



endoflife.date recommendations

How to document support lifecycles effectively.

whoami

C A P T.
NEMO



Nemo

@captn3m0

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endoflife-date / endoflife.date

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Keep track of various End of Life dates and support lifecycles for various products. Visit <https://endoflife.date> for a list of supported products. This information is very often [hard to track or badly presented](#). This project collates this data and presents it in an easily accessible format, with URLs that are easy to guess and remember.

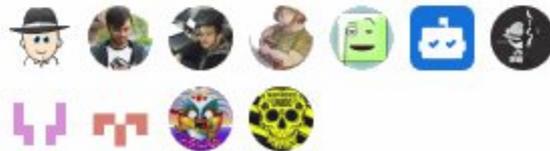
If you maintain release information (end-of-life dates, or support information) for a product, we have a [set of recommendations](#) along with a checklist on some best practices for publishing this information.

Currently tracking 89+ products.

 MIT license

 875 stars

Contributors 170



Sponsor this project



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opencollective.com/endoflife-date

angular

| Release | Released | Active Support | Security Support | Latest |
|-------------------|---|---|---|--------------------|
| 14 (Upcoming LTS) | 6 days ago (02 Jun 2022) | Ends in 5 months and 3 weeks (02 Dec 2022) | Ends in 5 months and 3 weeks (02 Dec 2022) | 14.0.0 |
| 13 (LTS) | 7 months ago (03 Nov 2021) | Ended 1 month and 5 days ago (04 May 2022) | Ends in 11 months (04 May 2023) | 13.3.11 |
| 12 (LTS) | 1 year ago (13 May 2021) | Ended 6 months and 4 weeks ago (12 Nov 2021) | Ends in 5 months (12 Nov 2022) | 12.2.16 |
| 11 (LTS) | 1 year and 6 months ago (11 Nov 2020) | Ended 1 year ago (11 May 2021) | Ended 4 weeks ago (11 May 2022) | 11.2.14 |
| 10 (LTS) | 1 year and 11 months ago (24 Jun 2020) | Ended 1 year and 5 months ago (24 Dec 2020) | Ended 5 months and 2 weeks ago (24 Dec 2021) | 10.2.5 |
| 9 (LTS) | 2 years and 4 months ago (06 Feb 2020) | Ended 1 year and 10 months ago (06 Aug 2020) | Ended 10 months ago (06 Aug 2021) | 9.1.13 |



Angular is a TypeScript-based free and open-source web application framework led from Google that was designed as a ground-up rewrite of AngularJS.

All major releases are typically supported for 18 months. This includes 6 months of active support (updates and patches), and 12 months of LTS support (critical fixes and security patches). Only newly identified security vulnerabilities and regression fixes are considered for LTS versions.

Angular follows [semantic versioning](#). Major releases happen roughly every 6 months, with 1-3 minor releases for every major release. There is an [update guide](#) available.

laravel

| Release | Released | Active Support | Security Support | Latest |
|-----------|---|---|---|-------------------|
| 9 | 3 months and 3 weeks ago (08 Feb 2022) | Ends in 1 year and 2 months (08 Aug 2023) | Ends in 1 year and 8 months (08 Feb 2024) | 9.15.0 |
| 8 | 1 year and 8 months ago (08 Sep 2020) | Ends in 1 month and 3 weeks (26 Jul 2022) | Ends in 7 months and 3 weeks (24 Jan 2023) | 8.83.15 |
| 7 | 2 years and 3 months ago (03 Mar 2020) | Ended 1 year and 7 months ago (06 Oct 2020) | Ended 1 year and 3 months ago (03 Mar 2021) | 7.30.6 |
| 6 (LTS) | 2 years and 9 months ago (03 Sep 2019) | Ended 4 months ago (25 Jan 2022) | Ends in 3 months (06 Sep 2022) | 6.20.44 |
| 5.8 | 3 years ago (26 Feb 2019) | Ended 2 years and 9 months ago (26 Aug 2019) | Ended 2 years and 3 months ago (26 Feb 2020) | 5.8.38 |
| 5.5 (LTS) | 4 years and 9 months ago (30 Aug 2017) | Ended 2 years and 9 months ago (30 Aug 2019) | Ended 1 year and 9 months ago (30 Aug 2020) | 5.5.50 |



Laravel is a free, open-source PHP web framework, created by Taylor Otwell and intended for the development of web applications following the model-view-controller (MVC) architectural pattern and based on Symfony.

For LTS releases, such as Laravel 5.5 and 6.0, bug fixes are provided for 2 years and security fixes are provided for 3 years. These releases provide the longest window of support and maintenance. For general releases, bug fixes are provided for 6 months and security fixes are provided for 1 year. For all additional libraries, including Lumen, only the latest release receives bug fixes.



The Gold Standard

Currently Supported Versions

php

| Branch | Initial Release | | Active Support Until | | Security Support Until | |
|--------|-----------------|-----------------------|----------------------|---------------------|------------------------|----------------------|
| 7.4 | 28 Nov 2019 | 2 years, 6 months ago | 28 Nov 2021 | 6 months ago | 28 Nov 2022 | in 5 months |
| 8.0 | 26 Nov 2020 | 1 year, 6 months ago | 26 Nov 2022 | in 5 months | 26 Nov 2023 | in 1 year, 5 months |
| 8.1 | 25 Nov 2021 | 6 months ago | 25 Nov 2023 | in 1 year, 5 months | 25 Nov 2024 | in 2 years, 5 months |

Or, visualised as a calendar:



Key

Clear explanation of what each phase means

| | |
|---------------------|--|
| Active support | A release that is being actively supported. Reported bugs and security issues are fixed and regular point releases are made. |
| Security fixes only | A release that is supported for critical security issues only. Releases are only made on an as-needed basis. |
| End of life | A release that is no longer supported. Users of this release should upgrade as soon as possible, as they may be exposed to unpatched security vulnerabilities. |

kubernetes

endoflife.date/k8s

Support Period

In accordance with the [yearly support KEP](#), the Kubernetes Community will support roughly fourteen (14) months.

The first twelve months of this timeframe will be considered the standard period.

Towards the end of the twelve month, the following will happen:

- [Release Managers](#) will cut a release
- The patch release series will enter maintenance mode

During the two-month maintenance mode period, Release Managers may cut additional

- CVEs (under the advisement of the Security Response Committee)
- dependency issues (including base image updates)
- critical core component issues

At the end of the two-month maintenance mode period, the patch release series will pick to the associated branch are to be closed soon afterwards.

Note that the 28th of the month was chosen for maintenance mode and EOL target

| Release | Released | Active Support | Maintenance Support | Latest |
|---------|--|---|---|-------------------------|
| 1.24 | 1 month and 6 days ago (03 May 2022) | Ends in 1 year and 3 months (29 Sep 2023) | Ends in 1 year and 3 months (29 Sep 2023) | 1.24.1 |
| 1.23 | 6 months ago (07 Dec 2021) | Ends in 6 months and 3 weeks (28 Dec 2022) | Ends in 8 months (28 Feb 2023) | 1.23.7 |
| 1.22 | 10 months ago (04 Aug 2021) | Ends in 2 months and 3 weeks (28 Aug 2022) | Ends in 4 months and 3 weeks (28 Oct 2022) | 1.22.10 |
| 1.21 | 1 year and 2 months ago (08 Apr 2021) | Ended 1 month and 1 week ago (28 Apr 2022) | Ends in 2 weeks and 6 days (28 Jun 2022) | 1.21.13 |



[Kubernetes](#) is an open-source container-orchestration system for automating computer application deployment, scaling, and management.

Kubernetes follows an N-2 support policy (meaning that the 3 most recent minor versions receive security and bug fixes) along with a [15-week release cycle](#). This results in a release being supported for 14 months (12 months of support and 2 months of upgrade period) starting from v1.19. (Prior releases received approximately 9 months of patch support).

Applicable fixes, including security fixes, may be backported to those three release branches, depending on severity and feasibility. Patch releases are cut from those branches at a [regular cadence](#), plus additional urgent releases, when required. The [Release Managers group](#) owns this decision. For more information, see [the patch release page](#), which also lists expected release dates for future releases, along with exact EoL dates for all active branches.

Since Kubernetes has a client-server architecture, there is a [supported version skew](#) between the client/server, which also determines the supported component upgrade order.



Understanding Expectations

Questions your release page is asked

Updates

Is there a new releases available? When is the next one due?

Support

Am I running a supported release? What does support mean?

Compatibility

What changes were made in release X. Will something break?

Lifecycle

How long will release X get bug fixes or security fixes?

Release Distinction

Should I be running a LTS release? What's the difference?

Policy

How are new releases versioned?



Recommendations



Empathy

Be Helpful.



In One Place

Stick to one page, one website.

Publishing

GOOD

[example.com/docs/eol](#)
[example.com/release-policy](#)
[angular.io/guide/releases](#)
[php.net/supported-versions.php](#)

BAD

[wiki.ubuntu.com/ReleaseCadence](#)
[ubuntu.com/about/release-cycle](#)
[wiki.ubuntu.com/Releases](#)

[example.com/docs/v3.4/eol \(?\)](#)
[devguide.python.org](#)



Document the lifecycle

Tell what's supported and for how long



Release Cadence

How often are you making new releases?

Release Cadence

GOOD

- Ubuntu
- Every month
- Every Christmas (Ruby)
- Every 29th February
- Maybe once every 2 weeks, but not guaranteed.
- Whenever needed.
- No release cadence.

BAD

Saying nothing.

The image features a stylized map of a landmass, possibly a continent or island, rendered in shades of green and light blue. The landmass is irregularly shaped with a jagged coastline. The text "What does Support mean?" is written in a large, bold, dark blue font across the center of the landmass. The background is white, with some faint blue dots and lines scattered around the edges of the map, suggesting a globe or a larger geographical context. The overall style is clean and modern, with a focus on the central text.

**What does
Support
mean?**

Different Meanings

- Priority security fixes.
- Critical bugfixes.
- Issues will be looked at
- Community Forum for support.

Conditions Applied*

- Only packages in the “main” repository.
- Only if you are a paying customer.
- Free for 3 machines.
- Only packages covered by our upstream LTS.
- As long as you’re running a support Python version.



What is supported?

Provide a list of “supported releases”.

elasticsearch

| Elasticsearch | EOL date | Maintained until |
|---------------|------------|------------------|
| 7.14.x | 2023-02-03 | 7.15.0 |
| 7.15.x | 2023-03-22 | 7.16.0 |
| 7.16.x | 2023-06-07 | 7.17.0 |
| 7.17.x | 2023-08-01 | 9.0.0 |
| 8.0.x | 2023-08-10 | 8.1.0 |
| 8.1.x | 2023-09-08 | 8.2.0 |
| 8.2.x | 2023-10-26 | 8.3.0 |



Dates

Be accurate, and exact.

How to document dates correctly

Absolute Dates

Don't make your users do the math every time.

No Ambiguous Dates

07-07-2021 is bad.

RFC3339 FTW!

Complete Dates

"2022 December" might mean upgrading on new year or not.



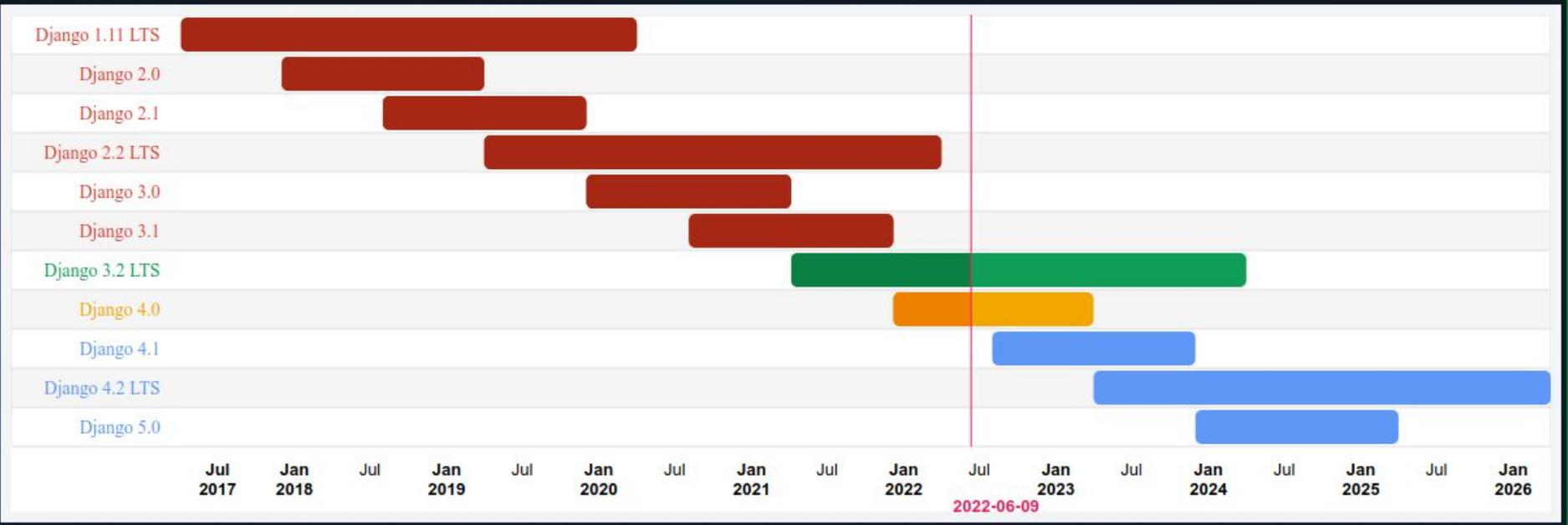
Calendar Images

Good Release Calendar Images

- Clearly **labelled** X-axis (Years, Quarters)
- Well **sorted** releases.
- Mark the **current date**
- **(Interactive)** Show information on hover.
- Keep it updated!
- Accessible



Django Release Cycle



Made by: Jeff Triplett aka @webology

Remixed from: @di_codes's Python Release Cycle

Made with: <https://developers.google.com/chart/interactive/docs/gallery/ganttchart>

Data Source: <https://www.djangoproject.com/download/>

ubuntu

Ubuntu releases

22.04 LTS (Jammy Jellyfish)

21.10 (Impish Indri)

21.04 (Hirsute Hippo)

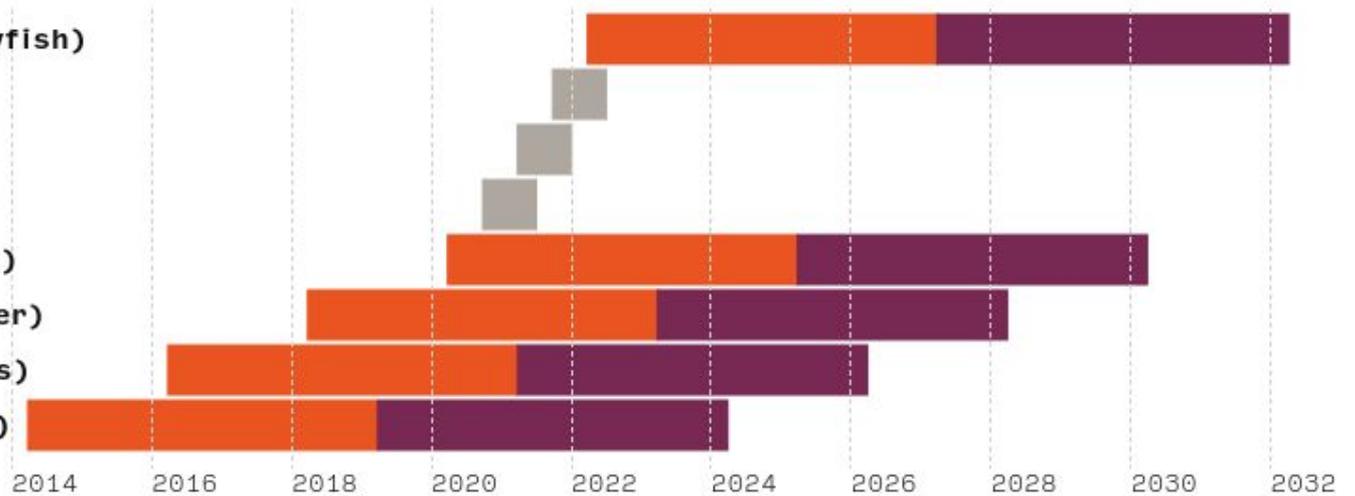
20.10 (Groovy Gorilla)

20.04 LTS (Focal Fossa)

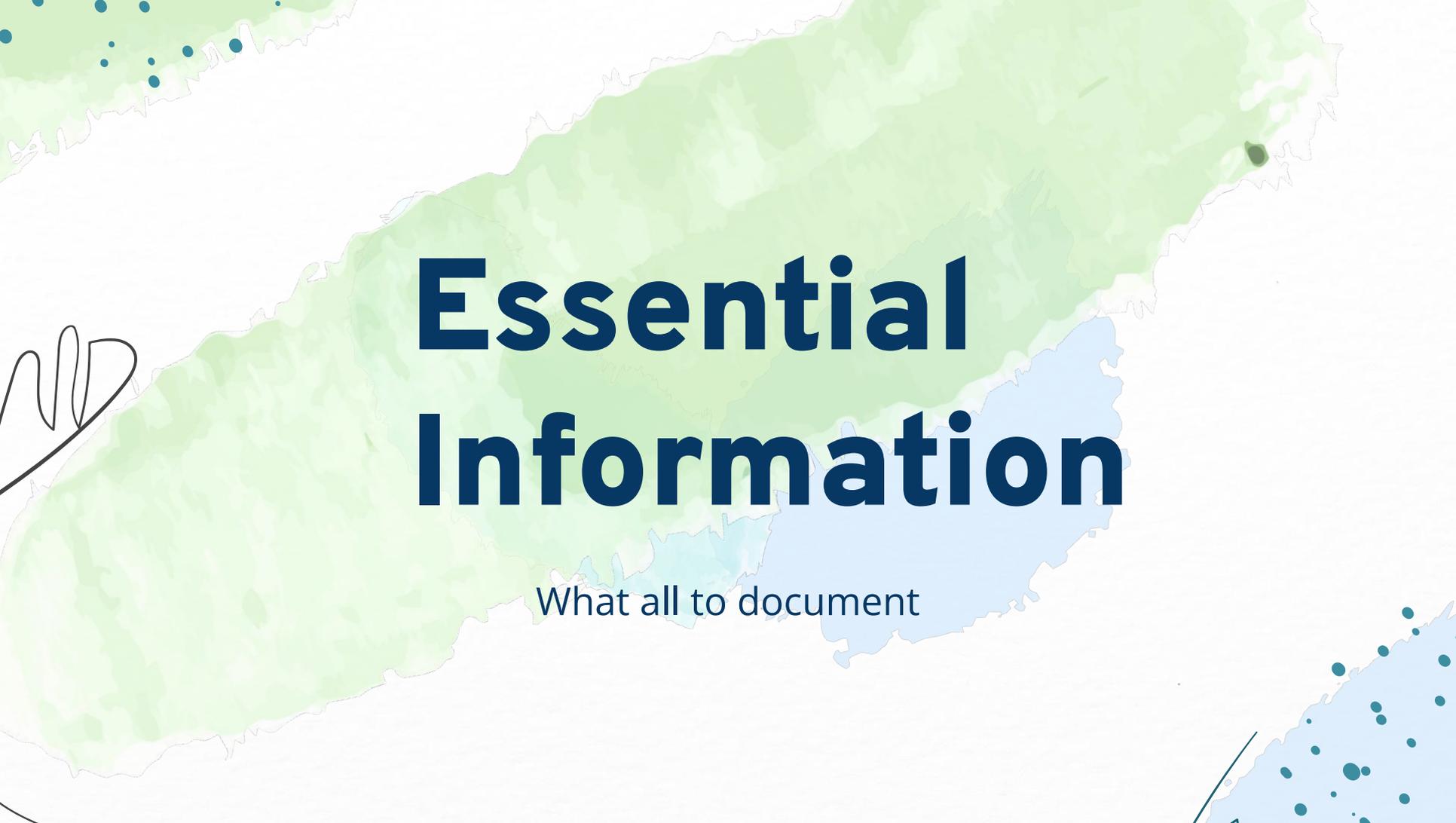
18.04 LTS (Bionic Beaver)

16.04 LTS (Xenial Xerus)

14.04 LTS (Trusty Tahr)



- Hardware and maintenance updates
- Interim release Standard Support
- Extended Security Maintenance (ESM)



Essential Information

What all to document

What all to list for every release cycle

Changelog

A link to the changelog for the latest release, not just the first one.

Latest

What's the latest release in this cycle (and is it supported)?

Dates

Release, Latest Release Date, LTS Date, Support, EOL

Download/Upgrade Links

How do I get this release?

Migration Guide

Helpful for complicated upgrades.

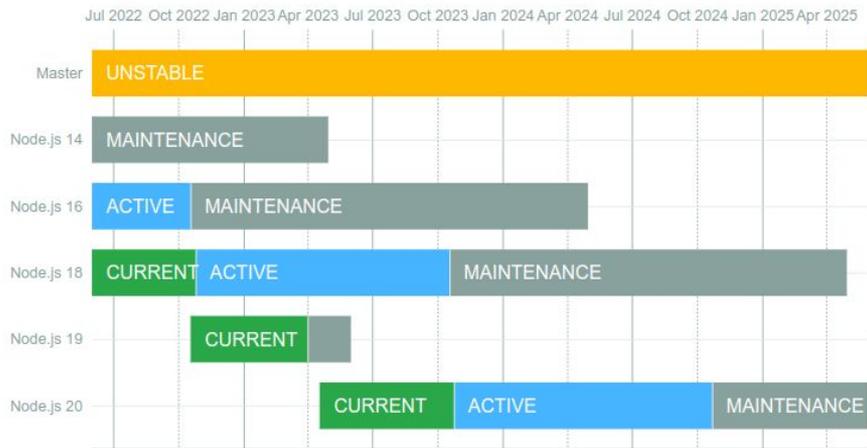
Unsupported Releases

Don't list these alongside supported ones.

A stylized map of a landmass, possibly an island or a region, rendered in shades of green and blue. The landmass is irregularly shaped with a jagged coastline. The word "Showcase" is written in a bold, dark blue, sans-serif font across the center of the landmass. The background is white with some faint, abstract shapes and dots in the corners, suggesting a larger map or a globe.

Showcase

Node.js



| RELEASE | STATUS | CODENAME | INITIAL RELEASE | ACTIVE LTS START | MAINTENANCE LTS START | END-OF-LIFE |
|---------|-----------------|----------|-----------------|------------------|-----------------------|-------------|
| v14 | Maintenance LTS | Fermium | 2020-04-21 | 2020-10-27 | 2021-10-19 | 2023-04-30 |
| v16 | Active LTS | Gallium | 2021-04-20 | 2021-10-26 | 2022-10-18 | 2024-04-30 |
| v18 | Current | | 2022-04-19 | 2022-10-25 | 2023-10-18 | 2025-04-30 |
| v19 | Pending | | 2022-10-18 | | 2023-04-01 | 2023-06-01 |
| v20 | Pending | | 2023-04-18 | 2023-10-24 | 2024-10-22 | 2026-04-30 |

- Changelog
- Latest Release
- Dates
- Download
- Migration
- Unsupported Releases
- Today's Date

BONUS

- Future releases
- Calendar

kubernetes

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- Changelog
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Python

Active Python Releases

For more information visit the [Python Developer's Guide](#).

| Python version | Maintenance status | First released | End of support |
|----------------|--------------------|----------------|----------------|
| 3.10 | bugfix | 2021-10-04 | 2026-10 |
| 3.9 | security | 2020-10-05 | 2025-10 |
| 3.8 | security | 2019-10-14 | 2024-10 |
| 3.7 | security | 2018-06-27 | 2023-06-27 |
| 2.7 | end-of-life | 2010-07-03 | 2020-01-01 |

- Changelog
- Latest Release
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- Unsupported Releases

Azure Kubernetes Service

| K8s version | Upstream release | AKS preview | AKS GA | End of life |
|-------------|------------------|-------------|----------|-------------|
| 1.20 | Dec-08-20 | Jan 2021 | Mar 2021 | 1.23 GA |
| 1.21 | Apr-08-21 | May 2021 | Jul 2021 | 1.24 GA |
| 1.22 | Aug-04-21 | Sept 2021 | Dec 2021 | 1.25 GA |
| 1.23 | Dec 2021 | Jan 2022 | Apr 2022 | 1.26 GA |
| 1.24 | Apr-22-22 | May 2022 | Jul 2022 | 1.27 GA |
| 1.25 | Aug 2022 | Sept 2022 | Nov 2022 | 1.28 GA |

- Changelog
- Latest Release
- Dates
- Release Notes
- Unsupported Releases

Amazon EKS

| Kubernetes version | Upstream release | Amazon EKS release | Amazon EKS end of support |
|--------------------|------------------|--------------------|---------------------------|
| 1.17 | December 9, 2019 | July 10, 2020 | November 2, 2021 |
| 1.18 | March 23, 2020 | October 13, 2020 | March 31, 2022 |
| 1.19 | August 26, 2020 | February 16, 2021 | June 30, 2022 |
| 1.20 | December 8, 2020 | May 18, 2021 | September 2022 |
| 1.21 | April 8, 2021 | July 19, 2021 | February 2023 |
| 1.22 | August 4, 2021 | April 4, 2022 | May 2023 |
| 1.23 | December 7, 2021 | August 2022 | October 2023 |

- Changelog
- Latest Release
- Dates
- Release Notes
- Unsupported Releases

haproxy

| Branch | Release date | End of life | Latest version | Changelog | Links |
|--|----------------------------|--------------------------------------|--------------------------|----------------------------|---|
| 2.7-dev | ~2022-Q4 | 2024-Q1 (dev » stable) | 2.7-dev0 | 2022/05/31 | git / web / dir / announce |
| 2.6 | 2022-05-31 | 2027-Q2 (LTS) | 2.6.0 | 2022/05/31 | git / web / dir / announce / bugs |
| 2.5 | 2021-11-23 | 2023-Q1 (stable) | 2.5.7 | 2022/05/13 | git / web / dir / announce / bugs |
| 2.4 | 2021-05-14 | 2026-Q2 (LTS) | 2.4.17 | 2022/05/13 | git / web / dir / announce / bugs |
| 2.2 | 2020-07-07 | 2025-Q2 (LTS) | 2.2.24 | 2022/05/13 | git / web / dir / announce / bugs |
| 2.0 | 2019-06-16 | 2024-Q2 (critical fixes only) | 2.0.29 | 2022/05/13 | git / web / dir / announce / bugs |
| 1.8 | 2017-11-26 | 2022-Q4 (critical fixes only) | 1.8.30 | 2021/04/12 | git / web / dir / announce / bugs |
| Hide/Show unmaintained | | | | | |

- Changelog
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Be Helpful

 endoflife.date/recommendations

Credits & Slides: captnemo.in/talks