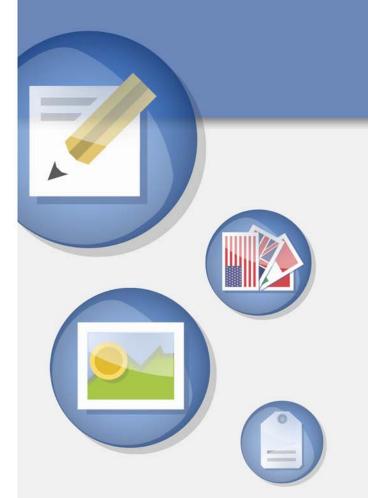
FatWire | Content Server 7

Version 7.6 Patch 2



Configuring Third-Party Software

Document Revision Date: Jan. 31, 2012



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About This Guide

This guide contains information about installing and configuring third-party software specifically for use by FatWire Content Server. You will use the information in this guide along with the CS installation guide for your platform, (and with the CS-LDAP integration guide, if you choose to integrate with LDAP).

How This Guide is Organized

The guide is divided into the following parts:

- Part 1, "Creating and Configuring a Database" shows you how to create and configure the supported databases before you install Content Server. (Supplements the Content Server installation guides.)
- Part 2, "Installing a Web Server" shows you how to install and configure the supported web servers, if you choose to use one. (Supplements the Content Server installation guides.)
- Part 3, "Installing and Configuring LDAP" shows you how to set up the supported LDAP server for integration with Content Server. (Supplements the CS-LDAP integration guide.)
- Part 4, "Virtualization" shows you how to create and configure virtual machines.

Who Should Use This Guide

This guide is for installation engineers who have experience installing and configuring enterprise-level software, including databases, database drivers, application servers, portal servers, and LDAP servers.

Graphics in This Guide

Graphics in this guide are screen captures of dialog boxes and similar windows that you will interact with during the installation or configuration process. These graphics are presented to help you follow the installation and configuration processes. They are not intended to be sources of information such as parameter values, options to select, and product version numbers.

Conventions

The following text conventions are used in this guide:

- **Boldface** type indicates graphical user interface elements that you select.
- *Italic* type indicates book titles, emphasis, or variables for which you supply particular values.
- Monospace type indicates file names, URLs, sample code, or text that appears on the screen.
- Monospace bold type indicates a command.

Third-Party Libraries

FatWire Content Server and its applications include third-party libraries. For additional information, see *FatWire Content Server 7.6 Patch 2: Third-Party Licenses*.

Part 1

Creating and Configuring a Database

Content Server requires access to a supported database that is configured specifically for Content Server. Instructions for creating and configuring supported databases are given in the following chapters:

- Chapter 1, "Creating and Configuring an Oracle 10g Database"
- Chapter 2, "Creating and Configuring an Oracle 11g Database"
- Chapter 3, "Creating and Configuring an MS SQL Server Database"
- Chapter 4, "Creating and Configuring an IBM DB2 8.x Database"
- Chapter 5, "Creating and Configuring an IBM DB2 9.1 Database"

The databases listed above are not configured for production; they are set up with full permissions. In practice, the permissions can be restricted for the user that Content Server will use to access a database. However, the following rights must exist: ability to create, modify, and delete tables and indexes.

If you need instructions on installing a supported database, refer to the product documentation. For instructions on creating and configuring a supported database refer to the chapters listed above. (Note that database configuration is identical across different application servers.)

Chapter 1

Creating and Configuring an Oracle 10g Database

Use this chapter to set up an Oracle 10g database for your Content Server installation. For background information regarding database configuration and users' permissions, see Part 1, "Creating and Configuring a Database."

This chapter contains the following sections:

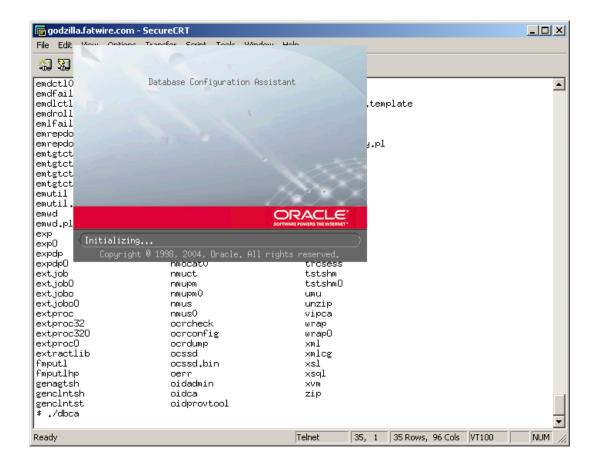
- Step I. Create an Oracle 10g Database
- Step II. Create a New User for Content Server

Step I. Create an Oracle 10g Database

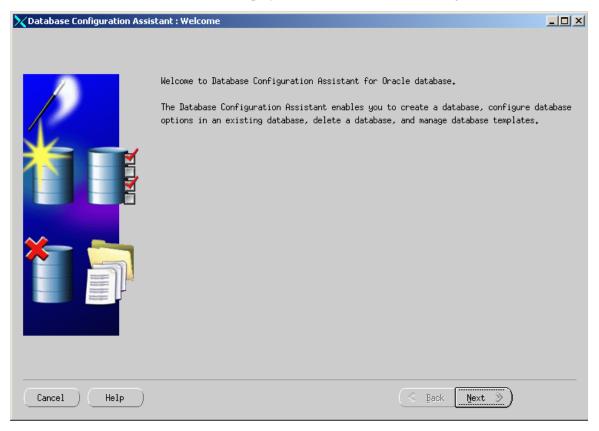
- 1. Execute the "Oracle Database Configuration Assistant" by doing one of the following:
 - In Unix, execute the command: dbca
 - In Windows, go to the "Oracle Programs" group and select **Database Configuration Assistant**.

Note

This step displays a load screen that can take some time to complete. Be patient.



2. On the first screen that is displayed, click Next. In the following screen, click Next.



🗙 Database Configuration Assi	stant, Step 1 of 12 : Operations	
	Select the operation that you want to perform: © Create a Database ○ Configure Database Options ○ Delete a Database ○ Manage Templates	
Cancel Help	S Back Next S	

3. Select the radio button **Create a Database** and click **Next**.

XDatabase Configuration Assist	tant, Step 2	2 of 12 : Database Templates	
	Select a	template from the following list to create a database:	
	Select	Template	Includes Datafiles
	0	Custom Database	No
	0	Data Warehouse	Yes
	9	General Purpose	Yes
Nourispidentian Nourispidentian	0	Transaction Processing	Yes
Harrison Barrier Harrison Barrier Harrison Harri			
			Show Details)
Cancel Help		😪 Back 🛛 Nex	at 📎

4. Select the radio button General Purpose and click Next.

Note

Database block size **must** be at least 4096 bytes. Selecting the **General Purpose** option automatically sets the block size to 8192 bytes.

5. Enter a unique global database name and SID (in this example the global database name is contentserverdb. The SID is CSDB). Click **Next**.

X Database Configuration Assis	stant, Step 3 of 12 : Database Identification	_ 🗆 🗵
	An Oracle database is uniquely identified by a Global Database Name, typically of t form "name.domain". Global Database Name: A database is referenced by at least one Oracle instance which is uniquely identifi from any other instance on this computer by an Oracle System Identifier (SID). SID:	
Cancel Help	🤇 Back Next 📎	

✓Database Configuration Assistant, Step 3 of 12 : Database Identification
Cotabase Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step 3 of 12: Database Identification Image: Configuration Assistant, Step
Cancel Help Sack Next >

🗙 Database Configuration Ass	sistant, Step 4 of 12 : Management Options	5	
_	÷ •	centrally using the Oracle Enterprise Manager Enterprise Manager Database Control. Choose th e to use to manage this database.	
	☑Configure the Database with Ente	rprise Manager	
	○Use Grid Control for Database M Select the Management Service	lanagement No Agents Found	
Y Norreg Advertary Y Norreg Advertary Wood (2000)	🖲 Use Database Control for Databa	ase Management	
1 Martin Statement	Enable Email Notifications		
Navazila Administra Navazila Administra Navazila Administra	Outgoing Mail (SMTP) Server:		
Average Averag	Email Address:		
May 22 Malannan May 22 Malannan May 22 Malannan	Enable Daily Backup		
Madapate Spittalismous Madapate Spittalismous	Backup Start Time:	02 w 00 w © AM C PM	
	OS Username:		
	Password:		
Cancel Help		🔇 Back (Next >>)	

- **8.** Enter a password, re-enter the same password in the "Confirm Password" field and click **Next**.
- **9.** For enhanced security select the radio button **Use Different Passwords** and enter a unique password for each of the given users.

🔀 Database Configuration Assist	ant, Step 6 of 12 : Storage Options	
	Select the storage mechanism you would like to use for the database. © File System Use the File System for Database storage.	
Nutries Annual Control of Control	C Automatic Storage Management (ASM) Automatic Storage Management simplifies database storage administration ar database layout for I/O performance. To use this option you must either sp of disks to create an ASM disk group or specify an existing ASM disk group	ecify a set
Andread States and Sta	○ Raw Devices Raw partitions or volumes can provide the required shared storage for Real Application Clusters (RAC) databases if you do not use Automatic Storage M and a Cluster File System is not available. You need to have created one for each datafile, control file, and log file you are planning to create i database. Specify Raw Devices Mapping File	lanagement raw device
Cancel Help	S Back Next >>	Einish

X Database Configuration Assis	tant, Step 7 of 12 : Database File Locations	- D ×
	Specify locations for the Database files to be created:	
	Use Database File Locations from Template	
	© Use Common Location for All Database Files	Transa
Nurstanin -	Database Files Location:	(Browse)
Notice Statement	Database Area:	Browse
Francescher im Frankensen Fra	Multiplex Redo Logs and Control Files,) If you want to specify different locations for any database files, pice the above options and use the Storage page to specify each location.	k either of
	File Location	Variables)
Cancel Help	🔇 Back (Next >>)	Einish

XDatabase Configuration Assist	ant, Step 8 of 12 : Recovery Configura	tion	
	required for automatic backup us	all backup and recovery operations, and sing Enterprise Manager. Oracle recommen so be located on physically different di (ORACLE_BASE>/flash_recovery Brows 2048 * M Byte Edit Archive Mode Parameters,	is also ds that the sks for data me)
Cancel Help		File Locatio	n Variables)

XDatabase Configuration Assist	ant, Step 9 of 12 : Database Content	
	Sample Schemas Custom Scripts Sample Schemas Custom Scripts Sample Schemas Illustrate the use of a layered approach to complexity, by some demonstration programs. Installing this will give you the follo in your database: Human Resources, Order Entry, Online Catalog , Produc Queued Shipping, Sales History . It will also create a tablespace calle The tablespace will be about 130 MB. Specify whether or not to add the Sample Schemas to your database. Sample Schemas	and are used wing schemas t Media,
Cancel Help	🔍 Back Next S	Einish

FatWire SOFTWARE

- 14. Click the Character Sets tab and do the following:
 - **a.** Select **Choose from the list of character sets** and select **UTF-8** from the drop-down menu.
 - b. Click the National Character Set drop down-menu and select UTF8.
- 15. Leave all other options on the different tabs as is and click Next.
- **16.** For database storage, no options need to be changed. However, if you wish to change the location of the database from the default of oradata located under the Oracle installation, you can do so on this page. Click **Next**.

XDatabase Configuration Assist	ant, Step 11 of 12 : Database Storage	<u>_ ×</u>
Storage - 110 Datafiles Batafiles Batafiles	Database Storage From the Database Storage page, you can specify storage parameters for the datability of the common of the datability of) to al , selec e able
Create Delete	File Location Variable	s)
Cancel Help	(nish)

17. Do not change any options. Click **Finish**.

Configuration Assistar	nt, Step 12 of 12 :	Creation Options	
	elect the databa ∳Create Dat	se creation options:	
Cancel Help		(Back Next > Einish

18. In the "Configuration" window, review the choices that you made on the previous screens. If you need to modify your choices, click **Cancel** and make the modifications. Otherwise, click **OK** to continue.

Confirmation			×
The following operations will be A database called "contenterver A template called "contenterver	db" will b	be created.	
Database Details:			
Use this database template to Common Options	o create a	eral Purpose pre-configured database optimized for general pose usage.	
0-44-0	Selected	1	
Option Oracle JVM	true		
Oracle Intermedia	true		
Oracle Text	true		
Oracle XML DB	true		
Oracle OLAP	true		
Oracle Spatial	true		
Oracle Data Mining	true		
Oracle Ultra Search	true		
(OK Ca	(Save as an HTML fi ncel) (Help)	le)

Note

If you are planning to use internationalization, for Content Server the key value is: National Character Set: UTF8

19. The following window shows the progress of the database creation. This step can take time to complete.

Database Configuration Assistant		
	 Copying database files Creating and starting Oracle instance Completing Database Creation Clone database creation in progress 11%	

20. When database creation is completed, click **Exit**.



Step II. Create a New User for Content Server

- Locate the file emoms.properties (in <oracle home>/<server name>_<SID>/sysman/config/).
 - a. Find the line: oracle.sysman.emSDK.svlt.ConsoleServerPort
 - **b.** The port after the line in step a is important. Make a note of it.
- 2. Run the command: emctl status dbconsole

The command should return an output similar to the following:

Oracle Enterprise Manager 10g Database Control Release 10.1.0.2.0 Copyright (c) 1996, 2004 Oracle Corporation. All rights reserved.

```
http://godzilla:5500/em/console/aboutApplication
```

Oracle Enterprise Manager 10g is running.

Logs are generated in directory /u02/app/oracle10/product/ 10.1.0/db_1/godzilla_orcl10so/sysman/log

Note

If the command returns the message that the Oracle Enterprise Manager is not running, start Oracle Enterprise Manager with the command: **emctl start dbconsole**

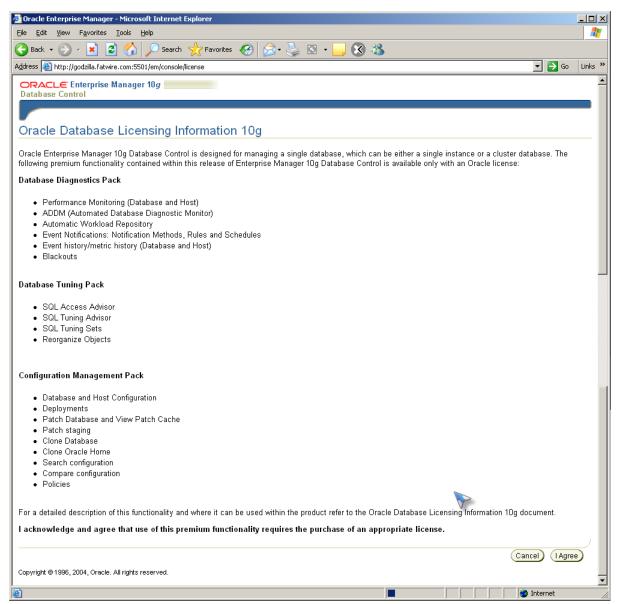
- **3.** Open a browser and do the following:
 - **a.** Browse to the URL http://<hostname>:<port>/em (from step 2).

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Address 🙋 http://godzilla.fatwire.com:5501/em/console/logon/logon	💌 🔁 Go 🛛 Links »
ORACLE Enterprise Manager 10g	Help
Login	
Login to Database:contenterverdb	
* User Name	
* Password	
Connect As Normal I Login	
 Copyright © 1996, 2004, Oracle. All rights reserved.	

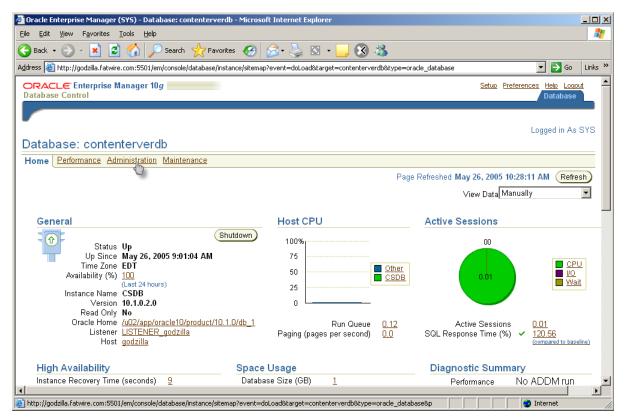
b. Log in to the browser, using the following field values:

Field Name	Field Value
User name	sys
Password	<pre><password creating="" db="" entered="" the="" when=""></password></pre>
Connect As	SYSDBA

c. As this is the first time you are using the Oracle Enterprise Manager, a license page is displayed. Click **I Agree**.



4. Click the Administration tab.



- a. From the Security menu, select Users. Click the Create button.
- **b.** In the "Create User" screen, fill in required fields with the values that are listed in the following table:

Field Name	Field Value
Name	csuser
Enter Password	<your choice=""></your>
Confirm Password	<same password=""></same>

🚰 Oracle Enterprise Manager - Create User - Microsoft Internet Explorer	
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Address 🕘 http://godzilla.fatwire.com:5501/em/console/database/security/user?event=create&cancelURL=/em/console/database/database	ObjectsSearch%3Fevent%3Dredispl🔽 🛃 Go 🛛 Links 🎽
ORACLE Enterprise Manager 10g Database Control	Setup Preferences Help Logout
Database: contenterverdb > Users > Create User	Logged in As SYS
Create User	
	Show SQL Cancel OK
General Roles System Privileges Object Privileges Quotas Consumer Groups Proxy Users	
* Name csuser	
Profile DEFAULT	
Authentication Password -	
* Enter Password	
* Confirm Password	
Expire Password now	
Default Tablespace 🔗	
Temporary Tablespace	
Status C Locked O Unlocked	
General Roles System Privileges Object Privileges Quotas Consumer Groups Proxy Users	
	,
	Show SQL Cancel OK
Database Setup Preferences Help Logout	_
	Normal Strengt

- 5. Click the **Roles** tab.
 - **a.** Click the **Modify** button.

🚰 Oracle Enterprise Manager - Create User - Microsoft	Internet Explorer		
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Address 🗃 http://godzilla.fatwire.com:5501/em/console/data	base/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/	console/database/databaseOt 💌 🄁 Go 🛛 Links 🌺	
ORACLE Enterprise Manager 10g		Setup Preferences Help Logout	
Database: contenterverdb > Users > Create User		Logged in As SYS	
General Roles System Privileges Object Privi	leges Quotas Consumer Groups Proxy Users	Show SQL) Cancel OK	
		Modify	
Role	Admin Option	Default	
CONNECT			
General Roles System Privileges Object Privi	leges Quotas Consumer Groups Proxy Users		
		Show SQL) Cancel) OK	
Copyright © 1996, 2004, Oracle. All rights reserved. About Oracle Enterprise Manager 10g Database Control	Database <u>Setup</u> <u>Preferences</u> <u>Help</u> <u>Logout</u>		

b. From the list of "Available Roles" (left side), select **Resource** and click the **Move** button.

🖉 Modify Roles - Microsoft Internet Explorer		
<u>File Edit View Favorites Tools H</u> elp		🥂 🕹
🚱 Back 🔹 🕥 🖌 🖹 😫 🏠 🔎 Search 🌟	Favorites 🧭 🔗 🍓 🖸 🗸 📙	8 3
Address 🙋 http://godzilla.fatwire.com:5501/em/console/databa	se/security/user?target=contenterverdb&type=c	racle_database&cancelURL=/em/console/database/databaseOt 🔽 🛃 Go 👘 Links 🎽
ORACLE Enterprise Manager 10g		Setup Preferences Help Logout Database
<u>Database: contenterverdb</u> > <u>Users</u> > Create User		Logged in As SYS
Modify Roles		
		Cancel OK
Available Roles	Selected Roles	
MGMT_USER OEM_MONITOR OLAP_DBA OLAP_USER RECOVERY_CATALOG_OWNER RESOURCE SCHEDULER_ADMIN SELECT_CATALOG_ROLE WKUSER WW_ADMIN_ROLE		
Copyright © 1996, 2004, Oracle. All rights reserved. <u>About Oracle Enterprise Manager 10g Database Control</u>	Database <u>Setup</u> <u>Preferences</u> <u> </u>	Cancel OK

Resource is moved to the "Selected Roles" list.

🖉 Modify Roles - Microsoft Internet Explorer		
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp		🥂 🖉
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Address 🗃 http://godzilla.fatwire.com:5501/em/co	onsole/database/security/user?target=contenterverdb&typ	e=oracle_database&cancelURL=/em/console/database/databaseOt 🔽 🛃 Go 🛛 Links 🌺
ORACLE Enterprise Manager 10g Database Control		Setup Preferences Help Logout Database
Database: contenterverdb > Users > Cri Modify Roles	eate User	Logged in As SYS
		(Cancel) (OK)
Available Roles	Selected Roles	
AQ_ADMINISTRATOR_ROLE AQ_USER_ROLE AUTHENTICATEDUSER CTXAPP DBA DELETE_CATALOG_ROLE DMUSER_ROLE DM_CATALOG_ROLE EUBCLIENT EXECUTE_CATALOG_ROLE ▼ Copyright © 1996, 2004, Oracle. All rights reserved About Oracle Enterprise Manager 10g Database Corr		Cance) OK
Cone Cone		🛛 📄 👘 💕 Internet

c. Click OK.

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- 6. Click the System Privileges tab.
 - **a.** Click the **Modify** button.

🚰 Oracle Enterprise Manager - Create User - Microsoft Internet Explorer	
Eile Edit Yiew Favorites Tools Help	A
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Address 🗃 http://godzilla.fatwire.com:5501/em/console/database/security/user?target=contenterverdb&t	ype=oracle_database&cancelURL=/em/console/database/databaseOt 🔽 🛃 Go 🛛 Links 🌺
ORACLE Enterprise Manager 10g	Setup Preferences Help Logout Database
Database: contenterverdb > Users > Create User	Logged in As SYS
Create User	
	Show SQL) Cancel OK
General Role System Privileges Object Privileges Quotas Consumer Groups	Proxy Users
	Modify
System Privilege No items found	Admin Option
General Roles System Privileges Object Privileges Quotas Consumer Groups	Proxy Users
	Show SQL Cancel OK
Copyright © 1996, 2004, Oracle. All rights reserved. <u>About Oracle Enterprise Manager 10g Database Control</u>	<u>s Help Logout</u>

b. From the list of "Available System Privileges" (left side), choose **Select Any Dictionary** and click the **Move** button.

🚰 Modify System Privileges - Microsoft Internet Explorer	
File Edit View Favorites Tools Help	an a
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Address 🙆 http://godzilla.fatwire.com:5501/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/	/em/console/database/databaseOt 💌 🔁 Go 👘 Links 🎽
ORACLE Enterprise Manager 10g Database Control	Setup Preferences Help Logout Database
<u>Database: contenterverdb</u> > <u>Users</u> > Create User Modify System Pri∨ileges	Logged in As SYS
Available System Privileges Selected System Privileges	Cancel) OK
REMOVE_ANY_WORKSPACE	,
Database <u>Setup</u> <u>Preferences</u> <u>Help</u> <u>Logout</u> Copyright © 1996, 2004, Oracle. All rights reserved. <u>About Oracle Enterprise Manager 10g Database Control</u>	Cancel) OK

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Select Any Dictionary is moved to the "Selected System Privileges" list.

🚰 Modify System Privileges - Microsoft Internet Explorer	
Eile Edit Yiew Favorites Iools Help	🥂
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Address 🗃 http://godzilla.fatwire.com:5501/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console/database	
ORACLE Enterprise Manager 10g Database Control	Setup Preferences Help Logout Database
Database: contenterverdb > Users > Create User Modify System Privileges	Logged in As SYS
	Cancel OK
Available System Privileges Selected System Privileges	
REMOVE ANY WORKSPACE RESTRICTED SESSION RESUMABLE ROLLBACK_ANY_WORKSPACE SELECT ANY SEQUENCE SELECT ANY TABLE SELECT ANY TABLE SELECT ANY TABLE SYSDBA SYSOPER UNDER ANY TABLE	
Database <u>Setup</u> <u>Preferences</u> <u>Help</u> <u>Logout</u> Copyright © 1996, 2004, Oracle. All rights reserved. <u>About Oracle Enterprise Manager 10g Database Control</u>	Cancel OK
Done 1	🔹 🚺 🔮 Internet

- **c.** (Optional) If you are creating a portal installation on WebLogic, also add the **Create View** privilege (by repeating step b).
- d. Click OK.

The database is now ready for Content Server.

- 7. In the upper right-hand corner, click Logout.
- **8.** The database is ready for Content Server. You can now create and configure the data source.

Next Step

You are now ready to create and configure the data source. For instructions, refer to your Content Server installation guide.

Chapter 2

Creating and Configuring an Oracle 11g Database

Use this chapter to set up an Oracle 11g database for your Content Server installation. For background information regarding database configuration and users' permissions, see Part 1, "Creating and Configuring a Database."

This chapter contains the following sections:

- Step I. Create an Oracle 11g Database
- Step II. Create a New User for Content Server

Step I. Create an Oracle 11g Database

1. Launch the Oracle Database Configuration Assistant by executing the following command:

<ora_home>/bin/dbca

2. In the "Welcome" screen, click Next.

	Database Configuration Assistant : Welcome
	Welcome to Database Configuration Assistant for Oracle database. The Database Configuration Assistant enables you to create a database, configure database options in an existing database, delete a database, and manage database templates.
Cancel Help	S Back Next >>

3. In the "Operations" screen, select Create a Database and click Next.

		Database Configuration Assistant, Step 1 of 15 : Operations	X
		Select the operation that you want to perform: © Create a Database © Configure Database Options © Delete a Database © Manage Templates © Configure Automatic Storage Management	
C	incel Help	<u>Back</u> <u>Next ≫</u>)	

4. In the "Database Templates" screen, select General Purpose or Transaction **Processing** and click **Next**.

Databa	Templates new datab	unation Assistant, Step 2 of 15 : Database Templates that include datafiles contain pre-created databases. They a vase in minutes, as opposed to an hour or more. Use templat necessary, such as when you need to change attributes like b altered after database creation.	es without datafiles
	Select	Template	Includes Datafiles
	9	General Purpose or Transaction Processing	Yes
	0	Custom Database	No
Wageneyadamian Wageneyadamian	0	Data Warehouse	Yes
Hersteinsteinen Bersteinsteinen Forstein Verstein Hersteinstein Hersteinstein Hersteinstein Hersteinstein Hersteinstein Hersteinstein Hersteinstein			
			Show Details
Cancel Help		S Back Next	»)

5. In the "Database Identification" screen, enter the global database name and the SID. (FatWire recommends using the same value for both; in our example, we are using contentDB.) When you are finished, click **Next**.

✓ Databas	e Configuration Assistar	nt, Step 3 of 15 : Database Identification
	"name.domain". Global Database Name: A database is referenced	iquely identified by a Global Database Name, typically of the form contentDB by at least one Oracle instance which is uniquely identified from s computer by an Oracle System Identifier (SID).
	SID:	contentDB
Cancel		S Back Next >

6. In the "Management Options" screen, select the **Configure Enterprise Manager** check box. Select other options as desired. When you are finished, click **Next**.

Da	tabase Configuration Assistant, Step 4 o	of 15 : Management Options	
	Configure Enterprise Manager		
	C Register with Grid Control for centralized management		
	Management Service	No Agents Found	
	Configure Database Control for	local management	
	Enable Alert Notifications		
Y May 2005 Advanture Y May 2005 Advanture May 2005 Advanture May 2005 Advanture May 2005 Advanture	Outgoing Mail (SMTP) Server:		
Market Market	Recipient Email Address:		
Wayang Malamian Wayang Malamian	🗆 Enable Daily Disk Backup to F	Recovery Area	
Average Averag	Backup Start Time:	02 🖕 00 🖕 🖲 AM 🔿 PM	
Monteshikaran Monteshikaran Monteshikaran	OS Username:		
Midapate State and American Midapate State and American Midapate State S	OS Password:		
Cancel Help	\supset	G Back <u>N</u> ext)	

- 7. In the "Database Credentials" screen, do one of the following:
 - If you are installing a production system, select **Use Different Administrative Passwords**, enter a unique password for each database user shown in the table, and click **Next**.
 - If you are installing a non-production system, select **Use the Same Administrative Password for All Accounts**, enter and re-enter a password, and click **Next**.

	e Configuration Assista For security reasons, you database.		ase Credentials
	OUse Different Adminis	trative Passwords	
	User Name	Password	Confirm Password
	SVS		
	SYSTEM		
	DBSNMP		
	SYSMAN		
	Use the Same Admini: Password: Confirm Password:	strative Password for All	Accounts
Cancel Help			Back Next ≫

8. In the "Storage Options" screen, select File System and click Next.

Data	abase Configuration Assistant, Step 6 of 15 : Storage Options
рака	 Select the storage mechanism you would like to use for the database. File System Use the File System for Database storage. Automatic Storage Management (ASM) Automatic Storage Management simplifies database storage administration and optimizes database layout for I/O performance. To use this option you must either specify a set of disks to create an ASM disk group or specify an existing ASM disk group. Raw Devices Raw partitions or volumes can provide the required shared storage for Real Application Clusters (RAC) databases if you do not use Automatic Storage Management and a Cluster File System is not available. You need to have created one raw device for each datafile, control file, and log file you are planning to create in the database. Specify Raw Devices Mapping File Browse
Cancel Help	<u> </u>

9. In the "Database File Locations" screen, select **Use Database File Locations from Template** (unless you want to use custom file names and locations) and click **Next**.

🕑 🛛 🖉 Database	Configuration Assistant, Step 7 of 15 : Database File Locations	//// = = ×
	Specify locations for the Database files to be created: Use Database File Locations from Template Use Common Location for All Database Files Database Files Location: Use Oracle-Managed Files Database Area: Multiplex Redo Logs and Control Files If you want to specify different locations for any database files, pick any o options except Oracle-Managed Files and use the Storage page later to c each file location. If you use Oracle-Managed Files, Oracle automatically the names for database files, which can not be changed on the Storage p File Location	ustomize enerates age.
Cancel Help	(<u> </u>	Einish

10. In the "Recovery Configuration" screen, leave the default values and click **Next**.

🕑 🛛 Database	Configuration Assistant, Step 8 c	of 15 : Recovery Configuration	//////////
	Choose the recovery options for the ✓ Specify Flash Recovery Area This is used as the default for al	database: I disk based backup and recovery	operations, and is
	also required for automatic disk	based backup using Enterprise M files and recovery files be located (anager. Oracle
Hanna Santa	Flash Recovery Area Size:	2048	M Bytes 🔻
Andream Andrea	Enable Archiving	Edit Archive Mode Parameters.	.)
		File	Location Variables)
Cancel Help		🔇 Back Ne:	a 🔊 🔄 Einish

11. In the "Database Content" screen, click **Next**.

Databa	ase Configuration Assistant, Step 9 of 15 : Database Content
	Sample Schemas Custom Scripts Sample Schemas illustrate the use of a layered approach to complexity, and are used by some demonstration programs. Installing this will give you the following schemas in your database: Human Resources, Order Entry, Online Catalog, Product Media, Information Exchange, Sales History. It will also create a tablespace called EXCAMPLE. The tablespace will be about 130 MB. Specify whether or not to add the Sample Schemas to your database. Sample Schemas
Cancel Help	

- **12.** In the "Initialization Parameters" screen, do the following:
 - **a.** In the **Memory** tab, set the preferred memory size for your database. The value you enter here will depend on the size and contents of your database. FatWire recommends a minimum of 384MB.

Database (Configuration Assistant, Ste		lization Parameters	_ ×
	Typical Memory Size (SGA and P Percentage: Use Automatic Memor C Custom Memory Management	40 % y Management	250 MB Show Memory Distribution)	992 MB
	SGA Size: PGA Size: Total Memory for Oracle	297 99	M Bytes M Bytes	
	All Initialization Parameters.	.)		
Cancel Help			🔇 Back Next 📎	Einish

- **b.** In the **Character Sets** tab, do the following:
 - 1) Select the Use Unicode (AL32UTF8) radio button.
 - 2) In the "National Character Set" drop-down list, select UTF-8 Unicode 3.0 UTF-8 Universal Character Set.

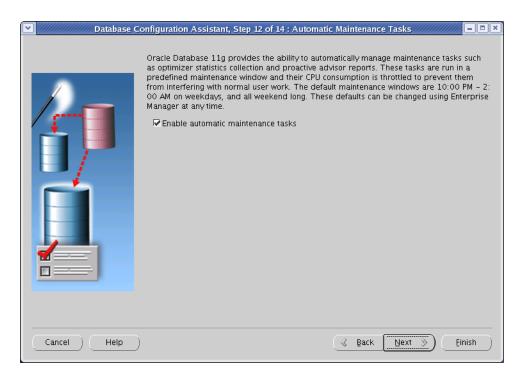
✓ Database	Configuration Assista	nt, Step 10 of 14 : Initialization Parameters
	Memory	Sizing Character Sets Connection Mode
	© Use the default The default chara operating system: © Use Unicode (AL32	icter set for this database is based on the language setting of this : WE8MSWIN1252. 2UTF8) set to Unicode (AL32UTF8) enables you to store multiple language ist of character sets
	National Character Se Default Language: Default Territory:	et: UTF8 - Unicode 3.0 UTF-8 Universal character set, CESU
	All Initialization Param	neters)
Cancel Help		G Back Next >

c. Click Next.

13. In the "Security Settings" screen, click Next.

	Database Configuration Assistant, Step 11 of 14 : Security Settings						
	Oracle recommends using the enhanced default security settings.						
	Reep the enhanced 11g default security settings (recommended) These settings include enabling auditing and a new default password profile.						
	C Revert to pre-11g default security settings To disable a particular category of enhanced settings for compatibility purposes choose from the following.						
Vigner Statement	Revert audit settings to pre-11g defaults						
Approximation Approx	☐ Revert password profile settings to pre-11g defaults						
Cancel He	Ip						

14. In the "Automatic Maintenance Tasks" screen, click Next.



15. In the "Database Storage" screen, review the selected file locations. (If you need to make changes, click **File Location Variables**.) Click **Next**.

	Databa	ase Configuration Assistant, Step 13 of 14 : Database Storage
	⊖- <mark>□ Storage</mark> 	Database Storage From the Database Storage page, you can specify storage parameters for database creation. This page displays a tree listing and summary view (multi-column lists) to
		enable you to change and view the following objects: Control files Tablespaces Datafiles Rollback Segments Redo Log Groups From any object type folder, click Create to create a new object. To delete an object,
		select the specific object from within the object type folder and click Delete . Important: If you select a database template including data files, then you will not be able to add or remove data files, tablespaces, or rollback segments. Selecting this type of template enables you to change the following: Destination of the datafiles Control files or log groups. For more information, refer to the
l	Create Delete	Oracle Database Storaoe Administrator's Guide.
(Cancel Help	🔇 Back Next >> Einish

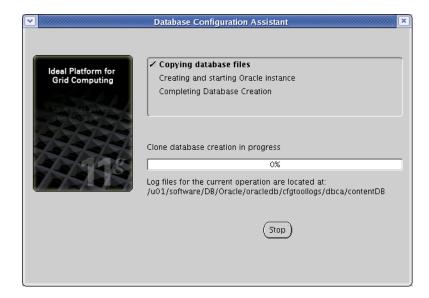
16. In the "Creation Options" screen, click **Finish**.

	e Configuration Assistant, Step 14 of 14 : Creation Options
Cancel Help	Back Next >) Einish

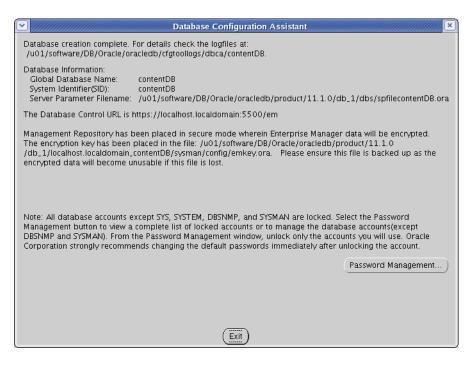
17. In the "Confirmation" screen, review the selected options, then click OK.

	C	Confirmation	×						
he following operations will be p									
A database called "contentDB" w	ill be creat	ed.							
Database Details:									
General Purpose or Transaction									
Processing									
Use this database template to create a pre-configured database optimized for general									
purpos	e or transa	action processing usage.							
Common Options									
common option.	·								
Option	Selected								
Oracle JVM	true								
Oracle Text	true								
Oracle XML DB	true								
Oracle Multimedia	true								
Oracle OLAP	true								
Oracle Spatial	true								
Oracle Ultra Search	true								
Oracle Label Security	false								
Sample Schemas	false								
		Save as an HTML file)						
	OK Car	ncel) (Help)							

18. Allow the database creation tasks to complete. If any one of the tasks fails, remedy the problem before continuing.



19. At the summary screen, make a record of the database SID and the database control URL, then click **Exit**.



Step II. Create a New User for Content Server

- 1. Determine the Console Server port:
 - **a.** Open the emoms.properties file in a text editor. The file is located in: <ora_home>/<servername>_<SID>/sysman/config/
 - **b.** Find the line,

oracle.sysman.emSDK.svlt.ConsoleServerPort and make a record of the port number value at the end of the line.

- **2.** Log in to the Oracle Enterprise Manager console:
 - a. Execute the following command: emctl status dbconsole

The command should return an output similar to the following:

Oracle Enterprise Manager 11g Database Control Release 11.1.0.6.0 Copyright (c) 1996, 2007 Oracle Corporation. All rights reserved. https://localhost.localdomain:1158/em/console/aboutApplication Oracle Enterprise Manager 11g is running.

Logs are generated in directory /u01/software/DB/Oracle/oracledb/ product/11.1.0/db_1/localhost.localdomain_vmorcldb/sysman/log

- **b.** Open a browser and go to the URL highlighted in bold in step a above. If you see a "Security Mismatch" error, ignore it (the error appears if you are using a self-signed certificate).
- **c.** Log in as the sys user (you specified a password for this user in step 7 on page 41) connecting as **SYSDBA**.

ORACLE Enterprise M Database Control	fanager 11 g	<u>Help</u>
Login		
* User Name	sys	
* Password		
Connect As	SYSDBA V	

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3. In the tab bar, click **Server**.

ORACLE Enterprise Manager 11 g			Setup Preferences	<u>Help Loquut</u> Database
Database Instance: vmorcidb				Logged in As SYS
	ver Schema Data Movement	Orthogon and Ownersh		
Home Performance Availability Ser	ver <u>Schema</u> <u>Data Movement</u>	Software and Support		
	Latest Data Collected	From Target Oct 1, 2007 4:38:29 PM I	EDT Refresh View Data Automatic	cally (60 sec) 💌
General	X Host CPU	Active Sessions	SQL Response Time	
Shutdown Black Out	100%	1.0	1.0	
Status Up	75	Wait		
Up Since Oct 1, 2007 12:50:34 PM EDT	50	0.5 User I/O	0.5	
Instance Name vmorcidb Version 11.1.0.6.0	25			
Host localdomain	o 💻	0.0	0.0	
Listener LISTENER_localhost.localdomain			Reference collectio	n is empty.
View All Properties	Load <u>4.43</u> Paging <u>0.00</u>	Maximum CPU 1	SQL Response Time (%	6) Unavailable
Vew Air Hopertes			Reset Referen	ice Collection)
Diagnostic Summary	Space Summary		High Availability	
ADDM Findings 7	Database	e Size (GB) <u>1.485</u>	Instance Recovery Time (sec)	22
Period Start Time Oct 1, 2007 3:00:02 PM E		-		n/a
Alert Log <u>No ORA- errors</u>	Segment Advisor Recom	—	, , ,	100
Active Incidents 🚺 🧕		y Violations 🗸 0	Flashback Database Logging	Disabled
Database Instance Health	Dump Area	a Used (%) <u>65</u>		

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- 4. Create the new user. Do the following:
 - a. In the "Security" section of the page, click Users.

ORACLE [:] Enterprise Manager 11 <i>g</i>		Setup Preferences Help Locaut Database
Database Instance: vmorcldb		Logged in As SY
Home Performance Availability Ser	ver Schema Data Movement Software and Sup	port
Storage	Database Configuration	Oracle Scheduler
Control Files	Memory Advisors	Jobs
Tablespaces	Automatic Undo Management	Chains
Temporary Tablespace Groups	Initialization Parameters	Schedules
Datafiles	View Database Feature Usage	Programs
Rollback Segments		Job Classes
Redo Log Groups		Windows
Archive Logs		Window Groups
Migrate to ASM		Global Attributes
Make Tablespace Locally Managed		Automated Maintenance Tasks
Statistics Management	Resource Manager	Security
Automatic Workload Repository	Getting Started	Users
AWR Baselines	Consumer Groups	Roles
	Consumer Group Mappings	Profiles
	Plans	Audit Settings
	Settings	Transparent Data Encryption
	Statistics	Virtual Private Database Policies
		Application Contexts

b. Click **Create** near the top right corner of the user list.

	L€ Enterprise Mana e Control	ger 11 <i>g</i>				Setu		<u>Help Lopout</u> atabase
tabase	instance: vmorcidb >						L	ogged in As S'
ers								
						Obj	ect Type User	
Search	n							
Enter ar	n object name to filter the da	ta that is displayed in y	our results set.					
Object	Name							
	Go)							
By defaul	it, the search returns all upperca	se matches beginning with	n the string you entered. To run an e	xact or case-sensitive ma	tch, double quote the search	string. You can use the wildcar	d symbol (%) in a	double quoted
string.								
Selecti	ion Mode Single 💌							Create
Edit	t) View) Delete) Actio	ons Create Like	Go			S Previous	s 1-25 of 33	▼ <u>Next 8</u>
					Temporary			
Select	UserName 🛆	Account Status	Expiration Date	Default Tablespace	Tablespace	Profile	Created	
(î	ANONYMOUS	EXPIRED &	Sep 25, 2007 3:39:21 PM	SYSAUX	TEMP	DEFAULT	Aug 3, 2007 1	:34:38 AM E
		LOCKED	EDT					
0	APEX_PUBLIC_USER	EXPIRED &	Sep 25, 2007 3:39:21 PM	USERS	TEMP	DEFAULT	Aug 3, 2007 2	:04:08 AM E
		LOCKED	EDT					

c. In the "Create User" form, fill in all required fields (marked with an asterisk). Fill in all other fields as necessary.

ORACLE En Database Contr	terprise Manager 11 g				<u>Setup</u> <u>Preferences</u> <u>Help</u> <u>Loquut</u> Database
Database Instanc	e:vmorcldb > Users >				Logged in As SYS
Create User					
					Show SQL Cancel OK
General	Roles System Privileges Object Priv	rileges Quotas	Consumer Group Privileges	Proxy Users	
* N	me csuser		-		
	ofile DEFAULT				
Authentica	tion Password				
* Enter Passw	ord				
* Confirm Passw	ord				
	For Password choice, the role is authorize	ed via password.			
	Expire Password now				
Default Tablesp	ace USERS	S.			
Temporary Tablesp	ace TEMP	s de la companya de l			
Sta	tus 🔿 Locked 🕙 Unlocked				

- 5. Select the default and temporary tablespaces for the new user. Do the following:
 - **a.** Select the default tablespace:
 - 1) In the "Create User" form, click the **flashlight** button next to the **Default Tablespace** field.
 - 2) In the form that appears, select the USERS radio button.
 - 3) Click Select.

		Cancel Selec
Searc	h	
Search	for Tablespace	
	,	
Resul	ts	
	ts Tablespace	
Select	Tablespace	
Select	Tablespace SYSAUX	
Select C	Tablespace SYSAUX SYSTEM	

- **b.** Select the temporary tablespace:
 - 1) In the "Create User" form, click the **flashlight** button next to the **Temporary Tablespace** field.
 - 2) In the form that appears, select the **TEMP** radio button.
 - 3) Click Select.

- 6. Assign the "Resource" role to the new user. Do the following:
 - **a.** In the tab bar, click **Roles**.
 - **b.** Click **Edit List** at the top right corner of the list of roles.

ORACLE Database Con		Setup Preferences Help Logout Database						
Database Insta	nce: vmor	cldb > Users >						Logged in As SYS
Create User								
								(Show SQL) (Cancel) (OK)
General	Roles	System Privileges	Object Pr	rivileges	Quotas	Consumer Group Privileges	Proxy Users	
		×						(Edit List
Role						Admin Option		Default
CONNECT						Γ		
General	Roles	System Privileges	Object Pr	rivileges	Quotas	Consumer Group Privileges	Proxy Users	
								(Show SQL) (Cancel) (OK)

- **c.** In the "Available Roles" list, select the **RESOURCE** role and click **Move**. The role appears in the "Selected Roles" list.
- d. Click OK.

ORACLE Enterprise Manager Database Control	11 <i>g</i>			Setup Preferences Help Lopout Database
Database Instance: vmorcldb > Use Modify Roles	rs >			Logged in As SYS
OLAF_DBA OLAP_USER OLAP_XS_ADMIN ORDADMIN OWB\$CLIENT OWB_DESIGNCENTER_VIEW OWB_USER RECOVERY_CATALOG_OWNER RESOURCE	▲ (>) Move (>>) Move All (©) Remove (©) Remove All	CONNECT	×	(<u>Cancel</u>) (<u>OK</u>)
				Cancel) OK)

- 7. Assign system privileges to the new user. Do the following:
 - a. In the tab bar, click System Privileges.
 - **b.** Click **Edit List** at the top right corner of the list of privileges.
 - c. In the "Available System Privileges" list, select **CREATE VIEW** and **SELECT ANY DICTIONARY**, then click **Move**.

The privileges appear in the "Selected System Privileges" list.

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d. Click OK.

ORACLE Ent Database Contro		e Manager 11 g 📃					<u>Setup</u> <u>Preferences</u> <u>Help Loquut</u> Database
Database Instance	: vmor	cldb > Users >					Logged in As SYS
Create User							
							(Show SQL) (Cancel) (OK)
General R	<u>ioles</u>	System Privileges	Object Privileges	Quotas	Consumer Group Privileges	Proxy Users	
							(Edit List)
System Privilege							Admin Option
CREATE VIEW							Г
SELECT ANY DICTIC	ONARY						
General R	<u>ioles</u>	System Privileges	Object Privileges	Quotas	Consumer Group Privileges	Proxy Users	
							(Show SQL) (Cancel) (OK)

A message confirming the creation of the new user is displayed. The user appears in the list of users.

	□L∈ "Enterprise Manag se Control	er 11 g				<u>Setu</u>	<u>Preferences Help Lopout</u> Database
Database	e Instance: vmorcldb >						Logged in As SYS
(j) Co	nfirmation						
Use	er CSUSER2 has been deleted	successfully					
Users							
						Obje	ect Type User 💌
Searc	:h						
Enter	an object name to filter the data	a that is displayed in y	our results set.				
Object	t Name						
0 0,00	Object Name						
By defa	Go) By default, the search returns all uppercase matches beginning with the string you entered. To run an exact or case-sensitive match, double quote the search string. You can use the wildcard symbol (%) in a double quoted						
string.							
Selec	tion Mode Single 💌						Create
Ed	Edit) (View) Delete) Actions Create Like (Go)						
					Temporary		
Selec	t UserName 🛆	Account Status	Expiration Date	Default Tablespace	Tablespace	Profile	Created
(°	ANONYMOUS	EXPIRED & LOCKED	Sep 25, 2007 3:39:21 PM EDT	SYSAUX	TEMP	DEFAULT	Aug 3, 2007 1:34:38 AM EDT
0	APEX_PUBLIC_USER	EXPIRED & LOCKED	Sep 25, 2007 3:39:21 PM EDT	<u>USERS</u>	TEMP	DEFAULT	Aug 3, 2007 2:04:08 AM EDT
C	CSUSER	OPEN	Mar 23, 2008 4:47:44 PM EDT	<u>USERS</u>	TEMP	DEFAULT	Sep 25, 2007 4:47:44 PM EDT

Next Step

You are now ready to create and configure the data source. For instructions, refer to your Content Server installation guide.

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Chapter 3

Creating and Configuring an MS SQL Server Database

Use this chapter to set up a SQL Server database for your Content Server (Spark) installation. For background information regarding database configuration and users' permissions, see Part 1, "Creating and Configuring a Database."

This chapter contains the following section:

• Creating a Database on MS SQL Server 2005

Creating a Database on MS SQL Server 2005

To create and configure a database on MS SQL Server 2005

- 1. Use the Windows Account Manager to create a new user account for the CS database user (for example, csuser), and assign a password to the account.
- 1. Open SQL Server Manager Studio.
- **2.** Log in to MS SQL Server:
 - **a.** Enter your user name and password (the default user name is sa).
 - b. Click Connect.
- **3.** Create the database:
 - **a.** In the left-hand tree, expand the **Databases** node.
 - **b.** Right-click the **Databases** node and select **New Database** from the pop-up menu.
 - **c.** In the "New Database" window, enter a name for your database and click **OK**. Your newly created database appears under the **Databases** node in the tree.
- **4.** In the tree, expand the node representing your newly created database, then expand the **Security** node underneath it.
- **5.** Click the **Users** tab.
- 6. Right-click within the white space underneath the list of existing users and select **New User** from the pop-up menu.
- 7. In the "Database User New" window, enter the user name of the CS database user (which you created in step 1 of this procedure) into the User name and Login name fields.
- 8. In the "Owned Schemas" and "Role Members" areas, select the **db_owner** check box.
- **9.** Click **OK**.

Database configuration is complete. You are now ready to create and configure the data source using the user name and password of the CS database user you created in step 1 of this procedure. For instructions, refer to your Content Server (Spark) installation guide.

Chapter 4

Creating and Configuring an IBM DB2 8.x Database

Use this chapter to set up a supported IBM DB2 database for your Content Server installation. For background information regarding database configuration and users' permissions, see Part 1, "Creating and Configuring a Database."

This chapter contains the following section:

• Creating and Configuring DB2 8.x for Content Server

Creating and Configuring DB2 8.x for Content Server

- **1.** Open DB Control Center (db2cc).
- **2.** Browse to the instance under which you want to create the new database.

If you do not have an existing instance in the left-hand tree, do the following:

- a. Right-click Instances and click Add...
- **b.** Fill in the form provided (or click **Discover**) then click **OK**.
- 3. Right-click Branch Databases > Create > Database Using Wizard...
- 4. In the "Create Database Wizard," fill in the following screens as indicated:
 - a. "Database name" Enter a unique database name (such as CSDB2), then click Next.
 - **b.** "Specify how and where to store the user tables." Leave the default option **Low maintenance** selected and click **Next**.
 - **c.** "Specify how and where to store the system catalog tables." Leave the default option **Low maintenance** selected and click **Next**.
 - **d.** "Specify how and where to store system temporary tables." Leave the default option **Low maintenance** selected and click **Next**.
 - e. "Tune the performance of this database." Click Next.
 - f. "Specify the locale for this database." Complete the following steps:
 - 1) In the Code Set drop-down list, select UTF-8.
 - 2) Under Collating Sequence, leave the default option selected.
 - 3) Click Next.
 - g. Review the actions that will take place when you click Finish, then click Finish.
- **5.** A DB2 message box appears, giving you the option to run the "Configuration Advisor." Click **No**.

A new database (with the name you provided in step 4) is now available in the left-hand tree.

- 6. In the left-hand tree, right-click **Buffer Pools** > Create.
- 7. In the "Create Buffer Pool" dialog box, do the following:
 - a. In the "Buffer Pool name" field, add a unique name (such as CSBUFFER32).
 - **b.** In the **Page size** drop-down list, select **32**.
 - c. Click OK.
- 8. In the left-hand tree, right-click **Table Spaces > Create**.
- 9. In the "Create Table Space Wizard," fill in the following screens as explained below:
 - a. "Specify a name for your table space." Enter a unique name (such as csTableSpace) in the "Table Space name" field. Then click Next.

- **b.** "Specify the type of table space you want to create." Leave the default value and click **Next**.
- **c.** "Specify a buffer pool for your new table space." Select the buffer pool created in step 7 of this procedure and click **Next**.
- **d.** "Select the space management system that you want to use." Leave the default option **System-managed space (low maintenance)** selected and click **Next**.
- e. "Define containers for this table space." Click Add, then complete the following steps:
 - 1) In the "Define Container" dialog box, enter a unique name for this container (such as CScontainer).
 - **2)** Under "Current Directory," select a location for this table space (note that you must select a physical location on a mounted disk where you want to place this table space; if you do not have an acceptable location at this point you should create one). Once you have selected a location, click **OK**.
 - 3) Click Next in the "Define Container" dialog box.
- f. "Specify the extent and prefetch sizes for this table space." Leave the default options selected and click **Next**.
- **g.** "Select hard drive specifications." Select the appropriate option for your physical media type from the list and click **Next**.
- **h.** "Specify the dropped table recovery option for your new table space." Click **Next**.
- i. Review the actions that will take place when you click **Finish**, then click **Finish**.
- **10.** Repeat step 9 of this procedure to create a temporary table space, making the following adjustments to the procedure:
 - **a.** When completing step 9a, indicate in the name that this is a temporary table space.
 - **b.** When completing step 9b, select **System Temporary** for the type of table space.
- **11.** In the left-hand tree, select **User and GroupObjects** and right-click **DB Users > Add**.
 - **a.** In the "Database" tab, do the following:
 - 1) Select a user from the User drop-down list.

Note

The drop-down list contains all valid system users. If there are no valid system users, you must create one before continuing.

2) Under "Grant authorities for the Selected User," select all the options.

Note

This is not recommended for a delivery system. Choose the options that are appropriate for your delivery system)

- **b.** Click the **Table Space** tab and do the following:
 - 1) Click Add Tablespace. In the "Add Tablespace" dialog box, select the tablespace created in step 9 of this procedure and click OK.
 - 2) In the "Table Space" tab, the new table space is now selected, but has a Ø symbol next to it. Select Grant from the Privileges drop-down list (located near the bottom of the tab).
- **c.** Repeat step **b** for the temporary table space created in step 10.
- **d.** Optionally, repeat step **b** to add the default table space USERSPACE1.

Note

The default table space was created with the database. Therefore its location is not under your control.

- e. Click OK.
- **12.** In the left-hand tree, right-click the database created in step 4 of this procedure and click **Configure Parameters**. In the list that opens, make the following changes:
 - **a.** Change LOCKLIST/100 to LOCKLIST/1024
 - **b.** Change LOCKTIMEOUT/None to LOCKTIMEOUT/30
 - **c.** Change APPLHEAPSZ/256 to APPLHEAPSZ/1024
- **13.** Database configuration is complete. You are now ready to create and configure the data source. For instructions, refer to your Content Server installation guide.

Chapter 5

Creating and Configuring an IBM DB2 9.1 Database

Use this chapter to set up a supported IBM DB2 database for your Content Server installation. For background information regarding database configuration and users' permissions, see Part 1, "Creating and Configuring a Database."

This chapter contains the following section:

• Installing and Configuring DB2 9.1 for Content Server

Installing and Configuring DB2 9.1 for Content Server

To install and configure a DB2 9.1 database, you will complete the following steps:

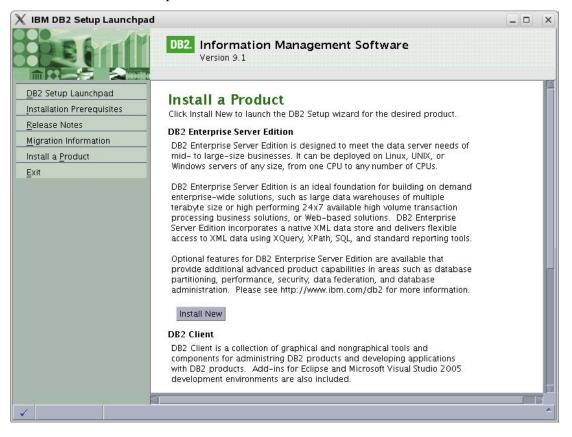
- A. Install DB2
- B. Create a New DB2 Database
- **C.** Create a User for the New Database
- **D.** Configure the Database

A. Install DB2

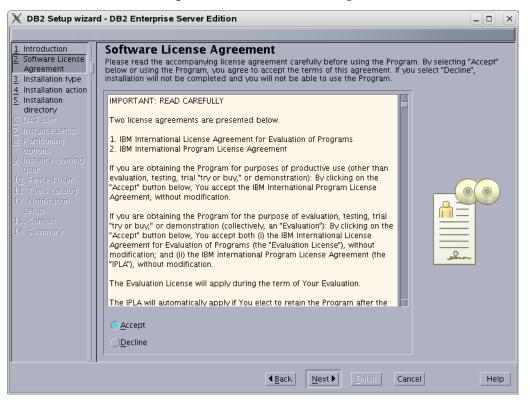
- 1. Uncompress the correct installation file for your distribution.
- 2. Run./db2setup
- 3. In the "Information Management Software" screen, select Install a Product.



4. Under "DB2 Enterprise Server Edition," select Install New.



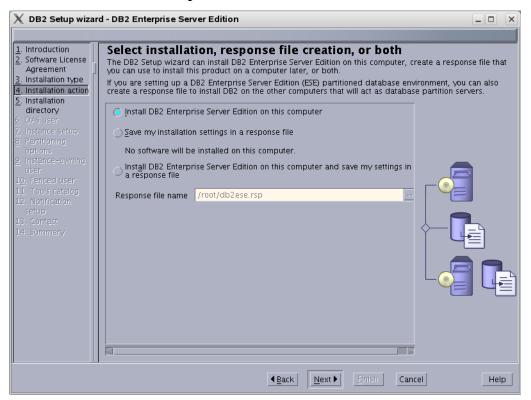
- 5. In the "Welcome to the DB2 Setup Wizard," click Next.
- 6. In the "Software License Agreement" screen, click Accept, then click Next.



7. In "Select the Installation Type," select **Typical** and click **Next**.

🗙 DB2 Setup wizar	d - DB2 Enterprise Server Edition	
Introduction Software License Agreement Installation type Installation type Installation action Installation Job User Thistance setup Partitioning options Instance-owning user I. Fenced user I. Tools catalog I2. Notification setup I3. Contact I4. Summary	Select the installation type Typical: 460 - 560 MB _Compact: 380 - 460 MB _Custom: 380 - 810 MB Information about the installation type Typical The typical setup includes basic database server function, database administration tools, and most product features and functionality. To add features for application development and other optional functionality later in the setup process, click Custom. To view all available features and those selected for a typical installation, press the View Features button. View Features	
	▲ <u>Back</u> <u>N</u> ext <u>Finish</u> Cance	el Help

8. In "Select installation, response file creation, or both," select Install DB2 Enterprise Server Edition on this Computer and click Next.



9. In "Select the installation directory," either enter a directory or use the default and click **Next**.

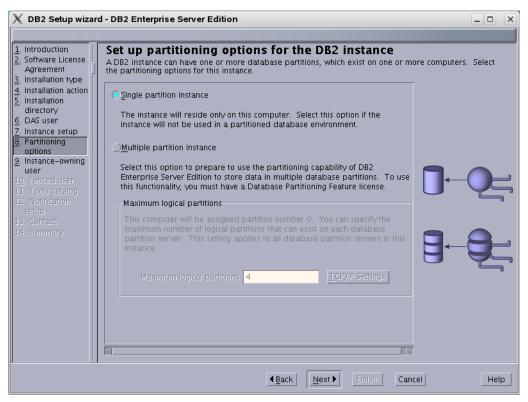
💥 DB2 Setup wizar	I - DB2 Enterprise Server Edition	
Introduction Software License Agreement Installation type Installation action Das user Tistance setup Partitioning options Instance-owning User Instance-owning User I. Tools catalog I. Notification setup Software Summary	Select the installation directory The DB2 Setup wizard installs DB2 Enterprise Server Edition in the following directory. directory, type the path or click the ellipsis button and select another directory. Directory /opt/ibm/db2/V9.1 Space required: 453 MB Space available: 18689 MB	To select a different
	▲ <u>Back</u> <u>Mext</u> <u>Einish</u> Cancel	Help

- **10.** In "Set user information for the DB2 Administration Server":
 - **a.** Keep the defaults, unless a previous attempt to install DB2 failed.
 - **b.** Enter a password.
 - c. Click Next.

11. In "Set up a DB2 instance," select Create a DB2 instance and click Next.

🗙 DB2 Setup wiza	rd - DB2 Enterprise Server Edition	
Introduction Software License Agreement Installation type Installation action S. Installation action S. Installation directory Os user Instance setup Partitioning options Instance-owning user I. Fenced user I. Tools catalog I. Notification setup I. Contact I. Summary	Set up a DB2 instance A DB2 instance is an environment in which you store data and run applications. You use this product. If you would like to add this computer to an existing partitioned database environm create an instance on this computer. The instance should be created on the instance orcereate a DB2 instance O Do not create a DB2 instance	ent, you should not
	▲Back Next Einish Can	tel

12. In "Set up partitioning options for the DB2 instance," select **Single partition instance** and click **Next**.



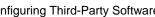
- **13.** In "Set user information for the DB2 instance owner":
 - a. Keep the defaults, unless a previous attempt to install DB2 failed.
 - **b.** Enter a password.
 - c. Click Next.

🗙 DB2 Setup wizar	d - DB2 Enterprise Sen	ver Edition		
Introduction Software License Agreement Installation type installation action S. Installation directory	Specify the instance-ow	nation for the DB2 insta ning user information for the DB2 ins will store instance information in the le as the user name.	tance. DB2 will use thi	s user to perform The name of the
<u>6</u> . DAS user	User name	db2inst1		
<u>7</u> . Instance setup <u>8</u> . Partitioning	UID		√ <u>U</u> se default UID	
options 9. Instance-owning	Group name	db2grp1		
user 1 <u>0</u> . Fenced user	GID		√ Use default <u>G</u> ID	
11. Tools catalog 12. Notification	Password		Password • You must specify a	
setup	Confirm password		• rou must specify a	
13. Contact 14. Summary	Home directory	/home/db2inst1		
	○ <u>E</u> xisting user			
	User name			
		▲ <u>Back</u> Next	Einish Can	cel Help

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- **14.** In "Set user information for the fenced user":
 - a. Keep the defaults, unless a previous attempt to install DB2 failed.
 - **b.** Enter a password.
 - c. Click Next.

🗙 DB2 Setup wizar	d - DB2 Enterprise Ser	ver Edition		_ D X
1. Introduction 2. Software License Agreement 3. Installation type 4. Installation action 5. Installation directory 6. DAS user	Specify the required inf procedures will execute Ne <u>w</u> user User name	nation for the fenced u ormation for the fenced user. Fenced under this user and group. db2fenc1		s (UDFs) and stored
7. Instance setup 8. Partitioning options	UID Group name	db2fgrp1	✓ <u>U</u> se default UID	
9. Instance-owning user	GID		√ Use default <u>G</u> ID	
1 <u>0</u> . Fenced user 11. Tools catalog	Password		Password • You must specify a secify a	value.
 Notification setup 	Confirm password			
13. Contact 14. Summary	Home directory	/home/db2fenc1 ···		
	○ <u>E</u> xisting user			
	User name	***		
		▲ <u>B</u> ack Next	Einish Can	cel Help



FatWire SOFTWARE

15. In "Prepare the DB2 tools catalog," select **Do not prepare the DB2 tools catalog** and click **Next**.

🗙 DB2 Setup wizar	d - DB2 Enterprise Serv	rer Edition	
Introduction Software License Agreement Installation type Installation action Installation	Certain DB2 tools such a	2 tools catalog as the Task Center and scheduler require a DB2 tools catalog on o ent. The DB2 tools catalog must be stored in a DB2 database. tools catalog	one of the DB2
directory <u>6</u> . DAS user	Instance	db2inst1 V	
7. Instance setup 8. Partitioning	Database		
options 9. Instance-owning	○ N <u>e</u> w	TOOLSDB	
user 10. Fenced user	⊖E <u>x</u> isting	<select></select>	<u> </u>
11. Tools catalog	Schema		
12. Notification setup	⊙Ne <u>w</u>	SYSTOOLS	1
13. Contact 14. Summary	⊖Existing	<select></select>	
	. <u>D</u> o not prepare ti	ne DB2 tools catalog	
		<u> </u>	Help

16. In "Set up notifications," do one of the following:

🗙 DB2 Setup wizar	d - DB2 Enterprise Server Edition	_ 🗆 🗙
Introduction Software License Agreement Installation type Installation type Installation type Installation directory Instance setup Partitioning options Instance-owning user I. Fenced user I. Tools catalog I2. Notification setup I3. Contact I4. Summany	Set up notifications You can set up your DB2 server to automatically send e-mail or pager notifications to alert a when a database needs attention. The contact information is stored in the administration concerd an unauthenticated SMTP server to send these notifications. Image: Set up your DB2 server to send notifications Notification SMTP server localhost.localdomain Administration contact list location Image: Local - Create a contact list on this computer Image: Remote - Use an existing contact list that resides on another DB2 server Remote IDB2 server to send notifications at this time If you do not set up your DB2 server to send notification log.	
	▲ <u>Back</u> <u>Next</u> <u>Finish</u> Cancel	Help

- If your system is a production server, select **Set up your DB2 server to send notifications**, enter a correct address for the local host, and click **Next**.
- If your system is a not a production server, you can select **Do not set up your DB2 server to send notifications at this time**, and click **Next**.

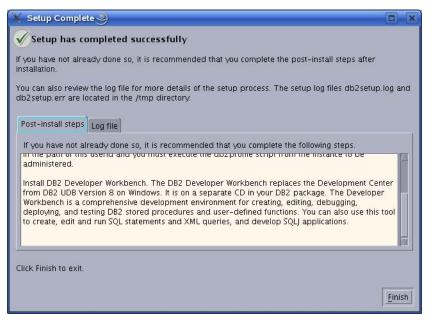
17. In "Start copying files," check that your options are correct and click Finish.

🗙 DB2 Setup wizar	d - DB2 Enterprise Server Edition		_
Introduction 2. Software License Installation type Installation action S. Installation direct OAS user 7. Instance setup Partitioning optio 9. Instance-owning 10. Fenced user 11. Tools catalog 12. Notification setu 13. Summary	Start copying files The DB2 Setup wizard has enough informatio change any settings, click Back. If you are sa Current settings New instances: Instance name: Start instance on reboot: FCM port range: TCP/IP configuration: Service name: Port number: Instance user information: User name: Group name: Home directory: Home directory:		
	DB2 Administration server: Instance user information: User name: Group name: Home directory:	dasusr1 dasadm1 /home/dasusr1	
		<u>B</u> ack <u><u>F</u>inish Can</u>	cel Help

18. Allow the installation to proceed.

ig X Installing DB2 Enterprise Server Edition	
Please wait while the DB2 Setup wizard installs DB2 Enter Server Edition on your computer and performs the requin configuration. This may take several minutes.	
Task: Installing GSKit support	
0%	100%
Overall progress:	
0%	100%

19. In "Setup has completed successfully," read the notes, check the log tab, and click **Finish**.



20. The installation of DB2 9.1 is now complete.

B. Create a New DB2 Database

- 1. Log in as db2inst1 (or your instance user created during the installation, step 13).
- 2. Navigate to: ./sqllib/bin and run db2cc
- 3. In the "Control Center View" screen, select Advanced.

🔁 Control Center View	×
Control Center View	
Specify the Control Center view that you want to display.	
⊖ <u>B</u> asic	
○ <u>A</u> dvanced	
OCustom Modify	
Details The advanced view displays all objects and actions available in the Control Center.	
✓Show this window at startup time	
OK Cancel Help	

- 4. In the "Control Center," open the application for creating a database:
 - a. Click the plus sign next to the tree option All Systems.

🔁 Control Center	
<u>Control Center</u> Selected Edit View Tools	Help
મેં જે જે 📼 કે 🔯 🖡 📮 🗍	
🛅 Object View	
Control Center	All Databases
🖶 🛅 All Systems	Name
- 🗠 All Databases	
	0 of 0 items displayed ↓ JAZ 3 → 3 → 1 → 1 → 1 → 1 → 1 → 1 → 1 → 1 →
	t Z Sp die Bag K K Deraum view view
	🗅 All Databases 📀 Help 🗙
	Actions: Select an object from the list above to display more
	Create New Database

- **b.** Click the expanded branch **All Databases**. (If you have not created a database previously, this branch is empty.)
- c. Right-click the branch All Databases and select Create Database > Standard.

- 5. In "Specify a name for your new database":
 - **a.** Enter a name for this database.
 - **b.** Select the check box **Enable database for XML**.
 - **c.** In the drop-down "Default bufferpool and table space page size," select **32** and click **Next**.

🔒 Create Database Wizard	
1. Name Specify a name for your new database. To drive, and click Flinish. If you want to tailor the database to overview. 2. Storage This wizard helps you create and tailor a new database. To drive, and click Flinish. If you want to tailor the database to overview. 2. Summary Database name Default directory /home/db2inst1 Alias Comment Enable database for XML (Code set will be set to UTF-8) Restrict access to system catalogs Let DB2 manage my storage (automatic storage) I want to manage my storage manually Default bufferpool and table space page size	create a basic database, type a new name, select a your requirements, click Next to continue. <u>Task</u>
	Next Finish Cancel

6. In "Specify where to store your data," click **Next** (a value is unnecessary, as we kept the default option of **Let DB2 manage my storage (automatic storage)**, on the previous page).

🔒 Create Data	abase Wizard 🛛 🔍
1. Name 2. Storage 3. Region 4. Summary	Specify where to store your data In an <u>automatic storage database</u> , the data is stored in one or more storage paths. If you do not specify additional storage paths, the database path specified on the Name page is used as the single storage path. If you clear the checkbox, the database path will not be used as a storage path. In this case, you must specify one or more storage paths in the storage paths list. If you do not want to create an automatic storage database, return to the Name page and click the radio button: I want to manage my storage manually.
	✓ Use the database path as a storage path: /home/db2inst1 Storage Path ◆ Free Space (MB) ♦ File System Capacity (MB) ♦ Per Add Change Remove
	0 of 0 items displayed 1 ⅔ 3 ∰ ∰ Default V View

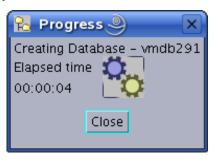
7. In "Specify the locale for this database," ensure that the drop-down "Code set" displays UTF-8 and click Next.

🔒 Create Datal	base Wizard 🎐		×	
1. Name 2. Storage	Specify the locale for this database. The locale (territory and code set) determines the set of characters your database uses. It also determines how different character strings are compared.			
<u>]3</u> . Region <u>4</u> . Summary	Database locale Country/Region d			
	△ NOTE: Databases enable XML functions.	d for XML must use code set UTF-8. Other values will disable)	
	-Collating Sequence	Character strings are sorted according to the code set you specify above.		
	Identity Identity_16bit	Character strings are sorted according to their hexadecimal value.		
	<u>U</u> CA400_NO	Encoding Scheme for UTF-16: 8-Bit specification (ČESU-8) Character strings are sorted using the Unicode Collation Algorithm 4.0.0, with normalization on.		
		Character strings are sorted as per UCA400_NO, but using the Royal Thai dictionary rules for the Thai characters. Character strings are sorted using the DB2 version 2 collating sequence.		
	ONESCHar	Character strings are sorted using System with additional rules for the specific codeset/territory.		
		▲Back Next Finish Cance	1	

8. In "Review the actions that will take place when you click finish," confirm that everything looks correct and click **Finish**.

🔒 Create Data	abase Wizard	
Create Data 1. Name 2. Storage 3. Region 4. Summary	Abase Wizard Review the actions that will take place when you cl When you click Finish, the wizard creates a database and the necessary table space parameters, go back to the appropriate page in this wizard. To view the equivalent Command Create database VMDB291 Automatic storage database: Yes Table space prefetch size: Automatic Default Automatic Storage User Table Space Default Automatic Storage Temporary Table Space Default database page size: 32 K Restrict system catalog access: No Territory: US	ick Finish s. To change any of the
	Code set: UTF-8 (XML enabled) Collating type: SYSTEM Storage paths: /home/db2inst1 Show Command	
	▲ <u>Back</u>	<u>F</u> inish Cancel

9. Allow the "Progress" window to complete creating the database. The window will close automatically when the database has been created.



10. The database has now been created and is displayed in the control center.

The figure below shows that a single database named vmdb291 is present in the control center

🔁 Control Center	_ 🗆 🗙
<u>Control Center</u> <u>Selected</u> <u>Edit</u> <u>View</u> <u>T</u> ools	Help
▙ੀ₭ॎ ॼ ॐ 經 । % ₽ <	
🛅 Object View	
Control Center	All Databases
🕂 🛅 All Systems	Name
H Databases	VMDB291 LOCALH db2inst1 Local VMDB291 /hom
	1 of 1 items displayed 나 2 강아 대한 바람 않 다 Default View ^ View
	🗀 All Databases 📀 Help 🗙
	Actions: Select an object from the list above to display more
	<u>Create New Database</u>
l	

C. Create a User for the New Database

1. Go to the command line. As the system user, create a new user named csuser that will be used to access the database from your FatWire product.

Example of how to create a user named csuser on Linux:

useradd -d /home/csuser -m -p demo4132 csuser

- **2.** Go back to the "Control Center" and add the user:
 - **a.** Expand the newly created database in the tree by clicking the plus sign, then expanding the branch **User and Group Objects.**
 - **b.** Click **DB** Users to open the right-hand panel.
 - c. Right-click the branch DB Users and select the Add option.

🔁 Control Center			_ 🗆 🗙				
Control Center Selected Edit View Tools Help							
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🗀 Object View							
Control Center All Systems All Databases All Databases VMDB291 Tables Views Allases	LOCALHOST - db2inst1 - VMDB2 Name DB2INST1 1 of 1 items displayed DB Users Actions: Actions: Add New User	91 - DB Users 첫 양 대 마이 오 두 Select an object from the li	Default View View				
		a					

- **3.** In the "Add User" application:
 - **a.** Select the user that was created in step C on page 84.
 - **b.** Under "Authorities," select all check boxes.
 - c. Click OK.

🔁 Add	User						X
LOCALHO	9ST - db2inst1 - VMD	B291					
View	Table Space	Function	Proc	edure	Method	Package	
	Database	Schema		Та	ible	Index	
Specit	'y a user name. You ca	an select a user	name fro	om the list	: or type one	in.	
User	ADM	Δ					
22	e the appropriate aut orities Connect to database Create tables Create packages Register routines to ex Qatabase administrato Create <u>schemas implic</u> Access to the load utili Create external routine Connect to guiesced d Security administrator	ecute in databa r authority itly ty 25 atabase					
	0M	Cancel	Appl	/ <u>R</u> e:	set Shoy	<u>w</u> SQL Helj	0

D. Configure the Database

- 1. Right-click the database that you created (listed in the branch that displays the database icon) and select **Configure Parameters**.
- **2.** In "Database Configuration":
 - **a.** Scroll through the list of options and replace the values of the following parameters with the values shown here:

LOCKTIMEOUT	30
APP_CTL_HEAP_SZ	1024
APPHEAPSZ	1024

b. Click **OK**.

R	Database Configura	ation - VMDB29 ⁻							X
	Coloct the value field of a			ite velu	_				
	Select the value field of a		1	ending		ŧ	Pending Value Effective 🖨	Dvn	
	Applications								
	AVG_APPLS	AUTOMATIC(1)						Yes	
	DLCHKTIME	10000						Yes	
	LOCKTIMEOUT	None						- 1	
	MAXAPPLS	AUTOMATIC(40)						Yes	
	MAXFILOP	64						Yes	
	MAXLOCKS	AUTOMATIC(60)						Yes	
	🔻 Environment							- 1	
	ALT_COLLATE							- 1	
	CODEPAGE	1208						- 1	
	CODESET	UTF-8						- 1	
	COLLATION SEOU		_						1
	109 of 109 item	c displayed	A	z 34	as i	ân (Default View*	^ View	
	109 01 109 ((8))	s displayed	+ 2	Z⇔r	ויצבי	978		VIEW	<u>'</u>
e	Hint								
Ir									-1
		OK		Canc	el	App	ly Show Command	Help	5

3. Right-click the database that you created (listed in the branch that displays the database icon) and select **Restart**.

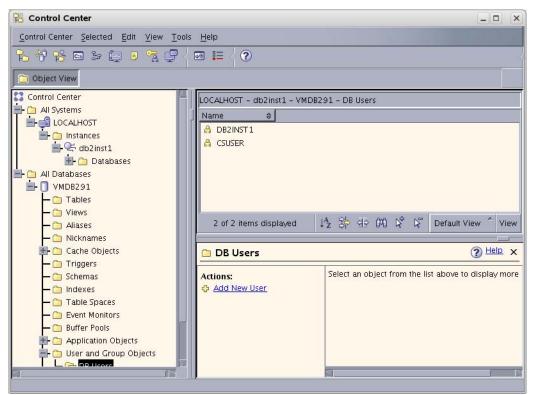
A status window flashes. *This does not mean that the operation has been completed.* Typically, you will need to wait 2 to 3 minutes for the system to restart.

- **4.** Stop the instance:
 - a. Expand the following "Control Center" tree branch: All Systems > LOCALHOST > Instances > name_of_your_instance
 - **b.** Right-click the instance.
 - c. Select Stop.

🔁 Control Center		,					
Control Center Selected Edit View Tools Help							
┺╬╬ॼ३०३३ । % ₽	•• •= < ?						
C Object View							
Control Center	LOCALHOST - db2inst1 - VMDB2	291 – DB Users					
All Systems	Name 🔤						
	A DB2INST1						
Instances	🔒 CSUSER						
+ Call Databases							
All Databases							
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— 🗀 Aliases	2 of 2 items displayed	↓ ^A 2 🐎 ∃∋ 🛱 🕅 🕅 🖓 🖓 Default View ^ View					
h incknames							
🚮 🛅 Cache Objects	🗀 DB Users	() Help ×					
— 🗀 Triggers — 🦳 Schemas	Actions:	Select an object from the list above to display more					
- indexes	Add New User	· · · · · ·					
Table Spaces	and a second						
- 🗁 Event Monitors							
🗕 🦳 Buffer Pools							
🛨 🧀 Application Objects							
📄 🗀 User and Group Objects							

- d. In the "Confirm stop" dialog box, click OK.
- e. Wait for the message that the instance has been stopped.

- **5.** Start the instance:
 - a. Expand the following "Control Center" tree branch: All Systems > LOCALHOST > Instances > name_of_your_instance
 - **b.** Right-click the instance.
 - **c.** Select **Start**.



6. Wait for the message that the instance has been started. *This does not mean that the operation has been completed.* Typically, you will need to wait 2 to 3 minutes for the system to restart.

Your database is now ready for use with your FatWire software product.

Configuring Third-Party Software: Content Server 7.6 Patch 2

Part 2 Installing a Web Server

This part describes how to install a web server. It contains the following chapters:

- Chapter 6, "Worksheets for Documenting the Web Server Installation"
- Chapter 7, "Installing IBM HTTP Server 6.1"
- Chapter 8, "Installing Internet Information Services 6.0 on Windows"
- Chapter 9, "Installing Internet Information Services 7.0 on Windows"
- Chapter 10, "Installing Apache on Solaris and Linux"

Chapter 6

Worksheets for Documenting the Web Server Installation

This chapter contains worksheets listing the web server parameters that you need to track.

Print this chapter. Then, as you install software, fill in the blank fields in these worksheets with the values of the specified parameters. You will save considerable time by doing this. Additionally, if something fails during the installation, the information in these worksheets will be valuable while you are troubleshooting. Use a separate set of worksheets for each installation so that each installation is fully documented.

The worksheets are constructed as tables that are divided into the following categories:

- Key to Sample Values
- Web Server Parameters

Key to Sample Values

The installation worksheets list parameters along with their sample values. Each sample value is classified as one of the following:

- **Default**: the value is automatically created at the time of the installation.
- **Normal**: the value represents the normal configuration for a simple installation. Do not use a different value unless your system requires it.
- **Option**: the value must be chosen from a preset list of options.
- **Suggested**: the value is recommended for the parameter.

Note

A **Suggested** account name has an Example password value. We strongly recommend that you select a password for this account that is appropriate for the security of your system.

• **Example**: the value is only an example that must be replaced by the value that is appropriate for your installation. The example value is not likely to be valid in your environment.

Web Server Parameters

Table 1: IIS Web Server Parameters

Parameter	Shown As	Comments	Your Value
Web Version	WebVersion	Example:	
		Apache 1.3.37	
Web Host Name	WebHost	Example:	
		jeeves	
Web Host IP Address	WebIP	Example:	
		104.222.111.155	
Web Server Port	WebPort	Default:	
		80	
IIS Only:	FilterName	Suggested:	
Filter Name (ISAPI plug- in name)		iisforwardfilter	
Apache Only:	ApacheRoot	Example:	
Apache Root Directory		/usr/apache	

Parameter	Shown As	Comments	Your Value
Web Version	WebVersion	Example:	
		Apache 1.3.37	
Web Host Name	WebHost	Example:	
		jeeves	
Web Host IP Address	WebIP	Example:	
		104.222.111.155	
Web Server Port	WebPort	Default:	
		80	
IIS Only:	FilterName	Suggested:	
Filter Name (ISAPI plug- in name)		iisforwardfilter	
Apache Only:	ApacheRoot	Example:	
Apache Root Directory		/usr/apache	

Table 2: Apache Web Server Parameters

Web Server Parameters

Chapter 7 Installing IBM HTTP Server 6.1

This chapter contains the following sections:

- Installation Steps
- Installing IHS with WebSphere Application Server on the Local Server

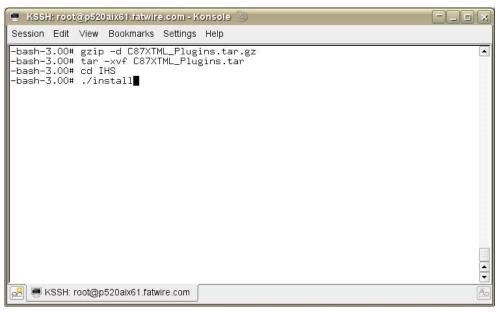
Note

In this guide, IBM HTTP Server is referred to as "IHS." WebSphere Application Server is referred to as "WAS."

98

Installation Steps

- 1. Download the correct file, WebSphere Plugins, for your IBM operating system.
- **2.** Extract the file to a temporary directory.



On Unix: tar -xvf <file name>
 For example:

gzip -d C87XTML_Plugins.tar.gz tar -xvf C87XTML_Plugins.tar

- On Windows: unzip <file name> For example:

unzip C87XTML_Plugins.zip

3. Change the directory to IHS/.

For example:

cd IHS/

- **4.** Run the installer:
 - For Unix: ./install
 - For Windows: install.exe

5. The "GUI" installer appears. Click **Next**.

🕲 IBM HTTP Server	V6.1.0.0 <@p520 aix61> 3
	Welcome to IBM HTTP Server 6.1
WebSphere, software	This wizard installs IBM HTTP Server 6.1 on your computer. See the <u>IBM HTTP Server 6.1 Installation Guide</u> to learn more about this installation.
	Click Next to continue.
InstallShield	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

6. Click the radio button I accept the IBM and non-IBM terms, to accept the license agreement and click Next.

14	Software License Agreement	
	Please read the following license agreement carefully.	
N WALCOME AND	International License Agreement for Non-Warranted Programs	
WebSphere, softwa	Part 1 - General Terms	
	BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, OR USING THE PROGRAM YOU AGREE TO THE TERMS OF THIS AGREEMENT. IF YOU AF ACCEPTING THESE TERMS ON BEHALF OF ANOTHER PERSON OR A COM OR OTHER LEGAL ENTITY, YOU REPRESENT AND WARRANT THAT YOU FULL AUTHORITY TO BIND THAT PERSON, COMPANY, OR LEGAL ENTIT THESE TERMS. IF YOU DO NOT AGREE TO THESE TERMS,	RE MPANY I HAVE
	- DO NOT DOWNLOAD INSTALL COPY ACCESS OR LISE THE PROGRAM	м. 🔳
	Read non-IBM terms	
	I accept both the IBM and the non-IBM terms	
	 I do not accept the terms in the license agreement Print 	
InstallShield		_
	< Back Next > Ca	ancel

7. In the "System prerequisites check" screen click Next.

🕲 IBM HTTP Server	/6.1.0.0 <@p520aix61> 🥥 📃 🗐 🔪
	System prerequisites check
WebSphere, software	Failed: Your operating system failed the prerequisites check.
	A supported operating system was not detected. Support for your operating system might have been added after the release of the product. You can continue with the installation, but the installation might not succeed. See the <u>WebSphere Application Server detailed system requirements</u> Web pages for more information about supported operating systems.
	Click Cancel to stop the installation and install a supported operating system. Click Next to continue the installation.
فاضاطاهم وجفا	
InstallShield	
	< Back Next > Cancel

8. In the "Enter the Install location" screen, select a location to install IHS 6.1 by using the **Browse** button, then click **Next**.

🕲 IBM HTTP Server	V6.1.0.0 <@p520aix	61> 🧐		
	Enter the install loc Product install locatio			
WebSphere, software	/u01/software/Apps	;/IHS6.1		
Alera:				Browse
100 m				
Part				
X				
and the stand of the stand				
InstallShield	9			
		< Back	Next >	Cancel
				Sauce

9. In the "Port Values Assignment" screen, enter the ports on which you wish to run IHS. Then click **Next**.

🕲 IBM HTTP Server \	/6.1.0.0 <@p520aix61>	
WebSphere, software		cates using the port numbers listed below. If these / IBM HTTP Server or another application, then rom their default values.
and and a second se	HTTP Port:	80
States -	HTTP Administration Port:	8008
InstallShield		< <u>Back Next > Cancel</u>

Note

We assume throughout this guide that you are using the default ports: 80 and 8008. If you have changed them, replace the values given with the ports you have selected.

- **10.** In the "HTTP Administration Server Authentication" screen:
 - a. Select
 - Create a user ID for IBM administration server authentication.
 - **b.** Fill in the fields:
 - User ID: admin
 - **Password**: <enter and confirm>

c. Click Next.

Confirm Password:	nistrative stored ter the
Password: Confirm Password:)n
Confirm Password:	
Confirm Password:	
istallShield	

- **11.** In the "Setup HTTP Administration Server" screen:
 - **a.** Select:
 - Setup IBM HTTP administration server to administer IBM HTTP Server
 - Create a unique ID and Group for the IBM HTTP Server administration
 - **b.** Fill in the fields:
 - User ID: ihs61
 - Group: ihs61.

Note

Record the unique name for the User ID and Group. They are needed to integrate with WAS. The User ID and Group can be anything you choose; ihs61 is only an example.

c. Click Next.

WebSphere, software	Setup HTTP Administration Server Perform steps to administer IBM HTTP Server using the IBM HTTP administration server on Linux and UNIX operating systems. When selected, the installation grants a user ID write access to the necessary IBM HTTP Server and plug-in configuration files. Optionally, you can complete this step after installation by running the setupadm script.
InstallShield	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

- 12. In the "IBM HTTP Server Plugin for IBM WebSphere Application Server" screen:
 - **a.** Select:
 - Install the IBM HTTP Server Plug-in for IBM WebSphere Application Server.
 - **b.** Fill in the fields:
 - Web server definition: webserver1
 - Host name: Enter the hostname on which the application server is found.
 - c. Click Next.

WebSphere, software	IBM HTTP Server Plug-in for IBM WebSphere Application Server Silently install the plug-in using the remote installation scenario. The host name and web server definition are used when creating the default plug-in configuration file. This file is used to route requests to the Application Server. If there are multiple Application Servers, then select one of the servers and specify the machine's host name. ✓ Install the IBM HTTP Server Plug-in for IBM WebSphere Application Server Web server definition:
	webserver1
	Host name or IP address for the Application Server:
X	10.120.16.68
the stand with the stand	
and all the same transmitteness it same	

13. In the "Installation summary" screen click **Next**.

H	Installation summary
WebSphere, software	Review the summary for correctness. Click Back to change values on previous panels. Click Next to begin the installation.
North-	IBM HTTP Server will be installed to the following location:
A state	/u01/software/Apps/IHS6.1
A State	with the following configuration:
	HTTP Port: 80 HTTP Administration Port: 8008 User ID for HTTP Administration Server Authentication: admin
	IBM HTTP Server Plug-in for IBM WebSphere Application Server will be installed to: /u01/software/Apps/IHS6.1/Plugins
InstallShield	J
instalphield -	< Back Next > Cancel

14. Allow the installer to finish.

🙆 IBM HTTP Server	V6.1.0.0 <@p520aix61> 🕑	
	Creating the uninstaller	
WebSphere, software	36%	
InstallShield	< <u>B</u> ack <u>N</u> ext >	Cancel

15. When the installation is complete click **Finish**.

🙆 IBM HTTP Server	V6.1.0.0 <@p520aix61>
H.	Success: The following product was successfully installed:
	IBM HTTP Server - /u01/software/Apps/IHS6.1
WebSphere, software	
	For information on configuring and using the IBM HTTP Server, refer to the on-line IBM HTTP Server Information Center.
	Click Finish to exit.
X	
End and the second	
InstallShield	
	< <u>Back</u> <u>N</u> ext > <u>Finish</u>

Note

Now, you will need to use the update installer to patch IBM HTTP Server to the same version as WebSphere 6.1. Information on using the update installer can be found on the IBM site when you download updates. You will need to update both the IHS server and the IHS plugins separately. To do so, you will need the WebSphere and the plugin fixpacks.

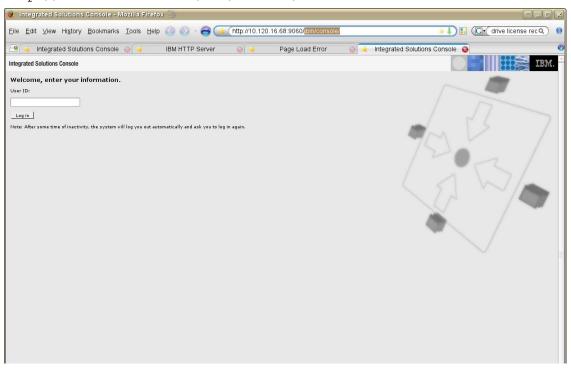
FatWire

Installing IHS with WebSphere Application Server on the Local Server

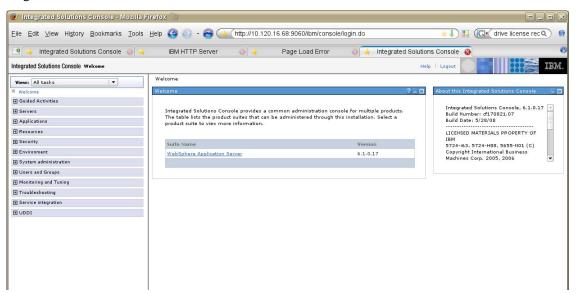
Note

It is preferable to perform this installation after Content Server is already installed. Then the plugin, cfg.xml, is automatically updated to include Content Server.

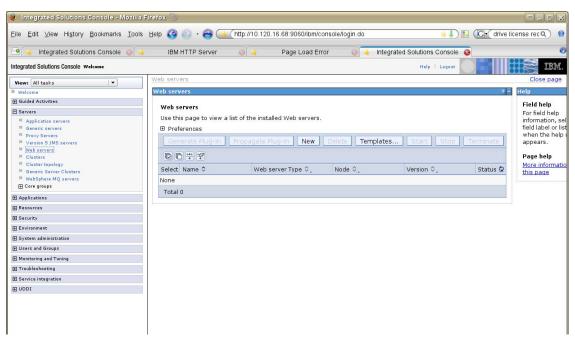
1. Browse to the WAS management console, for example: http://10.120.16.68:9060/ibm/console/



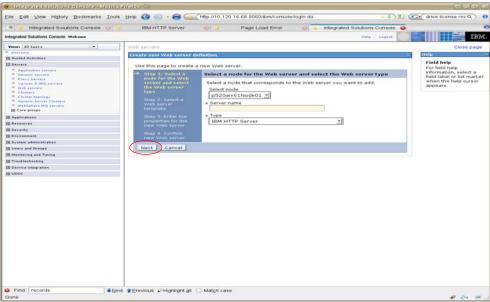
2. Log in to the Admin Site.



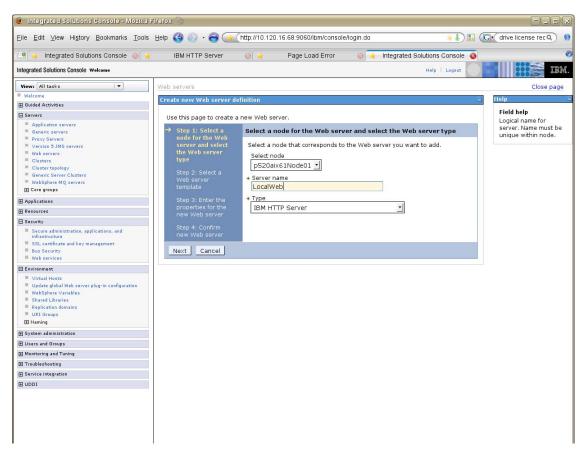
3. Select: Servers > Web Servers.



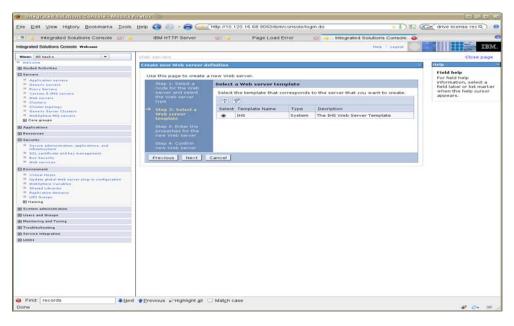
4. Click Next.



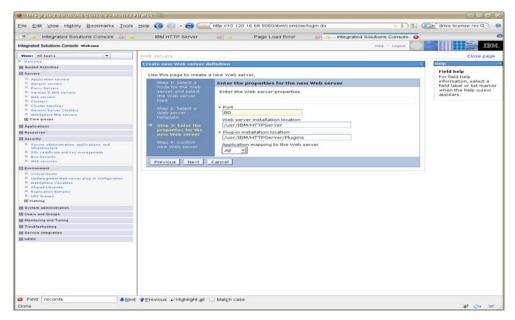
- **5.** To link IHS to WAS:
 - **a.** Fill in the fields:
 - Select node: Select the node that you want to federate with (normally this is the node of the application server or cluster on which CS is installed).
 - Server name: Enter the unique name for this web server, which was entered when you installed IHS.
 - Type: Keep the type as **IBM HTTP Server**.
 - b. Click Next.



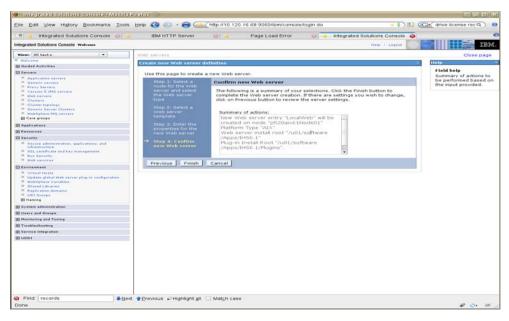
6. In the "Select a Web server template" screen click Next.



- 7. On the "Property Page":
 - **a.** Ensure that all entries are correct. The only entries that typically need to be changed are the locations for the IHS server and the Plugin Directory.
 - **b.** Click Next.



8. Confirm the new Web server, then click Finish.



9. Save the changes as requested.

😻 Integrated Solutions Consolo - Morilla	Photos					
Elle Edit View History Bookmarks Tools	Help 🥝 💿 · 😁 🦲	http://10.120.16.68.9060/lbm/	console/login do	4 P.	CG drive in	cense rec 🤉 😐
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E Resources	an and a second second				4	last action
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C Environment	105 105 111 MZ					
II Vitual Heats	0048					
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Shared Obrartes	LocalWeb	IBM HTTP Server	p520aix61Node01	ND 6.1.0.17	0	
 Replication domains 	Total 1					
URI Groups Diaming						
D System administration	é.					
Users and Groups	8					
Manitaring and Tuning						
III Troublesheeting						
D Service integration	6					
B upp1						
	et					
G Find: records 4Nex	it Previous Phighlight all	Match case				
Done						# 64 10

10. You can now start and stop the web server from the WAS console, using the Web servers selection.

eferences enerate Plug-in P D 12 12	Page Load Er rot the installed Web servers.		ted Solutions Console Help 1 Legent	ĊEIIII	Close page Close page Field help For field help information, field tabel or
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ct Name O	Web server Type C_	Node C_	Version C.	Status 🛱	this page
Localitieb	IBM HTTP Server	p520aix61Node01	ND 6.1.0.17	*	
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Chapter 8

Installing Internet Information Services 6.0 on Windows

This chapter explains how to install and test Microsoft's Internet Information Services (IIS) 6.0.

This chapter contains the following sections:

- Step I. Install IIS
- Step II. Verify the Installation
- Step III. Starting and Configuring IIS

Step I. Install IIS

Step I. Install IIS

- 1. Select Start > Settings > Control Panel > Add or Remove Programs.
- 2. In "Add or Remove Programs," click Add/Remove Windows Components.
- 3. In the "Windows Components Wizard" select Application Server, then click Details.

Windows Components Wizard	×
Windows Components You can add or remove components of Windows.	t
To add or remove a component, click the checkbox. A shaded part of the component will be installed. To see what's included Details. Components:	
Contract Con	4.9 MB 🔺
Application Server	34.4 MB
Certificate Services	1.8 MB
E-mail Services	1.1 MB
	7.9 MB 🗾
Description: Includes ASP.NET, Internet Information Services Application Server Console.	(IIS), and the
Total disk space required: 3.0 MB	Details
Space available on disk: 13629.2 MB	
< <u>B</u> ack <u>N</u> ext >	Cancel Help

FatWire

- 4. In the "Application Server" screen select:
 - Application Server Console
 - ASP.NET
 - Enable network COM+ access
 - Internet Information Services (IIS)

Click OK.

Application Server	×
To add or remove a component, click the check box. A shaded bo of the component will be installed. To see what's included in a com	
🗹 📸 Application Server Console	0.0 MB 📃
🗹 🇞 ASP.NET	0.0 MB
🗹 👰 Enable network COM+ access	0.0 MB
Enable network DTC access	0.0 MB
🗹 🏹 Internet Information Services (IIS)	27.4 MB
🗌 🚾 Message Queuing	7.0 MB
Description: Allows this computer to run ASP.NET applications.	
Total disk space required: 3.0 MB Space available on disk: 13568.3 MB	Details
OK	Cancel

- 5. In the "Windows Components Wizard," click Next.
- 6. When the "Windows Components Wizard" completes the configuration process click **Finish**.

Windows Components Wizard		×
	Completing the Windows Components Wizard You have successfully completed the Windows Components Wizard.	
	To close this wizard, click Finish.	
	< Back	Help

Step II. Verify the Installation

To verify that IIS can serve pages, test it from a web browser on the host machine and from the web browser of another machine on the network.

- 1. Start a web browser on the host machine that is running IIS.
- 2. Using the browser, go to the following URL:

http://localhost/

3. If the browser displays an "Under Construction" page, then IIS is installed and running.

OUnder Construction - Mozilla Firefox	
Ele Edit Yew Go Bookmarks Tools Help	0
🗇 - 🏟 - 🥵 区 😪 🔝 Intp://ocahost/	• O to 🖸
P Getting Started 🔂 Latest Headines	
 A real way of a construction A real way of a c	
Done	li li

Step III. Starting and Configuring IIS

A. IIS Manager

- 1. Open the **Start** menu and click **Run** to access IIS Manager.
- 2. Type inetmgr, then click OK.
- 3. Click the Web Sites option when the IIS Manager loads.

The right pane contains a list of the web sites that are managed including important information for each site, such as: the description, identifier, state, host header value, IP addresses, port, ssl port, and the status.

🐚 Internet Information Servi	🐌 Internet Information Services (IIS) Manager								
🐚 Eile Action View Window	w <u>H</u> elp								_ 8 ×
← → 🔁 🖬 🖻 🖻	s 😰 🖬 💂 🕨 🔳 🗉								
internet Information Services		Identifier	State	Host header value	IP address	Port	SSL Port	Status	
E 🗐 WIN2K364M5SQLUP (local	Default Web Site	1	Running		* All Unassigned *	80			
Application Pools									
🖻 📁 Web Sites 🗄 🍛 Default Web Site									
Web Service Extension									
_									
	•								►
					1				

4. To restart IIS Manager, select the Action menu, then click All Tasks > Restart IIS.

B. Changing the IIS Port

- 1. Open IIS Manager and expand local computer > Web Sites.
- 2. Right-click Default Web Site, and click Properties.

3. Next to IP address, click Advanced.

Default Web Site Properties	<u>? ×</u>
Directory Security HTTP Hea Web Site Performance ISA	ders Custom Errors ASP.NET PI Filters Home Directory Documents
Web site identification	
Description: Default Web 9	5ite
IP address: (All Unassigne	ed) 💽 Advanced]
ICP port: 80	SSL port:
Connections Connection timeout: 12	20 seconds
Enable logging	
W3C Extended Log File Format	Properties
OK	Cancel Apply Help

4. "Advanced Web Site Identification" enables you to specify a different port for each IP address. Select the entry for **Default** and click **Edit**.

IP address TCP port Host header value Default 80 Edit Add Remove Edit Myltiple SSL identities for this Web site SSL port IP address SSL port Add Remove Edit		te Identification			
Add Remove Edit Myltiple SSL identities for this Web site IP address SSL port Add Remove Edit	IP address	TCP port	Host heade	er value	
Myltiple SSL identities for this Web site IP address SSL port Add Remgve Edit	Y Default	80			
Myltiple SSL identities for this Web site IP address SSL port Add Remgve Edit					
Myltiple SSL identities for this Web site IP address SSL port Add Remgve Edit					
Myltiple SSL identities for this Web site IP address SSL port Add Remgve Edit	,	Add	Remove	Edit	
IP address SSL port				Ediciti	
Add Remove Edit	Myltiple SSL ideni	tities for this Web site			
	IP address			SSL port	
		A <u>d</u> d	Remove	Edit	
		ок	Cancel	Help	

- 5. In the "Add/Edit Web Site Identification" screen select from the fields provided:
 - IP address: Either select a specific IP address, or select (ALL Unassigned).
 - **TCP port**: Enter the desired port for the website to be accessed. If you selected a specific IP address, you can enter the **Host Header value** for that address. For example: www.fatwire.com.

A	dd/Edit Web Site Id	entification 🔀
	Identification	(All Unassigned)
	TCP p <u>o</u> rt:	85
	Ho <u>s</u> t Header value:	
	ОК	Cancel <u>H</u> elp

6. In the "Advanced Web Site Identification" screen, click OK.

<u>Iultiple identities</u>					
IP address		TCP port	Host hea	der value	
🏹 Default		35			
	0.dd	1 .	amoya	Edit	
	<u>A</u> dd.	<u> </u>	Remove	<u> </u>	
ultiple SSL ident			Remove	<u>E</u> dit	
Iultiple SSL ident			<u>R</u> emove		
Nultiple SSL ident			Remove	SSL	
_ ·			<u>Remove</u>		
_ ·			<u>R</u> emove		
_ ·			<u>Remove</u>		
_ ·			<u>Remove</u>		
_ ·		is Web site	<u>Remove</u>		

7. In the "Default Web Site Properties" screen, click OK.

Default Web Site Proper	ties	<u>?</u> ×
Directory Security Web Site Perform	HTTP Headers Custom Errors ance ISAPI Filters Home Directory	ASP.NET
Web site identification Description: IP address: ICP port:	Default Web Site (All Unassigned) SSL port:	nced]
Connection timeout:	120 seconds -Alives	
Active log format:	File Format	
	OK Cancel Apply	Help

C. Create a Virtual Directory

A virtual directory is used to make a local physical directory available through a web site by assigning it a simple URL.

- 1. Open IIS Manager and expand local computer > Web Sites.
- 2. Right-click **Default Web Site** and select **New** > **Virtual Directory**.
- 3. When the "Virtual Directory Creation Wizard" launches, click Next.

Virtual Directory Creation Wi	zard	×
	Welcome to the Virtual Directory Creation Wizard	
	This wizard helps you create a new virtual directory on this Web site.	
	To continue, click Next.	
	< Back Next > Cancel	

4. Enter an Alias for the virtual directory and click Next.

Virtual Directory Creation Wizard	×
Virtual Directory Alias Specify a short name, or alias, for this virtual d	irectory.
Type the alias you want to use to gain access same naming conventions that you would for r	
<u>A</u> lias: test	
	< Back Next > Cancel

5. Browse to the physical directory to be shared and click Next.

Virtual Directory Creation Wizard
Web Site Content Directory Where is the content you want to publish on the Web site?
Enter the path to the directory that contains the content for this Web site. Path:
C:\Documents and Settings\Administrator\Desktop\test Browse
< <u>B</u> ack <u>N</u> ext > Cancel

6. Select the appropriate access permissions for the physical directory, depending on the file types, then click **Next**.

Virtual Directory Creation Wizard	×
Virtual Directory Access Permissions Set the access permissions for this virtual directory.	
Allow the following permissions:	
✓ Read	
🔲 Run <u>s</u> cripts (such as ASP)	
Execute (such as ISAPI applications or CGI)	
<u> </u>	
To complete the wizard, click Next .	
< <u>B</u> ack <u>N</u> ext > C	ancel

7. Click Finish.

Virtual Directory Creation Wi	zard	×
	You have successfully completed the Virtual Directory Creation Wizard.	
	To close this wizard, click Finish.	
	< Back Finish Cance	el

D. Create a New ISAPI Filter

An ISAPI filter is used to change the default behavior of IIS and affects how HTTP requests are handled.

- 1. Open IIS Manager and expand local computer > Web Sites.
- 2. Right-click Default Web Site and click Properties.
- 3. Select the ISAPI Filters tab and click Add.

Default Web Site Pr	operties		?×
Directory Securit Web Site Pe	rformance ISAPI Filt	Custom Errors ers Home Directory	ASP.NET Documents
	ers are active only for this s list does not show filters		
Status	Filter Name	Priority	A <u>d</u> d
			<u>R</u> emove
			Edit
			Disabl <u>e</u>
			Move up
		r	Move d <u>o</u> wn
	ОК	Cancel Apply	Help

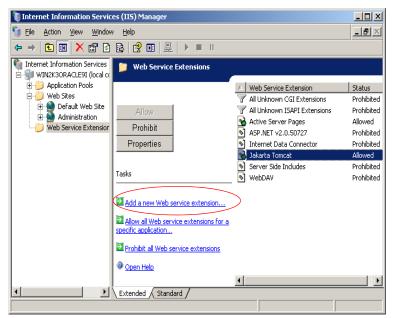
- 4. In the "Add/Edit Filter Properties" screen, fill in the fields provided:
 - Filter name: Enter a filter name.
 - **Executable:** Enter the locations for the Executable.
 - a. Click OK.

Add/Edit Filter Pi	roperties 🔀	1
Eilter name:	jakarta	
<u>E</u> xecutable:	karta Isapi Redirector\bin\isapi_redirect.dll	
	Browse	
ОК	Cancel <u>H</u> elp	

E. Create a New Web Service Extension

A web service extension is a program that extends the basic IIS functionality for serving static content.

1. In the "IIS Manager" click Web Service Extensions, then click Add a new Web service extension.



2. Enter a name for the web service extension, then click Add.

New Web Service Extension	×
Type the name of the new Web service extension, and speci must be enabled for the extension to run.	fy the files that
Extension name:	
Jakarta Tomcat	
R <u>e</u> quired files:	
	A <u>d</u> d
	Remove
Set extension status to Allowed	
OK Cancel	Help

3. Browse to the location of the web service extension file. Click OK.



4. Select Set extension status to Allowed, then click OK.

Step III. Starting and Configuring IIS

Chapter 9

Installing Internet Information Services 7.0 on Windows

This chapter explains how to install and test Microsoft's Internet Information Services (IIS) 7.0 on Windows 2008 Server.

This chapter contains the following sections:

- Step I. Install IIS
- Step II. Verify the Installation
- Step III. Starting and Configuring IIS

Step I. Install IIS

If IIS is not installed or is only partially installed, follow Microsoft's instruction for installing IIS 7.0 on Windows 2008 Server.

Here is a summary of the instructions:

- 1. Select Start > Settings > Control Panel.
- 2. Select Programs and Features
- 3. Select Turn Windows features on or off.

Programs and Features				- 🗆 ×
G Control Panel Progra	ms and Features	💌 🛃 Search		
File Edit View Tools Help				
Tasks	Uninstall or change a program			
View installed updates Get new programs online at	To uninstall a program, select it from the list and the	en dick "Uninstall", "Change	", or "Repair".	
Windows Marketplace	🕒 Organize 💌 🏢 Views 💌			0
	Name 🔺	Publisher	▼ Install ▼	Size 👻
	Java DB 10.3.1.4	Sun Microsystems, Inc	2/8/2008	25.8 MB
	🕌 Java(TM) 6 Update 4	Sun Microsystems, Inc.	2/8/2008	170 MB
	Java(TM) SE Development Kit 6 Update 4	Sun Microsystems, Inc.	2/8/2008	56.5 MB
	🕌 Java(TM) SE Development Kit 6 Update 4	Sun Microsystems, Inc.	2/8/2008	349 MB
	Microsoft Office 2003 Web Components	Microsoft Corporation	2/8/2008	29.0 MB
	Microsoft SQL Server 2005 (64-bit)	Microsoft Corporation	2/8/2008	634 MB
	Microsoft SQL Server 2005 Backward compatibility	Microsoft Corporation	2/8/2008	46.4 MB
	Microsoft SQL Server 2005 Books Online (English)	Microsoft Corporation	2/8/2008	138 MB
	Microsoft SQL Server Native Client	Microsoft Corporation	2/8/2008	5.81 MB
	Microsoft SQL Server Setup Support Files (English)	Microsoft Corporation	2/8/2008	36.1 MB
	Microsoft SQL Server VSS Writer	Microsoft Corporation	2/8/2008	573 KB
	Microsoft Visual Studio 2005 Premier Partner Editi	Microsoft Corporation	2/10/2008	184 MB
	SOLXML4	Microsoft Corporation	2/8/2008	2.23 MB
	Wware Tools	VMware, Inc.	2/8/2008	5.68 MB

4. In the "Server Manager" window scroll down to the "Features Summary" section and click **Add Features**.

Server Manager			
File Action View Help			
🖙 🔿 🖬			
Server Manager (WINDOWS2008SQL2	Server Manager (WINDOWS20085QL2)		
Roles			
Features Diagnostics Configuration	Get an overview of the status of this serve	er, perform top management tasks, and add or remove ser	ver roles and features.
Configuration			
C Storage	Last checked for updates: 2/18/2	2008 4:03 PM	Configure IE ESC
	Last installed updates: 2/10/	2008 3:28 AM	
	IE Enhanced Security Configuration On fo	r Administrators	
		r Users	
	Roles Summary		Roles Summary Help
			2
	Roles: 0 of 17 installed		Go to Roles
			Remove Roles
	Features Summary		? Features Summary Help
	Features: 0 of 34 installed	\langle	Add Features
			👼 Remove Features
	-		_
	 Resources and Support 		Resources and Support Help
	Help make Windows Server better by participating in t	the Customer Experience Improvement Program (CEIP)	Participate in CEIP
	Report issues to Microsoft and get solutions to commo	on problems by turning on Windows Error Reporting.	👰 Turn on Windows Error Reporting
	Browse technical resources for Windows Server, inclusion	ding how-to help, guides, web casts, and tools.	Windows Server TechCenter
	Get connected with other Microsoft customers through	h online community resources.	Windows Server Community Center
	Send us your feedback, such as bug reports and feat	ure suggestions, to help make Windows better.	😪 Send Feedback to Microsoft
۲ <u> </u>	🛟 Last Refresh: 2/18/2008 4:05:17 PM Configure ref	fresh	

5. In the "Select Features" screen select .NET Framework 3.0 Features.

Add Features Wizard		×
Select Features		
Peatures Confirmation Progress Results	State on o more features to instal on this server. Learner Bitt Goder Dhive Encryption Bitt Server Extensions Connection Manager Administration Kit Desktop Experience Desktop Experience Dy Policy Management Different Et Korage Manes Exever Dy Rort Monitor Dy Meret Monitor Dy Rort Monitor Dy Rott Monitor By Rott Mitor Dy Rott Monitor	Description: <u>Microsoft. NET Framework 3.0</u> combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identify information, enable seamless and secure comunication, and provide the ability to model a range of business processes.

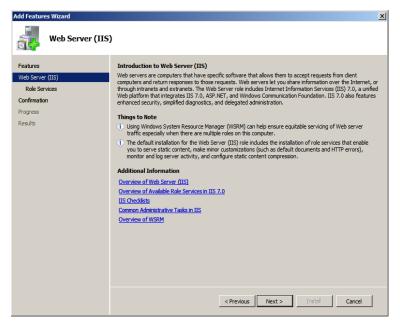
6. In the "Add Features Wizard" dialog box, select Add Required Role Services.

Add role services and features Features?	required for .NET Framework 3.0
You cannot install .NET Framework 3.0 Features installed.	s unless the required role services and features are also
Role Services:	Description:
Web Server (IIS) Web Server Security Windows Process Activation Service Configuration APIs NET Environment Process Model	<u>Web Server (IIS)</u> provides a reliable, manageable, and scalable Web application infrastructure.
	Add Required Role Services Cancel

7. The Web Server (IIS) option appears in the "Add Features Wizard." Click Next.

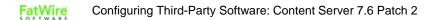
Add Features Wizard		×
Select Features		
Features Web Server (IIS) Role Services Confirmation Progress Results	Select one or more features to install on this server. Peatures:	Description: <u>Microsoft, NET Framework 3.0</u> combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customer's personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.

8. In the "Introduction to Web Server (IIS)" screen, click Next.



- **9.** In the "Select Role Services" screen:
 - **a.** Select the following:
 - Common HTTP Features
 - ISAPI Extensions
 - ISAPI Filters
 - HTTP Logging
 - Management Tools
 - Any other roles that are required for your installation, such as **HTTP Redirection**
 - b. Click Next.

Add Features Wizard		×
Select Role Servi	ices	
Features Web Server (IIS) Role Services Ornfinnation Progress Results	III Perfors Intra Redicection Intra Redicection destination Application Development whenevery AsP.NET might use at another Asp CGI Overcomin JISAPI Extensions	n: rection provides support to er requests to a specific n. Use HTTP redirection you want customers who one URL this is helpful in URL. This is helpful in URL. This is helpful in your Web site, to g a domain name that is spell, or forcing clients to re channel.
	< Previous Next >	nstall Cancel



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10. In the "Confirm Installation Selections" screen, confirm your choices and click **Install**.

Add Features Wizard		×
Confirm Installat	ion Selections	
Features Web Server (IIS) Role Services	To install the following roles, role services, or features, click Install. () 2 informational messages below	
Confirmation	 This server might need to be restarted after the installation completes. 	-
Progress	Web Server (IIS)	
Results	Find out more about Windows System Resource Manager (WSRM) and how it can help optimize CPU usage	
	Web Server Common HTTP Features Static Content Default Document Directory Browsing HTTP Errors HTTP Rediction Application Development .NET Extensions ISAPI Extensions Stati and Diagnostics HTTP Logging Security Request Filtering Manacement Tools Print, e-mail, or save this information	
	<previous next=""> Install Cancel</previous>	

- **11.** Allow the installation to complete, then review the results.
- 12. Click Close.

Add Features Wizard			×
Installation Resul	ts		
Features Web Server (IIS) Role Services	The following roles, role services, or features w	ere installed successfully: Ø Installation succeeded	-
Confirmation Progress Results	The following role services were installed: We Server Formon HTTP Features State: Content Default Document Directory Browsing HTTP Eerors HTTP Redirection Application Development JNET Extensions ISAPE Filters Health and Diagnostics HTTP Logging Security Request Filtering Management Tools IIS Management Console IST Framework 3.0 Features	Installation succeeded	Y
-	< <u>P</u>	revious Next > Close	Cancel

13. It is suggested at this point to reboot, but it is not required.

Step II. Verify the Installation

After installing IIS, you must verify the installation to determine whether it is serving pages properly. Test the installed IIS from the server that is hosting it as well as from another browser on the network.

To verify that IIS is serving pages

- **1.** Start a browser on the host that IIS is running on.
- 2. From the browser, go to the following URL: http://localhost/

IIS is installed and running if the browser displays the "IIS7" page.



Step III. Starting and Configuring IIS

A. IIS Manager

- 1. Start the management console, which is required before any other actions are taken.
- 2. Select: Start > All Programs > Administrative Tools > Internet Information Services (IIS) Manager
- 3. When the "Internet Information Services (IIS) Manager" loads:
 - **a.** Expand the left-hand tree that starts with the current system's name.
 - **b.** In the "Sites Entry" field select **Default Web Site**.

Number Information Services (II	S) Manager	- 🗆 🗵
🚱 💽 🎙 🕨 Start Page		• 📀 •
File View Help		
File View Help Connections	Nervore Recent connections The server of the server of t	
Ready		

B. Changing the IIS Port

- 1. Open the management console and browser to the **Default Site**
- 2. Right-click the **Default Web Site** entry and select **Edit Bindings** from the menu.

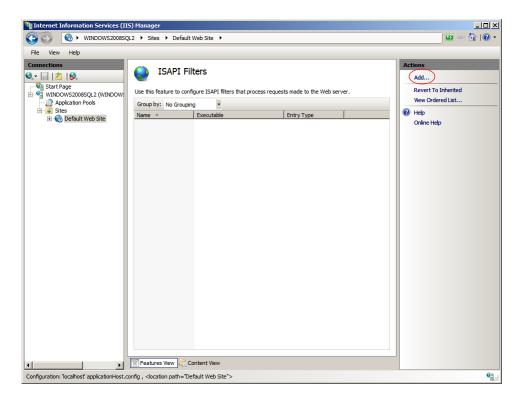
3. In the "Site Bindings" dialog box you can add or change the ports and IP address on which the Server IIS will bind.

Туре	Host Name	Port	IP Address	E 🔺	Add
http		80	*		- 14
net.tcp				8	Edit
net.pipe				*	Remove
net.m				<u>ا ا</u>	
•					Browse

4. Click **Close** after all changes have been made.

C. Adding a New ISAPI Filter

- 1. Open the management console and browser to the **Default Site**.
- 2. In the center list, click ISAPI Filters and click Add.



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- **3.** The "Add ISAPI Filter" dialog box appears.
 - **a.** Fill in the fields provided:
 - **Filter name:** Enter a filter name.
 - **Executable:** Enter the location of the Executable.
 - **b.** Click **OK**.

Add ISAPI Filter	<u>? ×</u>
Filter name:	
Executable:	
OK	Cancel

The new filter is added to the "ISAPI Filters" list.

Me Internet Information Services (IIS) Manager				
🚱 💿 🔞 • WINDOWS2008SQL2 • Sites • Default Web Site •				
File View Help				
Connections	Group by: No Groupin Name ~ test	igure ISAPI filters that process reque g	Entry Type	Actions Add Edt Rename X Renove Revert To Inherited Wew Ordered List W Help Online Help
Configuration: localhost applicationHost.c	oning ,			

Proxing Using IIS

- 1. Open the management console and browser to the Default Site.
- 2. In the center list click HTTP Redirect.
- 3. In the center panel of the "Internet Information Services (IIS) Manager":
 - a. Select the **Redirect requests to this destination** option.
 - **b.** Enter the location of the remote server in the text field (for Content Server or Remote Satellite Server include the context root).
 - c. Click Apply.

Number Information Services (I	IS) Manager	
G S WINDOWS2008S	QL2 > Sites > Default Web Site >	🖸 🗠 🔄 🛛 🚽
File View Help		
Connections	Redirect requests to this destination: Example: http://www.contoso.com/sales Redirect Behavior Redirect all requests to exact destination (instead of relative to destination) Orly redirect requests to content in this directory (not subdirectories) Status code: Found (302)	Actions
Configuration: 'Default Web Site' web.cor	nfig	• 1 .:



Step III. Starting and Configuring IIS

FatWire Configuring Third-Party Software: Content Server 7.6 Patch 2

Chapter 10

Installing Apache on Solaris and Linux

This chapter describes how to install and configure Apache HTTP Server on Solaris and Linux systems. As previously mentioned, you can install Apache on the same machine that will host WebLogic and Content Server, or you can install and use it on a separate host.

This chapter contains the following sections:

- Step I. Install Apache
- Step II. Document Your Apache Parameters
- Step III. Verify that Apache Contains the Correct Module
- Step IV. Verify that Apache Runs Properly
- Next Step

Step I. Install Apache

- 1. Apache HTTP Server can be pre-installed on Solaris 8, Solaris 9, Linux RedHat, and Linux SuSE systems. Determine whether Apache is installed on the environment(s) on which you plan to run it.
- **2.** Do one of the following:
 - If Apache is already installed, continue with "Step II. Document Your Apache Parameters," on page 140.
 - If Apache is not already installed, you can do one of the following:
 - Install it from your source medium.
 - Download it from the Internet.
 - Build it from source; that is, select the modules and compile the Apache executable yourself. If you want to build it from source, refer to the information that the Apache Foundation makes available at http://www.apache.org/ and follow their instructions.

Step II. Document Your Apache Parameters

We strongly recommend that you document the details of your Apache installation in Table 3, "Apache Parameters."

Parameter	What it Holds	Your Value
Web Server Version (WebVersion)	The version of Apache that the host is running. Note that you must use a version that Content Server supports.	
Web Host Name (WebHost)	The name by which the Apache host machine is known on the network.	
Web Host IP Address (WebIP)	The numeric Internet Protocol address assigned to the Apache host machine.	
Web Server Port (WebPort)	The port number assigned for Apache communications. By default, it has the value 80.	
Apache Root Directory (ApacheRoot)	The top-level directory in which Apache is installed. Immediate subdirectories of ApacheRoot include bin and conf.	

Table 3: Apache Parameters

Step III. Verify that Apache Contains the Correct Module

Note

This section applies only to Apache version 1.3x.

Apache is modular software, built from a set of modules. WebLogic Server requires that the mod_so.c module be present on the machine that is hosting the Apache web server. Please verify that your Apache server contains this module by using the command httpd with the -l option and search for mod_so in the output.

For example:

```
$ ApacheRoot/bin/httpd -1 | grep `mod_so'
mod_so.c
```

Examine the output and do one of the following:

- If the output from the preceding command contains mod_so.c, then your version of Apache contains the correct module. Proceed to "Step IV. Verify that Apache Runs Properly," on page 141.
- If the output from the preceding command does not contain mod_so.c, you must rebuild and reinstall Apache. For guidelines, see "Step I. Install Apache," on page 140.

Step IV. Verify that Apache Runs Properly

In this step, you will start Apache and verify that it is running properly. For verification instructions, see the Apache web site (given in "Step I. Install Apache," on page 140).

Next Step

Configure Apache to run with WebLogic and Content Server. For instructions, refer to the installation guide for your configuration.

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Part 3 Installing and Configuring LDAP

If you choose to use LDAP, Content Server must have access to a supported LDAP server specifically configured for Content Server. This part describes how to install and configure a supported LDAP server for integration with Content Server.

Note

- You must set up a supported LDAP server **before** you run the CS-LDAP integrator.
- If you are integrating with LDAP, but no content management sites exist in Content Server, then upon completion of the LDAP integration, refer to instructions in the CS-LDAP integration guide ("Step 8. Post Integration. If Content Management Sites are Not Installed").

This part contains the following chapters:

- Chapter 11, "Setting Up Sun Access Manager 7.0"
- Chapter 12, "Setting Up Sun Directory Server 6.0"
- Chapter 13, "Installing Active Directory Server 2008"
- Chapter 14, "Setting Up IBM Tivoli Directory Server 6.x"
- Chapter 15, "Setting Up OpenLDAP 2.3.x"
- Chapter 16, "Setting Up the WebLogic 9.x Embedded LDAP Server"
- Chapter 17, "Setting Up Oracle Directory Server 10.x"
- Chapter 18, "Setting Up MS Active Directory Server 2003"

Chapter 11 Setting Up Sun Access Manager 7.0

This chapter provides instructions for setting up the currently supported Sun Access Manager for use with Content Server.

Note

Sun Access Manager is installed as part of Sun Portal Server 7, which means that either Sun Access Manager and Sun Directory Server were installed locally on your portal server, or you elected to configure Sun Access Manager to connect to a remote instance of Sun Java Systems Directory Server. In either case, you already have Sun Access Manager installed and configured for your application server and portal server.

Note that you must set up Sun Access Manager before you run the CS LDAP integrator.

This chapter contains the following sections:

- Start/Stop Commands
- Creating CS Users in Sun Access Manager

Start/Stop Commands

This section lists commands for starting and stopping Sun Access Manager.

To start Sun Access Manager:

• On Solaris:

./usr/sbin/amserver start

• On Unix (except Solaris):

<sun_portal_home>/identity/bin/amserver start

• On Windows:

Start --> Programs --> Sun Microsystems --> Sun One Identity --> Start Sun One Identity Servers --> Start

To stop Sun Access Manager:

- On Solaris:
 - ./usr/sbin/amserver stop
- On Unix (except Solaris):

<sun_portal_home>/identity/bin/amserver stop

• On Windows:

```
Start --> Programs --> Sun Microsystems --> Sun One Identity --> Stop Sun One Identity Servers --> Stop
```

Creating CS Users in Sun Access Manager

In this section, you will use the Sun Access Manager console to create Content Server users in the backend LDAP server that is associated with Sun Access Manager.

To create Content Server users in Sun Access Manager

1. Access the following URL:

http://<app_server_address>:<port>/amconsole

		Java"
		Java"
	Sun Java [™] System Access Manager	
155555555555555	This server uses LDAP Authentication User Name:	
	Password:	

- 2. Log in using the user name (typically amadmin) and password that was selected during the installation of Sun Access Manager.
- **3.** When logged in, you will see two large frames. The left-hand frame has a hierarchy that can be navigated. The right-hand frame has details for the item selected on the left.

			Search Logout Help
🐟 Sun.			Welcome
Sun Java~ System Access Manager			amAdmin
Identity Management Service Configuration	on Current Sessi	ons Federation Management	
vm 🖡	vm		▲
View: Organizations 💌	View: General	V	Save Reset
Organizations (3 items)	General Proper	ties	
New Delete Search	Domain		
Name	Name:	1	
CommunitySample	Organization	Active -	
	Status:		
	Organization Aliases:	suse93portal7a.vm.fatwire.com vm	
		1	
		Add Remove	
	DNS Alias Names:		A
	1		

4. In the left-hand frame, click the link **DeveloperSample** (or the portal site which you used when installing Content Server).

5. Click the View drop-down menu. From here you may select Roles, Groups, or Users. As you will be adding a new user, select Users.

Sun Java- System Access Manager		Search Logout Help Welcome <u>amAdmin</u>
Identity Management Service Configurat	ion Current Sessions Federation Management	
vm > DeveloperSample	DeveloperSample	
View: Organizations	View: General	Save Reset
Organ Users	General Properties	
New. Services Search	Domain Name:	
Nam Roles Policies There Agents	Organization Status: Active	
	Organization Aliases: DeveloperSample	
	Add Remove	
	DNS Alias Names:	

6. A list of all known users is displayed in the left frame. Click New.

			Search Logo	ut Help
Sun Java- System Access Manager			Welcome <u>amAdmin</u>	
Identity Management Service Configuration	Current Sessions F	ederation Management		
<u>vm</u> > DeveloperSample ♪	fwadmin			
View: Users	View: General	•	Save	leset
Users (1 item)			* Indicates requir	ed field
New Delete fwadmin Search Advanced Search	First Name:			
User ID Full Name	* Last Name:	default		
☐ fwadmin fwadmin ▶	* Full Name:	fwadmin		
	Password:	Change		
	Email Address:			
	Employee Number:			
	Telephone Number:			
	Home Address:			
	* User Status:	Active 💌		
	Account Expiration Date:	Format: mm/dd/www.hh:mm		▲ ▼

- 7. Select the following services from the list in the right-hand frame:
 - Mobile Address Book
 - Mobile Calendar
 - Mobile Mail
 - Portal Desktop
 - Portal Subscriptions
 - SSO Adapter

Click Next.

Sun Java- System Access Manager	Current Sessions Federation Manageme	Search Logout Help Welcome <u>amAdmin</u> ent
vm > DeveloperSample ▷ View: Users Users (1 item) New Delete fwadmin Search Advanced Search User ID Full Name r fwadmin fwadmin ▷	New User - Step 1 of 2 Select the services to be assigned to the Available Services Image: Constraint of the services	

FatWire

8. In the "New User" form, fill out the required fields (marked by a red *). Ensure that "User Status" is set to Active. Click Finish.

		Search Logout	Help
🐟 Sun.		Welcome	
Sun Java System Access Manager		<u>amAdmin</u>	
Identity Management Service Configuration	Current Sessions Fode	ntion Management	
Identity Management Service Configuration	Current Sessions Feder	ration management	
<u>vm</u> > DeveloperSample ▶	New User - Step 2 of	2	
View: Users	Enter Required User At	ttributes	
Users (1 item)		* Indicates require	d field
New Delete fwadmin Search Advanced Search	User		
User ID Full Name	* User ID:	demouser	
☐ fwadmin fwadmin	First Name:		
	* Last Name:	demo	
	* Full Name:	user	
	* Password:	*****	
	* Password (confirm):	*****	
	* User Status:	Active 🔽	
	Back Finish	Ca	ncel

- **9.** Assign Groups to the user:
 - a. Locate the newly created user (the fastest way is to use the Search function).

			Search L	.ogout Help
Num.			Welco	
Sun Java" System Access Manager			amAdr	nin
Identity Management Service Configuration	Current Sessions	ederation Management		
Identity Management Service Configuration		ederation management		
<u>vm</u> > DeveloperSample ▷	demouser			
View: Users	View: General	•	Save	Reset
Users (1 item)			* Indicates r	equired field
New Delete *user Search Advanced Search	First Name:			
User ID Full Name	* Last Name:	demo		
(☐ demouser user ▶	* Full Name:	user		
	Password:	Change		
	Email Address:			
	Employee Number:			
	Telephone Number:			
	Home Address:			
	* User Status:	Active 💌		
	Account Expiration Date:	Format: mm/dd/www.bh.mm		•

b. In the right-hand frame, select **Groups** from the "View" drop-down menu.

👁 Sun		come	
Sun Java- System Access Manager	am/	<u>Admin</u>	
Identity Management Service Configuration Current Sessions Federation Management			
vm > DeveloperSample			•
View: Users I View: Groups I			
The Selected list contains the groups associated with Users (10 items)	ith this user.		
New Delete user* Search Advanced Search Advanced Search User ID Full Name Search □ user_analyst user_analyst PageEditor □ user_analyst user_analyst PageEditor □ user_analyst user_analyst PageEditor □ user_analyst user_approver PageEditor □ user_author user_approver PageEditor □ user_designer User_designer PageEditor □ user_designer User_expert User_expert □ user_marketer user_pricer PageEditor □ user_pricer user_pricer Remove All Selected: Selected:	<u>\$</u>		

- c. In the "Available" list box, select all Groups that you wish this user to have. In this example, three groups were assigned to the user: Spark-SiteAdmin, Spark-SparkContentUser, Spark-GeneralAdmin (listed in the "Selected" list box). For more detailed information about available groups, see the *Content Server Administrator's Guide*.
- d. Click Add.
- e. Click Save.

		Search Logout Welcome	Help
Sun Java- System Access Manager		amAdmin	
Identity Management Service Configuration	Current Sessions Federation Management		
vm > DeveloperSample ▷ View: Users v	* Search Available:		
Users (10 items) New Delete user* Search Advanced Search User ID Full Name ☐ demouser user ☐ user_analyst user_analyst ☐ user_analyst user_analyst ☐ user_approver user_approver ☐ user_author user_author ☐ user_checker user_checker ☐ user_designer user_designer ↓	PageEditor GE Lighting-GeneralAdmin BurlingtonFinancial-Designer GE Lighting-WorkflowAdmin FirstSitell-ProductEditor GE Lighting-Designer BurlingtonFinancial-Checker FirstSitell-ProductAuthor Add ♥ Add All ♥ Remove ♠ Selected:	4	
□ user_editor user_expert □ user_expert user_expert □ user_marketer user_marketer □ user_pricer user_pricer	Spark-SiteAdmin Spark-SparkContentUser Spark-GeneralAdmin		_
		Save Reset	t 🔺

10. (Optional) Test your new user by logging in to the portal (must be the organization under which the user was created and Content Server was installed; for example, DeveloperSample Organization).

Chapter 12 Setting Up Sun Directory Server 6.0

This chapter shows you how to set up Sun Directory Server 6.0 for use with Content Server running on Sun Portal Server 7.

Note

You must set up Sun Directory Serve before you run the CS LDAP integrator.

This chapter contains the following sections:

- Start/Stop Commands
- Installing Sun Directory Server
- Post-Installation Steps
- Completing and Verifying the LDAP Configuration
- Modifying User Passwords

Start/Stop Commands

This section contains commands for starting and stopping Sun Directory Server and the Sun Java Web Console.

Sun Directory Server

• To start:

/opt/sun/ds6/bin/dsadm start <instance_dir>

• To stop:

/opt/sun/ds6/bin/dsadm stop <instance_dir>

Sun Java Web Console

• To start:

/opt/sun/webconsole/bin/smcwebserver start

• To stop:

/opt/sun/webconsole/bin/smcwebserver stop

Installing Sun Directory Server

This section shows you how to install Sun Directory Server 6.

- 1. Download the Directory Server 6 package from the Sun website.
- 2. Decompress the file into a temporary directory and change to that directory.
- **3.** Within the temporary directory, change to the directory corresponding to your operating system and launch the installer.
- 4. In the "Welcome" screen, click Next.

<u>چ</u>	Welcome
Java	Welcome to the Sun Java(TM) Enterprise System; serious software made simple.
Java [™] Enterprise	Before you begin, please refer to the <i>Release Notes</i> and <i>Installation Guide</i> , available at http://docs.sun.com/prod/entsys.5.
System	You can install any or all of the Enterprise Network Services provided by the Java Enterprise System.
Sumerican Sector	Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to license terms.
	Next \$ Cancel Help

5. In the "Software License Agreement" screen, read the license agreement and click **Yes, Accept License**.

	<u>(</u>	Software License Agreement	
	Java	Before you can install this product, you must read and accept the agreement under w this product is licensed for use.	vhich
	Java™ Enterprise	Sun Microsystems, Inc. ("Sun") SOFTWARE LICENSE AGREEMENT ("SLA") and ENTITLEMENT for SOFTWARE	
	System	A. ENTITLEMENT for SOFTWARE. Capitalized terms not defined in this Entitlement have the meanings ascribed to them in the SLA (attached below as Section B). These terms will supersede any inconsistent or conflicting terms in the SLA.	
555		Licensee ("You"): The entity receiving the Software from Sun.	
C C C I		Effective Date: Date You receive the Software.	
RRRI		Software: Sun Software Portfolio, which may include the following:	
559		Solaris 10, Sun Java System Access Manager, Sun Java System Directory Server Enterprise Edition, Sun Java Directory Proxy Server, Sun Java System Identity	•
V	Certa	Have you read, and do you accept, all of the terms of the preceding Software License Agreement? If you Click Decline , the installer will exit without installing any products.	2
	SUIL.		
		Sack Yes, Accept License Decline He	elp

- 157

- 6. In the "Choose Software Components" screen, do the following:
 - a. Select Directory Server Enterprise Edition 6.0.
 - **b.** Expand the node and make sure that **Directory Service Control Center** is listed and selected.
 - c. Click Next.

<u>«</u>	Choose Softwa	are Components		
Java ⁻	Select All	Deselect All		Rescan System
lava™		Componen	t Name	Status Details
Enterprise	🗣 🦵 Service I	Registry 3.1		_
System	Directory & Id	entity Services		
	🗠 🥅 Access 1	Manager 7.1		
666	🗢 🔽 Director	y Server Enterprise	Edition 6.0	
8881	Availability Services			
2221	🗌 High Avi	ailability Session Sto	ore 4.4	=
222	Shared Service	5		
221	🗖 All Share	ed Components		-
	A . 			
Sun Java(TM) System Message Queue is an enterprise messaging system that provides reliable, asynchronous messaging based on the Java(TM) Message Service				
W OWIL nicrosystems	🗹 Install mu	ltilingual package	(s) for all selected componen	nts
	& Back	Next »		Cancel Help

- 7. In the "Specify Installation Directories" screen, do the following:
 - **a.** Enter the target installation directory for the Directory Preparation Tool.
 - **b.** Enter the target installation directory for Sun Directory Server. (This directory will be referred to as <dirserv_home> in the remainder of this chapter.)

Java [®]	Specify Installation Directories
Java™ Enterprise System	Directory Preparation Tool: Tware/Apps/sun/comms/dssetup Browse Directory Server: /u01/software/Apps/sun Browse
Sun.	
	& Back Next > Cancel Help

8. In the "Verify System Requirements" screen, wait until the status of all items reads "OK," then click **Next**. If any of the items fail the verification, you must remedy the problem and restart the installation.

<u></u>	Verify System Requirements		
Java [™] Enterprise System	Available disk space Installed memory Installed Swap space Operating system patches Operating system resources System Ready for Installation.	ок ок ок ок	
Sun.	& Back Next >	Cancel)

9. In the "Choose a Configuration Type" screen, select Configure Now and click Next.

<u>چ</u>	Choose a Configuration Type
Java	Configure Now (Enables you to configure components as part of installation.)
Java ^{as} Enterprise System	Configure Later (Installs components, but does not configure them. You must configure components after completing installation).
	& Back Next > Cancel Help

10. In the "Specify Common Server Settings" screen, enter the required information, then click **Next**.

Note

The host name and IP address of the machine running Directory Server must have a valid DNS entry on your network.

Java ⁻		r Settings I be the default values for all installe be overridden when you configure th	
Java™ Enterprise System	Host Name: DNS Domain Name:	rho10wl vm.fatwire.com	
	Host IP Address: Administrator User ID: Administrator Password: Retype Password: System User: System Group:	10.120.19.45 admin ******** ******** root root	At least 8 characters long
Sun.		ove will appear as default values on t t values will be marked with this not	
	≪ Back Next ≫		Cancel Help

11. In the "Create Directory Instance" screen, select Yes and click Next.

Java ⁻	Directory Server: Create Directory Instance
Java™ Enterprise System	Directory Server Console requires Directory Server, but does not require a directory instance. Although not a requirement, you can create a directory instance now during installation.
Sumerican Sector	Create a directory instance (in addition to installing Directory Server)?
	& Back Next > Cancel Help

- **12.** In the "Specify Instance Creation Information" screen, do the following:
 - **a.** Specify the directory in which the new Directory Server instance will reside. (This directory will be referred to as <instance_dir> in the remainder of this chapter.)
 - b. Specify the values for the System User and System Group fields.
 - c. Specify a Directory Manager password.
 - **d.** Specify the value for the **Suffix** field. (This value will be the **DN** value used to connect to this Directory Server instance; you will need it in step 4 on page 163.)
 - e. Click Next.

«	Directory Server: Specify Instance	Creation Information	
Java			
lava™	Instance Directory.	/u01/software/Apps/sun/dsins1	
Enterprise	Directory Instance Port:	389	
System	Directory Instance SSL Port:	636	
	Directory Manager DN:	cn=Directory Manager	
666	System User:	root	
2221	System Group:	root	
2221	Directory Manager Password:	*****	At least 8 character
2221	Retype Password:	*****	
557	Suffix:	dc=vm, dc=fatwire, dc=com	
55			
Saua			
Theresenters			
	≪ Back Next ≫	Can	icel Help

13. In the "Ready to Install" screen, click **Install** and wait for the installation to complete.

Java	Ready to Install Product: Java Enterprise System 5 Uninstall Location: /var/sadm/prod/sun-entsys5 Space Required: 209.44 MB
Java ^M Enterprise System	Sun Java(TM) System Directory Preparation Tool Sun Java(TM) System Directory Server Enterprise Edition 6.0 Sun Java(TM) System Directory Server Enterprise Edition 6 Command-Line Utilities Java Enterprise System Directory Server 6 Core Server Java Enterprise System Directory Proxy Server 6 Core Server
	Kenter Ke

14. In the "Installation Complete" screen, click Close.

Java [*]	Installation Complete
Java™ Enterprise System	Click the following buttons to view installation and configuration summaries or the installation log. The installer stores the summary and log files in this location: /var/opt/sun/install/logs/
Sum.	View Summary View Install Log Your next step is to perform the postinstallation configuration and verification tasks documented in the "Postinstallation" chapter of the Sun Java(TM) Enterprise System Installation Guide at http://docs.sun.com/doc/819-4891. Automatically display the Sun Java(TM) Enterprise System Installation Guide after the installer closes (requires an internet connection)
	Close Help

15. Continue to the next section, "Post-Installation Steps," to complete the installation.

Post-Installation Steps

Complete your Directory Server installation by performing the steps in this section. You must perform these steps **before** you run the Content Server LDAP integration program.

1. Start your new Directory Server instance:

```
/opt/sun/ds6/bin/dsadm start <instance_dir>
```

2. Create an LDIF file named csldap.ldif with the following contents:

```
dn: dc=vm,dc=fatwire,dc=com
objectClass: dcObject
objectClass: organization
dc: vm
description: Directory Server ldif file
o: Fatwire Software
dn: ou=People,dc=vm,dc=fatwire,dc=com
objectClass: organizationalUnit
objectClass: top
ou: People
dn: ou=Groups,dc=vm,dc=fatwire,dc=com
objectClass: organizationalUnit
objectClass: organizationalUnit
objectClass: top
ou: Groups
```

3. Change to the <dirserv_home>/ds6/bin directory.

4. Import the LDIF file you created in step 2 on page 162 using the following command:

./dsconf import <ldif_file> <dn>

where:

- <ldif_file> is the full path to the csldap.ldif file you created in step 2 on page 162, including the filename, and
- <dn> is the value you entered in the **Suffix** field in step 12 on page 161.

For example:

./dsconf import /u01/csldap.ldif dc=vm,dc=fatwire,dc=com

When you run the command, accept the certificate by answering **Yes** at the first prompt. At the second prompt, enter the Directory Manager password (you created this password in step 12 on page 161.)

Completing and Verifying the LDAP Configuration

This section shows you how to complete and verify your LDAP configuration using the Directory Service Control Center (used to manage Sun Directory Server.)

1. Start the Sun Java Web Console:

/opt/sun/webconsole/bin/smcwebserver start

- 2. Initialize the Directory Service Control Center:
 - **a.** Change to the <dirserv_home>/dscc6/bin directory.
 - **b.** Execute the following command: ./dsccsetup initialize
- **3.** Log in to the Sun Java Web Console as the system user you used to install Sun Directory Server, via the following URL:

https://<server>:6789/

<i>Sun</i> .	Server Name:	b Console rho10wl.vm.fatwire.com root ******* Log In	

(

4. In the "Services" section, click Directory Service Control Center (DSCC).

APPLICATIONS VERSION User: root Server: rho10wl.vm.fatwire.com Java [™] Web Console	LOG OUT HELP Java Sun [*] Microsystems, Inc.
Start Each Application in a New Window	Juit - Microsystems, inc.
Systems	Desktop Applications
No applications available	No applications available
Storage	Other
No applications available	No applications available
Services Directory Service Control Center (DSCC)	

5. In the "Directory Service Manager Authentication" screen, log in as the admin user, using the Directory Manager password. (You created this password in step 12 on page 161.)

APPLICATIONS VERSION			LOG OUT HELP
User: root Server: rho10wl.vm.fat	wire.com		K .
Java™ System Directo	ry Service Control Center		
			Sun™ Microsystems, Inc.
Directory Service Manag			
To manage directory servers and	directory proxy servers, enter the Director	y Service Manager user r	name and password.
Directory Service Manager:	admin		
Password:	*****		
	Log In		

6. If you see a pop-up error message informing you that the DSCC registry is not running, click **Start DSCC Registry**.



When the DSCC registry has started successfully, a confirmation message appears. Click **Close** to close the pop-up window. 7. In the console, click the **Directory Servers** tab.

APPLICATIONS V	ERSION					REFRESH LOG OUT	HELP
	o10wl.vm.fatwire.com						Ľ,
Java™ System	Directory Servi	ce Control Ce	nter				ava"
			_	_		Sun [™] Micro	
Common Tasks	Directory Servers	Proxy Servers	Server Groups	Settings		_	
Commo	on Tasks						
Directory Server	Administration			Directory En	try Management		
Manage Registere	ed Directory Servers		i	Create New	Entry		
View Replication	Topologies		i	Search Dire	ctory Data		
View Suffix Repli	ication Status		i	Browse Dir	ectory Data		
View Directory S	erver Logs						
				Deployment			
Proxy Server Ad	ministration			Create New	Directory Server		
Manage Register	ed Proxy Servers		i	Copy Config	guration Settings from One Direc	tory Server to Other Servers	i
View Proxy Serv	er Logs			Create New	Proxy Server		
				Copy Config	guration Settings from One Proxy	/ Server to Other Servers	i
Documentation				Create New	Suffix or Replication Topology		i
Browse Directory	y Service Control Center Onli	ne Help			guration Settings from One Suffi	r to Other Suffixes	i
Browse Directory	/ Server Enterprise Edition D	ocumentation on docs.s	un.com	copy coning	garadon octango nom one ounit.		

8. In the "More Server Actions" drop-down list, select Register Existing Server.

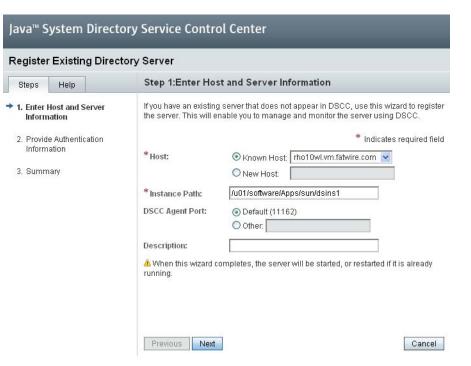
APPLICATION	VERSION				REFRESH LOG OUT HELP
User: root Ser	er: rho10wl.vm.fatwire.com				k
Java™ Sys	em Directory Ser	vice Control Co	enter		ے۔ Java"
					Sun™ Microsystems, Inc.
					* *
Common Ta	ks Directory Servers	Proxy Servers	Server Groups	Settings	

Directory Servers

To manage a server, click a server name. If a server does not appear in the list below, select Register Existing Server from the drop-down menu. >> More on this table

Directory Servers	(0)				
New Server Start	t Stop	More Server Actions	Filter: All Items	~	
Server Secure	Port	More Server Actions Copy Server Configuration	Server Group	Description	Instance Path
No registered Directory	Servers	Restart			
		Backup Restore			
		Register Existing Server Unregister Existing Server			
		Delete			

9. In the pop-up window that appears, enter the full path to the directory holding the target Directory Server instance (<instance_dir>) and click **Next**.



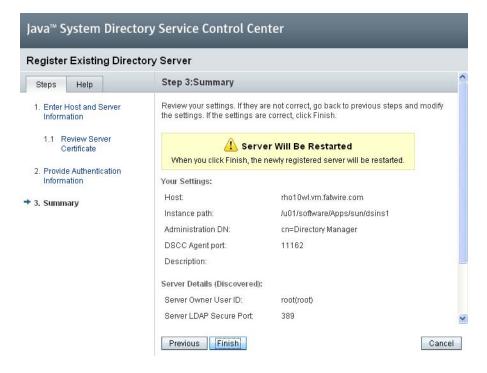
10. In the "Review Server Certificate" screen, select the **Accept the Certificate** check box and click **Next**.

Java [™] System Direct	ory Service Control Center
Register Existing Direct	tory Server
Steps Help	Step 1.1:Review Server Certificate
1. Enter Host and Server Information	The server is presenting a certificate that has not been signed by a known Certificate Authority. Information about this certificate is shown below. In order to register the server, you must accept the certificate from the server.
1.1 Review Server Certificate	Issued To: CN=rho10wl.vm.fatwire.com_agent
 Provide Authentication Information Summary 	Issued By: CN=rho10wl.vm.fatwire.com_ca Valid From: 3/26/07 10:13 AM Expires On: 3/26/27 10:13 AM Show Details
	Accept the certificate
	Previous Next Cancel

11. In the "Provide Authentication Information" screen, enter the Directory Manager password into the **Password** field and click **Next**.

egister Existing Direct	ory Server	
Steps Help	Step 2:Provide Authe	ntication Information
1. Enter Host and Server Information		vice Control Center to modify the server configuration, you tive User DN with the appropriate permissions on the r the User DN.
1.1 Review Server Certificate		* Indicates required field
 Provide Authentication Information Summary 	Host: Instance Path: Server LDAP Port: Server LDAP Secure Port: * Administration DN: * Password:	rho10wl.vm.fatwire.com /u01/software/Apps/sun/dsins1 389 636 [cn=Directory Manager

12. In the "Summary" screen, click Finish and wait for the instance to restart.



When the instance has restarted successfully, a confirmation message appears. Click **Close** to close the pop-up window. **13.** In the list of directory servers, click the Directory Server instance you just registered.

APPLICATIONS VERSION	REFRESH LOG OUT HELP
User: root Server: rho10wl.vm.fatwire.com	k
Java™ System Directory Service Control Center	چې Java
	Sun [™] Microsystems, Inc.
Common Tasks Directory Servers Proxy Servers Server Groups Settings	
Common rusito Directory Servers Press, Server Steaps Seturings	

Directory Servers

To manage a server, click a server name. If a server does not appear in the list below, select Register Existing Server from the drop-down menu. >> More on this table

Directory Servers (1)								
New Serv	ver Start StopN	lore Server Actions	s 💌 Filter:	All Items	~	□ →₽		
¥8 -	Server 🔺	Secure Port 🛆	Operational Status 🔝	Server Group 🗠	Description 🗠	Instance Path 🗠		
	rho10wl.vm.fatwire.com:389	636	Started			/u01/software/Apps/sun/dsins1		
[+6								

14. In the instance summary screen, click the Entry Management tab.

Directory Servers > rho10wl.vm.fatwire.com:389 Server Operation Suffixes Entry Management Schema Security Server Configuration Main Error Logs Access Logs Audit Logs Resource Usage Suffix Usage rho10wl.vm.fatwire.com:389 Start Stop RestartMore Server Actions General Name: rho10wl.vm.fatwire.com:389 Description: Edit	APPLICATIONS User root Server Java™ Syster			ntrol Cer	iter	RE		SOUT HELP
Main Error Logs Access Logs Audit Logs Resource Usage Suffix Usage rho10wl.vm.fatwire.com:389 Start Stop Restart More Server Actions Image: Comparison of the server Action of the serv	Directory Servers 🗧	rho10wl.vm.fatwir	re.com:389				30	n microsystems, in
rho10wl.vm.fatwire.com:389 Start Stop RestartMore Server Actions General Name: rho10wl.vm.fatwire.com:389 Description: Edit	Server Operatio	n Suffixes	Entry Manage	ment S	chema	Security	Server C	onfiguration
Start Stop Restart More Server Actions Image: Comparing the server Actions General Name: rho10wl.vm.fatwire.com:389 Description: Edit	Main Erro	r Logs Acces	s Logs Aud	it Logs R	esource Usa	age Su	ffix Usage	
Name: rho10wl.vm.fatwire.com:389 Description: Edit			-	ins	*			
Description: Edit	General							
	Name:	rho10wl.vm.fatwire	e.com:389					
Instance Path: /var/opt/sun/dsins1/ Location: Edit			17					

ocation: Edit Servers with the same Location are grouped together when viewing replication topology

Run Modes and Status

 Operational Status
 Started

 Read/Write Mode:
 Read/Write >>More on read/write mode

 Referral Mode:
 Disabled
 15. Examine the displayed LDAP directory data to make sure it is valid.

APPLICATIONS VEF	SION Owl.vm.fatwire	.com				REFRESH	LOG OUT	HELP
Java [™] System Directory Service Control Center								
Directory Servers > rho	Sun [®] Microsystems, Inc. Directory Servers > rho10wl.vm.fatwire.com:389							
Server Operation	Suffixes	Entry Managen	nent Schema	Security	Server Configuration	_	_	_
Browse Sea	rch Acce	ss Control Pa	assword Policies					

rho10wl.vm.fatwire.com:389 - Browse Data

You can browse LDAP data on this tab. To browse down the Directory Information Tree (DIT), click +. To browse up the DIT, use the View DN drop-down list. To hide the upper levels of the DIT, select a DN and set it as the View DN by clicking Use Selected Entry. To filter entries, use the View Options settings.

View DN: dc=vm,dc=fatwire,dc=com (3689 Entries)	-	Use Selected Entry
Image: Second		Selected Entry Edit Entry Delete Entry New Entry Search dn: dc=vm,dc=fatwire,dc=com ACIs: 32 Object Class: sunlSManagedOrganization, sunNameSpace, top, sunManagedOrganization, organization, domain Children: 30 View Options Filter: Full Name (cn) Enter a string to be matched or an LDAP filter. Display: 2 Levels ♥ ♥ Show Leaf Entries (lowest-level entries) Show Configuration Suffixes Refresh View
[+] ou=services	_	

Modifying User Passwords

This section shows you how to modify user passwords in Sun Directory Server.

1. Start the Sun Java Web Console:

/opt/sun/webconsole/bin/smcwebserver start

2. Log in to the Sun Java Web Console as the system user you used to install Sun Directory Server, via the following URL:

https://<server>:6789/

		Java"
Sum	Java [™] Web Console Server Name: rho10wl.vm.fatwire.com User Name: root Password: ****** Log In	

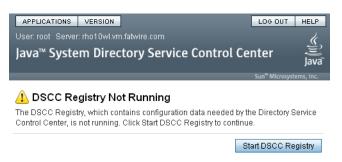
3. In the "Services" section, click Directory Service Control Center (DSCC).

APPLICATIONS VERSION User: root Server: rho10wl.vm.fatwire.com Java [™] Web Console	LOG OUT HELP Java Sun [®] Microsystems, Inc.
Start Each Application in a New Window	
Systems	Desktop Applications
No applications available	No applications available
Storage	Other
No applications available	No applications available
Services Directory Service Control Center (DSCC)	

4. In the "Directory Service Manager Authentication" screen, log in as the admin user, using the Directory Manager password. (You created this password in step 12 on page 161.)



5. If you see a pop-up error message informing you that the DSCC Registry is not running, click **Start DSCC Registry**.



When the DSCC Registry has started successfully, a confirmation message appears. Click **Close** to close the pop-up window. 6. In the console, click the **Directory Servers** tab.

User root Server rhollowitym fawrie com Java ^{Tw} System Directory Service Control Center Server Groups Settings Common Task Directory Servers Common Tasks Directory Server Administration View Suffix Replication Topologies View Suffix Replication Status View Directory Server Logs Deployment Create New Directory Server to Other Servers View Proxy Server Logs Decumentation Proxy Server Logs Documentation Proves Directory Server to Other Servers Composition One Directory Server to Other Servers Copy Configuration Settings from One Proxy Server to Other Servers Create New Suffix or Replication Topology Create New Suffix or Replication Topology Copy Configuration Settings from One Suffix to Other Suffixes Copy Configuration Settings from One Suffix to	APPLICATIONS VERSION		REFRESH LOG OUT	HELP
Directory Server Administration Directory Entry Management Manage Registered Directory Servers Image Registered Directory Servers View Replication Topologies Image Registered Directory Data View Suffix Replication Status Image Registered Directory Server Logs Proxy Server Administration Create New Entry View Directory Server Logs Deployment Proxy Server Administration Create New Directory Server View Proxy Server Logs Create New Proxy Server Documentation Create New Proxy Server to Other Servers View Directory Service Control Center Online Help Copy Configuration Settings from One Directory Server to Other Servers Copy Configuration Settings from One Directory Server to Other Servers Image Create New Suffix or Replication Topology Copy Configuration Settings from One Directory Server to Other Servers Image Create New Suffix or Replication Topology	User: root Server: rho10wl.vm.fatwire.com			Ľ,
Common Task Directory Servers Proxy Servers Settings Directory Server Administration Directory Entry Management Manage Registered Directory Servers Image Create New Entry View Replication Topologies Image Seguestered Directory Data View Suffix Replication Status Image Directory Data View Directory Server Logs Deployment Create New Directory Server Image Create New Directory Server View Proxy Server Logs Create New Directory Server Documentation Create New Proxy Server Image Directory Server Logs Copy Configuration Settings from One Directory Server to Other Servers Documentation Create New Suffix or Replication Topology Prowse Directory Service Control Center Online Help Copy Configuration Settings from One Suffix to Other Suffixes	Java ^m System Directory Service Control Cer	iter		Java
Directory Server Administration Directory Entry Management Manage Registered Directory Servers Image Registered Directory Servers Vew Replication Topologies Image Registered Directory Data View Suffix Replication Status Image Registered Proxy Server Logs Proxy Server Administration Image Registered Proxy Servers View Proxy Server Logs Image Registered Proxy Servers Deployment Image Create New Proxy Server Copy Configuration Settings from One Directory Server to Other Servers Image Create New Proxy Server Documentation Image Create New Suffix or Replication Topology Frowse Directory Service Control Center Online Help Image Copy Configuration Settings from One Suffix to Other Suffixes			Sun [™] Microsy	ystems, Inc.
Directory Server Administration Directory Entry Management Manage Registered Directory Servers Create New Entry View Replication Topologies Search Directory Data View Suffix Replication Status Browse Directory Data View Directory Server Logs Deployment Proxy Server Administration Create New Proxy Server Manage Registered Proxy Servers Copy Configuration Settings from One Directory Server to Other Servers View Proxy Server Logs Create New Proxy Server Documentation Create New Suffix or Replication Topology Browse Directory Service Control Center Online Help Copy Configuration Settings from One Proxy Server to Other Servers	Common Tasks Directory Servers Proxy Servers	Server Groups	Settings	
Manage Registered Directory Servers Image Registered Directory Servers View Replication Topologies Image Registered Directory Data View Suffix Replication Status Image Registered Directory Data View Directory Server Logs Deployment Proxy Server Administration Create New Directory Server Manage Registered Proxy Servers Image Registered Proxy Servers View Proxy Server Logs Create New Directory Server Documentation Create New Proxy Server to Other Servers Browse Directory Service Control Center Online Help Copy Configuration Settings from One Proxy Server to Other Servers Copy Configuration Settings from One Suffix to Other Suffixes Image Registeries from One Suffix to Other Suffixes	Common Tasks			
Manage Registered Directory Servers Image Registered Directory Servers View Replication Topologies Image Registered Directory Data View Suffix Replication Status Image Registered Directory Data View Directory Server Logs Deployment Proxy Server Administration Create New Directory Server Manage Registered Proxy Servers Image Registered Proxy Servers View Proxy Server Logs Create New Directory Server Documentation Create New Proxy Server to Other Servers Browse Directory Service Control Center Online Help Copy Configuration Settings from One Proxy Server to Other Servers Copy Configuration Settings from One Suffix to Other Suffixes Image Registeries from One Suffix to Other Suffixes				
View Replication Topologies Image: Search Directory Data View Suffix Replication Status Image: Browse Directory Data View Directory Server Logs Deployment Proxy Server Administration Create New Directory Server Manage Registered Proxy Servers Image: Copy Configuration Settings from One Directory Server to Other Servers View Proxy Server Logs Create New Proxy Server Documentation Create New Proxy Server to Other Servers Image: Directory Service Control Center Online Help Copy Configuration Settings from One Proxy Server to Other Suffix to Other Suffixes	Directory Server Administration		Directory Entry Management	
View Suffix Replication Status Image Browse Directory Data View Directory Server Logs Deployment Proxy Server Administration Create New Directory Server Manage Registered Proxy Servers Image Copy Configuration Settings from One Directory Server to Other Servers View Proxy Server Logs Create New Proxy Server Documentation Copy Configuration Settings from One Proxy Server to Other Servers Browse Directory Service Control Center Online Help Copy Configuration Settings from One Suffix to Other Suffixes	Manage Registered Directory Servers	i	Create New Entry	
View Directory Server Logs Deployment Proxy Server Administration Create New Directory Server Manage Registered Proxy Servers Copy Configuration Settings from One Directory Server to Other Servers View Proxy Server Logs Create New Proxy Server Documentation Copy Configuration Settings from One Proxy Server to Other Servers Browse Directory Service Control Center Online Help Copy Configuration Settings from One Suffix to Other Suffixes	View Replication Topologies) []	Search Directory Data	
Deployment Proxy Server Administration Create New Directory Server Manage Registered Proxy Servers Copy Configuration Settings from One Directory Server to Other Servers View Proxy Server Logs Create New Proxy Server Documentation Copy Configuration Settings from One Proxy Server to Other Servers Browse Directory Service Control Center Online Help Copy Configuration Settings from One Suffix to Other Suffixes	View Suffix Replication Status	i	Browse Directory Data	
Proxy Server Administration Create New Directory Server Manage Registered Proxy Servers Copy Configuration Settings from One Directory Server to Other Servers View Proxy Server Logs Create New Proxy Server Documentation Copy Configuration Settings from One Proxy Server to Other Servers Browse Directory Service Control Center Online Help Create New Suffix or Replication Topology	View Directory Server Logs			
Manage Registered Proxy Servers I View Proxy Server Logs Copy Configuration Settings from One Directory Server to Other Servers Documentation Copy Configuration Settings from One Proxy Server to Other Servers Browse Directory Service Control Center Online Help Create New Suffix or Replication Topology Copy Configuration Settings from One Suffix to Other Suffixes I			Deployment	
View Proxy Server Logs Create New Proxy Server Documentation Copy Configuration Settings from One Proxy Server to Other Servers Browse Directory Service Control Center Online Help Create New Suffix or Replication Topology Copy Configuration Settings from One Suffix to Other Suffixes 1	Proxy Server Administration		Create New Directory Server	
Documentation Copy Configuration Settings from One Proxy Server to Other Servers i Browse Directory Service Control Center Online Help Create New Suffix or Replication Topology i Copy Configuration Settings from One Suffix to Other Suffixes i	Manage Registered Proxy Servers	i	Copy Configuration Settings from One Directory Server to Other Servers	i
Documentation Browse Directory Service Control Center Online Help Copy Configuration Settings from One Suffix to Other Suffixes	View Proxy Server Logs		Create New Proxy Server	
Browse Directory Service Control Center Online Help Create New Suffix or Replication Topology Create New Suffix or Replication Topology Copy Configuration Settings from One Suffix to Other Suffixes			Copy Configuration Settings from One Proxy Server to Other Servers	i
Browse Directory Service Control Center Online Help Copy Configuration Settings from One Suffix to Other Suffixes			Create New Suffix or Replication Topology	i
Browse Directory Server Enterprise Edition Documentation on docs.sun.com	Browse Directory Service Control Center Online Help		Copy Configuration Settings from One Suffix to Other Suffixes	
	Browse Directory Server Enterprise Edition Documentation on docs.su	n.com		

7. In the list of directory servers, click the desired Directory Server instance.

APPLICATIONS VERSION		REFRESH LOG OUT HELP
User: root Server: rho10wl.vm.fatwire.com	k	
Java™ System Directory Service Control C	چ آن Java	
		Sun™ Microsystems, Inc.
Common Tasks Directory Servers Proxy Servers	Server Groups Settings	

Directory Servers

To manage a server, click a server name. If a server does not appear in the list below, select Register Existing Server from the drop-down menu. >> More on this table

Directory Servers (1)					
New Server Start StopM	lore Server Actions	s 🔽 Filter:	All Items	~	[]→[]
🖉 🗄 🧹 Server	Secure Port 🗻	Operational Status 🔝	Server Group 🗠	Description 🗠	Instance Path 🗠
rho10wl.vm.fatwire.com:389	636	Started			/u01/software/Apps/sun/dsins1

8. In the instance summary screen, click the Entry Management tab.



rho10wl.vm.fatwire.com:389

General	
Description: Instance Path: 7 Location:	rho10wl.vm.fatwire.com:389 Edit /var/opt/sun/dsins1/ Edit Servers with the same Location are grouped together when viewing replication topology

Run Modes and Status

Operational Status:	Started
Read/Write Mode:	Read/Write >>More on read/write mode
Referral Mode:	Disabled

9. In the list of directory entries, navigate to and double-click the **ou=People** node.

	SION					REFRESH	LOG OUT	HELP
User: root_Server: rho10wl.vm.fatwire.com							<u>«</u> .	
Java [™] System Directory Service Control Center						Ê		
							Sun [™] Micros	ystems, Inc.
Directory Servers > rho	o10wl.vm.fatwii	re.com:389						
Server Operation	Suffixes	Entry Management	Schema	Security	Server Configuration			
	rch Acce	ss Control Passwor	rd Policies					

rho10wl.vm.fatwire.com:389 - Browse Data

You can browse LDAP data on this tab. To browse down the Directory Information Tree (DIT), click +. To browse up the DIT, use the View DN drop-down list. To hide the upper levels of the DIT, select a DN and set it as the View DN by clicking Use Selected Entry. To filter entries, use the View Options settings.

/iew DN: dc=vm,dc=fatwire,dc=com (3689 Entries) 💌		Use Selected Entry
cn=Deny Write Access (+) cn=SunMobileAppABService (+) cn=SunMobileAppCalendarService (+) cn=SunMobileAppMailService (+) cn=SunPortalportal1DesktopService (+) cn=SunSoAdapterService (-) cn=Top-level Admin Role (_ cn=Top-level Admin Role (_ cn=Top-level Policy Admin Role (_ cn=Iop-level Policy Role) (_ cn=Iop-level Policy Role)		Selected Entry Edit Entry Delete Entry New Entry Search dn: ou=People,dc=vm,dc=fatwire,dc=com ACIs: 0 Object Class: top, organizationalunit, iplanet-am-managed-people-container Children: 3
 [+] cn=iPlanetAMUserService _ cn=oul=People_dcl=vm_dcl=fatwire_dcl=com [+] cn=srapOatewayAccessService [+] cn=srapNetFileService [+] cn=srapProxyletService [+] cn=srapProxyletService [+] o=CommunitySample [+] o=DeveloperSample 	11	Filter: Full Name (cn) Enter a string to be matched or an LDAP filter. Display: 2 Levels Image: Show Leaf Entries (lowest-level entries) Image: Show Configuration Suffixes
 [+] o=EnterpriseSample [-] o=Internet [+] ou=ClientData [+] ou=DSAME Users [-] ou=Groups [+] ou=WSRPProducersportal1 [+] ou=agents [+] ou=services [+] sunPortalAdminPortalDomainID=defaultDomain 		Refresh View

10. Under the **ou=People** node, select the user whose password you want to modify. then click **Edit Entry** in the "Selected Entry" area.

APPLICATIONS VERSION					REFRESH LOG OUT HELP	
User: root Server: rho10wl.vm.fatwire.o	K					
Java [™] System Directory Service Control Center						
	_	_	_		Sun [™] Microsystems, Inc.	
Directory Servers > rho10wl.vm.fatwire	Directory Servers > rho10wl.vm.fatwire.com:389					
Server Operation Suffixes	Entry Management	Schema	Security	Server Configuration		
Browse Search Acces	s Control Passwor	d Policies				

rho10wl.vm.fatwire.com:389 - Browse Data

You can browse LDAP data on this tab. To browse down the Directory Information Tree (DIT), click +. To browse up the DIT, use the View DN drop-down list. To hide the upper levels of the DIT, select a DN and set it as the View DN by clicking Use Selected Entry. To filter entries, use the View Options settings.

View DN: ou=People	 Use Selected Entry
[+] ou=People	Selected Entry New Entry Searoh dn: uid=amAdmin,ou=People,dc=vm,dc=fatwire,dc=com ACIs: 0 Object Class: iplanet-am-user-service, iplanet-am-managed-person, top, inetadmin, organizationalperson, person, sunamauthaccountlockout, inetuser, sunssoadapterperson, iplanet-am-session-service, sunportalnetletservice, iplanetpreferences, sunportalportal1 desktopperson, sunportalproxyletservice, inetorgperson, sunportalgatewayaccesservice, sunportalnetfileservice Children: 0
	View Options Filter: Full Name (cn) Enter a string to be matched or an LDAP filter.
	Display: 2 Levels ▼ ▼ Show Leaf Entries (lowest-level entries)
	Refresh View

11. Enter the new password into the **Password** and **Confirm Password** fields, then click **OK**.

	ERSION				RE	FRESH LOG OUT HELP
User: root Server: rh						<u>(</u>)
Java [™] System	Directory	Service Control Center				Java
	_		_	_	_	Sun [™] Microsystems, Inc.
Directory Servers > r	ho10wl.vm.fatwi	re.com:389 Data Browse > amAdmir	n Properties			
Entry Overview	Text View					
rho10wl.vm.fatv	vire.com:38	9 - amAdmin - Entry Overvi	ew			OK Cancel
× Required Attributes	s × Other					
≈ Allowed Attributes						4
						* Indicates required field
Required Attrib	utes					
* Full Name (cn):	amAdmin					
* Last Name (sn):	amAdmin					
Back to top						
Allowed Attribu	tes					
First Name (giveni	name):					
User ID (uid):			amAdmin			
Password (userPa	assword):		*****]
Confirm Passwor	d:		*****]
E-mail (mail):						
Telephone Numbe	r (telephoneNur	nber):				
Fax Number (facs	imileTelephonel	lumber):				
Locality (I):						
Organization (o):						
Organizational Un	it (ou):					
aci:						
adminRole:						
audio:						

12. Repeat steps 10 an 11 for each additional user whose password you want to modify.

Modifying User Passwords

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Modifying User Passwords

Chapter 13 Installing Active Directory Server 2008

This chapter includes the following sections:

- Installation Steps
- Configuring the Network Settings
- Installing Active Directory 2008 Services
- Installing Active Directory 2008 Installation Wizard
- Checking Group Policies
- Changing Group Policies

Installation Steps

- 1. Install the Operating System:
 - a. Install Windows Server 2008 (any Windows server except Web).
 - **b.** When the installation is complete, leave the installation disc in the drive, you will need it to complete the installation of ADS.
 - c. Set the Computer's Name and Suffix.
- 2. Open the "System Properties" dialog box.
 - **a.** Click **Start**, then right-click the computer icon.
- 3. In the "System" window select Advanced system settings.

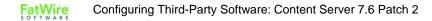
🛃 System			<u>_ </u>
Control Panel + Syste	em	▼ 🚱 Search	P
<u>File E</u> dit <u>V</u> iew <u>T</u> ools <u>H</u> elp			
Tasks Image: Device Manager Image: Remote settings Image: Remote settings Image: Advanced system settings	View basic information about Windows edition		•
	System — Processor: Memory (RAM): System type: Computer name, domain, and wc	AMD Athlon(tm)64 X2 Dual Core Processor 4600+ 1 2.00 GB 64-bit Operating System	.00 GHz
	Computer name, utiliarin, and we Computer name: Full computer name: Computer description: Workgroup:	windows2008sql2005sp2 windows2008sql2005sp2 windows2008sql2005sp2 s1WEST	
See also Windows <u>U</u> pdate	Windows activation — Windows is activated Product ID: 55041-222-0116	5321-76958 《Change product key	earn more online

- 4. Select the Computer Name tab.
 - a. Click Change.



- 5. In the pop-up window that appears, fill in the following fields:
 - **Computer name**: Enter the name you wish to designated for your computer. (Make a record of this name).
 - **Member of**: Select the **Workgroup** radio button, then enter a unique workgroup name. (Make a record of this name).

Computer Name/Domain Changes	×
You can change the name and the membership of this computer. Changes might affect access to network resources. <u>More information</u>	
Computer name:	
windows2008sql2005sp2	
Full computer name: windows2008sql2005sp2	
More	
Member of	
C Domain:	
Workgroup:	
ADFATWIRE	
OK Cancel	



a. Click More...

DNS Suffix and NetBIOS Computer Name	2		x
Primary DNS suffix of this computer:			
vm.fatwire.com			
$\overline{\mathbf{V}}$ Change primary DNS suffix when domain	membership cha	nges	
NetBIOS computer name: WINDOWS2008SQL2			
This name is used for interoperability with olde	er computers and	services.	
	ОК	Cancel	

- **b.** In the "DNS Suffix and NetBIOS Computer Name" dialog box fill in the fields:
- **Primary DNS suffix of this computer**: Enter the DNS suffix of your computer (Make a record of this suffix).
- Change Primary DNS Suffix when domain membership changes: If checkbox is selected, deselect it.
- c. Click **OK** to close the dialog box.
- 6. In the "Computer Name/Domain Changes" dialog box, click OK.
- 7. In the "System Properties" window click Close.
- 8. In the reboot dialog box click Restart Later.

Microsoft Windows	×	
You must restart your computer to apply these changes		
Before restarting, save any open files and close all programs.		
Restart Now Restart Later		

Configuring the Network Settings

To configure the network settings:

- 1. Open "Network Properties."
 - a. Select Start > Control Panel.
 - b. Click the Network and Sharing Center icon.
 - **c.** Select the Network Connection to edit (if you have more than one see ipconfig result, make sure to select the correct one).

letwork and Sharing Center			
🕞 🗸 🔹 🗸 Control Panel 🗸 N	etwork and Sharing Center	👻 🚱 Search	
Edit View Tools Help			
Tasks	Network and Sharing Cente	r	(
View computers and devices			View full map
Connect to a network			
Set up a connection or network			
Manage network connections	WINDOWS20085	OL2 Multiple networks	
Diagnose and repair	(This compute		Internet
	Network (Public network)		Customize
	Access	Local only	
	Connection	Local Area Connection	View status
		Local Area Connection	new status
	💐 Unidentified network (F	Public network)	Customize
	Access	Local only	
	Connection	Local Area Connection 2	View status
	Sharing and Discovery		
	Network discovery	Custom	•
	File sharing	On On	•
See also	Public folder sharing	© Off	•
Internet Options	Printer sharing	© Off	•
Windows Firewall	Password protected sharing		

2. Select View Status, located next to the network connection you have selected.

3. Click Properties.

Ι

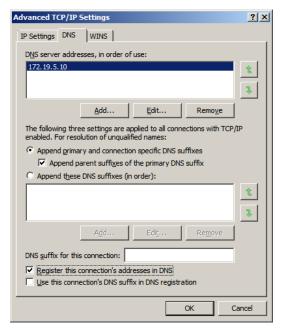
Local Area Connection 2 Status		x
General		_,
Connection		.
IPv4 Connectivity:	Local	
IPv6 Connectivity:	Limited	
Media State:	Enabled	
Duration:	00:50:41	
Speed:	1.0 Gbps	
Details		
Activity		.
Sent — 💐 —	Received	
Packets: 264	167	
Properties Disable Diagnose]	
	Close	

4. Select Internet Protocol Version 4 (TCP/Iv4).

Local Area Connection 2 Properties	x		
Networking Sharing			
Connect using: Intel(R) PRO/1000 MT Network Connection #2 MAC Address: 00 Contingure	- -0C-2		
This connection uses the following items:	1		
 Client for Microsoft Networks QoS Packet Scheduler File and Printer Sharing for Microsoft Networks Internet Protocol Version 6 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4) 			
Install Uninstall Properties			
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.			
OK Cancel			

- a. Set the IP address to an unused, static IP address.
- **b.** Set the preferred DNS server to your computer's IP address.

c. Click Advanced:



- Select the check box Append primary and connection-specific DNS suffixes.
- Select the check box Append parent suffixes of the primary DNS suffix.
- 5. Click on until you have exited the properties pane, then click Close.
- 6. Restart the computer.

Installing Active Directory 2008 Services

- 1. Select Start > Server Manger.
- 2. In the "Roles" section click Add Roles.

🖺 Server Manager				<u>- 0 ×</u>
File Action View Help				
(= -) .				
Server Manager (WINDOWS2008SQL2)	Server Manager (WINDOWS2008SQL2)			
Roles Features Diagnostics				
Features	3			
Diagnostics	Get an overview of the status of	this server, perform top management tasks, and add or rem	ove server roles and features.	
Configuration Storage	Last Il Istalieu upuates.	2/10/2000 J.20 MM		
otorage		2, 20, 2000 0, 20, 7, 1		-
	IE Enhanced Security Configuration	On for Administrators		
	(ESC):	On for Users		
	Roles Summary		Roles Summary Help	
	Roles: 1 of 17 installed		Go to Roles	
			Add Roles	
	Web Server (IIS)			
			E Remove Roles	
	Contractor Commence		Features Summary Help	
	 Features Summary 		Peatures summary Help	- 1
	Features: 3 of 34 installed		Add Features	
			Remove Features	
	.NET Framework 3.0 Features			_
	.NET Framework 3.0			
	XPS Viewer			
	WCF Activation			
	HTTP Activation			
	Non-HTTP Activation			
	Remote Server Administration Tools			
	Role Administration Tools			
	Web Server (IIS) Tools			
	Windows Process Activation Service			
	Process Model			
	.NET Environment			
	Configuration APIs			•
• •	🔇 Last Refresh: 2/19/2008 12:14:18 PM Cor	nfigure refresh		

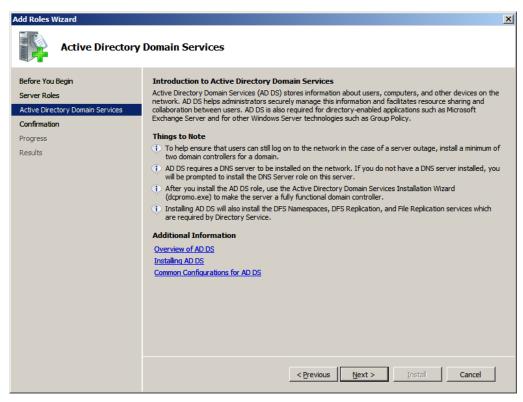
3. In the "Add Roles Wizard" click **Next**.

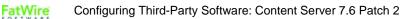
Add Roles Wizard		X
Before You Begin		
Before You Begin Server Roles Confirmation Progress Results	This wizard helps you install roles on this server. You determine which roles to install based on the tasks you want this server to perform, such as sharing documents or hosting a Web site. Before you continue, verify that: • The Administrator account has a strong password • Network settings, such as static IP addresses, are configured • The latest security updates from Windows Update are installed If you have to complete any of the preceding steps, cancel the wizard, complete the steps, and then run the wizard again. To continue, dick Next. If glip this page by default	
	< Previous Next > Install Cancel	

4. Select Active Directory Domain Services and click Next.

Add Roles Wizard		×
Select Server Ro	les	
Before You Begin Server Roles Active Directory Domain Services Confirmation Progress Results	Select one or more roles to install on this server. Roles: Active Directory Certificate Services Active Directory Pederation Services Active Directory Federation Services Active Directory Lightweight Directory Services Active Directory Rights Management Services Application Server DHCP Server DHS Server Fax Server Pint Services DDD Services Web Server (ITS) (Installed) Windows Deployment Services 	Description: Active Directory Domain Services (AD DS) stores information about objects on the network and makes this information available to users and network administrators. AD DS uses domain controllers to give network users access to permitted resources anywhere on the network through a single logon process.
	< Previous Next	> Install Cancel

5. Review the list of additional services to be installed along with Active Directory and click **Next**.





6. Click Install to begin installation of "Active Directory 2008."

Add Roles Wizard		×
Confirm Installat	ion Selections	
Before You Begin Server Roles Active Directory Domain Services Confirmation Progress	To install the following roles, role services, or features, dick Install.	_
Results	Active Directory Domain Services After you install the AD DS role, use the Active Directory Domain Services Installation Wizard (dcpromo.exe) to make the server a fully functional domain controller. Print, e-mail, or save this information	
	< Previous Next > Install Cancel]

7. Allow the installation to complete.

Add Roles Wizard	
Installation Progr	ess
Before You Begin Server Roles Active Directory Domain Services Confirmation Progress Results	Active Directory Domain Services
	Initializing installation < <u>Previous</u> <u>Next</u> > <u>Install</u> <u>Cancel</u>

8. Review the results of the "Add Roles Wizard" page. Click: Close this wizard and launch the Active Directory Domain Services Installation Wizard (dcpromo.exe).

Add Roles Wizard		×
Installation Results		
Before You Begin Server Roles Active Directory Domain Services Confirmation Progress Results	The following roles, role services, or features were installed successfully:	
	Print, e-mail, or save the installation report < Previous Next > Close Cancel]

Installing Active Directory 2008 Installation Wizard

1. In the welcome screen click Next.

🔂 Active Directory Domain Services Installation Wizard		
	Welcome to the Active Directory Domain Services Installation Wizard	
	Services (AD DS) on this server, making the server an Active Directory domain controller. To continue, click Next.	
	Leam more about the additional options that are available in <u>advanced mode installation</u> .	
	More about <u>Active Directory Domain Services</u>	
	< Back. Next > Cancel	

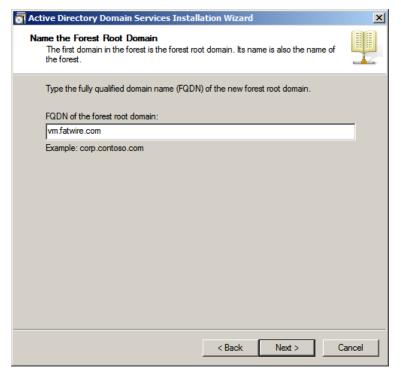
2. In the "Operating System Compatibility" screen click Next.

🐻 Active Directory Domain Services Installation Wizard	×
Operating System Compatibility Improved security settings in Windows Server 2008 affect older versions of Windows	
Windows Server 2008 domain controllers have a new more secure default for the security setting named "Allow cryptography algorithms compatible with Windows NT 4.0." This setting prevents Microsoft Windows and non-Microsoft SMB "clients" fror using weaker NT 4.0 style cryptography algorithms when establishing security channe sessions against Windows Server 2008 domain controllers. As a result of this new default, operations or applications that require a security channel serviced by Windows Server 2008 domain controllers might fail. Platforms impacted by this change include Windows NT 4.0, as well as non-Microsoft SMB "clients" and network-attached storage (NAS) devices that do not support stronger cryptography algorithms. Some operations on clients running versions of Windows earlier than Vista with Service Pack 1 are also impacted, including domain join operations performed by the Active Directory Migration Tool or Windows Deployment Services. For more information about this setting, see Knowledge Base article 942564 (http://go.microsoft.com/fwlink/?LinkId=104751).	n nel vft
< Back Next > Car	ncel

3. In the "Choose a Deployment Configuration" screen select Create a new Domain in a forest, then click Next.

Active Directory Domain Services Installation Wizard	×
Choose a Deployment Configuration You can create a domain controller for an existing forest or for a new forest.	
O Existing forest	
\mathbf{C} $ riangledd a$ domain controller to an existing domain	
C Greate a new domain in an existing forest This server will become the first domain controller in the new domain.	
• Create a new domain in a new forest	
More about possible deployment configurations	
< <u>B</u> ack <u>N</u> ext >	Cancel

- 4. Name the "Forest Root Domain":
 - Enter the name of the new forest, which is the DNS root domain that you created a. previously. Click Next.



b. Allow the check dialog to complete.



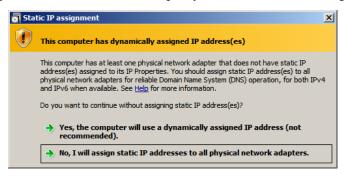
5. In the "Set Forest Functional Level" screen select **Windows Server 2008**, then click **Next**.

\overline Active Directory Domain Services Installation Wizard	×
Set Forest Functional Level Select the forest functional level.	
Eorest functional level:	
Windows Server 2008	-
<u>D</u> etails:	
This forest functional level does not provide any new features over the Windows 2003 forest functional level. However, it ensures that any new domains created in this forest will automatically operate at the Windows Server 2008 domain functional level, which does provide unique features.	A
You will be able to add only domain controllers that are running Windows Server 2008 or later to this forest.	
More about <u>domain and forest functional levels</u>	
< <u>B</u> ack <u>N</u> ext >	Cancel

6. In the "Additional Domain Controller Options" screen, ensure that **DNS Server** is selected, then click **Next**.

🖥 Active Directory Domain Services Installati	on Wizard		×
Additional Domain Controller Options			
Select additional options for this domain control	ler.		
DNS server			
🔽 Global catalog			
Read-only domain controller (RODC)			
Additional information:			
cannot be an RODC. We recommend that you install the DNS Serv controller.	ver service on	the first domain	T
More about additional domain controller option	<u>15</u>		
	< Back	Next >	Cancel

• If you have a DHCP based adapter you will see the following pop-up message:



Select **No, I will assign static IP addresses to all physical adapters** to continue with the installation. After the installation completes you can change any DHCP adapter back.

7. If the DNS zone you are creating does not have an authoritative parent zone, the following pop-up message may be displayed:



Select Yes to continue with the installation.

8. In the "Location for Database, Log Files, and SYSVOL" screen select the default in the **Database folder** field or change it as required by your system, then click **Next**.

\overline Active Directory Domain Services Installation Wizard		×
Location for Database, Log Files, and SYSVOL Specify the folders that will contain the Active Directory domain controll database, log files, and SYSVOL.	er 📕	
For better performance and recoverability, store the database and log fil volumes.	es on separate	
Database folder:		
C:\Windows\NTDS	Browse	
Log files folder:		
C:\Windows\NTDS	Browse	
, SYSVOL folder:		
C:\Windows\SYSVOL	Browse	
More about <u>placing Active Directory Domain Services files</u>		
< Back Next >	Cance	÷I

9. In the "Directory Services Restore Mode Administrator Password" screen, enter a password and make a record of it.

\overline Active Directory Domain Services Installation Wizard	×
Directory Services Restore Mode Administrator Password	
The Directory Services Restore Mode Administrator account is different from the domain Administrator account. Assign a password for the Administrator account that will be used when this domain controller is started in Directory Services Restore Mode. We recommend that you choose a strong password.	n
Password: Confirm password:	
More about Directory Services Restore Mode password	
< Back Next > Can	ncel

- **10.** In the "Summary" screen:
 - **a.** Review your settings.
 - **b.** Export your settings.
 - c. Click Next.

ctive Directory Domain Services Installation Wizard	
Summary	
Review your selections:	
Configure this server as the first Active Directory domain controller in a new forest.	
The new domain name is vm.fatwire.com. This is also the name of the new forest.	
The NetBIOS name of the domain is VM	
Forest Functional Level: Windows Server 2008	
Domain Functional Level: Windows Server 2008	
Site: Default-First-Site-Name	
Additional Options:	•
To change an option, click Back. To begin the operation, click Next.	
These settings can be exported to an answer file for use with other unattended operations. More about <u>using an answer file</u>	s
< Back Next >	Cancel

11. Wait for the installation to complete.



12. In the Active Directory Domain Services Installation Wizard, click **Finish** to complete the installation.

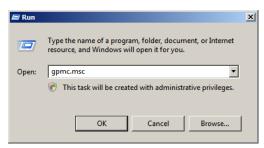
Active Directory Domain	Services Installation Wizard	×
	Completing the Active Directory Domain Services Installation Wizard Active Directory Domain Services is now installed on this computer for the domain vm fatwire.com. This Active Directory domain controller is assigned to the site Default-First-Site-Name. You can manage sites with the Active Directory Sites and Services administrative tool.	
	K Back Finish Cance	

13. Reboot the System.

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Checking Group Policies

- 1. Select Start > Run.
 - **a.** Enter gpmc.msc in the available field.
 - **b.** Click **OK**.



2. "Group Policy Management" opens.

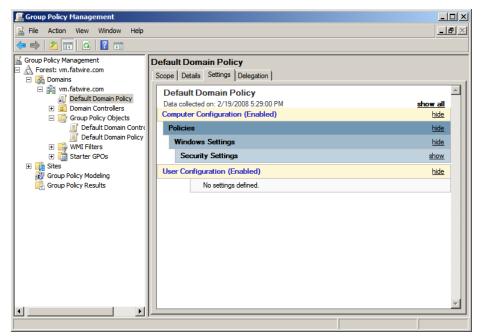
🛃 Group Policy Management	
🔜 File Action View Window	Help _BX
Image: Group Policy Management Image: The second secon	Group Policy Management Contents Name *

199

a. Expand the tree **Domains** > *your domain name*, then select **Default Domain Policy**, located in the left panel of the "Group Policy Management" screen.

🔜 Group Policy Management	
File Action View Window Help	_ 8 ×
(= =) (2 🗊 🖸 (= =	
Group Policy Management Group Policy Management Forest: vm.fatwire.com □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Default Domain Policy Scope Details Settings Delegation Links Display links in this location: The following sites, domains, and OUs are linked to this GPO: Location ▲ Enforced Umfatwire.com No Yes vmfatwire.com Image: Security Filtering No The settings in this GPO can only apply to the following groups, users, and computers: Name ▲ Add Remove Properties WMI Filtering This GPO is linked to the following WMI filter: Grone> Open

b. Select the **Settings** tab.



E Group Policy Management		<u>_ ×</u>
File Action View Window Help		_ Ð ×
🗢 🔿 🙋 🖬 🙆 📝 🖬		
Group Policy Management	Default Domain Policy	
Forest: vm.fatwire.com	Scope Details Settings Delegation	
□ 📑 vm.fatwire.com	Default Demois Deliau	
Default Domain Policy	Default Domain Policy Data collected on: 2/19/2008.5:29:00 PM	show all
⊡ Domain Controllers	Computer Configuration (Enabled)	hide
Group Policy Objects Default Domain Contro	Policies	
Default Domain Contro		hide
E Scherberger	Windows Settings	hide
🕀 🛅 Starter GPOs	Security Settings	hide
Sites Group Policy Modeling	Account Policies/Password Policy	hide
Group Policy Results	Policy Setting	
	Enforce password history 24 passwords remembered	
	Maximum password age 42 days	
	Minimum password age 1 days	
	Minimum password length 7 characters	
	Password must meet complexity Enabled requirements	
	Store passwords using reversible Disabled encryption	
	Account Policies/Account Lockout Policy	show
	Account Policies/Kerberos Policy	show

c. Expand Security > Account Policy/Password Policy section, by clicking <u>show</u>.

3. Review the "Policy" list. The option **Password must meet complexity requirements** is set to true by default. Change this option to **Disabled** (default Content Server passwords do not meet these requirements).

Changing Group Policies

- 1. Select Start > Run.
 - **a.** Enter: gpmc.msc in the field provided.
 - **b.** Click **OK**.

🖅 Run		×
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.	
Open:	gpmc.msc 💌	
	🕐 This task will be created with administrative privileges.	
	OK Cancel Browse	

In the "Group Policy Management" screen expand the tree Domains > name of your domain. Select the Default Domain Policy, located on the right of the screen, then select edit.

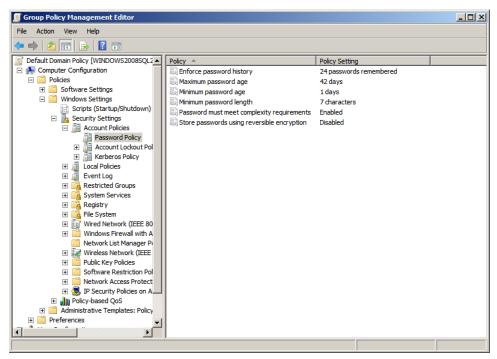
Security Filtering
The settings in this GPO can only apply to the following groups, users, and computers: Name

3. The "Group Policy Management Editor" window opens.

🗐 Group Policy Management Edit	or	<u> </u>
File Action View Help		
🗇 🔿 🔲 🖬 📓 🖬		
Policies Preferences Preferences Preferences Preferences	Select an item to view its description.	
I D	Extended Standard	

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a. In the left hand tree expand: Computer Configuration > Policies > Windows Settings > Security Settings > Account Settings > Password Policy



- **b.** Right-click **Password must meet complexity requirements**, located on the right side of the screen, then select **Properties**.
- **c.** In the "Password must meet complexity requirements Properties" dialog box select the radio button **Disabled**, then click **OK**.

Security Policy Setting Explain Password must meet complexity requirements C Define this policy setting: C Enabled
Define this policy setting:
C Enabled
O Disabled
OK Cancel Apply

- **d.** Close the "Group Policy Management Editor" and "Group Policy Management" windows.
- **4.** The domain will no longer check for password complexity. Content Server default passwords can now be used.

When Content Server is installed you can reverse step 2 by clicking **Enabled** to reengage the security settings.

Connecting to ADS Using an LDAP Browser

This section shows you how to connect to Active Directory Server using an LDAP browser.

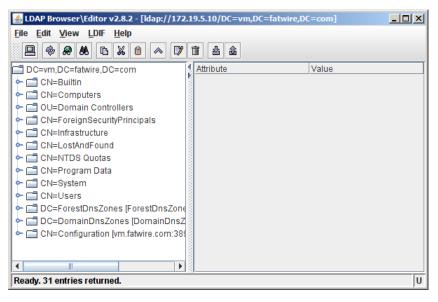
Note

You cannot add groups, set passwords, or activate accounts using an LDAP browser.

- **1.** Open the LDAP browser.
- 2. Select the Quick Connect tab.
- **3.** Fill out the following information:
 - Host: localhost (if connecting remotely, enter the actual host name)
 - **Base DN:** <DNS_suffix> (the part of the DNS name after the host name)
 - Anonymous bind: deselect
 - User DN: administrator@<DNS_suffix>
 - Append base DN: deselect
 - **Password:** <ADS_password> (you created this password in step 9 on page 196)
- 4. Click Connect.

🕌 Edit Ses	sion	X
Name	Connection Options	
- Host Info		
Host:	localhost	Port: 389 Version: 3 💌
Base DN:	DC=vm,DC=fatwire,DC=com	•
	Fetch DNs SSL	Anonymous bind
- User Info		
User DN	Administrator@vm.fatwire.com	📄 append base DN
Password		
		Save Cancel

5. Show the default view on the LDAP tree.



Chapter 14 Setting Up IBM Tivoli Directory Server 6.x

This chapter contains the following sections:

- IBM Tivoli Directory Server Commands
- Before Installing IBM Tivoli Directory Server
- Installing IBM Tivoli Directory Server
- Configuring Tivoli Directory Server
- Connecting to IBM TDS Using the LDAP Browser

Note

In this guide, Tivoli Directory Server is also referred to as "TDS."

IBM Tivoli Directory Server Commands

Table 4: IBM Tivoli Directory Server Commands

Action	Command	
Starting an instance	<ldap directory="" install="">/sbin/idsslapd -I <instance name=""></instance></ldap>	
Stopping an instance	<pre><ldap directory="" install="">/bin/ibmdirctl stop -h localhost -D cn=root -w <password cn="root" for=""></password></ldap></pre>	
Checking an instance	<ldap directory="" install="">/bin/ibmdirctl status -h localhost -D cn=root -w <password entered="" for<br="">cn=root></password></ldap>	
Displaying list of instances	<ldap directory="" install="">/sbin/idsilist</ldap>	
Loading the instance administration tool	<ldap directory="" install="">/sbin/idsxinst</ldap>	
Loading the configuration tool for an instance	<ldap directory="" install="">/sbin/idsxcfg -I <name instance="" of=""> IBM Tivoli Directory Server Configuration Tool File Help Choose a task: Overview Manage administr Manage schemafic Manage schemafic</name></ldap>	
	Admin password Configured If you want to configure the current instance as a Proxy server, refer to the IBM Tivoli Directory Server Administration Guide:	

Before Installing IBM Tivoli Directory Server

- 1. Create the following group: idsldap
- 2. Create a user for the LDAP instance and write down the password, for example, ldapdb2. This password will be used in step 7 of "Installing IBM Tivoli Directory Server."
- 3. Check that pdksh is installed.

Installing IBM Tivoli Directory Server

- 1. Download the Tivoli Directory Server from IBM.
- 2. Unzip the archive into a temporary directory.
- **3.** Go to the temporary directory and run:

./install_ldap_server.

root@rh4u5asoracle120gr2sjes5:/u01/Downloads	. 🗆 🗙
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>T</u> erminal Ta <u>b</u> s <u>H</u> elp	
creating: rspfile/	*
inflating: rspfile/amwpmcfg.rsp.template	
inflating: rspfile/install_amacld.options.template	
inflating: rspfile/install_amadk.options.template	
inflating: rspfile/install_amjrte.options.template	
inflating: rspfile/install_ammgr.options.template	
<pre>inflating: rspfile/install_amproxy.options.template inflating: rspfile/install_amrte.options.template</pre>	
inflating: rspfile/install_amwpm.options.template	
inflating: rspfile/install_ldap_server.options.template	
inflating: rspfile/pdjrtecfg.rsp.template	
inflating: rspfile/pdproxycfg.rsp.template	
inflating: rspfile/amauditcfg.rsp.template	
inflating: am_update_ldap.sh	
inflating: tamtblcp.ksh	
inflating: install_ldap_server	
inflating: install_ldaps_setup.jar	
creating: spd/	
inflating: spd/ldaps.spd.template	
[root@rh4u5asoracle120gr2sjes5 Downloads]# 1s	
am_update_ldap.sh EIC install_ldaps_setup.jar rspfile	
C87B9ML.zip help LAP spd	
common install_ldap_server linux_i386 tamtblcp.ks	h 🖉
[root@rh4u5asoracle120gr2sjes5 Downloads]# ./install_ldap_server	*

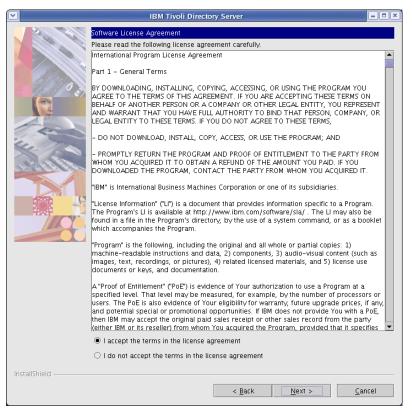
4. When the installation dialog box appears, select your language and click OK.

IBM Tivoli D	irectory Server 🖉 🗕 🗶
<u>S</u> elect a language to	be used for this wizard.
English	•
<u>0</u> K	<u>C</u> ancel

5. Click Next.

	IBM Tivoli Directory Server	- = ×
	Welcome to the InstallShield Wizard for IBM Tivoli Directory Server	
	The InstallShield Wizard will install IBM Tivoli Directory Server on your computer. To continue, choose Next. IBM Tivoli Directory Server International Business Machines Corporation www.ibm.com	
InstallShield	< Back Next >	ncel

6. On the "License Agreement" screen select I Accept the terms in this license agreement, then click Next.



- 7. On the first configuration screen, fill in the fields:
 - **DB2 administrator ID**: Name of the user you created for the LDAP instance.
 - **DB2 administrator password**: Enter the password (ldapdb2) given to the LDAP instance user in step 2, "Before Installing IBM Tivoli Directory Server."
 - Keep the default values for the other fields.
 - Click Next.

	IBM Tivoli Directory Server
	IBM Tivoli Directory Server
	To configure IBM Tivoli Directory Server, specify the following database information. DB2 administrator ID (also used for the instance name) *
4]dapdb2
For	DB2 administrator password *
4. 7.	****
all.	Password confirmation *
D. S. B. B. B. B.	nonenan anderen and the second se
	Group for the DB2 administrator (UNIX)
	root 🗾
HEAT	Create the DB2 administrator if it does not already exist
	Directory server database home *
	J/home/Idapdb2
	DB2 database name *
	amdb
	Encryption seed *
	0123456789012
InstallShield	
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel Help

- **8.** On the second configuration screen, fill in the fields:
 - **a.** Administrator password: Enter a password and remember it. This password will re-occur throughout the configuration and will be referred to as sn=root.
 - b. User-defined suffix: dc=<domain>, dc=<ext> For example, if your domain is fatwire.com, then the User-defined suffix should read: dc=fatwire,dc=com.
 - c. Confirm that the Local hostname is correct.
 - d. Click Next.

	IBM Tivoli Directory Server
3 6	IBM Tivoli Directory Server
	To configure IBM Tivoli Directory Server, specify the following database information.
1. m	Administrator ID *
	[cn=root
19 19 19 19	Administrator password *
	Tenner-tenne
	Password confirmation *
HAR .	
	User-defined suffix *
	[dc=fatwire,dc=com
	Local host name *
	directoryserver.fatwire.com
InstallShield	
instanzinera -	
	< Back Next > Cancel Help

- **9.** On the third configuration page:
 - **a.** Fill in the fields:
 - **SSL key file password**: Enter a password for SSL.
 - **Non-SSL port**: Confirm the Non-SSL port value is set to 389. If the Non-SSL has been changed, use the new value when installing CS.
 - b. Click Next.

	IBM Tivoli Directory Server
	IBM Tivoli Directory Server
	To configure IBM Tivoli Directory Server, specify the following database information.
4	[389
Ter	SSL port *
ile The	<u>j</u> 636
dialo.	SSL key file with full path *
200200	j/opt/ibm/ldap/V6.0/lib/am_key.kdb
	Browse SSL key file password * SSL key file password confirmation * SSL key file Password confirmation * Certificate label [PDLDAP Create SSL key file Enable Federal Information Processing Standards (FIPS)
InstallShield	,
	< Back Next > Cancel Help

	IBM Tivoli	Directory Server	//////////////////////////////////////			
2 40 60	This information shows disk space available and space required by the installation.					
	File system	Space required (KB)	Space available (KB)			
	/home/ldapdb2 (/dev/map	81920	8228732			
	/var (/dev/mapper/VolGrou	4	8228728			
and the second	/etc (/dev/mapper/VolGrou	8	8228724			
61216	/opt/ibm/Idap (/dev/mappe	. 97118	8228720			
	/opt/IBM/Idap/V6.0 (/dev/	58492	8228716			
	/usr/local/ibm/gsk7 (/dev/	12408	8228712			
	/opt/IBM/db2 (/dev/mappe	350929	8228712			
InstallShield	Component disk space details IBM DB2 Space required (KB): 350929 IBM Global Security Kit Space required (KB): 12408 IBM Tivoli Directory Client Space required (KB): 58504 IBM Tivoli Directory Server Space required (KB): 97118 Directory server database hon					
		< <u>B</u> ack <u>N</u> ext >	<u>C</u> ancel Help			

10. Confirm that enough disk space exists for the installation to succeed and click **Next**.

11. Review the summary and click **Next**.

	IBM Tivoli Directory Server					
200	Review the configuration options. Go back to change a value or proceed to begin the installation.					
	IBM DB2 = Not Installed					
	IBM Global Security Kit = Not Installed					
0	IBM Tivoli Directory Client = Not Installed					
	IBM Tivoli Directory Server = Not Installed					
	IBM Tivoli DirectoryServer = Not Installed DB2 administrator ID (also used for the instance name) = Idapdb2 DB2 administrator password = ******* Create the DB2 administrator (I to does not already exist = Yes Group for the DB2 administrator (UNIX) = root Directory server database name = /home/Idapdb2 DB2 database name = amdb Encryption seed = 0123456789012 Administrator D = cn =root Administrator password = ******** User-defined suffix = dc=fatWire,dc=com Local host name = rh4u5asoracle120gr2sjes5.vm.fatWire.com Non-SSL port = 336 SSL key file with full path = /opt/ibm/idap/V6.0/lib/am_key.kdb Create SSL key file = Yes SSL key file sword = ******* Certificate label = PDLDAP Enable Federal Information Processing Standards (FIPS) = No					
InstallShield						
	< <u>Back</u> <u>Next</u> <u>Cancel</u> He	elp				

12. Wait for the installer to finish.

	IBM Tivoli Directory Se	erver		_ = = ×
2000	IBM Tivoli Directory Server			
	Installing IBM DB2			
		5%		
		5%		
installShield -				
		< <u>B</u> ack	Next >	<u>C</u> ancel

- Istallation/Configuration has completed successfully.

 Status Details:

 Installed: IBM License Agreement Files

 Installed: IBM License Agreement Files

 Installed: IBM Thooli Directory Client

 Installed: IBM Thooli Directory Server

 Configured: IBM Thooli Directory Server

 Configured: IBM Thooli Directory Server

 Installed: IBM Thooli Directory Server

 Configured: IBM Thooli Directory Server

 Installed: IBM Thooli Directory Server

 Configured: IBM Thooli Directory Server

 Installed: IBM Thooli Directory Server

 Configured: IBM Thooli Directory Server

 Configured: IBM Thooli Directory Server

 InstallShield

 InstallShield
- **13.** Click **Finish**. The installation is now complete.

Configuring Tivoli Directory Server

Note

Only IBM TDS with sha encryption is supported by Content Server.

1. In a text editor open:

/home/<ldap user>/idsslapd-<ldap user>/etc/ibmslapd.conf.

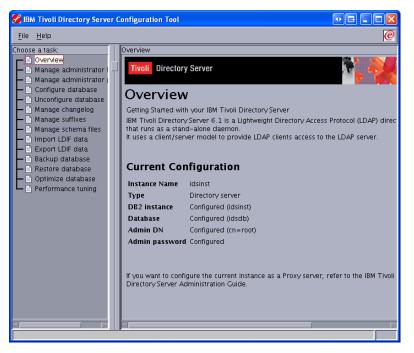
- 2. Search for the ibm-slapdPwEncryption parameter and change the value to sha.
- **3.** Save the change in the text editor.

Completing and Verifying the LDAP Configuration

1. Start the IBM TDS instance:
 <LDAP Install directory>/sbin/idsslapd -I <instance name>

2. Start the IBM TDS instance configuration tool (your display must be set in order to continue the configuration process):

<LDAP Install directory>/sbin/idsxcfg -I <name of instance>



3. Select Manage suffixes.

🍪 IBM Tivoli Directory Server Configuration Tool 🛛 🕕 🖪	
<u>F</u> ile <u>H</u> elp	Ø
Choose a task: Overview Manage administrator I Manage administrator I Manage administrator I Manage administrator I Manage administrator I Manage administrator I Manage administrator I Current suffix DNs Current suff	<u>A</u> dd <u>R</u> emove
Note: Removing a suffix eliminates access to all directory data beneath that suffix; however, the data is not removed from the directory.	11-1- 2
<u></u>	Help ?

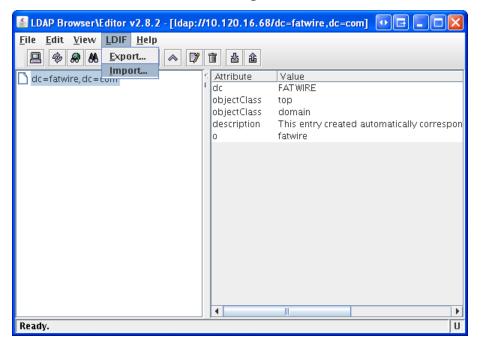
4. Make sure the User-defined suffix that was specified during installation appears in the list, then click **OK**.

Importing an LDIF file (LDAP Browser)

1. Start the IDM TDS instance:

<LDAP Install directory>/sbin/idsslapd -I <instance name>

- Connect to IBM TDS using the LDAP browser, for instructions see "Connecting to IBM TDS Using the LDAP Browser," on page 222.
- 3. Select: dc=<domain>,dc=<ext>
 - a. Click the LDIF menu, and select Import.



4. Click the Add only button.

🕌 LDIF Im	port 💀 🖬 🗖 🔀					
LDIF File:						
- Import n	ethod					
	Add only					
O Update only						
🔾 Update/Add						
	Import Cancel					

5. Browse to the LDIF file <cs_install_dir/ldap>/tivolildap.ldif and click OK.

🕌 Choose file		
Look <u>I</u> n:	dap	▼ @ <u> </u>
🗋 tivolildap.le	dif	
File Namer	ti alilaa lalif	
File <u>N</u> ame:	tivolildap.ldif	
Files of <u>T</u> ype:	LDIF files (Idif)	•
		OK Cancel

6. Click Import.

```
Note
```

The root entry will fail to import because it already exists, but all others will import successfully.

7. Click OK.



Importing an LDIF file (Configuration Tool)

1. Convert the LDIF file to Unix format using the dos2unix utility.

```
- Linux:
dos2unix <tivolildap.ldif>
```

- Solaris: mv tivolildap.ldif > tivolildap2.ldif dos2unix tivoli.ldap2.ldif > tivolildap.ldif
- 2. Stop the IBM TDS instance:

```
<LDAP Install directory>/bin/ibmdirctl stop -h localhost -D cn=root -w <password for cn=root>
```

3. Start the IBM TDS instance configuration tool (your display must be set in order to continue with the import process):

<LDAP Install directory>/sbin/idsxcfg -I <name of instance>

4. Select Import LDIF data.

💋 IBM Tivoli Directory Server Configuration Tool		
<u>File H</u> elp		(C
Choose a task: Overview Manage administrator DN Configure database Unconfigure database Manage changelog Manage suffixes Manage suffixe	Import LDIF data Enter the path and name of the LDIF file (on the LDAP server) fr Note: Before importing an LDIF file Use this panel to import data Path and LDIF file name Remove trailing spaces in Standard import or Buikload Standard import Cotat validation only Schema checking is done on the data, but the data is not added to the directory. Warning: To improve performance Buikload does not check the correctness of the data. Run Data validation only the LDIF file before attempting buikload. Start time Task messages	

- 5. Click Browse.
- 6. Browse to the LDIF file you wish to import and click OK.

🕅 Browse	
Enter <u>p</u> ath or folder name: /u01/CS/WebSphere/cs75/	Idap
Filte <u>r</u> * V Folders ·-	Files tivolildap.ldif
Enter file name:	
tivolildap.ldif	
<u>O</u> K <u>U</u> pdate	<u>C</u> ancel <u>H</u> elp

7. Click Import.

<u>File</u> Help	. 🗆 🗙
	Ø
Choose a task: Manage administrator DN Manage administrator password Configure database Disconfigure database Manage suffixes schema files Manage suffixes schema files Backup database Dotimize database Dotimize database Dotimize database Dotimize database Dotimize database Dotimize database Dotimize database Disconfigure databa	
Cjear result Import Stop Close Help	esuits elp ?

8. Click **OK** when the import is complete.

IBM Tivoli Directory Server Configuration Tr File Help	aol 🔹 🖬 🖬 🚺
The Tell Part of the second seco	Import LDIF data Enter the path and name of the LDIF file (on the LDAP server) from which you want to import directory data Note: Before importing an LDIF file you must add the corresponding suffixes in the Manage suffixes task. Path and LDIF file name [Vio 1/CS/WebSchere/cs75/Idap/Ivobildap.idit Browse]
Minconfigure database Manage changelog Manage softnes Manage schema files Import LDIF data Backup database Restore database Optimize database Performance tuning	
	10/16/08 2:15 PM QK Task messages GLPCTL1221 Maximum Open Files soft ulimit for the process is 2000 and the prescribed minimum is 500. GLPCTL1221 Maximum Physical Memory(Kbytes) soft ulimit for the process was 32768 and it is modified to the prescribed minimum 65536. GLPCTL1211 Maximum Stack Size(Kbytes) soft ulimit for the process was 32768 and it is modified to the prescribed minimum 65536. GLPCTL1211 Maximum Virtual Memory(Kbytes) soft ulimit for the process is 1 and the prescribed minimum 65536. GLPCTL121 Maximum Virtual Memory(Kbytes) soft ulimit for the process is 1 and the prescribed minimum is 1048576. GLPCN0221 The database plugin is successfully loaded from libback-config. a. GLPRD0052E Entry de=fawire, dc=com vilates the schema definition. GLPRD052E Entry de=fawire, dc=com vilates the schema definition. GLPRD052W Ind Id2abr. 79 entries have been successfully added our of 80 attempted.
	Clear results Import Stop Close Help ?

Adding Users and ACLs using an LDIF file

- 1. Create a blank LDIF file (for example, addstuff.ldif).
- 2. For each user that you wish to add, add the following to the LDIF file:

```
dn: uid=<User_Name>, cn=users, dc=<domain>, dc=<ext>
userPassword: <password>
uid: <User_Name>
objectClass: top
objectClass: person
objectClass: organizationalPerson
objectClass: inetOrgPerson
sn: <User_Name>
cn: <User_Name>
```

3. For each ACL you wish to add, add the following to the LDIF file:

```
dn: cn=<ACL Name>,cn=groups,dc=<domain>,dc=<ext>
objectClass: top
objectClass: groupOfNames
member: uid=<User_Name 1>,cn=users,dc=<domain>,dc=<ext>
member: uid=<User_Name 2>,cn=users,dc=<domain>,dc=<ext>
.
.
.
```

member: uid=<User_Name n>,cn=users,dc=<domain>,dc=<ext>

4. Import the LDIF file by following the steps in the section "Importing an LDIF file (LDAP Browser)," on page 217 or "Importing an LDIF file (Configuration Tool)," on page 218.

Connecting to IBM TDS Using the LDAP Browser

- 1. Download and install the LDAP browser.
- 2. Start the LDAP browser:
 - ./lbe.sh
- **3.** Fill in the required fields:
 - Host: Enter the IP or hostname of IBM TDS.

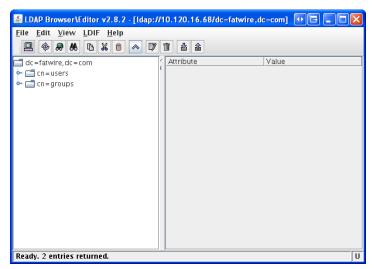
Note

The default port which IBM TDS runs on is 389.

- **Port**: Enter the port on which IBM TDS is running.
- **Base DN**: Enter the user-defined suffix that was entered during the installation of IBM TDS (see step 8 on page 211 for more information about the User-defined suffix).
- Anonymous bind: Deselect the check box
- User DN: Enter cn=root
- **Password**: Enter the password for cn=root

🕌 Edit Session			
Name	Connection Options]	
- Host Info)		
Host	10.120.16.68		Port: 389 Version: 3 💌
Base DN:	dc=fatwire,dc=com		-
	Fetch DNs	SSL	Anonymous bind
- User Info)		
User DN	cn=root		📄 append base DN
Password	•••••		
			Save Cancel

4. Click Save.



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Chapter 15 Setting Up OpenLDAP 2.3.x

This chapter explains how to set up OpenLDAP for use with Content Server.

Note

You must set OpenLDAP before you run the CS LDAP integrator.

It contains the following sections:

- OpenLDAP Commands
- Installing OpenLDAP
- Configuring OpenLDAP
- Adding Content Server Schema to OpenLDAP
- Modifying User Passwords

OpenLDAP Commands

This section contains the most commonly used OpenLDAP commands. Use it as a reference when configuring OpenLDAP for use with Content Server.

Starting OpenLDAP

Note

This section assumes that the slapd daemon is located in /usr/local/libexec. Depending on your installation, the daemon might be located elsewhere. In such cases, substitute the correct path in the commands listed in this section.

• To start OpenLDAP normally, use the following command:

```
/usr/local/libexec/slapd
```

• To start OpenLDAP with full debugging (useful when diagnosing configuration issues and installing Content Server), use the following command:

```
/usr/local/libexec/slapd -h 'ldap:///' -d 0x5001
```

Searching an OpenLDAP Server

To search an OpenLDAP Server, do the following:

1. Execute the following command:

```
ldapsearch -x -D "cn=Manager,dc=<domain>,dc=<extension>" -W
  -b '' -s base '(objectClass=*)' namingContexts
```

where <domain> and <extension> are the values you specified in step a on page 230.

2. When prompted for a password, enter the Root DN user password you specified in step d on page 231.

A typical response from the ldapsearch command looks as follows:

```
Enter LDAP Password:
# extended LDIF
#
# LDAPv3
# base <> with scope baseObject
# filter: (objectClass=*)
# requesting: namingContexts
#
#
dn:
namingContexts: dc=fatwire,dc=com
```

```
# search result
search: 2
result: 0 Success
# numResponses: 2
# numEntries: 1
```

Adding an LDIF File to an OpenLDAP Server

To add a well-formed LDIF file to your OpenLDAP Server, use the ldapadd command:

```
ldapadd -D 'cn=Manager,dc=<domain>,dc=<extension>'
    -w <root_dn_password> -f <LDIF_file_name>
```

where:

- <domain> and <extension> are the values you specified in step a on page 230.
- <root_dn_password> is the Root DN user password you specified in step d on page 231.
- <LDIF_file_name> is the name of the LDIF file you are adding.

Installing OpenLDAP

This section explains how to install OpenLDAP.

Note

OpenLDAP is bundled with most Linux distributions. If OpenLDAP is already installed on your system, skip this section.

To install Open LDAP

1. Download the OpenLDAP tgz archive from the OpenLDAP web site:

http://www.openldap.org/

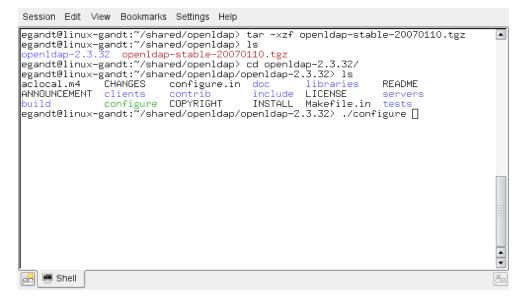
For example: openIdap-stable-20070110.tgz

- **2.** Decompress the archive:
 - If you are using GNU, use the following command:

```
tar-xvzf openldap-stable-20070110.tgz
```

- If you are not using GNU, use the following command:

gzip -d openldap-stable-20070110.tgz ; tar -xvf openldapstable-20070110.tar



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3. Change to the directory containing the OpenLDAP source. For example:

cd open1dap-2.3.32

```
Session Edit View Bookmarks Settings Help

egandt@linux-gandt:~/shared/openldap> tar -xzf openldap-stable-20070110.tgz
egandt@linux-gandt:~/shared/openldap> ls
openldap-2.3.32 openldap-stable-20070110.tgz
egandt@linux-gandt:~/shared/openldap> cd openldap-2.3.32/
egandt@linux-gandt:~/shared/openldap/openldap-2.3.32> ls
aclocal.m4 CHANGES configure.in doc libraries README
ANNOUNCEMENT clients contrib include LICENSE servers
build configure COPYRIGHT INSTALL Makefile.in tests
egandt@linux-gandt:~/shared/openldap/openldap-2.3.32> ./configure []

egandt@linux-gandt:~/shared/openldap/openldap-2.3.32> ./configure []
egandt@linux-gandt:~/shared/openldap/openldap-2.3.32> ./configure []
egandt@linux-gandt[]
eqandt@linux-gandt[]
eqandt@l
```

4. Configure the OpenLDAP source as follows:

```
./configure --enable-crypt --with-tls
```

```
Session Edit View Bookmarks Settings Help
config.status: creating servers/slapd/back-sql/Makefile
                                                                                                                    -
config.status: creating servers/slapd/shell-backends/Makefile
config.status: creating servers/slapd/slapi/Makefile
config.status: creating servers/slapd/overlays/Makefile
config.status: creating servers/slurpd/Makefile
config.status: creating tests/Makefile
config.status: creating tests/run
config.status: creating tests/progs/Makefile
config.status: creating include/portable.h
config.status: creating include/ldap_features.h
config.status: creating include/lber_types.h
config.status: executing depfiles commands
config.status: executing default commands
Making servers/slapd/backends.c
     Add config ..
Add ldif ...
      Add bdb ...
      Add hdb
      Add monitor
                       . . .
      Add relay .
Making servers/slapd/overlays/statover.c
Add syncprov ...
Please run "make depend" to build dependencies
egandt@linux-gandt:~/shared/openldap/openldap-2.3.32> make dep]
                                                                                                                    •
🛃 🖲 Shell
```

The suggested options are:

- --enable-crypt enables password encryption
- --with-tls enables TLS/SSL support

Note

If you want to customize OpenLDAP for your system, run ./configure --help for a complete list of configuration options.

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- 5. Compile OpenLDAP dependencies: make depend
- 6. Compile OpenLDAP: make
- 7. Install OpenLDAP: make install

Note

By default, OpenLDAP is installed in /usr/local.

Configuring OpenLDAP

This section shows you how to configure your OpenLDAP installation.

1. Edit the ldap.conf file as follows:

Note

If you installed OpenLDAP manually by following the steps in the previous section, ldap.conf is located in /usr/local/etc.

a. Specify your Base DN. Locate the following line (or create it if it does not exist): BASE dc=<domain>,dc=<extension>

where <domain> and <extension> are, respectively, the domain and TLD of your LDAP server.

The Base DN for OpenLDAP should always be two dc's in length. For example, if your full domain is vm.fatwire.com, your Base DN would be fatwire.com, and your BASE line would look as follows:

BASE dc=fatwire,dc=com

b. Specify your URI(s). Locate the following line (or create it if it does not exist):

URI ldap://<hostanme_or_IP> ldap://<hostanme_or_IP>

Enter the host names and/or IP addresses on which on which OpenLDAP is to listen for connections. Separate the entries with spaces. For example: URI ldap://127.0.0.1 ldap://localhost ldap://172.19.1.2

2. Edit the sldapd.conf file as follows:

Note

If you installed OpenLDAP manually by following the steps in the previous section, sldapd.conf is located in /usr/local/etc.

a. Locate the following section:

```
access to *
by self write
by users read
```

```
and replace it with:
```

access to *
 by dn="cn=Manager,dc=<domain>,dc=<extension>" write
 by self write
 by users read
 by anonymous auth

where <domain> and <extension> are the values you specified in step 1a.

b. Specify your suffix. Locate the following line (or create it if it does not exist):

suffix dc=<domain>,dc=<extension>

where <domain> and <extension> are the values you specified in step 1a.

c. Specify your Root DN user. (The Root DN user is used to access the LDAP Server.) Locate the following line (or create it if it does not exist):

rootdn cn=<user_name>,dc=<domain>,dc=<domain>

Enter Manager as the user name and replace <domain> and <extension> with the values you specified in step 1a.

d. Specify a password for the Root DN user. Locate the following line (or create it if it does not exist):

rootpw<password>

```
Note
```

The password can be either encrypted or unencrypted. (Encrypted passwords start with {SSHA}). If you wish to use an encrypted password, do the following:

- 1. Generate an encrypted password (hash) using the **slappasswd** command. The command generates a valid encrypted password (hash) and prints it to the terminal.
- **2.** Perform step e below.
- **e.** (Optional) If you chose to use an encrypted password in the previous step, set the password type to SHA. Locate the following line (or create it if it does not exist):

password-hash {SSHA}

This sets the password type to SHA (the default). You can set other password types; see the OpenLDAP documentation for more information.

3. Edit the core.schema file as follows:

Note

If you installed OpenLDAP manually by following the steps in the previous section, core.schema is located in /usr/local/etc/schema.

a. Locate the following section:

```
objectclass ( 2.5.6.17 NAME 'groupOfUniqueNames'
DESC 'RFC2256: a group of unique names (DN and Unique
Identifier)'
SUP top STRUCTURAL
```

FatWire Con

```
MAY ( businessCategory $ seeAlso $ owner $ ou $ o
   $ description $ uniqueMember)
MUST ( uniqueMember $ cn ))
```

b. Comment the section out by placing a # character at the beginning of each line. Then insert the following modified section after it:

```
objectclass ( 2.5.6.17 NAME 'groupOfUniqueNames'
    DESC 'RFC2256: a group of unique names (DN and Unique
    Identifier)'
    SUP top STRUCTURAL
    MAY ( businessCategory $ seeAlso $ owner $ ou $ o
        $ description $ uniqueMember)
    MUST ( cn ))
```

The difference between the original and modified sections is the last line:

```
MUST ( uniqueMember $ cn ) becomes MUST ( cn )
```

OpenLDAP is now configured.

Adding Content Server Schema to OpenLDAP

This section shows you how to add Content Server schema to your OpenLDAP server.

Note

If you are copying the contents of the sample LDIF file below, make sure to insert an empty line between dn sections and at the end of the file.

To configure OpenLDAP for Content Server

1. Create an LDIF file named pre_cs_openldap.ldif with the following contents:

```
dn: dc=<domain>,dc=<extension>
objectClass: dcObject
objectClass: organization
dc: fatwire
description: OpenLDAP pre_cs_setup
o: Fatwire Software
```

LDAP Manager Role
dn: cn=Manager,dc=<domain>,dc=<extension>
objectclass: organizationalRole
cn: Manager

```
# add the organizational Unit People
dn: ou=People,dc=<domain>,dc=<extension>
objectClass: organizationalUnit
objectClass: top
ou: People
```

```
# add the organizational Unit Group
dn: ou=Groups,dc=<domain>,dc=<extension>
objectClass: organizationalUnit
objectClass: top
ou: Groups
```

where <domain> and <extension> are the values you specified in step a on page 230.

The file will create a new organization (fatwire) containing two sub-organizations (Groups and People) and the Manager user. The Manager user will be used to access the LDAP server.

2. Add the pre_cs_openldap.ldif file to your OpenLDAP server. Execute the following command:

```
ldapadd -D 'cn=Manager,dc=<domain>,dc=<extension>'
    -w <root_dn_password> -f pre_cs_openldap.ldif
where:
```

- <domain> and <extension> are the values you specified in step a on page 230.
- <root_dn_password> is the Root DN user password you specified in step d on page 231.
- **3.** Test your OpenLDAP server. Execute the following command:

```
ldapsearch -x -b 'ou=Groups,dc=<domain>,dc=<extension>'
    '(objectclass=*)'
```

```
where <domain> and <extension> are the values you specified in step a on page 230.
```

An example response from the ldapsearch command looks as follows:

```
# extended LDIF
#
#
LDAPv3
# base <ou=Groups,dc=fatwire,dc=com> with scope subtree
# filter: (objectclass=*)
# requesting: ALL
#
#
#
# search result
search: 2
result: 0 Success
# numResponses: 1
```

If the pre_cs_openIdap.ldif file was successfully inserted into the LDAP server, the result: line indicates success, at which point you are ready to run the Content Server LDAP integrator. For instructions, see the CS-LDAP integration guide.

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Modifying User Passwords

When you ran the Content Server LDAP integrator, all Content Server users (except fwadmin, ContentServer, and DefaultReader) were assigned the password which you entered in the "Content Server Configuration" screen. For security reasons, you might want to manually assign unique passwords to those users.

Note

If you chose to use encrypted passwords when you configured OpenLDAP, you **must** change the passwords for all users on your CS system, or your Content Server installation will not function properly. This is because the CS LDAP integrator writes user passwords into OpenLDAP as plaintext, but OpenLDAP expects password hashes.

The following table shows the passwords you must assign to your Content Server users:

User	Password
DefaultReader	SomeReader
ContentServer	The password you supplied during CS installation
fwadmin	The password you supplied during CS installation
All other users on your CS system	The password you supplied during CS LDAP integration

This section covers the following methods for changing passwords in OpenLDAP:

- Modifying User Passwords Using an LDAP Browser
- Modifying User Passwords Using the Idapmodify Command

Modifying User Passwords Using an LDAP Browser

This section shows you how to modify user passwords using the free LDAP Browser/ Editor program available at http://www-unix.mcs.anl.gov/~gawor/ldap/.

To modify user passwords in OpenLDAP using an LDAP browser

- 1. Download and install the LDAP browser.
- 2. Start the LDAP browser: ./lbe.sh

3. Click the **Quick Connect** tab.

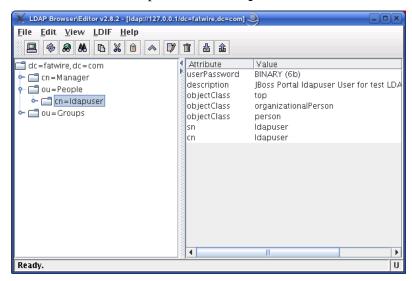
X Conne Session L Connecti	ist Quick Conn	ect		
- Host Info)			
Host			Port:	Version: 3 💌
Base DN:				•
	Fetch DNs	SSL 🗌	[Anonymous bind
- User Info	I			
User DN:				append base DN
Password:				
			Co	nnect Cancel

4. Fill out the fields as follows:

Field	Value				
Hostname	The host name of your OpenLDAP server.				
Port	389				
Version	3				
Base DN	The Base DN you specified in step a on page 230.				
Anonymous bind	Yes (select check box)				
User DN	cn=Manager				
Append base DN	Yes (select check box)				
Password	The Root DN user password you specified in step d on page 231.				

5. Click Connect.

6. In the left-hand tree, expand the **ou=People** node.



- 7. Double-click the user whose password you want to change and press Ctrl-E.
- **8.** The plaintext password written by the CS LDAP integrator appears in the **userPassword** field. Click **Set**.

💥 Edit - (cn=ldapi	user, ou=People, dc=fatwire,dc=com] 🥥					
<u>F</u> ile <u>E</u> dit						
objectClass:	top					
objectClass:	organizationalPerson					
objectClass:	person					
userPassword:	testme Verify Set Save as Insert from					
description:	JBoss Portal Idapuser User for test LDAP integration					
sn:	Idapuser					
cn:	Idapuser					
	Apply	Cancel				

9. In the pop-up window, enter the user's password and click Set.



The password appears in its encrypted form.

10. Click **Apply** to save the new password.

	user, ou=People, dc=fatwire,dc=com] 🍚					
<u>File</u> <u>E</u> dit	15					
objectClass:	top					
objectClass:	organizationalPerson					
objectClass:	person	person				
userPassword:	[SHA]Or7xoUzOzSDWzoksvgQq5tdJRs] Verify Set Save as Insert from					
description:	JBoss Portal Idapuser User for test LDAP integration					
sn:	Idapuser					
cn:	Idapuser					
	Apply	Cancel				
	Abbit	Cancer				

11. Repeat steps 7–10 for each user whose password you want to change. When you are finished, test your integration by logging in to Content Server.

Modifying User Passwords Using the Idapmodify Command

The **ldapmodify** command provides you with an interface in which you can enter valid LDIF statements to make changes to the configuration of your OpenLDAP server. This section shows you how to use the **ldapmodify** and **sldappasswd** commands to change the passwords of LDAP users.

To modify user passwords in OpenLDAP using the ldapmodify command

1. Generate an encrypted password for each user. Run the **sldappasswd** command and enter the plaintext password which you want to encrypt. The command outputs the encrypted password (hash) to the terminal. For example:

{SSHA}ydUT5RCpBAU80P0PW8gaHnsmYmLlmUL8

Note

If you are generating hashes for a large number of users, it is a good idea to store the hashes in a file, so that you can easily retrieve them in step 3. When you finish this procedure, make sure that you destroy the file in which the hashes are stored.

2. Execute the ldapmodify command as follows:

ldapmodify -D 'cn=Manager,dc=<domain>,dc=<extension>' -w <root_dn_password>

where:

- <domain> and <extension> are the values you specified in step a on page 230.
- <root_dn_password> is the Root DN user password you specified in step d on page 231.

When the command returns a blank line, you are ready to input LDIF statements.

3. Change the user's password. Issue the following commands:

a. dn:cn=<user_name>,ou=People,dc=<domain>,dc=<extension>

where user_name is the user name of the user whose password you want to change, and <domain> and <extension> are the values you specified in step a on page 230.

- b. changetype:modify
- C. replace:userPassword
- d. userpassword:<password_hash>

where <password_hash> is the hash generated by the **sldappasswd** command in step 1 of this procedure.

- e. Press Ctrl+D.
- f. Repeat steps a-e for each user whose password you want to change. When you are finished, press Ctrl+C to terminate the ldapmodify command.

Chapter 16

Setting Up the WebLogic 9.*x* Embedded LDAP Server

This chapter provides instructions on setting up the currently supported WebLogic Embedded LDAP Server for use with Content Server.

Note

You must set up WebLogic LDAP before you run the CS LDAP integrator.

This chapter contains the following sections:

- Enabling the WebLogic Embedded LDAP Server
- Modifying User Passwords

Enabling the WebLogic Embedded LDAP Server

This section explains how to enable the WebLogic Embedded LDAP Server.

To enable the WebLogic Embedded LDAP Server

- 1. Log in to the WebLogic Server Administration Console.
- 2. In the "Domain Structure" tree at the left, click your WebLogic portal domain.
- **3.** Set the Embedded LDAP password:
 - a. In the workspace, select the Security tab, then select the Embedded LDAP sub-tab.
 - b. In the "Change Center" pane in the upper left, click Lock & Edit.
 - **c.** In the **Credential** field, enter the desired Embedded LDAP password. Reenter the password in the **Confirm Credential** field for verification.
 - d. Click Save.

bea WEBLOGIC SERVER

Change Center	Welcome, weblogic		Connected to: portalDomain	🏠 Home	Log Out	Preferences	Help	AskBEA
View changes and restarts	Home > portalDomain							
Click the Lock & Edit button to modify, add or delete items in	Settings for portalDomain							
this domain.	Configuration Monitoring Control	Security Web Service 9	Security Notes					
Lock & Edit Release Configuration			Policies					
Domain Structure	Click the <i>Lock & Edit</i> button in th	e Change Center to modify	the settings on this page.					
portalDomain	This page allows you to configur	re the embedded LDAP serv	ver for this WebLogic Server domain.					
	🚑 Credential:	Jalakalalalalalalalalalalalalalala	The credential (usually a password) Info	used to conne	ect to the er	nbedded LDAP s	server. Mo	ore
How do I	🦉 Confirm Credential:	lalalalalalalalalalalalalalalalal	Enter the credential again. More Info					
Configure the embedded LDAP server	🚑 Backup Hour:	23	The hour at which the embedded LD/	AP server sho	uld be back	ed up. More Infi	ö	
Configure Authentication and Identity Assertion providers	🚑 Backup Minute:	5	The minute at which the embedded L	.DAP server s	hould be ba	cked up. More I	nfo	
System Status 💿	🚑 Backup Copies:	7	The maximum number of backup cop server. More Info	ies that shou	ld be made	for the embedo	led LDAP	
Health of Running Servers	4 Cache Enabled		Specifies whether a cache is used wi	th the embec	lded LDAP s	erver. M <mark>ore Inf</mark> o)	
Critical (0)	4 Cache Size:	32	The size of the cache (in kilobytes) the Info	nat is used wi	th the embe	edded LDAP ser	ver. More	
Overloaded (0) Warn (0)	🭇 Cache TTL:	60	The time-to-live of the cache (in seco More Info	onds) that is u	used with th	e embedded LD	AP servei	ſ.
OK (1)	🖉 🗌 Refresh Replica At Start	ир	Specifies whether a Managed Server is useful if you have made a large an active, and you want to download the Server push each change to the Man	nount of chan e entire replic	ges when th a instead of	e Managed Ser having the Adr	rver was	not
	🦉 🗌 Master First		Specifies whether a Managed Server (contained in the Administration Serv LDAP server (contained in the Manag	er), instead (of connectin			r

- 4. Create an Embedded LDAP authentication provider:
 - a. In the "Domain Structure" tree, click Security Realms.
 - b. In the workspace, click myrealm and select the Providers tab.

WEBLOGIC SERVE												
Change Center	Welcome, weblogi	с		C	Connecter	ed to: port	alDomain	🟠 Home	Log Out	Preferences	Help	AskBEA
View changes and restarts	Home > portalDoma	in > Summary of Security	y Realms > myrealm :	> Providers								
Pending changes exist. They must be activated to take effect.	Settings for n	nyrealm										
Activate Changes	Configuration	Users and Groups	Roles and Policies	Credential Mappir	ings Pro	oviders M	ligration					
Undo All Changes	Authentica	tion Authorization	Adjudication	Role Mapping Au	uditing	Credentia	l Mapping	Certification I	Path Keys	stores		
Domain Structure		ation provider allows										
portalDomain B-Environment I-Deployments B-Services I-Security Realms B-Interoperability B-Diagnostics	data stores, groups from	configure multiple A such as LDAP server previous releases of e this table ation Providers	s or DBMS. You ca	n also configure a R								
How do I 💽	New	Delete Reorder							Showing	1-5of5 Prev	vious Ne	ext
Configure Authentication and Identity Assertion providers	🔲 Nam	9	Description								Version	ı
Manage security providers	SQLA	uthenticator	Provider that per	forms DBMS authent	tication						1.0	
Set the JAAS control flag	U WSRI	PIdentityAsserter	WSRP 8.1 Compa	atibility, Identity Asse	erter Prov	vider					1.0	
Re-order Authentication providers	🔲 Defau	ıltīdentityAsserter	WebLogic Identity	/ Assertion provider							1.0	
System Status	SAML	IdentityAsserter	WebLogic SAML I	identity Assertion Pro	ovider. Si	Supports Se	ecurity Asse	ertion Markup L	anguage v1	1.	2.0	
	SAML	Authenticator	WebLogic SAML /	Authentication Provid	der.						1.0	
Health of Running Servers Failed (0)	New	Delete Reorder							Showing	1-5of5 Prev	vious Ne	ext
Critical (0)												

- c. Click New.
- d. In the Name field, enter a name for the authentication provider.
- e. In the "Type" drop-down list, select DefaultAuthenticator.
- f. Click OK. The new authentication provider appears in the provider list.
- 5. In the "Change Center," Click Activate Changes.
- 6. Stop the admin server.

Modifying User Passwords

This section shows you how to modify user passwords in WebLogic LDAP Server.

To modify user passwords in WebLogic LDAP Server

- 1. Log in to the WebLogic Server Administration Console.
- 2. In the "Domain Structure" tree, click Security Realms.
- 3. In the workspace, click myrealm and select the Users and Groups tab.

inge Center We	/elcome, weblogic	Connected to: PortalDomain	🏠 Home 🛛 Log Out	Preferences	Help AskB
ew changes and restarts	Home > Summary of Security Realms > myrealm > Us	ers and Groups $>$ Summary of Security Realms $>$ myrealm $>$ Users an	d Groups		
ck the Lock & Edit button to dify, add or delete items in	Settings for myrealm				
domain.		nd Policies Credential Mappings Providers Migration			
Lock & Edit Release Configuration	Users Groups	h user that has been configured in this security realm.			
ain Structure	The page alopays montation about out				
alDomain Environment Deployments	Customize this table Users				
and a sec					
Services Security Bealms	New Delete		Showing 1	l-10 of 15 Pre	vious Next
Security Realms nteroperability	New Delete	Description	Showing 1 Provider	I-10 of 15 Pre	wious Next
ecurity Realms nteroperability liagnostics		Description		I-10 of 15 Pre	evious Next
ecurity Realms hteroperability liagnostics	☐ Name ↔ ☐ Arthur	Description	Provider LDAPProvider	I - 10 of 15 Pre	wious Next
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iteroperability itagnostics	Image: Name ∞ Image: Arthur Image: Arthur Image: Connie Image: Conrad Image: ContentServer Image: DefaultReader Image: Desiree Image: Image	Description	Provider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider	1 - 10 of 15 Pre	wious Next
ecurity Realms teroperability iagnostics to I © nage users and groups ate users dify users ete users m Status ©	□ Name □ Arthur □ Connie □ Conrad □ ContentServer □ DefaultReader □ Desiree □ firstsite □ fwadmin	Description	Provider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider LDAPProvider	I - 10 of 15 Pre	wious Next

4. Click the user whose password you want to change.

The workspace displays the "Settings for user name" screen:

Settings for firstsite		
General Passwords Gro	ups	
Save		
Use this page to chang	e the description for the selected us	er.
Name:	firstsite	The login name of this user. More Info
Description:		A short description of this user. For example, the user's full name. More Info
Save		

5. Select the **Passwords** tab and enter the new password into both fields.

Settings for firstsite		
General Passwords Groups		
Use this page to change a user	s password.	
New Password:	deskelendeskelendesk	The new password of this user. More Info
Confirm New Password:	firste til efter	The confirmed new password of this user. More Info
Save		

6. Click Save.

A confirmation message appears.

Messages	
Settings updated successfully.	

Modifying User Passwords

Chapter 17 Setting Up Oracle Directory Server 10.x

This chapter provides instructions for setting up the currently supported version of Oracle Directory Server (ODS) for use with Content Server.

Note

You must set up ODS before you run the CS LDAP integrator.

This chapter contains the following sections:

- Start/Stop Commands
- Installing Oracle Directory Server
- Accessing Oracle Directory Manager
- Configuring ODS Password Security for Content Server
- Modifying User Passwords
- Deleting Users
- Connecting to ODS Using an LDAP Browser

Start/Stop Commands

This section lists commands for starting and stopping Oracle Directory Server.

• To start:

<oracle_home>/opmn/bin/opmnctl startproc ias-component=OID

• To stop:

<oracle_home>/opmn/bin/opmnctl stopproc ias-component=OID

Installing Oracle Directory Server

This section shows you how to install Oracle Directory Server for use with Content Server.

A. Pre-Installation Steps

Complete these steps before installing Oracle Directory Server.

- 1. Download the following packages from Oracle's website:
 - Oracle Identity Management Infrastructure
 - Oracle Identity Federation
- **2.** Create a temporary directory and decompress the installation packages to this directory using the following command:

cpio idmv < <cpio_file>

where <cpio_file> is the name of the package you want to decompress.

3. Create a new user account to run Oracle Directory Server (named oracledir in our example).

Note

If you have previously created a user to run Oracle applications on your system, skip this step. In such case, whenever the steps in the remainder of this chapter prompt you to provide the user name of your Oracle user, you must use your existing Oracle user.

a. Create an Oracle group:

groupadd oracledir

b. Create an Oracle user:

useradd -g oracledir -m -h <user_home_dir> oracledir where <user_home_dir> is the Oracle user's home directory.

c. Set a password for the Oracle user:

passwd oracldir

- 4. If you are installing on Linux, do the following (otherwise, skip this step):
 - **a.** Add the following lines to the file /etc/sysctl.conf:

```
kernel.shmall = 2097152
kernel.shmmax = 2147483648
kernel.shmmni = 4096
kernel.msgmnb=65535
kernel.msgmni=2878
kernel.sem = 256 32000 100 142
fs.file-max=131072
net.ipv4.ip_local_port_range = 1024 65000
net.core.rmem_default=262144
net.core.wmem_default=262144
net.core.rmem_max=262144
```

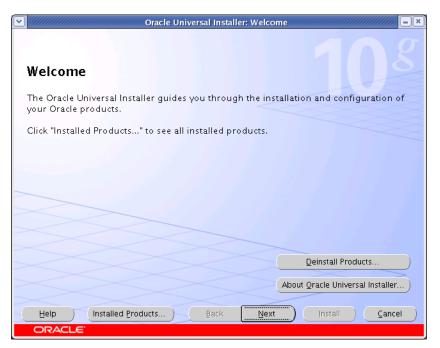
- **b.** Run the following command: **sysctl** -**p**
- **c.** Add the following lines to /etc/security/limits.con:

```
oracledir soft nproc 2047
oracledir hard nproc 16384
oracledir soft nofile 1024
oracledir hard nofile 65536
```

5. Log in as the Oracle user.

B. Install Oracle Directory Server

- 1. Complete the pre-installation steps listed in "A. Pre-Installation Steps," on page 246 if you have not already done so.
- 2. Change to the temporary directory into which you decompressed the Oracle Directory Server packages. Within the temporary directory, change to the Disk1 subdirectory.
- 3. Start the installer: ./runInstaller
- 4. In the "Welcome" screen, click Next.



- **5.** If no other Oracle products have been previously installed on this computer, do the following (otherwise, skip this step and continue to step 6 on page 250):
 - **a.** In the "Specify Inventory Directory and Credentials" screen, specify the location of the Oracle inventory directory and specify the system group of your Oracle user, then Click **Next**.

Oracle Universal Installer: Specify Inventory directory and credentials	. ×
Specify Inventory directory and credentials	
You are starting your first installation on this host. As part of this install, you need to specify a directory for installer files. This is called the "inventory directory". Within the inventory directory, the installer automatically sets up subdirectories for each product to contain inventory data and will consume typically 150 Kilobytes per product.	
Enter the full path of the inventory girectory.	
/home/oracledir/oralnventory Browse	
You can specify an Operating System group that has write permission to the above inventory directory. You can leave the field blank if you want to perform the above operations as a Superuser.	
Specify Operating System group name:	
oracledir	
Help Installed Products Back Next Install Cancel	D
ORACLE	

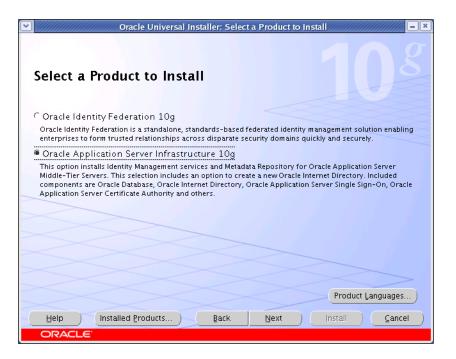
b. When the following pop-up dialog appears, run the requested script as the root user, then click **Continue**.

Oracle Universal Installer	×
Certain actions need to be performed with root privileges before the install can continue. These actions are stored in a shell script named /home/oracledir/oralnventory/orainstRoot.sh.	
Please execute the /home/oracledir/oralnventory/orainstRoot.sh script now from another window, then click "Continue" to continue the install.	
Help Continue Cancel	

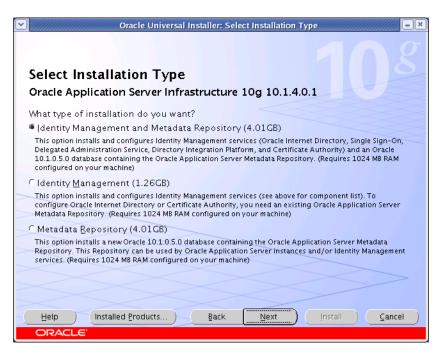
6. In the "Specify File Locations" screen, confirm the path and name of the destination directory, then click **Next**.

Specify File Locations		
Source		
Enter the full path of the file representing the product(s) you want to i	install:	
Path: /u01/Downloads/Disk1/stage/products.xml	-	Browse
	ı want to install the	e product.
Enter or select a name for the installation and the full path where you	ı want to install the	e product.
Enter or select a name for the installation and the full path where you Name: [oracleas1]	ı want to install thi	e product. Bro <u>w</u> se
Enter or select a name for the installation and the full path where you Name: [oracleas1]		
Enter or select a name for the installation and the full path where you Name: [oracleas1]		
Enter or select a name for the installation and the full path where you Name: oracleas1 Path: /u01/software/Apps/Oracle10/dirserv		Browse
Path: //u01/software/Apps/Oracle10/dirserv	T T	Browse

7. In the "Select a Product to Install" screen, select the Oracle Application Server Infrastructure radio button and click Next



8. In the "Select Installation Type" screen, select the **Identity Management and Metadata Repository** radio button and click **Next**.



9. In the next screen, allow the prerequisite check to complete. If any checks fail, resolve the issue before continuing. When all checks report as successful, click **Next**.

Note

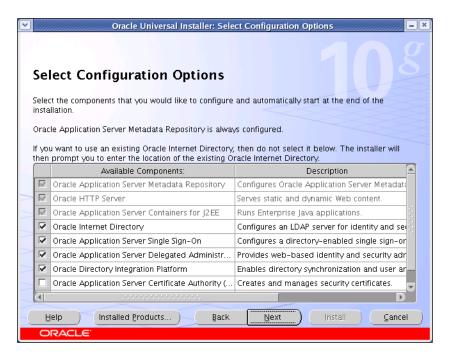
If you see a dialog warning you that port 1521 is in use by an Oracle 10.x component, click **OK**. If the dialog reports that an application other than an Oracle 10.x component is using port 1521, you must remedy the situation by following the instructions shown in the dialog before continuing.

Oracle Universal Installer: Product-specific P	rerequisite Ch	ecks 📃
The installer will now verify that the system meets all the minimu configuring the chosen product. You are required to manually ver flagged as warnings or manual checks. For details on performing see the details at the bottom.	rify and confirm	n the items that are
Check	Туре	Status
Checking operating system certification	Automatic	📃 In progress 📤
Checking security kernel parameters	Automatic	🗆 Pending
Checking recommended operating system packages	Automatic	Pending
Checking glibc installed on the system	Automatic	Pending
Yalidating ORACLE BASE Incation (if set) (◀	Automatic	Pendina V
		Retry Stop
0%		
Checking operating system certification		-
Help) (Installed Products,) Back Ne	xt [r	istall Cancel
ORACLE		

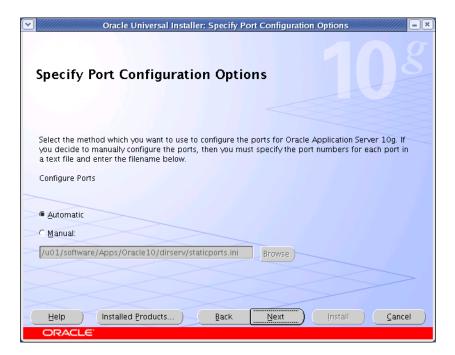
10. In the "Confirm Pre-Installation Requirements" screen, select the check boxes for all items in the list, then click **Next**.

Oracle Universal Installer: Confirm I	Pre-Installation Requirements
Confirm Pre-Installation Requi	irements
Verify that you have met all of the minimum pre-install all of the checkboxes. For details on performing these	
If your computer does not meet the minimum requirem or when you run Oracle Application Server Infrastructur	
Requirement	Description
Root Privileges	You must have access to the root user on this
>	
	D
Help Installed Products Back	Next (Install) Cancel

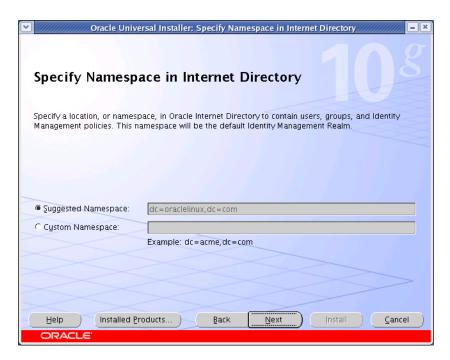
11. In the "Select Configuration Options" screen, click Next without making any changes.



12. In the "Specify Port Configuration Options" screen, select Automatic and click Next.



 In the "Specify Namespace in Internet Directory" screen, select the Suggested Namespace radio button and make a record of the corresponding field value. Click Next.



14. In the "Specify Database Configuration Options" screen, enter the required database information, then click **Next**. Make a record of the values you enter.

Note

If an Oracle database server resides on this machine, the installer will populate the fields in this screen automatically. However, FatWire strongly suggests that you you do not use these existing values and instead specify a new, unique SID and database storage (oradata) directory.

	Oracle Universal Installer: Specify Database Configuration Options	
Specif	y Database Configuration Options	
A Global E database.	se Naming Jatabase Name, typically of the form "name.domain", uniquely identifies an Oracle In addition, each database is referenced by at least one Oracle System Identifier (SID).	
	e Global Database Name and SID for this database. Database Name: orcl.localhost.localdomain SID: orcl	
The numb "Help" for	se Character Set er of language groups to be stored determine which database character set to use. See the definition of language groups. For the Unicode database character set, select "Unicode UTF-8 AL32UTF8"	
Select Da	atabase Character set: Unicode standard UTF-8 AL32UTF8	
Database File Location Use the file system for database storage. For best database organization and performance, Oracle recommends installing database files and Oracle software on separate disks.		
Specify [Database File Location: //u01/software/Apps/Oracle10/orada Browse	
Help) Installed Products) Back Next) Install Cancel	
ORAC	Ί.Ε'	

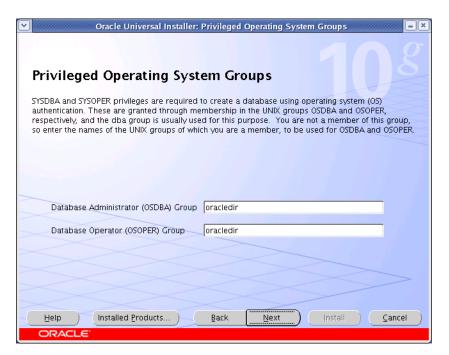
15. In the "Specify Database Schema Password" screen, select the **Use the same password for all accounts** radio button, then and enter and re-enter the desired password. Make a record of this password, then click **Next**.

♥ Oracle UI	niversal Installer: Specify Datab	oase Schema Passwords			
Specify Databa	se Schema Passwo	rds			
and be locked at the end on passwords for those accou	The Starter Database contains pre-loaded schemas, most of which have passwords that will expire and be locked at the end of installation. After the installation is complete, you must unlock and set new passwords for those accounts you wish to use. Schemas used for the database management and post-				
passwords for these accou		accounts will not expire. Specify the			
User Name	ds for these accounts	Confirm Password			
ราร					
SYSTEM					
SYSMAN					
DBSNMP					
	Use the same password for all the accounts				
Enter Password: ******** Confirm Password: *******					
Help Installed Products Back Next Install Cancel					
ORACLE					

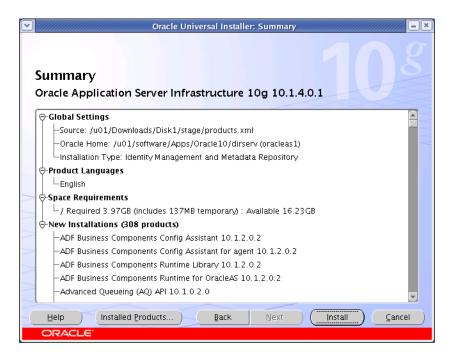
16. In the "Specify Instance Name and ias_admin password" screen, enter a unique instance name and a unique password. Re-enter the password and make a record of all values in this screen, including the administrator user name (ias_admin). When you are finished, click **Next**.

🕑 🦯 Oracle Univ	ersal Installer: Specify Instance Name and ias_admin Password
Specify Insta	nce Name and ias_admin Password
	erver Infrastructure instances installed on a host must have unique names. The name of the host are appended to the instance name.
	Server Infrastructure instance has its own password, regardless of which user on. Passwords are not shared across instances, even if the instances were ser.
The password must have least one of the charact	ve a minimum of 5 alphanumeric characters, maximum 30 characters, and at ers must be a number.
Administrator Usernam	e: ias_admin
Instance Name:	oracldir
ias_admin Password:	******
Confirm Password:	******
Help	led <u>Products</u> <u>Back</u> <u>Next</u> (Install <u>Cancel</u>
ORACLE	

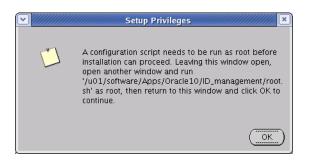
17. In the "Privileged Operating System Groups" screen, keep the default options and click **Next**.



18. In the "Summary" screen, review the configuration choices you have made, then click **Install**. Wait until the installation completes successfully.



19. When the following dialog appears, run the requested script as the root user, then click **OK**.



20. In the "Configuration Assistants" screen, allow all configuration steps to complete. If any of the steps fail, correct the indicated problem, then re-run the configuration process. When the configuration process completes successfully, click **Next**.

Oracle Universal Installer: Specify Inventory directory and credentials
Specify Inventory directory and credentials
You are starting your first installation on this host. As part of this install, you need to specify a directory for installer files. This is called the "inventory directory". Within the inventory directory, the installer automatically sets up subdirectories for each product to contain inventory data and will consume typically 150 Kilobytes per product.
Enter the full path of the inventory directory.
/home/oracledir/oralnventory Browse
You can specify an Operating System group that has write permission to the above inventory directory. You can leave the field blank if you want to perform the above operations as a Superuser.
Specify Operating System group name:
oracledir
Help Installed Products Back Next Install Cancel
ORACLE

- **21.** Allow the database configuration to complete.
- 22. In the "End of Installation" screen, click Exit.

Note

Make a record of the information displayed in the "Please Remember" dialog box (by copying and pasting it into a text file, for example) for future reference. Additional configuration information for your installation can be found in the file, <ora_home>/config./ias.properties. Specifically, look for the string, OIDport. This is the port on which Oracle Directory Server is listening for LDAP connections.

C. Post-Installation Steps

Complete these steps to test your Oracle Directory Server installation.

- 1. Test the management server:
 - **a.** Log in to the Management Application using the following credentials:

Note

By default, the URL is http://localhost.localdomain:1158/. The URL for your system is also part of the text file you created in step 22 on page 258.

```
User name: ias_admin
```

Password: <ias_admin_password> (you created this password in step 16 on page 256)

b. Log in to the Database Management Application using the following credentials:

```
Note
```

By default, the URL is http://localhost.localdomain:5500/em. The URL for your system is also part of the text file you created in step 22 on page 258.

User name: sys

Password: <db_schema_password> (you created this password in step 15 on page 256)

Connect As: SYSDBA

- **2.** Test the LDAP server:
 - **a.** Change to the <oracle_home>/bin directory.
 - **b.** Run the following command:

```
./ldapbind -h localhost -p <OIDport>
where <OIDport> is the port number you obtained in step 22 on page 258.
Example output:
bind successful
```

259

Accessing Oracle Directory Manager

- 1. Change to the <oracle_home>/bin directory:
- 2. Run the following command: ./oidadmin
- 3. In the "Directory Server Connection" dialog box, click OK.



- 4. Add a connection entry for your Directory Server instance.
 - a. In the "Directory Server Name Manager" screen, click Add.

 ✓ 	Directory Server Na	me Manage	11		- • ×
Server	Port		Available		
					Add
					Edit
					Remove
Help		QK	Cancel ,	Apply	<u>Revert</u>)

- **b.** In the "Directory Server Connection" pop-up dialog, enter the following values, then click **OK**.
 - Server: localhost
 - Port: <OIDport> (the port number you obtained in step 22 on page 258)

	Directory Server Conn	ection 🛛 💌
Server:		
Port:	389	
Help	C	OK Cancel

5. In the "Directory Server Name Manager" screen, select the new connection entry and click **OK**.

♥ ////////////////////////////////////	Directory Server Nam	ne Manager	/// = • ×
Server	Port	Available	
🚴 localhost	389	Yes	Add
			Edit
			Remove
Help			<u>Revert</u>)

- **6.** In the **Credentials** tab of the "Oracle Directory Manager Connect" screen, enter the following values:
 - User: cn=orcladmin
 - **Password:** <db_schema_password> (you created this password in step 15 on page 256)

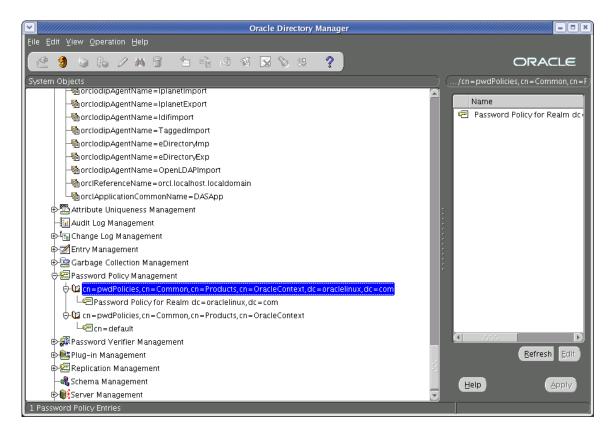


- - × Oracle Directory Manager @ 9 0 B / A 9 1 6 3 9 🛛 🖓 🥲 ? ORACLE ⊖ 🕞 Oracle Internet Directory Servers \ominus , cn = orcladmin@localhost:389 🖶 🐴 Access Control Management 🕀 🖺 Attribute Uniqueness Managemer – 📶 Audit Log Management 🕂 🔄 Change Log Management 🕀 📶 Entry Management E Garbage Collection Management Password Policy Management 🕩 🗱 Password Verifier Management 🕀 🏥 Plug-in Management Replication Management -🔩 Schema Management 🕀 🎼 Server Management 🗄 😔 Server Chaining Management Oracle Internet Directory Oracle Directory Manager Version10.1.4.0.1 Production
- 7. Click Login. Oracle Directory Manager loads.

Configuring ODS Password Security for Content Server

This section show you how to configure password security in Oracle Directory Server to meet Content Server's security requirements.

- 1. Log in to Oracle Directory Manager as cn=orcladmin. For instructions, see "Accessing Oracle Directory Manager," on page 260.
- **2.** In the tree on the left, expand the **Password Policy Management** node, then the node containing your DN (that is, the namespace you selected in step 13 on page 254):



3. Under the node containing your DN, select the Password Policy for Realm... node.

4. Increase the password expiration time from 120 days to 5 years.

In the **General** tab in the main pane, locate the "Password Expire Time" property. The default value of this property, expressed in seconds, is 10368000 (120 days). Change this value to 155520000 (5 years).

	Oracle Directory Manager	
Eile Edit View Operation Help		
🙋 🧐 😂 🗞 🖉 🖄 🕤	4 2 V 🔀 V 🔅 ?	ORACLE
System Objects	/Password Policy for Realm dc=oraclelinux,dc=com 역General 역소count Lockout 역가 Lockout 역 교문 Enable OID Password Policy	Password Syntax
- the orclodip Agent Name = Tagge - the orclodip Agent Name = eDirec - the orclodip Agent Name = eDirec - the orclodip Agent Name = OpenL - the orclodip Agent Name = OpenL - the orcl Application Common Nam - the orcl Application Common Nam		 Must Supply Old Password when Modifyir User Password Reversible Encryption Reset Password upon Next Login Old Password can be New Password Allow Hash Comparison
Audit Log Management ↓ Change Log Management ↓ Change Log Management ↓ Change Collection Management ↓ CarepwdPolicies, cn=Commi ↓ CarepwdPolicy Car	Grace Login Constraint: Number of Grace Logins after Password Expiration: Period for Grace Logins after Password Expiration: Password Expiry Time: Minimum Age for Password Self-Modify: Password Expiration Warning: Display Name:	Allow Hash Comparison Number of Grace Logins after Password Ex 5 0 10368000 604800 Password Policy for Realm dc=oraclelinux, c
Replication Management Schema Management Schema Management		

5. Select the **Password Syntax** tab.

FatWire

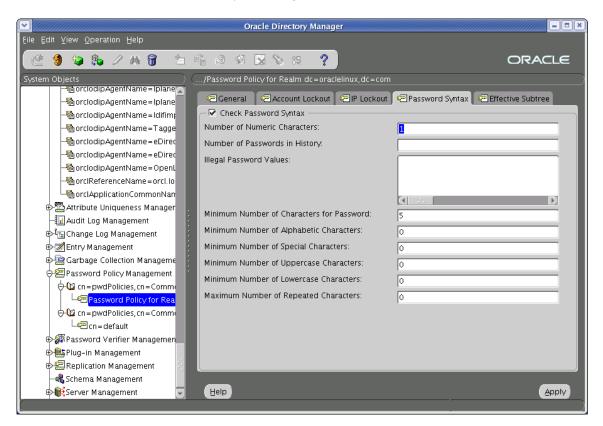
- 6. Configure password syntax constraints as follows:
 - **a.** Enable alpha-only passwords (that is, passwords that contain letters, but do not contain digits). You do this by setting the number of required numeric characters to none.

Note

Default Content Server passwords are alpha-only. If you are using these default passwords on your installation, you **must** enable alpha-only passwords in Oracle Directory Server.

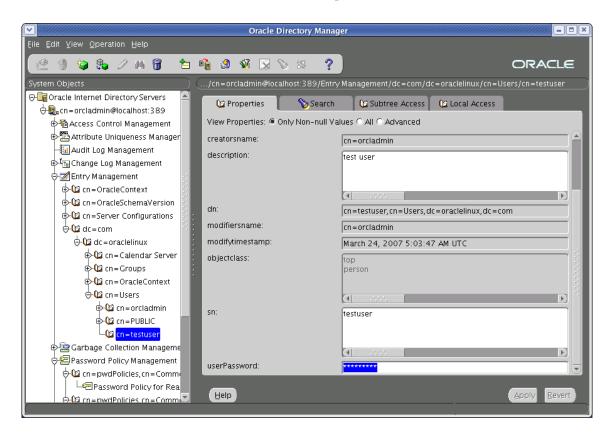
Locate the property named **Number of Numeric Characters** and change its value from 1 (default) to 0.

- **b.** Reduce the minimum password length to four characters. Locate the property named **Minimum Number of Characters for Password** and change its value from 5 (default) to 4.
- **c.** Click **Apply** to save your changes.



Modifying User Passwords

- 1. Log in to Oracle Directory Manager as cn=orcladmin. For instructions, see "Accessing Oracle Directory Manager," on page 260.
- 2. In the tree on the left, expand the **Password Policy Management** node, then the node containing your DN (that is, the namespace you selected in step 13 on page 254).
- **3.** Under the node representing your DN, expand the **cn=Users** node and select the user whose password you want to modify.
- 4. Select the **Properties** tab.
- 5. In the userPassword field, enter the new password.

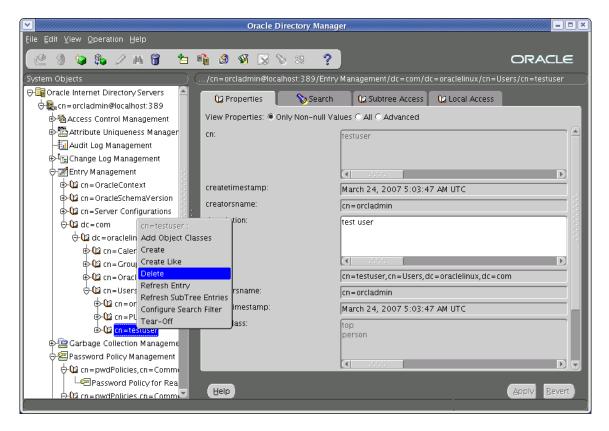


6. Click Apply to save your changes.

Deleting Users

This section shows you how to delete a user in Oracle Directory Server.

- 1. Log in to Oracle Directory Manager as cn=orcladmin. For instructions, see "Accessing Oracle Directory Manager," on page 260.
- 2. In the tree on the left, expand the **Password Policy Management** node, then the node containing your DN (that is, the namespace you selected in step 13 on page 254).
- **3.** Under the node representing your DN, expand the **cn=Users** node and select the user you want to delete.
- 4. Right-click the selected user and select **Delete** from the context menu.



5. In the confirmation pop-up dialog that appears, click **OK**.

Connecting to ODS Using an LDAP Browser

This section shows you how to connect to Oracle Directory Server using an LDAP browser.

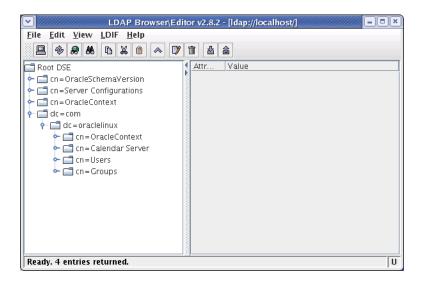
Note

You cannot add groups, set passwords, or activate accounts using an LDAP browser.

- **1.** Open the LDAP browser.
- 2. Select the Quick Connect tab.
- **3.** Enter the following information:
 - **Host:** localhost (if connecting remotely, enter the actual host name)
 - Base DN: leave blank
 - Anonymous bind: deselected
 - User DN: cn=orcladmin
 - Append base DN: deselected
 - **Password:** <dbschema_password> (you created this password in step 15 on page 256)

· //////		Connect	
Session L	ist Quick Connect		
Connecti	on Options		
- Host Info)		
Host	localhost		Port: 389 Version: 3 💌
Base DN:			•
	Fetch DNs	SSL 🔤	Anonymous bind
- User Info)		
User DN	cn=orcladmin		🗌 append base DN
Password	******		
			Connect Cancel

4. Click **Connect** to start your session.



5. Navigate to your DN (that is, the namespace you selected in step 13 on page 254).

FatWire

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Configuring Third-Party Software: Content Server 7.6 Patch 2

Chapter 18 Setting Up MS Active Directory Server 2003

This chapter provides instructions for setting up the currently supported Microsoft Active Directory Server (ADS) for use with Content Server.

Note

You must set up ADS before you run the CS LDAP integrator.

This chapter contains the following sections:

- Installing MS Active Directory Server
- Accessing the "Active Directory Users and Computers" Console
- Modifying User Passwords
- Deleting Users
- Configuring ADS Password Security for Content Server
- Connecting to ADS Using an LDAP Browser

Installing MS Active Directory Server

This section shows you how to install MS Active Directory Server 2003 for use with Content Server.

The procedure consists of the following steps:

- A. Install the Operating System
- B. Set the Machine's Name and Suffix
- C. Configure the Machine's Network Settings
- D. Install the Local DNS Server
- E. Configure the Local DNS Server
- F. Install MS Active Directory Server 2003

A. Install the Operating System

On the target machine, install Windows Server 2003 (any flavor except Web will do).

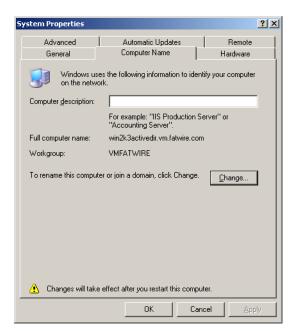
When the installation is complete, leave the installation disc in the drive – you will need it to complete the installation of ADS.

B. Set the Machine's Name and Suffix

1. Open the "System Properties" dialog.

This can be done in several ways. The fastest way is to right-click the **My Computer** icon on the desktop and select **Properties** from the context menu.

- 2. Select the Computer Name tab.
- 3. Click Change.



- 4. In the pop-up window that appears, do the following:
 - **a.** Enter the desired name for this machine. Make a record of this name.
 - **b.** Select the **Workgroup** radio button and enter a **unique** workgroup name. Make a record of this name.

Computer Name Changes
You can change the name and the membership of this computer. Changes may affect access to network resources.
Computer name:
win2k3activedir
Full computer name: win2k3activedir.vm.fatwire.com
[<u>More</u>]
Member of
C <u>D</u> omain:
VMFATWIRE
OK Cancel

- c. Click More.
- **d.** In the second pop-up window that appears, enter the DNS suffix for this machine. Make a record of this suffix.

DNS Suffix and NetBIOS Computer Name	? ×
Primary DNS suffix of this computer:	
vm.fatwire.com	
Change primary DNS suffix when domain membership changes	
NetBIOS computer name: WIN2K3ACTIVEDIR	
This name is used for interoperability with older computers and services.	
OK. Can	cel

- e. Make sure the Change primary DNS suffix when domain membership changes check box is not checked.
- f. Click **OK** to close the "DNS Suffix and NetBIOS Computer Name" pop-up window.
- 5. Click OK to close the "Computer Name Changes" pop-up window.
- 6. In the "System Properties" dialog box, click OK.
- 7. Restart the machine.

C. Configure the Machine's Network Settings

Configure the machine's network settings as follows:

- 1. Set the IP address to an unused static IP address.
- 2. Set the preferred DNS server to the machine's IP address.
- **3.** Make sure that the **Append primary and connection-specific DNS suffixes** check box on the **Advanced** tab under **DNS** settings in the **TCP/IP Protocol** properties for the machine's network interface is selected.
- 4. Make sure that **Append parent suffixes of the primary DNS suffix** check box is selected.

For instructions on configuring your machine's network settings, see the Windows Server 2003 documentation.

D. Install the Local DNS Server

- 1. Open the "Control Panel" and double-click Add and Remove Programs.
- 2. Click Add/Remove Windows Components.
- **3.** In the "Windows Components Wizard" pop-up window, select the **Networking Services** item (**not** its check box) and click **Details**.

indows Components Wizard		×
Windows Components You can add or remove co	mponents of Windows.	Ē
		A shaded box means that only ncluded in a component, click
Components:		
🗹 🧭 Internet Explorer Ei	nhanced Security Configural	ion 0.0 MB 📥
🔲 🚉 Management and I	Monitoring Tools	8.7 MB
🔲 🚽 Networking Servic	es	4.4 MB
🔲 🚆 Other Network File	and Print Services	0.1 MB
🗆 🔲 Remote Installation	Services	4.0 MB 🗾
Description: Contains a va	ariety of specialized, network	-related services and protocols.
Total disk space required:	11.7 MB	
Space available on disk:	21188.3 MB	<u>D</u> etails
[< <u>B</u> ack <u>N</u> ext>	Cancel Help

4. In the pop-up window that appears, select the check box next to **Domain Name System (DNS)** and click **OK**. The pop-up window closes.

Networking Services	
To add or remove a component, click the check box. A shaded box mean of the component will be installed. To see what's included in a component	
Subcomponents of Networking Services:	
🗹 📇 Domain Name System (DNS)	2.7 MB 🔺
🗆 🗔 🌉 Dynamic Host Configuration Protocol (DHCP)	0.0 MB
🗆 🚐 Internet Authentication Service	0.0 MB
🗆 📮 Remote Access Quarantine Service	0.1 MB
RPC over HTTP Proxy	0.1 MB
Element Simple TCP/IP Services	0.0 MB 🚽
🗆 📃 Windows Internet Name Service (WINS)	1.5 MB 💌
Description: Sets up a DNS server that answers query and update requinames.	ests for DNS
Total disk space required: 14.4 MB	Details
Space available on disk: 21188.3 MB	<u>P</u> _0.010
ОК	Cancel

- 5. In the "Windows Component Wizard" screen, click Next.
- 6. When the installation completes successfully, click Finished.

Windows Components Wizard		×
	Completing the Windows Components Wizard You have successfully completed the Windows Components Wizard.	
M	To close this wizard, click Finish.	
	< Back	Help

E. Configure the Local DNS Server

- 1. In the "Control Panel," double-click the Administrative Tools icon.
- 2. Double-click the DNS icon.
- **3.** In the "dnsmgmt console," select the machine name you entered in step 4 on page 273.
- **4.** Right-click the machine name and select **Configure this DNS Server** from the context menu.
- 5. In the "Configure a DNS Server Wizard" pop-up window that appears, click Next.

Welcome to the Configure a DNS Server Wizard	
This wizard helps you configure a DNS server by creating forward and reverse lookup zones and by specifying root hints and forwarders.	
Before continuing, review the DNS checklists.	
[_ DNS Checklists]	
For more information about configuring DNS, click Help.	
To continue, click Next.	
< <u>Back N</u> ext > Cancel Help	

6. In the "Select Configuration Action" screen, select the **Create forward and reverse** lookup zones radio button and click Next.

Configure a DNS Server Wizard
Select Configuration Action You can choose the lookup zone types that are appropriate to your network size. Advanced administrators can configure root hints.
Select the action you would like this wizard to perform:
C Create a forward lookup zone (recommended for small networks) This server is authoritative for the DNS names of local resources but forwards all other queries to an ISP or other DNS servers. The wizard will configure the root hints but not create a reverse lookup zone.
Create forward and reverse lookup zones (recommended for large networks) This server can be authoritative for forward and reverse lookup zones. It can be configured to perform recursive resolution, forward queries to other DNS servers, or both. The wizard will configure the root hints.
Configure root hints only (recommended for advanced users only) The wizard will configure the root hints only. You can later configure forward and reverse lookup zones and forwarders.
< Back Next > Cancel Help

7. In the "Forward Lookup Zone" screen, select the Yes, create a forward lookup zone (recommended) radio button and click Next.



8. In the "Zone Type" screen, select the Primary Zone radio button and click Next.

Zone Type The DN5 server supports various types of zones and storage.
 Select the type of zone you want to create: Primary zone Creates a copy of a zone that can be updated directly on this server. Secondary zone Creates a copy of a zone that exists on another server. This option helps balance the processing load of primary servers and provides fault tolerance. Styb zone Creates a copy of a zone containing only Name Server (NS), Start of Authority (SOA), and possibly glue Host (A) records. A server containing a stub zone is not authoritative for that zone. Store the zone in <u>Active Directory</u> (available only if DNS server is a domain controller)
< <u>Back N</u> ext > Cancel Help

9. In the "Zone Name" screen, enter the name of the zone you are creating. The zone name is the domain suffix you entered in step d on page 273. Click **Next**.

Zone Name What is the name of the new zone?	
The zone name specifies the portion of the DNS namespace for which this server is authoritative. It might be your organization's domain name (for example, microsoft.cr or a portion of the domain name (for example, newzone.microsoft.com). The zone na not the name of the DNS server.	
Zone name:	
vm.fatwire.com	
For more information about zone names, click Help.	
< <u>B</u> ack <u>N</u> ext > Cancel He	p

10. In the "Zone File" screen, keep the default zone file name and click **Next**.

New Zone Wizard X
Zone File You can create a new zone file or use a file copied from another DNS server.
Do you want to create a new zone file or use an existing file that you have copied from another DNS server?
Create a new file with this file name:
vm.fatwire.com.dns
O Use this existing file:
To use this existing file, ensure that it has been copied to the folder %SystemRoot%\system32\dns on this server, and then click Next.
< <u>B</u> ack <u>N</u> ext > Cancel Help

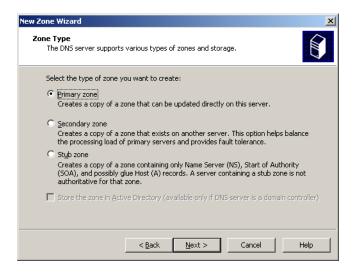
11. In the "Dynamic Update" screen, select the **Allow both nonsecure and secure dynamic updates** radio button and click **Next**.



12. In the "Reverse Lookup Zone" screen, select the **Yes, create reverse lookup zone now** radio button and click **Next**.

Configure a DNS Server Wizard	
Reverse Lookup Zone You can create a reverse lookup zone now or create one later by running the New Zone Wizard in the DNS console.	
A reverse lookup zone translates IP addresses to DNS names. Reverse lookup zones are usually necessary only if programs require this information.	
Do you want to create a reverse lookup zone now?	
Yes, create a reverse lookup zone now	
C No, don't create a reverse lookup zone now	
For more information about reverse lookup zones, click Help.	
< <u>Back</u> <u>N</u> ext > Cancel Help	

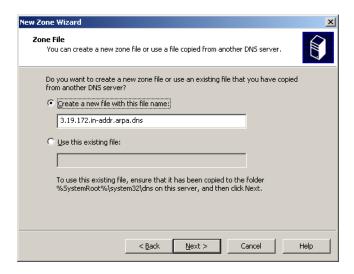
13. In the "Zone Type" screen, select the Primary Zone radio button and click Next.



14. In the "Reverse Lookup Zone Name" screen, select the **Network ID** radio button and enter the first three octets of the machine's IP address (you set this address in step 1 on page 274), then click **Next**.

New Zone Wizard
Reverse Lookup Zone Name A reverse lookup zone translates IP addresses into DNS names.
To identify the reverse lookup zone, type the network ID or the name of the zone. Network ID: 172 .19 .3 The network ID is the portion of the IP addresses that belongs to this zone. Enter the network ID in its normal (not reversed) order. If you use a zero in the network ID, it will appear in the zone name. For example, network ID in would create zone 10.in-addr.arpa, and network ID 10.0 would create zone 0.10.in-addr.arpa.
C Reverse lookup zone name: 3.19.172.in-addr.arpa
For more information on creating a reverse lookup zone, click Help. < Back

15. In the "Zone File" screen, keep the default zone file name and click Next.



16. In the "Dynamic Update" screen, select the **Allow both nonsecure and secure dynamic updates** radio button and click **Next**.

New Zone Wizard	×
Dynamic Update You can specify that this DNS zone accepts secure, nonsecure, or no dynamic updates.	
Dynamic updates enable DNS client computers to register and dynamically update their resource records with a DNS server whenever changes occur.	
Select the type of dynamic updates you want to allow:	
C) Allow only secure dynamic updates (recommended for Active Directory) This option is available only for Active Directory-Integrated zones.	
 Allow both nonsecure and secure dynamic updates Dynamic updates of resource records are accepted from any client. This option is a significant security vulnerability because updates can be accepted from untrusted sources. 	
O Do not allow dynamic updates Dynamic updates of resource records are not accepted by this zone. You must update these records manually.	
< <u>Back</u> <u>N</u> ext > Cancel Help]

17. In the "Forwarders" screen, select the **No, it should not forward queries** radio button and click **Next**.

Configure a DNS Server Wizard
Forwarders Forwarders are DNS servers to which this server sends queries that it cannot answer.
Should this DNS server forward queries?
C Yes, it should forward queries to DNS servers with the following IP addresses:
(optional)
No, it should not forward queries
If this server is not configured to use forwarders, it can still resolve names using root name servers.
For more information about forwarders, click Help.
< <u>B</u> ack <u>N</u> ext > Cancel Help

18. In the "Completing the Configure a DNS Server Wizard" screen, click **Finish**.

Configure a DNS Server Wizard		×
	Completing the Configure a DNS Server Wizard	
	You have successfully completed the Configure a DNS Server Wizard. When you click Finish, the following settings will be saved.	
	Settings:	
	DNS server to configure: WIN2K3ACTIVEDIR Forward lookup zone to create: vm.fatwire.com Reverse lookup zone to create: 3.19.172.in-addr.arpa	
	Configure the hosts that will use this DNS server to point to this DNS server for name resolution, and then verify name resolution using nslookup. If you added a new primary zone, add resource records to it for the hosts whose names need to be resolved by this DNS server.	
	To close this wizard, click Finish.	
	< Back Finish Cancel Help	

19. Close or minimize the DNS server window.

F. Install MS Active Directory Server 2003

- 1. Click Start, then Run, and enter dcpromo in the "Run" dialog box.
- 2. In the "Welcome to the Active Directory Installation Wizard" screen, click Next.

Welcome to the Active Directory Installation Wizard This wizard helps you install Active Directory services on this server, making the server a domain controller.
If this is the first time you have installed Active Directory, it is recommended that you first read the overview in <u>Active</u> <u>Directory Help</u> . To continue, click Next.
< Back. Next > Cancel

3. In the "Operating System Compatibility" screen, click Next.

Active Directory Installation Wizard	×
Operating System Compatibility Improved security settings in Windows Server 2003 affect older versions of Windows.	Ż
Domain controllers running Windows Server 2003 implement security settings that require clients and other servers to communicate with those domain controllers in a more secure way.	
Some older versions of Windows, including Windows 95 and Windows NT 4.0 SP3 or earlier, do not meet these requirements. Similarly, some non-Windows systems, including Apple Mac DS X and SAMBA clients, might not meet these requirements.	
For more information, see <u>Compatibility Help</u> .	
< <u>Back</u> Cance	

4. In the "Domain Controller Type" screen, select the **Domain controller for a new domain** radio button and click **Next**.

Active Directory Installation Wizard		
Domain Controller Type Specify the role you want this server to have.		
Do you want this server to become a domain controller for a new domain or an additional domain controller for an existing domain? © Domain controller for a new domain Select this option to create a new child domain, new domain tree, or new forest. This server will become the first domain controller in the new domain.		
C Additional domain controller for an existing domain		
Proceeding with this option will delete all local accounts on this server.		
All cryptographic keys will be deleted and should be exported before continuing.		
All encrypted data, such as EFS-encrypted files or e-mail, should be decrypted before continuing or it will be permanently inaccessible.		
< <u>B</u> ack <u>N</u> ext > Cancel		

- 5. "In the "Create a New Domain" screen, select the **Domain in a new forest** radio button and click **Next**.
- 6. In the "New Domain Name" screen, enter the DNS name you entered in step 9 on page 278, then click Next.

Active Directory Installation Wizard	×
New Domain Name Specify a name for the new domain.	
Type the full DNS name for the new domain (for example: headquarters.example.microso	
Eull DNS name for new domain:	
vm.fatwire.com	
	< <u>Back</u> <u>Next</u> > Cancel

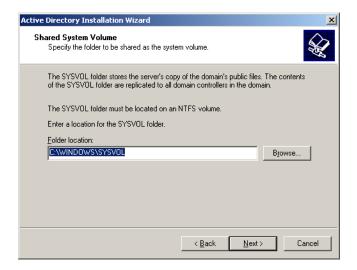
7. In the "NetBIOS Domain Name" screen, keep the default value and click Next. Make a record of this value.

Active Directory Installation Wizard	×
NetBIOS Domain Name Specify a NetBIOS name for the new domain.	
This is the name that users of earlier versions of Windows will use to identify the new domain. Click Next to accept the name shown, or type a new name.	
Domain NetBIOS name:	
< <u>B</u> ack <u>N</u> ext > Cance	:

8. In the "Database and Log Folders" screen, click Next.

Active Directory Installation Wizard	×
Database and Log Folders Specify the folders to contain the Active Directory database and log file:	
For best performance and recoverability, store the database and the log hard disks.	on separate
Where do you want to store the Active Directory database?	
Database folder:	
C:\WINDOWS\NTDS	Browse
Where do you want to store the Active Directory log?	
Log folder:	
C:\WINDOWS\NTDS	Browse
< <u>B</u> ack <u>N</u> ext >	Cancel

9. In the "Shared System Volume" screen, click Next.



10. In the "Diagnostic Results" screen, make sure that the diagnostic has completed successfully, then click **Next**. If the diagnostic fails, correct the indicated problem, click **Back** and then **Next** to rerun the diagnostic.

Active Directory Installation Wizard	×	
DNS Registration Diagnostics Verify DNS support, or install DNS on this computer.		
Diagnostic Results		
The registration diagnostic has been run 1 time.		
DNS registration support for this domain controller has been verified. To continue, click Next.		
Details		
The primary DNS server tested was: win2k3activedir.vm.fatwire.com (172.19.3.4)		
The zone was: vm.fatwire.com		
The test for dynamic DNS update support returned: "The operation completed successfully."		
< <u>B</u> ack <u>N</u> ext > Cance		

11. In the "Permissions" screen, select the **Permissions compatible only with Windows** 2000 and Windows 2003 operating systems and click Next.



12. In the "Directory Services Restore Mode Administrator Password" screen, enter a password and click **Next**. Make a record of this password.

Active	Directory Installation Wiza	rd	×
Dir	ectory Services Restore Mo This password is used when yo Mode.	ode Administrator Password u start the computer in Directory Services Restore	
	Type and confirm the password you want to assign to the Administrator account used when this server is started in Directory Services Restore Mode.		
	The restore mode Administrator account is different from the domain Administrator account. The passwords for the accounts might be different, so be sure to remember both.		
	Restore Mode Password:	•••••	
	Confirm password:	•••••	
	For more information about Dire	ctory Services Restore Mode, see <u>Active Directory</u>	<u>Help</u> .
		< <u>B</u> ack <u>N</u> ext>	Cancel

13. In the "Summary" screen, click Next.

Active Directory Installation Wizard		
Summary Review and confirm the options you selected.		
You chose to: Configure this server as the first domain controller in a new forest of domain trees. The new domain name is vm.fatwire.com. This is also the name of the new forest. The NetBIOS name of the domain is VM Database folder: C:\WINDOWS\NTDS Log file folder: C:\WINDOWS\NTDS SYSVOL folder: C:\WINDOWS\SYSVOL The password of the new domain administrator will be the same as the password of the administrator of this computer.]		
To change an option, click Back. To begin the operation, click Next.		
<u> < B</u> ack <u>N</u> ext > Cancel		

14. In the "Completing the Active Directory Installation Wizard" screen, click Next.



15. In the pop-up dialog that appears, click **Reboot Now** and wait for the machine to restart.

Active Directory Installation Wi	zard	×
Windows must be restarted before the changes made by the Active Directory Installation wizard take effect.		
<u>B</u> estart Now	Don't Restart Now	

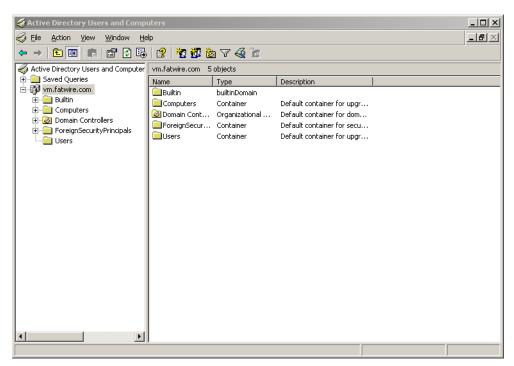
Active Directory Server is now installed and ready for use.

Accessing the "Active Directory Users and Computers" Console

You use the "Active Directory Users and Computers" console to manage your Active Directory Server configuration. To access the console, perform the following steps:

- 1. Click Start, then Run to bring up the "Run" dialog box.
- 2. In the "Run" dialog box, enter dsa.msc.
- 3. Click OK.

The "Active Directory Users and Computers" console loads.



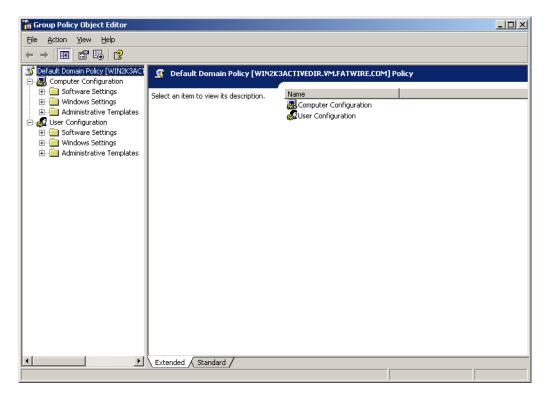
Configuring ADS Password Security for Content Server

This section shows you how to configure password security in Active Directory Server to meet Content Server's requirements.

- 1. Open the "Active Directory Users and Computers" console.
- **2.** In the tree on the left, right-click the desired domain and select **Properties** from the context menu.
- 3. In the dialog that appears, select the Group Policy tab.

vm.fatwire.com F	roperties			<u>?</u> ×
General Manag	ed By Group Po	licy		
Current Group Policy Object Links for vm				
Group Policy 0	Ibject Links		No Override	Disabled
S Default Do	main Policy			
	jects higher in the I from: win2k3acti			
New	A <u>d</u> d	<u>E</u> dit	1	<u>U</u> р
Options	Dele <u>t</u> e	<u>P</u> roperties	I 🗌	Do <u>w</u> n
☐ <u>B</u> lock Policy	inheritance			
		ОК	Cancel	Apply

4. The Group Policy Object Editor appears, showing the group policy you selected.



- 5. In the tree on the left, expand Computer Configuration > Windows Settings > Security Settings > Account Policies and select Password Policy.
- 6. In the main pane, double-click the **Minimum password length** item.
- 7. In the pop-up dialog that appears, enter 4 as the value and click **OK**.

Minimum password length Properties	<u>? ×</u>
Security Policy Setting	
Minimum password length	
Define this policy setting	
Password must be at least:	
OK Cancel	

- 8. Double-click the **Password must meet complexity requirements** item.
- 9. In the pop-up window that appears, select the **Disabled** radio button and click **OK**.
- 10. From the File menu, select Exit, then click OK.
- 11. Bring up the "Run" dialog, enter gpudate, and click OK.

Modifying User Passwords

This section shows you how to modify a user's password in Active Directory Server.

- 1. Open the "Active Directory Users and Computers" console.
- 2. In the tree on the left, select Users.
- 3. In the main pane, select the user whose password you want to modify.
- 4. Right-click the desired user name and select **Reset Password** from the context menu.
- 5. In the dialog that appears, enter and re-enter the new password, then click OK.

Deleting Users

This section shows you how to delete a user in Active Directory Server.

- 1. Open the "Active Directory Users and Computers" console.
- 2. In the tree on the left, select Users.
- 3. In the main pane, select the user whose password you want to modify.
- 4. Right-click the desired user name and select **Delete** from the context menu.
- 5. In the pop-up dialog that appears, click Yes.

Connecting to ADS Using an LDAP Browser

This section shows you how to connect to Active Directory Server using an LDAP browser.

Note

You cannot add groups, set passwords, or activate accounts using an LDAP browser.

- **1.** Open the LDAP browser.
- 2. Select the Quick Connect tab.
- **3.** Fill out the following information:
 - Host: localhost (if connecting remotely, enter the actual host name)
 - **Base DN:** <DNS_suffix> (the part of the DNS name after the host name)
 - Anonymous bind: deselect
 - User DN: administrator@<DNS_suffix>
 - Append base DN: deselect
 - **Password:** <ADS_password> (you created this password in step 12 on page 287)

		Connect	
Session L	ist Quick Connect		
Connecti	on Options		
- Host Info)		
Host	localhost	Ро	ort: 389 Version: 3 💌
Base DN:			-
	Fetch DNs	SSL	Anonymous bind
- User Info)		
User DN	cn=orcladmin		🔄 append base DN
Password	******		
L			Connect Cancel

4. Click Connect.

Connecting to ADS Using an LDAP Browser

Part 4 Virtualization

This part contains the following chapters:

- Chapter 19, "Creating and Configuring a Xen Virtual Machine"
- Chapter 20, "Creating a Zone in Solaris 10"
- Chapter 21, "Installing and Configuring VMware ESX Server 3.5"

Chapter 19

Creating and Configuring a Xen Virtual Machine

This chapter shows you how to create and configure a Xen Virtual Machine on Red Hat Enterprise Linux 5.0.

This chapter contains the following sections:

- Important Commands
- Configure GRUB
- Paravirtualization
- Full Virtualization
- Creating a New Virtual Machine

Important Commands

Command	Path
Start the xend control daemon	service xend start
Start the Virtual Machine Manager	virt-manager
Start a Virtual Machine	<pre>xm create /etc/xen/<virtual machine="" name=""></virtual></pre>
Shut down a Virtual Machine	xm shutdown /etc/xen/ <virtual machine<br="">name></virtual>
Suspend a Virtual Machine	xm suspend /etc/xen/ <virtual machine="" name=""></virtual>
Resume a Virtual Machine	<pre>xm resume /etc/xen/<virtual machine="" name=""></virtual></pre>
Configure the amount of startup memory for a Virtual Machine	<pre>xm mem-set /etc/xen/<virtual machine="" name=""> <amount in="" megabytes=""></amount></virtual></pre>
Configure the maximum allowable memory for a Virtual Machine	xm mem-max /etc/xen/ <virtual machine<br="">name> <amount in="" megabytes=""></amount></virtual>
Configure the number of vcpu's allocated to a Virtual Machine	<pre>xm vcpu-set /etc/xen/<virtual machine="" name=""> <number of="" vcpu's=""></number></virtual></pre>
View the xend log	xm log
Save a Virtual Machine	<pre>xm save /etc/xen/<virtual machine="" name=""> <path file="" save="" to=""></path></virtual></pre>
Restore a Virtual Machine	xm restore <path file="" save="" to=""></path>

Configure GRUB

The GRUB boot loader's configuration file contains the kernel-xen entries and a space separated list of arguments to be passed to the kernel at system boot time.

1. Enter the following path to open the boot loader's configuration file in a text editor:

/boot/grub/grub.conf

Example of kernel-xen entry:

```
itle Red Hat Enterprise Linux Server (2.6.18-3.el5xen)
root (hd0; 0)
kernel /xen.gz.-2.6.18-3.el5 dom0_mem=800M dom0_max_vcpus=1
module /vmlinuz-2.6..18-3.el5xen ro root=/dev/VolGroup00/
LogVol00 rhgb quiet
module /initrd-2.6.18-3. el5xenxen.img
```

2. To limit the amount of resources the domain0 system management domain can use, add space separated kernel arguments to the end of the kernel line of the kernel-xen entry.

Important kernel arguments:

- dom0_mem This argument limits the amount of memory that is available for domain0.
- dom0_max_vcpus This argument limits the amount of CPUs visible to domain0.

Paravirtualization

Requirements

Note

The latest version of most Linux distributions include the xen-kernel for paravirtualization support. Windows is not yet supported for paravirtualization.

- Guest operating system with Xen Paravirtualization support.
- Installation tree accessible via http, nfs, or ftp.

Creating an Installation Tree

An installation tree is the location for all the files that are needed to run and install the operating system. If a location is not already available via http, nfs, or ftp, one must be created using the installation disks or ISO images.

If you are using the installation CD-ROMs, complete the following steps:

- 1. Create a directory for your installation tree.
- 2. For each binary CD-ROM, execute the following:
 - mkdir /mnt/cdrom
 - mount -r /dev/cdrom /mnt/cdrom
 - cp -var /mnt/cdrom <path to installation tree>

Note

You may have to manually concatenate TRANS. TBL files.

- umount -v /mnt/cdrom

If you are using ISO images, complete the following steps:

- 1. Create a directory for your installation tree.
- 2. For each ISO image, execute the following:
 - mkdir /mnt/iso
 - mount -o loop <path to ISO> /mnt/iso
 - cp -var /mnt/iso/* <path to installation tree>
 - umount /mnt/iso

Making the Installation Tree Available

Once the installation tree has been created, the Virtual Machine creation tool requires this tree be made available via http, nfs, or ftp.

HTTP (Recommended)

- 1. Install Apache Web Server.
- 2. Move the installation tree into the htdocs directory of Apache.

301

3. Start the Apache Web Server. Go to the bin directory of Apache and run the following command:

apachectl start

4. Use the following URL: http://<apache host>/<installation tree>

NFS

- **1.** Open: /etc/exports in a text editor.
- 2. Add an entry for your installation tree, for example:

<path to installation tree> *
(rw,async,no_root_squash,no_subtree_check)

- **3.** Run the following commands:
 - exportfs -a
 - /etc/init.d/nfs start
 - /sbin/service nfs reload
- 4. Use the following URL: nfs://<hostname>/<path to installation tree></path to installation tree>

FTP

- 1. Copy your installation tree to a shared directory of an ftp server.
- **2.** Use the following URL:

ftp://<hostname>:<ftp port>/<path to installation tree>

Full Virtualization

Requirements:

• CPU with full virtualization support

Check CPU for full virtualization support.

• To check for full virtualization support on an Intel CPU, enter the following command:

grep vmx /proc/cpuinfo

- If a list of CPU flags is outputted, then your Intel CPU supports full virtualization. For example:

```
flags : fpu tsc msr pae mce cx8 apic mtrr mca cmov pat pse36
clflush dts acpi mmx fxsr sse sse2 ss ht tm syscall nx lm
constant_tsc pni monitor ds_cpl vmx est tm2 cx16 xtpr lahf_lm
```

- If nothing is outputted, your CPU does not support full virtualization.
- To check for full virtualization support on an AMD CPU, enter the following command:

grep svm /proc/cpuinfo

- If a list of CPU flags is outputted, then your AMD CPU supports full virtualization. For example:

flags : fpu tsc msr pae mce cx8 apic mtrr mca cmov pat pse36 clflush dt acpi mmx fxsr sse sse2 ss ht tm syscall nx mmtext fxsr_opt rdtscp lm 3dnowext pni cx16 lahf_lm cmp_legacy svm cr8_legacy

- If nothing is outputted, your CPU does not support full virtualization.

Creating a New Virtual Machine

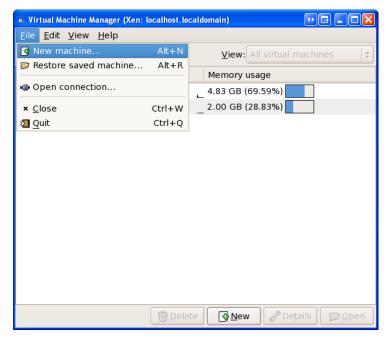
Note

A new virtual machine can be installed to a clean partition (recommended) or an image file on the host file system. If you will be installing on a clean partition, have this partition created before you go on to the next step.

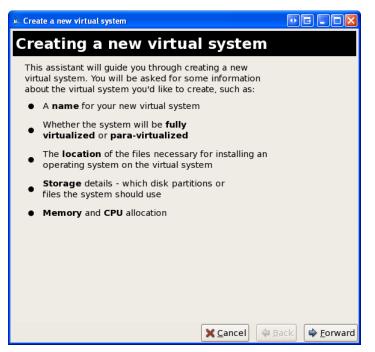
- 1. Open the Virtual Machine Manager by running the virt-manager command.
- 2. When the "Open Connection" window appears, select Local Xen host, then click Connect.

🔋 Open connection	
<u> Local Xen host </u>	
O <u>R</u> emote Xen host	
Host:	Port:
O Other hypervisor	
<u>U</u> RI:	
<u>Read only connection</u>	
	X Cancel Connect

3. Click: **File > New machine**.



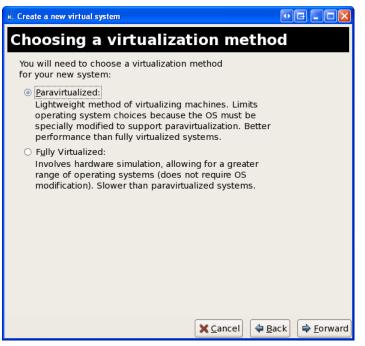
4. Click Forward.



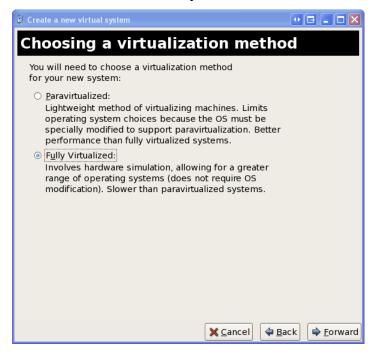
5. Enter a name for the Virtual Machine, then click Forward.



- 6. Select a virtualization method.
 - **a.** If you will be installing a guest operating system that has been specifically configured for Xen Virtualization, select **Paravirtualized**, then click **Forward**.



b. If you will be installing a guest operating system not specifically configured for Xen Virtualization, select **Fully Virtualized**, then click **Forward**.



FatWire Configuring Third-Party Software: Content Server 7.6 Patch 2

- **7.** (Paravirtualization Only).
 - **a.** Enter the URL to the installation tree created in the previous section.
 - For example:

```
http://<hostname>:<port>/tree
nfs://<hostname>:<port>/tree
ftp://<hostname>:<port>/tree
```

b. Click **Forward**.

🍺 Create a new virtual system		
Locating installation media		
Please indicate where installation media is available f operating system you would like to install on this paravirtualized virtual system. Optionally you can p URL for a kickstart file that describes your system:		
Install Media URL: http://10.120.12.31/tree	•	
Example: http://servername.example: http://se	ole.com/distro/i386/tree	
Kickstart U <u>R</u> L:	•	
Example: ftp://hostname.example.	com/ks/ks.cfg	
🗙 <u>C</u> ancel		

- 8. (Full Virtualization Only). Select the installation media location.
 - If **ISO Image Location** was selected, browse for the location of the ISO Image containing the operating system installer. Click **Forward**.

Create a new virtual system		
Locating installation media		
Please indicate where installation media is available for the operating system you would like to install on this fully virtualized virtual system:		
ISO Image Location:		
ISO Location: /root/boot-rhel4as-x86_(Browse)		
Please insert disc 1 of the installation media for the desired operating system now.		
Cancel Sector		

- If CD-ROM or DVD was selected, select the drive containing the installation media. Click **Forward**.

Create a new virtual system		
Locating insta	llation media	
	stallation media is available you would like to install on tual system:	
O ISO Image Location:		
ISO <u>L</u> ocation:	<u>B</u> rowse	
<u> <u> </u> </u>		
<u>P</u> ath to install media:	Enterprise Linux cd 1 20070613	
	🗙 <u>C</u> ancel 🛛 🖨 📿	🖨 <u>F</u> orward

- **9.** Select a storage method.
 - If **Normal Disk Partition** was selected, enter the path to the disk partition the Virtual Machine will be stored on. Click **Forward**.

🛿 Create a new virtual system 🛛 💽 🗖 🔲			
Assigning storage space			
Please indicate how you'd like to assign space on this physical host system for your new virtual system. This space will be used to install the virtual system's operating system.			
Normal Disk	<u>P</u> artition:		
P <u>a</u> rtition:	/dev/sdb1	Browse	
	Example: /dev/hdc2		
○ Simple F <u>i</u> le:			
File <u>L</u> ocation:		Browse	
File <u>S</u> ize:	2000 MB		
	1 Note: File size parameter is only relevant for a size parameter i	or new files	
	🗹 Allocate entire virtual disk now?		
Warning: If you do not allocate the entire disk at VM creation, space will be allocated as needed while the guest is running. If sufficient free space is not available on the host, this may result in data corruption on the guest.			
storage, to you	dd additional storage, including network-mounte Ir virtual system after it has been created using I would on a physical system.		
	🗙 <u>C</u> ancel 🗳	<u>B</u> ack	

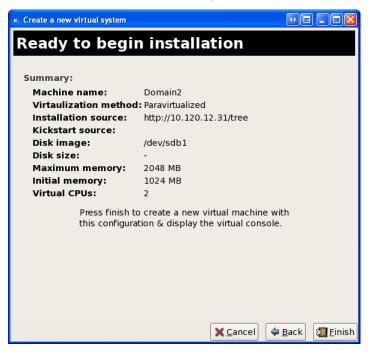
- If **Simple File** was selected, enter the path to the file that the Virtual Machine will be stored as, and select a file size. Click **Forward**.

🔋 Create a new virtua	l system	
Assigning	storage space	
host system for	ow you'd like to assign space on this pł your new virtual system. This space will e virtual system's operating system.	
🔿 Normal Disk	<u>P</u> artition:	
P <u>a</u> rtition:		Browse
	Example: /dev/hdc2	
Simple File:		
File <u>L</u> ocation:	/u01/rhel5pv.iso	Browse
File <u>S</u> ize:	16000 🚔 MB	
	1 Note: File size parameter is only relevant for a size parameter i	or new files
	Allocate entire virtual disk now?	
be allocated a	ou do not allocate the entire disk at VM creation is needed while the guest is running. If sufficient e on the host, this may result in data corruption o	free space
🥣 storage, to yoι	dd additional storage, including network-mounte ır virtual system after it has been created using i ı would on a physical system.	
		Pack Sonward
	X <u>C</u> ancel	Back

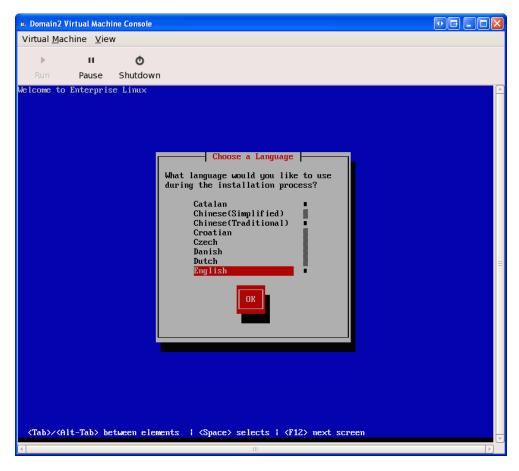
- **10.** When the "Allocate memory and CPU" screen appears, fill in the fields provided, then click **Forward**.
 - Memory:
 - VM Max Memory (MB): Enter the maximum amount of memory to be allocated to this Virtual Machine.
 - VM Startup Memory (MB): Enter the amount of memory to be allocated at startup of this Virtual Machine.
 - CPUs: Enter the number of virtual CPUs to be allocated to this Virtual Machine.

🗟 Create a new virtual system 💿 🖃 🔲 🔀
Allocate memory and CPU
Memory: Please enter the memory configuration for this VM. You can specify the maximum amount of memory the VM should be able to use, and optionally a lower amount to grab on startup. Warning: setting VM memory too high will cause out-of-memory errors in your host domain! Total memory on host machine: 6.94 GB VM Max Memory (MB): 2048 + VM Startup Memory (MB): 1024 +
CPUs: Please enter the number of virtual CPUs this VM should start up with. Logical host CPUs: 4 <u>V</u> CPUs: 2 Tip: For best performance, the number of virtual CPUs should be less than (or equal to) the number of logical CPUs on the host system.
🗙 <u>C</u> ancel 🖨 <u>B</u> ack 🖨 <u>F</u> orward

11. Review the Virtual Machine settings, and click Finish.



12. A new Virtual Machine is now created and booted, running the installer of the operating system in your installer tree.

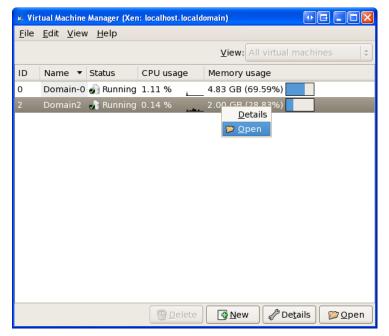


- **13.** After the installation of your operating system is complete, click to reboot the server. The following events occur:
 - **a.** The Virtual Machine shuts down. Its name is removed from the Virtual Machine list in the Virtual Machine Manager.
 - **b.** The Virtual Machine with the operating system you installed is relocated to the specified storage location. A configuration file is created in the /etc/xen directory. The file name is identical to the Virtual Machine name specified in the installation.

14. Run the following command to start the Virtual Machine:

```
xm create /etx/xen/<Virtual Machine name>
```

- **a.** When started, the Virtual Machine will be added to the Virtual Machine list in the "Virtual Machine Manager."
- **b.** Open the Virtual Machine from the "Virtual Machine Manager" by right-clicking the name and clicking **Open**.



Chapter 20 Creating a Zone in Solaris 10

This chapter provides instructions on how to create and configure a zone in Solaris 10. This chapter contains the following sections:

- Prerequisites
- Setting Up a Zone in Solaris 10
- First-Time Configuration for a Zone

Prerequisites

- Must be on Solaris 10 Update 4 (as this guide assumes that you are using such a version).
- It is preferred that one unused NIC is available and dedicated to each zone.
- Enough Disk space to create a zone and store the files associated with the zone. The actual space will depend on the application server used and the configuration. It is suggested that for a Sparse Zone you include enough space for Content Server, Application Server + 20%, and no less than 4GB of memory.
- Installation media for Solaris 10 Update 4, and a way to mount the media locally.

Setting Up a Zone in Solaris 10

Note

All commands are done as root

- 1. Create a directory as the root of your new zone (/u01/zone1) which will be used in this section: mkdir /u01/cs_zone1
- 2. Change permissions for /u01/cs_zone1: chmod 700 /u01/cs_zone1
- 3. Plumb the new interface in Solaris so that the zone will be able to find it. Ex. If the interface is named bgel: # ifconfig bge1 plumb
- 4. Create a new zone by running zonecfg, which will start zonecfg in interactive mode: **# zonecfg -z cs_zone1**
 - a. Start creating a new zone: zonecfg:cs_zone1> create
 - b. Set the path to the new zone (we will use the path created in step 1): zonecfg:cs_zonel> set zonepath=/u01/cs_zonel
 - c. Add an NIC to this zone: zonecfg:apache> add net
 - 1) Configure the interface for the zone (assumes that the unused physical NIC is named bge1): zonecfg:cs_zonel:net> set physical=bge1
 - 2) Set the IP address to be used by this zone, in this case a Class C subnet with the address of 10.120.16.84: zonecfg:cs_zonel:net> set address=10.120.16.84/24
 - 3) Exit the zone NIC config: zonecfg:cs_zone1:net> end
 - 4) Set the zone to automatically Start upon Boot (optional, but suggested):zonecfg:cs_zonel> set autoboot=true
 - 5) Check what the zone will look like with the info command:

```
zonecfg:cs_zonel> info
zonename: cs_zonel
zonepath: /u01/cs_zonel
autoboot: false
pool:
limitpriv:
```

```
inherit-pkg-dir:
    dir: /lib
inherit-pkg-dir:
    dir: /platform
inherit-pkg-dir:
    dir: /sbin
inherit-pkg-dir:
    dir: /usr
net:
    address: 10.120.16.84/24
    physical: bge1
```

- 6) Commit the changes: zonecfg:cs_zonel> commit
- 7) Exit the zone: zonecfg:cs_zone1> exit
- 5. Install the new zone. Use step 4a for a sparse zone and step 4b for a full zone.
 - If using a sparse zone run: # zoneadm -z cs_zone1 install
 - If using a full zone run: **# zoneadm** -b cs_zone1 install

The output will closely resemble the following:

```
Preparing to install zone <cs_zonel>.
Creating list of files to copy from the global zone.
Copying <2560> files to the zone.
Initializing zone product registry.
Determining zone package initialization order.
Preparing to initialize <1736> packages on the zone.
Initialized <1736> packages on zone.
Zone <cs_zonel> is initialized.
Installation of these packages generated warnings: <SMCmake>
The file </u01/cs_zonel/root/var/sadm/system/logs/install_log>
contains a log of the zone installation.
```

6. The zone is now configured and can be started, and logged into.

Important Commands for Solaris

Function	zoneadm Command
Starting up (booting a zone)	# zoneadm -z cs_zonel boot
Rebooting a zone	# zoneadm -z cs_zone1 reboot
Shut down	# zoneadm -z cs_zone1 halt
Removal (deleting a zone)	# zoneadm -z cs_zone1 uninstall
Log in to a zone	# zlogin -C cs_zone1

First-Time Configuration for a Zone

The first time, you will be prompted for a number of parameters. The following are the values that will need to be changed based on your environment). These are the same as are asked for in any new installation of Solaris:

1. Select a Language:

0. English

2. Select a Locale:

0. English (C - 7-bit ASCII)

3. What type of terminal are you using?

1) ANSI Standard CRT

4. Host name for bge1:1

sunloaner01cszone1

- Configure Kerberos Security
 [X] No
- **6.** Name service

[X] DNS

7. Domain name:

fatwire.com

8. Server's IP address:

xxx.xxx.xxx.xxx

9. Search domain:

fatwire.com

- **10.** Select the correct time zone.
- **11.** Enter a new root password.

Setup of the new Zone is now complete.

Chapter 21

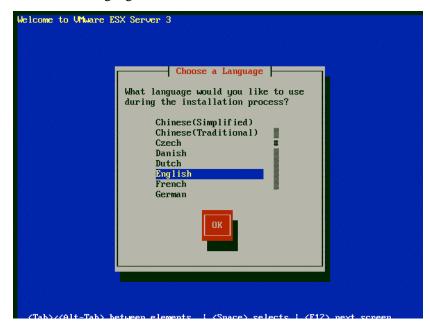
Installing and Configuring VMware ESX Server 3.5

This chapter provides instructions on installing and configuring VMware ESX Server 3.5. This chapter includes the following sections:

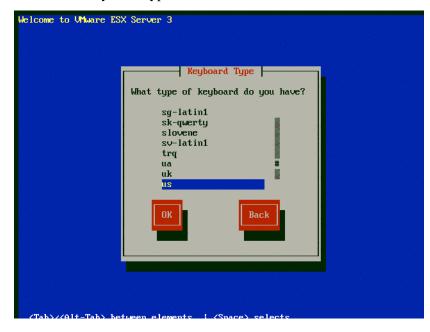
- Step I. Installing VMware ESX Server 3.5
- Step II. Installing VMware Infrastructure Client
- Step III. Configure VMware ESX Server 3.5
- Step IV. Create a Virtual Machine
- Step V. Install VM Tools

Step I. Installing VMware ESX Server 3.5

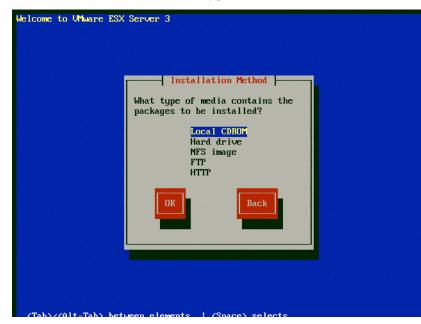
1. Select a language and click **OK**.



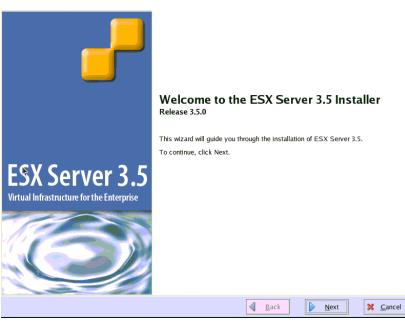
2. Select a keyboard type and click **OK**.



3. Select the installation media type and click **OK**.



4. Click Next.



5. Select a keyboard type and click Next.

ESX Server 3.5	* 🦰
Select Keyboard What type of keyboard do you want to use for this system?	
Keyboard	×
Russian (win)	
Slovakian	
Slovenian	
Spanish	
Speakup	
Speakup (laptop)	
Swedish	
Swiss French	
Swiss French (latin1)	
Swiss German	
Swiss German (latin1)	
Turkish	
Ukrainian	
United Kingdom	-
U.S. English	
U.S. International	~
Back Dext	🔀 <u>C</u> ancel

6. Select a mouse configuration and click Next.

ESX Server 3.5	· · · · · · · · · · · · · · · · · · ·
Mouse Configuration Select the appropriate mouse for the system.	
Model	
2 Button Mouse (PS/2)	N.
2 Button Mouse (serial)	
2 Button Mouse (USB)	
3 Button Mouse (PS/2)	
3 Button Mouse (serial)	
3 Button Mouse (USB)	
Wheel Mouse (PS/2)	
Wheel Mouse (USB)	
Genius Kensington	
 Logitech 	•
Serial Mouse Port	
/dev/ttyS0 (COM1 under DOS)	
/dev/ttyS1 (COM2 under DOS)	
/dev/ttyS2 (COM3 under DOS)	
/dev/ttyS3 (COM4 under DOS)	
Emulate 3 buttons	
4	Back

7. Select I accept the terms of the license agreement. Click Next.

ESX Se	rver 3.5 🦰
&	End User License Agreement To continue with the installation, please read and accept the end user license agreement.
NOTICE: E BOUND BY AGREE TO YOU MAY I DAYS AND PAYMENT. THEIR EMF	MASTER END USER LICENSE AGREEMENT BY DOWNLOADING AND INSTALLING, COPYING OR OTHERWISE USING THE SOFTWARE, YOU AGREE TO BE THE TERMS OF THIS VIMWARE MASTER END USER LICENSE AGREEMENT ("EULA"). IF YOU DO NOT THE TERMS OF THIS SULA, YOU MAY NOT DOWNLOAD, INSTALL, COPY OR USE THE SOFTWARE, AND RETURN THE UNUSED SOFTWARE TO THE VENDOR FROM WHICH YOU ACQUIRED IT WITHIN THIRTY (30) REQUEST A REFUND OF THE LICENSE FEE, IF ANY, ALREADY PAID UPON SHOWING PROOF OF "YOU" MEANS THE NATURAL PERSON OR THE ENTITY THAT IS AGREEING TO BE BOUND BY THIS EULA, PLOYEES AND THIRD PARTY CONTRACTORS THAT PROVIDE SERVICES TO YOU. YOU SHALL BE LIABLE "AILURE BY SUCH EMPLOYEES AND THIRD PARTY CONTRACTORS TO COMPLY WITH THE TERMS OF THIS NT.
Software (d written notic instance of is providing Server and	signated Administrative Access" means that access to the standard user interfaces of a given instance of the esignated in this section) that you may grant to a designated third party (a) for which you have provided advance e to VMware that you are providing outsourced services and (b) for whose dedicated benefit you have licensed such the Software. Designated Administrative Access is applicable only where you are 1) an IT outsourcing company that outsourced IT services to a client company and 2) applicable only to the following Software: ESX Server, VMware VirtualCenter.
	L Software" means GPL software licensed to you under the GNU General Public License as published by the Free pundation (GPL). A copy of the GPL is included on the media on which you received the Software or included in the
🖌 I accept	the terms of the license agreement
	Back Dext Cancel

8. Select **Recommended** and select the hard disk you will be installing on. Select **Keep** virtual machines and the VMFS that contains them. You will still be able to make changes on the next screen. Click **Next**.

ESX Server 3.5			2
Partitioning O The wizard can s	ptions et up initial system partitions for you, or you can create them yourself.		
How do you want to partition to Recommended If you are not familiar with	he disks for this system? ESX Server, we will select the best partitioning options for you.	h	
Install ESX Server on: √ Keep virtual machines	IDE Disk hda: ST3200822AS - 190780 MB		
O Advanced You must create all the sy	stem partitions on the disks for this system.		
	d Back	<u>N</u> ext	<u>C</u> ancel

9. Review the partitions to the hard disk and make any desired changes. Click Next.

ESX Server 3.	5									2
		artitions that we	recomm	end. You do	o not ne	eed to c	hange any	thing c	on this page	e.
To create a partition b To create a partition b System partitions:				ers, select fr	ee spa	ce and	click Edit.			
Device	Mount Point	Туре	Format	Size (MB)	Start	End				
✓ Hard Drives										
▽ /dev/hda										
/dev/hda1	/boot	ext3	1	102	1	13				
/dev/hda2	1	ext3	1	4997	14	650				
/dev/hda3		swap 🏷	1	541	651	719				
▽ /dev/hda4		Extended		185140	720	24321				
/dev/hda5	/var/log	ext3	1	1992	720	973				
Free		Free space		183147	974	24321				
▽ /dev/hdd										
/dev/hdd1		software RAID		476938	1	60801				
					Ne <u>v</u>	L	<u>E</u> dit		<u>D</u> elete	Re <u>s</u> et
						1	<u>3</u> ack		<u>N</u> ext	🔀 <u>C</u> ancel

10. Click Next.

ESX Server 3.5 🚽
Advanced Options These advanced options usually do not need to be changed.
Edit default bootloader configuration ESX Boot Specification How will the ESX Server boot? From a drive (install on the MBR of the drive): IDE Disk hda: ST3200822AS - 190780 MB This is the standard option. Make sure your BIOS settings are correct for the drive you select. From a partition Use this option, for example, if you are using a Boot Menu tool, or if you have the option to run special diagnostic software that runs in a separate partition.
Boot Options If you wish to add default options to boot up, enter them here: General kernel parameters:
Back Next Cancel

11. Enter network configuration information. Select **Create a default network for** virtual machines and click **Next**.

ESX Server 3.5							
Network Configuration Select and configure the network Interface card that is used for console communication.							
	Network Interface Card Device: 5:5:0 - e1000 - 82541PI Gigabit Ethernet Controller 🞽						
	Network Address and Host Name						
 Use the following 	networ	k inform	ation:				
IP Address	172	. 19	. 0	. 100			
Subnet mask	255	. 255	. 0	. 0			
Gateway	172	. 19	. 255	. 254			
Primary DNS	172	. 19	. 0	. 8			
Secondary DNS							
Host name:	localh	ost.loca	Idomair	1	Enter a fully qualified host name (e.g. host.vmware.com)		
VLAN Settings VLAN ID: (Leave blank if you are unsure whether your network requires a VLAN ID)							
Create a default net	vork for	virtual	machin	25			
					<u>Back</u> <u>Next</u> <u>Cancel</u>		

12. Select a time zone and click **Next**.

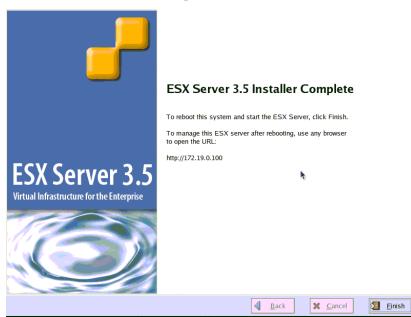
ESX Server 3.5
Time Zone Selection Set the time zone for the server by clicking on the map, selecting a location or selecting the UTC offset from GMT.
Map Location UTC Offset
Pacific/Midway - Midway Islands
Selected time zone: America/New_York - Eastern Time
Back Next Sec

13. Enter a root password, and re-enter the password for confirmation. Click **Next**.

ESX Server 3.5			2
Set Root Password Set the root (administrator) pase	sword for the VMware ESX Server.		
Passwords must be at least 6 characters. Root Password:			
Confirm: ******			₩
		Back Ne	ct <u>X</u> ancel

14. Review the installation options. Click Next.

ESX Server 3.5 🦰
About to Install The wizard is ready to install the VMware ESX Server. Please review the summary of your selected installation options.
Summary:
Language: English Keyboard: U.S. English
Mouse: Generic - 3 Button Mouse (USB)
Partition Disks: hda1 ext3 101M /boot hda2 ext3 4996M / hda3 swap 541M None hda5 ext3 1992M /var/log
Boot Loader Record: Master Boot Record of hda
Console Network Device: vswif0: e1000 - 82541PI Gigabit Ethernet Controller IP Address: 172.19.0.100 Subnet mask: 255.255.00
To Install VMware ESX Server 3.5, click Next.
<u>■</u> ack <u>■</u>



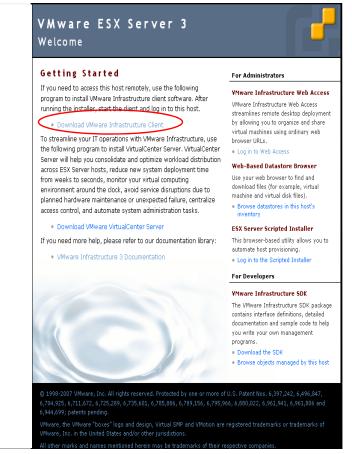
15. When the installation completes, click Finish.

16. After the machine has rebooted, you can access the console and log in to the machine by pressing **Alt-F1**. Take note of the URL, as it is used for VMware Infrastructure Web Access.



Step II. Installing VMware Infrastructure Client

1. From a Windows machine, open the URL noted in step 16 on page 325 of the previous section.



- **2.** From the "VMware ESX Server 3" welcome page, click **Download VMware Infrastructure Client**.
- 3. Install the VMware Infrastructure Client.

Step III. Configure VMware ESX Server 3.5

Create a VMkernel

- 1. Run the VMware Infrastructure Client.
- **2.** Select the IP of the VMware ESX Server. Use the root login with the password entered during the VMware ESX Server installation.

🧬 VMware Infrastructur	e Client 🛛 🖃 🔀
WMware Infras	structure Client
	host, enter the IP address or host name. enter the IP address or name of a
IP address / <u>N</u> ame:	172.19.0.100
<u>U</u> ser name:	root
Password:	****
	Login <u>C</u> lose <u>H</u> elp

3. Select the **Configuration** tab. Click: **Hardware > Networking** > **Add Networking**.

177.19.0.100 - Vikware In Rie Edit View Inventory Admin			
61 🦻 🥬 Inventory Administration	seracon ingens mep		e
। + त e			
Isodhori, boatlonan	The VMware ESX Server do To run virtual machines, create at least on	Your Stafe (1047) [Fundation (104 Ary(s) remaining) Heam, Remained addication, "Personnances" Configured to Stafe (1046), "Exercite,	Nafrash Add Natrocolleg
ecent Tasks			
iate Tarj	get Ratus	Industed by 🖓	Time Start Time
Tacks			100

4. Select VMkernel and click Next.

🙆 Add Network Wizard				
VMkernel - Network Acco The VMkernel reaches n	ess networks through uplink adapters a	attached to virtua	l switches.	
Connection Type Network Access	Select which virtual switch will using the unclaimed network a	handle the netwo dapters listed beli	rk traffic for this connection. You may als ow.	o create a new virtual switch
Connection Settings Summary	C Create a virtual swite	h Speed	Networks	
	Use vSwitch0	Speed	Networks	
	🔽 📟 vmnic0	1000 Full	172.19.0.20-172.19.0.23	
	Preview:		- Physical Adapters	
	Vinterine Por Virtual Machine Port Group VM Network	<u>9</u> .	• Winico	
	Service Console vswif0 : 172.19.0.100	<u>@</u> •-		

5. Select Use vSwitch0 and click Next.

Add Network Wizard				
VMkernel - Network Ac The VMkernel reaches	c cess s networks through uplink adapters a	ttached to virtua	switches.	
Connection Type Network Access	Select which virtual switch will using the unclaimed network a	handle the netwo dapters listed beli	rk traffic for this connection. You may also create a ne w.	w virtual switch
Connection Settings Summary	Create a virtual switc	h Speed	Networks	
	Use vSwitch0	Speed	Networks	
	🔽 💀 vmnic0	1000 Full	172.19.0.20-172.19.0.23	
	Preview:	•	- Physical Adapters	
	VMkernel Port-	<u>e</u> -	Physical Adapters	
	VMkernel Port			
	- Wilkernel Port - Wintual Machine Port Group WM Network - Service Console Port	<u>Q</u> +		
	- VMikernel Port VMikernel - Virtual Machine Port Group VM Network			
Helo	VMIkernel VMIkernel - Virtual Machine Port Group VM Network - Service Console Port Service Console	<u>Q</u> +		Cance

- 6. In the "Add Network Wizard" fill in the fields provided:
 - Under Port Group Properties:
 - Network Label: Enter a network label.
 - VLAN ID: Select a VLAN ID,
 - Select Use this port group for VMotion.
 - Under IP Settings:
 - IP Address: Enter an IP address
 - **Subnet mask**: Enter a subnet mask.
 - a. Click Next.

🔗 Add Network Wizard			
YMkernel - Connection S Use network labels to id		anaging your hosts and datacenters.	
Connection Type Network Access Connection Settings Summary	Port Group Properties Network Label: VLAN ID (Optional):	VMkernel 0 v Vuse this port group for VMction	
	IP Settings IP Address: Subnet Mask:	172 .19 .0 .101 255 .255 .0 .0	
	Preview: VWIkemel Port IT2.19.0.101 Vtrusi Machine Port Group VM Network Service Console Port Service Console vswif0 : 172.19.0.100	Physical Adapters	
Help	,	≤Back	Next ≥ Cancel

7. Click Finish.

🔗 Add Network Wizard		
Ready to Complete Verify that all new and mo	dified virtual switches are configured appropriately.	
Connection Type Network Access Connection Settings Summary	Host networking will include the following new and modified v5witches: Preview: Vitilemel Port	
Help	<u>≤</u> Back <u></u> Eir	ish Cancel

8. To make changes to the VMkernel, select the VMkernel and click Edit.

Summary Network Label: VMkernel	
56 Ports	
Virtual Machine VLAN ID: None	
VMotion and IP VMotion: Enabled	
IP Settings IP Address: 172.19.0.1	101
Subnet Mask: 255.255.0.	.0
MAC Address: 00:50:56:7	7a:45:07
MAC Address Changes: A Forged Transmits: A Traffic Shaping	Reject Accept Accept
	I/A
	4 C
MAC Address Changes: A Forged Transmits: A Traffic Shaping	Accept Accept

9. To add a default gateway to the VMkernel, click the General tab and click Edit.

🚱 VMkernel Properties		🖃 🖬
General Security Traffic Shaping		
	Nic reaming	1
Port Properties		
Network Label:	VMkernel	
VLAN ID (Optional):	None	
VMotion:	✓ Enabled	
IP Settings		
IP Address:	172 . 19 . 0 . 101	
Subnet Mask:	255 , 255 , 0 , 0	
VMkernel Default Gateway:	Edit	
	OK Cancel	Help

10. Enter a valid IP address for the default gateway. Click OK.

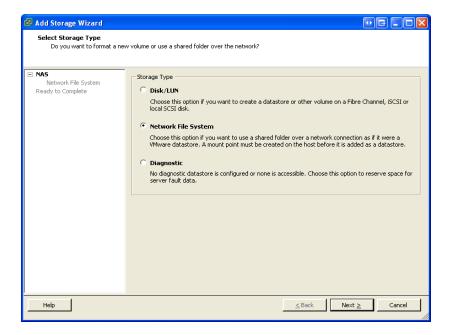
🚱 DNS and Routi	ng Confi	guration		E X
DNS Configuration	Routing			
Service Console				
Default gatewa	ay:	172 . 19	. 255 . 254	
Gateway devic	e:	vswif0	-	
VMkernel				
Default gatewa	ay:			
L				
			1	
		ОК	Cancel	Help

Create a Datastore

 From the VMware Infrastructure Client, click the Configuration tab. Under Hardware, click: Storage > Add Storage.

177.19.0.100								
e Edit View Invi	entory Administr	ation Plugins Help						
	P notiation							60 Days Remaining
म को	e							
Incahort.local	domain j	Included backformstin Veterung FSK 65 Energy 2016/0. Kanness, Server de The VM-Iware ESX Server de To sun visital naches, casta à laisa t Note: If you plan to use 65% or a netwo To add starage now, disk here to oracle. Includer: Processor	bees not have persi ne datastore for maintaining nk file system (UFS), ensure	stent storage.	uter line line line line line line line line		Pruing. Refresh · Renov	• Add Storage
		Processos Memory • Sorege Interverling Storege Adiptive Interverk Adiptive Software	Details	Long	Capacity	rive i type		
		London Frances The Configuration Of and Fouring Visual faulties Stanlag Modelen Visual faulties Scalable Scalable Scalable Resource Alkabotin Advanced Settings						Poperter
cent Tasks								
Tacks	Target	Ratus Into	sted by 👘	Time Start Time	Complete Time			100

2. Select a storage type. If you will be storing the virtual machines on a Fibre Channel, iSCSI, or local SCSI disk, select **Disk/LUN**. If you will be storing the virtual machines on a network shared folder, select **Network File System**. Click **Next**.



- **3.** Enter storage location information.
 - **a.** If you selected **Disk/LUN** in the previous step, select the SCSI device to use for your datastore and click **Next**. If the drive is not blank and you do not want these files to be overwritten, select **User free space**, otherwise select **Use the entire device**.
 - 1) Click Next.
 - 2) Enter a datastore name and click Next.
 - 3) Click Next.
 - 4) Click Finish.
 - **b.** If you selected **Network File System** in the previous step, enter the IP address or hostname of the server with the network file system.
 - 1) Enter the path of the directory of the network shared folder.
 - **2)** Enter a datastore name.
 - 3) Click Next.
 - 4) Click Finish.

🕼 Add Storage Wizard		
Locate Network File System Which shared folder will be u	ed as a VMware datastore?	
<u>NAS</u> Network File System Ready to Complete	Properties Server: 172.19.0.8 Examples: nas, nas.it.com or 192.168.0.1	
	Folder: //vmware/inactive/local/esx_temp Example: /vols/vol0/datastore-001 I Mount NFS read only	
	Datastore Name	
Help	_	≤Back Next ≥ Cancel

Step IV. Create a Virtual Machine

- 1. From the VMware Infrastructure Client, right-click the VMware ESX Server on the left side, and select **New Virtual Machine**.
- 2. Select Custom and click Next.

🚱 New Virtual Machine Wi	zard 🛛 💀 🖃 🗖 🔀
Select the Appropriate Co How would you prefer to c	nfiguration Virtual Machine Version: 4 onfigure your virtual machine?
Wizard Type Name and Location Datastore Guest Operating System CPUS Memory Network I/O Adapters Select a Disk Ready to Complete	Virtual Machine Configuration Typical Create a new virtual machine with the most common devices and configuration options. Custom Choose this option if you need to create a virtual machine with additional devices or specific configuration options.
Help	_≤Back Next ≥ Cancel

3. Enter a name for the virtual machine and click Next.

🚱 New Virtual Machine Wi	zard	
Select a Name and Locatio What do you want to call th	n for this Virtual Machine his virtual machine and where do you want it located?	Virtual Machine Version: 4
Wzard Type Name and Location Datastore Guest Operating System CPUs Memory Network I/O Adapters Select a Disk Ready to Complete	Provide a name for the new virtual machine and select its location in the machine names can contain up to 80 characters, but they must be unin Name: Red Hat Enterprise Linux S Virtual machine folders are unavailable when connected directly to the second secon	ique within each inventory folder.
Help	≤Back	Next ≥ Cancel

4. Select the datastore that was created in the previous section: "Create a Datastore," on page 332.

Wizard Type Name and Location Datastore		hoose a datasto	re that is large a	nough to acc	nine. comodate the virtual mach	nine and all its
Guest Operating System CPUs	virtual disk files, s					
Memory Network	Name [ESXDatastore]	Capacity 450.99 GB	Free 152.35 GB	Type	Access Single host	
I/O Adapters Select a Disk Ready to Complete						

5. Select the guest operating system type and version. Click Next.

🕑 New Virtual Machine Wi	zard	• 6 - 8 🛛
Choose the Guest Operatin What Guest operating syst	ig System em do you plan to use with this virtual machine?	Virtual Machine Version: 4
Wizard Type Name and Location Datastore Guest Operating System CPUs Memory Network I/O Adapters Select a Disk Ready to Complete	Guest Operating System: Microsoft Windows Linux Novell NetWare Solaris Other Version: Red Hat Enterprise Linux 5 (32-bit) Note: The selection on this page allows the wizard to provide defaults for varion parameters suitable for the guest OS you intend to install. Your selection is add wirtual machine's configuration to allow hosts to optimize scheduling and other machine for the targeted guest OS. This wizard does not install any guest OS for) recorded as part of the handling of the virtual
Help	<u>≤</u> Back	Next ≥ Cancel

6. Select the Number of virtual processors to allocate to the virtual machine. Click Next.

🕜 New Virtual Machine W	izard		e - • ×
Virtual CPUs Configure the number of '	virtual processors in the virtual machine.	Virtua	Machine Version: 4
Wizard Type Name and Location Datastore Guest Operating System CPUs Memory Network I/O Adapters Select a Disk Ready to Complete	Number of virtual processors:		
Help		\leq Back Next \geq	Cancel

7. Select the amount of memory to allocate to the virtual machine. Click Next.

🕑 New Virtual Machine Wi	zard	
Memory Configure the virtual mach	ine's memory size.	Virtual Machine Version: 4
Wizard Type Name and Location Datastore Guest Operating System CPUs Memory Network 1/O Adapters Select a Disk Ready to Complete	Specify the amount of memory allocated to this virtual memory size must be a multiple of 4MB. Memory for this virtual machine: 1 2048 4 65532 15 set the memory to one of the indicated values, you m click the colored triangle on the slider above or in the lege below. △ Guest OS recommended minimum 256 MB ▲ Guest OS recommended maximum 65532 MB ▲ Guest OS recommended maximum memory for any Linux guest OS is based on the least capable kernels for that Linux distribution and version number. Some kernel versions can support larger memory sizes. Consult your Linux release notes to see if your kernel can use a larger memory setting.	∃ MB
Help		Sack Next ≥ Cancel

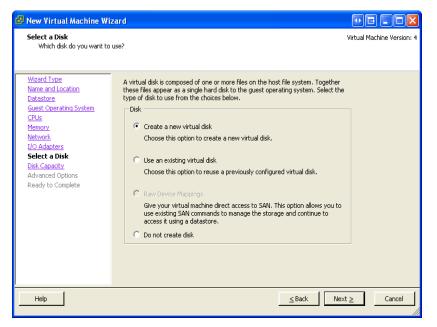
8. Select the number of physical network interface cards to allocate to the virtual machine. Select **Connect at Power On** for each network interface card. Click **Next**.

🚱 New Virtual Machine Wize	ırd	
Choose Networks Which network connections (will be used by the virtual machine?	Virtual Machine Version: 4
Wizard Type Name and Location Datastore Guest Operating System CPUs Memory Network I/O Adapters Select a Disk Ready to Complete	Create Network Connections How many NICs do you want to connect? I I Network Adapter NIC 1: Image: More and the state of	on on
Help	≤Back	Next ≥ Cancel

9. Select a storage adapter type. Click Next.

🚱 New Virtual Machine Wiz	ard	ve – DX
Select I/O Adapter Types Which I/O Adapter Types w	ould you like to use?	Virtual Machine Version: 4
Wteard Type Name and Location Datastore Guest Operating System CPUs Memory Network I/O Adapters Select a Disk Ready to Complete	Storage Adapter Types IDE Adapter: Standard ATAPI SCSI Adapter: C BusLogic (not recommended for this guest OS) C LSI Logic	
Help	≤Back	Next ≥ Cancel

10. Select Create a new virtual disk and click Next.



- **11.** Select the disk size for the virtual machine.
 - If you want the virtual machine stored on the VMware ESX Server machine, select **Store with the virtual machine**.
 - If you want the virtual machine stored in the datastore, select **Specify a datastore** and select the datastore location.

🕝 New Virtual Machine Wiz	ard	
Specify Disk Capacity and I How large do you want this	ocation disk to be and where should it be located?	Virtual Machine Version: 4
Wteard Type Name and Location Datastore Guest Operating System CPUs Memory, Network I/O Adapters Select: a Disk Disk Capacity Advanced Options Ready to Complete	Disk Capacity Disk Size: 40 - GB - Location Store with the virtual machine Specify a datastore Datastore:	Browse
Help		≤ Back Next ≥ Cancel

FatWire

12. Select a virtual device node and click Next.

🚱 New Virtual Machine Wiz	ard	
Specify Advanced Options These advanced options do	not usually need to be changed.	ual Machine Version: 4
Wizard Type Name and Location Datastore Guest Operating System CPUs Metwork I/O Adapters Select a Disk Disk Capacity Advanced Options Ready to Complete	Specify the advanced options for this virtual disk. These options do not normally need to be changed. Virtual Device Node SCSI (0:0) Mode Independent Independent Independent Changes are immediately and permanently written to the disk. C Nonpersistent Changes to this disk are discarded when you power off or revert to the snapshot.	
Help	<u>≤Back</u> Next ≥	Cancel

13. Review the virtual machine settings. Click **Finish**.

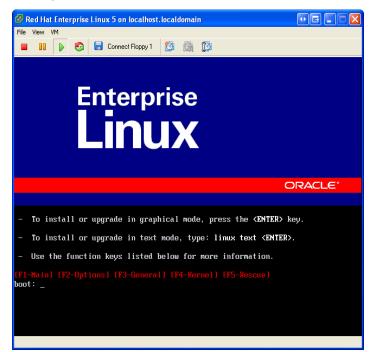
🚱 New Virtual Machine W	izard			6.0×
Ready to Complete New V Are these the options you			Virtual	Machine Version: 4
Wizard Type Name and Location Datastore	The virtual machine w	, a task will be started that will created with the following opt		
Guest Operating System CPUs Memory Network I/O Adapters Select a Disk Disk Capacity Advanced Options Ready to Complete	Name: Host/Cluster: Resource Pool: Datastore: Guest OS: Virtual CPUs: MICs: NICs 1 Network: NIC 1 Network: NIC 1 Network: NIC 1 Network: Create disk: Disk capacity: Datastore: Disk capacity: Datastore: Disk mode:	New virtual disk 40 GB ESXDatastore		
	Creation of the v	achine settings before submitting irtual machine does not include any need to install the guest OS just as		
Help			<u>≤</u> Back <u>F</u> inish	Cancel

14. If you are installing the guest operating system from a CD or DVD, enter the disc into either the CD/DVD drive of the machine with VMware ESX Server 3.5 installed, or the machine with VMware Infrastructure Client installed. If you are installing the guest operating system from .ISO files, copy the files to the datastore created in the previous section.

- **15.** Click the **Virtual Machines** tab. Right-click the newly created virtual machine and click **Edit Settings**. Click **CD/DVD Drive 1**.
 - **a.** Depending on where you put your installation media in the previous step, map the virtual CD/DVD drive to that location.
 - If your installation media is in the drive of the machine with VMware Infrastructure Client, select Client Device. You will not be able to connect this device until after the machine is started. To start the machine click Connect CD/ DVD from the console.
 - If your installation media is in the drive of the machine with VMware ESX Server 3.5, select **Host Device** and the location of the device. Make sure you also select **Connected** and **Connect at power on**.
 - If your installation media is located in the datastore, select **Datastore ISO file** and select the path to the file. Click **OK**.

🕝 Suse Linux 10 - Virtual Ma	chine Properties	
Hardware Options Resources		Virtual Machine Version: 4
Hardware	Summary	Device Status
Memory CPUs General Action of the second seco	2048 MB 1 Client Device	Connect at power on
Floppy Drive 1 CD/DVD Drive 1 Science 2010/00 Drive 1 Science 2010/00 Drive 1 Science 2010/00 Drive 1 Science 2010/00 Drive 1 Hard Disk 1	i /dev/hołc	
Add Remove		C IDE (0:0) CD/DVD Drive 1
Help		OK Cancel

16. Right-click on the virtual machine name on the left side and click Open Console.



17. Click the **Virtual Machines** tab. Right-click the newly created virtual machine and click **Power On**. If your installation media is located on the client machine, click **Connect CD/DVD** from the console.

Step V. Install VM Tools

On a Windows Guest

- **1.** Open a console to the virtual machine.
- 2. Power on the virtual machine.
- 3. In the console, click VM and click Install/Upgrade VMware Tools.
- 4. When the dialog box opens, click **OK**.

🚱 Install VMware Tools				
Installing the VMware Tools package will greatly enhance g performance in your virtual machine.	raphics and mouse			
WARNING: You cannot install the VMware Tools package until the guest operating system is running. If your guest operating system is not running, choose Cancel and install the VMware Tools package later.				
<u><u> </u></u>	<u>C</u> ancel			

- 5. From inside the virtual machine, click OK.
- 6. Click Start > Run and enter D:\setup.exe, where D: is the first CD-ROM drive on the machine, to start the InstallShield wizard.
- **7.** After the installation has been completed, if you are using a Windows 2000 or Windows XP guest operating system, reboot the virtual machine.

On a Unix Guest

- **1.** Open a console to the virtual machine.
- **2.** Power on the virtual machine.
- 3. In the console, click VM and click Install/Upgrade VMware Tools.
- 4. When the dialog box opens, click OK.

🚱 Install VMware Tools	e - DX
Installing the VMware Tools package will greatly enhance graphics and mouse performance in your virtual machine.	
WARNING: You cannot install the VMware Tools package until the guest operating system is running. If your guest operating system is not running, choose Cancel and install the VMware Tools package later.	
1	<u>D</u> K <u>C</u> ancel

- 5. From inside the virtual machine, when you're logged in as the root user, mount the VMware Tools virtual CD-ROM image and change to a working directory (/tmp).
- On Linux:

mount: /dev/cdrom /mnt/cdrom

cd /tmp

• On Solaris:

cd /tmp

If the CD-ROM was not already mounted as /cdrom/vmwaretools, restart the volume manager using the following commands:

/etc/init.d/volmgt stop
/etc/init.d/volmgt start

- 6. Uncompress the installer and unmount the CD-ROM image.
- On Linux:

```
tar zxpf /mnt/cdrom/VMwareTools-3.5.0-64607.tar.gz
umount /dev/cdrom
```

• On Solaris:

```
gunzip -c /cdrom/vmwaretools/vmware-solaris-tools.tar.gz | tar
xf -
```

7. Run the VMware Tools tar installer:

```
cd vmware-tools-distrib
./vmware-install.pl
```

- **a.** Respond to the questions the installer displays.
- 8. Start your graphical environment.
- 9. Start VMware Tools

vmware-toolbox &

Step V. Install VM Tools

