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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'node.1' command

\$ man node.1

NODE(1) BSD General Commands Manual NODE(1)

NAME

node ? server-side JavaScript runtime

SYNOPSIS

node [options] [v8-options] [-e string | script.js | -] [--]

[arguments ...]

node inspect [-e string | script.js | - | <host>:<port>] ...

node [--v8-options]

DESCRIPTION

Node.js is a set of libraries for JavaScript which allows it to be used outside of the browser. It is primarily focused on creating simple, easy-to-build network clients and servers.

Execute node without arguments to start a REPL.

OPTIONS

- Alias for stdin, analogous to the use of - in other command-line utilities. The executed script is read from stdin, and remaining arguments are passed to the script.

-- Indicate the end of command-line options. Pass the rest of the arguments to the script.

If no script filename or eval/print script is supplied prior to this, then the next argument will be used as a script filename.

--abort-on-uncaught-exception

Aborting instead of exiting causes a core file to be generated

for analysis.

`--completion-bash`

Print source-able bash completion script for Node.js.

`-C, --conditions string`

Use custom conditional exports conditions. `string`

`--cpu-prof`

Start the V8 CPU profiler on start up, and write the CPU profile to disk before exit. If `--cpu-prof-dir` is not specified, the profile file will be written to the current working directory with a generated file name.

`--cpu-prof-dir`

The directory where the CPU profiles generated by `--cpu-prof` will be placed. The default value is controlled by the `--diagnostic-dir` command-line option.

`--cpu-prof-interval`

The sampling interval in microseconds for the CPU profiles generated by `--cpu-prof`. The default is 1000.

`--cpu-prof-name`

File name of the V8 CPU profile generated with `--cpu-prof`.

`--diagnostic-dir`

Set the directory for all diagnostic output files. Default is current working directory. Set the directory to which all diagnostic output files will be written to. Defaults to current working directory. Affects the default output directory of: `--cpu-prof-dir`. `--heap-prof-dir`. `--redirect-warnings`.

`--disable-prototype=mode`

Disable the `Object.prototype.__proto__` property. If `mode` is `'delete'`, the property will be removed entirely. If `mode` is `'throw'`, accesses to the property will throw an exception with the code `'ERR_PROTO_ACCESS'`.

`--disallow-code-generation-from-strings`

Make built-in language features like `'eval'` and `'new Function'` that generate code from strings throw an exception instead. This

does not affect the Node.js `vm` module.

`--enable-fips`

Enable FIPS-compliant crypto at startup. Requires Node.js to be built with `./configure --openssl-fips`.

`--enable-source-maps`

Enable Source Map V3 support for stack traces.

`--experimental-fetch`

Enable experimental support for the Fetch API.

`--experimental-global-customevent`

Expose the CustomEvent on the global scope.

`--experimental-global-webcrypto`

Expose the Web Crypto API on the global scope.

`--experimental-import-meta-resolve`

Enable experimental ES modules support for `import.meta.resolve()`.

`--experimental-loader=module`

Specify the module to use as a custom module loader.

`--experimental-network-imports`

Enable experimental support for loading modules using ``import`` over ``https:``.

`--experimental-policy`

Use the specified file as a security policy.

`--no-experimental-repl-await`

Disable top-level `await` keyword support in REPL.

`--experimental-specifier-resolution`

Select extension resolution algorithm for ES Modules; either `'explicit'` (default) or `'node'`.

`--experimental-vm-modules`

Enable experimental ES module support in VM module.

`--experimental-wasi-unstable-preview1`

Enable experimental WebAssembly System Interface support.

`--experimental-wasm-modules`

Enable experimental WebAssembly module support.

`--force-context-aware`

Disable loading native addons that are not context-aware.

--force-fips

Force FIPS-compliant crypto on startup (Cannot be disabled from script code). Same requirements as --enable-fips.

--frozen-intrinsics

Enable experimental frozen intrinsics support.

--heapsnapshot-near-heap-limit=max_count

Generate heap snapshot when the V8 heap usage is approaching the heap limit. No more than the specified number of snapshots will be generated.

--heapsnapshot-signal=signal

Generate heap snapshot on specified signal.

--heap-prof

Start the V8 heap profiler on start up, and write the heap profile file to disk before exit. If --heap-prof-dir is not specified, the profile will be written to the current working directory with a generated file name.

--heap-prof-dir

The directory where the heap profiles generated by --heap-prof will be placed. The default value is controlled by the --diagnostic-dir. command-line option.

--heap-prof-interval

The average sampling interval in bytes for the heap profiles generated by --heap-prof. The default is 512 * 1024.

--heap-prof-name

File name of the V8 heap profile generated with --heap-prof.

--icu-data-dir=file

Specify ICU data load path. Overrides NODE_ICU_DATA.

--input-type=type

Set the module resolution type for input via --eval, --print or STDIN.

--inspect-brk=[host:]port

Activate inspector on host:port and break at start of user

script.

`--inspect-port=[host:]port`

Set the host:port to be used when the inspector is activated.

`--inspect-publish-uid=stderr,http`

Specify how the inspector WebSocket URL is exposed. Valid values are stderr and http. Default is stderr,http.

`--inspect=[host:]port`

Activate inspector on host:port. Default is 127.0.0.1:9229.

V8 Inspector integration allows attaching Chrome DevTools and IDEs to Node.js instances for debugging and profiling. It uses the Chrome DevTools Protocol.

`--insecure-http-parser`

Use an insecure HTTP parser that accepts invalid HTTP headers. This may allow interoperability with non-conformant HTTP implementations. It may also allow request smuggling and other HTTP attacks that rely on invalid headers being accepted. Avoid using this option.

`--jitless`

Disable runtime allocation of executable memory. This may be required on some platforms for security reasons. It can also reduce attack surface on other platforms, but the performance impact may be severe.

This flag is inherited from V8 and is subject to change upstream.

It may disappear in a non-semver-major release.

`--max-http-header-size=size`

Specify the maximum size of HTTP headers in bytes. Defaults to 16 KiB.

`--napi-modules`

This option is a no-op. It is kept for compatibility.

`--no-deprecation`

Silence deprecation warnings.

`--no-force-async-hooks-checks`

Disable runtime checks for ``async_hooks``. These will still be

enabled dynamically when `async_hooks` is enabled.

--no-addons

Disable the `node-addons` exports condition as well as disable loading native addons. When `--no-addons` is specified, calling `process.dlopen` or requiring a native C++ addon will fail and throw an exception.

--no-global-search-paths

Do not search modules from global paths.

--no-warnings

Silence all process warnings (including deprecations).

--node-memory-debug

Enable extra debug checks for memory leaks in Node.js internals. This is usually only useful for developers debugging Node.js itself.

--openssl-config=file

Load an OpenSSL configuration file on startup. Among other uses, this can be used to enable FIPS-compliant crypto if Node.js is built with `./configure --openssl-fips`.

--pending-deprecation

Emit pending deprecation warnings.

--policy-integrity=sri

Instructs Node.js to error prior to running any code if the policy does not have the specified integrity. It expects a Subresource Integrity string as a parameter.

--preserve-symlinks

Instructs the module loader to preserve symbolic links when resolving and caching modules other than the main module.

--preserve-symlinks-main

Instructs the module loader to preserve symbolic links when resolving and caching the main module.

--prof Generate V8 profiler output.

--prof-process

Process V8 profiler output generated using the V8 option `--prof`.

`--redirect-warnings=file`

Write process warnings to the given file instead of printing to `stderr`.

`--report-compact`

Write diagnostic reports in a compact format, single-line JSON.

`--report-dir --report-directory`

Location at which the diagnostic report will be generated. The ``file`` name may be an absolute path. If it is not, the default directory it will be written to is controlled by the `--diagnostic-dir` command-line option.

`--report-filename`

Name of the file to which the diagnostic report will be written.

`--report-on-fatalerror`

Enables the diagnostic report to be triggered on fatal errors (internal errors within the Node.js runtime such as out of memory) that leads to termination of the application. Useful to inspect various diagnostic data elements such as heap, stack, event loop state, resource consumption etc. to reason about the fatal error.

`--report-on-signal`

Enables diagnostic report to be generated upon receiving the specified (or predefined) signal to the running Node.js process. Default signal is `SIGUSR2`.

`--report-signal`

Sets or resets the signal for diagnostic report generation (not supported on Windows). Default signal is `SIGUSR2`.

`--report-uncaught-exception`

Enables diagnostic report to be generated on uncaught exceptions. Useful when inspecting JavaScript stack in conjunction with native stack and other runtime environment data.

`--secure-heap=n`

Specify the size of the OpenSSL secure heap. Any value less than 2 disables the secure heap. The default is 0. The value must be a

power of two.

--secure-heap-min=*n*

Specify the minimum allocation from the OpenSSL secure heap. The default is 2. The value must be a power of two.

--test Starts the Node.js command line test runner.

--test-only

Configures the test runner to only execute top level tests that have the `only` option set.

--throw-deprecation

Throw errors for deprecations.

--title=*title*

Specify process.title on startup.

--tls-cipher-list=*list*

Specify an alternative default TLS cipher list. Requires Node.js to be built with crypto support. (Default)

--tls-keylog=*file*

Log TLS key material to a file. The key material is in NSS SS? LKEYLOGFILE format and can be used by software (such as Wire? shark) to decrypt the TLS traffic.

--tls-max-v1.2

Set default maxVersion to 'TLSv1.2'. Use to disable support for TLSv1.3.

--tls-max-v1.3

Set default maxVersion to 'TLSv1.3'. Use to enable support for TLSv1.3.

--tls-min-v1.0

Set default minVersion to 'TLSv1'. Use for compatibility with old TLS clients or servers.

--tls-min-v1.1

Set default minVersion to 'TLSv1.1'. Use for compatibility with old TLS clients or servers.

--tls-min-v1.2

Set default minVersion to 'TLSv1.2'. This is the default for 12.x

and later, but the option is supported for compatibility with older Node.js versions.

--tls-min-v1.3

Set default minVersion to 'TLSv1.3'. Use to disable support for TLSv1.2 in favour of TLSv1.3, which is more secure.

--trace-atomics-wait

Print short summaries of calls to `Atomics.wait()`. This flag is deprecated.

--trace-deprecation

Print stack traces for deprecations.

--trace-event-categories categories

A comma-separated list of categories that should be traced when trace event tracing is enabled using `--trace-events-enabled`.

--trace-event-file-pattern pattern

Template string specifying the filepath for the trace event data, it supports `${rotation}` and `${pid}`.

--trace-events-enabled

Enable the collection of trace event tracing information.

--trace-exit

Prints a stack trace whenever an environment is exited proactively, i.e. invoking `process.exit()`.

--trace-sigint

Prints a stack trace on SIGINT.

--trace-sync-io

Print a stack trace whenever synchronous I/O is detected after the first turn of the event loop.

--trace-tls

Prints TLS packet trace information to `stderr`.

--trace-uncaught

Print stack traces for uncaught exceptions; usually, the stack trace associated with the creation of an `Error` is printed, whereas this makes Node.js also print the stack trace associated with throwing the value (which does not need to be an `Error` in?

stance).

Enabling this option may affect garbage collection behavior negatively.

`--trace-warnings`

Print stack traces for process warnings (including deprecations).

`--track-heap-objects`

Track heap object allocations for heap snapshots.

`--unhandled-rejections=mode`

Define the behavior for unhandled rejections. Can be one of ``strict`` (raise an error), ``warn`` (enforce warnings) or ``none`` (silence warnings).

`--use-bundled-ca`, `--use-openssl-ca`

Use bundled Mozilla CA store as supplied by current Node.js version or use OpenSSL's default CA store. The default store is selectable at build-time.

The bundled CA store, as supplied by Node.js, is a snapshot of Mozilla CA store that is fixed at release time. It is identical on all supported platforms.

Using OpenSSL store allows for external modifications of the store. For most Linux and BSD distributions, this store is maintained by the distribution maintainers and system administrators. OpenSSL CA store location is dependent on configuration of the OpenSSL library but this can be altered at runtime using environment variables.

See `SSL_CERT_DIR` and `SSL_CERT_FILE`.

`--use-largepages=mode`

Re-map the Node.js static code to large memory pages at startup.

If supported on the target system, this will cause the Node.js static code to be moved onto 2 MiB pages instead of 4 KiB pages.

mode must have one of the following values: ``off`` (the default value, meaning do not map), ``on`` (map and ignore failure, reporting it to stderr), or ``silent`` (map and silently ignore failure).

`--v8-options`

Print V8 command-line options.

`--v8-pool-size=num`

Set V8's thread pool size which will be used to allocate background jobs. If set to 0 then V8 will choose an appropriate size of the thread pool based on the number of online processors. If the value provided is larger than V8's maximum, then the largest value will be chosen.

`--zero-fill-buffers`

Automatically zero-fills all newly allocated Buffer and SlowBuffer instances.

`-c, --check`

Check the script's syntax without executing it. Exits with an error code if script is invalid.

`-e, --eval string`

Evaluate string as JavaScript.

`-h, --help`

Print command-line options. The output of this option is less detailed than this document.

`-i, --interactive`

Open the REPL even if stdin does not appear to be a terminal.

`-p, --print string`

Identical to `-e`, but prints the result.

`-r, --require module`

Preload the specified module at startup. Follows `require()`'s module resolution rules. `module` may be either a path to a file, or a Node.js module name.

`-v, --version`

Print node's version.

ENVIRONMENT

`FORCE_COLOR`

Used to enable ANSI colorized output. The value may be one of: 1, true, or an empty string to indicate 16-color support, 2 to indicate 256-color support, or 3 to indicate 16 million-color

support. When used and set to a supported value, both the NO_COLOR and NODE_DISABLE_COLORS environment variables are ignored. Any other value will result in colorized output being disabled.

NO_COLOR

Alias for NODE_DISABLE_COLORS

NODE_DEBUG modules...

Comma-separated list of core modules that should print debug information.

NODE_DEBUG_NATIVE modules...

Comma-separated list of C++ core modules that should print debug information.

NODE_DISABLE_COLORS

When set to 1, colors will not be used in the REPL.

NODE_EXTRA_CA_CERTS file

When set, the well-known root CAs (like VeriSign) will be extended with the extra certificates in file. The file should consist of one or more trusted certificates in PEM format.

If file is missing or misformatted, a message will be emitted once using process.emitWarning(), but any errors are otherwise ignored.

This environment variable is ignored when `node` runs as setuid root or has Linux file capabilities set.

The NODE_EXTRA_CA_CERTS environment variable is only read when the Node.js process is first launched. Changing the value at runtime using process.env.NODE_EXTRA_CA_CERTS has no effect on the current process.

NODE_ICU_DATA file

Data path for ICU (Intl object) data. Will extend linked-in data when compiled with small-icu support.

NODE_NO_WARNINGS

When set to 1, process warnings are silenced.

NODE_OPTIONS options...

A space-separated list of command-line options, which are interpreted as if they had been specified on the command line before the actual command (so they can be overridden). Node.js will exit with an error if an option that is not allowed in the environment is used, such as `--print` or a script file.

NODE_PATH directories...

A colon-separated list of directories prefixed to the module search path.

NODE_PENDING_DEPRECATION

When set to 1, emit pending deprecation warnings.

NODE_PRESERVE_SYMLINKS

When set to 1, the module loader preserves symbolic links when resolving and caching modules.

NODE_REDIRECT_WARNINGS file

Write process warnings to the given file instead of printing to `stderr`. Equivalent to passing `--redirect-warnings file` on the command line.

NODE_REPL_HISTORY file

Path to the file used to store persistent REPL history. The default path is `~/.node_repl_history`, which is overridden by this variable. Setting the value to an empty string (`""` or `" "`) will disable persistent REPL history.

NODE_REPL_EXTERNAL_MODULE file

Path to a Node.js module which will be loaded in place of the built-in REPL. Overriding this value to an empty string (`""`) will use the built-in REPL.

NODE_SKIP_PLATFORM_CHECK

When set to 1, the check for a supported platform is skipped during Node.js startup. Node.js might not execute correctly. Any issues encountered on unsupported platforms will not be fixed.

NODE_TLS_REJECT_UNAUTHORIZED

When set to 0, TLS certificate validation is disabled.

NODE_V8_COVERAGE dir

When set, Node.js writes JavaScript code coverage information to dir.

OPENSSL_CONF file

Load an OpenSSL configuration file on startup. Among other uses, this can be used to enable FIPS-compliant crypto if Node.js is built with `./configure --openssl-fips`.

If the `--openssl-config` command-line option is used, this environment variable is ignored.

SSL_CERT_DIR dir

If `--use-openssl-ca` is enabled, this overrides and sets OpenSSL's directory containing trusted certificates.

SSL_CERT_FILE file

If `--use-openssl-ca` is enabled, this overrides and sets OpenSSL's file containing trusted certificates.

TZ Specify the timezone configuration.

UV_THREADPOOL_SIZE size

Sets the number of threads used in libuv's threadpool to size.

BUGS

Bugs are tracked in GitHub Issues: <https://github.com/nodejs/node/issues>

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SEE ALSO

Website: <https://nodejs.org/>

Documentation: <https://nodejs.org/api/>

GitHub repository and issue tracker: <https://github.com/nodejs/node>

IRC (general questions): libera.chat #node.js (unofficial)

AUTHORS

Written and maintained by 1000+ contributors:

<https://github.com/nodejs/node/blob/HEAD/AUTHORS>

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