

Plone 2.5 User Manual

A User Manual for Plone content creators and managers.

1. Introduction

A Conceptual Overview of Plone

1.1. Conceptual Overview

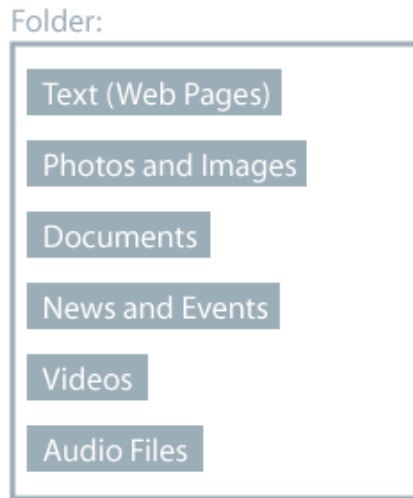
An explanation of Plone as a content management system

What is Plone?

Plone is a content management system (CMS) which you can use to build a web site. With Plone, ordinary people can contribute content to a web site without the help of a computer geek. Plone runs over the Web, too, so you don't need to install any special software on your computer. The word *content* is meant to be general, because you can publish so many types of information, including:

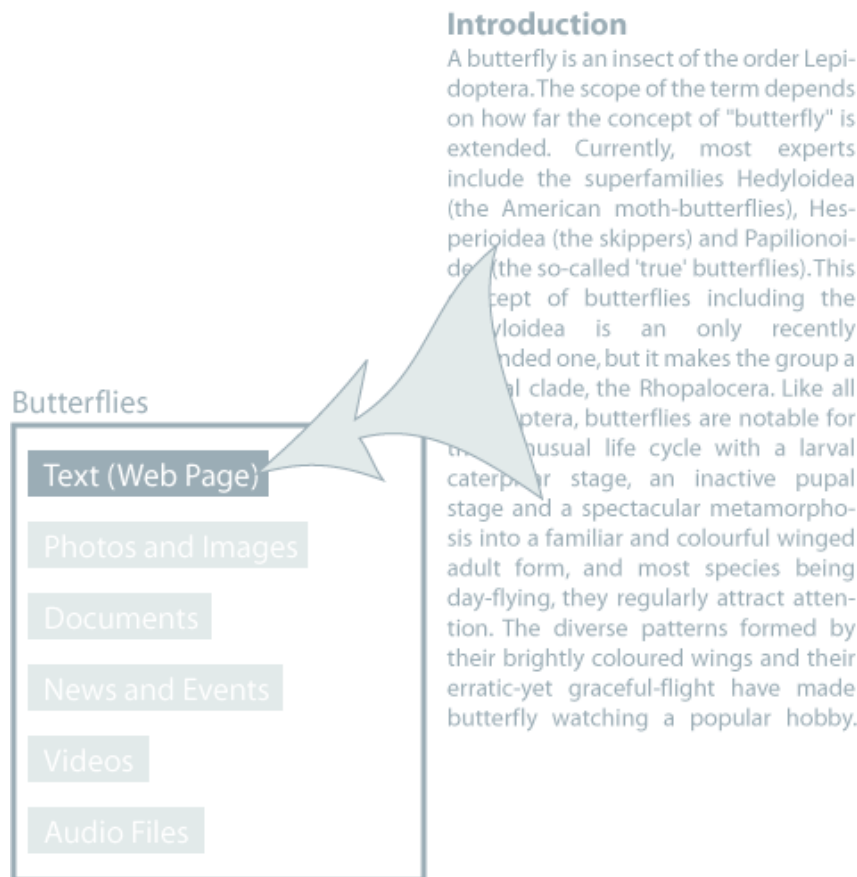


A Plone web site contains various kinds of content, including text, photos, and images. These can exist in many forms: documents, news items, events, videos, audio files, any types of file and data that can be uploaded or created on a web site. Content can also be uploaded from your local computer. You create *folders* on a Plone web site to hold content:

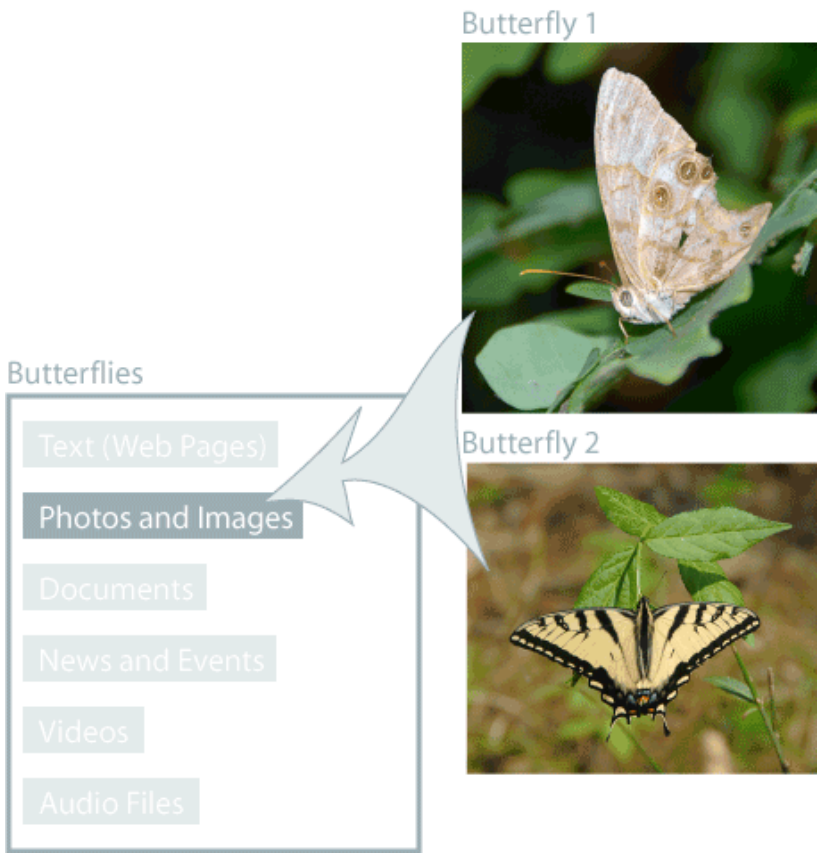


You Love Butterflies

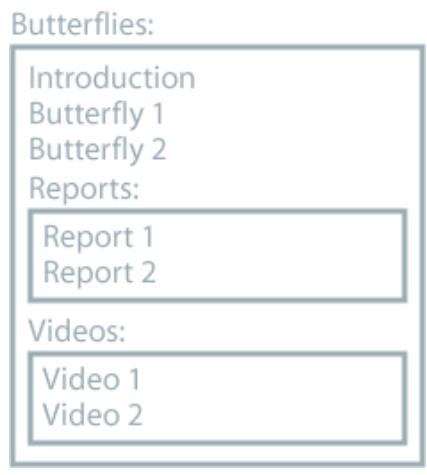
For example, to add content about butterflies, you might add a folder named "Butterflies," then add some text into a web page in the folder:



And then you might add some butterfly photos to the folder:



You can add many types of content to a folder, including sub-folders. After adding a few reports and videos to the Butterflies folder, the content would be organized like this, with two sub-folders within the Butterflies folder:

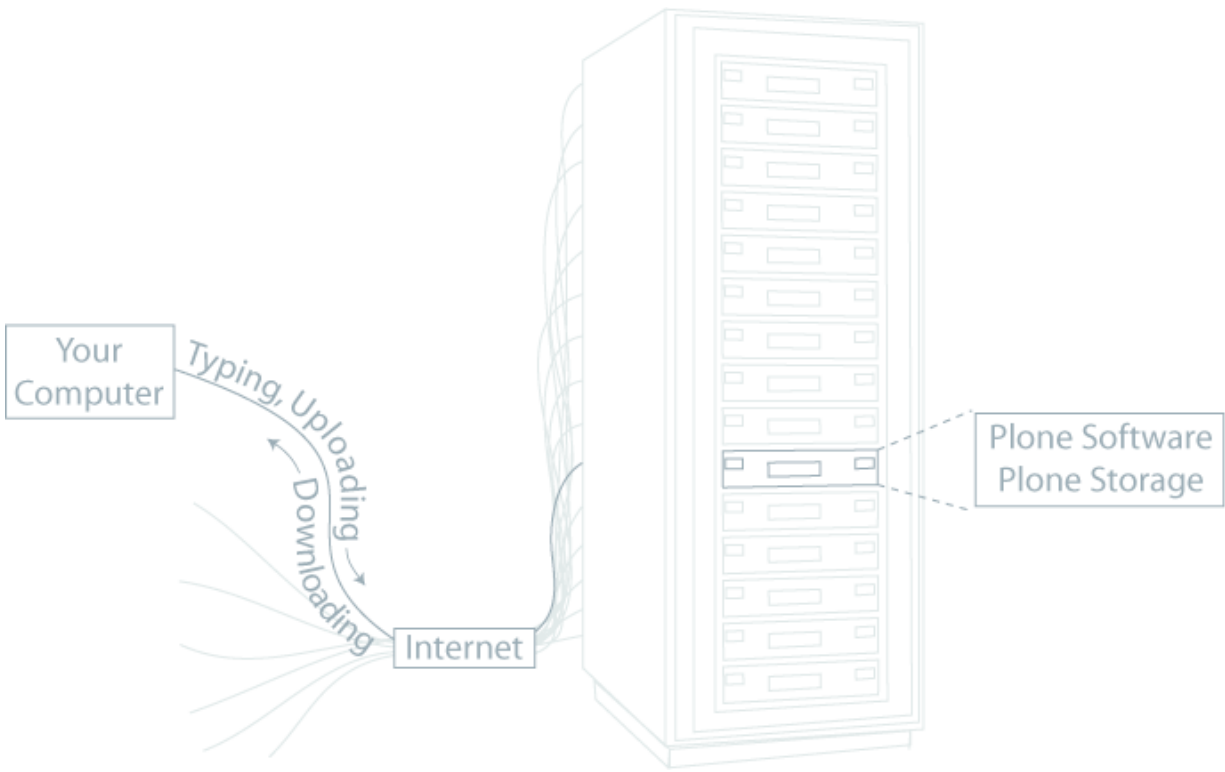


That's all you need to know -- the rest is just details. ;-)

But first, for the curious:

What Goes on Behind the Scenes

You may wonder how it all works. A typical Plone web site exists as an installation of Plone software on a web server. The web server may be anywhere, often at a website server company within a "rack" of computers dedicated to the task:



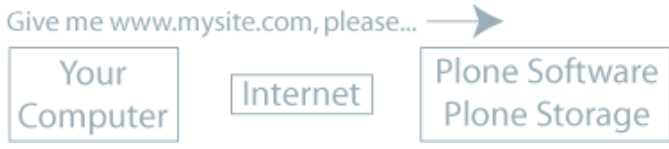
The diagram shows the many cables that connect individual server computers to the Internet, across fast network connections. Your Plone site is just software and database storage software installed on one of the individual server computers. As you type or click on your computer, data is sent up and down the networking cables and communication channels of the Internet to interact with your Plone software installation on the server.

Let's simplify the diagram showing how you interact with Plone:



You use your web browser -- Firefox, Safari, Internet Explorer, etc. -- to view and edit your Plone web site, and the changes are stored by the Plone software into its database storage system.

For example, imagine your butterfly Plone web site is located at at `mysite.com`. You type `www.mysite.com` into your web browser. After you press Enter, the following sequence of events happens as your browser talks to the web server at `mysite.com`:



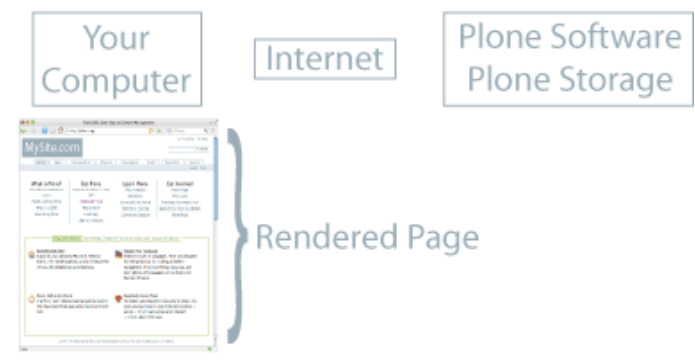
The Plone software responds, :



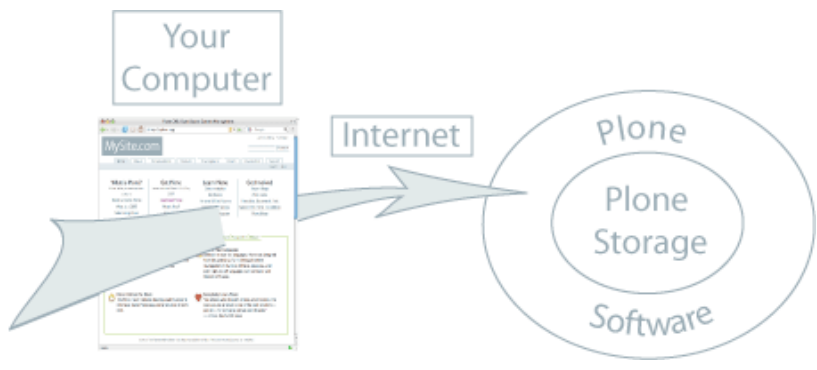
Plone reads its database to look for information stored in `mysite.com`. It then sends back the web page to your computer, in a code called HTML. HTML is a computer language that describes how a web page looks.

It includes text, graphics, fonts, the color of the background, and just about everything else. There are many online resources that can teach you HTML details, but one of Plone's advantages is that you don't need to know (much) about HTML. That's one reason for Plone and other similar web software; to let you focus on your content, e.g., butterfly text and graphics, instead of learning a new computer language.

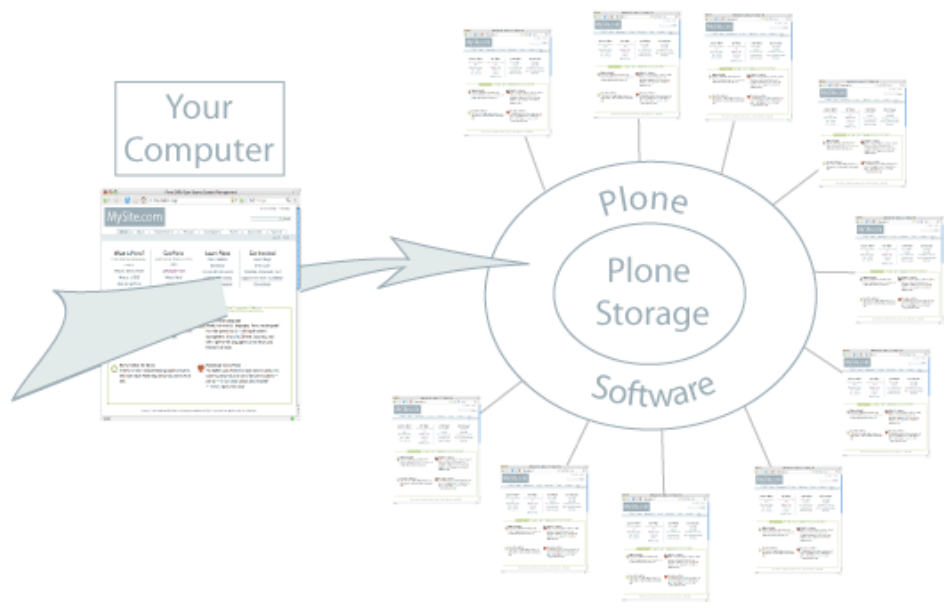
But back to our overview. Your web browser "renders" (translates) this HTML, and you see the resulting web page:



As you view your butterfly web page, you can choose to change it or add to it. You can also upload photos, documents, etc. at any time:



After you make your edits and click "save changes," the new version of the web page will be immediately available to anyone surfing to your site:

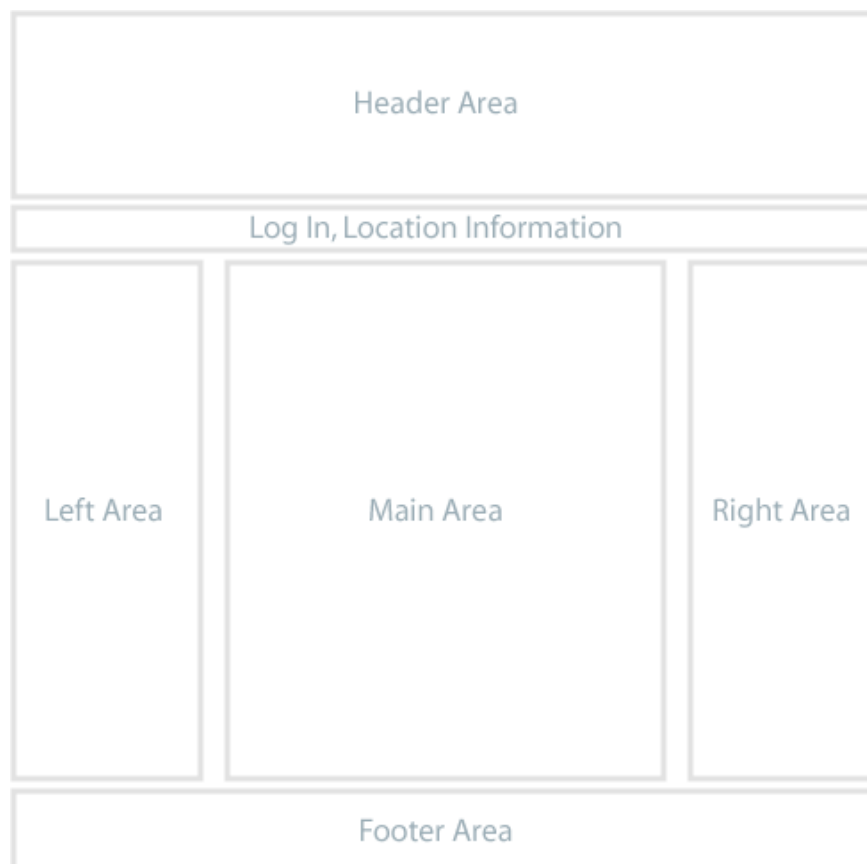


Now, on to the details...

1.2. Visual Design of Plone Web Sites

Plone allows web site administrators and designers the ability to create unique site designs.

What does a Plone web site look like? For years there has been a consistent design for the default Plone appearance. The default design looks generally like this:



The Plone web site you use could have a design radically different from this, but you should be able to find common elements, such as the log in link and a navigation panel or menu. In the default design, the navigation menu is in the left area, and usually appears as an indented list of folders in the site. There also may be a set of tabs in the *Log In, Location Information* strip near the top.

We can distinguish between the *design* of a web site and the *functionality* of a web site. For getting work done, focus on the functionality and don't worry so much about the appearance and layout of the web site. A strength of the Plone content management system is that a web site can be radically redesigned for a new look, without affecting the underlying content and functionality. The navigation menu can be moved from the left to the right, but it works the same. The right area can be deleted where functionality normally put there isn't needed. The areas for left, main, and right, as depicted above and below, could be changed to top, middle, and bottom, but it would still be a Plone web site underneath.

We'll use the default Plone layout design as an example of typical divisions of the screen:

The screenshot shows the Plone 2.5 CMS homepage with several annotated areas:

- HEADER AREA:** Contains the Plone logo, navigation links (site map, accessibility, contact), and a search box.
- LOGIN / LOCATION INFO:** A horizontal bar with links for Home, members, news, events, login, and join. Below it, a breadcrumb trail reads "you are here: home".
- LEFT AREA:** A vertical sidebar containing a navigation menu (Home, Members, News, Events), a login form with fields for Login Name and Password, and links for "Forgot your password?" and "New user?".
- MAIN AREA:** The central content area featuring a "Welcome to Plone" message by admin, dated 2007-05-30 15:00. It includes a congratulatory message, a "Quick Start" section with helpful hints, and a calendar for June 2007.
- RIGHT AREA:** A vertical sidebar containing a calendar for June 2007.
- FOOTER AREA:** The bottom section containing copyright information for the Plone CMS (© 2000-2007 by the Plone Foundation et al.), a "POWERED BY" logo, and a list of standards the site conforms to: SECTION 508, W3C AA, W3C XHTML, W3C CSS, and ANY BROWSER.

You may need to adapt these terms as needed for your Plone web site design. You may encounter varied terms for describing screen real estate, such as right and left "slots," for the left and right column areas, "portlet," or "viewlet," for discrete areas or boxes, and several other terms.

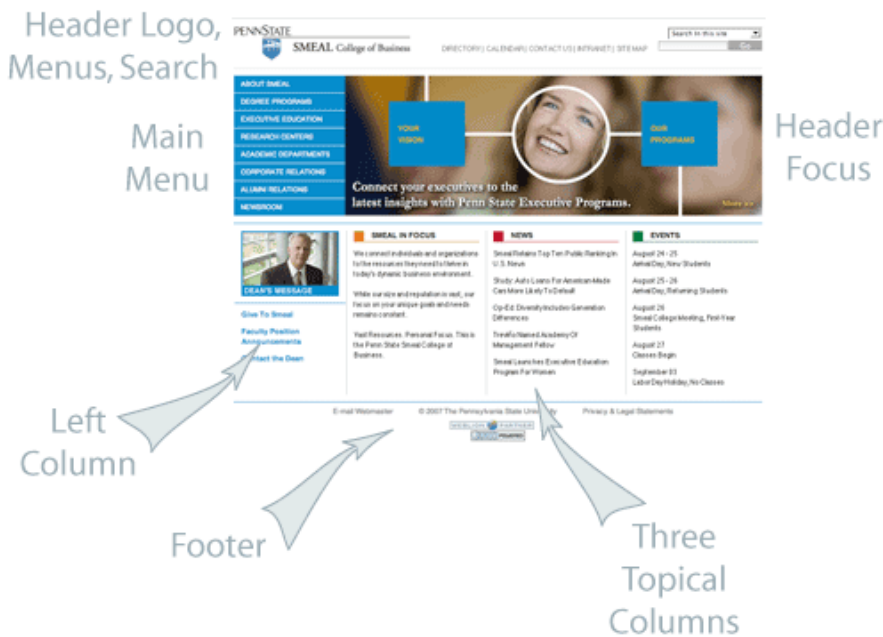
For example, we can select three web sites from the list of Plone web sites to compare:



This is the web site for Akamai, a leading provider of online web tools and acceleration technology. The header area has simple text menu choices for five main content areas arrayed horizontally at the bottom of the header area. At right, the header contains another horizontal menu and a search box. The bottom of the header area would contain log in information, for use by the maintainers of the web site. The main graphic at top left is a focus area for eye-catching graphics and current topics. There is a main area at left center where the main text is located. The right column holds a series of "portlets." The footer contains a horizontal menu, repeating the menu choices in the header, for convenience. There is a right-most column that has zoom settings.



This is the web site for Discover Magazine. The header area contains a large horizontal menu, the "main menu," if you will, a smaller horizontal menu at upper right, and a search box. This site is rich with textual "portlets" that cover so many topic areas, which are divided into three columnar areas, left, middle, and right. The top of the middle column contains a focus area with a video. There are large interactive boxes in several places. The footer contains basic site identification information and a link to "about us." For a large web site like Discover's, maintainers of the site log in to custom editing screens, and there is much automation of data feeds -- Plone uses Zope, a sophisticated storage system, and Python, a great programming language, which facilitates intelligent "wiring" of the flow of text and graphics into the web site.



The last of the three sites to examine is the web site for Penn State University's Smeal College of Business. The header contains a logo, a horizontal menu for main topic areas, and a search box at right. There is a main menu for this site at left, which is more traditional for a Plone web site. A large graphical area contains a rolling focus animation. There is another small graphical focus in the left column. Three textual columns round out the design, above the basic identification footer. Maintainers of this web site enter by means of a custom log in page, with the log in and user information showing along the bottom of the topmost header area.

So, what does a Plone web site look like? Traditionally, the out-of-the-box look is like that shown at the top of this page, with header, menu, columns, and a footer. These three sites illustrate how designers typically combine focus areas, vertical and horizontal menus, "portlets," and textual content, usually arrayed in several columns. The underlying machinery is Plone and Zope and Python, but the design "theme" or "skin" can be made to look any way the designer chooses.

1.3. Plone User Accounts and Roles

The basics of using a Plone web site account, the distinction between anonymous surfing and "logged in" web site work, and the description of user roles.

Plone web sites come in many flavors, ranging from personal websites with one user to community, organization, or business websites that could have hundreds of users. Users are often also called members. Each person who adds content to a Plone web site has their own user account. A user account includes a user name and a password. Some Plone sites allow people to sign up by visiting the site, clicking a "join" link, and filling out basic user information. Other sites have user accounts that are created by web site administrators, in which case people normally receive emails with the user account details.

However created, a Plone user account allows a person to log in by typing their user name and password. Passwords are case-sensitive, which means that you have to pay attention to the uppercase and lowercase letters. For example, if your password is xcFGt6v, you would have to type that exactly for it to work. Passwords that have some amount of strangeness to them are preferred over passwords like "raccoon" or "boardwalk," but it usually doesn't matter what you use, as long as you follow the rules, such as having no blanks and avoiding really short passwords.

Anonymous vs Authenticated Web Surfing

The distinction between *anonymous web surfing* and *authenticated (logged-in) web activity* is an important one:

Anonymous Web Surfing

This is the normal experience for a person surfing the web. You type the web address of a web site into your browser and you look at web pages, watch videos, view images, but you don't have to log in. This is why this mode is called anonymous: anyone can do it just by surfing normally. Note the presence of the *log in* link the screen image below (top right). If there is a *log in* link showing, you haven't logged in -- and you are surfing the web site anonymously, as seen in the following screen capture of a new Plone web site:

The screenshot shows the Plone CMS interface. At the top right, there are links for 'site map', 'accessibility', and 'contact'. Below these is a search bar with a 'search' button. A navigation bar contains links for 'home', 'members', 'news', and 'events'. On the right side of this bar are 'log in' and 'join' links. Below the navigation bar, a breadcrumb trail reads 'you are here: home'.

The main content area is divided into three columns. The left column contains a 'navigation' sidebar with links for 'Home', 'Members', 'News', and 'Events', and a 'log in' form with fields for 'Login Name' and 'Password', a 'log in' button, and links for 'Forgot your password?' and 'New user?'. The middle column features a 'Welcome to Plone' message by 'admin' (last modified 2007-06-09 01:55), a 'Congratulations! You have successfully installed Plone.' message, and a 'Get Started' section with three numbered steps: 1. Make sure you are logged in as an admin/manager user; 2. Set up your mail server; 3. Specify an owner for the site. Below these steps, it suggests finding out 'What's new in Plone 2.5'. The right column contains a calendar for June 2007, with the 30th highlighted in yellow.

At the bottom of the page, a footer contains the text: 'The Plone® CMS — Open Source Content Management System is Copyright © 2000–2007 by the Plone Foundation et al. Plone® and the Plone logo are registered trademarks of the Plone Foundation. Distributed under the GNU GPL license.' Below this is a 'PLONE POWERED' logo and a statement: 'This site conforms to the following standards:' followed by icons for 'SECTION 508', 'W3C AA', 'W3C XHTML', 'W3C CSS', and 'ANY BROWSER'.

Authenticated (Logged-in) Web Activity

You know the *authenticated* mode of web experience if you have ever used a bank or credit card website, or any other website that involved a user account. A bank web site will let you view your account information, fill out information forms, transfer funds, and do other actions, but only after you have logged

in. A Plone web site is not much different, except that in addition to basic actions, you can create new web pages and folders, upload images and files, and do more sophisticated things. Compare the screen image below, captured after a user called "John Smith" has logged in. Near the top right you see links for John Smith's name, my folder, preferences, undo, and log out. There is another important difference you see after logging in -- the main area in the middle now has a green header strip with tabs. This sort of header strip is present when a user has rights to change an area of the website. John Smith has the user rights to change this main area. The tabs in the green header strip for the main area will vary somewhat, but you can count on it looking like a tabbed interface with this particular green color. In the following screen capture, user John Smith has logged into a new Plone web site:

The screenshot shows the Plone 2.5 user interface. At the top right, there are links for "site map", "accessibility", "contact", and "site setup". The Plone logo is on the left. Below the logo is a search bar. A navigation bar contains "home", "members", "news", and "events". A user bar shows "John Smith" with links for "my folder", "preferences", "undo", and "log out". Below the user bar, it says "you are here: home".

The main content area has a green header strip with tabs: "contents", "view", "edit", "properties", and "sharing". The "view" tab is active, showing "display" and "add to folder" options. The "state" is "public draft".

The main content area displays a "Welcome to Plone" message by John Smith, dated 2007-06-09 01:55. The message congratulates the user for successfully installing Plone and provides instructions on how to get started. The instructions include logging in as an admin/manager user, setting up a mail server, and specifying an owner for the site. The message also suggests reading the Plone 2.5 documentation and server setup recommendations.

On the left side, there is a "navigation" sidebar with links for "Home", "Members", "News", and "Events". Below that is a "recent changes" sidebar showing a list of recent changes, including "admin" and "Past Events".

On the right side, there is a calendar for July 2007. The calendar shows the days of the week and the dates from 1 to 31. The date 1 is highlighted.

At the bottom of the page, there is a footer with the following text: "The Plone® CMS — Open Source Content Management System is Copyright © 2000–2007 by the Plone Foundation et al. Plone® and the Plone logo are registered trademarks of the Plone Foundation. Distributed under the GNU GPL license."

Below the footer, there is a "PLONE POWERED" logo and a statement: "This site conforms to the following standards:". Below this statement are several icons representing different standards: "SECTION 508", "W3C AA", "W3C XHTML", "W3C CSS", and "ANY BROWSER".

User Roles

Equally important is the distinction between different user roles on a Plone web site. To illustrate the simplest case, let's consider two user roles, one called *member* and the other called *manager*. Consider the different rights or "power" of these two roles:

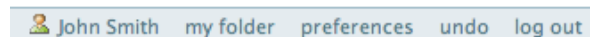
Member

- has a user account, so can log in
- can add content, but only in their own "member area," and can't change anything outside of this area
- can not publish content so that it is visible to the anonymous web surfer, even content which they added; a person with manager role must approve content for publishing

Manager

- has a user account, so can log in
- can add content anywhere and has the power to change anything
- can publish any content

You probably have a normal member account, at least when you first use a Plone web site. You may be given manager rights later, depending on your role on the web site. You can start adding content in your own "member area," which is reached by clicking the *my folder* link next to your name after you have logged in:



After clicking the my folder link, you'll see a header strip for your member area that has a green color with tabs for *contents*, *view*, *edit*, *properties*, and *sharing*:



You'll be able to explore to find the differences between these tabs, but here are descriptions to help you start:

- *contents* - shows a list of items in a folder
- *view* - shows the view an anonymous web surfer would see
- *edit* - shows a panel for changing a view
- *properties* - shows a panel for changing general data for an item
- *sharing* - shows a panel for setting rights of other members to see or edit content

You also see four menus in the green part of the header strip, *actions*, *display*, *add item*, and *state*:



Explore these also. Here are basic descriptions of these menus:

- *actions* - shows menu choices for cut, copy, paste, etc.
- *display* - shows menu choices for setting the display type (list view, summary view, etc.)
- *add item* - shows menu choices for adding content items (images, pages, folders, etc.)
- *state* - shows menu choices for setting publication state (private, public draft, public, etc.)

These menus and tabs will offer the main ways you interact with Plone. You will become very familiar with them as a matter of course.

1.4. Logging In

What to expect when you log in to a Plone site

When you visit a Plone web site anonymously, or are given the web address for site maintenance, you'll see a *log in* button something like this:



After clicking the *log in* link, you'll see an input panel where you type in your user name and password:

Please log in

To access this part of the site, you need to log in with your user name and password.

If you have forgotten your password, [click here to retrieve it](#).

Account details

Login Name
Login names are case sensitive, make sure the caps lock key is not enabled.

Password
Case sensitive, make sure caps lock is not enabled.

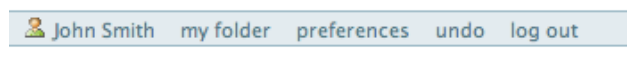
Please log out or exit your browser when you're done.

After logging in to a Plone web site you will see some indication of your name, often along the top in the strip beneath the header. Usually you will be able to click on your name or on a link called *my folder* to go to an area where you have rights to add content.

1.5. Setting Your Preferences

After logging in to a Plone web site, you can change your personal preferences for information about your identity and choice of web site settings.

After logging in, to set your personal preferences, click the *preferences* choice to the right of your name:



You will see the *personal preferences* panel:

view

edit

Personal Preferences

[▲ Up to My Preferences](#)

Your personal settings.

Personal Details

Full Name

E-mail

Location

Your location – either city and country – or in a company setting, where your office is located.

Language

Your preferred language.

Biography

A short overview of who you are and what you do. Will be displayed on the your author page, linked from the items you create.

Home page

The URL for your external home page, if you have one.

Content editor

Select the content editor that you would like to use. Note that content editors often have specific browser requirements.

Enable external editing

When checked, an icon will be made visible on each page which allows you to edit content with your favorite editor instead of using browser-based editors. This requires an additional application called ExternalEditor installed client-side. Ask your administrator for more information if needed.

Listed in searches

Determines if your user name is listed in user searches done on this site.

Portrait

To add or change the portrait: click the "Browse" button; select a picture of yourself. Recommended image size is 75 pixels wide by 100 pixels tall.



Delete Portrait

Date entry fields include:

- *full name* - If your name is common, include your middle initial or middle name.
- *email address* - REQUIRED - You may receive emails from the web site system, or from a message board, if installed, etc.
- *location* text box - This is the name of your city, town, state, province, or whatever you wish to provide.
- *language preference* selection menu - Plone excels at offering multilingual support.
- *biography* text box - Enter a short description of yourself here, about a paragraph or so in length.
- *home page* web address - If you have your own web site or an area at a photo-sharing web site, for instance, enter the web address here, if you wish, so people can find out more about you.
- *content editor* selection menu - If you create many web pages, consider use of an "external" text editor, which would allow you to edit body text with it, instead of the visual editor included in Plone. This is mainly for web designers and programmers who do more editing of actual code, but it could be useful for volume page creation using specialized text mark-up languages.
- *enable external editing* checkbox - This is for switching on and off the external editor mentioned above. Of course, it does nothing if no external editor has been selected above.
- *listed in searches* checkbox - Uncheck this box if you *do not* want to be listed in searches. Normally you would want to keep this checked, because having open communications is an important goal of most Plone web sites.
- *portrait* photograph upload - The portrait photograph will appear as a small image or thumbnail-size image, so it is best to use a head shot or upper-torso shot for this.

You can change your preferences whenever you wish.

2. Adding Content

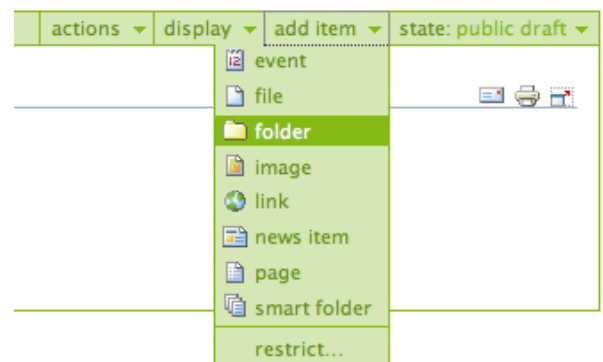
How to add basic content types to Plone web sites

2.1. Adding Folders

Adding folders to a Plone web site is the basic way of controlling the organization of content.

You have undoubtedly created folders (directories) on your computer. On Windows PC systems a hierarchy of folders is often created on c: or d: hard drives, or within a Documents folder. On the Mac and other systems, folders are created in a similar fashion. Plone folders are essentially identical, except that they are created on a Plone web site, for organizing content in Plone's built-in storage system.

Folders are added by clicking the *add item* menu (You need to be logged in to see the add item menu):



After clicking to add a folder, you'll see the folder edit panel, under the edit tab:

contents view edit properties sharing

Edit Folder

by [John Smith](#) — last modified 2007-07-01 20:31
A folder which can contain other items.

Title ■

Description
A short summary of the content

save cancel

Fill in the title, which is required, as indicated by the red square. The description is optional; you can always come back to the edit panel if you need to add a description of the folder.



Watch a video on adding a folder.

2.2. What's in a Web Name?

Individual content items on a Plone web site have discrete web addresses. Plone creates these as a matter of course.

What's in a Web Name?

The *titles* of content items, including folders, images, pages, etc., have no restrictions -- you can use any keyboard characters, including blanks. Titles, however, become part of web addresses. Web addresses, also known as URLs (Universal Resource Locators), are what you type in a web browser to go to a specific location in a web site (Or, you would click your way there), such as:

`www.mysite.com/about/personnel/sally/bio`

`www.mysite.com/images/butterflies/skippers/long-tailed-skippers`

Such web addresses *do* have restrictions on allowed keyboard characters, and blanks are not allowed. Plone does a good job of keeping web addresses correct by using near-equivalents of the titles we provide, by changing into lowercase and by substituting dashes for punctuation. To illustrate, let's take each of these two web addresses and split them out into their component parts:

```

www.mysite.com/about/personnel/sally/bio
^
website name
  ^
  a folder named About
    ^
    a folder named Personnel
      ^
      a folder named Sally
        ^
        a folder named Bio

```

In this first example, not much was needed: Plone changed each folder title to lowercase, e.g., from Personnel to personnel. You don't have to worry about this. Plone handles the web addressing; you just type in titles however you want.

The second example web address demonstrates how Plone takes the hassle out of web addressing:

```

www.mysite.com/images/butterflies/skippers/long-tailed-skippers
^
website name
  ^
  a folder named Images
    ^
    a folder named Butterflies
      ^
      a folder named Skippers
        ^
        a folder named Long-tailed Skippers

```

As with the first example, Plone simply changed the folder titles into lowercase for web addressing, except for the last one, which is more than one word and contains a dash. The dash in "Long-tailed Skippers" is fine for the web address, and it remains. The blank, however, was changed to a dash also. And the L in Long and the S in Skippers were changed to lowercase. You need to understand that Plone is doing this for you, but you don't have to worry about it. You would have simply typed "Long-tailed Skippers" for the title and Plone would handle the web addressing. The web address is referred to as the *short name* within Plone. When you rename something, you'll see the short name along with the title.

These illustrations apply to all content items, not just folders, so when you type in titles, use normal titles that have blanks and punctuation as you wish, but be aware that when you copy a Plone web address for making a link or for sharing with someone, the web address will be a little bit different (which is a good thing -- a necessary fix for web addressing).

2.3. Adding Images

Adding images to a Plone web site is a basic task that may involve a little work on your local computer, but is essential, because photographs, maps, and custom graphics are so important on web sites.

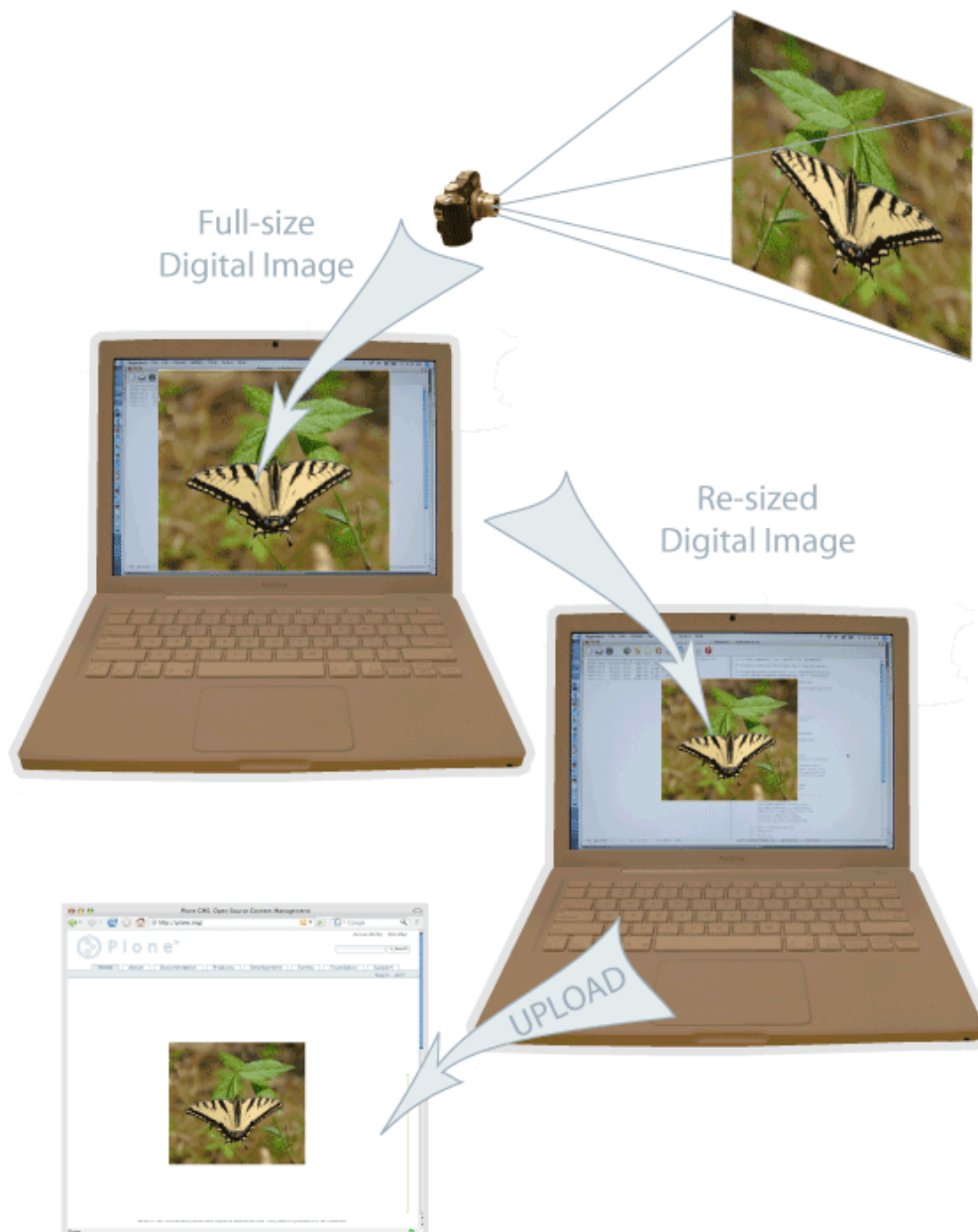
Images in Plone are usually photographs taken with a digital camera, but they can also be scanned images, graphical illustrations made with software, and other specialized images. Let's take the most common case, imagining that you have taken a photograph of a butterfly.

Digital photographs taken with modern cameras are usually too big to post directly on a website, so they need to be resized. A typical web site design may have a width of around 1000 pixels. When a photograph comes off your camera, it may be several thousand pixels wide and tall, and several megabytes in file size. You need to use software on your computer to resize the image to something less than 1000 x 1000 pixels, often just several hundred pixels maximum width. The software you use to view or print your digital photos will often have this resizing functionality, or you may have graphics software such as Corel Draw, Adobe Photoshop, Irfanview, or Gimp on your computer. Resizing an image, sometimes called resampling, is a

standard function you should be able to find in your software, often under the *Image* menu. How do you know what width, in pixels, to resize your image? It depends. For a little "head shot" photograph to go in a biography, maybe 200 pixels wide is just right. For a group photograph, 200 pixels would be too small to allow identification of the people in the photograph, so it would need to be 400 pixels wide. For a scanned map image, perhaps the image width would need to be 1000 pixels for the map detail to be usable.

After saving your resized image, giving it a name that indicates the new size (e.g., butterfly-resized-300px.jpg), you'll have an image file on your computer. The file format is most commonly .jpg (or .jpeg). Other common formats for images include .png and .gif. Take note of where you save images on your computer so that you can find them when you upload them to your Plone web site.

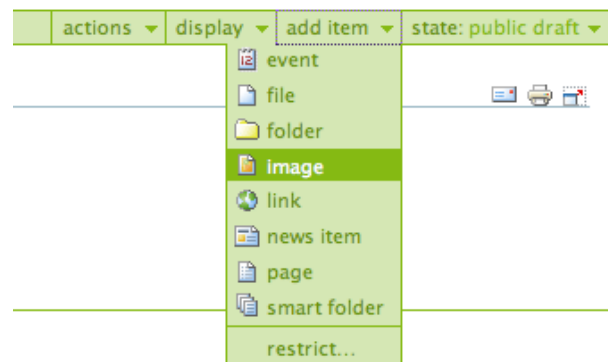
In summary, you take your photograph, transfer it to your computer, use image software on your computer to resize your photograph, then upload it to your Plone website:



When you upload an image to a Plone web site, several smaller, supplemental copies of the image will be automatically created, including the smallest, a thumbnail version. These smaller versions are used by Plone when showing images in lists of items in a folder. The original full-size image is always there, and this is the

size that is shown when you choose the uploaded image to be included in a web page. The rule to remember is that you should resize the image on your computer to the size you want to use on a web page, and just upload it. Plone will make other size copies upon uploading, but normally don't have to think about it; Plone will use the supplemental versions when needed for displays.

When you get ready to upload an image, use the *add item* menu for a folder (You will only see the *add item* menu after logging in):



After clicking to add an image, you'll see the *edit image* panel:

The screenshot shows the 'Edit Image' form in Plone 2.5. At the top, there are five tabs: 'view', 'edit', 'properties', 'transform', and 'sharing'. The 'edit' tab is selected. Below the tabs, the form has a title 'Edit Image' and a subtitle 'by John Smith — last modified 2007-07-02 16:35'. A description reads 'An image, which can be referenced in documents or displayed in an album.' The form contains four main input fields: 'Title' (a single-line text box), 'Description' (a multi-line text area), 'Image' (a text box with a 'Browse...' button), and 'Related Item(s)' (a vertical list box with a 'browse...' button and a 'remove selected items' button). At the bottom of the form are 'save' and 'cancel' buttons.

The Title and Description fields (field, as in *data input field*) are there, as with adding a Folder, and there are two additional things at the bottom. Let's look at the four input items individually:

- *Title* - Use whatever text you want, even with blanks and punctuation (Plone handles web addressing).
- *Description* - Always a good idea, but always optional. Leave it blank if you want.
- *Image* - The Image field is a text entry box along with a Browse... button. You don't have to type anything here; just click the Browse button and you'll be able to browse you local computer for the image file to upload (*Remember*: You need to *remember* where you keep your images on your computer).
- *Related Item(s)* - This is a Plone-specific field that allows powerful association of content items. When you are new to Plone, you may skip this input field. As you gain experience, you may find a need for making such associations, which help with searching for content. The merits of this field are described at the end of this section.

You also notice other tabs: *view*, for looking at the image, *properties*, for entering basic properties, and *sharing*, for setting access to the image for other users. The *view* tab is self explanatory -- click it whenever you need to see what an item will look like when browsed. The *properties* tab, and the basic data it covers, is described at the end of this section. The *sharing*

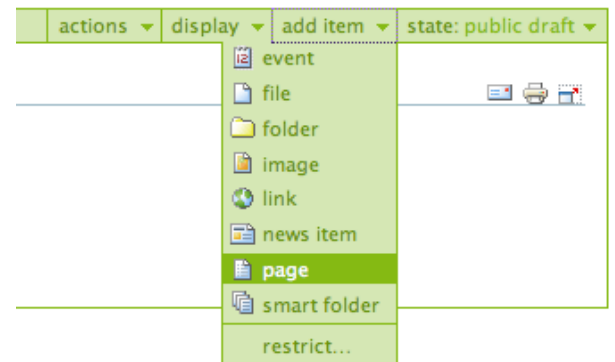
tab is described in a later section dedicated to managing who can see and edit content.

At a minimum, you will type in a title and browse for the image file, then hit *save* at the bottom to upload the image to the Plone web site. You'll have to wait a few seconds for the upload to complete (or a minute or so, if you have a slow Web connection). Plone will show you the uploaded image when done.

2.4. Adding Pages

Pages in Plone vary greatly, but are single "web pages," of one sort or another.

To add a page, use the *add item* menu for a folder:



After clicking to add a page, you'll see the *edit page* panel:

immediately. When you add an image, after uploading, it appears where you put it. When you right-align a paragraph, it immediately shifts to the right.

Underneath the middle panel you see a link for *Edit without visual editor*. This switches out the visual editor (kupu) panel with a simplified edit panel for entering plain text or structured text or restructured text. Plain text is just that: no frills text. Structured text and restructured text are "languages" that allow you to embed styling codes within text, with structured text being the simpler of the two. These are worth learning for speed of input if you do a lot of page creation, or if you are adept at such slightly more geeky approaches. We'll continue here with how to take the typical approach: to use the visual editor (kupu) tool.



Watch a video on using the visual editor to edit the body text of a page.

We will assume here that you understand how to use basic word processing software. There are a few web-specific things in the icon menu, but you'll recognize most as basic standard features:



Basic Formatting

For setting bold, italics, subscript, and superscript, select a word or phrase and click the appropriate icon.

Alignment (Justification)

For justification, place the cursor in a paragraph (you don't have to actually select the whole paragraph) and click the appropriate icon for left, center, or right justification. You may also select multiple paragraphs to apply the same justification across several paragraphs.

Numbered and Bulleted Lists

Numbered and bulleted list formatting are applied to paragraphs by first selecting the paragraphs, then clicking one of the icons. You may set formatting such as bold, italics, subscript and superscript to individual words or phrases before or after setting the paragraphs to a numbered or bulleted list.

Definition Lists

Definition lists are ideal for items involving a word or phrase associated with a paragraph, such as a list of butterfly groups and their descriptions.

Here's what a definition list looks like:

Swallowtails

Family Papilionidae - Swallowtails derive their name from their split long tails. These butterflies are

among the largest and most graceful.

Skippers

Family Hesperidae - Skippers derive their name from their characteristic rapid darting flight.

The steps to create a definition list are a little involved. Follow these steps:

1. Put your cursor on a new blank paragraph where you want the definition list to go.
2. Click the definition list icon.
3. Type the first word or phrase. The word or phrase will be left-aligned and will be in bold.
4. Hit the Return key (Enter key) to make a new line.
5. Type the definition. You will see that the formatting is normal and that it is now indented.
6. Hit the Return (Enter key) to make a new line.
7. Repeat 3 - 6 to add new words or phrases and definitions.

Important: When you are finished with the last definition, you have to hit the Return key *twice* to go back to normal formatting. If you don't, you'll be stuck adding to the definition list.

Blockquotes

Blockquotes are a special kind of paragraph indentation that has a visual style clearly setting it apart from other, normal paragraphs. This formatting style is useful for quotations, hence the name, but can also be used for stylized indentation like this:

indentation level one

indentation level two

indentation level two

indentation level two

indentation level one

indentation level two

indentation level three

indentation level three

indentation level two

indentation level one

To accomplish such blockquote formatting, have your cursor on a paragraph and click either of the blockquote indentation level icons. You may also select multiple paragraphs to change indentation level for a block.

Images

Images may be uploaded directly to a folder [LINK] and then inserted into a Page. But Plone's Page editor allows you to insert images as you write, as a more natural creative process. To add an image, put the cursor where you want the image to appear and click the image icon (tree icon). You'll see the following image insert panel:

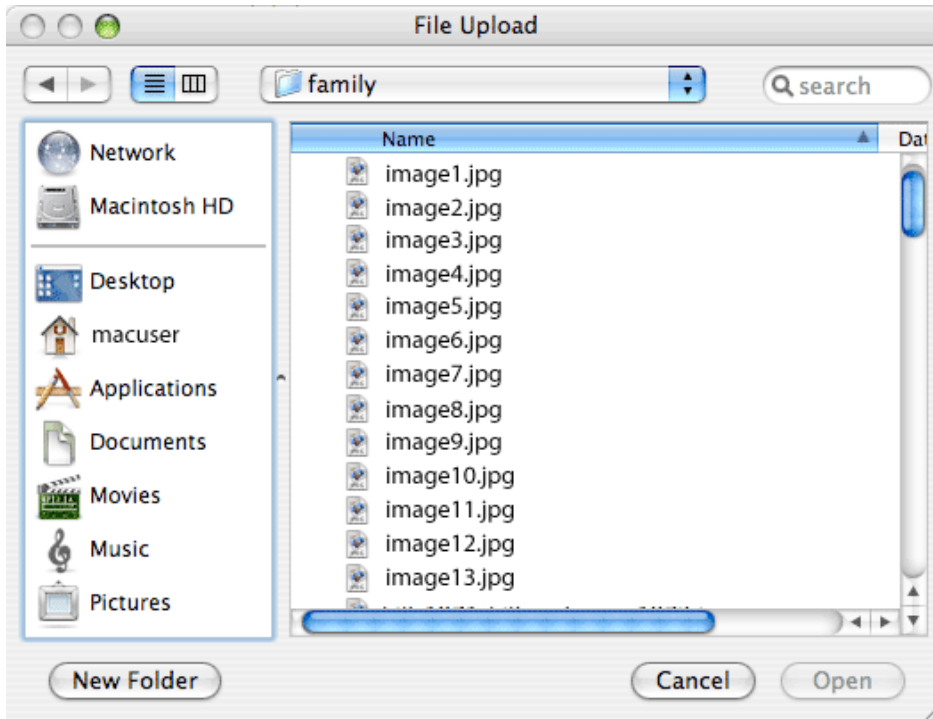


The *insert image* panel shows clickable links in the left column that will show different sets of images already uploaded to the Plone web site. *Home* is the "root" of the entire website (akin to clicking the "c: drive" on a Windows PC or "MacIntosh HD" on a Mac). *Current folder* is just that, the folder where you are adding the new Page. *My recent items* and *Recent items* show list of images that have been added to the Plone web site already, no matter where they are located.

Normally you will just click *Current folder* so you can upload the image to be inserted. We will assume this is the case, and you will see the following panel:



There's the *Upload* link you need to insert your image. Click it and you'll see a familiar file selection dialog box on your local computer, like this one on the Mac:



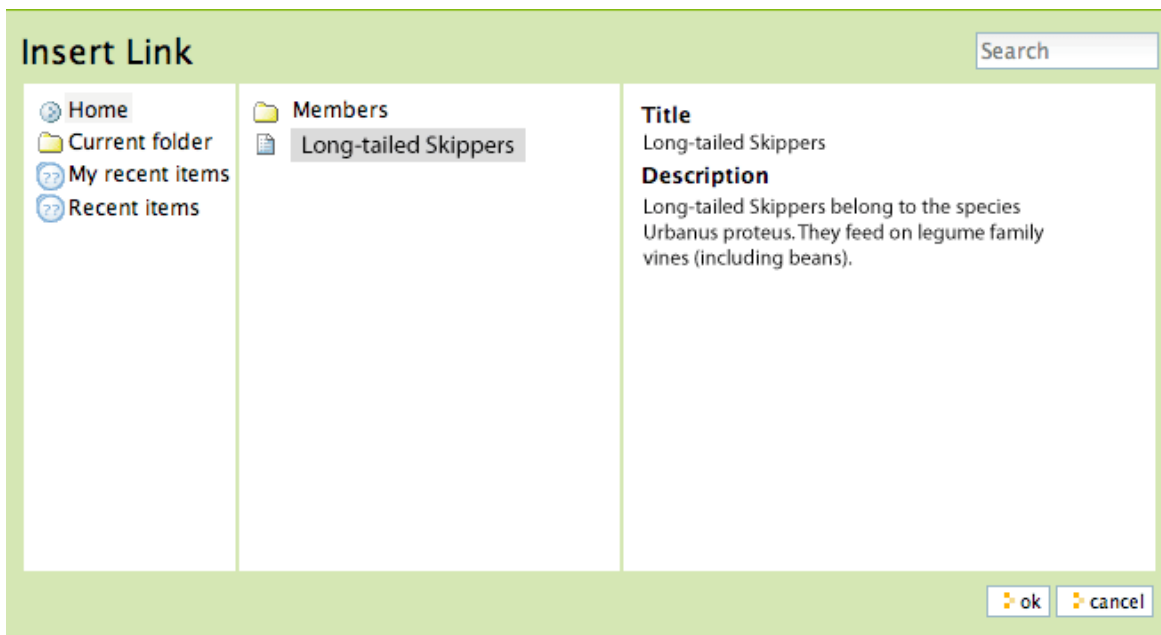
Here, the file selection dialog has been used to select a folder named "family" on the local computer. Any of the images could be selected for upload, and then the image would be transferred up to the Plone web site and -- here's the nice part -- it would also appear within the Page being created, already linked in properly. This is the sort of thing you have to try to appreciate, but it is one of the most important operations you can learn for creating pages on a Plone web site.



Watch a video on adding images to a page.

Internal Links

Select a word or phrase, click the *internal link* icon, and the *insert link* panel will appear:



You use this panel by clicking on Home or Current folder to begin navigating the Plone web site to find a folder, page, or image to which you wish to make a link. In the example above, a page named "Long-tailed Skippers" has been chosen for the link. After this panel is closed, a link to the "Long-tailed Skippers" page will be set for the word or phrase selected for the link.

External Links

Select a word or phrase, click the *external link* icon, and the External link panel will appear:

The screenshot shows a dialog box titled "External Link". At the top, it says "Link the highlighted text to this URL:". Below this is a text input field containing "http://|". To the right of the input field is a "preview" button. Below the input field is a large empty rectangular area. At the bottom right of the dialog are "ok" and "cancel" buttons.

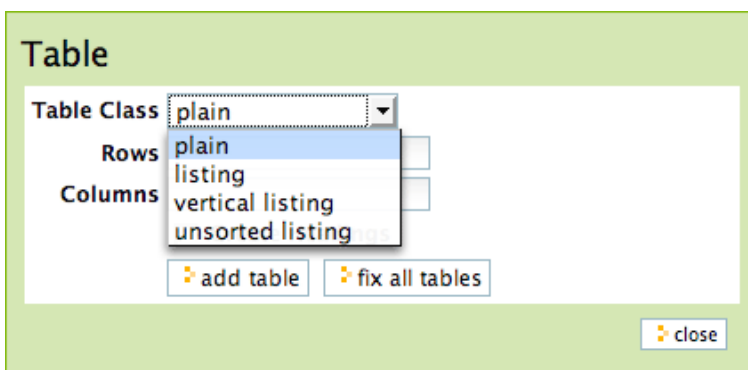
Type the web address of the external website in the box starting with `http://`. You can click *preview* if you need to check the address. If you paste in the web address, make sure you don't have duplicate `http://` at the beginning of the address. Then click *ok*. The external link will be set to the word or phrase you selected.

Tables

Tables are handy for tabular data and lists. To add a table, put your cursor where you want it and click the *add table* icon. You'll see the *add table* panel:

The screenshot shows a dialog box titled "Table". It contains a "Table Class" dropdown menu set to "plain", "Rows" and "Columns" input fields, a "Create Headings" checkbox, and "add table" and "fix all tables" buttons. A "close" button is at the bottom right.

Setting rows and columns is straightforward. If you check the *Create Headings* box you'll have a place to type column headings for the table. Table class refers to how you want the table to be styled. You have choices such as these:



Here are examples of these table styles:

plain:

Thoroughbred Champions Quarter Horse Champions

Man O' War	First Down Dash
Secretariat	Dashing Folly
Citation	Special Leader
Kelso	Gold Coast Express
Count Fleet	Easy Jet

listing:

Thoroughbred Champions Quarter Horse Champions	
Man O' War	First Down Dash
Secretariat	Dashing Folly
Citation	Special Leader
Kelso	Gold Coast Express
Count Fleet	Easy Jet

After the table has been created you can click in a cell to show table resizing handles and row and column add/delete icons:

Thoroughbred Champions Quarter Horse Champions	
Man O' War	First Down Dash
Secretariat	Dashing Folly
Citation	Special Leader
<u>Kelso</u>	Gold Coast Express
Count Fleet	Easy Jet

In the table above, the cursor has been placed in the "Special Leader" cell, which activates little square handles around the edges for resizing the entire table. It also activates add/delete icons for the current cell, the "Special Leader" cell. Clicking the little x in the circle will delete the entire row or column that contains the current cell. Clicking the little arrowhead icons will add a row above or below, or a column to the left or right of the current cell.

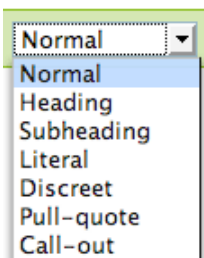
HTML Editor

The HTML Editor is available to people who want to edit the actual HyperText Markup Language code, which web browsers use to describe web pages and web site. Learning HTML basics lets you do special things, but it isn't necessary for typical use. If you click the HTML icon you'll see a panel with the actual

code, which you can edit, and then close the panel to get back to the WYSIWYG view.

Styles

The *Styles* pull-down menu lets you set the style for a selected block of text. Here are typical choices:



Normal is for normal text. Heading is usually bold, a slightly larger font, left-aligned, and with a single horizontal line extending across the page. Subheading is usually bold, an intermediate size font, and left-aligned. Literal is useful for quotes and for lining up text precisely, as with programming language code. Literal text is monospaced text set off by a box:

programming language code:

```
class SortAdvectionVelocities
    __init__(self, advectionVelocities):
        this.advectionVelocities = advectionVelocities

    sortVelocities():
        this.advectionVelocities.sort()
```

or columns of numbers:

```
location      velocity
-----
vector a      21.7
vector b      15.4
vector c      48.3
vector d      38.2
```

You could also use a table for such data.

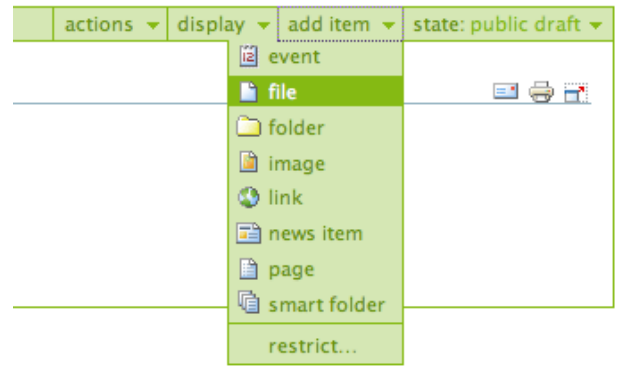
Zoom

The *zoom* icon expands the edit panel to take up the full browser window. Click the icon again and it will toggle back to the normal edit panel size.

2.5. Adding Files

Files of various types can be uploaded to Plone web sites.

Choose file in the *add item* menu for a folder to upload a file:



You will see the *edit file* panel:

Click the *Browse* button to navigate to the file you want to upload from your local computer. Provide a title (you can use the same file name used on your local computer if you want). Provide a *description*, or select *Related Item(s)* if you want. When you click the save button the file will be uploaded to the folder.



Watch a video on adding a file.

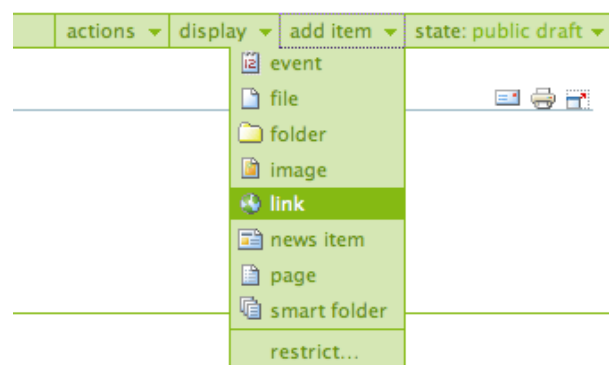
Example file types include PDF files, Word documents, database files, zip files... -- well, practically anything. Files on a Plone web site are treated as just files and will show up in contents lists for folders, but there won't be any special display of them. They will appear by name in lists and will be available for download if clicked.

There are specialized add-on tools for Plone web sites that search contents of files. If you are interested in this functionality, ask your Plone web site administrator.

2.6. Adding Links

Links to web pages within a Plone web site and to web pages at other web sites are easily created.

Add a link by clicking the menu choice in the *add item* menu for a folder:



You will see the *edit link* panel:

view edit properties sharing

Edit Link

by [John Smith](#) — last modified 2007-07-05 10:22

A link to an internal or external resource.

Title ■

Description
A short summary of the content

URL ■

Related Item(s)

Good titles for links are important, because the titles will show up in lists of links, and because there tend to be quite a number of links held in a folder as a set. Paste the web address in the URL field or type it in. There is no preview feature here, so it is best to paste the web address from a browser window where you are viewing the target for the link.

Links created in this way will result in discrete content items, as compared to links embedded within web pages. Having links as discrete items lets you do things like organizing them in folders or setting keywords on them to facilitate grouping in lists and search results.

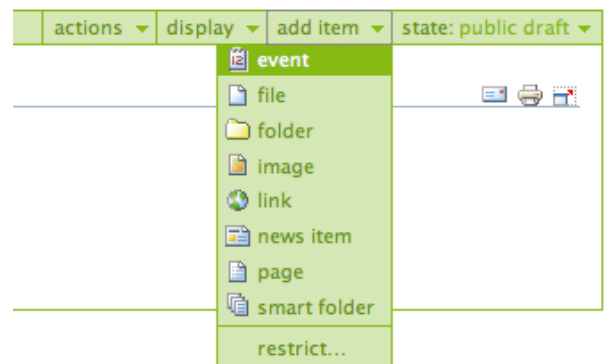


Watch videos about adding a link for an email address and adding links to external and internal documents.

2.7. Adding Events

Plone web sites have a built-in system for managing and showing calendar events.

Use the *add item* menu for a folder to add an event:



You will see rather large *edit event* panel:

view edit properties sharing

Edit Event



by [John Smith](#) — last modified 2007-07-05 10:57
Information about an upcoming event, which can be displayed in the calendar.

Title

Description

A short summary of the content

Event Starts

2007 / July / 5 10 : --

Event Ends

2007 / July / 5 10 : --

Event Location

Event body text

Text Format HTML



[Edit without visual editor](#)

Attendees

Event Type(s)

Existing keywords

New keywords

Event URL

Web address with more info about the event. Add http:// for external links.

Contact Name

Contact E-mail

Contact Phone

From the top, we have the following fields:

- *Title* - **REQUIRED**
- *Description*
- *Start date and time* - **REQUIRED**
- *End date and time* - **REQUIRED**
- *Event location*
- *Event body text* (visual editor panel)
- *Attendees*
- *Event type(s)*
- *Event URL*
- *Contact Name*
- *Contact Email*
- *Contact Phone*
- *Related Item(s)*

Note that only three fields, title and start and end date and time, are required. So, although this is a large input panel, if you are in a hurry, just type in the title and the start and end times and save. Of course, if you have the information, you should type it in.

One part of the panel needs a bit more explanation: the event start and end times. The year, month, day, and other fields are simple pull-down menus. But for the day, often you can't remember exactly and you need to consult a calendar. There is a handy pop-up calendar that offers an alternate way to select the day. If you click one of the little calendar icons adjacent to the day pull-down, :

Event Starts ■
 2007 / July / 5 10 : --

Event Ends ■
 2007 / July / 5 10 : --

you'll see this pop-up calendar:

Event Starts ■
 2007 / July / 5 10 : --

Event Ends ■ ? July, 2007 x

2007 / Today : --

wk	Mon	Tue	Wed	Thu	Fri	Sat	Sun
26							1
27	2	3	4	5	6	7	8
28	9	10	11	12	13	14	15
29	16	17	18	19	20	21	22
30	23	24	25	26	27	28	29
31	30	31					

Select date

Just click the day and it will be set. Fill in the fields for which you have information and save the event, but remember:

*It will not show on the main web site calendar until it has been **published**.* <-- **READ THIS!**

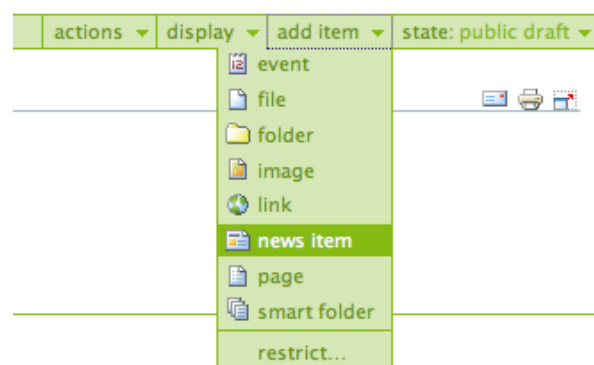


Watch a video on adding an event.

2.8. Adding News Items

Plone web sites have a built-in system for publishing news items.

Use the *add item* menu for a folder to add a news item:



You will see the *edit news item* panel:

The *Image* and *Image Caption* fields, proper, are for adding an image to be used as a representative graphic for the news item, for posting in news item listings.

As with events showing up in the calendar: *News items will not appear in the main web site news listing until they are **published**.*



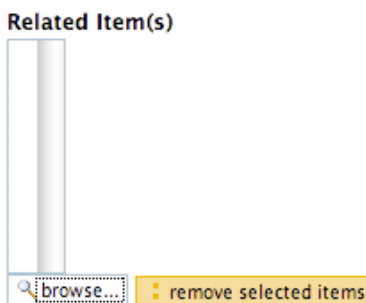
Watch a video on adding a news item.

2.9. Establishing Relationships

Plone has a built-in system for identifying connections between content items.

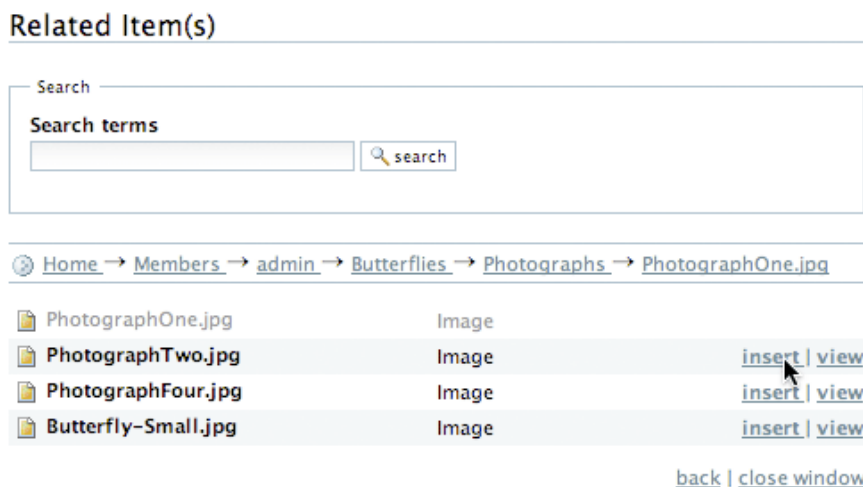
On several of those screen captures illustrating adding content, you may have noticed a *Related Items* area at the bottom of edit panels. This is where you can pick related items to establish connections between content items. Once items have been related to one another, links will automatically show for related items when an item is viewed. You can't do this for folders, but you can for regular content, such as pages and images.

For example, in a folder containing several photographs, you may wish to relate two of them so that when one is viewed, a link to the other will show. First, click the image (this image is called PhotographOne.jpg) and choose the edit tab. At the bottom will be the simple Related Item(s) input area:



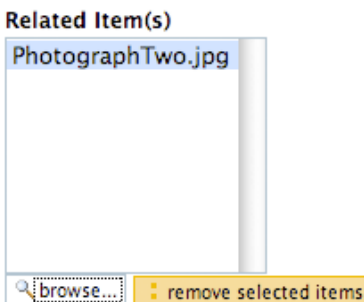
Clicking the *browse...* button will bring up a search panel to find items you may relate to PhotographOne.jpg:

[back](#) | [close window](#)



PhotographOne.jpg is shown greyed out (you can't relate an item to itself), and other images in the current folder are shown. If there were pages or other content items in the folder, they would show too. There is a search box if you would like to find items outside of the current folder. The list of items at the bottom has

insert / *view* choices at far right. In this example, the *insert* choice is about to be made to select PhotographTwo.jpg, which will be added to the list of items relating to PhotographOne.jpg:



Now, when PhotographOne.jpg is viewed, a link to PhotographTwo.jpg will be shown at the bottom of the display:



This is an easy way to give life to your website, so that content, however nicely organized it may be within folders, will have a dynamic aspect. Use your imagination, but concentrate on making sensible choices for establishing relationships. There are other ways of making connections in Plone, through use of SmartFolders, but the ease of setting related items at the time of content creation, or upon item editing, is a feature that should not be overlooked.

2.10. Setting Basic Properties

The properties tab panel has several fields for basic information about content items.

The properties tab panel has input fields for basic descriptive information called metadata. Metadata is sometimes called "data about data." The panel contains settings and fields for:

- whether the item shows up in the navigation menu
- keywords you wish to add or set
- a list of contributors for the item
- principle and secondary creators
- effective date
- expiration date
- language setting for the item
- copyrights that may pertain

- and whether discussion is allowed on the item

The properties tab panel:

contents view edit properties sharing
display ▼ add to folder ▼ state: public draft ▼

Edit Page

This information, also referred to as *metadata* is the collection of information that is used to categorize an object, assign effective dates and expiration dates, language, and keywords.

Exclude from navigation
If selected, this item will not appear in the navigation tree

Keywords

Existing keywords

New keywords

Contributors
The names of people that have contributed to this item. Each contributor should be on a separate line.

Creators
Persons responsible for creating the content of this item. Please enter a list of user names, one per line. The principal creator should come first.

admin

Effective Date
Date when the content should become available on the public site

2007 / -- / -- -- : --

Expiration Date
Date when the content should no longer be visible on the public site

2007 / -- / -- -- : --

Language

Language neutral (site default) ▼

Copyrights
The copyrights on this item.

Allow Discussion on this item

Default
 Enabled
 Disabled

There is no requirement to specify this information, but it is a good idea to do so when there are several people involved in content creation, especially if there are multiple creators and contributors working in groups. You don't always need fields such as effective and expiration dates, language, and copyrights, but these data should be specified when appropriate. A content management system can only be as good as the data completeness allows. Specifying keywords requires attention, but if you are able to get into the habit,

and are thoughtful to create a meaningful set of keywords, there is a return on the investment through searching and other facilities in Plone. You'll be able to put your finger on what you need, and can discover and use relationships within the content.

3. Managing Content

The contents tab is the place where content items can be copied, cut, pasted, moved, renamed, etc.

3.1. Editing Content

Editing Plone content works the same as adding content -- usually the data entry and configuration panels for the content are the same for editing as for adding.

Of course, when we edit an item of content, the item already exists. Click the edit tab for an item and you will see the data entry panel for the item, along with the existing values of the item's data.

For an example of something really simple, where editing looks the same as adding, we can review how to edit a folder.

The *edit* panel for a folder simply shows the title and description input areas. Often a description is not provided for a folder, so the only thing to change is the title. If you do wish to give a description, which is a good idea for distinguishing folders in a list, the description can be text only -- there is no opportunity for setting styling of text, such as bold, italics, or other formatting. This keeps the descriptions of Plone content items as simple as possible.

Here is the *edit* panel for a folder, in this case, one called "Butterflies":

The screenshot shows the 'Edit Folder' interface in Plone. At the top, there are five tabs: 'contents', 'view', 'edit', 'properties', and 'sharing'. Below the tabs are four buttons: 'actions', 'display', 'add item', and 'state: public draft'. The main content area is titled 'Edit Folder' and shows the following information:

- by [John Smith](#) — last modified 2007-07-07 19:12
- A folder which can contain other items.
- Title**
- Description**
- Buttons:

That's it. Change what you want and save, and the content item will be updated in Plone's storage system. You can repeatedly edit content items, just as you can repeatedly edit files on your local computer. By now you have appreciated that Plone stores discrete content items as separate entities, akin to "files" on a local computer, but you really don't have to think about it that way. Plone is a content management system, where

the content comes in the form of numerous discrete content items that may be individually edited. Edit away at your heart's content.

For an example of editing a content item that is a bit different than adding in the first place, we can examine editing an image. Editing an Image can be done by navigating to an individual image and clicking the edit tab. Clicking the *edit* tab for the image, you will see the following *edit* panel:

view edit properties transform sharing

actions add to folder state: public draft

Edit Image

by [John Smith](#) — last modified 2007-07-29 10:38


An image, which can be referenced in documents or displayed in an album.


Title ■

Description

A short summary of the content

Image ■



 [Current image](#) PNG image — 13 KB

Keep existing image

Delete current image

Replace with new image:

Related Item(s)

Here, an image called Butterfly-small.jpg is being edited. You can change the title and description, as usual, in which case you would usually keep the setting to "Keep existing image." You can also change the image itself by checking the "Replace with new image" choice. Or, clicking the "Delete current image" choice will simply delete the image entirely. The "Related Item(s)" setting at the bottom is the same one always present for Plone content.

So, editing an image is a bit different than adding one in the first place, but not by much.

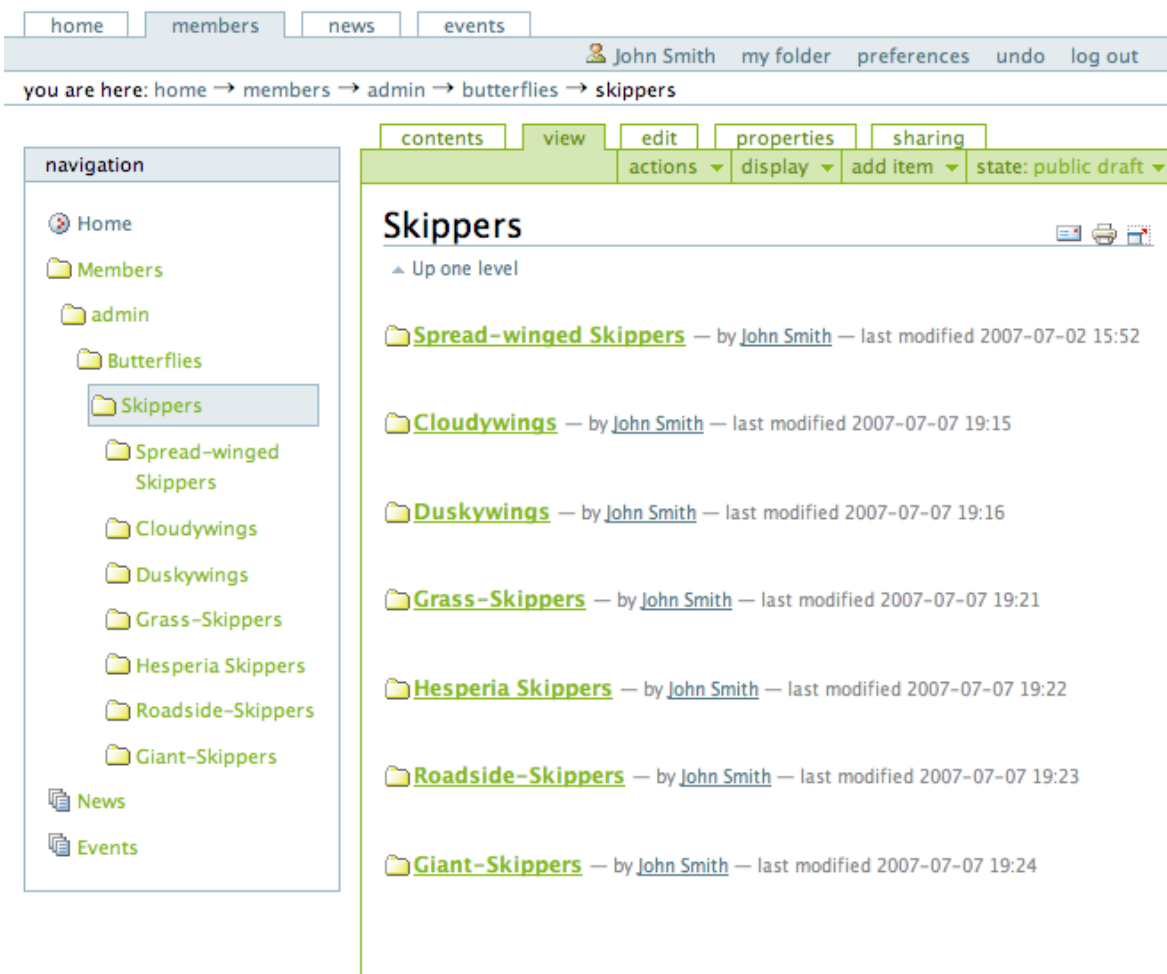
Editing panels for other content items are straightforward.

3.2. Folder View

The folder view panel shows one of several ways of listing folder contents.

For most content items, if you want to change how it looks, you edit the content directly. But folders are a different animal. As containers of other items, folders are "where the action is" in Plone, so we will treat folder management in this and the following section.

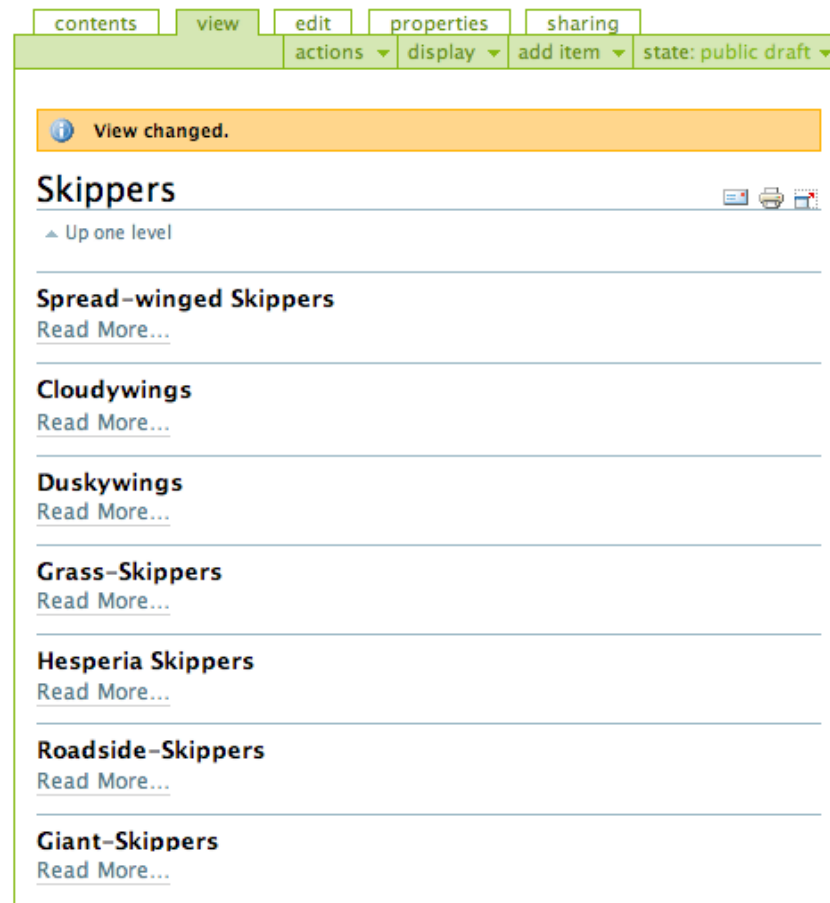
Consider a scenario where a butterfly enthusiast, John Smith, has logged in to his web site to work on the part devoted to Skipper butterflies. He navigates to the "Skippers" folder by clicking the navigation menu, which is on the left in his default Plone web site design. When he clicks the "Skippers" folder in the navigation menu, the view tab panel, or just "the view," for the folder is shown:



The *view tab panel* will show the *view* of any content item. The *view* is always how a content item would show for anonymous web site visitors. Click the *view tab* when you want to see what something looks like after you have changed something. For folders, you will see a listing of contained content items, in one of several list presentations, selected via the *display* pull-down menu. The default view is called *standard view*:



And, here is *summary view*:



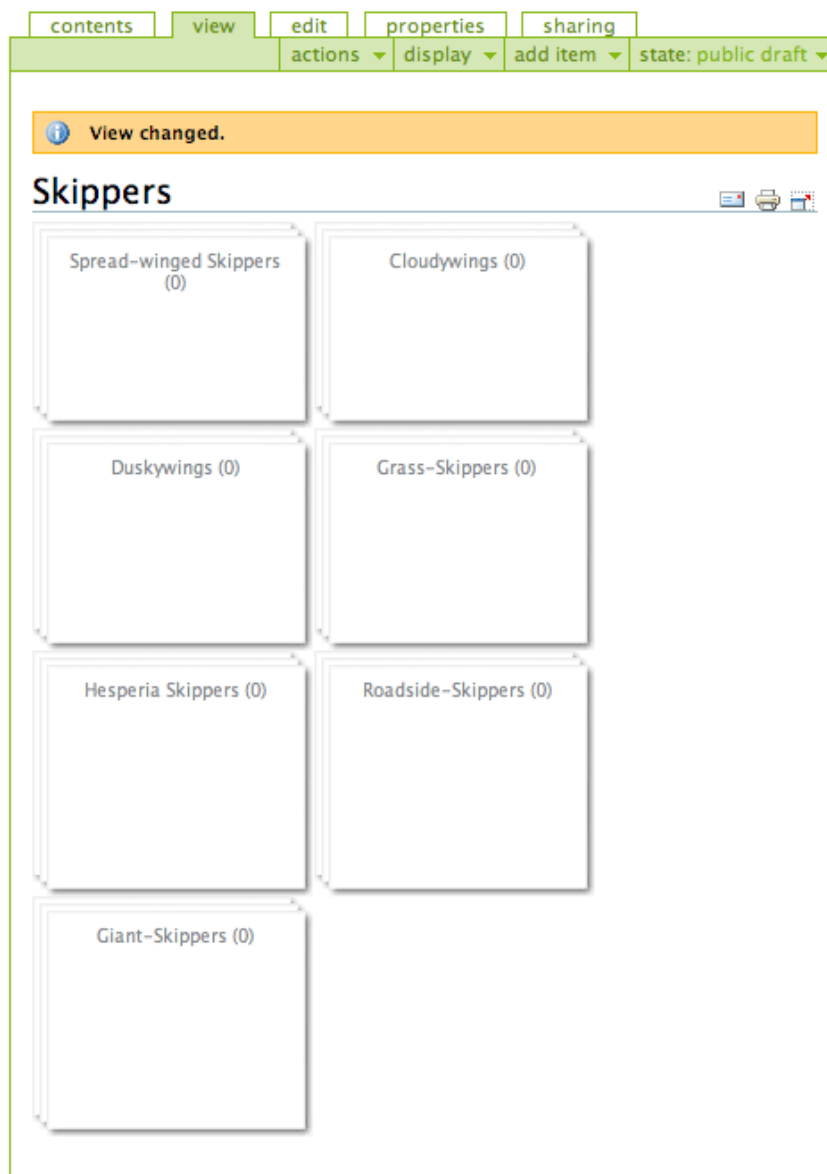
And, *tabular view*:



The screenshot shows the Plone CMS interface with a navigation bar at the top containing tabs for 'contents', 'view', 'edit', 'properties', and 'sharing'. Below the navigation bar is a secondary bar with 'actions', 'display', 'add item', and 'state: public draft'. A yellow notification bar at the top of the content area reads 'View changed.' The main heading is 'Skippers', with a link to 'Up one level' and icons for email, print, and refresh. Below the heading is a table with the following data:

title	author	type	modified
 Spread-winged Skippers	John Smith	Folder	2007-07-02 15:52
 Cloudywings	John Smith	Folder	2007-07-07 19:15
 Duskywings	John Smith	Folder	2007-07-07 19:16
 Grass-Skippers	John Smith	Folder	2007-07-07 19:21
 Hesperia Skippers	John Smith	Folder	2007-07-07 19:22
 Roadside-Skippers	John Smith	Folder	2007-07-07 19:23
 Giant-Skippers	John Smith	Folder	2007-07-07 19:24

And, *thumbnail view*, which is mainly useful for photographs, but still works for normal content:



Making a photo album is easy. Just add the photographs (images, or image files, the most common being .jpg files) to a folder and set the display view for the folder as thumbnail view. Thumbnail view will automatically handle the display as images are added to the folder, presenting a multi-page division into sets of images, as needed, as the number of images grows. If you are uploading photographic images from a digital camera or scanner, you will most likely want to resize them on your local computer before uploading them, because they are too large. This is described in a later section of this manual.

Setting an Individual Content Item as the View for a Folder

The basic list view functionality described above for folders fits the normal way we think of folders -- as containers of items -- but Plone adds a nice facility to set the view of a folder to be that of any single item contained within the folder. This takes advantage of the way the navigation system gets automatically wired up in a Plone web site as folders are created (As folders are created and published, they automatically show up in the navigation menu). Consider several scenarios where the custom display setting feature for a folder is very useful:

- Let's say you are setting up a hierarchy of web pages, with customized text on the pages and links to other pages. This is a case where you as the web page designer would like to control what the pages look like, how the links to other pages appear, perhaps as links in a table or as icons in a graphic

design. For a custom web page that will contain links to "sub web pages," you would add the page to a folder and then set the default display view for the folder to be the contained page. The display menu is one of the basic menus available for a folder (Look at any of the screen capture images above). The basic folder views described above will be overridden, and when the folder is clicked in the navigation menu, the web page with the customized links to "sub web pages" will show. This may seem a bit daunting, but people who have created fairly complicated web page hierarchies and menu systems appreciate this functionality, because of the intimate way folders form the navigation system of Plone web sites. A custom web page for a folder can be an elaborate graphical design, or it can be a simple textual description with instructions to use the navigation menu, as the following video illustrates:



Watch a video about setting the page display view.

- For another situation where this functionality is useful, consider a folder as a container of a document that gets updated periodically. There could be twenty versions of the document in the folder, but only one is current. The display of the folder would have been set to show the view of the first version of the document, when it was first created. As new documents were uploaded, the display of the folder was reset each time to show the current document, and the defunct documents were kept around for posterity, but set as private, so they won't appear.
- This dual nature of Plone folders, acting as generic containers or as navigation-wired "nodes" in a hierarchy, allows a kind of put-stuff-where-you-need-it approach. As the site is developed, folders get naturally created as work progresses. Pre-existing files, images, web pages get uploaded or newly created in folders throughout the web site. By "naturally" here, we mean that storage of content just falls out in the normal course of doing the work, just as you would add and organize files on your personal computer without thinking about it too hard. Before you know it, you have a large system of folders in a hierarchy, with some folders containing all sorts of files. Plone web sites get like that too, but this is a good thing -- it is a content management system, after all. An individual folder might contain all sorts of old pages, supporting data files and documents, original graphics files, etc., but if the display view for the folder is set to a single page amongst the crowd, the other documents will not be seen when the web site is surfed. But they will be there next year when you ask, "Now where did I put the original Adobe Illustrator version of that graphic?," and answer "Oh, yes, it is in the folder along with all the other stuff on that project." This way of doing things -- taking advantage of the storage system aspect of Plone -- is very important when several people share web site folder access and work collaboratively, but it happens even for web sites managed by a single person.

These examples illustrate that the flexibility of Plone folders is a central feature in the content management system.

Next, we move to the *contents* tab to see important functions for managing content.

3.3. Folder Contents

The contents tab shows a list of items in a folder. It is the place for simple item-by-item actions and for the manipulative actions of copy, cut, paste, move, reorder, etc.

The contents tab for folders is like "File Manager" or "My Computer" system utilities in Windows and Linux desktops and the "Finder" in Mac OS X, with similar functionality.

Clicking the *contents* tab for a folder, such as the "Skippers" folder below, shows the *contents* tab panel:

The screenshot shows the Plone CMS interface. At the top, there are navigation tabs: home, members, news, and events. Below these, a user profile for John Smith is shown with links for my folder, preferences, undo, and log out. A breadcrumb trail indicates the current location: you are here: home → members → admin → butterflies → skippers.

The main content area is titled 'Skippers' and has a 'contents' tab selected. Below the tab are buttons for 'view', 'edit', 'properties', and 'sharing'. A dropdown menu for 'actions' is open, showing options: 'display', 'add item', and 'state: public draft'. Below this is a table listing the contents of the 'Skippers' folder:

<input type="checkbox"/>	title	size	modified	state	order
<input type="checkbox"/>	Spread-winged Skippers	1 kB	2007-07-02 15:52	Public Draft	▲ ▼
<input type="checkbox"/>	Cloudywings	1 kB	2007-07-07 19:15	Public Draft	▲ ▼
<input type="checkbox"/>	Duskywings	1 kB	2007-07-07 19:16	Public Draft	▲ ▼
<input type="checkbox"/>	Grass-Skippers	1 kB	2007-07-07 19:21	Public Draft	▲ ▼
<input type="checkbox"/>	Hesperia Skippers	1 kB	2007-07-07 19:22	Public Draft	▲ ▼
<input type="checkbox"/>	Roadside-Skippers	1 kB	2007-07-07 19:23	Public Draft	▲ ▼
<input type="checkbox"/>	Giant-Skippers	1 kB	2007-07-07 19:24	Public Draft	▲ ▼

Below the table are buttons for 'copy', 'cut', 'rename', 'delete', and 'change state'. On the left, a navigation sidebar shows a tree structure: Home, Members, admin, Butterflies (selected), Skippers (selected), Spread-winged Skippers, Cloudywings, Duskywings, Grass-Skippers, Hesperia Skippers, Roadside-Skippers, and Giant-Skippers. At the bottom of the sidebar are links for News and Events.

The *contents* tab panel is immediately recognized by observing the check boxes beside the items in the contents list. Click these check boxes to select multiple items for performing *copy*, *cut*, *rename*, *delete*, or *change state* operations.

Plone has a clipboard for *copy* and *cut* operations. If you check one or more items, and click cut or copy, a paste button will be added to the row of buttons along the bottom of the panel. If you then click another folder, you'll be able to paste the items there. For a cut operation, the items will remain in the source folder -- they won't disappear -- until they are pasted somewhere.

Renaming items will show a panel for entering a new name for the *short name* (or *id*) of the item, as well as the *title*. The distinction between *short name* and *title* is one that becomes apparent only when you rename, because Plone automatically creates the *short name* from the *title* in most Plone web sites. But the renaming operation must show you the *short name* as well as the *title*, because usually would want to change both, if changing either. Consider the following example:

Rename item

Each item has a Short Name and a Title, which you can change by entering the new details below.

Swallowtails (swallowtails)

New Short Name
Short name is the part that shows up in the URL of the item.

swallowtails

New Title
Swallowtails

If you were to change the title to "Long-tailed Skippers," you would also change the short name to "long-tailed-skippers." This keeps things tidy -- it keeps them correct, so that the URL for the item, the web address, is kept up-to-date with the actual content item. Note that the short name should contain no blanks. Use dashes for any blanks in the title, and otherwise make it a carbon copy of the title. Also, use lowercase for the short name. See also the page "What's in a Web Name?" for a description of how Plone handles web addressing and the short name. The following video also includes in illustration of renaming:



Watch a video that includes renaming an item.

The *delete* operation is straightforward. Click to select one or more items, and then the delete button, and the items will be deleted.

The *change state* operation offers a great way to change the publication state of a selection of folders, and their subfolders if you select this option. In the following example, the publication state for a folder called "Long-tailed Skippers" is being modified. Checking the "Include Folder Items" will make the state change affect all contained content. Don't forget that you can do this to, say, three folders at a time, and all of their subfolders and contained content, so that in one fell swoop you can quickly publish, unpublish, etc.

In addition to these individual action operations, reordering is a natural mouse-driven manipulation, as described in the next section.

3.4. Reordering Items

The contents tab panel contains functionality for quick and precise reordering of items in a folder.

Consider the following folder, called "Skippers," for holding information about this type of butterfly. Often, when we add content items, we don't initially get them in the order we want. The desired ordering is not always alphabetical, but in this example we can assume so. Below you see the Skipper butterfly subfolders are not in alphabetical order:

The screenshot shows the Plone CMS interface. At the top, there are navigation tabs for 'home', 'members', 'news', and 'events'. Below these, the user 'John Smith' is logged in, with links for 'my folder', 'preferences', 'undo', and 'log out'. A breadcrumb trail indicates the current location: 'you are here: home → members → admin → butterflies → skippers'.

The main content area is titled 'Skippers' and contains a table of sub-folders. The table has columns for 'checkbox', 'title', 'size', 'modified', 'state', and 'order'. The data is as follows:

<input type="checkbox"/>	title	size	modified	state	order
<input type="checkbox"/>	Spread-winged Skippers	1 kB	2007-07-02 15:52	Public Draft	▲ ▼
<input type="checkbox"/>	Cloudywings	1 kB	2007-07-07 19:15	Public Draft	▲ ▼
<input type="checkbox"/>	Duskywings	1 kB	2007-07-07 19:16	Public Draft	▲ ▼
<input type="checkbox"/>	Grass-Skippers	1 kB	2007-07-07 19:21	Public Draft	▲ ▼
<input type="checkbox"/>	Hesperia Skippers	1 kB	2007-07-07 19:22	Public Draft	▲ ▼
<input type="checkbox"/>	Roadside-Skippers	1 kB	2007-07-07 19:23	Public Draft	▲ ▼
<input type="checkbox"/>	Giant-Skippers	1 kB	2007-07-07 19:24	Public Draft	▲ ▼

Below the table are buttons for 'copy', 'cut', 'rename', 'delete', and 'change state'. A left-hand navigation pane shows a tree structure with 'Home', 'Members', 'admin', 'Butterflies', 'Skippers', 'Spread-winged Skippers', 'Cloudywings', 'Duskywings', 'Grass-Skippers', 'Hesperia Skippers', 'Roadside-Skippers', and 'Giant-Skippers'. 'News' and 'Events' are also visible at the bottom of the navigation pane.

One way to move the top item, "Spread-winged Skippers," to the bottom of the list would be to click the small down arrow icon on the right, and keep working it down to the bottom. This is useful for small changes, but for such a multi-row move, it is better to click the top row and drag it to the bottom and drop it there (a so-called "drag and drop" action). Take care to click in an area of the row to be moved where the cursor is not over any text (click in the open space between the words), and simply drag and drop (hold the mouse button down as you move the item), as the following little animation illustrates:



The item that is being moved turns yellow as it is being moved. When the mouse button is released, the item stays where it was dragged. Click the view tab to see the reordered listing.

3.5. Cutting, Copying and Pasting Items

Cut, copy, and paste operations involve moving one or more items from one folder to another.

Cut/Paste

Moving items from one area to another on a website is a common task. Often this need arises with placement of content in the wrong folder. For example, if the author of the following content about Skipper butterflies realizes that a Swallowtail butterfly was mistakenly included -- the Eastern Tiger Swallowtail folder shown below -- the folder can simply be moved with a *cut/paste* operation:

The screenshot shows the Plone CMS interface for the 'Skippers' folder. The interface includes a navigation bar with tabs for 'contents', 'view', 'edit', 'properties', and 'sharing'. Below the navigation bar are dropdown menus for 'actions', 'display', 'add item', and 'state: public draft'. The main content area displays a list of folders under the heading 'Skippers'. The 'Eastern Tiger Swallowtail' folder is selected, indicated by a checked checkbox. Below the list, a row of action buttons is visible: 'copy', 'cut', 'rename', 'delete', and 'change state'. The 'cut' button is highlighted with a mouse cursor.

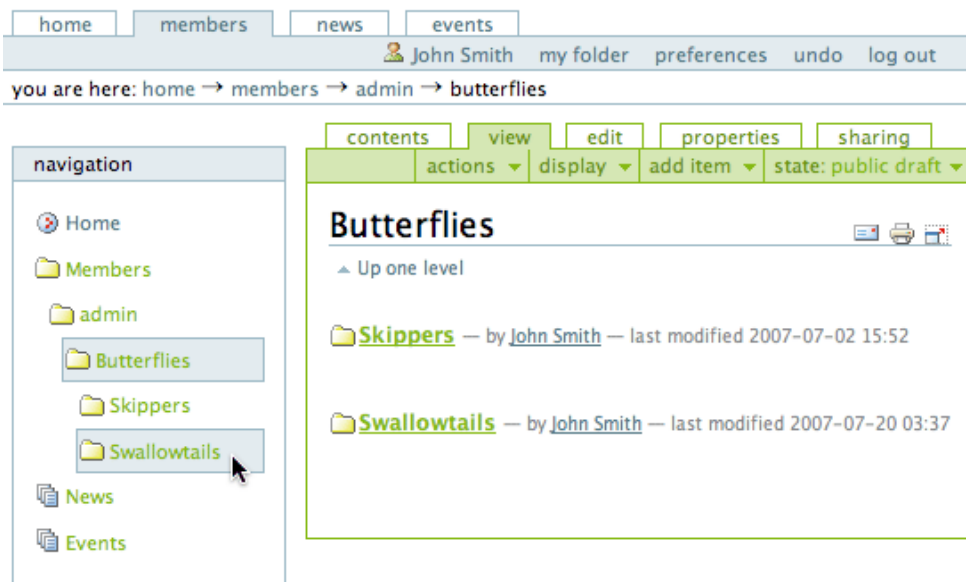
<input type="checkbox"/>	title	size	modified	state	order
<input type="checkbox"/>	Cloudywings	1 kB	2007-07-07 19:15	Public Draft	▲ ▼
<input type="checkbox"/>	Duskywings	1 kB	2007-07-07 19:16	Public Draft	▲ ▼
<input type="checkbox"/>	Grass-Skippers	1 kB	2007-07-07 19:21	Public Draft	▲ ▼
<input type="checkbox"/>	Hesperia Skippers	1 kB	2007-07-07 19:22	Public Draft	▲ ▼
<input checked="" type="checkbox"/>	Eastern Tiger Swallowtail	1 kB	2007-07-20 03:20	Public Draft	▲ ▼
<input type="checkbox"/>	Roadside-Skippers	1 kB	2007-07-07 19:23	Public Draft	▲ ▼
<input type="checkbox"/>	Giant-Skippers	1 kB	2007-07-07 19:24	Public Draft	▲ ▼
<input type="checkbox"/>	Spread-winged Skippers	1 kB	2007-07-02 15:52	Public Draft	▲ ▼

Note that the Eastern Tiger Swallowtail folder has been checked, and that the *cut* button is about to be clicked. After clicking the *cut* button, the screen will show a new *paste* button. The Eastern Tiger Swallowtail folder and all of its contents are now in the web site's "memory." The Eastern Tiger Swallowtail folder does not immediately disappear, however, awaiting the actual *paste* operation:

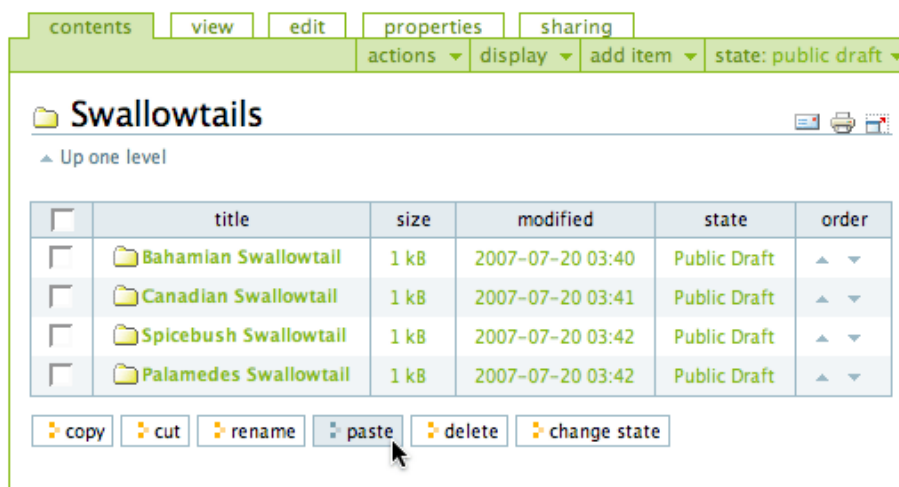
The screenshot shows the Plone CMS interface for the 'Skippers' folder, identical to the previous one, but with the 'paste' button now active and highlighted. The 'Eastern Tiger Swallowtail' folder remains selected in the list.

<input type="checkbox"/>	title	size	modified	state	order
<input type="checkbox"/>	Cloudywings	1 kB	2007-07-07 19:15	Public Draft	▲ ▼
<input type="checkbox"/>	Duskywings	1 kB	2007-07-07 19:16	Public Draft	▲ ▼
<input type="checkbox"/>	Grass-Skippers	1 kB	2007-07-07 19:21	Public Draft	▲ ▼
<input type="checkbox"/>	Hesperia Skippers	1 kB	2007-07-07 19:22	Public Draft	▲ ▼
<input type="checkbox"/>	Eastern Tiger Swallowtail	1 kB	2007-07-20 03:20	Public Draft	▲ ▼
<input type="checkbox"/>	Roadside-Skippers	1 kB	2007-07-07 19:23	Public Draft	▲ ▼
<input type="checkbox"/>	Giant-Skippers	1 kB	2007-07-07 19:24	Public Draft	▲ ▼
<input type="checkbox"/>	Spread-winged Skippers	1 kB	2007-07-02 15:52	Public Draft	▲ ▼

The *paste* button is now active. The next step is to navigate to the destination folder, in this case the Swallowtails folder:



After clicking the Swallowtails folder, the *paste* button will continue to show, because the paste operation has not yet been completed:



And last, clicking the *paste* button for the destination folder adds the Eastern Tiger Swallowtail folder to its proper place in the Swallowtails folder, and cuts it from the original location, the Skippers folder, and the *cut/paste* operation is complete.

Copy/Paste

A *copy/paste* operation is identical to the *cut/paste* operation, except that there is no removal of content from the original folder. It works as you would expect it to work.

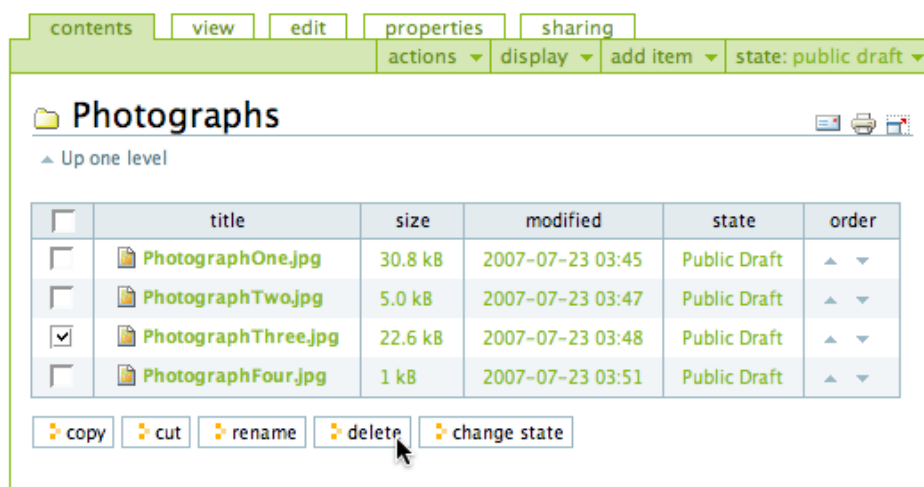


Watch a video about performing these operations.

3.6. Deleting Items

Items may be deleted from a folder with ease.

Sometimes it is necessary to delete a content item, often to replace it with an updated version. For example, perhaps you uploaded a photograph, only to realize that you picked the wrong one to upload from your local computer. Simply go to the contents tab and find the uploaded photograph, click to check it, then click the delete button:



In the example shown above, PhotographThree.jpg is about to be deleted.

Entire folders may be deleted, so care must be taken with the delete operation, but this is true for computer use in general, and we all have learned to do a last minute self-check to make sure the delete operation is intended.

As you will see in the next section, an *undo* operation is available, which offers some measure of protection against inadvertent deletion and major editing operations.

3.7. Undo!

Plone offers the chance to undo the last operation performed.

The *undo* operation is available for undoing one or several recent changes. To undo, click the undo link to the right of your name at the top of the edit area:

The screenshot shows the Plone 2.5 web interface. At the top, there is a navigation bar with tabs for 'home', 'members', 'news', and 'events'. Below this, a user profile for 'John Smith' is visible with links for 'my folder', 'preferences', 'undo', and 'log out'. A breadcrumb trail indicates the current location: 'you are here: home → members → admin → butterflies → photographs'.

The main content area is divided into a left sidebar and a right main panel. The sidebar, titled 'navigation', contains a tree view of the site structure: Home, Members (admin, Butterflies, Skippers, Swallowtails, Photographs), News, and Events. The 'Photographs' folder is selected.

The main panel shows the 'Photographs' folder view. It includes a toolbar with 'contents', 'view', 'edit', 'properties', 'sharing', 'actions', 'display', 'add item', and 'state: public draft'. A message box at the top states 'Item(s) deleted.'. Below this is a table listing the contents of the folder:

<input type="checkbox"/>	title	size	modified	state	order
<input type="checkbox"/>	PhotographOne.jpg	30.8 kB	2007-07-23 03:45	Public Draft	▲ ▼
<input type="checkbox"/>	PhotographTwo.jpg	5.0 kB	2007-07-23 03:47	Public Draft	▲ ▼
<input type="checkbox"/>	PhotographFour.jpg	1 kB	2007-07-23 03:51	Public Draft	▲ ▼

Below the table are buttons for 'copy', 'cut', 'rename', 'delete', and 'change state'.

After clicking *undo*, you will see a list of recent changes to the web site, in the order of most recent on top of the list. Click to check the actions you would like to undo, and then click the *undo button* at the bottom of the list:

undo	action performed	date and time
<input checked="" type="checkbox"/>	Deleted PhotographThree.jpg (/butterflies/photographs/butterflies_folder_text.png)	2007/07/23 04:06:29.137 GMT-5
<input type="checkbox"/>	Initiated creation of Image with id image.2007-07-23.5408503761 in http://localhost:8080/Plone/Members/admin/butterflies/photographs	2007/07/23 03:51:47.222 GMT-5
<input type="checkbox"/>	Initiated creation of Image with id image.2007-07-23.4870035761 in http://localhost:8080/Plone/Members/admin/butterflies/photographs	2007/07/23 03:49:05.359 GMT-5
<input type="checkbox"/>	Initiated creation of Image with id image.2007-07-23.2122996914 in http://localhost:8080/Plone/Members/admin/butterflies/photographs	2007/07/23 03:49:02.283 GMT-5

undo

Using *undo* on a Plone web site, as with using *undo* on computers in general, should be considered as a luxury not to be abused by overuse, as it adds a level of complexity to behind-the-scenes database storage. However, use it when you need it.

4. Using Smart Folders

Smart Folders take advantage of the intelligence of Plone.

4.1. Organization of Content

A Plone web site, using the underlying storage machinery of Zope, is a collection of content items distributed within a hierarchy of folders.

Before you know it, folders and subfolders have been created on a Plone web site and content added. Content may be organized naturally by the hierarchy of folders.

Consider the butterflies web site, which would have an organization something like this, with the main areas of the web site each a few layers deep, and the butterfly pages arrayed in a hierarchy:

- About
 - History
 - Keeping a Journal as a Kid
 - Natural History Mentors
 - The Present Treatment
 - Family
 - John
 - Bio
 - Other Interests
 - Tennis
 - Conservation
 - Local Politics
 - Sally
 - Bio
 - Other Interests
 - Karate
 - Cooking
 - Edward
 - Bio
 - Other Interests
 - Football
 - Painting
 - Elizabeth
 - Bio
 - Other Interests
 - Clarinet
 - Snowboarding
- Photography
 - Equipment
 - Techniques
 - Favorite Photographers
- Butterflies
 - Overview
 - Biology
 - Life Cycle
 - Egg
 - Caterpillar
 - Pupa
 - Adult
 - Distribution
 - Migration
 - Field Work
 - Projects
 - Organizations
 - North American Butterfly Association
 - Lepidopterists' Society
 - Xerces Society
 - Nature Conservancy
 - Bibliography
 - Species Treatments
 - Swallowtails
 - 13 species pages
 - Pierids (Whites and Yellows)
 - 30 species pages
 - Hairstreaks
 - 5 species pages
 - Satyrium Hairstreaks
 - 18 species pages
 - Scrub Hairstreaks
 - 9 species pages
 - Blues
 - 9 species pages
 - Azures
 - 9 species pages
 - Metalmarks
 - 3 species pages
 - Brushfoots
 - 4 species pages
 - Greater Fritillaries
 - 7 species pages
 - Lesser Fritillaries
 - 16 species pages
 - Angelwings and Tortoiseshells
 - 18 species pages
 - Red-Spotted Admiral
 - 10 species pages
 - Satyrs (Browns)
 - 13 species pages
 - Alpines and Arctics
 - 10 species pages
 - Monarchs (Milkweed Butterflies)
 - 3 species pages
 - Skippers
 - Spread-Wing Skippers
 - 8 species pages
 - Cloudy Wings
 - 8 species pages

Each of the butterfly treatment pages has sections on identification tips, a description, and keywords. Photographs are scattered through the butterfly section for butterflies John as seen personally. He writes an observation account for each new species he photographs, providing location, habitat, and any specific behavioral observations made.

This web site has a range of content, from personal biographies and interests of John and his family, to expanded pages on photography and other topics, to the many butterfly pages and photographs. Click-navigation is effective for finding most information, and for the butterfly content the organization by taxonomy is useful and fitting for the most common needs, but this is not the only way it could be organized. For instance, the butterfly pages could have been organized by habitat, by behavior, by size, by color, by whether or not John has observed the species, etc. John was torn between these ways of organizing the butterfly pages, but chose the taxonomic structure, because grouping and relating species by evolutionary relationship is the most useful way to do it. But John discovered how Plone lets him have his cake and eat it too:

Smart folders offer a way to create separate organizational treatments for content.

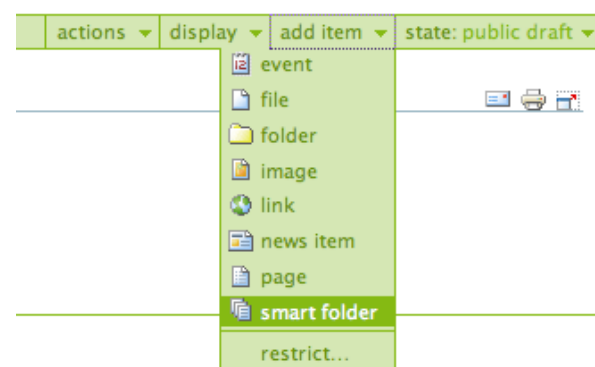
4.2. Adding Smart Folders

Smart Folders are virtual containers of lists of items found by doing a specialized search.

A smart folder is used for building a kind of virtual container for content -- the content actually exists wherever the items are stored throughout the web site, but the smart folder finds content along the guidelines set by a search criterion and makes it appear as if the items were stored in an alternate arrangement. For the butterfly pages described in the introduction to this section, the actual storage arrangement is by taxonomic grouping (Skippers, Monarchs, Dustyings, etc.), but with smart folders there can be virtual groupings by various criteria, such as by color. The butterfly pages matching the search criteria will be shown as if they "live" in the smart folder holding butterfly pages organized by color. Of course, there must be keywords for color in the butterfly pages for this to work. Search criteria made for searching general text can assemble very meaningful arrangements also.

Learning to think about content being stored wherever it is stored, and about using custom smart folders to gather up different "views" of the content, is an important step to using Plone most effectively. It is an intelligent system.

To add a smart folder, use the *add item* menu, as for adding other content types:



You will see the *edit smart folder* panel:

view
edit
properties
criteria
subfolders
sharing
subtopics

Edit Smart Folder

by [John Smith](#) — last modified 2007-07-05 13:20

An automatically updated stored search that can be used to display items matching criteria you specify.

Title ■

Description
A short summary of the content

Limit Search Results
If selected, only the 'Number of Items' indicated below will be displayed.

Number of Items

Display as Table
Columns in the table are controlled by 'Table Columns' below.

Table Columns
Select which fields to display when 'Display as Table' is checked.

Creation Date
 Creator
 Description
 Effective Date
 End Date
 Expiration Date

>>
 <<

Title

Below the title and description fields is a set of fields for specifying the format of search results returned by the search criterion for the new smart folder. The four fields in the panel above are in pairs. The top two fields let you limit the search results to a number of items that will be displayed. The bottom two fields let you control which pieces of information about the search result items will be shown in the table listing of the results.

Setting the search criterion

After setting the display configuration in the edit panel shown above, click the criteria tab to show the panel for setting search criteria:

The screenshot shows the 'Criteria for [...]' panel with a navigation bar at the top containing buttons for 'view', 'edit', 'properties', 'criteria', 'subfolders', 'sharing', and 'subtopics'. The main content area has a title 'Criteria for [...]' and a message: 'No criteria defined yet. The search will not show any results. Please add criteria below.'

There are two main sections:

- Add New Search Criteria:** This section has two columns. The first column is titled 'Field name' with a sub-label 'List Available Fields' and a dropdown menu currently showing 'Creation Date'. The second column is titled 'Criteria type' with a sub-label 'Criteria does match' and a dropdown menu currently showing 'Relative date'. Below these columns is an 'add' button.
- Set Sort Order:** This section has two columns. The first column is titled 'Field name' with a sub-label 'List Available Fields' and a dropdown menu currently showing 'No sort order'. The second column is titled 'Reverse' with a sub-label 'Reverse display order' and a checkbox that is currently unchecked. Below these columns is a 'save' button.

The top area of the panel, *Add New Search Criteria*, lets you set a field and a matching criterion. The bottom area, *Set Sort Order*, is a simple selection for a field to sort on.

For setting the search criterion, you have the choice of these fields:

This screenshot is similar to the previous one, but the 'Field name' dropdown menu in the 'Add New Search Criteria' section is open, displaying a list of available fields. The 'Criteria type' dropdown is still set to 'Relative date'. The 'Set Sort Order' section remains unchanged.

The list of fields shown in the dropdown menu is:

- Creation Date
- Creator
- Description
- Effective Date
- End Date
- Expiration Date
- Item Type
- Keywords
- Location
- Modification Date
- Related To
- Search Text
- Short Name
- Start Date
- State
- Title

The criteria types for matching data in content items depend on which field is selected.

After saving the smart folder, the search criteria will be applied and the results shown when the smart folder is clicked. You can create any number of smart folders for such custom views. For the butterfly example described above, the keywords field could be used to match color to have a series of smart folders for "Blue Butterflies," "White Butterflies," etc.

Multiple criteria can be used for a smart folder. For example, a smart folder called "Butterflies Photographed in the Last Month," could be made by setting a criterion on Creation Date and on Item Type as Image. Such date-based smart folders are really effective to show up-to-date views of content that don't require any administrative hand-work -- once such a smart folder has been created, it will automatically stay up to date.

Note: A smart folder doesn't behave like a normal folder -- you can't add content items via the add item menu, as you can for a normal folder.



Watch a video about adding a smart folder.

4.3. Smart Folder Intelligence

Smart Folder technology, when used properly, embodies one of the main advantages of a content management system.

You've seen how collections provide a way to augment an organization of content, with overlapping or overarching additional smart folders that key on date, or specific fields, or text searches. There is a deeper meaning to this, which gets to something called metadata, or "data about data," introduced in the section on Setting Basic Properties. Content management systems have this metadata, a kind of low-level intelligence, built into them. Plone incorporates the Dublin Core metadata element set, which was devised in Dublin, Ohio in 1995 at a library conference (Librarians are on the ones really on top of information, you know). As the name indicates, there is a core set of things one could describe for different bits of content, be they images or full documents, or whatever. The Dublin Core, properly, the Simple Dublin Core, includes the following 15 items:

1. Title
2. Creator
3. Subject
4. Description
5. Publisher
6. Contributor
7. Date
8. Type
9. Format
10. Identifier
11. Source
12. Language
13. Relation
14. Coverage
15. Rights

There are added-on wrinkles to this core you may read about here, but for this introduction to the concept, the Simple Dublin Core will suffice. You'll find some of these under the *Properties* tab of any item in Plone, and several others are implied by the nature of the content itself, such as for Type and Format, or by basic record-keeping wired into Plone, as for Publisher.

We are all lazy by nature, someone said. If only we filled in this optional information for any content item we create -- Think of the vast information and power at our fingertips! An exaggeration? Perhaps, but as we

explore here, the functionality is there waiting for your data-describing impulse to discover hidden potential (not so hidden -- in fact, right in front of your face).

Imagine a woman who stuffs all her content into a single big folder holding thousands of content items -- images, pages, events, news items, links -- the works. If you looked over her shoulder at this swirling mass, you might first think her to be a lazy person, or just one missing the organization gene. But you notice that she can always find stuff, and has quick search links stored away, and, when she needs to find something special, or to build a custom report, she is adept at fast assembly. How does she do it? She does it by dedication to filling out those metadata fields and by taking advantage of those clever smart folders.

The one-folder woman is using Plone as a content management system *de rigueur*. (Of course, it is so easy to also organize by folders, even in some crude sense, if you really are missing the organization gene). You might think such dedication should be limited to very large organizations, or especially to those cases where finding connections within information can bring significantly greater understanding -- or, potentially, wealth. But think of all those photos you've been taking with your digital camera. You have had the presence of mind to fill in at least the description field, haven't you? You know how quickly months become years, and 100s of photos become 1000s. You get the idea.

The payoff to using an intelligent system properly is efficiency and the discovery of relationships, perhaps subtle.

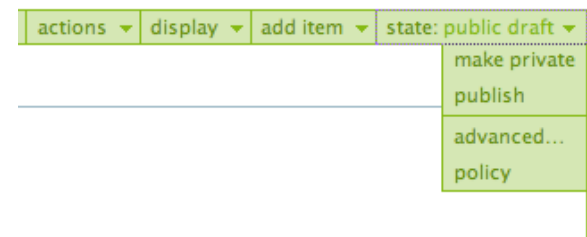
5. Collaboration, Publication, And Workflow

The state menu and related panels have settings for controlling the access and availability of content.

5.1. Basic Publication States

The publication control system for Plone is very flexible, starting with basic settings for making an item private or public.

In the upper right corner of the edit panel for any content type -- folders, images, pages, etc., and any specialized content types -- there is a menu on the right for publication state. This *state* menu has settings for controlling publication state:



The header for the menu will show the current publication state for the content item, such as *state: public draft*, as shown above. Public draft is the initial state when you create a content item -- an uploaded image, a page, a news item -- and in the public draft state, as the name indicates, the content item will generally be available to visitors to the web site. There are several subtleties about this, however. Content items in public draft state may or may not be shown in menus, but they could be seen by search engines and by direct access by web address. So, if the item is definitely meant to be hidden from view, because it is very rough draft perhaps, the *make private* menu choice is the appropriate step after the content item has been created.

Also, and this will be very important, certain content types, such as news items and events, will not appear on the website as you expect, until they are explicitly *published*.

Store this in your memory: **Publication state is important!**

Publication state can be changed only by users whose accounts have the necessary permissions. The menu choices in the state menu will reflect existing permissions settings. For example, in a big newspaper web site, a reporter could add pages for news articles, but the state menu will not show a *publish* menu choice, only a *submit* menu choice. This is because a reporter must submit articles up the line to the editorial staff for approval before publication. If your account has the permissions, however, the *publish* menu choice will appear and you can simply publish in one step.

For an editor, a content item that has been submitted may be *published* or *rejected*, either outright, because it is an inappropriate submission for the situation, or for the more typical reason that the content item needs revision.

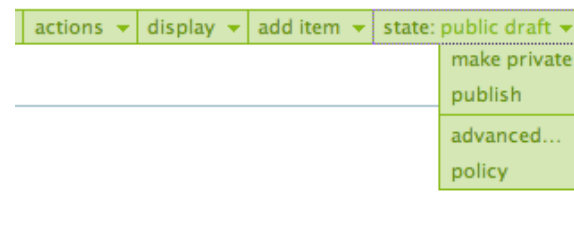
After a content item has been *published*, it may be *retracted*, to change the state back to *public draft* state, and from there set to private, if desired. The menu choices in the state menu will change accordingly.

Consideration should be given to retracting ("unpublishing"), or setting to *private*, any content that has become obsolete or undesired for some reason. Setting to *private* will take the item from public view and from showing up in search results, but will keep it around in case the format or the actual material (text, images, etc.) is needed later. This is especially true for content relating to events that may recur or to one-of-a-kind creations. The decision to delete or to set to *private* may depend on whether or not the content exists elsewhere, on a local computer. If the content is large in size, in the sense of disk space taken, perhaps saving to a local computer is warranted before deletion, if space on the website server computer is an issue.

5.2. Advanced Control

The publication control system, under the advanced menu, has sophisticated features for setting availability by date and by context.

The *state* menu has an *advanced...* item:



which brings up the *advanced* state panel:

contents view edit properties sharing
actions ▾ display ▾ add item ▾ state: public draft ▾

Publishing process

An item's status (also called its review state) determines who can see it. A **private** item can only be viewed by its Owner and by the site management. Only **published** items are available to the general user base and anonymous visitors. To make an item published, it has to be reviewed by one of the site's Reviewers. You can request that an item be reviewed by **submitting it for review**.

Another way to control the visibility of an item is with its **effective date**. An item is not publicly searchable before its effective date, *even if its status is **published***. This will prevent the item from showing up in portlets (or any other templates fed by catalog queries), although the item will still be available if accessed directly via URL.

— Publishing Details —

Affected content

<input type="checkbox"/>	title	size	modified	state
<input checked="" type="checkbox"/>	Long-tailed Skipper	1 kB	2007-07-02 15:52	Public Draft

Include folder items

If checked, this will attempt to modify the status of all content in any selected folders and their subfolders.

Effective Date

The date when the item will be available (of course it needs to be published too). If no date is selected the item will be effective immediately.

2007 ▾ / -- ▾ / -- ▾ -- ▾ : -- ▾

Expiration Date

The date when the item expires. This will automatically make the item invisible for others at the given date. If no date is chosen, it will never expire.

2007 ▾ / -- ▾ / -- ▾ -- ▾ : -- ▾

Comments

Will be added to the publishing history. If multiple items are selected, this comment will be attached to all of them.

Change State

Select the new state for the selected items.

- No change
- Make private
- Publish

by [John Smith](#) — last modified 2007-07-02 15:52

Below an explanation section at the beginning of the panel, there is a check box showing the content that will be affected by this change of publication state. It shows that the folder "Long-tailed Skipper" will be affected by this state change.

The next field, *Include folder items*, is a check box for controlling whether the state change affects this item only (the "Long-tailed Skipper" folder) or the items it contains and all of any subfolders and other contained items. This is an important check box. It lets you easily change the availability of an entire section of a website. For example, the "Long-tailed Skipper" folder could contain four subfolders, for photographs, species occurrence descriptions, taxonomic history, and behavior descriptions, all of which has been kept *private* during the initial work to build up this content. All of it could be immediately made public -- it could be *published* -- by checking this box and checking *publish* at the bottom before saving.

Likewise, an entire section could be immediately made *private*. For example, if an automobile rental agency decided to remove a car model from its fleet, an entire section of their website devoted to this car model, with several subfolders full of pages, images, and files, could be set to *private*.

The next two date fields are for *effective date* and *expiration date*. Their meanings are straightforward. If there is a window of time, for which a content item or a set of content items is valid for publication, it may be set with these fields.

A comment lets you attach an explanation to all content affected by the state change. This is especially useful when several people are working on a website, and a person less familiar with an area of the web site looks at content and wonders why it isn't published. They wonder, "This information looks good. Why isn't it published already?" Then they read a comment that says something like, "Don't publish until Richard checks on copyright issues regarding the items described here." Using comments is a good idea for sensitive information, even if you are the only person working on the web site, because you might forget why you made a decision about publication state.

Finally, at the bottom there is a choice of several available states for this action. It will vary, depending on the present state of the item. For example, if the item is currently in a published state, there won't be a choice for *publish*, if the item is presently in a *private* state, there won't be a choice for *make private*, etc. If an item is published already, there will be choices in this bottom part of the panel for *reject* and *retract*, for "unpublishing" at item, setting it back to *public draft* or then to *private* state.

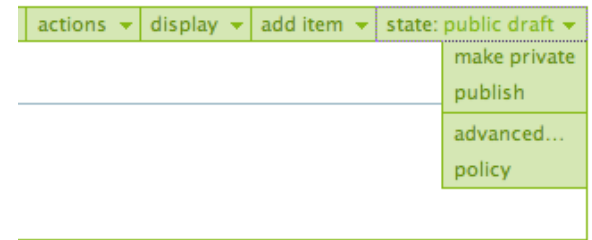


Watch a video about controlling publication state.

5.3. Workflow Policies

Workflow policies allow a site administrator to create a formalized system for controlling publication and content management as a step-by-step flow involving different users in set roles.

The *state* menu has a choice for *policy*:



Workflow is an advanced subject. It involves creation of a more regimented control of content creation, review, and publication. If you have a user account on a typical small Plone site, you will probably not encounter custom workflow policies, because there isn't a need for this more sophisticated control. But, the potential is there for using this functionality, as it is built in to Plone.

For an introduction to the workflow concept, consider an example involving a web site for a newspaper business, for which these different groups of people are at work:

Reporters

Can create stories, but can only submit them for review.

Editors

Can review stories, but can't publish completely. They send positively reviewed and edited stories up the line for further approval.

Copy Editors

Do final fact checking, fixes, and review, and may publish stories.

A *workflow policy*, sometimes abbreviated to *workflow*, describes the constraints on state-changing actions for different groups of people. Once the workflow policy has been created, it needs to be applied to an area of the website for the rules to take affect. In the example of the newspaper web site, a workflow policy would be set up and then applied to the folders where reporters do the work of adding news articles. Then, reporters create stories and send them up the line for review and approval:

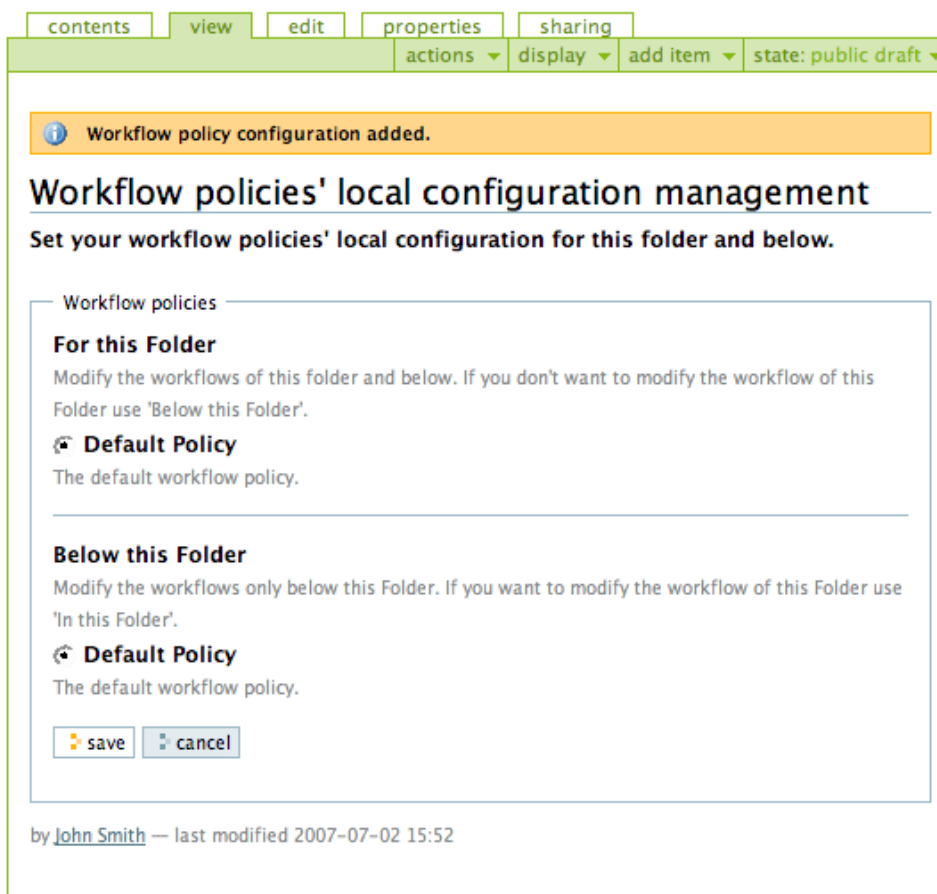


Reporters would add news articles and would *submit* them (the *publish* menu choice is not available to them). Likewise, editors may *reject* the article for revision or they may, in turn, *submit* the article up the line to a copy editor for final proofreading and publication.

Configuring a workflow policy is a matter of applying it to an area of the website. The *policy* menu choice brings up the *workflow policy* panel:



This small panel contains a link with the explicit title, "Add a workflow policy's local configuration in the Folder," which offers an intermediate check to make sure the intention is clear. Clicking the link brings up a workflow scope selection panel:



In this example, there is only one workflow policy available, "Default Policy," which is the standard workflow policy for Plone web sites. In the newspaper business example, there would be a policy here called something like "Editorial Review Policy." The choice here is between setting *For this Folder*, to apply the policy the contents of the folder itself, and the *Below this folder* choice, to apply the policy to any subfolders, as well. After saving, the workflow policy would be in effect for this area of the web site.

5.4. Collaboration Through Sharing

The sharing tab panel contains input controls for setting the access available to users of the web site.

The *sharing* tab panel is a large panel with many input fields:

contents
view
edit
properties
sharing
actions ▾
display ▾
add to folder ▾
state: published ▾

Current sharing permissions 📄 🖨️ 🗑️ 🔄

Attention! You are setting the sharing permissions for a Page. If you want to set the permissions for its container, click [here](#).

You can share the rights for both entire folders and single items. These users have privileges here:

Assigned Roles

	name	type	inherited role(s)	local role(s)
📁	John Smith	User	Owner	Owner

Roles to assign to selected user(s)/group(s)

Manager Member Reviewer

assign selected role(s) to selected user(s)/group(s)
 delete selected role(s) and user(s)/group(s)

Add sharing permissions to users

Sharing is an easy way to allow others access to collaborate with you on your content. To share this item, search for the person's name or email address in the form below, and assign them an appropriate role. The most common use is to give people Manager permissions, which means they have full control of this item and its contents (if any).

Search Terms

Search by Full Name ▾

Search Term

perform search

Add sharing permissions to groups

Groups are a convenient way to share items to a common set of users. Select one or more groups, and a role to assign.

Search Terms

Search Term

perform search

Advanced settings

Advanced Settings

Inherit roles from higher levels

Determines if the roles given to users and groups from higher levels are in effect in this context. Use this to block people who have local roles in higher-level folders from accessing this folder.

apply settings

Change ownership

To change the ownership for this Page, click [here](#)

by [John Smith](#) — last modified 2007-09-03 09:56 AM 🔗 [History](#)

The top box, called "Assigned Roles," shows existing settings for sharing of this item. It lists John Smith as the *Owner* of the item. That means that John Smith has the right to change the item, even delete it. This is similar to privileges of the *Manager* role. Buttons at the bottom allow you to change the assigned roles or delete them.

The next box, called "Add Sharing Permissions to Users," has a search function for finding specific users. Once found, sharing privileges are set via the buttons at the bottom of the box.

The next box, called "Add Sharing Permissions to Groups," works the same way, except it is targeted at whole groups of users. For instance, on a web site for a community group, there could be five groups, one for each main committee of the organization. Perhaps this item is a folder to contain documents maintained by the "Recruitment" committee. Sharing permissions could be set for the "Recruitment Committee" group, and all users within it would have the same privileges. Very easy, and very powerful.

The "Advanced Settings" box is for controlling sharing access within a hierarchy of folders. There can be sophisticated arrangements for sharing, to manage "groups within groups."

Finally, the "Change Ownership" box at the bottom has a link to change ownership -- akin to "reassigning" -- to another user.

6. Next Steps

This manual has focused on the perspective of the user. Site administrators will find various other help documentation on plone.org. To conclude this user-focused manual, we examine a few scenarios for taking on the site administration role, leading to accessing the more advanced documentation.

6.1. Other Useful Basic Documentation

Plone.org has individual documentation pages that are dedicated for specific tasks.

The documentation area has a section dedicated to basic use for content editors. You will find additional help documentation, some repeating some of the coverage treated in this manual and some focusing on solving more specific problems.

You may wish to navigate through the other help documents for site administration, changing the visual design, and programming, but keep in mind that many of these help documents are task-specific and get very technical.

6.2. From User to Site Administrator and Beyond

Assuming you have mastered the basic user-level functionality of Plone, taking on site administration tasks for a personal Plone web site can be a relatively easy next step. Examples given here are provided to guide anyone interested in learning beyond this manual.

The treatment presented in this page should be useful to you, even if you wish to do as little site administration as possible, because somebody has to perform these tasks. For you, site administration and programming tasks might be handled by someone else, but learning about the range of possibilities will open your eyes to the potential of Plone web sites, and you might think about things to ask your web site administrator about.

A web site administrator is the go-to person for technical help, software updates, and technical guidance. For

large web sites, multiple people serve in a site administration team, with specialization in the handling of such things as user accounts, site design, database maintenance, and programming. We can keep it simpler here, though, and think about how a sole site administrator, the owner of a personal web site, would use Plone.

Typical uses of Plone for personal web sites include sharing family photographs, keeping a blog, following a specific area of interest, maintaining a fan site, presenting teaching materials, and showcasing photographs, artwork, songs, or other creative work. The basic functions described in this manual are used, in addition to site administration tools and some level of web site programming.

We can use the butterfly enthusiast (lepidopterist) as an example of a person who steps beyond basic user tasks to build a personal web site. The lepidopterist is very knowledgeable about butterflies and wishes to share with the world, but also wants to collaborate with other butterfly people, interested individuals and scientists alike. Plone is a great tool for this job. The lepidopterist learns that people use Plone for small web sites and dives in.

Imagine three lepidopterist personas of differing ilks, in regard to experience and confidence in computer use:

- John-the-normal-person
- Elizabeth-the-web-page-builder
- Sally-the-programmer

These personas span the range of Plone web site owners, the first wearing only the hat of plone-user, the second wearing two hats, the plone-user hat and plone-site-administrator hat, and the third, appropriately, wearing three hats, the hats for plone-user, plone-site-administrator, and plone-site-programmer. Let's compare these personas.

John-the-normal-person

John-the-normal-person is in luck. He has a friend who makes web sites with Plone. He asks the friend to set him up a web site and to tell him what to do. The friend installs Plone on his own web server, registers a domain name for the web site, and wires and plumbs it all up. He even designs a nice butterfly logo and sets custom colors and a background image for the site. All John-the-normal-person has to do is learn about Plone from a user's perspective (using this manual and other user-oriented documentation on plone.org). That's it. John-the-normal person is on the Internet map.

John-the-normal-person asks his friend, who acts as site administrator for his web site, to set him up a regular user account, johnsmith. His friend creates the johnsmith account, and gives it full access rights to the web site by setting Manager role for the account. John-the-normal-person logs in as johnsmith and sees the green tabbed interface, with the tabs available anywhere on the site. He learns how to create folders first, and goes about creating a hierarchal structure of folders and subfolders for his bio and contact information, an area for family photos, and folders for the butterfly information. He learns the procedures for preparing images from digital photographs of his family members and of all those butterflies, and spends much time working through existing data and photographs, and uploads files and images. He writes web pages for butterfly groups and species following a simple template of his own design. After a few months of this basic, but intensive work, he is able to develop a monthly routine of updating the website with new butterfly images and descriptions.

Whenever John-the-normal-person has a question, he enjoys the luxury of asking for help from his friend, who is able to log in using the all-powerful *admin* account. There are some site administrator tasks for which John asks for guidance from his friend, but, for the most part, he maintains the website on his own. Site administration tasks he does for himself include:

- Adding new user accounts for members of his family and for fellow butterfly enthusiasts who help him write butterfly species descriptions.
- Managing user accounts and accessibility to different parts of the web site. For example, when he

needs help on writing or editing a butterfly species description from an expert, he uses the sharing tab to give edit access to the particular butterfly expert's account on the system.

- Updating several "portlets" in the left column area of his website, one showing a focus "butterfly of the month," and the other showing a recent photograph. For this, John-the-normal-person follows advice from his friend and by using several documents on plone.org as help.

For communications, John-the-normal-person interacts with other butterfly enthusiasts very effectively using E-mail. When there is a need to communicate about a specific butterfly, the natural hierarchical organization of folders makes it easy enough to refer to specific pages.

Elizabeth-the-web-page-builder

Elizabeth-the-web-page-builder has experience making web pages, and took a short-course in web page design using HTML coding. With this substantial background, she has the confidence to download Plone to her local computer and install it. This enables her to learn the bells and whistles of Plone without having to hassle with and learn about installing Plone on a web server -- yet. After following the directions to install Plone on her computer, she reads documentation about playing the role of web site administrator.

Elizabeth-the-web-page-builder uses the *admin* user account and the special password for *admin* provided by the installation software upon its conclusion. Elizabeth logs in as *admin*, after reading more documentation. She doesn't bother setting up a regular user account for herself, because she knows she can just use the *admin* account for site administration as well as for regular user tasks, as she will be the only user. As *admin*, she follows recipes on plone.org to change the logo and layout, the theme of the web site. She learns about the power of using cascading style sheet (CSS) definitions to easily alter the look of the web site, and how to make whole-scale changes to the site by installing new custom themes. She works on the theme for her new web site on her local Plone installation, until she is satisfied with the design.

Elizabeth-the-web-page-builder investigates options for hosting her web site on a web server, and explores different hosting providers that specialize in Zope web server software, the robust system that provides the understructure of Plone. She chooses a hosting provider and contracts web hosting services for a year. Elizabeth-the-web-page-builder sees the powerful features of Zope, but defers to the hosting provider for site setup tasks and installation of Zope and Plone on the server. The hosting provider also helps her with installation of her custom theme, already developed on her local Plone installation. Her new live web site has her custom logo, color scheme, and layout.

In the early stages of creating her web site, Elizabeth-the-web-page-builder performs the normal user tasks of creating folders, uploading files, adding photographs and graphics, and web pages to build the actual content of the site. Like John-the-normal-person, Elizabeth-the-web-page-builder performs basic site administration tasks using the special panels available to the *admin* user, but steps beyond site administration to the level of Plone web page building, and learns how to add custom page templates that access data objects stored in Plone's (and Zope's) storage system. With page templates, custom forms software downloaded from Plone.org, and a little bit of page template scripting, she learns to build a map system that shows distribution maps for any selection of butterflies on her website.

For communications, Elizabeth-the-web-page-builder installs a message board system in her Plone web site, along with enabling visitor commenting throughout the site. There is nothing terribly fancy about these communication functions, which augment standard E-mailing, but they get the job done effectively.

Sally-the-programmer

Sally-the-programmer knows much about web servers, web page building, and programming for the Web, having worked as a Java programmer in several stints, before taking a job as a history teacher and IT specialist at a high school. Her interest in butterflies is a passion, but she has substantial interest in web programming and web site databases. Sally-the-programmer already administers web servers, one a leased server she uses for her own website, for several friends, and for several local organizations, and several other school servers. Like Elizabeth-the-web-page-builder, Sally-the-programmer installs Plone and Zope on a

local PC and uses the *admin* account to kick the tires, and then she takes the more technical step to examine the innards of the system by cruising the filesystem and browsing code. Learning Python by example and by reading several books and web sites, she builds on her Java programming experience, and embraces Python for its clean syntax. She dives into learning from the many examples of Plone/Zope software applications that she downloads from the Web. She learns that Plone/Zope applications are built with Archetypes, a kind of high-level API (Application Programming Interface) used to write custom software for the system. She uses her local installation of Plone and Zope for software development and testing of custom Archetypes-based content types, and maintains a production installation on her web server.

Development of custom content types for her butterfly web site consumes her for some time, as she vigorously examines existing software applications and reads through tutorials on Plone.org. She develops several custom types, one called ButterflySpecies, for containing generic static information about a butterfly species, another called ButterflyTaxon, a so-called "folderish" content type for storing the species descriptions, and another called ButterflyObservation, for describing field data. Installing these types on her server system, she writes a Python program to "populate" the butterfly web objects from a text file containing existing formatted descriptions and data. Once complete, Sally's web site functions well as a streamlined system, requiring a minimum of effort to add new butterfly coverage.

Sally-the-programmer takes advantage of the built-in intelligence of the system, and adds to it with custom search result boxes, a focus feature, and a calendar-based view of the butterfly data. These elements are placed along the side of her website and as portlets placed intelligently through the pages of the web site, and are driven by a set of custom page templates and Python scripts that provide an interface to the underlying custom butterfly types. For communicating with other butterfly enthusiasts, a message board and visitor commenting are enabled for the site, in the same way Elizabeth-the-web-page-builder set up her web site, but Sally-the-programmer creates specific connections to the custom butterfly content types through use of smart folders, so that message board, commenting, and email traffic regarding different species are listed and coordinated in several very useful views.

Comparison and Conclusion

These three personas illustrate different ways to accomplish the same thing. Is any one of the three web sites necessarily and demonstrably better than the others? No, a person with little or no artistic talent, or programming skills, but with clear thinking, can build and maintain a great web site, just by using the built-in functionality of Plone. Use of custom smart folders in a stock Plone web site offers substantial power to yield similar results to those of the advanced programming treatment described in the third example. There are undoubtedly differences in convenience and presentation, but they aren't overly significant -- Plone and Zope are "out-of-the-box" web performers. Customization and development of specialized software only adds to a full-featured base.

So, whatever your experience and perspective, when you feel the need or want to expand your knowledge, use the documentation area of Plone.org, or buy a Plone and/or Zope book to dive in to the deeper waters of site administration and programming!