



Dan Harris, Webdrips CTO

Plan for Drupal 7/8 End of Life Now Before it's too Late

Webdrips.com: Your Full Stack

Technology Partner for Drupal

About Dan Harris & Webdrips

I've been working with Drupal for almost 12 years, and loving every minute.

We're a full stack end-to-end design and development service agency that provides consulting resources to help guide, plan, and execute business ideas.

We have extensive experience working with higher education and businesses from small to Fortune 100 in size.

We're a minority female owned company.

Quick Survey

1. Anyone have a Drupal 6 website?
2. Drupal 7?
3. Drupal 8?
4. Of those that have Drupal 8, how knowledgeable would you say you are on the authoring features?
 - a. Very knowledgeable?
 - b. Somewhat knowledgeable?

Overview & Agenda

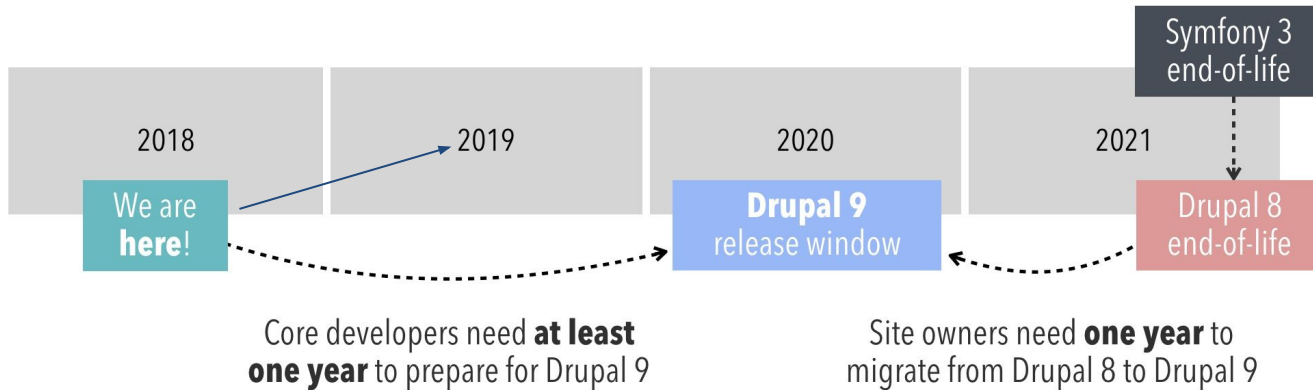
- Drupal 9: when and what
- Vastly Improved Content Editor Experience & Built-in Tools Available
- The Game-changing Layout Builder
- JSON:API is now in Core & Stable (Video & Demo?)
- Workspaces & Workflows (and their Differences)
- Multilingual Modules for Content Translation
- Media & Media Library for Media Management
- Mobile-first Responsive Built in
- Security, Performance, & Scalability
- Rapid Assessment of your Existing Site for Migrations/Upgrades
- Demo of Drupal 8.7 Including Many Core Authoring Features

Drupal 9 is Expected Next June!

- In just over a year, Drupal 9 will be released
- If your website is Running Drupal 6/7, now is the time to start planning
- Planning and executing Drupal 6/7 migrations can take up to a year.
 - Per Dries Buytaert, founder of Acquia and creator of Drupal
 - We have seen migrations ranging from hours to around a year

Drupal Release Roadmap

Drupal 9
will be released in **2020**



What to Expect from Drupal 9?

- Drupal 9 will be Drupal 8 without the depreciated code
- Drupal 9 will be backward-compatible with Drupal 8 contributed modules
 - So long as the D8 module doesn't use depreciated code
 - *A major first for Drupal*
 - Upgrading from 8 to 9 will be simple and painless

More on Drupal 9 (for those on D8)

- Drupal 9.0.0 will NOT have any new functions or features
- Another reason to prioritize upgrading to Drupal 9:
 - According to [Symfony's release roadmap](#), Symfony 3 will be end-of-life status in November, 2021.
 - EOL means security bugs are generally not fixed after the EOL date has passed.
 - Drupal 9 will "ship" with Symfony 4 (or possibly Symfony 5).

Vastly Improved Content Editor Authoring Experience

- For years the authoring experience was
 - severely lacking
 - clumsy
 - time consuming
 - These could be exacerbated further with poor architecture decisions.
- Not any more! Drupal 8 is now Awesome for Editors!
- [Nearly 7,000 contributed modules available for Drupal 8](#)

Tools Available to Drupal 8.7 Editors

- Quick Edit: allows in-place editing and saving using popup window
- CKEditor: provides a powerful WYSIWYG editor
- [Layout Builder](#): allows simple page layout changes
 - No need to hire Drupal developer or agency
- [Media and Media Library](#): provides a nice User Interface (UI) for adding and managing media assets (images, files, audio, and video).

More Tools Available to Drupal 8.7 Editors

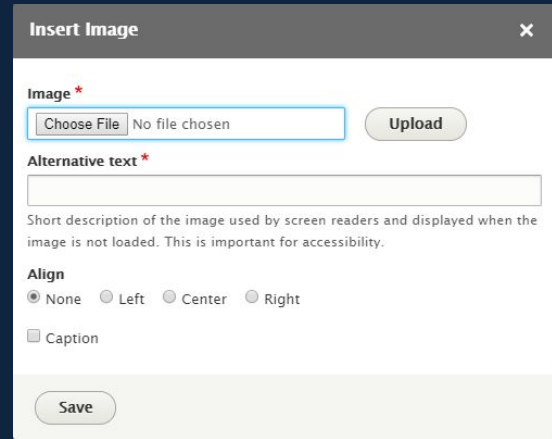
- [Workspaces](#): allows site editors to prepare and preview a complete set of related content on the live site before making it public
- [Workflows](#): provides a simple UI for creating basic to complex content moderation and governance workflows
- [Multilingual](#): add the ability to translate content and the authoring environment into other languages easily

The CKEditor Module Provides a Nice WYSIWYG Experience

- CKEditor is now so much nicer, and it just works!
 - Creating uniform consistent-looking content across content entities
 - With a little configuration help, your site will look more cohesive
- Place & Resize Images, and add Alt text and a Caption all with Ease
 - With prior versions of Drupal, resizing images was done by setting the size manually, then checking the results, and repeating until satisfied.
 - That's not exactly a friendly user experience.

Inserting Images into the Body

- Inserting an image, setting the alignment, & adding alt text and a caption are all easy with the Image Widget.
- Its smart in how it handles your added images and caption.
 - Left/right align automatically wraps text around the image.
 - Centered images have no wrapping.
 - It all just makes sense!

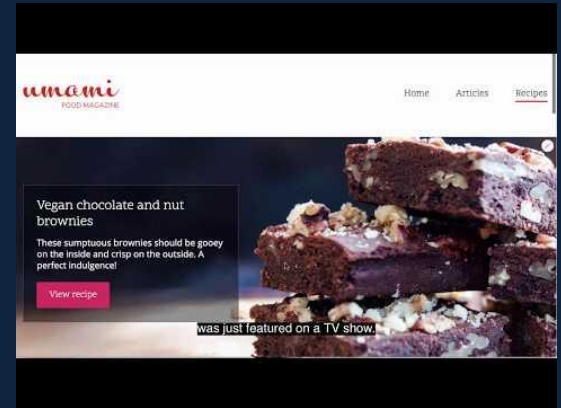


The screenshot shows a dialog box titled "Insert Image" with a close button (X) in the top right corner. The dialog is divided into several sections:

- Image ***: A file selection area with a "Choose File" button, the text "No file chosen", and an "Upload" button.
- Alternative text ***: A text input field. Below it is a small explanatory text: "Short description of the image used by screen readers and displayed when the image is not loaded. This is important for accessibility."
- Align**: Radio buttons for "None", "Left", "Center", and "Right".
- Caption**: A checkbox labeled "Caption".
- Save**: A button at the bottom of the dialog.

Introducing the Amazing (& now Stable) Layout Builder

- Page Layout tool is Ready for Production use
 - Powerful
 - Mobile-friendly
 - Accessible
 - Revisionable
 - Works with Workflows (Discussed Later)
 - Provides Context-based Previews (Toggle on/off)
- Rapidly Create Layouts without Hiring an Agency
 - Usable by Content Authors
 - Drag & Drop Content Blocks
- Game Changer



JSON:API For Decoupled/Headless Drupal

- What is JSON:API?
 - A Specification for how
 - Clients that Request Resources Be Fetched or Modified
 - A Server Should Respond to those Requests
 - It's Designed to Minimise both
 - # of Requests
 - Amount of Data Transmitted between Clients and Servers
 - The Efficiency is Achieved without Compromising
 - Readability
 - Flexibility
 - Discoverability
- This is the Fifth Module in D8's "Web Services" package

JSON:API - What can it do?

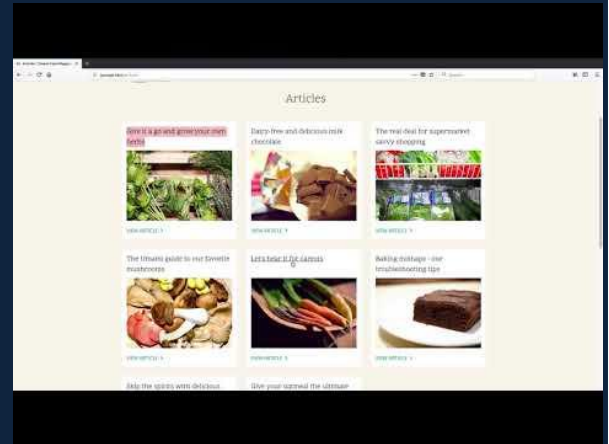
- Provide Fast/Easy Method to build [“Decoupled” Applications](#)
- Expose Entity Information to be Referenced By 3rd Party Applications
 - The “Payload” Delivered by Drupal Modified Using only Parameters
 - Simply Access the Desired info using
 - URLs with UUIDs
 - Standard HTTP GET/POST Methods
- Create Content Models (Architecture) in Drupal’s UI (Like Normal)
 - Without Writing any Code
 - Output after JSON:API is Added is a Standards-compliant API
 - Content can be Pulled into JS Apps, Digital Kiosks, Chatbots, etc.

JSON:API Enables Access to all Drupal Entities

- Using the Module, ALL Existing Website Entities can be Accessed
 - Blog Posts
 - Users
 - Tags
 - Comments
- Access API Provides Standardized Method for
 - Reading/Modifying Entities
 - Fetching Entity References
 - Fetching only Desired Data (e.g. Title)
- Querying Entities is Possible without any Config (e.g. a View)
 - Front End Developers can Start Immediately

JSON:API Example

- Setup:
 - Enable Module & Configure Permissions
 - Navigate to <https://example.com/jsonapi/...>
- Suppose you've created a Sports Stats Site
 - A Decoupled app (Android/iPhone etc) can be created to consume the site's data
 - The App Controls the Formatting/Theme
 - The App can provide filters to send params to refine results
 - Example: only show pitching stats from SF Giants
 - Watch Video... (Tool used in Video is called Postman)



Drupal Workspaces

- Prepare and preview a complete set of related content
 - Done on the live site before making it public
 - Example: a new event coming up that includes the event announcement, a preview webinar, and a form to request more information and tickets.
 - Review and publish all related content with a single "Easy Button"
 - Allows creation of multiple environments (e.g. staging, events, and live)

More on Drupal Workspaces

- Move content between the environments.
 - Think of each environment as a parallel group of content.
 - Editors and other groups (e.g. Legal) can edit content in any environment.
 - There's no limit to the number of environments.
 - Until content has been deployed from a given environment, even if published in one environment, it will remain unpublished in all other environments.
 - Changes in one environment have no affect on the others.

Final Words on Workspaces

- It eliminates the need to have a separate site just to stage content OR
- Staging content on a production site with some convoluted workflow.
- Once everything in a given environment is ready
 - Use the magic Deploy to Live button to make all the changes visible.
 - If further updates are needed later, use the same process again to make those changes live.

Workspaces Quick Video

The screenshot shows a web application interface for 'Awesome Product'. At the top, there is a navigation bar with a 'Manage' button, a user profile for 'John Doe', and a notification for 'Product Microscope updates'. Below the navigation bar, the main content area features a 'Home' tab, a search bar, and a 'Tools' section with an 'Add content' link. The main content area displays three articles, each with a placeholder image, a title, a submission date, and a body of text. The first article is titled 'Etiam porta sem malesuada magna mollis euismod.' and is submitted by 'Anonymous (not verified)' on 'Thu, 07/14/2016 - 13:14'. The second article is titled 'Lorem ipsum dolor sit amet, consectetur adipiscing elit.' and is also submitted by 'Anonymous (not verified)' on 'Thu, 07/14/2016 - 13:14'. The third article is titled 'Etiam porta sem malesuada magna mollis euismod.' and is submitted by 'Anonymous (not verified)' on 'Thu, 07/14/2016 - 13:14'. Each article has a 'Read more' and 'Add new comment' link.

Manage John Doe Product Microscope updates

My account Log out

Awesome Product

Home

Search

Tools

[Add content](#)

Etiam porta sem malesuada magna mollis euismod.
Submitted by Anonymous (not verified) on Thu, 07/14/2016 - 13:14
Vivamus sagittis lacus vel augue laoreet rutrum faucibus dolor auctor. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Morbi leo risus, porta ac consectetur ac, vestibulum at eros. Sed posuere consectetur est at lobortis. Aenean eu leo quam. Pellentesque ornare sem lacinia quam venenatis vestibulum. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Morbi leo risus, porta ac consectetur ac, vestibulum at eros.

[Read more](#) [Add new comment](#)

Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Submitted by Anonymous (not verified) on Thu, 07/14/2016 - 13:14
Integer posuere erat a ante venenatis dapibus posuere velit aliquet. Donec sed odio dui. Curabitur blandit tempus porttitor. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Donec sed odio dui. Vestibulum id ligula porta felis euismod semper. Vivamus sagittis lacus vel augue laoreet rutrum faucibus dolor auctor. Aenean eu leo quam. Pellentesque ornare sem lacinia quam venenatis vestibulum. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Sed posuere consectetur est at lobortis.

[Read more](#) [Add new comment](#)

Etiam porta sem malesuada magna mollis euismod.
Submitted by Anonymous (not verified) on Thu, 07/14/2016 - 13:14
Vivamus sagittis lacus vel augue laoreet rutrum faucibus dolor auctor. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Morbi leo risus, porta ac consectetur ac, vestibulum at eros. Sed posuere consectetur est at lobortis. Aenean eu leo quam. Pellentesque ornare sem lacinia quam venenatis vestibulum. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Morbi leo risus, porta ac consectetur ac, vestibulum at eros.

[Read more](#) [Add new comment](#)

Workflows Module

- Allows you to apply a workflow to desired content entity types:
 - Content (page) types
 - Block types
 - Media types.
- Used with the Content Moderation module
 - Create simple to complex content approval workflows.
 - Allows easy implementation of state machine logic for the process of getting a page from draft to published.

More on Workflows

- Different roles may have different permissions for transitions
- It provides simple to complex governance workflow implementation.
- Ideally suited for medium to large entities that require a few to multiple touch points before publishing a page.
 - Example: a student at a university could create an event, the department could approve the event contents, the facilities could assign a room number, and then final approval to add the event to the calendar.

What's the Difference Between Workflows and Workspaces?

1. Workflows can be applied to blocks, media, and page types, but they only can be applied to one given Drupal entity at a time.
2. Workspaces provides a bulk moderation process currently limited to pages, menus, and tags
 - The group of content is then reviewed and edited in one "environment"
 - Then deployed to another

Workflows and Workspaces Don't work Together Yet

- We strongly believe the modules should work together
 - There are a couple of issues (think revision tables) to be addressed first.
 - We hope this is resolved by Drupal 8.8 at the latest
 - They provide different enough functionality that it would be great to see them work together.

Multilingual for Language Translations

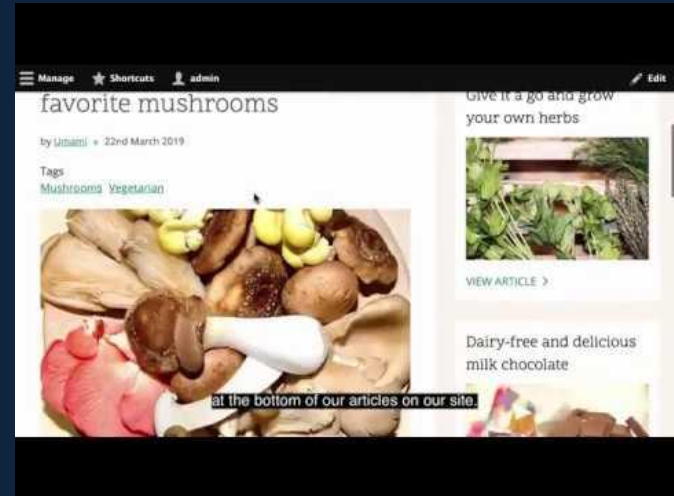
- All content, from what's can be translated into other languages.
 - Includes content visible to guests & the administration interface
- Insanely easy to configure and execute in Drupal 8
 - Especially compared to prior versions of Drupal.
- The translations can now be migrated in a much simpler manner.
- Built-in multilingual capabilities means superior ease of use
 - Every entity has the same translation workflow.

More on the Multilingual Capabilities

- In Drupal 8, almost everything is considered an “entity”.
- With prior versions of Drupal entities were broken up into distinct categories, such as node (page), field collection, and so on.
 - Things like blocks weren’t considered entities.
- Why is this important?
 - All entities may be translated using a simple UI and the same steps.
 - [Configure a workflow](#) to approve translations in every language.

Media & (Still Experimental) Media Library Modules

- Finally a Media Management System to be proud of.
- The Media Library is/has
 - Easy to use
 - Stylish
 - A drag & drop UI
 - Accessibility support
 - Inline Media Creation
 - Flexible Grid/Table views
- Will be Stable in 8.8 (due Dec. 2019)
- Works well with Workflows



Mobile-First Responsive Design with Built-in Themes

- Drupal was the first major CMS to be mobile friendly out-of-box
 - From the installation to the authoring experience to built-in themes.
 - For example, the [BYU Sophie site](#) we migrated uses the Bartik theme.
 - Being able to use a built-in Drupal 8 theme with only a few tweaks wound up saving significant time and cost to BYU.
 - We had planned a second phase to deliver a responsive design
 - Thanks to the time we saved on the migration, we were able to include the design in the first phase deliverable.

More on Mobile-first Responsive in Drupal 8

- It's equally important website themes work well across devices, browsers, and operating systems.
- Themes provide responsive designs consumable by mobile devices.
- Most premium and contributed themes are also responsive.
 - Users are far less likely to bounce from responsive sites while on mobile
 - Search engines won't ding your rankings on mobile searches

Reasons Drupal 8 is the Most Secure to Date

1. It has far more Crucial Built-in Functionality than Prior Versions
2. Built on top of the Symfony PHP Framework
3. Twig Templates Enforce Greater Decoupling and is More Secure than PHPTemplate
4. The PHP Input Filter has Been Removed
5. The Configuration Layer Doesn't Allow PHP

More Reasons Drupal 8 is the Most Secure Drupal to Date

6. Site Configuration is no Longer in PHP
7. Improved Editor Content Entry Mechanism and Filtering
8. Hardened User Sessions and Session ID Handling
9. Automatic Cross-site Request Forgery Token Protection in Route Definitions
10. Trusted Host Patterns were added to all Requests

Final Reasons Drupal 8 is the Most Secure Drupal to Date

11. MySQL (via PDO) now Limited to Executing Single Statements
12. Clickjacking Protection Enabled by Default
13. Core JavaScript API now Compatible with Strict Content Security Policy

Conclusion: there are at least 13 reasons why D8 is more secure than prior versions of Drupal (although some of these items have been back-ported).

Performance Improvements

- Over the years, websites have gotten (mostly) faster thanks to improvements in
 - CMS caching and technology improvements
 - Server technology
 - Browsers
 - Protocols
 - etc.

Performance Improvements Continued

- People have gotten used to the idea that websites are fast.
- If your website isn't fast, users will likely bounce
 - Google may [ding your page rankings](#) (although they [claim not to](#)).
 - Yet we're expected to provide content-rich pages with fancy backgrounds
 - All while maintaining the user experience people have come to expect.

Performance Improvements Continued

- Can D8 be faster than prior versions given it's significantly more feature-rich?
 - [BigPipe](#) improves performance by sending the cacheable parts of the page first, then the dynamic/uncacheable parts.
 - D8 requires PHP 7.x, which offers a [modest performance improvements](#)
 - D8 provides a built-in [dynamic page cache](#) for logged in users
 - Caches pages minus the personalized parts.
 - D8 introduced the concept of “cache tags”
 - Allows much more precise cache invalidations.

Drupal 8 Scalability Improvements

- It ships with [RESTful Web Service APIs](#).
 - This makes it much easier to connect to other applications.
 - The possibilities of how Drupal 8 can be used are practically endless.
 - For example, Drupal can be used to [serve content to mobile applications](#).
 - Other examples might include sharing content with [Internet of Things \(IoT\) devices](#) like wearables.

More on Drupal 8 Scalability

For more information on how Drupal 8 provides better scalability

- [Highly Scalable](#)
- [Making Drupal 8 Fly.](#)
- And let's not forget that better website performance (probably) [means better SEO performance](#) in the form of higher page rankings.

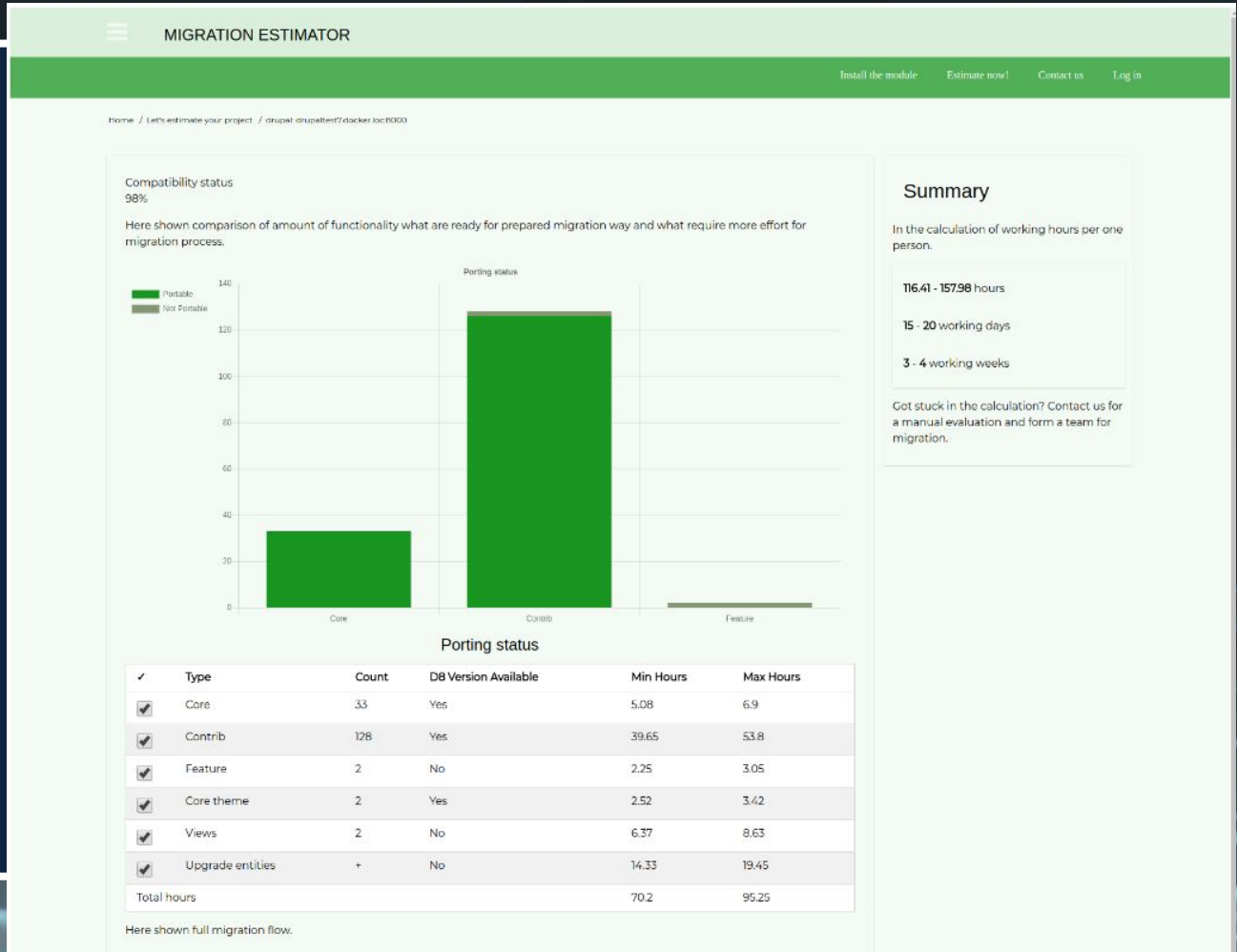
How to Rapidly Assess your Site for Ballpark Upgrade Estimates

- As of 8.6, most of the architecture and data (pages, blocks, users, tags, etc.) can be migrated with a button click after a brief configuration
- That leaves the following to be migrated manually:
 - Depreciated architecture (e.g. field collections become paragraphs)
 - Data for these can be migrated manually or with the help of custom code
 - Views
 - Contrib module settings
 - Custom themes and custom modules

Assessment Tools

- The one Webdrips has been using is [Upgrade Check](#)
 - Available for D6/7
 - Provides a very good head start to the estimation (as you'll see)
- A tool to check depreciated code to rapidly get modules updated from D8 to D9 is [available on Github and called Drupal Check](#)

Upgrade Check Overview



Upgrade Check Setup, Build, and QA Time

How will your web property be upgraded to Drupal8

#	Name	Description	Min Hours	Max Hours
1	Environment setup for migration	The Drupal 7 or Drupal 6 site to be upgraded is deployed into our development environment and verified. Drupal 8 is installed when the migration is to be executed.	8.4	11.4
2	Modules Rewrite	1. Custom modules are rewritten for Drupal 8. 2. Contrib not availability version modules for Drupal 8, and are rewritten for Drupal.	44.72	60.7
3	Prepare Upgrade entities	The time to prepare updating entity data is calculated, such as: users, user roles, nodes, node types, fields, menus and menu elements, taxonomy vocabularies and taxonomies terms, comments, image styles, etc.	14.33	19.45
4	Run Migration process	The migrate upgrade module is executed here. The time it takes to configure the migration process, because usually takes a few attempts to resolve issues that persist before successful migration.	5.88	7.98
5	Rebuild views	Views are not automatically upgraded to Drupal 8. All the views will be re-built.	6.37	8.63
6	Rebuild features	Features loose support after an automated upgrade. We need to re-package the features and build/configure the missing dependencies.	2.25	3.05
7	Site Rebuilding	Il the configuration and site rebuilding is done for missing items. For example: Panel pages, rules, display suits, cron jobs, etc.	This require manual estimation	This require manual estimation
8	Theme Building	Drupal 8 uses an entirely new templating engine Twig. The theme needs to be re-developed. Chunks of code from the present website can be reused. The exact extent of re-use can be figured only after a manual audit.	2.52	3.42
9	File Systems	The public files are handled mostly by the automated migration above. The private files need to be migrated separately. Files will has big size. Also the validation is executed at this stage to ensure 100% successful migration of files.	0.02	0.03
10	Prepare commerce	Prepare commerce. Re-Cofigure in Drupal 8 commerce. The exact extent of re-use can be figured only after a manual audit.	21	28.5
11	Data Validation	A validation process is executed to monitor and verify data consistency from the source Drupal 7 site and the post-migration Drupal 8 Site. Deployment - The migrated Drupal 8 site is deployed to staging and production.	2.52	3.42
12	QA	A standard QA process ensures UAT.	4.2	5.7
13	Site deployment	The migrated Drupal 8 site is deployed to dev, staging and production environments.	4.2	5.7
Total hours			116.41	157.98

Upgrade Check Modules & Views

MODULES PORTING EFFORT ESTIMATION

#	✓	Name	Type	DB availability	Version	Min hours	Max hours
1	✓	i18n_user	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-1.24	0	0
2	✓	variable_realm	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-2.5	0	0
3	✓	variable_store	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-2.5	0	0
4	✓	i18n_variable	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-1.24	0	0
5	✓	block	core	Yes	7.56	0.15	0.22
6	✓	addressfield	This <i>module</i> has been included with Drupal 8 core	Yes	7.x-1.2	0.42	0.57
7	✓	admin_devel	contrib	Yes	7.x-3.0-rc5	0.22	0.28
8	✓	authcache	This <i>module</i> has been included with Drupal 8 core	Yes	7.x-2.2	5.03	6.83
9	✓	authcache_ajax	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-2.2	0	0
10	✓	authcache_block	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-2.2	0	0
11	✓	authcache_builitn	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-2.2	0	0
12	✓	authcache_comment	This <i>submodule</i> has been included with Drupal 8 core	Yes	7.x-2.2	0	0

About our Drupal 8 Demo Site

- The only free [Drupal 8 hands-on demo site](#) available
 - Try it right now, without having to install it yourself.
 - Test drive the awesome new Drupal authoring environment
 - Access walkthrough tutorials
 - Add and edit pages
 - Try multiple Drupal core modules

What you can try on Our Drupal 8 Demo Site

- [Layout Builder](#): change a page layout without hiring an agency
- [Multilingual](#): provides a translation interface & workflow
- [Workflows](#) module: moderate example content on this site
- [Media and Media Library](#): add, edit, and manage media assets
- [Workspaces](#): manage pages as a group
- More ...
- Our [About Drupal 8](#) page covers all the major authoring features

DRUPAL 8.7.1 DEMO TIME





Q & A TIME

- dan@webdrips.com
- 800-930-2701 x 802
- @webdrips
- <https://webdrips.com>
- <https://demo.webdrips.com>