



Version 1.1.1

Installation Guide



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Chapter 1 Installation Overview

- FatWire Gadget Server
- Prerequisites for Installing FatWire Gadget Server
- Mappings Worksheet

FatWire Gadget Server

FatWire Gadget Server is a gadget container application. Gadget Server consists of a management system and production system, as shown in Figure 1.

Note

In this guide, the term "production system" means "delivery system."

Figure 1: Gadget Server Installation



The management system contains the gas-admin web application, gas-boot web

application, gas-service web application, gas-os web application, and a FatWire Content Server installation running the Web Experience Management (WEM) Framework, which includes Representational State Transfer services (REST), Central Authentication Service (CAS), and the WEM Framework interface.

The production system contains the gas-os web application, the CAS application for visitors, gas-boot web application, gas-service web application, user-service web application, and a Content Server installation running the WEM Framework, which includes CAS and REST. The production system does not require the WEM Framework interface. The LDAP server can be configured to replace the native authentication system used by the WEM Framework.

Gadget Server is a set of distributed applications:

- The gas-os application is an OpenSocial container, which provides a reference implementation for the OpenSocial standard. gas-os provides the code to render gadgets, proxy requests, handle REST and RPC requests, and enable visitor discovery with OAuth. The gas-os application is capable of rendering OpenSocial gadgets in a web browser.
- gas-admin is Gadget Server's interface. As shown in Figure 1, it runs on the management system.

The gas-admin application is used to register gadgets for display on site visitors' dashboards. Installing the Gadget Server Samples Module provides several gadgets out-of-the-box that can be registered to the gas-admin application. The sample gadgets are: List, RSS, ThumbList, and SlideShow. Gadgets with OAuth support can be personalized by visitors and/or retrieve a visitor's personalized data from the gadget's OAuth Service Provider.

The gas-admin application specifies a predefined user, which is a Content Server general administrator (fwadmin, by default) who belongs to the RESTAdmin group. Real users derive their access rights to Gadget Server through the general administrator's membership in the RESTAdmin group, making it unnecessary to add the real users to any REST group.

Interface functions in gas-admin are protected by the roles GeneralAdmin, SiteAdmin, and Designer. If a role does not exist, it is created during the installation process. Each role grants its user access to the gas-admin application and exposes a set of interface functions commensurate with the role.

The gas-admin application provides one of two interfaces, depending on the site to which it is assigned:

- On {cs_site}, gas-admin displays its global gadget catalog interface, which is protected by the GeneralAdmin role and therefore accessible only to general administrators. The global gadget catalog is used to centrally store gadgets and distribute them to other sites, which run the Gadget Server user interface.
- On sites other than {cs_site}, gas-admin displays its user interface, which provides the site gadget catalog for registering gadgets locally, a dashboard to contain the gadgets, and offers options for deploying registered gadgets to the website. Which interface functions are displayed to a user depends on the user's role.
- The gas-boot application manages production services and communication between the production and management systems. The gas-boot application provides a caching service based on jmemcached. It also provides a registry service based on Apache ZooKeeper. ZooKeeper maintains a centralized configuration file that defines how the applications communicate with each other, which eliminates the need to configure each application individually. **Single-server installations require only one instance of gas-boot (the production instance).**
- The gas-service application handles gadget data.

On the management system, gas-service provides the JavaScript API to support the gas-admin interface and user interactions. For example, when a user invokes an interface function, gas-admin sends the user's request to the gas-service application, which sends the request to the production system REST layer, which retrieves the requested information from the production system database. The information is displayed in the gas-admin interface. On the production system, gas-service serves gadgets to web pages tagged with gadget configuration code. The gas-service application maintains the gadget registry, provides gadget code for download, and serves JavaScript API requests from the gadgets to provide them with data.

• The user-service application handles visitor data. It serves requests related to visitors, such as registration and editing of visitor profiles. In this manner, user-service keeps track of visitors' profile data and collects such information as author IDs, display names, and images.

When the Gadget Server applications are installed, Gadget Server asset types are installed in Content Server's databases. The asset types are used to define gadgets (including the Gadget Server sample gadgets, which must be installed separately), and provide the infrastructure for Gadget Server, such as the dashboard, site visitor account storage, and the skins for Gadget Server's interface.

Prerequisites for Installing FatWire Gadget Server

Anyone installing Gadget Server must have expertise with FatWire Content Server, the WEM Framework, and the process of installing enterprise-level software. Before installing Gadget Server, complete the following checklist:

- Verify that you have the Gadget_Server_v1.1.zip file.
- Review Gadget Server release notes for the latest information regarding supported platforms and Gadget Server installation procedures.

Note

FatWire product documentation is available on our e-docs site, at http://support.fatwire.com. The site is password protected. Accounts can be opened from the home page.

- Read this guide to determine your installation options:
 - Gadget Server can be installed to work with either its native identity provider (the database used by the WEM Framework) or an LDAP identity provider.
 - Gadget Server can be installed via the Configuration Tool or manually. Installing Gadget Server via the Configuration Tool is recommended.
 - Gadget Server can be installed on dual-server systems or single servers.

A dual-server installation consists of two physically separate machines, one hosting the management environment, the other hosting the production environment. A single-server installation consists of a single machine hosting both the management and production environments. This guide is written for dual-server installations. Instructions for single-server installations are provided in this guide, as necessary.

Note

Single-server installations are supported only for development purposes.

- Unless noted otherwise, all mention of the cas application refers to visitor cas.

- Gadget Server requires two dedicated application servers: one application server for its management instances and one for its production instances.
- Management and production systems must be Content Server installations running the WEM Framework and CAS. For information about installing Content Server with the WEM Framework, see the *Content Server 7.6 Patch 1 Supported Platform Document* and the rollup installation guide. For information about the WEM Framework, refer to the product guides in the Content Server 7.6 Patch 1 directory on the FatWire e-docs site.
- The general administrator used throughout this guide must be a member of the RestAdmin security group on both the management and production systems. Gadget Server users will connect to the Gadget Server interfaces through the general administrator, as explained on page 7.
- On the content management system, mirror the following sites to the production system:
 - {cs_site}, which you can create or re-use to host the Gadget Server Global Gadget Catalog interface
 - Sites other than {cs_site}, which you can create or re-use to host the Gadget Server User interface

Note

Once you have installed Gadget Server and registered the Gadget Server application with the WEM Framework, you will assign the application to the sites mirrored on the production system to host either the Global Gadget Catalog interface or the Gadget Server User interface.

- On the production system, enable searches as follows: Start the Lucene search engine. Configure search indexing, using the steps in the "Public Site Search" chapter of the *Content Server Developer's Guide*.
- On Unix systems, enable rendering of gadgets by adding the -Djava.awt.headless=true JVM parameter to JAVA_OPTS on both the management and production application servers used by Gadget Server.
- To ensure an efficient installation process, use the worksheet on page 10 to pre-record information that you will be prompted to enter during the installation process.

Following the Gadget Server installation instructions, this guide provides you with instructions for installing Sample Gadgets on the FirstSiteII sample site (with **StoreDemoData** enabled). For instructions, see Chapter 6, "Adding Sample Gadgets."

Mappings Worksheet

Use Table 1 as a worksheet to record the information you will provide during the installation process. Properties are listed in the order in which they appear in the dialogs of the Configuration Tool. They are named exactly as they appear in the default Gadget Server configuration files.

Note

Gadget Server uses encrypted passwords (as well as unencrypted passwords when an LDAP server is installed). Enter passwords as follows:

- If using the Configuration Tool, enter passwords in plain text. They will be encrypted automatically by the Configuration Tool.
- If you choose to install manually:
 - Enter encrypted passwords, obtained from the encryption utility provided with Gadget Server. See "Encrypting Passwords Manually," on page 26.
 - LDAP users, enter both the encrypted and unencrypted versions of {ldap_user_password}. You will specify the *encrypted* version in the gas_registry_schema.xml file and the *unencrypted* version in deployerConfigContext.xml, located in the visitor cas application (cas/WEB-INF/classes/deployerConfigContext.xml).

Property	Required	Description	Your Value
{management_cs_ip}	√	IP address or host name of the Content Server management system (which contains the WEM Admin interface)	
{management_cs_port}	~	Port for the management Content Server	
{management_cs_context_ root}	~	Context root for the management Content Server	
{cs_management_username}	V	User name for a Content Server general admin with full REST permissions (default, fwadmin) to the management Content Server	
{cs_management_password}	~	Password for the above Content Server user {cs_management_username}	
{management_cs_cas_ip}	~	IP address or host name for CAS on the Content Server management system	
{management_cs_cas_port}	\checkmark	CAS port on the Content Server management system	
<pre>{management_cs_cas_ context_root}</pre>	~	CAS context root on the Content Server management system.	

Table 1: Mappings Worksheet

FatWire

Table 1:	Mappings	Worksheet	(continued)
----------	----------	-----------	-------------

Property	Required	Description	Your Value
{production_cs_ip}	\checkmark	IP address or host name of the Content Server production system	
{production_cs_port}	\checkmark	Port for the production Content Server	
<pre>{production_cs_context_ root}</pre>	~	Context root for the production Content Server	
{cs_production_username}	¥	User name for a Content Server general admin with full REST permissions (default, fwadmin) to the production Content Server	
{cs_production_password}	\checkmark	Password for above user {cs_production_username}	
{production_cs_cas_ip}	~	IP address or host name for CAS on the production Content Server system	
{production_cs_cas_port}	\checkmark	CAS port on the production Content Server system	
<pre>{production_cs_cas_context_ root}</pre>	~	CAS context root on the production Content Server system.	
{cs_site}	~	The site where Gadget Server's asset types and Global Gadget Catalog interface will be enabled (must be a site that exists on both management and production Content Servers). It is the same site that you created (or selected) and mirrored on page 9. This is a site to which you will assign the Gadget Server application once you have registered the application with the WEM Framework.	
{management_gas_ip}	\checkmark	IP address or host name for Gadget Server's management system	
{management_gas_port}	~	Port for Gadget Server on the management system	
{production_gas_ip}	~	IP address or host name for Gadget Server's production system	
{production_gas_port}	~	Port for Gadget Server on the production system	
{GASHOME}	V	Path to the directory under which Gadget Server will be installed and the following subdirectories will be created: logs, storage, data, install. (For single-server installations, only one {GASHOME} is required.)	

Table 1: Mappings Worksheet (continued)

Property	Required	Description	Your Value
{gas_production_ldap_ip}	When using LDAP	IP address or host name for the LDAP server for Gadget Server's production system	
{gas_production_ldap_port}	When using LDAP	Port for the LDAP server for Gadget Server's production system	
{ldap_basedn}	When using LDAP	Base DN for Gadget Server (example dc=fatwire,dc=com)	
{ldap_username}	When using LDAP	User name with administrative permissions to the given Base DN	
{ldap_user_password}	When using LDAP	Password of administrative user {ldap_username}. Note : If you plan to install Gadget Server via the Configuration Tool, enter the unencrypted password. If installing manually, enter both the encrypted <i>and</i> unencrypted versions of the password.	
{gasvisitor_username}	✓	Gadget Server visitor name, used as the default visitor when one is logged in. This is also the security user for Gadget Server.	
{gasvisitor_password}	~	Password for above Gadget Server visitor {gasvisitor_username}. Note: If you plan to install Gadget Server via the Configuration Tool, a random and complex password is automatically created. If installing manually, it is strongly recommended that you create a complex password.	
{mailhost_ip}	~	IP address or host name of mail server	
{mailhost_port}	~	Port on which the mail server is listening (normally 25)	
{use_mail_account_to_ send_mail}	~	Must be set to true or false	
{email_from_account}	~	Email address from which to send mail	
<pre>{sender_email_account}</pre>	Only when {use_mail_ account_to_ send_mail} is true	User name used to log in to the SMTP server	

Table 1:	Mappings	Worksheet	(continued)
----------	----------	-----------	-------------

Property	Required	Description	Your Value
{sender_email_password}	Only when {use_mail_ account_to_ send_mail} is true	Password for the above email account {sender_email_account}	

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Chapter 2 Installation Options

- Selecting an Identity Provider
- Installing Gadget Server with Its Native Identity Provider
- Installing Gadget Server with a New or Existing LDAP Server

Selecting an Identity Provider

Gadget Server can be installed to work with either its native identity provider (the database used by the WEM Framework) or an LDAP identity provider. Gadget Server can be installed via the Configuration Tool or manually. The Configuration Tool is preferred, as it prompts you for installation parameters (listed on page 10) and encrypts passwords automatically. If you select the LDAP option, the Configuration Tool will configure Gadget Server applications to use the LDAP identity provider.

Note

Before continuing, ensure that you have completed the following steps:

- "Prerequisites for Installing FatWire Gadget Server," on page 8.
- Filled out the installation worksheet (page 10).
- You have carefully chosen the type of identity provider to enable. Once Gadget Server is installed, it cannot be switched to use a different identity provider.

Installing Gadget Server with Its Native Identity Provider

In this type of installation, users are authenticated by default against the database used by the WEM Framework. Install Gadget Server using instructions in one of the following chapters:

- Chapter 3, "Installing FatWire Gadget Server via the Configuration Tool":
 - "Installing Gadget Server Graphically," on page 20
 - "Installing Gadget Server Silently," on page 25
- Chapter 4, "Installing FatWire Gadget Server Manually"

Installing Gadget Server with a New or Existing LDAP Server

Using LDAP, instead of WEM, as Gadget Server's identity provider is recommended if you wish to share user accounts between Community Server and Gadget Server, or a third-party application and Gadget Server.

- **1.** Do one of the following:
 - If you are using a new LDAP server, install and configure a supported LDAP server, listed in the Gadget Server release notes. Continue to step 2.
 - To set up an existing LDAP server, create a new Base DN to provide for Gadget Server visitors. Complete the steps below, starting with step 2.

FatWire Gadget Server 1.1.1 Installation Guide

2. Create an ldif file with the following information, replacing the {ldap_basedn} parameter with the value for your system (you can import multiple users by copying the # add user section for each user):

```
dn: {ldap_basedn}
objectclass: dcObject
objectclass: organization
dc: fatwire
description: OpenLDAP pre_gas_setup
o: Fatwire Software
dn: cn=<user_name>, {ldap_basedn}
objectClass: inetOrgPerson
objectClass: top
userPassword: <user_password>
cn: <user_name>
sn: <user_name>
displayName: <user_name>
description: <user_name>
```

- **3.** Import the created ldif file.
- **4.** In LDAP, create a default visitor user with the following credentials: {gasvisitor_username} and {gasvisitor_password}. This visitor will be used by default for anonymous visitors.
- **5.** You are ready to install Gadget Server. For instructions, see one of the following chapters:
 - Chapter 3, "Installing FatWire Gadget Server via the Configuration Tool":
 - "Installing Gadget Server Graphically," on page 20
 - "Installing Gadget Server Silently," on page 25
 - Chapter 4, "Installing FatWire Gadget Server Manually"

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Chapter 3

Installing FatWire Gadget Server via the Configuration Tool

- Overview of the Gadget Server Configuration Tool
- Installing Gadget Server Graphically
- Installing Gadget Server Silently

Overview of the Gadget Server Configuration Tool

The Configuration Tool guides you through the Gadget Server installation process by prompting you for installation parameters (listed on page 10) and automatically encrypts all passwords that must be encrypted. If you choose the LDAP option, the Configuration Tool will enable the Gadget Server applications to use the LDAP identity provider.

The Configuration Tool provides the following installation options:

- Installing Gadget Server Graphically
- Installing Gadget Server Silently

Note

Before continuing, ensure that you have completed the following steps:

- "Prerequisites for Installing FatWire Gadget Server," on page 8.
- Filled out the installation worksheet (page 10).
- If you plan to use an LDAP identity provider, you have set up the LDAP server as shown on page 16.

Installing Gadget Server Graphically

For dual-server installations, complete the following steps on both the management and production systems unless otherwise noted. Notes for single-server installations are provided where necessary:

1. Unzip the Gadget_Server_v1.1.zip file.

Ex./u01/Downloads/GS

- **2.** Copy the gasmanagement and gasproduction folders to the gs_Configure folder.
- **3.** Creating the home directory: The home directory is where logs, Gadget Server monitoring data, and ZooKeeper data will be stored for Gadget Server. The path to this directory will be the value for {GASHOME} throughout this guide.

Ex./u01/software/GS

- If you wish to have the Configuration Tool create the home directory, skip this step and continue with step 4.
- If you wish to create the home directory, note the following:
 - On management and production systems, we recommend using the same path.
 - On single-server installations, only one {GASHOME} is necessary. In this {GASHOME} directory we recommend using two separate paths – one for management logs and one for production logs.
- 4. Configure two Gadget Server application servers:
 - Dual-server installations: One application server is for the production system, for Gadget Server production applications; the other is for the management system, for Gadget Server management applications.

- Single-server installations: One application server is for the Gadget Server production applications; the other is for the Gadget Server management applications.
- **5.** Set JAVA_HOME to the jdk folder of the version of Java that will be used. The Java version must be 1.6 or higher.

Ex.export JAVA_HOME=/opt/jdk1.6.0_20

- 6. If installing on a Unix environment, ensure that the bash shell and sed stream editor are installed and located in the PATH environment variable.
- 7. Install Gadget Server:
 - a. Run the configureGS.sh or configureGS.bat script.

Note

On Unix, the DISPLAY environment variable must be set. **Ex.** export DISPLAY=10.120.19.21:0.0

b. In the **Install Type** tab, select **Management** if you are installing on the management application server, or **Production** if you are installing on the production application server.



c. In the **Content Server** tab, enter the values from your mappings worksheet (page 10).

• FatWire Gadget Server 1.1 - Configure
Install Type Content Server Gadget Server GS Production LDAP Email
Content Server Management Address: cs.mangement.fatwire.com
Content Server Management Port: 8080
Content Server Management ContextRoot: cs
Content Server Management User Name: fwadmin
Content Server Management User's Password: xceladmin
Content Server Management CAS Address: cs.management.fatwire.com
Content Server Management CAS Port: 8080
Content Server Management CAS ContextRoot: cas
Content Server Production Address: cs.production.fatwire.com
Content Server Production Port: 8080
Content Server Production ContextRoot: cs
Content Server Production User Name: fwadmin
Content Server Production User's Password: xceladmin
Content Server Production CAS Address: cs.production.fatwire.com
Content Server Production CAS Port: 8080
Content Server Production CAS ContextRoot: cas
Issues Exit Commit Changes

d. In the **Gadget Server** tab, enter the values from your mappings worksheet. You can either enter the value for {GASHOME} (see step 3), or browse to the directory.

🔹 FatWire Gadget Server 1.1 - Configure 🥥 🙋	
Install Type Content Server GS Production LDAP Email	_
GS CS Application: AdminSite	{cs_site}
GS Management Address: gas.management.fatwire.com	
GS Management Port: 8580	
GS Production Address: gas.production.fatwire.com	
GS Production Port: 8580	
GS Home directory. /u02/GS Browse	
Evit Commit Changes	1
Exit	

e. In the GS Production LDAP tab, do one of the following:

- If you are not using LDAP, set "Store GS Users in LDAP" to **False**. The fields "GS Visitor User" and "GS Visitor User's Password" are pre-populated (if necessary you can supply your own values). Continue to the next step.
- If you are using LDAP, set "Store GS Users in LDAP" to **True** and enter the values from your mappings worksheet. **Complete this step on both the management and production systems.**

• FatWire Gadget Server 1.1 - Configure
Install Type Content Server Gadget Server GS Production LDAP Email
Store GS Users is LDAP: 💿 True 🔘 False
GS LDAP Address: gas.production.fatwire.com
GS LDAP Port: 389
GS LDAP Basedn: dc=fatwire,dc=com
GS LDAP administrative User: cn=Directory Manager
GS LDAP administrative User's Password: password
GS Visitor User: gasvisitor
GS Visitor User's Password: password
leques
Issues
Exit

- f. Click the **Email** tab:
 - 1) Enter the values from your mappings worksheet. Set "Require Login to send email" to the value of {use_mail_account_to_send_mail}.
 - 2) Click Commit Changes.

	🔹 FatWire Gadget Server 1.1 - Configure 💿 🔕
	Install Type Content Server Gadget Server GS Production LDAP Email
	CS Mail Host's Address: email fatwire com
	CS Mail Host's Port 25
	GS Email (From field) Address: gasadmin@fatwire.com
	Beguire Login to condiamail Carrie Calco
	Require Login to send email O True 🖲 Paíse
	GS Email Sending User's Addressgassender@fatwire.com
	GS Email Sending User's Password password
٦I	ssues
	Exit Commit Changes
_	

g. After the Configuration Tool has completed configuring Gadget Server, click OK.



- **h.** Deploy the Gadget Server WAR files at {GASHOME}/install, first on the production application server, then on the management application server (as required by boot order):
 - Dual-Server installations On the production application server, deploy gasboot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-boot, gas-os, and gas-service.
 - Single-Server installations On the production application server, deploy gas-boot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-os, and gas-service. (Deploy gas-boot only on the production application server. gas-boot is not used on the management environment.)

8. Once the WAR files are deployed, proceed to Chapter 5, "Post-Installation Steps" to secure and verify your installation, register the Gadget Server application, and authorize its users.

Installing Gadget Server Silently

For dual-server installations, complete the following steps on both the management and production systems unless otherwise noted. Notes for single-server installations are provided where necessary:

1. Unzip the Gadget_Server_v1.1.zip file.

Ex. /u01/Downloads/GS

- **2.** Copy the gasmanagement and gasproduction folders to the gs_Configure folder.
- **3.** Creating the home directory: The home directory is where logs, Gadget Server monitoring data, and ZooKeeper data will be stored for Gadget Server. The path to this directory will be the value for {GASHOME} throughout this guide.

Ex./u01/software/GS

- If you wish to have the Configuration Tool create the home directory, skip this step and continue with step 4.
- If you wish to create the home directory, note the following:
 - On management and production systems, we recommend using the same path.
 - On single-server installations, only one {GASHOME} is necessary.
- 4. Configure two Gadget Server application servers:
 - Dual-server installations: One application server is for the production system, for Gadget Server production applications; the other is for the management system, for Gadget Server management applications.
 - Single-server installations: One application server is for Gadget Server production applications; the other is for Gadget Server management applications.
- **5.** Create a GSsettings.ini file, which is required for running the Configuration Tool in silent mode. The GSsettings.ini file can be created either manually or from the GSsettings.ini of a previous installation. Both methods are provided below.

Single-Server Installations

Create one GSsettings.ini file.

To create GSsettings.ini manually

- **a.** Open a blank file named GSsettings.ini in a text editor and add the following properties:
 - 1) Add all properties from your mappings worksheet (page 10), in the format <property>=<value> (one property per line).

Ex. {cs_management_username}=fwadmin
 {cs_management_password}=xceladmin

Note

All '=' characters within a property value must be prefixed with a backslash $(\land \land \land)$.

Ex. {ldap_username}=cn\=Directory Manager

```
{ldap_basedn}=dc\=fatwire,dc\=com
```

- 2) Add the InstallationProductType property and set it to either MANAGEMENT or PRODUCTION depending on your system.
- **b.** Save the changes.

To create GSsettings.ini from a previous installation

- **a.** Copy the GSsettings.ini file located in the Gadget Server Configuration Tool directory of the previous installation.
- **b.** Open the copied GSsettings.ini in a text editor and make the following changes, ensuring that all '=' characters within a property value are prefixed with a backslash ('\'), as noted above:
 - 1) Replace the values of the listed properties with the values in your mappings worksheet (page 10).
 - 2) Change the value of InstallationProductType to MANAGEMENT, PRODUCTION, or SINGLESERVER depending on your system.
- **c.** Save your changes.
- 6. Copy the GSsettings.ini file to the directory of the Gadget Server Configuration Tool.
- **7.** Set JAVA_HOME to the jdk folder of the version of Java that will be used. The Java version must be 1.6 or higher.

Ex.export JAVA_HOME=/opt/jdk1.6.0_20

- 8. If installing on a Unix environment, verify that the bash shell and sed stream editor are installed and located in the PATH environment variable.
- **9.** Run the Configuration Tool in silent mode:
 - Dual-server installations: Run the configureGS.sh or configureGS.bat script on both the management and production systems, adding the -Dsilent option to specify silent mode. For example:

configureGS.sh -Dsilent

- Single-server installations: Run the configureGS.sh or configureGS.bat script on the system containing both the management and production environments. For example:

configureGS.sh -Dsilent

10. After the Configuration Tool has completed configuring Gadget Server, deploy the Gadget Server WAR files at {GASHOME}/install. Deploy the files first on the production application server, then on the management application server (as required by boot order):

- Dual-Server installations On the production application server, deploy gasboot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-boot, gas-os, and gas-service.
- Single-Server installations On the production application server, deploy gas-boot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-os, and gas-service. (Deploy gas-boot only on the production application server. gas-boot is not used on the management environment.)
- **11.** Once the WAR files are deployed, proceed to Chapter 5, "Post-Installation Steps" to secure and verify your installation, register gas-admin, and authorize its users.

Installing Gadget Server Silently

Chapter 4 Installing FatWire Gadget Server Manually

- Overview of the Manual Installation Process
- Encrypting Passwords Manually
- Installing Gadget Server
- Configuring Gadget Server to Use the LDAP Identity Provider

Overview of the Manual Installation Process

The manual process for installing Gadget Server requires you to:

- 1. Manually encrypt passwords (shown on this page).
- **2.** Install Gadget Server by configuring various property files for its applications and deploying the applications (page 31).
- **3.** Configure the Gadget Server applications to use the LDAP identity provider (page 37), if you have set up an LDAP server.

Encrypting Passwords Manually

Before installing Gadget Server, encrypt all passwords as described in "Mappings Worksheet," on page 10 and record them in the worksheet (Table 1, on page 10).

To encrypt passwords

1. Run the following command:

```
java -jar gs-password-encryptor-1.1.jar
```

2. Enter your password into the "Password" field and click Trim:

Password		Trim
Crypted Password		Copy to clipboard

The encrypted password is displayed in the 'Crypted Password' field. For example, Testme is entered as the password; the encrypted password is displayed in the "Crypted Password" field.

Password	Testme	[Trim
Crypted Password	vFz2sN3fhLzuIWZ+	[Copy to clipboard

3. When you have encrypted all passwords that require encryption and filled out the worksheet, you are ready to install Gadget Server. Continue with "Installing Gadget Server," on page 31.

Installing Gadget Server

Note

Before continuing, ensure that you have completed the following steps:

- "Prerequisites for Installing FatWire Gadget Server," on page 8.
- Filled out the worksheet (Table 1, on page 10), using encrypted passwords obtained from the utility described on page 30.
- If you plan to use an LDAP identity provider, you have set up the LDAP server as shown on page 16.

To manually install Gadget Server

For dual-server installations, complete the following steps on both the management and production systems unless otherwise noted. Notes for single-server installations are provided where necessary:

- 1. Configure two Gadget Server application servers:
 - Dual-server installations: One application server is on the production system for the Gadget Server production applications; the other is on the management system for the Gadget Server management applications.
 - Single-server installations: One application server is for the Gadget Server production applications; the other is for the Gadget Server management applications.
- 2. Create a home directory where the logs, Gadget Server monitoring data, and ZooKeeper data will be stored for Gadget Server. The path to the home directory will be the value for {GASHOME} throughout this guide. On management and production systems, we recommend using the same path. On single-server installations, only one {GASHOME} is necessary.

Ex. /u01/software/GS

3. Create a directory under {GASHOME} for ZooKeeper data.

Ex. /u01/software/GS/data

4. Create a directory under {GASHOME} for Gadget Server monitoring data.

Ex. /u01/software/GS/storage

5. Create a directory under {GASHOME} for logs.

Ex. /u01/software/GS/logs

- 6. Unzip the Gadget Server applications.
- **7.** Configure the files that are listed in Table 2, on page 32 and described on the referenced pages.
- **8.** If you have set up an LDAP server as shown on page 16, configure the Gadget Server applications to use the LDAP identity provider. For instructions, see page 37.
- **9.** Deploy the Gadget Server WAR files first on the production application server, then on the management application server (as required by boot order), as follows:

- Dual-Server installations On the production application server, deploy gasboot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-boot, gas-os, and gas-service.
- Single-Server installations On the production application server, deploy gas-boot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-os, and gas-service. (Deploy gas-boot only on the production application server. gas-boot is not used on the management environment.)
- **10.** You have completed the installation process. Go to Chapter 5, "Post-Installation Steps" to secure and verify your installation, register gas-admin, and authorize its users.

Gadget Server Configuration Files

Table 2 lists the Gadget Server applications, their corresponding configuration files, and the pages on which configurable parameters are described.

System	Gadget Server App	Configu	uration File	For Parameters, See
Management	All GS apps	/WEB-INF/classes/	log4j.properties	page 33
and Production	gas-service	/WEB-INF/classes/	cos_facilities.xml	page 33
Troduction		/WEB-INF/classes/	registry_client.properties	page 33
	gas-os	/WEB-INF/classes/	cos_facilities.xml	page 33
		/WEB-INF/classes/	registry_client.properties	page 33
		/WEB-INF/classes/	gsoauthkey.pem	page 35
	gas-boot ^a	/WEB-INF/classes/	Java Key Store (JKS)	page 33
		/WEB-INF/classes/	sslproxy.properties	page 34
		/WEB-INF/classes/	zoo.properties	page 35
		/WEB-INF/classes/	jmemcached.properties	page 36
Production	gas-boot	/WEB-INF/classes/	gas_registry_schema.xml	page 10 (Table 1)
		/WEB-INF/classes/	schema_import.properties	page 37
	user-service	/WEB-INF/classes/	cos_facilities.xml	page 33
		/WEB-INF/classes/	registry_client.properties	page 33
		/WEB-INF/classes/	user_runtime.xml	page 37
	cas (visitor)	same files as user	-service	
Management	gas-admin	/WEB-INF/classes/	cos_facilities.xml	page 33
		/WEB-INF/classes/	registry_client.properties	page 33

Table 2: Gadget Server Configuration Files

a. On single-server installations, gas-boot is not used on the management environment.

log4j.properties

Configure this file as follows for all applications listed in Table 2, on page 32.

Property	Value	Your Value
log4j.appender.logfile.file	{GASHOME}	
log4j.appender.logfile.MaxFileSize	10MB	
log4j.appender.logfile.MaxBackupIndex	5	

cos_facilities.xml

Configure this file as follows for the applications specified in Table 2, on page 32:

Bean	Кеу	Value	Your Value
storage	storageFolder	{GASHOME}	

registry_client.properties

Configure this file as follows for the applications specified in Table 2, on page 32

Property	Value	Your Value
zookeeper.server.host	<pre>{management_gas_ip} for management apps {production_gas_ip} for production apps</pre>	
zookeeper.server.port	2181 Note: Do not change this value.	

Java Key Store (JKS)

Single-Server Installations

Configure only the production gas-boot application. All URLs that point to gasboot must point to the production gas-boot (the management gas-boot is not used).

Configuring gas-boot instances on management and production starts with the RSA SSL key integration. The Java Key Store file contains the RSA key and must be identical on both the production and management instances of gas-boot. Filename and password information for the Java Key Store are configured in the sslproxy.properties file.

On the management system, gas-boot does not store configurations, but only proxies requests (for configurations) coming from management applications to the production gas-boot. The production gas-boot serves the request with actual data from the ZooKeeper. Management applications connect to management gas-boot, which then connects to production gas-boot via an SSL tunnel. The SSL tunnel properties are in the following files: JKS, sslproxy.properties, zoo.properties, and jmemcached.properties.

Gadget Server ships with the default JKS (cert.jks) containing an RSA key. Gadget Server also ships with a default sslproxy.properties file configured with the cert.jks file name and password information. The default key may be used, but should be regenerated for security reasons.

Note

When using SSL, the preferred method is to ensure that a valid signed certificate is present and can be accepted by both the management and production servers. Alternatively, you can create your own JKS with RSA key, using the following command:

<JAVA_HOME>/bin/keytool -genkey -alias sslproxy -keysize 2048 -validity 936500 -keyalg RSA -dname "<dname>" keypass <keypass> -storepass <storepass> -keystore <jks_filename>

The following example uses default values from the sslproxy.properties file:

keytool -genkey -alias sslproxy -keysize 2048 -validity 936500 -keyalg RSA -dname "CN=fatwire" -keypass fatwire -storepass fatwire -keystore cert.jks

sslproxy.properties

Single-Server Installations

Configure sslproxy.properties for only the production instance of gas-boot (the management instance is not used).

The sslproxy.properties file must be reconfigured only if you customized the Java Key Store (page 33). The sslproxy.properties file must be identical on the management and production instances of gas-boot and its parameters must specify the same values that were used to generate the Java Key Store file (page 33).

- If you generated the Java Key Store file, enter the parameter values that you used to generate the file.
- If you used the default Java Key Store (cert.jks), do not modify the default sslproxy.xml file.

The sslproxy.xml file contains the following parameters:

- ssl.cert=<Java_Key_Store_filename>
- ssl.keypass=<keypass>

- ssl.storepass=<storepass>
- ssl.dname=<distinguished_name>

By default they are set as follows (to match the parameters that were used to generate the default cert.jks file):

- ssl.cert=cert.jks
- ssl.keypass=fatwire
- ssl.storepass=fatwire
- ssl.dname=CN=fatwire

gsoauthkey.pem

This is an SSL private key file. The gas-os application uses this key as a default for OAuth gadgets lacking their own consumer credentials. The gas-os application ships with a default private key file. For security reasons we recommend generating a custom key for each gas-os instance (management and production). Generating a custom private key for gas-os requires the OpenSSL tool to be installed. Many Linux distributions come with pre-compiled OpenSSL packages. Windows binaries can be found at http://www.openssl.org/related/binaries.html.

To generate a custom SSL private key for OAuth:

1. Create a gskey.pem file by executing the following command:

```
openssl req -newkey rsa:1024 -days 365 -nodes -x509 -keyout
gskey.pem -out gskey.pem -subj /CN=GadgetServerKey
```

2. Convert the previously generated certificate from the gskey.pem file to PKCS#8 format in the gsoauthkey.pem file.

openssl pkcs8 -in gskey.pem -out gsoauthkey.pem -topk8 -nocrypt -outform PEM

3. Copy the newly generated gsoauthkey.pem file into the gas-os/WEB-INF/ classes directory. Overwrite the previous directory, if it exists.

zoo.properties

Single-Server Installations

Configure zoo.properties for only the production instance of gas-boot (the management instance is not used).

Configure this file as follows for the gas-boot management and production applications, specified in Table 2, on page 32:

- dataDir: Replace {GASHOME} with the value for your system.
- tempClientPort: Either specify the port that is temporarily used to start the ZooKeeper application, or keep the default value.
- clientPort: Either specify the port on which the ZooKeeper application starts, or keep the default value.

• sslClientPort: Either specify the port used by the ZooKeeper SSL connections, or keep the default value.

Note

For dual-server installations, the value of sslClientPort must be the same on both the management and production systems. This port must also be opened on any firewall between management and production. The default value 4181 is appropriate for most installations.

• sslHost: Specify the production server host.

jmemcached.properties

Single-Server Installations

Configure jmemcached.properties for only the production instance of gas-boot (the management instance is not used).

Configure this file as follows for the gas-boot management and production applications, specified in Table 2, on page 32:

- jmemcached.port: Either specify the port on which the Java memory cache manager starts, or keep the default value.
- jmemcached.sslport: Either specify the port that is used by the Java memory cache manager SSL connections, or keep the default value.

Note

For dual-server installations, the value of jmemcached.sslport must be the same on both the management and production systems. This port must also be opened on any firewall between management and production. The default value 22322 is appropriate for most installations.

• jmemcached.sslHost: Specify the production server host.

schema_import.properties

Configure this file as follows for the gas-boot production application, specified in Table 2, on page 32:

Property	Description	Value	Your Value
importOnStart	Controls whether the gas_registry_schema.xml file is re-imported into ZooKeeper on server startup.	true, to pick up changes to the schema file	
cleanIfExists	Controls whether a value is cleaned from the existing schema in ZOOKeeper before the new schema is imported.	true, to pick up changes to the schema file	

user_runtime.xml

This file must be identical for both the cas and user-service applications. Set {cs_site} in the siteName bean to the value that you specified in the worksheet on page 10. If you are setting up an LDAP identity provider, you must also complete the next section, "Configuring Gadget Server to Use the LDAP Identity Provider."

Configuring Gadget Server to Use the LDAP Identity Provider

Note

Complete the steps in this section if you have set up a supported LDAP server as shown in "Installing Gadget Server with a New or Existing LDAP Server," on page 16.

To enable the LDAP identity provider

1. In the visitor cas and user-service applications, modify the user_runtime.xml file as follows:

WEB-INF/classes/user_runtime.xml

Bean	Property	LDAP
wemIdentityProvider	enabled	false
	defaultProvider	false
ldapIdentityProvider	enabled	true
	defaultProvider	true

- 2. Back up deployerConfigContext.xml in cas/WEB-INF and rename deployerConfigContext_onlyLDAP.xml to deployerConfigContext.xml to allow CAS to pick up changes.
- **3.** In the **new** cas/WEB-INF/deployerConfigContext.xml file, set the following LDAP properties:

Bean	Кеу	Value
LdapPrincipalProvider	searchBase	{ldap_basedn}
		Ex.dc=tatwire,dc=com
LdapAuthenticationHandler	searchBase	{ldap_basedn}
		Ex.dc=fatwire,dc=com
LdapContextSource	urls	{gas_production_ldap_ip} {gas_production_ldap_port}
	userDn	{ldap_username}
		Ex. cn=Directory Manager
	password	{ldap_user_password}
		Note: Enter the unencrypted password.
LdapPersonAttributeDao	baseDN	{ldap_basedn}
		Ex.dc=fatwire,dc=com

cas/WEB-INF/classes/deployerConfigContext.xml

- **4.** Once you have enabled the LDAP identity provider, deploy the Gadget Server WAR files first on the production application server, then on the management application server (as required by boot order):
 - Dual-Server installations On the production application server, deploy gasboot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-boot, gas-os, and gas-service.
 - Single-Server installations On the production application server, deploy gasboot, gas-os, gas-service, user-service, and visitor cas. On the management application server, deploy gas-admin, gas-os, and gasservice. (Deploy gas-boot only on the production application server. gasboot is not used on the management environment.)
- 5. You have completed the installation process. Go to Chapter 5, "Post-Installation Steps" to secure and verify your installation, register gas-admin, and authorize its users.

Chapter 5 Post-Installation Steps

- Overview
- If Community Server 1.1 is Installed
- Configuring Security
- Enabling Shindig Features
- Verifying Your Gadget Server Installation
- Enabling Gadget Server

40

Overview

Having installed Gadget Server, you are ready to secure your installation and verify your installation by testing the URLs of the Gadget Server applications. You will then register the gas-admin application with the WEM Framework of the management system, authorize yourself, and authorize others to use gas-admin.

If Community Server 1.1 is Installed

Verify that Zookeeper and JMemcached in cos-boot and gas-boot are using different ports.

Configuring Security

Recommended security measures are the following:

- Securing Ports
- Creating Certificates, JKS, and Private Keys
- Specifying OAuth Consumer Credentials

Securing Ports

- The following ports should be accessible only from the local machine, to decrease the possibility of leaking information:
 - ZooKeeper port (2181, by default). This port is configured in the clientPort property of the gas-boot/WEB-INF/classes/zoo.properties file.
 - JMemcached port (11211, by default). This port is configured in the jmemcached.port property of the gas-boot/WEB-INF/classes/jmemcached.properties file.
- Open the following SSL gas-boot ports on the delivery host:
 - ZooKeeper SSL port (4181, by default). This port is configured in the sslClientPort property of the gas-boot/WEB-INF/classes/ zoo.properties file.
 - JMemcached SSL port (22322, by default). This port is configured in the jmemcached.sslport property of the gas-boot/WEB-INF/classes/jmemcached.properties file.

Creating Certificates, JKS, and Private Keys

• Create a custom JKS (Java Key Storage) with custom RSA key in the gas-boot application. For instructions, see "Java Key Store (JKS)," on page 33.

Note

The file (cert.jks, by default) must be identical for both gas-boot instances.

• Create a custom Private Key, gsoauthkey.pem for the gas-os application. For instructions, see "gsoauthkey.pem," on page 35.

Note

We recommend creating two gsoauthkey.pem files, one for each of the gas-os applications.

Specifying OAuth Consumer Credentials

Consumer credentials are the consumer key and consumer secret (for definitions and other information, see the *Gadget Server User's Guide*). Specify the following sets of consumer credentials in the gas-boot/WEB-INF/classes/gas_registry_schema.xml file:

Bean Key		Default Value	Your Value
gasProductionOS	consumer.key	gadgetPrivateConsumer	
private	consumer.secret	gadgetPrivateSecret	
gasProductionOS	consumer.key	gadgetPublicConsumer	
public	consumer.secret	gadgetPublicSecret	

Enabling Shindig Features

Gadgets that are either developed for *iGoogle* or use *iGoogle* features may require you to enable extra Shindig features for Gadget Server in order for those gadgets to render properly. If you enable these Shindig features, Gadget Server downloads the third-party libraries necessary for rendering the gadgets that require them from the Shindig website. For Gadget Server to download the necessary third-party libraries, you must have access to the internet.

If you wish to enable additional Shindig features for Gadget Server, you must uncomment the following lines in the gas-os/WEB-INF/classes/gas_features.txt file in both gas_os applications (management and production):

- # features/analytics/feature.xml
- # features/com.google.gadgets.analytics/feature.xml
- # features-extras/org.jquery.core-1.4.2/feature.xml

Note

Once the additional Shindig features are enabled, restart both the management and production application servers for the changes to take effect.

Verifying Your Gadget Server Installation

You will verify your installation by testing the URLs of the Gadget Server applications.

Note

URLs in this section are used only to verify that Gadget Server is correctly installed; they must not be used to invoke the Gadget Server application for content management operations. The Gadget Server application must be registered with and accessed from the WEM Framework.

- 1. Start Content Server's application server before starting Gadget Server's application servers. The production application servers must be fully started before the management application servers are started.
- **2.** Verify the following applications:
 - **a.** Verify the visitor cas application:

```
http://{production_gas_ip}:{production_gas_port}/cas/login
```

Ex. http://gas.production.fatwire.com:8580/cas/login

A successful connection displays the CAS login form. Sign in as {gasvisitor_username}/{gasvisitor_password}. If the user name and password are valid, the "Log In Successful" message is displayed.

b. Verify the user-service application:

A successful connection displays the "Welcome to User Service" message: http://{production_gas_ip}:{production_gas_port}/userservice

Ex. http://gas.production.fatwire.com:8580/user-service

c. Verify the gas-service applications:

A successful connection displays the "Welcome to GS Service" message.

- To verify the management gas-service application, open the following URL:

http://{management_gas_ip}:{management_gas_port}/gasservice

Ex. http://gas.management.fatwire.com:8580/gas-service

- To verify the production gas-service, open the following URL:

http://{production_gas_ip}:{production_gas_port}/gasservice

Ex. http://gas.production.fatwire.com: 8580/gas-service

d. Verify the gas-os applications:

A successful connection displays the "Welcome to GS OpenSocial Container" message.

 To verify the management gas-os application, open the following URL: http://{management_gas_ip}:{management_gas_port}/gas-os Ex.http://gas.management.fatwire.com:8580/gas-os

- To verify the production gas-os application, open the following URL: http://{production_gas_ip}:{production_gas_port}/gas-os
 Ex. http://gas.production.fatwire.com:8580/gas-os
- **e.** Verify the gas-admin application:
 - 1) Log in to the Gadget Server interface as a general administrator:

```
http://{management_gas_ip}:{management_gas_port}/gas-
admin/start.jsp?siteid=<site_name>
```

```
Ex. http://gas.management.fatwire.com:8580/gas-admin/
start.jsp?siteid=FirstSiteII
```

- In the CAS login form, sign in as a general administrator (fwadmin/ xceladmin by default).
- 3) Open Gadget Server. Its user interface is displayed:

Gadgets						
Register Gadget Delete			Sea	arch	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Filter
						Entertainment (0)News (0)
Select All	No gadgets	match the selected c	riteria			 Utilities (0) Economics (0) Other (0)
			Show rows:	5 🗸 0 of 0		Using the Site Catalog
						The Site Catalog is a collection of gadgets available to a particular site. Some of these gadgets have been enabled from Gadget Servers Global Catalog. Modifying a gadget in the Site Catalog (e.g., renaming it), affects only that sites versio of the gadget. The global version is not affected.
						Register a gadget to add it directly to the Site Catalog. Use this process when a desired gadget is not available from the Global Catalog.
						Delete a gadget to remove it from the Sit Catalog. The Global Catalog is not affected.
						Gadgets in the Site Catalog can be deleted by selecting them using the checkboxes and then clicking on Delete Gadget in the too row.
						Click a gadget to edit it

3. When all tests have been successfully completed, continue to the next section to register the Gadget Server application with the WEM Framework.

Enabling Gadget Server

- Registering the Gadget Server Application
- Authorizing Users to Work with the Gadget Server interfaces

Registering the Gadget Server Application

In this section, you will register the Gadget Server application with the WEM Framework on the management system. Registration displays the Gadget Server application icon on the login page and WEM banner, lists the application on the **Apps** page, and enables the WEM Framework to render the application's interface.

To register the Gadget Server application

- 1. On the management system, log in to the Content Server Advanced interface as a general administrator (fwadmin/xceladmin by default).
- 2. On the Admin tab, select Site > AdminSite, and register the application as follows:
 - **a.** Create an FW_View asset with the following values:
 - Name: GasView (or a name of your own choice)
 - Parent Node: frame1
 - View Type: Iframe

```
Source Url: http://
    {management_gas_ip}:{management_gas_port}/
    gas-admin/WemContext.gas
```

- **b.** Create an FW_Application asset with the following values:
 - **Name**: GS (or a name of your own choice)
 - Icon URL: wemresources/images/icons/apps/ GadgetServer.png (🛜)
 - Active Icon URL: wemresources/images/icons/apps/ GadgetServerActive.png
 - Layout type: Layout Renderer
 - Layout URL: wemresources/layout/admin.html
 - Add the new FW_View asset as an associated view by selecting it from the **History** tab (located on the tree in the left-hand panel) and clicking **Add Selected Items**. Click **Save Changes**.
- **3.** Log in to the WEM Framework as a general administrator (fwadmin/xceladmin), select **AdminSite**, click the WEM Admin icon, click **Apps** in the menu bar, and check that Gadget Server is listed on the **Apps** page.
- 4. Continue to the next section to authorize access to the Gadget Server interfaces.

Authorizing Users to Work with the Gadget Server interfaces

Detailed information about user authorization is available in the *Gadget Server User's Guide*. For a quick start, follow the steps below:

To authorize users to work with Gadget Server interfaces

- **1.** Log in to the WEM Framework:
 - a. Log in to the WEM Admin interface (management system) as a general administrator (the default credentials are fwadmin/xceladmin). Access WEM Admin at the following URL:

```
http://<server>:<port>/<context>/login
```

where <server> is the host name or IP address of the server running WEM, and <context> is the name of the web application that was deployed on <server>. Depending on how the system was set up, you may also need to include the port number.

b. If you are logging in for the first time, select **AdminSite** from the drop-down menu, and click the **Admin** icon.



- **2.** Assign the Gadget Server application to {cs_site}:
 - a. In the menu bar, click Apps.
 - b. Mouse over the Gadget Server application name and select Manage App.
 - c. In the "Manage App" screen, click Assign to Sites.
 - **d.** Select {cs_site} to run the Global Gadget Catalog interface.
 - e. Select the GeneralAdmin role for the Gadget Server application.
- **3.** Assign the Gadget Server application to a site other than {cs_site} to run the Gadget Server User interface.

Note

To assign the Gadget Server application to sites other than {cs_site}, you must first create or select the sites on the management system, then mirror the sites to the production system.

- **a.** In the menu bar, click **Apps**.
- **b.** Mouse over the Gadget Server application name and select Manage App.

- c. In the "Manage App" screen, click Assign to Sites.
- **d.** Select the desired site, other than {cs_site}, on which you wish to run the Gadget Server User interface.
- **e.** Select the following roles for the Gadget Server application: GeneralAdmin, SiteAdmin, and Designer.
- 4. Authorize users to access Gadget Server's interfaces. In this step you will assign users to {cs_site} or the site(s) running the Gadget Server User interface, and assign to each user at least one of the roles that was assigned to gas-admin. (Sharing at least one role to an application and a user on the same site grants the user access to the application on that site):
 - **a.** In the menu bar, select **Sites**.
 - **b.** Mouse over the site to which the Gadget Server application is assigned and select **Manage Site Users**.
 - **c.** In the "Manage Site Users" screen, complete one or both of the following steps, as necessary:
 - To assign roles to an existing site user, mouse over the user's name and select **Assign Roles to User**.
 - To assign a user to the site and assign roles to the user, click **Assign Users** > *select the name of the user you wish to assign to the site* > **Continue**.
 - **d.** In the "Assign Roles to User" screen, select at least one of the following roles: **GeneralAdmin, SiteAdmin, Designer**, (see Table 3 for permissions associated with each role).

Permissions	Gadg	et Server Role	s
	GeneralAdmin	SiteAdmin	Designer
Enable Gadget Server's Global Gadget Catalog Interface	\checkmark		
Enable Gadget Server's User Interface	✓	\checkmark	
Register Gadgets to Global Gadget Catalog	\checkmark		
Register Gadgets to a Site Gadget Catalog	✓	\checkmark	
Remove Gadgets from the Global Gadget Catalog	\checkmark		
Remove Gadgets from a Site Gadget Catalog	✓	\checkmark	
Enable Gadgets for a Site Gadget Catalog	\checkmark		
Modify Gadget Metadata	✓	\checkmark	

Pormissions	Gadget Server Roles				
Fermissions	GeneralAdmin	SiteAdmin	Designer		
Add Default Gadgets to the Dashboard	\checkmark	\checkmark	\checkmark		
Modify the Dashboard's Default Layout	\checkmark	~	\checkmark		
Modify the Dashboard's Default Color Theme	\checkmark	~	\checkmark		
Authorize a Domain	\checkmark	\checkmark	\checkmark		
Configure Appearance Settings for Gadgets	\checkmark	\checkmark	\checkmark		
Deploy the Dashboard "Tag"	\checkmark	~	\checkmark		
Deploy an Individual Gadget's "Tag"	\checkmark	\checkmark	\checkmark		
Modify the Deployed Dashboard's Defaults	\checkmark	~	\checkmark		

Table 3:	Gadget	Server	permissions	and roles

5. Click Save and Close.

Note

Verify that the site administrator is a member of the REST security group SiteAdmin_AdminSite. For instructions on adding a user to a group, see the WEM Framework Administrator's Guide.

- 6. Verify the user's access to Gadget Server:
 - a. Log in to the WEM Framework as one of the new Gadget Server users.
 - **b.** If the user is a general administrator, access the global gadget catalog by selecting {cs_site} and the Gadget Server icon:

FatWire Web Experience N	lanagement Version 1.0	
FatWire SOFTWARE	Site AdminSite	(cs_site) (AdminSite, by default) Gadget Server icon
	« Login again	

- If the user is not a general administrator, select the site running the Gadget Server user interface and click the Gadget Server icon:

FatWire Web Experie	nce Management Versic	n 1.0
FatWire SOFTWARE	Site GadgetServer	Site other than {cs_site} running the Gadget Server user interface Gadget Server icon
	« Login	again

- **7.** Your interface is one of the following:
 - If you selected {cs_site}, the Global Gadget Catalog interface is displayed:

	FatWire	Gadget Server	Gadgets			ž
Register gadgets to the global gadget catalog		Gadgets	Enable Delete	Search	م _	Filter
Enable globally registered gadgets on the desired site gadget catalogs		Select All	There are no results matching	ng your criteria Show rows: S 0-0	of 0	

- If you selected a site other than {cs_site} to which gas-admin is assigned, the Gadget Server User interface is displayed:

	FatWire	Gadget Server	Gadgets	Dashboard	Permissions	Appearance Settings	Deployment	ž
	Gade	gets						
Register gadgets to the -	🕨 🥝 Regi	ster Gadget Delete			Sear	đ	P	Filter
site gadget catalog								Entertainment (0)
	Select	All						Utilities (0)
			There are no	results matching your	criteria			Economics (0) Other (0)
					Show rows:	5 🔽 0-0 of 0 🌒	0	

Next Steps

- If you wish to install Sample Gadgets, continue to Chapter 6, "Adding Sample Gadgets."
- For information and instructions about using Gadget Server, see the *Gadget Server* User's Guide.

Chapter 6 Adding Sample Gadgets

- Prerequisites for Installing Sample Gadgets
- Installing the Gadget Server Samples Module

Prerequisites for Installing Sample Gadgets

Content Server ships with the following sample gadgets:

ListGadget, RSSGadget, ThumbListGadget, and SlideshowGadget



The sample gadgets must be installed on the FirstSite II sample site. The site must be enabled to store demo data:

FirstSite II Sample Site	
Installer	FatWire Content Server 7
	FirstSite II Sample Site
	Select the FirstSite II modules you would like to install: Structure and Navigation Store Schema Document Schema Cocument Schema Pocty ILP Package Filex Visitors with Samples Site Preview
Exit	Help Previous Next

If your target Content Server system does not have FirstSite II, install the sample gadgets on a separate Content Server system that is running FirstSite II with **Store Demo Data** enabled, then publish FirstSite II to the target system.

Installing the Gadget Server Samples Module

Installing sample gadgets installs the following components:

- FW_CSGadget asset type (used to create gadgets)
- Sample gadgets (assets of type FW_CSGadget)
- Templates for rendering the gadgets
- Assets that provide content for the sample gadgets. The assets are instances of FirstSite II asset types.

To install sample gadgets

- 1. If your management Content Server system is not running FirstSite II with Store **Demo Data** enabled, create a separate Content Server system. At the end of the installation process, you will publish FirstSite II with sample gadgets to the management Content Server.
- **2.** Extract the installation file named GadgetServer_v1.1.zip to the host machine. Extracting this zip file creates a subdirectory named GS_Samples.

```
Note
```

Do not change the name of this subdirectory or any of its subdirectories, and make sure that you retain the archived directory structure. Otherwise, the installer will fail.

- 3. Run the Gadget Server Integration Installer script:
 - Windows: gsInstall.bat
 - Unix:gsInstall.sh
- 4. In the "Welcome" screen, click Next.

FatWire Installation	×
Installer	
	FatWire Gadget Server Sample Gadgets To install the necessary components click the Next button to begin.
Exit	Next

5. In the "FatWire License Agreement" screen, select I accept and click Next.

FatWire License Agreement		
Installer		
	FatWire License Agreement	
	Please read the license agreement and select the appropriate button.	
	FATWIRE SOFTWARE LICENSE AGREEMENT	^
	IMPORTANT: PLEASE READ THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE. FATWIRE CORPORTATION AND/OR ITS SUBSIDIARIES (COLLECTIVELY "FATWIRE") IS WILLING TO LICENSE THE SOFTWARE TO YOU AS THE INDIVIDUAL, THE COMPANY, OR THE LEGAL ENTITY THAT WILL BE UTILIZING THE SOFTWARE (REFRERINCED BELOW AS "YOU" OR "YOUR") ONLY ON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS OF THIS LICENSE AGREEMENT. THIS IS A LEGAL AND ENFORCEABLE CONTRACT BETWEEN YOU AND FATWIRE. BY CLICKING THE "ACCEPT" OR "YES" BUTTON OR LOADING THE SOFTWARE, YOU HAVE READ, UNDERSTAND AND AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT ACREE TO THESE TERMS AND CONDITIONS, THACK THE USE OF BOX OR OTHERWISE INDICATE REFUSAL, MAKE NO FURTHER USE OF THE SOFTWARE AND CONTON CONTINUES, FURCH THER USE OF	•
	 I accept I do not accept 	
Exit	Previous	

6. In the "Installation Directory and License File" screen, enter the path to your Content Server installation directory.

Installation Directory and Lic	ense File	X
Installer		
	Installation Directory and License File	
	Path to the Content Server installation directory:	
	C:/csinstallations/patch4/csInstall	
	Browse	
Exit	Help Previous Next]

7. Select Gadget Server - Sample Gadgets.

Select Products to install	١
	Select Products to install
	Select the product(s) that you want to install: Gadget Server – Sample Gadgets v1.1.0
Exit	Help Previous Next

The following components will be installed:

- FW_CSGadget asset type (used to create gadgets)
- Sample gadgets (assets of type FW_CSGadget)
- Templates for rendering the gadgets
- Assets that provide content for the sample gadgets. The assets are instances of FirstSite II asset types.
- **8.** In the "Clustering" screen, determine whether you are installing the sample gadgets on a single server or a secondary cluster member. Click **Next**.

Clustering		
Installer		
	Clustering	
	Specify whether the target CS installation is clustered or non-clustered: Single Server	
Exit	Previous Next	

9. In the "Enter Gadget Server Information" screen, select either **http** or **https**, and then enter the host name and port number of your Gadget Server installation.

Gadget Server Information		\mathbf{X}
Installer		
	Enter Gadget Server Information:	
	 ● http: ○ https 	
	Enter Hostname:	
	Enter Portnumber:	
Exit	Previous	

10. Click Next.

Settings Summary		X
Installer		
	Settings Summary	
	Installation Directory : C:/csinstallations/patch4/csInstall License File Path : C:/csinstallations/patch4/csInstall/FWLicense.xml Installation Type : Single server Shared Folder Path : C:/csinstallations/patch4/csInstall/Shared Host Name : achadha-755 Port Number : 6008 Platform Type : APPSEVVER Application Server : Tomcat 6.x Server Path : C:/csinstallations/patch4/tomcat Database : MS SQL Server 2005/2008 JNIDI Data Source Name : csDataSource Web Experience Management:	
Exit	Help Previous Ne	×t

11. During the installation, the "Installation Progress" dialog box appears. Click **Install** to begin the installation.

© Installation Progress	
Installer	
Installation Progress Click Install to begin the installation process.	
0%	
Client Log \ Server Log \	
(2010-06-17 10)43(28)642(C2-106) HALL[INEO] C2560(b) disblay/pialogs() : Hodinces to be inscalled in criment un	11
Exit Help Previous Drop Schema Install T	est CS

12. When the "Installation Actions" dialog box opens, start your Content Server installation, and click **Test** to test your Content Server installation. Click **OK**.

Insta	¢Warning [
Installation in p	Installation Actions	
nt Log Serve 0-06-17 10:50:01, 0-06-17 10:50:01, 0-06-17 10:50:00, 0-06-17 10:50:08, 0-06-17 10:50:08, 0-06-17 10:50:08, 0-06-17 10:50:21, 0-06-17 10:50; 0-06-17 10:50; 0-06-17 10:50; 0-06-17 10:50; 0-06-17 10;	1. If your platform requires you to manually deploy the Gadget Server Sample Gadgets, deploy it now. 2. Start your application server. 3. Click Test to test the installation and make sure all tests are successful. 4. If the tests are successful, click OK.	ominsta this file vait11 ominsta this file vait11 get servi /csinsta o war fil war ominsta
0-06-17 10:50:39. 0-06-17 10:50:39. 0-06-17 10:50:45. 0-06-17 10:51:26. 0-06-17 10:51:26. 0-06-17 10:51:26. 0-06-17 10:51:26.	Exit Test Property Editor Help OK	this file wait111 nt C:/cs directorie at = (-1) at = (-1)

13. When the installation is complete, click **OK**.

Installati	on Progress	
lient Log \ Server Log \	Installation Drogross	
110-06-17 10:53:50.630[]0 110-06-17 10:53:50.646[]C 110-06-17 10:53:50.802[]0 110-06-17 10:53:51.474][0 110-06-17 10:53:51.474][0 110-06-17 10:53:51.739][0 110-06-17 10:53:55.739][2 110-06-17 10:53:55.942][0	Installation successful. Check Release Notes and Documentation for I	further information. further information.
110-06-17 10:53:55.942 [] 0 110-06-17 10:53:56.521 [] 0 110-06-17 10:53:56.521 [] 0 110-06-17 10:53:56.567 [] 0 110-06-17 10:53:56.567 [] 0 110-06-17 10:53:56.646 [] 0 110-06-17 10:53:56.661 [] 0	apache.commons.http://ent.Http:MethodBase .INSTALL[INFO] ActionHandler.ExecuteComm .apache.commons.http://ent.Http:MethodBase .INSTALL[INFO] ActionHandler.ExecuteComm .apache.commons.http://ent.Http:MethodBase .INSTALL[INFO] ActionHandler.ExecuteComm .INSTALL[INFO] Worker.run	[WARN] Going to buffer response body of large and: ExecuteCommand success for http://acha [WARN] Going to buffer response body of large and: ExecuteCommand success for http://acha [WARN] Going to buffer response body of large and: ExecuteCommand success for http://acha
tallation Finished Successfu	4	

- 14. Register the sample gadgets in either the Gadget Server global gadget catalog or site gadget catalog. For instructions, see "Registering Gadgets" in the *Gadget Server User's Guide*. To register gadgets you need to enter their descriptor URLs. Follow the instructions below to locate the gadgets' descriptor URLs:
 - **a.** Log in to the Content Server Advanced interface with the credentials of a general administrator (for example, fwadmin/xceladmin).
 - **b.** Select the FirstSite II sample site.
 - c. In the button bar, click Search.

The list of asset types is displayed. Make sure that the **CS-Based Gadget** asset type is included in this list:

Search		
Туре	Name	
Attribute Editor	Find Attribute Editor	(Advanced search)
Content Attribute	Find Content Attribute	(Advanced search)
Content Definition	Find Content Definition	(Advanced search)
Content Filter	Find Content Filter	(Advanced search
Content Parent Definition	Find Content Parent Definition	(Advanced search
Content Parent	Find Content Parent	(Advanced search
Content	Find Content	(Advanced search
CS-Based Gadget	Find CS-Based Gadget	(Advanced search
CSElement	Find CSElement	(Advanced search
Document Attribute	Find Document Attribute	(Advanced search
Document Definition	Find Document Definition	(Advanced search
Document Filter	Find Document Filter	(Advanced search
Document Parent Definition	Find Document Parent Definition	(Advanced search
Document Parent	Find Document Parent	(Advanced search
Document	Find Document	(Advanced search
Media Attribute	Find Media Attribute	(Advanced search
Media Definition	Find Media Definition	(Advanced search
Media Filter	Find Media Filter	(Advanced search
Media Parent Definition	Find Media Parent Definition	(Advanced search
Media Parent	Find Media Parent	(Advanced search
Media	Find Media	(Advanced search
Page	Find Page	(Advanced search
SiteEntry	Find SiteEntry	(Advanced search
StyleSheet	Find StyleSheet	(Advanced search
Template	Find Template	(Advanced search
Visitor Attribute	Find Visitor Attribute	(Advanced search



- d. In the list of asset types, click Find CS-Based Gadget.
- e. In the "Search for FW_CSGadget" screen, click Search.
- f. Preview any of the sample CS-Based Gadget assets.
- g. In the "Template" field, select ListSiteGadgets.

The gadget descriptor URLs will look similar to the following:

Preview Template: ListSiteGadgets 💌 Wrapper: FSIIPreviewWrapper 💌 2010-12-17 12:38:28 🏢 Go Get Link
ListGadget
http://10.120.12.75:8080/cs1/Satellite?c=FW_CSGadget&cid=1269873534992&
pagename=FirstSiteII%2FFW_CSGadget%2FGenerateGadgetXML
RSSGadget
http://10.120.12.75:8080/cs1/Satellite?c=FW_CSGadget&cid=1269873535165&
pagename=FirstSiteII%2FFW_CSGadget%2FGenerateGadgetXML
SlideshowGadget
http://10.120.12.75:8080/cs1/Satellite?c=FW_CSGadget&cid=1269873535728&
pagename=FirstSiteII%2FFW_CSGadget%2FGenerateGadgetXML
ThumbListGadget
http://10.120.12.75:8080/cs1/Satellite?c=FW_CSGadget&cid=1269873553620&
pagename=FirstSiteII%2FFW_CSGadget%2FGenerateGadgetXML

Once you successfully register the sample gadgets, they are displayed as thumbnails on either the global gadget catalog or a site gadget catalog, depending on how you registered the gadgets. For example:

FatWire Gadget Server	Gadgets			×
Gadgets				
Segister Gadget Enable	Delete	Search	<i>p</i>	
Solect All		Show rows: 5 💌 1-1 of 1	••	New gadget registered to the global gadget catalog

For more information about sample gadgets and creating custom gadgets, see the *Gadget* Server Developer's Guide.