

Node.js

Node.js is an open-source, cross-platform, JavaScript runtime environment.

For information on using Node.js, see the [Node.js website](#).

The Node.js project uses an [open governance model](#). The [OpenJS Foundation](#) provides support for the project.

This project has a [Code of Conduct](#).

Table of contents

- [Support](#)
- [Release types](#)
 - [Download](#)
 - [Current and LTS releases](#)
 - [Nightly releases](#)
 - [API documentation](#)
 - [Verifying binaries](#)
- [Building Node.js](#)
- [Security](#)
- [Contributing to Node.js](#)
- [Current project team members](#)
 - [TSC \(Technical Steering Committee\)](#)
 - [Collaborators](#)
 - [Triagers](#)
 - [Release keys](#)
- [License](#)

Support

Looking for help? Check out the [instructions for getting support](#).

Release types

- **Current:** Under active development. Code for the Current release is in the branch for its major version number (for example, [v15.x](#)). Node.js releases a new major version every 6 months, allowing for breaking changes. This happens in April and October every year. Releases appearing each October have a support life of 8 months. Releases appearing each April convert to LTS (see below) each October.
- **LTS:** Releases that receive Long Term Support, with a focus on stability and security. Every even-numbered major version will become an LTS release. LTS releases receive 12 months of *Active LTS* support and a further 18 months of *Maintenance*. LTS release lines have alphabetically-ordered code names, beginning with v4 Argon. There are no breaking changes or feature additions, except in some special circumstances.
- **Nightly:** Code from the Current branch built every 24-hours when there are changes. Use with caution.

Current and LTS releases follow [semantic versioning](#). A member of the Release Team [signs](#) each Current and LTS release. For more information, see the [Release README](#).

Download

Binaries, installers, and source tarballs are available at <https://nodejs.org/en/download/>.

Current and LTS releases

<https://nodejs.org/download/release/>

The [latest](#) directory is an alias for the latest Current release. The `latest-codename` directory is an alias for the latest release from an LTS line. For example, the [latest-fermium](#) directory contains the latest Fermium (Node.js 14) release.

Nightly releases

<https://nodejs.org/download/nightly/>

Each directory name and filename contains a date (in UTC) and the commit SHA at the HEAD of the release.

API documentation

Documentation for the latest Current release is at <https://nodejs.org/api/>. Version-specific documentation is available in each release directory in the `docs` subdirectory. Version-specific documentation is also at <https://nodejs.org/download/docs/>.

Verifying binaries

Download directories contain a `SHASUMS256.txt` file with SHA checksums for the files.

To download `SHASUMS256.txt` using `curl` :

```
$ curl -O https://nodejs.org/dist/vx.y.z/SHASUMS256.txt
```

To check that a downloaded file matches the checksum, run it through `sha256sum` with a command such as:

```
$ grep node-vx.y.z.tar.gz SHASUMS256.txt | sha256sum -c -
```

For Current and LTS, the GPG detached signature of `SHASUMS256.txt` is in `SHASUMS256.txt.sig`. You can use it with `gpg` to verify the integrity of `SHASUMS256.txt`. You will first need to import [the GPG keys of individuals authorized to create releases](#). To import the keys:

```
$ gpg --keyserver hkps://keys.openpgp.org --recv-keys  
DD8F2338BAE7501E3DD5AC78C273792F7D83545D
```

See [Release keys](#) for a script to import active release keys.

Next, download the `SHASUMS256.txt.sig` for the release:

```
$ curl -O https://nodejs.org/dist/vx.y.z/SHASUMS256.txt.sig
```

Then use `gpg --verify SHASUMS256.txt.sig SHASUMS256.txt` to verify the file's signature.

Building Node.js

See [BUILDING.md](#) for instructions on how to build Node.js from source and a list of supported platforms.

Security

For information on reporting security vulnerabilities in Node.js, see [SECURITY.md](#).

Contributing to Node.js

- [Contributing to the project](#)
- [Working Groups](#)
- [Strategic initiatives](#)
- [Technical values and prioritization](#)

Current project team members

For information about the governance of the Node.js project, see [GOVERNANCE.md](#).

TSC (Technical Steering Committee)

- [aduh95](#) - Antoine du Hamel <duhamelantoine1995@gmail.com> (he/him)
- [apapirovski](#) - Anatoli Papirovski <apapirovski@mac.com> (he/him)
- [BethGriggs](#) - Beth Griggs <bgriggs@redhat.com> (she/her)
- [BridgeAR](#) - Ruben Bridgewater <ruben@bridgewater.de> (he/him)
- [ChALkeR](#) - Сковорода Никита Андреевич <chalkex@gmail.com> (he/him)
- [cjhrg](#) - Colin Ihrig <cjihrg@gmail.com> (he/him)
- [danielleadams](#) - Danielle Adams <adamzdanielle@gmail.com> (she/her)
- [fhinkel](#) - Franziska Hinkelmann <franziska.hinkelmann@gmail.com> (she/her)
- [gireeshpunathil](#) - Gireesh Punathil <gpunathi@in.ibm.com> (he/him)
- [jasnell](#) - James M Snell <jasnell@gmail.com> (he/him)
- [joyeecheung](#) - Joyee Cheung <joyeec9h3@gmail.com> (she/her)
- [mcollina](#) - Matteo Collina <matteo.collina@gmail.com> (he/him)
- [mhdawson](#) - Michael Dawson <midawson@redhat.com> (he/him)
- [mmarchini](#) - Mary Marchini <oss@mmarchini.me> (she/her)
- [MylesBorins](#) - Myles Borins <myles.borins@gmail.com> (he/him)
- [RaisinTen](#) - Darshan Sen <raisinten@gmail.com> (he/him)
- [richardlau](#) - Richard Lau <rlau@redhat.com>
- [ronag](#) - Robert Nagy <ronagy@icloud.com>
- [targos](#) - Michaël Zasso <targos@protonmail.com> (he/him)
- [tniessen](#) - Tobias Nießen <tniessen@tnie.de> (he/him)
- [Trott](#) - Rich Trott <rtrott@gmail.com> (he/him)

► Emeriti

Collaborators

- [addaleax](#) - Anna Henningsen <anna@addaleax.net> (she/her)
- [aduh95](#) - Antoine du Hamel <duhamelantoine1995@gmail.com> (he/him)
- [ak239](#) - Aleksei Koziatinskii <ak239spb@gmail.com>
- [antsmartian](#) - Anto Aravinth <anto.aravinth.cse@gmail.com> (he/him)
- [apapirovski](#) - Anatoli Papirovski <apapirovski@mac.com> (he/him)
- [AshCripps](#) - Ash Cripps <acripps@redhat.com>
- [Ayase-252](#) - Qingyu Deng <i@ayase-lab.com>
- [bcoe](#) - Ben Coe <bencoe@gmail.com> (he/him)
- [bengl](#) - Bryan English <bryan@bryanenglish.com> (he/him)
- [benjamingr](#) - Benjamin Gruenbaum <benjamingr@gmail.com>
- [BethGriggs](#) - Beth Griggs <bgriggs@redhat.com> (she/her)
- [bmeck](#) - Bradley Farias <bradley.meck@gmail.com>
- [bnb](#) - Tierney Cyren <hello@bnb.im> (they/he)

- [bnoordhuis](#) - Ben Noordhuis <info@bnoordhuis.nl>
- [BridgeAR](#) - Ruben Bridgewater <ruben@bridgewater.de> (he/him)
- [bzoz](#) - Bartosz Sosnowski <bartosz@janeasystems.com>
- [cclauss](#) - Christian Clauss <cclauss@me.com> (he/him)
- [ChALkeR](#) - Сковорода Никита Андреевич <chalkex@gmail.com> (he/him)
- [cjhrig](#) - Colin Ihrig <cjhrig@gmail.com> (he/him)
- [codebytere](#) - Shelley Vohr <shelley.vohr@gmail.com> (she/her)
- [danbev](#) - Daniel Bevenius <daniel.bevenius@gmail.com> (he/him)
- [danielleadams](#) - Danielle Adams <adamzdanielle@gmail.com> (she/her)
- [devnexus](#) - David Carlier <devnexus@gmail.com>
- [devsnek](#) - Gus Caplan <me@gus.host> (they/them)
- [dmabupt](#) - Xu Meng <dmabupt@gmail.com> (he/him)
- [dnlup](#) Daniele Belardi <dwon.dnl@gmail.com> (he/him)
- [edsadr](#) - Adrian Estrada <edsadr@gmail.com> (he/him)
- [evanlucas](#) - Evan Lucas <evanlucas@me.com> (he/him)
- [fhinkel](#) - Franziska Hinkelmann <franziska.hinkelmann@gmail.com> (she/her)
- [Flarna](#) - Gerhard Stöbich <deb2001-github@yahoo.de> (he/they)
- [gabrielsschulhof](#) - Gabriel Schulhof <gabrielsschulhof@gmail.com>
- [gengjiawen](#) - Jiawen Geng <technicalcute@gmail.com>
- [GeoffreyBooth](#) - Geoffrey Booth <webadmin@geoffreybooth.com> (he/him)
- [gireeshpunathil](#) - Gireesh Punathil <gpunathi@in.ibm.com> (he/him)
- [guybedford](#) - Guy Bedford <guybedford@gmail.com> (he/him)
- [HarshithaKP](#) - Harshitha K P <harshitha014@gmail.com> (she/her)
- [himself65](#) - Zeyu Yang <himself65@outlook.com> (he/him)
- [hiroppey](#) - Yuta Hiroto <hello@hiroppey.me> (he/him)
- [iansu](#) - Ian Sutherland <ian@iansutherland.ca>
- [indutny](#) - Fedor Indutny <fedor@indutny.com>
- [JacksonTian](#) - Jackson Tian <shyvo1987@gmail.com>
- [JakobJingleheimer](#) - Jacob Smith <jacob@frende.me> (he/him)
- [jasnell](#) - James M Snell <jasnell@gmail.com> (he/him)
- [jkrems](#) - Jan Krems <jan.krems@gmail.com> (he/him)
- [joesepi](#) - Joe Sepi <sepi@joesepi.com> (he/him)
- [joyeecheung](#) - Joyee Cheung <joyeec9h3@gmail.com> (she/her)
- [juanarbol](#) - Juan José Arboleda <soyjuanarbol@gmail.com> (he/him)
- [JungMinu](#) - Minwoo Jung <nodecorelab@gmail.com> (he/him)
- [legendecas](#) - Chengzhong Wu <legendecas@gmail.com> (he/him)
- [Leko](#) - Shingo Inoue <leko.noor@gmail.com> (he/him)
- [linkgoron](#) - Nitzan Uziely <linkgoron@gmail.com>
- [lpinca](#) - Luigi Pinca <luigipinca@gmail.com> (he/him)
- [lundibundi](#) - Denys Otrishko <shishugi@gmail.com> (he/him)
- [Lxyx](#) - Zijian Liu <lxyxzj@gmail.com> (he/him)
- [marsonya](#) - Akhil Marsonya <akhil.marsonya27@gmail.com> (he/him)
- [mcollina](#) - Matteo Collina <matteo.collina@gmail.com> (he/him)
- [meixg](#) - Xuguang Mei <meixuguang@gmail.com> (he/him)
- [Mesteery](#) - Mestery <mestery@protonmail.com> (he/him)
- [mhdawson](#) - Michael Dawson <midawson@redhat.com> (he/him)
- [miladfarc](#) - Milad Fa <mfarazma@redhat.com> (he/him)
- [mildsunrise](#) - Alba Mendez <me@alba.sh> (she/her)
- [mmarchini](#) - Mary Marchini <oss@mmarchini.me> (she/her)
- [mscdex](#) - Brian White <mscdex@mscdex.net>

- [MylesBorins](#) - Myles Borins <myles.borins@gmail.com> (he/him)
- [oyyd](#) - Ouyang Yadong <oyydoibh@gmail.com> (he/him)
- [panva](#) - Filip Skokan <panva.jp@gmail.com>
- [PoojaDurgad](#) - Pooja D P <Pooja.D.P@ibm.com> (she/her)
- [puzpuzpuz](#) - Andrey Pechkurov <apechkurov@gmail.com> (he/him)
- [Qard](#) - Stephen Belanger <admin@stephenbelanger.com> (he/him)
- [RaisinTen](#) - Darshan Sen <raisinten@gmail.com> (he/him)
- [rexagod](#) - Pranshu Srivastava <rexagod@gmail.com> (he/him)
- [richardlau](#) - Richard Lau <rlau@redhat.com>
- [rickyes](#) - Ricky Zhou <0x19951125@gmail.com> (he/him)
- [ronag](#) - Robert Nagy <ronagy@icloud.com>
- [ruyadorno](#) - Ruy Adorno <ruyadorno@github.com> (he/him)
- [rvagg](#) - Rod Vagg <rod@vagg.org>
- [ryzokuken](#) - Ujjwal Sharma <ryzokuken@disroot.org> (he/him)
- [santigimeno](#) - Santiago Gimeno <santiago.gimeno@gmail.com>
- [shisama](#) - Masashi Hirano <shisama07@gmail.com> (he/him)
- [ShogunPanda](#) - Paolo Insogna <paolo@cowtech.it> (he/him)
- [srl295](#) - Steven R Loomis <srloomis@us.ibm.com>
- [starkwang](#) - Weijia Wang <starkwang@126.com>
- [sxa](#) - Stewart X Addison <sxa@redhat.com> (he/him)
- [targos](#) - Michaël Zasso <targos@protonmail.com> (he/him)
- [TimothyGu](#) - Tiancheng "Timothy" Gu <timothygu99@gmail.com> (he/him)
- [tniessen](#) - Tobias Nießen <tniessen@tnie.de> (he/him)
- [trivikr](#) - Trivikram Kamat <trivikr.dev@gmail.com>
- [Trott](#) - Rich Trott <rtrott@gmail.com> (he/him)
- [vdeturckheim](#) - Vladimir de Turckheim <vlad2t@hotmail.com> (he/him)
- [VoltrexMaster](#) - Mohammed Keyvanzadeh <mohammadkeyvanzade94@gmail.com> (he/him)
- [watilde](#) - Daijiro Wachi <daijiro.wachi@gmail.com> (he/him)
- [XadillaX](#) - Khaidi Chu <i@2333.moe> (he/him)
- [yashLadha](#) - Yash Ladha <yash@yashladha.in> (he/him)
- [yosuke-furukawa](#) - Yosuke Furukawa <yosuke.furukawa@gmail.com>
- [ZYSzys](#) - Yongsheng Zhang <zyszys98@gmail.com> (he/him)

► Emeriti

Collaborators follow the [Collaborator Guide](#) in maintaining the Node.js project.

Triagers

- [Ayase-252](#) - Qingyu Deng <i@ayase-lab.com>
- [himadriganguly](#) - Himadri Ganguly <himadri.tech@gmail.com> (he/him)
- [iam-frankqiu](#) - Frank Qiu <iam.frankqiu@gmail.com> (he/him)
- [marsonya](#) - Akhil Marsonya <akhil.marsonya27@gmail.com> (he/him)
- [meixg](#) - Xuguang Mei <meixuguang@gmail.com> (he/him)
- [Mesteery](#) - Mestery <mestery@protonmail.com> (he/him)
- [PoojaDurgad](#) - Pooja Durgad <Pooja.D.P@ibm.com>
- [RaisinTen](#) - Darshan Sen <raisinten@gmail.com>
- [VoltrexMaster](#) - Mohammed Keyvanzadeh <mohammadkeyvanzade94@gmail.com> (he/him)

Release keys

Primary GPG keys for Node.js Releasers (some Releasers sign with subkeys):

- **Beth Griggs** <bgriggs@redhat.com> 4ED778F539E3634C779C87C6D7062848A1AB005C

- **Bryan English** <bryan@bryanenglish.com> 141F07595B7B3FFE74309A937405533BE57C7D57
- **Colin Ihrig** <[cijhrig@gmail.com](mailto:cjihrig@gmail.com)> 94AE36675C464D64BAFA68DD7434390BDBE9B9C5
- **Danielle Adams** <adamzdanielle@gmail.com> 74F12602B6F1C4E913FAA37AD3A89613643B6201
- **James M Snell** <jasnell@keybase.io> 71DCFD284A79C3B38668286BC97EC7A07EDE3FC1
- **Michaël Zasso** <targos@protonmail.com> 8FCCA13FEF1D0C2E91008E09770F7A9A5AE15600
- **Myles Borins** <myles.borins@gmail.com> C4F0DFFF4E8C1A8236409D08E73BC641CC11F4C8
- **Richard Lau** <rlau@redhat.com> C82FA3AE1CBEDC6BE46B9360C43CEC45C17AB93C
- **Rod Vagg** <rod@vagg.org> DD8F2338BAE7501E3DD5AC78C273792F7D83545D
- **Ruben Bridgewater** <ruben@bridgewater.de> A48C2BEE680E841632CD4E44F07496B3EB3C1762
- **Ruy Adorno** <ruyadorno@hotmail.com> 108F52B48DB57BB0CC439B2997B01419BD92F80A
- **Shelley Vohr** <shelley.vohr@gmail.com> B9E2F5981AA6E0CD28160D9FF13993A75599653C

To import the full set of trusted release keys (including subkeys possibly used to sign releases):

```
gpg --keyserver hkps://keys.openpgp.org --recv-keys
4ED778F539E3634C779C87C6D7062848A1AB005C
gpg --keyserver hkps://keys.openpgp.org --recv-keys
141F07595B7B3FFE74309A937405533BE57C7D57
gpg --keyserver hkps://keys.openpgp.org --recv-keys
94AE36675C464D64BAFA68DD7434390BDBE9B9C5
gpg --keyserver hkps://keys.openpgp.org --recv-keys
74F12602B6F1C4E913FAA37AD3A89613643B6201
gpg --keyserver hkps://keys.openpgp.org --recv-keys
71DCFD284A79C3B38668286BC97EC7A07EDE3FC1
gpg --keyserver hkps://keys.openpgp.org --recv-keys
8FCCA13FEF1D0C2E91008E09770F7A9A5AE15600
gpg --keyserver hkps://keys.openpgp.org --recv-keys
C4F0DFFF4E8C1A8236409D08E73BC641CC11F4C8
gpg --keyserver hkps://keys.openpgp.org --recv-keys
C82FA3AE1CBEDC6BE46B9360C43CEC45C17AB93C
gpg --keyserver hkps://keys.openpgp.org --recv-keys
DD8F2338BAE7501E3DD5AC78C273792F7D83545D
gpg --keyserver hkps://keys.openpgp.org --recv-keys
A48C2BEE680E841632CD4E44F07496B3EB3C1762
gpg --keyserver hkps://keys.openpgp.org --recv-keys
108F52B48DB57BB0CC439B2997B01419BD92F80A
gpg --keyserver hkps://keys.openpgp.org --recv-keys
B9E2F5981AA6E0CD28160D9FF13993A75599653C
```

See [Verifying binaries](#) for how to use these keys to verify a downloaded file.

► Other keys used to sign some previous releases

Security release stewards

When possible, the commitment to take slots in the security release steward rotation is made by companies in order to ensure individuals who act as security stewards have the support and recognition from their employer to be able to prioritize security releases. Security release stewards manage security releases on a rotation basis as outlined in the [security release process](#).

- Datadog
 - [bengl](#) - **Bryan English** <bryan@bryanenglish.com> (he/him)

- [vdeturckheim](#) - **Vladimir de Turckheim** <vlad2t@hotmail.com> (he/him)
- NearForm
 - [mcollina](#) - **Matteo Collina** <matteo.collina@gmail.com> (he/him)
- Red Hat and IBM
 - [joesepi](#) - **Joe Sepi** <joesepi@ibm.com> (he/him)
 - [mhdawson](#) - **Michael Dawson** <mdawson@redhat.com> (he/him)

License

Node.js is available under the [MIT license](#). Node.js also includes external libraries that are available under a variety of licenses. See [LICENSE](#) for the full license text.