## **Content Server**

Version: 7.0

# Configuring Third-Party Software

Document Revision Date: Mar. 26, 2007



FATWIRE CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall FatWire be liable for any loss of profits, loss of business, loss of use of data, interruption of business, or for indirect, special, incidental, or consequential damages of any kind, even if FatWire has been advised of the possibility of such damages arising from this publication. FatWire may revise this publication from time to time without notice. Some states or jurisdictions do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

Copyright © 2007 FatWire Corporation. All rights reserved.

This product may be covered under one or more of the following U.S. patents: 4477698, 4540855, 4720853, 4742538, 4742539, 4782510, 4797911, 4894857, 5070525, RE36416, 5309505, 5511112, 5581602, 5594791, 5675637, 5708780, 5715314, 5724424, 5812776, 5828731, 5909492, 5924090, 5963635, 6012071, 6049785, 6055522, 6118763, 6195649, 6199051, 6205437, 6212634, 6279112 and 6314089. Additional patents pending.

FatWire, Content Server, Content Server Bridge Enterprise, Content Server Bridge XML, Content Server COM Interfaces, Content Server Desktop, Content Server Direct, Content Server Direct Advantage, Content Server DocLink, Content Server Engage, Content Server InSite Editor, Content Server Satellite, and Transact are trademarks or registered trademarks of FatWire, Inc. in the United States and other countries.

*iPlanet, Java, J2EE, Solaris, Sun,* and other Sun products referenced herein are trademarks or registered trademarks of Sun Microsystems, Inc. *AIX, IBM, WebSphere,* and other IBM products referenced herein are trademarks or registered trademarks of IBM Corporation. *WebLogic* is a registered trademark of BEA Systems, Inc. *Microsoft, Windows* and other Microsoft products referenced herein are trademarks or registered trademarks of Microsoft Corporation. *UNIX* is a registered trademarks of The Open Group. Any other trademarks and product names used herein may be the trademarks of their respective owners.

This product includes software developed by the Apache Software Foundation (http://www.apache.org/) and software developed by Sun Microsystems, Inc. This product contains encryption technology from Phaos Technology Corporation.

You may not download or otherwise export or reexport this Program, its Documentation, or any underlying information or technology except in full compliance with all United States and other applicable laws and regulations, including without limitations the United States Export Administration Act, the Trading with the Enemy Act, the International Emergency Economic Powers Act and any regulations thereunder. Any transfer of technical data outside the United States by any means, including the Internet, is an export control requirement under U.S. law. In particular, but without limitation, none of the Program, its Documentation, or underlying information of technology may be downloaded or otherwise exported or reexported (i) into (or to a national or resident, wherever located, of) Cuba, Libya, North Korea, Iran, Iraq, Sudan, Syria, or any other country to which the U.S. prohibits exports of goods or technical data; or (ii) to anyone on the U.S. Treasury Department's Specially Designated Nationals List or the Table of Denial Orders issued by the Department of Commerce. By downloading or using the Program or its Documentation, you are agreeing to the foregoing and you are representing and warranting that you are not located in, under the control of, or a national or resident of any such country or on any such list or table. In addition, if the Program or Documentation is identified as Domestic Only or Not-for-Export (for example, on the box, media, in the installation process, during the download process, or in the Documentation), then except for export to Canada for use in Canada by Canadian citizens, the Program, Documentation, and any underlying information or technology may not be exported outside the United States or to any foreign entity or "foreign person" as defined by U.S. Government regulations, including without limitation, anyone who is not a citizen, national, or lawful permanent resident of the United States. By using this Program and Documentation, you are agreeing to the foregoing and you are representing and warranting that you are not a "foreign person" or under the control of a "foreign person."

Configuring Third-Party Software Document Revision Date: Mar. 26, 2007 Product Version: 7.0

#### FatWire Technical Support

www.fatwire.com/Support

#### FatWire Headquarters

FatWire Corporation 330 Old Country Road Suite 207 Mineola, NY 11501 www.fatwire.com

## Table of

# Contents

About This Guide	,
Who Should Use This Guide	'
Graphics in This Guide	'
Technical Support	ł

## Part 1. Creating and Configuring a Database

1	Creating and Configuring an Oracle 9.2.0.x Database	11
	Step I. Create an Oracle 9.2.0. <i>x</i> Database	12
	Step II. Configure the Database for Content Server	
	Next Step	
2	Creating and Configuring an Oracle 10g Database	21
	Step I. Create an Oracle 10g Database	
	Step II. Create a New User for Content Server	
	Next Step	
3	Creating and Configuring an MS SQL Server Database	45
	Creating a Database on MS SQL Server 2000 SP3+	.46
	Creating a Database on MS SQL Server 2005	
4	Creating and Configuring an IBM DB2 8.x Database	49
	Creating and Configuring DB2 8.x for Content Server	
5	Creating and Configuring an IBM DB2 9.1 Database	53
	Installing and Configuring DB2 9.1 for Content Server	
	A. Install DB2	
	B. Create a New DB2 Database.	
	C. Create a User for the New Database	

D. Configure the Database
---------------------------

## Part 2. Installing a Web Server

6	Worksheets for Documenting the Web Server Installation	83
	Key to Sample Values	.84
	Web Server Parameters	.84
7	Installing IIS on Windows	87
	Step I. Install IIS	88
	Step II. Document Your IIS Installation	
	Step III. Verify the Installation	88
	A. Start IIS	.88
	B. Verify that IIS is Serving Pages	. 89
	Next Step	. 89
8	Installing Apache on Solaris and Linux	91
	Step I. Install Apache.	
	Step II. Document Your Apache Parameters.	
	Step III. Verify that Apache Contains the Correct Module	93
	Step IV. Verify that Apache Runs Properly	93
	Next Step	.93

## Part 3. Install and Configuring LDAP

9	Setting Up Sun Java Systems Access Manager 7.0	
	Start/Stop Commands	
	Creating CS Users in Sun Access Manager.	
10	Setting Up Sun Java Systems Directory Server 5.2	107
	Start/Stop Commands	
	Starting and Stopping Sun Directory Server	
	Starting and Stopping the Sun Directory Server Admin Interface	
	Installing Sun Directory Server	
	Verifying Your LDAP Configuration	
	Modifying User Passwords	
11	Setting Up OpenLDAP 2.3.x	125
	OpenLDAP Commands	
	Starting OpenLDAP.	
	Searching an OpenLDAP Server	

Adding an LDIF File to an OpenLDAP Server	
Installing OpenLDAP	
Configuring OpenLDAP	
Adding Content Server Schema to OpenLDAP	133
Modifying User Passwords	
Modifying User Passwords Using an LDAP Browser	135
Modifying User Passwords Using the Idapmodify Command	
12 Setting Up the WebLogic 9.x Embedded LDAP Server	139
Enabling the WebLogic Embedded LDAP Server	
Modifying User Passwords	142

## **About This Guide**

This guide contains information about installing and configuring third-party software specifically for use by Content Server. Instructions in this guide supplement the instructions in the Content Server installation guides. The steps you will follow show you how to create and configure the supported databases, install supported web servers, and integrate Content Server with LDAP servers.

### 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.

### **Technical Support**

Help is available from FatWire Technical Support at the following website:

http://www.fatwire.com/Support/contact\_info.html

7

**Technical Support** 

8

### Part 1

## **Creating and Configuring a Database**

Content Server requires access to a supported database that is specifically configured for the product. Supported databases include:

- Oracle 9, 10g
- Microsoft SQL Server 2000 SP3+, 2005
- DB2 8.2, 9.1

The databases listed above are not configured for production, but are set up with full permissions. In practice, the permissions can be curtailed 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.

Instructions on creating and configuring the databases for Content Server are given in the chapters of this guide. Because database configuration is identical across different application servers, refer to the correct chapter to set up the database of your choice.

This part contains the following chapters:

- Chapter 1, "Creating and Configuring an Oracle 9.2.0.x Database"
- Chapter 2, "Creating and Configuring an Oracle 10g 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"

## Chapter 1

# Creating and Configuring an Oracle 9.2.0.x Database

Use this chapter to set up an Oracle 9.2.0.*x* database for your Content Server installation. For background information regarding database configuration and users' permissions, see "Creating and Configuring a Database," on page 9.

This chapter contains the following sections:

Step I. Create an Oracle 9.2.0.x Database

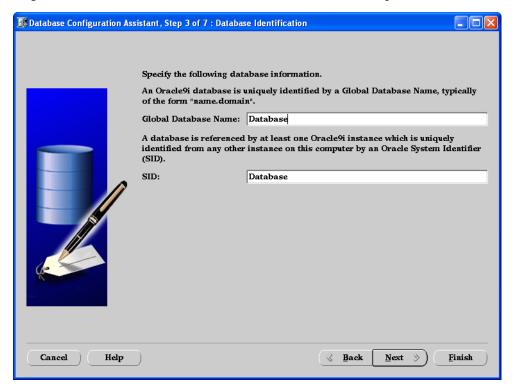
Step II. Configure the Database for Content Server

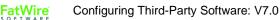
## Step I. Create an Oracle 9.2.0.x Database

- Go to the \$ORACLE9\_HOME/bin directory: cd \$ORACLE9\_HOME/bin
- 2. Run the Database Configuration Assistant: dbca
- 3. In the welcome screen, click Next.
- 4. Fill in the following screens as shown below:
  - **a.** On the "Step 1 of 8: Operations" screen, leave **Create a database** selected and click **Next**.
  - **b.** On the "Step 2 of 8: Database Templates" screen, select **General Purpose** and click **Next**.

Database Configuration Assis	tant, Step 2	of 8 : Database Templates	
	Select a tem	plate from the following list to create a database:	
	Select	Template Name	Includes Datafi
	0	Data Warehouse	Yes
	9	General Purpose	Yes
	0	Transaction Processing	Yes
	0	New Database	No
Harrison Barison Bari			
			Show Details
Cancel Help		S Back Next	»

**c.** On the "Step 3 of 7: Database Identification" screen, enter the database name in the Global Database Name field. The SID will be automatically set to the first eight characters of the Database Name. Each SID must be unique. Click **Next**.





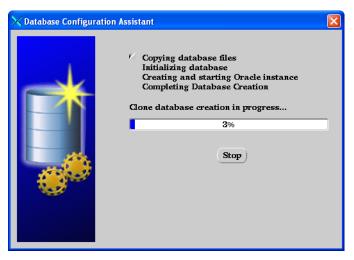
- d. On the "Step 4 of 7: Database Connection Options" screen, leave **Dedicated Server mode** selected and click **Next**.
- e. On the "Step 5 of 7: Initialization Parameters" screen:
  - 1) Select the tab Character Sets.
  - 2) On the character sets screen, select Choose from the list of character sets and UTF8 from the drop-down menu. For the National Character Set select UTF8 and click Next.

Database Configuration Assis	tant, Step 5 of 7	: Initialization Pa	ameters		
	C Use the o The defat setting o O Use Unio Setting e multiple I © Choose f UTFS National Char	ult character set fo f this operating <del>sy</del> code (AL32UTF8) haracter set to Un language groups. from the list of cha	stem: WE8ISO8	i859P1. F8) enables you to	
Cancel Help			(a. 1	Back Next	) Finish
			<u></u>	gues tout	

- f. On the "Step 6 of 7: Database Storage" screen, click Next.
- g. On the "Step 7 of 7: Creation Options" screen, click Finish.

14

- 5. When the summary screen appears, click OK.
- **6.** When the "Installation Progress Screen" appears, wait for the installation to be completed.



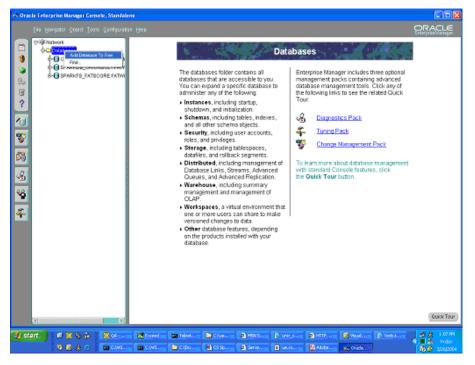
**7.** After the installation has been completed, the database information screen will appear, listing information about how to connect to this database using the enterprise management console. Click **OK**.

## Step II. Configure the Database for Content Server

Oracle Enterprise Mana		
ORACLE ENTERPRISE MANAGER	Launch standalone	
	C Login to the Oracle Management Server	
	OK Cancel Help	
ORACLE	Copyright @ 1998, 2002, Oracle Corporation. All rights rese	

1. Start Oracle Enterprise Manage Console. Click OK.

2. Expand Network > Databases. Select the database you have created.



**3.** In the database login screen, log in as SYS and enter the password you specified earlier while creating the database. Click **OK**.

Gracia Enterprise Manager Censole, Standalone		
Ele Mavigator Object Tools Configuration H		ORACLE
Image: Control of the control of th	Butabases biter contains al disbases biter contains al disbases biter contains al disbases biter contains al disbases biter accessible by su use on equad a spacific disbases annighter stry of the following instances, richtering tischig, butdown, and infinietzion: Sthemas includes tables, albors Sthemas includes tables Sthemas inclu	
(1 start. ) 0 8 % % 8 80000 b	Stand Trint Class TSU	C A LIST
9 E & C (m 644	a Civil 🖕 Ciba 🖓 Ciba 💽 Serve 🔹 sector	10 0 100000000000000000000000000000000

ά€Netwo	rk	Usemame	Account Status	Expire Date	Default Tablespace	Temporary Tablespace	Profile	Created
à 🗀 Dat	abarar	WWWWWWWWWW	EXPIREO & LOCKED	26-Mar-2004	XDB	TEMP	DEFAULT	12-May 2002
		C TUOMO	EXPIRED & LOCKED	26-Mar-2004	DRSY8	TEMP	DEFAULT	12-May-2802
	CSDB_STICKY/FATWI		OPEN		SYSTEM	TEMP	DEFAULT	12-May-2002
- \$ <b>6</b>	SPARKDB_ORIONSO	AFA HR	EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP		12-Min-2002
- 68.	SPARKES_FATSCORE	SAT MOSYS	EXPIRED & LOCKED	26-Mar-2004	SVSTEM	TEMP	DEFAULT	12-May-2002
	Ministance	ODM	EXPIRED & LOCKED	26-Mar-2004	ODM	TEMP	DEFAULT	12-May-2002
		ODM_MTR	EXPIRED & LOCKED	26-Mar-2004	ODM	TEMP	DEFAULT	12-May-2802
÷	💐 Schema	0E	EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP	DEFAULT	12-May-2002
	de Becurity	OLAPSYS	EXPIRED & LOCKED	26-Mar-2004	CVMLITE	TEMP	DEFAULT	12-May-2002
I	6000m	ORDPLUGIN	5 EXPIRED & LOCKED	26-Mar-2004	SYSTEM	TEMP	DEFAULT	13-May-2002
			EXPIRED & LOCKED	26-Mar-2004	SVSTEM	TEMP		12-May-2002
I	9-02		EXPIRED & LOCKED	26-Mar-2004	SVSTEM	TEMP	DEFAULT	12-May-2002
	to the save un.		EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP	DEFAULT	12-May-2002
I	Add Privile	peato User(s)	OPEN					
I		of lie to Lizev(s).	EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP		12-May-2002
I	e 🐴 Assign a F		EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP		13-May-2002
I		negenent •	EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP		12-May-2002
I	End Datab	use Objects	EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP		12-May-2002
I	ID-A Find.		EXPIRED & LOCKED	26-Mar-2004	EXMMPLE	TEMP		12-May-2802
I		100,000	EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP		12-May-2002
I	6-60E	06_06	EXPIRED & LOCKED	26-Mar-2004	EXAMPLE	TEMP		12-May-2002
I	€-@OLAPSYS	205_05	EXPIRED & LOCKED	26-Mir-2004	EXAMPLE	TEMP		12-Miry-2002
I	B-CROPLUGE	IS SCOTT	OPEN		SYSTEM	TEMP		12-May-2002
I	6-CRDSYB	503 M	EXPIRED & LOCKED OPEN	26-Mar-2004	EXAMPLE			12-May-2002
I		SYSTEM	OPEN		SYSTEM SYSTEM	TEMP		12-May-2002
I	ID COUTLIN	STSTEM WEPROXY	EXPIRED & LOCKED	26-Mar-2004	DRSVS	TEMP		12-May-2802
I	6-to PM	WERE	EXPINED & LOCKED	26-Mar-2004	DRSYS	TEMP		12-May-2002 12-May-2002
	8-8 PUBLIC	WHETE	EXPIRED & LOCKED	26-Mar-2004	SYSTEM	TEMP		12-May-2002
I		- 208	EXPIRED & LOCKED	26-Mar-2004	XDB	TEMP		12-May-2002
I	e-taos	- 0.6	ENHRED & DUCKED	50-Mill-2004	208	168F	CERMOUT	12-9889-2002
I	¢~‱08_ADM							
I	0 30 CD							
I	B-GG_CBADM							
I								
I	6-06_CS							
I	8-605_ES							
I	⊕-€ag8_08_08							
I	0-00_WS							
I	e≻& scoπ							
I	i¢-∰asH							
	1	1						

4. Expand Security > Users. Right-click and select Create.

5. On the General tab, enter a username and password.

🕷 Oracle Enterprise Hanager Comole, Standaler	19	
Ein Hawipstor Obient Tools Opreigurate		
	Create Cancel Show SOL Heb	Pittle         Crosted           CGFFALT         12 May 1002           CGFFALT         13 May 1002

6. On the Role tab, select Connect and Resource.

18 <b>1</b>	Create User - SYS@SPARKFS_FATSCORE.FATWIRE.COM						×			
	eneral /ailable:	Role	System	Object	Quota	XML	Consu	mer Group	Proxy Users	
	AVAUSE AVA AD									
J	AVA_DE	PLOY		0.0						
	LOGSTDBY_ADMINISTRATOR OEM_MONITOR									
	LAP_DE		ALOG_OV	VNER						
	ESOUR		ROLE							• - 3
8	_	CATAL	DG_ROLE							
Ľ	ROOLI	•								
G	ranted:				~	$\sim$				
ľ	Role							Admin Optio	n Default	
	CONN	IECT						×	<ul> <li>✓</li> </ul>	
4	RESO	URCE						x	×	
					<u>C</u> re	ate	Can	cel Show	SQL (Hel	p

7. On the System tab, choose Select Any Dictionary. Click Create.

Create User - SYS@SPARKFS_FATSCORE.FATWIRE.COM	
General Role System Object Quota XML Consumer Group	Proxy Users
Available:	
ON COMMIT REFRESH	
QUERY REWRITE	
RESTRICTED SESSION	
RESUMABLE SELECT ANY DICTIONARY	
SELECT ANY SEQUENCE	
SELECT ANY TABLE	
SYSDBA	
SYSOPER	
UNDER ANY TABLE	
UNDER ANY TYPE	<b>T</b>
Granted:	Adusia Oution
System Privilege	Admin Option
2 SELECT ANY DICTIONARY	×
<u>C</u> reate Cancel Sho	w SQL Help

Database configuration is complete.

## **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 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:

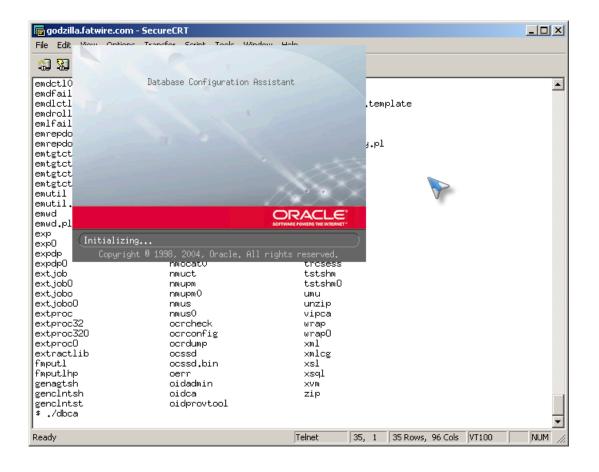
- Step I. Create an Oracle 10g Database
- Step II. Create a New User for Content Server

## 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**.

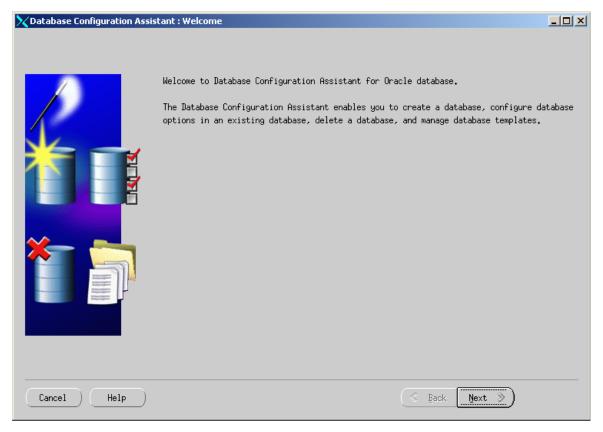
### Note

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



22

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



Contraction Assistant, Step 1 of 12 : Operations				
Database Configuration Assi	<pre>stant, Step 1 of 12 : Operations Select the operation that you want to perform:</pre>			
Cancel Help				

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

Contrabase Configuration Assistant, Step 2 of 12 : Database Templates					
	Select a t	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		
Navarrajakantan Navarrajakantan	0	Transaction Processing	Yes		
Negramment Negramment					
			Show Details)		
Cancel Help		🔇 Back Nex			

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

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

🗙 Database Configuration Assis	stant, Step 3 of 12 : Database Identification	
	An Oracle database is uniquely identified by a Global Database Name, typically of the form "name.domain". Global Database Name: A database is referenced by at least one Oracle instance which is uniquely identified from any other instance on this computer by an Oracle System Identifier (SID). SID:	
Cancel Help	( <u>&amp; Back</u> <u>Next</u> )	

🗙 Database Configuration Assistant, Step 3 of 12 : Database Identification
An Oracle database is uniquely identification  An Oracle database is uniquely identified by a Global Database Name, typically of the form "name,domain". Global Database Name: contenterverdb  A database is referenced by at least one Oracle instance which is uniquely identified from any other instance on this computer by an Oracle System Identifier (SID). SID:  SID:
Cancel Help ( Jack Next >)

```
FatWire Configuring Third-Party Software: V7.0
```

🗙 Database Configuration Assis	tant, Step 4 of 12 : Management Option	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	
	OUse Grid Control for Database   Select the Management Service	lanagement No Agents Found	
Yapanti Badan Ian Yapanti Badan Ian Yapanti Badan Ian Yapanti Badan Ian	◎ Use Database Control for Datab	ase Management	
1 Magazza Balancian Magazza Balancian	Enable Email Notifications		
Watersteinen Wortspeleren Westerst	Outgoing Mail (SMTP) Server:		
Norman Thursdanian Norman Norman Norman	Email Address:		
Million Shillion an Million Shillion an	Enable Daily Backup		
Moor Report Party and	Backup Start Time:		
	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	
Vatabase Configuration Assist         Vatabase Configuration Assist </th <th>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 op database layout for I/O performance. To use this option you must either specif 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 Manage and a Cluster File System is not available. You need to have created one raw for each datafile, control file, and log file you are planning to create in th database. Specify Raw Devices Mapping File Browse,</th> <th>timizes y a set ement device</th>	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 op database layout for I/O performance. To use this option you must either specif 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 Manage and a Cluster File System is not available. You need to have created one raw for each datafile, control file, and log file you are planning to create in th database. Specify Raw Devices Mapping File Browse,	timizes y a set ement device
Cancel Help	S Back Next S	inish )

🔀 Database Configuration Assis	tant, Step 7 of 12 : Database File Locations	
	Specify locations for the Database files to be created:	
	• Use Database File Locations from Template	
	OUse Common Location for All Database Files	
	Database Files Location;	(Browse)
14000000	○Use Oracle-Managed Files	
West States in West States in Microsoft American	Database Area:	Browse
1 Majoritz fijkliker fan 1 Majoritz fijkliker fan 1 Majoritz fijkliker fan 1 Majoritz fijkliker fan	(Multiplex Redo Logs and Control Files)	
Arteritational Arteritation	If you want to specify different locations for any database files, pi the above options and use the Storage page to specify each location.	ck either of
	File Location	Variables)
Cancel Help	🔇 Back Mext 📎	Einish

Choose the recovery options for the database: Specify Flash Recovery Area This is used as the default for all backup and recovery operations, and is also required for automatic backup using Enterprise Manager. Oracle recommends that the database files and recovery files be located on physically different disks for data protection and performance.	X Database Configuration Assis	tant, Step 8 of 12 : Recovery Configur	ration	
Flash Recovery Area:       {ORACLE_BASE}/flash_recovery       Browse         Flash Recovery Area Size:       2048       M Bytes         Enable Archiving       Edit Archive Mode Parameters	Nacional Statemente Nacional Statemente Nacional Statemente Nacional Statemente	Specify Flash Recovery Area This is used as the default fo required for automatic backup database files and recovery fi protection and performance. Flash Recovery Area: Flash Recovery Area Size:	or all backup and recovery operatio using Enterprise Manager. Oracle n les be located on physically diffe {ORACLE_BASE>/flash_recovery 2048	ecommends that the rent disks for data Browse M Bytes
Cancel       Help	Andread Advances Marcal Advances Marcal Advances Marcal Advances Marcal Advances Marcal Advances		(File I	Location Variables)

🔀 Database 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, 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, Queued Shipping, Sales History . It will also create a tablespace called EXAMPLE. The tablespace will be about 130 MB. Specify whether or not to add the Sample Schemas to your database. Sample Schemas	t )
Cancel Help	🔇 Back Next >> Einis	sh

- 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**.

$\geq$	Database Configuration Assistant, Step 11 of 12 : Database Storage				
	Storage         -₩1 Controlfile         -₩2 Datafiles         -₩3 Redo Log Groups	Database Storage From the Database Storage page, you can specify storage parameters for the database creation. This page displays a tree listing and summary view (multi-column lists to change and view the following objects: • Control files • Tablespaces • Datafiles • Rollback Segments • Redo Log Groups From any object type folder, clinetate to create a new object. To delete an object specific object from within the object type folder abelletick Important: If you select a database template including data files, you will not be remove data files, tablespaces, or rollback segments. Selecting this type of tem you to change the following: • Destination of the datafiles • Control files or log groups.	) to al , selec be able		
	(Create Delete)	File Location Variabl	es)		
	Cancel Help	S Back Next >> Ei	nish		

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

Database Configuration Assista	nt, Step 12 of 12	Creation Options	
Oatabase Configuration Assistance         S	Gelect the databa I⊄Create Dat	se creation options:	
Cancel Help		् ि हुक्ट	( 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.	
		1	
Option Oracle JVM	Selected 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		
C	OK Ca	(Save as an HTML fi Incel) (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.

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

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** 

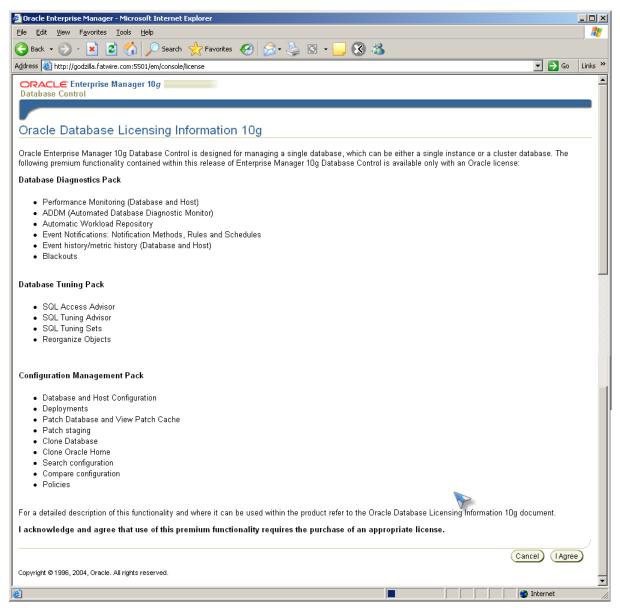
- **3.** Open a browser and do the following:
  - **a.** Browse to the URL http://<hostname>:<port>/em (from step 2).

🗿 Oracle Enterprise Manager - Microsoft Internet Explorer	
Elle Edit View Favorites Tools Help	
😋 Back 🝷 📀 🖌 🙎 🏠 🔎 Search 🤺 Favorites 🤣 🔗 = 😓 🔯 👻 🦓	
Address 🙋 http://godzilla.fatwire.com:5501/em/console/logon/logon	💌 🌛 Go 🛛 Links 🌺
ORACLE Enterprise Manager 10g	Help
Login	
Login to Database:contenter∨erdb	
* User Name	
* Password	
Connect As Normal	
Copyright © 1996, 2004, Oracle. All rights reserved.	

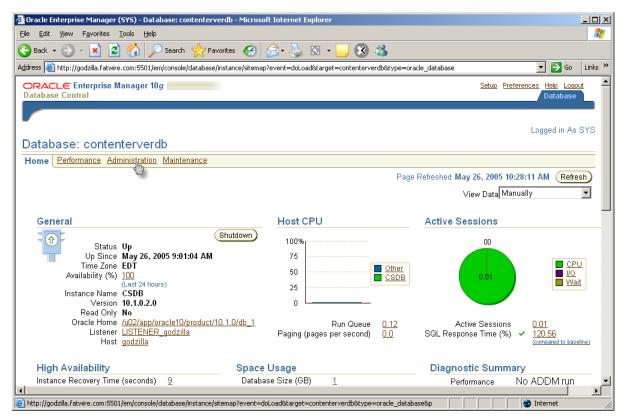
**b.** Log in to the browser, using the following field values:

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	
<u>File Edit Vi</u> ew Favorites Iools <u>H</u> elp	2
😋 Back 🔹 📀 🗸 📓 🏠 🔎 Search 🤺 Favorites 🤣 😒 - 😓 🔯 - 🛄 🐼 🖄	
Address and http://godzilla.fatwire.com:5501/em/console/database/security/user?event=create&cancelURL=/em/console/database/databaseObjects	Search%3Fevent%3Dredisp🔽 🛃 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 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 @ Unlocked	
General Roles System Privileges Object Privileges Quotas Consumer Groups Proxy Users	
	Show SQL) Cancel OK
Database   Setup   Preferences   Help   Logout	<b></b>
	🔹 📄 👘 Internet

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

🚰 Oracle Enterprise Manager - Create User - Microsoft	Internet Explorer		
<u>Eile Edit View Favorites Tools H</u> elp		20	
🚱 Back 🔹 💮 👻 😰 🏠 🔎 Search 🚽	🎖 Favorites 🔣 😒 - 🍉 🐼 🖄		
Address 🙆 http://godzilla.fatwire.com:5501/em/console/data	base/security/user?target=contenterverdb&type=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 Roles System Privileges Object Privi	leges Quotas Consumer Groups Proxy Users		
	1	( Modify )	
Role	Admin Option	Default	
CONNECT		<b>N</b>	
General Roles System Privileges Object Privi	leges Quotas Consumer Groups Proxy Users		
	~	Show SQL) Cancel OK	
Database   <u>Setup</u>   <u>Preferences</u>   <u>Help</u>   <u>Logout</u> Copyright © 1996, 2004, Oracle. All rights reserved. About Grade Enterprise Manager 10g Database Control			

**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 Iools H</u> elp	📲 👘 🖓 👘
🚱 Back 🔹 🕥 🖌 🙎 🏠 🔎 Search   the Favorites 🚱 🔗 - 🍃 🖾 -	<mark>_ 8</mark> 🚳
Address 🙆 http://godzilla.fatwire.com:5501/em/console/database/security/user?target=contenterverdb&typ	e=oracle_database&cancelURL=/em/console/database/databaseOt 🔽 🛃 Go 👘 Links 🎽
ORACLE Enterprise Manager 10g	Setup Preferences Help Loquut Database
Database: contenterverdb > Users > Create User Modify Roles	Logged in As SYS
	Cancel) OK)
Available Roles Selected Roles	
MGMT_USER OEM_MONITOR OLAP_DBA OLAP_USER RECOVERY CATALOG_OWNER RESOURCE SCHEDULER_ADMIN SELECT_CATALOG_ROLE WKUSER WM_ADMIN_ROLE	
Database   <u>Setup</u>   <u>Preferences</u> Copyright © 1996, 2004, Oracle. All rights reserved. <u>About Oracle Enterprise Manager 10g Database Control</u>	Cancel OK

**Resource** is moved to the "Selected Roles" list.

🗿 Modify Roles - Microsoft Internet Explorer 📃 🔳				
Eile Edit View Favorites Iools Help 🦧				
🕞 Back 🔹 🕥 🖌 😰 🏠 🔎 Search 🤺 Favorites 🤣 🔗 + چ 🖾 - 🛄 🛞 🖄				
Address 💣 http://godzilla.fatwire.com:5501/em/o	console/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 > Cr	reate User	Logged in As SYS		
Modify Roles				
Available Roles	Selected Roles	Cancel OK		
AG_ADMINISTRATOR_ROLE AQ_USER_ROLE AUTHENTICATEDUSER CTXAPP DBA DELETE_CATALOG_ROLE DMUSER_ROLE DM_CATALOG_ROLE EJBCLIENT EXECUTE_CATALOG_ROLE		Cancel OK		
Cone Done		🛛 📄 👘 Internet		

c. Click OK.

42

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

🔰 Oracle Enterprise Manager - Create User - Microsoft Internet Explorer 📃 🖸			
Ele Edit View Favorites Iools Help			
🔇 Back 🔹 🕥 🖌 📓 🏠 🔎 Search 🤺 Favorites 🚱 🔗 • 🌽 🖾 🗉 🖕 🛞 🖏			
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 Setup Preferences Help Logout Database Control Database			
Database: contenterverdb         > Users         > Create User         Logged in As SYS			
Create User           General Roles         Show SQL         Cancel         OK			
Modify System Privilege Admin Option			
No items found			
General Roles System Privileges Object Privileges Quotas Consumer Groups Proxy Users			
Copyright © 1996, 2004, Oracle. All rights reserved. About Oracle Enterprise Manager 10g Database Control			

**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 Iools Help	
😋 Back 🔹 📀 💌 😰 🏠 🔎 Search 🤺 Favorites  🔗 😓 - چ 🔯 🛄 🐼 🖄	
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	;ole/database/databaseOt 💌 🔁 Go 🛛 Links 🌺
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     Image: Constraint of the second sec	,
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

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

🚰 Modify System Privileges - Microsoft Internet Explorer	_ <b>_</b> ×			
Eile Edit Yiew Favorites Iools Help 🦧				
😋 Back + 🕥 - 💌 🖻 🏠 🔎 Search 🤺 Favorites 🤪 🎅 + 🌽 🖾 - 🛄 🛞 🖄				
Address 🙆 http://godzilla.fatwire.com:5501/em/console/database/security/user?target=contenterverdb&type=oracle_database&cancelURL=/em/console	e/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			
	Cancel OK			
Available System Privileges          REMOVE_ANY_WORKSPACE         RESUMABLE         ROLLBACK_ANY_WORKSPACE         SELECT ANY SEQUENCE         SELECT ANY TABLE         SYSDBA         SYSDPER         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 Done	📄 📄 📄 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 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 sections:

- Creating a Database on MS SQL Server 2000 SP3+
- Creating a Database on MS SQL Server 2005

## Creating a Database on MS SQL Server 2000 SP3+

### To create and configure a database on MS SQL Server 2000 SP3+

- **1.** Create the database login:
  - a. Open "Enterprise Manager."
  - In the left-hand tree, select Microsoft SQL Servers > SQL Server Group > (Local) > Security.
  - c. Right-click on Logins and select New Login...
    - 1) Create a user (such as csuser), and select the proper authentication method.
    - **2)** Save this user.
- **2.** Create the database:
  - a. In the left-hand tree, select Microsoft SQL Servers > SQL Server Group > (Local) > Databases.
  - b. Right-click on Databases and select New Database...
    - 1) Enter a name (such as CSDB), then modify the other fields as needed for your installation.
    - 2) Finish creating this database.
- **3.** Assign account privileges:
  - **a.** Select the newly created database in the left-hand tree and click **Open**.
  - b. Right-click on Users and select Add new Database User...
  - **c.** In the drop-down list, choose the user created in step c of this procedure. In the **Permit role membership** list, check the box next to **db\_owner**.
  - **d.** Save the new user.

Database configuration is complete. You are now ready to create and configure the data source. For instructions, refer to your Content Server (Spark) installation guide.

## 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.

48

### 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 sections:

• 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.

52

### 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 sections:

• 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:

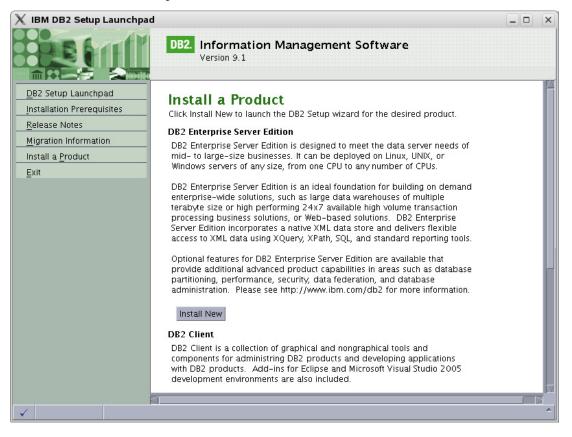
- A. Install DB2
- **B.** Create a New DB2 Database
- **C.** Create a User for the New Database
- **D.** Configure the Database

### A. Install DB2

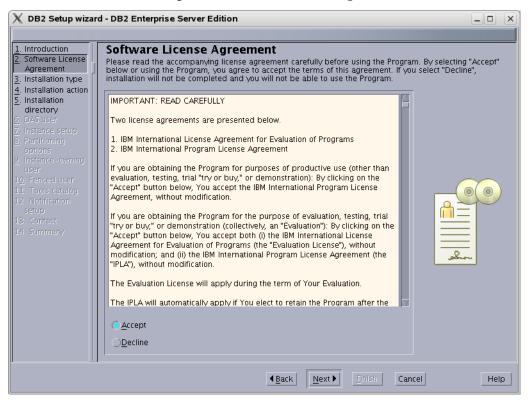
- 1. Uncompress the correct installation file for your distribution.
- 2. Run./db2setup
- 3. In the "Information Management Software" screen, select Install a Product.



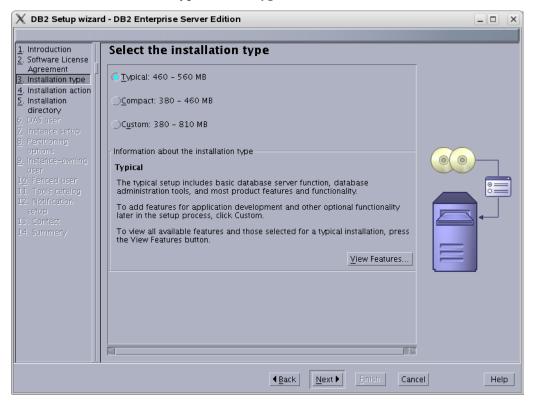
4. Under "DB2 Enterprise Server Edition," select Install New.



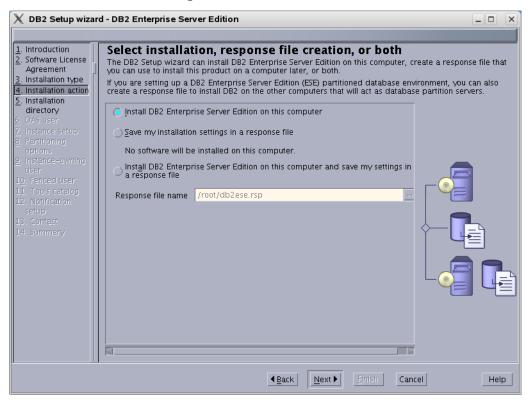
- 5. In the "Welcome to the DB2 Setup Wizard," click Next.
- 6. In the "Software License Agreement" screen, click Accept, then click Next.



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



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	d - DB2 Enterprise Server Edition 🧶 📃 🗆 🗶
Introduction     Software License Agreement     Installation type     Installation type     Installation action     Software     Installation     Installation     Software     Instance setup     Partitioning     options     Instance-owning     User     I. Fenced user     I. Notification     setup     I3. Contact     I4. Summary	Select the installation directory The DB2 Setup wizard installs DB2 Enterprise Server Edition in the following directory. To select a different 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
	▲ <u>Back</u> <u>Next</u> <u>Finish</u> Cancel Help

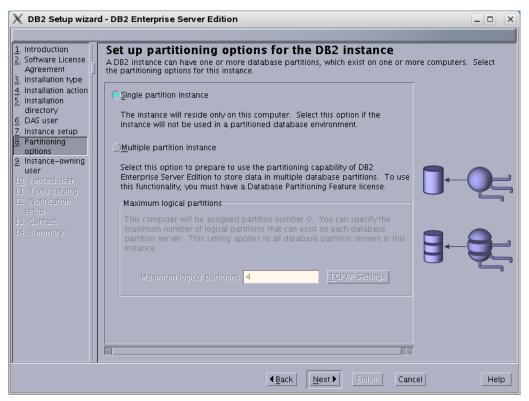
- **10.** In "Set user information for the DB2 Administration Server":
  - **a.** Keep the defaults, unless a previous attempt to install DB2 failed.
  - **b.** Enter a password.
  - c. Click Next.

🗙 DB2 Setup wizar	d - DB2 Enterprise Ser	ver Edition		
1. Introduction         2. Software License         Agreement         3. Installation type         4. Installation action         5. Installation	The DB2 Administration	nation for the DB2 Adm Server (DAS) runs on your computer et of privileges is required to run the	to provide support red	quired by the DB2 tools.
directory 6. DAS user	User name	dasusr1		
7. Instance setup 8. Partitioning	UID		<u>√U</u> se default UID	
options 9. Instance-owning	Group name	dasadm1		
user 10. Fenced user	GID		<b>√</b> Use default <u>G</u> ID	
11. Tools catalog 12. Notification	Password		Password	
setup 13. Contact	Confirm password		• You must specify a 1	
14. Summary	Home directory	/home/dasusr1 ···		
	User name			
		Back     Next	Finish Can	sol Holo
		▲Back Next	Einish Can	cel Help

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

🗙 DB2 Setup wizar	d - DB2 Enterprise Server Edition	_ <b>D</b>   <b>X</b>
Introduction     Software License     Agreement     Installation type     Installation action     Installation     directory     AS user     Instance setup     B Partitioning     options     Instance-owning     User     10. Fenced user     11. Tools catalog     12. Notification     setup     13. Contact     14. 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 partition server. © Create a DB2 instance © Do not create a DB2 instance	nent, you should not
	▲ <u>Back</u> <u>Einish</u> Can	cel Help

**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		
1. Introduction         2. Software License         Agreement         3. Installation type         4. Installation action         5. Installation	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
directory <u>6</u> . DAS user	User name	db2inst1		
<u>7</u> . Instance setup <u>8</u> . Partitioning	UID		<mark>√</mark> Use default UID	
options 9. Instance-owning	Group name	db2grp1		
user 1 <u>0</u> . Fenced user	GID		<b>√</b> Use default <u>G</u> ID	
11. Tools catalog 12. Notification	Password		Password • You must specify a	
setup	Confirm password		• Tou must specify a	
13. Contact 14. Summary	Home directory	/home/db2inst1 ····		
	○ <u>E</u> xisting user			
	User name			
			Einish Can	cel Help

- **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.

8. Partitioning options     Group name     db2fgrp1       9. Instance-owning user     GID     ✓L       10. Fenced user     Password     Pass	r defined functions (UDFs) and stored Use default UID Use default <u>G</u> ID
13. Contact 14. Summary Existing user User name User name Meack	Firiish Cancel Help

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

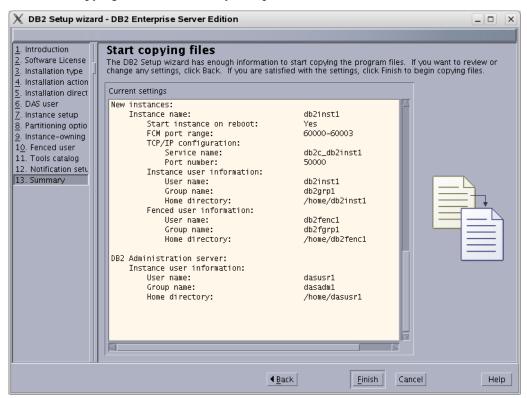
X DB2 Setup wizard - DB2 Enterprise Server Edition				
1. Introduction         2. Software License         Agreement         3. Installation type         4. Installation action         5. Installation		c <b>atalog</b> enter and scheduler require a DB2 tools cata ? tools catalog must be stored in a DB2 datab		
directory 6. DAS user	Instance db2inst1	Δ		
7. Instance setup 8. Partitioning	Database			
options 9. Instance-owning	ONEW TOOLSDB			
user 10. Fenced user	⊖E <u>x</u> isting <select></select>	V		
11. Tools catalog	Schema			
12. Notification setup	ONEM SYSTOOLS		1 m	
13. Contact 14. Summary	OExisting <select></select>	γ		
	● <u>D</u> o not prepare the DB2 tools	catalog		
		▲ <u>Back</u> <u>Next</u> Einish Car	ncel Help	

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

🗙 DB2 Setup wizar	d - DB2 Enterprise Server Edition	_
Introduction     Software License     Agreement     J. Installation type     4. Installation action     5. Installation     directory     6. DAS user     7. Instance setup     9. Partitioning     options     9. Instance-owning     user     10. Fenced user     11. Tools catalog     12. Notification     setup     13. Contact     14. Summany	Set up notifications         You can set up your DB2 server to automatically send e-mail or pager notifications to all when a database needs attention. The contact information is stored in the administration need an unauthenticated SMTP server to send these notifications.         Set up your DB2 server to send notifications         Notification SMTP server       localhost.localdomain         Administration contact list location         Local - Create a contact list on this computer         Remote - Use an existing contact list that resides on another DB2 server         Remote DB2 server to send notifications at this time         If you do not set up your DB2 server to send notification log.	ert administrators in contact list. You
	▲ <u>Back</u> <u>Next</u>	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**.

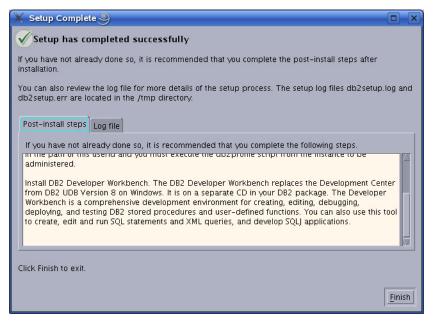
17. In "Start copying files," check that your options are correct and click Finish.



**18.** Allow the installation to proceed.

X Installing DB2 Enterprise Server Edition	
Please wait while the DB2 Setup wizard installs DB2 Enterpri Server Edition on your computer and performs the required configuration. This may take several minutes.	ise
Task: Installing GSKit support	
0% 10	0%
Overall progress:	
0% 10	0%

**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.

8 Control Center View	X		
Control Center View			
Specify the Control Center view that you want to display.			
⊖ <u>B</u> asic			
C Advanced			
OCustom Modify			
Details			
The advanced view displays all objects and actions available in the Control Center.			
✓Show this window at startup time			
OK Cancel Hel	0		

- 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> <u>Selected</u> <u>Edit</u> <u>View</u> <u>T</u> ools	Help		
🔓 🕆 🍄 📼 🌫 🔯 🗉 🕱 🖵 🕻 (			4
🛅 Object View			
Control Center	All Databases		
🛨 🛅 All Systems	Name ⇔ System ⇒	; Instance ≑ Type ≑ Database ≑ Path ≑ Comr	nen
L 🦳 All Databases			×
		AI	

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

69

- **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		×
Iname       Specify a name for your new database         2       Storage         3       Region         4       Strimmary         Database name	ame, select a le. <u>Task</u>	)
<u>Mext</u>	inish Cano	:el

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).

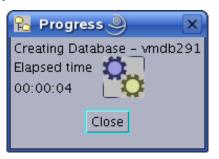
7. In "Specify the locale for this database," ensure that the drop-down "Code set" displays UTF-8 and click **Next**.

🔁 Create Dat	abase Wizard 🎐		X)
<u>1</u> . Name	Specify the l	ocale for this database.	
<u>2</u> . Storage		and code set) determines the set of characters your database uses. It also determines how strings are compared.	
3. Region 4. Summary		strings are compared.	
<u>4</u> . Summary	Database locale		
	Country/Region d	efault 7	
		Territory US	
		Code set UTF-8	
		d for XML must use code set UTF-8. Other values will disable	
	XML functions.		
	Collating Sequence		
	⊂ S <u>∨</u> stem	Character strings are sorted according to the code set you specify above.	
	<u>l</u> dentity	Character strings are sorted according to their hexadecimal value.	
	Ol <u>d</u> entity_16bit	Character strings are sorted using the Compatibility Encoding Scheme for UTF-16: 8-Bit specification (CESU-8)	
	<u>U</u> CA400_NO	Character strings are sorted using the Unicode Collation Algorithm 4.0.0, with normalization on.	
	UCA400_L <u>T</u> H	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.	
		<u> 15aur</u>	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	abase Wizard         Review the actions that will take place when you click Finish         When you click Finish, the wizard creates a database and the necessary table spaces. To change any of parameters, go back to the appropriate page in this wizard. To view the equivalent command, click Sho Command         Create database VMDB291         Automatic storage database: Yes         Table space prefetch size: Automatic         Default Automatic Storage User Table Space         Default Automatic Storage Table Space         Storage paths:         /home/db2inst1         Show Command	the
	▲ <u>Back</u>	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>V</u> iew <u>T</u> ools	s <u>H</u> elp
▙ ੀ 않 ॼ 늘  ▣ "☆ 및 <	•• = { ?
🛅 Object View	
Control Center	All Databases
🛨 🛅 All Systems = 🗁 All Databases	│ Name
H Databases	VMDB291 LOCALH db2inst1 Local VMDB291 /hom
	1 of 1 items displayed ↓ Z Strate CPC K K Default View View
	🗅 All Databases 📀 Help >
	Actions: Select an object from the list above to display mor
	Create New Database

### 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 on the branch DB Users and select the Add option.

🔁 Control Center			_ 🗆 🗙
<u>Control Center</u> <u>Selected</u> <u>Edit</u> <u>V</u> iew <u>T</u> ools	<u>H</u> elp		
┺╬╚ॼ३०३२ । % ⊑ <	•• = < ?		<
Dbject View			
Control Center	LOCALHOST - db2inst1 - VMDB2	91 – DB Users	
- All Systems	Name 🔶		
All Databases	A DB2INST1		
— 🛅 Views			
— 🗀 Aliases			
🗕 🛅 Nicknames			
+- 🗀 Cache Objects			
- 🗁 Triggers - 🎦 Schemas	1 of 1 items displayed	A \$ = m & F	Default View 🔶 View
— 🗀 Indexes			
🗕 🦳 Table Spaces	🗀 DB Users		⑦ Help ×
- 🗀 Event Monitors			
Buffer Pools	Actions:	Select an object from the li	st above to display more
🕂 🛅 Application Objects	Add New User		
User and Group Objects			
DB Groups			
🛨 🧰 Federated Database Objects			
📙 🛅 XML Schema Repository (XSR)			
		5	

- **3.** In the "Add User" application:
  - **a.** Select the user that was created in step C on page 74.
  - **b.** Under "Authorities," select all check boxes.
  - c. Click OK.

🔁 Add	User						X
LOCALHO	ST – db2inst1 – VMD	8291					
View	Table Space	Function	Proc	edure	Metho	d Package	
	Database	Schema		Та	able	Index	
Specif	y a user name. You c	an select a user	name fro	om the list	: or type o	ne in.	
User		4					
, oser	AD.01	/					
	e the appropriate aut	horities to grant	to the se	elected us	er.		
	orities Connect to database						
	reate tables						
	ireate packages						
	egister routines to ex	ecute in databa	se mana	aer's proc	ess		
	atabase administrati			g =			
	- ireate schemas implic						
	ccess to the <u>l</u> oad utili	ty					
	reate external r <u>o</u> utin	es					
	ionnect to <u>q</u> uiesced d	atabase					
S	ec <u>u</u> rity administrator	authority					
	Of	Cancel	Appl	/ <u>R</u> e:	set Sh	IO <u>W</u> SQL He	ip

### D. Configure the Database

- 1. Right-click on 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 Configu	ration - VMDB29	1							X
	Select the value field of	4		nding		2 \$	Pending Value I	- Effective ≙	Dvn	
	Applications	raide	<u>~   · ~</u>	nang	T GIGI		Trending Falder		<u>, , , , , , , , , , , , , , , , , , , </u>	
	AVG_APPLS	AUTOMATIC(1)							Yes	
	DLCHKTIME	10000							Yes	
	LOCKTIMEOUT	None								
	MAXAPPLS	AUTOMATIC(40)							Yes	
	MAXFILOP	64							Yes	
	MAXLOCKS	AUTOMATIC(60)							Yes	
	🗢 Environment								_ 1	
	ALT_COLLATE								_ 1	
	CODEPAGE	1208								
	CODESET	UTF-8								
			_							1
	<u></u>		1.4	ы.	75	مم				
	109 of 109 iten	ns displayed	J₽Z	\$	9P	649	Default View*		View	′
	Hint									
	niit									
		OK		Cano	el		ply Show Cor	nmand	Help	5

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

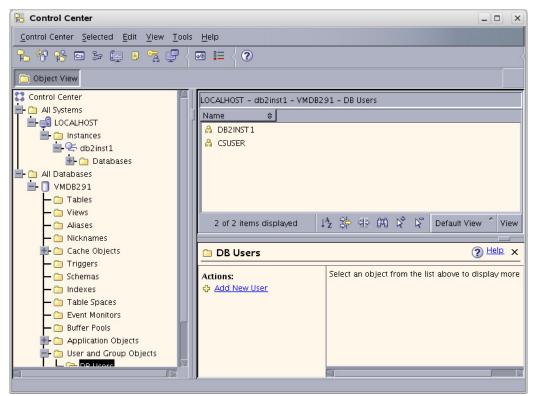
A status window flashes. *This does not mean that the operation has been completed.* Typically, you will need to wait 2 to 3 minutes for the system to restart.

- 4. Stop the instance:
  - a. Expand the following "Control Center" tree branch: All Systems > LOCALHOST > Instances > name\_of\_your\_instance
  - **b.** Right-click on the instance.
  - c. Select Stop.

🔁 Control Center			_				
<u>Control Center</u> <u>Selected</u> <u>Edit</u> <u>View</u> <u>T</u> ools	Help						
┺╬╬◙ѷ╚┋┇╬┇	•• = < ?						
🗀 Object View	Diject View						
Control Center	LOCALHOST - db2inst1 - VMDB2	91 – DB Users					
All Systems	Name 🔶						
	B2INST1						
Instances	🔒 CSUSER						
📑 😋 ubzinsti 🗄 🛅 Databases							
All Databases							
-  VMDB291							
Tables							
🗕 🗀 Views	II						
— 🗀 Aliases	2 of 2 items displayed	小学会会大	Default View 🗍 View				
🗕 🛅 Nicknames							
🔃 🗀 Cache Objects	🗀 DB Users		⑦ Help ×				
— 🗀 Triggers	A	Select an object from the list	above to display more				
- 🗁 Schemas	Actions:	Sciect an object nom the list	above to appray more				
— 🔁 Table Spaces							
- Die Event Monitors							
🗕 🛅 Buffer Pools							
🗐 🦳 Application Objects							
📕 🗀 User and Group Objects							
Pol 18	•	[ind]					

- 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 on 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.

# 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 IIS on Windows"
- Chapter 8, "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 We	eb 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

# Chapter 7 Installing IIS on Windows

This chapter explains how to install and test Microsoft's Internet Information Services (IIS). It contains the following sections:

- Step I. Install IIS
- Step II. Document Your IIS Installation
- Step III. Verify the Installation
- Next Step

#### Note

Typically, IIS is either partially or fully installed on most Windows 2000 machines.

- If IIS is only partially installed or not installed, start with the first section, "Step I. Install IIS," on page 88.
- If IIS is fully installed, start with the section "Step II. Document Your IIS Installation," on page 88.

## Step I. Install IIS

If IIS is not installed or is only partially installed, follow Microsoft's instruction for installing IIS on a Windows 2000 system.

As a convenience, here is a quick synopsis of the instructions:

- 1. Select Start > Settings > Control Panel.
- 2. Select Add/Remove Programs.
- 3. Select the Add/Remove Windows Components tab on the left.

The Add/Remove Windows Components Wizard appears.

**4.** Select **Internet Information Services (IIS)** and then follow the instructions for installing it.

## **Step II. Document Your IIS Installation**

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

#### Table 3: IIS Parameters

Parameter	What It Holds	Your Value
Web Version (WebVersion)	The version number of the IIS software that you installed.	
Web Host Name (WebHost)	The name by which the installation machine is known on the network.	
Web Host IP Address (WebIP)	The numeric Internet Protocol address assigned to the web server host machine.	
Web Server Port (WebPort)	The port number assigned for web server communications. By default, it has the value 80.	

## Step III. Verify the Installation

After you have installed IIS, you start it and then browse to it in a web browser to determine whether it is serving pages as it should.

### A. Start IIS

You can start the various IIS services in various ways. To be sure that all the necessary services are running, start IIS from the **Services** node.

#### To start IIS services

1. Right-click on the My Computer icon.

89

- 2. Select Manage from the right-mouse menu.
- **3.** In the **Computer Management** dialog box, expand the **Services and Applications** node in the tree.
- 4. Select Services.
- 5. In the list of services on the right, right click **IIS Admin Service**.
- 6. Select **Start** from the right mouse menu.

#### To start or stop the default web site only

- 1. Right-click on the MyComputer icon.
- 2. Select Manage from the right mouse menu.
- **3.** In the **Computer Management** window, expand the **Services and Applications**. node in the tree.
- 4. Expand the Internet Information Services node.
- 5. Right-click on Default Web Site.
- 6. Select Start or Stop, as appropriate, from the right mouse menu.

### B. Verify that IIS is Serving Pages

To verify that IIS can serve pages, test it from both the server that is hosting it and from another browser on the network.

#### To verify that IIS can serve pages

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

http://WebHost:WebPort

- **3.** Do one of the following:
  - If the browser displays the IIS home page, then IIS is installed and running properly. Continue to step 4.
  - If the browser returns an error, consult Microsoft's documentation, determine what went wrong, and fix it before you continue.
- **4.** Start a browser on another machine on your network (a host other than the machine hosting IIS).
- 5. From the browser, go to the following URL:

http://WebHost:WebPort

If the browser displays the IIS "Under Construction" page, then IIS is installed and running and the network naming service appears to be working properly.

## **Next Step**

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

Next Step

## Chapter 8

# 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 92.
  - 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 4, "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 4: 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 93.
- 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 92.

## 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 92).

## **Next Step**

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

# Part 3 Install and Configuring LDAP

This part describes how to install and configure a supported LDAP server for integration with your Content Server application.

This part contains the following chapters:

- Chapter 9, "Setting Up Sun Java Systems Access Manager 7.0"
- Chapter 10, "Setting Up Sun Java Systems Directory Server 5.2"
- Chapter 11, "Setting Up OpenLDAP 2.3.x"
- Chapter 12, "Setting Up the WebLogic 9.x Embedded LDAP Server"

#### Chapter 9

# Setting Up Sun Java Systems Access Manager 7.0

This chapter provides instructions for setting up the currently supported Sun Java Systems 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.

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
•1??????????????????	Sun Java <sup>™</sup> System Access Manager	
	This server uses LDAP Authentication User Name: Password: Log In	

- 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.

Sun Java~ System Access Manager			Search   Logout   Help Welcome <u>amAdmin</u>
Identity Management Service Configuratio	n Current Sessio	ns Federation Management	
vm 🖻	vm		<b></b>
View: Organizations	View: General	•	Save Reset
Organizations (3 items)          New       Delete       Search         Name       CommunitySample       DeveloperSample         DeveloperSample       EnterpriseSample       DeveloperSample	General Propert		
	•		• •

**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>
	n Current Sessions Federation Management	
<u>vm</u> > DeveloperSample	DeveloperSample	<u> </u>
View: Organizations	View: General	Save Reset
Organ Groups Users	General Properties	
New. Services Search	Domain Name:	
Nam Roles Policies There Agents	Organization Status: Active	
	Organization Aliases: DeveloperSample	
		▼
	Add Remove	
	Add Relieve	
	DNS Alias Names:	

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

			Search L	ogout   Help
Sun Java~ System Access Manager			Welcor <u>amAdn</u>	
Identity Management Service Configuration Current Sessions Federation Management				
<u>vm</u> > DeveloperSample ♪	fwadmin			<u> </u>
View: Users	View: General	•	Save	Reset
<u>Users (1 it</u> em)			* Indicates re	equired field
New Delete fwadmin Search Advanced Search	First Name:			
User ID Full Name	* Last Name:	default		
_	* 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		Search   Logout   Help Welcome <u>amAdmin</u>
Identity Management     Service Configuration       vm > DeveloperSample     ↓       View:     Users     ✓       Users (1 item)     ✓     ↓       New     Delete     fwadmin     Search       Advanced Search     ✓     ↓       User ID     Full Name     ↑       fwadmin     ↓	Current Sessions       Federation Management         New User - Step 1 of 2         Select the services to be assigned to the         Available Services         Image: Construct a service of the service of t	

**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	
<i>♦ Sun.</i>			Welcome		
Sun Java <sup>®</sup> System Access Manager			amAdmin		
Identity Management Service Configuration Current Sessions Federation Management					
<u>vm</u> > DeveloperSample	New User - Step 2 of	2			
View: Users	Enter Required User At	tributes			
Users (1 item)			* Indicates requi	ed 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		С	ancel	

- **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
<i>♦ Sun</i> .			Welcor	
Sun Java" System Access Manager			amAdn	nin
Identity Management Service Configuration	Current Sessions	ederation Management		
Technig management Service comigaration		cucration management		
<u>vm</u> > DeveloperSample ↓	demouser			<u> </u>
View: Users	View: General	•	Save	Reset
Users (1 item)			* Indicates re	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/vvvv hh·mm		

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

	Search	I Logout	Help
Sun Java- System Access Manager		elcome n <u>Admin</u>	
Identity Management Service Configuration	Current Sessions Federation Management		
<u>vm</u> > DeveloperSample ▷	demouser		
View: Users 💌	View: Groups		
Users (10 items) New Delete user* Search	The Selected list contains the groups associated with this user Use Search to find a specific group.		
New     Delete     Juser     Search       Advanced Search     Advanced Search       User ID     Full Name       user_analyst     user_analyst       user_analyst     user_analyst       user_approver     user_analyst       user_approver     user_analyst       user_analyst     user_analyst       user_designer     user_beat       user_editor     user_expert       user_expert     user_expert       user_marketer     user_pricer       user_pricer     user_pricer	*       Search         Available:       PageEditor         GE Lighting-GeneralAdmin       BurlingtonFinancial-Designer         GE Lighting-WorkflowAdmin       FirstSitell-ProductEditor         GE Lighting-Designer       BurlingtonFinancial-Checker         BurlingtonFinancial-Checker       FirstSitell-ProductAuthor         Add ♥       Add All ♥       Remove All ♠         Selected:		

- 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 Help				
Sun Java- System Access Manager		Welcome <u>amAdmin</u>				
Identity Management Service Configuration	Identity Management Service Configuration Current Sessions Federation Management					
<u>vm</u> > DeveloperSample ♪	Use Search to find a specific group.	<ul> <li>Image: A set of the set of the</li></ul>				
View: Users	* Search					
Users (10 items)          New       Delete       user*       Search         Advanced Search         User ID       Full Name         □ demouser       user       □         □ user_analyst       user_analyst       □         □ user_analyst       user_analyst       □         □ user_author       user_author       □         □ user_checker       user_checker       □         □ user_designer       user_designer       □         □ user_editor       user_editor       □         □ user_expert       user_expert       □         □ user_narketer       user_marketer       □         □ user_pricer       user_pricer       □	Available:         PageEditor         GE Lighting-GeneralAdmin         BurlingtonFinancial-Designer         GE Lighting-WorkflowAdmin         FirstSiteII-ProductEditor         GE Lighting-Designer         BurlingtonFinancial-Checker         FirstSiteII-ProductAuthor         Add ♥       Add All ♥         Remove ♠       Remove All ♠         Selected:       Spark-SiteAdmin         Spark-SparkContentUser       Spark-GeneralAdmin					
		Save Reset				

**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 10

# Setting Up Sun Java Systems Directory Server 5.2

This chapter how to set up the currently supported Sun Java Systems Directory Server for use with Content Server on Sun Portal Server 7. This chapter contains the following sections:

- Start/Stop Commands
- Installing Sun Directory Server
- Verifying Your LDAP Configuration
- Modifying User Passwords

# **Start/Stop Commands**

This section contains commands for starting and stopping Sun Directory Server and its administration interface.

## Starting and Stopping Sun Directory Server

- To start:
  - On Solaris:

/usr/sbin/directoryserver start

- On Unix (except Solaris):

```
<dirserv_home>/slapd-<hostname>/start-slapd
```

- On Windows:

Start the following service: Sun ONE Directory Server 5.2 <hostname>

- To stop:
  - On Solaris:

/usr/sbin/directoryserver stop

- On Unix (except Solaris):

<dirserv\_home>/slapd-<hostname>/stop-slapd

- On Windows:

Stop the following service: Sun ONE Directory Server 5.2 <hostname>

## Starting and Stopping the Sun Directory Server Admin Interface

- To start:
  - On Solaris:

/usr/sbin/directoryserver start-admin

- On Unix (except Solaris):

<dirserv\_home>/start-admin

- To stop:
  - On Solaris:

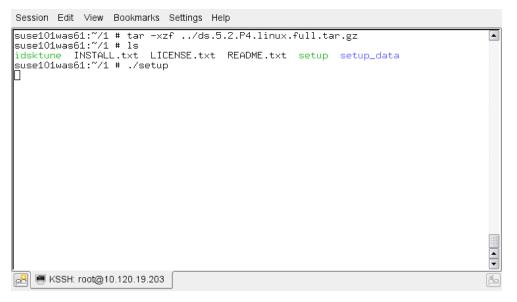
/usr/sbin/directoryserver stop-admin

- On Unix (except Solaris):

<dirserv\_home>/stop-admin

# Installing Sun Directory Server

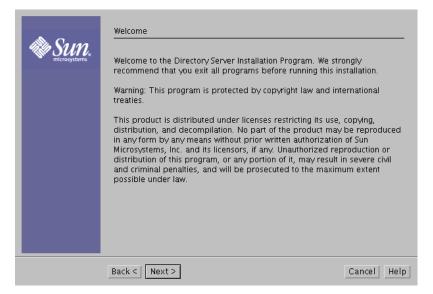
- **11.** Download the Directory Server installation file (ds.5.2.P4.linux.full.tar.gz) from Sun's web site.
- **12.** Decompress the file into a temporary directory and change to that directory.
- 13. Start the Directory Server installer using the following command: ./setup



14. In the "Environment Check" screen, click Next.

🕸 Sun.	Environment Check
- mlcrosystems	Warning: the operating system may be missing required patches. If you have not already done so, it is recommended that you quit the installer and run the idsktune utility located in this directory. The idsktune utility provides a list of patches and tuning settings relevant to your operating system as described in the Sun Java(TM) System Directory Server 5.2 Installation and Tuning Guide. If you proceed without resolving all idsktune ERROR conditions, installation may fail.
	Eack ( Next > Cancel

**15.** In the "Welcome" screen, click **Next**.



**16.** In the "Software License Agreement" screen, click **Yes** (Accept License).

Serve .	Software License Agreement
microsystems	Before you can install this product, you must read and accept the agreement under which this product is licensed for your use.
	Sun Java(TM) System Directory Server 5.2 (formerly iPlanet(TM) Directory Server)
	IF YOU HAVE PAID IN FULL ALL CORRESPONDING FEES AND CHARGES IN CONNECTION WITH A LICENSE FOR Sun Java(TM) System DIRECTORY SERVER 5.2 (ALONG WITH ALL ACCOMPANYING SOFTWARE AND DOCUMENTATION, THE "DIRECTORY SERVER"), YOUR LICENSE TO THE DIRECTORY SERVER IS SET FORTH ENTIRELY IN SECTION B. OTHERWISE, YOUR EVALUATION LICENSE TO THE DIRECTORY SERVER IS SET FORTH ENTIRELY IN SECTION A. The two licenses set forth in Sections A and B are separate and distinct legal agreements.
	Have you read, and do you accept, all of the terms of the preceding Software License Agreement? If you choose No, the installation program will end without installing the product.
	Back < Yes (Accept License) No Help

**17.** In the "Fully Qualified Computer Name" screen, ensure that the displayed DNS name is valid for this server and click **Next**.

4	& Sun	Fully Qualified Computer Name		
	microsystems	Enter the fully qualified name of the computer		
		Fully Qualified Computer Name:	suse101was61.vm]fatwire.com	
		Back < Next >	Cancel Help	

 In the "Select Server or Console Installation" screen, select Sun Java(TM) System Servers (default selection) and click Next.

and Samo	Select Server or Console Installation	
microsystems	Choose the type of installation you prefer,	then Click Next.
	∕Sun Java(TM) System Servers	Installs the Sun Java(TM) System servers, Sun Java(TM) System Server Console, and related components.
	⇔Sun Java(TM) System Server Console	Installs the Sun Java(TM) System Server Console as a stand-alone Java application.
	Back < Next >	Cancel Help

**19.** In the "Type of Installation" screen, select **Typical** (default selection).

in Sum	Type of Insta	allation	
microsystems	Choose the type of installation you prefer, then Click Next.		
	⇔Express	Installation option choices are made automatically. easiest installation and recommended for evaluatin product.	
	◆Typical	Software will be installed with the most common op Recommended for most deployments.	tions.
	⇔Custom	You may choose the options you want to install. Recommended for advanced users.	
	Back < Ne	xt> Ca	ncel Help

**20.** In the "Select Installation Directory" screen, enter the path and directory where you want Directory Server installed. (This path is referred to later in this chapter as <dirserv\_home>.) Typically, it is safe to use the default, unless your installation requires you to install Directory Server in a different location. Make a record of the path you enter here. When you are finished, click **Next**.

a Sun	Select installation directory	
microsystems	Directory to install Directory Server components: /var/Sun/mps	Browse
_	Back < Next >	Cancel Help

**21.** In the pop-up dialog, click **Create Directory**.



22. In the "Select Components" screen, select all options and click Next.

• •	Select Components
SUN.	Directory Server components showing a checked box will be installed.
	🛛 🔽 Sun Java(TM) System Directory Suite 🛛 28.19 MB
	☑ Sun Java(TM) System Directory Server 26.43 MB
	☑ Sun Java(TM) System Directory Console Support 1.76 MB
	E 🔽 Sun Java(TM) System Administration Services 7.74 MB
	☑ Sun Java(TM) System Administration Server 7.51 MB
	☑ Sun Java(TM) System Administration Console 230.89 KB
	😑 🗹 Sun Java(TM) System Server Console 🛛 69.54 MB
	Sun Java(TM) System Server Console Core 4.54 MB
	☑ Java Runtime Environment 65.00 MB
	☑ Sun Java(TM) System Server Basic Libraries 25.04 MB
	Back < Next > Cancel Help

**23.** In the "Sun JAVA(TM) Systems Directory Server User Group" screen, enter the user name and group under which Directory Server will run. The default values are acceptable, but if you need to change them for security reasons, you may do so. When you are finished, click **Next**.

<b>O C C C C C C C C C C</b>	Sun Java(TM) Syst	tem Directory Server User and Group	
Microsystems		m user and group names under whose ide System Directory server will run.	ntity
	System User:	jroot	
	System Group:	Iroot	
	Back < Next >	]	Cancel Help

**24.** In the "Configuration Directory Server" screen, select **The new instance will be the configuration Directory Server** (default selection) and click **Next**.

in Sama	Configuration E	Directory Server	
	You may store Sun Java(TM) System server configuration information in another Sun Java(TM) System Directory Server. If you have already prepared a configuration server, you may configure the new server to use it.		
	♦The new in:	stance will be the configuration Directory Server	
	⇔Use existing	g configuration Directory Server	
	Host:		
	Port:	389	
	Bind As:	admin	
	Password:		
	Back < Next	> Cancel Help	

**25.** In the "Data Storage Location" screen, select **Store data in the new Directory Server** (default selection) and click **Next**.

	Data Storage L	ocation
W SUN. microsystems	You may alread information.	dy have a Directory Server where you store user and group
	∕⊳Store data i	n the new Directory Server
	⇔Store data i	n an existing Directory Server
	Host:	
	Port:	389
	Bind As:	cn=Directory Manager
	Password:	
	Suffix:	dc=vm, dc=fatwire, dc=com
	Back < Next	> Cancel Help

- **26.** In the "Directory Server Settings" screen, all values should be properly detected by the installer. Confirm that they are as follows, and make changes if necessary:
  - "Server Identifier" is the Directory Server host name
  - "Server Port" is the Directory Server port. This must be set to **389**.
  - "Suffix" is the Directory Server domain. This is also the LDAP base DN.

Server	Directory Server Settings		
M SUN . microsystems	Settings the new se	rver will use for basic operation	
	Server Identifier:	jsuse101was61	
	Server Port:	[389	
	Suffix:	Idc=vm, dc=fatwire, dc=com	
	Back < Next >		Cancel Help

#### Note

Make a record of the information you enter in this screen. You will need this information when running the Content Server LDAP integration program.

When you are finished, click Next.

116

**27.** In the "Configuration Directory Server Administrator" screen, enter a password in the appropriate fields. Make a record of the password you enter here. When you are finished, click **Next**.

Sum	Configuration Directory Server Administrator		
microsystems	The Directory Admin Configuration Direct	nistrator ID is used to register the server with the ory Server.	
	Administrator ID:	<u>j</u> admin	
	Password:	******	
	Password (again):	*****	
	Back < Next >	Cancel Help	

**28.** In the "Administration Domain" screen, click Next.

Sun.	Administration Domain Enter some descriptive, unique name for the administration domain, such as the name of the organization responsible for managing the domain.
	Administration Domain: Jym.fatwire.com
	Back < Next > Cancel Help

**29.** In the "Directory Manager Settings" screen, enter a password in the appropriate fields. Make a record of the password you enter here. When you are finished, click **Next**.

<b>0</b>	Directory Manager Setting	15
M SUN . microsystems	Enter a Distinguished Nar a password at least 8 cha	ne (DN) for the Directory Manager and aracters long.
	Directory Manager DN:	icn=Directory Manager
	Password:	******
	Password (again):	Jananana
	Back < Next >	Cancel Help

30. In the "Administration Server Port Selection" screen, click Next.

Super-	Administration Server P The Administration Serv servers. Specify the nur Administration Port:	ver runs on a different network port t	from other
	Back < Next >		Cancel Help

**31.** In the "Ready to Install" screen, click **Install Now** and wait until the installation is complete.

🖓 Sun	Installing
microsystems	
_	Installing Sun Java(TM) System Directory Server
	Stop Help

**32.** In the "Configuring" screen, click **Next**.

in Sum	Configuring
microsystems	Configuration of the Directory Server failed.
	Checking connection to the Configuration Directory Server done. Registering Administration Server with Configuration Directory Server done.
	Loading Administration Server tasks done. Loading global Administration Server configuration done.
	Generating configuration files done. Configuration of the Administration Server succeeded.
	SunONE-WebServer-Enterprise/6.0SP3 B05/19/2004 05:54
	warning: daemon is running as super-user [LS Is1] http://suse101was61.vm.fatwire.com, port 390 ready to accept required
	startup: server started successfully
	Administration server started properly. Error Configuration of the server(s) failed. Click Next to continue.
	Next > Help

in Sum	Installation Summary		
microsystems	The Directory Server insta	ullation status is shown Status	n below: Information
	Directory Server	Partially Inst	alled. Details
	Click "Details" next to p	roduct status for mor	e information.
			Close He

33. In the "Installation Summary" screen, click Close.

# **Verifying Your LDAP Configuration**

This section shows you how to verify your LDAP configuration through the Sun JES Server Console. You will also use the console to administer Sun Directory Server.

- **1.** Start the JES Server Console:
  - On Solaris:

/usr/sbin/directoryserver startconsole

- On Unix (except Solaris):

<dirserv home>/startconsole

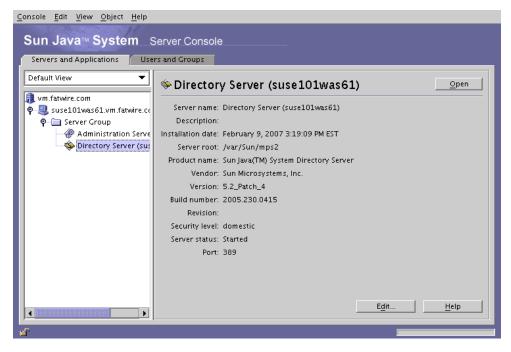
- **2.** In the "Server Console" dialog box, do the following:
  - a. In the User ID field, enter cn=Directory Manager.
  - **b.** In the **Password** field, enter the Directory Manager password you entered in step 29 on page 117.

120

c. Click OK.



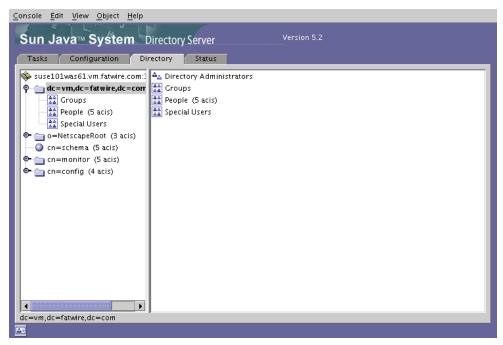
**3.** In the "System Server Console," drill down the left-hand tree and double-click the **Directory Server** node.



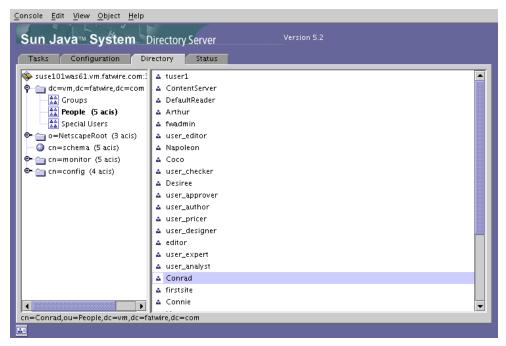
4. In the pop-up window that appears, click the **Directory** tab.



5. In the left-hand tree, locate the base DN for this instance of Directory Server. The base DN is the value you entered in the **Suffix** field in step 26 on page 115. (In the example below, the base DN is dc=vm, dc=fatwire, dc=com.)



6. In the left hand tree, click the **People** node and browse the directory in order to confirm that the Content Server users were added correctly.



7. (Optional) If you want to change user passwords, continue on to the next section, "Modifying User Passwords," on page 122.

# **Modifying User Passwords**

When you run the Content Server LDAP integrator, all Content Server users (except for fwadmin, ContentServer, and DefaultReader) are assigned the default password that you enter in the "Content Server Configuration" screen of the integrator. For security reasons, you might want to manually change the passwords for these users.

#### Note

User passwords can be changed from the CS interface or through the JES Server Console. Because it is faster to use the Server Console, we provide the steps in this chapter. To change passwords though Content Server, see the *Content Server Administrator's Guide*.

#### To modify user passwords through the JES Server Console

- 1. Perform the steps in "Verifying Your LDAP Configuration," on page 119.
- 2. In the list of users, double-click the user whose password you want to change.

**3.** In the window that appears, enter the new user password into the appropriate fields, then click **OK**.

🔺 Martha			Phone: Fax:
User Account	* Last Name: * Common Name(s):	Martha Martha	
	Password: Confirm Password:	**************************************	
	Phone: Fax:		
		* Indicates a required field	
Access Permis	sions Help	<u>O</u> K <u>C</u> ancel <u>H</u>	elp

Modifying User Passwords

124

# Chapter 11 Setting Up OpenLDAP 2.3.x

This chapter explains how to set up OpenLDAP for use with Content Server. 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 130.

2. When prompted for a password, enter the Root DN user password you specified in step d on page 131.

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 130.
- <root\_dn\_password> is the Root DN user password you specified in step d on page 131.
- <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



129

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

cd openldap-2.3.32

```
Session Edit View Bookmarks Settings Help
```

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.

- 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 Config

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

Comment the section out by placing a # character 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 \mbox{\sc sc n} ) 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.

#### To configure OpenLDAP for Content Server

1. Create an LDIF file named pre\_cs\_openldap.ldif with the following contents:

```
version: 1
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 130.
```

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 130.
- <root\_dn\_password> is the Root DN user password you specified in step d on page 131.

**3.** Test your OpenLDAP server. Execute the following command:

where <domain> and <extension> are the values you specified in step a on page 130.

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\_openldap.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 *LDAP Integration Guide*.

# **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.

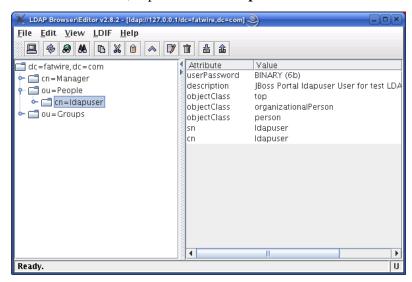
X Conne Session L Connecti	ist Quick Connect	
- Host Info		
Host		Port: Version: 3 💌
Base DN:		•
	Fetch DNs	SL 🛛 Anonymous bind
- User Info		
User DN:		🗌 append base DN
Password:		
		Connect Cancel

**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 130.	
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 131.	

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=ldapu	ser, 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.

🗙 Generate Password 🥹	
Enter password:	
Set Cancel	

The password appears in its encrypted form.

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

🗙 Edit - [cn=ldapuser, ou=People, dc=fatwire,dc=com] 🧶						
<u>F</u> ile <u>E</u> dit						
objectClass:	top					
objectClass:	organizationalPerson					
objectClass:	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						

**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 130.
- <root\_dn\_password> is the Root DN user password you specified in step d on page 131.

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 130.

- 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 12

# 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.

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.

<b>bea</b> administration co					<b></b>		
Change Center	Welcome, weblogic	Connected to: portalDomain	🟠 Home 🛛 Log Out	Preferences	Help /	Aski	
View changes and restarts	Home > portalDomain						
Click the Lock & Edit button to modify, add or delete items in this domain.	Settings for portalDomain						
Lock & Edit	Configuration Monitoring Control Se General Filter Unlock User Emb	edded LDAP Roles Policies					
	Click the <i>Lock &amp; Edit</i> button in the Ch	Click the Lock & Edit button in the Change Center to modify the settings on this page.					
Domain Structure	This page allows you to configure th	e embedded LDAP server for this WebLogic Server domain.					
—Deployments B-Services —Security Realms B-Interoperability	4 Credential:	The credential (usually a password) Info	used to connect to the e	embedded LDAP :	server. Mor	re	
⊡-Diagnostics	Confirm Credential:	)					
Configure the embedded LDAP	Backup Hour: 23	The hour at which the embedded LD	AP server should be bac	ked up. More Inf	ö		
<ul> <li>Configure Authentication and Identity Assertion providers</li> </ul>	Backup Minute: 5	The minute at which the embedded	LDAP server should be b	acked up. More :	Info		
ystem Status	Backup Copies: 7	The maximum number of backup coperations of the server. More Info	pies that should be mad	e for the embedo	ied LDAP		
Health of Running Servers	🖉 🗹 Cache Enabled	Specifies whether a cache is used w	ith the embedded LDAP	server. More Info	o		
Failed (0) Critical (0) Critical (0) Cverloaded (0) Warn (0)	4 Cache Size:	The size of the cache (in kilobytes) the size of the cache (in kilobytes) the size of the cache (in kilobytes) the size of the	hat is used with the emb	oedded LDAP ser	ver. More		
	Go Cache TTL:	The time-to-live of the cache (in sec More Info	onds) that is used with t	he embedded LC	)AP server.		
OK (1)	🖉 🗌 Refresh Replica At Startup	Specifies whether a Managed Server is useful if you have made a large ar active, and you want to download th Server push each change to the Mar	mount of changes when e entire replica instead (	the Managed Se of having the Adr	rver was n	not	
	4 Master First	Specifies whether a Managed Server (contained in the Administration Serv LDAP server (contained in the Manag	ver), instead of connecti	ng to the local re			

140

- 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.

<b>WEBLOGIC SERVE</b> ADMINISTRATION CONSO					
Change Center	Welcome, weblogic	Connected to: portalDomain	🟠 Home 🛛 Log C	Dut Preferences	Help AskBEA
View changes and restarts	Home > portalDomain > Summary of Sec	urity Realms > myrealm > <b>Providers</b>			
Pending changes exist. They must be activated to take effect.	Settings for myrealm				
Activate Changes	Configuration Users and Group	Roles and Policies Credential Mappings Providers Migration			
Undo All Changes	Authentication Authoriza	ion Adjudication Role Mapping Auditing Credential Mapping	Certification Path	Keystores	
Domain Structure		ws WebLogic Server to establish trust by validating a user. You must h			
portalDomain ⊕-Environment  Deployments ⊕-Gervices  Security Realms ⊕-Interoperability ⊕-Diagnostics		: Authentication providers in a security realm. Different types of Authen rers or DBMS. You can also configure a Realm Adapter Authentication p of WebLogic Server.			
How do I	New Delete Reord	τ.	Show	ving 1 - 5 of 5 Previ	ous   Next
Configure Authentication and Identity Assertion providers	Name	Description			Version
Manage security providers	SQLAuthenticator	Provider that performs DBMS authentication		t	1.0
Set the JAAS control flag	WSRPIdentityAsserter	WSRP 8.1 Compatibility, Identity Asserter Provider		t	1.0
Re-order Authentication providers	DefaultIdentityAsserter	WebLogic Identity Assertion provider		1	1.0
System Status	SAMLIdentityAsserter	WebLogic SAML Identity Assertion Provider. Supports Security Asse	rtion Markup Languag	je v1.1. 2	2.0
	SAMLAuthenticator	WebLogic SAML Authentication Provider.		t	1.0
Health of Running Servers	New Delete Reord	r	Show	ving1-5of5 Previ	ous   Next
Failed (0)				-	
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.

141

ortalDomain Environment Deployments Services	User	-		
Security Realms	Ne			Showing 1 - 10 of 15 Previous   Ne
i∎…Interoperability i⊡Diagnostics		Name 💫	Description	Provider
_		Arthur		LDAPProvider
ow do I		Connie		LDAPProvider
Manage users and groups		Conrad		LDAPProvider
Create users	Г	ContentServer		LDAPProvider
Modify users		DefaultReader		LDAPProvider
Delete users	Г	Desiree		LDAPProvider
ystem Status 💿	Г	firstsite		LDAPProvider
	Г	fwadmin		LDAPProvider
Health of Running Servers		Mark		LDAPProvider
Failed (0)	Г	Martha		LDAPProvider
Critical (0)	Ne	w Delete		Showing 1 - 10 of 15 Previous   Ne
Overloaded (0)				

Modifying User Passwords

🟠 Home

Log Out

Preferences

Help

AskBEA

## **Modifying User Passwords**

WEBLOGIC SERVER

ADMINISTRATION CONSOLE

Welcome, weblogic

Settings for myrealm

Users Groups

🕻 be'a

Change Center

this domain.

View changes and restarts Click the Lock & Edit button to

modify, add or delete items in

Lock & Edit Release Configuration This section shows you how to modify user passwords in WebLogic LDAP Server.

Connected to: PortaiDomain

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.
- In the workspace, click myrealm and select the Users and Groups tab. 3.

Home > Summary of Security Realms > myrealm > Users and Groups > Summary of Security Realms > myrealm > Users and Groups

Configuration Users and Groups Roles and Policies Credential Mappings Providers Migration

This page displays information about each user that has been configured in this security realm.

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

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

Settings for firstsite		
General Passwords Group	DS	
Use this page to change	the description for the selec	cted user.
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:	deteleteteletetelet	The new password of this user. More Info
Confirm New Password:	de d	The confirmed new password of this user. More Info
Save		

6. Click Save.

A confirmation message appears.

Messages	
✓ Settings updated successfully.	

Modifying User Passwords