Constants · The Julia Language

Base / Constants







# **Constants**

Core.nothing — Constant

nothing

The singleton instance of type Nothing, used by convention when there is no value to return (as in a C void function) or when a variable or field holds no value.

Base.PROGRAM\_FILE - Constant

PROGRAM\_FILE

A string containing the script name passed to Julia from the command line. Note that the script name remains unchanged from within included files. Alternatively see @\_\_FILE\_\_.

Base.ARGS — Constant

**ARGS** 

An array of the command line arguments passed to Julia, as strings.

Base.C\_NULL — Constant

C\_NULL

The C null pointer constant, sometimes used when calling external code.

Base. VERSION - Constant

1 of 5 3/20/21, 12:18 **VERSION** 

A VersionNumber object describing which version of Julia is in use. For details see Version Number Literals.

Base.DEPOT PATH - Constant

DEPOT\_PATH

A stack of "depot" locations where the package manager, as well as Julia's code loading mechanisms, look for package registries, installed packages, named environments, repo clones, cached compiled package images, and configuration files. By default it includes:

- 1. ~/. julia where ~ is the user home as appropriate on the system;
- 2. an architecture-specific shared system directory, e.g. /usr/local/share/julia;
- 3. an architecture-independent shared system directory, e.g. /usr/share/julia.

So DEPOT\_PATH might be:

```
[joinpath(homedir(), ".julia"), "/usr/local/share/julia", "/usr/share/julia"]
```

The first entry is the "user depot" and should be writable by and owned by the current user. The user depot is where: registries are cloned, new package versions are installed, named environments are created and updated, package repos are cloned, newly compiled package image files are saved, log files are written, development packages are checked out by default, and global configuration data is saved. Later entries in the depot path are treated as read-only and are appropriate for registries, packages, etc. installed and managed by system administrators.

DEPOT\_PATH is populated based on the JULIA\_DEPOT\_PATH environment variable if set.

See also: JULIA\_DEPOT\_PATH, and Code Loading.

Base.LOAD\_PATH — Constant

LOAD\_PATH

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An array of paths for using and import statements to consider as project environments or package directories when loading code. It is populated based on the JULIA\_LOAD\_PATH environment variable if set; otherwise it defaults to ["@", "@v#.#", "@stdlib"]. Entries starting with @ have special meanings:

- @ refers to the "current active environment", the initial value of which is initially determined by the JULIA\_PROJECT environment variable or the --project command-line option.
- @stdlib expands to the absolute path of the current Julia installation's standard library directory.
- @name refers to a named environment, which are stored in depots (see JULIA\_DEPOT\_PATH) under the environments subdirectory. The user's named environments are stored in ~/.julia/environments so @name would refer to the environment in ~/.julia /environments/name if it exists and contains a Project.toml file. If name contains # characters, then they are replaced with the major, minor and patch components of the Julia version number. For example, if you are running Julia 1.2 then @v#.# expands to @v1.2 and will look for an environment by that name, typically at ~/.julia/environments/v1.2.

The fully expanded value of LOAD\_PATH that is searched for projects and packages can be seen by calling the Base.load\_path() function.

See also: JULIA\_LOAD\_PATH, JULIA\_PROJECT, JULIA\_DEPOT\_PATH, and Code Loading.

Base.Sys.BINDIR — Constant

Sys.BINDIR

A string containing the full path to the directory containing the julia executable.

Base.Sys.CPU\_THREADS — Constant

Sys.CPU\_THREADS

The number of logical CPU cores available in the system, i.e. the number of threads that the CPU can run concurrently. Note that this is not necessarily the number of CPU cores, for example, in the presence of hyper-threading.

See Hwloc.jl or Cpuld.jl for extended information, including number of physical cores.

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Sys.WORD\_SIZE

Standard word size on the current machine, in bits.

### Base.Sys.KERNEL — Constant

Sys.KERNEL

A symbol representing the name of the operating system, as returned by uname of the build configuration.

## Base.Sys.ARCH — Constant

Sys.ARCH

A symbol representing the architecture of the build configuration.

## Base.Sys.MACHINE — Constant

Sys.MACHINE

A string containing the build triple.

#### See also:

- stdin
- stdout
- stderr
- ENV
- ENDIAN\_BOM
- Libc.MS\_ASYNC

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- Libc.MS\_INVALIDATE
- Libc.MS\_SYNC

« Multi-Threading Filesystem »

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