

# zplugin.zsh(1)

## NAME

zplugin.zsh - a shell script

## SYNOPSIS

Documentation automatically generated with `zshelldoc`

## FUNCTIONS

```
pmodload
zpcdclear
zpcdreplay
zpcmpdef
zpcmpinit
-zplg-add-fpath
-zplg-add-report
-zplg-any-to-user-plugin
-zplg-clear-debug-report
-zplg-compdef-clear
-zplg-compdef-replay
-zplg-debug-start
-zplg-debug-stop
-zplg-debug-unload
-zplg-deploy-message
-zplg-diff
-zplg-diff-env
-zplg-diff-functions
-zplg-diff-options
-zplg-diff-parameter
-zplg-find-other-matches
-zplg-ice
-zplg-load
-zplg-load-ices
-zplg-load-plugin
-zplg-load-snippet
-zplg-pack-ice
-zplg-prepare-home
@zplg-register-annex
-zplg-register-plugin
--zplg-reload-and-run
-zplg-run
-zplg-run-task
-zplg-service
```

```
--zplg-shadow-alias
--zplg-shadow-autoload
--zplg-shadow-bindkey
--zplg-shadow-compdef
-zplg-shadow-off
-zplg-shadow-on
--zplg-shadow-zle
--zplg-shadow-zstyle
-zplg-submit-turbo
-zplg-substitute
-zplg-wrap-track-functions
zplugin
-zplugin_scheduler_add_sh
@zsh-plugin-run-on-unload
@zsh-plugin-run-on-update
AUTOLOAD add-zsh-hook
AUTOLOAD compinit
AUTOLOAD is-at-least
PRECMD-HOOK -zplg-scheduler
```

## DETAILS

### Script Body

Has 126 line(s). Calls functions:

```
Script-Body
|-- add-zsh-hook
|-- is-at-least
`-- -zplg-prepare-home
```

Uses feature(s): *add-zsh-hook*, *alias*, *autoload*, *export*, *is-at-least*, *setopt*, *zmodload*, *zstyle*

Exports (environment): ZPFX // ZSH\_CACHE\_DIR

### pmodload

Compatibility with Prezto. Calls can be recursive.

Has 9 line(s). Calls functions:

```
pmodload
'-- -zplg-load-snippet
  |-- -zplg-add-report
  |-- -zplg-deploy-message
  |-- -zplg-pack-ice
  |-- -zplg-wrap-track-functions
  '-- zplugin-install.zsh/-zplg-download-snippet
```

Uses feature(s): *zstyle*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## zpcdclear

A wrapper for `'zplugin cdclear -q'` which can be called from hook ices like the `atinit''`, `atload''`, etc. ices.

Has 1 line(s). Calls functions:

```
zpcdclear
'-- -zplg-compdef-clear
```

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## zpcdreplay

A function that can be invoked from within `'atinit'`, `'atload'`, etc. ice-mod. It works like `'zplugin cdreplay'`, which cannot be invoked from such hook ices.

Has 1 line(s). Calls functions:

```
zpcdreplay
'-- -zplg-compdef-replay
```

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## zpcmpdef

Stores compdef for a replay with 'zpcdreplay' (turbo mode) or with 'zplugin cdreplay' (normal mode). An utility function of an undefined use case.

Has 1 line(s). Doesn't call other functions.

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## zpcompinit

A function that can be invoked from within 'atinit', 'atload', etc. ice-mod. It runs 'autoload compinit; compinit' and respects ZPLGM[ZCOMP\_DUMP\_PATH] and ZPLGM[COMPINIT\_OPTS].

Has 1 line(s). Calls functions:

```
zpcompinit  
'-- compinit
```

Uses feature(s): *autoload, compinit*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## -zplg-add-fpath

Has 8 line(s). Calls functions:

```
-zplg-add-fpath  
'-- -zplg-any-to-user-plugin
```

Called by:

```
zplugin
```

## -zplg-add-report

Adds a report line for given plugin.

\$1 - uspl2, i.e. user/plugin  
\$2, ... - the text

Has 3 line(s). Doesn't call other functions.

Called by:

```
-zplg-load-plugin  
-zplg-load-snippet  
--zplg-shadow-alias  
--zplg-shadow-autoload  
--zplg-shadow-bindkey  
--zplg-shadow-compdef  
--zplg-shadow-zle  
--zplg-shadow-zstyle
```

## **-zplg-any-to-user-plugin**

Allows elastic plugin-spec across the code.

\$1 - plugin spec (4 formats: user---plugin, user/plugin, user, plugin)  
\$2 - plugin (only when \$1 - i.e. user - given)

Returns user and plugin in \$reply

Has 23 line(s). Doesn't call other functions.

Called by:

```
-zplg-add-fpath
-zplg-load
-zplg-run
zplugin-autoload.zsh/-zplg-any-to-uspl2
zplugin-autoload.zsh/-zplg-changes
zplugin-autoload.zsh/-zplg-compiled
zplugin-autoload.zsh/-zplg-compile-uncompile-all
zplugin-autoload.zsh/-zplg-create
zplugin-autoload.zsh/-zplg-delete
zplugin-autoload.zsh/-zplg-find-completions-of-plugin
zplugin-autoload.zsh/-zplg-get-path
zplugin-autoload.zsh/-zplg-glance
zplugin-autoload.zsh/-zplg-show-report
zplugin-autoload.zsh/-zplg-stress
zplugin-autoload.zsh/-zplg-uncompile-plugin
zplugin-autoload.zsh/-zplg-unload
zplugin-autoload.zsh/-zplg-unregister-plugin
zplugin-autoload.zsh/-zplg-update-or-status-all
zplugin-autoload.zsh/-zplg-update-or-status
zplugin-install.zsh/-zplg-get-latest-gh-r-version
zplugin-install.zsh/-zplg-install-completions
zplugin-side.zsh/-zplg-any-colorify-as-uspl2
zplugin-side.zsh/-zplg-compute-ice
zplugin-side.zsh/-zplg-exists-physically
zplugin-side.zsh/-zplg-first
```

## -zplg-clear-debug-report

Forgets dtrace report gathered up to this moment.

Has 1 line(s). Calls functions:

```
-zplg-clear-debug-report
`-- zplugin-autoload.zsh/-zplg-clear-report-for
```

Called by:

```
zplugin
zplugin-autoload.zsh/-zplg-unload
```

## -zplg-compdef-clear

Implements user-exposed functionality to clear gathered compdefs.

Has 3 line(s). Doesn't call other functions.

Called by:

```
zpcdclear  
zplugin
```

## -zplg-compdef-replay

Runs gathered compdef calls. This allows to run 'compinit' after loading plugins.

Has 16 line(s). Doesn't call other functions.

Uses feature(s): *compdef*

Called by:

```
zpcdreplay  
zplugin
```

## -zplg-debug-start

Starts Dtrace, i.e. session tracking for changes in Zsh state.

Has 9 line(s). Calls functions:

```
-zplg-debug-start  
|-- -zplg-diff  
|   |-- -zplg-diff-env  
|   |-- -zplg-diff-functions  
|   |-- -zplg-diff-options  
|   '-- -zplg-diff-parameter  
'-- -zplg-shadow-on
```

Called by:

```
zplugin
```

## -zplg-debug-stop

Stops Dtrace, i.e. session tracking for changes in Zsh state.

Has 3 line(s). Calls functions:

```
-zplg-debug-stop
|-- -zplg-diff
|   |-- -zplg-diff-env
|   |-- -zplg-diff-functions
|   |-- -zplg-diff-options
|   `-- -zplg-diff-parameter
`-- -zplg-shadow-off
```

Called by:

zplugin

## -zplg-debug-unload

Reverts changes detected by dtrace run.

Has 5 line(s). Calls functions:

```
-zplg-debug-unload
`-- zplugin-autoload.zsh/-zplg-unload
```

Called by:

zplugin

## -zplg-deploy-message

Deploys a sub-prompt message to be displayed OR a 'zle .reset-prompt' call to be invoked

Has 13 line(s). Doesn't call other functions.

Uses feature(s): *read*, *zle*



Called by:

```
-zplg-load-snippet  
-zplg-load  
zplugin-autoload.zsh/-zplg-recall
```

## -zplg-diff

Performs diff actions of all types

Has 4 line(s). Calls functions:

```
-zplg-diff  
|-- -zplg-diff-env  
|-- -zplg-diff-functions  
|-- -zplg-diff-options  
'-- -zplg-diff-parameter
```

Called by:

```
-zplg-debug-start  
-zplg-debug-stop  
-zplg-load-plugin
```

## -zplg-diff-env

Implements detection of change in PATH and FPATH.

```
$1 - user/plugin (i.e. uspl2 format)  
$2 - command, can be "begin" or "end"
```

Has 18 line(s). Doesn't call other functions.

Called by:

```
-zplg-diff  
-zplg-load-plugin
```

## -zplg-diff-functions

Implements detection of newly created functions. Performs data gathering, computation is done in \*-compute().

\$1 - user/plugin (i.e. uspl2 format)  
\$2 - command, can be "begin" or "end"

Has 8 line(s). Doesn't call other functions.

Called by:

-zplg-diff

## -zplg-diff-options

Implements detection of change in option state. Performs data gathering, computation is done in \*-compute().

\$1 - user/plugin (i.e. uspl2 format)  
\$2 - command, can be "begin" or "end"

Has 7 line(s). Doesn't call other functions.

Called by:

-zplg-diff

## -zplg-diff-parameter

Implements detection of change in any parameter's existence and type. Performs data gathering, computation is done in \*-compute().

\$1 - user/plugin (i.e. uspl2 format)  
\$2 - command, can be "begin" or "end"

Has 9 line(s). Doesn't call other functions.

Called by:

-zplg-diff

## -zplg-find-other-matches

Plugin's main source file is in general `'name.plugin.zsh'`. However, there can be different conventions, if that file is not found, then this functions examines other conventions in order of most expected sanity.

Has 14 line(s). Doesn't call other functions.

Called by:

-zplg-load-plugin  
zplugin-side.zsh/-zplg-first

## -zplg-ice

Parses ICE specification (`'zplg ice'` subcommand), puts the result into `ZPLG_ICE` global hash. The ice-spec is valid for next command only (i.e. it "melts"), but it can then stick to plugin and activate e.g. at update.

Has 14 line(s). Doesn't call other functions.

Uses feature(s): *setopt*

Called by:

zplugin

*Environment variables used: ZPFX*

## -zplg-load

Implements the exposed-to-user action of loading a plugin.

\$1 - plugin spec (4 formats: `user---plugin`, `user/plugin`, `user`, `plugin`)  
\$2 - plugin name, if the third format is used

Has 70 line(s). Calls functions:

```
-zplg-load
|-- -zplg-any-to-user-plugin
|-- -zplg-deploy-message
|-- -zplg-load-plugin
|   |-- -zplg-add-report
|   |-- -zplg-diff
|   |   |-- -zplg-diff-env
|   |   |-- -zplg-diff-functions
|   |   |-- -zplg-diff-options
|   |   `-- -zplg-diff-parameter
|   |-- -zplg-diff-env
|   |-- -zplg-find-other-matches
|   |-- -zplg-shadow-off
|   |-- -zplg-shadow-on
|   `-- -zplg-wrap-track-functions
|-- -zplg-load-snippet
|   |-- -zplg-add-report
|   |-- -zplg-deploy-message
|   |-- -zplg-pack-ice
|   |-- -zplg-wrap-track-functions
|   `-- zplugin-install.zsh/-zplg-download-snippet
|-- -zplg-pack-ice
|-- -zplg-register-plugin
|-- zplugin-install.zsh/-zplg-get-package
`-- zplugin-install.zsh/-zplg-setup-plugin-dir
```

Uses feature(s): *eval, setopt, source, zle*

Called by:

```
-zplg-run-task
-zplg-service
zplugin
```

## **-zplg-load-ices**

Has 23 line(s). Doesn't call other functions.

Uses feature(s): *wait*

Called by:

```
zplugin
```

Environment variables used: *ZPFX*

## -zplg-load-plugin

Lower-level function for loading a plugin.

\$1 - user  
\$2 - plugin  
\$3 - mode (light or load)

Has 111 line(s). Calls functions:

```
-zplg-load-plugin  
|-- -zplg-add-report  
|-- -zplg-diff  
|   |-- -zplg-diff-env  
|   |-- -zplg-diff-functions  
|   |-- -zplg-diff-options  
|   `-- -zplg-diff-parameter  
|-- -zplg-diff-env  
|-- -zplg-find-other-matches  
|-- -zplg-shadow-off  
|-- -zplg-shadow-on  
`-- -zplg-wrap-track-functions
```

Uses feature(s): *eval, setopt, source, unfunction, zle*

Called by:

```
-zplg-load
```

## -zplg-load-snippet

Implements the exposed-to-user action of loading a snippet.

\$1 - url (can be local, absolute path)

Has 199 line(s). Calls functions:

```
-zplg-load-snippet
|-- -zplg-add-report
|-- -zplg-deploy-message
|-- -zplg-pack-ice
|-- -zplg-wrap-track-functions
`-- zplugin-install.zsh/-zplg-download-snippet
```

Uses feature(s): *autoload, eval, setopt, source, unfunction, zparseopts, zstyle*

Called by:

```
pmodload
-zplg-load
-zplg-run-task
-zplg-service
zplugin
zplugin-autoload.zsh/-zplg-update-or-status-snippet
```

## **-zplg-pack-ice**

Remembers all ice-mods, assigns them to concrete plugin. Ice spec is in general forgotten for second-next command (that's why it's called "ice" - it melts), however they glue to the object (plugin or snippet) mentioned in the next command for later use with e.g. `'zplugin update ...'`

Has 3 line(s). Doesn't call other functions.

Called by:

```
-zplg-load-snippet
-zplg-load
@zsh-plugin-run-on-unload
@zsh-plugin-run-on-update
zplugin-side.zsh/-zplg-compute-ice
```

## **-zplg-prepare-home**

Creates all directories needed by Zplugin, first checks if they already exist.

Has 28 line(s). Doesn't call other functions.

Called by:

Script-Body

*Environment variables used:* ZPFX

## @zplg-register-annex

Registers the z-annex inside Zplugin – i.e. an Zplugin extension

Has 4 line(s). Doesn't call other functions.

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## -zplg-register-plugin

Adds the plugin to ZPLG\_REGISTERED\_PLUGINS array and to the zsh\_loaded\_plugins array (managed according to the plugin standard: <http://zdharma.org/Zsh-100-Commits-Club/Zsh-Plugin-Standard.html>)

Has 23 line(s). Doesn't call other functions.

Called by:

-zplg-load

## --zplg-reload-and-run

Marks given function (\$3) for autoloading, and executes it triggering the load. \$1 is the fpath dedicated to the function, \$2 are autoload options. This function replaces "autoload -X", because using that on older Zsh versions causes problems with traps.

So basically one creates function stub that calls `--zplg-reload-and-run()` instead of "autoload -X".

\$1 - FPATH dedicated to function  
\$2 - autoload options  
\$3 - function name (one that needs autoloading)

Author: Bart Schaefer

Has 11 line(s). Doesn't call other functions.

Uses feature(s): *autoload*, *unfunction*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## -zplg-run

Run code inside plugin's folder  
It uses the 'correct' parameter from upper's scope `zplugin()`

Has 24 line(s). Calls functions:

```
-zplg-run  
'-- -zplg-any-to-user-plugin
```

Uses feature(s): *eval*, *setopt*

Called by:

zplugin

## -zplg-run-task



A backend, worker function of -zplg-scheduler. It obtains the tasks index and a few of its properties (like the type: plugin, snippet, service plugin, service snippet) and executes it first checking for additional conditions (like non-numeric wait'' ice).

\$1 - the pass number, either 1st or 2nd pass  
\$2 - the time assigned to the task  
\$3 - type: plugin, snippet, service plugin, service snippet  
\$4 - task's index in the ZPLGM[WAIT\_ICE\_...] fields  
\$5 - mode: load or light  
\$6 - the plugin-spec or snippet URL or alias name (from id-as'')

Has 44 line(s). Calls functions:

```
-zplg-run-task
|-- -zplg-load
|   |-- -zplg-any-to-user-plugin
|   |-- -zplg-deploy-message
|   |-- -zplg-load-plugin
|   |   |-- -zplg-add-report
|   |   |-- -zplg-diff
|   |       |-- -zplg-diff-env
|   |       |-- -zplg-diff-functions
|   |       |-- -zplg-diff-options
|   |       `-- -zplg-diff-parameter
|   |   |-- -zplg-diff-env
|   |   |-- -zplg-find-other-matches
|   |   |-- -zplg-shadow-off
|   |   |-- -zplg-shadow-on
|   |   `-- -zplg-wrap-track-functions
|   |-- -zplg-load-snippet
|   |   |-- -zplg-add-report
|   |   |-- -zplg-deploy-message
|   |   |-- -zplg-pack-ice
|   |   |-- -zplg-wrap-track-functions
|   |   `-- zplugin-install.zsh/-zplg-download-snippet
|   |-- -zplg-pack-ice
|   |-- -zplg-register-plugin
|   |-- zplugin-install.zsh/-zplg-get-package
|   `-- zplugin-install.zsh/-zplg-setup-plugin-dir
|-- -zplg-load-snippet
|   |-- -zplg-add-report
|   |-- -zplg-deploy-message
|   |-- -zplg-pack-ice
|   |-- -zplg-wrap-track-functions
|   `-- zplugin-install.zsh/-zplg-download-snippet
`-- zplugin-autoload.zsh/-zplg-unload
```

Uses feature(s): *eval, source, zle, zpty*

Called by:

-zplg-scheduler

## -zplg-scheduler

Searches for timeout tasks, executes them. There's an array of tasks waiting for execution, this scheduler manages them, detects which ones should be run at current moment, decides to remove (or not) them from the array after execution.

\$1 - if "following", then it is non-first (second and more) invocation of the scheduler; this results in chain of 'sched' invocations that results in repetitive -zplg-scheduler activity

if "burst", then all tasks are marked timeout and executed one by one; this is handy if e.g. a docker image starts up and needs to install all turbo-mode plugins without any hesitation (delay), i.e. "burst" allows to run package installations from script, not from prompt

Has 74 line(s). **Is a precmd hook.** Calls functions:

```

-zplg-scheduler
|-- add-zsh-hook
`-- -zplg-run-task
    |-- -zplg-load
    |   |-- -zplg-any-to-user-plugin
    |   |-- -zplg-deploy-message
    |   |-- -zplg-load-plugin
    |   |   |-- -zplg-add-report
    |   |   |-- -zplg-diff
    |   |   |   |-- -zplg-diff-env
    |   |   |   |-- -zplg-diff-functions
    |   |   |   |-- -zplg-diff-options
    |   |   |   `-- -zplg-diff-parameter
    |   |   |-- -zplg-diff-env
    |   |   |-- -zplg-find-other-matches
    |   |   |-- -zplg-shadow-off
    |   |   |-- -zplg-shadow-on
    |   |   `-- -zplg-wrap-track-functions
    |   |-- -zplg-load-snippet
    |   |   |-- -zplg-add-report
    |   |   |-- -zplg-deploy-message
    |   |   |-- -zplg-pack-ice
    |   |   |-- -zplg-wrap-track-functions
    |   |   `-- zplugin-install.zsh/-zplg-download-snippet
    |   |-- -zplg-pack-ice
    |   |-- -zplg-register-plugin
    |   |-- zplugin-install.zsh/-zplg-get-package
    |   `-- zplugin-install.zsh/-zplg-setup-plugin-dir
    |-- -zplg-load-snippet
    |   |-- -zplg-add-report
    |   |-- -zplg-deploy-message
    |   |-- -zplg-pack-ice
    |   |-- -zplg-wrap-track-functions
    |   `-- zplugin-install.zsh/-zplg-download-snippet
    `-- zplugin-autoload.zsh/-zplg-unload

```

Uses feature(s): *add-zsh-hook*, *sched*, *setopt*, *zle*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## **-zplg-service**

Handles given service, i.e. obtains lock, runs it, or waits if no lock

\$1 - type "p" or "s" (plugin or snippet)  
\$2 - mode - for plugin (light or load)  
\$3 - id - URL or plugin ID or alias name (from id-as'')

Has 30 line(s). Calls functions:

```
-zplg-service
|-- -zplg-load
|   |-- -zplg-any-to-user-plugin
|   |-- -zplg-deploy-message
|   |-- -zplg-load-plugin
|   |   |-- -zplg-add-report
|   |   |-- -zplg-diff
|   |   |   |-- -zplg-diff-env
|   |   |   |-- -zplg-diff-functions
|   |   |   |-- -zplg-diff-options
|   |   |   `-- -zplg-diff-parameter
|   |   |-- -zplg-diff-env
|   |   |-- -zplg-find-other-matches
|   |   |-- -zplg-shadow-off
|   |   |-- -zplg-shadow-on
|   |   `-- -zplg-wrap-track-functions
|   |-- -zplg-load-snippet
|   |   |-- -zplg-add-report
|   |   |-- -zplg-deploy-message
|   |   |-- -zplg-pack-ice
|   |   |-- -zplg-wrap-track-functions
|   |   `-- zplugin-install.zsh/-zplg-download-snippet
|   |-- -zplg-pack-ice
|   |-- -zplg-register-plugin
|   |-- zplugin-install.zsh/-zplg-get-package
|   `-- zplugin-install.zsh/-zplg-setup-plugin-dir
`-- -zplg-load-snippet
    |-- -zplg-add-report
    |-- -zplg-deploy-message
    |-- -zplg-pack-ice
    |-- -zplg-wrap-track-functions
    `-- zplugin-install.zsh/-zplg-download-snippet
```

Uses feature(s): *kill*, *read*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## --zplg-shadow-alias

Function defined to hijack plugin's calls to 'alias' builtin.

The hijacking is to gather report data (which is used in unload).

Has 36 line(s). Calls functions:

```
--zplg-shadow-alias  
'-- -zplg-add-report
```

Uses feature(s): *alias*, *setopt*, *zparseopts*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## --zplg-shadow-autoload

Function defined to hijack plugin's calls to 'autoload' builtin.

The hijacking is not only to gather report data, but also to run custom 'autoload' function, that doesn't need FPATH.

Has 56 line(s). Calls functions:

```
--zplg-shadow-autoload  
'-- -zplg-add-report
```

Uses feature(s): *autoload*, *eval*, *setopt*, *zparseopts*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## --zplg-shadow-bindkey

Function defined to hijack plugin's calls to 'bindkey' builtin.

The hijacking is to gather report data (which is used in unload).

Has 106 line(s). Calls functions:

```
--zplg-shadow-bindkey  
|-- is-at-least  
'-- -zplg-add-report
```

Uses feature(s): *bindkey, is-at-least, setopt, zparseopts*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## --zplg-shadow-compdef

Function defined to hijack plugin's calls to 'compdef' function. The hijacking is not only for reporting, but also to save compdef calls so that 'compinit' can be called after loading plugins.

Has 6 line(s). Calls functions:

```
--zplg-shadow-compdef  
'-- -zplg-add-report
```

Uses feature(s): *setopt*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## -zplg-shadow-off

Turn off shadowing completely for a given mode ("load", "light", "light-b" (i.e. the 'trackbinds' mode) or "compdef").

Has 19 line(s). Doesn't call other functions.

Uses feature(s): *setopt, unfunction*

Called by:

```
-zplg-debug-stop  
-zplg-load-plugin
```

## -zplg-shadow-on

Turn on shadowing of builtins and functions according to passed mode ("load", "light", "light-b" or "compdef"). The shadowing is to gather report data, and to hijack 'autoload', 'bindkey' and 'compdef' calls.

Has 25 line(s). Doesn't call other functions.

Called by:

```
-zplg-debug-start  
-zplg-load-plugin
```

## --zplg-shadow-zle

Function defined to hijack plugin's calls to 'zle' builtin.

The hijacking is to gather report data (which is used in unload).

Has 36 line(s). Calls functions:

```
--zplg-shadow-zle  
'-- -zplg-add-report
```

Uses feature(s): *setopt*, *zle*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## --zplg-shadow-zstyle

Function defined to hijack plugin's calls to 'zstyle' builtin.

The hijacking is to gather report data (which is used in unload).

Has 23 line(s). Calls functions:

```
--zplg-shadow-zstyle  
'-- -zplg-add-report
```

Uses feature(s): *setopt*, *zparseopts*, *zstyle*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## -zplg-submit-turbo

If ``zplugin load``, ``zplugin light`` or ``zplugin snippet`` will be preceded with ``wait``, ``load``, ``unload`` or ``on-update-of`/`subscribe`` ice-mods then the plugin or snippet is to be loaded in turbo-mode, and this function adds it to internal data structures, so that `-zplg-scheduler` can run (load, unload) this as a task.

Has 16 line(s). Doesn't call other functions.

Called by:

zplugin

## -zplg-substitute

Has 39 line(s). Doesn't call other functions.

Uses feature(s): *setopt*

Called by:

zplugin-install.zsh/-zplg-at-eval  
zplugin-install.zsh/-zplg-download-snippet  
zplugin-install.zsh/-zplg-get-package  
zplugin-install.zsh/-zplg-setup-plugin-dir

Environment variables used: ZPFX

## -zplg-wrap-track-functions

Has 19 line(s). Doesn't call other functions.

Uses feature(s): *eval*

Called by:

-zplg-load-plugin  
-zplg-load-snippet



# zplugin

Main function directly exposed to user, obtains subcommand and its arguments, has completion.

Has 375 line(s). Calls functions:

```
zplugin
|-- compinit
|-- -zplg-add-fpath
|   '-- -zplg-any-to-user-plugin
|-- -zplg-clear-debug-report
|   '-- zplugin-autoload.zsh/-zplg-clear-report-for
|-- -zplg-compdef-clear
|-- -zplg-compdef-replay
|-- -zplg-debug-start
|   |-- -zplg-diff
|   |   |-- -zplg-diff-env
|   |   |-- -zplg-diff-functions
|   |   |-- -zplg-diff-options
|   |   '-- -zplg-diff-parameter
|   '-- -zplg-shadow-on
|-- -zplg-debug-stop
|   |-- -zplg-diff
|   |   |-- -zplg-diff-env
|   |   |-- -zplg-diff-functions
|   |   |-- -zplg-diff-options
|   |   '-- -zplg-diff-parameter
|   '-- -zplg-shadow-off
|-- -zplg-debug-unload
|   '-- zplugin-autoload.zsh/-zplg-unload
|-- -zplg-ice
|-- -zplg-load
|   |-- -zplg-any-to-user-plugin
|   |-- -zplg-deploy-message
|   |-- -zplg-load-plugin
|   |   |-- -zplg-add-report
|   |   |-- -zplg-diff
|   |   |   |-- -zplg-diff-env
|   |   |   |-- -zplg-diff-functions
|   |   |   |-- -zplg-diff-options
|   |   |   '-- -zplg-diff-parameter
|   |   |-- -zplg-diff-env
|   |   |-- -zplg-find-other-matches
|   |   |-- -zplg-shadow-off
|   |   |-- -zplg-shadow-on
|   |   '-- -zplg-wrap-track-functions
|   '-- -zplg-load-snippet
```

```

| | |-- -zplg-add-report
| | |-- -zplg-deploy-message
| | |-- -zplg-pack-ice
| | |-- -zplg-wrap-track-functions
| | `-- zplugin-install.zsh/-zplg-download-snippet
| |-- -zplg-pack-ice
| |-- -zplg-register-plugin
| |-- zplugin-install.zsh/-zplg-get-package
| `-- zplugin-install.zsh/-zplg-setup-plugin-dir
|-- -zplg-load-ices
|-- -zplg-load-snippet
| |-- -zplg-add-report
| |-- -zplg-deploy-message
| |-- -zplg-pack-ice
| |-- -zplg-wrap-track-functions
| `-- zplugin-install.zsh/-zplg-download-snippet
|-- -zplg-run
| `-- -zplg-any-to-user-plugin
|-- -zplg-submit-turbo
|-- zplugin-autoload.zsh/-zplg-cdisable
|-- zplugin-autoload.zsh/-zplg-cenable
|-- zplugin-autoload.zsh/-zplg-clear-completions
|-- zplugin-autoload.zsh/-zplg-compiled
|-- zplugin-autoload.zsh/-zplg-compile-uncompile-all
|-- zplugin-autoload.zsh/-zplg-help
|-- zplugin-autoload.zsh/-zplg-list-bindkeys
|-- zplugin-autoload.zsh/-zplg-list-compdef-replay
|-- zplugin-autoload.zsh/-zplg-ls
|-- zplugin-autoload.zsh/-zplg-module
|-- zplugin-autoload.zsh/-zplg-recently
|-- zplugin-autoload.zsh/-zplg-search-completions
|-- zplugin-autoload.zsh/-zplg-self-update
|-- zplugin-autoload.zsh/-zplg-show-all-reports
|-- zplugin-autoload.zsh/-zplg-show-completions
|-- zplugin-autoload.zsh/-zplg-show-debug-report
|-- zplugin-autoload.zsh/-zplg-show-registered-plugins
|-- zplugin-autoload.zsh/-zplg-show-report
|-- zplugin-autoload.zsh/-zplg-show-times
|-- zplugin-autoload.zsh/-zplg-show-zstatus
|-- zplugin-autoload.zsh/-zplg-uncompile-plugin
|-- zplugin-autoload.zsh/-zplg-uninstall-completions
|-- zplugin-autoload.zsh/-zplg-unload
|-- zplugin-autoload.zsh/-zplg-update-or-status
|-- zplugin-autoload.zsh/-zplg-update-or-status-all
|-- zplugin-install.zsh/-zplg-compile-plugin
|-- zplugin-install.zsh/-zplg-compinit
|-- zplugin-install.zsh/-zplg-forget-completion
`-- zplugin-install.zsh/-zplg-install-completions

```

Uses feature(s): *autoload, compinit, eval, setopt, source*

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## **-zplugin\_scheduler\_add\_sh**

Copies task into ZPLG\_RUN array, called when a task timeouts.  
A small function ran from pattern in /-substitution as a math function.

Has 7 line(s). Doesn't call other functions.

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## **@zsh-plugin-run-on-unload**

The Plugin Standard required mechanism, see:  
<http://zdharma.org/Zsh-100-Commits-Club/Zsh-Plugin-Standard.html>

Has 2 line(s). Calls functions:

```
@zsh-plugin-run-on-unload  
'-- -zplg-pack-ice
```

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## **@zsh-plugin-run-on-update**

The Plugin Standard required mechanism

Has 2 line(s). Calls functions:

```
@zsh-plugin-run-on-update  
'-- -zplg-pack-ice
```

Not called by script or any function (may be e.g. a hook, a Zle widget, etc.).

## **add-zsh-hook**

Add to HOOK the given FUNCTION.  
HOOK is one of chpwd, precmd, preexec, periodic, zshaddhistory, zshexit, zsh\_directory\_name (the \_functions subscript is not required).

With -d, remove the function from the hook instead; delete the hook variable if it is empty.

-D behaves like -d, but pattern characters are active in the function name, so any matching function will be deleted from the hook.

Has 93 line(s). Doesn't call other functions.

Uses feature(s): *autoload, getopts*

Called by:

```
Script-Body  
-zplg-scheduler
```

## compinit

Initialisation for new style completion. This mainly contains some helper functions and setup. Everything else is split into different files that will automatically be made autoloaded (see the end of this file). The names of the files that will be considered for autoloading are those that begin with an underscores (like `_condition`).

The first line of each of these files is read and must indicate what should be done with its contents:

```
`#compdef <names ...>'
```

Has 549 line(s). Doesn't call other functions.

Uses feature(s): *autoload, bindkey, compdef, compdump, eval, read, setopt, unfunction, zle, zstyle*

Called by:

```
zpcompinit  
zplugin
```

## is-at-least

Test whether `$ZSH_VERSION` (or some value of your choice, if a second argument is provided) is greater than or equal to `x.y.z-r` (in argument one). In fact, it'll accept any dot/dash-separated string of numbers as its second argument and compare it to the dot/dash-separated first argument. Leading non-number parts of a segment (such as the "zefram" in 3.1.2-zefram4) are not considered when the comparison is done; only the numbers matter. Any left-out segments in the first argument that are present in the version string compared are considered as zeroes, eg `3 == 3.0 == 3.0.0 == 3.0.0.0` and so on.

Has 56 line(s). Doesn't call other functions.

Called by:

Script-Body  
--zplg-shadow-bindkey