Drupal User Guide

This guide was written mainly for people with minimal knowledge of the Drupal content management system. The topics will help them become skilled at installing, administering, site building, and/or maintaining the content of a Drupal-based website. The guide is also aimed at people who already have some experience with a current or past version of Drupal, and want to expand the range of their skills and knowledge or update them to the current version. The guide is kept up-to-date with the current major version of the core software. Currently Drupal 10.

Contents

Preface

Copyright

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Audience and Goal

This guide was written mainly for people with minimal knowledge of the Drupal content management system. The topics will help them become skilled at installing, administering, site building, and/or maintaining the content of a Drupal-based website. The guide is also aimed at people who already have some experience with a current or past version of Drupal, and want to expand the range of their skills and knowledge or update them to the current version.

This guide assumes that you have already decided you want to learn and use Drupal. If you need to learn more before deciding, see Section 1.1, "Concept: Drupal as a Content Management System".

Depending on which aspects of Drupal you would like to learn, you will need some background knowledge to understand this guide: general Internet skills and knowledge are assumed, and the guide concentrates on how to use the software itself. For instance, the sections about installing Drupal on a web server assume you can obtain web hosting and figure out how to transfer files to your chosen web host. Similarly, the sections about content management assume you can log into a website and fill in a web-based form.

After reading this guide, you should be able to:

- Plan the content architecture for a Drupal-based site
- Build the site that you planned
- Manage and administer your site

- Understand documentation and blog posts on topics not covered here, to expand your knowledge and skills
- Connect with the worldwide Drupal community

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Organization

This user guide contains a series of topics, each of which covers either a *task* (how to do something) or a *concept* (background knowledge, terminology, and the like). Concept topics have names starting with *Concept:*, while task topics have names containing verbs, like *Editing Basic Site Information*.

The topics are grouped into chapters in a logical order, with concepts and tasks interleaved so that concepts are presented before related tasks, and tasks build on each other. To take advantage of this, you are encouraged to read the entire guide in its presented order, possibly skipping topics that are not of interest or that present information you already know. Remember to try out the tasks on your own site as you read the guide; most people learn better by doing rather than reading.

If you prefer, you can also use the index or table of contents to jump straight to a topic that you'd like to learn about, rather than reading the entire guide. To facilitate this approach, each topic lists the prerequisite knowledge that you'd need in order to understand it, if any (with links to the topics that present that knowledge); task topics also list *site prerequisites* (things that you would need to have configured or created on your site in order to perform the task). Also, most topics have sections at the end where you can find related information and/or tasks for expanded understanding, to continue your learning.

You may also want to refer to the Glossary section as you read — it gives brief definitions of most of the terminology used in the guide, with links to topics having more detailed explanations.

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Reporting Problems

Goal

Report a problem with this guide, such as:

- Information that is incorrect or does not follow best practices
- Steps that do not work
- Screenshots or text that doesn't match what you see on the screen
- Unclear writing
- Places where a table or screenshot would help clarify the text
- Failure to define terminology
- Missing knowledge prerequisites or site prerequisites for a topic
- Typographical, spelling, grammar, or formatting errors
- Broken links

Steps

1. Make a note of the topic or topics that contain the problem you have found.
2. Log in to *Drupal.org* (you will need to create a user account if you do not already have one).
3. Visit the User Guide issues page on *Drupal.org*.
4. Verify that the problem you found has not already been reported in another issue:
   - If there are only a few open issues, scan the *Summary* column to see if any of their descriptions match the problem you found. You may also need to read some of the issues to make sure, which you can do by clicking the links in the *Summary* column.
   - If the open issue list is long, enter either a keyword related to the problem you found or the title of the topic where the problem occurs in the *Search for* box, and click *Search* to reduce the issue list. Then either scan the summaries or read the issues to see if they match your problem.
5. If you determine that your problem has not already been reported, click *Create a new issue*, and fill in the issue report as follows:

Field name	Explanation	Example value
Title	Short summary of the problem you found	Instructions in "Adding a Content Type" do not work
Category	Type of issue being reported	Bug report
Version	Version of the guide you found the problem in	9.1.x-dev
Issue summary	Details of the problem you found	In the "Adding a Content Type" topic, in step 3, when I clicked *Save*, I got the following error message: ...

6. Reread the *Title* and *Issue summary* you entered, and verify that the following information is included in your report:
   - A complete description of the problem you found
   - The name of the topic or topics where you found the problem
   - The language you are reading the guide in (if not English)
   - If you read the guide on a website, a link to the page or pages with the problem
7. Click *Save* to create the issue.
8. Check back on the issue in a few days. If one of the project maintainers has asked for clarification, respond by adding a comment to the issue.

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Conventions of the Guide

Assumptions and prerequisites

This guide has the following assumptions and prerequisites:

- This guide covers the current major version of the core software.

- This guide is organized into topics; see the section called "Organization" for details. Many topics include a *Prerequisite knowledge* section, which lists other topics whose content knowledge is needed in order to understand the topic you are reading. Some background knowledge that is not covered in the guide is also assumed; see the section called "Audience and Goal" for details.
- Many task topics list *Site prerequisites*, which are tasks that you'll need to have completed on your site before you'll be able to do the task in the topic you are reading.
- The specifics of the site prerequisites relate to the scenario used throughout this guide of building a site for a farmers market (see the section called "Guiding Scenario" for details). You can adapt the tasks to your own scenario, but you will also need to remember the changes you made when deciding if your site satisfies the site prerequisites for a task.
- For all task topics after Section 3.7, "Running the Interactive Installer", there is also an implicit prerequisite: you must have installed the latest stable version of the content management software on your site, and be logged in to a user account with sufficient permissions to do the task (such as the user account created when you installed your site, which automatically has full permissions).
- If you read all the topics in order, and perform all of the steps in the task topics as you go (staying logged in), you should have the background knowledge and site prerequisites in place for each topic as you read it.
- This guide demonstrates how to perform tasks using the administrative user interface, and wherever possible, also using the latest stable version of the Drush command-line tool (see Section 3.2, "Concept: Additional Tools"). You can feel free to use a different command-line tool, such as Drupal Console (if you look up equivalent commands), or to only use the administrative interface for now.

Text conventions

The following conventions are used in the text of this guide:

- The URL *example.com* means the base URL of your website. See the Navigation section below for more details on how URLs internal to your site are indicated.
- Text you should see in the user interface of your site is shown in *italics*, such as: Click *Save configuration*. This only applies to text in the user interface that comes from the software, not to text that was entered in a previous topic. For example, in a topic about editing, you might see this instruction: Click *Edit* in the row of the About page (*Edit* would be in italics, but About would not be, because the About page was created in a previous topic).
- URLs, file names, and newly-introduced terminology are also shown in *italics*.
- Text that you should type at a shell command line is shown in monospace type, such as:

```
drush cache:rebuild
```

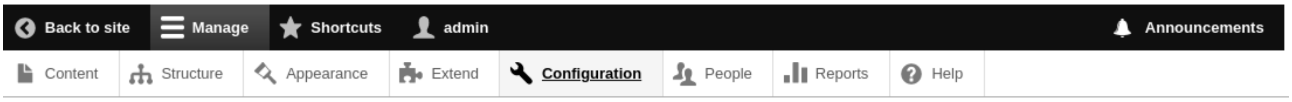
- Within this guide, the word *directory* is always used to refer to file directories (which some people prefer to call *folders*).

Navigation

To do most of the task topics in this guide, you will need to navigate to one or more pages in the administrative interface of your site. You might see something like this in the instructions (this will make more sense after you have the base software installed):

In the *Manage* administrative menu, navigate to *Structure* > *Taxonomy* (*admin/structure/taxonomy*).

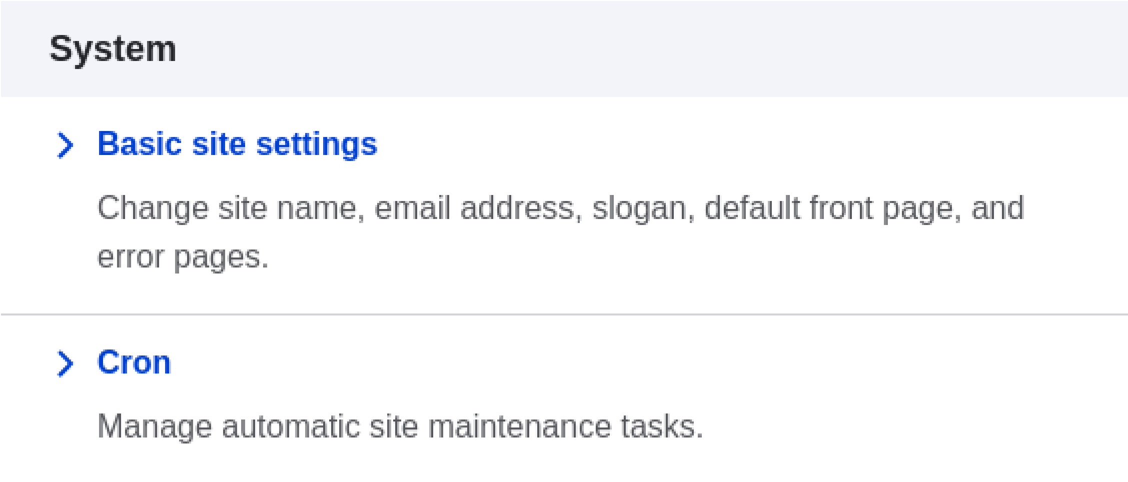
Navigation instructions like this assume that you have the core Toolbar module installed, and this example means that in the menu bar at the top of your site, you would need to click *Manage* to expose the menu choices, then click *Structure*, then *Taxonomy*, and that at the end, you would be on a page with URL *http://example.com/admin/structure/taxonomy* (if your site base URL is *http://example.com*).



Here's another example:

In the *Manage* administrative menu, navigate to *Configuration* > *System* > *Basic site settings* (*admin/config/system/site-information*).

In this example, after clicking on *Manage* and *Configuration*, you would need to find the *System* section of the page, and within that, click *Basic site settings*. After that, you'd end up on *http://example.com/admin/config/system/site-information*.



One other note: if you are using the standard administrative core Seven theme, many "Add" buttons in the administrative interface are displayed with + signs on them. For instance, on admin/content, the Add new content button appears as + *Add new content*. However, this is theme-dependent and is not really part of the text on the button (for instance, it would not necessarily be read by a screen reader), so in this guide, the convention is to not mention the + sign on the buttons.

Filling in forms

Many of the task topics in this guide include steps where you will fill out a web form. In most cases, a screen capture image of the form will be included, along with a table of the values you will need to enter into each form field. For example, you might see a table that starts out like this, explaining the site information form you would see if you navigated to *Configuration* > *System* > *Site information* (*admin/config/system/site-information*):

Field name	Explanation	Example value
Site details > Site name	Name of your site	Anytown Farmers Market

To use this table, find the field labeled *Site name* in the section that is under *Site details* in the form, and enter the name of your site in this field. An example site name of "Anytown Farmers Market" is suggested in the table, which relates to the scenario of building a website for a farmers market that you'll find all through this guide (see the section called "Guiding Scenario" for details). Also note that on some forms, you might have to click a section title (like *Site details* in this example) to expand the section and find the field it contains.

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Guiding Scenario

When reading this guide, it is helpful to have a website building project in mind. The following project scenario provides context and links together the examples in this guide:

You are making a website for a farmers market. The site needs to display information about the location and hours of the market, and an About page with the history of the market. It also needs to list the vendors. Vendors should be able to edit their listings (including a logo or photo), and post recipes. Site visitors should be able to browse recipes, or locate recipes using ingredients that they purchased at the market. Some visitors to your site speak another language, so the main pages and vendor pages need to be translated.

As you read through the guide and try out the tasks it describes, you may choose to follow the scenario exactly; you could also modify the tasks to suit your purposes. If you do want to follow the scenario exactly, you'll find that you need some image files, which are located in the *assets* directory of the *.zip* or *.tgz* file download available on the User Guide project page.

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Chapter 1

Understanding Drupal

1.1 Concept: Drupal as a Content Management System

What is a Content Management System?

A content management system (CMS) is a software tool that lets users add, publish, edit, or remove content from a website, using a web browser on a smartphone, tablet, or desktop computer. Typically, the CMS software is written in a scripting language, and its scripts run on a computer where a database and a web server are installed. The content and settings for the website are usually stored in a database, and for each page request that comes to the web server, the scripts combine information from the database and *assets* (JavaScript files, CSS files, image files, etc. that are part of the CMS or have been uploaded) to build the pages of the website.

The combination of the operating system that the CMS runs on, the scripting language it is written in, the database it stores its information in, and the web server that runs the scripts to retrieve information and return it to the site visitor's web browser is known as the *stack* that the CMS runs on; the commonly used combination of the Linux operating system, Apache web server, MySQL database, and PHP scripting language is known as the *LAMP stack*.

What is Drupal?

Drupal is a flexible CMS based on the LAMP stack, with a modular design allowing features to be added and removed by installing and uninstalling *modules*, and allowing the entire look and feel of the website to be changed by installing and uninstalling *themes*. The base Drupal download, known as Drupal Core, contains the PHP scripts needed to run the basic CMS functionality, several optional modules and themes, and many JavaScript, CSS, and image assets. Many additional modules and themes can be downloaded from the *Drupal.org* website.

Drupal can also run on other technology stacks:

- The operating system can be Windows or Mac OS instead of Linux.
- The web server can be Nginx or IIS instead of Apache.
- The database can be PostgreSQL or SQLite instead of MySQL, or a MySQL-compatible replacement such as MariaDB or Percona.

Other operating systems, web servers, and databases can also be made to work; however, the scripts that the software uses are written in PHP, so that cannot be changed.

What are the reasons for using Drupal?

When building a website, you have your choice of using one of the many existing CMS packages and hosted services, developing your own CMS, or building the site without using a CMS. Here are some of the reasons you might choose to use Drupal:

- Building a small, simple site with static HTML pages is not difficult, and you can get a simple site up very quickly. Setting up a site in a CMS generally requires more time initially, but brings you the benefits of on-line editing (easier for less experienced content maintainers), uniformity (harder to maintain using static HTML for larger sites), and the possibility of more complex features requiring a database.
- Some CMS software is special-purpose; for instance, there are packages and hosted services that you can use to build a blog or a club membership website. Drupal, in contrast, is a general-purpose CMS. If you are building a special-purpose site, you might choose to use a special-purpose CMS; however, if your site falls even slightly outside the intended purpose, you will probably be better off using a general-purpose CMS rather than trying to adapt a special-purpose CMS.
- Building your own CMS-type software can seem attractive. However, using a general-purpose CMS like Drupal as a starting point is usually a better idea, because the basic CMS functionality (such as user accounts and content management) has thousands of developer hours behind it, including many years of user testing, bug fixing, and security hardening.
- Some CMS software packages are expensive to purchase a license for. Some are free or have a free version, but have restrictive licenses that do not allow you to make modifications and extensions. You might prefer to use a package (like Drupal) that has a less restrictive software license, and is developed by a world-wide community. See Section 1.6, "Concept: The Drupal Project" for more on this topic.

Related topics

- Section 1.2, "Concept: Modules"
- Section 1.3, "Concept: Themes"
- Section 1.4, "Concept: Distributions"
- Section 1.6, "Concept: The Drupal Project"

Additional resources

- *Drupal.org* community documentation page "Understanding Drupal: Overview"
- *Drupal.org* page "FAQ" (Frequently Asked Questions)
- *Drupal.org* page "Case Studies"
- Wikipedia page "Content management systems"
- Wikipedia page "Modular design"

Attributions
Written and edited by Kristof van Tomme at Pronovix, Jennifer Hodgdon, and Michael Lenahan at erdfisch.

1.2 Concept: Modules

Prerequisite knowledge

Section 1.1, "Concept: Drupal as a Content Management System"

What is a module?

A module is a set of PHP, JavaScript, and/or CSS files that extends site features and adds functionality.

You can turn the features and functionality on by *installing* the module, and you can turn it off by *uninstalling* the module; before uninstalling, you may need to remove data and configuration related to the feature or functionality.

Each module that is installed adds to the time needed to generate pages on your site, so it is a good idea to uninstall modules that are not needed.

The core download provides modules for functionality such as:

- Managing user accounts (the core User module)
- Managing basic content (the core Node module) and fields (the core Field and Field UI modules; there are also core modules providing field types)
- Managing navigation menus (the core Menu UI module)
- Making lists, grids, and blocks from existing content (the core Views and Views UI modules)

You can download additional *contributed modules* from the *Drupal.org* Module Downloads, or create your own *custom modules*.

Related topics

- Section 1.3, "Concept: Themes"
- Section 1.4, "Concept: Distributions"
- Section 4.4, "Uninstalling Unused Modules"
- Section 11.1, "Finding Modules"
- Section 11.3, "Downloading and Installing a Module from *Drupal.org*"
- Section 13.3, "Concept: Security and Regular Updates"
- Section 13.6, "Updating a Module"

Additional resources

Drupal.org community documentation page "Module developer's guide"

Attributions

Written by Jennifer Hodgdon.

1.3 Concept: Themes

Prerequisite knowledge

Section 1.1, "Concept: Drupal as a Content Management System"

What is a Theme?

A theme is a set of files that define the visual look and feel of your site. The core software and modules that run on your site determine which *content* (including HTML text and other data stored in the database, uploaded images, and any other asset files) is displayed on the pages of your site. The theme determines the HTML markup and CSS styling that wraps the content.

The core software provides several basic themes with the core distribution. These themes have largely been designed and built by the community over the last several years and will all be good choices for building your first sites and becoming more familiar with how the core software works.

Drupal is a well-established CMS so the market for 3rd party themes - both free and paid - is very robust.

If none of the 3rd party options suit your needs, you'll need to create a custom theme. A custom theme can be as simple as a single CSS file that adds styling to the markup provided by the core software. Guidance for creating custom themes in Drupal can be found in the *Drupal.org* community documentation page "Theming Drupal".

Related topics

- Section 11.4, "Finding Themes"
- Section 11.5, "Downloading and Installing a Theme from *Drupal.org*"
- Section 1.2, "Concept: Modules"

Additional resources

Drupal.org community documentation page "Theming Drupal"

Attributions

Written and edited by John Grubb and Jennifer Hodgdon.

1.4 Concept: Distributions

Prerequisite knowledge

- Section 1.1, "Concept: Drupal as a Content Management System"
- Section 1.2, "Concept: Modules"
- Section 1.3, "Concept: Themes"

What are Distributions?

Distributions provide site features and functions for a specific type of site as a single download containing the core software, contributed modules, themes, and pre-defined configuration. A distribution makes it possible to set up a complex site for a specific purpose, in fewer steps than installing and configuring elements individually.

There are two main types of distributions:

Full-featured Distributions A full-featured distribution is a project that provides a complete solution to set up a site for a specialized purpose, such as academic, business, government, nonprofit, publishing, social, etc. For example, you could use an existing distribution for farmers markets to build your own website, or you could share your set-up for the farmers market site as a distribution for others to use.

Other Distributions Distributions can also be quick-start tools that developers and site builders can use as a starting point.

Related topics

Section 14.1, "Connecting with the Community"

Additional resources

Drupal.org Drupal Distribution Downloads

Attributions

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1.5 Concept: Types of Data

What are the types of data?

The data and information on your site is divided up into four types, which are edited, translated, and stored differently. These four types are:

Content Information (text, images, etc.) meant to be displayed to site visitors. This type of information tends to be relatively permanent, but can normally be edited.

Configuration Information about your site that is not content, but is also relatively permanent, and is used to define how your site behaves or is displayed. It is sometimes also displayed to site visitors, but tends to be smaller pieces of text (like field labels, the name of your site, etc.) rather than larger chunks that you'd normally think of as Content.

State Information of a temporary nature about the current state of your site, such as the time when cron jobs were last run.

Session Information about individual site visitors' interactions with the site, such as whether they are logged in and their cookies. This is technically a subtype of State information, since it is also temporary.

Related topics

- Section 2.3, "Concept: Content Entities and Fields"
- Section 13.1, "Concept: Cron"
- Section 7.1, "Concept: Users, Roles, and Permissions"
- Section 2.7, "Concept: User Interface, Configuration, and Content translation"

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1.6 Concept: The Drupal Project

Prerequisite knowledge

Section 1.1, "Concept: Drupal as a Content Management System"

What is Free and Open Source Software?

Free and Open Source Software (FOSS) is software that is developed by a community of people, released under a non-commercial license, and whose *source code* (the program files that make up the software) is freely available. For more information on the non-commercial license used by Drupal, see Section 1.7, "Concept: Drupal Licensing".

What is the Drupal project?

The Drupal project is a FOSS project whose purpose is to develop the core content management system software, as well as add-on modules, additional themes, translations, documentation, and special-purpose distributions. The people who contribute their time and money to the Drupal project come from all over the world, and are a diverse community that comes together for this common purpose.

The community encompasses many smaller groups who perform many different tasks such as developing a particular piece of Drupal-related software, writing documentation, maintaining the security of Drupal software, translating Drupal software into a particular language, using Drupal for some specific purpose, and coming together to meet in person within a particular geographical area.

For more on how you can connect to and communicate with the world-wide community, see Section 14.1, "Connecting with the Community" and Section 14.2, "Getting Support".

What is the Drupal Association?

The Drupal Association is a non-profit organization dedicated to supporting the Drupal project and community. Its main functions are:

- Putting on large conventions around the world
- Maintaining the *Drupal.org* websites and the servers that they run on
- Promoting Drupal as a web platform
- Supporting Drupal education and training
- Providing grants to the Drupal community in support of its mission
- Raising funds for these purposes

Related topics

- Section 1.7, "Concept: Drupal Licensing"
- Section 13.3, "Concept: Security and Regular Updates"
- Section 14.1, "Connecting with the Community"
- Section 14.2, "Getting Support"

Additional resources

- Drupal project governance
- Drupal Code of Conduct

Attributions
Written by Jennifer Hodgdon.

1.7 Concept: Drupal Licensing

Prerequisite knowledge

Section 1.1, "Concept: Drupal as a Content Management System"

What is Drupal Licensing?

Drupal and all contributed files hosted on *Drupal.org* are licensed under the GNU General Public License (GPL), version 2 or later. That means you are free to download, reuse, modify, and distribute any files that are part of a project on *Drupal.org* under the terms of GPL version 2 or 3. You can also run the core software in combination with any code with any license that is compatible with version 2 or 3.

Drupal contributors should follow these guidelines:

- All files (PHP, JavaScript, images, Flash, etc.) that are part of a project on *Drupal.org* have to be under GPL version 2 or later.
- All Drupal contributors retain copyright on their code, but agree to release it under the same license as Drupal.

- Drupal modules and themes are a derivative work of Drupal. If you distribute them, you must do so under the terms of GPL version 2 or later.
- All content on *Drupal.org* itself is copyrighted by its original contributors, and is licensed under the Creative Commons Attribution-ShareAlike license 2.0.
- Sample code on *Drupal.org* is also available under GPL version 2 or later.

Related topics

Section 14.1, "Connecting with the Community"

Additional resources

- *Drupal.org* page on "Licensing"
- "Drupal LICENSE.txt" page on *api.drupal.org*
- GNU General Public License, version 2
- GNU General Public License, version 3
- Creative Commons Attribution-ShareAlike license 2.0.
- "Legal Group" on *groups.drupal.org*

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Chapter 2

Planning Your Site

2.1 Concept: Regions in a Theme

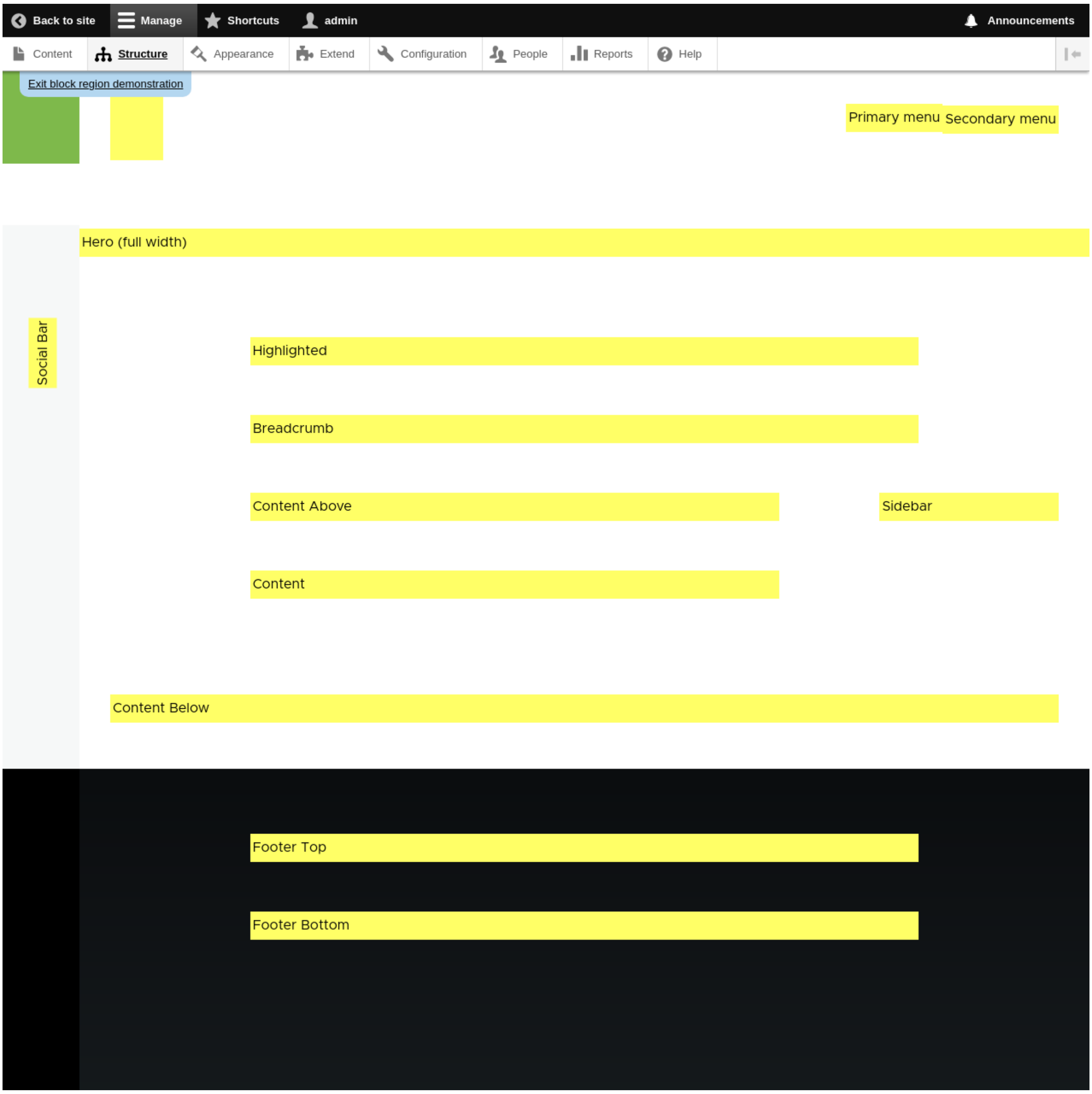
Prerequisite knowledge

Section 1.3, "Concept: Themes"

What is a region?

Besides its primary content, a web page contains other content such as site branding (site name, slogan, and logo), navigation aids (menus, links, and icons), formatted text, and images. Each theme provides a set of named regions, such as *Header*, *Content*, and *Sidebar*, where site builders may choose to place their content.

The available regions depend on the theme design. Only the Content region, which contains the primary content, is required; others are optional. The core Olivero theme provides the regions highlighted in the following image.



Related topics

- Section 8.1, "Concept: Blocks"
- Section 2.3, "Concept: Content Entities and Fields"
- Section 8.3, "Placing a Block in a Region"

Attributions
Written and edited by John MacDonald, Michael Lenahan at erdfisch, and Joe Shindelar at Drupalize.Me.

2.2 Planning Your Site Layout

Goal

Plan the navigation and layout of the site, for both mobile and desktop browsers.

Prerequisite knowledge

- Section 1.3, "Concept: Themes"
- Section 2.1, "Concept: Regions in a Theme"
- the section called "Guiding Scenario"

Steps

It is a good idea to plan the site layout before you start building the site and writing content; however, your plan may need to be revised either before you start implementing it or after you have some of the site built with draft content in place, based on budgetary concerns or stakeholder feedback.

1. Make a list of the information that your site should present to visitors. In the farmers market scenario, this might include:
   - Location of the market, with directions and a map
   - Hours and days the market is open
   - History of the market
   - List of vendors
   - Details about each vendor
   - Searchable list of recipes
   - Details about each recipe
   - List of the most recently added recipes
2. Decide which information should be on which pages or types of pages on the site:

   Information that should be on all pages Address, hours, and recently-added recipes list

   Vendor details pages Information about each vendor on its own page

   Recipe details pages Details of each recipe on its own page

   Home page Location, map, directions, and hours

   About page History of the market

   Vendors list page List of vendors, with links to vendor detail pages

   Recipe list page Searchable list of recipes, with links to recipe detail pages
3. Decide which information is the most important on each page. Site visitors using mobile phones or other small browsers will often only see the content that is presented first, and they may not scroll down to see all of the information.
4. Decide which of these pages should appear in the main site navigation. For instance, the main navigation might consist of the Home, About, Vendors, and Recipes pages.
5. Make a rough design sketch for each page, showing how it would look when viewed on a small screen such as a phone, as well as on a larger screen such as a desktop browser. Considering that most site visitors will be using smaller browsers, it is a good idea to start with the phone-size layout, to make sure that these visitors will be able to find the information they need without too much scrolling.

In making these page layout plans, you might find that you need to revise your plan for which information should be on which pages. For example, you might decide that the address, hours, and recently-added recipes list would all fit well in the right sidebar area of all pages, when the site is viewed on desktop-sized browsers. On the other hand, you might decide that for mobile browsers, you would instead put the address and hours in a short format at the top of each page, but only display the recent recipe list at the bottom of the home page.

Expand your understanding

Section 2.5, "Planning your Content Structure"

Videos

Planning Your Site Layout

Planning Your Site Layout
Attributions
Written by Jennifer Hodgdon.

2.3 Concept: Content Entities and Fields

Prerequisite knowledge

- Section 1.5, "Concept: Types of Data"
- Section 1.2, "Concept: Modules"

What is a content entity?

A *content entity* (or more commonly, *entity*) is an item of content data, which can consist of text, HTML markup, images, attached files, and other data that is intended to be displayed to site visitors. Content entities can be defined by the core software or by modules.

Content entities are grouped into *entity types*, which have different purposes and are displayed in very different ways on the site. Most entity types are also divided into *entity subtypes*, which are divisions within an entity type to allow for smaller variations in how the entities are used and displayed. Here is a table of some common content entity types:

Entity type	Entity subtype	Defining Module	Main uses
Content item	Content type	Node module	Content intended to be the main page area for pages on the site
	Example: In the farmers market site example, you might have content types for basic pages, vendor pages, and recipe pages.		
Comment	Comment type	Comment module	Commentary added to content entities (typically to Content item entities)
	Example: On a blog site, blog posts might have comments. They are not needed in the farmers market site example.		
User profile	(none)	User module	Data related to a person with a user account (login access) on the site
	Example: Every site has at least basic user profiles with user names and email addresses; social networking sites may have more complex user profiles with more information.		

Entity type	Entity subtype	Defining Module	Main uses
Custom block	Block type	Custom Block module	Text and images in smaller chunks, often displayed in the site header, footer, or sidebar
	Example: In the farmers market site example, you might put the hours and location in a sidebar block.		
Taxonomy term	Vocabulary	Taxonomy module	Used to classify other types of content
	Example: In the farmers market site example, you might classify Recipe content with an Ingredients taxonomy vocabulary, with taxonomy terms like Carrots and Tomatoes. In a blogging site, blog posts might be classified using a Tags vocabulary, and perhaps also a Categories vocabulary.		
File	(none)	File module	An image or attachment file that is tracked and managed by the site, often attached to other types of content
	Example: In the farmers market site example, both Recipe and Vendor pages might have image attachments, which would (behind the scenes) be managed as File entities by the site.		
Contact form	Form type	Contact module	A form that lets site visitors contact site owners
	Example: A contact form is needed in the farmers market site example.		

What is a field?

Within entities, the data is stored in individual *fields*, each of which holds one type of data, such as formatted or plain text, images or other files, or dates. Field types can be defined by the core software or by modules.

Fields can be added by an administrator on entity subtypes, so that all entities of a given entity subtype have the same collection of fields available. For example, the Vendor content type in the farmers market example might have fields for the vendor name, a logo image, website URL, and description, whereas the *Basic page* content type might only have fields for the title and page body. When you create or edit entities, you are specifying the values for the fields on the entity.

Related topics

- Section 2.5, "Planning your Content Structure"
- Section 5.2, "Creating a Content Item"
- Section 6.1, "Adding a Content Type"
- Section 6.5, "Concept: Taxonomy"
- Section 7.1, "Concept: Users, Roles, and Permissions"
- Section 8.1, "Concept: Blocks"

Attributions

Written and edited by Jennifer Hodgdon and Grant Dunham.

2.4 Concept: Modular Content

Prerequisite knowledge

- Section 2.3, "Concept: Content Entities and Fields"
- Section 2.2, "Planning Your Site Layout"

What is modular content?

Given that the content of your site is stored in a database, it is desirable to make the content *modular*, meaning that certain pages on your site, rather than being edited as a whole page, are instead generated automatically from other content items. For instance, in the farmers market site scenario, you might create individual content items for recipes. If the recipe content items have a field that keeps track of ingredients, then your site could include a composite page that would list recipes, and allow visitors to search for a recipe that contained some particular ingredient they had bought at the market.

Smaller sections of pages can also be generated as composites. For instance, recipe content items could have a field that keeps track of which vendor submitted the recipe (see Section 6.4, "Concept: Reference Fields"), with the vendor details edited in separate vendor content items. This would allow you to do the following on your site:

- On each Recipe page, there could be an area that displays some information about the vendor that submitted the recipe, such as their name and market stall number.
- Each vendor page could have a section that lists the recipes they have submitted.

The key idea is that each piece of information is only edited in one place. When vendor information is updated, all recipe pages that display that vendor information are automatically updated; when a recipe is submitted by a vendor, it is automatically displayed on the vendor page. The core Views module is the usual way to use modular content to create composite pages and page sections; see Section 9.1, "Concept: Uses of Views" for more information. Also, *view modes* are useful for defining different ways to display each content item; see Section 6.10, "Concept: View Modes and Formatters" for more information.

Related topics

- Section 2.5, "Planning your Content Structure"
- Section 6.1, "Adding a Content Type"
- Section 6.3, "Adding Basic Fields to a Content Type"
- Section 6.4, "Concept: Reference Fields"
- Section 6.10, "Concept: View Modes and Formatters"
- Section 9.1, "Concept: Uses of Views"

Attributions
Written by Jennifer Hodgdon.

2.5 Planning your Content Structure

Goal

Make a plan for the content structure of the site (which type and subtype of entity to use for which content), and which pages will contain listings of content.

Prerequisite knowledge

- Section 2.3, "Concept: Content Entities and Fields"
- Section 2.4, "Concept: Modular Content"
- the section called "Guiding Scenario"

Steps

1. Brainstorm about what content your site needs to contain, which could include content that visitors would be looking for, as well as content that you want to show to visitors. The result could be the description in the section called "Guiding Scenario".

2. For each identified piece of content, decide which content entity type would be the best fit. In doing this, you'll need to consider where and how the content will be used and edited on the site. For example, in the farmers market site scenario, you might want to display the hours and location of the farmers market on the sidebar of every page. For that content, a single custom block makes sense. As another example, you might decide that pages displaying information about each vendor should be content items managed by the core Node module, because you want vendors to be able to edit their own listings. The core Node module permission system lets you do this easily.

   These decisions do not necessarily always have only one right answer; for instance, you could decide that vendor pages should be user profiles instead of content items, but if you did that the content would be tied to a specific user account, and it would not be as easy to later change the ownership of a vendor page to a different user account.

3. Within each content entity type you identified, decide what division into entity subtypes would make sense. For example, in the farmers market site example, you would probably decide that under the Content item entity type, there should be one content type for basic pages (Home and About), one for vendor pages, and one for recipe pages.

4. For each entity subtype you decided on, decide what fields are needed. For instance, the Vendor content type might need fields for the vendor name, web page URL, image, and description.

5. Decide on what entity listings are needed, which could be entire pages or smaller areas on the page. For each listing, you'll need to determine which entities should be listed. Then you'll need to decide in what order and with what filtering options they should be displayed; for example, you might want to give the site visitor the option to search by keyword, to filter the list down to a subset, or to sort the list. You'll also need to decide what information from the entities should be shown, which might result in adding to the list of fields you determined in the previous step. The farmers market site, for example, needs to have a Recipes listing page that lists content items of type Recipe, with the ability to filter by ingredients, so that means that the Recipe content type needs an Ingredients field.

6. For each identified field on each entity subtype, identify what type of data it should contain (such as plain text, formatted text, a date, an image file, etc.), and how many values should be allowed. Most fields are single-valued, but for example, a Recipe should allow for multiple values in its Ingredients field.

7. Consider which fields would be best as references to taxonomy term entities: fields whose values should be chosen from a list of allowed values. Allowed values that are expected to change and grow over time, are good candidates. An example is the Ingredients field for the Recipe content type.

8. Consider which fields should reference other content entities. An example is that since vendors will be submitting recipes, a field will be needed on the Recipe content type that references the Vendor content item for the vendor who submitted the recipe.

Here's an example of the resulting content structure for the farmers market scenario example site:

Entity type	Entity subtype	Examples	Fields
Content item	Basic page	Home page, about page	Title, page body
Content item	Vendor	A page for each vendor at the market	Vendor name, page body, image, URL
Content item	Recipe	A page for each submitted recipe	Recipe name, page body, image, reference to Vendor who submitted it, Ingredients taxonomy
Custom block	(generic)	Copyright notice for footer, Hours and location for sidebar	No special fields
Taxonomy term	Ingredients	Carrots, tomatoes, and other recipe ingredients	No special fields
Contact form	(generic)	Generic contact form	Name, email, subject, message
User profile	(none)	Will not be displayed on site	No special fields

And here are the listings the site needs:

Page or page area	Entity type and subtype	Filter/sort/pagination	Fields displayed
Vendors page	Vendor content items	All vendors, alphabetical, paged	Image, vendor name, trimmed body
Recipes page	Recipe content items	Filter by ingredients, alphabetical, paged	Image, recipe name
Recent recipes sidebar	Recipe content items	List 5 most recent	Image, recipe name

Expand your understanding

- Section 6.1, “Adding a Content Type”
- Section 6.3, “Adding Basic Fields to a Content Type”
- Section 6.6, “Setting Up a Taxonomy”

Related concepts

Section 6.5, “Concept: Taxonomy”

Videos

Planning Your Content Structure

Planning Your Content Structure
Attributions
Written and edited by Jennifer Hodgdon and Grant Dunham.

2.6 Concept: Editorial Workflow

Prerequisite knowledge

- Section 1.1, “Concept: Drupal as a Content Management System”
- Section 2.3, “Concept: Content Entities and Fields”

What is an editorial workflow?

An *editorial workflow* is the process organizations follow to create, review, edit, and publish content. Multiple people in different roles in the organization can be part of the process. For example, content creators could collect information and write content; editors could review, edit, ask for changes, and publish the content once it's ready to be shared with the audience. Later on, content revisions could go through a simple process for small changes, or a more complex process with reviews for larger changes.

What tools are available for managing workflows?

Published/Unpublished status The Content item entity type supports marking each content item as either Published or Unpublished. Viewing permissions are separate for published and unpublished content; for example, all site visitors might be able to see published content items, while only content creators and editors can see unpublished content items.

Revision tracking Some content entity types support revision tracking, meaning that as content is revised, the software stores the older revisions, so that they can be compared or reverted.

Workflows The core Workflows module lets you define workflow states and transitions, beyond just having content be published or unpublished. The companion core Content Moderation module lets you assign permissions and roles to the workflow transitions. Both can be used with both Content item and Custom block entity types.

Block placement The Custom block content entity lets you create a custom block and edit it, but only make it visible on the site once it is ready.

Related topics

- Section 5.2, "Creating a Content Item"
- Section 5.3, "Editing a Content Item"
- Section 8.2, "Creating A Custom Block"
- Section 8.3, "Placing a Block in a Region"

Attributions
Written and edited by Diána Lakatos at Pronovix, Grant Dunham, and Jennifer Hodgdon.

2.7 Concept: User Interface, Configuration, and Content translation

Prerequisite knowledge

- Section 1.5, "Concept: Types of Data"
- Section 1.2, "Concept: Modules"
- Section 2.3, "Concept: Content Entities and Fields"

What languages does the software support?

The base language for the software that your site runs (core software, modules, and themes) is English. However, using this software you can create a site whose default language is not English, in which case anyone viewing the site should see only that language (assuming that the site is fully translated). You can also use this software to create a multi-lingual site, with a language switcher that site visitors can use to switch to their preferred language. You need to have the core Language module installed in order to use a language other than English on the site.

What can be translated on your site?

There are three types of information that you can translate, each with its own method for translating:

User interface text Built-in text present in the core software, modules, and themes. This can be translated from the base English language of the software into the language(s) of your site. Typically, rather than needing to translate this text yourself, you can download translations. You need to have the core Interface Translation module installed in order to translate this text, and the core Update Manager module installed in order to automatically download translations.

Configuration text Text whose structure and initial values are defined by the core software, modules, and themes, but that you can edit. Examples include the labels for fields in your content types, header text in views, your site name, and the content of automatic email messages that your site sends out. After creating configuration text in the default language of your site, you can translate it into other languages. For default configuration supplied by the core software, modules, and themes, translation is included with the downloads of user interface text translations. You need to have the core Configuration Translation module installed in order to translate this text.

Content text and files If your site is multilingual, you can configure the content fields on your site to be translatable. After creating content in one language, you can translate it into other languages. Fields can contain textual information or uploaded files, and for each field on each entity subtype, you can configure it to be translatable or non-translatable. You need to have the core Content Translation module installed in order to translate this text.

What information will remain in English on my site?

Even if the default language of your site is not English, you will still see English text on certain administrative pages used to manage configuration. The reason is that when you edit configuration, you are editing the base, untranslated configuration values; translating configuration is a separate operation. For example, if you visit the *Menus* administration page, you will see menu names in English (for the menus that were set up when you installed your site), and if you click an *Edit menu* link, you will be editing the English name and description of the menu. To edit the menu name in a different language, you would need to have the core Configuration Translation module installed, and use the *Translate* link to edit the translated menu information.

Related topics

- Section 10.1, "Adding a Language"
- Section 10.2, "Configuring Content Translation"
- Section 10.3, "Translating Content"
- Section 10.4, "Translating Configuration"

Attributions
Written by Jennifer Hodgdon.

Chapter 3

Installation

3.1 Concept: Server Requirements

What are the requirements for running the core software?

Disk space

The total amount of disk space needed for your site is not a fixed amount, as it depends on your site. The base files for the core software take up about 100 MB on the web server. You will need more space if you install additional modules or themes, and you'll also need space for media, backups, and other files generated by and uploaded to your site. The database also uses disk space, although that is typically not in the same area (and in some cases, not even on the same server) as that used by the site files.

PHP

PHP 8.1 or a higher PHP 8 version. PHP must be set up with a minimum memory size of 64MB; if you are running multiple modules on your site or using memory-intensive PHP-based command-line tools (such as Composer), considerably more memory than that may be needed.

Certain PHP extensions are also required; the exact list of required PHP extensions depends on how you install the core software and which modules you are using on your site. Generally, hosting service providers have installed all the PHP extensions you will need. If you are self-hosting or running your site on your local computer, you will get error messages during installation if any required PHP extensions are missing, and should be able to install them and continue.

Web server

Apache (Recommended) Apache is the most commonly used web server. The core software will work on Apache 2.4.7 or higher hosted on UNIX/Linux, OS X, or Windows that have the Apache mod_rewrite module installed and enabled. The Apache VirtualHost configuration must contain the directive *AllowOverride All* to allow the *.htaccess* file to be used.

PHP Local Server You can temporarily run a local demo site on your computer using just PHP, without installing web server software.

Nginx Nginx is a commonly used web server that focuses on high concurrency, performance and low memory usage. The core software will work on Nginx 0.7 or greater hosted on UNIX/Linux, OS X, or Windows. The ngx_http_rewrite_module must be installed and enabled.

Microsoft IIS Microsoft IIS is a web server and set of feature extension modules for use with Microsoft Windows. The core software will work with IIS 5, 6, 7, 8, or 10 if PHP is configured correctly. Because clean URLs are required, you may need to use a third party product. For IIS 7/8, you can use the Microsoft URL Rewrite module or a third party solution.

Database

Use one of the following databases:

- MySQL - 5.7.8 (MariaDB 10.3.7, Percona 5.7.8) or higher with an InnoDB-compatible primary storage engine
- PostgreSQL - 10.0 or higher with the pg_trgm extension
- SQLite - 3.26 or higher. Temporary local demo sites use SQLite, which is distributed as part of PHP and doesn't require installing separate database software, but make sure your version of PHP has the minimum SQLite included.

Additional resources

- *Drupal.org* community documentation page "System requirements"
- PHP Runtime Configuration (PHP memory limit and other settings)
- Installing a new Drupal application on your local machine
- Creating a Drupal demo application for evaluation purposes

Attributions
Adapted by Karl Kedrovsky, Brian Emery, and Jennifer Hodgdon from "System requirements", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

3.2 Concept: Additional Tools

What tools are available for site builders?

There are several additional tools available that help you create sites faster, more accurately and with less effort.

Drush and Drupal Console See below for more about command-line tools.

Git See below for more about version control tools.

Composer See below for more about Composer.

Devel The contributed Devel module helps with development tasks such as debugging and inspecting code, analyzing database queries, and generating dummy content.

What are command-line tools?

Command-line tools provide an alternative to using the administrative interface for various operations on your site. Many site builders and maintainers have invested the time to install and learn a command-line tool, because:

- Administrative tasks are typically faster and less tedious when performed at the command line than in the user interface.
- You can write scripts that combine site-related commands with other commands on the server, to automate more complicated tasks.
- Command-line tools provide additional functionality not available via the administrative interface; for example, running database queries.

The most popular tools are Drush and Drupal Console. Drush has been available longer, and has commands for both the core software and contributed modules; Drupal Console started as a tool for module programmers, but has a growing list of commands for site builders. This guide documents commands from the latest stable version of Drush for many tasks; it does not document Drupal Console commands or commands for older versions of Drush, but you can look them up in the Drupal Console and Drush documentation.

To use these tools, you will need to have command-line terminal access to the server where your website will be hosted, and you will need to install Composer first in order to install either the Drush or Drupal Console tool.

To install Drush or Drupal Console first make sure your project is using Composer to manage dependencies. See below for more about Composer. Then use the following commands:

```
# Install Drush
composer require drush/drush

# Install Drupal Console
composer require drupal/console:~1.0 --prefer-dist --optimize-autoloader
```

What is a version control system?

A version control system is software that keeps copies of files and revision history in a *repository*, and allows you to add, delete, and update files. For a web site project, revision control software can help you:

- Test locally before deploying files on the live site
- Look at, compare with, and revert to previous versions of files
- Look at the added, changed, or deleted files before you *commit* the changes (update the repository)
- Merge changes from different team members together
- Keep files and configuration synchronized between local and live sites

There are many proprietary and open-source version control systems to choose from; a popular choice is Git, which is open-source software that runs on most computer platforms. Git is a *distributed* version control system that allows you to have one or more copies of your repository, which allows you to commit changes to a copy and then only *push* them to the repository you've designated as *canonical* when you're ready to share them with others. The canonical git repository can be hosted on your local computer or a server at your company, but many software projects and individuals host their Git repositories using third-party services provided by GitLab or GitHub.

What is Composer used for?

Composer is a tool for managing PHP dependencies, where the developer specifies what version of each external library is needed, and Composer manages the process of downloading and installing the libraries.

Composer can be installed on the local development environment or webserver but is often already available in Drupal development tool kits.

The core software is a primary user of Composer, because it makes use of several externally-developed software libraries, which must be downloaded and installed in order for the core software to work. When you install the core software, you either need to download an archive that contains compatible versions of the external libraries, or you need to run Composer to download the external libraries after the initial download. The Drush and Drupal Console command-line tools are also downloaded using Composer.

Some contributed modules also make use of externally-developed software libraries; for example, a Facebook integration module might require Facebook's integration library to be installed for the module to work, and a geographical module might make use of a standard library of geographical functions. To install a module with external dependencies, you will need to run Composer.

What tools are available for module and theme developers?

In addition to the site builder tools mentioned above, the following tools are useful for module and theme developers.

Drupal Console Drupal Console is a command-line tool that generates boilerplate code and interacts with a Drupal site. It can generate, for example, block or form code, install modules and themes, and create dummy content. Drupal Console makes use of the Symfony Console.

Coder Coder is a command-line tool that checks if your modules and themes comply with coding standards and other best practices. It can also fix coding standard violations.

Browser debugging tools Web browsers such as Firefox and Chrome include tools that allow viewing, editing, debugging, and monitoring CSS, HTML, and JavaScript. You can open the debugging pane or window by right-clicking the mouse in an area of your window, and choosing "Inspect" or "Inspect element".

Related topics

Section 3.5, "Using Composer to Download and Update Files"

Additional resources

- *Drupal.org* community documentation page "Development tools overview"
- *Drupal.org* community documentation page "Using Composer with Drupal"
- Wikipedia article "Distributed version control"

Attributions
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3.3 Concept: Methods for Downloading and Installing the Core Software

Prerequisite knowledge

- Section 3.2, "Concept: Additional Tools"
- Section 3.1, "Concept: Server Requirements"
- Section 1.4, "Concept: Distributions"

What methods are available for downloading the core software?

Before you can build a site, you will need to first download the core software. Depending on your plans, there are several ways that you can download the core software:

Try a free online demo If you are evaluating whether or not to use Drupal to build a site, you can use an online provider to get a demo installation of the core software in 20 minutes or less. See the *Drupal.org* page "Try Drupal".

Use a one-click installer from your hosting provider If you choose to install the core software at your hosting provider, your hosting provider may have specific documentation and/or a one-click install that you can use. See *Drupal.org's* list of hosting providers that support Drupal.

Use a pre-configured environment Use a pre-configured environment or virtual machine that contains Drupal and all the required supporting software to install Drupal locally. See the section for your operating system under *Drupal.org* community documentation page "Local server setup guide" for possible options.

Download manually from the web site If you plan to build a site without add-on modules that have complicated dependencies, you can download the core software, or a distribution that contains the core software and additional modules or themes, from the web site. See Section 3.6, "Downloading the Core Software Manually" for instructions.

Use Composer If you plan to use the Drush tool (see Section 3.2, "Concept: Additional Tools"), or if you are building a site that might use modules with complicated dependencies, you should use Composer to download the core software, because Composer will manage the dependencies properly. If you start your site by downloading manually, however, you can convert to using Composer to manage dependencies later. See Section 3.5, "Using Composer to Download and Update Files" for downloading and conversion instructions.

What happens when I install the core software?

Installing the core software means setting up some database tables, configuration, and an administrative user account, so that you can build and use your site.

What methods are available for installing the core software?

There are several ways to install the core software:

Behind-the-scenes installer If you choose to use an online demo or one-click installer from a hosting provider, the core software may be installed for you automatically.

Interactive installer The core software has an interactive installer that presents you with several on-line forms, and then completes the installation using the information you provide in the forms. See Section 3.4, "Preparing to Install" and Section 3.7, "Running the Interactive Installer".

Demo site installer If you download the core software to your local computer, you can quickly create a temporary demo site that uses the built-in web server and SQLite database that are part of PHP. The command to set up a demo site is given at the end of Section 3.6, "Downloading the Core Software Manually". In this case, you will not run the interactive installer.

Command-line tool Command-line tools (see Section 3.2, "Concept: Additional Tools") can also be used to perform the installation steps.

Attributions
Written and edited by Drew Gorton, Michael Lenahan at erdfisch, Jennifer Hodgdon, and Jojy Alphonso at Red Crackle.

3.4 Preparing to Install

Goal

Download the core software, and handle any required prerequisites.

Prerequisite knowledge

- Section 3.1, "Concept: Server Requirements"
- Section 3.2, "Concept: Additional Tools"
- Section 3.3, "Concept: Methods for Downloading and Installing the Core Software"
- How to install and configure server software (if installing on your own computer)
- How to set up hosting for a generic web site
- How to create a database

Site prerequisites

Server software must be installed on the computer where you plan to host your site. See Section 3.1, "Concept: Server Requirements".

Depending on how you plan to download the core software, you may need to install additional software tools first. See Section 3.3, "Concept: Methods for Downloading and Installing the Core Software" and Section 3.2, "Concept: Additional Tools".

Steps

1. Choose methods for downloading and installing the core software, from those listed in Section 3.3, "Concept: Methods for Downloading and Installing the Core Software". The rest of these instructions apply to the Composer and manual download options and the interactive installer; if you chose other options, the software should be installed for you.

2. Set up a URL and hosting for your site on the server. Verify that the hosting is working by putting a simple HTML file in the web root directory of the hosting, and visiting the URL for your site.

3. Create a database, along with a database user account with full access.

4. Download the core software files to the web root directory, using the method you decided on. See Section 3.3, "Concept: Methods for Downloading and Installing the Core Software" for links to instructions.

Expand your understanding

See Section 3.7, "Running the Interactive Installer" to run the interactive installer.

Alternatively, you can use the following Drush command, from inside the directory that you downloaded the software to, where *DB_NAME*, *DB_USER* and *DB_PASS* are your database's credentials:

```
drush site:install standard --db-url='mysql://DB_USER:DB_PASS@localhost/DB_NAME' -- ↩
    site-name=example
```

Videos

Preparing to Install

Preparing to Install

Additional resources

Drush

Attributions

Written and edited by Drew Gorton, Michael Lenahan at erdfisch, Jennifer Hodgdon, and Jojy Alphonso at Red Crackle.

3.5 Using Composer to Download and Update Files

Goal

Use Composer to download or update files and dependencies in the core software, or in add-on modules and themes. Skip this topic if you are not using Composer.

Prerequisite knowledge

Section 3.2, "Concept: Additional Tools"

Site prerequisites

If you want to use Composer, it must be installed either on a local development server or your live site. See Section 3.2, "Concept: Additional Tools".

Steps

If you are unable to install the Composer tool on your live server, you can follow the steps in any of the sections below on your local server, and then transfer any updated or added files to your live server. The recommended procedure is to make an archive or zip file of the new and changed directories, transfer the archive to your live server, delete the directories that have changed, and extract the archive. Make sure to check for updates and additions to the following files, in the root of your installation:

- *vendor* directory
- *autoload.php*
- *composer.json*
- *composer.lock*

Using Composer to download the core software

Follow these steps if you have not yet downloaded or installed the core software, and you want to use Composer to download both the core software and its external dependencies:

1. At the command line, change to one level above the directory where you want the software to reside.
2. Enter this command, where *mydir* is the directory you want to create:

   ```
   composer create-project drupal/recommended-project mydir
   ```

3. The latest release of the core software will be downloaded to the *mydir/web* sub-directory.

Converting a previously-downloaded site to use Composer

If you previously downloaded the core software without using Composer, you may find later that you want or need to use Composer to manage and update dependencies. For sites created using version 8.8.0 or later of the core software the files already contain the necessary Composer configuration and you can start using Composer at any time.

If your site includes modules, themes, or profiles, that are not part of the core software it is a good idea to add them to the *composer.json* file in the root directory of your site.

Run the following command once for each module, theme, or profile downloaded from Drupal.org substituting `module_name` for the name of the project you want to add:

```
composer require drupal/module_name
```

See below for more on managing site dependencies with Composer.

To convert a site that was created using a version of the core software prior to 8.8.0, or that was installed from a zip or tar.gz file downloaded from Drupal.org, see the instructions at Add Composer to an existing site.

Using Composer to download a module or theme

Follow these steps if you are already using Composer to manage the core software, and you want to use Composer to add a contributed module or theme with its dependencies.

1. Each time you want to add a contributed module or theme, determine the project's short name. This is the last part of the URL of the project page; for example, the Geofield module, at https://www.drupal.org/project/geofield, has short name `geofield`.

2. To download the contributed module or theme, along with its external dependencies, enter the following command at the root of your site (substituting the short name of the module or theme for `geofield`):

   ```
   composer require drupal/geofield
   ```

Using Composer to update previously-downloaded files

Follow these steps to update the files for the core software or a contributed module or theme, after having already started to manage dependencies with Composer:

1. Determine the short name of the project you want to update. For the core software, it is *core*. For contributed modules and themes, it is the last part of the URL of the project page; for example, the Geofield module, at https://www.drupal.org/project/geofield, has short name `geofield`.

2. If you want to update to the latest stable release, use the following command, substituting the short name of the project to be updated for `geofield`:

   ```
   composer update drupal/geofield --with-dependencies
   ```

3. If you need a specific version, determine how to enter the version number you want to update to. For example, for version 8.x-1.16 of a contributed module, you would enter just the 1.16, and for the core software version 9.0.7, you would enter 9.0.7. Then enter the following command at the root of your site (substituting the short name of the project for `geofield` and the correct version number):

   ```
   composer require drupal/geofield:1.16
   ```

Expand your understanding

You can learn more about Composer commands by using Composer's built-in help system. For example, to learn more about the `create-project` command, enter `composer help create-project` in your command window.

Videos

Using Composer and Git to Download Files

Using Composer and Git to Download Files

Additional resources

- *Drupal.org* community documentation page "Using Composer to manage Drupal site dependencies"
- *Drupal.org* community documentation page "Update Drupal core via Composer"
- *Drupal.org* community documentation page "Add Composer to an existing site"

Attributions

Adapted by Jennifer Hodgdon, Hans Fredrik Nordhaug, and Joe Shindelar at Drupalize.Me from "Using Composer to manage Drupal site dependencies", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

3.6 Downloading the Core Software Manually

Goal

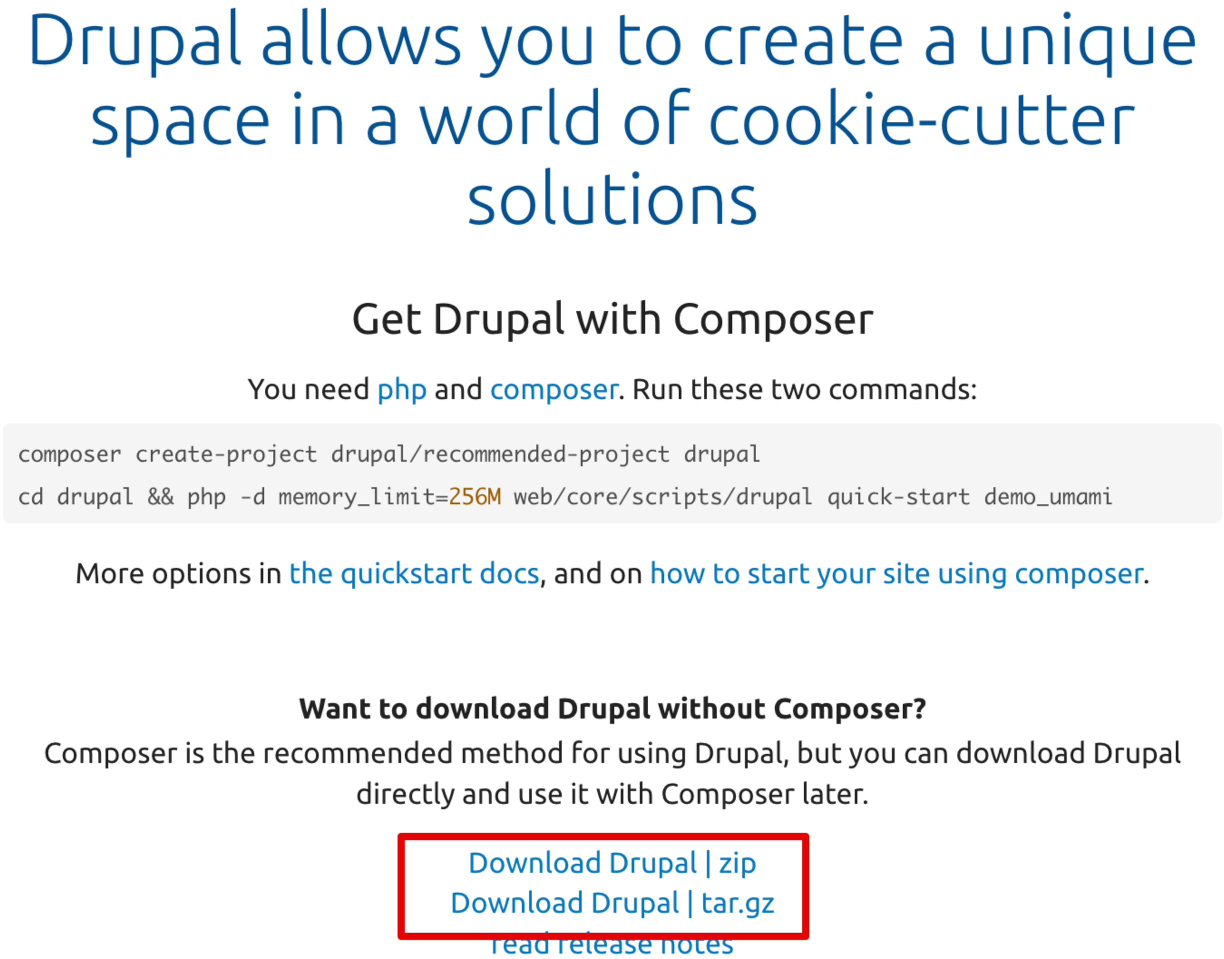
Download the core software or a distribution manually. Skip this topic if you are downloading using some other method.

Prerequisite knowledge

- Section 1.4, "Concept: Distributions"
- Section 3.3, "Concept: Methods for Downloading and Installing the Core Software"

Steps

1. Go to *https://www.drupal.org* and navigate to *Build > Download & Extend* in the top-level menu.



2. If you want to download just the core software, click the *Download Drupal zip* or *download tar.gz* link, and save the file to your local machine.

3. If you want to download a distribution, click the *Distributions* icon or link, choose a distribution from the list, click through to its project page. On the project page click the link to view the release notes for the latest release, and click the link to download a zip or tar.gz file to your local machine.

4. Upload the downloaded file to your hosting account. Log in to the control panel and navigate to the *HTML* directory. Save the file there.

5. Uncompress the tar.gz or zip file, which will create a new directory. If you do not have terminal access, or your hosting server is not running Linux, your hosting control panel's file manager should provide a way to extract the files. If you have terminal access to your hosting server (running Linux), you can use a command like:

```
tar -xzf drupal-9.0.7.tar.gz
```

6. Delete the compressed file from the server, unless your unpacking method already deleted it.
7. Rename the directory or reconfigure your web hosting, so that the directory name matches the directory your web hosting is configured to use for your site.

Expand your understanding

Once you have the software downloaded, you can install a temporary demo site (see Section 3.3, "Concept: Methods for Downloading and Installing the Core Software") by running the following command from the top-level directory of the core software:

```
php core/scripts/drupal quick-start standard
```

The demo site will be installed, and your web browser should open to log in to the new site, which will only run as long as the PHP command is active. To learn more about this functionality, use its help command:

```
php core/scripts/drupal quick-start --help
```

Videos

Downloading the Core Software Manually

Downloading the Core Software Manually

Attributions

Written and edited by Drew Gorton, Michael Lenahan at erdfisch, Jennifer Hodgdon, and Jojy Alphonso at Red Crackle.

3.7 Running the Interactive Installer

Goal

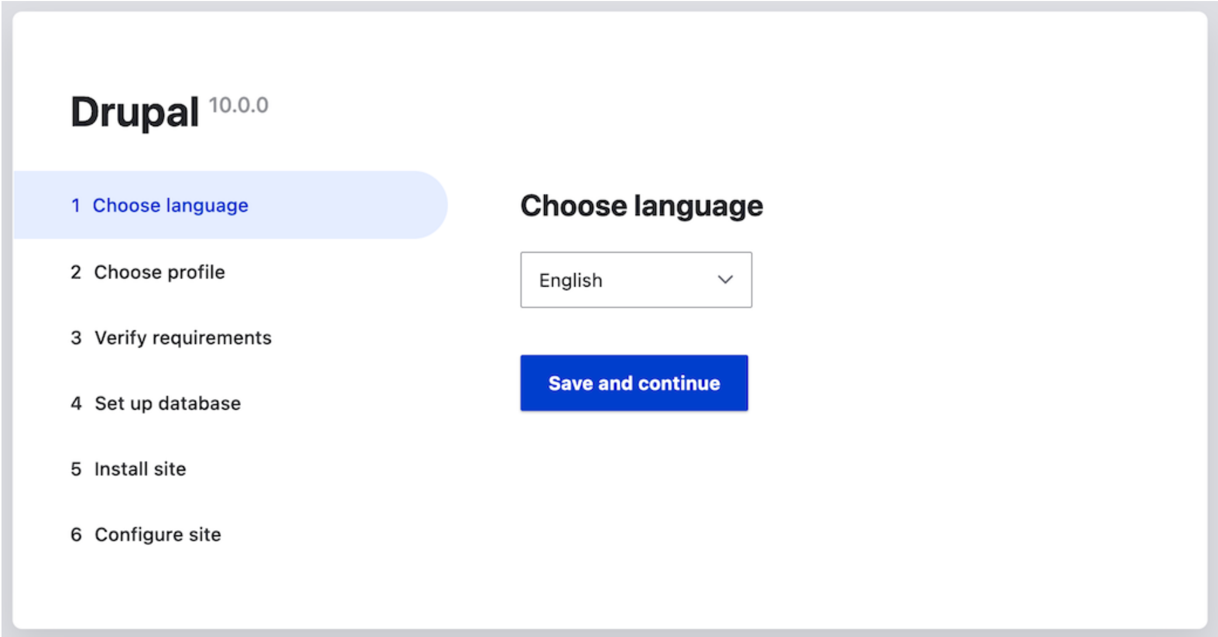
Install the core software and create the admin account by running the included installer.

Site prerequisites

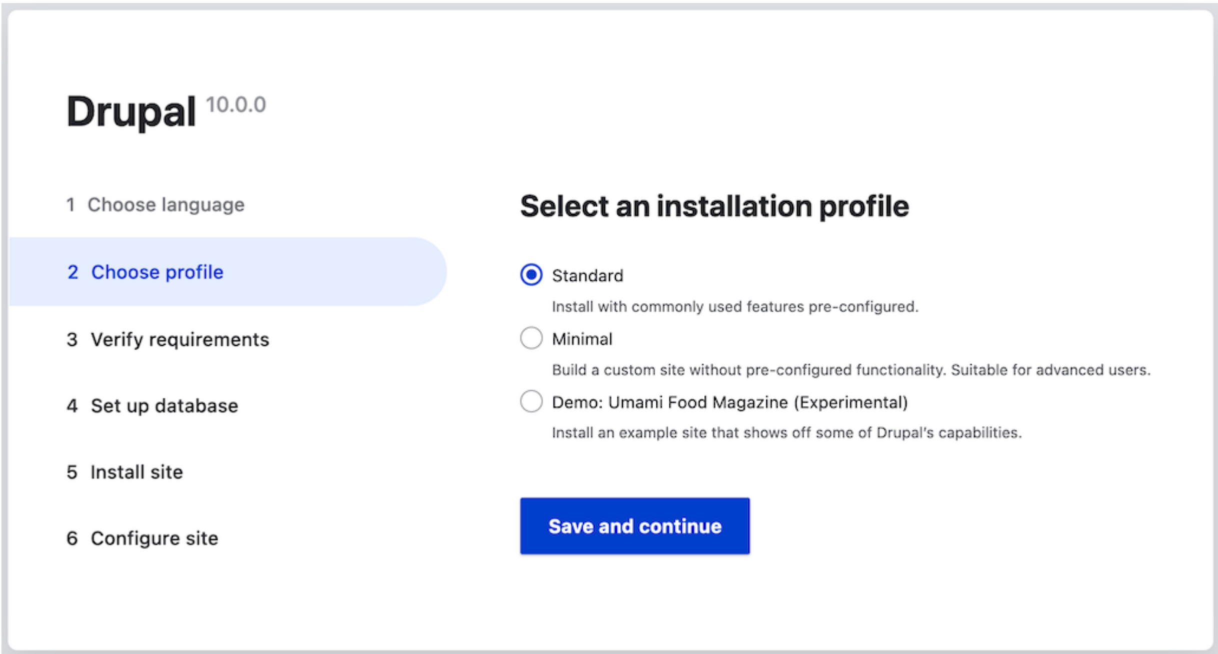
Section 3.4, "Preparing to Install"

Steps

1. If you are using a 1-click install from a hosting provider or demo site, you will most likely see some or all of the following screens as part of the installation process. If you uploaded the core files manually or using Composer, to start the installer, open a browser and visit the URL that you set up for your hosting.
2. Select a language on the first page of the installer; for example, English. You could optionally choose from any of the other listed languages. The language files for the chosen language will be downloaded and installed so that the rest of the installation process can be finished in the chosen language. After choosing a language, click *Save and continue*.



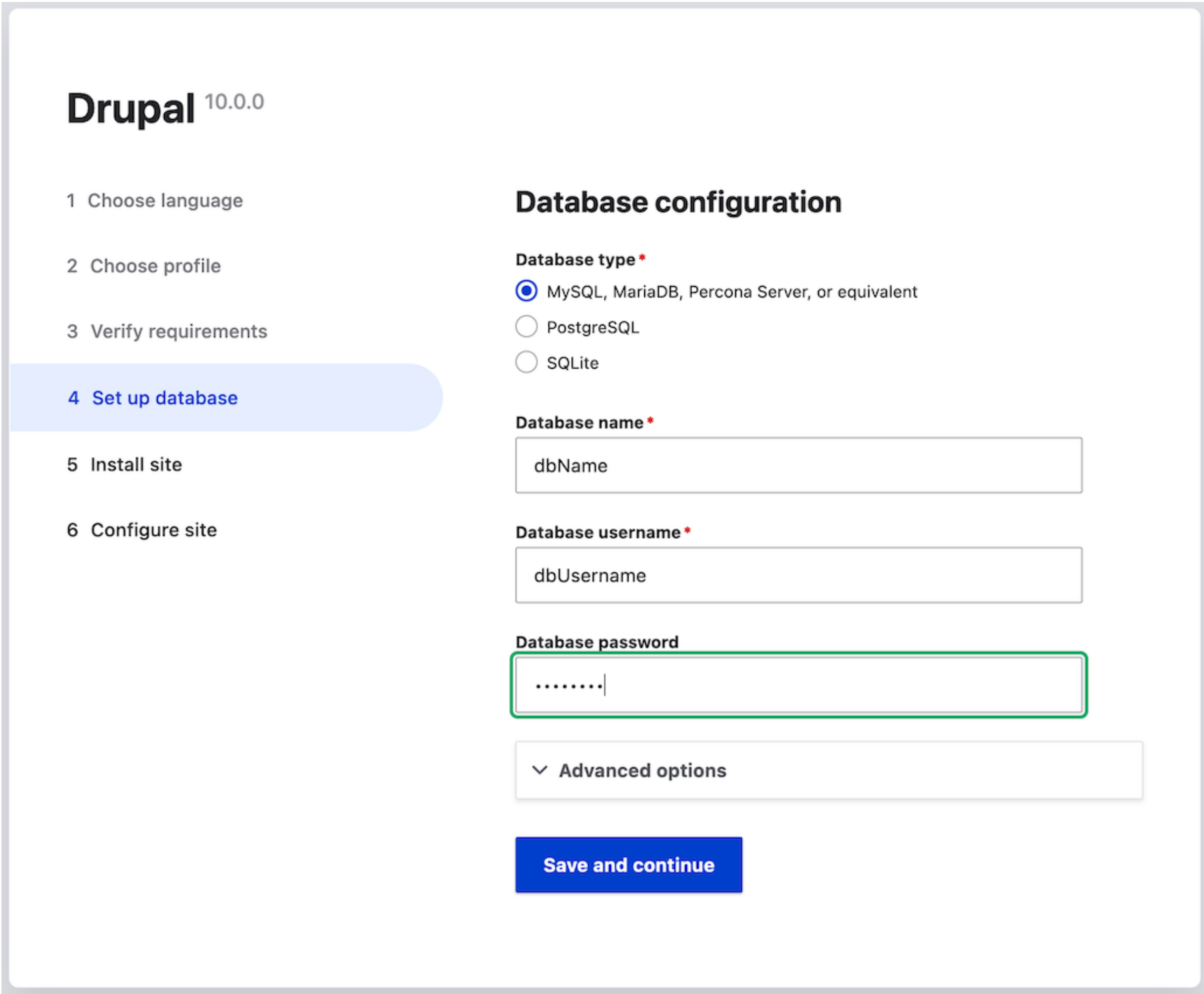
3. Select an installation profile. Installation profiles provide site features and functions for a specific type of site as a single download containing the core software, contributed modules, themes, and pre-defined configuration. Core contains two installation profiles. Select the core Standard installation profile. Click *Save and continue*.



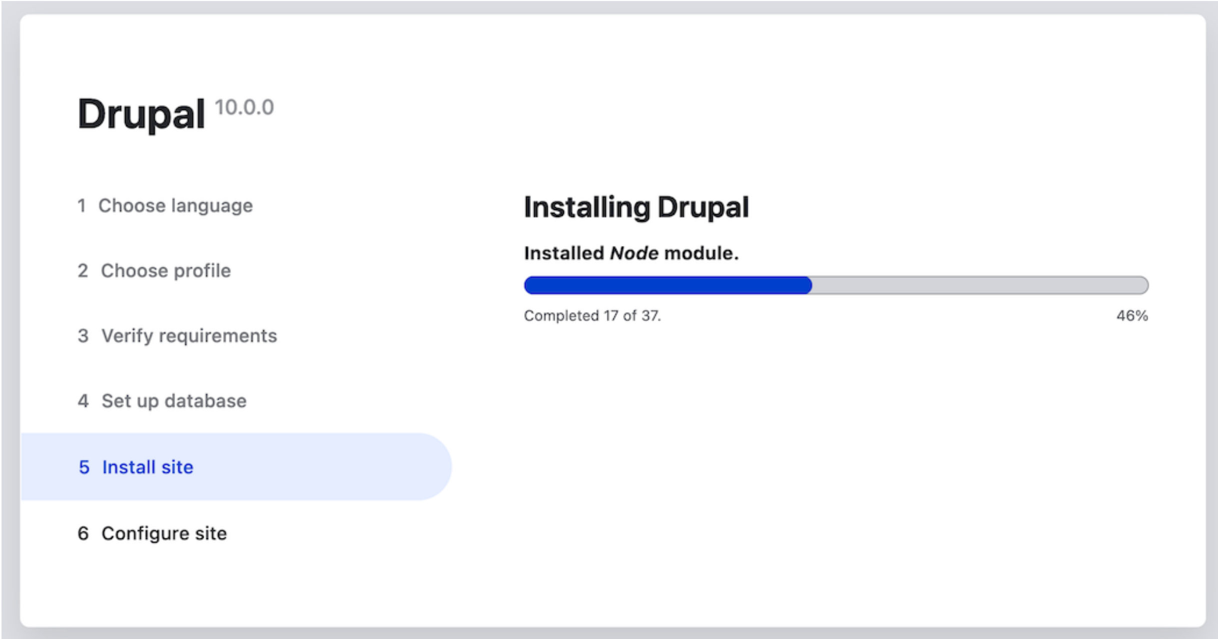
4. The next step in the installer will verify that your system meets the minimum requirements. If it does not, you'll be presented with an outline of what needs to be corrected in order to proceed. If it does, the installer will automatically advance to the next step.

5. Provide details of the database you created in the Section 3.4, "Preparing to Install" chapter. Then click *Save and continue*.

Field name	Explanation	Value
Database name	The custom name given to the database	drupal
Database username	Username created	databaseUsername
Database password	Password chosen	



6. The next step will display a progress bar under the heading *Installing Drupal*. After the installer has completed, it will automatically advance to the next step.

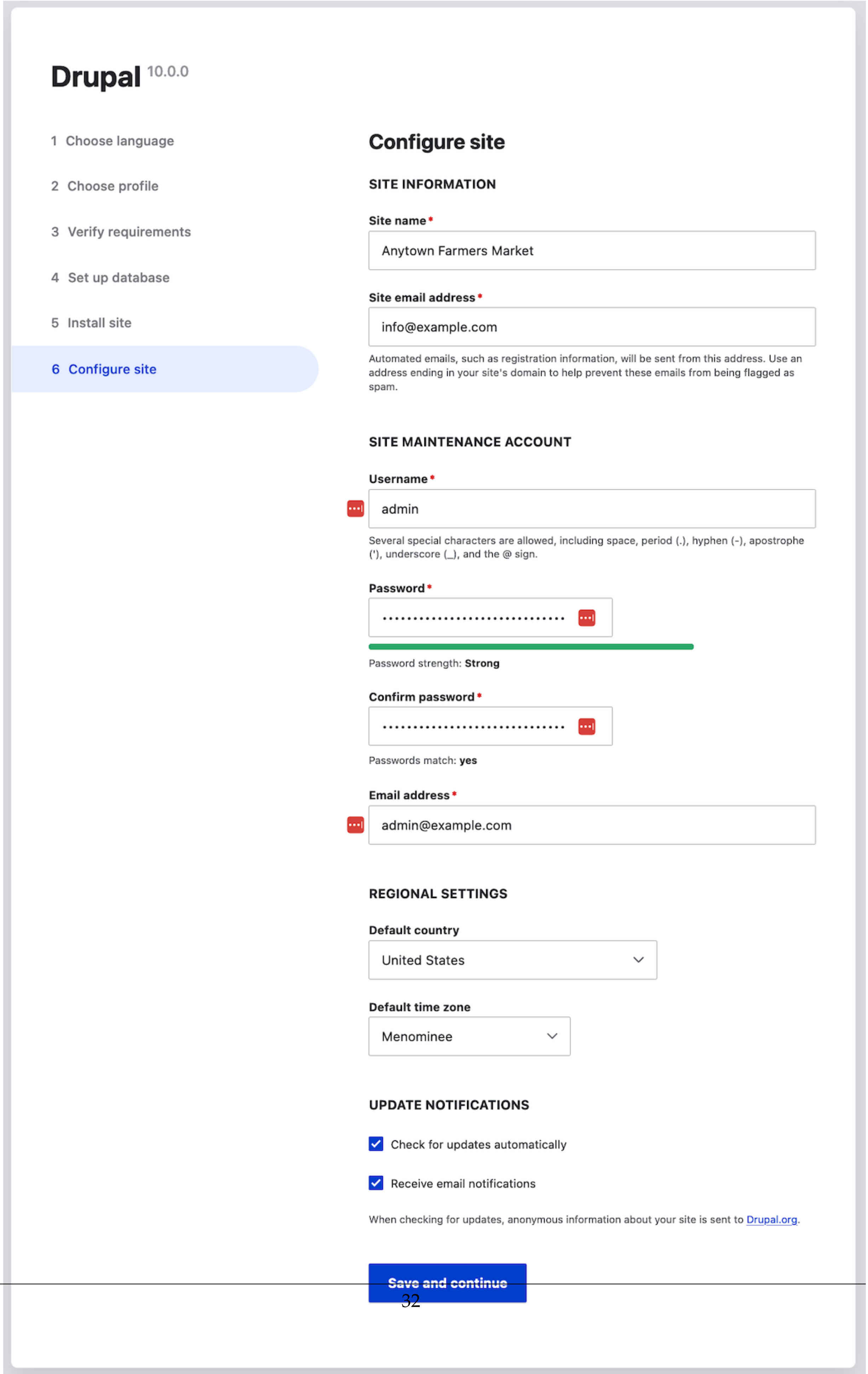


7. The next step is to configure some basic information about your new site (also notice if there is a warning about file permissions, for a later step). Note that the user account you create in this step is the site's admin account. See Section 7.2, "Concept: The User 1 Account" for important information about this unique account. You can safely name this account "admin", and make sure to choose a secure and unique password.

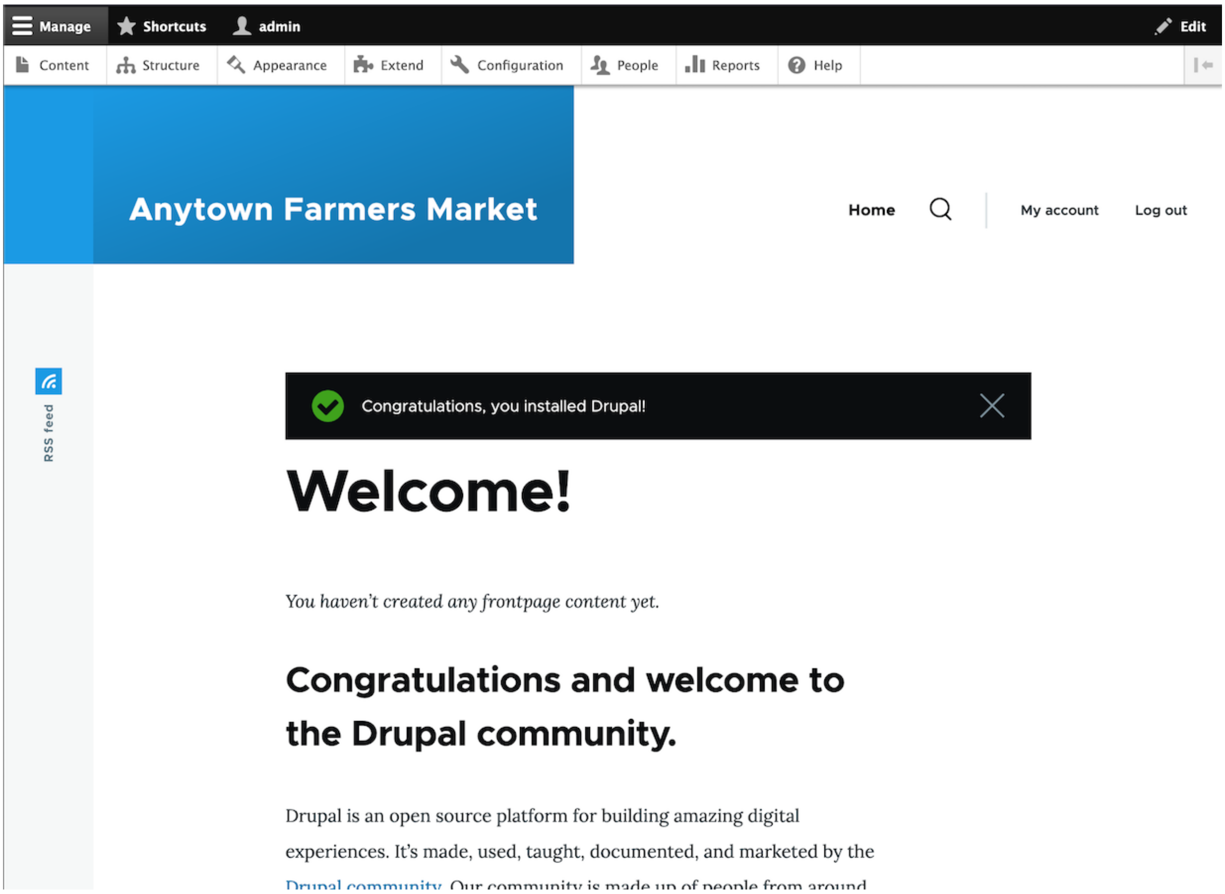
   Fill in the form with the following information:

Field name	**Explanation**	**Value**
Site name	The name chosen for the site	Anytown Farmers Market
Site email address	The email associated with the site	info@example.com
Username	The designated user's credentials	admin
Password	The password chosen	
Confirm password	Repeat the password	
Email address	The user's email	admin@example.com

   The remaining fields can likely be left at their default values.


Drupal 10.0.0
1 Choose language
2 Choose profile
3 Verify requirements
4 Set up database
5 Install site
6 Configure site
Configure site
SITE INFORMATION
Site name *
Anytown Farmers Market
Site email address *
info@example.com
Automated emails, such as registration information, will be sent from this address. Use an address ending in your site's domain to help prevent these emails from being flagged as spam.
SITE MAINTENANCE ACCOUNT
Username *
admin
Several special characters are allowed, including space, period (.), hyphen (-), apostrophe ('), underscore (_), and the @ sign.
Password *
Password strength: Strong
Confirm password *
Passwords match: yes
Email address *
admin@example.com
REGIONAL SETTINGS
Default country
United States
Default time zone
Menominee
UPDATE NOTIFICATIONS
Check for updates automatically
Receive email notifications
When checking for updates, anonymous information about your site is sent to Drupal.org.
Save and continue

8. Click *Save and continue*.
9. You will be redirected to the front page of your new site and you should see the message *Congratulations, you installed Drupal!* displayed at the top of the page.



10. You may have seen a warning in the Configuration step about file permissions, and you may continue to see this warning until you fix the permissions. To avoid the warning and make your site more secure, change the permissions on the *sites/default* directory and the *sites/default/settings.php* file so that they are read-only (you may need to consult your hosting company documentation about how to do that).

Expand your understanding

Check the Status Report to see if there are any problems with the installation. See Section 12.5, "Concept: Status Report".

Related concepts

- Section 11.7, "Concept: Development Sites"
- Section 3.2, "Concept: Additional Tools"

Videos

Running the Installer

Running the Installer

Additional resources

- *Drupal.org* community documentation page "Create a database"
- *Drupal.org* community documentation section "Webhosting issues"

Attributions
Written and edited by Joe Shindelar at Drupalize.Me, and Jojy Alphonso at Red Crackle.

Chapter 4

Basic Site Configuration

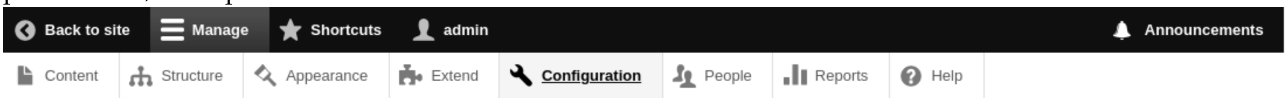
4.1 Concept: Administrative Overview

Prerequisite knowledge

- Section 1.3, "Concept: Themes"
- Section 1.2, "Concept: Modules"

What is the administrative menu?

The toolbar provided by the core Toolbar module displays the *Manage* administrative menu at the top or left side of the site, for users with permission to see it. This menu provides access to all of the administrative areas of the site. The menu links will vary depending on which modules are active on your site and the permissions of the person viewing the menu; if you install using the core Standard installation profile and have full administrative permissions, the top-level links are as follows:



Content Lists and manages existing content, and allows creation of new content.

Structure Contains a list of links for managing structural elements of the site, such as blocks, content types, menus, and taxonomy.

Appearance Manages themes and appearance-related settings.

Extend Manages the installation and uninstallation of modules.

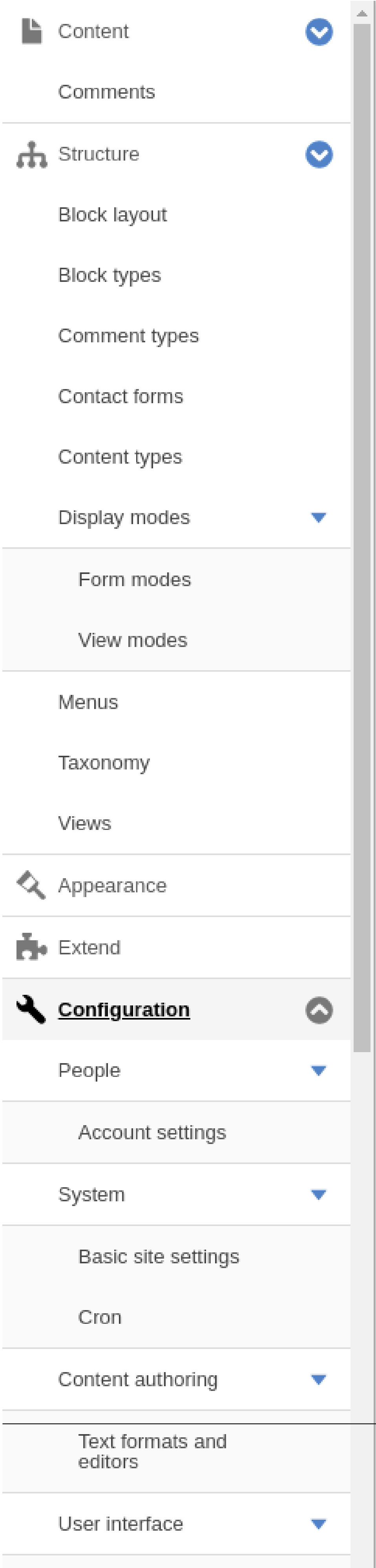
Configuration Contains links to settings pages for various site features.

People Manages users, roles, and permissions.

Reports Contains links to logs, update information, search information, and other information about the site's status.

Help Lists help topics for installed modules that provide them.

The arrow button on the far right side of the second line of the toolbar (or far left side, if the site is being viewed using a right-to-left-reading language like Arabic) can be used to switch the menu from appearing horizontally at the top of the page, to a vertical format on the left side (or right side, in right-to-left languages). When viewed vertically, the menu becomes an interactive tree.


Content
Comments
Structure
Block layout
Block types
Comment types
Contact forms
Content types
Display modes
Form modes
View modes
Menus
Taxonomy
Views
Appearance
Extend
Configuration
People
Account settings
System
Basic site settings
Cron
Content authoring
Text formats and editors
User interface

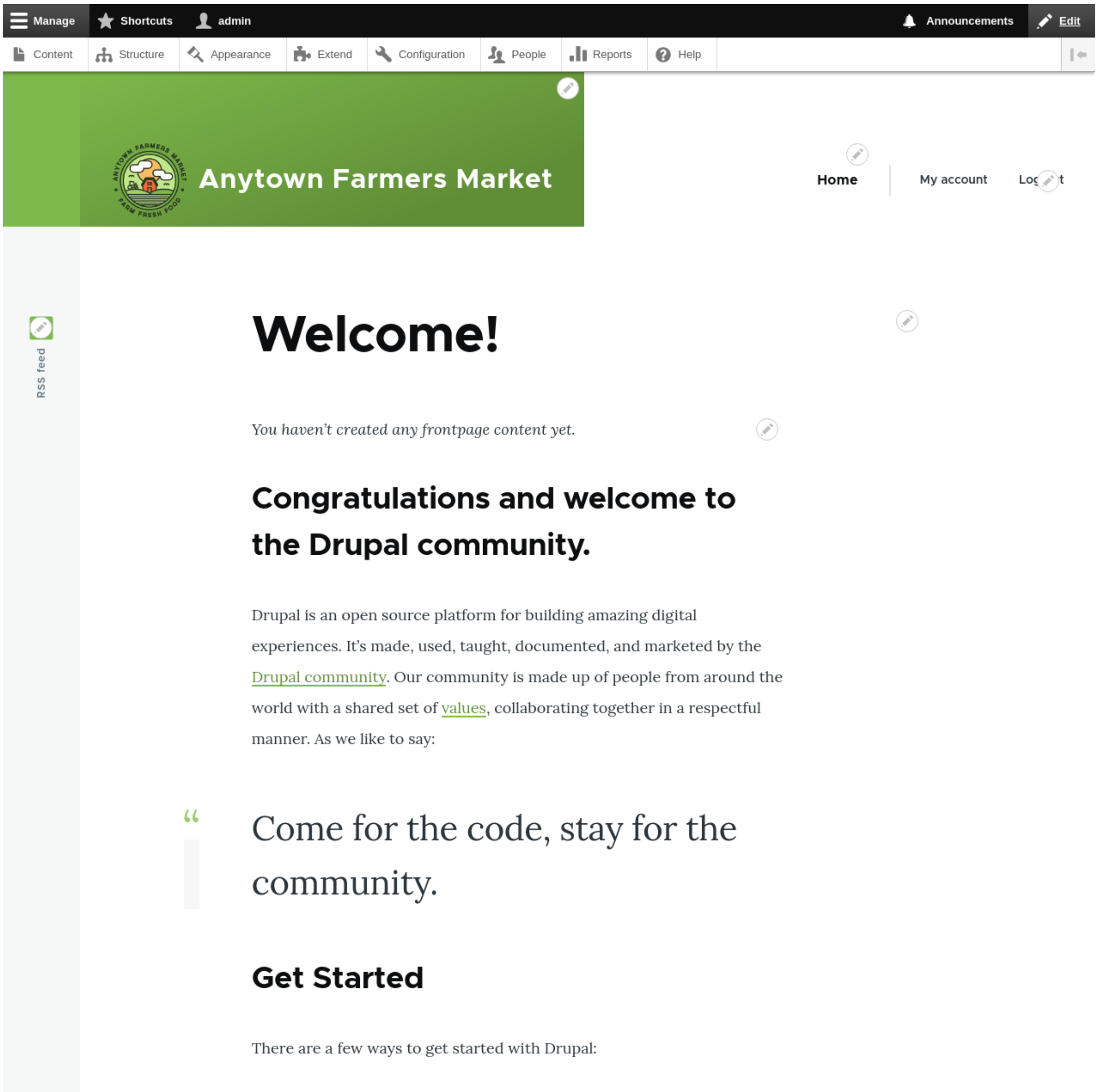
This guide has a standard way to describe navigation to administrative pages using the administrative toolbar. See the section called “Conventions of the Guide” for more information.

What are contextual links?

Some administrative and editing functionality on the site can be accessed through the *contextual links* displayed by the core Contextual Links module. Contextual links take you to some of the same pages that you can access through the administrative menu, but instead of having to navigate through the menu hierarchy, these links are provided near where the related content is displayed on your site.

Contextual links have to be activated to be visible. If your site’s theme uses the default styling for contextual links, a pencil icon is used to indicate that contextual links are present and activated, and if you click the icon, you will see the contextual links. There are two ways to activate the pencil icons that provide access to the contextual links:

- If you are using a mouse in a browser, the icon will temporarily appear when you hover over an area that has related contextual links.
- You can click the master pencil icon (or its *Edit* link) at the right end of the top bar in the toolbar, which will activate all of the contextual links on the current page. This icon is only visible on pages with contextual links.



Attributions
Written by Scott Wilkinson and Jennifer Hodgdon.

4.2 Editing Basic Site Information

Goal

Change basic site information such as *Site name*, *Slogan*, *Default time zone*.

Prerequisite knowledge

Section 4.1, "Concept: Administrative Overview"

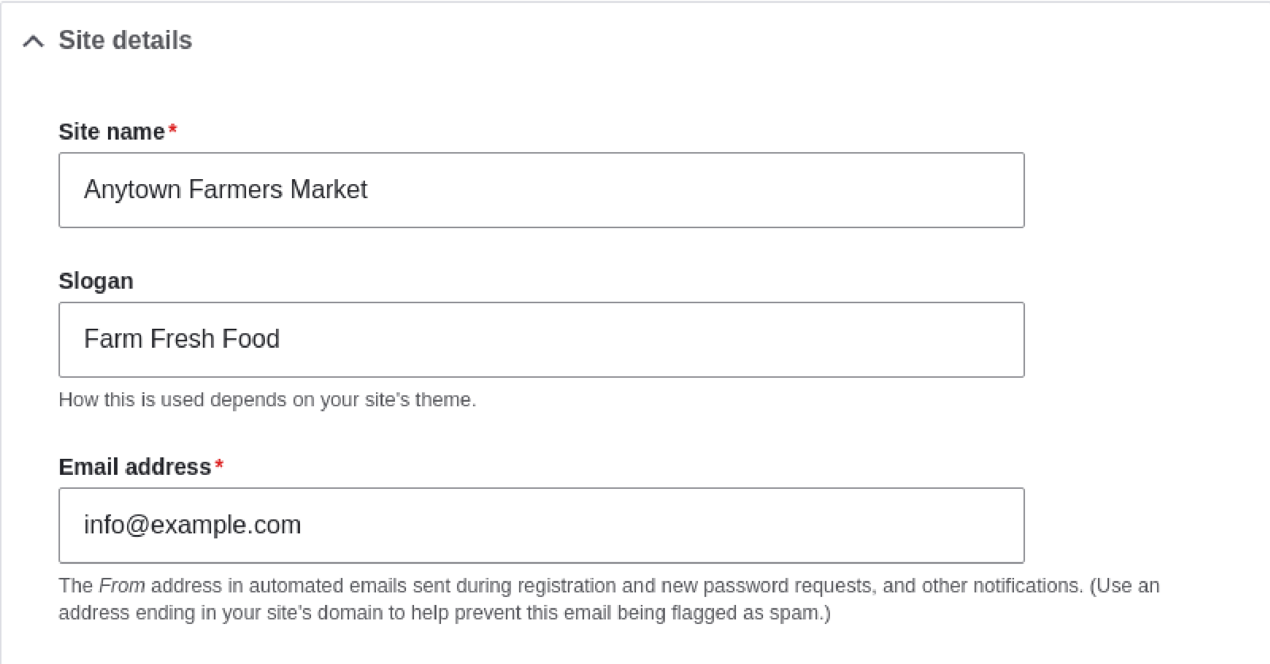
Steps

Configuring the basic site information

1. In the *Manage* administrative menu, navigate to *Configuration* > *System* > *Basic site settings* (*admin/config/system/site-information*) to change the *Site name*, *Slogan*, administrative *Email address*, or the *Default front page* path.

2. Fill in the available fields as appropriate for your site.

Field name	Explanation	Example value
Site details > Site name	Used to identify the site and displayed in browsers	Anytown Farmers Market
Site details > Slogan	How this is used depends on your site's theme. Not displayed by default when using the Olivero theme.	Farm Fresh Food
Site details > Email address	Used as *From* address in automated email messages (registrations, password resets, etc)	info@example.com



3. After editing the fields, click *Save configuration* to see the changes applied to the site.

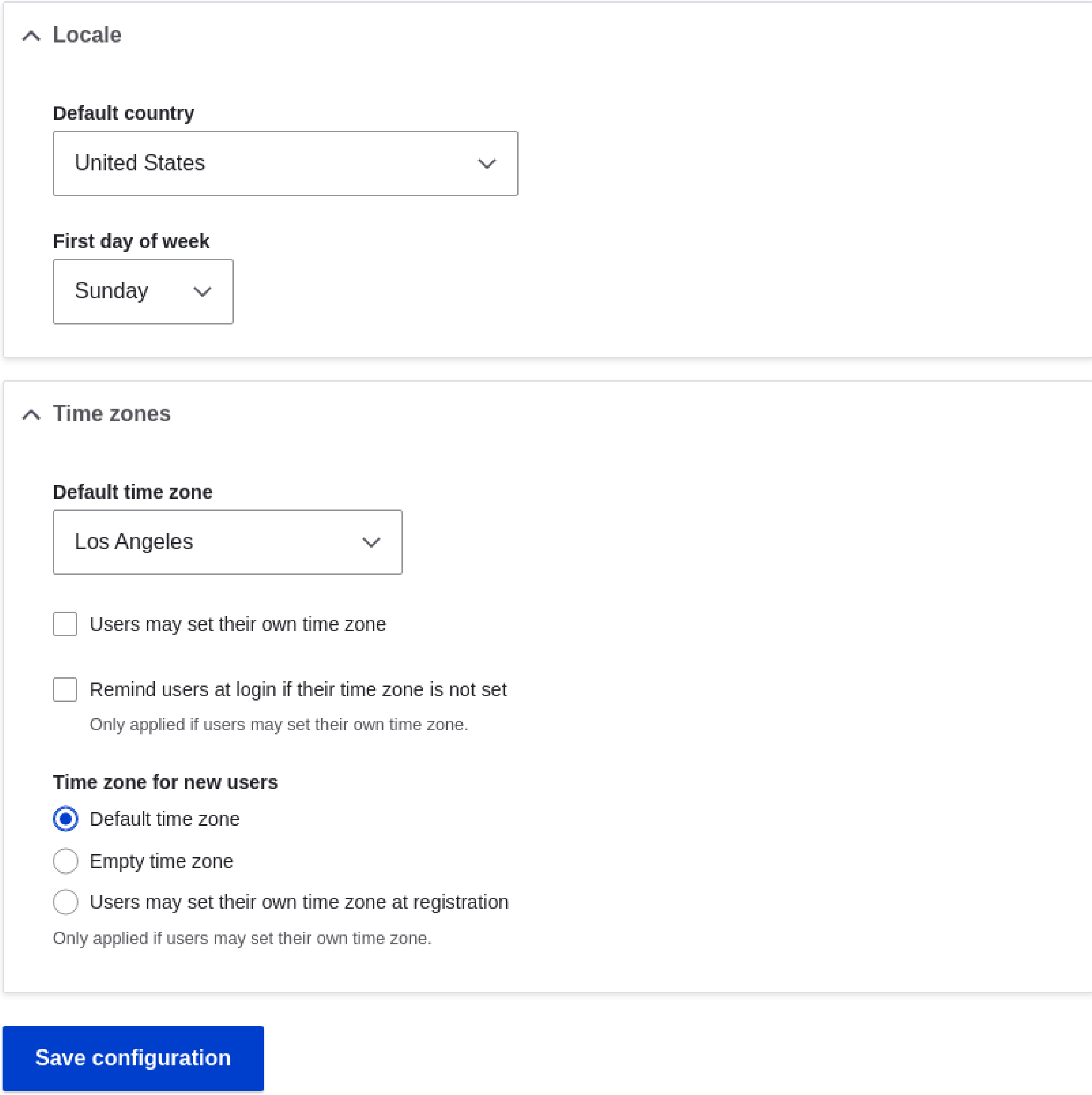
Configuring default Regional settings

1. In the *Manage* administrative menu, navigate to *Configuration* > *Regional and language* > *Regional settings* (*admin/config/regional/settings*).

2. Fill in the form as follows:

Field name	Explanation	Example value
Locale > Default country	The primary country for your site	United States
Locale > First day of week	The day when the week starts on calendars	Sunday

Field name	Explanation	Example value
Time zones > Default time zone	The primary time zone for your site	America > Los Angeles
Time zones > Users may set their own time zone	Whether logged-in users can choose a different time zone for display of dates and times on the site	Unchecked



3. After editing the fields, click *Save configuration* to see the changes applied to the site.

Videos

Editing Basic Site Information

Editing Basic Site Information

Additional resources

Drupal.org community documentation page "Getting started with Drupal administration"

Attributions

Written and edited by Sree Veturi, Michael Lenahan at erdfisch, Antje Lorch, Jennifer Hodgdon, and Joe Shindelar at Drupalize.Me.

4.3 Installing a Module

Goal

Install a core module, or a contributed module whose files have already been uploaded to the site, through the administrative interface or using Drush.

Prerequisite knowledge

Section 1.2, "Concept: Modules"

Site prerequisites

If you want to use Drush to install modules, Drush must be installed. See Section 3.2, "Concept: Additional Tools".

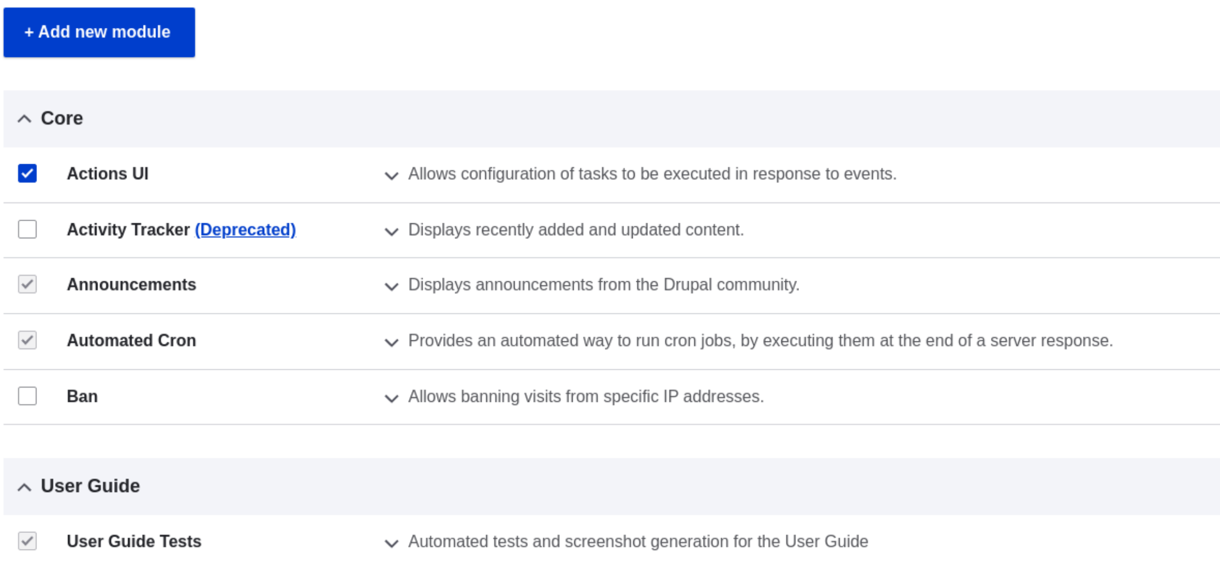
Steps

You can use the administrative interface or Drush to install modules.

Using the administrative interface

1. In the *Manage* administrative menu, navigate to *Extend* (*admin/modules*). The *Extend* page appears showing all the available modules in your site.

2. Check the boxes for the module or modules you want to install. For example, check the box for the core Actions UI module.



3. Click *Install*. The checked modules will be installed.

Using Drush

1. In the *Manage* administrative menu, navigate to *Extend* (*admin/modules*). The *Extend* page appears showing all the available modules in your site.
2. Find the machine name of the module you want to install, by expanding the information area for the module. For instance, the core Actions UI module's machine name is *action*.
3. Run the following Drush command to install the module:

```
drush pm:enable action
```

Expand your understanding

If you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Videos

Installing a Module

Installing a Module

Additional resources

Drush

Attributions
Written and edited by Boris Doesborg and Jennifer Hodgdon, and Joe Shindelar at Drupalize.Me.

4.4 Uninstalling Unused Modules

Goal

Uninstall the core Search and History modules, as well as the core Actions UI module if you installed it in Section 4.3, "Installing a Module", to reduce overhead.

Prerequisite knowledge

Section 1.2, "Concept: Modules"

Site prerequisites

- You must have at least one unused module on your site that you want to uninstall, such as the core Search module.
- If you want to use Drush to uninstall modules, Drush must be installed. See Section 3.2, "Concept: Additional Tools".

Steps

You can use the administrative interface or Drush to uninstall modules.

Using the administrative interface

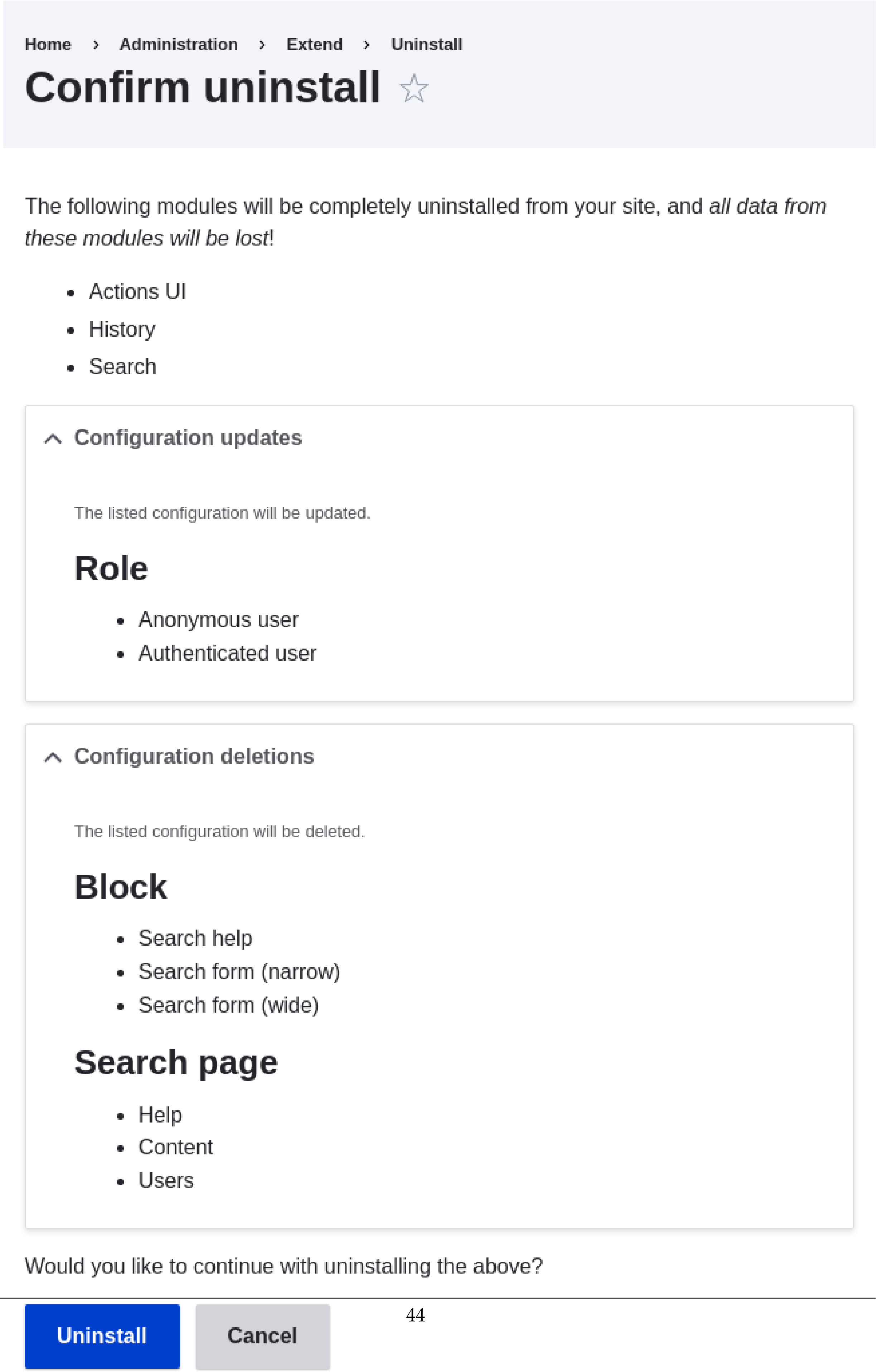
1. In the *Manage* administrative menu, navigate to *Extend* > *Uninstall* (*admin/modules/uninstall*) where you will find the list of modules that are ready to be uninstalled.

2. Check the boxes for the modules you are uninstalling (*Search*, *History*, and *Actions UI*). Click *Uninstall* at the bottom of the page.

Uninstall	Name	Description
☑	Actions UI	Allows configuration of tasks to be executed in response to events.
☐	AJAX request tracking	Tracks AJAX requests to allow JS tests to reliably wait and observe these.
☐	Announcements	Displays announcements from the Drupal community.
☐	Automated Cron	Provides an automated way to run cron jobs, by executing them at the end of a server response.

> **NOTE**
>
> You cannot uninstall a module if it is required by some other module(s) and/or functionality. For example, the core File module is required by the core Text Editor, CKEditor, and Image modules. It can't be uninstalled unless you uninstall its dependent module(s) and functionality first. A module that cannot be uninstalled yet will have a disabled checkbox, restricting you from uninstalling it.

3. Step 2 will prompt you to confirm the module uninstall request. Click *Uninstall*.


Home › Administration › Extend › Uninstall
Confirm uninstall
The following modules will be completely uninstalled from your site, and all data from these modules will be lost!
Actions UI
History
Search
Configuration updates
The listed configuration will be updated.
Role
Anonymous user
Authenticated user
Configuration deletions
The listed configuration will be deleted.
Block
Search help
Search form (narrow)
Search form (wide)
Search page
Help
Content
Users
Would you like to continue with uninstalling the above?
Uninstall
Cancel

Using Drush

1. In the *Manage* administrative menu, navigate to *Extend* (*admin/modules*). The *Extend* page appears showing all the available modules in your site.

2. Find the machine name of the module you want to uninstall, by expanding the information area for the module. For instance, the core Actions UI module's machine name is *action*.

3. Run the following Drush command to uninstall the module:

```
drush pm:uninstall action
```

Expand your understanding

- Section 3.2, "Concept: Additional Tools"
- Section 12.2, "Clearing the Cache"
- You can also uninstall the core Comment module by following these steps, but only after comment fields have been removed, which is a side effect of Section 6.2, "Deleting a Content Type".

Videos

Uninstalling Unused Modules

Uninstalling Unused Modules
Attributions
Written and edited by Joe Shindelar at Drupalize.Me, Surendra Mohan, and Jojy Alphonso at Red Crackle.

4.5 Configuring User Account Settings

Goal

Turn off the ability for people to register user accounts on the site. Also, review and/or edit the email messages generated by the site for events related to user accounts.

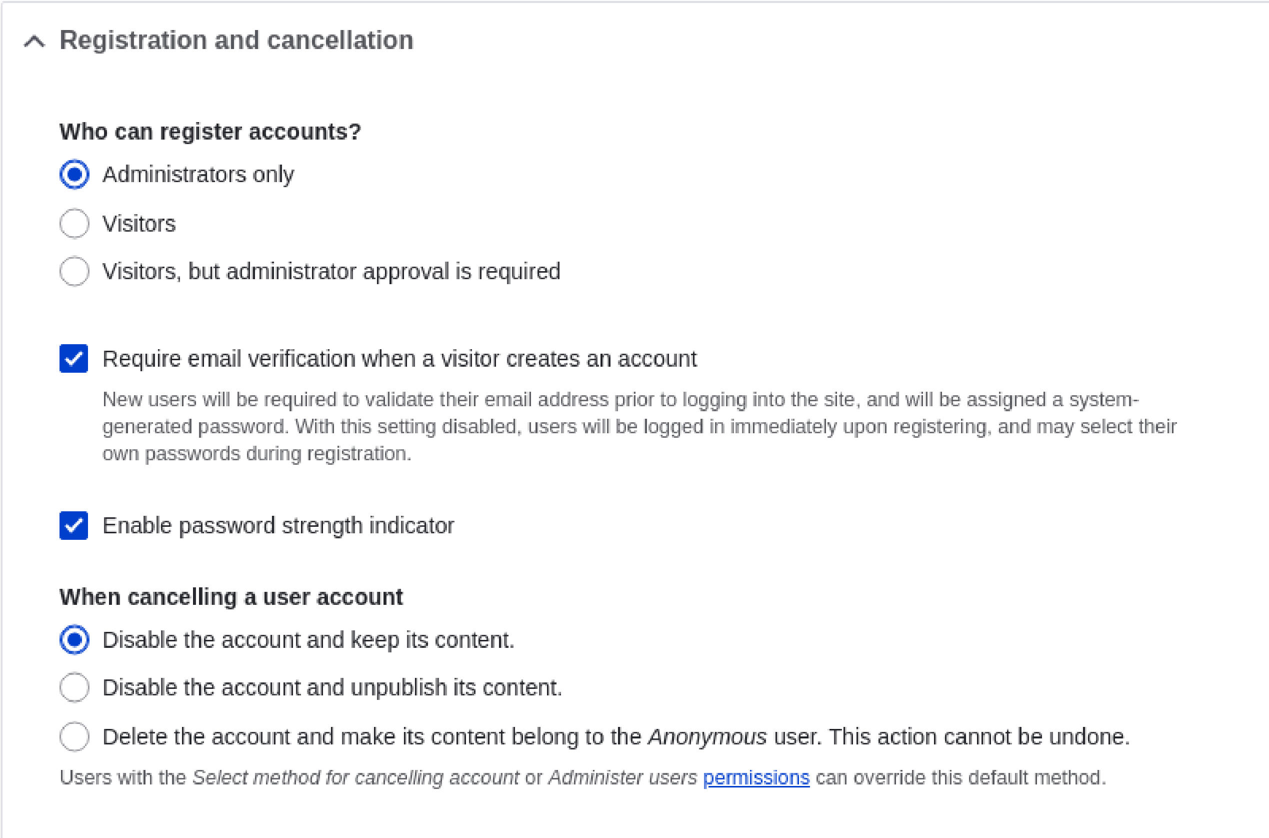
Prerequisite knowledge

Section 4.1, "Concept: Administrative Overview"

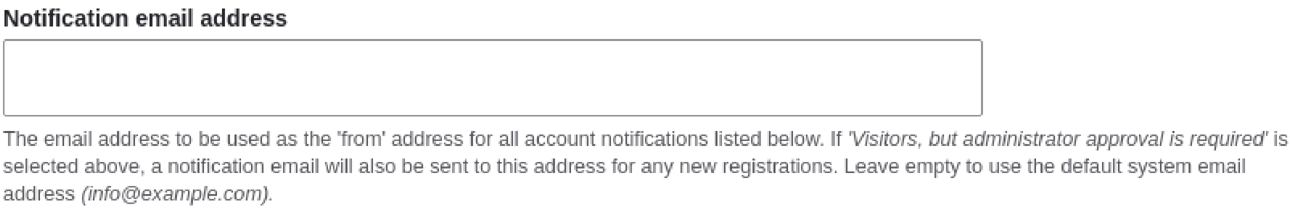
Steps

1. In the *Manage* administrative menu, navigate to *Configuration* > *People* > *Account settings* (*admin/config/people/accounts*).

2. Under *Registration and cancellation*, select *Administrators only* as the people with permissions to register user accounts. You can check *Require email verification when a visitor creates an account* in case you want to change the settings for account registration later on.

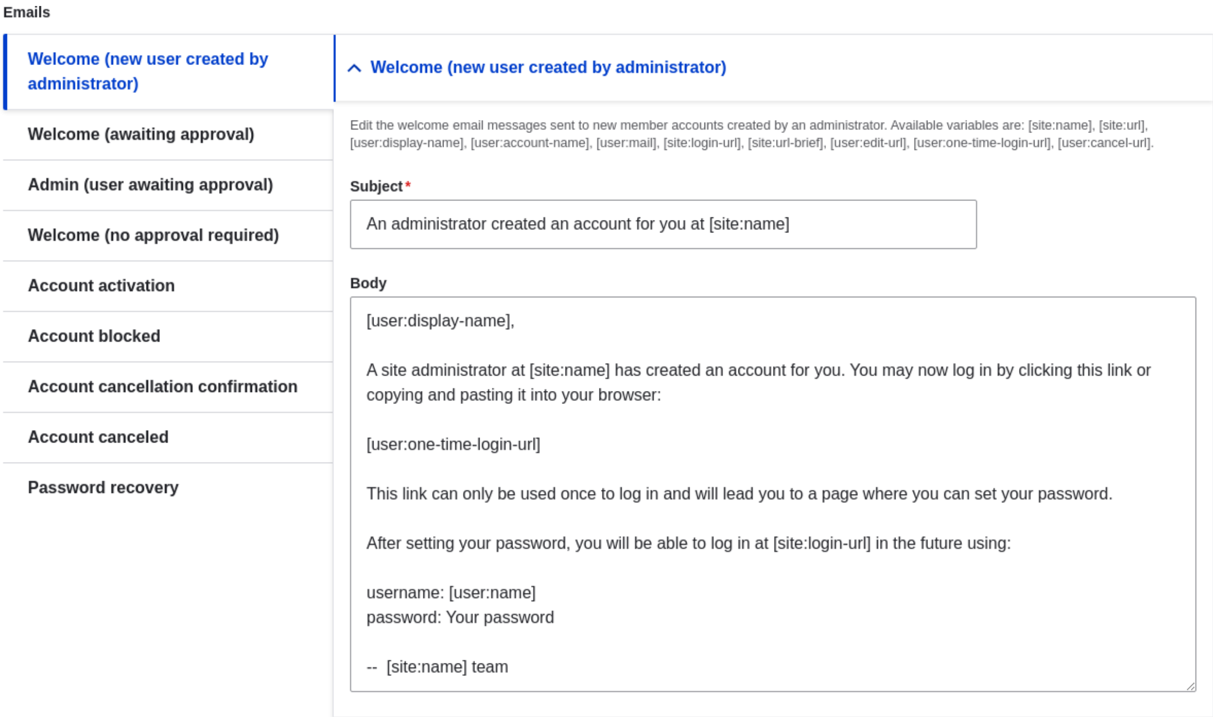


3. Optionally, change the default email address from which user account notifications from the farmers market website will be sent. This will help you maintain a separate email address from the one used for the website in general. For example, this email address for user account notifications will be useful for a staff member(s) communicating with vendors.



4. Optionally, edit the email templates under *Emails* to customize automated emails. There are several email templates provided by the core software. They are meant for different user-specific occasions. All of them can be personalized and three can be disabled via checkboxes: activation, blocking, and cancellation.

   You can send out your own text (for example, welcoming the new vendors for whom accounts were just created) by editing the *Welcome (new user created by administrator)* template.



5. Click *Save configuration* to save the changes.

Expand your understanding

- Section 12.2, "Clearing the Cache"
- Section 7.4, "Creating a User Account"

Related concepts

See Chapter 7, Managing User Accounts for more information about user accounts and permissions.

Videos

Configuring User Account Settings

Configuring User Account Settings

Additional resources

Securing your site can help you with a more safety-focused approach to configuration.

Attributions

Written and edited by Laura Vass at Pronovix, and Jojy Alphonso at Red Crackle.

4.6 Configuring the Theme

Goal

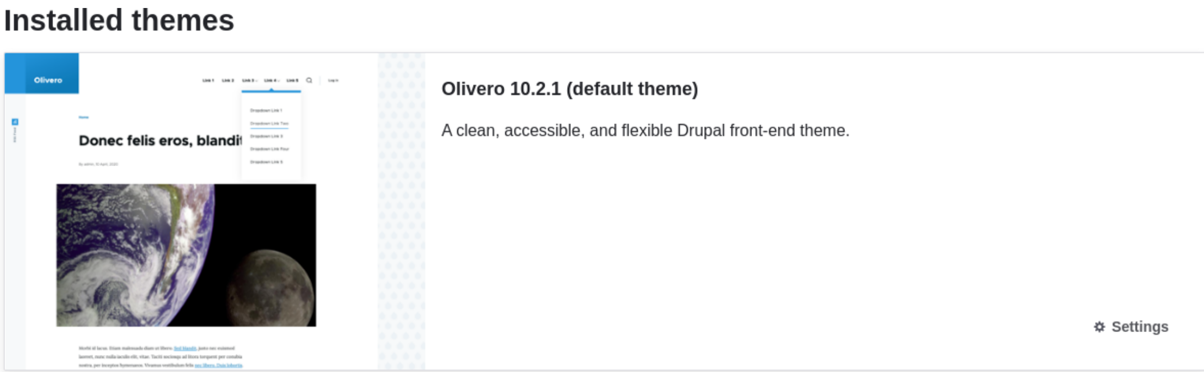
Edit the settings of the default core Olivero theme to change the color scheme and to add a logo.

Prerequisite knowledge

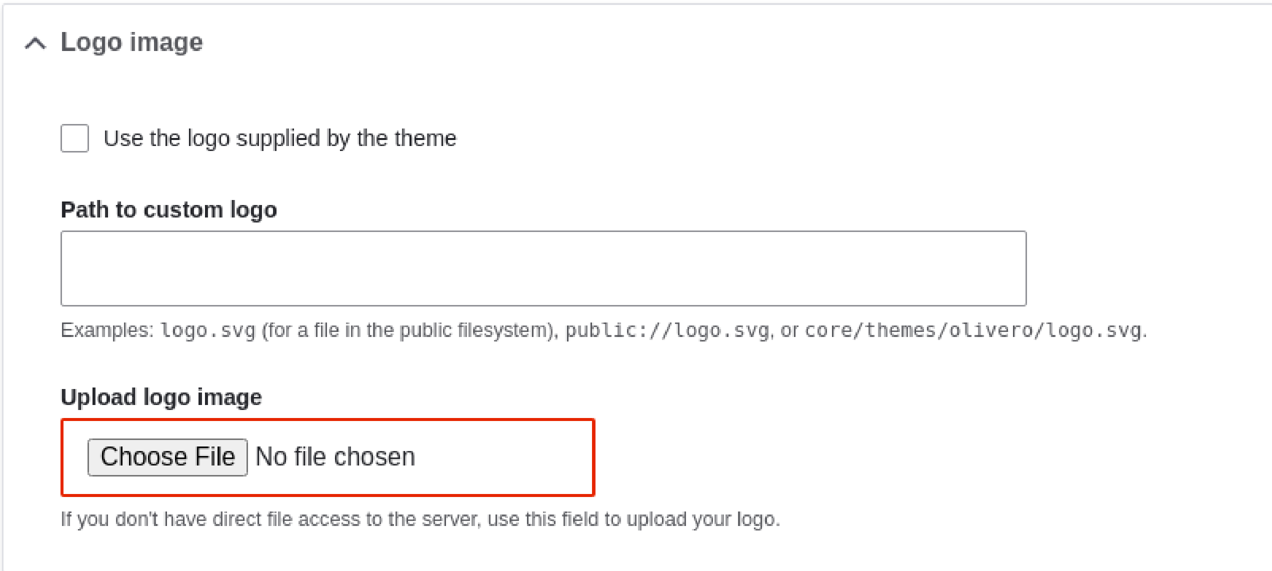
Section 1.3, "Concept: Themes"

Steps

1. In the *Manage* administrative menu, navigate to *Appearance* (*admin/appearance*).
2. Under *Installed themes*, you will find Olivero listed as your default theme. Under *Olivero* (*default theme*), click *Settings*.



3. Under *Logo image*, uncheck *Use the logo supplied by the theme*.



4. Under *Upload logo image*, locate a logo file and upload it to your site. Note: You can also set a universal logo for all themes under *Appearance* > *Settings* (*admin/appearance/settings*). A custom logo for your theme will override the universal logo.

   Once you have selected the file you would like to upload, you will see its filename next to the *Choose File* or *Browse* button in your browser.

5. Under *Olivero Utilities*, you can choose to use a different color scheme for the theme. You can choose from a list of existing color scheme's, or enter a color and the core software will generate a new scheme based on that color.

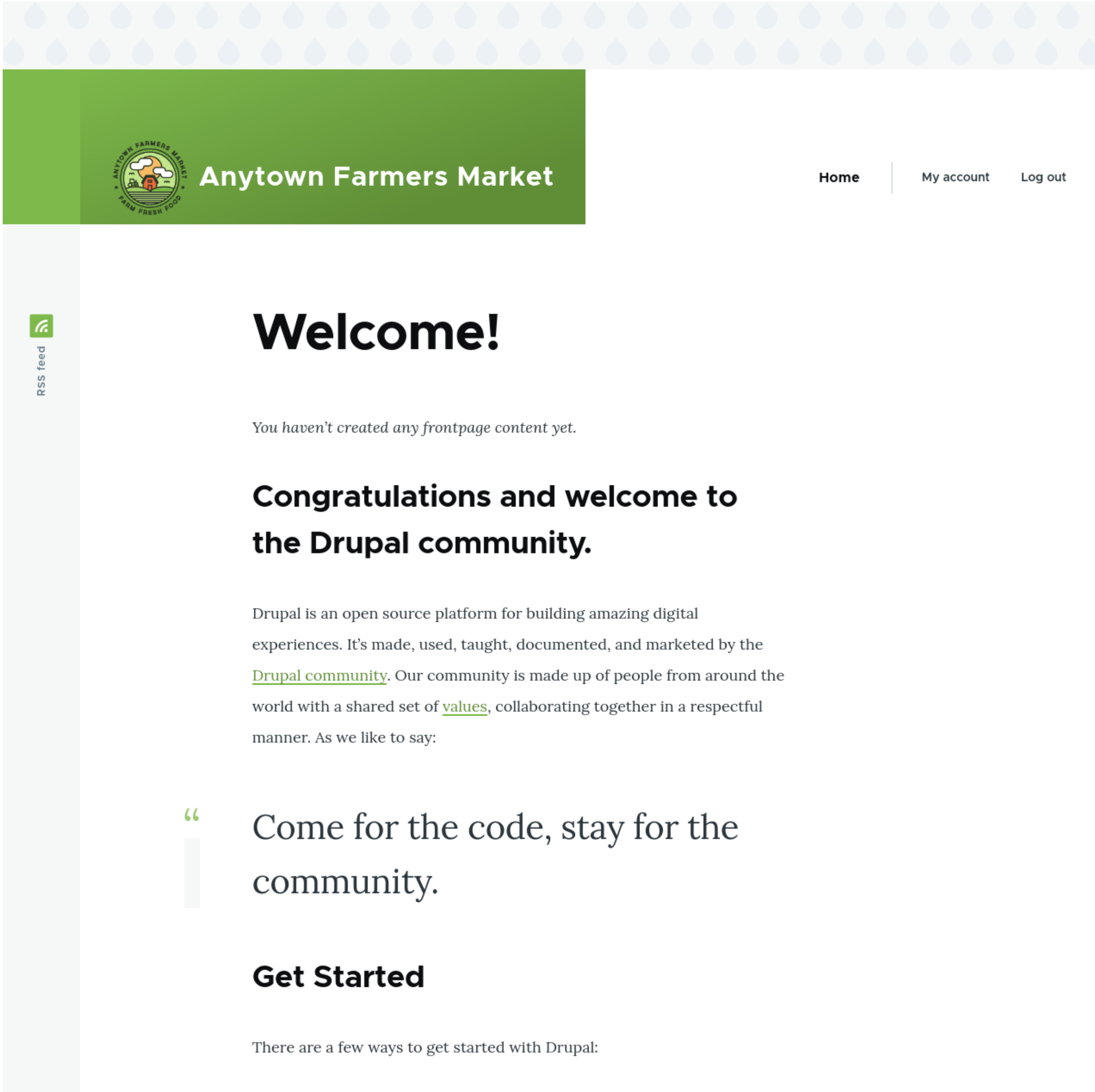
For example, use the following custom color:
+

Field	**Color**
Primary base color	#7db84a (green)

+ Note: You can also use a color picker by pressing the colored square on the right to select a color of your choice. The web color codes will be added for you.

1. In order to save your changes and see the updated colors and logo on your site, click *Save configuration* at the bottom of the page.

2. Click *Return to site* or *Home* in the toolbar to verify that you have updated the core Olivero theme settings for your website.



Expand your understanding

- Section 11.4, "Finding Themes"
- Section 11.5, "Downloading and Installing a Theme from *Drupal.org*"
- If you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Videos

Configuring the Theme

Configuring the Theme

Attributions

Written and edited by Ann Greazel, Amanda Luker at Advomatic, Jack Haas, and Joe Shindelar at Drupalize.Me.

Chapter 5

Basic Page Management

5.1 Concept: Paths, Aliases, and URLs

What is a URL?

URL is the abbreviation for ”Uniform Resource Locator”, which is the page’s address on the web. It is the ”name” by which a browser identifies a page to display. In the example ”Visit us at *example.com*.”, *example.com* is the URL for the home page of your website. Users use URLs to locate content on the web.

What is a Path?

A path is the unique, last part of the URL for a specific function or piece of content. For example, for a page whose full URL is *http://example.com/node/7*, the path is *node/7*.

Here are some examples of paths you might find in your site:

- *node/7*
- *taxonomy/term/6*
- *admin/content/comment*
- *user/login*
- *user/3*

What is an Alias?

The core software has a feature called ”URL Alias” that allows you to provide a more understandable name to the content. So, if you have an ”About Us” page with the path *node/7*, you can set up an alias so that your visitors will see it as *http://www.example.com/AboutUs*. The core Path module, which supports URL aliasing, provides this functionality.

Related topics

- Section 5.2, “Creating a Content Item”
- Section 5.3, “Editing a Content Item”

Attributions

Adapted by Diána Lakatos at Pronovix from ”URL aliases”, and ”URL paths” copyright 2000-2024 by the individual contributors to the Drupal Community Documentation

5.2 Creating a Content Item

Goal

Create and publish a content item that will be used as the home page of the site.

Prerequisite knowledge

- Section 5.1, "Concept: Paths, Aliases, and URLs"
- Section 2.3, "Concept: Content Entities and Fields"

Site prerequisites

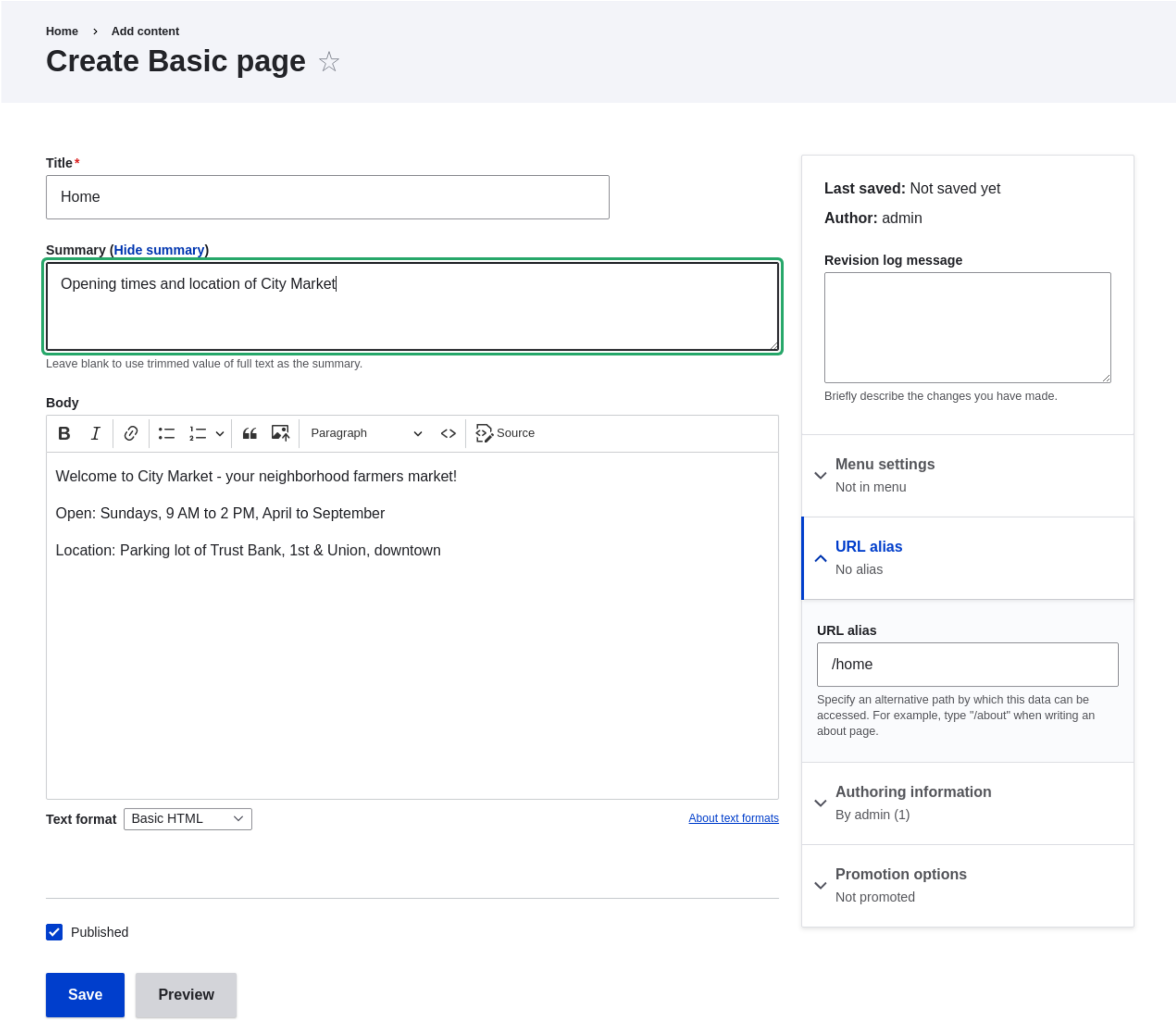
The *Basic page* content type must exist. This is created on your site when you install with the core Standard installation profile.

Steps

1. In the *Manage* administrative menu, navigate to *Content* > *Add content* > *Basic page* (*node/add/page*). The *Create Basic page* form appears.
2. Click *Edit summary*.
3. Fill in the fields as shown below.

Field name	**Explanation**	**Value**
Title	Title of the page. Will also be used as a meta tag in the source code, URL alias, and as label of the content item in administration screens	Home
Summary	Summary of the value of the body field. Can be used as teaser in overview pages	Opening times and location of City Market.
Body	Full content of the page	Welcome to City Market - your neighborhood farmers market! Open: Sundays, 9 AM to 2 PM, April to September Location: Parking lot of Trust Bank, 1st & Union, downtown
Published	Whether the content is published for public view or not	Checked
URL alias > URL alias	Alternate relative path for the content	/home

By clicking the *Source* button in the rich text editor toolbar, you can see the HTML source code of the text that you are editing.



4. Click *Preview* to ensure everything looks like expected.
5. Click *Back to content editing*.
6. Click *Save*. The content is saved and can be found on the *Content* page.
7. Follow the same steps to create an About page, with title ”About”, and a body telling about the history of the farmer’s market.

Expand your understanding

- Section 5.4, “Designating a Front Page for your Site”
- Section 5.6, “Adding a Page to the Navigation”
- Section 10.3, “Translating Content”

Related concepts

- Section 2.7, “Concept: User Interface, Configuration, and Content translation”
- Section 5.1, “Concept: Paths, Aliases, and URLs”
- Section 5.3, “Editing a Content Item”

Videos

Creating a Content Item

[Creating a Content Item]

Additional resources

Drupal.org community documentation page "About nodes"

Attributions

Written by Agnes Kiss and Boris Doesborg.

5.3 Editing a Content Item

Goal

Update the hours on the Home page content item.

Prerequisite knowledge

Section 5.2, "Creating a Content Item"

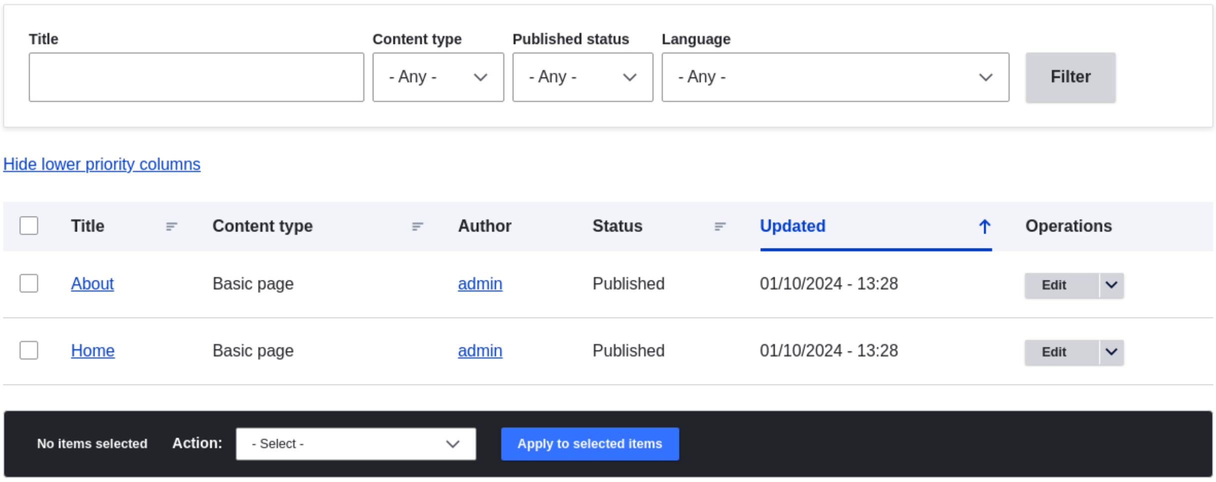
Site prerequisites

A content item for the Home page must exist. See Section 5.2, "Creating a Content Item".

Steps

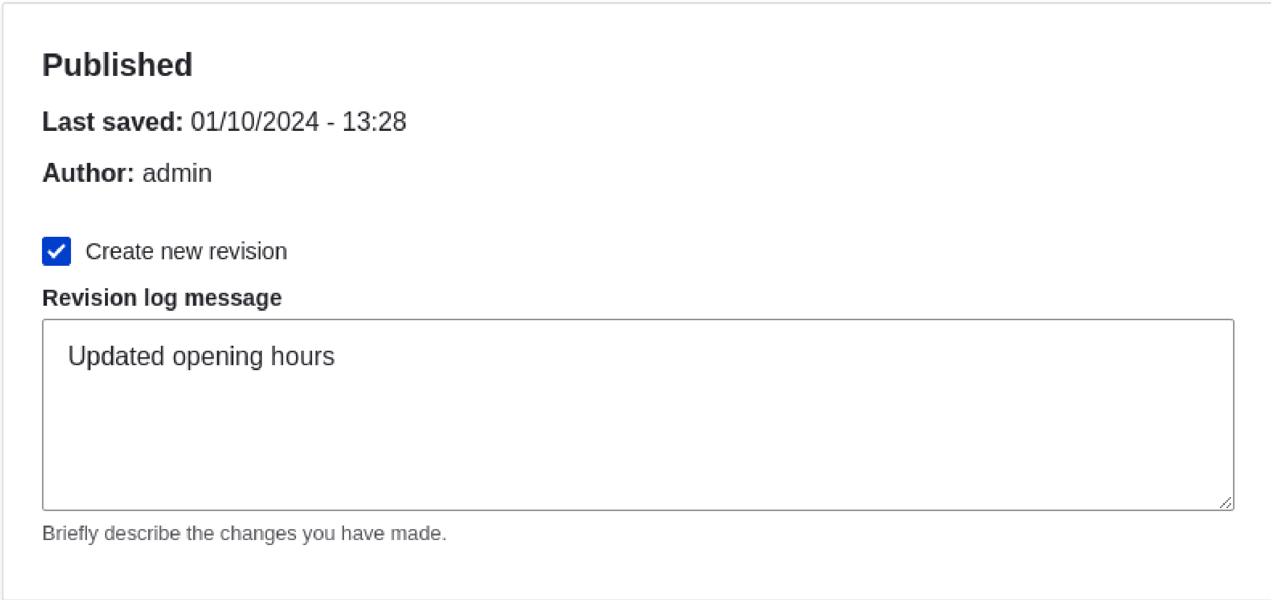
1. In the *Manage* administrative menu, navigate to *Content* (*admin/content*).

2. If the content item you want to edit was updated or created recently, it should appear near the top of the content list on that page. If not, you can use the *Content type*, *Title*, or other filters to locate the content item.



3. Click *Edit* in the row of the content item you want to edit (Home), to open the content editing form. Update the opening hours in the *Body* field. See Section 5.2, "Creating a Content Item" for an explanation of the fields and a screenshot.

4. Check *Create new revision* under *Published*, if it is not already checked, and enter a *Revision log message* explaining what changes you are making (for example, you might enter "Updated opening hours"). This text will appear in the revision log for the page.



5. Click *Save* to save your changes.

6. You will be redirected back to the *Content* administrative page, and there should be a message showing that the content item was updated.

Expand your understanding

As an alternative to the first two steps above, you can also reach the content edit form as follows:

1. Starting from your site's home page, use the site's navigation menus to locate the page where the content you want to edit is displayed to visitors.

2. Most themes will display an *Edit* link or tab near the top of that page to people with permission to edit the page; clicking the link will take you to the full content edit form.

Videos

Editing a Content Item

Editing a Content Item
Attributions
Written by Chris Dart and Jennifer Hodgdon.

5.4 Designating a Front Page for your Site

Goal

Configure which content item is displayed as the front page of your website.

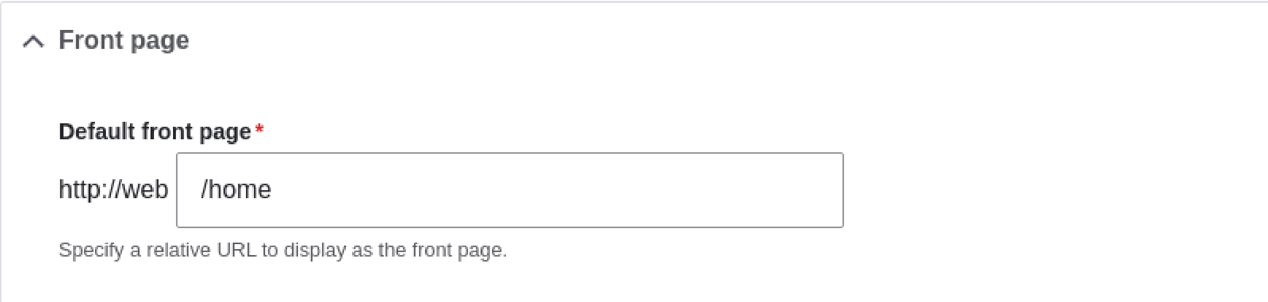
Site prerequisites

The content item that you want to designate as the front page of your site must exist. See Section 5.2, "Creating a Content Item".

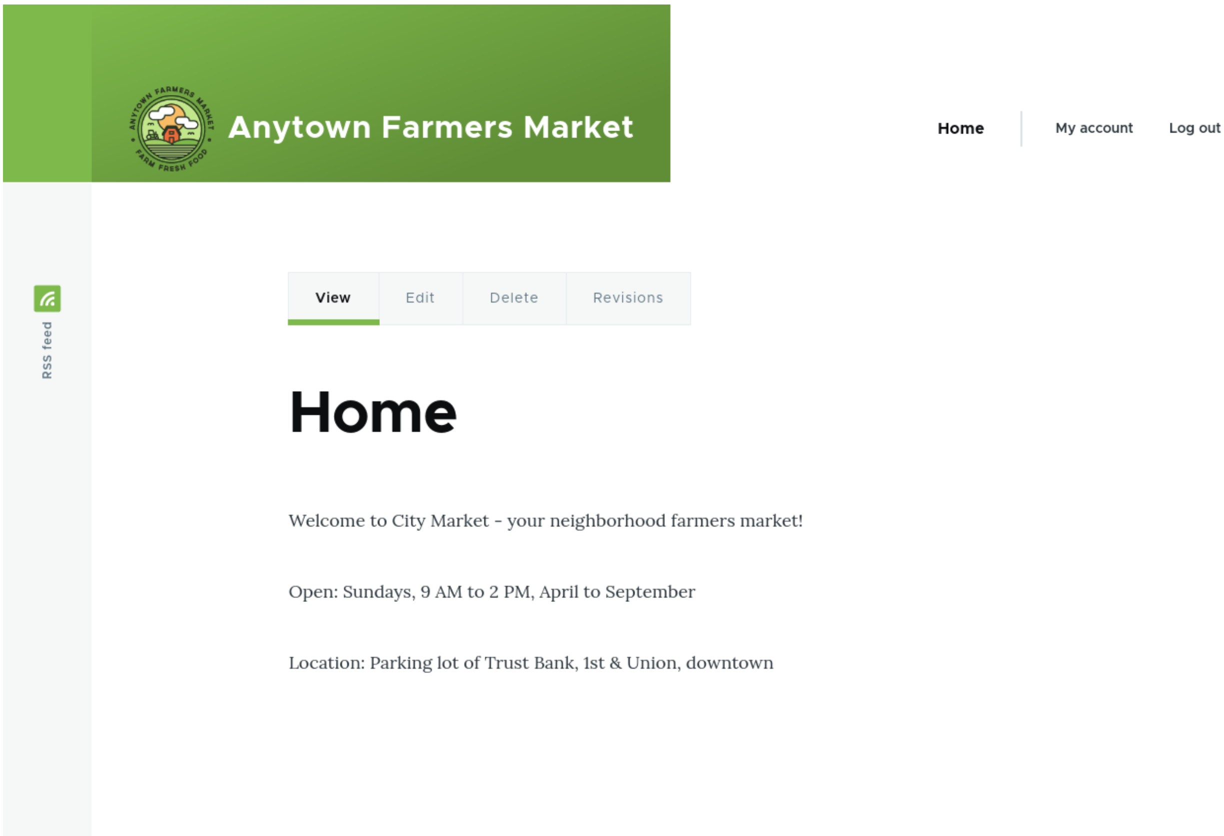
Steps

1. In the *Manage* administrative menu, navigate to *Configuration* > *System* > *Basic site settings* (*admin/config/system/site-information*).

2. Under *Front page*, replace */node* with the name of the page you would like to make the home page. To use the home page that was previously created, provide its path */home*. Click *Save configuration*.



3. Navigate to the home page to verify that it displays content as configured by you.



Expand your understanding

- Section 5.6, "Adding a Page to the Navigation"
- Follow Section 5.2, "Creating a Content Item" to create an error page to be used as a 404 (page not found) or 403 (not authorized) response on your site. Then following the steps here, you can designate it as the error response, in the *Error pages* section of the configuration.

Related concepts

Section 5.5, "Concept: Menu"

Videos

Designating a Front Page for Your Site

Designating a Front Page for Your Site
Attributions
Written and edited by Ann Greazel, Jack Haas, and Jojy Alphonso at Red Crackle.

5.5 Concept: Menu

What is a menu?

Menus are a collection of links used to navigate a website. The core Menu UI module provides an interface to control and customize the menu system. Menus are primarily displayed as a hierarchical list of links. By default, new menu links are placed inside a built-in menu labeled *Main navigation*, but administrators can also create custom menus.

The core Standard installation profile contains five menus:

Main navigation Links to sections intended for site visitors. They are usually created by site administrators.

Administration Links to administrative tasks. This menu mainly contains links supplied by modules on your site.

User account menu Links to tasks associated with the user account such as *My account* and *Log out*.

Footer Links to important pages within the site intended for the footer. They are usually created by site administrators.

Tools Links to tasks necessary for site visitors. Some modules feature their links here.

You can customize menus in the following ways, using the menu administration functionality:

- Creating new custom menus.
- Adding new menu links.
- Reordering menu links by setting their "weight" or by dragging them into place.
- Renaming menu links (link title).
- Changing the link description (the tooltip that appears when you mouse over a menu link).
- Moving a menu link into a different menu by editing its *Parent link* property.

A menu link will only be shown to a visitor if they have the rights to view the page it links to. For example, the admin menu link is not shown to visitors who are not logged in.

Related topics

- Section 5.6, "Adding a Page to the Navigation"
- Section 5.7, "Changing the Order of Navigation"
- To display a menu, you will need to place the block that corresponds to the menu in a region of your theme; see Section 8.1, "Concept: Blocks", Section 2.1, "Concept: Regions in a Theme", and Section 8.3, "Placing a Block in a Region". The core Standard installation profile places all of the menus it defines except Administration in regions of the core Bartik theme. The core Toolbar module, which is installed by the core Standard installation profile, displays the Administration menu; it is also displayed by the contributed Admin Toolbar module.

Attributions
Written and edited by Ajay Viswambharan, Jojy Alphonso at Red Crackle, Jennifer Hodgdon and Bill Seremetis.

5.6 Adding a Page to the Navigation

Goal

Add a page to the navigation. For example, the About page.

Prerequisite knowledge

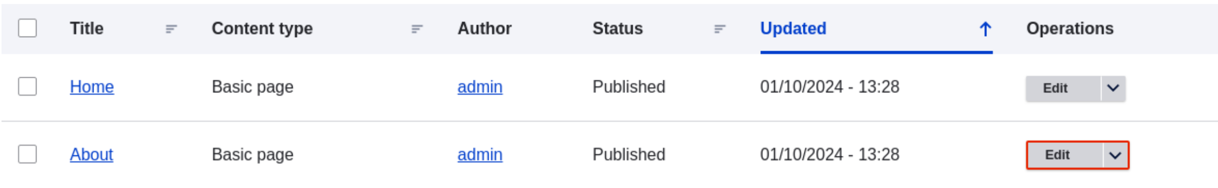
- Section 5.5, "Concept: Menu"
- Section 5.3, "Editing a Content Item"

Site prerequisites

The About page content item must exist. See Section 5.2, "Creating a Content Item".

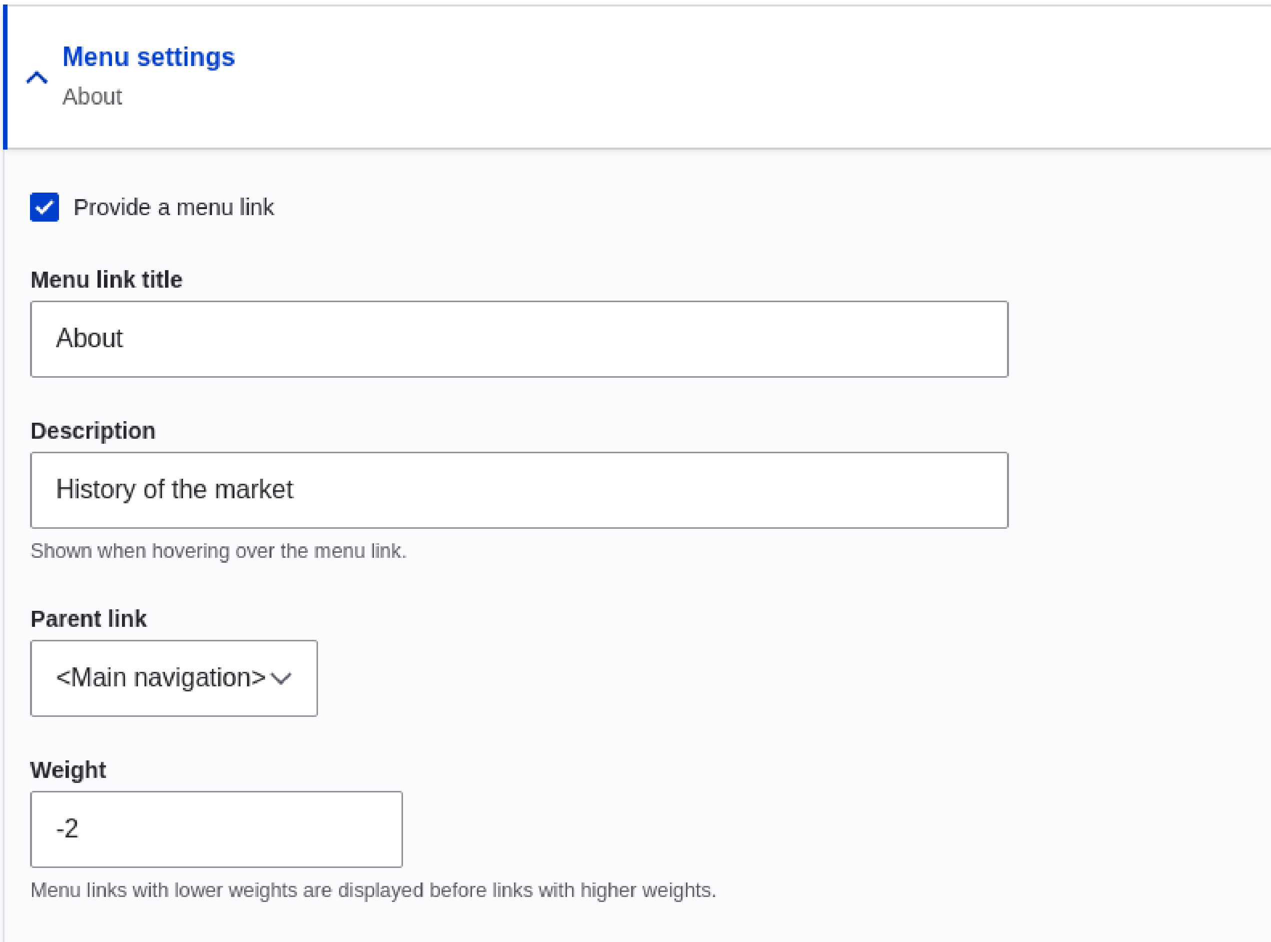
Steps

1. In the *Manage* administrative menu, navigate to *Content* (*admin/content*).
2. Find the About page, and click *Edit* in that row. The content editing form appears.

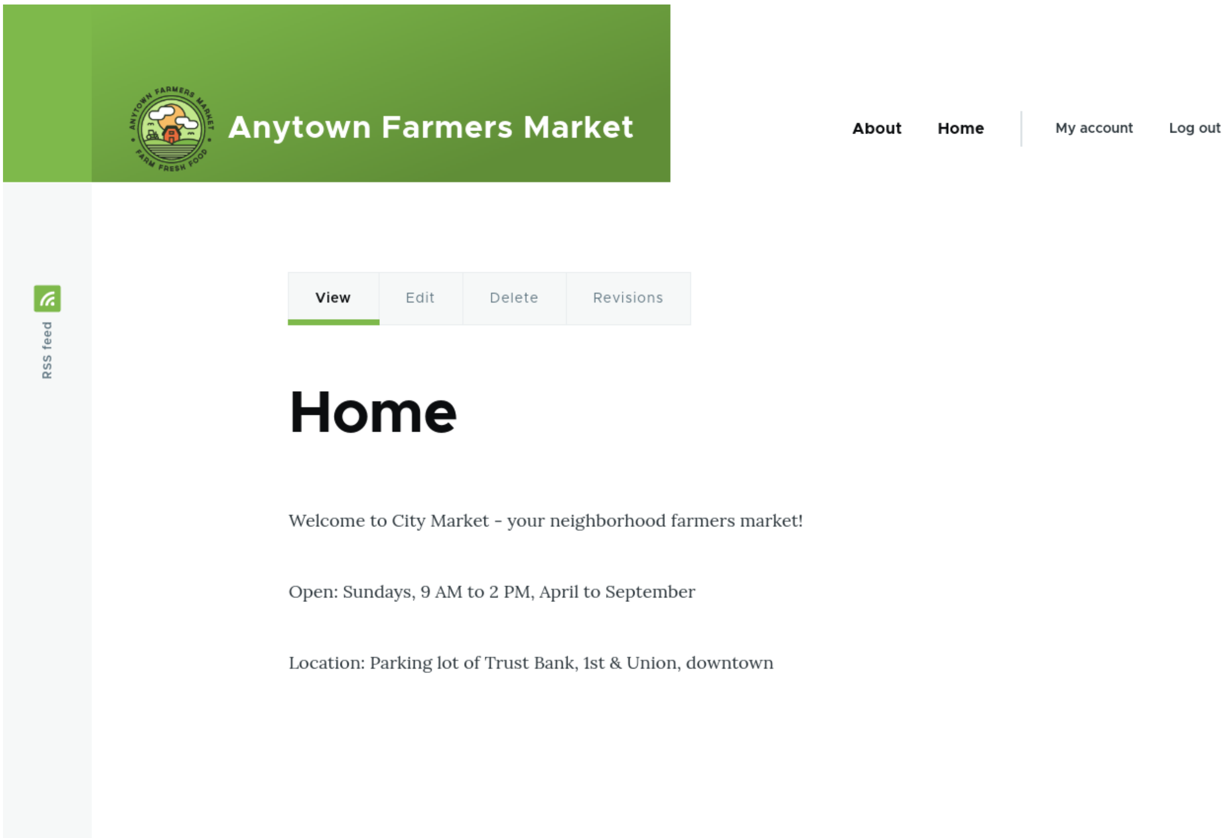


3. Click *Menu settings* on the right to expand it.
4. Check *Provide a menu link* for the menu options to appear.
5. Enter values from the table below:

Field name	**Explanation**	**Example value**
Menu link title	Title that will be displayed in the menu	About
Description	Text that will be displayed when a visitor hovers over the link	History of the market
Parent link	Location of the page in the menu hierarchy. For example, if you choose <*Main navigation*>, the page will appear in the highest level of the navigation. By choosing another menu link as parent, you can create a menu hierarchy of multiple levels.	<Main navigation>
Weight	The order in which the page should appear in the menu (lower-weighted menu links will be shown before higher-weighted menu links)	-2



6. Click *Save* to save the changes. Click *Home* or *Return to site* in the navigation bar to see the result, which could look like the picture below.



Expand your understanding

Section 5.7, "Changing the Order of Navigation"

Videos

Adding a Page to the Navigation

Adding a Page to the Navigation

Additional resources

Drupal.org community documentation page "Adding a link to a menu"

Attributions

Adapted by Boris Doesborg from "Adding a link to a menu", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation; edited by Jack Haas.

5.7 Changing the Order of Navigation

Goal

Reorder the links in a menu.

Prerequisite knowledge

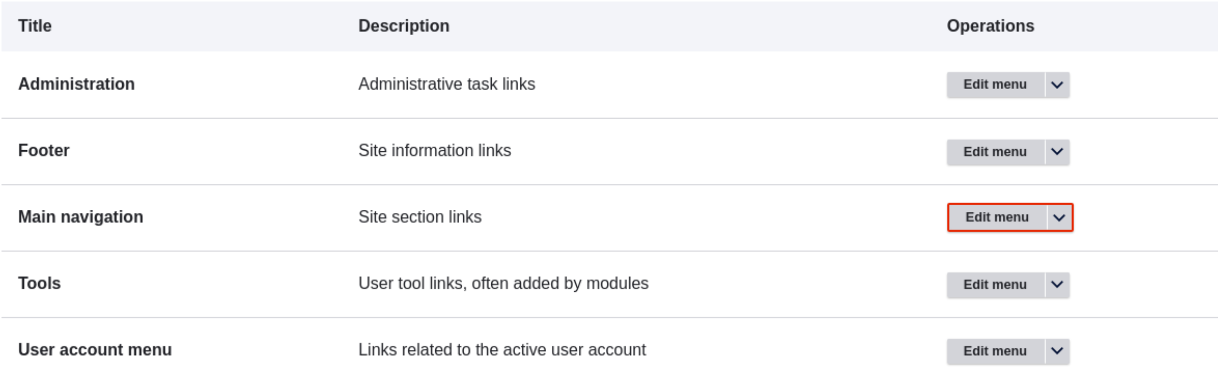
- Section 5.5, "Concept: Menu"
- Section 5.6, "Adding a Page to the Navigation"

Site prerequisites

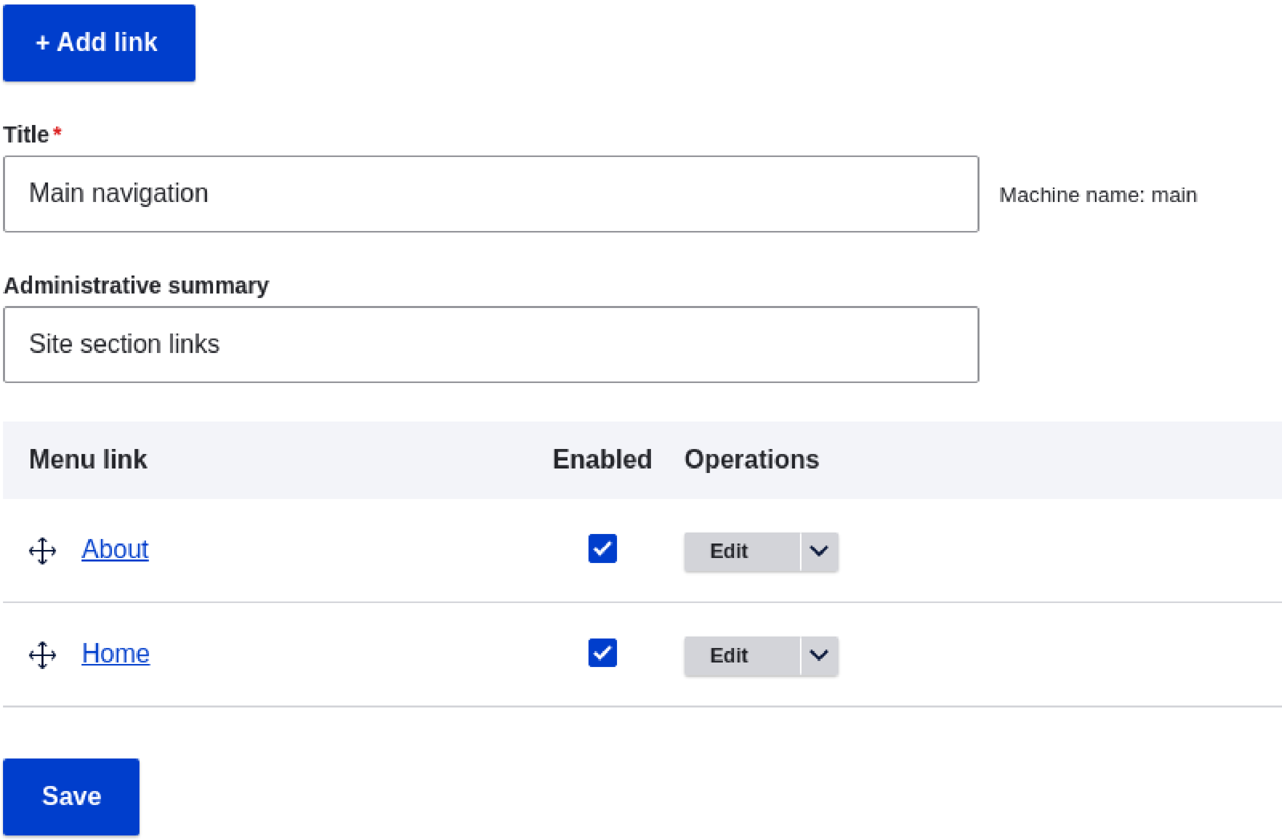
Home and About pages must exist in the main navigation menu. See Section 5.6, "Adding a Page to the Navigation".

Steps

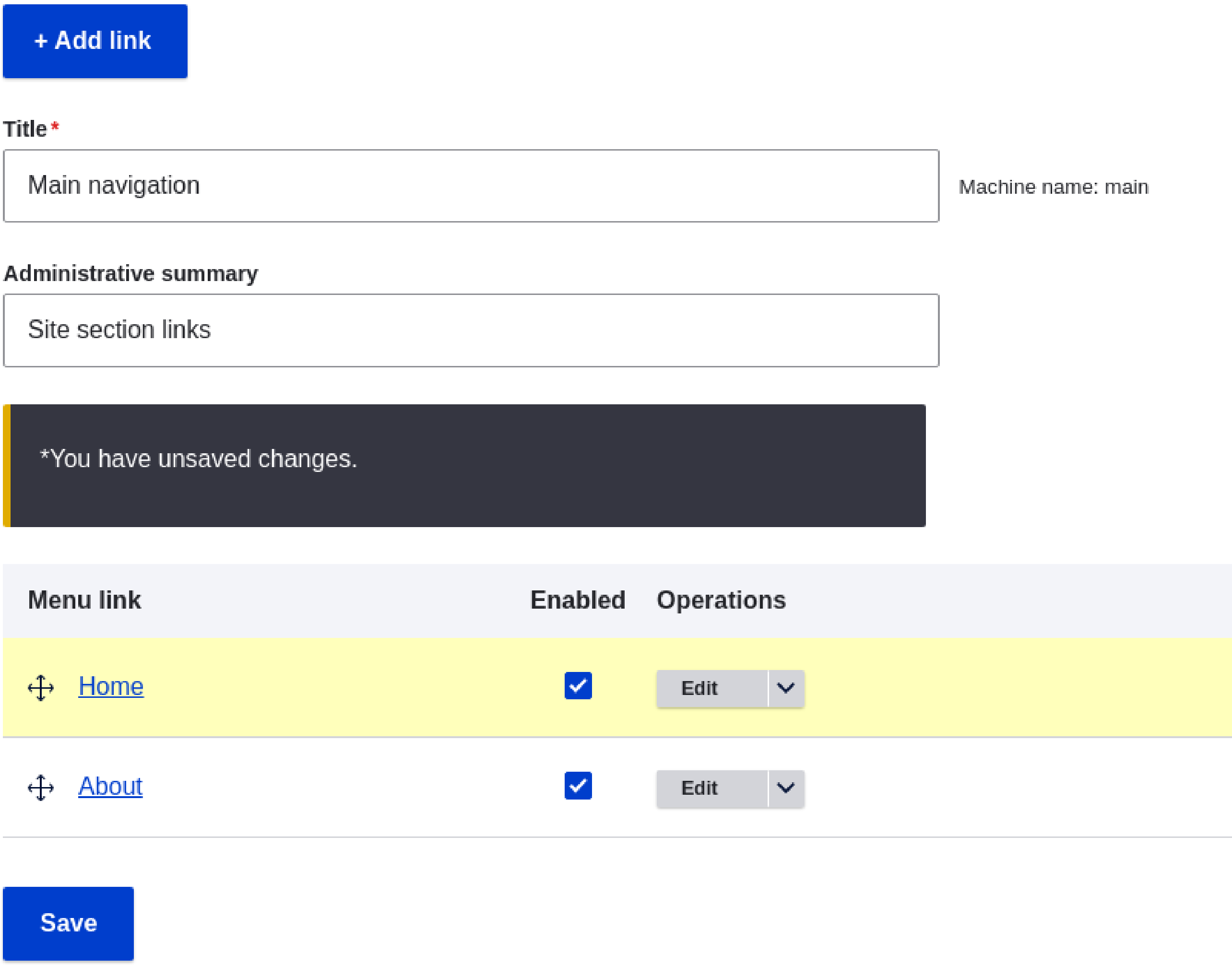
1. In the *Manage* administrative menu, navigate to *Structure* > *Menus* (*admin/structure/menu*) where all menus on your site are listed. Click *Edit Menu* from the *Operations* dropdown for *Main navigation*. You can also reach this page using contextual links (refer to Section 4.1, "Concept: Administrative Overview") for the menu. Note that the names and descriptions of the menus that were provided by your installation profile are shown in English on this page; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.



2. The *Edit menu* page will display a list of each link in the menu you chose (*Main navigation*).



3. Drag the cross bar handles of menu links to change their order: Home, then About. As an alternative to dragging, you can click the *Show row weights* link at the top of the table and select numerical weights (menu links with lower or more negative weights will be shown first).



4. Click *Save*.

5. The home page now displays the main navigation with the Home menu link displayed first.

Expand your understanding

Add a menu link called *Contact*, leading to the */contact* page, to your Main navigation menu. The contact page is provided by the core Contact module; you may want to edit its layout and fields (see Section 6.9, "Changing Content Entry Forms").

Related concepts

Section 5.5, "Concept: Menu"

Videos

Changing the Order of Navigation

Changing the Order of Navigation
Attributions
Written by Ann Greazel.

Chapter 6

Setting Up Content Structure

6.1 Adding a Content Type

Goal

Add and configure a new content type Vendor.

Prerequisite knowledge

Section 2.3, "Concept: Content Entities and Fields"

Site prerequisites

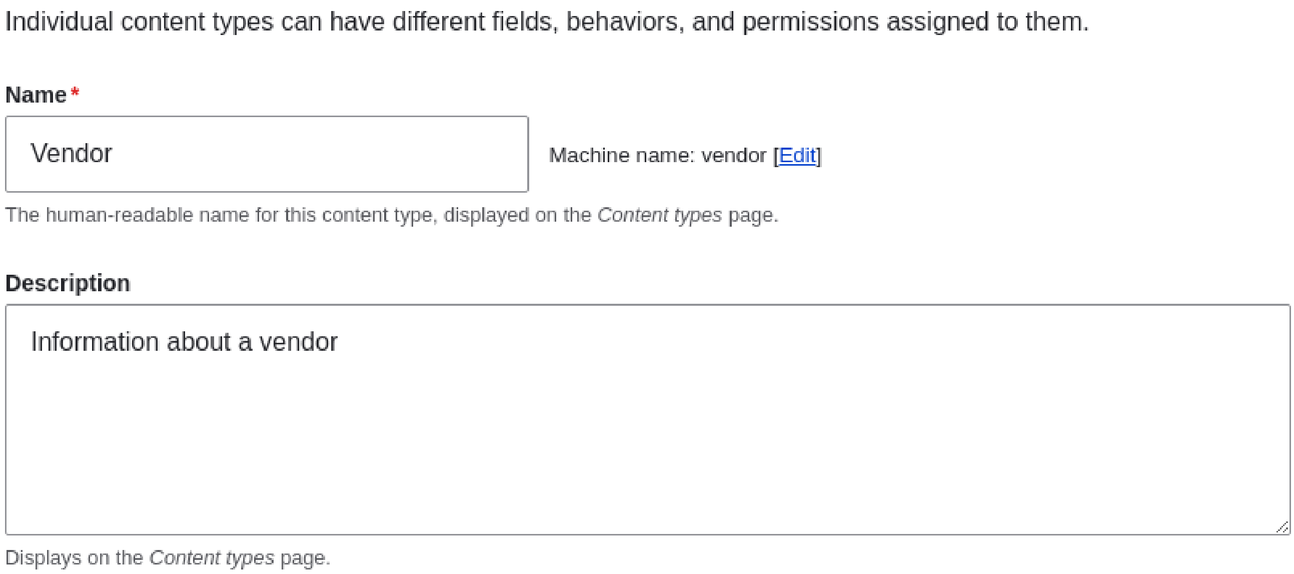
You need to have a plan in place for your content structure. See Section 2.5, "Planning your Content Structure".

Steps

1. In the *Manage* administrative menu, navigate to *Structure* > *Content types* (*admin/structure/types*). The *Content types* page appears showing all the available types of content. Note that the names and descriptions of the content types that were provided by your installation profile are shown in English on this page; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.

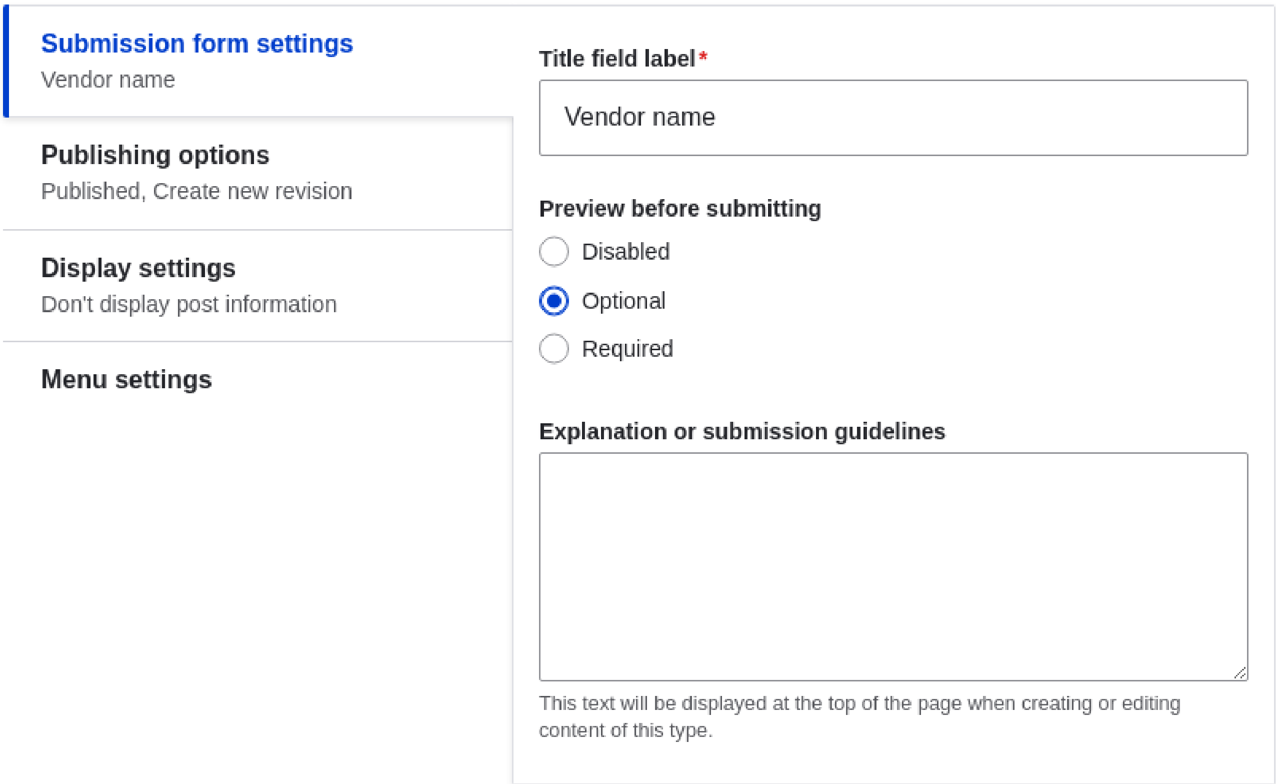
2. Click *Add content type*. The *Add content type* page appears. Fill in the fields as shown below.

Field name	Explanation	Example value
Name	Name of the content type	Vendor
Description	Explain the use of the content type	Information about a vendor



3. Under *Submission form settings*, configure the form that is used for creating and editing content of this type. Fill in the fields as shown below.

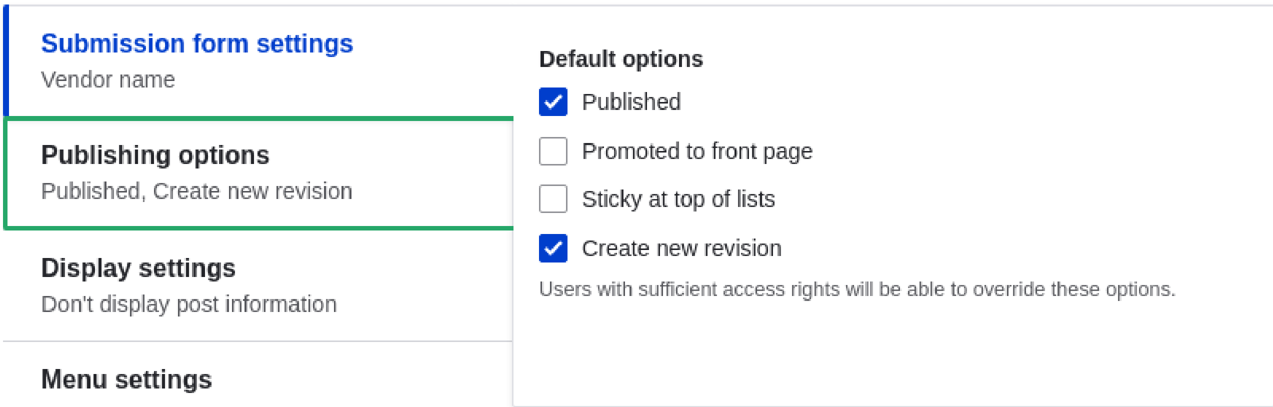
Field name	**Explanation**	**Example value**
Title field label	Label of the Title field that is shown when editing or creating content of this type.	Vendor name
Preview before submitting	Option to choose whether you should preview the content before submitting.	Optional
Explanation or submission guidelines	Instructions for creating or editing content.	(Leave blank)



4. Under *Publishing options*, decide on default options for new content of this type. Fill in the fields as shown below.

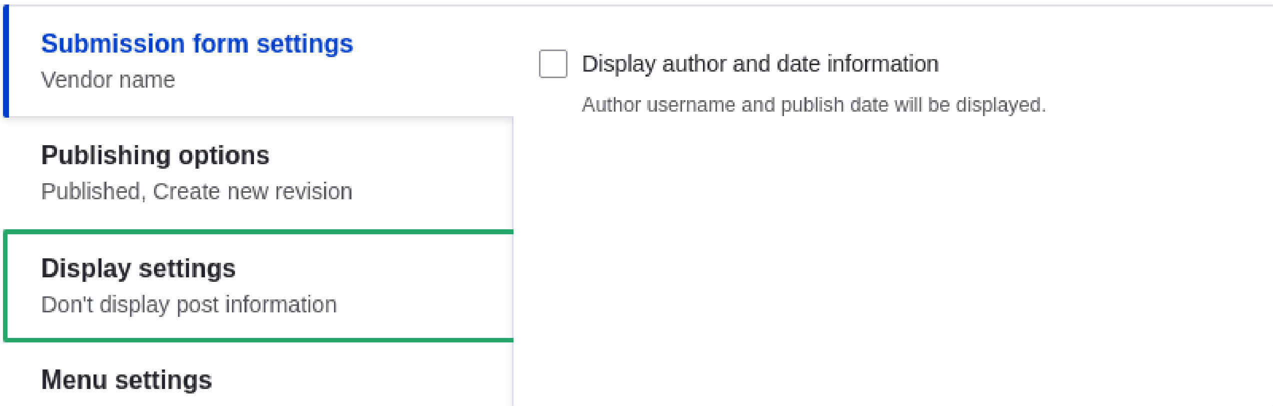
Field name	Explanation	Example value
Published	Make the content item published by default.	Checked
Promoted to front page	In a default website, this setting can be used to show content on the homepage.	Unchecked
Sticky at top of lists	In a default website, this setting can be used to keep content on top of a list.	Unchecked
Create new revision	Create a new revision each time the vendor is being edited.	Checked

Changing these settings does not affect the content items that have already been created.



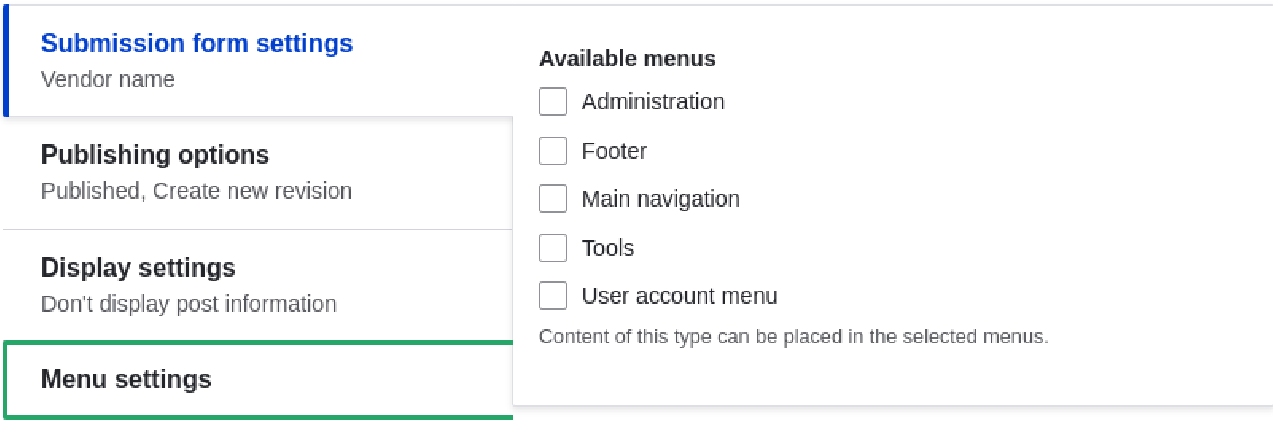
5. Under *Display settings*, decide if the author and publication date will be visible in the content item. Fill in the fields as shown below.

Field name	Explanation	Example value
Display author and date information	Display the author username and publication date on each vendor page.	Unchecked

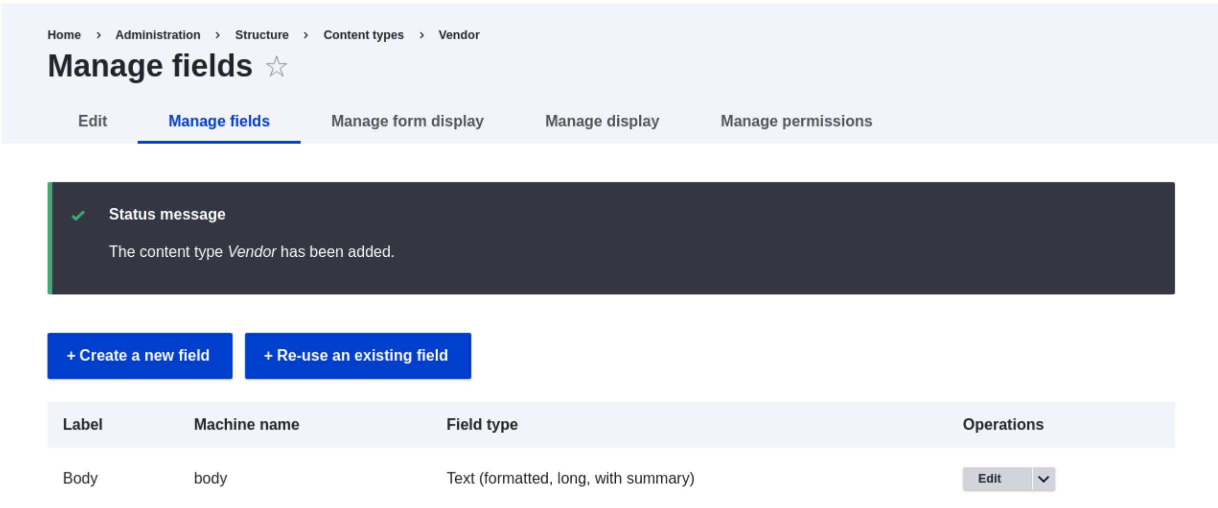


6. Under *Menu settings*, fill in the fields as shown below.

Field name	Explanation	Example value
Available menus	Menus that this type of content can be added to. Vendors do not need to appear in menus, so uncheck all menu options.	Unchecked



7. Click *Save and manage fields* to save the content type. The *Manage fields* page appears that allows you to add fields to the content type. See Section 6.3, "Adding Basic Fields to a Content Type"



8. Follow the same steps to create a content type for recipes. Example values for the fields in the forms, where they are different from the steps above:

Field name	Example value
Name	Recipe
Description	A recipe submitted by a vendor
Submission form settings - Title	Recipe name

Expand your understanding

- Section 6.3, "Adding Basic Fields to a Content Type"
- Install and configure the contributed Pathauto module so that content items get automatically generated URLs/path aliases. See Section 5.1, "Concept: Paths, Aliases, and URLs" for more on URLs within your site, Section 11.1, "Finding Modules" for instructions on finding contributed modules, and Section 11.3, "Downloading and Installing a Module from *Drupal.org*" for instructions on downloading and installing contributed modules.

Videos

Adding a Content Type

Adding a Content Type

Attributions
Written and edited by Sree Veturi, Boris Doesborg, and Jennifer Hodgdon.

6.2 Deleting a Content Type

Goal

Delete the unneeded content type *Article*.

Prerequisite knowledge

Section 4.1, "Concept: Administrative Overview"

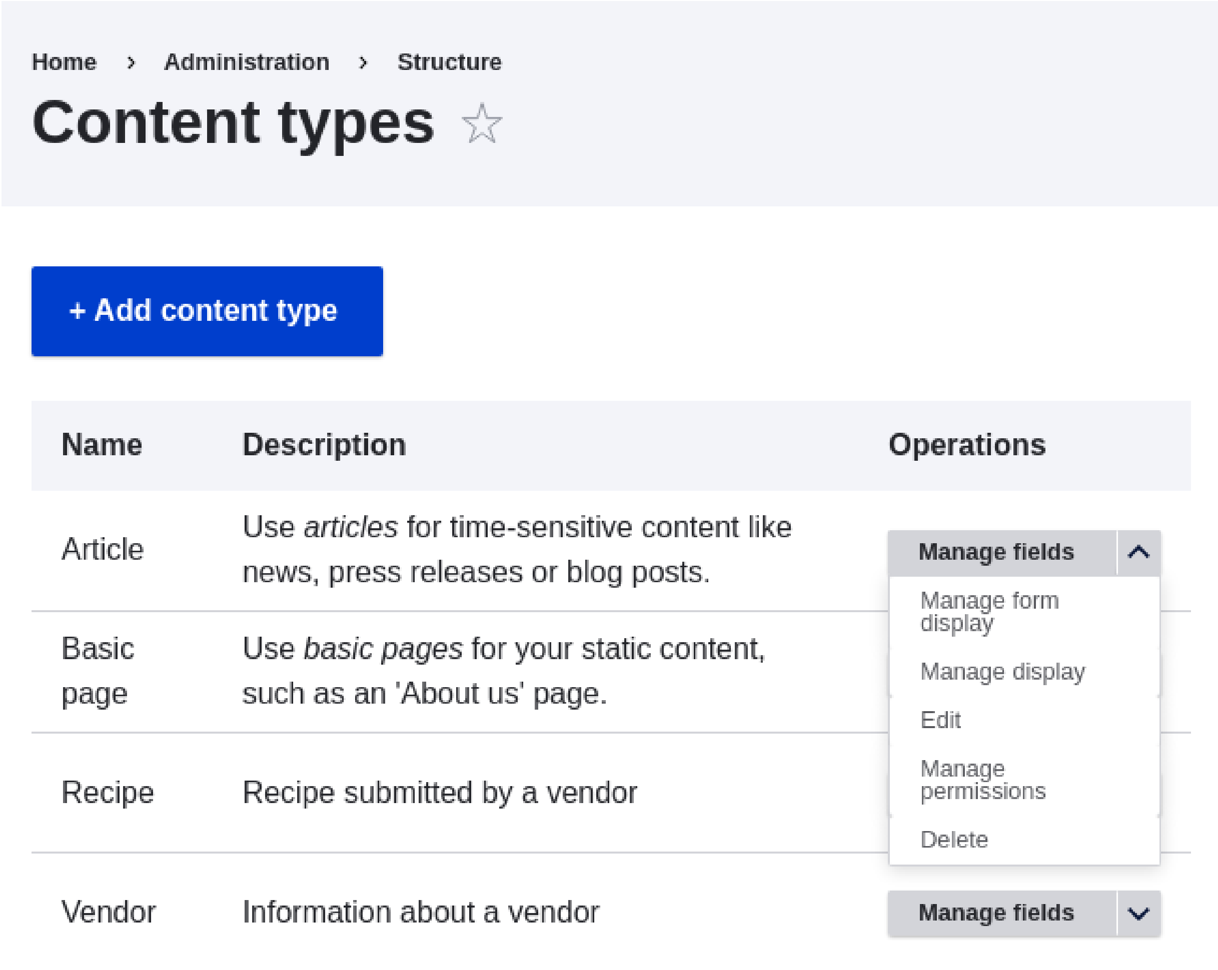
Site prerequisites

The *Article* content type must exist. It is created on your site when you install with the core Standard installation profile.

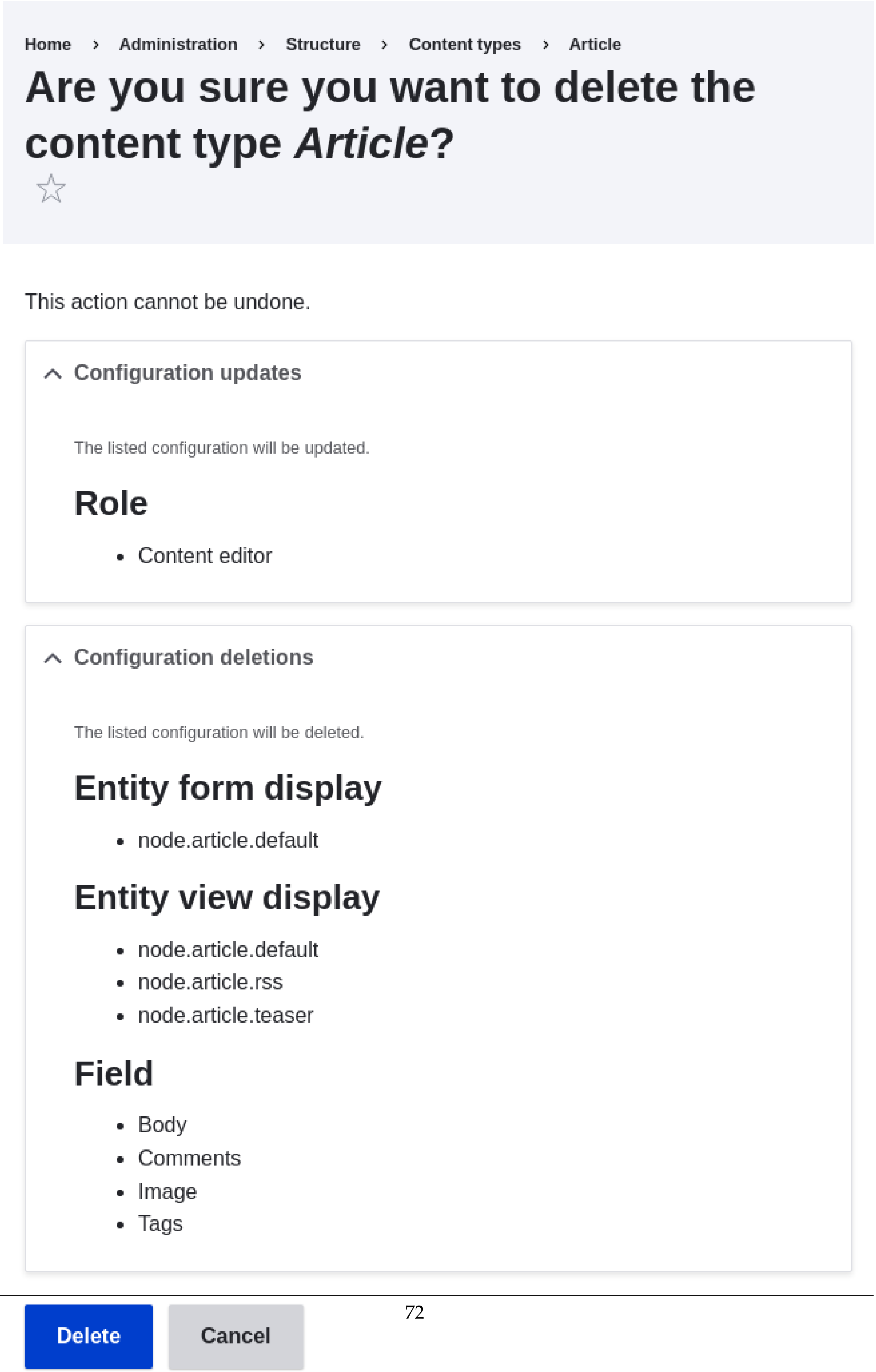
Steps

1. In the *Manage* administrative menu, navigate to *Structure* > *Content types* (*admin/structure/types*). The *Content types* page appears.

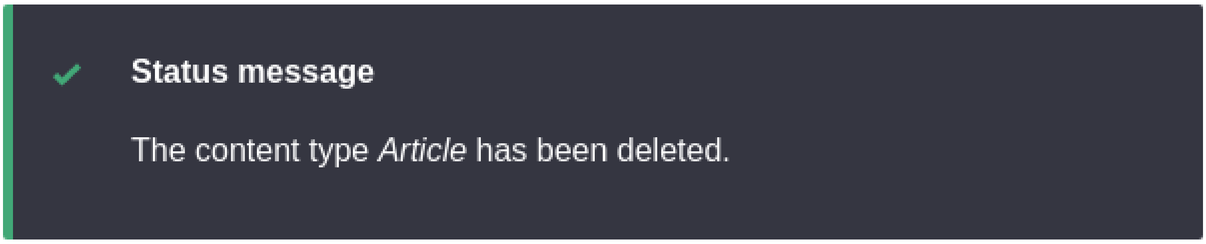
2. Click *Delete* in the *Operations* dropdown button for the *Article* content type. Note that the name of this content type is in English on this page; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.



3. A confirmation page is displayed. Click *Delete*.


Home › Administration › Structure › Content types › Article
Are you sure you want to delete the content type *Article*?
This action cannot be undone.
Configuration updates
The listed configuration will be updated.
Role
Content editor
Configuration deletions
The listed configuration will be deleted.
Entity form display
node.article.default
Entity view display
node.article.default
node.article.rss
node.article.teaser
Field
Body
Comments
Image
Tags
Delete
Cancel

4. The *Content types* page appears with a confirmation message saying that the content type has been deleted:



Videos

Deleting a Content Type

Deleting a Content Type
Attributions
Written and edited by Sree Veturi and Boris Doesborg.

6.3 Adding Basic Fields to a Content Type

Goal

Add a link field and an image field to the Vendor content type.

Prerequisite knowledge

Section 2.3, "Concept: Content Entities and Fields"

Site prerequisites

The Vendor content type must exist. See Section 6.1, "Adding a Content Type".

Steps

Add the fields Vendor URL and Main image to the Vendor content type.

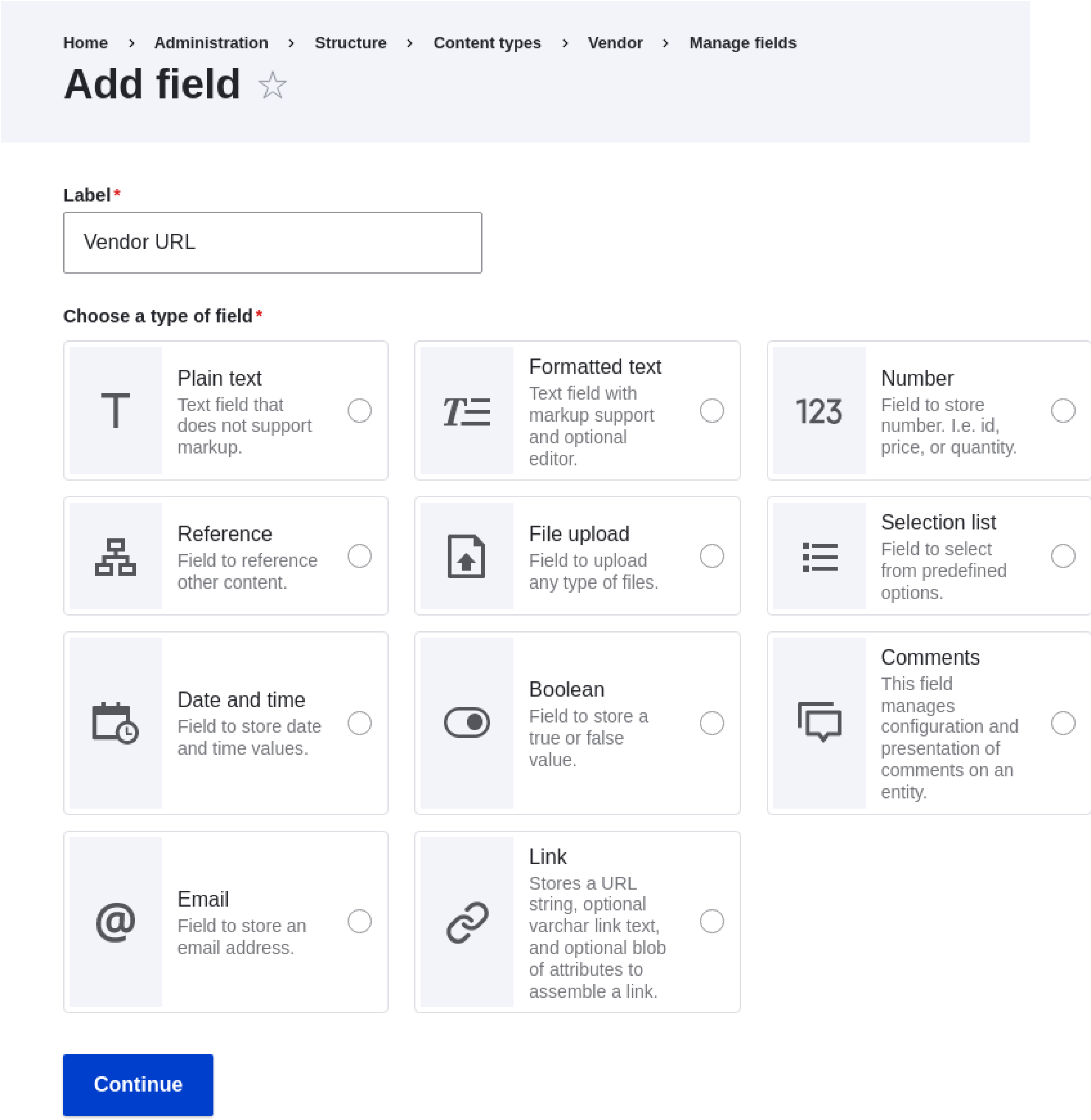
1. In the *Manage* administrative menu, navigate to *Structure* > *Content types* (*admin/structure/types*). Then click *Manage fields* in the dropdown button for the Vendor content type. The *Manage fields* page appears. From here you can either create a new field for the content type or re-use an existing field. Note that the names and descriptions of the content types and fields that were provided by your installation profile are shown in English on these pages; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.

2. Click *Add field*. The *Add field* page appears.

3. Fill in the fields as shown below.

Field name	Explanation	Value
Label	Label that is visible in administration pages	Vendor URL
Choose a type of field	Field type	Link

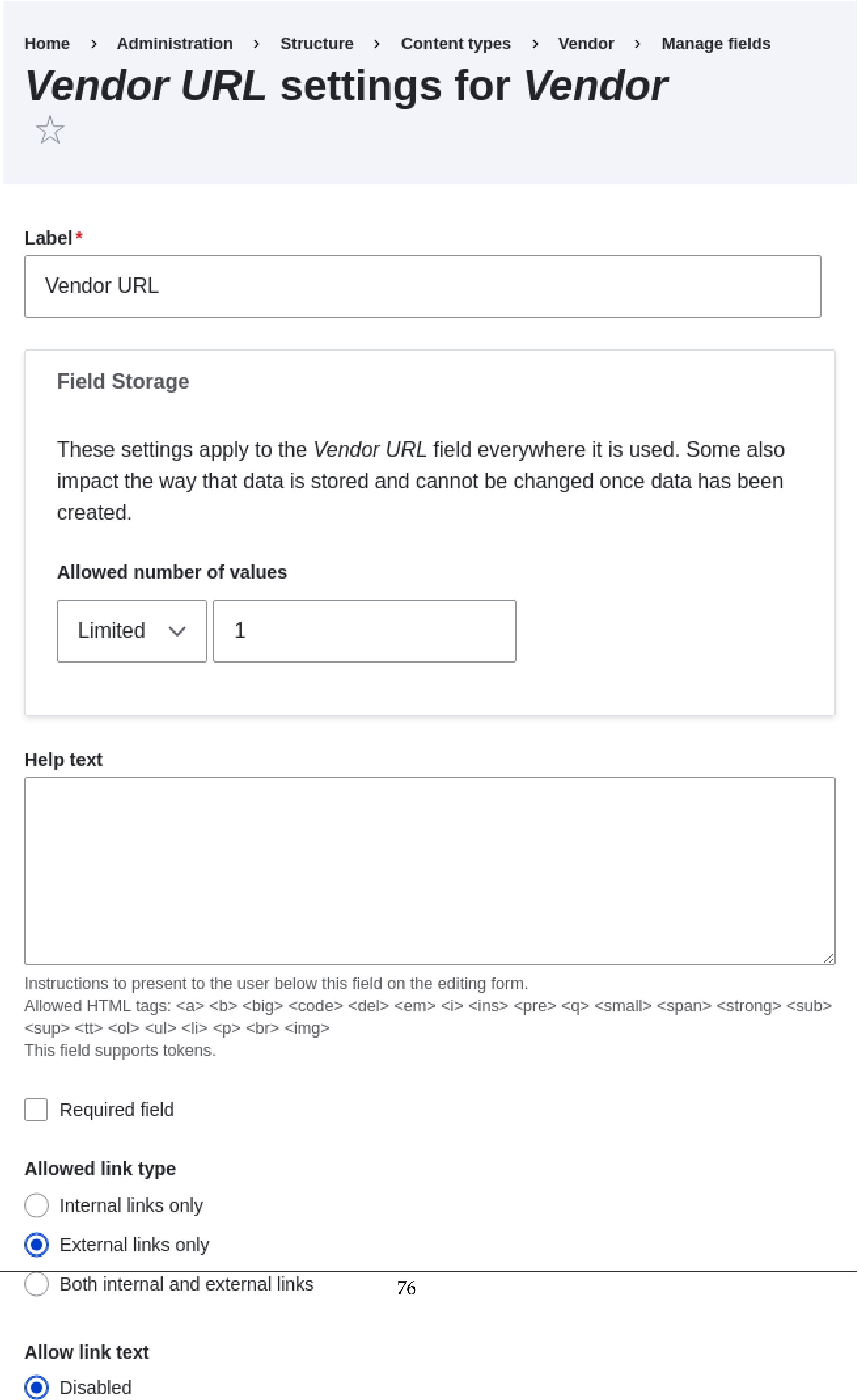
A machine name is automatically generated, based on the *Label* value. Click *Edit* if you want to override the default name.



4. Click *Continue. The page _Vendor URL settings for Vendor* appears which allows you to configure the field. Fill in the fields as shown below.

Field name	Explanation	Value
Label	Label that is visible in the content form	Vendor URL
Allowed number of values	The number of values that can be entered	Limited, 1
Help text	The instruction that is shown below the field	(leave blank)
Required field	Whether the field is required or not	Unchecked
Allowed link type	The kind of links that can be entered	External links only

Field name	Explanation	Value
Allow link text	Whether a link text can be entered	Disabled


Home › Administration › Structure › Content types › Vendor › Manage fields
Vendor URL settings for Vendor
Label *
Vendor URL
Field Storage
These settings apply to the Vendor URL field everywhere it is used. Some also impact the way that data is stored and cannot be changed once data has been created.
Allowed number of values
Limited
1
Help text
Instructions to present to the user below this field on the editing form.
Allowed HTML tags: <a> <b> <big> <code> <del> <em> <i> <ins> <pre> <q> <small> <span> <strong> <sub> <sup> <tt>   <p>
 <img>
This field supports tokens.
Required field
Allowed link type
Internal links only
External links only
Both internal and external links
Allow link text
Disabled

5. Click *Save settings*. The Vendor URL has been added to the content type. Continue creating the Main image field.
6. Click *Add field*. The *Add field* page appears. Fill in the fields as shown below.

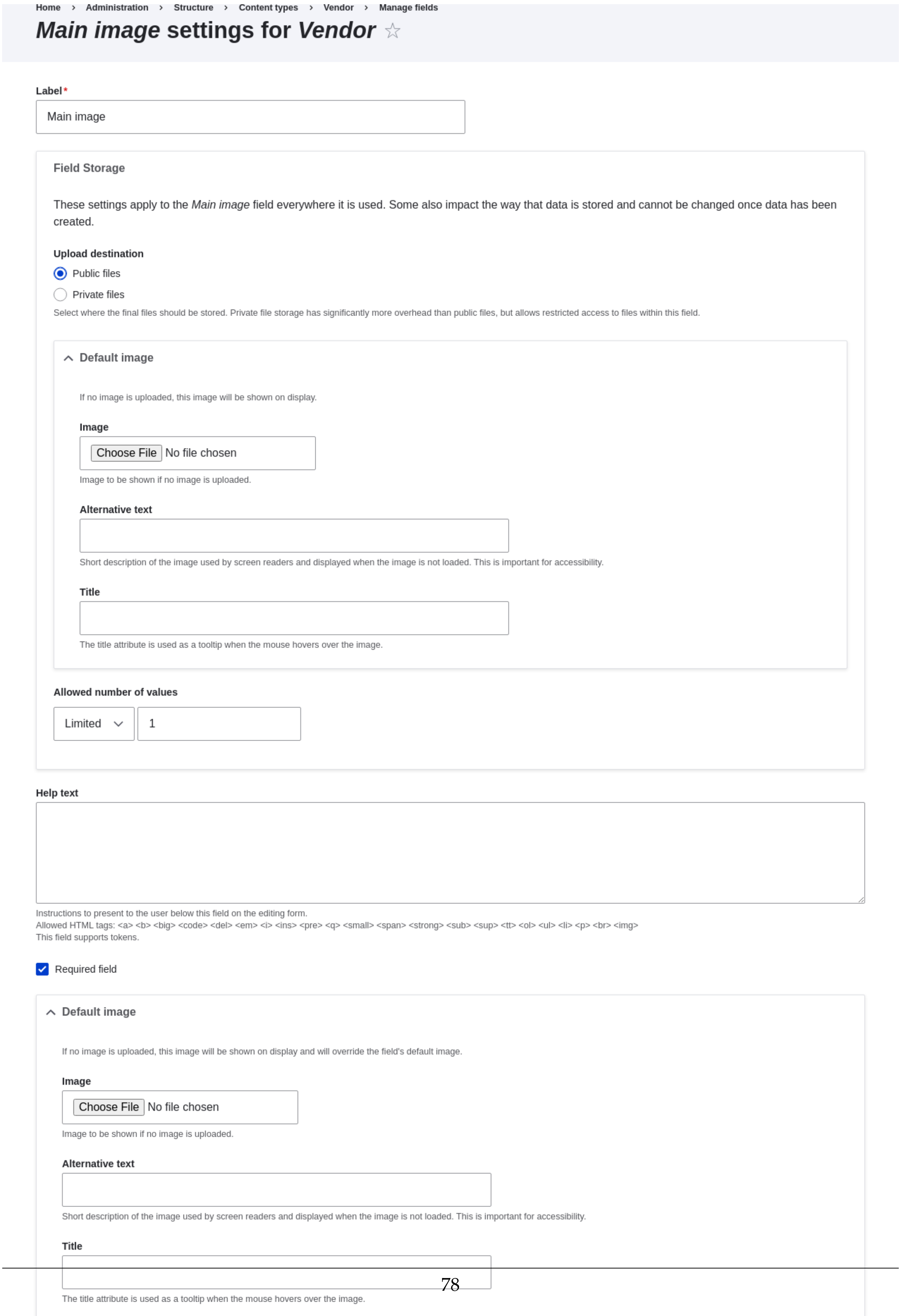
Field name	Explanation	Value
Label	Label that is visible in administration pages	Main image
Choose a type of field	Field type	File upload
Choose an option below	Field sub-type	Image

7. Click *Continue*. The page Main image settings for Vendor appears. Fill in the fields as shown below.

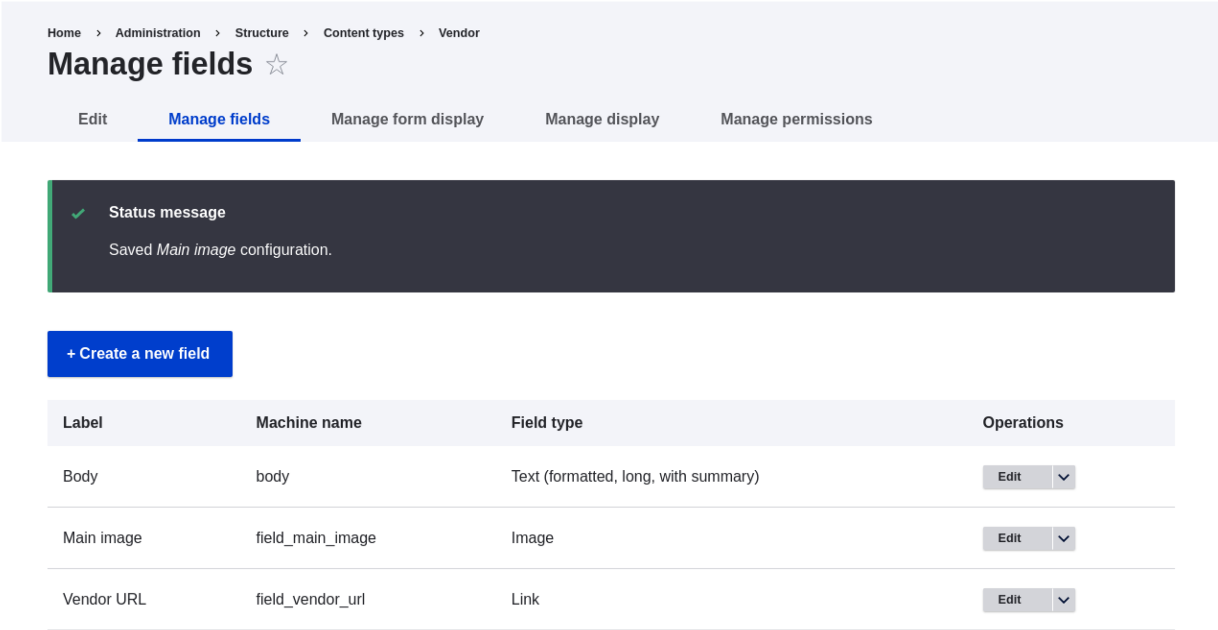
+

Field name	Explanation	Value
Label	Label that is visible in the content form	Main image
Allowed number of values	The number of values that can be entered	Limited, 1
Default image	You can set a default image here. This will be used when you do not provide an image when creating a Vendor content item.	(leave blank)
Help text	The instruction that is shown below the field	(leave blank)
Required field	Whether the field is required or not	Checked
Allowed file extensions	The type of images that can be uploaded	png, gif, jpg, jpeg
File directory	The directory where the files will be stored. By providing a file directory value, you ensure that all images uploaded via the Main image field will be located in the same directory.	vendors
Minimum image dimensions	The minimum dimensions of the uploaded image	600 x 600
Maximum upload size	The maximum file size of the uploaded image	5 MB
Enable Alt field	Whether an alternative text can be entered	Checked
Alt field required	Whether an alternative text is required	Checked

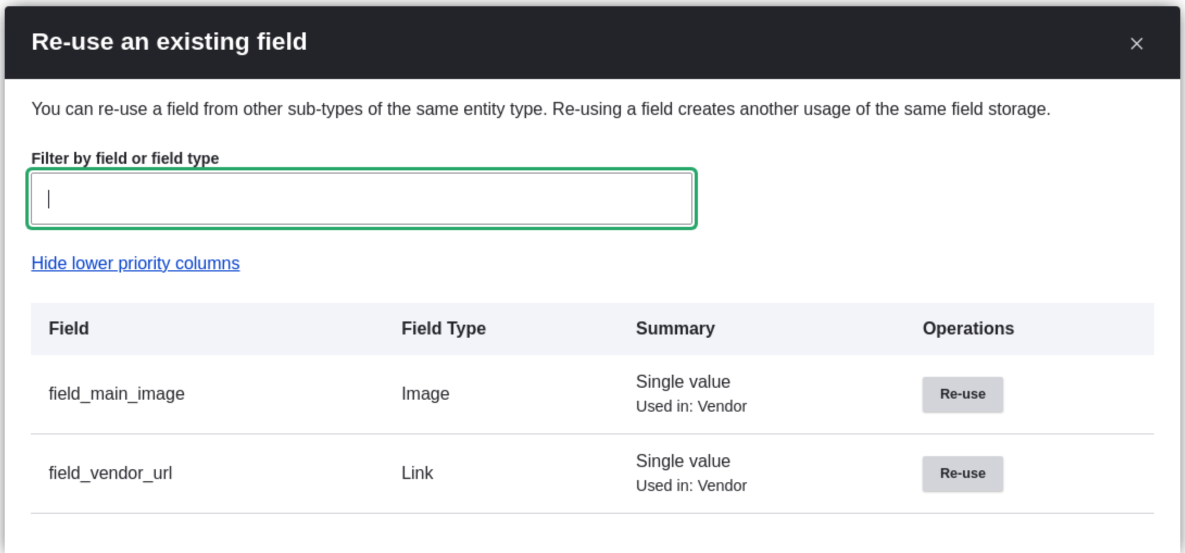
+


Home › Administration › Structure › Content types › Vendor › Manage fields
Main image settings for Vendor
Label*
Main image
Field Storage
These settings apply to the Main image field everywhere it is used. Some also impact the way that data is stored and cannot be changed once data has been created.
Upload destination
Public files
Private files
Select where the final files should be stored. Private file storage has significantly more overhead than public files, but allows restricted access to files within this field.
Default image
If no image is uploaded, this image will be shown on display.
Image
Choose File No file chosen
Image to be shown if no image is uploaded.
Alternative text
Short description of the image used by screen readers and displayed when the image is not loaded. This is important for accessibility.
Title
The title attribute is used as a tooltip when the mouse hovers over the image.
Allowed number of values
Limited
1
Help text
Instructions to present to the user below this field on the editing form.
Allowed HTML tags: <a> <b> <big> <code> <del> <em> <i> <ins> <pre> <q> <small> <span> <strong> <sub> <sup> <tt>   <p>
 <img>
This field supports tokens.
Required field
Default image
If no image is uploaded, this image will be shown on display and will override the field's default image.
Image
Choose File No file chosen
Image to be shown if no image is uploaded.
Alternative text
Short description of the image used by screen readers and displayed when the image is not loaded. This is important for accessibility.
Title
The title attribute is used as a tooltip when the mouse hovers over the image.

1. Click *Save settings*. Main image has been added to the content type.



2. Add a Main image field to the Recipe content type, using similar steps. Start by navigating to the Recipe content type's *Manage Fields* page. Then use the *Re-use an existing field* button to open the modal dialog and press the *Re-use* button that corresponds with the Main image field in the table. Then skip to step 7 and follow the remaining steps.



3. Create two Vendor content items (see Section 5.2, "Creating a Content Item") called "Happy Farm" and "Sweet Honey". Make sure that they include images and URLs.

Expand your understanding

- Section 6.12, "Concept: Image Styles"
- Section 6.11, "Changing Content Display"
- Section 6.9, "Changing Content Entry Forms"

Videos

Adding Basic Fields to a Content Type

Adding Basic Fields to a Content Type

Additional resources

Drupal.org community documentation page "Add a field to a content type"

Attributions

Written by Sree Veturi and Boris Doesborg, and Joe Shindelar at Drupalize.Me.

6.4 Concept: Reference Fields

Prerequisite knowledge

Section 2.3, "Concept: Content Entities and Fields"

What is a reference field?

A *reference field* is a field that represents a relationship between an entity and one or more other entities, which may belong to the same or different entity type. The three most commonly-used reference fields are:

Content reference A reference to a content item. For example, you might want to connect recipes to the vendors who submitted them. You would set up a content reference field called Submitted by referencing Vendor content items on the Recipe content type.

Taxonomy term reference A reference to a taxonomy term. For example, you might want to connect recipes to their ingredients. You would set up a taxonomy term reference field called Ingredients on the Recipe content type. This reference field will point to the vocabulary Ingredients.

User reference A reference to a user account. For example, you might want to connect recipes with their chefs. You would set up a user reference field called Chefs on the Recipe content type.

Related topics

Section 6.5, "Concept: Taxonomy"

Attributions

Written and edited by Surendra Mohan, and Jojy Alphonso at Red Crackle.

6.5 Concept: Taxonomy

Prerequisite knowledge

- Section 2.3, "Concept: Content Entities and Fields"
- Section 6.4, "Concept: Reference Fields"

What is Taxonomy?

Taxonomy is used to classify website content. One common example of taxonomy is the tags used to classify or categorize posts in a blog website; the farmers market website could use an ingredients taxonomy to classify recipes. Individual taxonomy entities are known as *terms* (the blog tags or recipe ingredients in these examples); and a set of terms is known as a *vocabulary* (the set of all blog post tags, or the set of all recipe ingredients in these examples). Technically, taxonomy terms are an entity type and the entity subtypes are the vocabularies. Like other entities, taxonomy terms can have fields attached; for instance, you could set up an image field to contain an icon for each term.

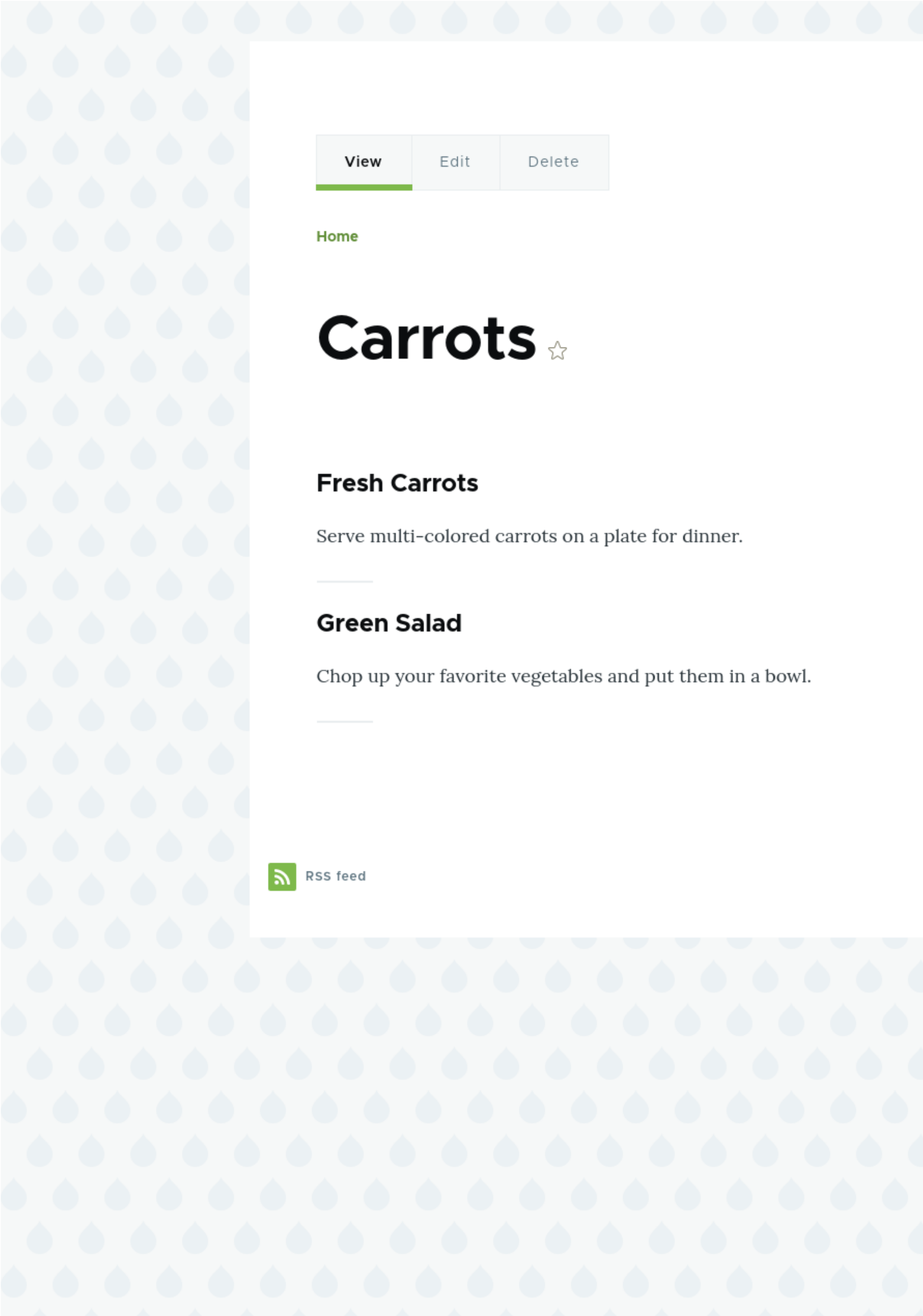
An individual vocabulary can organize its terms in a hierarchy, or it could be flat. For example, blog tags normally have a flat structure, while a recipe ingredients vocabulary could be hierarchical (for example, tomatoes could be a sub-term of vegetables, and under tomatoes, you could have green and red tomatoes).

Taxonomy terms are normally attached as reference fields to other content entities, which is how you can use them to classify content. When you set up a taxonomy reference field, you can let users enter terms in two ways:

Free tagging New terms can be created right on the content editing form.

Fixed list of terms The list of terms is curated and managed outside the content editing form, and users can only choose from the existing list when editing content.

Taxonomy reference fields can be added to any entity, such as user accounts, custom blocks, or regular content items. If you use them to classify regular content items, your site will automatically be set up with taxonomy listing pages for each term; each of these pages lists all of the content items that are classified with that term. For example, if you created several recipes that all had carrots as an ingredient, you might see something like this on the Carrots taxonomy listing page:


View
Edit
Delete
Home
Carrots
Fresh Carrots
Serve multi-colored carrots on a plate for dinner.
Green Salad
Chop up your favorite vegetables and put them in a bowl.
RSS feed

Related topics

- Section 6.6, "Setting Up a Taxonomy".
- The listing pages are views, which are covered in Chapter 9, Creating Listings with Views.

Attributions

Adapted and edited by Surendra Mohan, Jennifer Hodgdon, and Jojy Alphonso at Red Crackle from "Organizing content with taxonomies" and "About taxonomy", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

6.6 Setting Up a Taxonomy

Goal

Create an Ingredients vocabulary and add it to the Recipe content type as a field that can contain an unlimited number of values and that allows adding new terms to the vocabulary.

Prerequisite knowledge

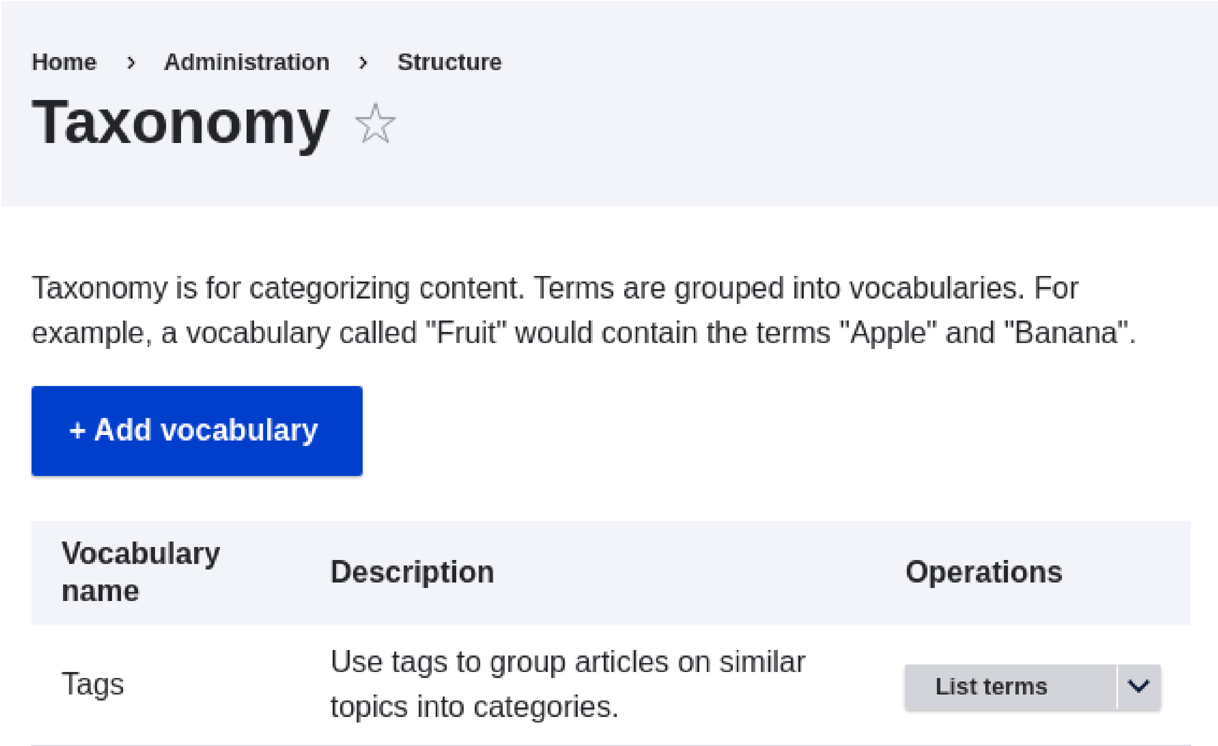
- Section 2.3, "Concept: Content Entities and Fields"
- Section 6.5, "Concept: Taxonomy"
- Section 6.3, "Adding Basic Fields to a Content Type"

Site prerequisites

The Recipe content type must exist. See Section 6.1, "Adding a Content Type".

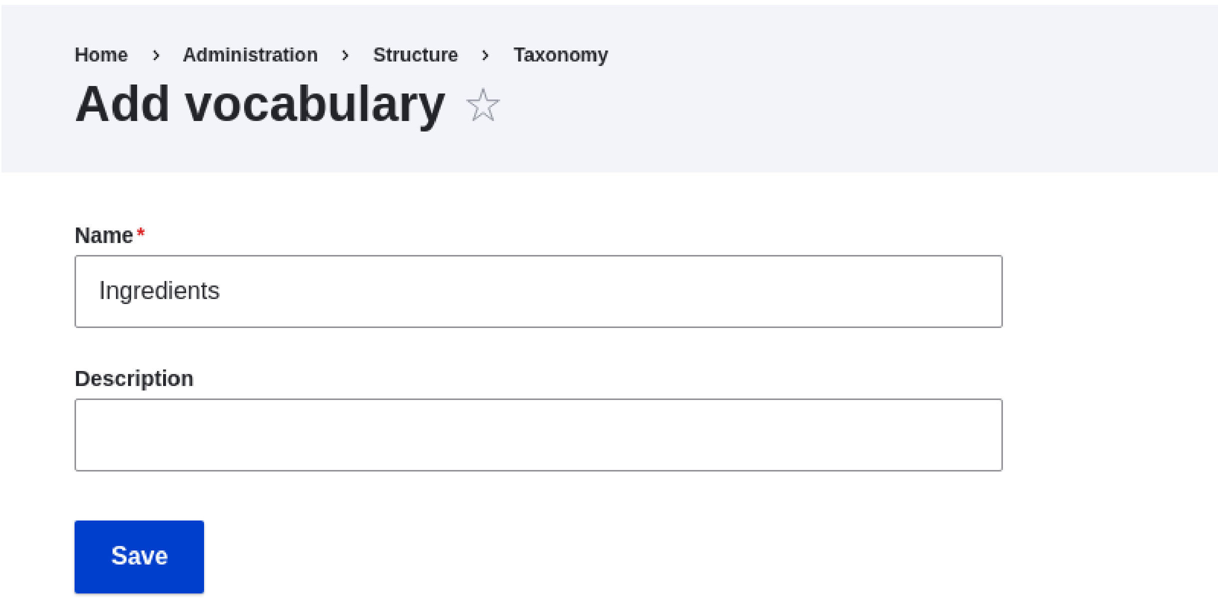
Steps

1. In the *Manage* administrative menu, navigate to *Structure* > *Taxonomy* (*admin/structure/taxonomy*). You will see the *Tags* vocabulary that was created with the core Standard installation profile. (Note that the name and description of this vocabulary are shown in English on this page; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.)

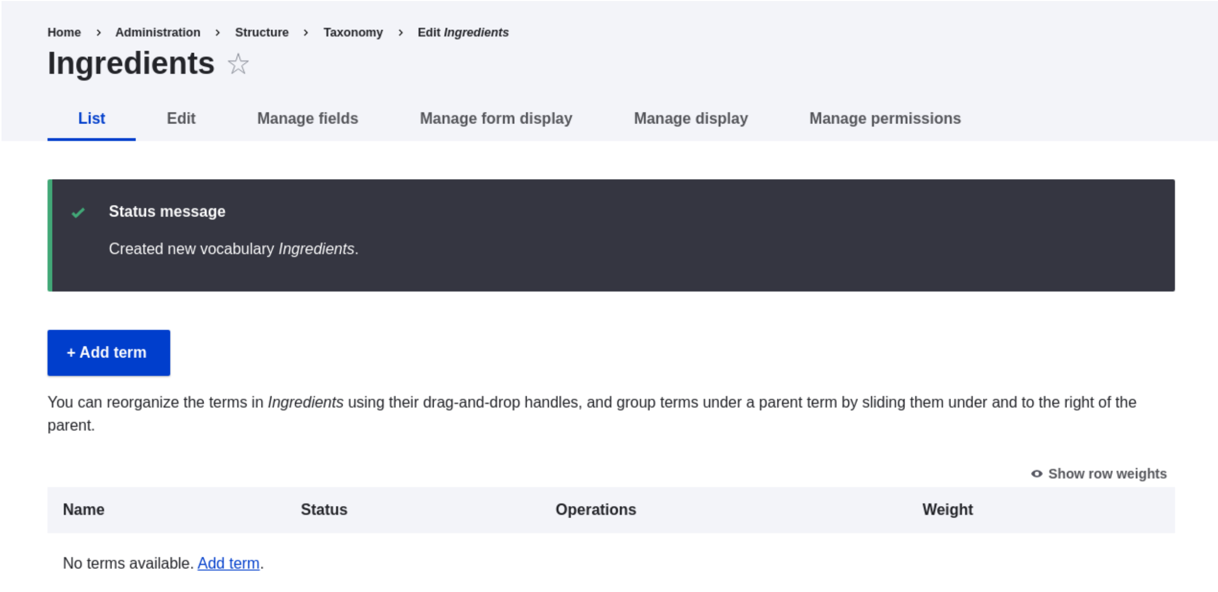


2. Click *Add vocabulary*, and fill in the values below.

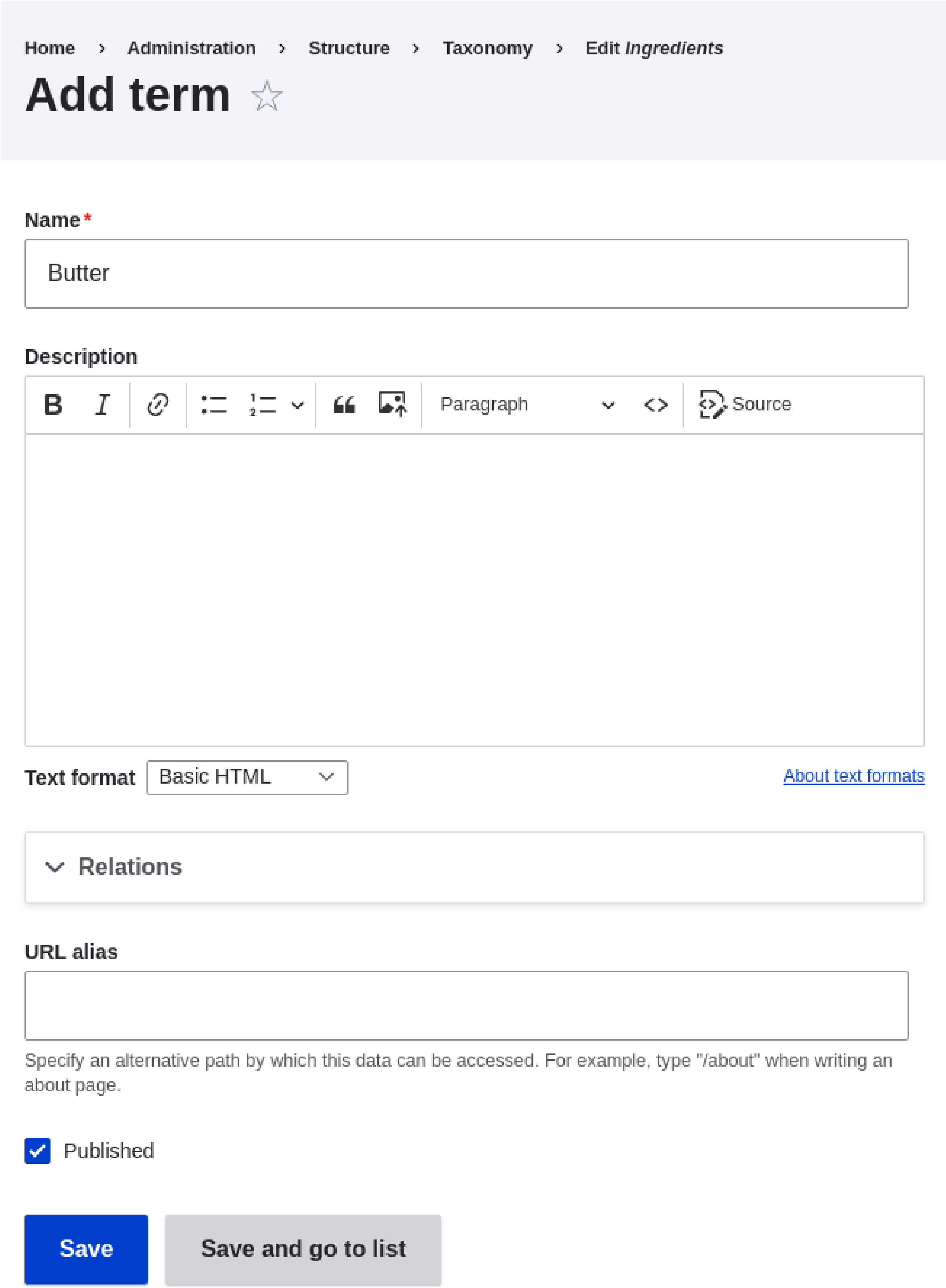
Field name	Explanation	Example value
Name	The name of the vocabulary	Ingredients
Description	A brief note about the vocabulary	(Leave blank)



3. Click *Save*. You will be taken to the Ingredients page, which shows a list of all the terms in this vocabulary.



4. Click *Add term*. Enter "Butter" in the *Name* field. Click *Save*.

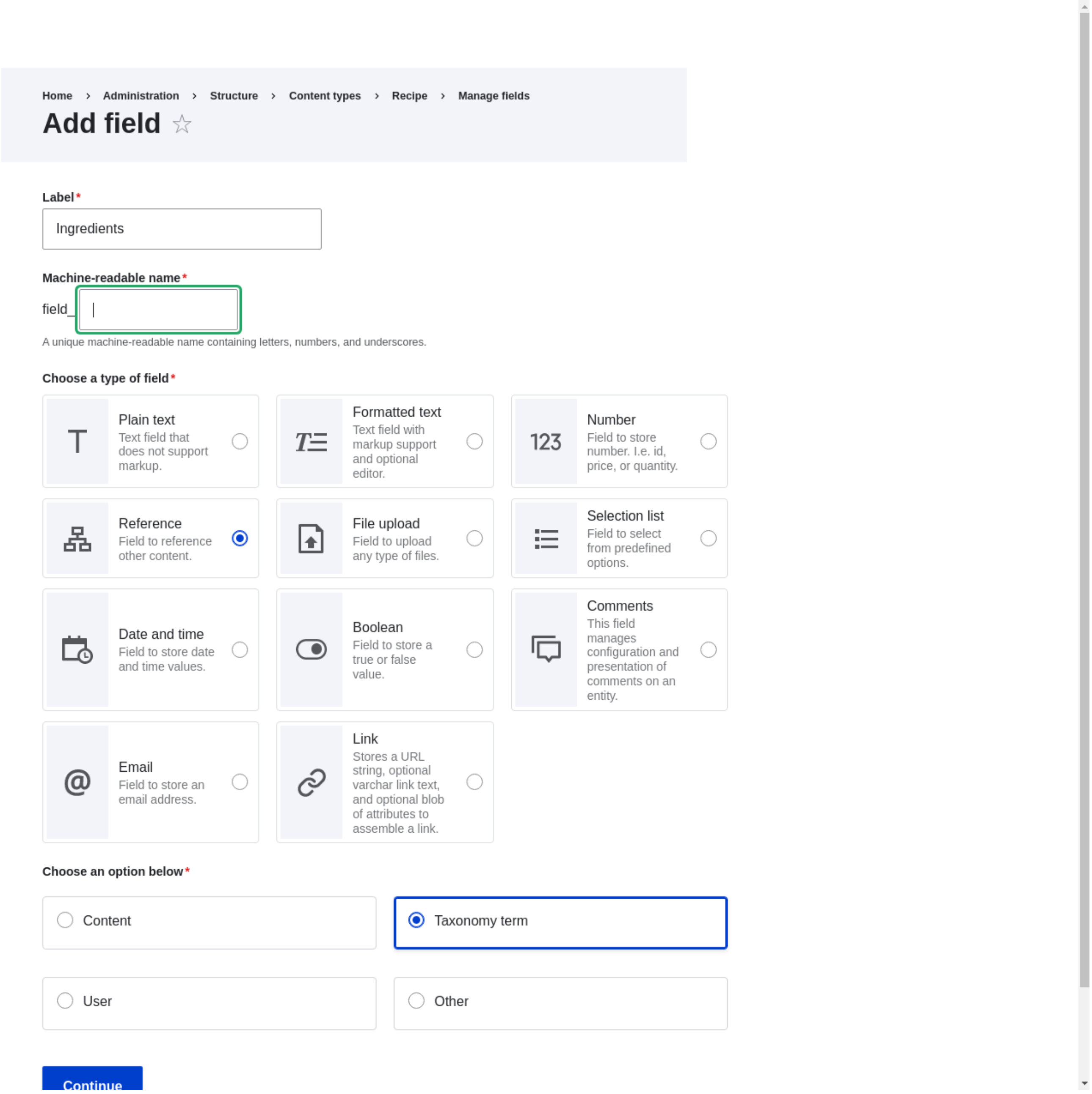


5. You will receive a confirmation about the term you created. Add more terms. For example, ”Eggs” and ”Milk”.

6. In the *Manage* administrative menu, navigate to *Structure* > *Content Types* (*admin/structure/types*). Click *Manage fields* for your Recipe content type.

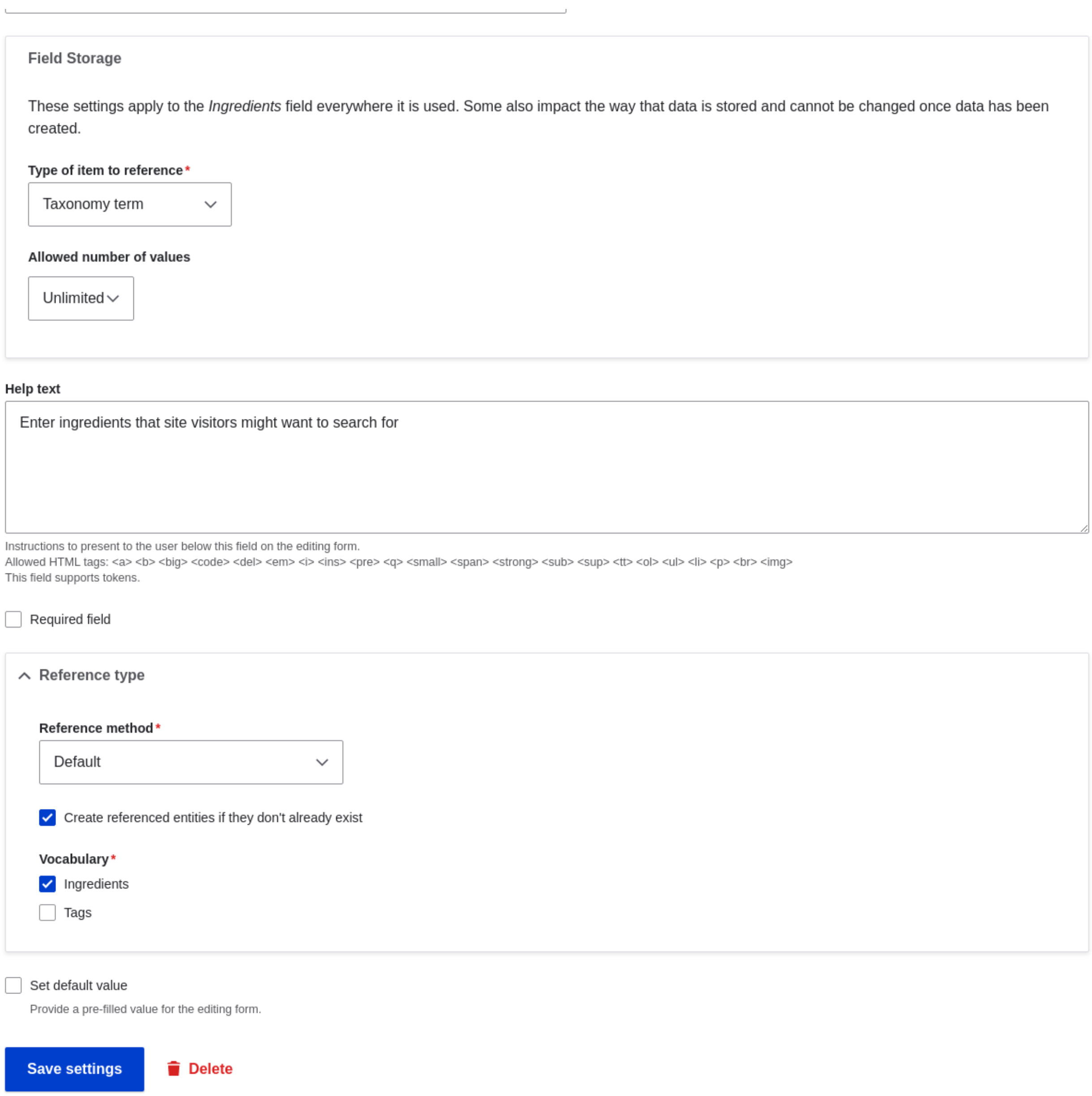
7. Click *Add field*, and enter values from the table below. Click *Save and continue*.

Field name	Explanation	Value
Label	The title to give the field	Ingredients
Choose a type of field	Select the field type	Reference
Choose an option below:	Type of content to reference	Taxonomy term

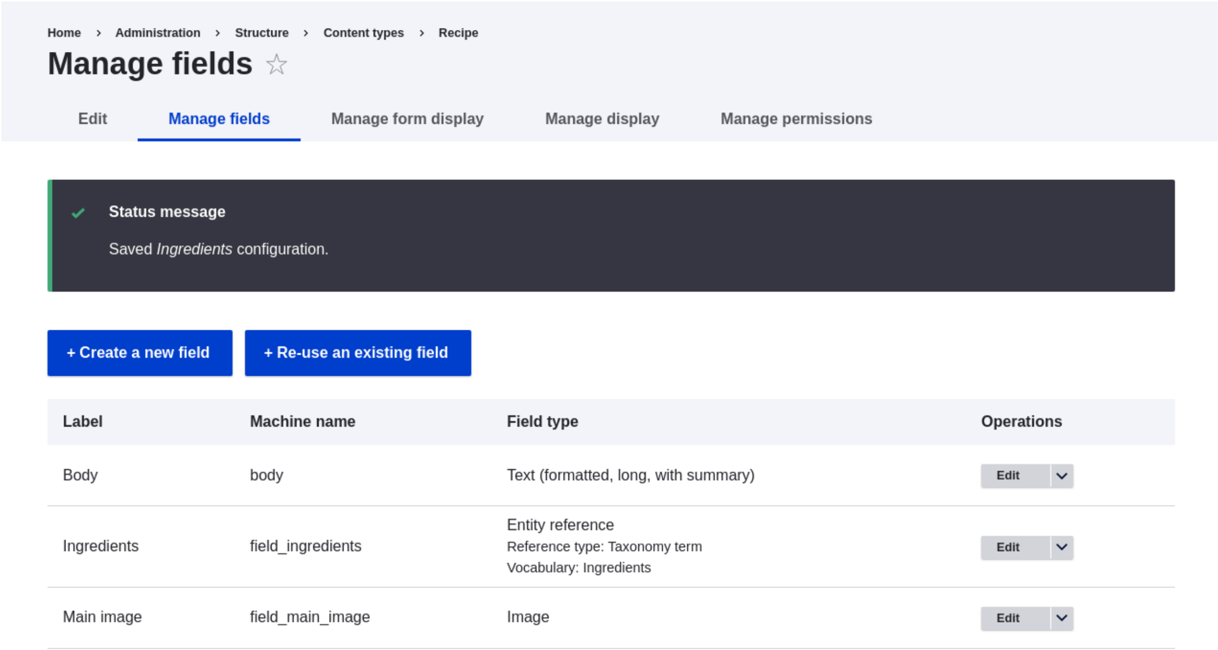


8. On the following configuration screen, enter the values from the table below. Click *Save settings*.

Field name	Explanation	Value
Help text	Help shown to users creating content	Enter ingredients that site visitors might want to search for
Type of item to reference	The type of entity that is referenced by the field	Taxonomy term
Allowed number of values	The number of values a user can enter	Unlimited
Reference type > Reference method	Select the method used to choose allowed values	Default
Reference type > Vocabulary	Select the vocabulary to choose allowed values from	Ingredients
Reference type > Create referenced entities if they don't already exist	Whether new ingredient terms can be created from the content editing form	Checked



9. Click *Save settings*. You will be taken back to the *Manage Fields* page. A message will be displayed saying that the configuration for Ingredients is complete.



Videos

Setting up a Taxonomy

Setting up a Taxonomy
Attributions
Written and edited by Bob Snodgrass, and Jojy Alphonso at Red Crackle.

6.7 Adding a Reference Field

Goal

Add a reference field so that recipes can be linked to the vendor that has submitted it.

Prerequisite knowledge

- Section 6.3, "Adding Basic Fields to a Content Type"
- Section 6.4, "Concept: Reference Fields"
- Section 6.1, "Adding a Content Type"

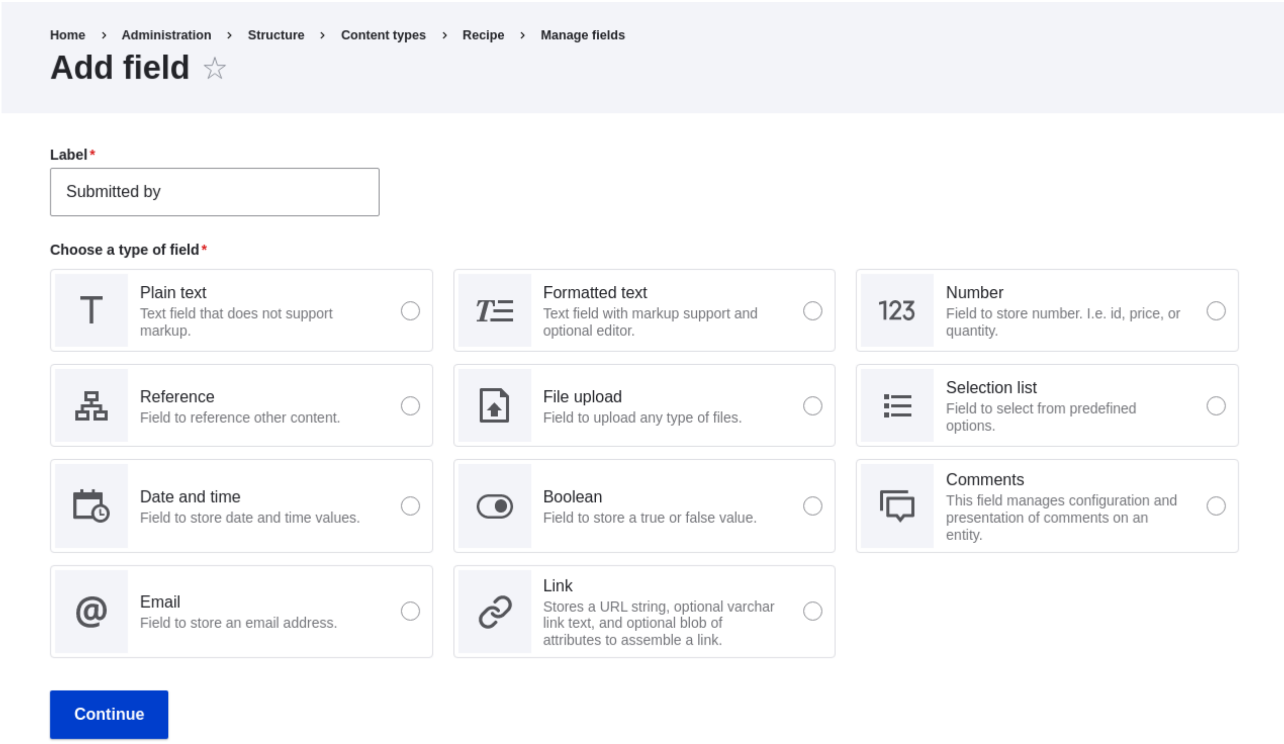
Site prerequisites

The Recipe and Vendor content types must exist. See Section 6.1, "Adding a Content Type".

Steps

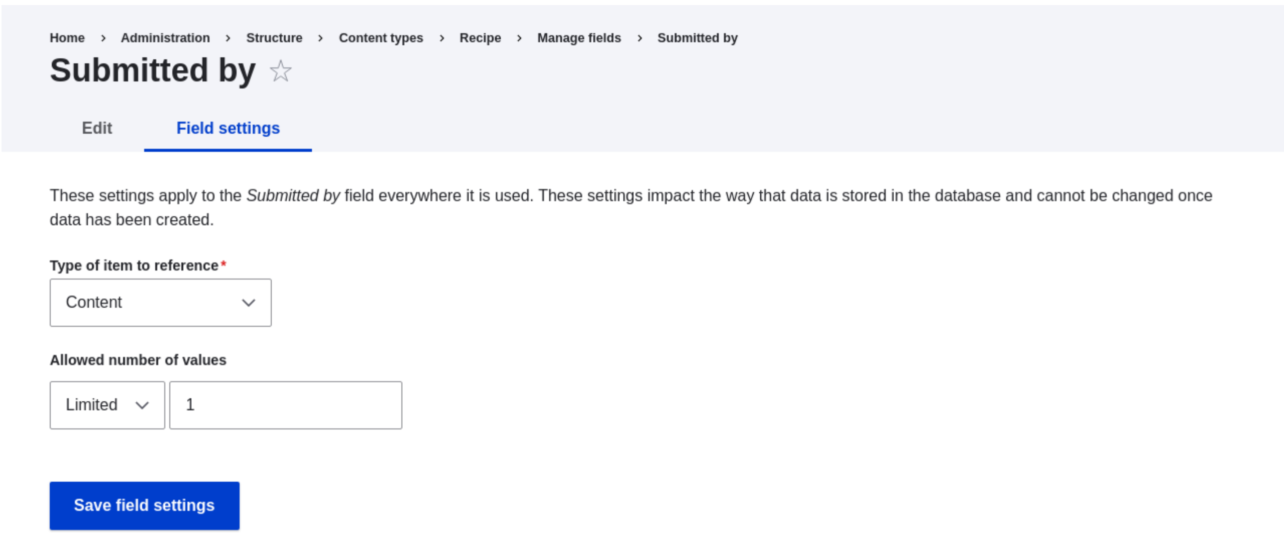
1. In the *Manage* administrative menu, navigate to *Structure* > *Content types* (*admin/structure/types*). Then click *Manage fields* in the dropdown button for the Recipe content type. The *Manage fields* page appears.
2. Click *Add field*. The *Add field* page appears. Fill in the fields as shown below. Click *Save and continue*.

Field name	Explanation	Value
Add a new field	Option to specify the field type	Reference > Content
Label	The title you want to give the field	Submitted by



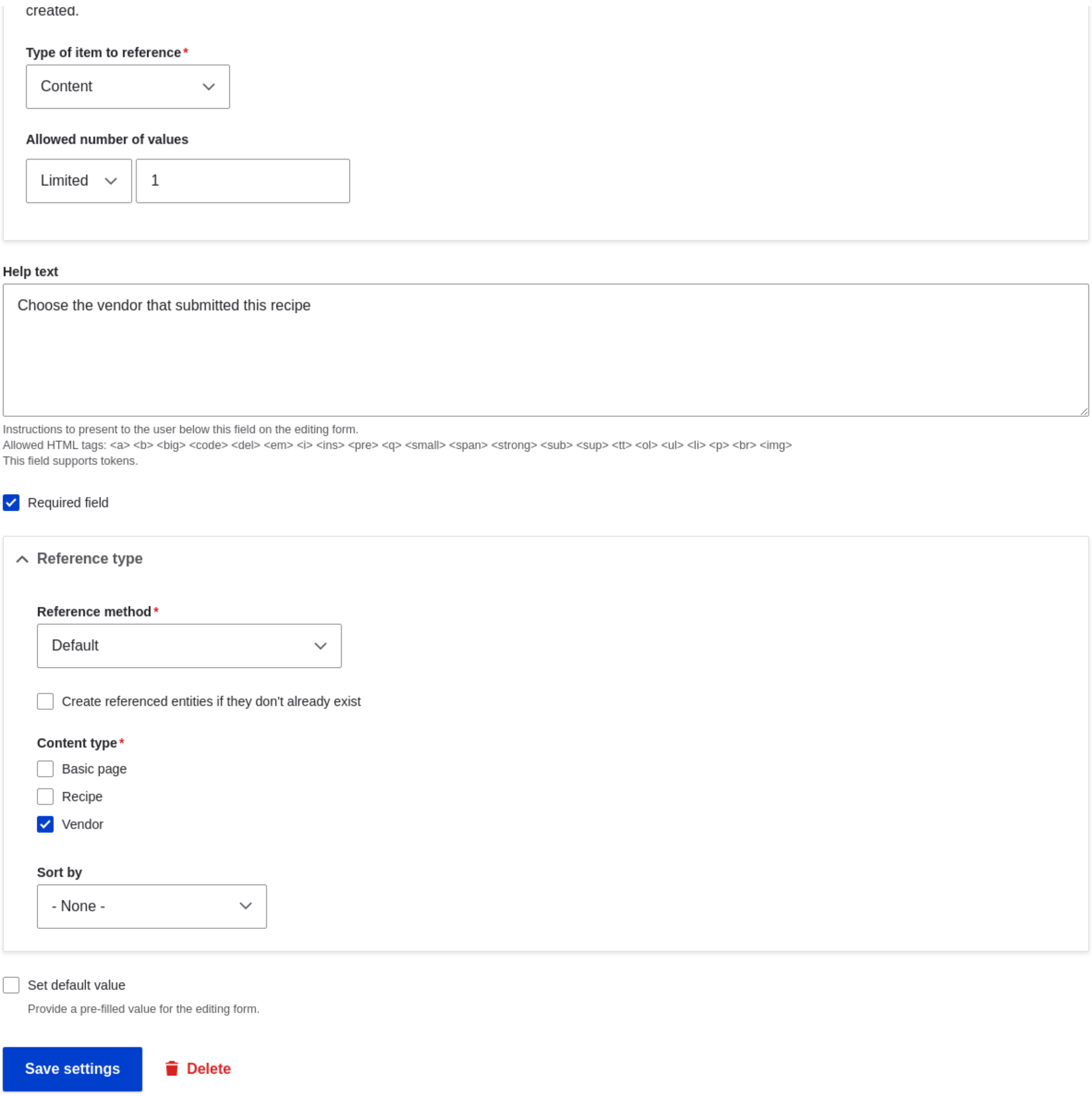
3. The page Submitted by appears which lets you set the allowed number of values. Fill in the fields as shown below. Click *Save settings*.

Field name	Explanation	Value
Type of item to reference	Option to select the type of referenced entity	Content
Allowed number of values	Specify the count of values associated with the field	Limited, 1

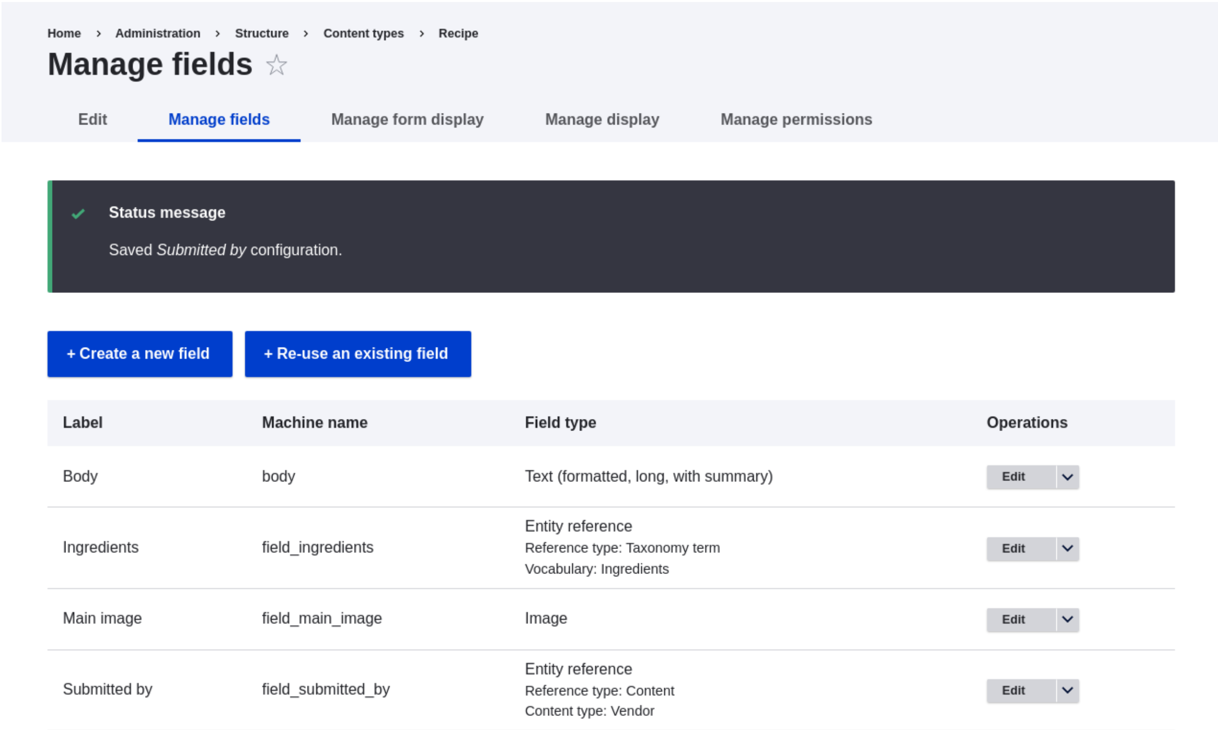


4. The page *Submitted by settings for Recipe* appears which allows you to configure the field. Fill in the fields as shown below. Click *Save settings*.

Field name	Explanation	Value
Label	Title shown for this field on the page	Submitted by
Help text	Brief text aiding the person creating content	Choose the vendor that submitted this recipe
Required field	Whether a value has to be provided or not	Checked
Reference type > Reference method	Option to select reference method	Default
Reference type > Content type	Specify the content type	Vendor
Reference type > Sort by	Sorting field	Vendor name
Reference type > Sort direction	Sorting order	Ascending



5. The Submitted by field has been added to the content type.



Videos

Adding a Reference Field

Adding a Reference Field
Attributions
Written and edited by Boris Doesborg, and Jojy Alphonso at Red Crackle.

6.8 Concept: Forms and Widgets

Prerequisite knowledge

Section 2.3, "Concept: Content Entities and Fields"

What are forms and widgets?

The content management system software that your site is running allows administrators to edit content and configure settings online, using various web *forms*. In particular, *content editing forms* are used to edit your site's content entities, and they are configurable by administrators; settings configuration forms are provided by modules and cannot themselves be configured.

The data in your site's content entities is stored in one or more fields that are attached to the entity type and/or subtype. When you configure the content editing form for each entity subtype, you can:

- Select a *widget* for each field. A widget defines the method used to enter the data for the field. For example, a taxonomy term can be chosen using an autocomplete field, a select list, or a tags-style field that lets editors add new tags automatically.
- Configure widget settings. For example, you can choose the size of a plain-text entry field.
- Hide one or more fields from the editing form.
- Reorder the fields.

In principle, you can also have multiple content editing forms available for each entity subtype. This feature is rarely used, however; the only exception in common use is for the user profile fields: you can use different forms for user registration and user editing. For example, you might have a limited set of fields shown when users first register on the site, and more fields shown later on when they edit their profiles.

Related topics

- Section 6.9, "Changing Content Entry Forms"
- Section 6.10, "Concept: View Modes and Formatters"

Attributions
Written by Jennifer Hodgdon.

6.9 Changing Content Entry Forms

Goal

Change the Recipe form to use a different widget to enter terms in the Ingredients field.

Prerequisite knowledge

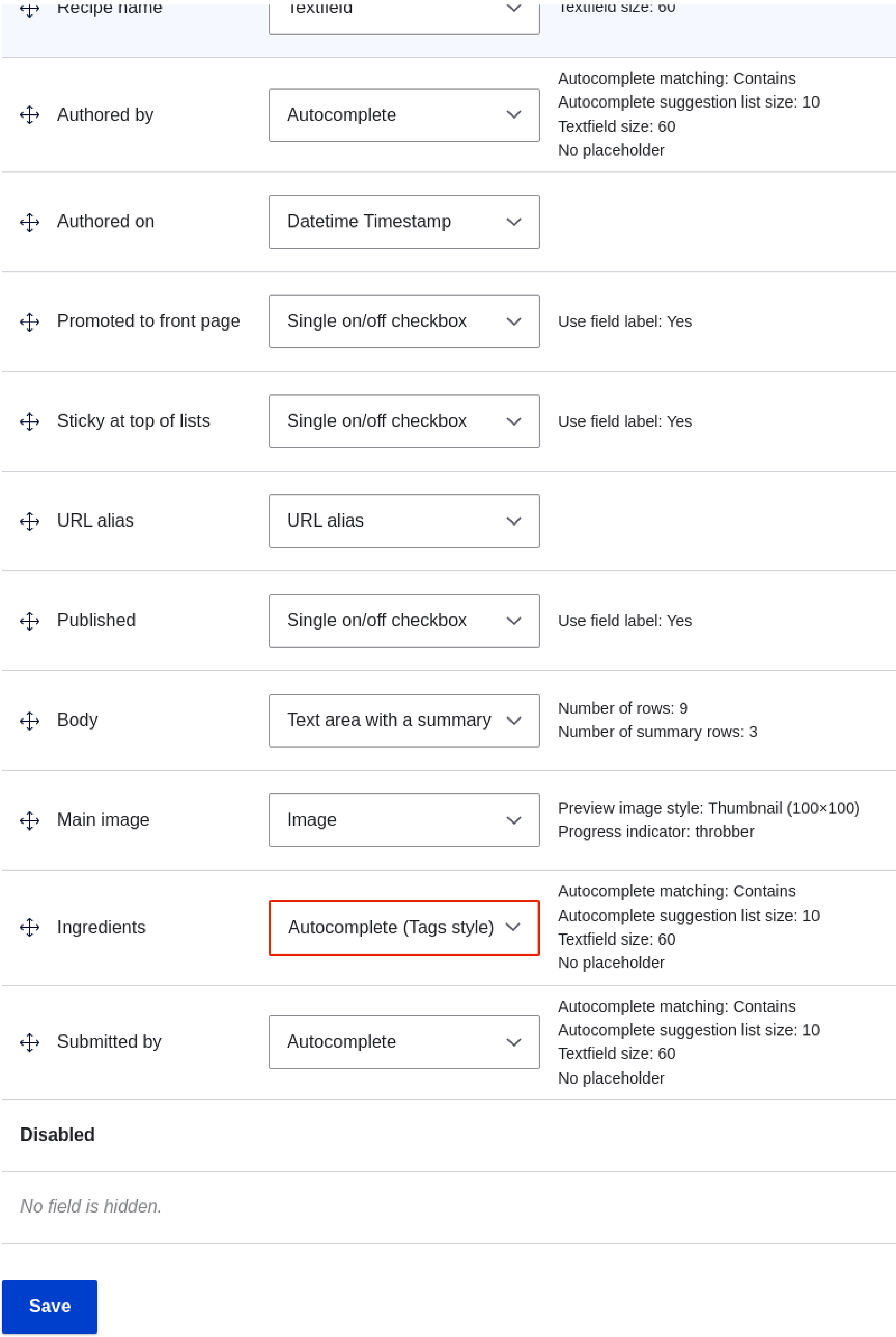
- Section 6.1, "Adding a Content Type"
- Section 6.3, "Adding Basic Fields to a Content Type"
- Section 6.5, "Concept: Taxonomy"
- Section 6.8, "Concept: Forms and Widgets"

Site prerequisites

The Recipe content type must exist, and it must have an Ingredients taxonomy term reference field. At least one Vendor content item must exist. See Section 6.1, "Adding a Content Type" and Section 6.6, "Setting Up a Taxonomy".

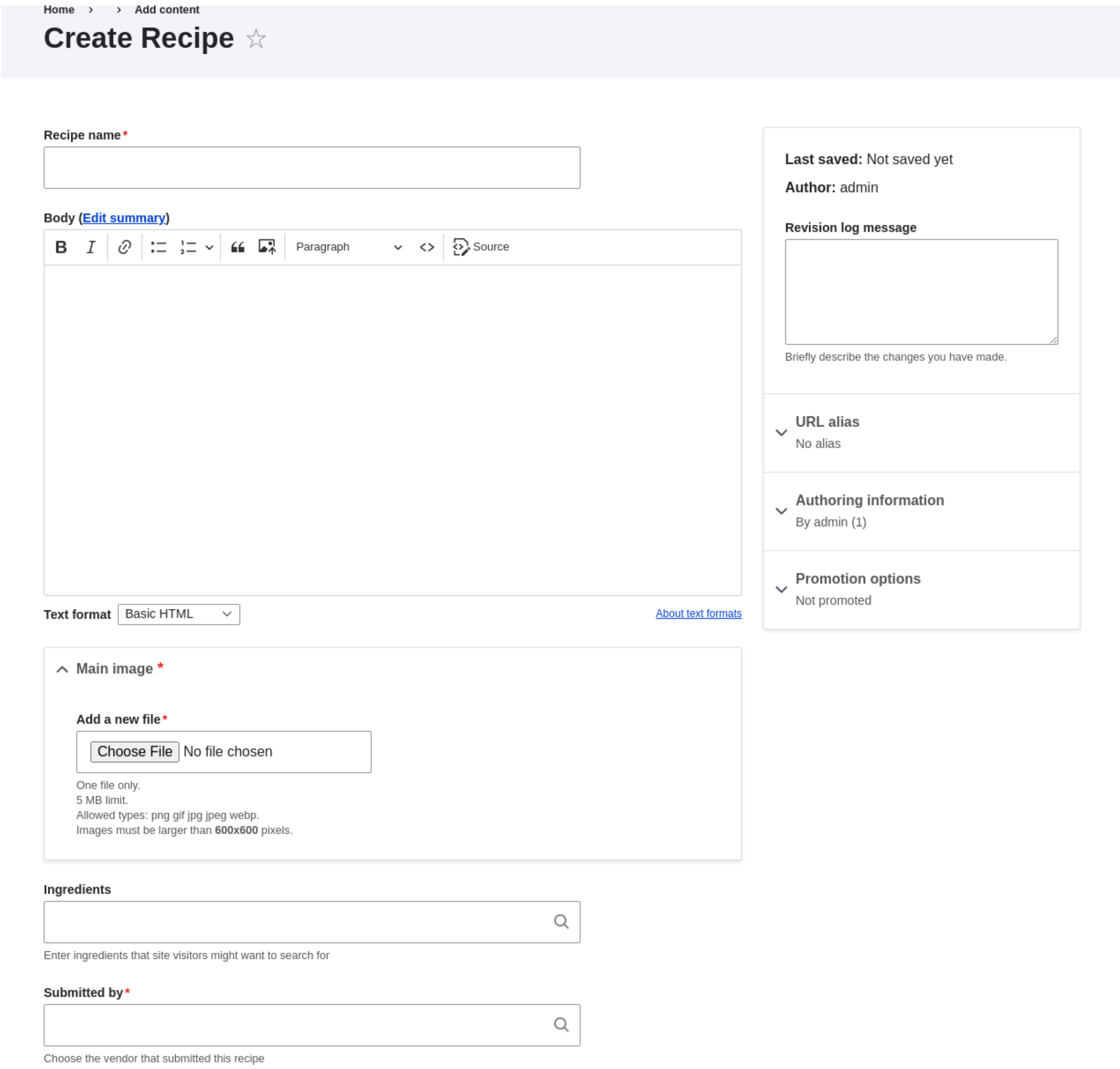
Steps

1. In the *Manage* administrative menu, navigate to *Content* > *Add content* > *Recipe* (*node/add/recipe*) to look at the content entry form that is set up by default. Notice how you have to enter ingredients one by one, instead of having a more compact format.
2. In the *Manage* administrative menu, navigate to *Structure* > *Content types* (*admin/structure/types*). Then click *Manage form display* on the dropdown button for the Recipe content type. The *Manage form display* page appears.
3. For the Ingredients field, select *Autocomplete* (*Tags style*) in the *Widget* column.


Authored by
Autocomplete
Autocomplete matching: Contains
Autocomplete suggestion list size: 10
Textfield size: 60
No placeholder
Authored on
Datetime Timestamp
Promoted to front page
Single on/off checkbox
Use field label: Yes
Sticky at top of lists
Single on/off checkbox
Use field label: Yes
URL alias
URL alias
Published
Single on/off checkbox
Use field label: Yes
Body
Text area with a summary
Number of rows: 9
Number of summary rows: 3
Main image
Image
Preview image style: Thumbnail (100×100)
Progress indicator: throbber
Ingredients
Autocomplete (Tags style)
Autocomplete matching: Contains
Autocomplete suggestion list size: 10
Textfield size: 60
No placeholder
Submitted by
Autocomplete
Autocomplete matching: Contains
Autocomplete suggestion list size: 10
Textfield size: 60
No placeholder
Disabled
No field is hidden.
Save

4. Click *Save*.

5. In the *Manage* administrative menu, navigate to *Content* > *Add content* > Recipe (*node/add/recipe*) to verify the changed behavior of the content form. The Ingredients field is now a single text field that accepts multiple values.



6. Create two Recipe content items (see Section 5.2, "Creating a Content Item"), such as recipes for "Green Salad" and "Fresh Carrots". Make sure all the fields have values, including images, ingredients, and submitted by (set this to one of the Vendor content items you created in Section 6.3, "Adding Basic Fields to a Content Type").

Expand your understanding

Change the main site Contact form by navigating in the *Manage* administrative menu to *Structure* > *Contact forms*. For instance, you may want to hide the *Send yourself a copy* or *Language* fields.

Videos

Changing Content Entry Forms

Changing Content Entry Forms
Attributions
Written by Boris Doesborg.

6.10 Concept: View Modes and Formatters

Prerequisite knowledge

Section 6.1, "Adding a Content Type"

What is a View mode?

How an entity (such as content, a user or a comment) is displayed, depends on the context in which it is shown. This context is known as a *view mode*. Examples of view modes are:

- a full page of the content with all the field values
- a teaser of the content with a thumbnail image and a *Read more* link
- a full user profile with a zoomable portrait photo
- a user avatar with username and a link to the profile

Every view mode can be configured through the administration pages. To see the configuration options for the view modes of the Recipe content type, navigate in the *Manage* administrative menu to *Structure* > *Content types* (*admin/structure/types*) and click *Manage display* from the dropdown button. In each view mode, all fields can be hidden or displayed, and if they are displayed, you can choose and configure the field formatter.

What is a field formatter?

A field formatter is a setting for displaying the field values. For example, long text fields can be displayed trimmed or full-length, and taxonomy term reference fields can be displayed in plain text or linked to the taxonomy term page. Consult the *Manage display* page to see the field formatters for the fields of the Recipe content type.

Related topics

- Section 6.1, "Adding a Content Type"
- Section 6.11, "Changing Content Display"

Additional resources

Drupal.org community documentation page "View modes"
Attributions
Adapted by Boris Doesborg from "View modes", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

6.11 Changing Content Display

Goal

Make the content items more readable, accessible, and visibly attractive by reordering the fields, hiding labels, and tuning the output of the fields.

Prerequisite knowledge

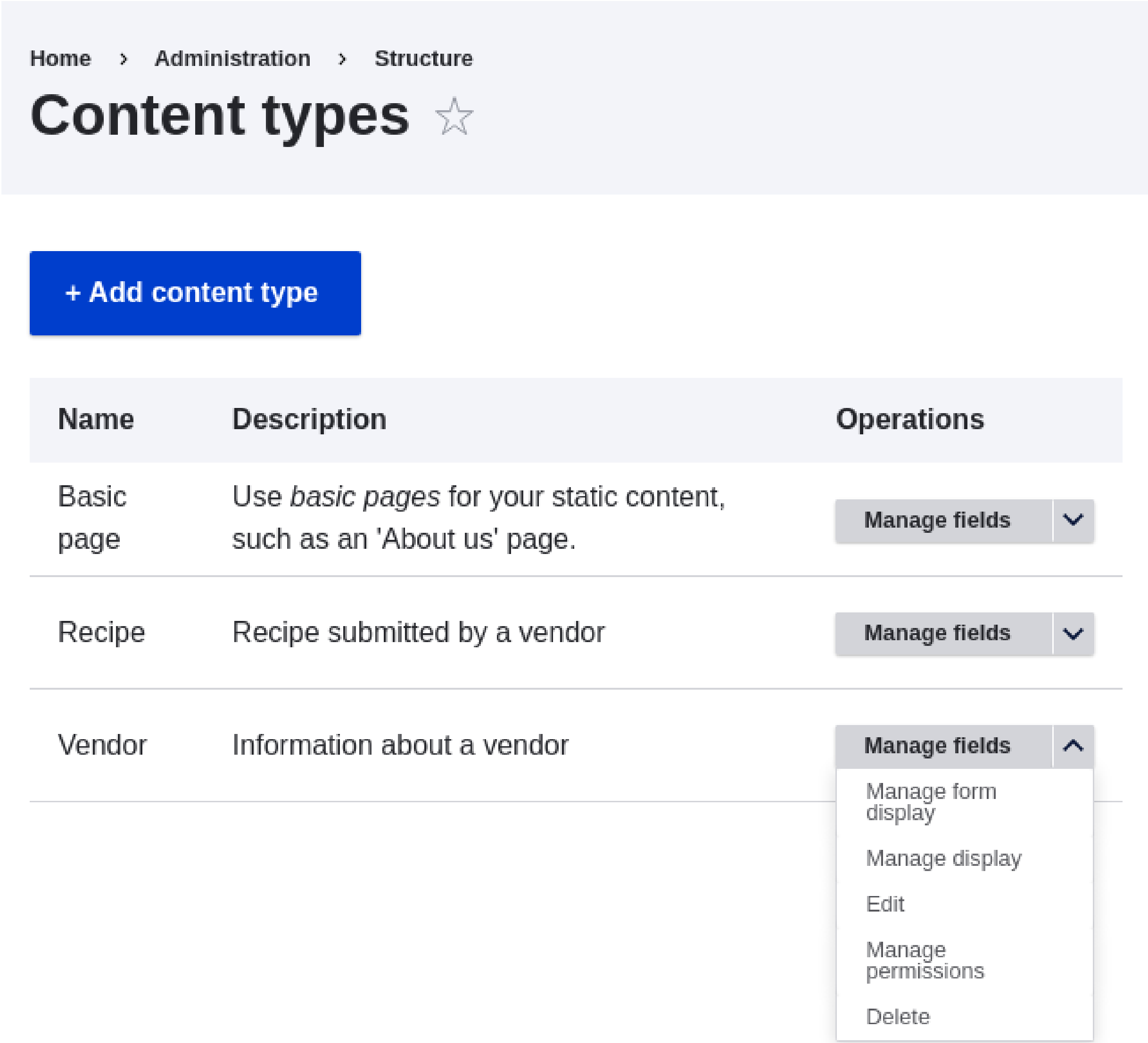
- Section 2.3, "Concept: Content Entities and Fields"
- Section 6.10, "Concept: View Modes and Formatters"

Site prerequisites

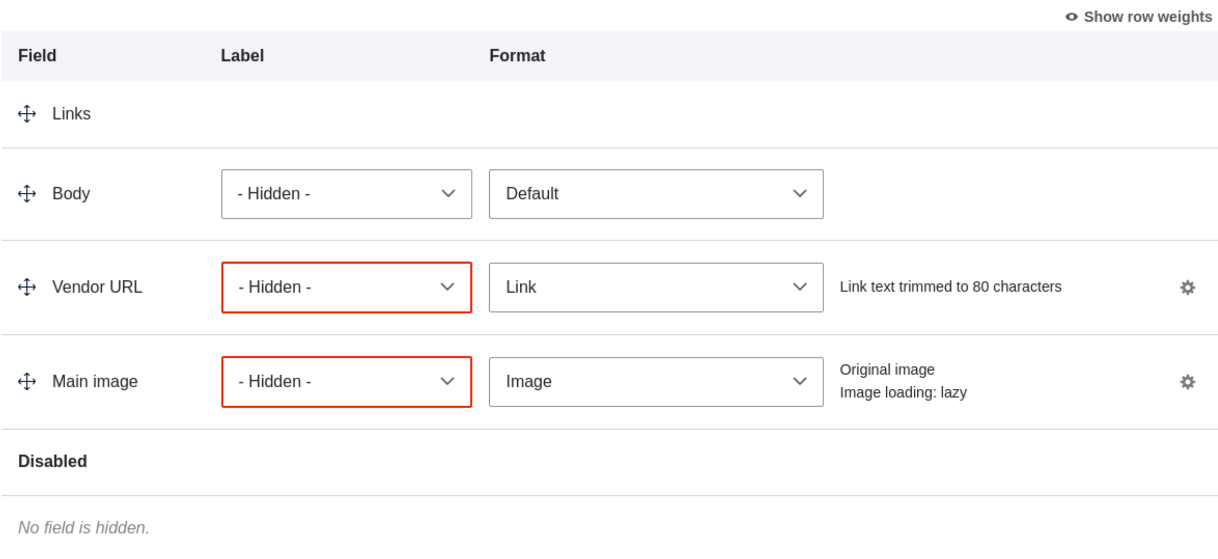
The Vendor content type must exist, it must have Main Image and Vendor URL fields, and your site must have at least one Vendor content item. See Section 6.1, "Adding a Content Type", Section 6.3, "Adding Basic Fields to a Content Type", and Section 5.2, "Creating a Content Item".

Steps

1. Find and view a Vendor content item you created in Section 6.3, "Adding Basic Fields to a Content Type". Notice that there are several things that could be done to improve how the page looks:
   - The Main Image and Vendor URL fields should not have labels.
   - The order of the fields should be changed so that the image comes first.
   - The image should be smaller.
2. To fix the first two problems, and update some additional settings, in the *Manage* administrative menu, navigate to *Structure* > *Content types* (*admin/structure/types*). Then click *Manage display* in the dropdown button for the Vendor content type.

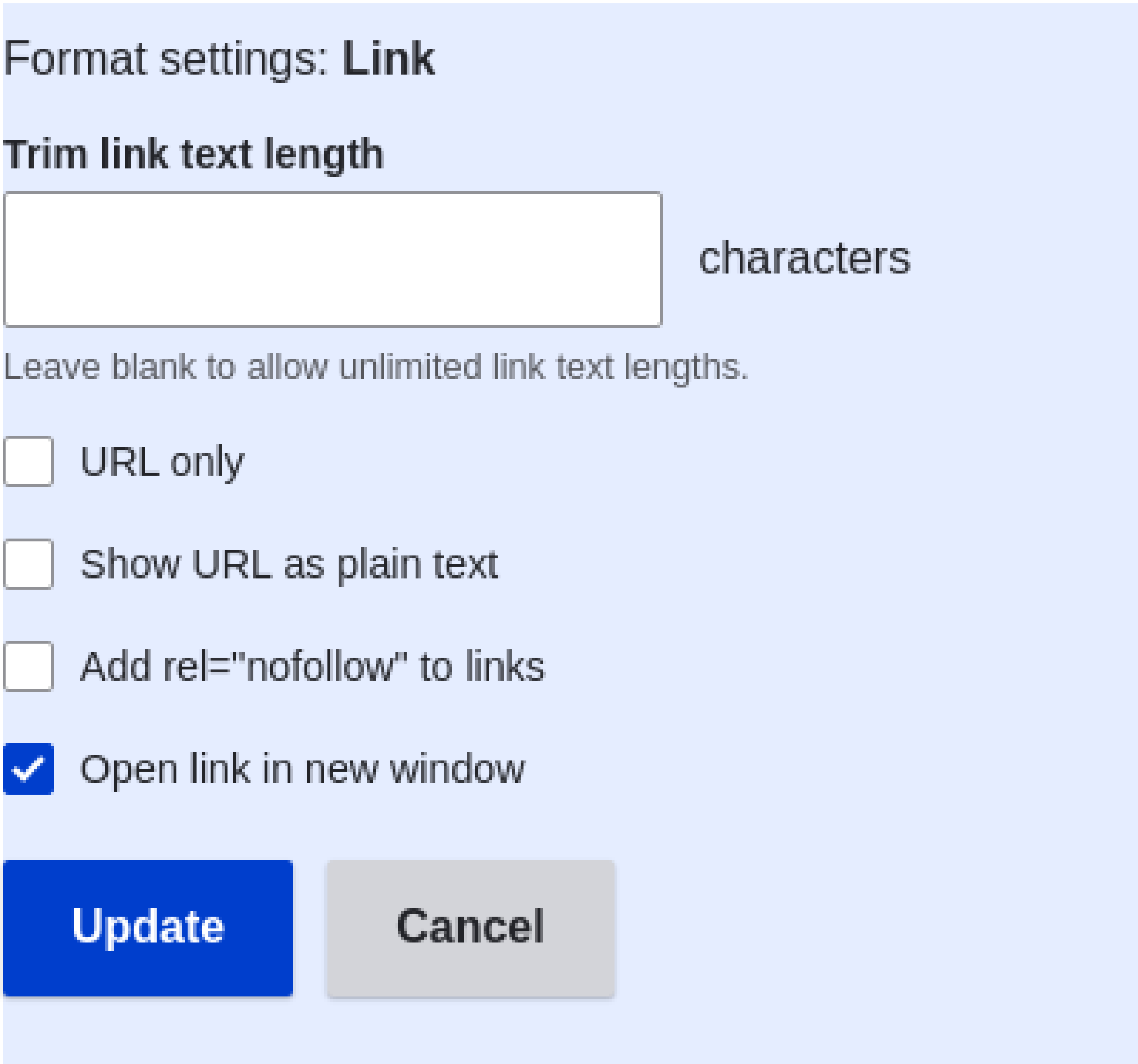


3. Under the *Label* column, select *Hidden* for Main image. Do the same for Vendor URL.

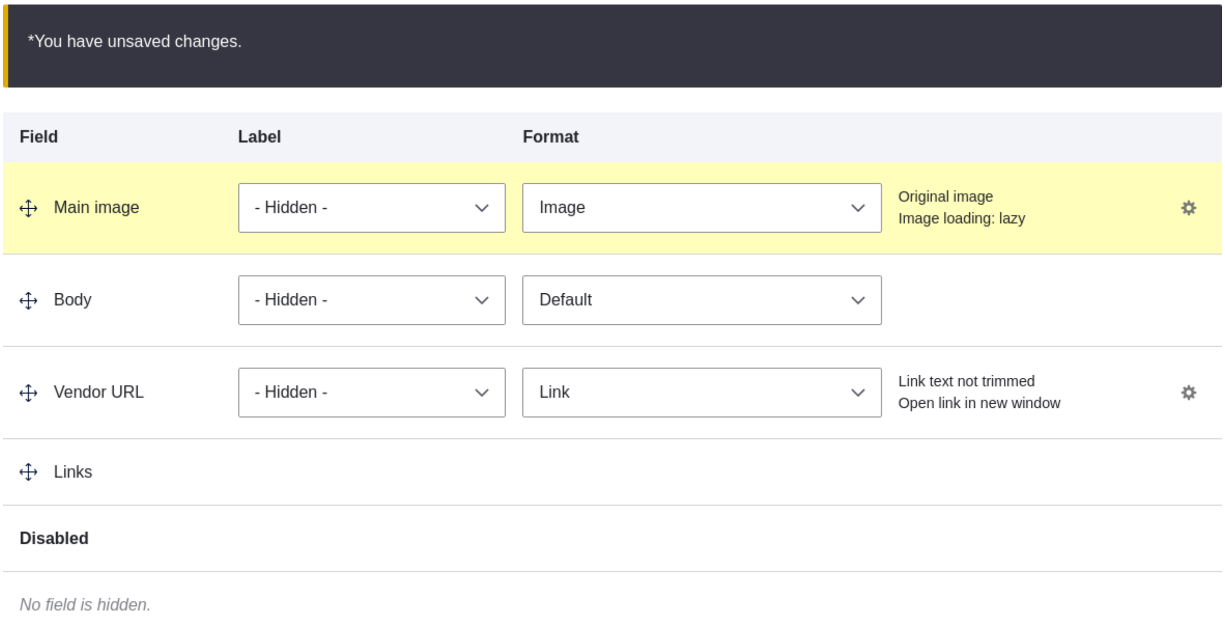


4. Click the gear wheel for the Vendor URL field, to open the configuration options.
5. Fill in the fields as shown below.

Field name	Explanation	Example value
Trim link text length	Maximum displayed length for link text	Blank (no trimming)
Open link in new window	Whether links should open in a new window or the same window	Checked



6. Click *Update*.
7. Drag the cross bar handles of the fields to reorder as Main image, *Body*, Vendor URL, and *Links*. As an alternative to dragging, you can click the *Show row weights* link at the top of the table and enter numerical weights (fields with lower or more negative weights will be shown first).



8. Click *Save*.

9. Find the Vendor content item from step 1 again, and verify that the updates have been made.

10. Repeat similar steps to manage the display of the Recipe content type fields.

Expand your understanding

- Make the main image smaller. See Section 6.13, "Setting Up an Image Style".
- If you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Related concepts

Section 6.12, "Concept: Image Styles"

Videos

Changing Content Display

Changing Content Display

Additional resources

- *Drupal.org* community documentation page "Specify how fields are displayed"
- *Drupal.org* community documentation page "Rearrange the order of fields"
- *Drupal.org* community documentation page "View modes"

Attributions
Written by Ann Greazel and Boris Doesborg.

6.12 Concept: Image Styles

Prerequisite knowledge

Section 6.3, "Adding Basic Fields to a Content Type"

What are image styles?

Image styles allow you to upload a single image but display it in several ways; each display variation, or *image style*, is the result of applying one or more *effects* to the original image.

As an example, you might upload a high-resolution image with a 4:3 aspect ratio, and display it scaled down, square cropped, or black-and-white (or any combination of these effects). The core software provides a way to do this efficiently:

1. Configure an image style with the desired effects on the *Image styles* page (*admin/config/media/image-styles*).

2. The effects will be applied the first time a particular image is requested in that style.

3. The resulting image is saved.

4. The next time that same style is requested, the saved image is retrieved without the need to recalculate the effects.

The core software provides several effects that you can use to define styles; others may be provided by contributed modules.

Visit the *Image styles* page via the *Manage* administrative menu, navigate to *Configuration* > *Media* > *Image styles* (*admin/config/media/image-styles*) to see the image styles that are defined by default.

Related topics

- Section 6.13, "Setting Up an Image Style"
- Section 6.14, "Concept: Responsive Image Styles"
- Section 6.3, "Adding Basic Fields to a Content Type"

Additional resources

Drupal.org community documentation page "Working with images"

Attributions

Adapted and edited by Boris Doesborg, and Jojy Alphonso at Red Crackle, from "Working with images" copyright 2000-2024 by the individual contributors to the Drupal Community Documentation

6.13 Setting Up an Image Style

Goal

Add an image style and use it to display images on Vendor pages.

Prerequisite knowledge

- Section 6.3, "Adding Basic Fields to a Content Type"
- Section 6.11, "Changing Content Display"
- Section 6.12, "Concept: Image Styles"

Site prerequisites

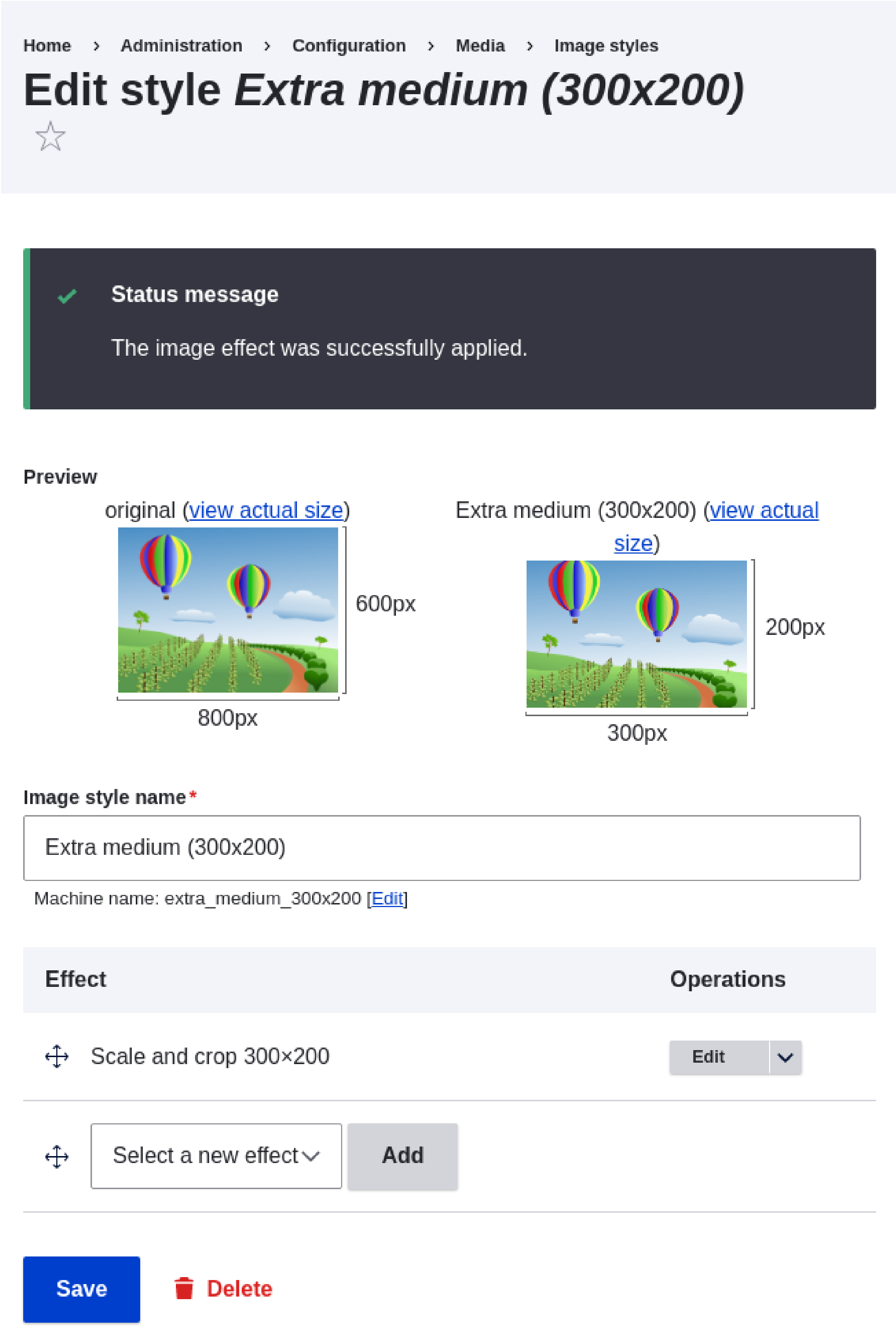
- Vendor and Recipe content types must exist. See Section 6.1, “Adding a Content Type”.
- Main image fields must exist for both content types. See Section 6.3, “Adding Basic Fields to a Content Type”.
- Content items must exist for both content types. See Section 6.1, “Adding a Content Type”, Section 6.3, “Adding Basic Fields to a Content Type”, and Section 5.2, “Creating a Content Item”.

Steps

1. In the *Manage* administrative menu, navigate to *Configuration* > *Media* > *Image styles* (*admin/config/media/image-styles*).
2. Click *Add image style*.
3. Enter the name *Extra medium (300x200)*
4. Click *Create new style*. The page *Edit style Extra medium (300x200)* appears.
5. In the *Effect* table, select *Scale and crop*. Click *Add*.
6. Fill in the fields as shown below.

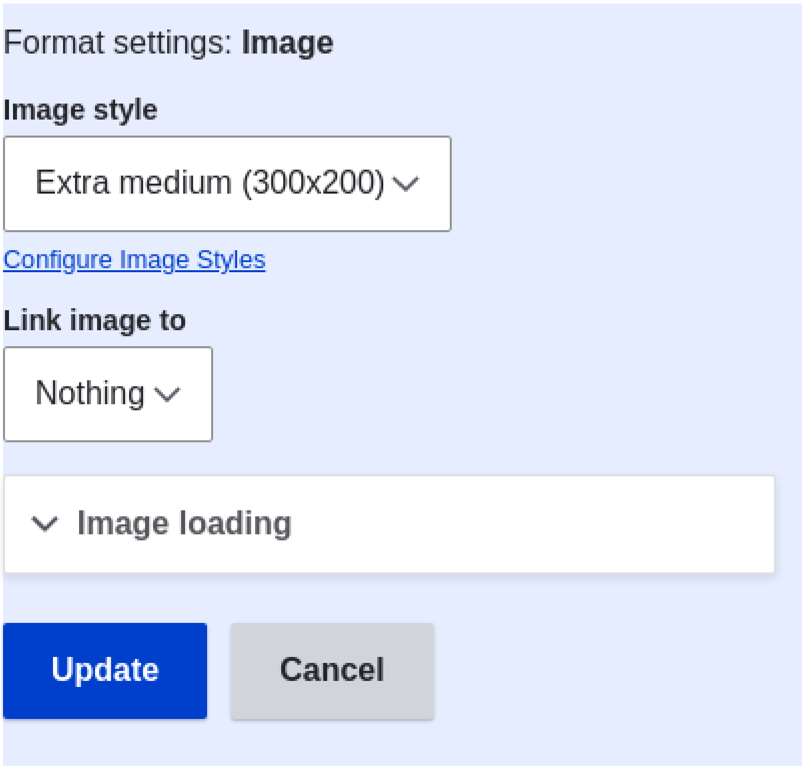
Field name	**Value**
Width	300
Height	200

7. Click *Add effect*. The image style is saved with the chosen effects.


Home › Administration › Configuration › Media › Image styles
Edit style Extra medium (300x200)
Status message
The image effect was successfully applied.
Preview
original (view actual size)
600px
800px
Extra medium (300x200) (view actual size)
200px
300px
Image style name*
Extra medium (300x200)
Machine name: extra_medium_300x200 [Edit]
Effect
Operations
Scale and crop 300×200
Edit
Select a new effect
Add
Save
Delete

8. In the *Manage* administrative menu, navigate to *Structure* > *Content types* (*admin/structure/types*).
9. Click *Manage display* in the *Operations* dropdown for the Vendor content type. The *Manage display* page (*admin/structure/types/manage/vendor/display*) appears.
10. Ensure that the secondary tab *Default* is selected.
11. Click the gear wheel for the *Main image* field, to open the configuration options.
12. Fill in the fields as shown below.

Field name	Explanation	Example value
Image style	Which image style to use	Extra medium (300x200)
Link image to	Page to visit if image is clicked	Nothing



13. Click *Update*.
14. Click *Save*. The new image style will be used while displaying Vendor content.
15. Open a Vendor content item and verify that it now shows up with the scaled-down image. See Section 5.3, "Editing a Content Item" for information on how to locate an existing content item.
16. Repeat steps 8-15 for the Recipe content type.

Related concepts

- Section 6.3, "Adding Basic Fields to a Content Type"
- Section 6.12, "Concept: Image Styles"
- Section 6.14, "Concept: Responsive Image Styles"

Videos

Setting up an Image Style

Setting up an Image Style

Additional resources

Drupal.org community documentation page "Working with images"

Attributions

Adapted and edited by Boris Doesborg, and Jojy Alphonso at Red Crackle from "Working with images", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

6.14 Concept: Responsive Image Styles

Prerequisite knowledge

- Section 1.3, "Concept: Themes"
- Section 6.11, "Changing Content Display"
- Section 6.12, "Concept: Image Styles"

What are responsive image styles?

The core Responsive Image module provides responsive image styles. This allows you to have images in your website that are specifically sized for different screen sizes. This is useful, for example, to make your site load faster on mobile devices because image sizes are optimized for smaller screens.

A responsive image style is a mapping between image styles and breakpoints. Breakpoints are the points where a responsive design needs to change in order to respond to different screen sizes. Responsive image styles can either work with breakpoints defined in your theme or with breakpoints defined in the responsive image style settings.

When a responsive image style is defined, it can be used in the display settings for Image fields. This allows the site to display responsive images using the HTML5 *picture* tag, or using the *srcset* and *sizes* attributes in an *img* tag, depending on how the responsive image style is set up.

Related topics

Section 6.3, "Adding Basic Fields to a Content Type"

Additional resources

- *Drupal.org* community documentation page "Responsive web design"
- *Drupal.org* community documentation page "Responsive Images"
- *Drupal.org* community documentation page "Working with breakpoints in Drupal"
- Blog post "Responsive Images in Drupal 8 using *srcset*"

Attributions

Adapted by Boris Doesborg from Responsive images, copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

6.15 Concept: Text Formats and Editors

What are text formats and filters?

Text formats change how HTML tags and other text are processed and displayed on your site. Text formats are composed of a series of *filters*, each of which transforms text. When users create content, a text format is associated with the content, and the full, original text is stored in the database. The content is then passed through the filters in the text format before it becomes output on the site.

The core Filter module provides text format functionality, and the core Standard installation profile sets up *Basic HTML*, *Restricted HTML*, and *Full HTML* text formats. Each text format has an associated permission, so that you can allow only trusted users to use permissive text formats. This restricts untrusted users to text formats like *Basic HTML*, which filters out dangerous HTML tags.

What are the editors associated with text formats?

Each text format can be associated with an editor, such as a visual WYSIWYG (What You See Is What You Get) HTML editor. The core Text Editor module provides the ability to associate editors with text formats, and to configure the editors (such as adding and removing buttons from their toolbars). The core CKEditor module provides the industry-standard editor known as CKEditor, so that it can be used to edit HTML content on your site.

What is cross-site scripting?

Cross-site scripting (XSS) is a security vulnerability typically found in websites. In a site that is not well protected, malicious users can enter script into web pages that are viewed by other users (for example, in a comment or in the body of a page). A cross-site scripting vulnerability may be used by attackers to login as another user. It is important to configure the text formats of your website to prevent such abuse.

Related topics

Section 13.3, “Concept: Security and Regular Updates”

Additional resources

- *Drupal.org* community documentation page ”Filter module overview”
- Wikipedia page ”Cross-site scripting”

Attributions
Written and edited by Boris Doesborg and Jennifer Hodgdon.

6.16 Configuring Text Formats and Editors

Goal

Add a horizontal rule tag to the *Basic HTML* text format, and a corresponding button to its editor configuration.

Prerequisite knowledge

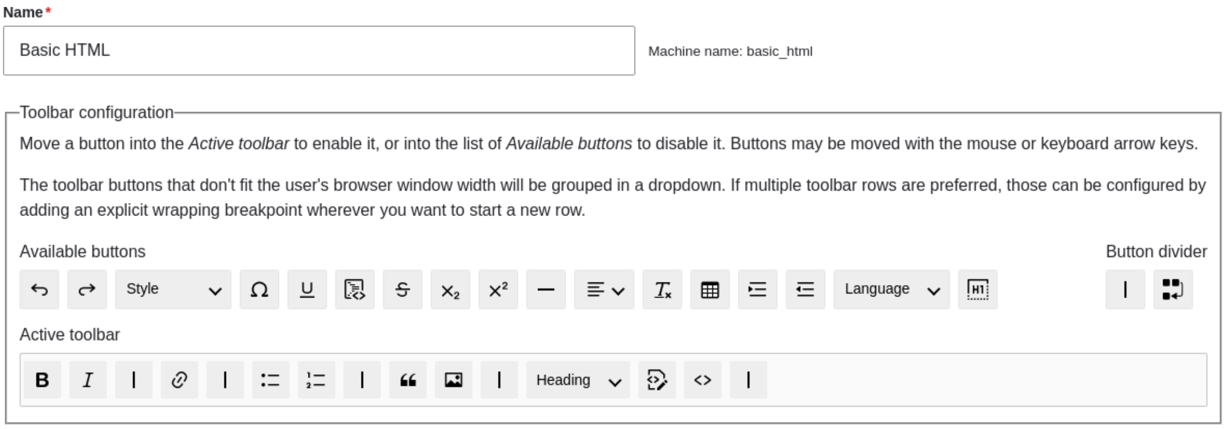
Section 6.15, “Concept: Text Formats and Editors”

Site prerequisites

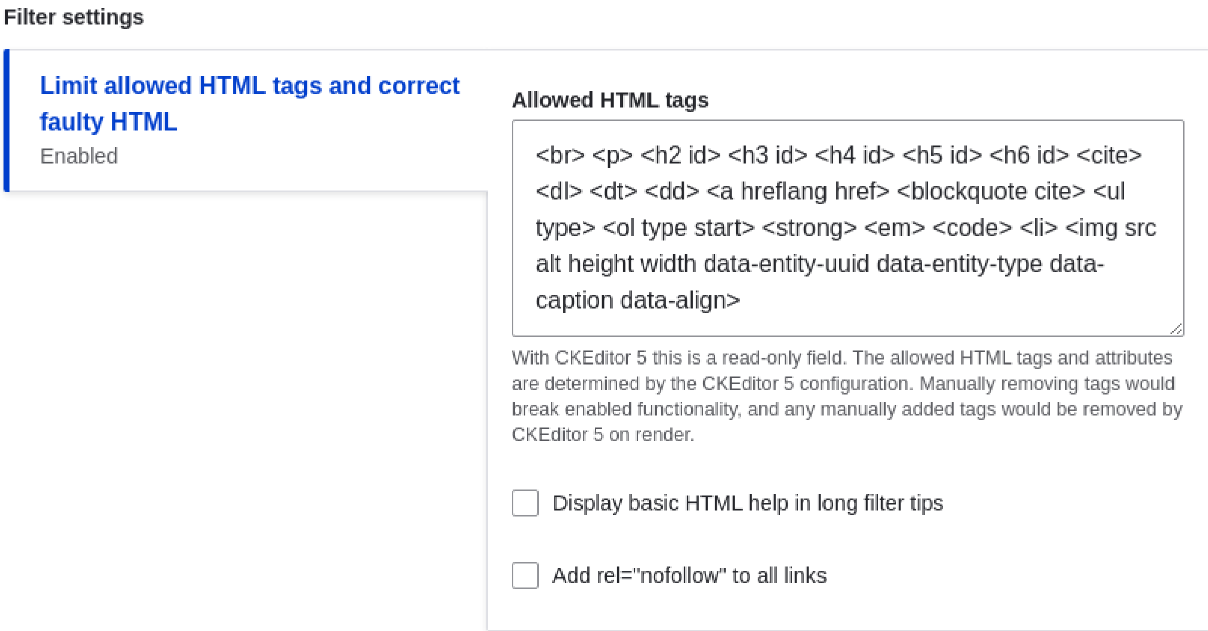
- The core Filter, Editor, and CKEditor modules must be installed. They are installed on your site when you install with the core Standard installation profile.
- The *Basic HTML* text format must exist. This is created on your site when you install with the core Standard installation profile.

Steps

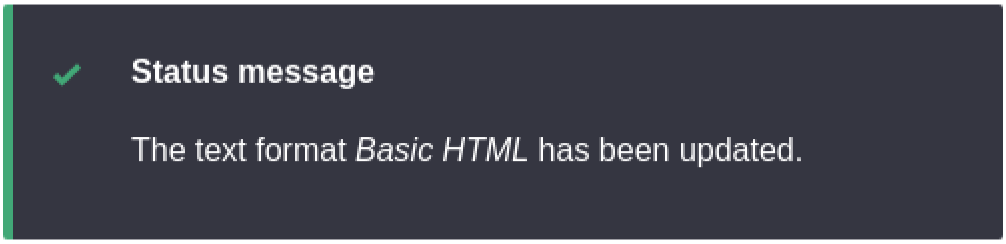
1. In the *Manage* administrative menu, navigate to *Configuration* > *Content authoring* > *Text formats and editors* (*admin/config/content/formats*). The *Text formats and editors* page appears. Note that the names of the text formats that came with your installation profile are shown in English on this page; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.
2. Click *Configure* for the *Basic HTML* text format. The *Basic HTML* page appears.
3. Note that *CKEditor* is selected in the *Text editor* field. This allows you to configure the editor's toolbar.
4. Drag the *horizontal line* button from *Available buttons* to the *Active toolbar*. Toolbar items can be visually grouped together using a vertical divider. As an alternative to dragging, you can tab to select buttons and then move them using keyboard arrow keys.



5. Note that you can change the *Filter processing order*.
6. Under *Filter settings* > *Limit allowed HTML tags and correct faulty HTML*, in the field *Allowed HTML tags*, verify that `<hr>` is present (adding its editor button will automatically update the allowed tags).



7. Click *Save configuration*. You will be taken back to the *Text formats and editors* page. A message will be displayed saying that the text format has been updated.



Expand your understanding

If you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Videos

Configuring Text Formats and Editors

Configuring Text Formats and Editors

Attributions

Written and edited by Boris Doesborg, and Joe Shindelar at Drupalize.Me.

Chapter 7

Managing User Accounts

7.1 Concept: Users, Roles, and Permissions

What are Users?

Anyone who visits your website is a *user*, including you. There are three groups of users:

- Users who are not logged in, or *anonymous users*
- Users who are logged in, or *authenticated users*
- The administrative user account that was automatically created when you installed your site, or User 1. See Section 7.2, "Concept: The User 1 Account".

What are Permissions?

The ability to do actions on your site (including viewing content, editing content, and changing configuration) is governed by *permissions*. Each permission has a name (such as *View published content*) and covers one action or a small subset of actions. A user must be granted a permission in order to do the corresponding action on the site; permissions are defined by the modules that provide the actions.

What are Roles?

Rather than assigning individual permissions directly to each user, permissions are grouped into *roles*. You can define one or more roles on your site, and then grant permissions to each role. The permissions granted to authenticated and anonymous users are contained in the *Authenticated user* and *Anonymous user* roles, and depending on the installation profile you used when you installed your site, there may also be an *Administrator* role that is automatically assigned all permissions on your site.

Each user account on your site is automatically given the *Authenticated user* role, and may optionally be assigned one or more additional roles. When you assign a role to a user account, the user will have all the permissions of the role when logged in.

It is a good practice to make several roles on your site. In the farmers market site example, you might want the following roles:

- A Vendor role that allows vendors to edit their own vendor listing page
- A Content editor role for editing the general farmers market pages
- A User manager role for managing the vendor accounts
- The *Administrator* role that was installed with your site, for expert users to manage the site configuration

Related topics

- Section 7.3, "Creating a Role"
- Section 7.5, "Assigning Permissions to a Role"
- Section 7.6, "Changing a User's Roles"
- Section 7.4, "Creating a User Account"
- Section 7.2, "Concept: The User 1 Account"
- Section 7.7, "Assigning Authors to Content"

Additional resources

- *Drupal.org* community documentation page "Users, roles and permissions"
- *Drupal.org* community documentation page "Managing Users"
- *Drupal.org* community documentation page "User Roles"

Attributions
Adapted by Mark LaCroix, Boris Doesborg, and Jennifer Hodgdon from "User Roles", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

7.2 Concept: The User 1 Account

Prerequisite knowledge

Section 7.1, "Concept: Users, Roles, and Permissions"

What is the user 1 account?

During the installation of your site, you created the first user account. Each user account internally has a numeric user ID, and since the ID of this user is one, it is commonly referred to as the *user 1* account. This user account is special, because independent of what roles it is assigned, someone logged in as user 1 has permission to do all actions on the site, including viewing and editing all content, editing any user account, changing site configuration, installing and uninstalling modules, and running the update script.

Because of this level of permission, some people refer to this account as the *root user*, similar to the "root" user account that has full administrative permissions in Linux and other operating systems.

It is usually better to make separate accounts for each administrative user, giving them the *Administrator* role, rather than having all administrative users log in using the user 1 account. There are several reasons for this:

- Some actions and updates on the site are logged, and if everyone uses the same account, it is difficult to know who did them if you have questions.
- The *Administrator* role permissions can be modified to be safer than the full permissions of the user 1 account, so that people do not inadvertently change site features that shouldn't be changed.
- People's responsibilities on a site may change over time. With ordinary user accounts, this can be mirrored in permissions by assigning or unassigning roles to their user accounts. If they are all using the user 1 account, this is more difficult.
- On some sites, the author of content or comments is displayed or tracked, and if everyone uses the same account to create content, it is difficult to know who created the content.

It is not possible to delete the user 1 account from the administrative user interface. It would be possible to do with a database query, but it could cause problems in your site and is not advisable.

Additional resources

Drupal.org community documentation page "Accounts and roles"

Attributions

Written and edited by Mark LaCroix and Jennifer Hodgdon.

7.3 Creating a Role

Goal

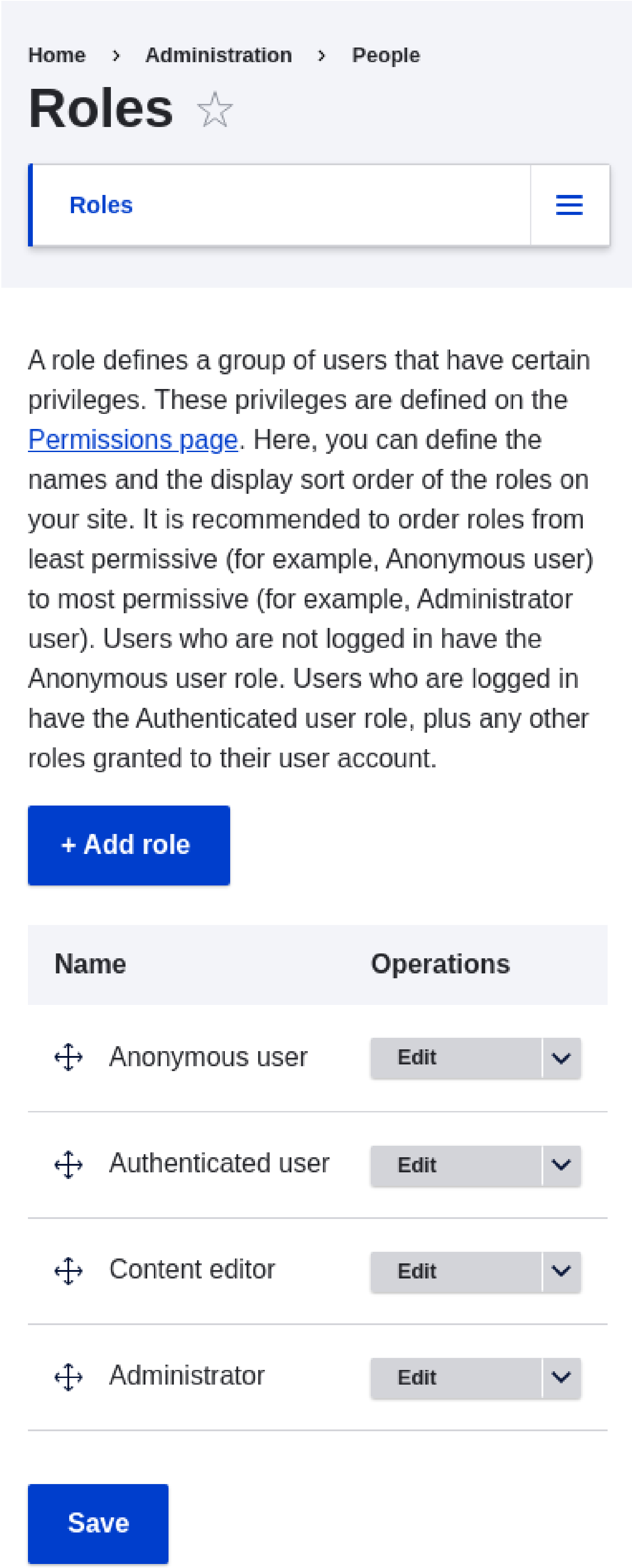
Create a Vendor role to allow some - but not all - users to perform specific tasks.

Prerequisite knowledge

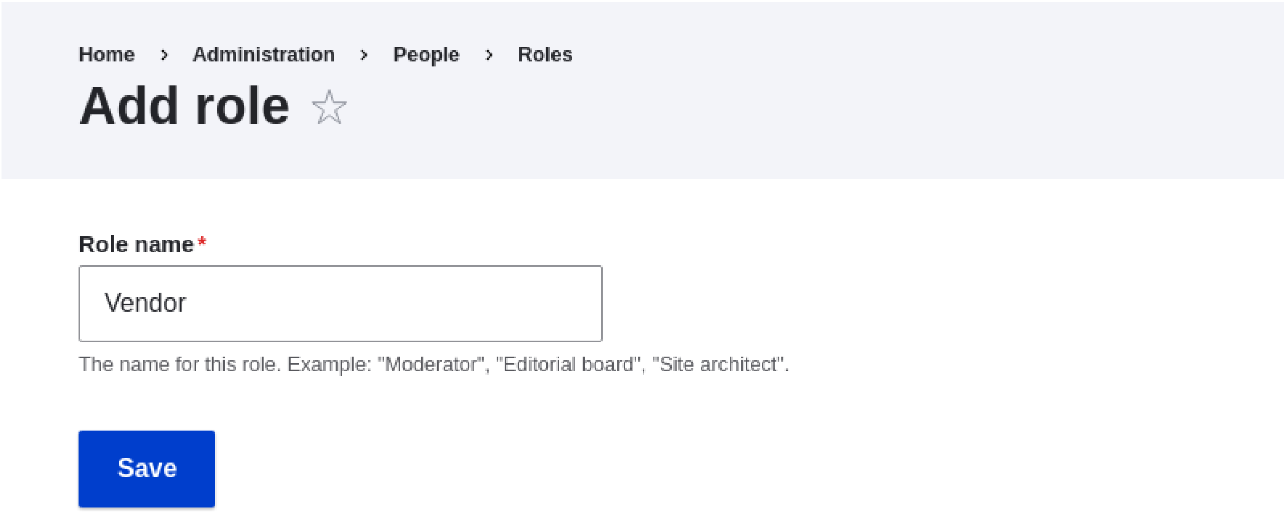
Section 7.1, "Concept: Users, Roles, and Permissions"

Steps

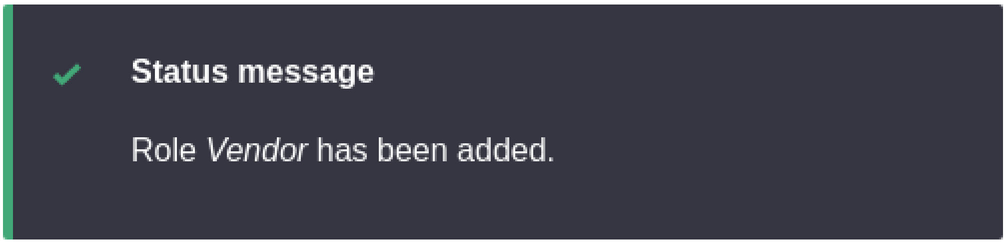
1. In the *Manage* administrative menu, navigate to *People* > *Roles* (*admin/people/roles*).
2. You will find default roles *Anonymous user*, *Authenticated user*, and *Administrator* already present.


Home › Administration › People
Roles
Roles
A role defines a group of users that have certain privileges. These privileges are defined on the Permissions page. Here, you can define the names and the display sort order of the roles on your site. It is recommended to order roles from least permissive (for example, Anonymous user) to most permissive (for example, Administrator user). Users who are not logged in have the Anonymous user role. Users who are logged in have the Authenticated user role, plus any other roles granted to their user account.
+ Add role
Name
Operations
Anonymous user
Edit
Authenticated user
Edit
Content editor
Edit
Administrator
Edit
Save

3. Click *Add Role* to add a custom role.
4. Type Vendor in the *Role name* field. Click *Save*.



5. You will see the message "Role Vendor has been added." displayed at the top of the page.



Expand your understanding

- Section 7.5, "Assigning Permissions to a Role"
- Section 7.6, "Changing a User's Roles"

Videos

Creating a Role

Creating a Role

Additional resources

Drupal.org community documentation page "User Roles"

Attributions

Adapted and edited by Jack Probst, Boris Doesborg, and Joe Shindelar from "User Roles", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation

7.4 Creating a User Account

Goal

Create Vendor user accounts for Sweet Honey and Happy Farm vendors.

Prerequisite knowledge

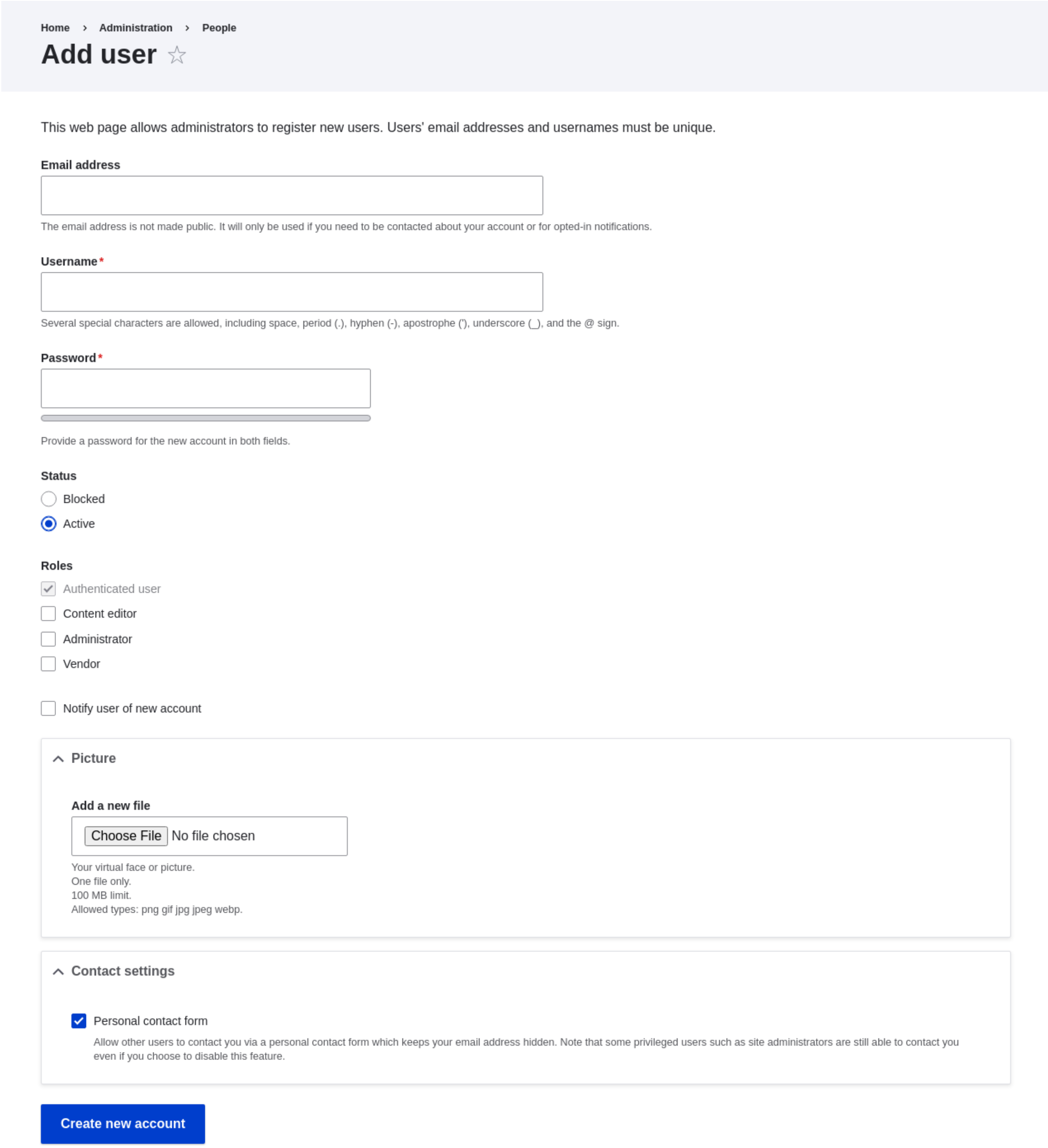
- Section 7.1, "Concept: Users, Roles, and Permissions"
- Section 7.2, "Concept: The User 1 Account"
- Section 7.3, "Creating a Role"

Site prerequisites

The Vendor role must exist on your site. See Section 7.3, "Creating a Role".

Steps

1. In the *Manage* administrative menu, navigate to *People* (*admin/people*).
2. Click *Add user*.

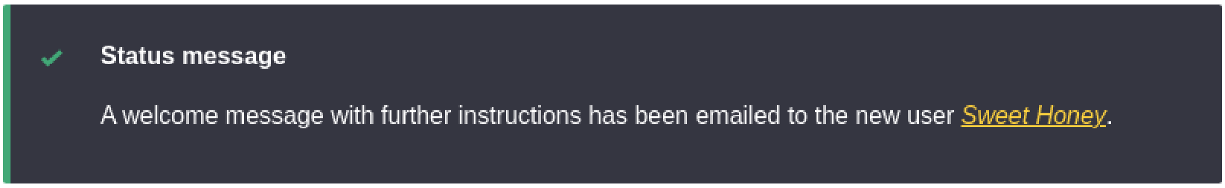


3. Fill in the form fields. See the table below.

Field name	**Explanation**	**Example value**
Email address	A valid email address for the vendor. All emails from the system will be sent to this address. The email address is not made public.	honey@example.com

Field name	Explanation	Example value
Username	A username for the vendor that they will use to sign in or author content items. Spaces are allowed; punctuation is not allowed except for periods, hyphens, apostrophes, and underscores.	Sweet Honey
Password	A password the vendor will use to sign in to the site. You can see how safe the password is on the *Password strength* gauge. You also get tips on how to make it safer.	(Make a secure password)
Confirm password	Type the same password to avoid any typing mistakes.	(Repeat password)
Status	Set the status of the user account. *Blocked* users will not be able to sign in.	Active
Roles	Set the role of the user account.	Vendor
Notify user of new account	Whether or not to send a notification to the vendor's email address.	Checked
Picture	Click *Browse* and select a picture to upload. Pay attention to size restrictions.	Photo of the vendor
Contact settings	Enable or disable the display of a contact form for the account.	Checked

4. Click *Create new account*. You will get a notification about the user account creation.



5. Create a second Vendor account for Happy Farm by following the steps above.

Expand your understanding

Create a user account for yourself.

Videos

Creating a User Account

Creating a User Account
Attributions
Written by Diána Lakatos at Pronovix.

7.5 Assigning Permissions to a Role

Goal

Change the permissions for the Vendor role so that users can create, edit, and delete Recipe and Vendor content, format the content, and contact each other.

Prerequisite knowledge

- Section 7.1, "Concept: Users, Roles, and Permissions"

Site prerequisites

The Vendor role must exist on your site. See Section 7.3, "Creating a Role".

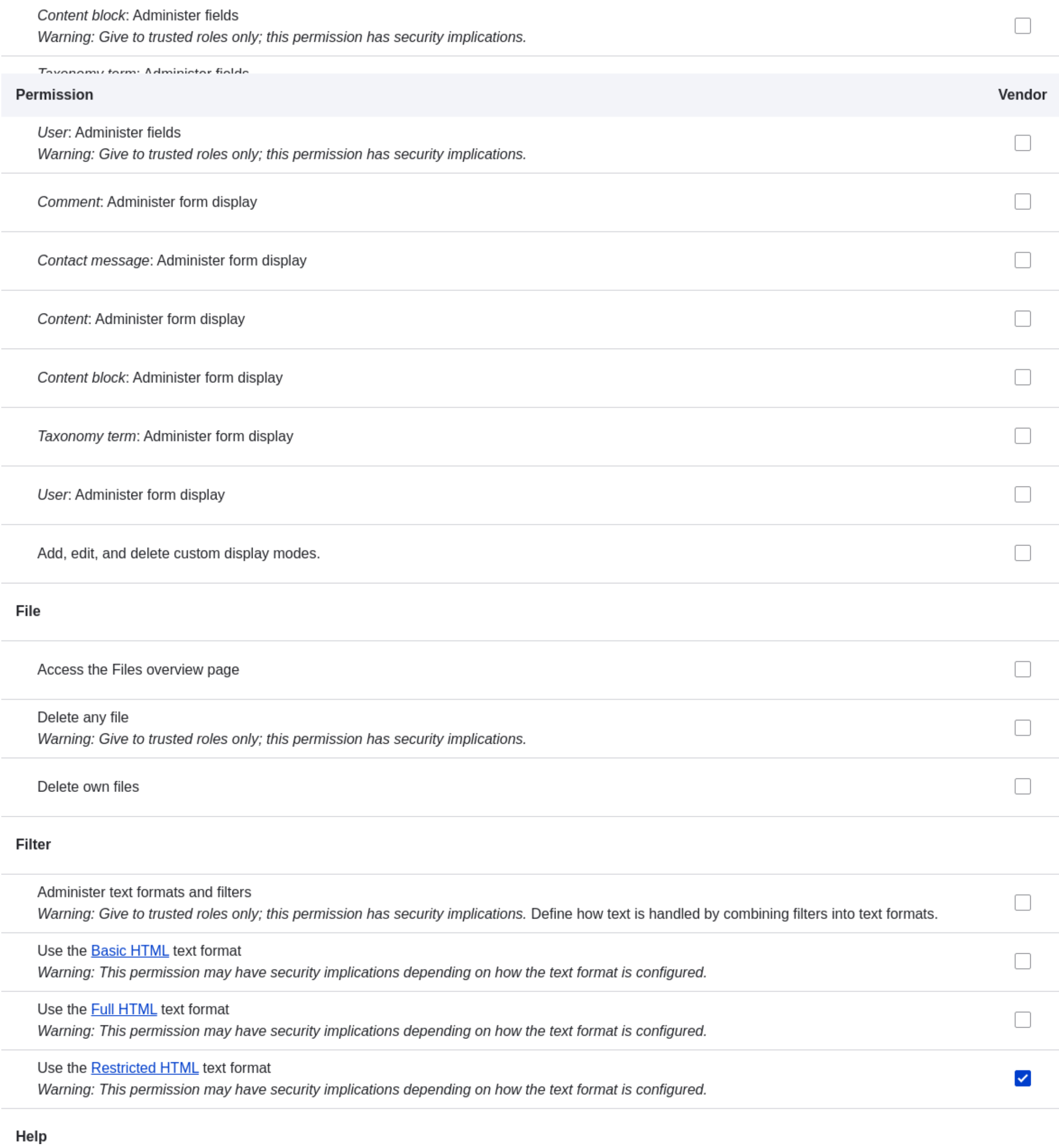
Steps

1. In the *Manage* administrative menu, navigate to *People* > *Roles* (*admin/people/roles*). The *Roles* page appears.

2. Click *Edit permissions* in the dropdown for the Vendor role. The *Edit role* page appears where you can see all the available actions for the website such as, for example, *Post comments* or *Administer blocks*. The available permissions depend on the modules that are installed in the site. Note: Some permissions may have security implications. Be cautious while assigning permissions to roles.

3. Check the boxes for the following permissions, listed by module:

Module	**Permission**
Contact	Use users' personal contact forms
Filter	Use the Restricted HTML text format
Node	Recipe: Create new content
Node	Recipe: Edit own content
Node	Recipe: Delete own content
Node	Vendor: Edit own content



4. Click *Save permissions*. You will get a message saying your changes have been saved.

Expand your understanding

- Log in as one of the new users you created in Section 7.4, "Creating a User Account". Verify whether you have the correct permissions.
- Section 7.6, "Changing a User's Roles"

Related concepts

Section 7.2, "Concept: The User 1 Account"

Videos

Assigning Permissions to a Role

Assigning Permissions to a Role

Additional resources

Drupal.org community documentation page "Managing Users"

Attributions

Adapted and edited by Boris Doesborg, Brian Emery, and Jojy Alphonso at Red Crackle, and Joe Shindelar at Drupalize.Me, from "User Roles", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

7.6 Changing a User's Roles

Goal

Change or add roles to a given user, either by editing a single-user or by applying a bulk operation.

Prerequisite knowledge

Section 7.1, "Concept: Users, Roles, and Permissions"

Site prerequisites

The user account that you want to update, and the role you want it to have, must already exist. See Section 7.4, "Creating a User Account", Section 7.3, "Creating a Role", and Section 7.5, "Assigning Permissions to a Role".

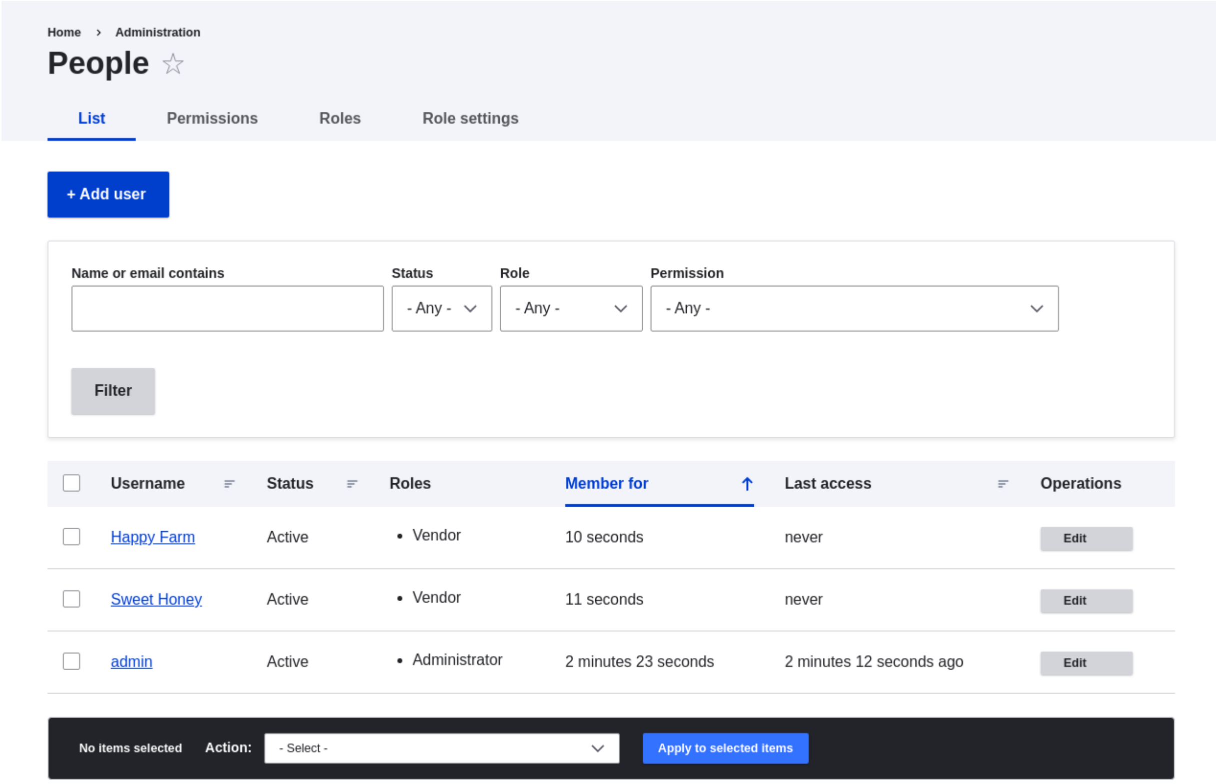
Steps

Updating the roles using single-user editing method

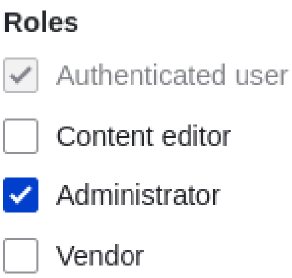
1. In the *Manage* administrative menu, navigate to *People* (*admin/people*).

2. Locate the user 1 account (named "admin") to assign it the *Administrator* role. If it is not immediately visible, use the *Name or email contains* filter, or other filters, to narrow down the list.

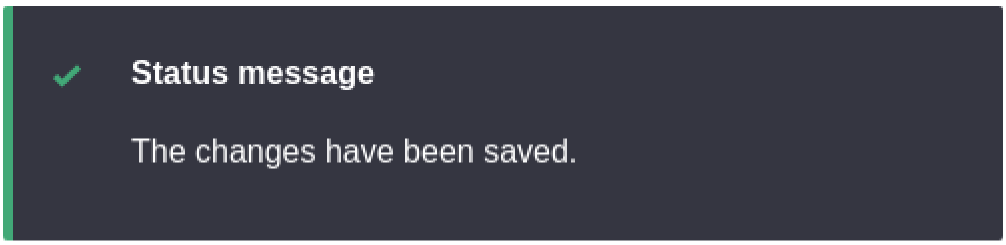
3. Click *Edit* to update the user account.



4. On the *Edit* page, scroll down to *Roles* section. Check the *Administrator* role for the user account.



5. Click *Save* to update the user account. You should be returned to the *People* page and see a message saying that the changes have been saved.

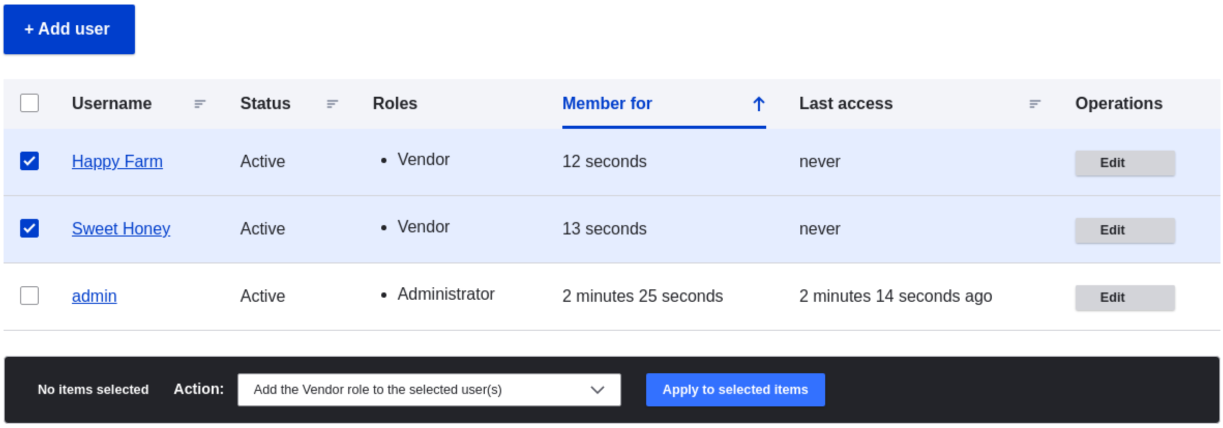


Updating the roles using bulk editing method

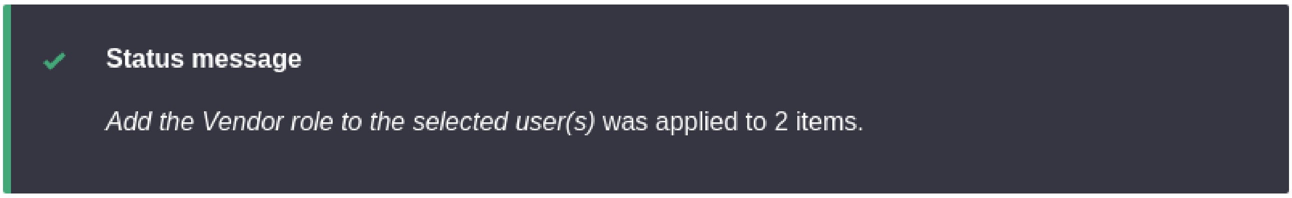
1. If the users Happy Farm and Sweet Honey did not already have the Vendor role, here is how you would add it. In the *Manage* administrative menu, navigate to *People* (*admin/people*).

2. Locate Vendor user accounts *Sweet Honey* and *Happy Farm* and check them. If they are not immediately visible, use the *Name or email contains* filter, or other filters, to narrow down the list.

3. Select *Add the Vendor role to the selected user(s)* from the *Action* select list.



4. Click *Apply to selected items*. You should see a message indicating that the desired changes were made.



Videos

Changing a User's Roles

Changing a User's Roles
Attributions
Written by Chris Dart and Jennifer Hodgdon

7.7 Assigning Authors to Content

Goal

Assign Vendor content items Happy Farm and Sweet Honey to the corresponding Vendor user accounts, so they can edit their own Vendor profiles on the site.

Prerequisite knowledge

- Section 7.1, "Concept: Users, Roles, and Permissions"

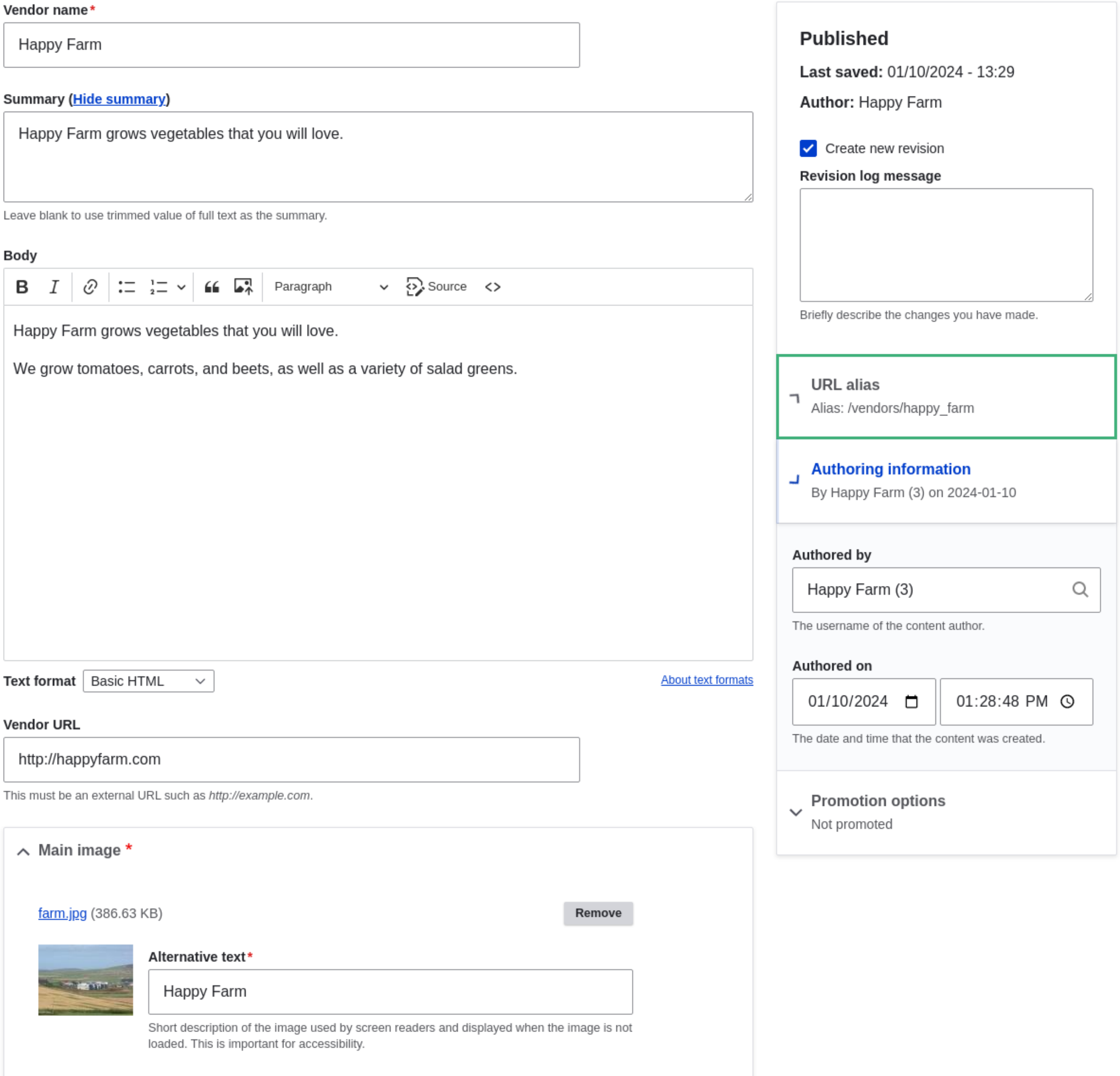
Site prerequisites

- The Vendor content type must exist, and your site must have at least two Vendor content items. See Section 6.1, "Adding a Content Type", Section 6.3, "Adding Basic Fields to a Content Type", and Section 5.2, "Creating a Content Item".
- User accounts for at least two vendors must exist. See Section 7.4, "Creating a User Account".

Steps

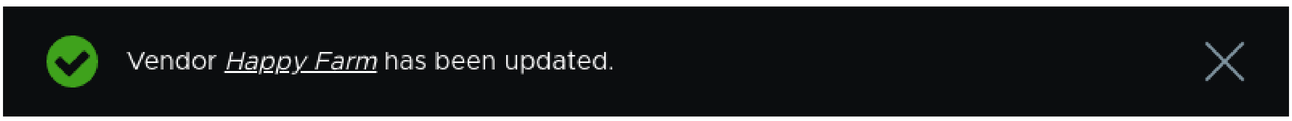
1. In the *Manage* administrative menu, navigate to *Content* (*admin/content*).
2. Find Vendor content item Happy Farm in the list. If it is not immediately visible, you can filter the list by *Published status*, *Content type* (Vendor), *Title*, or *Language*. Click *Edit* for the Vendor content item you would like to assign an author to.

3. Under *Authoring information*, start typing the Vendor's user name Happy Farm in the *Authored by* field. The field lists matching user names. Select the Vendor's user name from the list.



4. Click *Save*.

5. You will get a notification that the Vendor content item has been updated.



6. Follow these steps again to assign Vendor content item Sweet Honey to the Vendor user account Sweet Honey.

Videos

Assigning Authors to Content

Assigning Authors to Content

Attributions

Written by Diána Lakatos at Pronovix.

Chapter 8

Blocks

8.1 Concept: Blocks

What is a block?

Blocks are individual pieces of your site's web page layout. They are placed inside the regions (see Section 2.1, "Concept: Regions in a Theme") of your theme, and can be created, removed, and rearranged in the *Block layout* (*admin/structure/block*) administration page. Examples of blocks include the *Who's online* listing, the main navigation menu, and the breadcrumb trail. The main page content is also a block.

Some modules make new blocks available for placement on your site. For example, when the core Search module is installed and configured, it provides a block that contains a search form. You may also create and place your own custom blocks.

Each block has its own configuration settings, which allow you to select which pages of your site will display the block. It is even possible to place multiple copies of a block, each with its own separate configuration and visibility rules.

Related topics

- Section 2.1, "Concept: Regions in a Theme"
- Section 8.2, "Creating A Custom Block"
- Section 8.3, "Placing a Block in a Region"

Attributions

Adapted by Les Lim from "Managing blocks" copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

8.2 Creating A Custom Block

Goal

Create a block showing the hours and location of the farmers market.

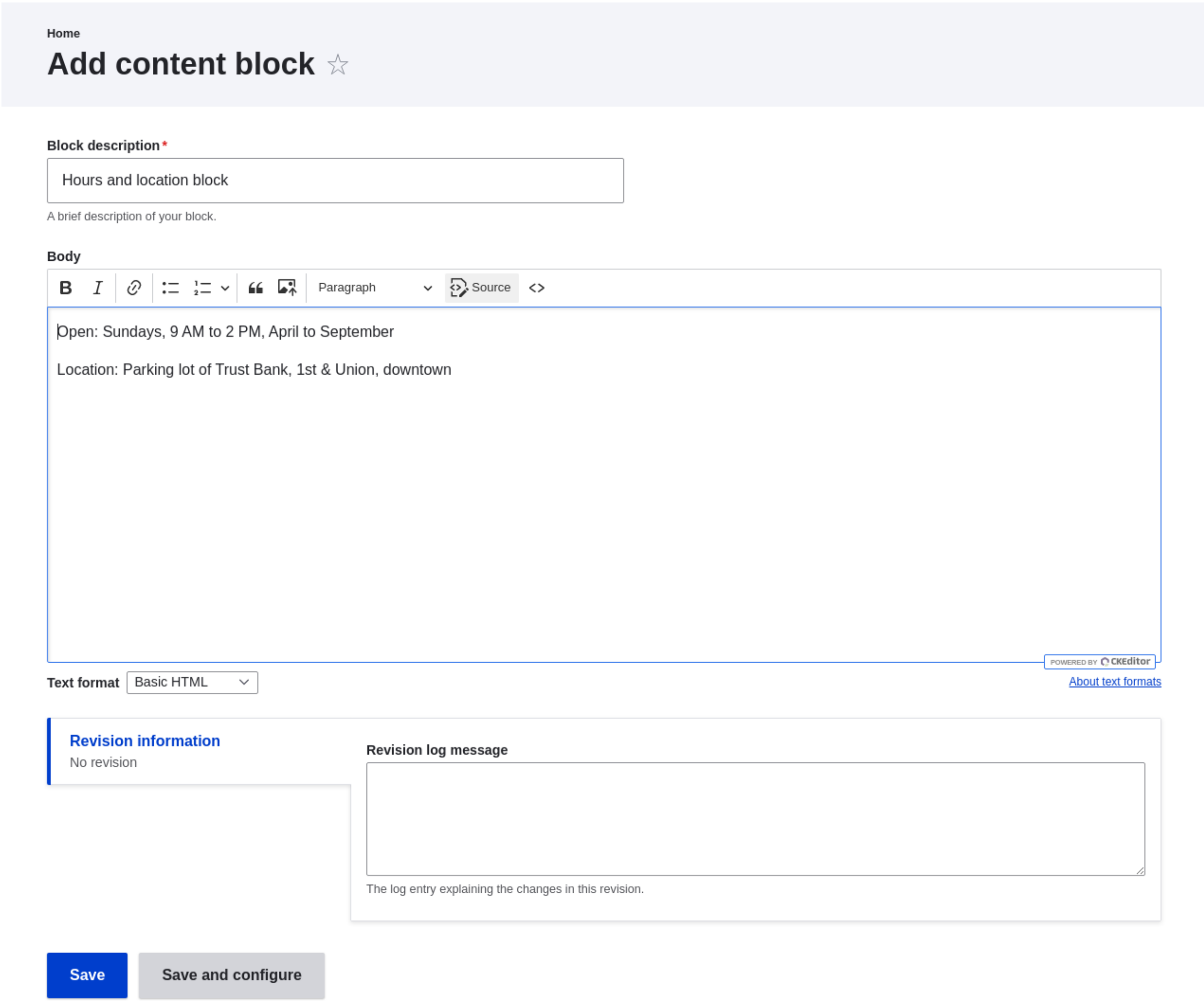
Prerequisite knowledge

- Section 8.1, "Concept: Blocks"
- Section 2.1, "Concept: Regions in a Theme"

Steps

1. In the *Manage* administrative menu, navigate to Content_ > *Blocks* (*admin/content/block*).
2. Click *Add content block*. The *Add content block* page appears.
3. Fill in the fields as shown below.

Field name	Explanation	Example value
Block description	Name of the block shown to administrators	Hours and location block
Body	Content of the block when it is displayed	Open: Sundays, 9 AM to 2 PM, April to September Location: Parking lot of Trust Bank, 1st & Union, downtown Anytown.



4. Click *Save*. A message appears indicating the block has been saved.

Expand your understanding

- Edit the content of your custom block. In the *Manage* administrative menu, navigate to *Content* > *Blocks* (*admin/content/block*). Find your block in the list and click *Edit* to make changes.

- Place the block you created in the sidebar. See Section 8.3, "Placing a Block in a Region" for details.

Videos

Creating a Custom Block

Creating a Custom Block

Additional resources

Drupal.org community documentation page "Managing blocks"

Attributions

Adapted by Jacob Redding and Boris Doesborg from Managing blocks, copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

8.3 Placing a Block in a Region

Goal

Place the Opening hours and location block in the website's sidebar.

Prerequisite knowledge

Section 8.1, "Concept: Blocks"

Site prerequisites

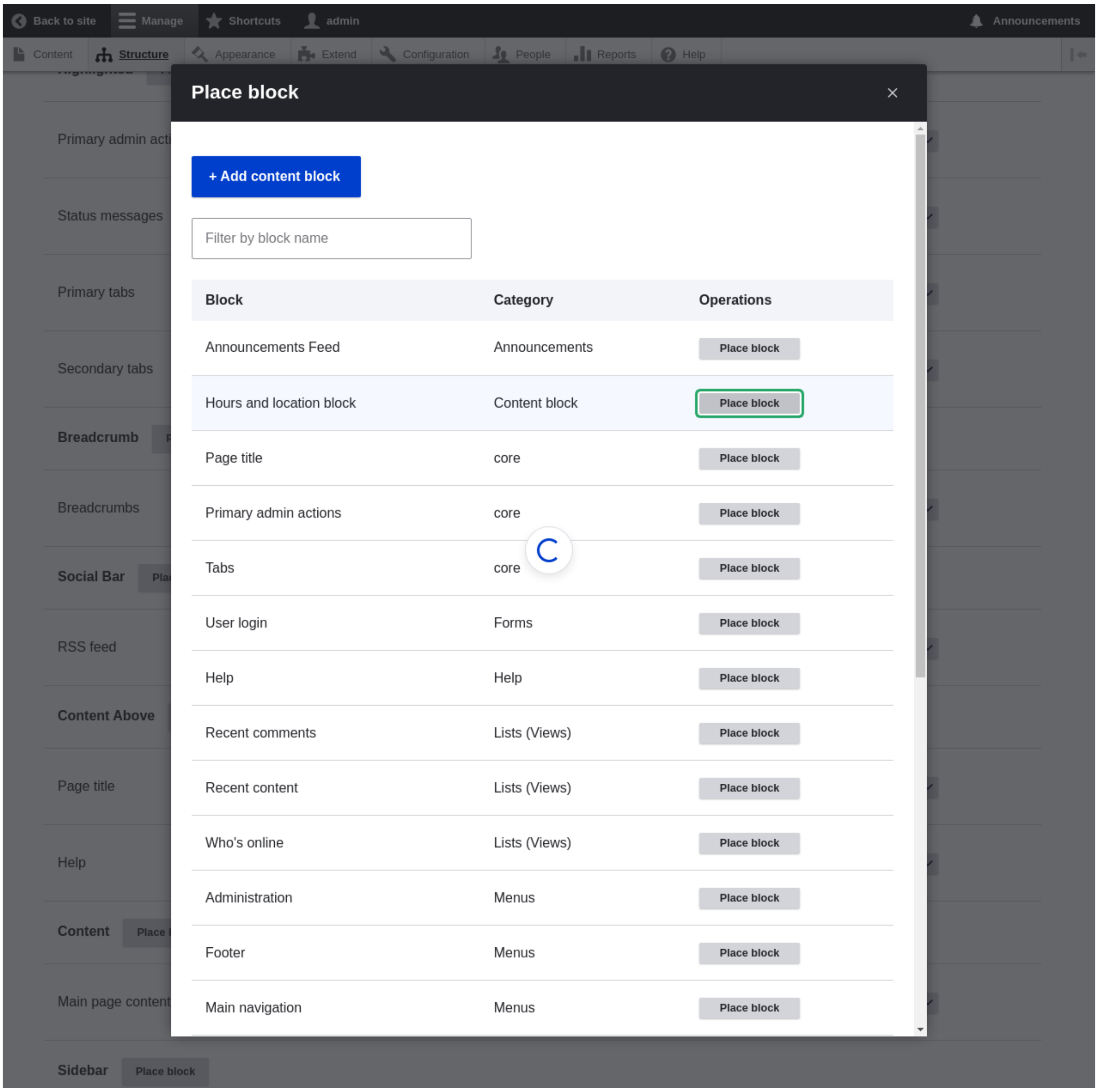
- The core Olivero theme must be installed and set as default. See Section 4.6, "Configuring the Theme".
- The Opening hours and location block must exist. See Section 8.2, "Creating A Custom Block".

Steps

1. In the *Manage* administrative menu, navigate to *Structure* > *Block layout* (*admin/structure/block*). The *Block layout* page appears, listing the theme's regions.
2. Ensure that in the secondary tab the core Olivero theme is selected. Block placement is defined per theme.
3. Locate the region *Sidebar* in the list and click *Place block* next to it. The *Place block* window appears, listing all the blocks.
4. Locate the block Opening hours and location and click *Place block* next to it. The *Configure block* window appears. Fill in the fields as shown below.

Field name	Explanation	Example value
Title	Title to be displayed for the block	Hours and location
Display title	Whether or not to display the title with the block	Checked
Region	Which theme region to display it in	Sidebar second

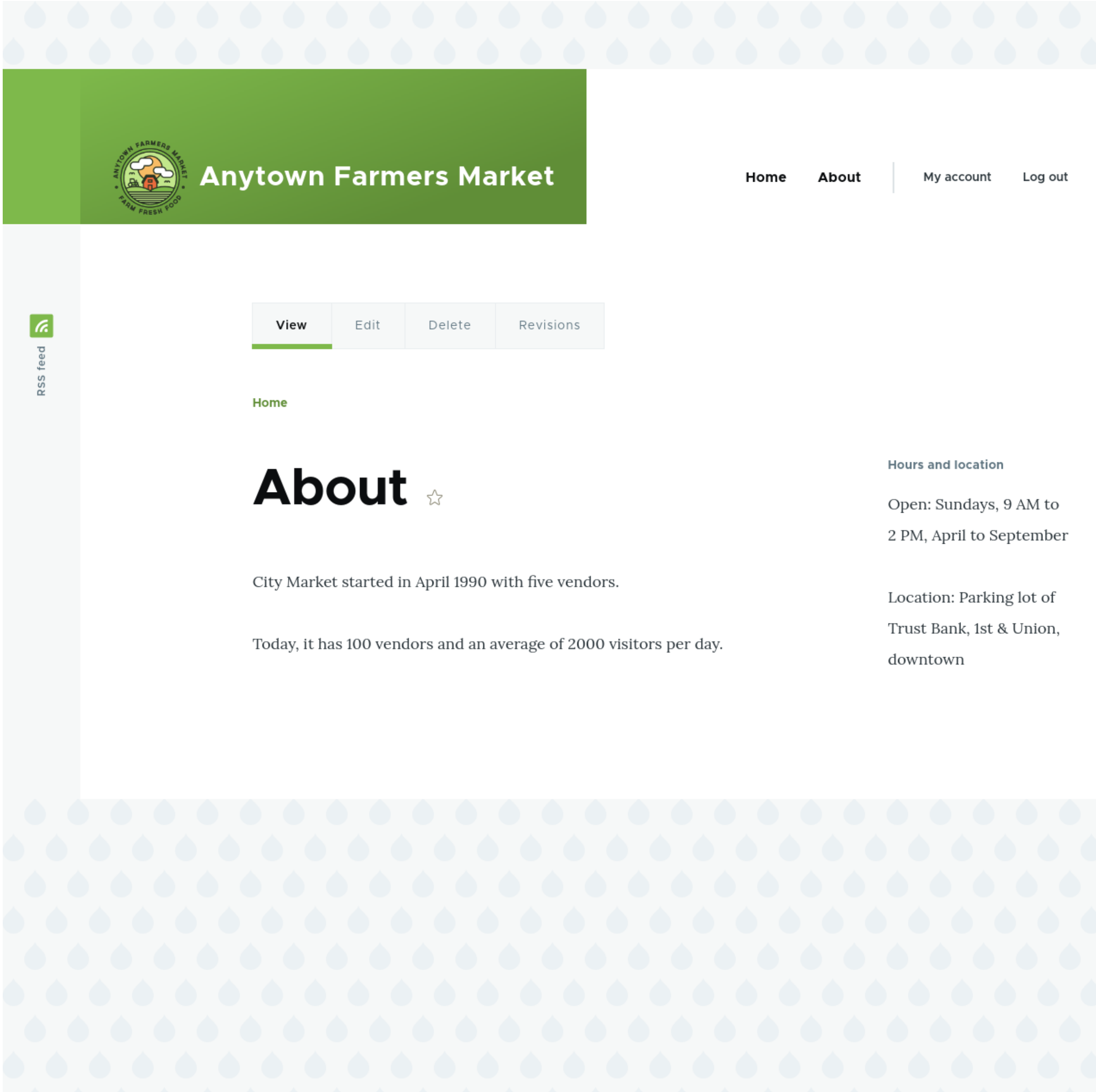
You can also hide or display the block on specific pages. In the case of the Farmer's market website you do not set any of these configuration options because you want to show the block everywhere.



5. Click *Save block*. The *Block layout* page appears. You can drag the cross bar handles of blocks to change their order within each region. As an alternative to dragging, you can click the *Show row weights* link at the top of the table and select numerical weights (blocks with lower or more negative weights will be shown first).

6. Verify that the Opening hours and location block is listed in the *Sidebar second* region, and click *Save blocks*.

   The block has been placed on the sidebar of all pages that use the core Bartik theme.



Expand your understanding

- Remove the *Powered by Drupal* block from the *Footer Bottom* region by clicking *Disable* or *Remove* in the *Operations* dropdown button. Clicking *Disable* will let you enable the block easily later with the same configuration; if you click *Remove* and you want the block back, you would need to go through the steps in this topic to place it in a region again. Note that the names of the blocks that are provided by the core software, such as *Powered by Drupal* and *User login*, are shown in English on this page; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.
- Place the *User login* block in a region.
- If you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Videos

Placing a Block in a Region

Placing a Block in a Region
Attributions
Written and edited by Boris Doesborg, Jennifer Hodgdon, and Joe Shindelar at Drupalize.Me

Chapter 9

Creating Listings with Views

9.1 Concept: Uses of Views

Prerequisite knowledge

- Section 2.4, "Concept: Modular Content"
- Section 2.3, "Concept: Content Entities and Fields"

What is a view?

A *view* is a listing of content on a website. The core Views module handles the display of views, and the core Views UI module allows you to create and edit them in the administrative interface. When you define views, you are interested in taking data from your website and displaying it to the user.

What types of data can be displayed using views?

You can create views to output practically any content entity that is stored in the system. For example, you can create the following lists for the farmers market site:

- Lists of vendors
- Lists of recipes
- Lists of the most recent content on the site
- Lists of users on the site

What are the ways data can be output using views?

A listing created by a view can be in any of the following forms:

- Table with sortable fields
- Grid layouts
- Teasers or pictures that link to articles
- Blocks
- JSON output
- RSS feeds
- Calendars
- On-screen slideshows

Related topics

- Section 9.2, "Concept: The Parts of a View"
- Section 9.3, "Creating a Content List View"

Attributions
Written and edited by Michael Lenahan at erdfisch, and Jojy Alphonso at Red Crackle.

9.2 Concept: The Parts of a View

Prerequisite knowledge

- Section 2.3, "Concept: Content Entities and Fields"
- Section 2.4, "Concept: Modular Content"
- Section 9.1, "Concept: Uses of Views"
- Section 5.1, "Concept: Paths, Aliases, and URLs"
- Section 8.1, "Concept: Blocks"

What are the parts of a view?

When you are editing a view in the administrative interface, you will see the following parts (or sections), which allow you to specify what data to output, in what order, and in what format:

Display Each view can have one or more displays, each of which produces one type of output. Options for display types include:

Page Makes output at a particular URL, for the main page content at that URL.

Block Makes output in a block, which can be placed on pages.

Feed Makes an RSS or another type of feed.

Attachment Makes output that you can attach to another display.

Format Depending on the display type, you can choose to output your data in a table, grid, HTML list, or another format. Some formats also give you a second choice that lets you output either rendered entities or fields; other formats do not give you this choice (for example, if you use a table format, you must always use fields).

Fields Depending on the format choice, you may be able to choose which content fields are output. For example, if you were making a view of recipe content items, in a block display you might show only the recipe names, while in a full page display you might also show an image field because you have more space.

Filter criteria Filters limit the data to be output, based on criteria such as whether the content has been published or not, the type of content, or a field value. For instance, to make a view of recipe content items, you would need to filter to the Recipe content type, and to published recipes. Filters can also be *exposed*, which means that users will have a form where they can choose their own filter values. You might use this on a Recipe page to let users filter for recipes with certain ingredients.

Sort criteria Defines the order to present the output, which can be based on any content field.

Contextual filters Contextual filters are like regular filters, except that the values come from the *context* of the view display, such as the full URL of the page being displayed, the current date or time, or some other value that can be detected by the view calculation.

Relationships Relationships allow you to expand what is displayed in your view, by relating the base content being displayed to other content entities. Relationships are created using fields on the base content that relate it to the other content; one example is that all regular content items have an author field, which references the user account of the person who authored the content. Once you have created a relationship, you can display fields from the referenced entity in the view.

Related topics

Section 9.3, "Creating a Content List View"

Attributions

Written and edited by Surendra Mohan and Jennifer Hodgdon.

9.3 Creating a Content List View

Goal

Create a page listing vendors that will be automatically updated whenever a vendor is added, deleted, or updated on the site.

Prerequisite knowledge

- Section 9.1, "Concept: Uses of Views"
- Section 9.2, "Concept: The Parts of a View"

Site prerequisites

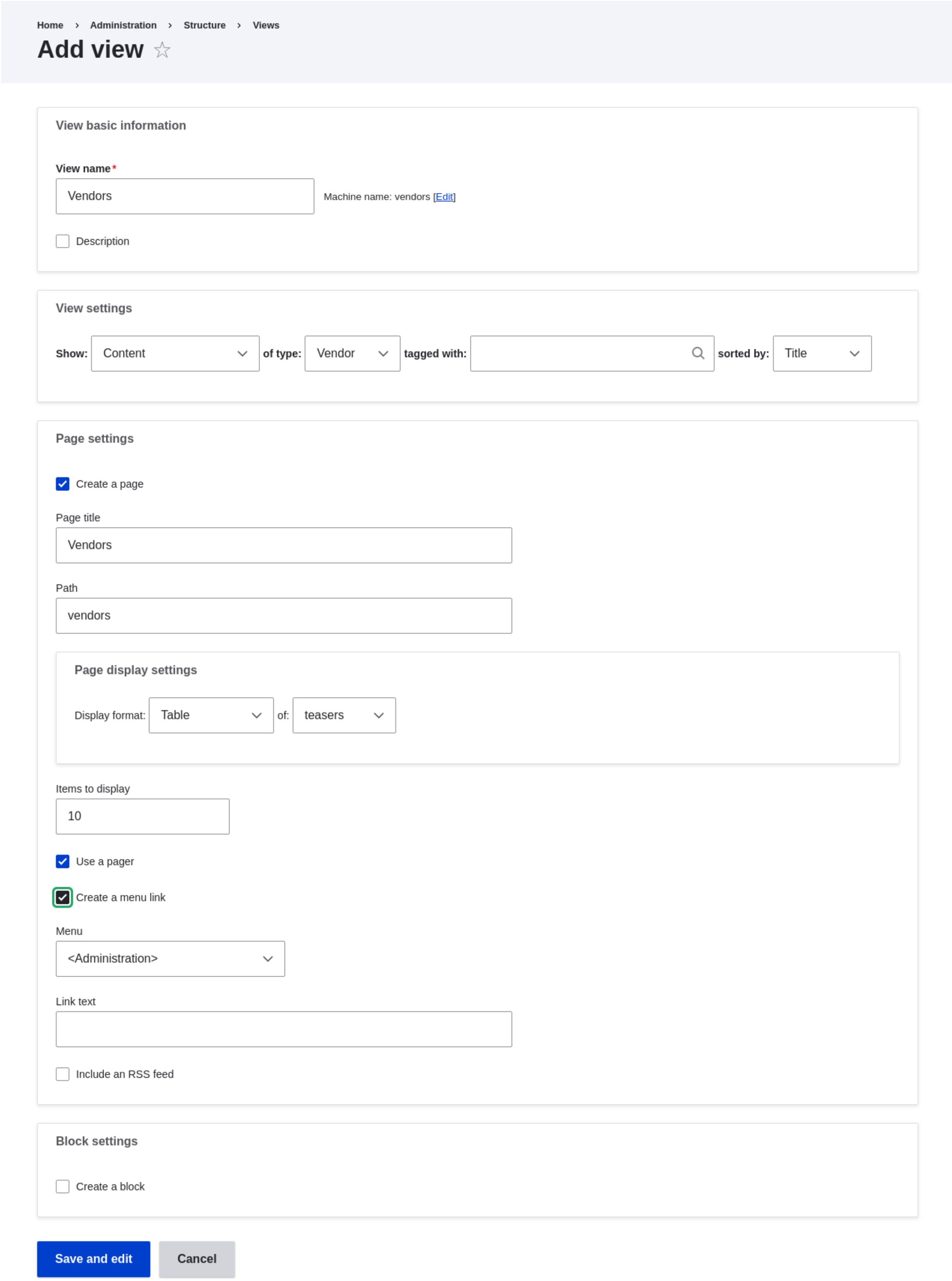
- The core Views and Views UI modules must be installed. These are installed for you when you install with the core Standard installation profile.
- The Vendor content type must exist, with URL and Main image fields. Your site must have a couple of Vendor content items. See Section 6.1, "Adding a Content Type", Section 6.3, "Adding Basic Fields to a Content Type", and Section 5.2, "Creating a Content Item".
- The *Medium* (*220x220*) image style must be defined. This is created on your site when you install the core Image module (installed with the core Standard installation profile) but can be recreated if deleted. See Section 6.13, "Setting Up an Image Style".

Steps

1. In the *Manage* administrative menu, navigate to *Structure* > *Views* > *Add view* (*admin/structure/views/add*). The *Add view* wizard appears.
2. Fill in the fields as shown below.

Field name	Explanation	Example value
View basic information > View name	Name of the view that will be visible in the administration pages	Vendors
View settings > Show	Type of information listed in the view	Content
View settings > of type	Specify content type	Vendor
View settings > sorted by	List order	Title
Page settings > Create a page	Create a page that displays the view	Checked
Page settings > Page title	Title show above the view	Vendors

Field name	Explanation	Example value
Page settings > Path	Address of the page	vendors
Page settings > Page display settings > Display format	Type of list	Table
Page settings > Items to display	Number of items visible on the page	10
Page settings > Use a pager	Split up the list in several pages if there are more items	Checked
Page settings > Create a menu link	Add the view page to the menu	Checked
Page settings > Menu	Menu in which to add the link	Main navigation
Page settings > Link text	Label of the link in the menu	Vendors



3. Click *Save and edit*. The view configuration page appears.
4. Under *Fields*, click *Add* from the dropdown button. The *Add fields* pop-up appears.

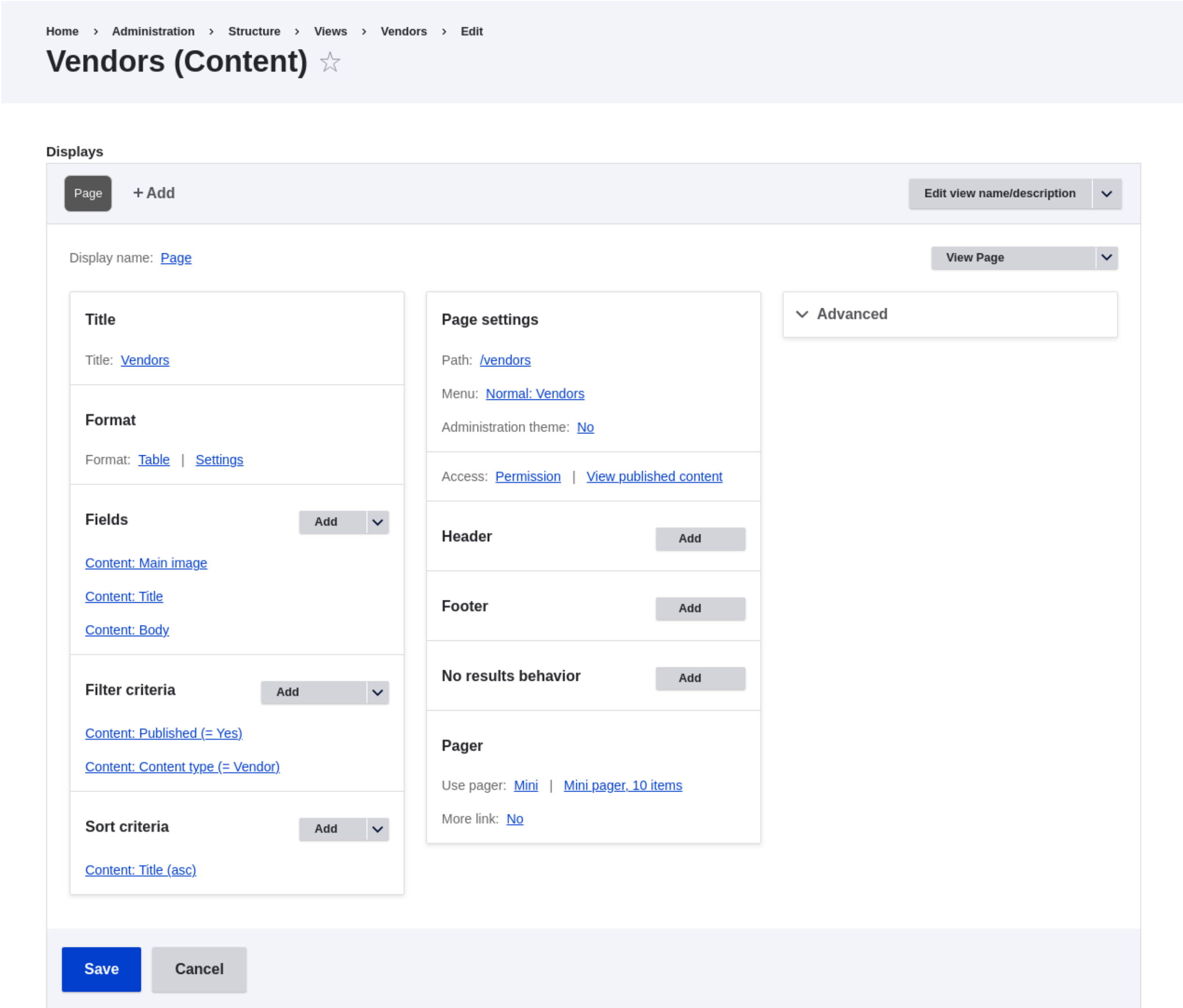
5. Enter the word "image" in the search field.
6. Check Main image in the table.
7. Click *Apply*. The *Configure field: Content: Main Image* pop-up appears.
8. Fill in the fields as shown below.

Field name	**Explanation**	**Example value**
Create a label	Add a label before the field value	Unchecked
Image style	The format of the image	Medium (220x220)
Link image to	Add a link to the content item	Content

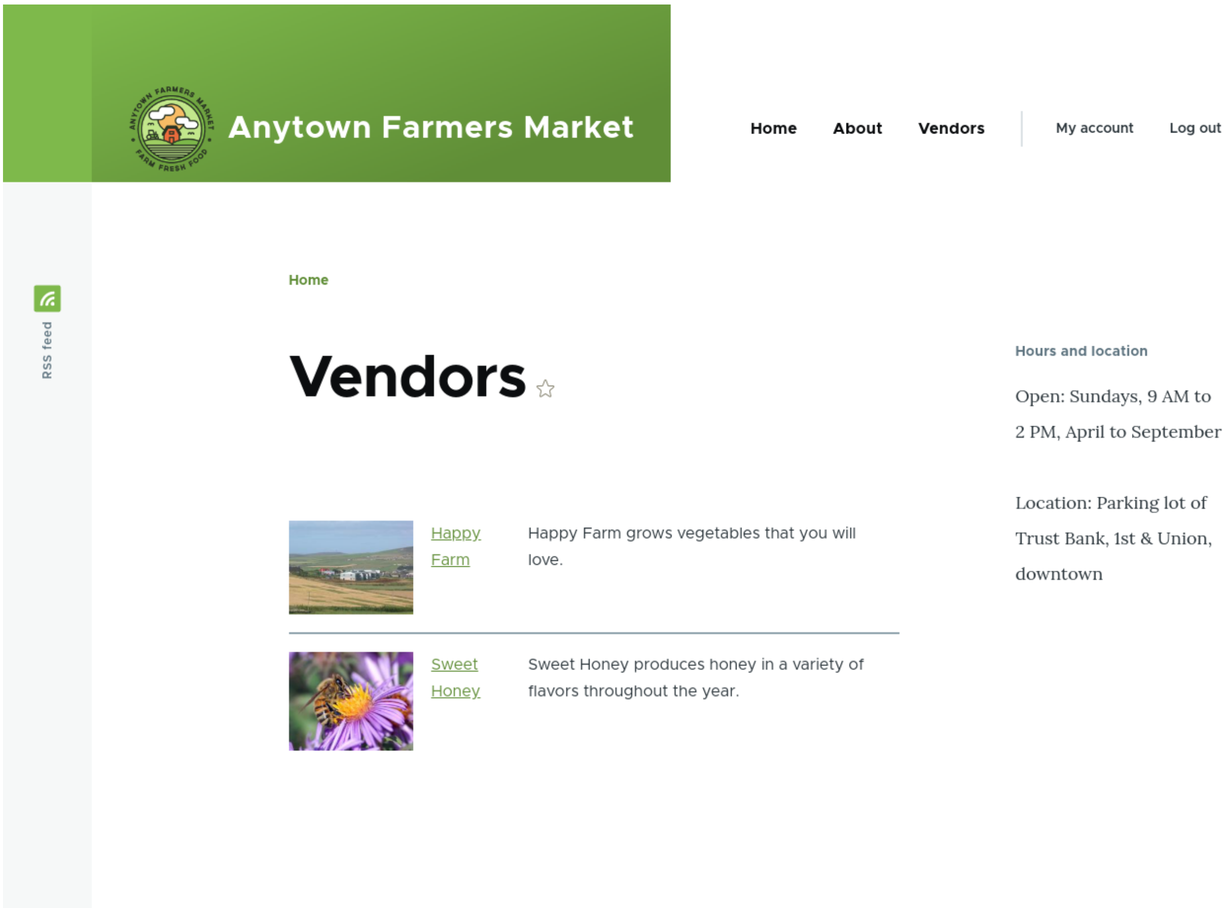
9. Click *Apply*. The view configuration page appears.
10. Under *Fields*, click *Add* from the dropdown button. The *Add fields* pop-up appears.
11. Enter the word "body" in the search field.
12. Select *Body* in the table.
13. Click *Apply*. The *Configure field: Content: Body* pop-up appears.
14. Fill in the fields as shown below.

Field name	**Explanation**	**Example value**
Create a label	Add a label before the field value	Unchecked
Formatter	The presentation of the field value	Summary or trimmed
Trimmed limit:	The number of maximum characters shown	120

15. Click *Apply*. The view configuration page appears.
16. Under *Fields*, click *Content: Title* (*Title*). The *Configure field: Content: Title* pop-up appears.
17. Uncheck *Create a label*. This will remove the label that was created by the wizard.
18. Click *Apply*. The view configuration page appears.
19. Under *Fields*, click *Rearrange* in the dropdown button. The *Rearrange fields* pop-up appears.
20. Drag the cross bar handles of fields to put them into the right order: Image, Title, Body. As an alternative to dragging, you can click the *Show row weights* link at the top of the table and enter numerical weights (fields with lower or more negative weights will be shown first).
21. Click *Apply*. The view configuration page appears.
22. Optionally, click *Update preview* for a preview.
23. Click *Save*.



24. Navigate to the homepage and click Vendors from the main navigation to see the result.



Expand your understanding

The link to the view in the main navigation will probably not be in the right place. Change the order of the menu links in the main navigation. See Section 5.7, "Changing the Order of Navigation".

Videos

Creating a Content List View

Creating a Content List View
Attributions
Written/edited by Boris Doesborg and Jennifer Hodgdon.

9.4 Duplicating a View

Goal

Create a page listing recipes by duplicating the existing Vendors view. Modify the page so that the recipes are displayed in a grid and can by filtered by ingredients.

Prerequisite knowledge

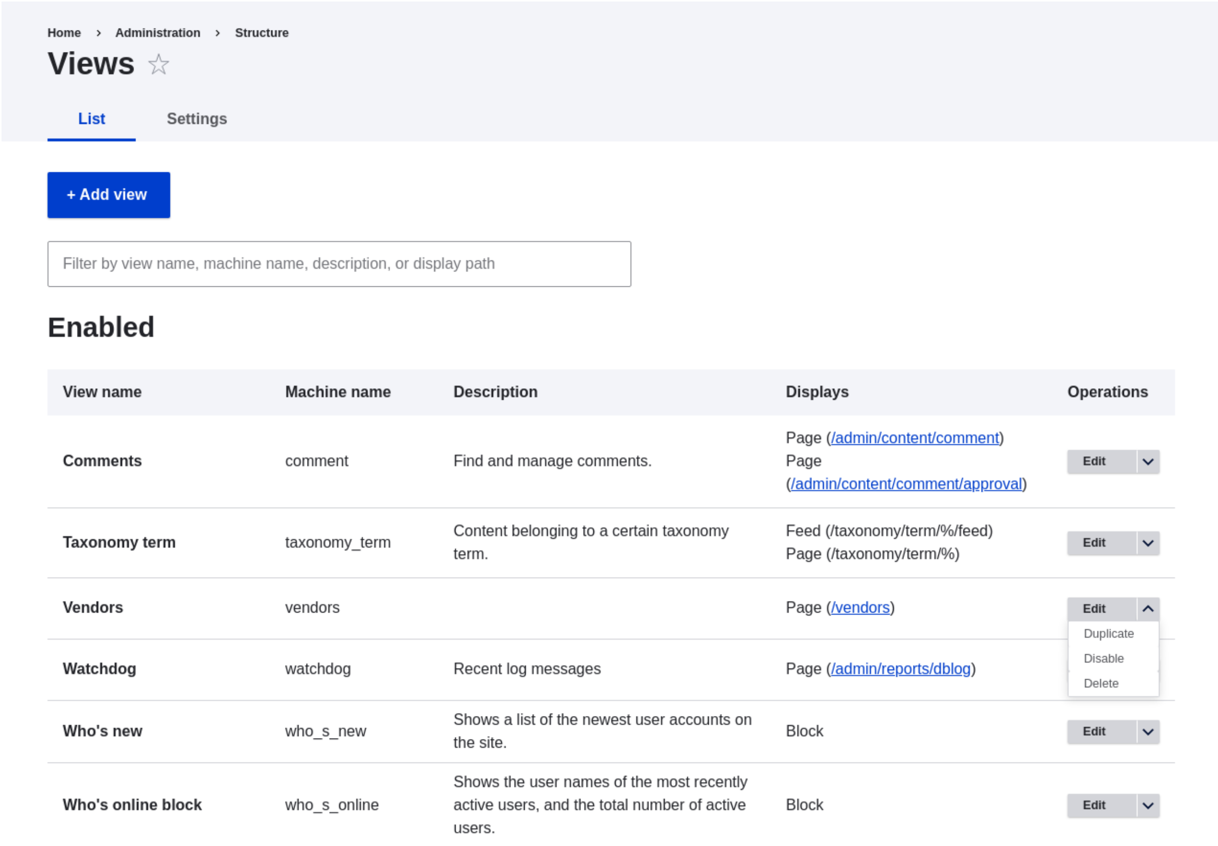
- Section 9.1, "Concept: Uses of Views"
- Section 9.2, "Concept: The Parts of a View"
- Section 9.3, "Creating a Content List View"

Site prerequisites

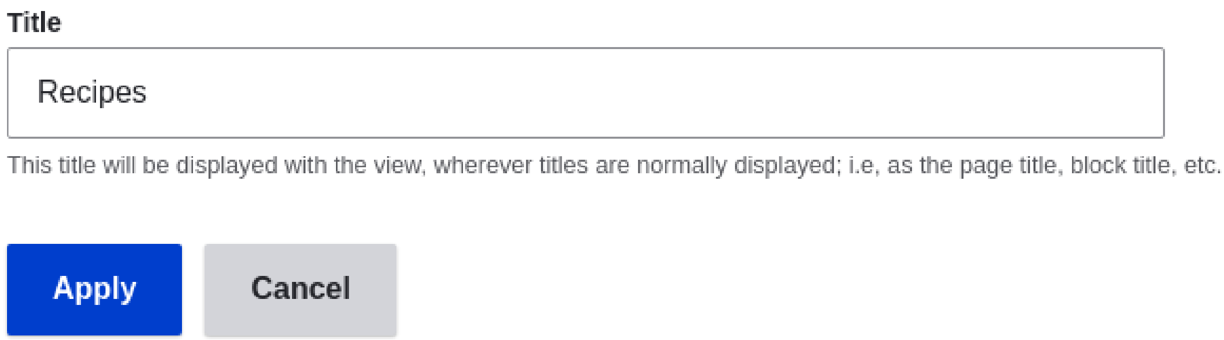
- The Vendor and Recipe content types must exist; both must have Main image fields, and the Recipe content type must have an Ingredients field. Your site must also have a couple of Recipe content items. See Section 6.1, "Adding a Content Type", Section 6.3, "Adding Basic Fields to a Content Type", Section 6.6, "Setting Up a Taxonomy", Section 6.9, "Changing Content Entry Forms", and Section 5.2, "Creating a Content Item".
- The Vendors view must exist. See Section 9.3, "Creating a Content List View".

Steps

1. In the *Manage* administrative menu, navigate to *Structure* > *Views* (*admin/structure/views*). Find the view "Vendors" and click *Duplicate* in its dropdown button. (Note that the names of views that came with your installation profile are shown in English on this page; see Section 2.7, "Concept: User Interface, Configuration, and Content translation" for an explanation.)



2. Name the duplicate "Recipes" and click *Duplicate*. The view configuration page appears.
3. To change the title of the view page to "Recipes", click Vendors in the *Title* field under *Title*. The *Page: The title of this view* pop-up appears. Enter "Recipes". Click *Apply*.



4. To change from a table to a grid format, click *Table* in the *Format* field under *Format*. The *Page: How should this view be styled* pop-up appears. Check *Grid* and click *Apply*. The *Page: Style options* pop-up appears. Retain the default values and click *Apply*.

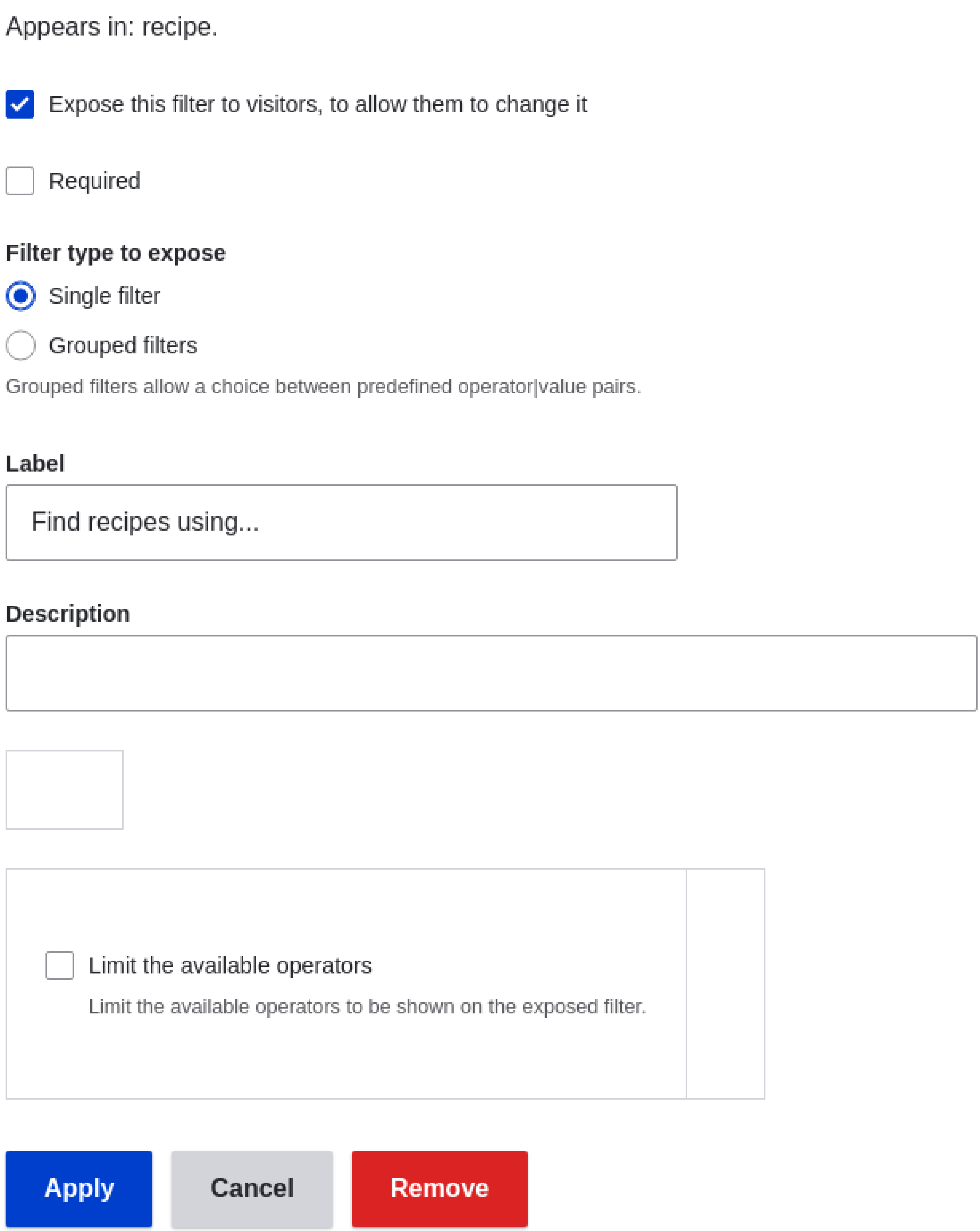
5. To retain only the title and image fields for the Recipes view, click *Content: Body* under *Fields*. Click *Remove* in the pop-up that appears.

6. To change the content type filter to use the Recipe content type, click *Content: Type* (=*Vendor*) under *Filter criteria*. In the *Configure filter criterion: Content: Type* pop-up, check Recipe and uncheck Vendor. Click *Apply*.

7. To add a further filter that is exposed to visitors, click *Add* in the dropdown button under *Filter criteria*. Search for "ingredients" and check "Ingredients (field_ingredients)". Click *Add and configure filter criteria*.

8. The appearing pop-up offers extra settings on vocabulary and selection type. Click *Apply and continue*. The next pop-up allows you to expose this filter to visitors. Fill in the fields as shown below, and click *Apply*.

Field name	**Explanation**	**Example value**
Expose this filter to visitors, to allow them to change it	Allow visitors to filter and search	Checked
Required	Whether a value has to be provided or not	Unchecked
Label	Label shown for this filter on the view page	Find recipes using...



9. To change the *Path* label field to "Recipes", click "/vendors" in the *Path* field under *Page settings*. In the pop-up that appears, enter the path "recipes" and click *Apply*.

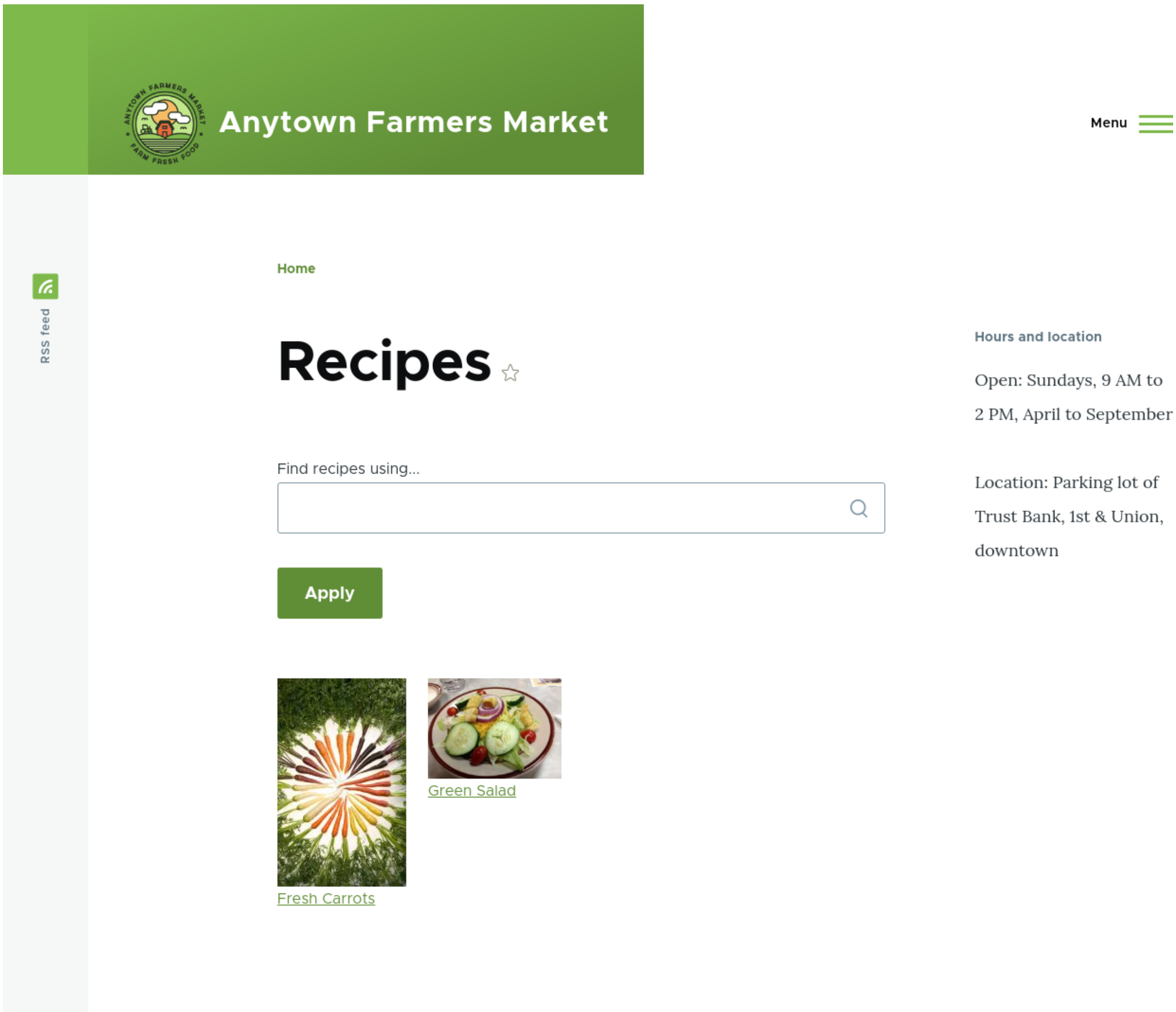
   Note that when editing a view, you enter paths without the leading "/", unlike on other administrative pages (such as when providing a path to a content item page).

10. To change the menu link title, click "Normal: Vendors" in the *Menu* field under *Page settings*. In the pop-up that appears, change the title to "Recipes" and click *Apply*.

11. In order to use Ajax (see Ajax entry in the Glossary) to make filtering and paging faster for users, under *Advanced* > *Other*, click *No* in the *Use AJAX* field. Check *Use AJAX* in the pop-up that appears, and click *Apply*.

12. Click *Save* to save the view.

13. Go back to the home page and click Recipes in the navigation to view the new Recipes page.



Expand your understanding

The link to the view in the main navigation will probably not be in the right place. Change the order of the menu links in the main navigation. See Section 5.7, "Changing the Order of Navigation".

Related concepts

- Section 2.5, "Planning your Content Structure"
- Ajax entry in the Glossary

Videos

Duplicating a View

Duplicating a View

Attributions
Written and edited by Laura Vass at Pronovix, and Jojy Alphonso at Red Crackle.

9.5 Adding a Block Display to a View

Goal

Add a block display to the Recipes view to display the most recent recipes in a sidebar, and change its configuration without changing the existing Recipes page view.

Prerequisite knowledge

- Section 9.1, "Concept: Uses of Views"
- Section 9.2, "Concept: The Parts of a View"
- Section 9.3, "Creating a Content List View"

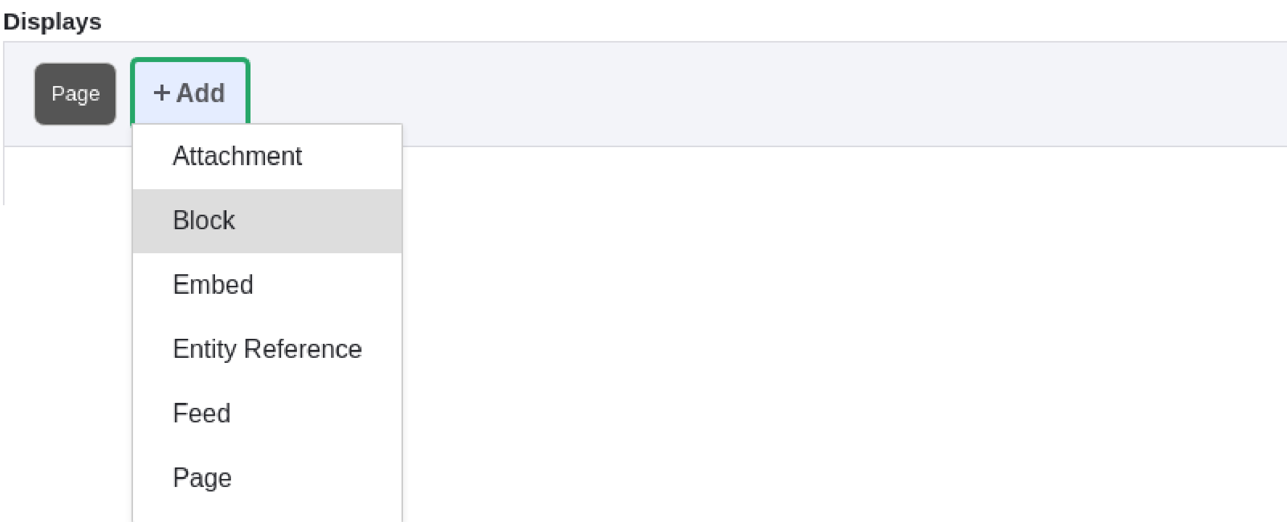
Site prerequisites

- The Recipe content type must exist, it must have a Main image field, and your site must have a couple of Recipe content items. See Section 6.1, "Adding a Content Type", Section 6.3, "Adding Basic Fields to a Content Type", Section 6.9, "Changing Content Entry Forms", and Section 5.2, "Creating a Content Item".
- The *Thumbnail* (*100x100*) image style must be defined. This is created on your site when you install the core Image module (installed with the core Standard installation profile) but can be recreated if deleted. See Section 6.13, "Setting Up an Image Style".
- The Recipes view must exist. See Section 9.3, "Creating a Content List View" and Section 9.4, "Duplicating a View".

Steps

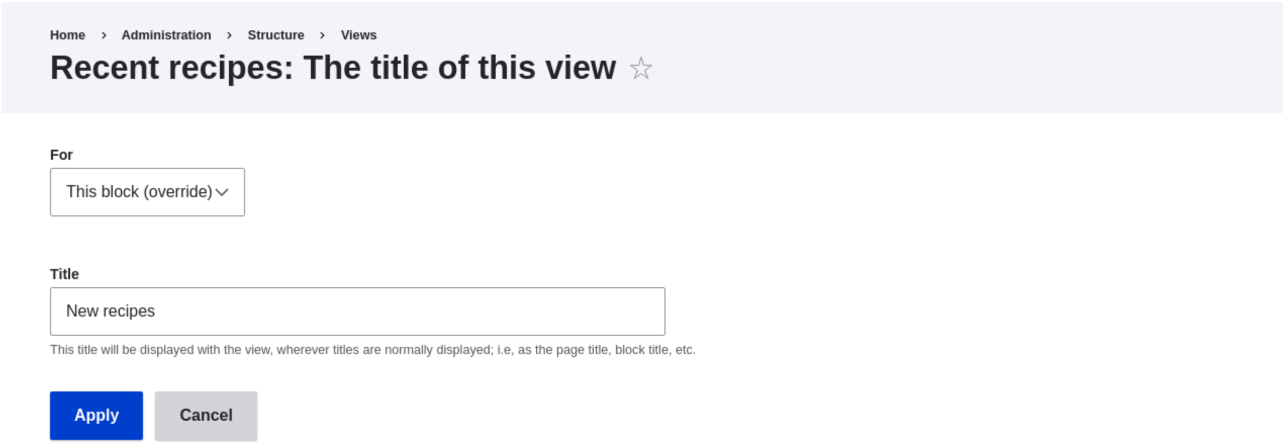
1. In the *Manage* administrative menu, navigate to *Structure* > *Views* (*admin/structure/views*). Find the view "Recipes" and click *Edit* from its dropdown button. Alternatively, navigate to the Recipes page in the main site navigation, and click the *Edit view* contextual link in the main area of the page. See Section 4.1, "Concept: Administrative Overview" for information about contextual links.

2. Create a new block display by clicking *Add* under *Displays*. Click *Block* from the list of links that appears. The new display is created, and the focus is automatically switched to its configuration.



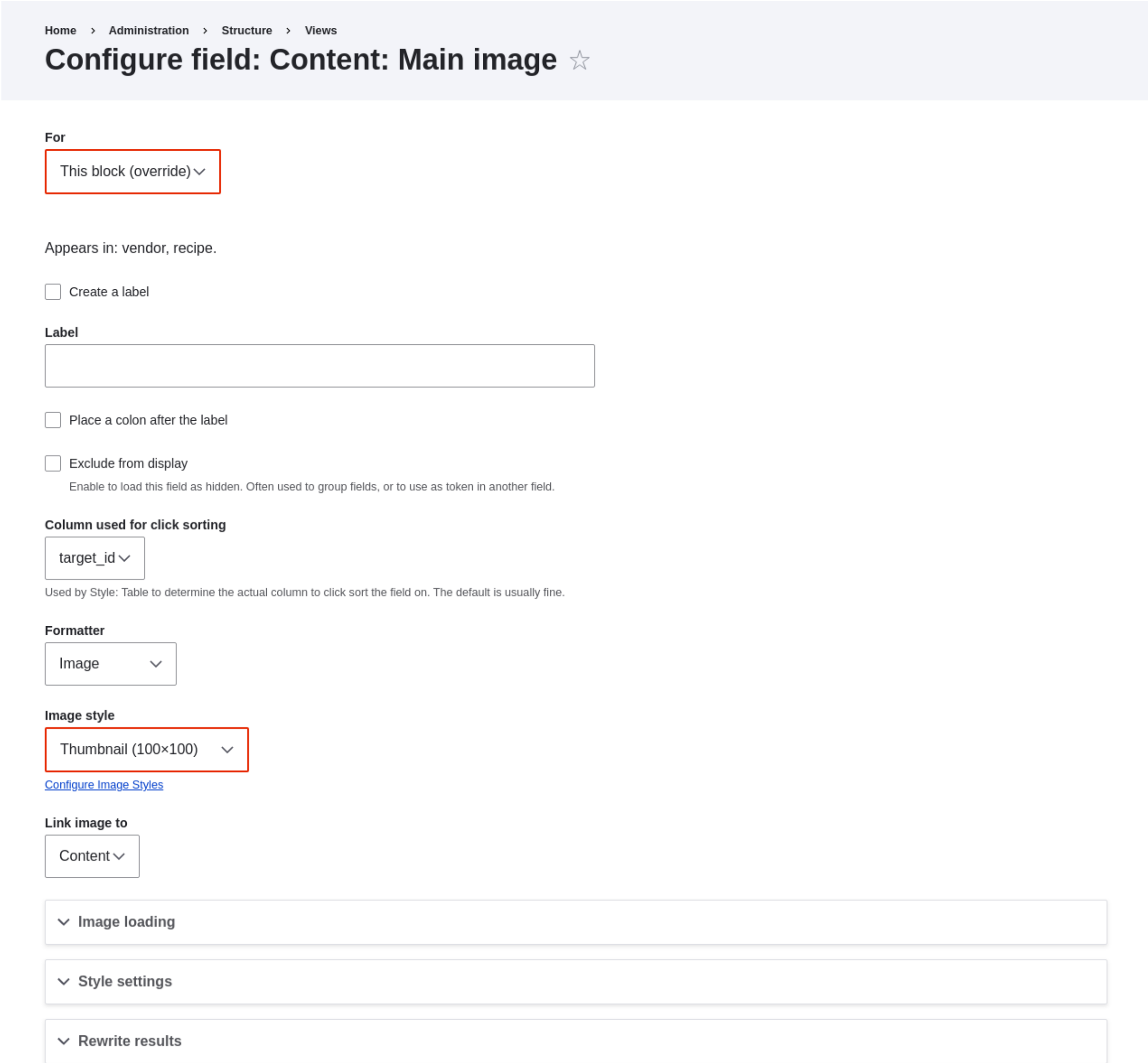
3. To change the title of this display, click *Block* in the *Display name* field. The *Block: The name and the description of this display* pop-up appears. Change the *Administrative name* to "Recent recipes". Click *Apply*.

4. To change the title of the block, click Recipes in the *Title* field under *Title*. In the pop-up that appears, select *This block (override)* from the *For* select list. Change the *Title* field to "New recipes" and click *Apply (this display)*.



5. To change the block's style, click *Grid* in the *Format* field under *Format*. In the pop-up that appears, select *This block (override)* from the *For* select list. Select *Unformatted list* and Click *Apply (this display)*. You can further configure the style options in the next pop-up that appears. Then click *Apply*.

6. To configure the image field, click *Content: Main image* under *Fields*. In the pop-up that appears, select *This block (override)* from the *For* select list. Select *Image style Thumbnail (100x100)*. Click *Apply (this display)*.



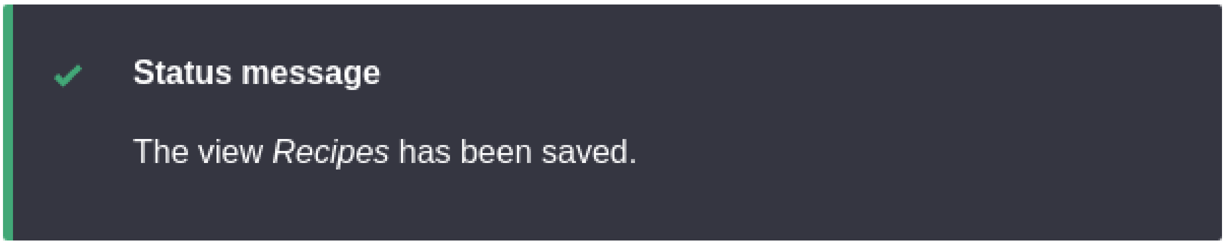
7. To remove ingredients as a filter, click *Content: Ingredients (exposed)* under *Filter criteria*. In the pop-up that appears, select *This block (override)* from the *For* select list. Click *Remove* at the bottom.

8. To configure how you want the content to be sorted in the view, click *Add* from the dropdown button under *Sort criteria*. In the pop-up that appears, select *This block (override)* from the *For* select list. Check *Authored on* (in the *Content* category), and then click *Add and configure sort criteria*.

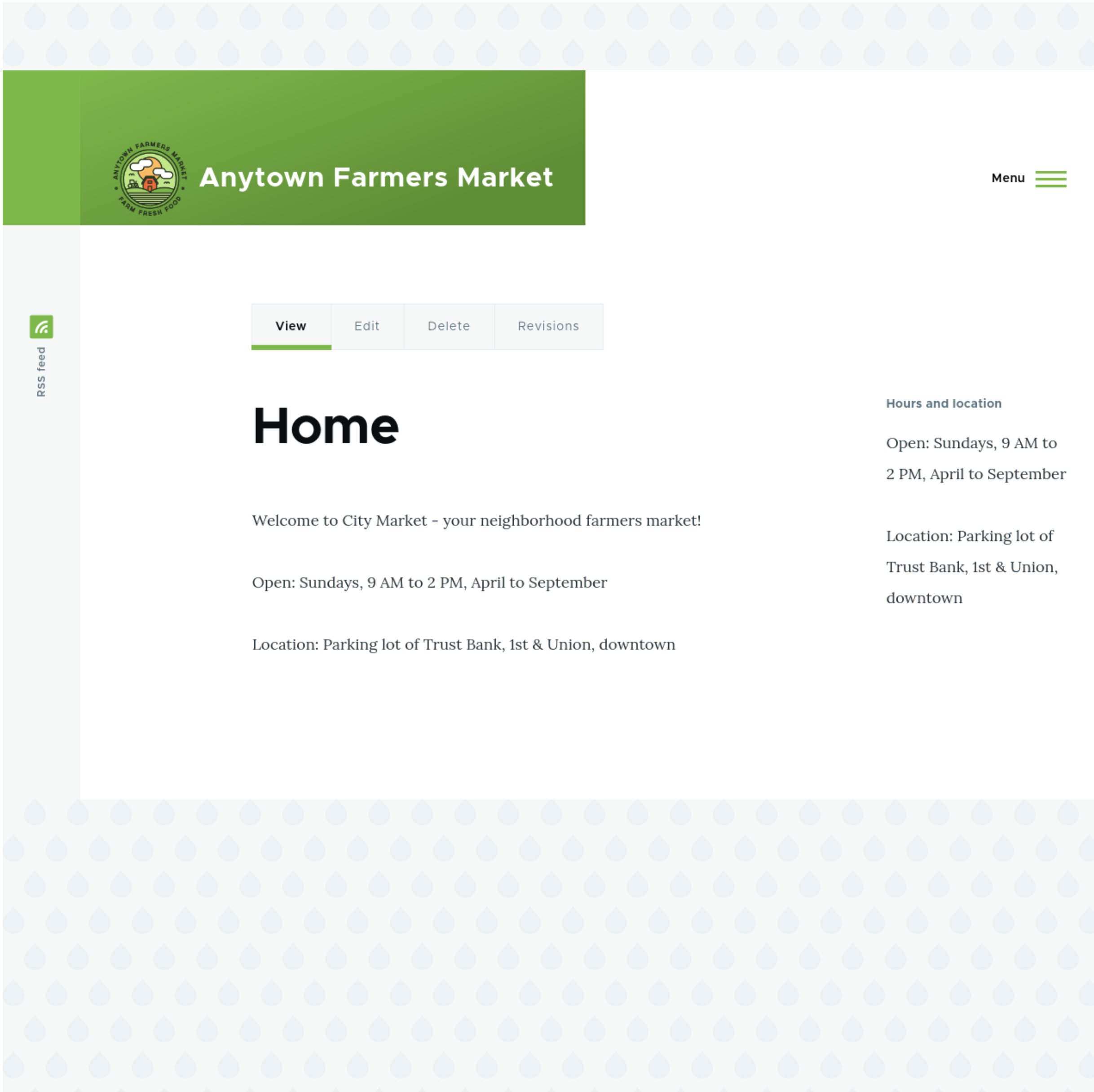
9. In the appearing configuration pop-up, select *Sort descending* to have the most recent recipes appear first. Click *Apply*.

10. To specify the number of items to be displayed, click *Mini* in the *Use pager* field under *Pager*. In the pop-up that appears, select *This block (override)* from the *For* select list. Under *Pager*, select *Display a specified number of items*. Click *Apply (this display)*. In the *Block: Pager options* pop-up, provide "5" as the value for *Items to display*. Click *Apply*.

11. Click *Save*. You will either see the view editing page again, or the Recipes page, depending on what you did in step 1. You should also see a message saying that the view has been saved.



12. Place the "Recipes: Recent Recipes" block in the *Sidebar second* region. See Section 8.3, "Placing a Block in a Region". Navigate to the site's home page to see the block.



Videos

Adding a Block Display to a View

Adding a Block Display to a View

Attributions

Written and edited by Laura Vass at Pronovix, Jennifer Hodgdon, and Jojy Alphonso at Red Crackle.

Chapter 10

Making Your Site Multilingual

10.1 Adding a Language

Goal

Add one or more languages to your site and define which one is used by default.

Prerequisite knowledge

Section 2.7, "Concept: User Interface, Configuration, and Content translation"

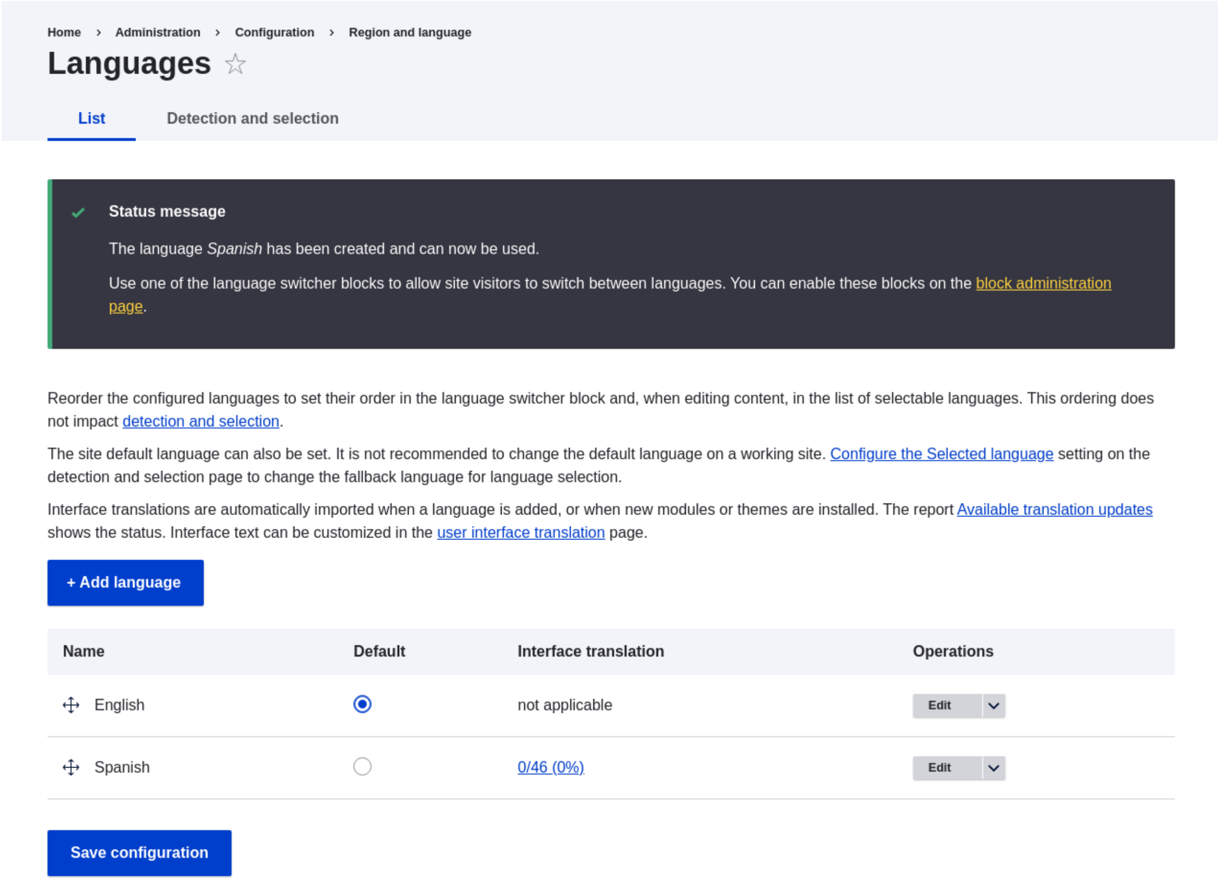
Steps

1. Install the four core multilingual modules (Language, Interface Translation, Content Translation, and Configuration Translation), by following the steps in Section 4.3, "Installing a Module".

2. In the *Manage* administrative menu, navigate to *Configuration* > *Region and language* > *Languages* (*admin/-config/regional/language*).

3. Click *Add language*.

4. Select *Spanish* (or your preferred language) from the *Language name* select list. Click *Add language*. After waiting for translations to finish downloading, you will be returned to the *Languages* page, with a confirmation message and the new language shown.



5. Follow the steps in Section 8.3, "Placing a Block in a Region" to place the *Language switcher* block in the *Sidebar second* region. This will enable site visitors to switch between languages, once the site has been translated.

Expand your understanding

- Section 10.2, "Configuring Content Translation"
- Section 10.3, "Translating Content"

Videos

Adding a Language

Adding a Language

Additional resources

Drupal.org community documentation page "Multilingual guide"

Attributions

Written and edited by Leila Tite, Jennifer Hodgdon, and Boris Doesborg.

10.2 Configuring Content Translation

Goal

Make *Custom block*, *Custom menu link*, and *Content* entity types translatable. Select specific subtypes and set which fields of these can be translated.

Prerequisite knowledge

- Section 2.3, "Concept: Content Entities and Fields"
- Section 2.7, "Concept: User Interface, Configuration, and Content translation"

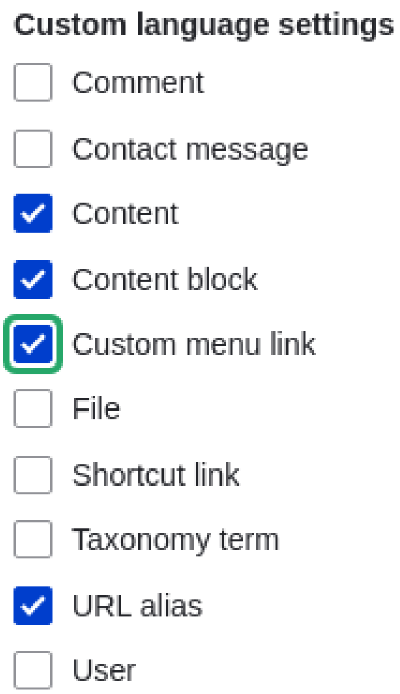
Site prerequisites

The core Content Translation module must be installed, and your site must have at least two languages. See Section 10.1, "Adding a Language".

Steps

1. In the *Manage* administrative menu, navigate to *Configuration* > *Regional and language* > *Content language and translation* (*admin/config/regional/content-language*).

2. Under *Custom language settings*, check *Content*, *Content block* and *Custom menu link* to make these entity types translatable.



3. Configuration options appear for *Content*, *Content block* and *Custom menu link*. Choose the subtypes you want to translate for each entity type. Check *Basic page* for *Content*, *Basic block* for *Content block* and *Custom menu link* for *Custom menu link*.

4. Verify the settings for the entity types as shown below:

Field name	Explanation	Example value
Default language	The default language for the entity subtype	Site's default language (English)
Show language selector on create and edit pages	Whether or not the language selector should be shown while editing and creating content	Checked

5. Choose the fields that should be translatable for *Basic page* as shown in the table below. If a field is not translation-dependent, leave it unchecked.

Field name	**Explanation**	**Example value**
Title	The title of the content	Checked
Authored by	The author	Unchecked
Published	Whether the content has been published or not	Checked
Authored on	Date of publishing	Unchecked
Changed	Date of last update	Unchecked
Promoted to front page	Whether the content will be included in some content views	Unchecked
Sticky at top of lists	Whether the content will be displayed first in some content views	Unchecked
URL alias	Nicer URL for the content	Checked
Body	The main content of the page	Checked

6. Similarly, check the appropriate boxes for translatable fields belonging to *Basic block* and *Custom menu link*.

7. Click *Save configuration*.

Expand your understanding

- Section 10.4, "Translating Configuration"
- Section 10.3, "Translating Content"

Videos

Configuring Content Translation

Configuring Content Translation

Additional resources

- Blog post "Multilingual Drupal 8 tidbits, part 5"
- Blog post "Multilingual Drupal 8 tidbits, part 17"

Attributions
Written and edited by Laura Vass at Pronovix, Jojy Alphonso at Red Crackle, and Jennifer Hodgdon.

10.3 Translating Content

Goal

Translate the home page to Spanish.

Prerequisite knowledge

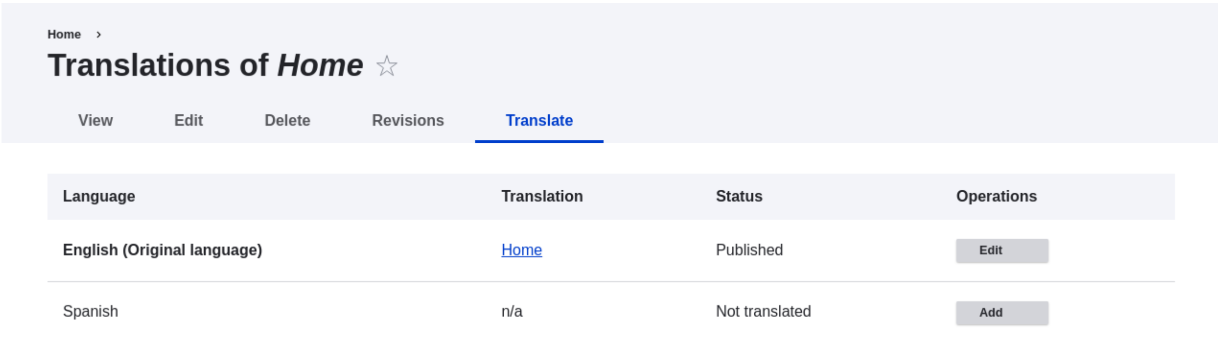
Section 2.7, "Concept: User Interface, Configuration, and Content translation"

Site prerequisites

- The Home content item must exist. See Section 5.2, “Creating a Content Item”.
- The core Content Translation module must be installed, and your site must have at least two languages. See Section 10.1, “Adding a Language”.
- The *Basic page* content type must be configured to be translatable. See Section 10.2, “Configuring Content Translation”.

Steps

1. In the *Manage* administrative menu, navigate to *Content* (*admin/content*).
2. Locate the home page. You can search for it by entering ”Home” in the title field.
3. Select *Translate* from the dropdown button in the row of the Home content item. The page *Translations of Home* appears.
4. Click *Add* in the row *Spanish*.



5. Note that the user interface has switched to Spanish. To switch it back to English, remove the first instance of *es* in the browser’s URL. For example, if your URL looks like *example.com/es/node/5/translations/add/en/es*, remove the *es* that comes immediately after *example.com*.
6. Fill in the fields as shown below.

Field name	Explanation	Value
Title	Translated title of the page	Página principal
Body	Translated body of the page	Bienvenido al mercado de la ciudad - ¡el mercado de agricultores de tu barrio! Horario: Domingos de 9:00 a 14:00. Desde Abril a Septiembre Lugar: parking del Banco Trust número 1. En el centro de la ciudad
URL alias > URL alias	Translated address of the webpage	pagina-principal

7. Click *Save (this translation)*.
8. Go to your site’s home page to view the newly translated page.

Expand your understanding

- Follow the steps above to translate more content on your site.

- Section 10.4, "Translating Configuration"

Videos

Translating Content

Translating Content
Attributions
Written by Boris Doesborg.

10.4 Translating Configuration

Goal

Translate the labels on the Recipes view page into Spanish.

Prerequisite knowledge

- Section 2.7, "Concept: User Interface, Configuration, and Content translation"
- Section 9.3, "Creating a Content List View"

Site prerequisites

- The core Configuration Translation module must be installed, and your site must have at least two languages. See Section 10.1, "Adding a Language".
- The Recipes view must exist. See Section 9.3, "Creating a Content List View" and Section 9.4, "Duplicating a View".

Steps

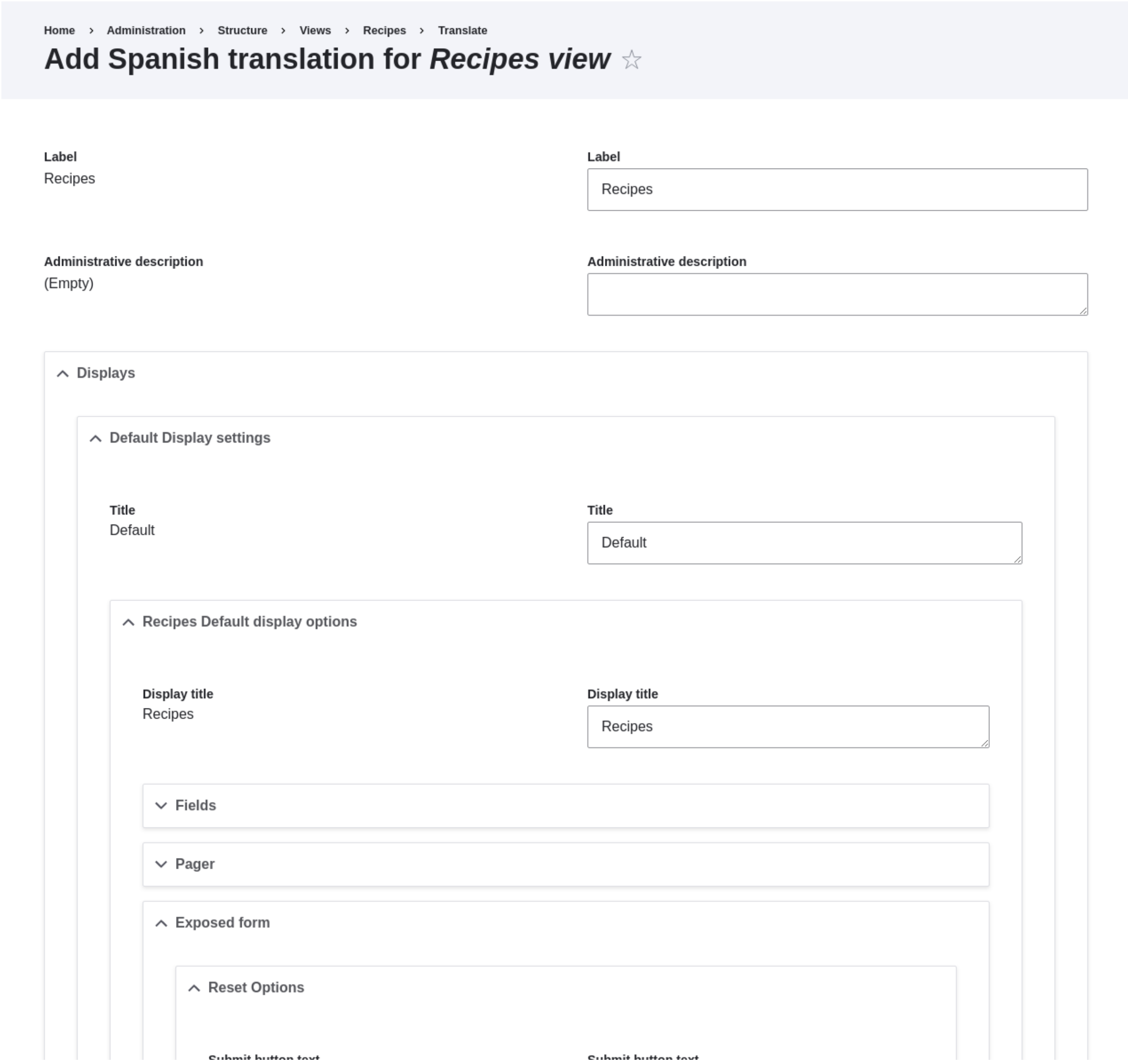
The basic steps for translating any configuration on your site are:

1. In the *Manage* administrative menu, navigate to *Configuration* > *Regional and Language* > *Configuration translation* (*admin/config/regional/config-translation*).
2. Locate the configuration item that you would like to translate. For example, to translate the site name, you need to find *System information*. For configuration that is grouped by type (for example, views or date formats), click the *List* button to list all configuration of that type, and then locate the item you are looking for.
3. Click *Translate* for the item you located.
4. Find a button that will let you add a translation in the desired language, and click this button.
5. Enter the translation in the form, and save.

Most configuration is fairly straightforward and intuitive to edit in this manner. Views configuration is an exception, because the translation editing form is nothing like the view editing form, and it is complex and hierarchical rather than being a simple form with just a few fields. As an example of how to translate a view, here are the steps to translate the labels in the Recipes view to Spanish:

1. In the *Manage* administrative menu, navigate to *Configuration* > *Regional and Language* > *Configuration translation* (*admin/config/regional/config-translation*).
2. Click *List* in the *Views* row.
3. Click *Translate* in the Recipes row.

4. Click *Add* in the *Spanish* row. The page *Add Spanish translation for Recipes view* appears.
5. Under *Displays* > *Master Display settings* > *Recipes default display Options*, translate *Display title* from "Recipes" to "Recetas".
6. Under *Displays* > *Master display settings* > *Recipes default display options* > *Exposed form* > *Reset options*, translate *Submit button text* from "Apply" to "Applicar". The other buttons and labels in this section do not appear on the Recipes page or block, and do not need to be translated.



7. Under *Displays* > *Master display settings* > *Recipes default display options* > *Filters* > (*Empty*) *taxonomy term ID* > *Find recipes using... Expose*, translate *Label* from "Find recipes using..." to "Encontrar recetas usando...".
8. Click *Save translation*.
9. Navigate to the Recipes page and switch to Spanish using the Language switcher block. Verify that the labels have been translated.

Expand your understanding

- Translate the block display title in the Recent recipes display settings section of the Recipes view.

- Translate the page title in the Vendors view.
- Translate other configuration. Some examples of where to find the translation pages:
  - To translate the site name, navigate in the *Manage* administrative menu to *Configuration* > *System* > *Basic site settings* > *Translate system information* (*admin/config/system/site-information/translate*).
  - To translate the contact form, navigate in the *Manage* administrative menu to *Structure* > *Contact forms* (*admin/structure/contact*). Click *Translate* in the dropdown button in the *Website feedback* row.
  - To translate the name of a menu, navigate in the *Manage* administrative menu to *Structure* > *Menus* (*admin/structure/menu*). Click *Translate* in the dropdown button for the menu whose name you want to translate.
  - Menu links within a menu are considered to be content (not configuration); see Section 10.2, "Configuring Content Translation" to enable translation. Once translation is enabled, navigate in the *Manage* administrative menu to *Structure* > *Menus* (*admin/structure/menu*). Click *Edit menu* in the dropdown button for the menu whose links you want to translate. Click *Translate* in the dropdown button for the link you want to translate.
  - To translate field labels on a content type, navigate in the *Manage* administrative menu to *Structure* > *Content types* (*admin/structure/types*). Click *Manage fields* in the dropdown button for the content type whose field labels you want to edit. Click *Translate* in the dropdown button for the field whose label you want to edit.
- Translate content. See Section 10.3, "Translating Content".

Videos

Translating Configuration

Translating Configuration
Attributions
Written and edited by Boris Doesborg and Jennifer Hodgdon.

Chapter 11

Extending and Customizing Your Site

11.1 Finding Modules

Goal

Find and evaluate modules on *Drupal.org*.

Prerequisite knowledge

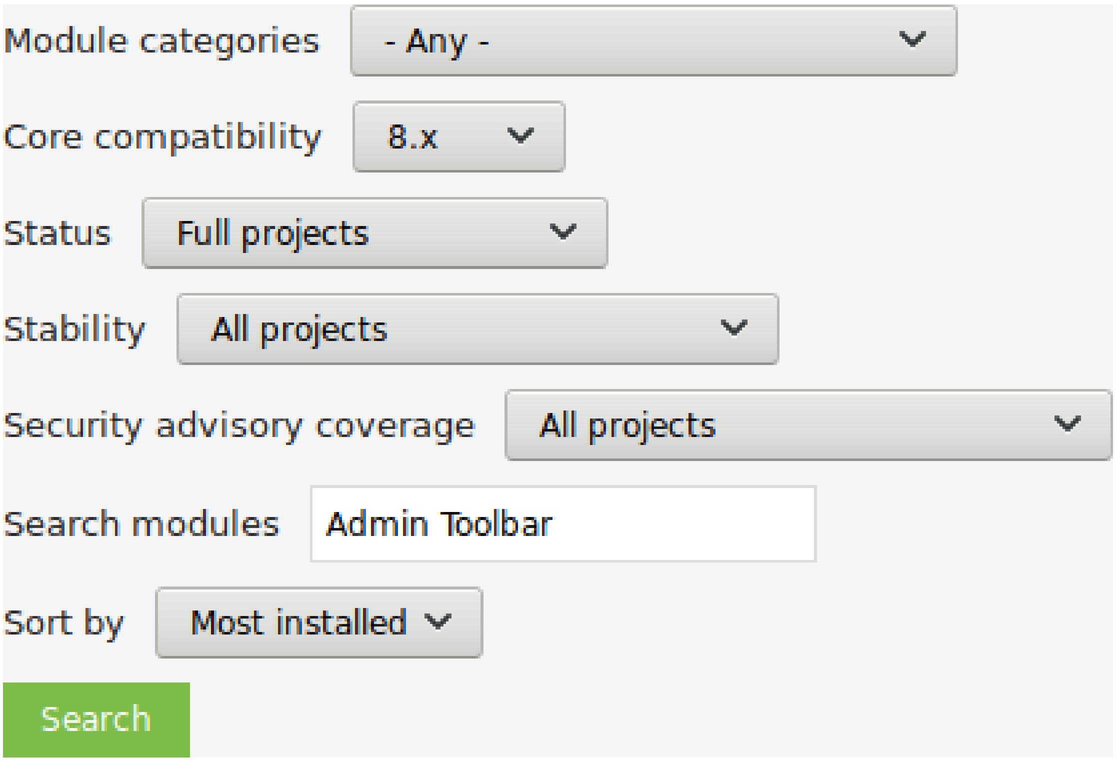
- Section 1.1, "Concept: Drupal as a Content Management System"
- Section 1.2, "Concept: Modules"

Steps

1. Go to *Drupal.org*, and navigate to *Download & Extend* > *Modules* (https://www.drupal.org/project/project_module).
2. Filter your search using the categories on the module search page. Fill in the fields as shown below.

Field name	**Explanation**	**Example value**
Maintenance status	How actively should the module be maintained?	Actively maintained
Development status	What kind of development should the module undergo?	Any
Module categories	The module's topic area.	Administration
Core compatibility	The version of the core software the module is compatible with.	9.x
Status	Project status: *Sandbox projects* are experimental projects. *Full projects* have already gone through an approval process, but they can still be in development.	Full projects
Stability	Whether or not the project maintainer has created a production-ready version.	Has a supported stable release
Security advisory coverage	Whether or not the project maintainer has agreed to follow Drupal Security Team procedures.	Has security advisory coverage

Field name	Explanation	Example value
Search modules	Search for *Admin Toolbar*, a module that will be covered in detail later. Alternatively, you can also leave the field blank if you are not sure which module to search for.	Admin Toolbar
Sort by	Order your search results by criteria like *Most installed* (popular modules that many sites use) or *Last release* (date of latest version released).	Most installed



3. Click *Search*. Search results will appear.

Admin Toolbar

Posted by eme on *20 April 2015*, updated *2 October 2017*

What is Admin Toolbar module ?

Admin Toolbar intends to improve the default Drupal Toolbar (the administration menu at the top of your site) to transform it into a drop-down menu, providing a fast access to all administration pages.

The module works on the top of the default toolbar core module and is therefore a very light module and keeps all the toolbar functionalities (shortcut / media responsive).

How to use Admin Toolbar module ?

Just install it like any other module.

Read more · Categories: Actively maintained , Under active development , Administration

Adminimal Admin Toolbar

Posted by energee on *19 March 2016*, updated *25 July 2017*

This module is inspired by Adminimal Administration Menu. It provides a minimalist style to Admin Toolbar for Drupal 8.

Although the "Adminimal" theme provides menu styling, there are some conflicts with Admin toolbar and styling will only be present when the admin theme is set like when editing content.

Read more · Categories: Actively maintained , Under active development , Administration ,

Theme Enhancements

D8 Editor File upload

Posted by DuaelFr on *5 September 2015*, updated *21 March 2017*

This module allows to add a button in the Drupal 8 rich text editor active toolbar to directly upload and link files into your content. Without this module, the writer would have to upload the files on the webserver via a file field or a FTP connexion then manually create the link.

Read more · Categories: Actively maintained , Under active development , Content

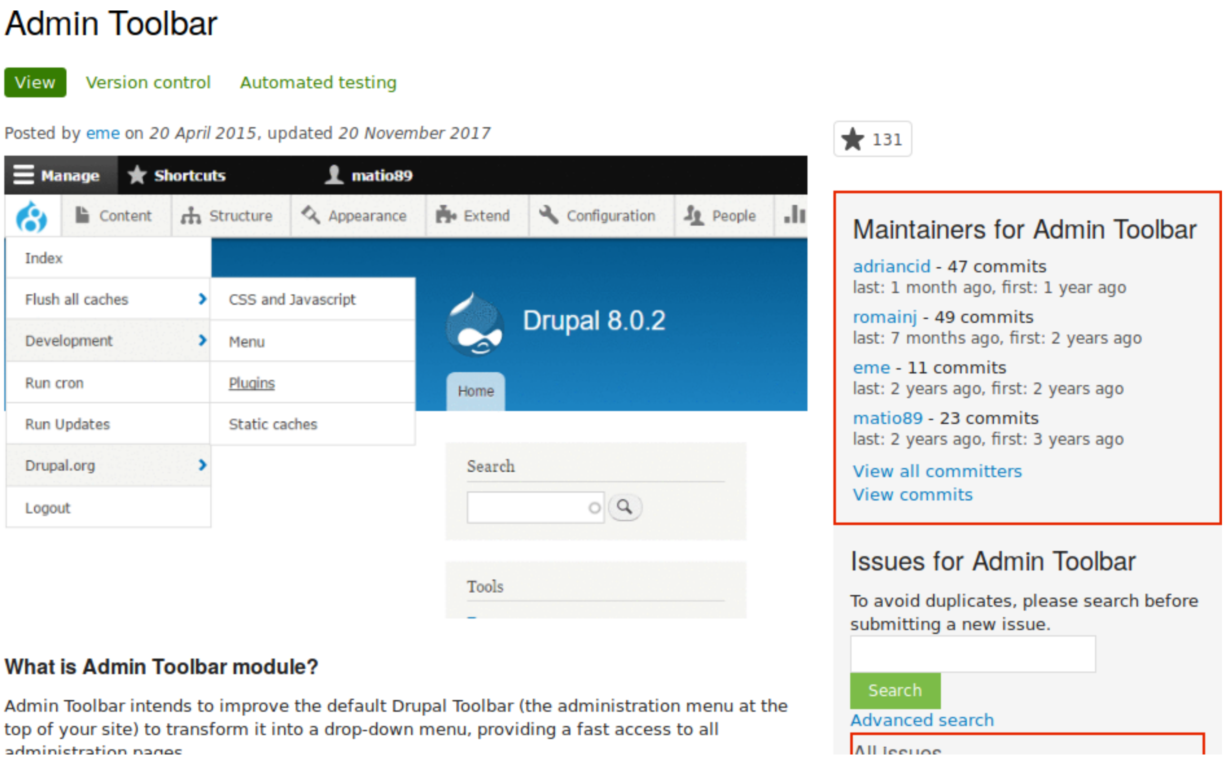
CKEditor Media Embed Plugin

Posted by grndlvl on *20 October 2015*, updated *12 October 2017*

4. To further evaluate a module, click its title in the list of search results to visit its project page.

Some aspects to pay attention to when evaluating modules:

- Project description: The description of the module on its project page should be clear and useful. You should get an idea of its features and requirements.
- Project information: There may be warnings in this area of the page, such as if a module is no longer being developed, or is not covered by the security advisory policy.
- Project information > Reported installs, downloads: You can see how many people have downloaded and how many sites use the module. If it's only used by a few sites, it might be a unique solution that not many people need, or it might be a warning sign that you shouldn't use it either.
- Maintainers: When was the last commit (the last time someone updated something on the module) or last release (new version)? If the project has few open issues, a long time since commits/releases might be appropriate, but if it has a lot of open issues and there are no commits/releases, that would be a clue that it might be abandoned.
- Issues: See if there are any open issues, potential problems with the module. Check the Statistics to see how regularly issues are responded to.
- Documentation, Resources: Check if the module has documentation or a README file, that can help you install, configure, explore, and test it.



Expand your understanding

Section 11.3, "Downloading and Installing a Module from *Drupal.org*"

Videos

Finding Modules

Finding Modules

Attributions

Written by Diána Lakatos at Pronovix.

11.2 Enabling and Disabling Maintenance Mode

Goal

Put your site in maintenance mode to allow users with the right permissions to use the site while users without this permission are presented with a message that the site is under maintenance.

Prerequisite knowledge

Section 13.3, "Concept: Security and Regular Updates"

Site prerequisites

If you want to use Drush to enable or disable maintenance mode, Drush must be installed. See Section 3.2, "Concept: Additional Tools".

Steps

You can use the administrative interface or Drush to enable or disable maintenance mode.

Enabling maintenance mode using the administrative interface

1. In the *Manage* administrative menu, navigate to *Configuration* > *Development* > *Maintenance mode* (*admin/config/development/maintenance*). The *Maintenance mode* page appears.

2. Fill in the fields as shown below.

Field name	Explanation	Value
Put site into maintenance mode	Enable the maintenance mode	Checked
Message to display when in maintenance mode	The information that is shown to website visitors when the mode is enabled. Variables such as @site can be used in the message	@site is currently under maintenance but should be back shortly. Thank you for your patience.

3. Click *Save configuration*.

4. Verify that the site is in maintenance mode by accessing it from another browser where you aren't logged in. If you are not able to verify, try clearing the cache. See Section 12.2, "Clearing the Cache".

Disabling maintenance mode using the administrative interface

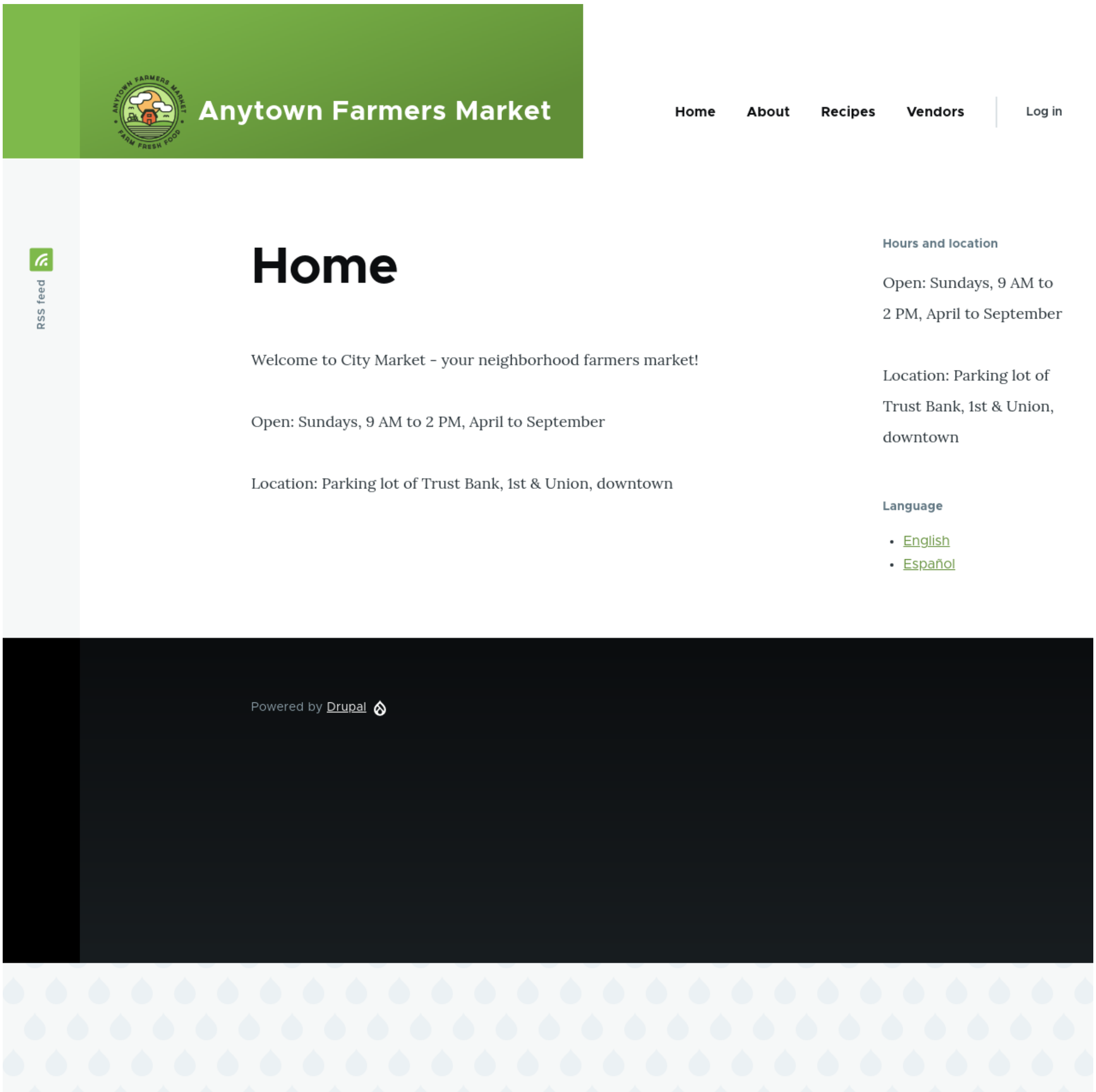
1. In the *Manage* administrative menu, navigate to *Configuration* > *Development* > *Maintenance mode* (*admin/-config/development/maintenance*). The *Maintenance mode* page appears.

2. Fill in the fields as shown below.

Field name	**Explanation**	**Value**
Put site into maintenance mode	Disable the maintenance mode	Unchecked
Message to display when in maintenance mode	No message required while disabling. You can leave the field blank.	

3. Click *Save configuration*.

4. Verify that the site is no longer in maintenance mode by accessing it from another browser where you aren't logged in. If you are not able to verify, try clearing the cache. See Section 12.2, "Clearing the Cache".



Enabling or disabling maintenance mode using Drush

1. Follow the user interface steps above to edit the site maintenance message, if desired.
2. Run the following Drush commands to enable maintenance mode and clear the cache:

```
drush config:set system.maintenance message "Optional message" -y
drush state:set system.maintenance_mode 1 --input-format=integer
drush cache:rebuild
```

3. Run the following Drush commands to disable maintenance mode and clear the cache:

```
drush state:set system.maintenance_mode 0 --input-format=integer
drush cache:rebuild
```

4. After running either set of commands, verify that your site is either in or out of maintenance mode by visiting the site in a browser where you are not logged in.

Expand your understanding

- Section 13.5, "Updating the Core Software"
- Section 13.7, "Updating a Theme"
- Section 13.6, "Updating a Module"

Videos

Enabling and Disabling Maintenance Mode

Enabling and Disabling Maintenance Mode
Attributions
Written and edited by Boris Doesborg, Jojy Alphonso at Red Crackle, and Jennifer Hodgdon.

11.3 Downloading and Installing a Module from *Drupal.org*

Goal

Download and install the contributed Admin Toolbar module, which allows you to easily browse through the administration section of the website.

Prerequisite knowledge

- Section 1.2, "Concept: Modules"
- Section 11.1, "Finding Modules"
- Section 3.2, "Concept: Additional Tools"

Site prerequisites

- If you want to install modules via the website, the core Update Manager module must be installed. See Section 4.3, "Installing a Module" for instructions on installing modules.
- If you want to use Drush, Drush must be installed. See Section 3.2, "Concept: Additional Tools".

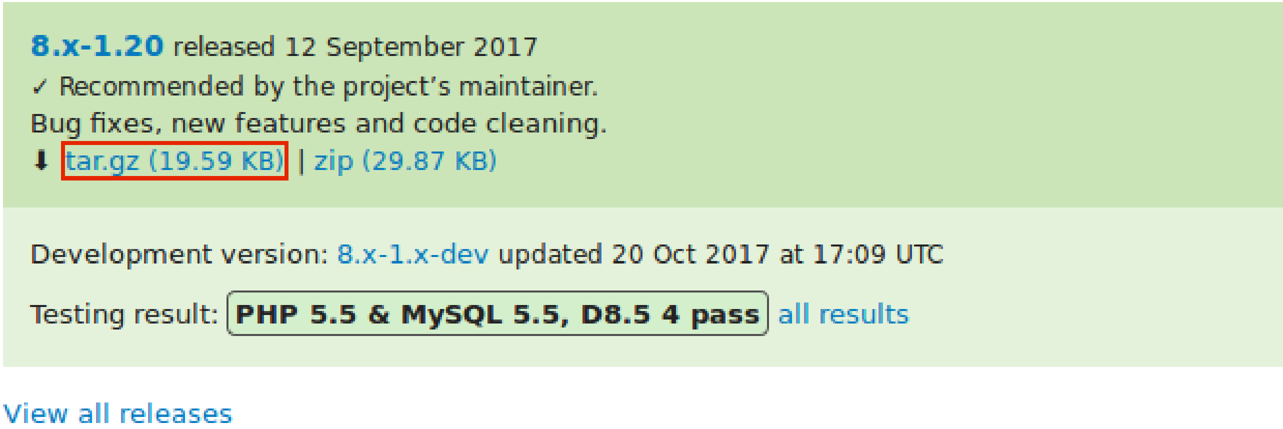
Steps

You can use the administrative interface to download and install a contributed module. If you are installing a custom module rather than a contributed module, if you see a message saying *Installing modules and themes requires FTP access to your server*, or if the steps below do not work to download and unpack the module files, follow the steps in Section 11.6, "Manually Downloading Module or Theme Files". If you are using Composer to manage the files in your site, follow the steps for downloading in Section 3.5, "Using Composer to Download and Update Files". In either of these cases, you can then install the module using Drush, or by continuing with step 7 in the instructions for the administrative interface below.

Using the administrative interface

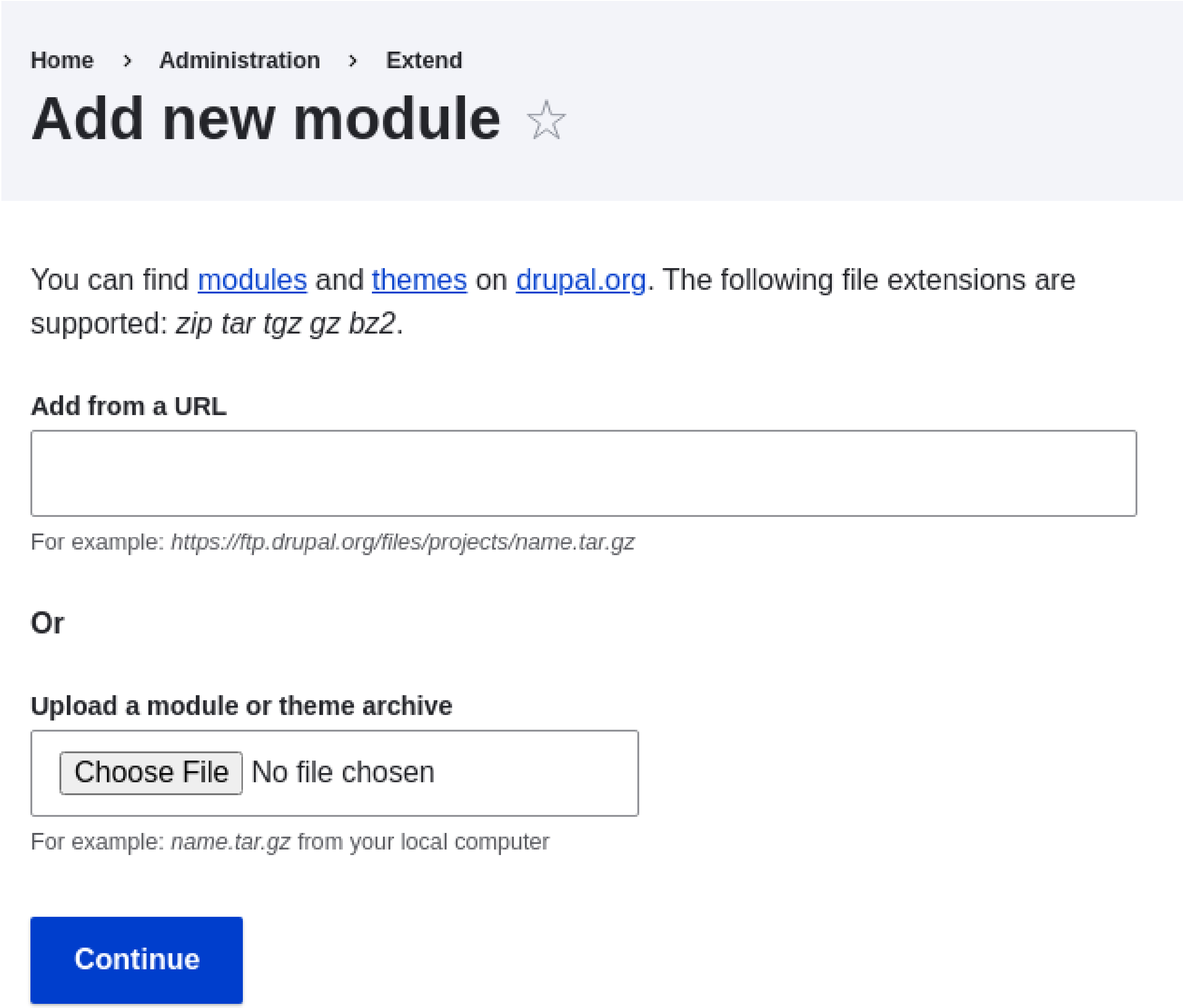
1. On the *Admin toolbar* project page on drupal.org (*https://www.drupal.org/project/admin_toolbar*), scroll to the *Downloads* section at the bottom of the page.

2. Copy the address of the *tar.gz* link. Depending on your device and browser, you might do this by right clicking and selecting *Copy link address*.



3. In the *Manage* administrative menu, navigate to *Extend* (*admin/modules*). The *Extend* page appears.

4. Click *Add new module*. The *Add new module* page appears.



5. In the field *Add from a URL*, paste the copied download link. This value could look like this: *https://ftp.drupal.org/files/pr 8.x-2.4.tar.gz*

6. Click *Continue* to upload and unpack the new module on the server. The files are being downloaded to the *modules* directory.

7. Click *Enable newly added modules* to return to the *Extend* page. If you used the manual uploading procedure mentioned earlier, then you can continue with this step, and reach the *Extend* page by using the *Manage* administrative menu and navigating to *Extend* (*admin/modules*).

8. Locate the *Admin toolbar* module and check it.

9. Click *Install* to turn on the new module.

Using Drush to install a module

1. Find the project name for the module you want to install, which is the last segment of the module's project page URL. For example, if the project URL is *https://www.drupal.org/project/admin_toolbar*, the project name is "admin_toolbar".

2. Download the module using either the steps in Section 11.6, "Manually Downloading Module or Theme Files" or Section 3.5, "Using Composer to Download and Update Files".

3. Run the following Drush command, giving the project name (for example, `admin_toolbar`) as a parameter:

```
drush pm:enable admin_toolbar
```

4. Follow the instructions on the screen.

Expand your understanding

- Verify that the contributed Admin Toolbar module is working by browsing through the menu in the administration section.
- Install and configure the contributed Pathauto module so that content pages in your site get nice URLs by default. See Section 5.1, "Concept: Paths, Aliases, and URLs" for more on URLs.
- If you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Videos

Downloading and Installing a Module from Drupal.org

Downloading and Installing a Module from Drupal.org

Additional resources

- *Drupal.org* community documentation page "Installing Drupal modules"
- "Download and Extend" page on *Drupal.org*
- Admin Toolbar module on *Drupal.org*

Attributions
Written and edited by Boris Doesborg, Joe Shindelar at Drupalize.Me, and Jennifer Hodgdon.

11.4 Finding Themes

Goal

Find and evaluate themes on *Drupal.org*.

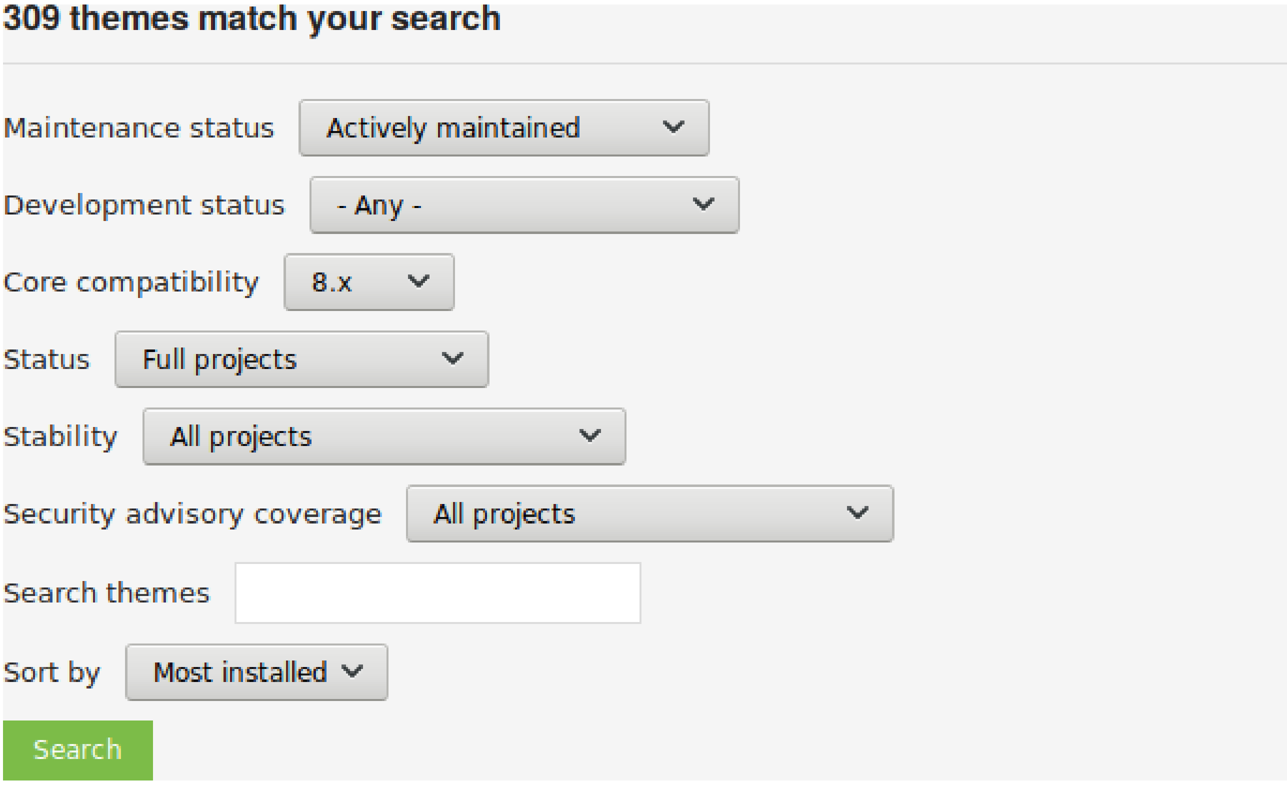
Prerequisite knowledge

- Section 1.1, "Concept: Drupal as a Content Management System"
- Section 1.3, "Concept: Themes"

Steps

1. Go to https://www.drupal.org, and navigate to *Download & Extend* > *Themes* (https://www.drupal.org/-project/project_theme).
2. Filter your search using the categories on the theme search page. For example, you might use these filters:

Field name	Explanation	Example value
Maintenance status	How actively is the theme maintained? If a theme is actively maintained, you can expect bug fixes and improvements on a regular basis.	Actively maintained
Development status	What kind of development is the theme undergoing? If you select *Under active development*, you can expect new features to be added, and some aspects may still change. If you select *Maintenance fixes only*, it means that the theme is considered complete.	Any
Core compatibility	The Drupal version the theme is compatible with.	9.x
Status	*Sandbox projects* are experimental projects. *Full projects* have already gone through an approval process, but they can still be in development.	Full projects
Stability	Whether or not the project maintainer has created a production-ready version.	Has a supported stable release
Security advisory coverage	Whether or not the project maintainer has agreed to follow Drupal Security Team procedures.	Has security advisory coverage
Search themes	Search by search term in the theme's description.	-
Sort by	Order your search results by criteria like *Most installed* (popular themes that many sites use) or *Last release* (date of latest version released).	Most installed



3. Click *Search*. Search results will appear.

Bootstrap

Posted by wundo on *18 May 2008*, updated *15 December 2016*

> Sleek, intuitive, and powerful mobile first front-end framework for faster and easier web development. Bootstrap has become one of the most popular front-end frameworks and open source projects in the world.

This base theme bridges the gap between Drupal and the Bootstrap Framework.

Features

- jsDelivr CDN for "out-of-the-box" styling and faster page load times.
- Bootswatch theme support, if using the CDN.
- Glyphicons support via Icon API.
- Extensive integration and template/preprocessor overrides for most of the Bootstrap Framework CSS, Components and JavaScript
- Theme settings to further enhance the Drupal Bootstrap integration:
  - Breadcrumbs
  - Navbar
  - Popovers
  - Tooltips
  - Wells (per region)

Documentation

Visit the project's official documentation site or the markdown files inside the `./docs` directory.

Supported modules

Drupal 8

- Bootstrap Layouts

Drupal 7

- Bootstrap Core
- jQuery Update
- Icon API
- Picture
- Views *(partial support)*
- Webform *(partial support)*

5 Year Evolution (gource)

https://youtu.be/Cvq6MPJp2dI

4. To further evaluate a theme, click its title in the list of search results to visit its project page.

Some aspects to pay attention to while evaluating themes:

- Introduction: The description of the theme on its project page should be clear and useful. A screenshot of the theme helps your evaluation as well.
- Project information: There may be warnings in this area of the page, such as if a theme is no longer being developed, or is not covered by the security advisory policy.
- Project information > Reported installs, downloads: You can see how many people have downloaded and how many sites use the theme.
- Issues: See if there are any open issues, potential problems with the theme. Check the Statistics to see how regularly issues are responded to.
- Documentation, Resources: Check if the theme has documentation or a README file, that can help you install, configure, explore, and test it.

Expand your understanding

- Section 11.5, "Downloading and Installing a Theme from *Drupal.org*"

Videos

Finding Themes

Finding Themes
Attributions
Written by Diána Lakatos.

11.5 Downloading and Installing a Theme from *Drupal.org*

Goal

Download and install a theme from *Drupal.org*.

Prerequisite knowledge

- Section 11.4, "Finding Themes"
- Section 3.2, "Concept: Additional Tools"

Site prerequisites

If you want to install via the website, the core Update Manager module must be installed. See Section 4.3, "Installing a Module" for instructions on installing modules.

If you want to use Drush, Drush must be installed. See Section 3.2, "Concept: Additional Tools".

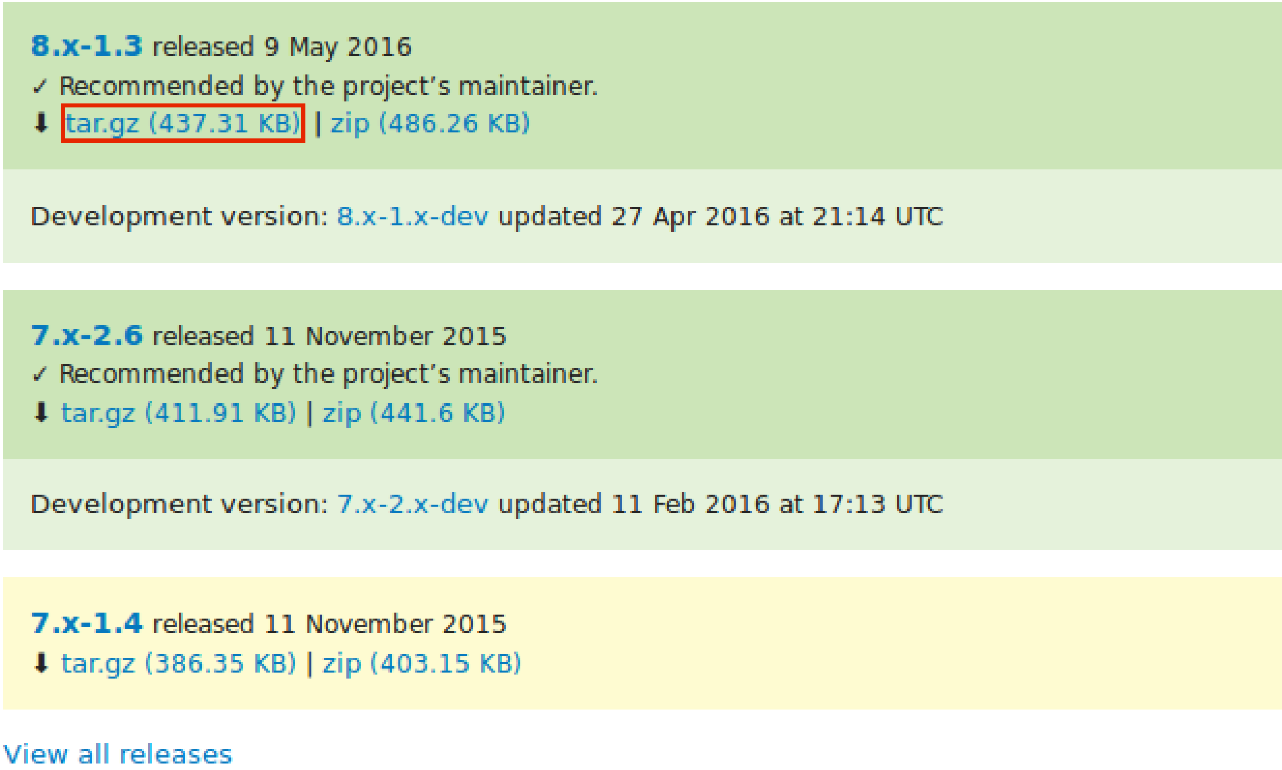
Steps

You can use the administrative interface to download and install a contributed theme. If you are installing a custom theme rather than a contributed theme, if you see a message saying *Installing modules and themes requires FTP access to your server*, or if the steps below do not work to download and unpack the theme files, follow the steps in Section 11.6, "Manually Downloading Module or Theme Files". If you are using Composer to manage the files in your site, follow the steps for downloading in Section 3.5, "Using Composer to Download and Update Files". In either of these cases, you can then install the theme using Drush, or by continuing with step 7 in the instructions for the administrative interface below.

Using the administrative interface

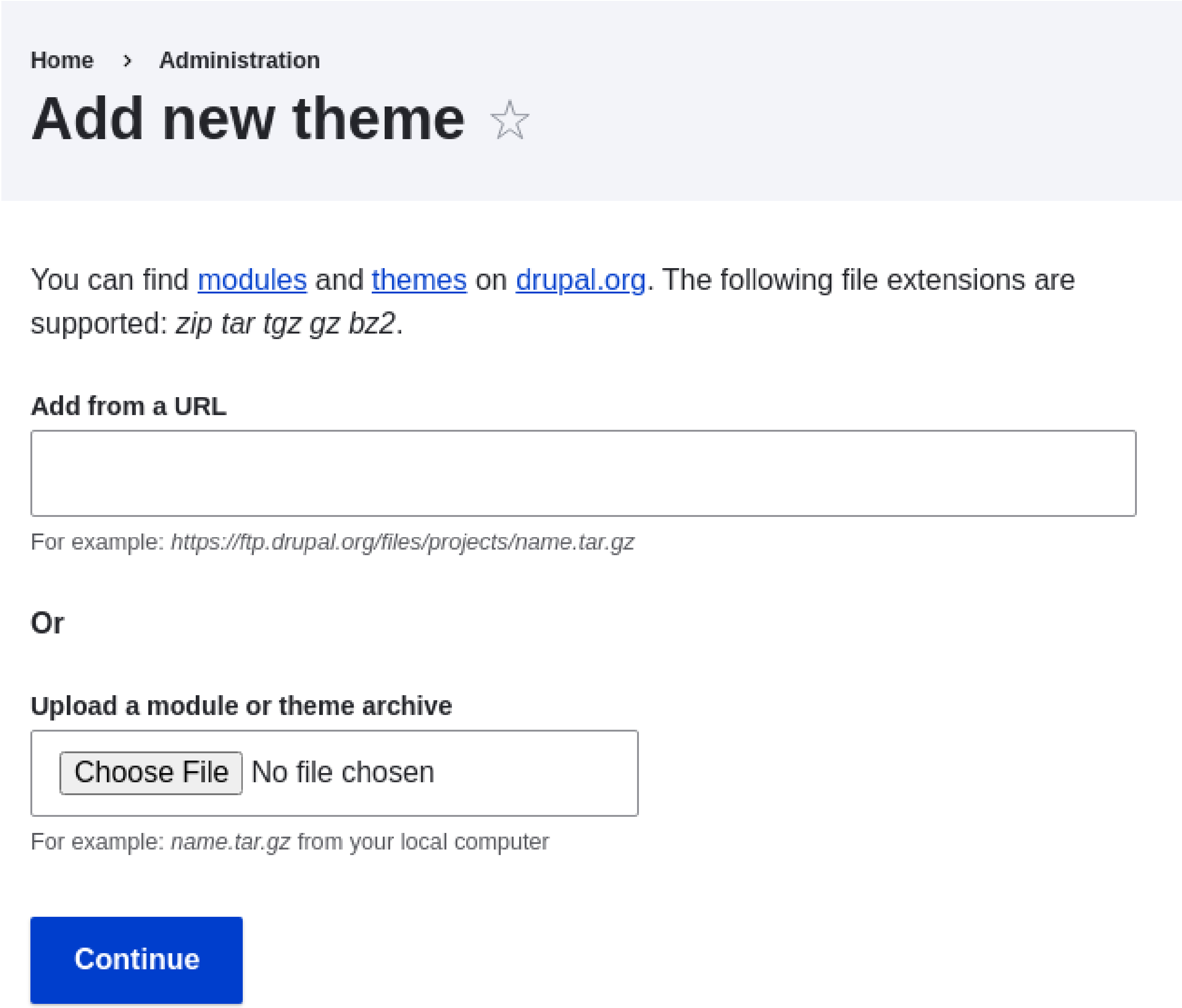
1. On the theme's project page on drupal.org (for example, *https://www.drupal.org/project/honey*), scroll to the *Downloads* section at the bottom of the page.

2. Right-click *tar.gz* to copy the address.

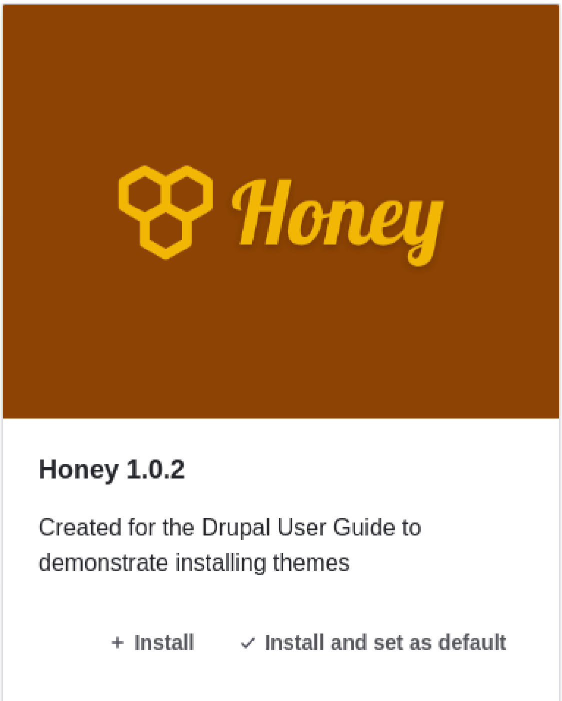


3. In the *Manage* administrative menu, navigate to *Appearance* (*admin/appearance*). The *Appearance* page appears.

4. Click *Add new theme*. The *Add new theme* page appears.



5. In the field *Add from a URL*, paste the copied download link. This value could look like `https://ftp.drupal.org/f`
6. Click _ *to upload and unpack the new theme on the server. The files are being downloaded to the _themes* directory.
7. Click *Install newly added themes* to return to the *Appearance* page. If you used the manual uploading procedure mentioned earlier, then you can continue with this step, and reach the *Appearance* page by using the *Manage* administrative menu and navigating to *Appearance* (*admin/appearance*).
8. Locate the new theme under *Uninstalled themes* and click *Install and set as default* to use it. All non-administrative pages on the site will now use this new theme.



Using Drush to install a theme

1. Find the project name for the theme you want to install, which is the last segment of the theme's project page URL. For example, if the project URL is *https://www.drupal.org/project/honey*, the project name is `honey`.
2. Download the theme using either the steps in Section 11.6, "Manually Downloading Module or Theme Files" or Section 3.5, "Using Composer to Download and Update Files".
3. Run the following Drush commands, giving the project name (for example, *honey*) as a parameter:

```
drush theme:enable honey
drush config:set system.theme default honey
```

4. Follow the instructions on the screen.

Expand your understanding

- In the *Manage* administrative menu, navigate to *Appearance* (*admin/appearance*) and uninstall any themes that you are not using.
- Section 11.1, "Finding Modules"
- Section 11.3, "Downloading and Installing a Module from *Drupal.org*"
- If you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Videos

Downloading and Installing a Theme from Drupal.org
Downloading and Installing a Theme from Drupal.org
Attributions
Written and edited by Joe Shindelar at Drupalize.Me, and Boris Doesborgh.

11.6 Manually Downloading Module or Theme Files

Goal

Manually download module or theme files and upload them to your site, if the website or Drush methods for installing or updating a module or theme do not work, or if you are placing a custom-written module or theme.

Prerequisite knowledge

- Section 1.2, "Concept: Modules"
- Section 11.1, "Finding Modules"
- Section 1.3, "Concept: Themes"
- Section 11.4, "Finding Themes"

Site prerequisites

You need to be facing any of the following to perform the manual download described in this topic:

- File permission issues
- FTP permission issues
- You created a custom module/theme or received its files from someone
- You could not successfully complete the instructions in Section 11.3, "Downloading and Installing a Module from *Drupal.org*", Section 11.5, "Downloading and Installing a Theme from *Drupal.org*", Section 13.6, "Updating a Module", or Section 13.7, "Updating a Theme"

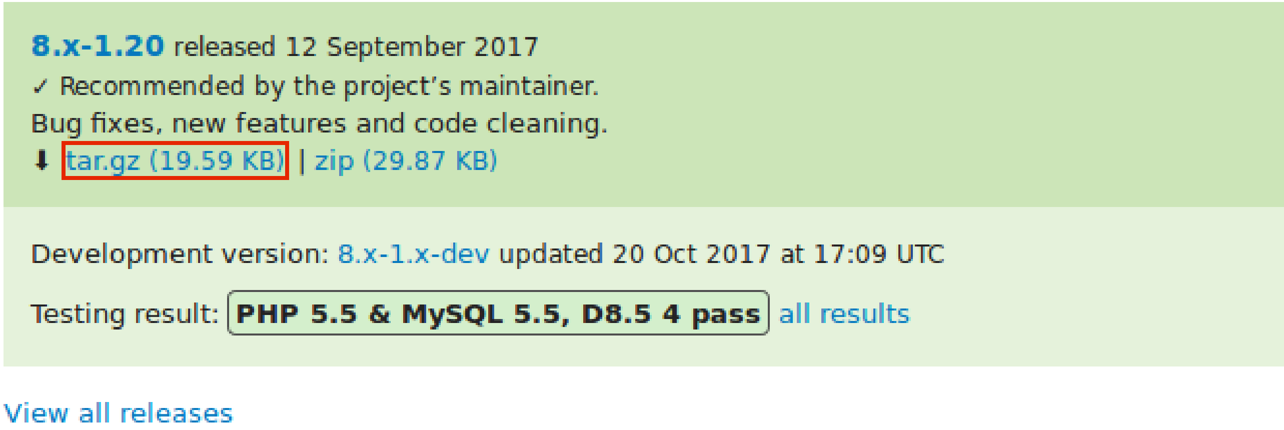
Skip this topic if none of the above applies to you. If you are using Composer to manage the files in your site, follow the file updating steps in Section 3.5, "Using Composer to Download and Update Files" instead of this topic.

Steps

If you are installing a module or theme from *Drupal.org*, follow the downloading instructions, and then the uploading/unpacking instructions. If you created the module or theme, skip the downloading step. Instead, create an archive file (that you know how to extract on the server) and proceed with the steps in uploading/unpacking, using whatever method is appropriate for the way you initially created the archive file.

Downloading the files

1. Open the module or theme project page on drupal.org; for example, the *Admin toolbar* page (https://www.drupal.org/project/admin_toolbar).
2. Scroll to the *Downloads* section near the bottom of the page.

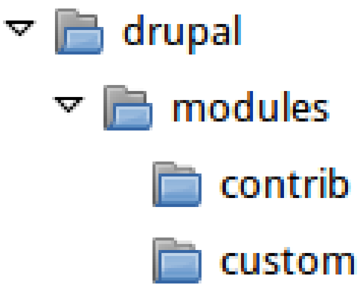


3. Click *tar.gz* to download the file to your computer. Alternatively, if you have terminal access to your hosting server (running Linux), you can copy the link address for the *tar.gz* file from your browser, and use this command to download the file (substituting the copied URL):

```
wget https://ftp.drupal.org/files/projects/admin_toolbar-8.x-2.4.tar.gz
```

Uploading the files to your site and unpacking them

1. If you are adding a new module or theme, create subdirectories in your top-level *modules* and *themes* directories (if they don't already exist). Typically, people make a *contrib* subdirectory for contributed modules and themes that are downloaded from *Drupal.org*, and a *custom* subdirectory for modules and themes that they created. Your *modules* directory might look like this:



2. If you are replacing an existing module or theme with an updated version, put the site into maintenance mode. See Section 11.2, "Enabling and Disabling Maintenance Mode".

3. If you are replacing an existing module or theme with an updated version, find and delete all the existing files and directories for the existing module or theme. Modules are normally located in directories under the top-level *modules* directory, and themes are normally located in directories under the top-level *themes* directory.

4. Upload the *.tar.gz* file (or whatever archive you created) to your site. Place it in either the same location from which you deleted the directory (if replacing an existing module or theme) or the appropriate subdirectory of *modules* or *themes* (if adding a new module or theme).

5. Extract the files from the *.tar.gz* archive (or whatever archive you created), making a subdirectory in the same location as the archive file. If you do not have terminal access, or your hosting server is not running Linux, your hosting control panel's file manager should provide a way to extract the files. If you have terminal access to your hosting server (running Linux) and you are using a tar.gz file, you can use a command like:

```
tar -xzf admin_toolbar-8.x-2.4.tar.gz
```

6. Delete the compressed file from the server, unless your unpacking method already deleted it.

7. Refer to Section 11.3, "Downloading and Installing a Module from *Drupal.org*", Section 11.5, "Downloading and Installing a Theme from *Drupal.org*", Section 13.6, "Updating a Module", or Section 13.7, "Updating a Theme" to complete the installation or update of the module or theme. Start at the step after the automatic download has been completed.

Expand your understanding

- If you work with multiple environments (for example, a local development site and a production site) you will have to repeat the steps on each environment, or re-clone the environment. See Section 11.8, "Making a Development Site".
- If you added a new theme, navigate in the *Manage* administrative menu to *Appearance* (*admin/appearance*) and uninstall the old theme.

Videos

Manually Downloading Module or Theme Files

Manually Downloading Module or Theme Files

Additional resources

- *Drupal.org* community documentation page "Updating modules"
- *Drupal.org* community documentation page "Installing Drupal modules"
- *Drupal.org* community documentation page "Installing themes"

Attributions
Written and edited by Boris Doesborg, Jennifer Hodgdon, and Marc Isaacson.

11.7 Concept: Development Sites

What are Development Sites?

Development Sites are different copies of the same site used for developing, updating, and testing a site without risking the integrity of the live site.

An example deployment workflow for site building will usually include the sites mentioned below:

Local environment The development process starts with developers working on new features, bug fixes, theming, and configuration in their local environment.

Development site Developers push the changes they've been working on to the development site. For a team of more than one developer, version control is usually used. Git is a version control system that tracks your files for any changes. You can then commit those changes to a repository. Using Git allows team members to work on the same site without overriding each other's work. It also makes it possible to easily roll back to previous stages of the development.

Staging site The staging site can be used for testing, or presenting the changes to the client for approval. QA (Quality Assurance) and UAT (User Acceptance Testing) are most often carried out on the staging site. It is recommended to have live content on both the development and staging sites, so that you can test how the new features will work with the existing content.

Production site The live site on the web available to visitors. It contains new features that have been proven safe to go live.

Based on the project's size, scope, requirements, or stakeholders, stages from the above workflow can be removed, or additional stages can be added. For example, a testing site before staging can be added to separate testing and user acceptance processes.

Related topics

- Section 11.8, "Making a Development Site"
- Section 2.6, "Concept: Editorial Workflow"
- Section 11.11, "Managing File and Configuration Revisions with Git"

Attributions
Written and edited by Diána Lakatos, and Jojy Alphonso at Red Crackle.

11.8 Making a Development Site

Goal

Make a copy of a site that you can use to develop new features and test updates on.

Prerequisite knowledge

Section 11.7, "Concept: Development Sites"

Site prerequisites

- You have a live, developed site that you would like to make a copy of for development purposes.
- If you want to use Drush for some of the steps in this task, Drush must be installed. See Section 3.2, "Concept: Additional Tools".

Steps

1. Follow the steps in Section 3.4, "Preparing to Install", so that you have hosting set up for your development site, you know where the web root is for your development site, and you have an empty database and database user for your development site to use.
2. The next step is to make a database dump file, containing the contents of your site's database. This file can be quite large, but there are two things you can do to reduce the size:
   - Compress the file, using gzip or another compression utility.
   - Exclude the contents of the database tables for the internal caching system, by truncating these tables. Their data is temporary, and you need only the table structure and not the table contents in order to make a copy of the site.
     To make the database dump, try one of the following methods:
   - If you use Drush, use this command, which will include only the structure and not the contents of the cache tables, and gzip-compress the output:

     ```
     drush sql:dump --gzip --structure-tables-list="cache,cache_*" \
       --result-file='PATH/TO/BACKUPFILE.sql'
     ```

   - If you are using MySQL and have access to the command line, use this command after truncating the cache tables (substituting in your site's database name, user name, and password):

     ```
     mysqldump -u'USERNAME' -p'PASSWORD' DATABASENAME | \
       gzip > PATH/TO/BACKUPFILE.sql.gz
     ```

- If you are using MySQL as your database, and your live site's server has phpMyAdmin installed (it is available from many hosting control panels), you can truncate the cache tables by selecting them in the phpMyAdmin table structure list and choosing the *Empty* operation at the bottom of the page. Then use the *Export* tab in phpMyAdmin to export in *SQL* format, with *gzip* compression to reduce the file size.
- Use the contributed Backup and Migrate module from within your live site. See Section 11.3, "Downloading and Installing a Module from *Drupal.org*" for instructions on installing contributed modules.

  You now have a database dump stored in the file *BACKUPFILE.sql.gz*. For security reasons, avoid storing this file on your hosting server anywhere under the Drupal site root. This will prevent others from getting a copy of your database.

3. Copy all of the files from the web root of your live site to the web root of your development site. You may wish to use Git to do this; if so, see Section 11.11, "Managing File and Configuration Revisions with Git".
4. Edit the *sites/default/settings.php* file under your development site's top-level directory in a plain-text editor. Find the lines near the end that contain the database name, database username, and database password, and update them to the information about the development site database you set up. The lines look something like this (before editing):

```
$databases['default']['default'] = [
  'database' => 'live_site_database_name',
  'username' => 'live_site_database_username',
  'password' => 'live_site_database_password',
  b''…b''
```

5. Check whether your *settings.php* file has the following setting; if yes, then you will need to edit this to point to your development site URL instead of your production site URL:

```
$settings['trusted_host_patterns']
```

6. Check whether your *settings.php* file has the following setting, and has it set to a random string value. If it does not, then you will need to add or edit it in order to prevent fatal errors:

```
$settings['hash_salt'] = 'any_string_value';
```

   One way to produce a random string for the hash salt is the following Drush command:

```
drush php-eval 'echo
  \Drupal\Component\Utility\Crypt::randomBytesBase64(55) . "\n";'
```

   If you don't use Drush, there are numerous web sites and applications that provide random string generators; you'll want to generate a string that is about 74 characters long.

7. Import the database dump file you created, into the development site's database. Try one of the following methods:

   - If you are using MySQL as your database, and your live site's server has phpMyAdmin installed (it is available from many hosting control panels), use the *Import* tab in phpMyAdmin. You may find that you have to restart the import a few times, if your database was large.
   - If you are using MySQL and have access to the command line, use this command (substituting in your site's database name, user name, and password; if you made a gzip-compressed backup file, you will also need to uncompress it first):

```
gunzip < PATH/TO/BACKUPFILE.sql.gz | \
  mysql -u'USERNAME' -p'PASSWORD' DATABASENAME
```

   - If you prefer to use Drush, use this command:

```
drush sql:query --file='PATH/TO/BACKUPFILE.sql.gz'
```

8. If your development and live sites need to have different configuration, then you have to use configuration overrides in the *settings.php* file. The *$config* variable will help you maintain override values separately from the standard configuration data. For instance, you might want the site name to be "Anytown Farmers Market" on the production site, but "Development Site for Anytown Farmers Market" on the development site. To do that, you could have the production value in the site configuration (in the database), and on the development site, in the settings.php file, you would need to have:

```
$config['system.site']['name'] =
  "Development Site for Anytown Farmers Market";
```

Expand your understanding

- Verify that the development site is working correctly.
- Log in to the development site as an administrator, and clear the cache. See Section 12.2, "Clearing the Cache".
- Section 11.9, "Deploying New Site Features"
- Section 11.11, "Managing File and Configuration Revisions with Git"

Videos

Making a Development Site

Making a Development Site

Additional resources

- Installing a new Drupal application on your local machine
- Creating a Drupal demo application for evaluation purposes

Attributions
Written and edited by Jennifer Hodgdon, Joe Shindelar at Drupalize.Me, and Jojy Alphonso at Red Crackle.

11.9 Deploying New Site Features

Goal

Copy a view that you have created in a local development site to the production site.

Prerequisite knowledge

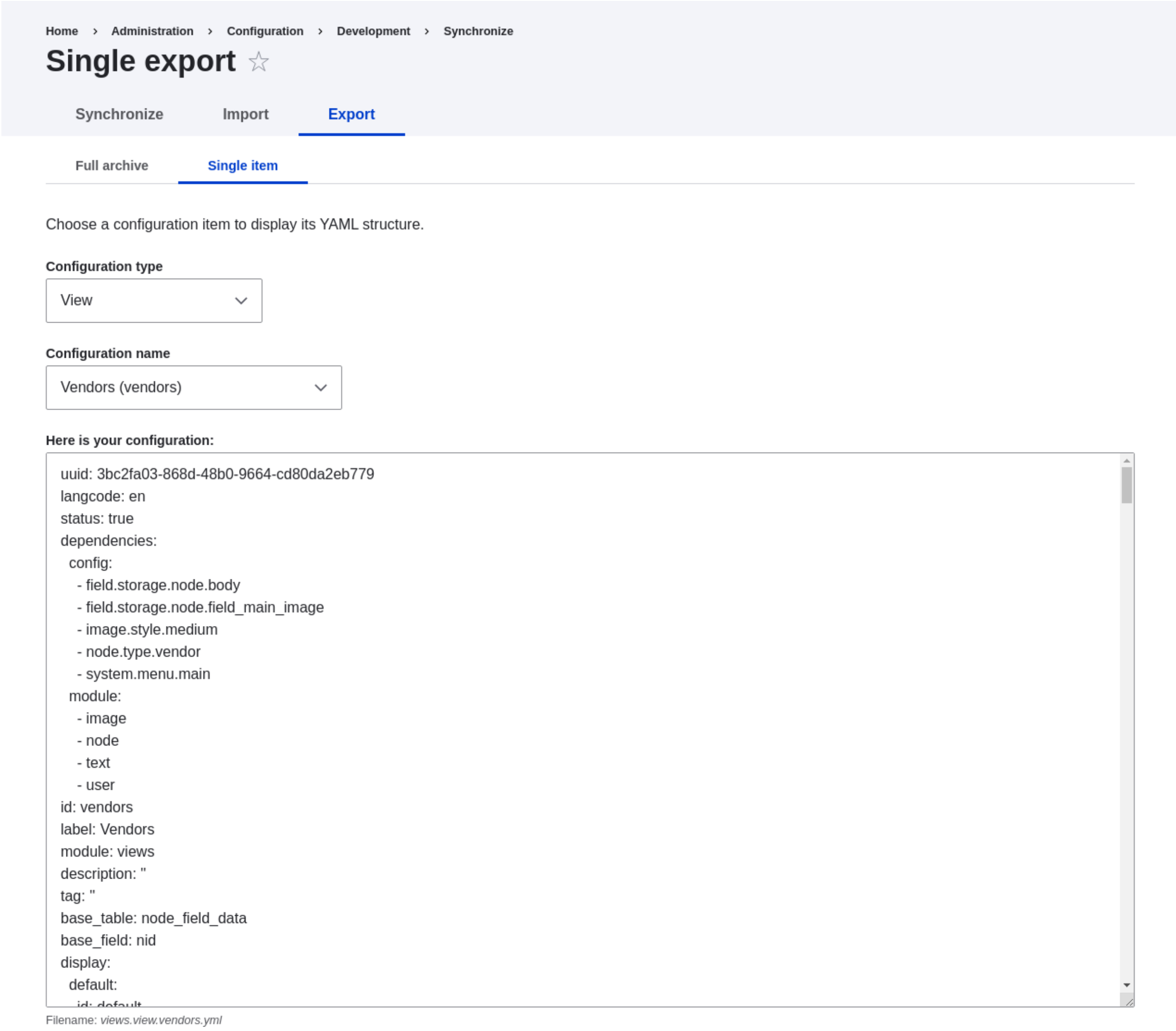
- Section 11.8, "Making a Development Site"
- Section 11.10, "Synchronizing Configuration Versions"
- Section 11.7, "Concept: Development Sites"

Site prerequisites

- The core Configuration Manager module must be installed in both the development and production sites. See Section 4.3, "Installing a Module" for instructions on installing core modules.
- The Vendor content type must exist in both the development and production sites, with the same fields. See Section 6.1, "Adding a Content Type".
- The Vendors view must exist in the development site but not the production site. See Section 9.3, "Creating a Content List View".

Steps

1. Open the local development site.
2. In the *Manage* administrative menu, navigate to *Configuration* > *Development* > *Configuration synchronization* > *Export* > *Single item* (*admin/config/development/configuration/single/export*). The *Single export* page appears.
3. Select *View* from the *Configuration type* list.
4. Select Vendors from the *Configuration name* list. The configuration appears in the textarea.
5. Copy the configuration from the textarea.



6. Open the production site.

7. In the *Manage* administrative menu, navigate to *Configuration* > *Development* > *Configuration synchronization* > *Import* > *Single item* (*admin/config/development/configuration*). The *Import* page appears.

8. Select *View* from the *Configuration type* list.

9. Paste the configuration in the textarea.

10. Click *Import*. The confirmation page appears.

11. Click *Confirm*.

12. Verify that the view was imported by navigating in the *Manage* administrative menu to *Structure* > *Views*.

Expand your understanding

The steps in this topic show how to export and import a single configuration item. However, often if you develop functionality on a development website and want to transfer it to your production site, you will need to transfer multiple configuration items. For instance, if you developed a new content type with fields, you would need to transfer several configuration items for each field, one for the content type itself, and possibly multiple view mode and form mode items, and they would have to be transferred in the right order. Getting this right can be both tedious and difficult.

As an alternative, you can export and import the complete configuration of the site. For this, you would need a local development site that is a clone of the production site (see Section 11.8, "Making a Development Site"), and then you can follow the steps in Section 11.10, "Synchronizing Configuration Versions" to synchronize configuration between development and production sites.

Another alternative is to use the contributed Features module, which allows exporting and importing bundled functionality (for example, all the configuration for a photo gallery).

Finally, if you do not see the effect of these changes in your site, you might need to clear the cache. See Section 12.2, "Clearing the Cache".

Related concepts

- Section 11.7, "Concept: Development Sites"
- Section 2.6, "Concept: Editorial Workflow"

Videos

Deploying New Site Features

Deploying New Site Features

Attributions

Written by Boris Doesborg.

11.10 Synchronizing Configuration Versions

Goal

Synchronize the configuration between a development and live site.

Prerequisite knowledge

- Section 1.5, "Concept: Types of Data"
- Section 3.4, "Preparing to Install"
- Section 11.7, "Concept: Development Sites"
- Section 11.8, "Making a Development Site"

Site prerequisites

- You must have a development copy of your production site. See Section 11.8, "Making a Development Site".
- The core Configuration Manager module must be installed on both the development and production sites. See Section 4.3, "Installing a Module" for instructions on how to install core modules.
- You must have changed configuration on either the production or development site (the *source site*), and want to synchronize the changes to the other site (the *destination site*). As an example, you can develop a new content type, fields, and views on your development site, and when it is all working correctly, deploy the changes to the live site.

- All configuration that should not be synchronized between the source and destination sites must be stored in configuration overrides in the *settings.php* file rather than in the database. See Section 11.8, "Making a Development Site".

Steps

1. In the source site, in the *Manage* administrative menu, navigate to *Configuration* > *Development* > *Configuration synchronization* > *Export* (*admin/config/development/configuration/full/export*).
2. Click *Export*. Your site will generate an archive of the full site configuration. Save the file on your local computer.
3. In the destination site, in the *Manage* administrative menu, navigate to *Configuration* > *Development* > *Configuration synchronization* > *Import* (*admin/config/development/configuration/full/import*).
4. Browse to find the downloaded configuration archive, and click *Upload*. Your configuration archive will be uploaded to the destination site, and you will be redirected to the configuration *Synchronize* page (*admin/config/development/configuration*) with a message saying your files were uploaded.
5. Verify that the differences shown on the page are what you expect. You may see configuration items that have been added, deleted, or changed; for changed items, you can click *View differences* to see what the changes are.
6. When you are satisfied, click *Import all* to import the configuration changes.

Expand your understanding

- If the changes you have made involve only one configuration item (such as one view), you can use the single configuration export/import feature to deploy the change between sites. See Section 11.9, "Deploying New Site Features".
- After the step where you export the full configuration from the source site, you might also want to unpack the archive and commit it to a version control system, such as Git, to track changes in your site configuration. See Section 11.11, "Managing File and Configuration Revisions with Git".

Videos

Synchronizing Configuration Versions

Synchronizing Configuration Versions

Attributions

Written by Jennifer Hodgdon.

11.11 Managing File and Configuration Revisions with Git

Goal

Use the Git revision control tool to manage revisions to files and configuration on your site.

Prerequisite knowledge

- Section 3.2, "Concept: Additional Tools"
- Section 3.3, "Concept: Methods for Downloading and Installing the Core Software"
- Section 11.7, "Concept: Development Sites"

- How to set up a Git repository and find its *clone* URL. For example, if you want to use GitLab to host your repository, see GitLab "Create a project" page and GitLab "Command Line basic commands" page. And if you want to use GitHub to host your repository, see GitHub "Create a repo" page and GitHub "Which remote URL should I use" page.
- How to open and use a command terminal window and a plain-text editor.
- To manage configuration, how to unpack and pack archive files (such as *.zip* and *.tar.gz*).

Site prerequisites

- You must have downloaded the software for your site, using one of the methods in Section 3.3, "Concept: Methods for Downloading and Installing the Core Software". If you want to manage configuration, you must have installed the software and have a running site.
- Git client software must be installed on your site's server. See Git for instructions.
- You must have a new repository created and know its Git clone URL.

Steps

Initializing the repository

Do these steps once, after creating a Git repository, to connect your local directory to the repository and add the initial files to it.

1. Open a command terminal window, and change to the directory where your site's files are located. This is your "top" directory.
2. Determine where your web root is. If the *core*, *modules*, and *themes* directories are located directly in this directory, then you are in your web root. If you have used Composer to download the software, then these files are located inside the *web* subdirectory (which is your web root).
3. In a plain text editor, create a new file called *.gitignore* in the top directory (or edit it if it already exists). This file contains a list of files and directories that Git should ignore (not add to the repository). For example, the *settings.php* file for your site should not be added to Git, because it contains your database account information, and the media files uploaded to your site (usually in *sites/default/files*) should not be in Git either — the objective is to have the software in the repository, not the site content.
4. Make sure the following lines are in the *.gitignore* file. If your web root is not your top directory, check each of these to see if they need a prefix. For example, *sites* may need to be replaced with *web/sites*.

```
sites/*/settings*.php
sites/*/files
config
```

5. Enter the following commands:

```
git init
git add -A
```

6. Optionally, verify the list of files you will be adding to your Git repository by entering this command and scrolling through the (very long) list:

```
git status
```

7. Enter the following commands. You can substitute your own *commit message* for "Initial file add" if you wish, and you will need to substitute your own Git clone URL for the URL in the second command:

```
git commit -m "Initial file add"
git remote add origin https://gitlab.com/example-name/example-repo.git
git push -u origin master
```

8. If you are using GitLab, GitHub, or another host with online access, you can now go to your repository page and see that the files are there.

Updating files in the repository

Use these steps when you have updated, added, or deleted one or more files in your site, in order to send the changes (*push*) to your repository.

1. Open a command terminal window, and change to the directory where your site's files are located.
2. Check the list of files that have been added, changed, or deleted:

   ```
   git status
   ```

3. Optionally, for text files that have been changed (not images), look at the differences between the new and old versions of the file:

   ```
   git diff path/to/file.txt
   ```

4. Stage all the changes for the next commit, and verify that they are staged:

   ```
   git add -A
   git status
   ```

5. You can omit a particular file from the commit that you have already staged, or add another file to the ones you have already staged. If a particular file or directory keeps getting added by mistake, consider adding it to the *.gitignore* file so that it will be ignored by Git. Omit/add commands:

   ```
   git reset HEAD path/to/file.txt
   git add path/to/file.txt
   ```

6. Commit and push your changes. Substitute something meaningful for the commit message:

   ```
   git commit -m "commit message here"
   git push
   ```

7. If you have other copies of your repository, update them by opening a command window in the directory of each copy and running the following command:

   ```
   git pull
   ```

Making a copy of the files in your repository

Follow these steps if you want to copy all the files in your repository to a new location. For example, you might have both a local development copy of your site and a production site, or several team members might all have local copies of the site.

1. Open a command window in the location where you want the files to be.
2. Enter the following command, substituting your repository clone URL for the URL, and the name of the subdirectory you want them in for *dirname*:

   ```
   git clone https://gitlab.com/example-name/example-repo.git dirname
   ```

Managing configuration in the repository

1. Follow the instructions on Section 11.10, “Synchronizing Configuration Versions” to export a complete archive of your site’s configuration.

2. If you have not already initialized configuration in the repository, unpack the configuration archive into a new directory, preferably above the web root directory, and follow the instructions above to add these files to your repository.

3. After initializing, whenever your site configuration changes, export and unpack the configuration archive in the same location. Follow the instructions above to update these files in your repository.

4. To import updated configuration to another site, make an archive of the configuration directory from your repository. Then follow the instructions on Section 11.10, “Synchronizing Configuration Versions” to upload and import this archive into the site.

Related concepts

Section 11.7, “Concept: Development Sites”

Attributions

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Chapter 12

Preventing and Fixing Problems

12.1 Concept: Cache

Prerequisite knowledge

Section 1.1, “Concept: Drupal as a Content Management System”

What is the page cache?

The software that runs your site, on each page request, must perform calculations and retrieve data from the database, in order to compose the page that is sent to the web browser or other application that is accessing the site. These calculations take time, which can mean that your page load time is longer than would be desirable.

There are several ways that page load time can be sped up, including installing software on the server. The system includes the core Internal Page Cache and Dynamic Page Cache modules, which do not require any additional server software; they use a *database cache* mechanism to speed up your site. The way these modules work is that during page calculations, intermediate results and the final page output are stored in a special database area (known as the *cache*). Then the next time a compatible request is made, intermediate or final results, as appropriate, can be retrieved and used rather than redoing the entire calculation. In addition, when content or data that affects a particular calculation is updated, the affected cached data is removed from the cache, forcing that part of the calculation to be redone the next time it is needed.

These caching modules normally work reasonably well, and offer at least some speed-up for most sites. However, sometimes the page cache can have problems, such as:

- Corrupted data in the cache, leading to garbled or incorrect page output
- Old data remaining in the cache too long, leading to outdated page output
- Insufficient caching, leading to slow page loads

What other data is cached?

Independent of whether the two page cache modules are installed on your site, the software that your site runs will still cache the output of many internal calculations. The core systems that cache data include:

- The theme system caches information in the database cache about which template files are used to render various types of data. If you are developing a new theme and add a new template file, you’ll need to clear this cache to have your theme file recognized.
- CSS and JavaScript files can optionally be optimized and compressed (depending on your site settings). If so, the compressed versions are stored in the file system so that they don’t have to be re-optimized too often. If you are developing a module or theme, you may need to either turn off or clear this file cache to have changes to CSS or JavaScript files be recognized.

- The system locates certain low-level PHP functions and classes, such as *hook implementations* and *plugin classes*, from your installed modules and stores information about which module has which functionality. If you are developing a new module or adding features to an existing module, you may need to clear this cache to have your new features be recognized.

Related topics

If you have problems with your site, the first thing to try to fix it is usually to clear the cache. See Section 12.2, "Clearing the Cache" for more information.

Additional resources

Learn about additional caching and performance optimization methods in the *Drupal.org* community documentation page "Caching overview".
Attributions
Written by Jennifer Hodgdon.

12.2 Clearing the Cache

Goal

Clear or rebuild your site's internal caches to ensure they are up-to-date with the most recent data, using the user interface or Drush.

Prerequisite knowledge

- Section 12.1, "Concept: Cache"
- Section 3.2, "Concept: Additional Tools"

Site prerequisites

If you want to use Drush to clear the cache, Drush must be installed. See Section 3.2, "Concept: Additional Tools".

Steps

You can use the administrative interface or Drush to clear the cache. You can also use the rebuild script or Drush to do a more complete cache rebuild.

Using the administrative interface to clear the cache

1. In the *Manage* administrative menu, navigate to *Configuration* > *Development* > *Performance* (*admin/config/development/performance*). If you cannot access this page in the administrative interface, use one of the other methods to clear or rebuild the cache.
2. Click *Clear all caches*.
3. A message saying the cache has been cleared appears at the top of the page.
4. If this doesn't resolve the problem that caused you to want to clear the cache, try a rebuild instead.

Using the rebuild script

1. Open *settings.php* (*/sites/default/settings.php*) in any plain text editor. Add this line to the end of the file and save it:

```
$settings['rebuild_access'] = TRUE;
```

2. Visit *http://www.example.com/core/rebuild.php* in your browser (where *www.example.com* is your site's URL). After a short pause, you should be redirected to the home page of your site, and the cache should be rebuilt.

3. Open *settings.php* (*/sites/default/settings.php*) in a text editor. Find the line you added with *$settings*[rebuild_access], remove this line, and save the file.

Using Drush to rebuild or clear the cache

You can use one of two commands:

- Use the command `drush cache:rebuild` to clear and rebuild all cached data for a site. After running this command, you will see the output message "Cache rebuild complete."
- Use the command `drush cache:clear` to see a list of individual caches and then choose the specific cache you would like to clear. Running this command should produce output like the following:

```
> drush cache:clear
Enter a number to choose which cache to clear.
 [0]   :  Cancel
 [1]   :  drush
 [2]   :  theme-registry
 [3]   :  menu
 [4]   :  css-js
 [5]   :  block
 [6]   :  module-list
 [7]   :  theme-list
 [8]   :  render
 [9]   :  views
```

Choose a cache to clear by entering the number associated with that cache. Press "Enter" to continue.

To clear a specific cache type, you can specify it in the cache:clear command. For example to clear the render cache:

```
drush cache:clear render
```

Videos

Clearing the Cache

Clearing the Cache

Additional resources

Drupal.org community documentation page "Clearing or rebuilding Drupal's cache"

Attributions

Adapted and edited by Joe Shindelar and Jack Haas from "Clearing or rebuilding Drupal's cache", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

12.3 Concept: Data Backups

Prerequisite knowledge

- Section 1.1, "Concept: Drupal as a Content Management System"
- Section 3.4, "Preparing to Install"

What is a site backup?

If something happens to the computer (or computers) that your site and its database are running on, or if you lose access to this computer, you could lose some or all of your site's data. You could also lose data if your site is hacked, or if someone with administrative privileges on your site deletes or alters data mistakenly from the administrative interface. In order to prevent scenarios like this from being permanent, expensive data losses, it is important to make regular backups of your site's data, and to store them in a location that is separate from the computer where your site is running.

The frequency with which you should make data backups, and how many backups you should keep, depends on how frequently your site is changing. If you have a very large amount of content on your site that is being added to or updated many times per day, you would want to make more frequent backups than you would for a site that changes rarely. Also consider that some time could pass between when a data problem occurs and when you notice that it is a problem, so storing a sequence of backups (so that you can go back to the last known good data and retrieve that), rather than overwriting a single backup repeatedly, is a good practice.

Another consideration is that whatever format you store your backups in, it is a good idea to verify that you can actually retrieve lost data from your backups. You might want to test several possible data loss scenarios, and make sure that your data can be restored to the site in all cases.

In order to make a complete backup of your site, you will need to make copies of the following:

- The data in the *sites* directory, including the *sites/default/settings.php* file.
- The data in your site's database. A few tables can be truncated, such as those storing the temporary data cache and user login session information, but it is always safe to back up the entire database.
- Uploaded files, such as images and other attachments. The location of these files is configurable; the standard location is the *sites/default/files* directory under your site root. In the *Manage* administrative menu, navigate to *Configuration* > *Media* > *File system* (*admin/config/media/file-system*) to check the file upload locations; to change them, you'll need to edit your *settings.php* file.
- Modules, themes and any other software files you have customized. You can find customized modules and themes in the *modules* and *themes* directories respectively. Some people prefer to back up all software files, including core files and contributed modules and themes (which you could recover by downloading them again from the source), rather than trying to pick out specific files that definitely need to be backed up.

You can perform a test to confirm whether your backup has been done right by making a development copy of the site (see Section 11.8, "Making a Development Site").

Related topics

- Section 13.5, "Updating the Core Software"
- Section 11.8, "Making a Development Site"
- Section 12.1, "Concept: Cache"

Additional resources

- *Drupal.org* community documentation page "Backing up a site"
- The contributed Backup and Migrate module, which can be used to set up automatic backups of the database and uploaded files.

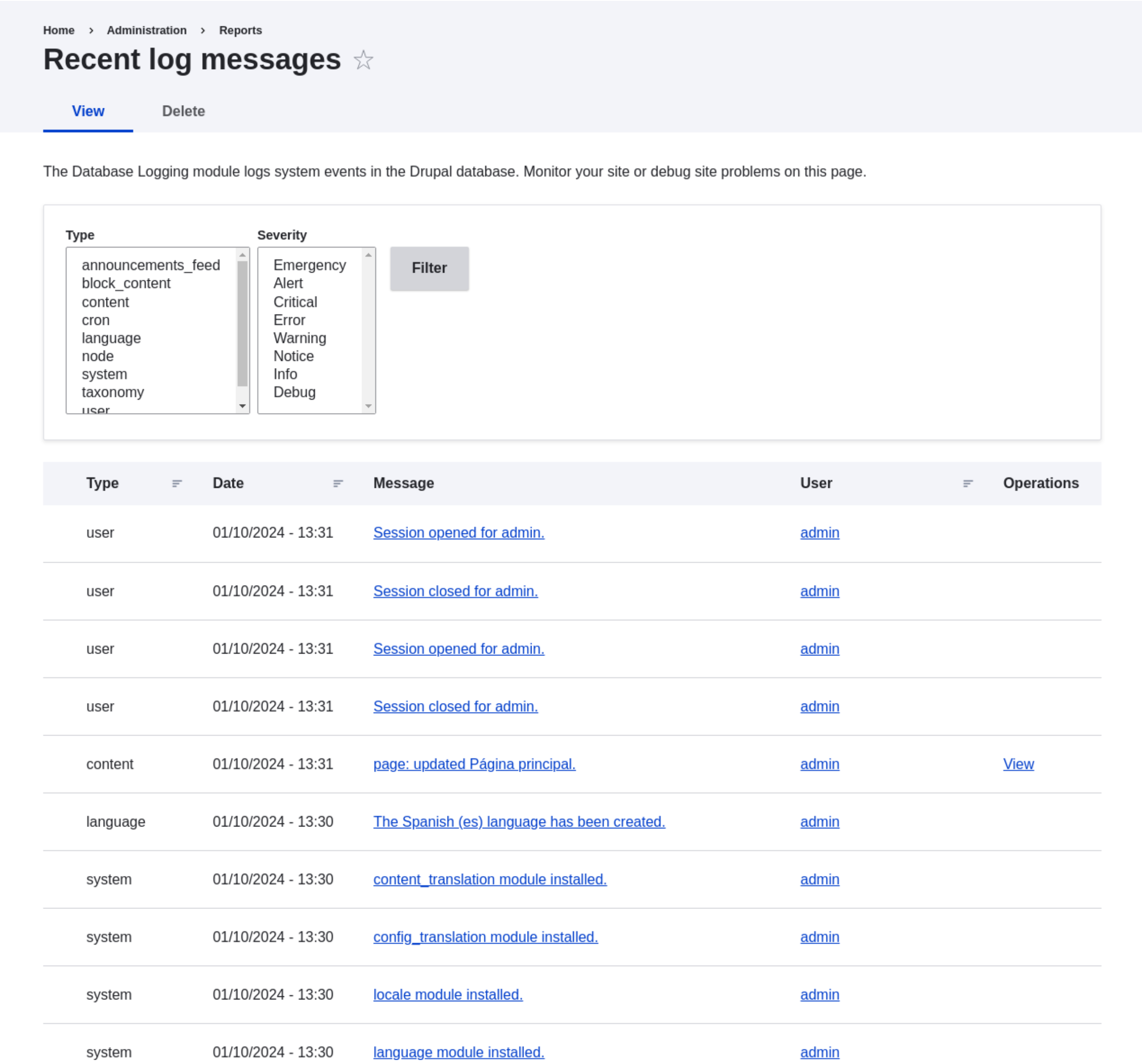
Attributions
Written by Jennifer Hodgdon.

12.4 Concept: Log

What is a Log?

Your site captures system events in a log to be reviewed by an authorized individual at a later time. The log is a list of recorded events containing usage data, performance data, errors, warnings, and operational information. It is vital to check the log on a regular basis as it is often the only way to tell what is going on.

You can find your site's recent log messages in the *Manage* administrative menu by navigating to *Reports* > *Recent log messages* (*admin/reports/dblog*). These logs may be cleared by administrators and automated cron tasks, so they should not be used for forensic logging. For forensic purposes, use the Syslog module.



Attributions

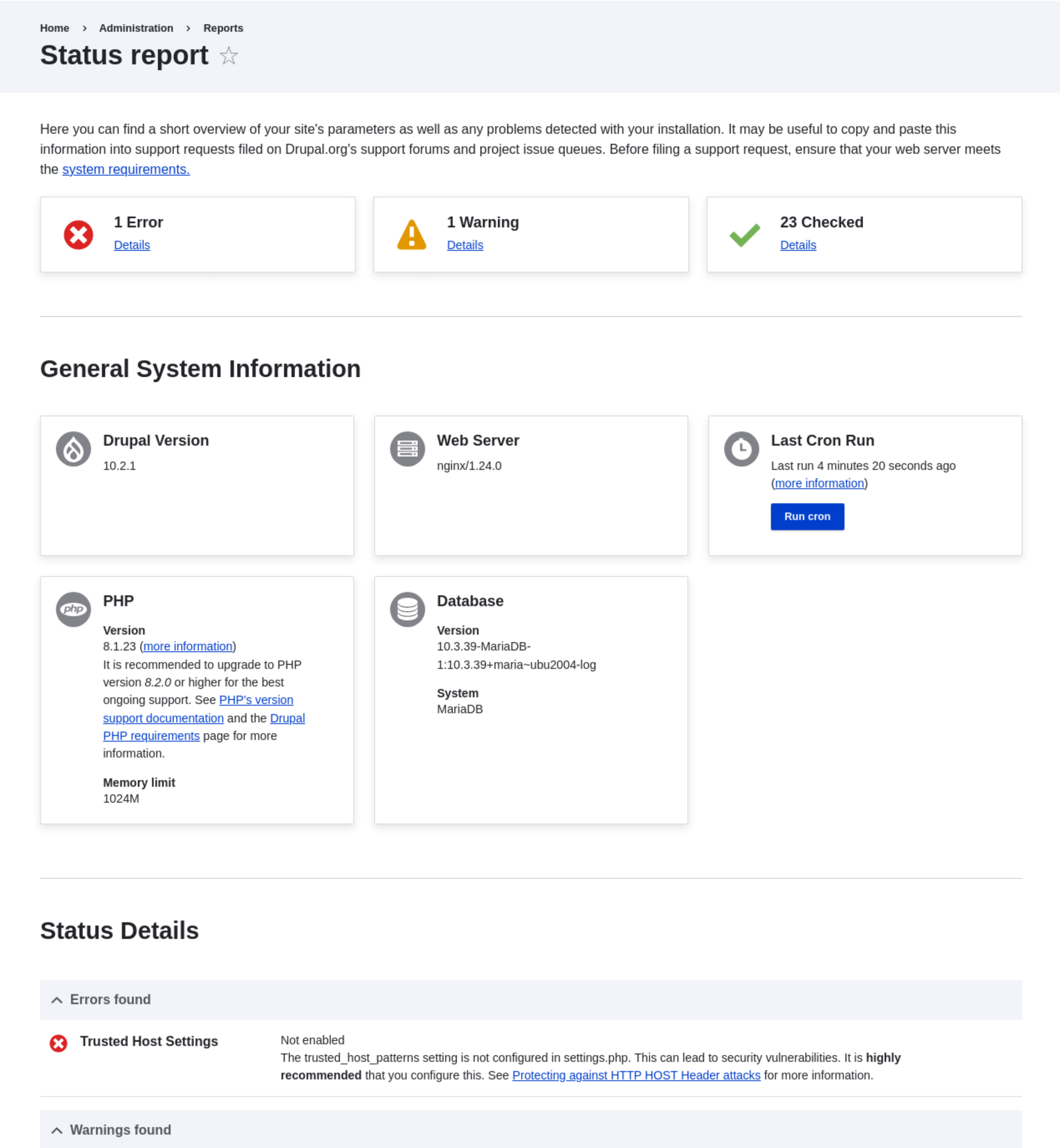
Adapted by Diána Lakatos from "Reports" copyright 2000-2024 by the individual contributors to the Drupal Community Documentation

12.5 Concept: Status Report

What is a Status Report?

The status report is a short overview of your site's parameters as well as any problems detected with your installation. It may be useful to copy and paste this information into support requests filed on *Drupal.org's* support forums and project issue queues or when asking for help on other channels.

You can find the status report in the *Manage* administrative menu by navigating to *Reports* > *Status report* (*admin/reports/status*).



Related topics

Section 14.2, "Getting Support"

Additional resources

If you have an error about trusted host settings in your status report, see *Drupal.org* community documentation page "Trusted Host settings".

Attributions

Chapter 13

Security and Maintenance

13.1 Concept: Cron

What are cron tasks?

To ensure that your site and its modules continue to function well, a group of administrative operations should be run periodically. These operations are called *cron* tasks. Examples of cron tasks are: checking for module and theme updates, indexing content for search, or cleaning up temporary files.

What is the relationship between the site's cron tasks and Unix cron?

Linux/Unix-based operating systems have a cron scheduler that can be used to run periodic tasks. You can use the server's cron scheduler to schedule runs of the site's cron tasks. Alternatively, you can use the core Automated Cron module to run tasks. You can check the site's cron tasks' status in the status report.

Related topics

- Section 13.2, "Configuring Cron Maintenance Tasks"
- Section 12.5, "Concept: Status Report"

Additional resources

Drupal.org community documentation page "Setting up cron"

Attributions

Written and edited by Diána Lakatos at Pronovix, Dave Hansen-Lange at Advomatic, and Boris Doesborg.

13.2 Configuring Cron Maintenance Tasks

Goal

Check whether cron maintenance tasks are run regularly, and if not, either install the core Automated Cron module or run cron maintenance tasks from outside the website.

Prerequisite knowledge

Section 13.1, "Concept: Cron"

Steps

1. Review the *Status report* (see Section 12.5, "Concept: Status Report") to see when cron maintenance tasks were last run.

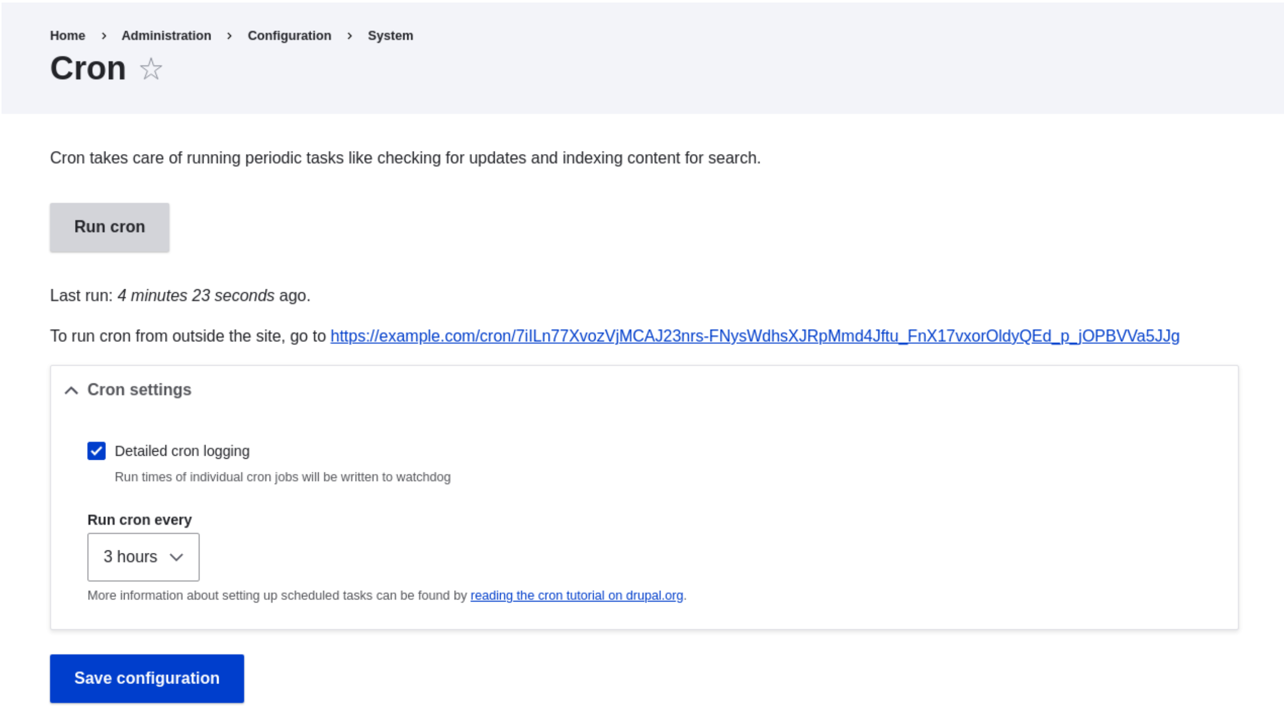
   If you installed the website using the core Standard installation profile (or similar), then cron maintenance tasks might already be running via the core Automated Cron module. By default, these tasks are run about every three hours.

2. Choose whether to run cron maintenance tasks using the core Automated Cron module, or by other means. The core Automated Cron module might not be suitable for some websites because:

   - Each time someone accesses a page on the site, the module checks how long it has been since cron maintenance tasks have last run, and then runs them if necessary. If no one visits the website for a long time, cron maintenance tasks will not be run.
   - Cron maintenance tasks are run after the page has been generated. This means there is less time for the tasks to be run before various server timeouts are reached (for example, PHP execution timeout). If this happens, the logs (see Section 12.4, "Concept: Log") will show error messages that cron is unable to complete.
   - There is a small scalability cost associated with the core Automated Cron module. This is because one of the web server's processes is occupied (and can't serve other web pages) until the cron maintenance tasks are complete.

3. If you want to use the core Automated Cron module, first make sure it is installed (it is installed with the core Standard install profile; see Section 4.3, "Installing a Module" if it is not installed).

   Next, configure the module to control how frequently cron maintenance tasks are run. In the *Manage* administrative menu, navigate to *Configuration* > *System* > *Cron* (*admin/config/system/cron*). Select the desired interval from the *Run cron every* field under *Cron settings*, and click *Save configuration*.

4. If you want to run cron maintenance tasks from outside the website, uninstall the core Automated Cron module (see Section 4.4, "Uninstalling Unused Modules"). Next, find the cron URL. This URL is shown in the *Status report* (see Section 12.5, "Concept: Status Report"), and in the *Cron* administration page (see previous step). The URL looks like this: *http://www.example.com/cron/0MgWtfB33FYbbQ5UAC3L0LL3RC0PT3RNUBZ*

Whenever this URL is visited, cron maintenance tasks will run. Set up one of the following schedulers to access this URL regularly:

- The Cron daemon (Linux, OS X, Solaris, BSD)
- Scheduled Tasks (Windows)
- A cron SASS provider (software as a service)
- A cron manager provided by your web hosting provider (see the documentation provided by your provider)

Related concepts

Section 13.3, "Concept: Security and Regular Updates"

Videos

Configuring Cron Maintenance Tasks

Configuring Cron Maintenance Tasks

Additional resources

- Drush page "Running Drupal cron tasks from Drush"
- *Drupal.org* community documentation page "Setting up cron"

Attributions
Written and edited by Dave Hansen-Lange at Advomatic, Boris Doesborg, and Jennifer Hodgdon.

13.3 Concept: Security and Regular Updates

Prerequisite knowledge

- Section 1.1, "Concept: Drupal as a Content Management System"
- Section 1.2, "Concept: Modules"
- Section 1.3, "Concept: Themes"
- Section 1.6, "Concept: The Drupal Project"

What are security updates?

Any software occasionally has bugs, and sometimes these bugs have security implications. When security bugs are fixed in the core software, modules, or themes that your site uses, they are released in a *security update*. When critical security updates are announced, they will be shown in the administration pages of your website. You will need to apply security updates in order to keep your site secure. See Section 13.4, "Keeping Track of Updates" to learn how to be notified of security updates by email, and Section 13.5, "Updating the Core Software", Section 13.6, "Updating a Module", and Section 13.7, "Updating a Theme" to learn how to make updates.

What is the security team?

The Drupal open-source project has a team of volunteers who track security-related bugs and release security updates. They also help other developers fix bugs, and maintain information for users on how to keep their websites secure. You can learn more about the security team and their practices and processes at the *Drupal.org* Security Team page.

How are security bugs reported?

It is important that security problems be kept confidential until they are fixed, so that sites are less likely to be compromised before they can be secured. If you find a potential security problem in any of the software you downloaded from the *Drupal.org* website, follow the procedures on the *Drupal.org* Security Team page to report it.

What are regular (non-security) updates?

The core software, modules, and themes also periodically have regular updates to add new features and fix bugs. These updates are less critical than security updates. As a general best practice, updates should be applied as long as they do not cause problems with your site. Testing on a development copy of your site is always a good idea before applying updates on a live site. This is because some updates may include changes that are not compatible with the modules or themes on your site, or that will break a particular functionality on your site.

Related topics

- Section 13.4, “Keeping Track of Updates”
- Section 13.5, “Updating the Core Software”
- Section 13.6, “Updating a Module”
- Section 13.7, “Updating a Theme”
- Section 11.8, “Making a Development Site”

Additional resources

- *Drupal.org* community documentation page ”Securing your site”
- ”Security advisories” on Drupal.org
- *Drupal.org* Security team

Attributions
Written and edited by Boris Doesborg and Jennifer Hodgdon.

13.4 Keeping Track of Updates

Goal

Keep your site safe and up-to-date by keeping up with the latest security updates.

Prerequisite knowledge

Section 13.3, “Concept: Security and Regular Updates”

Steps

There are a few different ways to receive notifications of security releases:

- Highly critical security announcements will be displayed on the administration pages of your website. A link will be shown to the announcement on Drupal.org which explains when and how you can update your website.

- In the *Manage* administrative menu, navigate to *Reports* > *Available updates* > *Settings*. Enter the email addresses to be notified when updates are available. You can also specify whether you want daily or weekly updates. Click *Save configuration*.
- Subscribe to the security announcements email list. To subscribe, log in to *Drupal.org*, go to your user profile page and subscribe to the security newsletter on the *Edit* > *My newsletters* tab.
- Follow @drupalsecurity on Twitter.
- Subscribe to RSS feeds for core security updates, contributed project updates and public service announcements.

Related concepts

- Section 13.3, "Concept: Security and Regular Updates"
- Section 13.5, "Updating the Core Software"
- Section 13.6, "Updating a Module"
- Section 13.7, "Updating a Theme"

Videos

Keeping Track of Updates

Keeping Track of Updates

Additional resources

- "Security advisories" on *Drupal.org*
- *Drupal.org* Security Team
- @drupalsecurity on Twitter

Attributions
Written by Sarah German at Advomatic.

13.5 Updating the Core Software

Goal

Update the core software, either through the administrative interface or by using Drush.

Site prerequisites

- If you want to use Drush, Drush must be installed. See Section 3.2, "Concept: Additional Tools".
- If your site is live, you should test this process in a development environment before running it on your production site. See Section 11.8, "Making a Development Site".

Steps

1. Make a complete backup of your site. Refer to Section 12.3, "Concept: Data Backups".

2. Open *settings.php* (*/sites/default/settings.php*) in any plain text editor. Find the line with the *$settings*[update_free_access] variable. By default, it is set to "FALSE" due to security reasons. Change the setting to "TRUE":

   ```
   $settings['update_free_access'] = TRUE;
   ```

3. Disable any caching technique (memcache, varnish, and so on) your application might be using.

4. Put your site in maintenance mode. See Section 11.2, "Enabling and Disabling Maintenance Mode".

5. If you are using Composer to manage dependencies, skip the next six steps, and instead see Section 3.5, "Using Composer to Download and Update Files" for instructions on downloading updated files. Continue with the *update.php* step.

6. Download the tar.gz or zip file archive for the latest version of Drupal core for the branch you are currently using (such as 8.x or 9.x) from *Drupal.org* Drupal Core Downloads. See Section 3.4, "Preparing to Install" for more details on how to find the latest version.

7. Upload the archive file to your web hosting server.

8. Extract the archive file to a temporary directory on your server (should be outside the directory where the site is hosted). Your hosting control panel's file manager should provide a way to extract the files. Or, if you have terminal access to your hosting server (running Linux), you can use a command like:

   ```
   tar -xzf drupal-8.3.2.tar.gz
   ```

9. In your site hosting directory, delete the *core* and *vendor* directories, and all files that are not in a subdirectory, including *.htaccess*, *composer.json*, and *autoload.php*. Don't delete custom and customized files because you may end up losing the custom functionality stored in them.

10. Copy the *core* and *vendor* directories and the non-custom/non-customized files that you deleted in the preceding step from the temporary directory to your site directory.

11. Run the *update.php* script using either of the following:

    - Visit *http://www.example.com/update.php* in your browser (where *www.example.com* is your site's URL). Click *Continue* in the first screen to run the updates and successfully complete the script.
    - Run the following Drush command: `drush updatedb`

12. If you get any error or warning, re-run the *update.php* script again till all the updates have been completed successfully.

13. Open *settings.php* (*/sites/default/settings.php*) in a text editor. Find the line with the *$settings*[update_free_access] variable and update it to "FALSE":

    ```
    $settings['update_free_access'] = FALSE;
    ```

14. Click *Administration pages* to return to the administration section of your site.

15. Take your site out of maintenance mode. See Section 11.2, "Enabling and Disabling Maintenance Mode".

16. Clear the cache. See Section 12.2, "Clearing the Cache".

17. Re-enable any caching technique you disabled at Step 3.

18. You should have the updated version running. You can verify the current version of your software by checking the *Status report* (see Section 12.5, "Concept: Status Report").

Expand your understanding

- Section 3.2, "Concept: Additional Tools"
- Section 11.8, "Making a Development Site"
- Section 12.3, "Concept: Data Backups"

Related concepts

Section 12.5, "Concept: Status Report"

Videos

Updating the Core Software

Updating the Core Software

Additional resources

- "Drupal Core Downloads" page on *Drupal.org*
- "Registry Rebuild" page on *Drupal.org*
- The file */core/UPDATE.txt* within your installation.

Attributions
Written and edited by Surendra Mohan, Boris Doesborgh, and Jojy Alphonso at Red Crackle.

13.6 Updating a Module

Goal

Update a contributed module and run the *Database updates* script.

Prerequisite knowledge

- Section 13.3, "Concept: Security and Regular Updates"
- Section 13.1, "Concept: Cron"

Site prerequisites

- A contributed module has been installed and there is an update available for it. See Section 11.3, "Downloading and Installing a Module from *Drupal.org*" and Section 13.4, "Keeping Track of Updates".
- If your site is live, you should test this process in a development environment before running it on your production site. See Section 11.8, "Making a Development Site".
- You have created a full-site backup. See Section 12.3, "Concept: Data Backups".
- If you want to use the user interface, the core Update Manager module must be installed. See Section 4.3, "Installing a Module" for instructions on installing core modules.

Steps

Before you start, check for module-specific update instructions. This is typically necessary while updating modules that involve the usage of third-party libraries. Read and understand all module-specific requirements before proceeding with the updates. To find instructions, check the module's project page *Read Documentation* link.

To view further instructions, download the tar.gz or .zip file from the project page to your local computer. Unzip the file and look for *README.txt*, *INSTALL.txt*, and *UPGRADE.txt* that come with the module's installation file. Also, review the release notes on the project page by clicking the version number you're downloading.

You can use the administrative interface to update a contributed module. If you are updating a custom module rather than a contributed module, if you see a message saying *Installing modules and themes requires FTP access to your server*, or if the steps below do not work to obtain the new module files, follow the steps in Section 11.6, "Manually Downloading Module or Theme Files". You can then continue here with step 6 in the instructions for the administrative interface below.

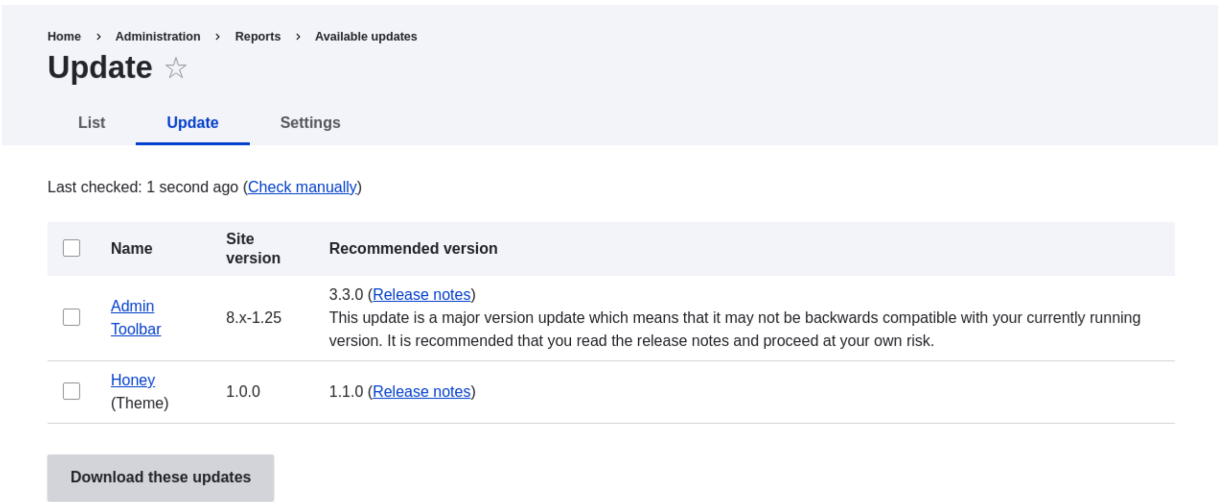
If you are using Composer to manage the files in your site, follow the steps in Section 3.5, "Using Composer to Download and Update Files" to update the files, then continue here with step 5 in the instructions for the administrative interface below.

Using the administrative interface

1. Put your site in maintenance mode. See Section 11.2, "Enabling and Disabling Maintenance Mode".

2. In the *Manage* administrative menu, navigate to *Reports* > *Available updates* > *Update* (*admin/reports/updates/update*).

3. Find and check the module in the list. Click *Download these updates* for the module.



4. Click *Continue*.
5. Click *Run database updates*. If you obtained the new module files manually, start with this step, and reach the database updates page by typing the URL *example.com/update.php* in your browser.
6. Click *Continue* and apply all updates. The database update scripts will be executed.
7. Click *Administration pages* to return to the administration section of your site.
8. Take your site out of maintenance mode. See Section 11.2, "Enabling and Disabling Maintenance Mode".
9. Clear the cache (refer to Section 12.2, "Clearing the Cache").

Expand your understanding

- Review the site log (refer to Section 12.4, "Concept: Log") once the updates are complete to check for errors.
- Section 13.7, "Updating a Theme"

Videos

Updating a Module

Updating a Module

Attributions

Adapted by Boris Doesborgh, and Sarah German at Advomatic, from "Update modules", copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.

13.7 Updating a Theme

Goal

Update a contributed theme on your site and run the *Database Updates* script.

Prerequisite knowledge

- Section 13.3, "Concept: Security and Regular Updates"
- Section 13.1, "Concept: Cron"

Site prerequisites

- A contributed theme has been installed and there is an update available for it. See Section 11.5, "Downloading and Installing a Theme from *Drupal.org*" and Section 13.4, "Keeping Track of Updates".
- If your site is live, you should test this process in a development environment before running it on your production site. See Section 11.8, "Making a Development Site".
- You have created a full site backup. See Section 12.3, "Concept: Data Backups".
- If you want to use the user interface, the core Update Manager module must be installed. See Section 4.3, "Installing a Module" for instructions on installing core modules.

Steps

You can use the administrative interface to update a contributed theme. If you are updating a custom theme rather than a contributed theme, if you see a message saying *Installing modules and themes requires FTP access to your server*, or if the steps below do not work to obtain the new theme files, follow the steps in Section 11.6, "Manually Downloading Module or Theme Files", and then continue with step 5 in the instructions for administrative interface below.

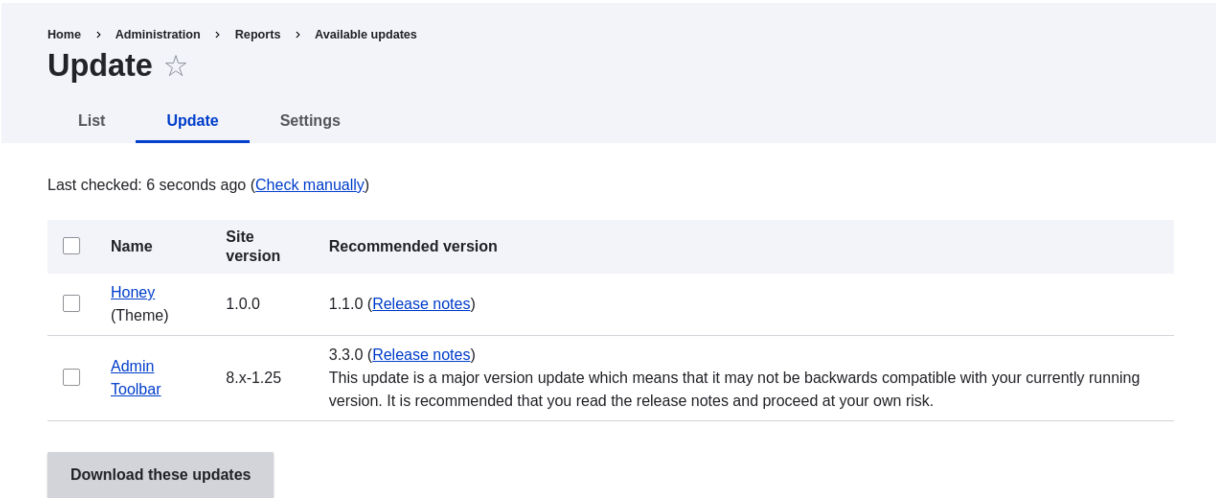
If you are using Composer to manage the files in your site, follow the steps in Section 3.5, "Using Composer to Download and Update Files" to update the files, then continue here with step 6 in the instructions for the administrative interface below.

Using the administrative interface

1. Put your site in maintenance mode. See Section 11.2, "Enabling and Disabling Maintenance Mode".

2. In the *Manage* administrative menu, navigate to *Reports* > *Available updates* > *Update* (*admin/reports/updates/update*).

3. Find and check the theme in the list. Click *Download these updates* for the theme.



4. Click *Continue*.

5. Click *Run database updates*. If you obtained the new theme files manually, start with this step, and reach the database updates page by typing the URL *example.com/update.php* in your browser.

6. Click *Continue* to run the updates. The database update scripts will be executed.

7. Click *Administration pages* to return to the administration section of your site.

8. Take your site out of maintenance mode. See Section 11.2, "Enabling and Disabling Maintenance Mode".

9. Clear the Drupal cache (refer to Section 12.2, "Clearing the Cache").

Expand your understanding

- Review the site log, see Section 12.4, "Concept: Log", once the updates are complete to check for errors.
- Section 13.6, "Updating a Module"

Videos

Updating a Theme

Updating a Theme

Attributions

Written by Boris Doesborg.

Chapter 14

Final Thoughts

14.1 Connecting with the Community

Prerequisite knowledge

Section 1.6, "Concept: The Drupal Project"

How can you connect with the community?

The Drupal project has a world-wide community of developers and users. One of the best ways to improve your knowledge of the platform is to connect with others that are using it, and get involved in the open-source community. There are many ways that you can get started:

Attend an event There are both regional and international Drupal events held around the world. See the "DrupalCon" page on *Drupal.org* to find international events, and the "Event Calendar" on *groups.drupal.org* or *drupical.com* to find regional events.

Join a local group There are Drupal user groups all around the world. Many of them have regular meetings, which you can attend to learn more about Drupal and connect to other Drupal users. Find local user groups on *groups.drupal.org*.

Participate in a topical or language group There are also interest groups for a wide range of topics, which have on-line discussion forums. Find topical groups on *groups.drupal.org*. Many languages have their own websites too; you can find them on the "Language-specific communities" page on *Drupal.org*.

Chat online The Drupal project uses Slack and DrupalChat for on-line chatting. There are regional, topical, and general-purpose chat groups available. Find out more on the "Slack" page on *Drupal.org* and "DrupalChat" page on *Drupal.org*.

Report a problem See below.

Contribute You can contribute your time and expertise to the community in many ways, such as:

- Developing modules or themes. See the "Contribute to Development" page on *Drupal.org*, or improving them (using the issue queues for existing projects).
- Translating the user interface. See *localize.drupal.org*.
- Writing documentation. See "Contribute to Documentation" on *Drupal.org*.
- Answer Support questions. See Section 14.2, "Getting Support".

How can you report a problem or suggest a feature?

Each project within the community (such as the Drupal Core project for the base software, and projects for each contributed theme and module) uses *issues* to keep track of software bugs and plans for new features. You can participate by creating a bug report when you find a problem, creating a feature request, or commenting on existing issues. Search before creating an issue, to make sure that the problem or feature has not already been reported or requested. See the *Drupal.org* page "Use the issue queue" and the *Drupal.org* page "Reporting a problem" for more information.

If you find a problem that you believe is related to security, such as a cross-site scripting vulnerability, do not report it in the standard issue queue. Instead, report it to the security team. See the *Drupal.org* page "How to report a security issue" for details.

Related topics

Section 14.2, "Getting Support"

Additional resources

- "Code of Conduct" on *Drupal.org*
- "Event Calendar" on *groups.drupal.org* or *drupical.com*
- "Community page on *Drupal.org*
- *groups.drupal.org*
- "Slack" page on *Drupal.org*
- "DrupalChat" page on *Drupal.org*
- "Ways to get involved" page on *Drupal.org*
- *Drupal.org* page "Why get involved?"
- *Drupal.org* page "Contributor tasks"
- *Drupal.org* page "Use the issue queue"
- *Drupal.org* page "Reporting a problem"
- *Drupal.org* page "How to report a security issue"

Attributions
Written by Jennifer Hodgdon, and Joe Shindelar at Drupalize.Me.

14.2 Getting Support

Prerequisite knowledge

- Section 1.6, "Concept: The Drupal Project"
- Section 14.1, "Connecting with the Community"

Where can you find support?

The Drupal project is open-source, so if you have questions about or problems with the software, your options for finding answers and fixes are somewhat different from what they would be for commercial software.

There are several options for free support provided by community volunteers. First, some Slack channels, DrupalChat channels, local groups, and language communities encourage support questions, through on-line chat, in-person meetings, or websites (find out more about these on Section 14.1, "Connecting with the Community").

Second, some (but not all) contributed module, distribution, and theme projects encourage you to post support requests in issues. Generally, projects that have a very large number of users do not allow support requests in their issues (Drupal Core is in that category), while projects with a smaller number of users welcome the occasional support question. Be respectful of developer time and read the documentation for the project before posting a question in an issue. On the other hand, all projects encourage you to use issues to report problems and bugs; see Section 14.1, "Connecting with the Community" to learn more about that.

In addition to those resources, the following sites provide free forums where volunteers answer support questions about Drupal:

- The *Drupal.org* Forums
- "Drupal Answers" on StackExchange

If you prefer to pay for support (presumably in exchange for more extensive service or better availability), you can find service providers in the "Drupal Marketplace" on *Drupal.org*.

Related topics

- Section 14.3, "Learning More"
- Section 14.1, "Connecting with the Community"

Additional resources

- "Support" page on *Drupal.org*
- "Drupal Marketplace" on *Drupal.org*
- The *Drupal.org* Forums
- "Drupal Answers" on StackExchange

Attributions
Written by Jennifer Hodgdon.

14.3 Learning More

Prerequisite knowledge

- Section 1.6, "Concept: The Drupal Project"
- Section 14.1, "Connecting with the Community"

Where can you go to learn more?

The following resources should prove useful to you, as you continue to advance your skills:

Drupal Community Documentation Wiki-like documentation contributed by the Drupal community, ranging from basic to advanced, about all aspects of Drupal (site building and administration, theming, development, and contributed modules).

api.drupal.org Reference documentation for programmers about the Drupal API.

"Drupal Planet" page on *Drupal.org* An aggregation of blog posts about Drupal from around the web, posted by blogging members of the Drupal community who have applied for inclusion. Topics range from programming to site building to Drupal news.

Groups, events, and meetups See Section 14.1, "Connecting with the Community" for more about topical, regional, and language groups, as well as local, regional, and international events.

"Training Marketplace" page on *Drupal.org* The Marketplace lists paid training providers. For free training, check whether events include training sessions; there are also free or very low-cost training events listed on the "Global Training Days" page on *Drupal.org*.

Support sites See Section 14.2, "Getting Support" to locate support forums; searching them can be useful for learning about specific topics.

Attributions
Written by Jennifer Hodgdon, and Joe Shindelar at Drupalize.Me.

Chapter 15

Glossary

Ajax

A web technology used to exchange data with a server to dynamically update parts of a web page (for example, forms) without needing entire page reloads.

Alias

A user-friendly name to replace the internal path that the system assigns to a URL on the site. For example, you might assign an alias of */about* to the About page on your site, to replace the internal path */node/5*. This would give the page a URL of *http://example.com/about* instead of *http://example.com/node/5*. See Section 5.1, "Concept: Paths, Aliases, and URLs" for more information.

Anonymous

A person (user) interacting with the site who is not logged in. See Section 7.1, "Concept: Users, Roles, and Permissions" for more information.

Authenticated

A person (user) interacting with the site who is logged in. See Section 7.1, "Concept: Users, Roles, and Permissions" for more information.

Block

A chunk of content (text, images, links, etc.) that can be displayed on a page of a site. Blocks are displayed in regions. See Section 8.1, "Concept: Blocks" for more information.

Breakpoint

Breakpoints are used to separate the height or width of browser screens, printers, and other media output types into steps. A responsive site adjusts its presentation at these breakpoints. See Section 6.14, "Concept: Responsive Image Styles" for more information.

Bundle

Synonym for Entity subtype.

Cache

The site's internal cache stores the output of time-consuming calculations, such as computing output for an HTML page request, and then retrieves them instead of recalculating the next time they are needed. External caching systems can also be used on the web server to speed up a site's response. See Section 12.1, "Concept: Cache" for more information on the internal cache.

Coding standards

Coding standards are the rules for programmers that define best practices, formatting, and various other rules, so that everyone uses the same conventions and has the same expectations when they see code. See Section 3.2, "Concept: Additional Tools" for more information.

Composer

The PHP dependency manager used by Drupal, Drush, Drupal console, the Symfony framework and others. It is the preferred means of installing Drupal projects. See Section 3.5, "Using Composer to Download and Update Files" for more information.

CMS

Acronym for Content Management System.

Configuration

Information about your site that is not content, and is meant to be more permanent than state information, such as the name of your site, the content types and views you have defined, etc. See Section 1.5, "Concept: Types of Data" for more information.

Content

Information meant to be displayed on your site, such as text, images, downloads, etc. See also Configuration and State. See Section 1.5, "Concept: Types of Data" for more information.

Content item

An item of content that is typically meant to be displayed as the main content of a page on your site. This is an entity type. See Section 2.3, "Concept: Content Entities and Fields" for more information.

Content Management System (CMS)

A collection of tools designed to allow the creation, modification, organization, search, retrieval and removal of information on a website. See Section 1.1, "Concept: Drupal as a Content Management System" for more information.

Content type

An entity subtype for the content item entity type. Each content type is used for some particular purpose on the site, and each has its own fields. For example, a site for a farmers market might have a content type for simple pages, and another for a vendor listing page. See Section 2.3, "Concept: Content Entities and Fields" for more information.

Contextual Filter (in a View)

Limits the data to be output in a view, based on the context of the view display, such as the full URL of the page. See Section 9.2, "Concept: The Parts of a View" for more information.

Contextual link

A link to an administrative page for editing or configuring a feature of the site, shown in the context where that feature is displayed. Example: a link to configure a menu that is shown when you hover your mouse over the menu. See Section 4.1, "Concept: Administrative Overview" for more information.

Contributed

Modules, themes, and distributions that are not part of the Drupal core download, and that can be downloaded separately from the *Drupal.org* website.

Cron

On some operating systems, *cron* is a command scheduler application that executes commands or scripts periodically. Your site defines periodic tasks, also known as cron tasks, that need to be triggered either by an operating system cron scheduler, or internally. See Section 13.1, "Concept: Cron" for more information.

Cross Site Scripting

Security vulnerability typically found in websites. In a site that is not well protected, malicious users can enter script into web pages that are viewed by other users. See Section 6.15, "Concept: Text Formats and Editors" for more information.

Devel

Module that helps with development tasks such as debugging and inspecting code, analyzing database queries, and generating dummy content. See Section 3.2, "Concept: Additional Tools" for more information.

Development site

Copy of the live website that is used for developing, updating, and testing the website. See Section 11.7, "Concept: Development Sites" for more information.

Display (in a View)

Type of output of a view, for example a page, a block or a feed. See Section 9.2, "Concept: The Parts of a View" for more information.

Distribution

A single download that provides a shortcut for setting up a specific type of site, such as a website for a club or for e-commerce. A distribution contains Drupal core, along with contributed modules and/or themes; many distributions also pre-configure the site or even create sample content upon installation. See Section 1.4, "Concept: Distributions" for more information.

Drupal Association

Non-profit organization dedicated to supporting the Drupal project and community. See Section 1.6, "Concept: The Drupal Project" for more information.

Drupal core

The files, themes, profiles, and modules included with the standard project software download. See Section 1.1, "Concept: Drupal as a Content Management System" for more information.

Drupal console

Command line shell and scripting interface for Drupal. Comparable with Drush. See Section 3.2, "Concept: Additional Tools" for more information.

Drush

Command line shell and scripting interface for Drupal. Comparable with Drupal console. See Section 3.2, "Concept: Additional Tools" for more information.

Editorial Workflow

Process to create, review, edit, and publish content. Multiple people in different roles (for example content creators and editors) can be part of the process. See Section 2.6, "Concept: Editorial Workflow" for more information.

Entity

An item of either content or configuration data, although in common usage, the term often refers to content entities. Examples include content items, custom blocks, taxonomy terms, and definitions of content types; the first three are content entities, and the last is a configuration entity. See also Entity type, Entity subtype, and Field. See Section 2.3, "Concept: Content Entities and Fields" for more information.

Entity subtype

Within a content entity type, a grouping of entities that share the same fields. For example, within the content item entity type, a farmers market site might have subtypes (known as content types) for static pages and vendor pages, each with its own group of fields. You may also see the term *bundle* used (especially in programmer documentation) as a synonym of entity subtype. See Section 2.3, "Concept: Content Entities and Fields" for more information.

Entity type

The overall type of an entity; in common usage, it is only applied to a content entity. Examples include content types, taxonomy terms, and custom blocks. See Section 2.3, "Concept: Content Entities and Fields" for more information.

Field

Data of a certain type that is attached to a content entity. For instance, on a farmers market site's vendor content type, you might have fields for an image, the vendor description, and a taxonomy term. See Section 2.3, "Concept: Content Entities and Fields" for more information.

Field bundle

Synonym for Entity subtype.

Field formatter

Configuration that defines how the data in a field is displayed. For example, a text field could be displayed with a prefix and/or suffix, and it could have its HTML tags stripped out or limited. See also View mode and Field widget. See Section 6.10, "Concept: View Modes and Formatters" for more information.

Field widget

Configuration that defines how someone can enter or edit data for a field on a data entry form. For example, a text field could use a single-line or multi-line entry box, and there could be a setting for the size of the box. See also Field formatter. See Section 6.8, "Concept: Forms and Widgets" for more information.

Filter (in a View)

Limits the data to be output in a view, based on criteria such as publication status, type of content, or field value. See Section 9.2, "Concept: The Parts of a View" for more information.

Formatter

See Field formatter.

FOSS

Acronym for *Free and Open Source Software*, meaning software that is developed by a community of people and released under a non-commercial license. See also GPL. See Section 1.6, "Concept: The Drupal Project" for more information.

Git

Version control system used by Drupal developers to coordinate their individual code changes. Git records everyone's changes to a given project in a directory tree called a git repository. See Section 3.2, "Concept: Additional Tools" for more information.

GPL

Acronym for the *GNU General Public License*, a non-commercial software license. All software downloaded from the *Drupal.org* website is licensed under the "GNU General Public License, version 2". See also FOSS. See Section 1.7, "Concept: Drupal Licensing" for more information.

Image style

A set of processing steps that transform a base image into a new image; typical processing includes scaling and cropping. See Section 6.12, "Concept: Image Styles" for more information.

Installing

Preparing Drupal core or any contributed theme or module for usage. In the case of Drupal core this means downloading the necessary files, creating the database, configuring and running the installation script. See Section 3.3, "Concept: Methods for Downloading and Installing the Core Software" for more information.

LAMP

Acronym for *Linux, Apache, MySQL, and PHP*: the software on the web server that the scripts commonly run on (although it can use other operating systems, web servers, and databases). See Section 3.1, "Concept: Server Requirements" for more information.

Log

A list of recorded events on the site, such as usage data, performance data, errors, warnings, and operational information. See Section 12.4, "Concept: Log" for more information.

Menu

A set of links used for navigation on a site, which may be arranged in a hierarchy. See Section 5.5, "Concept: Menu" for more information.

Module

Software (usually PHP, JavaScript, and/or CSS) that extends site features and adds functionality. The Drupal project distinguishes between *core* and *contributed* modules. See Section 1.2, "Concept: Modules" for more information.

Path

The unique, last part of the internal URL that the system assigns to a page on the site, which can be a visitor-facing page or an administrative page. For example, the internal URL for the About page on your site might be *http://example.com/node/5*, and in this case, the path is *node/5*. See also Alias. See Section 5.1, "Concept: Paths, Aliases, and URLs" for more information.

Permission

The ability to perform some action on the site, such as editing a particular type of content, or viewing user profiles. See also Role. See Section 7.1, "Concept: Users, Roles, and Permissions" for more information.

Reference field

A field that represents a relationship between an entity and one or more other entities, which may be the same entity type or a different type. For example, on a farmers market site, a recipe content item might have a reference field to the vendor (also a content item) that posted the recipe. Taxonomy term fields are also reference fields. See Section 6.4, "Concept: Reference Fields" for more information.

Region

A defined area of a page where content can be placed, such as the header, footer, main content area, left sidebar, etc. Regions are defined by themes, and the content displayed in each region is contained in blocks. See Section 2.1, "Concept: Regions in a Theme" for more information.

Relationship (in a View)

Expansion of the data that is displayed in a view, by relating the base content to other content entities. See Section 9.2, "Concept: The Parts of a View" for more information.

Repository

Location where a version control system stores all the files and directories for a project. See Section 3.2, "Concept: Additional Tools" for more information.

Responsive

A site or theme is said to be responsive if it adjusts its presentation in response to the size of the browser screen, printer, or other media output type. See also Breakpoint. See Section 6.14, "Concept: Responsive Image Styles" for more information.

Revision

A record of the past or present state of a content entity, as it is edited over time. See Section 2.6, "Concept: Editorial Workflow" for more information.

Role

A named set of permissions that can be applied to a user account. See Section 7.1, "Concept: Users, Roles, and Permissions" for more information.

Security update

An update that fixes a security-related bug, such as a hacking vulnerability. See Section 13.3, "Concept: Security and Regular Updates" for more information.

Session

Information about individual site visitors' interactions with the site, such as whether they are logged in and their cookies. See Section 1.5, "Concept: Types of Data" for more information.

Staging site

Copy of the live website that can be used for testing, or presenting the changes to the client for approval. See Section 11.7, "Concept: Development Sites" for more information.

State

Information of a temporary nature about the current state of your site, such as the time when cron was last run, etc. See also Content and Configuration. See Section 1.5, "Concept: Types of Data" for more information.

Taxonomy

The process of classifying content. See Section 6.5, "Concept: Taxonomy" for more information.

Taxonomy term

A term used to classify content, such as a tag or a category. See also Vocabulary. See Section 6.5, "Concept: Taxonomy" for more information.

Text format

Configuration that defines the processing that happens to user-entered text before it is shown in the browser. This might include stripping or limiting HTML tags, or turning URLs into links. See Section 6.15, "Concept: Text Formats and Editors" for more information.

Theme

Software and asset files (images, CSS, PHP code, and/or templates) that determine the style and layout of the site. The Drupal project distinguishes between *core* and *contributed* themes. See Section 1.3, "Concept: Themes" for more information.

UI

Acronym for User Interface.

Update

A newer version of your site's software, either Drupal core or a module or theme. See also Security update. See Section 13.3, "Concept: Security and Regular Updates" for more information.

URL

A web page's unique address on the web. For example https://example.com/node/7. See Section 5.1, "Concept: Paths, Aliases, and URLs" for more information.

User

A person interacting with the site, either logged-in or anonymous. See Section 7.1, "Concept: Users, Roles, and Permissions" for more information.

User interface

The text, styles, and images that are visible on a site, separated logically into the user interface for site visitors and the administrative user interface.

User one (User 1)

The initial user account that is created when you install the site (whose ID number is 1). It automatically has all permissions, even if it is not assigned an administrative role. See Section 7.2, "Concept: The User 1 Account" for more information.

Version Control System

Software that keeps copies of files and revision history in a repository, and allows you to add, delete, and update files. See Section 3.2, "Concept: Additional Tools" for more information.

View

A formatted listing of data; typically, the data comes from content entities. For example, on a farmers market site, you might create a content item for each vendor. You could then make view that generates a listing page that shows a thumbnail image and short description of each vendor, linking to the full-page content item. Using the same data, you could also make a view that generates a new vendors block, which would show information from the most recently added vendors. See Section 2.4, "Concept: Modular Content" for more information.

View mode

A set of field formatter configuration for all of the fields of a content entity, some of which may be hidden. Each entity subtype can have one or more view modes defined; for example, content types typically have *Full* and *Teaser* view modes, where the *Teaser* view mode displays fewer or trimmed-down fields. See Section 6.10, "Concept: View Modes and Formatters" for more information.

Vocabulary

A group of taxonomy terms to choose from when classifying content in a particular way, such as the list of all of the vendor categories on a farmers market site. Technically, vocabularies are the entity subtype for the taxonomy term entity type. See Section 6.5, "Concept: Taxonomy" for more information.

Widget

See Field widget.

Wizard

A web form that allows you to fill in a few values, and creates something with sensible defaults based on the values you chose. For example, there are wizards for creating views of different types. See Section 9.3, "Creating a Content List View" for more information.

WYSIWYG

Acronym for *What You See is What You Get*, meaning a method for editing content where what you see on the editing screen closely resembles the final product. See Section 6.16, "Configuring Text Formats and Editors" for more information.

Workflow

See Editorial Workflow.

XSS

Acronym for Cross Site Scripting.

Appendix A

Appendix

A.1 Guide-Wide Attributions

This guide was written by contributors to the Drupal open-source project, and is licensed under the CC BY-SA 2.0 license. See the section called "Copyright" for more information. Details about the contributors for guide-wide tasks are below. For individual topics, the attributions for writing, editing, and/or translating are at the end of each topic.

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- Amber Matz - Volunteer coordination and project management
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- The glossary was written and adapted by Jennifer Hodgdon, with parts from "Glossary", "Overview of Configuration (vs. other types of information)", and "Working with breakpoints in Drupal", each copyright 2000-2024 by the individual contributors to the Drupal Community Documentation.
- The index was improved and curated by Anna van Raaphorst.
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- Zach Carter
- A workshop organized by the ”Spokane Drupal User Group” on groups.drupal.org, with students from the Web Development Certificate program at Spokane Community College

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