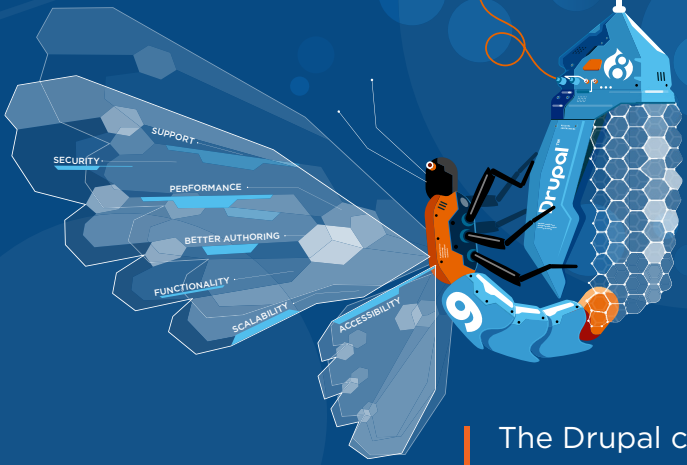
GET READY FOR Drupal™ 9



The Drupal clock is ticking. Plan your CMS upgrade today.

CYBER-DUCK

Drupal 7 and 8 will no longer get updates, bug fixes or security patches in November 2022 and November 2021 respectively. With Drupal 9 released, it's time to steer your ship in the right direction.

About Cyber-Duck

Established in 2005, Cyber-Duck is a leading digital transformation agency that delivers transformation powered by user-centred design, data and technology. The company blends an ISO-accredited design process with lean and agile management principles, and draws expertise from investment in creative R&D.

The Cyber-Duck team has been working with Drupal since 2006 when it selected the Drupal CMS as its main platform to develop websites. Since then Cyber-Duck has taken strides, using Drupal for clients like the Commonwealth, Wilmington Plc and Sport England. Cyber-Duck puts a huge emphasis on accessibility both in content and within the UX of each project. As an Acquia partner, Cyber-Duck is able to leverage Lift for personalisation, Mautic for CRM and Maestro for marketing automation.



Introduction

You may have heard about a major change that's coming to Drupal. The release of Drupal 9 and the end-of-life for Drupal 7 and 8 have serious implications for hundreds of thousands of organisations' websites.

We've had a lot of concerned queries about the forthcoming change from existing clients and prospects, so we've prepared this white paper to help you understand what's happening, when, why – and how you can ensure your organisation isn't adversely affected.

I hope you find it helpful – as always, if you'd like to get in touch or have any feedback, you can reach me at danny@cyber-duck.co.uk.

Danny Bluestone
Founder and CEO, Cyber-Duck

What's happening with Drupal 7, 8 and 9?

In June 2020, the first version of Drupal 9 was released. It's the next stage in development for the popular open-source content management system.

Then, Drupal 7 (November 2022) and 8 (November 2021) will reach end-of-life. This means they'll no longer get updates, bug fixes or security patches from Drupal.org or the Drupal community.

But right now, more than 700,000 websites are still using Drupal 7.

These websites will need to migrate to Drupal 9 by November 2022 to ensure they stay secure.

Why are Drupal 7 and 8 being withdrawn?

Up to version 7, Drupal's core developers had coded much of its PHP framework themselves. With version 8, Drupal decided to do something different. They rebuilt it on existing well-established PHP frameworks. It was a jump forward for the publishing platform.

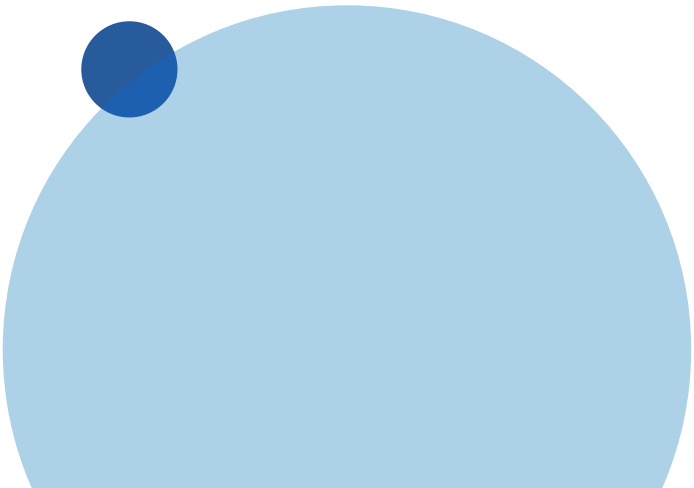
Version 8 onwards uses object-orientated PHP that leans on third-party PHP libraries such as Symfony, Twig and Guzzle. This has given Drupal an even better product and developer's experience. But it also means Drupal needs to keep up with the evolution of these underlying frameworks. So now it needs to align its product releases with theirs.

Because of that popularity, Drupal has extended its support. In June 2020, The Drupal Association even announced that the end-of-life for Drupal 7 would be extended until November 2022, in the wake of COVID-19.

It's time for the platform to move on.

That's because there's a major upgrade to the Symfony framework on the horizon. Symfony 3 is reaching end-of-life in November 2021. Symfony 3 is Drupal 8's biggest dependency. So when Symfony 3 is withdrawn, Drupal needs to be using Symfony 4 or 5.

That means a new version of Drupal, Drupal 9, and the withdrawal of support for first Drupal 8 in 2021 and then Drupal 7 in 2022, which we appreciate is confusing.



What does this mean for your organisation?

First up, Drupal 7 and 8 will no longer get automated testing, updates or security patches from Drupal.org or the Drupal community from November 2022 and 2021 respectively.

This is critical. It means your site – should you stay on 7 or 8 – risks becoming vulnerable. You'll either need to replatform, or to engage niche specialist care to support it longer-term.

It also means that if you've put off upgrading to Drupal 8, it's time to rethink now. Drupal recommends that sites are upgraded to 8 ahead of 9. That will give your site as much time as possible to settle down and for your in-house or agency developers to adjust to the new framework.

Drupal acknowledges that the jump from 7 to 8 is a significant step and will take time. They have also indicated that the upgrade from 8 to 9 will be much more straightforward.

What are my options if I'm running Drupal 7?

If you're running Drupal 7, you have four options:

1. Upgrade now to Drupal 8
2. Upgrade later to Drupal 8 and then to Drupal 9
3. Stick with Drupal 7 and consider getting specialist ongoing support
4. Do nothing and plan a new website on another CMS platform before the end of 2021

Why upgrade to Drupal 8 now

The upgrade from Drupal 7 to 8 is significant: the front-end systems have been completely rebuilt. This means there's a heavy coding lift because the entire front end of your site will need to be reworked.

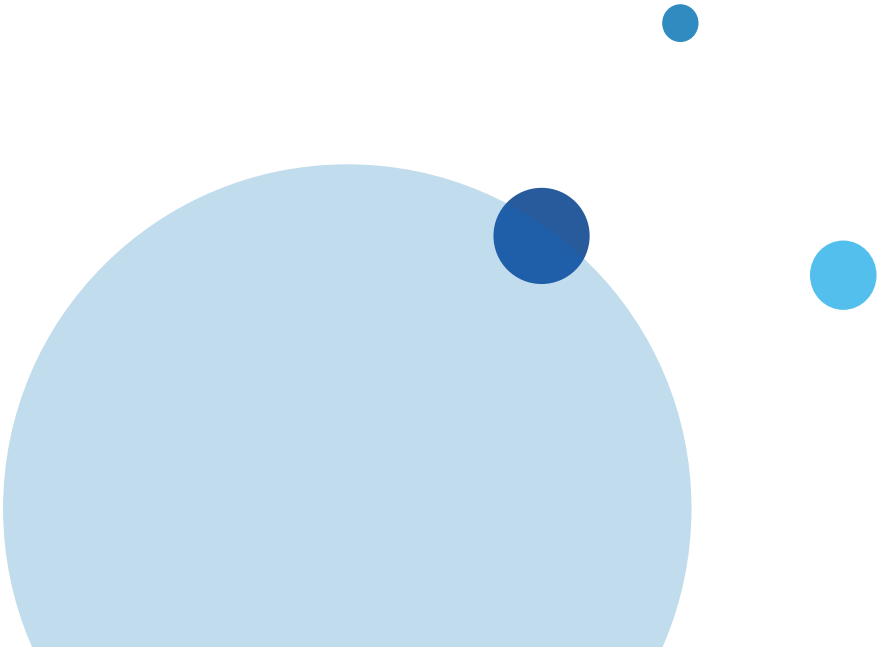
However, Drupal has promised the upgrade from Drupal 8 to 9 will be an easy transition. That's because the first Drupal 9 will essentially be version 8 with some technical debt stripped out and some underlying dependencies (like the Symfony ones mentioned earlier) updated, but mostly backward compatible.

Drupal 8 also offers significant benefits to:

- Security
- Performance
- Functionality
- Scalability
- Usability of the CMS for the editors

You'll be able to benefit from these enhanced functionalities if you migrate now.

You should think of this as a two-stage process. A heavier lift to replatform to 8, giving you time to assess and iterate your migration, then a straightforward level-up to Drupal 9.



Should I wait and upgrade straight to Drupal 9?

As we've said, the jump from 8 to 9 isn't a big one – but the jump from 7 to 8 is. That's why Drupal recommends you split the process and upgrade to 8 first. Otherwise you risk rushing through a major migration and an additional upgrade, in order to meet the November 2022 deadline.

In practical terms, there's no need to release the Drupal 8 version and the upgrade to Drupal 9 is easy. For development purposes, that pause at Drupal 8 for a few days is probably worth it to properly assess API compatibility.

If you give yourself time to adjust to Drupal 8:

- Your team will have time to adjust to a new, more sophisticated platform

- You'll have time to change or update key Drupal 7 third-party community modules that might not be compatible with Drupal 8 (most of them are, but not all)
- You'll have time to test and iterate your new site to continue your BAU content updates
- You'll have time to see how Drupal 9 evolves in its first few months
- You'll have time to assess Drupal 9's new functionality and consider what potential it holds for your organisation

Can I stay on Drupal 7 for now?

There's nothing to stop you staying on Drupal 7. You can have a reasonably secure site even if it's not supported by Drupal.org. You can maintain it too – and there'll be niche support companies to help you. We don't recommend this past the summer of 2022, but why leave it until the last minute when you can start benefiting from the improvements to Drupal sooner?

Here's why:

- Over time, it gets harder to keep a legacy site secure. Drupal.org has a dedicated security team whose job is to find holes in supported versions of Drupal. They're good at catching vulnerabilities and quick to issue security patches. The same goes for modules contributed by the Drupal community.

- From November 2022, Drupal.org will stop supporting Drupal 7 – as will the Drupal developer community. You'll only be able to purchase that support from specialist companies – which can be more expensive in the long run – or tackle the risk alone. There is no long-term support for Drupal 8 planned at this time.

- There's also a risk that any vulnerabilities may become public straight away, because there'll be no Drupal.org or community support. Drupal has warned of a "zero-day exploit".



What does Drupal recommend?

Drupal recommends upgrading to 8 ahead of 9. We recommend this approach too. You can replatform to Drupal 8, see how it works, take a breath and adjust, then move on to Drupal 9 – a much easier step – once you're happy.

That means your migration needs to be planned now, to avoid a last-minute rush next year. Starting to plan the upgrade to Drupal 8 this summer of 2020 means you can aim to relaunch your site on Drupal 8 in Q3 or Q4 2020, giving you plenty of time to plan the D9 upgrade in Q1 2021.

So if you can migrate now, you should. Drupal and its community will be moving their focus to Drupal 8 and then 9. Replatforming now means you won't get left behind.

What is the process and lift for updating?

It's best to take a phased approach that gives you time to assess and adjust at each stage. Every Drupal project is different, but all migrations include the following stages:

1. Audit

The audit assesses what needs doing. It examines the website to establish its core functionality, custom code and content. The audit will:

- Compile a list of all modules used
- Ascertain whether those modules are in Drupal 8 core
- If not in core, whether there's a Drupal 8 version of that module that is officially supported

- If that's unavailable, whether any alternative modules can be used instead (and the implication on your business logic or publishing workflows)
- If no alternatives are available, what modules will need to be custom-coded or dropped

This can be done with the help of an upgrade module that generates a report. You can do it manually, but the upgrade module catches all functionality across the website – you can be more sure that nothing's been forgotten.

You'll also want to consider:

- Content types and any custom blocks
- Third-party functionality, such as payment processing
- Any other external elements or interfaces

This part of the process sounds simple, but we know from experience that it's not. Mapping every module's functionality is time-consuming, complex and requires technical expertise. Depending on the complexity of your site, this could take anything from 2 to 10+ days.

Your migration is also a good time to assess your content and do a bit of pruning. For example, you might have a third-party forum that's fallen out of use since the rise of social media; or content that's out of date. Or you might have new legal obligations around data protection or accessibility.

This is also something we can help with. With Sport England, for example, we audited thousands of pages of content. Based on their new information architecture, we then worked out together what really needed to be migrated and how best to structure and present it to their users.

So do consider that you've got an opportunity here to review and revamp your site, not just replatform it.

2. Recommendation

We'll then work with you to build the recommendation for the new site. This is a step that benefits from a collaborative approach. There's a lot of to and from when you're planning the migration, so we find it works best when we work closely with you. This can be achieved in a few days if there is no major changes to the information architecture.

3. Migration

The next step is the replatforming itself. All your modules need to be migrated to the new Drupal 8 structure, including any custom modules.

Many sites will have bespoke modules coded specifically for the needs of that site. As Drupal 7 used procedural PHP and Drupal 8 uses object-orientated PHP with a totally different data entity storage model, these custom modules will need to be completely re-written.

The front-end systems for Drupal 7 and 8 are also very different. That means all the website's HTML templates need to be converted manually. Your theme – which controls the HTML and front-end presentation – will need to be rebuilt from the ground up. (This is another reason why it's worth considering a redesign – the front-end coding lift is significant anyway.) Some websites have very few templates; others we've worked on have had hundreds.

Once your theme is created, most content can then be migrated automatically. There are rare exceptions where that's not possible, and a manual migration is required, but those tend to be edge cases. That could include any custom blocks that have been created for your site.

4. Review

The migration isn't the end of the process. To ensure your new site is fully functional, there's a stringent UAT (user acceptance testing) process to make sure the replatforming has caught everything and that it all looks and works as it should.

This includes a rigorous check of third-party elements and functionality, such as payment processing and data capture, to ensure your analytics, business logic and publishing workflows are performing as required.

Is there any way around the upgrade process?

Some websites use a standard theme. They may be able to upgrade the theme so their sites carry on working. However, most sites have custom templates, so will need to replatform.

What risks are involved in the migration?

As you can see, the migration process from Drupal 7 to 8 is a big step - the whole environment has changed. Since Drupal 8 was released, the ecosystem has matured considerably, so the

risks that were present at first have largely been mitigated. But there are still risks depending on your project and the functionality and modules that have been implemented. That's why the audit stage is crucial: it will establish the scale and risk of the entire migration, allowing you to approach the upgrade with certainty and clarity.

How Cyber-Duck can help

At Cyber-Duck, we've been developing with Drupal since 2005 – that's 15 years! – since the days of Drupal 4. Our expert team of Drupal developers – many of whom have a decade or more's hands-on experience with Drupal – have been trusted with Drupal sites by the Cabinet Office, the Commonwealth and Sport England. We're here to help with your sites, too.

We take a three-step approach:

1. The first step is to audit your migration. This will examine all the elements of your current setup, from core functionality to custom code and finally content, to establish the scale of the task.

2. Next, we work as an extension of your existing team to replatform your site. (If you don't have an internal team we can take care of the entire migration for you.) That's also when we can apply our ISO-certified user-centred design approach, to ensure your site meets your customers' needs.

3. Finally, once you're happy with your site running on Drupal 8, we can take care of the upgrade to Drupal 9.

What will it cost?

The great strength of Drupal is its flexibility. Because it's open-source, with core, community-contributed and custom modules and themes, each site is different. So it's hard to give a ballpark figure – it could range from £50,000 to £350,000+.

We usually engage with clients on a one-off consultancy audit for a few days to analyse the site and deliver a more accurate migration plan and budget, so there is no long-term commitment at this first stage.

It also depends on whether you want a straight technical upgrade, or if you see it as an opportunity to review your site. Things may have moved on since it was built – it could be worth reviewing your current customers' needs and journeys.

One cost to consider, though, is the expense and risk of maintaining out-of-date software. The technical and PR cost of a security breach quickly soars, even with specialist technical support. That's why we're happy to advise you on an approach that fits your organisation, but we're unlikely to suggest that you stick with Drupal 7.

Start a migration audit

Cyber-Duck is a specialist at re-platforming and setting up new CMS instances for institutions, corporate organisations and public bodies. To get a free quote and estimate, just visit our Drupal page and send us your contact details.

Let's Collaborate

We've been trusted by the Bank of England, Financial Ombudsman Service and many more to help maximise their business growth online. Get in touch to begin your digital transformation today.

+44 (0)20 8953 0070
hello@cyber-duck.co.uk
www.cyber-duck.co.uk

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