

Drupal CMS SEO Track Plan

This document outlines a proposal for the search engine optimization (SEO) functionality included in Drupal CMS.

The target audience for this proposal includes the following personas:

- **Marketer:** Possesses some technical knowledge but primarily seeks user-friendly marketing tools.
- **No-Code Developer/Site Builder:** Technically skilled, with a preference for configuring applications rather than writing code.

The personas outlined above have the following requirements for SEO functionality:

- **Marketer:** Seeks the ability to use SEO tools to increase or maintain ranking in search engines and social media (meta tag descriptions and images, URL paths, redirects, etc) without developer assistance, and is willing to learn how to use the available tools.
- **No-Code Developer/Site Builder:** Shares the same goals as the marketer but is also capable of handling more complex tasks like configuring meta tags, schema.org vocabularies, sitemaps, and Robots.txt

This proposal aims to address these requirements with a comprehensive solution.

Our approach is to create two recipes. The first recipe will configure the basic configurations that every site should have. The second recipe adds the most popular tools for search engine optimization and social media and configures them on any content types that are installed.

We then aim to provide guidelines for other recipes/tracks to follow to make their functionality as optimized as possible.

Our final goal is to create tests to verify the functionality of our recipes, and the overall performance of our built site.

Community Survey Results

We ran a survey to gather input from the community on how they optimize Drupal for search engines. We received 59 responses, and helped us formulate our plan and recommendations.

- [Drupal Starshot SEO Track Survey Results](#)
- Data:
 -  Drupal Starshot SEO Track Survey (Responses)
 -  Starshot OOTB survey results - SEO specific

The Plan

Create a base/basic SEO recipe

Status: Must have out of the box, applied by Drupal CMS core

Deliverable: Drupal CMS Basic SEO recipe. (**drupal_cms_seo_basic**)

We will create and deliver a basic Drupal recipe that will install and configure Drupal CMS SEO basics.

This recipe will:

- Alter core settings
 -  Caching/Performance
- Require and configure modules
 -  Token
 -  Pathauto
 -  Redirect/Redirect 404
 -  Easy Breadcrumb
 -  Hreflang
- Suggest other related recipes (@TODO when these other recipes exist.)
 -  SEO tools - https://www.drupal.org/project/drupal_cms/issues/3476550
 - Others - https://www.drupal.org/project/drupal_cms/issues/3476780
 - Analytics
 - Accessibility Tools
 - Performance

Create a SEO tools recipe

Status: Must have out of the box, optional by Drupal CMS core

Deliverable: Drupal CMS SEO tools recipe. (**drupal_cms_seo_tools**)

We will create and deliver a Drupal recipe that will install and configure Drupal CMS for success in the most popular search engines.

This recipe will:

- Require modules
 - ☒ Dashboard
 - ☒ HTML Sitemap
 - ☒ Robots.txt
 - ☒ Metatag
 - ☒ Real Time SEO
 - ☒ SEO Checklist
 - ☒ Simple XML Sitemap
 - ☒ Tour
- Configure
 - ☒ Provide fields that can be used for Meta tags
 - ☒ ~~Create an SEO Dashboard~~
 - ☒ Create an HTML Sitemap based on the Main menu
 - ☒ Configure Robots.txt module for the HTML Sitemap
 - ☒ Provide configured Metatag defaults
 - ☒ Configure Real Time SEO on existing content types
 - ☒ Provide an SEO Checklist
 - ☒ Configure an XML Sitemap
 - ☒ ~~Create SEO Tours~~
- Suggest other related recipes
 - ☒ Analytics
 - ☒ Accessibility Tools

~~Create an SEO Dashboard~~

A common thread in the survey results is that finding and configuring everything in Drupal is difficult. Let's gather together all of the SEO-related features of Drupal and put them in a single place using <https://www.drupal.org/project/dashboard>

- ☒ Useful links - Links to configuration forms of SEO-related core and modules
 - ☒ Robots.txt
 - ☒ HTML Sitemap
 - ☒ Metatag defaults
 - ☒ Add Redirect
 - ☒ SEO Checklist
 - ☒ Real Time SEO
- UX Review - The Dashboard should have a UX review - https://www.drupal.org/project/drupal_cms/issues/3476802

Tours

- ☒ ~~SEO Dashboard tour~~
- ☒ SEO Checklist
- Metatag defaults - https://www.drupal.org/project/drupal_cms/issues/3476782

- entity.metatag_defaults.collection
 - A default
- Simple Sitemap (XML) - https://www.drupal.org/project/drupal_cms/issues/3476785
 - entity.simple_sitemap.collection
- Redirect - https://www.drupal.org/project/drupal_cms/issues/3476788
 - redirect.list
 - redirect.add
 - redirect_404.fix_404
- Pathauto - https://www.drupal.org/project/drupal_cms/issues/3476791
 - Entity.pathauto_pattern.collection
- Drupal core > path_alias - https://www.drupal.org/project/drupal_cms/issues/3485060
 - entity.path_alias.collection
 - Entity.path_alias.add_form

Define Best Practices Requirements for Drupal CMS recipes

https://www.drupal.org/project/drupal_cms/issues/3476804

Status: Must have out of the box

Deliverable: Guidelines

A sitewide SEO recipe can add structure and functionality to set the groundwork for an optimized site. Such a recipe can also update existing content types if they exist during recipe application.

What a sitewide SEO recipe cannot do is update any configuration on any content types that are added after it is applied.

Because of this, we aim to define best practices for each Content type to be included in the Drupal CMS. These requirements will be distributed to the other track leads to be used as a guide in their entity creation. In our next phase, we aim to create tests to ensure these requirements are followed.

Fields

To ensure we have correctly structured data, we propose that all content types have the following fields:

- SEO Title

- SEO Description
- SEO Image

With a minimum of these three fields, we can define meta images and descriptions for search engines and social media sites without needing the Drupal metatag field on node edit forms as it is a performance and UX liability.

Using fields also allows for more streamlined AI integration, as content admins can use the AI module to populate or use ECA to have AI automate the needed content.

These fields should be organized in the node forms using a fieldgroup, and will not be displayed in the front-end rendering of the node.

The fallback in Meta tags would be as follows:

None

```
node:field_seo_page_title -> node:title  
node:field_seo_description -> node:summary  
node:field_seo_image -> ???
```

The Drupal CMS Advanced Recipe adds these fields to content types if they exist at the time of the Advanced SEO recipe application. To offset the risk of not having them, we should work to ensure that all recipes that create content types have these fields to start with.

Meta tags

All recipes that create a content type must create a `metatag.metatag_default.*.yaml` config.

URL Paths

All recipes that create a content type must create a `pathauto.pattern.*.yaml` config.

XML Sitemap

All recipes that create a content type must create a `simple_sitemap.bundle_settings.default.node.*.yaml`

Schema.org Vocabularies

Both Google and Bing define the schema.org vocabularies that they consume. Google provides a [Google Rich Results test](#) where you can enter snippets of code, or full urls to validate the structure of the data is correct and complete.

The following is a list of supported Schema types as defined in [Google Search Console's help page for the Rich Results test](#), organized by the proposed Drupal entity type. Another tool we can reference what content types Google prioritizes is the [Structured Data Markup Helper](#).

We must determine which the content types that are included in Drupal CMS fall into each of the following categories, and require that they provide a data structure that passes the defined requirements for inclusion in Google's rich features.

Sitewide

- [Breadcrumb](#) {Bing} - Will be configured by the SEO recipe using the Easy Breadcrumb module.

Advanced Search Track

- [Sitelinks searchbox](#) - Should be configured in the Search recipes.

Blog Track

- [Article](#) - Blog post

Event Track

- [Event](#) {Bing} - Event

Content type

- [Course info](#) N/A at this time.
 - [Course list item](#) N/A at this time.
- [Fact check \(ClaimReview\)](#) {Bing} N/A at this time.
- [FAQ](#) N/A
- [Hotels](#) N/A
- [Job posting](#) N/A at this time.
 - [Estimated salary](#) N/A at this time.
 - [Employer aggregate rating](#) N/A at this time.
- [Local business](#) N/A at this time.
- [Movie](#) N/A at this time.
- [Organization](#) {Bing} N/A at this time.
- [Practice Problems](#) (Quiz) N/A at this time.
- [Product snippet](#) (Product, Review, Offer) {Bing} N/A at this time.
 - [Merchant listings](#) N/A at this time.
 - [Review snippet](#) {Bing} N/A at this time.

- [Employer aggregate rating](#) N/A at this time.
- [Profile page \(People\)](#) {Bing} N/A at this time.
- [Q&A page](#) N/A at this time.
 - [Education Q&A](#) N/A at this time.
- [Recipe](#) {Bing} N/A at this time.
- [Software app](#) N/A at this time.
- [Vacation rental](#) N/A at this time.
- [Vehicle listing](#) N/A at this time.

Media

- [Image metadata](#) - We could handle in the SEO recipe
- [Video](#) - We could handle in the SEO recipe
 - [Learning video](#) N/A at this time.

Comment

- [Discussion forum](#) N/A at this time.

Sitewide Alerts (Contrib module)

- [Special Announcement](#) N/A at this time.

Views

- [Carousel \(ItemList of Course list, Movie, Recipe, Restaurant\)](#) N/A at this time.
- [Dataset](#) N/A at this time.

Other

- [Math solvers](#) N/A at this time.
- [Paywalled content](#) N/A at this time.
- [Subscribed Content](#) N/A at this time.

Create tests

Status: Should have out of the box

Deliverable: Tests

- Functional tests to enforce Content recipe requirements - https://www.drupal.org/project/drupal_cms/issues/3476805
- Lighthouse - https://www.drupal.org/project/drupal_cms/issues/3479394
 - [Drupal Stack Pack](#) (Recommendations)
-  Cypress e2e - https://www.drupal.org/project/drupal_cms/issues/3479386

-  Base SEO Recipe -
https://www.drupal.org/project/drupal_cms/issues/3479610
- Advanced Recipe - @TODO

Marketing Platform Integrations

Status: Won't have

Deliverable: TBD

- These are the marketing platforms that were documented in the Starshot Product brief.
 - Mid-market analytics:
 -  Google Analytics (Assumed in other Drupal CMS Recipes)
 - Mid-market SEO tools:
 -  Real-Time SEO for Drupal (Yoast) (Advanced SEO Recipe)
 -  Google Search Console (Link from SEO Dashboard)
 -  Semrush (Paid service, not going to include.)
 -  Rank Math (WordPress plugin) - No Drupal version
 - Mid-market social media
 -  Hootsuite - no module
 -  Buffer - D7 module only
<https://www.drupal.org/project/bufferapp>