Deploying
ADOBE® CONTRIBUTE® CS4
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Chapter 1: Overview

Adobe® Contribute® is a website editor that lets people connect to departmental and other websites so that they can update web page content. Administrative assistants, product managers, human resource managers, and other people in an organization can use Contribute to update their team website without having to contact a web team or other departmental resources.

For larger organizations, you can optionally use Adobe® Contribute® Publishing Server (CPS) with Contribute. CPS is a user management and publishing solution that lets Contribute administrators manage large groups of Contribute users and monitor what those users do on the website.

This chapter, intended for website administrators and IT professionals, gives you valuable information you need before you deploy Contribute, and optionally CPS, in an organization. It explains the Contribute user management models for using Contribute alone or with CPS, shows scenarios for setting up Contribute in a variety of IT environments, and lists the people and the various tasks involved in successfully deploying Contribute.

Understanding Contribute user management models

User management lets you add and remove user access to websites and create user roles that restrict editing privileges in a site. User management also provides a mechanism that lets users easily connect to a website.

Contribute has two user management models: manual site connections using Contribute only and managed site connections using Contribute plus the CPS User Directory service.

**Manual connections**  Let you communicate connection information to users, who then create their own connections, either by entering connection information in the Connection Wizard or by importing a connection-key file that you give them.

This user model works best for smaller workgroups and organizations. It allows you to quickly set up Contribute, create a connection to your website, define the necessary user roles, generate connection information for the website connection and user role, and send the information to users in the form of a connection-key file.

**Managed connections**  Lets you use CPS to integrate Contribute with your organization’s LDAP or Active Directory services, letting you add and remove user access to a website and modify user roles without having to resend connection-key files to users. You can also create a file-based database, using an XML file to manually enter user names and passwords.

CPS is intended for larger organizations that have several Contribute users to manage. CPS lets you add and remove users from websites and roles without having to resend connection information. When you create a connection to a website that uses CPS, you add users to a list that grants access to a given website and user role. When users access the website, CPS prompts them for a user name and password. After they enter their user name and password, they are granted access to the website and the role you’ve assigned to them.

To use CPS, you must have a J2EE application server such as Adobe® JRun™ 4 installed. To learn about other CPS functionality, see “Using Contribute Publishing Server with Contribute” on page 2. For more information about getting CPS for your organization, see the CPS website at www.adobe.com/products/contribute/server/.
Using Contribute Publishing Server with Contribute

Using Contribute Publishing Server (CPS) with Contribute creates a powerful solution for managing and maintaining your website.

CPS is a J2EE-based server application that lets you centrally manage large groups of Contribute users. CPS includes the following services:

**User Directory service** Is a user management solution that lets you integrate Contribute with your organization’s user directory to easily manage and authenticate users.

**E-mail Notification service** Lets you automatically notify users about changes to web pages in the draft review process.

**Log service** Lets you monitor website activity so that you can easily troubleshoot problems.

CPS also has two other services that you can extend to meet your needs or use as they are:

**Simple File Deployment service** Enables you to easily move files from a staging or testing server to a live server.

**RSS Activity Feed service** Produces a syndication feed that lists changes that occur in any folder on your website.

The biggest advantage to using CPS is the ability to integrate your organization’s user directory services (such as LDAP or Active Directory) with Contribute. This gives you individual control over which user is granted access to a particular website and the role to which they are assigned.

Consider a large organization with several decentralized websites. In addition to a public-facing site that provides information about the organization, several internal sites are in use by individual departments and workgroups. The organization uses LDAP as both a directory service that lets users look up other employees as well as an authentication service through which administrators set permissions that limit users’ access to file-sharing servers and other network resources.

Unlike sites that don’t use CPS to manage users, when a user logs in to a CPS website, the User Directory service retrieves the connection information associated with that user, and provides access to the sites that the administrator assigned. By maintaining site connection information in the User Directory, administrators can add or remove access to websites without having to resend connection information.

This example provides a partial listing of employees from an organization’s user directory. The employees, their workgroup affiliations, and the sites they can access are listed in the following table:

<table>
<thead>
<tr>
<th>User</th>
<th>Workgroup</th>
<th>Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Lydon</td>
<td>Product Management</td>
<td>Sales, Production, Marketing</td>
</tr>
<tr>
<td>Malcolm McClaren</td>
<td>Product Management</td>
<td>Sales, Production, Marketing</td>
</tr>
<tr>
<td>Martin Atkins</td>
<td>Marketing</td>
<td>Marketing</td>
</tr>
<tr>
<td>Keith Levine</td>
<td>Sales</td>
<td>Sales</td>
</tr>
<tr>
<td>John Savage</td>
<td>Production</td>
<td>Production</td>
</tr>
<tr>
<td>Laura Logic</td>
<td>Web Design</td>
<td>Sales, Production, Marketing</td>
</tr>
<tr>
<td>Jah Wobble</td>
<td>Contribute Administrator</td>
<td>Sales, Production, Marketing</td>
</tr>
</tbody>
</table>

Although this user list is oversimplified, it demonstrates one possible scenario for the way that users within an organization might be assigned access to websites. This scenario divides users according to their role within the organization, and assumes that they have full editing and publishing privileges in their respective sites. Certain users have access to all the sites. For example, the product managers, John Lydon and Malcolm McClaren, work with all the teams in developing and launching products, and need to contribute to all the sites.
Likewise, web designer Laura Logic and Contribute administrator Jah Wobble have access to all sites. As the web designer, Laura provides templates that are easy to add content to and that fit the needs of users collaborating internally. The templates she maintains include those for taking meeting minutes, for scheduling, and for providing product specifications, marketing launch plans, and sales projections, to name a few. Laura also collaborates with Jah Wobble, the Contribute administrator, to help determine the editing and publishing privileges for individual users and roles.

CPS integrates with the organization’s LDAP service, which authenticates user access to various network resources. In this case, the LDAP authentication is the first step in granting access to websites hosted on various servers within the organization. The Contribute roles further define user privileges in a website, determining the degree to which users can modify pages in the site.
**Overview**

Common website configurations

Before you deploy Contribute, consider various scenarios for setting up Contribute for large or multi-team organizations.

This section describes three primary configurations for you to consider as you set up a Contribute site.

**Single website on one webserver**  Typically, this is a website where users have read access to the root of the site and read/write access to specific folders in the site as controlled by the file server or network permissions. There is a single root folder and all users access the site by using the same Contribute connection. If this applies to your site, see “Deploying Contribute for a single website with one web server” on page 4.

**Multiple websites on one webserver**  This structure has a single root folder. The root folder contains folders for each section or organizational function in the website. Contribute roles are used to control user access to particular folders on the site and to assign a subset of the common templates used on the site. Although not required, file server permissions are usually used in addition to Contribute roles to restrict user access to sections of a site. If this applies to your site, see “Deploying Contribute for multiple websites on one web server” on page 5.

**Website on a staging server and a live server**  Many websites use a staging web server with their production web server. Staging servers let you create and test web content without making it live on your public-facing website. Only when content has been approved are web pages and their associated files copied from the staging to the production web server. When used with Contribute, a staging server adds an extra measure of security because you can configure your staging server so that Contribute-specific files (such as administrative folders, rollback files, and interim drafts) are not copied to the publicly accessible website outside your network firewall. For more information, see “Deploying Contribute to a staging server and a live server” on page 6.

Depending on how your website is structured, use separate strategies to successfully set up Contribute for multiple users and groups. Specifically, consider where to store the Contribute shared settings file, how to prevent overlapping connection paths, and how you’ll send connections to users.

**Deploying Contribute for a single website with one web server**

In this example, Contribute is deployed to a simple intranet consisting of a single web server hosting a departmental website. The website has a single, common root folder with subfolders for individual departments. The site uses Dreamweaver® templates and CSS styles to enforce the look and feel of the website and SSIs to maintain page elements such as navigation menus, headers, and footers.

The key to this arrangement is that all users have the same Contribute site connection. In other words, a single connection point for all users controls the behavior of Contribute when editing the website. To restrict users to editing content in their workgroup’s folder, you would need to create a role that limits access to a specific folder.

An advantage to this type of Contribute deployment is that users in all departments can collaborate by sending pages for review to one another. If separate connections had been created for each department (as in the example “Deploying Contribute for multiple websites on one web server” on page 5), then only the users with access to that folder could receive and edit drafts sent to them for review.
It is important that the Templates folder, which is located at the same level as the Contribute shared settings folder (_mm), is accessible by all users, and the site’s CSS (CSS folder), and server side includes (SSI folder) are protected by role settings that restrict access to those folders. Web pages and associated files stored in these folders cannot be edited using Contribute, preventing them from being inadvertently modified or damaged. To restrict users to editing content in their workgroup’s folder, create a role that limits access to a specific folder.

**Deploying Contribute for multiple websites on one web server**

This scenario has several departmental intranet sites, each of which needs access restricted to members of the given department. To accomplish this, the administrator creates a separate Contribute connection for each department’s folder in the website (to essentially create subsites). In addition, each department has its own set of Dreamweaver templates on which to base new pages.

When connecting users to their respective sites, the administrator creates and distributes a connection key for each website connection.

In this scenario, three administrator connections are created. The site administrators create a connection to their department’s section of the website (for example, /myIntranet/sales). Additional roles can be created to define any restrictions for users in the site (for example, to specific subfolders in the Sales folder or to set editing options).
Users can browse the entire site but are restricted to editing in their department’s folder. This way, individual groups can maintain control over their web content and can act more independently with the content they make available to the entire organization. A potential drawback to this arrangement is that users in different departments cannot collaborate on pages. Each department must work independently.

**Deploying Contribute to a staging server and a live server**

Many organizations use a staging web server with their production web server. A staging server lets you create websites on a non-production web server, so you can generate and test content without making it live on your organization’s public website. The use of a staging server also lets you maintain an automatic backup copy of all your website content.

In regard to Contribute, the use of a staging server lets you copy only folders and files that you specify as necessary for your website. This enables you to use Contribute to update web content on the staging server, but only publish the necessary web pages to your production web server for public access.
By configuring Contribute to work with content on your staging server, you can provide an extra measure of security by not copying Contribute’s administrative files and folders to your production server. This also lets you eliminate the presence of unnecessary files from a server with public access.

To use Contribute with a staging server, you create a connection to the staging server’s website. Users can update content on the staging server. Any temporary drafts that are created during the review process, or drafts of files that are in the process of being updated, but not yet published to the website, remain on the staging server, protected by your network’s firewall.

When using a staging server, configure the software you use to copy web pages and related files from the staging server to the production server to not copy the following folders and the files they contain:

_mm Contains Contribute administrative files and the messaging folders used to notify users when they have a draft that requires their attention.

_baks Archives rollback copies of files.

_notes Contains design notes. These files record information about who last published a given page, and other information.
**MMWIP** Contains drafts of pages that have been sent for review but have not yet been published to the site.

Keeping these folders, and the files that Contribute stores inside them, off your production website provides an additional level of security. Although every effort has been made to make these folders and their files secure, the best security measure is to keep them on a server protected by your network’s firewall. In addition, consider using access control lists (ACLs) to secure these folders further by restricting access to network addresses in your organization’s network.

### Deployment roles and responsibilities

After you understand how Contribute fits into your organization, it’s important to understand the various roles involved in deploying Contribute.

As a system or website administrator, you play a large part in deploying Contribute. The deployment responsibilities include the following tasks (for a complete list, see "Deployment tasks checklist" on page 9):

- Installing the Contribute software.
- Creating connections to websites that users of Contribute can access.
- Defining roles (a collection of privileges that you assign to specific users).
- Installing Contribute on individual computers throughout your organization.
- (Optional) Integrating Contribute with Contribute Publishing Server (CPS).

The size of your organization and the job roles associated with your organization’s websites determine who assumes responsibility for deployment. A single system administrator may be responsible for all deployment, or other members of the organization’s web team or IT staff may be involved.

If you are a system administrator, this might be your first time to work with web pages and web content. Your role as a system administrator may intersect with the role of web designer.

The following table describes the function of each role that relates to Contribute:

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribute administrator</td>
<td>Responsible for installing Contribute, setting up user roles and privileges, and determining the degree to which users can access and update websites. Contribute administrators are often members of an organization’s IT staff, responsible for maintaining server and network infrastructure, managing user and file permissions across an organization’s network.</td>
</tr>
<tr>
<td>System administrator</td>
<td>Maintains web servers and web server access. This role often overlaps with that of the Contribute administrator and may be handled by the same person in smaller organizations.</td>
</tr>
<tr>
<td>Web designer</td>
<td>Designs websites, determining their look and feel, and creates and maintains the site’s content.</td>
</tr>
<tr>
<td>Web developer</td>
<td>Develops web-based applications, such as for absence reporting and financial reporting, distributed to users over the web.</td>
</tr>
<tr>
<td>Contribute user</td>
<td>Contribute users range widely in their job tasks and computer experience. What they have in common is the need to update web page content quickly and easily. Using Contribute, they can easily connect to a website and safely update its content without inadvertently introducing malfunctions.</td>
</tr>
</tbody>
</table>
These roles vary from organization to organization. In smaller organizations and workgroups, a single person may handle the job of administering Contribute and determining the design of the website. Larger workgroups and departments may have a team of people involved in maintaining their website.

### Deployment tasks checklist

The following table describes the tasks you need to perform to successfully deploy Contribute.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure network and server permissions</td>
<td>Ensure that the network and server permissions allow read, write, and modify access so that Contribute users can connect to the site and update pages. For more information, see “Preparing your web server before you deploy” on page 11.</td>
</tr>
<tr>
<td>Plan your site structure and connection path</td>
<td>Plan your site structure, including considerations for subsites or multiple connections, and determine your connection path. For more information, see “Planning your Contribute site structure and connection path” on page 15.</td>
</tr>
<tr>
<td>Install Contribute and create an administrative website connection</td>
<td>Install Contribute on the computer from which you'll administer the site, create a connection to the website by using Contribute, and establish yourself as the Contribute administrator for the site. To learn more about creating an administrative connection, see &quot;Installing Contribute and creating an administrative connection&quot; on page 21.</td>
</tr>
<tr>
<td>Install Contribute Publishing Server (CPS) (optional)</td>
<td>CPS is a suite of Java server applications that lets you integrate Contribute with Lightweight Directory Access Protocol (LDAP) or Active Directory services, and implement e-mail notifications to keep Contribute users informed about the status of their drafts in progress. To use CPS, you must install and configure the server on a Java application server. For more information, see “Installing Contribute Publishing Server (Optional)” on page 23</td>
</tr>
<tr>
<td>Configure Contribute settings and roles</td>
<td>Configure the administrative settings so that Contribute works more efficiently with your website, and create Contribute roles based on the privileges and restrictions you want to place on a user's ability to access and edit pages in the site. For more information, see “Configuring Contribute” on page 31.</td>
</tr>
<tr>
<td>Configure CPS User Directory service (optional)</td>
<td>If you use CPS, configure the User Directory service: you must specify the user directory type, and either configure CPS to access your LDAP or Active Directory server, or enter user information into a file-based database. You can also configure other CPS services now, or you can do it later. For more information, see “Configuring Contribute Publishing Server (CPS only)” on page 37.</td>
</tr>
<tr>
<td>Configure the Log and E-mail services (optional)</td>
<td>Configure the log file and e-mail settings that CPS should use. You can configure these CPS services now, or you can do it later. For more information, see “Configuring Contribute Publishing Server (CPS only)” on page 37.</td>
</tr>
</tbody>
</table>
In addition to the basic tasks described in the preceding table, you can further enhance your website by designing it to be more easily maintainable or by adding additional functionality by using CPS.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable your website to work with CPS (optional)</td>
<td>If you use CPS, you must enable your website to work with the server.</td>
</tr>
<tr>
<td></td>
<td>For more information, see &quot;Enabling Contribute websites to work with CPS (CPS only)&quot; on page 42.</td>
</tr>
<tr>
<td>Add users to the website</td>
<td>In Contribute, add users to the website.</td>
</tr>
<tr>
<td></td>
<td>For more information, see &quot;Adding users to your website (CPS only)&quot; on page 44.</td>
</tr>
<tr>
<td>Deploy Contribute to your user base</td>
<td>Deploy Contribute to your users, and send them website connection information so they can access the website.</td>
</tr>
<tr>
<td></td>
<td>To learn more about distributing website connections, see &quot;Deploying Contribute and website connections&quot; on page 46.</td>
</tr>
</tbody>
</table>
Chapter 2: Setting up your Contribute Server Environment

After you have given some consideration to what is involved in deploying Adobe® Contribute® and Contribute Publishing Server (CPS), you are ready to begin. First you need to prepare your network, then you can install the software.

Preparing your web server before you deploy

Before you actually install Contribute and roll it out, consider how Contribute will affect your network and prepare for it by setting permissions, access, and securing special files and folders on your web server.

Understanding network and server permissions

Contribute is unique in that it allows editing of web pages directly on the server hosting your website. This level of server access makes network permissions and access control especially important.

There are at least three levels of permissions for every Contribute site:

- Permissions defined by the network operating system (for instance, Windows® or UNIX® server software)
- Permissions defined by the web server software
- Roles you define in Contribute

Network permissions can be set in several ways through a variety of systems. Contribute always adheres to the network permissions for read and write access to folders. It also obeys permissions set through LDAP and similar systems. Contribute can never overwrite any server- or network-level permissions.

Note: The server’s network and operating system permissions, and the web server software’s permissions, always take precedence over Contribute permissions.

Whenever you provide access to a web server, take precautions to ensure that the operating system of the server hosting the site, as well as the web server software itself (and the FTP server, if you are using FTP), are secure. For the best practices related to securing your website from accidental and malicious tampering, see the documentation provided with your server’s operating system, FTP, and web server software.

Note: You can set folder permissions to allow a user or group of users to modify a folder and later define more restrictive folder- or file-editing options when you define the Contribute user roles.

Understanding server access for connecting to CPS-managed websites

As an administrator, you should require that users enter their own account username and password to log in when they use FTP, SFTP, or WebDAV to connect to a website managed by CPS. This is a best practice and the default option. The alternative is to use a shared FTP, SFTP, or WebDAV account for a website connection managed by CPS.
Requiring users to log in with their own account username and password provides an extra layer of security. When you share a website connection that uses a shared account, the username and password for the shared account are stored on the machine where CPS is installed. The password is stored as a hash of the password in a non-browsable folder, and you can restrict access to this folder. However, the password could be at risk if it is not a strong password. Therefore, it is recommended that you not use shared account information for any CPS website connection, but that you require users to log in with their own account information.

If you require users to log in with their own account information, CPS prompts them for a username and password. You can improve the user experience by creating FTP, SFTP, or WebDAV accounts tied to your user directory service so that users do not have to know or remember another password. If the CPS login is also tied to your user directory service, CPS can automatically reuse the user’s CPS login information to open the connection and does not prompt for a second password for connection information. The user also can have Contribute remember the account username and password for future use.

As an administrator for a website managed by CPS, you can view or modify FTP, SFTP, and WebDAV settings by editing the connection.

**Restricting access to administrative folders and special file types**

Access to administrative folders and special file types is restricted as a security measure.

When you create a site connection, Contribute creates special files that are stored in folders whose names begin with an underscore (such as _mm, _baks, and _notes). These folders may contain files with user names, e-mail addresses, previous versions of web pages, and other types of meta information used by Contribute. The underscore allows Dreamweaver® from Adobe and Contribute to distinguish between those folders and the other folders in your site.

Contribute and Dreamweaver use this naming convention to filter these special files and prevent them from appearing in the Dreamweaver Site panel and in the Contribute Remote File Browser. These hidden folders can’t be browsed, overwritten, or inadvertently altered by users. Additionally, some search engines and automated programs are designed not to return pages found in folders whose names begin with an underscore.

To ensure that these folders and files remain protected, review the configuration of your web server software and make certain that you block HTTP access to folders whose names begin with an underscore (_mm, _baks, and _notes), the MMWIP folder, and files identified by the file extensions .lck, .mno, .bak, .lbi, .csi, and .dwt.

In particular, you might want to block HTTP access to the MMWIP folder. The MMWIP folder contains interim drafts of files (works in progress) that you might want to protect. Adobe recommends that you restrict access to the MMWIP folder so that only members of your organization can browse files in that folder.

*Note:* In addition to using the computer’s operating system and web server software configuration settings, you might consider using a third-party URL scanner to block HTTP access to secure these files and folders.

**Apache web servers**

If your website uses Apache, you can explicitly disable browsing folders and files that begin with an underscore. If you know how to modify the Apache web server’s httpd.conf file and have permission to do so, you can use the DirectoryMatch directive to prevent visitors from viewing any file in a folder beginning with an underscore.

If you’re not sure how to edit the Apache httpd.conf file or don’t have permission to do so, ask your system administrator or Internet service provider (ISP) to do it for you. To learn more about limiting access to files and folders, and other security issues relevant to the Apache web server, see the documentation supplied with your Apache distribution.
**Microsoft IIS web servers**

To prevent unauthorized users from accessing Contribute administrative folders under Microsoft® IIS, use access control lists (ACLs) to prevent read access by unauthenticated users of the operating system as well as by clients connecting to IIS. When you use ACLs to restrict access, only properly authenticated users can view the contents of the Contribute administrative folder. Anonymous web clients, or other users with access to the server, cannot view the administrative folder and its contents.

*Note:* When setting permissions for Contribute administrative folders, ensure that Contribute has read/write access to the administrative folders and the files they contain. Contribute uses the settings in these files to enforce role settings of users connecting to the site.

In addition to securing the administrative folders using the operating system’s permissions and access control lists, consider using UrlScan to further secure IIS web servers. UrlScan is a security tool provided by Microsoft that screens incoming requests to the server by filtering the requests based on rules that you create. Filtering requests helps secure the server by ensuring that only valid requests are processed.

To learn more about the UrlScan utility, see the Microsoft website at [www.microsoft.com](http://www.microsoft.com).

**Other web servers**

If you are using another vendor’s web server, refer to the documentation supplied with your web server software to learn how to prevent users from accessing specific folders and files.

**Special files created by the draft review process**

The draft review process enables you to send drafts to users for final approval before publishing pages to your site. When you enable the draft review process, Contribute creates a series of folders and files used in tracking pages as they make their way through the collaborative approval workflow. Although there are no site maintenance or planning tasks involved in enabling approvals for your website, be aware of the additional files and folders that Contribute creates to manage the workflow.
The following figure shows an example of a file sent for review, and the files and folders that are created when you send a user of your website a page for review.
This figure shows the main folders and files that are created when you enable the draft review process for a given site and a user sends a page for review. The following folders are created:

_mm/ct2004/messaging/users Contains a folder for each user for whom the draft review process is enabled. Each user folder is populated with a series of XML files that identify what drafts the user has in the system. In the previous example, the file notifyWIP.jr615v2v4p.csi indicates that notification has been sent to one or more users that there is a page that needs review.

WIPMetaData Contains a series of files that maintain the draft history and the current state and location of the draft in the draft review process. The files contained in this folder include an XML file (wipMeta.mje1d0zlz4vxc.csi in this example) that serves as a pointer to files in the draft review process and also include contact information for the sender and recipient of the draft. A corresponding file with the extension .fre indicates that the file is free (available for review).

MMWIP Stores drafts in progress. For each file in the draft review process, a random folder name and filename are generated. In the preceding example, the actual filename is myPage.htm. Contribute generates the folder name 8eba150d and the filename 3629c837.htm.mno to represent the file as it progresses through the draft review process.

When you are using the annotation mode of review, a <filename>.ann file is created containing the comments. The filename is the same as that of the HTML file.

When the recipient of the page requiring review chooses to view it, Contribute creates a LCK (lock) file for the page in the website, and a CHK (checkout) file in the WIPMetaData folder. These files indicate that the file is in use by the recipient and tracks changes made to the file.

The filename extensions (.mno and .csi) used by the draft review process help to prevent interim drafts of web pages and their associated XML messaging files from being served by your web server. This helps to prevent users from inadvertently sending a link to a draft of a file or from using a web browser to view files in the draft review process. In addition, Contribute places a guard page in each of the folders used to store files for review. The guard page (labeled index.html in the previous example) redirects users to the website’s home page.

### Planning your Contribute site structure and connection path

The connection you create to a website with Contribute determines the network protocol to use when accessing the site, the web address (URL) of the site, and the degree to which the site’s structure is accessible to content contributors. Before creating a connection to a website, carefully consider how users will access the site and what areas of the site they must access.

### Understanding Contribute connection paths

A Contribute website is defined when you create an administrative connection and select the website folder to connect to. All folders from the folder you connect to and below make up the Contribute site.

As the administrator, you can establish a connection to the root folder in a website if you need access to all the folders in that site. Or, you can establish a connection to a lower-level folder, depending on the access you and your users require.

Adobe recommends that you create a connection at the root of your website (www.mysite.com/intranet/, for example), and use the Contribute Permissions settings to limit user access to specific folders in the site.
As an alternative to creating one website connection for all your users, you can create separate connections for different parts of the website. For example:

- connection1: www.mysite.com/intranet/marketing
- connection2: www.mysite.com/intranet/finance

It is also possible to create overlapping connection paths. This occurs when you create a website connection to a folder, and then create another website connection at a lower level, to a folder that is contained in the first website connection. For example:

- connection1: www.mysite.com/intranet/
- connection2: www.mysite.com/intranet/marketing

In this case, the connection paths overlap, and the second connection is a *child website* of the first connection, which is the *parent website*.

> Adobe recommends that, if you create child sites, you make any users who are connected to a parent site, also connect to any child sites.

When you create website connections to different parts of your website, it is important to remember that each website connection represents a Contribute website. So your entire website can consist of multiple websites (as many websites as connections you create). Users who connect to each website are limited to editing pages and sending drafts for review in their website.

This is a valid way to set up connections in Contribute. It just requires careful consideration.

### Understanding subsites and overlapping website connections

An overlapping website connection occurs when you create a website connection to a folder in your website and then create another website connection to a folder that is contained in the original website connection. For example:

- connection1: www.mysite.com/intranet/
- connection2: www.mysite.com/intranet/marketing

The first connection, at the higher level, is the *parent website*, and the second connection, at the lower level, is the *child website*.

Child websites do not inherit from the parent website. This includes administrative settings, roles, templates, and other assets. Each website connection is its own distinct website and is not related to any other website connections you create.

When you have website connections that overlap, the most nested website that contains the page a user is editing or viewing takes priority for administrative settings and roles, the draft review process, and templates and other assets.

For example, consider the marketing website (www.mysite.com/intranet/marketing), which is a child of the intranet website (www.mysite.com/intranet/). When a user edits a page in the marketing website, the settings and roles for that connection apply, the user can send only a draft for review to other users who are connected to that website, and the user has access to template and shared assets for that website only.

> Adobe recommends that, if you create overlapping website connections, you make any users who are connected to a parent site also connect to any child sites.
Understanding administrative settings and roles in overlapping websites

Contribute creates a special administrative folder (labeled _mm) that contains a shared settings file in each website you create a connection to. The shared settings file contains information about each role you define, including the administrator role and any site-wide permissions you define.

When you establish overlapping website connections, you might have users who have multiple connections to different parts of your entire website. When those users edit a page, the settings file for the most nested website connection applies for the page and the user.

For example, consider a user with the following connections:

- connection1: www.mysite.com/intranet/
- connection2: www.mysite.com/intranet/marketing

A page in the marketing folder, marketinganalysis.htm for example, is technically part of both websites that user is connected to. But because these are two separate connections—and therefore two separate websites—there are two different administrative folders. When the user edits the marketinganalysis.htm file, the roles and settings for the most nested website connection applies; in this example, www.mysite.com/intranet/marketing.

Now suppose the same user edits a file in the intranet/marketing/contacts folder, and the user does not have a website connection to that folder. The user can still edit pages in that folder because it is part of the marketing website, but the user does not have a separate connection to that folder, so it is not a separate website. Again, the settings for www.mysite.com/intranet/marketing apply because that is the deepest website connection in the path to the page the user is editing.

Understanding the draft-for-review process in overlapping websites

When you send drafts for review, your list of possible reviewers are users who are connected to your website. And the draft you send for review is temporarily placed in the root of your website (that is, the root of your Contribute website connection).

💡 To avoid potential problems with the draft review process, users who are connected to websites that have child websites, should also connect to all the child websites.

When you have overlapping sites, depending on your website connections, the draft review process might not work as you expect:

1 You might not be able to send to users you expect to send to.

   For example, consider the following website connections:

   - User 1’s connection: www.mysite.com/intranet/
   - User 2’s connection: www.mysite.com/intranet/marketing

   If User 1 edits a page in the marketing folder and then clicks Send For Review, the list of possible reviewers is users connected to the same website as User 1 (www.mysite.com/intranet/). In this case, User 1 could not send to User 2, who belongs to the marketing website.

   Now suppose that User 1 has website connections to both websites (www.mysite.com/intranet/ and www.mysite.com/intranet/marketing) and User 2 has a connection to the marketing website only (www.mysite.com/intranet/marketing). If User 1 edits a page in the marketing folder, and then clicks Send For Review, the list of possible reviewers is users connected to the User 1’s most nested website, www.mysite.com/intranet/marketing. In this case, User 1 could send the draft to User 2.

2 Reviewers might not receive drafts.
Consider the same website connections from the previous example:

- User 1’s connection: www.mysite.com/intranet/
- User 2’s connection: www.mysite.com/intranet/marketing

If User 1 edits a page in the marketing folder and then clicks Send for review, the list of possible reviewers is users connected to the same website as User 1 (www.mysite.com/intranet/).

If both websites have a group with the same name, Writer, then User 1 might send to the Writer group for www.mysite.com/intranet/ when the draft has to be sent to the Writer group for the marketing website. In this case, the marketing Writer group would not receive the draft from User 1.

3 Reviewers might not be able to take action on a draft.

Now, consider the following website connections:

- User 1’s connection: www.mysite.com/intranet/
- User 2’s connections: www.mysite.com/intranet/ and www.mysite.com/intranet/marketing

Suppose User 1 edits a page in the marketing folder and sends it to User 2 for review. The draft for review is temporarily placed on the website at the root of User 1’s website connection (www.mysite.com/intranet/).

(Remember, User 1 does not have a website connection to the marketing website.) When User 2 receives the draft, there is a conflict because User 2 has website connections to the site where the draft for review was placed and also to the website that contains the original page.

In this case, Contribute has a conflict on how to handle the draft for review, because it expects the draft for review to be in the same folder as the original page. Because of this conflict, User 2 can send the draft for review or delete the draft only. User 2 cannot edit or publish the draft for review.

**Understanding templates, shared assets, and images in overlapping websites**

Templates in Contribute reside in a folder named Templates in the root folder of each website connection (for example, /Templates/contactPage.dwt). Shared assets and images are also stored separately for each website and are available to users depending on the role the website administrator assigned to them for that website.

When you have overlapping website connections in your website, you might have users who have multiple connections to different parts of your website. When those users edit a page, they have access to the templates and shared assets for the most nested website connection for the page and the user.

You must carefully consider where you place your templates, shared assets, and images. For example, if you place the company logo in the root of the intranet website (www.mysite.com/intranet/), users who have connections to the marketing website only (www.mysite.com/intranet/marketing) won’t have access to the logo.

**Understanding Contribute network connection types**

Contribute lets you connect to websites using one of several network connection types. The connection type you choose depends upon the infrastructure of your website. For example, if you are deploying Contribute to update a workgroup’s intranet site, you can, in most instances, use a local area network connection. However, if the site is hosted through an ISP or other external resource, you might need to use either an FTP, SFTP, or WebDAV connection.

**Local area networks**

When Contribute is used to connect to a web server through a local network, the web server must be visible to the local network. Contribute can also be used with virtual private network (VPN) servers to ensure that all file transmissions occur behind your firewall. If the web server is not visible to the local network, you can create an FTP connection with Contribute to work with the website (if the server you’re creating a connection to has an FTP server installed).
Setting up your Contribute Server Environment

To ensure that you are entering the correct network path, click Browse in the Connection wizard to locate and select the network folder. If the path to the folder is correct, but Contribute still cannot create a connection, verify that the folder has proper read/write permissions.

Depending on how the server you are connecting to is configured, you might not be able to see the complete path to the website folder. If you cannot connect to the server, make certain you are using a fully qualified path.

To learn how to check your server’s network and folder permissions, see the documentation supplied with your server operating system.

**File transfer protocol (FTP)**

If users access the website by using FTP, ensure that the folder has delete, overwrite, and rename privileges enabled. When anonymous FTP is used, these options are typically disabled by default so that users cannot update pages or add new pages to the website.

If you will use FTP to connect to a website, Adobe recommends that you use SFTP. In addition to providing a secure connection when you transfer files to and from Contribute and your website, SFTP is a more reliable connection protocol.

When you create an FTP connection, Contribute attempts to auto-detect the FTP path, checking that the FTP folder is the same folder that contains your website files. If the folder paths don’t match, Contribute can’t write to the page displayed by your browser and prompts you to enter the correct path.

To ensure that you are entering the correct FTP path, click Browse in the Connection wizard to locate and select the FTP folder. If the path to the folder is correct but Contribute still can’t create a connection, verify that the folder has proper read, write, and modify permissions for the user. If you are creating an anonymous FTP account, the server must be configured to support delete, rename, and overwrite permissions for the anonymous user. In some cases, file permissions on UNIX servers may be configured in a way that prevents Contribute from operating, especially if the server doubles as a file server. For more information, see “Setting up a site connection in Contribute” on the Contribute Support Center.

To test whether FTP is set up correctly for an end user, you can transfer a test web page to the server. Then, using the login settings you provide to the user, attempt to view the page in a browser.

**Secure FTP**

SFTP is a secure version of the FTP protocol. Like SSH, SFTP prevents unauthorized users from gaining access to password and user information that is sent without encryption over the Internet.

Standard FTP sends the user ID and password as clear (that is, unencrypted) text, allowing anyone monitoring your FTP data to see your user ID and password, as well the data being transmitted. With SFTP, everything you transmit is encrypted, protecting it from monitoring by intruders.

In addition to increased security, Adobe recommends that you use SFTP because it’s a more robust protocol that provides more reliable performance. The following reasons describe why SFTP is a better protocol:

- A more strict protocol than FTP
- Supports functionality that FTP does not
- Is more efficient than FTP
- Does not conflict with firewalls, proxy servers, or routers
- Provides a secure connection over which to transfer files
To use SFTP with Contribute, you must have an SFTP server installed. You cannot use a standard FTP server and select SFTP from the connection type choice in Contribute; the connection fails. You must also have Secure Shell 2 (SSH2) enabled on the server. Contribute provides SFTP only over SSH2-protected network connections.

To learn more about SFTP, see the documentation supplied with your server’s operating system and SFTP server. To learn more about SSH2, see the SSH Communications Security website at www.ssh.com.

Note: Contribute supports only password-based authentication. Other authentication methods, such as certificate-based authentication, public key, and Kerberos, are not supported.

FTP and SFTP file permissions
Typically, FTP servers are configured so that when they create (or write) a new file, the permissions created for the file give the person uploading the file read/write permission and give members in the permission group read-only access.

In the case of Contribute, this process can cause a problem when another user tries to edit a page. Contribute can read the file, but when it attempts to copy the updated file back to the web server, the FTP server’s file permissions prevent Contribute from writing the new file.

When configuring your FTP server to work with Contribute, be certain to configure the file permissions that the FTP server creates for new files so that members of the permission group can read and write the file. This issue typically occurs on UNIX servers. Set the permissions for files to umask 664, which provides read and write access to the file owner (the person who created the file) and to the permissions group (which would include any users needing to connect to the website to update the file).

WebDAV
Web-based Distributed Authoring and Versioning (WebDAV) is a series of extensions to the HTTP protocol that lets users collaboratively update and manage files on a website. A key feature of the WebDAV protocol is file locking. Users connecting to a WebDAV-enabled site lock files when they open the file for editing. This prevents a user of the same website from overwriting another user’s changes.

To use Contribute with a WebDAV-enabled site, you must use a WebDAV server that supports exclusive write locks. Exclusive write locks guarantee that only the lock owner (the person who opened the file for editing) can overwrite the file.

Note: Some WebDAV servers support shared write locks, which allow two or more users to collaborate concurrently on a web page. Contribute does not support shared write locks. If a user opens a page using Contribute on a WebDAV-enabled site that uses shared locks, Contribute opens the file only if it can create an exclusive lock. If another user is editing the file, Contribute informs the user that the file is not available for editing.

When creating a connection to a WebDAV-enabled site, you must provide a WebDAV-specific URL. This might consist of a specific port number used by the WebDAV site.

For example, suppose that this is the URL of your site:

www.mysite.com/

This might be the WebDAV URL:

www.mysite.com:81/

Appending the port number 81 to the site’s domain name specifies the network address used by WebDAV.

WebDAV-enabled sites often have their own user name and password requirements. You can create these on an individual basis, or you can create a group user name and password.
When creating a connection to a WebDAV site, you must not mix connection types (such as FTP with WebDAV or local area network with WebDAV). You must use only the WebDAV connection type. When you create a connection to a website using local area network, FTP, or SFTP connections, Contribute uses its own file-locking mechanism to prevent users from overwriting each other’s files. Contribute connections using these connection types cannot detect files locked with WebDAV locks and could inadvertently open a file being edited by a WebDAV-enabled connection.

To prevent users from setting up different connection types to a WebDAV-enabled site, do one of the following:

- Tell users creating connections that they should use only the WebDAV connection type with WebDAV-enabled sites.
- Send a connection key that allows only users connecting to the site to use WebDAV.
- Restrict local area network, FTP, and SFTP access to the server hosting the WebDAV-enabled site.

For more information on WebDAV, see the WebDAV Resources website at www.webdav.org.

Network paths and web addresses (URLs)

When creating a connection to the website, Contribute prompts you to provide the web address (URL) of the website, and the network connection information of the server and folder storing the website. Both the web address and network path must point to the same folder in the website.

For example, suppose your website is located at the directory path:

\MyServer\wwwroot\sites\MySite

And the corresponding web address for this site is:

www.MyServer.com/sites/MySite

When creating the connection, you must enter these values correctly, so they point to the same folder.

To ensure that the website and network folder (or in the case of FTP and SFTP, the FTP folder) are the same, Contribute uploads a temporary file using the path information you provide. Contribute then attempts to read the temporary file through HTTP, using the web address you provide. If Contribute succeeds in locating the temporary file, the paths match, and Contribute creates the connection. If the paths don’t match, Contribute prompts you again for the correct path.

Note: If your users will use FTP to connect to a website folder in the FTP Host folder, you must provide an absolute path to the folder.

Installing Contribute and creating an administrative connection

After you plan your website infrastructure and configure the network and server permissions for appropriate read, write, and modify permissions, you must install a copy of Contribute and create a Contribute administrator connection to the website.

Note: You can create as many administrative connections as necessary, depending on how many sites and subsites you need to establish.

Go ahead and install Contribute, and then gather the information you need for connecting (see “Preparing to connect to a website” on page 22) and establish your administrative connection (see “Creating a Contribute website connection” on page 22).
Preparing to connect to a website

Before you begin, gather the following information:

1. Your user name and e-mail address

   The user name and e-mail address identify users and the web pages they are working on. Contribute prevents multiple users from simultaneously editing the same web page. (Contribute uses a system much like the Dreamweaver check in/check out system to avoid editing conflicts.)

   **Tip:** If you have multiple copies of Contribute, use a different user name for each copy. For example, Chris(laptop), and Chris(Mac). Using the same user name can cause problems because you can override checkouts you make on the other computer.

2. Web address (URL) of the website

   A website’s Uniform Resource Locator (URL) is its address either on the Internet or on an organization’s intranet. Website URLs usually have the following form:

   http://www.mysite.com/

3. Network path to the website (for connecting to local networks)

   The network path is the location of the website in your organization’s local network. The network path includes the name of the server on which the website is stored and the directory path of the website’s files on that server. For example, your network path might be \mycomputer\wwwroot\ (Windows) or afp://server:volume: (Macintosh).

   **Note:** If you are a Mac OS X® user, to create a LAN connection, make sure to mount the network volume of the server you are creating a connection to on your computer desktop before you create your connection. In the Finder, select Go > Connect To Server to mount the network to which you want to connect.

4. FTP or SFTP connection information

   FTP provides a secure way to transfer files to your local or remote web server. If you will connect to your website from a remote location (for example, telecommuting from home or another office) you may need to connect to the website using FTP, to transfer files from a remote location across the Internet to your website (for example, if you don’t have a local network connection to the website).

   If you or your users will connect to your website by using FTP or SFTP, you must know the address of the FTP server as well as the user name and password to connect to the FTP server. For example, your FTP server’s address might be ftp.mysite.com.

   **Note:** For websites that are managed by Contribute Publishing Server (CPS), require users to use their own FTP or SFTP account information to connect to the website. For more information, see "Understanding server access for connecting to CPS-managed websites" on page 11.

See also

“Creating a Contribute website connection” on page 22

Creating a Contribute website connection

The Contribute Connection Wizard (Windows) or Connection Assistant (Macintosh) guides you through the steps of creating a connection to a website, prompting you for the information needed to establish a website connection.

**Note:** If you are a Macintosh user and have a .Mac account, you can easily create a connection to your .Mac account. In the Connection Assistant, select the .Mac check box. For information about selecting a folder to connect to in your .Mac website, see Contribute Help.
To create a website connection:
1 Start Contribute.
2 Select Edit > My Connections (Windows) or Contribute > My Connections (Macintosh).
   The My Connections dialog box appears. The options in this dialog box let you create and manage your Contribute connections.
3 Click Create.
   The Connection Wizard (Windows) or Connection Assistant (Macintosh) appears.
   This wizard or assistant guides you through setting up a new website connection. As you complete each screen in the wizard or assistant, click Next (Windows) or Continue (Macintosh) to go to the next screen.
4 Click Back or Go Back to return to a previous screen, if necessary.
   If you need more information about how to complete a screen, click the Help button.
5 On the Summary screen, review the connection settings to verify that they’re correct and click Done (Windows) or Finish (Macintosh) to complete the connection.
   Contribute creates a connection to the website.
   After Contribute has successfully created a connection to the website, the Connection Wizard or Assistant closes, and the main page of the website appears in the Contribute browser.

Installing Contribute Publishing Server (Optional)

The Contribute Publishing Server (CPS) installers give you two options for installing CPS, depending on your server environment:

- Simple Installation is for systems that do not already have a Java application server installed. This installation includes a Java Runtime Environment (JRE) and JRun 4 server for use with CPS. For more information, see “Installing Contribute Publishing Server using the Simple Installation” on page 24.
- WAR File Installation is for systems that have a Java application server already installed. For more information, see “Installing Contribute Publishing Server by using the WAR File Installation” on page 25.

   If your platform does not have an installer, you can download a WAR file and associated data files, and then follow the WAR File Installation process to install CPS.

   **Note:** If your platform does not have an installer, and you need to perform the WAR file installation but do not have a Java application server, you can download a trial version of the JRun 4 server with limited licensing capabilities. For more information, see the Adobe website at www.adobe.com

Software requirements

Contribute Publishing Server (CPS) is a J2EE web application that you can install as a Web Application Archive (WAR) file onto any supported Java application server.

You can install CPS as an integrated Java application server that includes Adobe* JRun™ 4.0, or as a WAR file that you deploy onto an existing Java application server.
Install CPS on its own server in a firewall-protected network. When using the User Directory service, CPS stores information to authenticate user access to web servers in your IT environment. For this reason, follow security procedures appropriate to any other application server you might install in your infrastructure.

For a list of the minimum hardware and software configurations required to successfully operate CPS, see http://www.adobe.com/products/contribute/productinfo/systemreqs/.

### Installing Contribute Publishing Server using the Simple Installation

The Simple Installation for CPS enables you to install a preconfigured Java application server that includes CPS. This installation is recommended if you don’t have an existing Java application server.

#### To install CPS by using the Simple Installation (Windows):

1. Download the installation file.
2. Double-click the file to start the installer.
3. Read and accept the license agreement to continue with the installation.
4. In the Installation Method screen, select the Simple Installation option.
5. Accept the default installation location or click Choose to select another location.
   - The default location is: C:/Program Files/Macromedia/Contribute Publishing Server
6. When prompted, enter an administrative password to restrict access to the CPS Console.
   - This is not the same password used to protect the Contribute administrator role, so you might want to make a note of it.
7. Review the Summary screen, and then click Install when you are ready to begin the installation.
   - The installer writes folders and files to the installation folder. CPS installs as a Windows service and automatically starts.
   - **Note:** The Contribute Publishing Server/jrun4 directory contains the JRun 4 application server and a deployed version of CPS.
8. In the Installation Complete screen, click Done to close the installer window.
   - The CPS Console launches in a browser. The browser probably displays a security warning, because the CPS installer created a self-signed certificate for the server. The certificate is used to create a secure connection, and self-signed certificates are not verified by a third-party so you always need to accept them.
   - **Note:** The CPS Console requires that you have Adobe Flash Player 7 installed on your computer.
9. Accept the certificate.
   - You might want to permanently accept the certificate, if you can. Otherwise, you might be prompted to accept the certificate each time you launch the CPS Console.
   - The CPS Console Login dialog box appears.
10. Enter the password you created during the installation process.
    - The CPS Console appears for you to configure CPS. For information, see “Configuring Contribute Publishing Server (CPS only)” on page 37.
    - **Note:** You can access the CPS Console by selecting Start > Programs > Macromedia > Macromedia Contribute Publishing Server > Administer Macromedia Contribute Publishing Server.
To install CPS by using the Simple Installation (UNIX):

1. Download the installation file.

2. At the command prompt, enter the following command to set execute permissions for the JRun installation shell script:
   ```
   chmod +x cps-linux.bin
   ```
   **Note:** If you are installing on the Solaris™ platform, substitute solaris for linux in the command.

3. Enter the following command to run the JRun installation script:
   ```
   sh ./cps-linux.bin
   ```
   **Note:** If you are installing on the Solaris platform, substitute solaris for linux in the command.

   The installer extracts the installation files, and then runs the install script.

4. View each screen of the license agreement, and then accept the agreement to continue with the installation.

5. In the Installation Method screen, select the Simple Installation option.

6. In the Installation Folder screen, accept the default installation location or enter another location.

7. In the Administrator Password screen, enter an administrative password to restrict access to the CPS Console.
   - *This is not the same password used to protect the Contribute administrator role, so you might want to make a note of it.*

8. Review the Summary screen, and then press Enter when you are ready to begin the installation.

   When the installer finishes, the Installation Complete screen displays a list of scripts that you can use to start and stop CPS.

9. Press Enter to exit the installer, and then change to the installation folder.

10. Enter the following command to start CPS:
    ```
    sh ./bin/startCPS.sh
    ```
    When you see the message, Server contribute-wps ready, the server has started.

11. Now you are ready to log in to the CPS Console and configure CPS.

    For information, see “Configuring Contribute Publishing Server (CPS only)” on page 37.

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**Installing Contribute Publishing Server by using the WAR File Installation**

Use the WAR File Installation for CPS if your computer is already running a J2EE application server or if there is not a Simple Installation installer for your platform.

**Note:** If your platform doesn’t have an installer, and you need to perform the WAR File Installation but do not have a Java application server, you can download a trial version of the JRun 4 server with limited licensing capabilities. For more information, see the Adobe website at [www.adobe.com](http://www.adobe.com).

The WAR File installation process involves the following steps:

1. Generate the WAR file.
   - In this step, you’ll use an installer to generate the WAR file and configure CPS file locations.
   
   **Note:** If there is not an installer for your platform, you might be able to download the zip file containing the WAR file and associated data files. In this case, you can skip the step for generating the WAR file, and proceed to the next step for deploying the WAR file.
2 Deploy the WAR file.

After you have the WAR file, you are ready to deploy it.

**Generating the WAR file using an installer**
The first step in the WAR File Installation for CPS is using an installer to generate a WAR file and associated data files in a directory structure. The installer also configures the WAR files to reference the installed data files.

*Note: If you want to change the location of these data files you can do so later, after you generate and deploy the WAR file.*

**To use the CPS installer to generate a WAR file (Windows):**
1 Download the installer.
2 Double-click the file to start the installer.
3 Read and accept the license agreement to continue with the installation.
4 In the Installation Method window, select the WAR file option.
5 Accept the default installation location or click Choose to select another location.
   The default location is: C:/Program Files/Macromedia/Contribute Publishing Server.
6 When prompted, enter an administrative password to restrict access to the CPS Console.
   *This is not the same password used to protect the Contribute administrator role, so you might want to make a note of it.*
7 Click Close when you finish viewing the Summary screen.
   The installer creates a directory structure that includes a WAR file and associated data files.
8 Now you are ready to deploy the WAR file.

**To use the CPS installer to generate a WAR file (UNIX):**
1 Download the installation file.
2 At the command prompt, enter the following command to set execute permissions for the JRun installation shell script:
   ```
   chmod +x pubserver-linux.bin
   ```
   *Note: If you installing on the Solaris platform, substitute solaris for linux in the command.*
3 Enter the following command to run the JRun installation script:
   ```
   sh ./pubserver-linux.bin
   ```
   *Note: If you installing on the Solaris platform, substitute solaris for linux in the command.*
   The installer extracts the installation files, and then runs the install script.
4 View each screen of the license agreement, and then accept the agreement to continue with the installation.
5 In the Installation Method screen, select the WAR file option.
6 In the Installation Folder screen accept the default installation location or enter another location.
7 In the Administrator Password screen, enter an administrative password to restrict access to the CPS Console.
   *This is not the same password used to protect the Contribute administrator role, so you might want to make a note of it.*
8 Review the Summary screen, and then press Enter when you are ready to begin the installation.
The installer creates a directory structure that includes a WAR file and associated data files.

9 Now you are ready to deploy the WAR file.

Deploying the WAR file
After you have the WAR file, you are ready to deploy it to your J2EE application server.

Note: CPS requires that your J2EE application server be running version 1.4 or later of the JVM (Java Virtual Machine).

The CPS application must run from an expanded directory structure. J2EE application servers vary in how you deploy the WAR file and create the expanded directory structure. Typically, there are two methods:

1 Deploy the compressed WAR file to a working directory.

On some J2EE application servers (such as IBM® WebSphere®), the deployment process expands the WAR file into a working directory, and from that point forward, the expanded directory is considered to be the application. For these application servers, you deploy the compressed WAR file and work in the resulting directory structure.

2 Expand the WAR file and deploy the expanded structure as the working directory.

On other application servers (such as JRun 4, BEA® WebLogic®, and JBoss), you expand the WAR file manually and then deploy the expanded directory structure, which becomes your working directory.

Note: The reason that you must expand the WAR file and then deploy the expanded structure into a working directory on certain Java application servers is to prevent the server from extracting the compressed WAR file to a temporary directory each time the server is started. If this happens, the application data stored in the ckm.xml file is written over each time the server extracts the compressed WAR file to a temporary directory.

The deployment method you use depends on your application server.

For more information, see the Java application server documentation on deploying a WAR file.

The following procedure demonstrates deploying CPS on a JRun 4 server.

Note: The following procedure assumes that you have a preexisting version of JRun 4 installed.

To deploy the WAR file on a JRun 4 server:
1 Manually expand the pubserver.war file in the installation folder.
   • At the command prompt, change to the CPS installation folder.

2 Create your working directory, using the following command:

   mkdir pubserver-war (UNIX)

   or

   md pubserver-war (Windows)

   a Change to your working directory, using the following command:

      cd pubserver-war

   b Expand the WAR file in your working directory, using the following command:

      java_home/bin/jar -xvf ..\pubserver.war

      where java_home is the root directory of your Java Runtime Environment (JRE).

3 Start the JRun server if it is not already running.

4 Open a web browser, and enter the URL for the JRun Administration Console.

Using the default installation location, the URL is: http://localhost:8000.
The JRun Administration Console appears in your web browser.

5 Enter the JRun administrator’s user name and password.

6 Expand the Default Server icon in the left pane, and then click the J2EE Components icon.

7 Click Add on the Web Applications panel.

8 Navigate to the working directory you created (pubserver-war) by clicking Browse, or by entering the path in the Source File Path text field.

9 Click Deploy.

The working directory is deployed in JRun, and the J2EE Components Summary screen appears.

Note: In the General Settings section, confirm that the Context Path is set to /contribute.

10 Click the Logging icon in the left pane.

The Log Viewer appears. Review the log to make sure that the server started correctly.

11 If you didn’t use an installer to generate the WAR file and configure CPS file locations, proceed to configuring the CPS file locations; if you used an installer, you can skip this step, unless you want to change the location where CPS data is stored.

12 Now you are ready to log in to the CPS Console and configure CPS.

For more information see, “Configuring Contribute Publishing Server (CPS only)” on page 37.

Deploying CPS on JBoss (Macintosh) application servers

JBoss is an open source, Java-based application server commonly deployed on Macintosh OS X servers. Adobe recommends that you manually expand the pubserver.war file in the installation folder, and copy the expanded WAR file to the folder: <JBoss_home>/server/default/deploy.

To deploy CPS on the JBoss application server:

1 Stop the JBoss application server by opening a terminal window, and executing the shutdown.sh script.

   % /<JBoss_home>/server/bin/shutdown.sh

2 Manually expand the pubserver.war file, and copy the expanded WAR file to the <JBoss_home>/server/default/deploy folder.

3 Create a folder named "database".
This is where you will store user and connection information.

4 Create the database.xml file in the database folder. If you are using a file-based user directory, ensure that the user_directory.xml file is also in the database folder. By default, the contents of the user_directory.xml file will look like this:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<directory/>
```

5 At the command prompt, change to the WEB-INF/config folder in your CPS working directory.

6 Open the ckm.xml file in a text editor.

   Note: You can change the location of the database folder and the error log files according to your deployment requirements.

7 Change the path value for `<home_directory>` to indicate the folder created in step 3 to store user and connection information.

   The following example changes the database folder path to: `<Macintosh HD>/Contribute Publishing Server/database`.

   Note: If you already added user and connection information in CPS, move that information from the current location to the new location you set.

   For example:

   ```xml
   <plugin_fileDatabase>
   <home_directory><Macintosh HD>/Contribute Publishing Server/database</home_directory>
   </plugin_fileDatabase>
   ``

8 Change the path value for `<logger_settings>` to indicate where you want to store CPS error and output logs.

   For example:

   ```xml
   <out>
   <file><Macintosh HD>/Contribute Publishing Server/logs/out.log</file>
   </out>
   <err>
   <file><Macintosh HD>/Contribute Publishing Server/err.log</file>
   </err>
   ``

9 Save and close ckm.xml, and then restart your JBoss application server.

   To restart JBoss, execute the `run.sh` script in a terminal window.

   `% <JBoss_home>/server/bin/run.sh`

10 Now you are ready to log in to the CPS Console and configure CPS.

    Using a web browser, browse to the following URL: https://<server>/8080/cps/<context_root>/admin.

    Replace the `<server>` and `<context_root>` variables with the domain name (or IP address) of your server, and the CPS context root name (the name of the WAR file).

    For information, see “Configuring Contribute Publishing Server (CPS only)” on page 37.

**Configuring the CPS file locations**

CPS stores user and connection information, along with logs, to your local file system, and indicates where those files are stored.
To configure the WAR file:

1. At the command prompt, change to the WEB-INF\config folder in your CPS working directory.
2. Open the ckm.xml file in a text editor.
3. Change the path value for `<home_directory>` to indicate where you want to store user and connection information.
   
   **Note:** If you already added user and connection information in CPS, move that information from the current location to the new location you set.
4. Change the path value for `<logger_settings>` to indicate where you want to store CPS error and output logs.
   
   For example:
   ```xml
   <out>
     <file>C:\Contribute Publishing Server\logs\out.log</file>
   </out>
   <err>
     <file>C:\Contribute Publishing Server\err.log</file>
   </err>
   ```
5. Save and close ckm.xml, and then restart your JBoss application server.
6. Now you are ready to log in to the CPS Console and configure CPS.
   
   For information, see “Configuring Contribute Publishing Server (CPS only)” on page 37.
Chapter 3: Configuring Contribute

After you install Adobe® Contribute® and connect to your website (see “Setting up your Contribute Server Environment” on page 11), you are ready to configure Contribute and Contribute Publishing Server (CPS) to meet your needs.

If you are using CPS, you need to enable your website to work with the server and add users to the server. Finally, you can deploy Contribute to your users and give them website connection information.

Configuring Contribute

After you install Contribute and connect to your website, you are ready to adjust the administrative settings for the website, and to create roles with different levels of access for different users.

About Contribute administrative settings

Contribute administrative settings are a collection of settings that apply to all users of your website. These settings let you fine-tune Contribute to provide a better user experience. The Contribute administrative settings are as follows:

- **Users and Roles**: Lets you add users to the site, and create, edit, and delete roles.
- **Administration**: Lets you specify a primary administrator for the site, set an administrator password, and remove administration.

  *Contribute does not require that you set an administrator password; however, you should create a password to protect access to the administrative functions. If you fail to assign an administrator or an administrative password, anyone with a Contribute connection to the site can make themselves an administrator of that site.*

- **Publishing Server**: Lets you enable your website connection to use CPS—a suite of applications running on a server that lets you extend the capabilities of Contribute, as well as provide additional functions for users.

  *Note: If you will be using the CPS User Directory service, you should enable CPS and the User Directory service before adding users to the site. When you start the User Directory service, any users who have connected to the site are removed, and any connection keys you might have sent to users become disabled. To learn more about CPS, see “Understanding Contribute user authentication models” on page 37.*

- **Web Server**: Lets you configure Contribute to work with your website's specific web server configuration. Because all websites vary somewhat in how they are set up, the configuration options in the Web Server dialog box let you specify settings specific to your website, which Contribute might not be able to determine automatically.

  To learn more about the web server configuration settings you can specify, see the web server index pages section and the alternate website addresses section in Contribute Help.

- **Rollbacks**: Lets you enable rollback files and specify the number of rollback files to maintain on the server.

  To learn more about rollbacks, see Contribute Help.

- **Page Expiry**: Lets you specify an expiry date for pages. This helps you maintain only that information that is current on your website.

- **Workflow Association**: Lets you associate a workflow to a template. All pages created using that template will follow the workflow assigned to it.
**Links**  Lets you specify the format for links on your website. Links can be written relative to the path of the current page, or relative to the root of the website.

**New pages**  Lets you specify the encoding used for characters in web pages and the default page extension (.htm, .html, and so on) to use when you create pages.

By default, the character encoding for new pages is set to Western, which applies to all English and Western European languages. The default encoding is set from your computer operating system’s default encoding. Additional options include Central European, Cyrillic, Greek, Icelandic, Japanese, Traditional Chinese, Simplified Chinese, and Korean. If you want to create pages that display characters for multiple languages, select UTF-8.

To learn more about setting new pages preferences, see Contribute Help.

**Compatibility**  Contribute offers administrators two compatibility options - one that allows users with earlier versions to work on the website, and one that does not.

To learn more about setting compatibility preferences, see Contribute Help.

**Enable PDF Embedding**  Enables Contribute users to insert documents as embedded PDF objects in draft web pages.

**See also**
“Configuring Contribute administrative settings” on page 32

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**Configuring Contribute administrative settings**

The Administer Website dialog box lets you configure a variety of settings that specify how Contribute interacts with your website as well as letting you manage users.

You can set settings that affect the whole website, such as the administrator’s contact or password information, the number of rollback versions of pages to save, and filename conventions for website default home pages.

For more information about Contribute administrative settings, see “About Contribute administrative settings” on page 31.

**To open the Administer Website dialog box:**

1. Select Edit > Administer Websites (Windows) or Contribute > Administer Websites (Macintosh), and select the website you want to set options for.

2. If prompted, enter the Administrator password, and then click OK.

Assigning an administrator to a site and assigning a password for the administrative account are optional. For more information about becoming an administrator, see Contribute Help.
The Administer Website dialog box appears.

3 Select the administrative settings category you want to modify from the list on the left side of the dialog box.

Click the Help button in the dialog or see Using and Administering Contribute for information about options in this dialog box.

**About Contribute user roles and settings**

Contribute lets you control access to your website by creating roles. Roles are collections of settings that you create, each of which may be assigned privileges by the administrator of the site. The roles you create reflect different levels of access to page creation, editing and deletion of content, page design, and approval.

You can define any number of Contribute roles and specify various options for each role you create. Contribute roles are not based on system or network user groups. You can create the same role for members of various workgroups and send them a connection. As long as the recipients have appropriate access to the network and server, they can edit the website.

**Contribute default roles**

Contribute has three default roles: Administrator, Publisher, and Writer.

**Administrator** Identifies the administrator of the site, who can create roles and modify existing ones, add users to the site, and send connections to new users so that they can access the site. A site can have more than one person assigned to the administrative role.

**Publisher** Identifies users who can create and edit pages as well as publish pages to the website.

**Writer** Identifies users who can create and edit pages, but cannot publish pages to the website. A user in the Writer role must send their pages for review to a user in a Publisher or Administrator role who can publish the page to the site or send it back to the Writer for additional editing.

Depending on your website publishing needs, and the number of people adding content to your site, you might only need to use the Administrator and Publisher roles. If you deploy Contribute in an organization where website content must be approved before it's published, you should use the Administrator, Publisher, and Writer roles.
In general, you shouldn’t need to create too many roles for a website. If you are deploying Contribute in a large organization that uses many internal websites to communicate information, consider creating connections to Contribute from the individual websites and sending appropriate roles to the users who are responsible for each site’s content.

**Settings for user roles**
Contribute lets you define the following categories of permissions and website settings in the Edit *Role Name* Settings dialog box:

- **General** lets you select a starting (home) page that users in the selected role see when they enter the website. For more information about general role settings, see Contribute Help.
- **Folder/File Access** limits a role’s access to the selected folder (or folders) and any subfolders they contain. For more information about folder and file access settings, see Contribute Help.
- **Editing** lets you specify what content users can modify and determine how Contribute processes paragraphs, line spacing, and accessibility options. Select the Allow HTML Snippet Insertion option for a user role to enable users to insert HTML code snippets in Contribute pages. For more information about page editing paragraph settings, and inserting HTML code snippets, see Contribute Help.
- **Styles and Fonts** specifies which font sets users have access to, and which users can apply style and formatting to text. For more information about style and font settings, see Contribute Help.
- **New Pages** specifies whether Contribute users can create blank pages, and which (if any) Dreamweaver MX templates they can use to create pages. You can also specify which pages, if any, the user can copy. The options in this category determine what options users see in the New Page dialog box. For more information about setting new web page preferences, see Contribute Help.
- **File Placement** lets you specify folder locations for files based on the file extension used to identify the file type. You can also specify that Contribute not allow files of a certain size to be uploaded to the web server. For more information about setting options for file placement, see Contribute Help.
- **Shared Assets** lets you create a library of assets (such as images, Adobe® Flash® Player 9 content, or Dreamweaver from Adobe library items) that users can add to web pages. You can restrict access to shared assets to specific users or let any Contribute user accessing the website add the assets to their pages. For more information about setting options for shared assets, see Contribute Help.
- **New Images** lets you specify a maximum file size, width, and height for images. You can also restrict users so that they can use images only from a shared asset library that you create, or you can allow them to add any image to a web page. For more information about setting options for new images, see Contribute Help.

**Example role assignments**
As an example of roles you might create, consider an online magazine. The job functions associated with producing a magazine include a publisher, managing editor, copy editor, writer, and web designer. In addition, Contribute adds an administrator to maintain the magazine’s website. Each role reflects separate access to article creation, approval, editing and deletion, page design, and site maintenance.

The following table describes the roles and privileges related to Contribute:
Creating Contribute roles

You can create roles for users to determine their level of access in a website.

For more information about Contribute default user roles and settings, see “About Contribute user roles and settings” on page 33.

When Contribute users connect to a website, they are prompted to indicate which role they belong to (this is not true for CPS-managed sites). For example, a Contribute user might choose or be assigned to the Writer role. Thereafter, while connected to that website, that user has whatever permissions you have configured for the Writer role.

To create a role:
1. Select Edit > Administer Websites (Windows) or Contribute > Administer Websites (Macintosh), and then select the website you want to administer from the submenu.

   If the website has no administrator, click Yes when a dialog box asks whether you want to become the website administrator. Then enter and confirm an administrator password for the website, and click OK.

   The Administer Website dialog box appears.

2. Select Users And Roles.

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Contribute role</th>
<th>Privileges</th>
</tr>
</thead>
<tbody>
<tr>
<td>System administrator</td>
<td>Administrator</td>
<td>Installs Contribute, creates connections to the website, and defines Contribute roles appropriate to the magazine’s job functions. The system administrator consults the designer on how to set up role settings so that other members of the magazine’s staff have appropriate editing privileges in their area.</td>
</tr>
<tr>
<td>Publisher</td>
<td>Publish</td>
<td>Gives final approval to all articles on the website and can publish final drafts of pages or send them back for additional editing or writing.</td>
</tr>
<tr>
<td>Managing editor</td>
<td>Publish</td>
<td>Monitors drafts as they go from writers to copy editors and keeps track of who is working on what article. The managing editor approves articles before sending them to the publisher for final approval and publication to the website.</td>
</tr>
<tr>
<td>Copy editor</td>
<td>Writer</td>
<td>Can edit any unlocked text on a page. The copy editor cannot publish pages to the site; they send the edited articles to the managing editor for approval.</td>
</tr>
<tr>
<td>Writer</td>
<td>Writer</td>
<td>Can edit any unlocked text on a page, insert images, and apply pre-defined styles to text.</td>
</tr>
<tr>
<td>Web designer</td>
<td>Administrator</td>
<td>The designer creates new CSS styles and web page templates to accommodate changing site designs, inserts images and Flash content into pages, and adds assets to the shared asset library for writers to insert into pages.</td>
</tr>
</tbody>
</table>

See also

“Creating Contribute roles” on page 35
By default, Contribute creates three roles: Administrator, Publisher, and Writer.

3. Click Create New Role.
   The Create New Role dialog box appears.

4. Select an existing role from the Create New Role From Copy Of List box.
   Selecting an existing role as a base for a new role lets you reuse the selected role’s settings. You can modify the new role’s settings as needed.

5. Enter a name for the role you want to create, and then click OK.
   The new role appears in the list of role names in the User and Roles panel of the Administer Website dialog box.

6. Select the role name, and then click Edit Role Settings.
   The Edit Role dialog box appears. The Edit Role dialog box lets you modify the user settings associated with each role.

7. Modify the settings for the role.

8. When you finish defining the role, click OK to save your changes.
The Role dialog box closes, returning you to the Administer Website dialog box.

9. To create additional roles, repeat steps 4 through 7 for each role you want to add.

10. Select another administrative category to modify, or click Close to apply your changes and exit the Administer Website dialog box.

   Note: You can modify a role’s settings at any time, even after you have distributed a connection key. Connection information and website permissions are maintained separately.

11. To modify the roles you have created, select the role whose settings you want to modify and click Edit Role Settings. The Role dialog box appears.

12. Click Close to close the Define Roles dialog box, and then click Close to close the Administer Website dialog box.

Next, you will configure CPS. For more information, see “Configuring Contribute Publishing Server (CPS only)” on page 37. If you are not using CPS to manage your website, then you are ready for user to install Contribute and connect to the website. For more information, see “Deploying Contribute and website connections” on page 46.

Configuring Contribute Publishing Server (CPS only)

If you are using Contribute Publishing Server (CPS) with Contribute, it’s important to configure the User Directory service when you deploy. User Directory service is a user management solution that lets you integrate Contribute with your organization’s user directory to easily manage and authenticate users.

You can also configure the E-mail Notification and Log services at the same time, or you can wait until later. At a later time, you will probably also want to set up Simple File Deployment service and RSS Feed service. For more information, see Contribute Publishing Server Help.

Before you configure the User Directory service, you should understand the two authentication models available, and how Contribute works with LDAP and what the LDAP authentication workflow is.

Understanding Contribute user authentication models

Contribute provides two user authentication models that you can use:

File-based authentication. Lets you use either a password stored in an XML file, or Windows domain authentication.

When using the Contribute file-based authentication system, CPS looks up the user’s credentials in an XML file located on the server.

When using Windows domain authentication, CPS validates the user’s identity against the Windows domain in which CPS operates.

Note: Windows domain authentication uses the winNT.dll library for authentication. You must ensure that this file’s path (usually c:\windows\system32) is placed in the java.library.path environment variable.

User directory service-based authentication. Lets you integrate Contribute with user directory services such as Lightweight Directory Access Protocol (LDAP) or Active Directory.

About Contribute and LDAP or Active Directory

Lightweight Directory Access Protocol (LDAP) is a protocol for accessing information directories. Microsoft Active Directory and LDAP are types of directory services. In the case of directory services, a directory is like a telephone book and not like a directory (folder) on your computer.
You can integrate the User Directory service of CPS with your directory service. The User Directory is an application service that enables you to centrally manage users.

When you integrate with your LDAP directory, you control who can access your website and how they are authenticated.

**LDAP branches** Using the User Directory service, you can add your entire LDAP user directory for your website, or you can indicate specific branches to search.

You have the following options:

- Add the root node of your LDAP tree to the user directory, and enable search for users or groups in any of the branches.

- Add specific branches to the user directory and determine the scope of the search—whether you want to search only the branch or the branch and any subbranches. This way, you can exclude certain branches of your LDAP tree from the search.

For each branch you add, you can define a user search only or you can define a user and a group search.

For example, suppose your LDAP directory has three branches: East, Central, and West. You want to integrate with the LDAP directory of your entire company, so in the following example, you add one branch for a user search to the user directory:

```
User branch with baseDN:o=MyCompany, Search Scope:SUBTREE_LEVEL,
filter:(objectClass=organizationalPerson)
```

Now, suppose you want to include only the Central and West branches and you want to define user and group searches. You add the following four branches to the user directory:

```
User branch with baseDN:ou=Central,o=MyCompany, Search Scope:SUBTREE_LEVEL,
filter:(objectClass=organizationalPerson)
User branch with baseDN:ou=West,o=MyCompany, Search Scope:SUBTREE_LEVEL,
filter:(objectClass=organizationalPerson)
Group branch with baseDN:ou=Central,o=MyCompany, Search Scope:SUBTREE_LEVEL,
filter:(objectClass=groupOfNames)
Group branch with baseDN:ou=West,o=MyCompany, Search Scope:SUBTREE_LEVEL,
filter:(objectClass=groupOfNames)
```

**LDAP permissions and Contribute permissions** Integrating your company LDAP directory with CPS adds another layer of permissions. When connecting to an LDAP or Active Directory server, CPS respects any file/folder permissions set by the LDAP or Active Directory service. Contribute permissions are layered on top of the directory service or the network/server permissions and are applied globally.

Contribute permissions, which are settings stored in an XML file at the root of your website, are specific controls for the Contribute editing environment. These permissions are not assigned on a per-user basis; they are groups of settings that Contribute reads when first connecting to a website. Contribute then conforms to these settings during the editing process. Contribute administrators can specify access to certain folders for different user roles.

**LDAP authentication types** CPS authenticates users against the LDAP directory. For CPS to authenticate a user, the LDAP server must verify the user’s display name. This is usually a unique name in the LDAP tree that is associated with the user. CPS receives only a user name, so it must retrieve the user’s display name, based on the user name, to authenticate the user.
In your User Directory service configuration, you can select one of four types of LDAP authentication:

1. **LDAP Bind** authenticates users by pre-pending a specified prefix and appending a specified suffix to the user ID. With this method, you can specify only a single prefix and a single suffix.
   - Use this method if all the DNs in your LDAP directory are stored as `prefix + <username> + suffix`
   - If all DNs are not stored according to this pattern, then this method does not enable you to construct a path to all the users in your system.

2. **LDAP Bind (auto-find user DN)** authenticates users in a two-step process: CPS looks up the user ID of the user who’s trying to log in to determine that user’s DN, and then uses the DN to authenticate the user.
   - Use this method if all your DNs are not stored according to the same `prefix + <username> + suffix` pattern.
   - For example, if you have set up CPS to search multiple branches (OUs) of your LDAP tree, and those branches store DNs in different ways, then you should use this authentication method.
   - Although this method requires an extra LDAP search (compared to the LDAP Bind method), it gives you more flexibility.

3. **Password In File** authenticates users using passwords that you specify when you add users to the file-based User Directory.
   - **Note:** If you use the file-based authentication with an LDAP Directory, you must have a file entry for each user in your LDAP directory.

4. **Windows domain** uses your organization’s Microsoft Windows’ authentication solution.
   - If you use this method, the User IDs in your LDAP directory must match your Windows user IDs.
   - For more information about Contribute user management models and integrating Contribute with your organization’s directory services, see “Understanding Contribute user management models” on page 1.

**Authentication workflow**

When you attempt to connect to a CPS-managed website through Contribute, the process through which CPS communicates with your organization’s LDAP or other user directory service is as follows:

1. Contribute prompts you for user directory authentication credentials.
2. Contribute generates a Simple Object Access Protocol (SOAP) user authentication message, and sends the request to CPS over an SSL-encrypted network connection.
   - **Note:** While sending SOAP requests to CPS, Contribute sends the request over an SSL encrypted network connection, and uses port 8900 by default. The message timeout is 20 seconds.
3. CPS requests authentication from the LDAP server by using the credentials specified in the SOAP user authentication message.
   - **Note:** While sending requests to the user directory server, CPS sends the request over an LDAP or LDAPS network connection, and uses ports 389 and 636 by default. The message timeout is 60 seconds.
4. The LDAP server attempts to validate the credentials and sends the resulting confirmation or rejection to CPS.
5. If the authentication was successful, CPS sends a connection key to the Contribute client for each website that you have access to.
6. For each connection that CPS does not return, Contribute prompts you for FTP authentication for the corresponding website.
If you successfully authenticate access to a website, you can edit the website by using Contribute.

### Configuring CPS User Directory and other services

You should configure CPS User Directory services when you deploy CPS. You can also configure the E-mail Notification and Log services at the same time, or you can wait until later.

*Note: For more information about configuring the other CPS services, see Contribute Publishing Server Help.*

After you configure the User Directory service, you can enable your website to use CPS.

**To configure Contribute Publishing Server:**

1. In a web browser, enter the URL for the CPS Console.

   *Note: The CPS Console requires that you have Flash Player 7 installed on your computer.*

   The URL is https://hostname:port/contribute/admin/server.cfm, and uses the following variables:

   - **hostname** Is the server computer's DNS name or IP address.
   - **port** Is the network port number that CPS uses. If you used the Simple Installation, the port number is 8900. If you deployed CPS as a WAR file in an existing Java application server, the port number varies with your application server's configuration. The following table lists the port numbers that CPS uses on some of the more popular Java application servers:

<table>
<thead>
<tr>
<th>Java application server</th>
<th>Port number</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEA Weblogic</td>
<td>7001</td>
</tr>
<tr>
<td>IBM Websphere</td>
<td>9080</td>
</tr>
<tr>
<td>Adobe JRUN</td>
<td>8900</td>
</tr>
<tr>
<td>JBoss</td>
<td>8080</td>
</tr>
</tbody>
</table>
If you select the Simple Installation for installing CPS (see “Installing Contribute Publishing Server (Optional)” on page 23), the URL for the CPS Console is https://localhost:8900/contribute/admin/server.cfm/.

The CPS Console launches in a browser.

If this is the first time you’re launching the console, the browser probably displays a security warning, because the CPS installer created a self-signed certificate for the server. The certificate is used to create a secure connection, and self-signed certificates are not verified by a third party so you always need to accept them.

2. If your browser displays a security warning, accept the certificate.

   You might want to permanently accept the certificate, if you can. Otherwise, you might be prompted to accept the certificate each time you launch the CPS Console.

3. Enter the CPS administrator password you created during the installation process, and then click Login to log in to the CPS Console.

   The CPS Console appears. Make a note of the CPS Console web address that appears at the top of the Overview panel; you’ll need this address later when you enable CPS in Contribute.

4. Select User Directory from the Services Settings list on the left.

   At this point, you should configure the User Directory. You can also configure the E-mail, and Log services now, or you can do it later.

   Note: The Website Settings category shows the website-specific settings for websites you’ve enabled CPS for. You’ll enable CPS for your website next, and then configure Website Settings.

5. Enter all the settings to configure the User Directory service.

   For more information about any of the settings, click the Help link to show online help.

6. Click Save Settings to save your settings.

7. (Optional) Select another service from the Services Settings list on the left if you want to configure the other services now.
Now you are ready to start Contribute, and enable your website to use CPS. To do so, see “Enabling Contribute websites to work with CPS (CPS only)” on page 42.

Configuring the User Directory service to use secure LDAP

The default configuration of the User Directory service does not encrypt communications to the LDAP server. You can configure the service to use secure LDAP (LDAPS) to encrypt information to and from your LDAP server.

Note: Before you set up LDAPS, you should have already configured the User Directory service to integrate with your LDAP/Active Directory server.

This section describes one method for configuring the User Directory service to use LDAPS. This method uses the Java keytool to import your LDAP server SSL certificate into the trust store of the CPS J2EE server JVM.

Note: The following procedure is for the CPS Simple Installation—if you did not already have a Java application server when you installed CPS. If you used the CPS WAR File Installation—because you already had a Java application server—then you should consult your Java server documentation for information about importing an SSL certificate.

To import your LDAP SSL certificate into CPS trust store to use LDAPS:

1. In a command prompt, change to the CPS installation directory in the following default location:
   
   C:/Program Files/Macromedia/Contribute Publishing Server/jre/bin

2. Enter the following command:

   keytool

   Depending on your configuration, you might need to include more information. The complete command is:

   keytool -import -alias serverca -file <certificate filename and path> -keystore {jrun.rootdir}/lib/trustStore -storepass changeit

   In this command, certificate filename and path is the name and location of your LDAP SSL certificate.

3. Restart the server running CPS.

   Now you are ready to start Contribute, and enable your website to use CPS. To do so, see “Enabling Contribute websites to work with CPS (CPS only)” on page 42.

Enabling Contribute websites to work with CPS (CPS only)

After you install (see “Installing Contribute Publishing Server (Optional)” on page 23) and configure (see “Configuring CPS User Directory and other services” on page 40) Contribute Publishing Server (CPS), you can enable any website to which you’ve created a connection to access CPS.

Note: If you haven’t created a connection to your website, do so before you proceed with these instructions. For information, see “Creating a Contribute website connection” on page 22.

To enable CPS:

1. Start Contribute.

2. Select Edit > Administer Websites > Website Name.

   The Administer Website dialog box appears.

3. Select Publishing Server from the list of administrative categories on the left.
4 Click Enable Publishing Server.
The Enable Publishing Server dialog box appears.

5 Enter the Publishing Server web address in the address field and deselect the Enable User Directory check box if you will not use the User Directory service to manage users.

Note: If you plan to use the User Directory service to manage users, see “Adding users to your website (CPS only)” on page 44 to learn how to add users to your website.

For information about options in this dialog box, click Help to show online help.

6 Click OK.
Contribute establishes a connection to CPS.

7 In the Administer Website dialog box, click the Publishing Server Console link.
The CPS Login dialog box appears.

8 Enter the CPS administrator password, and then click Login to log in to the CPS Console.
The CPS Console opens to the Website Settings panel.
Verify that you want the Log and E-mail Notification services enabled.

By default, the Log and E-mail Notification services are enabled. To disable one or more of these services, deselect the appropriate check box, and click Save Settings.

Now, Contribute is enabled to use Contribute Publishing Server and you are ready to add users to your website. For more information, see “Adding users to your website (CPS only)” on page 44.

**Adding users to your website (CPS only)**

When you enable Contribute to work with CPS (see “Enabling Contribute websites to work with CPS (CPS only)” on page 42), you must add users to the website from your LDAP, Active Directory, or file-based user database.

**Note:** Any users previously connected to the website are removed.

Users cannot connect to a CPS-managed website unless you have added them as users. This differs from using Contribute without CPS, where anyone with a connection key and connection information can connect.

1. In Contribute, select Edit > Administer Websites > Website Name.
   The Administer Website dialog box appears.

2. Select Users And Roles from the list of administrative categories on the left.

3. Click Add Users.
The Add Users dialog box appears.

4 Select a role to assign users from the Role For The New Users pop-up menu.

The role you assign determines the users’ editing permissions for modifying the site’s pages.

5 Add users to the role you selected. The Search Results panel lets you locate users in your organization’s user directory and add them to the list of users for the role you’ve selected.

Do the following to find and add user names to a role:

a Enter a name in the Search text box, and then click Search. Contribute shows the closest matches it finds in the Search Results list.

b Select the name of the user you want to add to the role, and click Add to move that user to the list of Users to add.

If you inadvertently add a user to a role, you can remove that user by selecting their name in the Users to add list and clicking Remove.

6 (Optional) Select the Send Connection Key e-mail To Users option to send an e-mail to the users you’ve added to the role.

Contribute creates a single e-mail message with a connection link that you can send to the users. The e-mail lets the user know that they’ve been given access to the website, and the connection link lets them easily import connection information into their copy of Contribute.

7 Click OK to close the Add Users dialog box.

The Users And Roles panel of the Administer Website dialog box shows the new users who are assigned to a specific role.

8 To add additional users, repeat steps 4 through 8.

For more information on creating user roles, see “About Contribute user roles and settings” on page 33.

Now you are ready for user to install Contribute and connect to the website. For more information, see “Deploying Contribute and website connections” on page 46.
Deploying Contribute and website connections

To set up Contribute users, you need to make sure that every user has Contribute installed on their machine. Then, you need to provide them with the basic site connection information for the web server. You do this by sending them a connection key.

Contribute lets you share website connection information by embedding website information in a connection-key file. Because the connection key is encrypted with a password, any network or File Transfer Protocol (FTP) login information you send in the file remains secure and can be accessed only through Contribute. You can either e-mail the file to users, or save it to your computer for users to download and import.

Note: FTP and Secure FTP (SFTP) connection keys can be used across platforms; LAN connection keys are platform specific.

After receiving a connection key, a user double-clicks it to start the connection process. Because the file is encrypted, the user must know the password that the administrator defined for the key. Connection keys also specify what role settings to apply. When the user supplies the correct password, Contribute automatically makes a connection to the site and allows page edits as defined for the associated Contribute role.

If you are using CPS to manage users, you must add users to your website before they can connect and begin using Contribute to edit the website (see “Adding users to your website (CPS only)” on page 44). After you have added users to the website, you can send them a connection key to connect.

You can also have users type connect:server domain name (where server domain name is the name of the server where CPS is installed) in the Contribute browser address bar to connect to the website.

The procedure for sending a connection key varies depending on whether you are using CPS to manage your website or not. If you’re not using CPS, see “Sending connection keys for websites” on page 46. If you are using CPS to manage users, see “Sending connections for CPS managed sites” on page 48.

Sending connection keys for websites

Using the Export Connection Wizard (Windows) or Export Connection Assistant (Macintosh), you can easily set up connections to websites for other users by sending them a connection key.

Note: To send a website connection key to other users, you must create one or more Contribute website connections to share. If you need to create a Contribute website connection, see "Installing Contribute and creating an administrative connection" on page 21.

If your website is managed by CPS, see “Sending connections for CPS managed sites” on page 48 for information about sending connection keys.

To create a website connection key to share with users:
1. Select Edit > Administer Websites (Windows) or Contribute > Administer Websites (Macintosh), and select the website you want to administer from the submenu.
2. If the website has no administrator, click Yes when a dialog box asks whether you want to become the website administrator. Then enter and confirm an administrator password for the website, and click OK.
The Administer Website dialog box appears.

3 Select the Users And Roles category on the left side of the dialog box. The Users And Roles dialog box appears.

4 You can send a connection-key file to a new user, or you can send a connection key to a user who has already connected to the site, and assign them a new role.
   - To send a connection key to a new user, click Send Connection Key.
   - To send a connection key to an existing user, assigning them a new role, select the user’s name from the list of connected users, and click Send Connection Key.

   The Send Connection Key Wizard (Windows) or Export Connection Key Assistant (Macintosh) appears.

5 Follow the instructions in the wizard or assistant, and click Next (Windows) or Continue (Macintosh) to proceed to the next screen.
6. After completing the wizard or assistant, a new connection-key file is created for users, assigning them to a new role. You can e-mail the connection-key file to the user or save the file to your computer.

7. Select another category to modify, or click Close to exit the Administer Website dialog box and save your changes.

See also
“Deploying Contribute and website connections” on page 46

Sending connections for CPS managed sites
If you’re using Contribute Publishing Server (CPS) to manage your website, you send users a connection key that connects them to the server.

You can also have users type connect:server domain name (where server domain name is the name of the server where CPS is installed) in the Contribute browser address bar to connect to the website.

Note: Before users can use a connection key or type connect: to connect to a CPS managed website, you must add users to the website. If you haven’t already done so, see “Adding users to your website (CPS only)” on page 44.

If you’re not using CPS to manage your website, see “Sending connection keys for websites” on page 46 for information about sending connection keys.

To send a CPS connection key:
1. Select Edit > Administer Websites (Windows) or Contribute > Administer Websites (Macintosh), and select the website you want to administer from the submenu.

   If the website has no administrator, click Yes when a dialog box asks whether you want to become the website administrator. Then enter and confirm an administrator password for the website, and click OK.

   The Administer Website dialog box appears.

2. Click Send Connection Key.

   The Send Connection Key dialog box appears.

3. You can select to e-mail the connection link to the user, or save the file to your local computer.

4. Select another category to modify, or click Close to exit the Administer Website dialog box and save your changes.

See also
“Deploying Contribute and website connections” on page 46
“Adding users to your website (CPS only)” on page 44

Deploying Contribute across an organization
You can deploy Contribute on multiple computers across the organization by using the Microsoft Systems Management Server (SMS). SMS allows you to effectively manage large groups of Microsoft-based computer systems in your organization with services such as remote control, patch management, and software distribution. Combining the features of SMS and Adobe’s installer, you can deploy Contribute by simply creating a package within the SMS administrator console. The package is automatically sent to all the client computers in the organization. The SMS client on each client computer receives the package and then runs it to install the Contribute application. You can choose to set up the installation process in such a way that it does not require any user intervention.
System Requirements

- Intel® Pentium 4, Intel Centrino®, Intel Xeon®, or Intel Core ™ Duo (or compatible) processor.
- Windows NT, Microsoft® Windows XP with Service Pack 2 or Windows Vista™ Home Premium, Business, Ultimate, or Enterprise (certified for 32-bit editions).
- 512 MB of RAM
- 1 GB of available hard-disk space (additional free space required during installation)

Permissions

You must have local Administrator rights to install SMS on computers running Windows NT.

Client status

It is not necessary that the user is logged into the computer when you install or uninstall Contribute.

Deploying Contribute by using Microsoft Systems Management Server

To deploy Contribute by using SMS, you must first create a package and add an advertisement, which then initiates the deployment process. The package is automatically sent to all the client computers in the organization. The SMS client on each client computer receives the package and then runs it to install the Contribute application.

To deploy Contribute using SMS, do the following:

1. Uninstall previous versions of Contribute
2. Customize the deployment.xml file
3. Set up the server
4. Create the SMS package
5. Create the program
6. Create the collection
7. Create an advertisement

Uninstall previous versions

It is recommended that you first uninstall any existing versions of Contribute. You can uninstall Contribute by doing one of the following:

- Uninstall using Add/Remove Programs
- Uninstall using SMS/SCCM. To remove Contribute using SMS, follow the installation steps for preparing the package for deployment. Use the following command-line switch in the General tab of the Program Properties dialog box.

```bash
etup.exe --deploymentFile=uninstall.xml --mode=silent```

Note: If the uninstall process prompts you to restart the computer, do so.

Customize uninstall and install files

For silent installations where there is no user intervention required during the installation process, you must configure the AdobeContribute5-mul.install.xml file. Similarly, to silently uninstall Contribute, you must configure the AdobeContribute5-mul.remove.xml file.
Specify the serial number and location for installation in the files as follows.

- `<Property name="serialNumber">xxxxxxxxxxxxxxxxxxxxxxxx</Property>
- `<Property name="INSTALLDIR">Drive:\Program Files\Adobe</Property>

**Setup the server**

SMS 2003 offers greater control and flexibility than previous versions. With SMS 2003, you can force a package to run by using a specified account with administrative rights on the target computer. This lets you distribute the package to client computers who are not logged into the network or to a user who does not have administrator rights.

1. From the Windows Start menu, select Start > Programs > Systems Management Server > Systems Management Server Console.
   
   The Systems Management Server Console appears.

2. In the left pane of the MMC, expand Site Database Tree, and then expand the Site Hierarchy node.

3. Select the site by right-clicking the site, and then select Properties.
   
   The Properties dialog box appears.

4. (Optional) On the Accounts tab in the Properties dialog box, specify the SQL server account.
   
   The SQL Server account, sometimes called the Site Database account, provides SMS services running on the primary site server with access to the SMS site database. If you configure SMS to use Windows Authentication, the SQL Server account information in the site properties appears blank, but SMS automatically uses either the SMS Service account (standard security) or the Computername$ account (advanced security). No additional configuration is required. It is recommended that you use advanced security and Windows Authentication because then SMS uses LocalSystem or Computername$ to connect to the SMS site database, so the password is managed by the operating system and is less vulnerable to discovery and misuse.

**Create the package**

If you are creating a package from the SMS Installer, the installer creates an executable file that has all the information and the commands necessary for deployment.

1. Open the Systems Management Server console, right-click Packages, and then select New>Package.
   
   The Package Properties dialog box appears.

2. On the General tab, enter the name of the package (up to 50 characters), and then enter information for the following. The name field is compulsory, but the others are optional.
   
   - Name for the package
   - Version number of the package
   - Publisher’s Name
   - Language version
   - Description of the package

3. On the Data Source tab, select This Package Contains Source files.

4. For Source Directory, select the type of location for the source files.

5. Click Browse to specify the location of the source file or enter the location manually. Click OK.

6. On the Distribution Settings tab, select Medium from the Sending Priority pop-up menu.

7. Click OK.
The package appears under the Package node of the Site Database tree in the SMS console.

Create the program
1. In the SMS console, right-click Packages, and select My Packages > Programs.
   The Program Properties dialog box appears.
2. Enter a name for the program
3. Do one of the following:
   - To install Contribute by bringing up the interface for installation on the users’ computers, click Browse, navigate to the installation folder, and select setup.exe.
   - To display the interface for installation on the users’ computers without their intervention, enter the following in the command line field
     `Setup.exe --mode=silent --deploymentFile=AdobeContribute5- mul.install.xml`
     
     **Note:** Ensure that the Setup.exe and the AdobeContribute5- mul.install.xml file are in the same directory.
     In the Environment tab, uncheck User Input Required, and select Run with Administrative Rights.
4. Click OK.
5. Go to the SMS console and do the following:
   a. Under the Packages node, expand the SMS package you created.
   b. Right-click the package and select All Tasks > Distribution Points.
      The New Distribution Points Wizard dialog box appears.
6. In the New Distribution Points Wizard dialog box, select the servers to designate as the distribution points, and click Finish.

Create the collection
1. Open the Systems Management Server console, right-click Collections, and then select New>Collection.
2. Enter the name of the collection in the Name field.
4. Click Next.
5. Choose "System Resource" in Resource Class field and "Netbios Name" in the Attribute Name field. Enter the name of the computer in the format %<system name>% in the value field.
     
     **Note:** `%` is a wild card character that can be used to search for computers based on their naming pattern.
     Select Use A Compressed Copy Of The Source Directory if the source files might be removed from the specified path (for example, if the source files are on a CD). If you select this option and then specify Update All Distribution Points in the Manage Distribution Points Wizard, a new version of the compressed copy is created from the specified source folder.
6. (Optional) Enter the name of the collection to which the machine belongs.
7. Select the computers that you want to add to the collection, and click Next.
8. Click Next.
Create the advertisement

The final step in the deployment process is to create an advertisement that pushes the SMS package to the client computers.

1. Expand Collections on the Site Database tree. Right-click the collection, and select All Tasks > Distribute Software. The Distribute Software wizard starts.
2. Click Next.
3. Select an Existing Package on the Package screen, and click Next.
4. On the Distribution Points screen, select the distribution point to copy the package to, and click Next. The name of the package appears.
5. Click Next. (Optional) Specify a name and comment for the advertisement.
6. Click Next
7. On the Advertise To Subselections screen, select Advertise The Program Only To Members Of The Specified Collection.
8. On the Advertisement Schedule screen, do the following:
   a. Confirm or change the time for the advertisement to be pushed to the client computers.
   b. Specify if the advertisement should expire and the date and time (if it should expire).
   c. Click Next.
9. Click Yes to assign the program on the Assign Program screen, and then click Next.
10. Verify the settings you selected on the Completing the Distribute Software Wizard screen, and then click Finish.
website connections
  child websites 16
  creating 22
  overlapping 16
website, address (URL) 22
wizards, Connection Wizard 22