, only the users root and bungadm are allowed to signon to a higher mode than restricted mode.

OPTIONS

/configurator	Enters configurator mode, i.e. full access to all functions.
/supervisor	Enters supervisor mode, i.e. full access to all sessions. There will be also some additional commands available, like broadcast.
/terminal <i>ipaddr</i>	Defines terminal for restricted mode. IP address must be given as a hexadecimal number. No meaning if given in combination with /supervisor.

OBSOLETE OPTIONS

/adwin	Same as /supervisor.
/master	Combination of /supervisor and /configurator.

NOTES

Configurator mode can be enabled and disabled by the commands [enable configurator](#) resp. [disable configurator](#). Enable is allowed only from supervisor mode. However, configurator mode can be entered without supervisor mode by the signon command.

SYNTAX

```
enable configurator
```

DESCRIPTION

Enables configurator mode. Command can only be used if in supervisor mode, although configurator mode can be entered without supervisor mode by the [signon](#) command.

Only one user can enter configurator mode at the same time.

Configurator mode can be disabled by [disable configurator](#).

SYNTAX

```
disable configurator
```

DESCRIPTION

Disables configurator mode.

Configurator mode can be enabled either by [signon](#) or by [enable configurator](#).

SYNTAX

`quit/exit`

DESCRIPTION

Terminates the connection to the bungee server.

SYNTAX

```
save [filename]
```

DESCRIPTION

Saves the current configuration. If no *filename* is specified, the configuration is saved to `bung.conf`.

SYNTAX

`license` *customer hostident vermajor verminor sessions expidate osname osrelase password*

DESCRIPTION

Installs the license obtained from the bungee vendor.

Current license can be displayed by [show license](#).

SYNTAX

```
show license
```

DESCRIPTION

Show the license currently installed.

A license is installed by the command [license](#).

Authorization log lines, generated by the bungee server, have always the following format:

daytime host bungsrv[pid]: <debuglevel> cc priv user: cmd

Examples

```
Aug 31 11:10:16 pluto bungsrv[782]: <5> 0 -- theo: show sessions
Aug 31 11:15:54 pluto bungsrv[782]: <5> 0 -C root: mod user theo /ses
1
Aug 31 11:18:27 pluto bungsrv[782]: <5> 26 -c theo: mod user theo /ses
none
Aug 31 12:08:38 pluto bungsrv[782]: <5> 26 s- theo: bro session 821
Hallo
```

Field descriptions

daytime	Date and time of the command.
host	Name of the host the bungee server is running on.
pid	PID of the bungee server.
debuglevel	Debug level this command was output with. 5 is for authorization messages.
cc	Completion code, numeric: 0 if command succeeded, otherwise error code (see below, but always as a positive value).
priv	Privileges needed for this command, two characters: 1st: 'S' if superuser privileges needed, 2nd: 'C' if configurator privileges needed. If a privilege is not needed, a '-' is displayed. If the command succeeded, the characters are displayed in upper case, otherwise lower case.
user	User who was signed on when this command was given.
cmd	Command string (passwords are concealed by asterisks).

All error codes are negative. A value of zero means 'no error'.

- 1 communication error
- 2 a time-out has occurred
- 11 unspecified error (forgot to set code?)
- 12 syntax error
- 13 memory allocation error
- 14 object already defined in bungee
- 15 object not defined in bungee
- 16 object does not exist
- 17 file access error
- 18 no space to store
- 19 ambiguous input
- 20 invalid value
- 21 referenced group not defined
- 22 invalid variable name
- 23 object is attached by another process
- 24 object is localized
- 25 invalid login
- 26 privilege violation
- 27 configurator already active
- 80 invalid customer name in license
- 81 invalid host ident in license
- 82 invalid major version in license
- 83 invalid minor version in license
- 84 invalid session count in license
- 85 invalid expiration date in license
- 86 invalid operating system name in license
- 87 invalid operating system release in license
- 88 invalid password in license

Bungee Shell Information Transmitter

Necessary programme: bungmit (name derived from 'transmit')

Environment conditions for all sub-functions (partially except "pin"):

If BUNG_PEER is set in environment, it is used to connect to bungee client via socket. Otherwise an ASCII string like "<BUNG:...>" is sent to standard output.

If BUNG_VERBOSE is defined in environment, the sent command is written as a debug message to standard error.

Environment variables LC_MESSAGES and LANG can be used to select language.

SYNTAX

```
bungmit pin [-c] [-r maxtry] [-t timeout]
```

Tries to get socket address from bungee client and writes it as BUNG_PEER=... to standard output.

OPTIONS

- c Clear standard input first.
- r *maxtry* Set maximum number of connection tries. Default is 5.
- t *timeout* Timeout in seconds for each connection try. Default is 5 seconds.

SYNTAX

```
bungmit ces {=string/octstring}
```

Sets connect enter string in bungee client. String can be given either verbose or as an octal-coded string.

SYNTAX

```
bungmit itx
```

Sends current user name and terminal type to bungee client.

SYNTAX

```
bungmit udp number {=string/octstring}
```

Sets a user-defined parameter in the current bungee session. String can be given either verbose or as an octal-coded string.