# zinit.zsh(1)

#### **NAME**

zinit.zsh - a shell script

## **SYNOPSIS**

Documentation automatically generated with `zshelldoc'

## **FUNCTIONS**

```
+zi::deploy-message
+zi::message
+zi::prehelp-usage-message
-zi::scheduler add sh
:zi::reload-and-run
:zi::tmp-subst-alias
:zi::tmp-subst-autoload
:zi::tmp-subst-bindkey
:zi::tmp-subst-compdef
:zi::tmp-subst-zle
:zi::tmp-subst-zstyle
@autoload
@zi::register-annex
@zi::register-hook
@zi::substitute
@zsh-plugin-run-on-unload
@zsh-plugin-run-on-update
__zi::add-fpath
__zi::add-report
__zi::any-to-pid
__zi::any-to-user-plugin
__zi::compdef-clear
__zi::compdef-replay
__zi::diff
__zi::diff-env
__zi::diff-functions
__zi::diff-options
__zi::diff-parameter
__zi::find-other-matches
__zi::formatter-auto
__zi::formatter-bar
__zi::formatter-bar-util
__zi::formatter-dbg
__zi::formatter-pid
```

```
__zi::formatter-th-bar
 __zi::formatter-url
__zi::get-mtime-into
 __zi::get-object-path
 __zi::ice
 __zi::load
 __zi::load-ices
__zi::load-object
 __zi::load-plugin
 __zi::load-snippet
__zi::main-message-formatter
 __zi::pack-ice
 __zi::parse-opts
 __zi::prepare-home
__zi::register-plugin
 __zi::run
 __zi::run-task
 __zi::set-m-func
 __zi::setup-params
 __zi::submit-turbo
 __zi::tmp-subst-off
 __zi::tmp-subst-on
 __zi::util-shands-path
 pmodload
 zicdclear
 zicdreplay
 zicompdef
 zicompinit
 zinit
 zpcdclear
 zpcdreplay
 zpcompdef
 zpcompinit
 zplugin
AUTOLOAD add-zsh-hook
AUTOLOAD compinit
AUTOLOAD is-at-least
PRECMD-HOOK @zi::scheduler
```

## **DETAILS**

## **Script Body**

Has 245 line(s). Calls functions:

```
Script-Body
|-- +zi::message
|-- @zi::register-hook
```

```
-- __zi::get-mtime-into
-- __zi::prepare-home
   |-- zinit-autoload.zsh/__zi::clear-completions
   `-- zinit-install.zsh/__zi::compinit
-- add-zsh-hook
-- is-at-least
l-- zinit
   |-- +zi::message
   |-- +zi::prehelp-usage-message
       `-- +zi::message
   -- __zi::add-fpath
       `-- __zi::any-to-user-plugin
    -- __zi::compdef-clear
       `-- +zi::message
   |-- __zi::compdef-replay
       `-- +zi::message
   |-- __zi::get-object-path
       `-- __zi::any-to-user-plugin
   |-- __zi::ice
   |-- __zi::load-ices
       `-- __zi::get-object-path
           `-- __zi::any-to-user-plugin
   |-- __zi::load-object
       |-- __zi::load
           |-- +zi::deploy-message
           |-- __zi::any-to-user-plugin
           |-- __zi::load-plugin
               |-- :zi::tmp-subst-autoload
               | |-- +zi::message
                 |-- __zi::add-report
                   |-- __zi::any-to-user-plugin
                   `-- is-at-least
               |-- __zi::add-report
               |-- __zi::diff
               |-- zi::diff-functions
                   |-- __zi::diff-options
               '-- __zi::diff-parameter
               -- __zi::diff-env
               |-- __zi::find-other-matches
               |-- __zi::tmp-subst-off
               `-- __zi::tmp-subst-on
            -- __zi::load-snippet
               |-- +zi::deploy-message
               |-- +zi::message
               |-- __zi::add-report
               |-- __zi::find-other-matches
               |-- __zi::get-object-path
                   `-- __zi::any-to-user-plugin
               -- __zi::pack-ice
               |-- __zi::set-m-func
```

```
`-- +zi::message
            |-- __zi::setup-params
            `-- zinit-install.zsh/__zi::download-snippet
        |-- __zi::pack-ice
        |-- __zi::register-plugin
            `-- +zi::message
        -- __zi::set-m-func
          `-- +zi::message
        |-- __zi::setup-params
        |-- zinit-install.zsh/__zi::get-package
        `-- zinit-install.zsh/__zi::setup-plugin-dir
    `-- zi::load-snippet
        |-- +zi::deploy-message
        |-- +zi::message
        |-- __zi::add-report
        |-- __zi::find-other-matches
        |-- __zi::get-object-path
           `-- __zi::any-to-user-plugin
        |-- __zi::pack-ice
        |-- __zi::set-m-func
        '-- +zi::message
        |-- __zi::setup-params
        `-- zinit-install.zsh/__zi::download-snippet
-- __zi::parse-opts
|-- __zi::run
    |-- +zi::message
    |-- __zi::any-to-user-plugin
    `-- __zi::get-object-path
        `-- __zi::any-to-user-plugin
-- __zi::submit-turbo
|-- compinit
|-- zinit-additional.zsh/__zi::clear-debug-report
|-- zinit-additional.zsh/__zi::debug-start
|-- zinit-additional.zsh/__zi::debug-stop
|-- zinit-additional.zsh/__zi::debug-unload
|-- zinit-autoload.zsh/ zi::cdisable
|-- zinit-autoload.zsh/__zi::cenable
|-- zinit-autoload.zsh/__zi::clear-completions
|-- zinit-autoload.zsh/__zi::compile-uncompile-all
|-- zinit-autoload.zsh/__zi::compiled
|-- zinit-autoload.zsh/__zi::help
|-- zinit-autoload.zsh/__zi::list-bindkeys
|-- zinit-autoload.zsh/__zi::list-compdef-replay
|-- zinit-autoload.zsh/ zi::ls
|-- zinit-autoload.zsh/__zi::module
|-- zinit-autoload.zsh/__zi::recently
|-- zinit-autoload.zsh/__zi::search-completions
|-- zinit-autoload.zsh/__zi::self-update
|-- zinit-autoload.zsh/__zi::show-all-reports
|-- zinit-autoload.zsh/__zi::show-completions
|-- zinit-autoload.zsh/__zi::show-debug-report
```

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

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

#### +zi::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:

```
__zi::load-snippet
__zi::load
zinit-autoload.zsh/__zi::recall
```

## +zi::message

Has 16 line(s). Doesnt call other functions.

```
+zi::prehelp-usage-message
:zi::tmp-subst-autoload
Script-Body
__zi::compdef-clear
__zi::compdef-replay
__zi::load-snippet
__zi::register-plugin
__zi::run
__zi::set-m-func
zinit
zinit-additional.zsh/:zi::tmp-subst-source
zinit-additional.zsh/__zi::debug-start
zinit-additional.zsh/__zi::debug-unload
zinit-autoload.zsh/ zi::build-module
zinit-autoload.zsh/__zi::cd
zinit-autoload.zsh/__zi::self-update
zinit-autoload.zsh/ zi::show-zstatus
zinit-autoload.zsh/__zi::uninstall-completions
zinit-autoload.zsh/__zi::update-all-parallel
zinit-autoload.zsh/__zi::update-or-status-all
zinit-autoload.zsh/__zi::update-or-status
zinit-autoload.zsh/__zi::wait-for-update-jobs
zinit-install.zsh/\~zi::mv-hook
zinit-install.zsh/\~zi::ps-on-update-hook
zinit-install.zsh/\~zi::reset-hook
zinit-install.zsh/ zi::compile-plugin
zinit-install.zsh/__zi::compinit
zinit-install.zsh/__zi::download-file-stdout
zinit-install.zsh/ zi::download-snippet
zinit-install.zsh/__zi::extract
zinit-install.zsh/__zi::get-cygwin-package
zinit-install.zsh/__zi::get-latest-gh-r-url-part
zinit-install.zsh/__zi::get-package
zinit-install.zsh/__zi::install-completions
zinit-install.zsh/__zi::jq-check
zinit-install.zsh/__zi::setup-plugin-dir
zinit-install.zsh/ zi::update-snippet
zinit-install.zsh/ziextract
zinit-side.zsh/__zi::countdown
zinit-side.zsh/__zi::exists-physically-message
```

## +zi::prehelp-usage-message

Has 38 line(s). Calls functions:

```
+zi::prehelp-usage-message
`-- +zi::message
```

Called by:

```
zinit
zinit-autoload.zsh/__zi::delete
```

#### -zi::scheduler\_add\_sh

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

Has 7 line(s). Doesnt call other functions.

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

#### :zi::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 :zi::reload-and-run() instead of "autoload -X".

Author: Bart Schaefer

\$1 - FPATH dedicated to function

\$2 - autoload options

\$3 - function name (one that needs autoloading)

Has 11 line(s). Doesnt 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.).

## :zi::tmp-subst-alias

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

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

Has 36 line(s). Calls functions:

```
:zi::tmp-subst-alias
`-- __zi::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.).

## :zi::tmp-subst-autoload

```
Hijack plugin's calls to the 'autoload' builtin.
```

The hijacking gathers report data and runs custom 'autoload' function, that doesn't need FPATH.

Has 111 line(s). Calls functions:

```
:zi::tmp-subst-autoload
|-- +zi::message
|-- __zi::add-report
|-- __zi::any-to-user-plugin
`-- is-at-least
```

Uses feature(s): autoload, eval, is-at-least, setopt, zparseopts

Called by:

```
@autoload
__zi::load-plugin
```

# :zi::tmp-subst-bindkey

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

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

Has 120 line(s). Calls functions:

```
:zi::tmp-subst-bindkey
|-- __zi::add-report
'-- is-at-least
```

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.).

### :zi::tmp-subst-compdef

Function defined to hijack plugin's calls to the '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:

```
:zi::tmp-subst-compdef
`-- __zi::add-report
```

Uses feature(s): setopt

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

## :zi::tmp-subst-zle

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

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

Has 36 line(s). Calls functions:

```
:zi::tmp-subst-zle
`-- __zi::add-report
```

Uses feature(s): setopt, zle

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

## :zi::tmp-subst-zstyle

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

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

Has 23 line(s). Calls functions:

```
:zi::tmp-subst-zstyle
`-- __zi::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.).

#### @autoload

Has 4 line(s). Calls functions:

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

## @zi::register-annex

```
]]]
Registers the z-annex inside Zinit D i.e. an Zinit extension
```

Has 11 line(s). Doesnt call other functions.

Uses feature(s): setopt

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

## @zi::register-hook

```
Registers the z-annex inside Zinit (i.e., an Zinit extension)
```

Has 6 line(s). Doesnt call other functions.

Uses feature(s): setopt

Called by:

Script-Body

### @zi::scheduler

Searches for timeout tasks, executes them. Theres 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 @zi::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 75 line(s). **Is a precmd hook**. Calls functions:

```
-- zi::diff
               |-- __zi::diff-env
               |-- __zi::diff-functions
               |-- __zi::diff-options
               `-- __zi::diff-parameter
           |-- __zi::diff-env
           |-- __zi::find-other-matches
           |-- __zi::tmp-subst-off
           `-- __zi::tmp-subst-on
        -- __zi::load-snippet
           |-- +zi::deploy-message
           |-- +zi::message
           |-- __zi::add-report
           |-- __zi::find-other-matches
           |-- __zi::get-object-path
           '-- __zi::any-to-user-plugin
           -- __zi::pack-ice
           |-- __zi::set-m-func
           '-- +zi::message
           |-- __zi::setup-params
           `-- zinit-install.zsh/__zi::download-snippet
       |-- __zi::pack-ice
       |-- __zi::register-plugin
          `-- +zi::message
       |-- __zi::set-m-func
          `-- +zi::message
       |-- __zi::setup-params
       |-- zinit-install.zsh/__zi::get-package
       `-- zinit-install.zsh/__zi::setup-plugin-dir
    -- __zi::load-snippet
       |-- +zi::deploy-message
      |-- +zi::message
      |-- __zi::add-report
       |-- __zi::find-other-matches
       |-- __zi::get-object-path
           `-- __zi::any-to-user-plugin
       |-- __zi::pack-ice
       |-- __zi::set-m-func
          `-- +zi::message
       |-- __zi::setup-params
      `-- zinit-install.zsh/__zi::download-snippet
   `-- zinit-autoload.zsh/__zi::unload
-- add-zsh-hook
```

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.).

#### @zi::substitute

Has 40 line(s). Doesnt call other functions.

Uses feature(s): setopt

Called by:

```
zinit-autoload.zsh/_zi::at-eval
zinit-install.zsh/\~zi::atclone-hook
zinit-install.zsh/\~zi::configure-base-hook
zinit-install.zsh/\~zi::cp-hook
zinit-install.zsh/\~zi::extract-hook
zinit-install.zsh/\~zi::make-base-hook
zinit-install.zsh/\~zi::mv-hook
zinit-install.zsh/\_zi::at-eval
zinit-install.zsh/__zi::get-package
```

Environment variables used: ZPFX

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

```
The Plugin Standard required mechanism, see: https://zdharma-continuum.github.io/Zsh-100-Commits-Club/Zsh-Plugin-Standard.html
```

Has 2 line(s). Calls functions:

```
@zsh-plugin-run-on-unload
`-- __zi::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
`-- __zi::pack-ice
```

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

## \_zi::add-fpath

Has 10 line(s). Calls functions:

```
__zi::add-fpath
`-- __zi::any-to-user-plugin
```

Called by:

```
zinit
```

## \_zi::add-report

```
Adds a report line for given plugin.

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

Has 3 line(s). Doesnt call other functions.

Called by:

```
:zi::tmp-subst-alias
:zi::tmp-subst-bindkey
:zi::tmp-subst-compdef
:zi::tmp-subst-zle
:zi::tmp-subst-zstyle
__zi::load-plugin
__zi::load-snippet
```

## \_\_zi::any-to-pid

Has 22 line(s). Calls functions:

```
__zi::any-to-pid
`-- __zi::util-shands-path
```

Uses feature(s): setopt

```
zinit-side.zsh/__zi::any-colorify-as-uspl2
zinit-side.zsh/__zi::exists-physically-message
zinit-side.zsh/__zi::first
```

## zi::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)
```

```
$REPLY - user and plugin
```

Has 29 line(s). Doesn@t call other functions.

Uses feature(s): *setopt* 

```
:zi::tmp-subst-autoload
__zi::add-fpath
__zi::get-object-path
__zi::load
__zi::run
zinit-autoload.zsh/__zi::any-to-uspl2
zinit-autoload.zsh/__zi::changes
zinit-autoload.zsh/__zi::compile-uncompile-all
zinit-autoload.zsh/ zi::compiled
zinit-autoload.zsh/__zi::create
zinit-autoload.zsh/__zi::delete
zinit-autoload.zsh/__zi::find-completions-of-plugin
zinit-autoload.zsh/__zi::glance
zinit-autoload.zsh/ zi::show-report
zinit-autoload.zsh/__zi::stress
zinit-autoload.zsh/__zi::uncompile-plugin
zinit-autoload.zsh/ zi::unload
zinit-autoload.zsh/__zi::unregister-plugin
zinit-autoload.zsh/__zi::update-all-parallel
zinit-autoload.zsh/__zi::update-or-status-all
zinit-autoload.zsh/__zi::update-or-status
zinit-install.zsh/__zi::install-completions
zinit-side.zsh/__zi::any-colorify-as-uspl2
zinit-side.zsh/__zi::compute-ice
zinit-side.zsh/__zi::exists-physically-message
zinit-side.zsh/ zi::exists-physically
zinit-side.zsh/__zi::first
```

Environment variables used: ZPFX

## zi::compdef-clear

Implements user-exposed functionality to clear gathered compdefs.

Has 3 line(s). Calls functions:

```
__zi::compdef-clear
`-- +zi::message
```

```
zicdclear
zinit
zpcdclear
```

## \_zi::compdef-replay

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

Has 17 line(s). Calls functions:

```
__zi::compdef-replay
`-- +zi::message
```

Uses feature(s): *compdef* 

Called by:

```
zicdreplay
zinit
zpcdreplay
```

## \_zi::diff

```
Performs diff actions of all types
```

Has 4 line(s). Calls functions:

```
__zi::diff
|-- __zi::diff-env
|-- __zi::diff-functions
|-- __zi::diff-options
`-- __zi::diff-parameter
```

Called by:

```
__zi::load-plugin
zinit-additional.zsh/__zi::debug-start
zinit-additional.zsh/__zi::debug-stop
```

### zi::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). Doesnt call other functions.

Called by:

```
__zi::diff
__zi::load-plugin
```

### zi::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). Doesnt call other functions.

Called by:

```
__zi::diff
```

### zi::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). Doesnt call other functions.

```
__zi::diff
```

## zi::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). Doesnt call other functions.

Called by:

```
__zi::diff
```

## zi::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 the most same order.

Has 22 line(s). Doesn@t call other functions.

Called by:

```
__zi::load-plugin
__zi::load-snippet
zinit-side.zsh/__zi::first
```

#### zi::formatter-auto

Has 50 line(s). Calls functions:

```
__zi::formatter-auto
|-- __zi::formatter-pid
| `-- zinit-side.zsh/__zi::any-colorify-as-uspl2
`-- __zi::formatter-url
```

Uses feature(s): type

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

### \_zi::formatter-bar

Has 1 line(s). Calls functions:

```
__zi::formatter-bar
`-- __zi::formatter-bar-util
```

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

## \_zi::formatter-bar-util

Has 7 line(s). Doesn@t call other functions.

Called by:

```
__zi::formatter-bar
__zi::formatter-th-bar
```

## \_zi::formatter-dbg

Has 5 line(s). Doesnt call other functions.

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

## \_\_zi::formatter-pid

Has 11 line(s). Calls functions:

```
__zi::formatter-pid
`-- zinit-side.zsh/__zi::any-colorify-as-uspl2
```

Uses feature(s): source

Called by:

```
__zi::formatter-auto
```

#### zi::formatter-th-bar

Has 1 line(s). Calls functions:

```
__zi::formatter-th-bar
`-- __zi::formatter-bar-util
```

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

### \_\_zi::formatter-url

Has 19 line(s). Doesnễt call other functions.

Called by:

```
__zi::formatter-auto
```

## \_zi::get-mtime-into

Has 7 line(s). Doesnt call other functions.

Called by:

```
Script-Body
zinit-autoload.zsh/__zi::self-update
zinit-autoload.zsh/__zi::update-or-status-all
```

## \_zi::get-object-path

Has 28 line(s). Calls functions:

```
__zi::get-object-path
`-- __zi::any-to-user-plugin
```

```
__zi::load-ices
__zi::load-snippet
__zi::run
zinit
zinit-autoload.zsh/__zi::get-path
zinit-install.zsh/__zi::setup-plugin-dir
zinit-install.zsh/__zi::update-snippet
zinit-side.zsh/__zi::first
zinit-side.zsh/__zi::two-paths
```

#### zi::ice

Parses ICE specification, puts the result into 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 13 line(s). Doesn@t call other functions.

Uses feature(s): setopt

Called by:

zinit

Environment variables used: ZPFX

### zi::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 95 line(s). Calls functions:

```
__zi::load
|-- +zi::deploy-message
|-- __zi::any-to-user-plugin
|-- __zi::load-plugin
  |-- :zi::tmp-subst-autoload
        -- +zi::message
       |-- __zi::add-report
        |-- __zi::any-to-user-plugin
        `-- is-at-least
    |-- __zi::add-report
    |-- __zi::diff
      |-- __zi::diff-env
      |-- __zi::diff-functions
        |-- __zi::diff-options
      `-- __zi::diff-parameter
    |-- __zi::diff-env
    |-- __zi::find-other-matches
    |-- __zi::tmp-subst-off
    `-- __zi::tmp-subst-on
 -- __zi::load-snippet
   |-- +zi::deploy-message
    |-- +zi::message
   |-- __zi::add-report
    |-- __zi::find-other-matches
    |-- __zi::get-object-path
    '-- __zi::any-to-user-plugin
    |-- __zi::pack-ice
    |-- __zi::set-m-func
    '-- +zi::message
    |-- __zi::setup-params
    `-- zinit-install.zsh/__zi::download-snippet
-- __zi::pack-ice
|-- __zi::register-plugin
   `-- +zi::message
|-- __zi::set-m-func
   `-- +zi::message
|-- __zi::setup-params
|-- zinit-install.zsh/__zi::get-package
`-- zinit-install.zsh/__zi::setup-plugin-dir
```

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

```
__zi::load-object
__zi::run-task
zinit-additional.zsh/__zi::service
```

#### zi::load-ices

Has 22 line(s). Calls functions:

```
__zi::load-ices
`-- __zi::get-object-path
`-- __zi::any-to-user-plugin
```

Called by:

```
zinit
```

Environment variables used: ZPFX

## \_zi::load-object

Has 12 line(s). Calls functions:

```
__zi::load-object
|-- __zi::load
   |-- +zi::deploy-message
   |-- __zi::any-to-user-plugin
    |-- __zi::load-plugin
       |-- :zi::tmp-subst-autoload
            |-- +zi::message
            |-- __zi::add-report
            |-- __zi::any-to-user-plugin
            `-- is-at-least
        |-- __zi::add-report
        |-- __zi::diff
            |-- __zi::diff-env
           |-- __zi::diff-functions
            |-- __zi::diff-options
            `-- __zi::diff-parameter
        |-- __zi::diff-env
        |-- zi::find-other-matches
        |-- __zi::tmp-subst-off
        `-- __zi::tmp-subst-on
     -- __zi::load-snippet
        |-- +zi::deploy-message
        |-- +zi::message
        |-- __zi::add-report
        |-- __zi::find-other-matches
        |-- __zi::get-object-path
          `-- __zi::any-to-user-plugin
        |-- __zi::pack-ice
        |-- __zi::set-m-func
```

```
`-- +zi::message
        |-- __zi::setup-params
        `-- zinit-install.zsh/__zi::download-snippet
    -- __zi::pack-ice
    |-- __zi::register-plugin
       `-- +zi::message
    -- __zi::set-m-func
       `-- +zi::message
   |-- __zi::setup-params
   |-- zinit-install.zsh/__zi::get-package
   `-- zinit-install.zsh/__zi::setup-plugin-dir
`-- zi::load-snippet
   |-- +zi::deploy-message
   |-- +zi::message
    |-- __zi::add-report
    |-- __zi::find-other-matches
    |-- __zi::get-object-path
      `-- __zi::any-to-user-plugin
    |-- __zi::pack-ice
    |-- __zi::set-m-func
    '-- +zi::message
    |-- __zi::setup-params
    `-- zinit-install.zsh/__zi::download-snippet
```

Called by:

```
zinit
```

# \_zi::load-plugin

```
Lower-level function for loading a plugin.
```

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

Has 128 line(s). Calls functions:

```
__zi::load-plugin
|-- :zi::tmp-subst-autoload
 |-- +zi::message
   |-- __zi::add-report
    |-- __zi::any-to-user-plugin
    `-- is-at-least
|-- __zi::add-report
|-- __zi::diff
  |-- __zi::diff-env
   |-- __zi::diff-functions
    |-- __zi::diff-options
   `-- __zi::diff-parameter
|-- __zi::diff-env
|-- __zi::find-other-matches
|-- __zi::tmp-subst-off
`-- __zi::tmp-subst-on
```

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

Called by:

```
__zi::load
```

# \_zi::load-snippet

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

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

Has 203 line(s). Calls functions:

```
__zi::load-snippet
|-- +zi::deploy-message
|-- +zi::message
|-- __zi::add-report
|-- __zi::find-other-matches
|-- __zi::get-object-path
| `-- __zi::any-to-user-plugin
|-- __zi::pack-ice
|-- __zi::set-m-func
| `-- +zi::message
|-- __zi::setup-params
`-- zinit-install.zsh/__zi::download-snippet
```

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

Called by:

```
__zi::load-object
__zi::load
__zi::run-task
pmodload
zinit-additional.zsh/__zi::service
```

## \_zi::main-message-formatter

Has 18 line(s). Doesn $\tilde{\textbf{t}}$  call other functions.

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

## \_zi::pack-ice

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

Has 3 line(s). Doesnt call other functions.

Called by:

```
@zsh-plugin-run-on-unload
@zsh-plugin-run-on-update
__zi::load-snippet
__zi::load
zinit-install.zsh/__zi::update-snippet
zinit-side.zsh/__zi::compute-ice
```

### \_zi::parse-opts

Has 2 line(s). Doesnt call other functions.

```
zinit
zinit-autoload.zsh/__zi::delete
```

## \_zi::prepare-home

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

Has 45 line(s). Calls functions:

```
__zi::prepare-home
|-- zinit-autoload.zsh/__zi::clear-completions
`-- zinit-install.zsh/__zi::compinit
```

Uses feature(s): source

Called by:

```
Script-Body
```

Environment variables used: ZPFX

## \_zi::register-plugin

Adds the plugin to ZINIT\_REGISTERED\_PLUGINS array and to the zsh\_loaded\_plugins array (managed according to the plugin standard: https://zdharma-continuum.github.io/Zsh-100-Commits-Club/Zsh-Plugin-Standard.html).

Has 23 line(s). Calls functions:

```
__zi::register-plugin
`-- +zi::message
```

Called by:

```
__zi::load
```

#### zi::run

```
Run code inside plugins folder
It uses the 'correct' parameter from uppers scope zinit().
```

Has 24 line(s). Calls functions:

```
__zi::run
|-- +zi::message
|-- __zi::any-to-user-plugin
`-- __zi::get-object-path
`-- __zi::any-to-user-plugin
```

Uses feature(s): eval, setopt

Called by:

zinit

#### zi::run-task

A backend, worker function of \_\_zi::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 - current pass: 1 or 2

$2 - time assigned to the task

$3 - type: plugin, service plugin, service snippet, snippet

$4 - tasks index in the ZINIT[WAIT_ICE_...] fields

$5 - mode: load, light

$6 - details: alias name (derived from id-as''), plugin-spec, or snippet URL
```

Has 47 line(s). Calls functions:

```
`-- __zi::diff-parameter
         -- __zi::diff-env
        |-- __zi::find-other-matches
        |-- __zi::tmp-subst-off
        `-- __zi::tmp-subst-on
    -- __zi::load-snippet
        |-- +zi::deploy-message
        |-- +zi::message
        |-- zi::add-report
        |-- __zi::find-other-matches
        |-- __zi::get-object-path
           `-- __zi::any-to-user-plugin
        |-- __zi::pack-ice
        |-- __zi::set-m-func
           `-- +zi::message
        |-- __zi::setup-params
        `-- zinit-install.zsh/__zi::download-snippet
    -- __zi::pack-ice
    |-- __zi::register-plugin
        `-- +zi::message
    |-- __zi::set-m-func
       `-- +zi::message
    |-- __zi::setup-params
    |-- zinit-install.zsh/__zi::get-package
    `-- zinit-install.zsh/__zi::setup-plugin-dir
 -- __zi::load-snippet
    |-- +zi::deploy-message
    |-- +zi::message
    |-- __zi::add-report
    |-- __zi::find-other-matches
    |-- __zi::get-object-path
        `-- __zi::any-to-user-plugin
    |-- __zi::pack-ice
    |-- __zi::set-m-func
      `-- +zi::message
    |-- __zi::setup-params
    `-- zinit-install.zsh/__zi::download-snippet
`-- zinit-autoload.zsh/__zi::unload
```

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

Called by:

```
@zi::scheduler
```

## \_zi::set-m-func

```
]]]
Sets and withdraws the temporary, atclone/atpull time function `m`.
```

Has 17 line(s). Calls functions:

```
__zi::set-m-func
`-- +zi::message
```

Uses feature(s): setopt

Called by:

```
__zi::load-snippet
__zi::load
zinit-autoload.zsh/__zi::update-or-status
```

## \_zi::setup-params

Has 3 line(s). Doesnt call other functions.

Called by:

```
__zi::load-snippet
__zi::load
```

### zi::submit-turbo

```
If 'zinit load', 'zinit light' or 'zinit snippet' will be preceded with 'wait', 'load', 'unload' or 'on-update-of'/'subscribe' ice-mods then the plugin or snipped is to be loaded in turbo-mode, and this function adds it to internal data structures. @zi::scheduler uses the data to create load or unload tasks.
```

Has 16 line(s). Doesnt call other functions.

```
zinit
```

## \_zi::tmp-subst-off

```
Turn off temporary substituting of functions completely for a given mode ("load", "light", "light-b" (i.e. the `trackbinds' mode) or "compdef").
```

Has 21 line(s). Doesnt call other functions.

Uses feature(s): setopt, unfunction

Called by:

```
__zi::load-plugin
zinit-additional.zsh/__zi::debug-stop
```

## \_zi::tmp-subst-on

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

Has 32 line(s). Doesnt call other functions.

Uses feature(s): source

Called by:

```
__zi::load-plugin
zinit-additional.zsh/__zi::debug-start
```

# \_zi::util-shands-path

```
Replaces parts of path with %HOME, etc.
```

Has 9 line(s). Doesnt call other functions.

Uses feature(s): setopt

```
__zi::any-to-pid
```

Environment variables used: ZPFX

## pmodload

Has 15 line(s). Calls functions:

Uses feature(s): zstyle

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

#### zicdclear

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

Has 1 line(s). Calls functions:

```
zicdclear
`-- __zi::compdef-clear
`-- +zi::message
```

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

## zicdreplay

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

Has 1 line(s). Calls functions:

```
zicdreplay
`-- __zi::compdef-replay
`-- +zi::message
```

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

## zicompdef

Stores compdef for a replay with "zicdreplay" (turbo mode) or with "zinit cdreplay" (normal mode). An utility function of an undefined use case.

Has 1 line(s). Doesnt call other functions.

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

## zicompinit

```
A function that can be invoked from within "atinit", "atload", etc. ice-mod. It runs "autoload compinit; compinit" and respects ZINIT[ZCOMPDUMP_PATH] and ZINIT[COMPINIT_OPTS].
```

Has 2 line(s). Calls functions:

```
zicompinit
`-- compinit
```

Uses feature(s): autoload, compinit

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

#### zinit

Entrypoint function directly exposed to user, consumes subcommands with respective arguments, and completion.

#### Has 560 line(s). Calls functions:

```
zinit
|-- +zi::message
|-- +zi::prehelp-usage-message
   `-- +zi::message
-- __zi::add-fpath
   `-- __zi::any-to-user-plugin
-- __zi::compdef-clear
   `-- +zi::message
-- __zi::compdef-replay
   `-- +zi::message
-- __zi::get-object-path
   `-- __zi::any-to-user-plugin
-- __zi::ice
-- __zi::load-ices
   `-- __zi::get-object-path
       `-- __zi::any-to-user-plugin
|-- __zi::load-object
    |-- __zi::load
       |-- +zi::deploy-message
        |-- __zi::any-to-user-plugin
        |-- __zi::load-plugin
           |-- :zi::tmp-subst-autoload
            | |-- +zi::message
              |-- __zi::add-report
               |-- __zi::any-to-user-plugin
                `-- is-at-least
            |-- __zi::add-report
            |-- __zi::diff
              |-- __zi::diff-env
            | |-- __zi::diff-functions
               |-- __zi::diff-options
            '-- __zi::diff-parameter
            |-- __zi::diff-env
            |-- __zi::find-other-matches
            |-- __zi::tmp-subst-off
            `-- __zi::tmp-subst-on
         -- __zi::load-snippet
            |-- +zi::deploy-message
            |-- +zi::message
            |-- __zi::add-report
            |-- __zi::find-other-matches
            |-- __zi::get-object-path
                `-- __zi::any-to-user-plugin
```

```
-- __zi::pack-ice
            -- __zi::set-m-func
               `-- +zi::message
            |-- __zi::setup-params
            `-- zinit-install.zsh/__zi::download-snippet
        |-- zi::pack-ice
        |-- __zi::register-plugin
           `-- +zi::message
        -- __zi::set-m-func
           `-- +zi::message
       |-- __zi::setup-params
        |-- zinit-install.zsh/ zi::get-package
        `-- zinit-install.zsh/__zi::setup-plugin-dir
    -- __zi::load-snippet
        |-- +zi::deploy-message
        |-- +zi::message
        |-- __zi::add-report
        |-- __zi::find-other-matches
        |-- __zi::get-object-path
            `-- __zi::any-to-user-plugin
        |-- __zi::pack-ice
        -- __zi::set-m-func
           `-- +zi::message
        |-- __zi::setup-params
        `-- zinit-install.zsh/__zi::download-snippet
-- __zi::parse-opts
|-- __zi::run
  |-- +zi::message
   |-- __zi::any-to-user-plugin
   `-- __zi::get-object-path
       `-- __zi::any-to-user-plugin
-- zi::submit-turbo
|-- compinit
-- zinit-additional.zsh/__zi::clear-debug-report
|-- zinit-additional.zsh/__zi::debug-start
|-- zinit-additional.zsh/__zi::debug-stop
|-- zinit-additional.zsh/__zi::debug-unload
|-- zinit-autoload.zsh/ zi::cdisable
|-- zinit-autoload.zsh/__zi::cenable
|-- zinit-autoload.zsh/__zi::clear-completions
|-- zinit-autoload.zsh/__zi::compile-uncompile-all
|-- zinit-autoload.zsh/__zi::compiled
|-- zinit-autoload.zsh/__zi::help
|-- zinit-autoload.zsh/ zi::list-bindkeys
|-- zinit-autoload.zsh/__zi::list-compdef-replay
|-- zinit-autoload.zsh/__zi::ls
|-- zinit-autoload.zsh/__zi::module
|-- zinit-autoload.zsh/__zi::recently
|-- zinit-autoload.zsh/__zi::search-completions
|-- zinit-autoload.zsh/__zi::self-update
-- zinit-autoload.zsh/__zi::show-all-reports
```

```
|-- zinit-autoload.zsh/_zi::show-completions
|-- zinit-autoload.zsh/_zi::show-registered-plugins
|-- zinit-autoload.zsh/_zi::show-report
|-- zinit-autoload.zsh/_zi::show-times
|-- zinit-autoload.zsh/_zi::show-zstatus
|-- zinit-autoload.zsh/_zi::uncompile-plugin
|-- zinit-autoload.zsh/_zi::unload
|-- zinit-autoload.zsh/_zi::update-or-status
|-- zinit-autoload.zsh/_zi::update-or-status
|-- zinit-install.zsh/_zi::compile-plugin
|-- zinit-install.zsh/_zi::compinit
|-- zinit-install.zsh/_zi::forget-completion
|-- zinit-install.zsh/_zi::install-completions
```

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

Called by:

```
Script-Body
zplugin
```

## zpcdclear

Has 1 line(s). Calls functions:

```
zpcdclear
`-- __zi::compdef-clear
    `-- +zi::message
```

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

### zpcdreplay

Has 1 line(s). Calls functions:

```
zpcdreplay
`-- __zi::compdef-replay
   `-- +zi::message
```

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

### zpcompdef

Has 1 line(s). Doesnt call other functions.

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

## zpcompinit

Has 2 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.).

## zplugin

Has 1 line(s). Calls functions:

```
zplugin
`-- zinit
    |-- +zi::message
    |-- +zi::prehelp-usage-message
      `-- +zi::message
    -- __zi::add-fpath
        `-- __zi::any-to-user-plugin
    -- __zi::compdef-clear
       `-- +zi::message
    -- __zi::compdef-replay
       `-- +zi::message
    |-- __zi::get-object-path
        `-- __zi::any-to-user-plugin
    |-- __zi::ice
    -- __zi::load-ices
        `-- __zi::get-object-path
            `-- __zi::any-to-user-plugin
     -- __zi::load-object
        |-- __zi::load
            |-- +zi::deploy-message
            |-- __zi::any-to-user-plugin
            |-- __zi::load-plugin
                |-- :zi::tmp-subst-autoload
                | |-- +zi::message
                    |-- __zi::add-report
                    |-- __zi::any-to-user-plugin
                    `-- is-at-least
```

```
-- __zi::add-report
            -- __zi::diff
               |-- __zi::diff-env
               |-- __zi::diff-functions
               |-- __zi::diff-options
               `-- __zi::diff-parameter
            |-- __zi::diff-env
           |-- __zi::find-other-matches
            |-- __zi::tmp-subst-off
            `-- __zi::tmp-subst-on
        -- __zi::load-snippet
           |-- +zi::deploy-message
           |-- +zi::message
           |-- __zi::add-report
            |-- __zi::find-other-matches
           |-- __zi::get-object-path
               `-- __zi::any-to-user-plugin
           |-- __zi::pack-ice
           |-- __zi::set-m-func
               `-- +zi::message
            |-- __zi::setup-params
           `-- zinit-install.zsh/__zi::download-snippet
        |-- __zi::pack-ice
        |-- __zi::register-plugin
           `-- +zi::message
        |-- __zi::set-m-func
       '-- +zi::message
       |-- __zi::setup-params
       |-- zinit-install.zsh/__zi::get-package
       `-- zinit-install.zsh/__zi::setup-plugin-dir
    `-- __zi::load-snippet
       |-- +zi::deploy-message
       |-- +zi::message
        |-- __zi::add-report
        |-- __zi::find-other-matches
        |-- __zi::get-object-path
        | `-- __zi::any-to-user-plugin
        |-- __zi::pack-ice
        |-- __zi::set-m-func
        '-- +zi::message
        |-- __zi::setup-params
       `-- zinit-install.zsh/__zi::download-snippet
-- __zi::parse-opts
|-- zi::run
   |-- +zi::message
   |-- __zi::any-to-user-plugin
   `-- __zi::get-object-path
      `-- __zi::any-to-user-plugin
-- __zi::submit-turbo
|-- compinit
-- zinit-additional.zsh/__zi::clear-debug-report
```

```
-- zinit-additional.zsh/__zi::debug-start
|-- zinit-additional.zsh/__zi::debug-stop
|-- zinit-additional.zsh/__zi::debug-unload
|-- zinit-autoload.zsh/__zi::cdisable
|-- zinit-autoload.zsh/__zi::cenable
|-- zinit-autoload.zsh/__zi::clear-completions
|-- zinit-autoload.zsh/__zi::compile-uncompile-all
|-- zinit-autoload.zsh/__zi::compiled
|-- zinit-autoload.zsh/ zi::help
|-- zinit-autoload.zsh/__zi::list-bindkeys
|-- zinit-autoload.zsh/__zi::list-compdef-replay
|-- zinit-autoload.zsh/ zi::ls
|-- zinit-autoload.zsh/__zi::module
|-- zinit-autoload.zsh/__zi::recently
|-- zinit-autoload.zsh/__zi::search-completions
|-- zinit-autoload.zsh/__zi::self-update
|-- zinit-autoload.zsh/__zi::show-all-reports
|-- zinit-autoload.zsh/__zi::show-completions
|-- zinit-autoload.zsh/__zi::show-debug-report
|-- zinit-autoload.zsh/__zi::show-registered-plugins
|-- zinit-autoload.zsh/__zi::show-report
|-- zinit-autoload.zsh/__zi::show-times
|-- zinit-autoload.zsh/__zi::show-zstatus
|-- zinit-autoload.zsh/__zi::uncompile-plugin
|-- zinit-autoload.zsh/__zi::uninstall-completions
|-- zinit-autoload.zsh/__zi::unload
|-- zinit-autoload.zsh/__zi::update-or-status
|-- zinit-autoload.zsh/__zi::update-or-status-all
|-- zinit-install.zsh/__zi::compile-plugin
|-- zinit-install.zsh/__zi::compinit
|-- zinit-install.zsh/__zi::forget-completion
`-- zinit-install.zsh/ zi::install-completions
```

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). Doesnt call other functions.

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

Called by:

```
@zi::scheduler
Script-Body
```

### 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 573 line(s). Doesn@t call other functions.

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

Called by:

```
zicompinit
zinit
zpcompinit
```

#### 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). Doesnễt call other functions.

```
:zi::tmp-subst-autoload
:zi::tmp-subst-bindkey
Script-Body
zinit-install.zsh/__zi::download-snippet
```