● Centric Software[™]



CENTRIC 8 INSTALLATION GUIDE

Software Version C8 5.5 January 2016



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About this Guide

Using this Guide

This Guide provides the Installation Roadmap for the Centric 8 PLM Software Application. The document outlines the hardware and software Installation checklist as well as the Pre-requisites for Installing the Centric 8 Application. This document also provides a detailed step-by-step explanation on how to install the Application on either a Single Server or a Dual Server.

Technical Support

Customer Support is available to all registered users of Centric 8.

1.866.796.6218 8:00 AM-8:00 PM EST

Email: support@centricsoftware.com

Providing feedback on Documentation

Email us your feedback regarding documentation to <u>documentation@centricsoftware.com</u> stating the following in the subject line:

Feedback regarding "Document Name"

Getting more information

We provide a range of online documents for registered users:

- Administrator Guide
- PDF Print Service Installation Guide
- Image Service Installation Guide
- Requirements Guide

Conventions

This document uses the following conventions:

Example	Indicates
In the Choose Database Server Location	In the Choose Database
dialog box, select the Local database radio	Server Location dialog box,
button.	use the mouse to click on the
	radio button corresponding to

	the Local database.
Select Tasks > Detach	Select the Tasks menu item and then select Detach from the options.
Press ALT+TAB	On the keyboard, press both ALT key and the TAB key simultaneously.

This document uses the following font conventions:

Font Convention	Indicates	Example
Bold	Field Name, Dialog box name, Screen or Page name, Button or Radio button name, keyboard keys	Click on Next .
Italics	Topic Reference	If you are planning to configure shared WebAccess directory refer to <u>WebAccess Shared Directory</u> <u>Installation</u> on page 100.
Text in brown (Font type: Garamond)	Path/File Name/Folder Name	<centricinstalldirectory>\wildfly- 8.1.0\standalone\configuration\standalone- pi.xml</centricinstalldirectory>

This guide also uses the following terms for mouse actions. Use the left mouse button unless instructed otherwise.

Actions	Example
Click	Click the mouse button
Right-click	Click the right mouse button
Double-click	Click the mouse button twice without moving the mouse

PART I: INSTALLATION & CONFIGURATION REQUIREMENTS

Included in Part I :



1. INSTALLATION ROADMAP

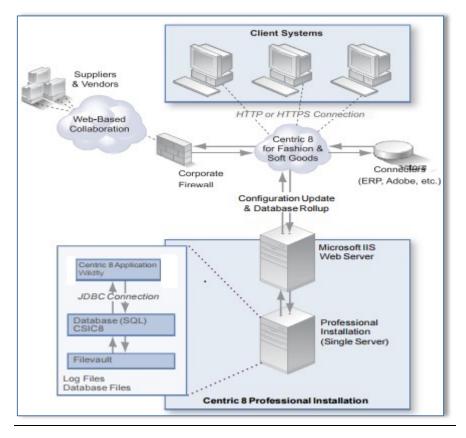
1.1 INSTALLATION

You have two installation paths when installing Centric 8 on either Single Server or the Dual Server. For more information on Server requirements, refer Centric 8 Requirements Guide.

1.1.1 Single Server Installation

In the case of a Single Server Installation, install the application software, database and the FileVault on a single server which communicates with the Microsoft IIS Web Server to deliver content to the client systems.

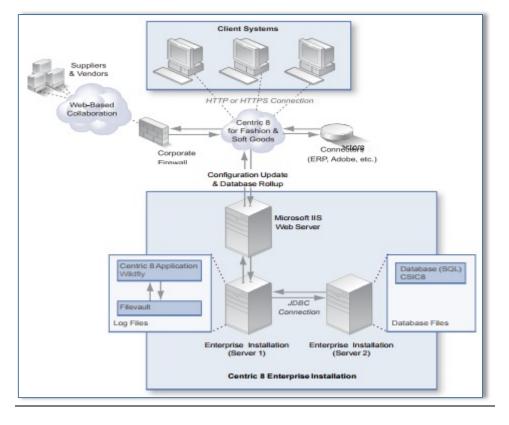




1.1.2 Dual Server Installation

In case of dual server installation, install the application software and FileVault on Server 1 and the database on Server 2. Servers 1 and 2 communicate through JDBC, and Server 1 communicates with the Microsoft IIS Web Server to deliver content to the client systems.

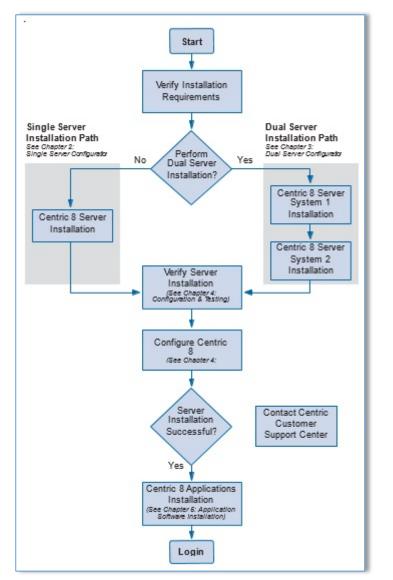




1.1.3 Installation Roadmap

Refer to the following flowchart (Figure 1-3) below, which explains the process of installation depending on whether it is a Single Server or Dual Server Installation.





PART II: INSTALLATION, CONFIGURATION & TESTING

Included in Part II:

- <u>Chapter 2: Centric 8 Installation Checklist</u>
- <u>Chapter 3: Single Server Software Installation</u>
- <u>Chapter 4: Dual Server Software Installation</u>
- <u>Chapter 5: Configuration & Testing</u>
- <u>Chapter 6: Application Software Installation</u>

2. CENTRIC 8 INSTALLATION CHECKLIST

Review the following checklists before starting the Centric 8 software installation; this list is based on the requirements for an OOTB Centric 8 installation. Use this checklist to determine how best to configure Centric 8 including server set up recommendations. These checklists apply to both the Single Server and Dual Server installation except where noted.

2.1 HARDWARE CHECKLIST

- 1. If you install the Centric 8 server database on a shared server, it must be a separate 'instance' to minimize the impact of other database (Dual Server configuration).
- 2. Use a 64-bit operating system with Windows 2012 Server or Windows 2008 Server or 2008 R2 and Microsoft IIS Web Server version 7.0 or above.
- **3.** On the database server, verify that the SQL instance port is not blocked by the Firewall. If it is blocked, set it as exception.
- 4. Split the database and the temporary database (TEMPDB) between two separate physical disks.
- 5. If the database tables are located on virtual drives, verify that the TEMPDB is on virtual drives at the physical level, and are completely independent. In other words, do not simply use another virtual drive that is a "slice" across a disk array used to support other virtual drives. If you are using RAID technology, ensure 1 RAID array for TEMPDB and a different RAID array for C8 DATA TABLES.
- 6. Allow additional disk space for Filevault expansion based on projected image and document storage.

2.2 SOFTWARE CHECKLIST

- 1. When you select the Filevault location, you must select a local disk, if you are using Single or Dual server installation. For cluster setup, select a network shared folder.
- 2. Determine the administrator username and password before installation and always use the same username and password for the first installation as well as for future upgrades or reinstallation.



The following characters are not supported in SQL Administrator password in Centric 8 installation: %, ^, &, *, (), "

- 3. Verify that C8 username and password match in server and application installation; if they do not match, the installation will fail.
- 4. If the Wildfly service is not manually stopped, the installer automatically stops it before installation, upgrades, restoration and reinstallation.
- 5. Close all applications including the Window Services dialog box before installation.
- 6. You must have SQL Server administrator rights to create tables and the database, as well as for mixed mode authentication. Make sure SQL Instance port is configured to use static port.
- 7. You must have the following Microsoft IIS Web Server Port details:

- Set to port 80 (this is the default HTTP port).
- Set other web servers to a separate port address.
- Set user account to IUSER-<machine-name>; you must have both read and execute permission to the installation directories

If you are using the Microsoft IIS Web Server version 7.0 or above, you must add the ISAPI and CGI modules when installing IIS.

Do not use an underscore "_" character in the machine name as it is not supported in the host name by Internet standards and may cause an error. Machine names must contain only alphanumeric characters (use upper and lowercase letters, and/or numbers) or the dash "-" character; however, a dash character cannot appear at the end of a machine name.

- 8. If you are planning to configure Wildfly Cluster, refer Appendix B, Wildfly Cluster.
- 9. If you are planning to configure shared WebAccess directory refer to <u>WebAccess Shared Directory</u> <u>Installation</u> on page 185.

2.2.1 Supported Browsers

IE9, IE10, IE11, Firefox and Chrome.

2.3 PRE-REQUISITES

1. System Admin Privilege

To create and set up an Oracle database for Centric PLM software, the user who is preparing the database must have System Administration authority over the system and the database to be created.



The following characters are not supported in SQL Administrator password in Centric 8 installation: %, ^, &, *, O, "

2. HTTPS

If the server has HTTPS redirect rule enabled on IIS, disable it before proceeding with the installation, else the installation will fail.

3. Oracle 11G Software Installed

The Oracle Database 11G Enterprise Edition Release 2 (11.2.0.3+) 64- Bit is recommended. The Database hosting system has to meet the minimum Hardware requirements specified in the Oracle Database Installation Guide. To achieve better performance for Centric PLM Software, the Oracle database should be configured on an efficient machine.

4. Oracle Database Software

Before creating an Oracle database to serve Centric PLM, the Oracle Database Software must be installed.

5. Minimum Required Oracle DB Components

This guide provides a minimal list to create a database using DBCA or upgrade an existing database to meet Centric PLM requirement.

6. Oracle Database Components

Centric PLM requires the following Oracle Database Components:

- Oracle Workshop Manager
- Oracle Database Catalog Views
- Oracle Database Packages and Types
- Oracle XML Database

7. Drive Structures

For better performance, it is best to have the drive structure as mentioned below.

FOR SINGLE SERVER

C:	OS & Program Drive (C: drive for C8 Program installation)
D:\SQLDATA	C8 Database files (.mdf/*.ndf)
L:\SQLLLOG	C8 Database files (*.ldf)
F:\FILEVAULT	C8 Filevault directory (Image and print service Log)
T:\SQLTEMP	Temp Drive (for Windows and SQL Temp files only)

FOR DUAL SERVER - APPLICATION SERVER

C:	OS & Program Drive (C: drive for C8 Program installation)
F:\FILEVAULT	C8 Filevault directory (Image and print service Log)
T:\WINTEMP	Temp Drive (for Windows Temp files only)

FOR DUAL SERVER - DATABASE SERVER

C:	OS & Program Drive (C: drive for C8 Program installation)
D:\SQLDATA	C8 Database files (.mdf/*.ndf)
L:\SQLLLOG	C8 Database files (*.ldf)
T:\SQLTEMP	Temp Drive (for SQL Temp files only)

To install C8 using LDAP Authentication, contact technical support for configuration details.

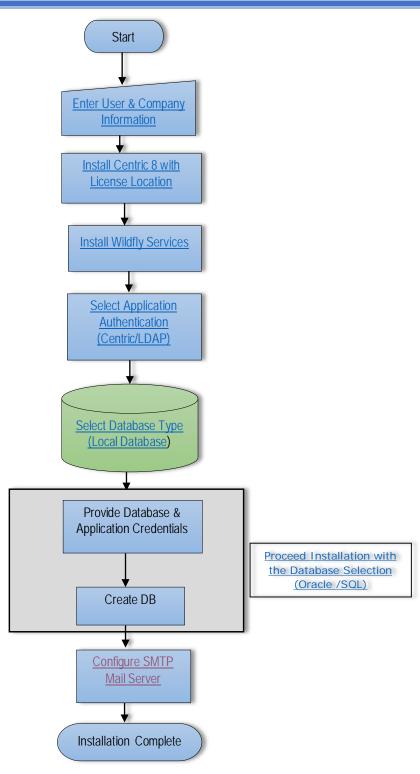
Contact technical support for SMTP details. For information regarding settings and how to configure it on your production server refer <u>Appendix E, Configuring SMTP on Windows 2008</u> <u>Server</u>.

For technical support, collect the product details from the Centric 8 Cover Page, and contact Customer Technical Support:

Telephone: 866.796.6218 (8:00 AM – 8:00 PM Eastern Standard Time)

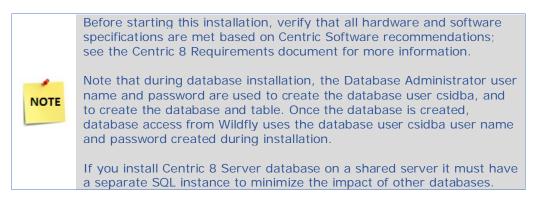
Email: support@centricsoftware.com

3. SINGLE SERVER SOFTWARE INSTALLATION



3.1 SINGLE SERVER SOFTWARE INSTALLATION

Use the following set of instructions to install the server software for your Single Server installation.



- 1. Select your domain name and log into the domain as Administrator.
- 2. Close all open Windows applications. Copy the \\install\C8Server directory to the server.



To install Centric 8, right-click **Setup.exe** and select **Run as Administrator**.

3. The Welcome dialog box is displayed. Read the contents of the Welcome page.

Figure 3-1: Welcome dialog box



4. To begin Installation, click on the **Next** button. The **End User License Agreement** dialog box is displayed.

NOTICE AGREEN AGREEN OF THE THIS AG ACCOMI	TO END USER: C MENT. USE OF TH MENT (ITHE SOFT SE TERMS. IF YOU REEMENT, PROM	END USER LICE AREFULLY READ IS SOFTWARE PR WARE() CONSTIT J DO NOT AGREE (PTLY RETURN T O THE LOCATION ND.	THE FOLLOW OVIDED WIT UTES YOUR TO THE TEF HE SOFTWA	VING LEGAL H THIS ACCEPTANCE RMS OF RE AND THE	1
SHALL S OR OTH AN EXIS WITH C	SUPERCEDE THE ER ORDERING D TING AND/OR AL ENTRIC SOFTWA	OCUMENT. IF AS	CUSTOMER P THE END US D LICENCE A MENT WILL 1	URCHASE ORDER ER YOU HAVE	1

Figure 3-2: End User License Agreement dialog box

5. Read the license agreement, and then click on the **Yes** button to accept the license agreement. The **User Information** dialog box is displayed.

User Information

6. In the User Information dialog box, Enter your user name and company name in the **Name** and **Company** fields respectively, and click on Next.

you work.	e of the company for whom
Ngme:	
Company:	
	Ngme:

Figure 3-3: User Information dialog box.

7. The Choose Destination Location dialog box is displayed as show below.

Figure 3-4: User Information dialog box

	Setup will install Centric 8 in the following folder.
centric eight	To install to this folder, click Next.
	To install to a different folder, click Browse and select another folder.
	You can choose not to install Centric 8 by clicking Cancel to exit Setup.
	Destination Folder C:\Program Files\Centric Software\C8 Bjowse

8. To accept the default destination folder, click on **Next**. Else, to select a different destination folder, click on **Browse** and click on **Next**.



Install Centric 8

9. The following Install Centric 8 or Database Only dialog box is displayed.

Figure 3-5: Install Centric 8 or Database Only dialog box

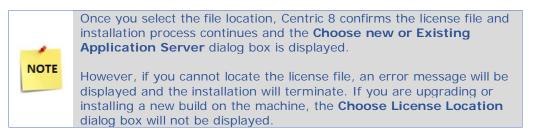
Install Centric 8 or Datab	pase Only	×
centric eight	Please choose to install either Centric 8 with database or only database.	the
	Centric 8 (includes database)	
	C Database Only	
	< <u>B</u> ack <u>N</u> ext> Cancel	

- 10. Select Centric 8 (includes database), and then click on Next.
- 11. The first time Centric 8 is installed, the **Choose Centric 8 License Location** dialog box is displayed.

Choose Centric 8 License	Location
	Browse
CENTRIC	< <u>B</u> ack <u>N</u> ext > Cancel

Figure 3-6: Choose Centric 8 License Location dialog box

12. Click on **Browse** and navigate to the folder containing the C8.lic license file; click on **Next**.



- 13. The Choose New or Existing Application Server dialog box is displayed.
- BACK TO FLOWCHART

Wildfly Service Installation

14. In the Choose New or Existing Application Server dialog box, install Wildfly on your system, select the Install Wildfly radio button. To use a previously installed instance of Wildfly running on your system, select the Use Installed Wildfly radio button. Click on Next.

Figure 3-7: Choose New or Existing Application Server

Choose New or Existing A	Opplication Server Choose if you want to install Wildly or if you alreatistated Wildly on the Server computer and do n & Installed Wildly Install Wildly Use Installed Wildly	
	it. 🙃 Install Wildfly	
	(Back Next)	Cancel

BACK TO FLOWCHART

Centric Authentication

NOTE

- 15. The Select Authentication Mode dialog box is displayed.
- a. If you want to use the Centric8 Authentication, click on the **Centric Authentication** radio button and click on **Next**. This will take you to the **Choose Java Development Kit (JDK) Installation directory** dialog box.

If you select **Centric Authentication**, it will not integrate with LDAP, which means that users have to be created manually.

If you choose **LDAP Authentication**, you can integrate with Active Directory Services (LDAP) where Domain users with their information can be synchronized in real time.

centric eight	Please select which Authentication mode you plan to use with Centric 8.
100	Centric Authentication
	C LDAP Authentication
CENTRIC	

Figure 3-8: Select Authentication Mode dialog box - Centric Authentication

b. If you want to use LDAP Authentication, to enter LDAP Server information, select the LDAP Authentication radio button and click on Next.

Figure 3-9: Select Authentication Mode dialog box - LDAP Authentication

Select Authentication M	ode	X
centric eight	Please select which Authentication mode you plan to use with Centric 8.	
	C Centric Authentication	
	C LDAP Authentication	
	<back next=""> Cancel</back>	

16. In the Enter LDAP Server Information dialog box, enter details for the following fields:

- Server Address
- Root Search DIR

- Search Base
- Bind Username

Note: The Bind Username field details should be in the format Username@LDAPDomainname

Bind Password

17. Click on Next.

Figure	3-10:	Enter	LDAF	Server	Inform	ation	dialog	box
--------	-------	-------	------	--------	--------	-------	--------	-----

ric eight Search	enter the Server Address, Root Search Directory and Base string for LDAP Authentication. If anonymous binds are not allowed, please enter Bind nd Password. Otherwise, leave it blank.
Server	Address: Ldap://192.168.10.26.389
Root Se	earch DIR: cn=Users,dc=lab,dc=frametech,dc=com
Search	h Base: up.cn=Users,dc=lab,dc=frametech,dc=con
Bind U	Isemame: Administrator@lab
ENTRIC Bind P	assword:

- 18. To enable SSL functionality for LDAP, refer Appendix J, LDAP Setup.
- 19. If you do not have the Java Development Kit (JDK) version 1.8.0_45 already installed on your system, the Choose Java Development Kit (JDK) Installation directory dialog box will be displayed. To choose the destination folder for the JDK files, click on the Browse button. Click on Next.

Choose Java Developmen	nt Kit (JDK) Installation Directory	×
centric eight	Select the location to install the Java Development Kit.	
	C:\\CENTRI~1\C8\jdk1.8.0_45	
	< Back Next > Cancel	

Figure 3-11: Choose Java Development Kit (JDK) Installation Directory dialog box

BACK TO FLOWCHART

Select Database Type

20. The Select Database Type dialog box is displayed.

Figure 3-12: Select Database Type dialog box

Select Database Type		
centric eight	Please select which type of database you plan to use with Centric 8. © Microsoft SQL Server © Oracle	
	< Back Next > Cancel	

- 21. Select either **Microsoft SQL Server** or **Oracle** as the database type; follow the appropriate instructions based on your selection in this dialog box:
 - Microsoft SQL Server on page 25
 - Oracle Database on page 30

3.1.1 Microsoft SQL Server

Follow the step given below if you are using a Microsoft SQL Server database.

- a. Select the Microsoft SQL Server radio button and click on Next.
- b. The **Choose Database Server Location** dialog box is displayed. Select the **Local database** radio button. Click on **Next**.

Choose Database Serve	Location	×
centric eight	Choose if want to use local or remote database with Centric 8.	
	C Local database	
	C Bemote database	
The second		
	< <u>B</u> ack <u>N</u> ext > Cancel	1

Figure 3-13: Choose Database Server Location dialog box

c. The MS SQL Server Information dialog box is displayed.

Figure 3-14: MS SQL Server Information dialog box

centric eight	Please enter the following MS SQL Server information. Note: Leave SQL Instance Name field blank if you choose to use Default instance. SQL Administrator Username: SQL Administrator Password: SQL Instance Name:
CENTRIC	

d. Enter the username and password in the corresponding fields, and enter the SQL instance name in the SQL Instance Name field OR leave this field empty to use the default instance name. Click on Next. e. The Enter **Centric 8 Administrator Username and Password** dialog box is displayed. Enter the username and password, and confirm the password; click on **Next**.

itric eight	Please enter the Centric 8 Administrator username and password.
	Username: Administrator
	Password:
14	Confirm Password:
CENTRIC	
	<back next=""> Cancel</back>

Figure 3-15: Enter Centric8 Administrator Username and Password dialog box



The Username and Password cannot be identical. Use strong passwords for Centric8 Administrator user (for example, include alphanumeric upper and lowercase letters, numbers and symbols).

f. The Enter Centric 8 Database Information dialog box is displayed.

Figure 3-16: Enter Centric 8 Database Information dialog box

tric eight war	ning: Datab	following Centric 8 Database information ase name should not have any special ashes, underscores, spaces etc.	n.
Use	name:	csidba	
Pas	word:		
Con	firm Passwo	rd:	
Dat	abase:		
CENTRIC			
		< <u>B</u> ack <u>N</u> ext> Ca	ncel



The following characters are not supported in SQL Administrator password and csidba user password in Centric 8 installation: %, ^, &, *, O, "



Use strong passwords for Centric8 Administrator user (for example, include alphanumeric upper and lowercase letters, numbers and symbols).

- g. In the **Username** field, enter the username. Enter details in the **Password** and **Confirm Password** fields. In the **Database** field, enter the database name. Click on **Next**.
- h. The Choose New or Existing Database dialog box is displayed.

Figure 3-17: Choose New or Existing Database dialog box

Choose New or Existing (Database 🛛 🕅
	Choose if you want to create a new database or use an existing one. Warning: Creating a new database will delete any existing database. Create New Database Use Existing Database
	Cancel

i. Click on the **Create New Database** radio button and click on **Next**; the **Choose Database Location** dialog box is displayed.

Figure 3-18: Choose Database Location dialog box

Choose Database Locati	on X
centric eight	Please choose the directory that will contain the Centric 8 database.
CENTRIC	
TO FT WART	c:\\centric software\c8\database Browse
	< <u>B</u> ack <u>N</u> ext> Cancel

- j. To accept the default destination folder, click on **Next** OR to select a different destination folder click on **Browse**. Then, click on **Next**.
- k. The Choose FileVault Location dialog box is displayed. To accept the default destination folder, click on Next OR to select a different destination folder, click on the Browse button. Then, click on Next.

centric eight	Note: We rec	se the directory th commend the File erver machine.		
	Destination c:\\centri	Folder c software\c8\file	vault	Biowse
		< <u>B</u> ack	<u>N</u> ext >	Cancel

Figure 3-19: Choose File Vault Location dialog box

I. The **Choose WebAccess Location** dialog box is displayed. If the WebAccess directory has to be configured under a different directory on the same machine or a shared directory on a different machine, click on **Browse** and select the right location.

Note: If you are planning to install WebAccess using shared directory feature, refer <u>WebAccess Shared Directory Installation</u>.

Figure 3-20: Choose WebAccess Location dialog box

centric eight	tion Please choose the directory that will contain the Client WebAccess files. Note: We recommend the WebAccess folder should reside on application server machine.
CENTRIC.	Destination Folder C:\\CENTRI~1\C8\WebAccess Browse
	< Back Next > Cancel

m. The Check Setup Information dialog box is displayed. Verify the details displayed under the Current Settings section. To make changes, click on the Back button ELSE to confirm the settings and proceed, click on Next.

Check Setup Information	×
centric eight	Setup has enough information to begin the installation. If you want to review or change any of the settings, click Back. If you are satisfied with the settings, click Next to begin.
Ser and	Current Settings:
In the second seco	User Information: Windows User Centric
	Destination Directory: C:\PROGRA~1\CENTRI~1\C8
	Application Server: Wildfly
-CENTRIC	Wildfly Application server installation Directory: C:\PROGRA~1\CENTRI~1\C8\wildfly-8.1.0
S O F T W A R E	- -
	<pre></pre>

Figure 3-21: Check Setup Information dialog box

n. To complete the installation process, click on the **Finish** button.

Figure 3-22: Setup Complete dialog box

Setup Complete	
centric eight	Setup has completed the installation of the Centric 8 (C8) Server.
0	Refer to the C8 Installation Manual, Centric8 Installation Guide.pdf, located in the C:\Program Files\Centric Software\C8\Help for configuring the C8 Server Components.
CENTRIC	Click Finish to complete setup.
	< Back Finish

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3.1.2 Oracle Database

Follow the steps given below, if you are using an Oracle database.

o. In the Select Database Type dialog box, select the Oracle radio button and click on Next.

Figure 3-23: Select Database Type dialog box

Select Database Type		×
	Please select which type of database you plan to use with Centric 8. Microsoft SQL Server Cacle	
	< <u>B</u> ack <u>N</u> ext > Cancel	

p. In the **Choose Database Server Location** dialog box, select the **Local database** radio button and click on **Next**.

Choose Database Serve	rLocation	×
centric eight	Choose if want to use local or remote database with Centric 8.	
	C Local database	
	C Bemote database	
1994		
-		_
	< Back Next > Cancel	

Figure 3-24: Choose Database Server Location dialog box

q. The **Enter Oracle Service Name** dialog box is displayed. In the **Service** field, enter details which identifies the Oracle server, and click on **Next**.

Figure 3-25: Enter Oracle Service Name dialo,	g bos	C
---	-------	---

Enter Oracle Service Nan	ne	×
	Oracle databases allow more than one database server running on a host. Each database server is called an "instance". Each instance is belonged to a service. Enter the service name ("service_names" parameter value) which identifies your Oracle server. Service: COFRI	
	< Back Next > Cancel	

r. The **Oracle Server Information** dialog box is displayed. In the **Username** field, enter the Oracle Server Username details. Enter details in the **Password** and **Port** fields and click on **Next**.

Trans	2 21.	\bigcap	C	T f		1: 1.	. 1
Figure	2-20:	Oracie	Server	1110171	iaiion	$a_{1}a_{1}a_{1}a_{2}a_{3}a_{3}a_{3}a_{3}a_{3}a_{3}a_{3}a_{3$	- 00X
0.000						0	

521		
521		
	< Back	< Back Next >

s. The Enter Centric 8 Administrator Username and Password dialog box is displayed. Enter details in the Username, Password and Confirm Password fields; click on Next.



The Username and Password cannot be identical. Use strong passwords for Centric8 Administrator user (for example, include alphanumeric upper and lowercase letters, numbers and symbols).

Username: Administrator Password:
Password:
Confirm Password:

Figure 3-27: Enter Centric 8 Administrator Username and Password dialog box

t. The Enter Centric 8 Database Administrator Username and Password dialog box is displayed. Enter details in the Username, Password fields and click on Next.



The Username and Password cannot be identical. Use strong passwords for Centric8 Administrator user (for example, include alphanumeric upper and lowercase letters, numbers and symbols).

Figure 3-28: Enter Centric 8 Database Administrator Username and Password

centric eight	Please enter the Centric 8 Database Administrator username and password.	
	Usemame: CSIDBA Password:	I
CENTRIC	< Back Next > Cancel	

u. In the **Choose New or Existing Database** dialog box, select the **Create New Database** radio button and click on **Next**.

Choose New or Existing	Database 🔀
	Choose if you want to create a new database or use an existing one.
centric eight	Warning: Creating a new database will delete any existing database.
	Create New Database
	C Use Existing Database
CENTRIC	
	<u> (Back N</u> ext) Cancel

Figure 3-29: Choose New or Existing Database dialog box

v. The **Choose Database Location** dialog box is displayed; to accept the default destination folder, click on **Next** OR to select a different folder, click on **Browse**. Click on **Next**.

Figure 3-30: Choose New or Existing Database dialog box

Choose Database Locatio	in 🗙
centric eight	Please choose the directory that will contain the Centric 8 database.
	Destination Folder d:\sqldata Browse
	< Back Next > Cancel

w. The **Choose File Vault Location** dialog box is displayed; to accept the default destination folder, click on **Next**. Else, to select a different folder, click on **Browse**. Click on **Next**.

centric eight	Please choose the directory that will contain the File vault. Note: We recommend the File vault folder should reside on application server machine.
-	Destination Folder c:\\centric software\c8\filevault Browse

Figure 3-31: Choose File Vault Location dialog box

x. The **Choose WebAccess Location** dialog box is displayed; to accept the default destination folder, click on **Next**. Else, if the WebAccess directory has to be configured under a different directory on the same machine or a shared directory on a different machine, click on the **Browse** button to select the right location.

Note: To install WebAccess using the shared directory feature, refer <u>WebAccess Shared</u> <u>Directory Installation</u>.

Figure 3-32: Choose WebAccess Location dialog box

Please choose the directory that will contain the Client WebAccess files.
Note: We recommend the WebAccess folder should reside on application server machine.
Destination Folder C:\\CENTRI^1\C8\WebAccess Browse

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SMTP setup

22. The Enter SMTP Mail Server name and Email Address dialog box is displayed.

Figure 3-33: Enter SMTP Mail Server name and Email Address dialog box



23. Enter details in the SMTP and Email fields and click on Next. The Select Program Folder dialog box is displayed.

Figure 3-34: Select Program Folder dialog box

Select Program Folder	Setup will add program icons to the Program Folder list You may type a new folder name, or select one from th Folders list. Click Next to continue.	
	Program Folders: Centric 8 Existing Folders:	_
	Accessories Administrative Tools Centric 8 Centric Product Intelligence Ghostscript Microsoft SQL Server 2005	-
	Microsoft Visual Studio 2005 Rea/VNC Startup < Back Next >	 ▼

24. To use the default program folder click on **Next**. The **Check Setup Information** dialog box is displayed.

Figure 3-35: Check Setup Information dialog box

Check Setup Information	×
centric eight	Setup has enough information to begin the installation. If you want to review or change any of the settings, click Back. If you are satisfied with the settings, click Next to begin. Current Settings:
	User Information: Windows User Centric Destination Directory:
	C:\PROGRA*1\CENTRI*1\C8 Application Server: Wildfly Wildfly Application server installation Directory:
	C:\PROGRA~1\CENTRI~1\C8\wildfly-8.1.0

- 25. Verify the details under the **Current Settings** section. To make changes to the settings, click on **Back**. Else, to accept the settings and proceed with the Installation click on **Next**.
- 26. Once the installation is complete, the Setup Complete dialog box is displayed.

Figure 3-36: Setup Complete dialog box

Setup Complete	
centric eight	Setup has completed the installation of the Centric 8 (C8) Server.
	Refer to the C8 Installation Manual, Centric8 Installation Guide.pdf, located in the C:\Program Files\Centric Software\C8\Help for configuring the C8 Server Components.
CENTRIC	Click Finish to complete setup.
	< <u>B</u> ack Finish

27. Click on Finish.

Relocate database files location

- **28.** If you have followed the Drive Structure as mentioned in the <u>Pre-requisites</u> section, you need to move the C8_txlog.ldf to L:\SQLLOG. To do this, go to step 29.
- 29. Stop Wildfly Services.
- **30.** In **Start** menu, click **SQL Server Management Studio**. In the **Connect to Server** dialog box, enter details for the **Server name**, **Login** and **Password** fields. Then, click on **Connect**.

Server type:	Database Engine	-
Server name:	2K8-S2K8R2-AR	
Authentication:	SQL Server Authentication	
Login:	sa	•
Password:	(access)	

Figure 3-37: Connect to Server dialog box

31. Right-click on the C8 Database, and select Tasks > Detach.

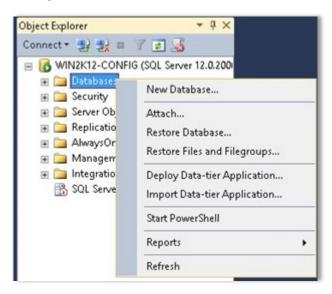
	m Databases ase Snapshots			
	New Database New Query Script Database as	•		
	Tasks	•	Detach	
E C	Policies Facets	•	Take Offline Bring Online	
🗉 🧀 Server	Start PowerShell		Shrink	,
🗈 🧰 Replici 🕀 🦢 Manaç	Reports		Back Up	
🖲 强 SQL SI	Rename		Restore	•
	Delete		Mirror	
	Refresh Properties		Launch Database Mirroring Monitor Ship Transaction Logs	

32. In the **Detach Database** dialog box, ensure that the **Drop Connection and Update Attributes** check boxes are selected. Click on **OK**.

Figure 3-38: Detach Database dialog box

elect a page	🖾 Script 🔹 🚺 Help	iš.				
P General						
	Databases to detact				2	
	Database Name	Drop	Updat	Status	and the second se	
	C8	1		Not	22 Active connection(s)	
Connection						
Server						
CHO-MIRROR						
Connection: sa						
View connection properties						
rogress						
Progress Ready						

- **33.** Once the databases are successfully detached, go to the D:\SQLDATA folder.
- **34**, Cut C8_TXLOG.ldf file and paste it in L:\SQLLOG.
- 35. In the Start menu, click on SQL Server Management Studio. Enter details for the Server name, User login I d and Password fields. Then, click on Connect.
- 36. Right-click on Databases and select Attach.



37. In the Attach Databases dialog box, click on Add.

Figure 3-39: Attach Databases dialog box

	٨	ttach Databases			×
Select a page	🔊 Script 🔹 🚺 Help	,			
	Databases to attack				
	MDF File Location	on	Database Name	Attach As	
	C Database details:	8	Add_	Remove	2
Connection	Original File Name	File Type Curre	ent File Path	Message	_
Server: JCP-MIRROR Connection: 58					
1 View connection properties					
Progress			Add Catalog	Remove	
O Ready					
				OK Can	cel

38. Select C8_data.mdf and click on **OK**.

Figure 3-40: Attach Databases dialog box

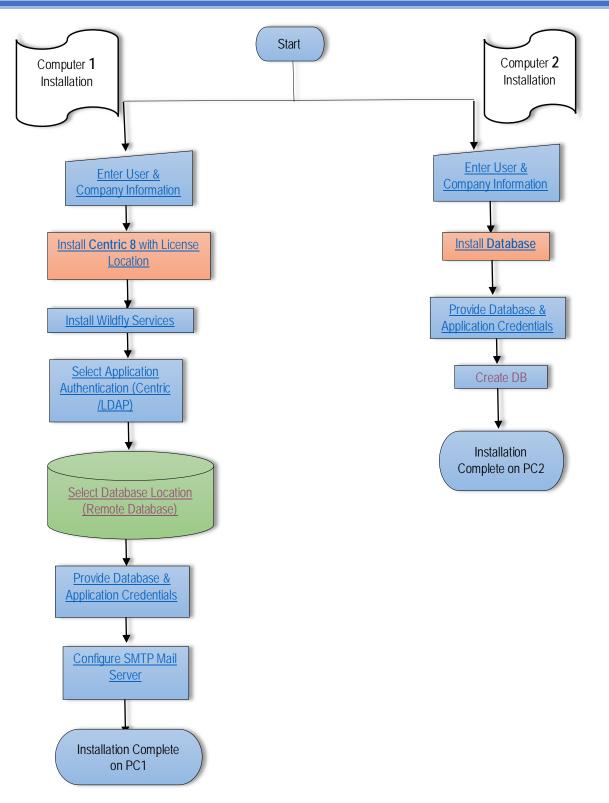
Ũ	Locate Datab	base Files - JCP-M	IRROR	- 🗆 X
Database Data File location:	D:\SQLDATA			
B - C: B - D: B - D: B - DCP_Backup_Cleanl - SQLDATA B - System Volume Infon B - F: B - L: B - T:	nstall_06_15_2015	38_data.mdf		
File name: C8_	data.mdf		Database Data Files(*.n	ndf) 🗸
			ОК	Cancel

NOTE

You can now proceed to <u>Chapter 5, Configuration & Testing</u> to configure the database.

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4. DUAL SERVER SOFTWARE INSTALLATION



4.1 Computer 1 Installation

Use the following set of instructions to install computer 1 of your Dual Server installation.



- 1. Select your domain name and log into the domain as Administrator. Close all Windows applications.
- 2. Close all open applications. Copy the \\install\C8Server directory to the server.



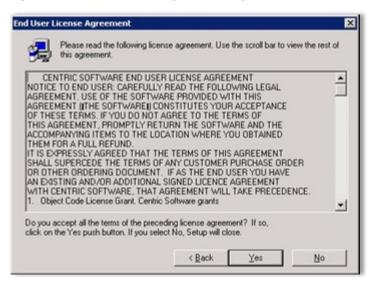
3. The Welcome dialog box is displayed as shown below.

Figure 4-1: Welcome dialog box



4. To begin installation, read the details in the **Welcome** dialog box and then click on **Next**. The **End User License Agreement** dialog box is displayed.

Figure 4-2: End User License Agreement dialog box



User Information

5. To accept the license agreement, read the license agreement details and click on Yes. The User Information dialog box is displayed as shown below.

Figure 4-3: End User License Agreement dialog box

User Information	X
centric eight	Please enter your name and the name of the company for whom you work.
	N <u>a</u> me:
The second second second	Company:
-	
	< <u>B</u> ack <u>N</u> ext> Cancel

6. Enter your user name and company name in the corresponding fields, and click on **Next**. The **Choose Destination Location** dialog box is displayed.

contrio alaht	Setup will install Centric 8 in the following folder.
centric eight	To install to this folder, click Next.
	To install to a different folder, click Browse and select another folder.
	You can choose not to install Centric 8 by clicking Cancel to exit Setup.
- mart	

Figure 4-4: Choose Destination Location dialog box

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Install Centric 8

 To accept the default destination folder, click on Next OR to select a different destination folder click on the Browse button. Click on Next. The Install Centric 8 or Database Only dialog box is displayed.

Figure 4-5: Install Centric 8 or Database Only dialog box

Install Centric 8 or Datab	ase Only
Centric eight	Please choose to install either Centric 8 with database or only the database.
	< <u>B</u> ack <u>N</u> ext > Cancel

- 8. Select the Centric 8 (includes database) radio button, and then click on Next.
- 9. The first time Centric 8 is installed, the **Choose Centric 8 License Location** dialog box is displayed as shown below. Click on the **Browse** button and navigate to the folder containing the C8.lic license file; click on **Next**.

Choose Centric 8 License	Please choose the directory that contains the Centric 8 license.
	Browse
	< Back Next > Cancel

Figure 4-6: Choose Centric 8 License Location



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Install Wildfly Services

10. The Choose New or Existing Application Server dialog box is displayed. To install the Wildfly Server on your system, select the Install Wildfly radio button. Else, to use a previously installed instance of Wildfly on your system, select the Use Installed Wildfly radio button. Click on Next.

Choose New or Existing (Application Server	×
	Choose if you want to install Wildfly or if you installed Wildfly on the Server computer an it. Install Wildfly Use Installed Wildfly	
	< Back Next >	Cancel

Figure 4-7: Choose New or Existing Application Server dialog box

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Application Authentication

- 11. The Select Authentication Mode dialog box is displayed.
- To use the Centric8 Authentication, select the Centric Authentication radio button. Click on Next. This takes you to the Choose Java Development Kit (JDK) Installation directory dialog box.



Figure 4-8: Select Authentication Mode dialog box

Select Authentication M	ode	х
centric eight	Please select which Authentication mode you plan to use with Centric 8.	
	Centric Authentication	
CENTRIC	C LDAP Authentication	
	< Back Next > Cancel	

13. To use LDAP Authentication, select the LDAP Authentication radio button and then click on Next.

Figure 4-9: Select Authentication Mode dialog box

Select Authentication N	1ode X
centric eight	Please select which Authentication mode you plan to use with Centric 8.
	C Centric Authentication
	LDAP Authentication
	(Back Next) Cancel

14. In the Enter LDAP Server Information dialog box, enter details for the Server Address, Root Search DIR and the Search Base string. Enter details for the Bind Username and Bind Password fields and click on Next.

Note: The Bind Username must be in the format Username@LDAPDomainname.

Figure 4-10: Enter LDAP Server Information dialog box

Enter LDAP Server Inforn	nation		×
centric eight	Search Base strin Note: If anonymou	Server Address, Root Search Directory and g for LDAP Authentication. us binds are not allowed, please enter Bind rd. Otherwise, leave it blank.	
	Server Address:	Ldap://192.168.10.26:389	
	Root Search DIR:	cn=Users,dc=lab,dc=frametech,dc=com	
140	Search Base:	up,cn=Users,dc=lab,dc=frametech,dc=com	
	Bind Username:	Administrator@lab	
	Bind Password:	жиния	
		< Back Next > Cancel	

To enable SSL functionality for LDAP, refer Appendix J, LDAP Setup.

15. If you do not have the Java Development Kit (JDK) version 1.8.0_45 already installed on your system, the Choose Java Development Kit (JDK) Installation directory dialog box will be displayed. To choose the destination folder for the JDK files, click on the Browse button. Click on Next.



Figure 4-11: Choose Java Development Kit (JDK) Installation Directory dialog box

16. The Select Database Type dialog box is displayed.

Figure 4-12: Select Database Type dialog box



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Select Database Server Location

17. Select either Microsoft SQL Server or Oracle as the database type, and click on Next. The Choose Database Server Location dialog box is displayed. Select the Remote database radio button and then click on Next.

Figure 4-13: Choose Database Server Location dialog box



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Database Authentication and Centric Application Authentication

18. In step 17 above, if the database type selected was SQL Server then the SQL Server Database Server Information dialog box will be displayed; enter the database domain name and port details, and click on Next.

Figure 4-14: Database Server Information dialog box

Database Server Informa	ation		×
centric eight	Please entr Instance P	er the Centric 8 database server name and SQL ort.	
	Name:	2K8R2-S2K8R2-QA	
	Port:	1433	
		< Back Next > Cancel	

19. In step 17, if the database type selected was Oracle, then the Oracle Database Server Information dialog box is displayed; enter the database domain name and port details and click on the Next button.

Database Server Inform	ation	×
	Please enter the Centric 8 database server information. Note: Name must be Fully Qualified Domain Name (FQDN). Name:	
	< <u>B</u> ack <u>N</u> ext > Canc	el

Figure 4-15: Database Server Information dialog box

20. The Enter Oracle Service Name dialog box is displayed. Enter Oracle Service name and click on Next.

Figure 4-16: Enter Oracle Service Name

Enter Oracle Service Name	e	×
	Oracle databases allow more than one database server running on a host. Each database server is called an "instance". Each instance is belonged to a service_names" parameter value) which identifies your Oracle server. Service: CBFR1	
	< Back Next > Cancel	

21. The Enter Centric 8 Administrator Username and Password dialog box is displayed.



Use strong passwords for Centric8 Administrator user (for example, include alphanumeric upper and lowercase letters, numbers and symbols).

Figure 4-17: Enter Centric 8 Administrator Username and Password

Username: Administrator Password: Confirm Password:	ric eight	Please enter the Centric 8 Administrator username and password.	
Confirm Password:		Username: Administrator	_
		Password:	_
NTRIC		Confirm Password:	_
	CENTRIC		

22. Enter details in the Username, Password and Confirm Password fields and click on Next. Ensure that the Username and Password are not identical. The Enter Centric 8 Database Information dialog box is displayed.

Figure 4-18: Enter Centric 8 Database Information dialog box

Enter Centric 8 Database	Information		×
centric eight	Warning: Databas	Illowing Centric 8 Database information. e name should not have any special shes, underscores, spaces etc.	
	Username:	csidba	
in a sub-section of the section of t	Password:	*****]
	Confirm Password:	*****	
	Database:	C8	
		< Back Next > Cancel	

23. Enter details in the Username, Password and Confirm Password fields and click on Next.



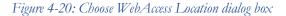
Use strong passwords for Centric8 Database Administrator user (for example, include alphanumeric upper and lowercase letters, numbers and symbols)

24. The Choose File Vault Location dialog box is displayed.

Figure 4-19: Choose File Vault Location dialog box



25. The Choose WebAccess Location dialog box is displayed. If the WebAccess directory has to be configured under a different directory in the same machine or shared directory in a different machine, click on **Browse** and select the right location. If you are planning to install WebAccess using shared directory feature, refer to <u>WebAccess Shared Directory Installation</u>.



centric eigh	Please choose the directory that will contain the Client WebAccess files.
0	Note: We recommend the WebAccess folder should reside on application server machine.
CENTRIC	Destination Folder C1\CENTRI~1\C8\WebAccess Browse
CENTRIC	

26. To accept the default destination folder, click on Next. Else, to select a different destination folder, click on the Browse button and select the right location. Click on Next. The Enter SMTP Mail Server name and Email Address dialog box is displayed.



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SMTP Configuration

27. Enter your SMTP mail server name and email address in the corresponding fields, and click on **Next**. The **Select Program Folder** dialog box is displayed.

Figure 4-21: Enter SMTP Mail Server name and Email Address dialog box

Enter SMTP Mail Server	name and	Email Address X
centric eight	address r	nter the name of the SMTP Mail Server and Email equired by the Centric 8. Email address is used to relay s in Centric 8 and report any problems encountered.
	SMTP	I
CENTRIC	Email	
		< <u>₿</u> ack <u>N</u> ext> Cancel

Figure 4-22: Select Program Folder dialog box

centric eight	Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
	Program Folders:
and the second	Centric 8
and the second second	Existing Folders:
	Accessories Administrative Tools
	Centric 8
	Centric Product Intelligence Ghostscript Microsoft SQL Server 2005 Microsoft Visual Studio 2005
CENTRIC	Rea/NC Startup

- 28. Click Next to use the default program folder. The Check Setup Information dialog box is displayed.
- Figure 4-23: Check Setup Information dialog box

Check Setup Information		×
Check Setup Information	Setup has enough information to begin the installation. If you want to review or change any of the settings, click Back. If you are satisfied with the settings, click Next to begin. Current Settings: User Information: Windows User Centric Destination Directory: C:\PROGRA~1\CENTRI~1\C8 Application Server: Wildfly Wildfly Application server installation Directory:	×
	C:\PROGRA~1\CENTRI~1\C8\wildfly-8.1.0	, -
	< Back Next > Cance	<u></u>

- 29. Verify the details under the **Current Settings** section. To make changes, click on the **Back** button. Else, to continue with the current settings and begin installation, click on **Next**. Once the installation process is completed, the **Setup Complete** dialog box is displayed.
- 30. Click on Finish. Proceed to Computer 2 Installation.

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4.2 Computer 2 Installation

Use the following set of instructions to install on computer 2 of your Dual Server installation.

1. On computer 2, select your domain name and log into the domain as Administrator.



During database installation, the Database Administrator user name and password are used to create the database user 'csidba' and to create the database and table. Once the database is created, database access from Wildfly uses the database user 'csidba' user name and password created during installation.

If you install Centric 8 Server database on a shared server it must have a separate SQL instance to minimize the impact of other databases.

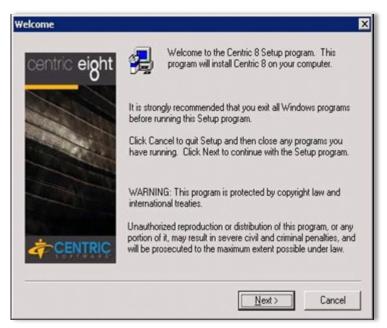
2. Copy the \\install\C8Server directory to computer 2.



To install Cenric 8, right-click Setup.exe and click Run as Administrator.

3. The **Welcome** dialog box is displayed.

Figure 4-24: Welcome dialog box



4. To begin the installation process, read the Welcome dialog box details and click on **Next**. The **End User License Agreement** dialog box is displayed.

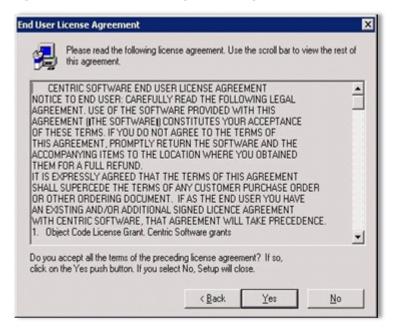


Figure 4-25: End User License Agreement dialog box

5. To accept License Agreement, read the contents of the Welcome page and click on Yes. The User Information dialog box will be displayed.

User Information

6. Enter your user name and company name in the corresponding **Name** and **Company** fields, and click on the **Next** button. The **Choose Destination Location** dialog box is displayed.

Figure 4-26: User Information dialog box

user Information	Please entryou work.	r your name and the name of the company for whom
	Name: Company:	Windows User
CENTRIC		
		<back next=""> Cancel</back>

ontrio alabt	Setup will install Centric 8 in the following folder.
entric eight	To install to this folder, click Next.
	To install to a different folder, click Browse and select another folder.
	You can choose not to install Centric 8 by clicking Cancel to exit Setup.
CENTRIC	Destination Folder C:\Program Files\Centric Software\C8Browse

Figure 4-27: Choose Destination Location dialog box

- To accept the default destination folder, click on Next. Else, to select a different destination folder, click on Browse and select a different destination folder. Click on Next. The Install Centric 8 or Database Only dialog box will be displayed.
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Select Database

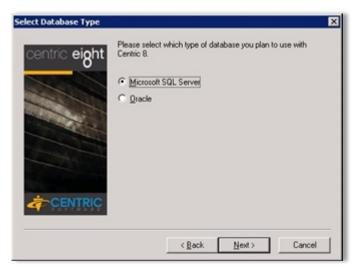
8. Click on the **Database Only** radio button and click on **Next**. The **Select Database Type** dialog box is displayed. Select **Microsoft SQL Server** and click on **Next**.

Note: If you select the Oracle radio button, go to Step 11

Figure 4-28: Install Centric 8 or Database Only dialog box

Install Centric 8 or Datab	base Only
centric eight	Please choose to install either Centric 8 with database or only the database.
	C Gentric 8 (includes database)
- All	C Database Only
the second	
CENTRIC	
- Ferrerate	
	<back next=""> Cancel</back>
	- Town Town

Figure 4-29: Select Database Type dialog box



9. The MS SQL Server Information dialog box is displayed. Enter details for the SQL Administrator Username, SQL Administrator Password and the SQL Instance Name fields.



The following characters are not supported in SQL Administrator password in Centric 8 installation: %, ^, &, *, (), "

Figure 4-30: MS SQL Server Information dialog box

MS SQL Server Inform	tion 🗵
centric eight	Please enter the following MS SQL Server information. Note: Leave SQL Instance Name field blank if you choose to use Default instance. SQL Administrator Username: SQL Administrator Password: SQL Instance Name: < < SQL Instance Name: SQL Administrator Password:
NOTE Se	you are installing on a SQL Server instance, you must enter the SQL rver administrator user name and password to create tables and the tabase.

Database Authentication and Application Authentication

10. Click on Next. The Enter Centric 8 Administrator Username and Password dialog box is displayed.

eight password.
Username:
Confirm Password

Figure 4-31: Enter Centric 8 Administrator Username and Password dialog box

11. Enter details for the Username, Password and Confirm Password fields and click on Next. The Enter Centric 8 Database Information dialog box is displayed. Go to Step 18.



The Username and Password must not be identical. Use strong passwords for Centric 8 Administrator user (for example, include alphanumeric upper and lowercase letters, numbers, and symbols).



Figure 4-32: Enter Centric 8 Database Information dialog box

entric eight	Warning: Database	llowing Centric 8 Database information. e name should not have any special hes, underscores, spaces etc.
	Usemame:	Ceidlas
	Password	0000
-AC	Confirm Password	
	Database:	[C8
CENTRIC		
		<back next=""> Cancel</back>

12. In the Select Database Type dialog box, click on the Oracle radio button and click on Next.

Figure 4-33: Select Database Type dialog box

Select Database Type		×
centric eight	Please select which type of database you plan to use with Centric 8. Microsoft SQL Server Tacle	
	< Back Next > Cancel	

- 13. The Enter Oracle Service Name dialog box is displayed.
- 14. Enter Oracle Service name and click on Next.

Figure 4-34: Enter Service Name

Enter Oracle Service Nam	e	×
	Oracle databases allow more than one database server running on a host. Each database server is called an "instance". Each instance is belonged to a service. Enter the service name ("service_names" parameter value) which identifies your Oracle server. Service:]
	< Back Next > Cancel	

15. The Oracle Server Information dialog box is displayed. Enter details for the Oracle Server Username, Password and Port and click on Next.

Figure 4-35: Oracle Server Information dialog box

entric eight	Please enter the following Oracle Server Information.	
	Usemame: STSTEM	_
	Password.	_
-	Port 1521	_
CENTRIC		

16. Enter the server login and password details in the corresponding fields and click on **Next**. The **Enter Centric 8 Administrator Username and Password** dialog box is displayed.



Use strong passwords for Centric 8 Administrator user (for example, include alphanumeric upper and lowercase letters, numbers, and symbols)

ric eight password
Usemame: Password: Confirm Password:

Figure 4-36: Enter Centric 8 Administrator Username and Password dialog box

17. Enter the username and password details in the corresponding fields and click on Next.

Figure 4-37: Enter Centric 8 Database Administrator Username and Password dialog box

ministrator Username and Password	×
ease enter the Centric 8 Database Administrator username of password.	
(Back Next) Cancel	-
	lease enter the Centric 8 Database Administrator username nd password. Sername: SIDBA assword: eneresee (Back Nest) Cancel

18. Enter details in the **Password** and click on **Next**. The **Choose New or Existing Database** dialog box is displayed.

BACK TO FLOWCHART

Create Database

19. Select the Create New Database radio button and click on Next. The Choose Database Location dialog box is displayed.

Figure 4-38: Choose New or Existing Database dialog box



Figure 4-39: Choose Database Location dialog box



20. To accept the default destination folder, click on Next OR to select a different destination folder, click on Browse and select a destination folder. Click on Next. The Select Program Folder dialog box is displayed.

centric eight	Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
	<u>P</u> rogram Folders:
and the second se	Centric 8
Man and an and an and an	Existing Folders:
	Accessories Administrative Tools Centric 8
	Centric Product Intelligence Ghostscript Microsoft SQL Server 2005 Microsoft Visual Studio 2005 Real/VNC Startup

Figure 4-40: Select Program Folder dialog box

21. To use the default Program folder, click on Next. Else, select a new program folder from the list under Existing Folders and then click on Next. The Check Setup Information dialog box is displayed.

Figure 4-41: Check Setup Information dialog box

Check Setup Information	i E	×
centric eight	Setup has enough information to begin the installation. If you want to review or change any of the settings, click Back. If you are satisfied with the settings, click Next to begin.	
	Current Settings:	
And the second sec	Windows User Centric	
	Destination Directory: C:\PROGRA~1\CENTRI~1\C8	
	Application Server: Wildfly	
CENTRIC	Wildfly Application server installation Directory: C:\PROGRA~1\CENTRI~1\C8\wildfly-8.1.0	
S O FT WARE		
	< Back Next > Cancel	

22. Verify the details under Current Settings section. To make changes to the current settings, click on Back. Else, to continue with the settings and begin the installation process, click on Next. Once the installation is completed, the Setup Complete dialog box is displayed.



Figure 4-42: Setup Complete dialog box

23. Click on Finish.

Move log file

If you have followed the Drive Structure as mentioned in the Pre-requisite section, you need to move the C8_txlog.ldf to L:\SQLLOG. To do this, go to step 24.

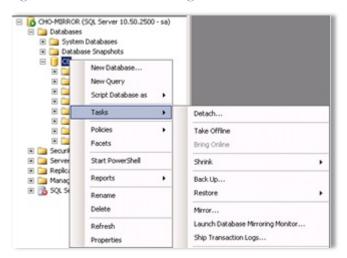
- 24. Stop Wildfly Services.
- 25. In the Start menu, click on SQL Server Management Studio. Enter details for the Server name, User login I d and Password fields. Then, click on Connect.

Figure 4-43: Connect to Server dialog box

	Database Contine	
Server type:	Database Engine	-
Server name:	2K8-S2K8R2-AR	-
Authentication:	SQL Server Authentication	-
Login:	sa	-
Password:	[second	

26, Right-click on the C8 Database. Select Tasks > Detach.

Figure 4-44: Detach Database dialog box



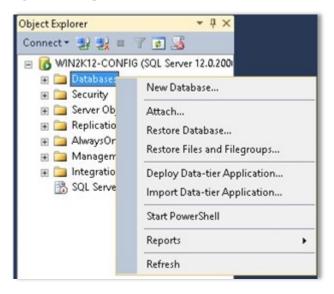
27. In the **Detach Database** dialog box, verify if the **Drop Connection** and **Update Attributes** check boxes are selected. Click on **OK**.

Figure 4-45: Detach Database dialog box

	Script - 🚺 Help	,					
P General	Databases to detach:						
	Database Name	Database Name Drop Updat Status Message		Message			
	C8	P	P	Not	22 Active connection(s)		
-							
Connection							
Server CHO-MIRROR							
Connection							
Connection: ta							
B Yes connection properties							
New connection properties							
IN Yes connection properties	t						
New connection properties							

- 28. Once the databases are successfully detached, go to the D:\SQLDATA folder.
- **29.** Cut C8_TXLOG.ldf file and paste it in L:\SQLLOG.
- 30. In the Start menu, click on SQL Server Management Studio. Enter details for the Server name, User login I d and Password fields. Then, click on Connect.
- 31. In the Explorer window, right-click on Databases and select Attach.

Figure 4-46: Explorer window



32. In the Attach Databases dialog box, click on the Add button.

Figure 4-47: Attach Database dialog box

0	A	ttach Datab	bases		_	o x	
Select a page P General	🔄 Script 🔹 🚺 Help						
	Databases to attach:						
	MDF File Location			Database Name	Attach As 0		
	٢			Add_	Ram	>	
	AddRemove						
	Original File Name	File Type	Current F	ile Path	Message		
Connection							
Server: JCP-MIRROR							
Connection: sa							
View connection properties							
Progress				Add Catalog.	Rem	ove	
O Ready							
					OK C	Cancel	

33. Select C8_data.mdf and click on OK.

Figure 4-48: Locate Database Files dialog box

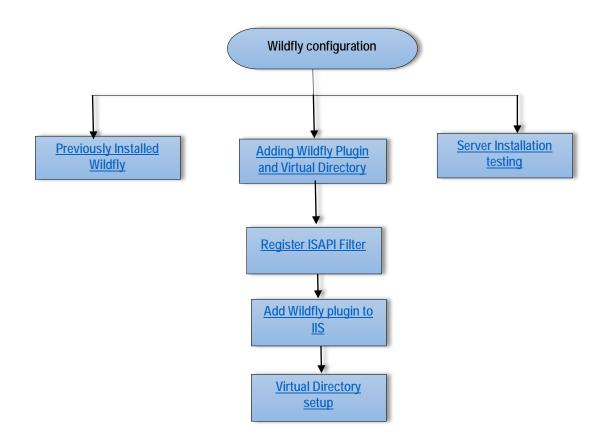
0	_ D X		
Database Data File location:	D:\SQLDATA	3	٩,
C C S D: S SRECYCLE BIN S SQLDATA S System Volume In S L: T :	aninstal_06_15_2015	i _data.md	
File name:	8_dəta.mdf	Database Data F	Files(".mdf) v



You can now proceed to <u>Chapter 5 Configuration and Testing</u> to configure the database.

BACK TO FLOWCHART

5. CONFIGURATION AND TESTING



5.1 Configure Wildfly

Once you install the server software, you are ready to configure Wildfly for the server configuration.



If this is a fresh installation, you must complete all of the configuration steps in this section. However, if this is an upgrade you may proceed to <u>Server Installation Testing</u> on page 71.

For information about changing Wildfly memory usage, see <u>Appendix</u> <u>C, Wildfly Memory Usage</u>on page 189.

5.1.1 Previously Installed Wildfly

If you have previously installed and configured Wildfly to work with a Microsoft IIS Web Server, you must modify the configuration to work with the Centric 8 installation. Configure your Wildfly- IIS plug-in to handle the servlet context named: **csi-requesthandler**

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5.1.2 Adding the Wildfly Plug-In & Virtual Directory Set Up

After you install Wildfly using the Centric 8 installation, you must add a Wildfly ISAPI plugin. This plug-in enables Wildfly to communicate with IIS, and enables request handling. Once you add the Wildfly plug-in, you must create a virtual directory for the Wildfly plug-in for the Microsoft IIS Web Server.

5.1.2.1 To register the ISAPI filter

1. In the Centric 8 directory, locate the file: iis_redirect.reg

<Centric8InstallDirectory>\wildfly-8.1.0\bin\win32\i386\

- 2. To register the ISAPI filter, double-click on the file.
- BACK TO FLOWCHART

5.1.2.2 To add a Wildfly Plug-in (Microsoft IIS Web Server 7.0 and 8.0)

- 1. On the Start menu, select Programs > Administrative Tools > Internet Information Services (IIS) Manager.
- 2. Under Connections, expand the top-level server name, and then expand the Web Sites folder.
- 3. Click **Default Web Site**, and in the center pane under IIS, right-click on the **ISAPI Filters** and select **Open Feature**.
- 4. In the right pane under Actions, click on Add. The Add ISAPI Filter dialog box is displayed.
- 5. In the Filter name field, type *wildfly*.

6. Click on the Browse button and locate the ISAPI filter file isapi_redirect.dll located in

<Centric8InstallDirectory>\wildfly-8.1.0\bin\win32\i386\

- 7. Select the file. To close the Add ISAPI Filter dialog box, click on OK.
- BACK TO FLOWCHART

5.1.2.3 Virtual Directory Set Up (Microsoft IIS Web Server 7.0 and 8.0)

- 1. On the Start menu, select Programs > Administrative > Tools Internet Information Services (IIS) Manager.
- 2. In the Internet Information Services (IIS) Manager, under the Connections section, rightclick on Default Web Site and select Add Virtual Directory. The Add Virtual Directory dialog box displays.
- 3. In the Add Virtual Directory dialog box, type the alias name in the Alias field (case sensitive):

jakarta



In order for Centric 8 to function properly, the name of this virtual directory must be *jakarta*.

4. In the Physical path field, browse to and select the

<Centric8InstallDirectory>\wildfly-8.1.0\bin\win32\i386 folder, and then click OK.

- 5. In the Internet Information Services (IIS) Manager, under Connections, expand the Default Web Site and click on jakarta.
- 6. In the center pane, under IIS, right-click on Handler Mapping and select Open Feature.
- 7. In the right pane under Actions, click on Edit Feature Permissions. The Edit Feature Permissions dialog box is displayed.
- 8. Select the Execute checkbox, and then click on OK.
- In the Internet Information Services (IIS) Manager, under Connections section, right-click on Default Web Site and select Add Virtual Directory. The Add Virtual Directory dialog box is displayed.
- 10. In the Add Virtual Directory dialog box, type the alias name in the Alias field (case sensitive):

WebAccess

- 11. In the **Physical path** field, browse and select the <<u>Centric8InstallDirectory</u>><u>WebAccess folder</u>, and then click on **OK**.
- 12. In the Internet Information Services (IIS) Manager, under the Connections section, click on the top-level server name.
- 13. In the center pane, under IIS, right-click on ISAPI and CGI Restrictions and select Open Feature.

- 14. In the right pane, under Actions, click on Add. The Add ISAPI or CGI Restriction dialog box is displayed.
- 15. In the ISAPI or CGI path field, browse to

<Centric8InstallDirectory>\wildfly-8.1.0\bin\win32\i386 folder and select the file isapi_redirect.dll.

- 16. In the **Description** field, enter a description for the restrictions.
- 17. Select the Allow extension path to execute checkbox, and then click on OK.
- **18.** In order for the changes to take effect, it is necessary to restart the Microsoft IIS Web Server. In the right pane, under **Manager Server**, click on **Restart**.

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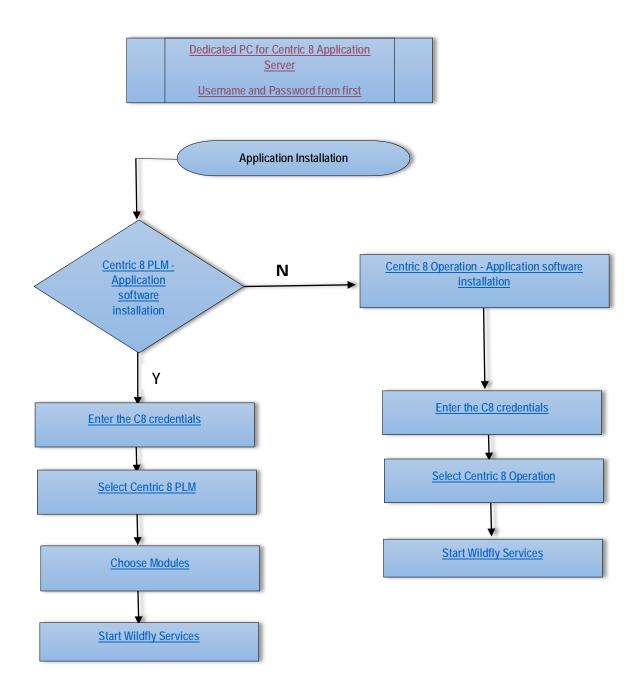
5.1.3 Server Installation Testing

Use the following steps to test your server installation.



- 1. Open Internet Explorer. On the Tools menu, click on Internet Options.
- 2. On the General tab, in the Browsing History section, select Delete > Delete files.
- 3. In the **Delete Files** dialog box, click on **Yes** to clear the cache. Click on **Close**, and then click on **OK**. Close **Internet Explorer**.
- 4. On the Start menu, select Programs > Administrative Tools > Services.
- 5. In the Services window, right-click on Centric Wildfly Service and click on Start.
- 6. Once the service restarts, make sure that the login page is displayed by opening a browser window and logging into Centric 8.
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6. APPLICATION SOFTWARE INSTALLATION



6.1 Before Installing

Before you install the application software, verify the following:

- You have a dedicated machine on which to install the Centric 8 Applications server
- Single or Dual Server software installation was successful (For more information, see <u>Single Server Installation</u> on page <u>9</u> and <u>Dual Server Installation</u> on page <u>10</u>)
- For all future upgrades, use the username and password from the first installation.
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6.2 Centric 8 PLM Application Software Installation

To install the application software, follow these steps:

- 1. Select your domain name and log into the domain as Administrator.
- 2. To verify that Wildfly is running, on the Start menu, select Programs → Administrative Tools → Services.
- 3. Close all Windows applications.
- 4. Copy the \\install\C8Applications directory to the server.



To launch the Wizard, right-click on **setup.exe** and select **Run as Administrator**.

5. The **Welcome** dialog box is displayed as shown below.

Figure 6-1: Welcome dialog box



6. To begin the installation process, read the details on the **Welcome** dialog box and click on **Next**. The **End User License Agreement** dialog box is displayed.

Figure 6-2: End User License Agreement dialog box



- 7. Read the license agreement, and click on Yes to accept the license agreement. The Enter Centric 8 Administrator Username and Password dialog box is displayed.
- BACK TO FLOWCHART

Enter the credentials

- Enter your administrator username and password in the corresponding Username and Password fields. Ensure that you use the same Username and Password used earlier (in Chapter 2 or Chapter 3). Click on Next. The Choose Application dialog box is displayed.
- Figure 6-3: Enter Centric 8 Administrator Username and Password dialog box

Enter Centric 8 Administra	tor Username and Password
centric eight	Please enter the Centric 8 Administrator username and password.
	Username: Administrator Password:
CENTRIC	
	< Back Next > Cancel

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Select Application

9. Select Centric 8 PLM, or select the desired configuration installation, and click on **Next**. If you select **Centric 8 PLM**, the **Choose Centric 8 Modules (Optional)** dialog box is displayed.

If you choose **Centric 8 Operations**, refer <u>Centric 8 PLM Application Software Installation</u> on page <u>73</u>.

Figure 6-4: Choose Application dialog box



The following modules are available in Centric 8:

Choose Centric 8 Modules	; (Optional)	×
centric eight	Please select the optional modules you want to install.	
	Eusiness Planning	
Children and Child	🗖 Calendar Management	
and the second sec	Collection Book	
and the second s	Enterprise Search	
	Material Management	
1	Product Specification	
	C Quality	
CENTRIC	F Reporting	
POPENSE.	C Sourcing	
		-
	< Back Next > Cancel	

Figure 6-5: Centric 8 Modules

Business Planning

Define currencies and exchange rates, configure business markets, formalization of planning buckets, linking to sourcing libraries for target and forecast buckets and plan by products (material or style).

Calendar Management

Track Technical Data Sheets (TDS) as tracked activities, tracked PO, manage materials and material approval.

Collection Book

This module contains details about a Product at the Marketing and Sales level. Use this module to set up data for a collection book iPad application. The module also acts as an interface to setup vendors and the sales division.

Enterprise Search

This module employs advanced search tools that allow users to define search criteria in predefined search profiles. Users can search the Centric 8 product data using predefined search criteria or define a custom search profile.

Material Management

Using this module, users can create materials that can be used throughout the system. This module can also be used to define libraries for creating logical groupings based on individual business needs.

Product Specification

Define and deliver specification details and also create the season hierarchy capturing valuable ideas, comments and feedback.

Quality

Using this module, users can define quality assurance testing methods, standards, procedures and expectations on Materials and Style Types defined in Centric 8.

Reporting

Reports can be generated as per customer requirements. The output can be either in a PDF format, an Excel Sheet or a graphical representation.

Sourcing

This module can be used to define supplier, factory and shipping details. The module also assists in improving supplier collaboration and performance tracking, fabric and color approval by supplier as well as sample and cost management - from product concept stage through final product delivery.

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Choose Modules

10. To select one or more of the optional modules, select the checkbox adjacent to the required module. Click on Next. For example, select the module Enterprise Search. The Enter Centric Insight Information dialog box is displayed; enter the Insight server information and click on Next.

Choose Centric 8 Modules	s (Optional)
centric eight	Please select the optional modules you want to install.
	🗖 Business Planning
	Calendar Management
Million and Annual State	Collection Book
Construction Construction	Enterprise Search
	Material Management
	Product Specification
	C Quality
CENTRIC	E Reporting
TOPEVARE	C Sourcing
	< Back Next > Cancel

Figure 6-6: Choose Centric 8 Modules (Optional)

Figure 6-7: Enter Centric Insight Information dialog box

Centric Insight In	Please actes the following Castric Invisit Canus internation
	Server.
	Domain:
1995	Port
CENTRIC	
	< Back Next> Cancel



11. The Check Setup Information dialog box is displayed.

Centric 8 Optional Modules: Sourcing Calendar Management	
Product Specification Material Management WBS Business Planning Cost Scenario Quality Reporting Collection Book	*

Figure 6-8: Check Setup Information dialog box

- 12. Verify the application and module settings under Current Settings. To change the current settings, click on the Back button. Else to continue with the current settings and begin the installation process, click on Next.
- **13.** If you are installing Centric 8 PLM without adding any of the optional modules, proceed to step 17.
- 14. If one or more optional modules have been selected in the **Choose Centric 8 Modules** (Optional) dialog box,
 - The configuration files will be uploaded
 - The installer will stop the Wildfly service
 - Centric Wildfly Service Restart Required dialog box is displayed as shown below:

Figure 6-9: Centric Wildfly Service Restart Required dialog box

Centric W	ildfly Service Restart Required	×
i	Please restart Centric WildFly-8.1.0 Service from Services dialog. After restart, make sure you can login to Centric 8 and then click OK.	
	ОК	

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Start Wildfly Services

- 15. To view the desktop, on your keyboard Press Alt+Tab. On the Start menu, select Programs Administrative Tools > Services. In the Services window, right-click on the Centric Wildfly Service and select Start.
- 16. Once the service restarts, open a browser window and log into Centric 8, this is to verify successful install of the Centric 8 application. To log out of C8 click on **Sign Out**.

- 17. Press Alt+Tab to return to the installation. Else, to complete the installation, in the Centric Wildfly Service Restart Required dialog box, click on OK.
- 18. On completion of the installation process, the Setup Complete dialog box is displayed.

Figure 6-10: Setup Complete dialog box



- 19. To complete the installation process, click on **Finish**. To verify whether or not you can successfully log in to the application, use the following link: <u>http://localhost/webaccess</u>
- 20. You are now ready to log into Centric 8 and either configure the Centric 8 PLM OR install the Centric 8 PDF Server. For more information on installing the server, see <u>Appendix H, PDF Print</u> <u>Server</u> on page 229.

6.3 Centric 8 Operation Application Software Installation

- 1. To verify whether or not Wildfly is running, on the Start menu, select Programs ► Administrative Tools ► Services.
- 2. Select your domain name and log into the domain as Administrator.
- 3. Close all Windows applications.
- 4. Copy the \\install\C8Applications directory to the server.



To launch the Wizard, right-click on **Setup.exe** and select **Run as Administrator**.

5. The Welcome dialog box is displayed.

Figure 6-11: Welcome dialog box



6. Read the contents of the Welcome dialog box. To begin installation, click on Next. The End User License Agreement dialog box is displayed.

Figure 6-12: End User License Agreement dialog box

AGREEN	TO END USER: CARE IENT. USE OF THE S IENT (ITHE SOFTWA	ID USER LICENSE AGREEMENT EFULLY READ THE FOLLOWING LEGAL OFTWARE PROVIDED WITH THIS REI) CONSTITUTES YOUR ACCEPTANCE	1
THIS AG ACCOMP THEM F	REEMENT, PROMPT PANYING ITEMS TO T OR A FULL REFUND.	D NOT AGREE TO THE TERMS OF LY RETURN THE SOFTWARE AND THE HE LOCATION WHERE YOU OBTAINED	
SHALL S OR OTH AN EXIS WITH C	UPERCEDE THE TER ER ORDERING DOCU TING AND/OR ADDIT ENTRIC SOFTWARE,	HAT THE TERMS OF THIS AGREEMENT RMS OF ANY CUSTOMER PURCHASE ORDER JMENT. IF AS THE END USER YOU HAVE IIONAL SIGNED LICENCE AGREEMENT THAT AGREEMENT WILL TAKE PRECEDENCE. Centric Software grants	-

7. Read the license agreement. To accept the license agreement, click on Yes. The Enter Centric 8 Administrator Username and Password dialog box is displayed.

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Enter Centric 8 Credential

 Enter your administrator username and password in the corresponding Username and Password fields. Ensure that you use the same Username and Password, used earlier in Chapter 2 and Chapter 3. Click on Next. The Choose Application dialog box is displayed.

Enter Centric 8 Administ	rator Username and Password	×
centric eight	Please enter the Centric 8 Administrator username and password.	
	Usemame: Administrator	
	Parsword	
CENTRIC		
	<back next=""> Cance</back>	el

Figure 6-13: Enter Centric 8 Administrator Username and Password dialog box

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Select Application

9. Select the Centric 8 Operations radio button and click on Next.

Figure 6-14: Choose Application dialog box

Choose Application		×
centric eight	Please select a Application you want to work with.	
	C Centric 8 PLM	
Carlo Carlo	Centric 8 Operations	
CENTRIC	C Update Configuration	
	<back next=""> Cancel</back>	1

10. The Check Setup Information dialog box is displayed. Click on Next.

centric eight	Setup has enough information to begin the installation. If you want to review or change any of the settings, click Back. If you are satisfied with the settings, click Next to begin. Current Settings:	
	Product Application: Centric 8 Operations	*
	<u>د</u>	2

Figure 6-15: Check Setup Information dialog box

11. On completion of the upload process of configuration files, the installer stops the Wildfly service and the **Centric Wildfly Service Restart Required** dialog box is displayed as shown below:

Figure 6-16: Centric Wildfly Service Restart Required dialog box

Ce	entric J8	loss Service Restart Required		x
4 S	0	Please restart Centric WildFly-8.1.0 S After restart, make sure you can login OK.	ervice from Services dialog. h to Centric 8 and then click	
			OK	

BACK TO FLOWCHART

Start Wildfly Services

- 12. Press Alt+Tab to view your desktop. On the Start menu, select Programs > Administrative Tools > Services. In the Services window, right-click on Centric Wildfly Service and select Start.
- 13. Make sure there is no error in the PI_Centric.log file. To complete the installation, in the Centric Wildfly Service Restart Required dialog box, click on OK.
- 14. Once the installation process is completed, the **Setup Complete** dialog box is displayed.

Figure 6-17: Setup Complete dialog box



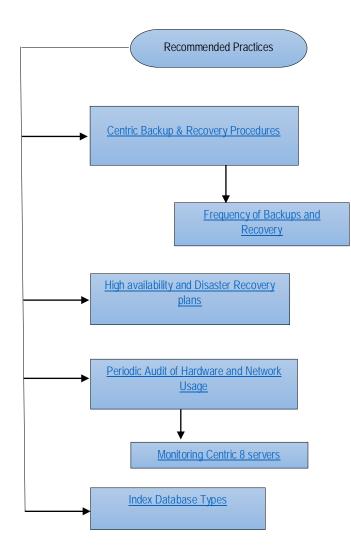
15. To complete the installation, click on **Finish**. To check if you can successfully log in to the application, use the following link: <u>http://localhost/webaccess</u>

PART III: BACKUP AND RESTORATION, UNINSTALLATION PROCEDURES

Included in Part III:

- <u>Chapter 07: Recommended Practices</u>
- <u>Chapter 08: Post Installation checklist</u>
- <u>Chapter 09: Backup Procedures for SQL Server</u>
- <u>Chapter 10: Restoration Procedures for SQL servers</u>
- <u>Chapter 11: Oracle DB Backup & Restore Procedure</u>
- <u>Chapter 12: Uninstall Centric 8</u>

7. RECOMMENDED PRACTICES



7.1 Centric 8 Backup and Recovery Procedures

Your Centric 8 database and FileVault contain all of your project data; backup your data on a regular basis to avoid data loss and to allow for data restoration and migration.

During the backup procedure, it is necessary to back up both the database and the FileVault. You can manually backup your database using the Microsoft SQL Server Management Studio.

The FileVault is a repository for all of the customer data. When you back up the FileVault, a backup of the directory sub-tree is created.

If the FileVault data is stored in multiple FileVault folders, backup all of the data into the same folder.

You can create scripts that allow you to automatically backup your database and FileVault. When you automate the backup process, use the following parameters:

- Set the backup process to run when no users are working in Centric 8
- You can back up the database and FileVault simultaneously

On completion of the backup procedure, run the restoration procedure to verify that the backup is successful.

For a successful restoration, verify that you have an original backup and that the SQL Server target instance and database used for restoration have the same collation as the source instance and database.

Restoration is possible for the following two conditions:

Restore Database on Same Server

Means restoring on the same database on which Centric 8 is installed. For example, you have a Test Server and you wish to restore a previous backup of the Test Server database.

Restore Database on a Different Server

Means restoring a database that is from a different server. For example, you have a Production Server and a Test Server, and you wish to update the Test Server with a database backup from the Production Server.

For detailed restoration steps, refer <u>Chapter 10: Restoration Procedures for SQL servers</u> on page 107.

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7.1.1 Frequency of Backups and Recovery

Depending on your IT failover and disaster policy, the following is recommended:

- Backup Centric 8 database and Filevault on daily and/or weekly basis.
- Full backup (Cold) of database and Filevault at non-business hours.
- Incremental backup (Hot) of database and Filevault on a daily basis.

 Do not put backups on same hard disk where database resides. Consider restoration time when scheduling backups.

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7.2 High Availability and Disaster Recovery Procedures

Based on Centric 8 usage, the Administrator can determine the tolerance / downtime for the PLM application. For high availability, Centric recommends the following:

1. Mirror SQL database

Setup SQL replication and mirror server such that when the SQL server is offline/not available, the mirror server can be online and available.

2. Create Failover instance for database

If the SQL cluster is in use, setup Failover instance for SQL so it can be brought in during down time.

3. Filevault in sync

Have a mirror server setup with Filevault backup either using DFS or manual copy of folders.

4. Application Failover

Setup a failover instance for the application, configure URL to point to a new server during down time.

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7.3 Periodic Audit of Hardware and Network Usage; Plan for Upgrade

Evaluate your database needs based on projected use, implementation, and integration of existing data. The Filevault expansion plan can be based on the projected image and document storage.



Based on your implementation, accumulation of log files, and projected image and document usage, your mimimum requirements may wary.

Work with Centric Software Client Services or Contact Centric Technical Support for specifications based on your disk space capacity needs.

Centric recommends that you evaluate the current Centric 8 data usage periodically, say every 6 months, and evaluate the projected use.

You may be adding more users to the system or adding modules for production use etc. Based on that, plan for upgrading hardware (adding more memory/upgrading CPU processors etc).



7.3.1 Monitoring Centric 8 Servers

Following is a list of things that you (Customer IT) should monitor on Centric 8 Servers:

Disk usage

Check for free space availability regularly to minimize interruption

CPU usage

During peak usage of Centric 8, use monitoring tools such as Perfmon to monitor CPU usage, capture the results

Memory usage

Ensure that sufficient memory is allocated for the App server (wildfly) and SQL database based on current usage in order to get optimal performance. Adjust the memory settings accordingly.

During peak load periods, monitor the PDF printing usage. Setup multiple PDF servers to distribute the load.

- Monitor Centric 8 log files (located in <C8 Install>\Log folder) and report them to the Technical Support Team
- Support if any errors found
- Monitor database performance by capturing SQL queries using SQL profiler tool and send us the trace files
- If your database server is hosting other databases, monitor database activity regularly and ensure that it does not interfere with Centric 8 database
- If the application server is hosted on a VM, monitor VM host server CPU and memory usage and adjust settings accordingly

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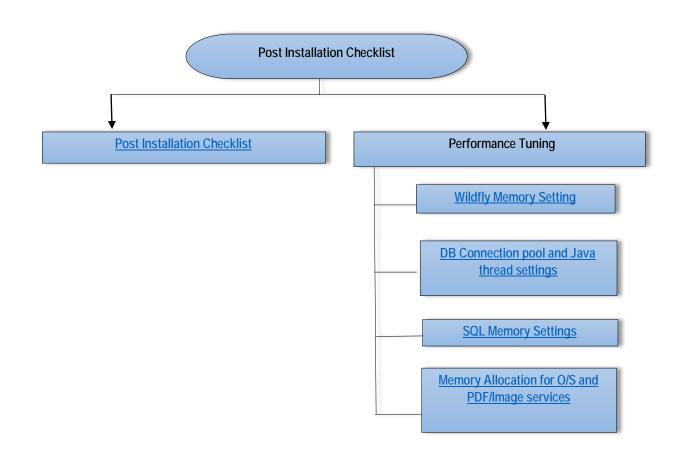
7.4 Index Database Tables

- Reindexing script is available in the Centric 8 installation path in the Database Scripts folder.
- Reindexing command: BATCH_RebuildAllIndexes.bat DBServerName sa sa_password CentricDBName.
 - Open Command prompt.
 - Navigate to Database scripts folder under C8 Installed directory.
 - Execute the Batch file BATCH_RebuildAllIndexes.bat DBServerName sa sa_password CentricDBName.



- Index Centric 8 database tables for improved performance.
- Re-index database tables weekly, process takes approximately 20 minutes.
- Schedule re-indexing time so as to least impact your business and IT processes; note that Centric 8 remains online during re-indexing but performance may be affected

8. POST INSTALLATION CHECKLIST



8.1 Post Installation Checklist

1. Make sure you are able to login to C8 application and verify that the display of the **Setup and Home** page is OK.

Busines	s Objects	Enumerations Shared Directories Co	py Templates Teams	Type Configuration	Sourcing Size Chart	Settings		
Views [Default	🔹 🃺 👻 🥌 🛱 Export 🔹 🛛 Resu	lts: 20 🔹 🔿 Suspen	d				
Changed	Enabled	Business Object 🔺	Display Name	Plural	Tooltip Display Format	Module	Notes	Action
(AII)	(All)	(All)				(All)	(AII)	
	1	Activity	Manual Activity			Calendar		2
	1	Assortment Item	Assortment Item	Assortment Items		Product		2
	1	Audit Container	Auditable			Home		2
	1	BaseOrder	Order	Orders		Sourcing		1
	1	Business Category	Business Category	Business Categories		Business Planning		2
	1	Business Market	Business Market	Business Markets		Business Planning		1
	1	Business Plan	Business Plan	Business Plans		Business Planning		1
	1	Business Plan Actual	Business Plan Actual	Business Plan Actuals		Business Planning		1
	1	Business Plan Actual For Market	Actual Market	Actual Markets		Business Planning		1
	1	Business Plan Actual For Product	Actual Product	Actual Products		Business Planning		2
	1	Business Plan Actual For Product On Market	Business Plan Actual	Business Plan Actuals		Business Planning		1
	1	Business Plan Actual Report	BPActualReport			Business Planning		2
	1	Business Plan Commited	Business Plan Committed	Business Plan Committeds		Business Planning		1
	1	Business Plan Commited For Market	Committed Market	Committed Markets		Business Planning		1
	1	Business Plan Commited For Product	Committed Product	Committed Products		Business Planning		1
	1	Business Plan Commited For Product On Market	Business Plan Committed	Business Plan Committeds		Business Planning		1
	1	Business Plan Commited Report	BPCommittedReport			Business Planning		5
	1	Business Plan Details	BPDetails			Business Planning		5
	1	Business Plan Expressions	BPExpressions			Business Planning		1
	1	Business Plan For Market	Business Market Plan	Business Market Plans		Business Planning		5
fore								_

- 2. Verify whether or not you are able to print ad-hoc PDF.
 - To print ad-hoc PDF, navigate to **Home** > **Style** > **Season** tab. From the **Export** dropdown list, select PDF. Verify whether or not the Data Package prints is OK.

Figure 8-2: Export to PDF option

My Hom	e Style	Materia	al Specificatio	n Sourcing	Documents	Issues	Reports	Select Set	s Busine
Seasons	Shapes	Themes	Styles Sty	le Gallery Colo	rways Styl	e Samples	Sample	Storage S	Style SKUs
Views Def	ault	•	il - C 🖨		sults: 20 🔻	- O Su	spend		
				Excel	The second se				
Seaso	n 🔨 🚽	Code	Desci		umber of St	yles	Image	Actions	*
Seaso (All)	• •	Code (All)	Desci (All)	Excel (Flat)	umber of St All)	yles	Image	Actions	^

- 3. Ensure that the Image Service is working as expected and the images can be viewed when an AI file is added as a document.
 - To add an AI file as a document, navigate to **Home > Documents > Documents** tab.

Documents All Docume	nts Contra	ctual Docume	nts Contractu	al Document Groups	Supplier Contractual	Documents
Upload Views Defaul			📕 🔻 Export 💌			
Document 🔺	Latest Revision	Revision Description	Rev Created	File	Image	Images
(All)	(All)	(All)	(All)	(All)		(All)
AIArtboards.ai	1		1/7/16, 9:26 PM	AIArtboards.ai		
AILarge.ai	1		1/7/16, 9:26 PM	AILarge.ai		AILarge-0.png
JohnTaber001.ai	1		1/7/16, 9:29 PM	JohnTaber001.ai	J	JohnTaber001-0.png
TESTINGSASI.ai	1		1/7/16, 9:29 PM	TESTINGSASI.ai		TESTINGSASI-0.png

Figure 8-3: Adding AI file on the Documents tab

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Performance Tuning

1. Wildfly Memory Setting (standalone.conf.bat)

Adjust java memory based on available system memory and number of concurrent users.

• The default memory is 4GB (suitable for 20 users). You can increase 2GB memory for each additional user (up to 10 concurrent users)



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2. DB connection pool and Java thread settings (standalone-pi*.xml)

Adjust max DB connection pool and max threads count based on number of active concurrent users.

 Search for max-connection pool string in standalone-pi*.xml file. The default pool size is 25. Increase it to number of active users count

```
<pool>
  <min-pool-size>2</min-pool-size>
  <max-pool-size>25</max-pool-size>
```

 Search for max-threads string in standalone-pi*.xml file. The default thread size is 50. Increase it to 10 less than max DB connection pool setting

```
<long-running-threads>
        <core-threads count="50"/>
        <queue-length count="50"/>
        <max-threads count="45|"/>
        <keepalive-time time="10" unit="seconds"/>
```

 Increasing the db connection pool else the thread setting will increase Wildfly Java memory. Ensure that the system has enough memory available before making this change.

rem # JVM memory allocation pool parameters - modify as appropriate. set "JAVA_OPTS=-Xms512M -Xmx4096M -XX:MaxPermSize=512M"

BACK TO FLOWCHART

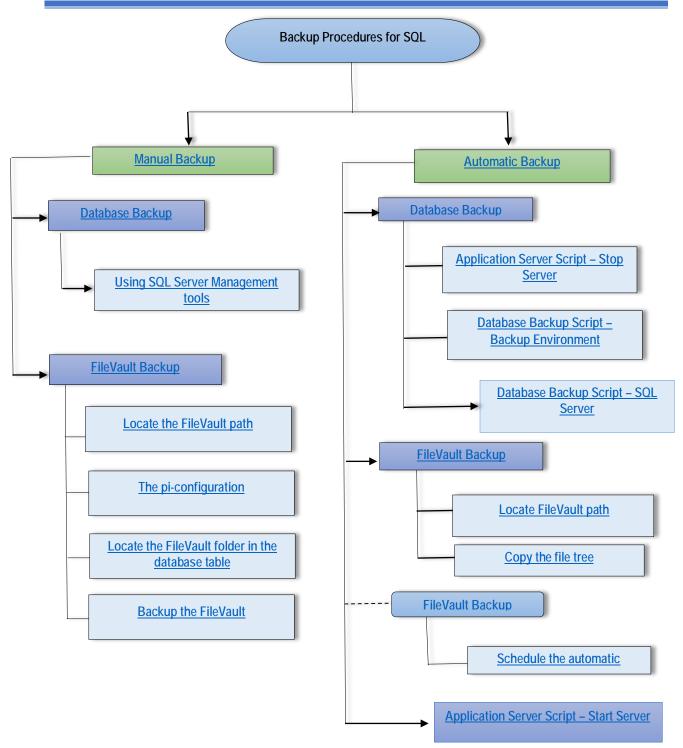
3. SQL Memory Setting (SQL management studio)

- Adjust the memory setting for the SQL instance based on Centric 8 database size
 - Based on the PLM usage and user activity, set maximum memory for SQL instance in SQL management studio on the Instance properties
 Memory tab
 - Ensure that the max memory setting is greater than the C8 database size

BACK TO FLOWCHART

4. Consider allocating 2GB for Operating system and 2GB for PDF/Image services.

9. BACKUP PROCEDURES FOR SQL SERVER



9.1 Backup

Your Centric 8 database and FileVault contain all of your project data; backup your data on a regular basis to avoid data loss and to allow for data restoration and migration.

During the backup procedure, ensure back up of both the database and the FileVault.

9.1.1 Manual Database Backup

You can manually backup your database using the Microsoft SQL Server Management Studio.

BACK TO FLOWCHART

9.1.2 Backup – Database Backup (SQL Server)

The **SQL Server Management Studio** is an integrated environment used for configuring, managing, administrating, and developing components of the SQL Server.

BACK TO FLOWCHART

9.1.2.1 Back up the database using the SQL Server Management Tools

- 1. Before taking a backup, ensure that the Wildfly Services are stopped. Else, the backup will fail.
- On the Start menu, select Programs ➤ Microsoft SQL Server 2008 R2 ➤ SQL Server Management Studio. The Connect to Server dialog box is displayed.

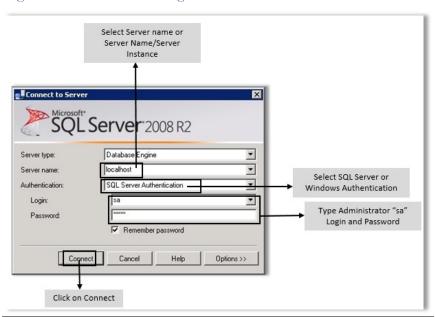


Figure 9-1: Connect to Server dialog box

- On the Server name menu, select the <server name> to which you wish connect to the default instance OR select <server name>\<instance name> to select a named instance on the server.
- 4. To use the database system administrator user name, **'sa'**, and the corresponding database system administrator password, on the **Authentication** menu, select **SQL Server Authentication**.

ELSE

If you have administrator rights on the server and wish to login using your user name and password, select **Windows Authentication**

- 5. Click on Connect. The Microsoft SQL Server Management Studio window is displayed.
- 6. In the **Object Explorer** pane, expand the server group, and then expand **Databases**.
- 7. Under **Databases**, right-click on the **C854** database icon (or the database name specified in the standalone-pi-mssql.xml file), select **Tasks ► Back Up**.
- 8. The Back Up Database dialog box is displayed. Under Select a page, click on General. The General dialog box is displayed in the right pane.

Figure 9-2: Back Up Database – C854 dialog box – General Page

📔 Back Up Database - C854	
Select a page	🖳 Script 👻 🚺 Help
General Options	Source Database: Cost SiMPLE Backup type: Copy-only Backup Backup component: C Database C Files and filegroups: Backup set Name: C854Full Database Backup Description: Backup set Backup set Description: Backup set will expire:
Connection Server:	C D ± days C Dnx 8/31/2015 ✓
IT-TEST Connection: sa <u>View connection properties</u>	Back up to: C Disk C Tope C Program Files/Microsoft SQL Server/MSSQL10_50 MSSQLSERVER/MSSQL Add Remove
Progress Ready	Contents
	OK Cancel

- 9. In the **Source** section, from the **Database** drop-down menu, select the database you wish to back up.
- 10. From the Backup type drop-down menu, select Full.

11. In the **Backup set** > **Backup set will expire**, click on the **After** radio button and select **0** days.



It is necessary to select **After** in the Backup set will expire option, and set the field value to **0**. Else the backup file is rendered useless after a given delay or date.

- 12. Under **Destination**, the **Back up to** window displays the last location used to generate the backup file.
- Click on Disk. To add a new destination file, click on Add OR to remove the currently selected destination, click on Remove. Additionally, you can click Contents to view the media set (device) location.
- 14. Under **Select a page**, click on **Options**. The **Options** dialog box is displayed in the right pane.

0	1	9	1	0	
📒 Back Up Data	abase - C854				

Figure 9-3: Back up Database – C854 dialog box – Options Page

📒 Back Up Database - C854			_ 🗆 🗵				
Select a page	🔄 Script 🝷 🚺 Help						
Options	Overwrite media						
	 Back up to the existing media set 						
	 Append to the existing back 	cup set					
	Overwrite all existing backu	p sets					
	Check media set name and	backup set expiration	100				
	Media set name:						
	C Back up to a new media set, a	nd erase all existing backup sets					
	New media set name:						
	New media set description:		<u>^</u>				
	Reliability	,					
	Verify backup when finished						
	Perform checksum before writin	ng to media					
	Continue on error						
Connection	Transaction log						
Server: IT-TEST	C Truncate the transaction log						
Connection	C Back up the tail of the log, and	leave the database in the restoring state					
\$ð	Tape drive						
View connection properties	Unload the tape after backup						
	Rewind the tape before un	loading					
Progress	Compression						
Ready	Set backup compression:	Use the default server setting	-				
		ОК	Cancel				
			//				

- 15. Under Overwrite media, click on the Back up to the existing media set and then click on one of the following options:
- a. **Append to the existing backup set**: Adds a new set of data to the media set; the new set of data is added as a new backup set inside the original backup. During restoration, this selection allows you to select which back up to restore.
- b. **Overwrite all existing backup sets**: Overwrites all data with the current media set contents.



To eliminate duplication and reduce the file size, Centric Software recommends selecting **Overwrite all existing backup sets** option.

- 16. To safeguard the backup media from accidental overwrite, select Check media set name and backup set expiration. Type the name of the media to be used for the backup operation in the Media set name field OR leave the field blank to specify that the system check only the backup set expiration.
- 17. For backup completion verification, under the **Reliability** section, click on **Verify backup when finished**.



- **18.** Click on **OK**. Allow the database backup to progress; depending on the database size and the installation server capacity, the backup process takes from a few seconds to a few minutes. Once the backup process is completed, the following confirmation message is displayed:
- Figure 9-4: Successful backup confirmation message

Microsoft SQL Server Management Studio			
1	The backup of database 'C854' completed successfully.		
4		ОК	

- 19. Click on OK, and then close the SQL Server Management Studio window.
- BACK TO FLOWCHART

9.1.3 Backup – FileVault

The FileVault is a repository of all customer data. When you back up the FileVault, you create a backup of the directory sub-tree.



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9.1.3.1 Locate the FileVault path

1. Locate the FileVault installation folder.

For example: C:\Program Files\Centric Software\C8.

If you do not know the location of the FileVault folder, you can locate the folder in one of two ways:

- Search the file: pi-configuration.properties OR
- Review the database table
- BACK TO FLOWCHART

9.1.3.2 Search the pi-configuration.properties file

1. Open the file pi-configuration.properties in Notepad. The file is located in your Centric 8 program folder on your system:

<Centric8InstallDirectory>\Centric8\wildfly-8.1.0\Standalone\configuration

2. Search for the following string:

'com.centricsoftware.server.FilePublisher.CENTRIC_FILE_VAULT.VaultFolder'

3. The FileVault folder location appears at the end of this line of code, for example:

= C:\\PROGRA~1\\CENTRI~1\\Centric 8\\FileVault

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9.1.3.3 Locate the FileVault folder in the database table

- 1. In the SQL Server Management Studio dialog box, create a new query on the database.
- 2. Enter the following code in the query window:

SELECT [File_URL_ID]

- , [Version]
- , [NodeName]
- , [PublishedTime]
- , [Publisher_URL_ID]
- , [PublishedSize]
- , [Content]
- , [VaultFullPath]

FROM [Database Name].[dbo].[Centric_file_version]

- 3. Click on Execute.
- 4. The FileVault folder location is displayed in the VaultFullPath column in the Result pane.

Figure 9-5: FileVault folder location

h Marcanel 1994 Server Management Stadio Die Edit Yew Query Driet Inde Window Commu Line Query ()) () () () () () () () () () () ()								-10	
HI 92 22 CID11 + F Epecte ✓	- 23年	281	-990000	12240	1				
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H 🛄 dio. MS_MESSAGES		1-001-09	2008-07-15 09 44 59 090	3214	491294	NULL	D'Program Files/Centric Software/PT		
8 de.345_TRANSACTIONS	and and the second seco	1001-09	2008-07-15 09 48 15 633	3294	491294	NULL	D. Program Filer/Centric Software/PT		
10 🛄 dba.KeyGenerator	and the second s	1002-09-81	2008-07-15-09-48-49.320	3294	434704	NULL	D: Program Files/Centric Software/PT		
 B abo.Node_truerient B abo.Node_variant 	and and a second second	002-09-81	2008-07-15-09-48-57-417	3294	437097	NULL	D. Program Files/Centric Software/PT		
8 do.oreTineExpressionNodes	and a second second	1003-09	2008-07-15 09 49:04 620	3294	406791	NULL	D Program Files/Centric Softwarr/PT		
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iii 🛄 douRolup_expression	8 10	1005-09	2008-07-15 09 49 19 760	3294	443613	NULL	D Program Files/Centric Software/Pt		
H de-SAAC_Policy H de-SAAC_Policy_Right	2 10	1006-09	2008-07-15 09 49 27 057	3294	392170	NULL	D. Program Files/Centric Software/PD		-

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9.1.3.4 Backup the FileVault

If you have multiple FileVault folders, be sure to backup all the folders.

- 1. On the system where Centric 8 is installed, open Windows Explorer.
- 2. Make a copy of the FileVault sub-tree structure, and paste the **FileVault** data into a backup folder location.

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9.2 Automatic Database Backup

You can create scripts that allow you to automatically backup your database and FileVault. When you automate the backup process, use the following parameters:

- Set the backup process to run when no users are working in Centric 8
- You can back up the database and FileVault simultaneously
- Back to Flowchart

9.2.1 Application Server Script – Stop Server

Once the backup process is completed, create two batch (.bat) files. One of the .bat files is used to stop the application and the application server. The other .bat file is used to restart the application and application server.

NOTE

After the application server stops, allow the stop service scripts to conclude before continuing with the backup; this allows asynchronous activities to come to a complete stop on the application server.

9.2.1.1 Stop the application server

- 1. Create a batch file with the name: StopPIApparel.bat.
- 2. In the batch file, add the following command:

net stop <service name>

Where <service name> represents the default **Centric Wildfly Service**, for example, net stop 'Centric Wildfly-8.1.0 Service'

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9.2.2 Database Backup Script – Backup Environment

Create a batch file to set the backup environment and execute an SQL Server script.

9.2.2.1 Set the backup environment and execute the SQL Server script

- 1. Create a batch file called BackupCentricCSIPI1DataBase.bat.
- 2. Add the following script to the batch file to set the environment, and to execute the SQL Server script:

pause

Where the following is true:

- <admin login> is the system administrator login (for example, sa)
- <admin password> is the corresponding password
- <database server> is the database server name or IP address
- <database name> is the name of the Centric 8 database; the default name is CSIPI1
- <backup sql script path> is the full path to the SQL Server script that is to follow

For example:

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9.2.3 Database Backup Script – SQL Server Script

Create a batch file to back up the database.

9.2.3.1 Create the SQL Server script

- 1. Create a batch file called DatabaseBackup.sql.
- 2. Create the following script to automatically back up the database after setting the environment with the following file:

BackupCentricCSIPI1DataBase.bat

```
BACKUP DATABASE [<database name>] TODISK = N'<backup path>\<database</th>name>.bak' WITH NOFORMAT, INIT,NAME = 'Not <database name>-Complete databasemaintenance', SKIP, NOREWIND, NOUNLOAD,STATS = 10
```

GO

Where the following is true:

- <database name> is the name of Centric 8 database; the default value is CSIPI1
- <backup path> is the full path to the backup directory; the database backup is then included in the .bak file

```
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```

9.2.4 FileVault Backup Scripts (Application Server) – Copy File Tree Script

On the application server, back up the FileVault and create a batch file to copy the file subtree.

9.2.4.1 Locate the FileVault path

- 1. Search the pi-configuration.properties file for the FileVault location:
- a. Open the file pi-configuration.properties in Notepad.
- b. Search for the string:

'com.centricsoftware.server.FilePublisher.CENTRIC_FILE_VAULT.VaultFolder'

- 2. The FileVault folder location appears at the end of this line of code, for example C:\\PROGRA~1\\CENTRI~1\\Centric8\\FileVault
- BACK TO FLOWCHART

9.2.4.2 Copy the file tree

- 1. Create a batch file on the application server called BackupCentricFileVault.bat.
- 2. Add the following script to the file:

set dir_name=FileVaultBackup_%DATE: ~7,2%_%DATE: ~4,2%

md <backup path>\%dir_name%

xcopy /S <file vault location> <backup path>\%dir_name%

Where the following is true:

- dir_name is any FileVault in a directory matching the backup day
- <file vault location> is the full path to the FileVault folder
- <backup path> is the full path to the backup directory



Always back up the database and FileVault in the same session. If you have multiple FileVault folders, use this script to back up all FileVault folders.

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9.2.5 FileVault Backup Scripts (Application Server) – Scheduled

The Microsoft Windows integrated backup tool allows you to schedule FileVault backup by calling the **BackupCentricFileVault.bat** file.



You can use the Scheduled Tasks window to automatically backup the database.

9.2.5.1 Schedule the automatic backup

- 1. On the Start menu, click on Control Panel.
- 2. In the Control Panel window, double-click on Scheduled Tasks.
- 3. In the Scheduled Tasks window, click on Add Scheduled Task. The Scheduled Task Wizard is displayed. Click on Next.

Figure 9-6: Scheduled Task Wizard (1) dialog box



4. Click on **Browse** to locate and select your FileVault batch file BackupCentricFileVault.bat. Click on **Next**.

Scheduled Task Wizard

 Lype a name for this task. The task name can be the same name as the program name.

 FileVaul Backup

 Perform this task:

 Daily

 Weekly

 Monthly

 Dine time only

 When my computer starts

 When I Jog on

Figure 9-7: Scheduled Task Wizard (2) dialog box

5. Enter a name for the task. To set the backup to run daily, click on the **Daily** radio button and then click on **Next**.

Scheduled Task Wiza	rd 🔀
R	Select the time and day you want this task to start. Start time: 11:1: PM Perform this task: • Every Day • Weekdays • Every 1 start gate: 8/21/2008
	< <u>B</u> ack <u>N</u> ext > Cancel

Figure 9-8: Scheduled Task Wizard (3) dialog box

6. In the Start time field, select a start time. Under Perform this task:, click on the Every Day radio button. In the Start date: field, select the start date. Click on Next.

Figure 9-9: Scheduled Task Wizard (4) dialog box

Scheduled Task Wiza	rd		
R	run as if it were started Enter the user name: Enter the <u>p</u> assword: <u>C</u> onfirm password:	ssword of a user. The task will by that user. Administrator •••••••• •••••••• ered, scheduled tasks might	
	< <u>B</u> ack	Next > Cancel	

7. Enter details in the Enter the user name, Enter the password and Confirm Password fields.

	To modify your scheduled task setup:
	On the Start menu, click on Control Panel.
NOTE	In the Control Panel window, double-click on Scheduled Tasks.
NOTE	 In the Scheduled Tasks window, right-click on your scheduled task and select Properties. Modify your scheduled task as necessary. To save changes, in the Properties dialog box, click on OK.

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9.2.6 Application Server Script – Start Server

On completion of the backup procedure, restart the application server.

9.2.6.1 Start the application server

- 1. Create a batch (.bat) file named **StartPIAppareI.bat**.
- 2. In the batch file, add the following command:

```
net start <service name>
```

Where <service name> represents the default Centric Wildfly Service, for example,

net start 'Centric Wildfly-8.1.0 Service'

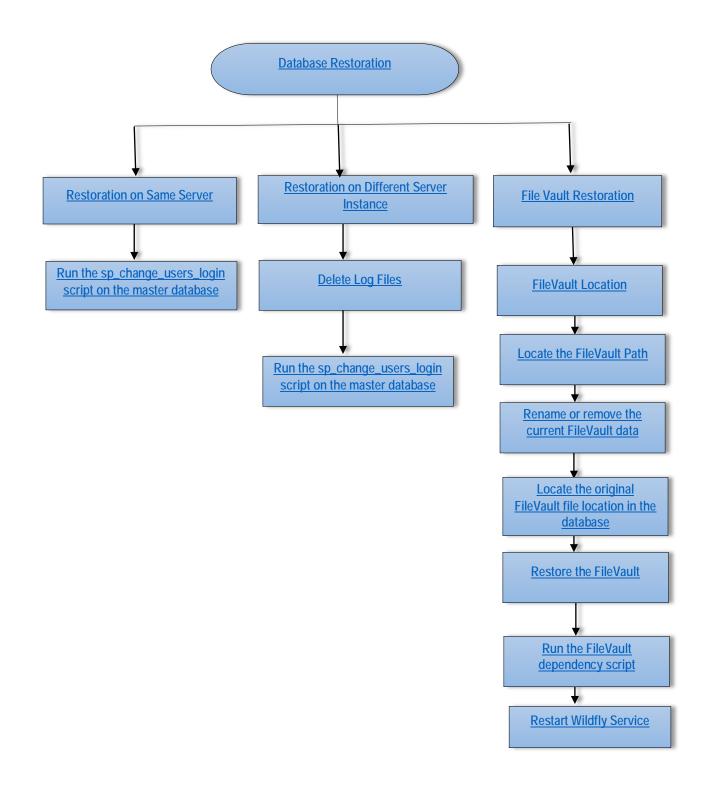
3. On completion of the backup procedure, restart the system by running the StartPIApparel.bat file.



To verify that the backup is successful, run the restoration procedure. For more information, refer <u>RESTORATION PROCEDURES FOR SQL SERVERS</u> on page 107.

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10. RESTORATION PROCEDURES FOR SQL SERVERS



10.1 Database Restoration

For a successful restoration, always back up the database and FileVault using the procedures described in the section <u>"Backup"</u> on page 95. Verify that you have an original backup and that the SQL Server target instance and database used for restoration have the same collation as the source instance and database.

1. Restore Database on Same Server

If you are restoring on the same database on which Centric 8 is installed, for example, you have a Test Server and you wish to restore a previous backup of the Test Server database, use the steps provided in the section <u>Centric 8 Backup and Recovery Procedures</u> on page 87.

2. Restore Database on a Different Server

If you are restoring a database that is from a different server, for example, you have a Production Server and a Test Server, and you wish to update the Test Server with a database backup from the Production Server, follow the steps in <u>Centric 8 Backup and Recovery Procedures</u> on page 87 and then use the steps in <u>Database Restoration</u>: <u>Different Server Instance</u> on page 113 to complete the restoration.

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NOTE

Ensure that the same C8 software is installed and working.

10.2 Restore the Database

To restore the database:

- 1. In the Services window, right-click on Centric Wildfly Service, and select Stop.
- 2. On the Start menu, select Programs > Microsoft SQL Server > SQL Server Management Studio. The Connect to Server dialog box is displayed.
- 3. Log into the database server. The SQL Server Management Studio window is displayed.
- 4. In the **Object Explorer** pane, expand the server group, and then expand **Databases**.
- 5. Under Databases, right-click on the database and select Tasks > Restore > Database.

-	
NOTE	To verify the database name, refer the standalone-pi.xml file.

Diew Query	188 B B B	3 08		80883.			
groed Epilorer groed * 2 = Databaser 8 = Datab 8 = Datab 8 = Datab	TUNTERSPORT (SQL Serv motabases are Snapshots		• 9 X	Object Explorer Details	RSPORT	(Detabases)(CSIPT1	⇒ X ∂ Item(s)
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	Renage		Bring Onli	ine			
	Delete		grink.				
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		- 1		saction Logs	_		
			Generate Import Du Export Du	2010.000 A			
			Copy Dat	abase			

Figure 10-1: Microsoft SQL Server Management Module dialog box

- 6. The Restore Database window appears.
- 7. In the **General** page, under **Destination for restore**, verify that the database name is the database name specified in the standalone-pi-mssql.xml file.
- 8. Under Source for restore, click From device and select Browse. The Specify Backup dialog box is displayed.

Specify Backup Specily the backup media	and its location for your restore op	eration.
Backup media:	File	2
Backup Jocation:		
		Add
		Bemove
		Contents

Figure 10-2: Specify Backup dialog box

9. In the Specify Backup dialog box, click on Add. The Locate Backup File dialog box appears.

10. In the Locate Backup File dialog box, locate and select the desired restoration file of type .bak.

Figure 10-3: Locate Backup File dialog box

	lle - INTERSPORTPI\INTERSPORT	
B Builds B B Docume B B Inetpub B B PI B B Program B B RECYCL	SIPIT.bak Ints and Settings Files ER folyme Information	
Selected gath:	C:\Backup\20080722	
Files of type:	Backup Files(".bak;".tm)	•
File pame:	CSIP11.bak	Cancel

11. Click on **OK**. The selected file name is displayed in the **Specify Backup** dialog box in the **Backup location** pane.

Figure 10-4: Specify Backup dialog box

Specify Backup		×
Specify the backup media	and its location for your restore ope	eration.
Backup media:	File	-
Backup Jocation:		
C:\Backup\20080722\CS	PI1.bak	Add
		Bemove
		Contents
		Congenis
1		
	<u>0</u> K	Cancel Help

12. To close the **Specify Backup** dialog box, click on **OK**. The selected file is displayed in the **Restore Database** dialog box.

Figure 10-5: Restore Database CSIPI1

Restore Database - CSIPI1						_IQ)>	
Select a page General	Script - L	Help					
P Options	Destination fo Select or		new or existing database for you	r restore operat	tion.		
	To database: To a point in time:		CSIPIT			•	
			Most recent possible		-		
	Source for re	store					
	Specily B	e source and loca	tion of backup sets to restore.				
	C From o	C From database: CSIP11					
	From device: C:\Blackup\20080722\CSIP11.bak						
	Sglect the backup sets to restore:						
	Restore	procession and procession and and and and and and and and and an			Component Type Serv		
	V	CSIPI1-Complete	e Base de données Sauvegarde	Database	Full	INTERCENTR	
Connection							
Server. INTERSPORTPIVINTERSPORT							
Connection:							
View connection properties							
Progress							
Ready							
107	1					2	
				OK		Cancel	

13. In the **Select the backup sets to restore** pane, in the Restore column, select the checkbox adjacent to the required file name (to be used for restoration).



A single backup file can contain more than one backup. The backup date and the server name are available in this window; check the date and server information to verify that you are selecting the backup you wish to use for the restoration.

- 14. In the left pane under **Select a page**, click on **Options**; the right pane displays the restoration options.
- 15. In the right pane under **Restore options**, select the parameters for the restoration.



The database file path may change from one server to another; update all file paths in the Original File Name as necessary.

- a. Under Restore options, select the Overwrite the existing database checkbox.
- b. Under **Restore the database files as**, review the file names and make sure there are no duplicate file names. If there is a duplicate file name, modify the name.
- c. Under Recovery state select Leave the database ready to use by rolling back uncommitted transactions.

🣒 Back Up Database - CSIPI1					_ 🗆 🗙
Select a page	<u> S</u> cript 👻 📑 Help				
General					
🚰 Options	Source				
	Database:		CSIPI1		•
	Recovery model:		FULL		
	Backup type:		Full		•
	🔲 Copy-only Backup				
	Backup component:				
	Database				
	C Files and filegroups:				
	Backup set				
	Name:	CSIPI1-Full Dat	abase Backup		
	Description:				
	Backup set will expire:				
	 After: 	0	•	days	
Connection	O On:	1/23/2014	Ψ.		
Server:	Destination		~	_	
localhost		Disk		Таре	
Connection: sa	C:\Program Files\Microsoft SQL 9	Server\MSSQL10	50.MSSQLSERVI	ERIMSSQL	Add
View connection properties					Remove
Progress					Contents
Ready					
	4			•	
				OK	Cancel

Figure 10-6: Back Up Database - CSIPI1 dialog box

16. After setting up the restoration parameters, click on **OK**. The restoration progress displays at the bottom of the left pane; allow the restoration process to finish. When the restoration process is completed, a confirmation message is displayed as shown below:

Figure 10-7: Message confirming successful completion of the restoration procedure

Microsoft SQL Server Management Studio	<u>×</u>
The restore of database 'CSIPI1' completed successfully.	
4	ОК

BACK TO FLOWCHART

10.2.1 Run the sp_change_users_login script on the master database

- 1. Verify that the Wildfly Service is stopped.
- 2. In the SQL Server Management Studio dialog box, right-click on the top-level database icon and select New Query.

3. In the query window, type the *sp_change_users_login* script:

use <database name>

exec sp_change_users_login 'update_One', 'csidba', 'csidba'

For example,

use PLMCentricDB

exec sp_change_users_login 'update_One', 'csidba', 'csidba'

4. Click on **Execute**.

5. Click on **OK** and close Microsoft SQL server Management Studio.

6. In the Services window, right-click on the Centric Wildfly Service and select Start.



If you are restoring the database on a different server instance, proceed to <u>Database Restoration</u>: <u>Different Server Instance</u> on this page. Else, proceed to <u>FileVault Restoration</u> on page 114

BACK TO FLOWCHART

10.3 Database Restoration: Different Server Instance

If you are restoring on a different server instance, once you restore the database by following the instructions in the section <u>Database Restoration</u> on page 108, you then delete the log files, and update the user login.

BACK TO FLOWCHART

10.3.1 Delete Log Files

 Delete the .log files located in the following location: <Centric8InstallDirectory>\Centric8\LOG

On completing deletion of the log files, follow the steps given below to restore the database on a different server instance.

BACK TO FLOWCHART

10.3.2 Run the sp_change_users_login script on the master database

1. Verify that the Wildfly Service has stopped.

- 2. In the SQL Server Management Studio dialog box, right-click the top-level database icon and select New Query.
- 3. In the query window, type the sp_change_users_login script:

use <database name>

exec sp_change_users_login 'update_One', 'csidba', 'csidba'

For example,

use PLMCentricDB

exec sp_change_users_login 'update_One', 'csidba', 'csidba'

4. Click on Execute.

BACK TO FLOWCHART

10.4 FileVault Restoration

Once the database is restored, it is not possible to restore the FileVault.

BACK TO FLOWCHART

10.4.1 FileVault Location

The FileVault location is determined during installation. When restoring a server or duplicating a configuration on a different server, you must verify, and if necessary, update the FileVault location to reconnect the files with the application.

BACK TO FLOWCHART

10.4.1.1 Locate the FileVault Path

- 1. Search the pi-configuration.properties file for the FileVault location:
- a. Open the file pi-configuration.properties in Notepad.
- b. Search for the string:

'com.centricsoftware.server.FilePublisher.CENTRIC_FILE_VAULT.VaultFolder'

2. The FileVault folder location appears at the end of this line of code, for example:

= C:\\PROGRA~1\\CENTRI~1\\Centric8\\FileVault

BACK TO FLOWCHART

10.4.1.2 Rename or remove the current FileVault data

1. Locate the FileVault folder, for example, <Centric8InstallDirectory>\Centric8\FileVault.



If your FileVault data is stored in multiple FileVault folders, copy all of the data into the same restoration folder.

- 2. Overwrite the contents of the FileVault folder.
- BACK TO FLOWCHART

10.4.1.3 Locate the original FileVault file location in the database

1. In the SQL Server Management Studio dialog box, create a new query on the database, and enter the following code in the query window:

SELECT [File_URL_ID]

- , [Version]
- , [NodeName]
- , [PublishedTime]
- , [Publisher_URL_ID]
- , [PublishedSize]
- , [Content]
- , [VaultFullPath]

FROM [Database Name] . [dbo] . [Centric_file_version]

2. Click Execute.

3. The FileVault path displays in the **VaultFullPath** column in the Result pane. Use this path to complete the dependency script in <u>Run the FileVault dependency script</u> on page 116.

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Figure 10-8: Microsoft SQL Server Management Studio

BACK TO FLOWCHART

10.4.1.4 Restore the FileVault

- Copy the desired FileVault backup to the FileVault location to restore the data.
- BACK TO FLOWCHART

10.4.1.5 Run the FileVault dependency script

It is possible that the FileVault path may change during backup and restoration. To update the FileVault path, run the dependency script where *<source File Vault path>* represents the backup FileVault path (defined in Locate the original FileVault file location in the database on page 115) and *<target File Vault path>* represents the new FileVault path.

1. In **SQL Server Management Studio**, right-click on the database and select **New Query**. Paste the following script into the Query pane; be sure to replace *<source File Vault path>* and *<target File Vault path>* with the correct FileVault paths:

SET NOCOUNT ON SET ARITHABORT ON; SET CONCAT_NULL_YIELDS_NULL ON; SET QUOTED_IDENTIFIER ON; SET ANSI_NULLS ON; SET ANSI_PADDING ON;

SET ANSI_WARNINGS

ON;

SET NUMERIC_ROUNDABORT OFF;

DECLARE @ROWCOUNT INT;

DECLARE @TOTROWCOUNT INT; SET

@TOTROWCOUNT=0

DECLARE @BeforePartialStringnvarchar(100);SET @BeforePartialString='<source File Vault path>\'

DECLARE @AfterPartialString nvarchar(100);SET @AfterPartialString='<target File Vault path>\'

SET ROWCOUNT

10000 SET @ROWCOUNT = -1

WHILE @ROWCOUNT

<> 0

BEGIN

UPDATE dbo.Centric_file_version

SET VaultFullPath=REPLACE(VaultFullPath,@BeforePartialString,@AfterPartialString) WHERE CHARINDEX(@BeforePartialString,VaultFullPath) > 0;

SET @ROWCOUNT = @@ROWCOUNT;

SET @TOTROWCOUNT=@TOTROWCOUNT +

@ROWCOUNT; IF @ROWCOUNT > 0

PRINT CONVERT(varchar(12),@TOTROWCOUNT)+'Centric_file_version.VaultFullPath columns updated so far'

END;

- 2. Click on Execute.
- 3. On completion of the script execution, a success message is displayed in the Messages pane.
- 4. Delete the log files.

BACK TO FLOWCHART

10.4.1.6 Restart Wildfly Service

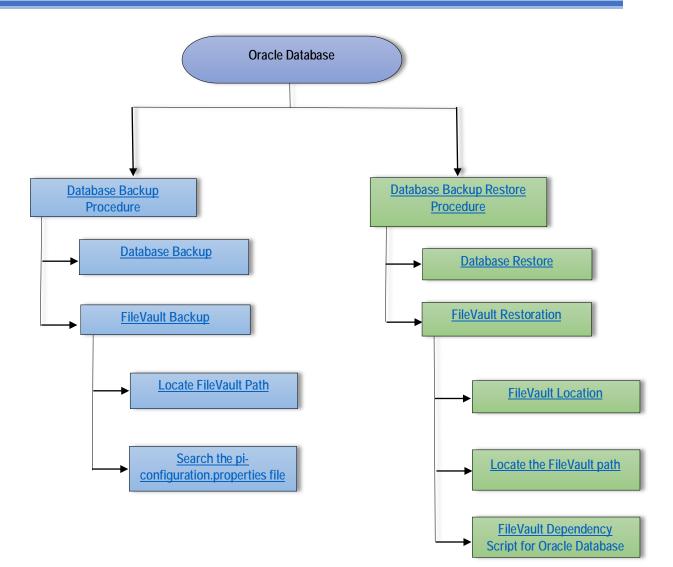
Once the restoration is complete, restart the Wildfly service.

• How to start Wildfly Service

- 1. On the Start menu, select Programs > Administrative Tools > Services.
- 2. In the Services window, right-click on Centric Wildfly Service and select Start.
- 3. Allow a few moments for the batch files to finish running in the background.

BACK TO FLOWCHART

11. ORACLE DB BACKUP AND RESTORE PROCEDURE



11.1 Backup

Your Centric 8 database and FileVault contain all of your project data. To avoid data loss and to allow for data restoration and migration, ensure that you backup your data on a regular basis.

During the backup procedure, ensure that you back up both the database and the FileVault.

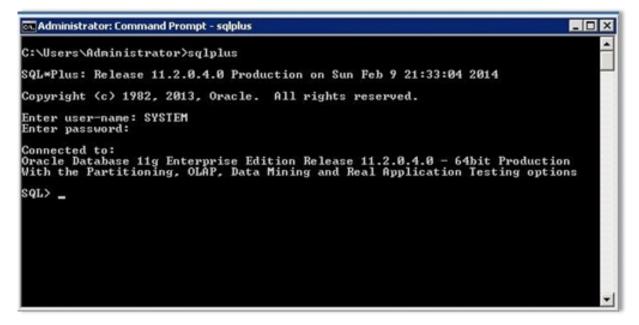
BACK TO FLOWCHART



11.2 Database Backup

1. Open the **Command Prompt** and type *sqlplus* and press the **Enter** key. Type oracle Administrator username and password.

Figure 11-1: Administrator: Command Prompt - sqlplus



2. Type Select directory_name from all_directories; and click on the Enter key.

Note: All current default directories will be displayed.

DIRECTORY_NAME -------DMPDIR XMLDIR DATA_PUMP_DIR ORACLE_OCM_CONFIG_DIR

Figure 11-2: Administrator: Command Prompt – SQL Plus (2)



- 3. In SQL Plus, type Create Directory DMPDIR1 as 'C:/DMPDIR1'.
- 4. Create a New folder **DMPDIR1** under C:/ Drive.

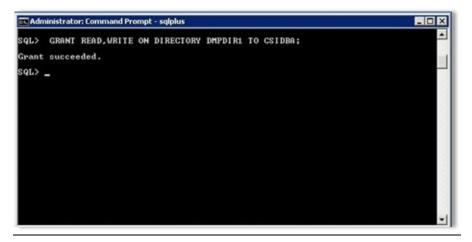
Figure 11-3: Creating a new folder under Local Disk (C:)

rganize 👻 🍃 Open	Include in library Share with New folder)III • 🛄	
* Favorites	Name *	Date modified	Туре	s.
Desktop	👍 inetpub	7/5/2012 2:29 PM	File folder	1
bownloads	🕌 Install	1/29/2013 8:51 PM	File folder	
E Recent Places	NativeImporterSetup130416_C8_4.9	4/25/2013 4:35 AM	File folder	
	3 NativeImporterunzip	7/9/2013 12:34 AM	File folder	
Libraries	Je PerfLogs	7/13/2009 8:20 PM	File folder	
Documents	📙 Program Files	1/27/2014 5:38 AM	File folder	
Music Pictures	Program Files (x06)	12/2/2013 3:04 PM	File folder	
Videos	🔒 Sample	3/13/2013 2:39 AM	File folder	
	JEMP	2/9/2014 9:34 PM	File folder	
1 2KBR2-52K12-PR	📕 test	5/28/2013 5:19 AM	File folder	
Local Disk.(C:)	🔒 Users	1/29/2013 6:27 PM	File folder	
E on PRABHU	Ji Windows	1/31/2014 1:54 AM	File folder	
Network	C849-BACKUP.bak	5/30/2013 4:51 AM	BAK File	
WECWORK	CSImageService_03_11_13	3/11/2013 2:30 AM	Text Document	
	🛞 msdia00.dll	12/1/2006 11:37 PM	Application extension	
	NativeImporterSetup130416_C8_4.9	4/16/2013 4:23 PM	Compressed (zippe	
	seasonsample.xls	2/6/2013 1:29 AM	XLS File	
	SW_DVD9_SQL_Sw_Ent_Core_2012_English_MLF_X17-99682.IMG	4/14/2012 9:11 AM	1MG File	1
	DMPOINT	2/9/2014 9:36 PM	File folder	
	4			•

5. In SQL Plus, login as Administrator and type the command GRANT READ, WRITE ON DIRECTORY DMPDIR1 TO CSIDBA; and press the Enter key.

Grant Permission to the directory.

Figure 11-4: Administrator: Command Prompt – SQL Plus (3)



6. Type the following command

expdp CSIDBA/CSI1nstall schemas=CSIDBA directory=DMPDIR1 dumpfile=exp.DMP logfile=exp.log

Figure 11-5: Administrator: Command Prompt

🐼 Administrator: Command Prompt	- O ×
	as=CSIDBA directory=DMPDIR1
Export: Release 11.2.0.4.0 - Production on Sun Feb 9 2	1:41:04 2014
Copyright (c) 1982, 2011, Oracle and/or its affiliates	. All rights reserved.
Connected to: Oracle Database 11g Enterprise Edition R	Release $11.2.9.4.9 - 64$ hit
Production	
With the Partitioning, OLAP, Data Mining and Real Appl Starting "CSIDBA"."SYS_EXPORT_SCHEMA_01": CSIDBA/**** Ory-DMPDIRi dumpfile-jaiexp.DMP logfile=exp.log	Hication lesting options
Estimate in progress using BLOCKS method Processing object type SCHEMA_EXPORT/TABLE/TABLE_DATA	
Total estimation using BLOCKS method: 15.93 MB	Section 2016 August 201
Processing object type SCHEMA_EXPORT/PRE_SCHEMA/PROCAC	T_SCHEMA
Processing object type SCHEMA_EXPORI/IYPE/IYPE_SPEC Processing object type SCHEMA_EXPORI/SEQUENCE/SEQUENCE	
Processing object type SCHEMA_EXPORT/IABLE/IABLE	
Processing object type SCHEMA_EXPORT/TABLE/COMMENT	
Processing object type SCHEMA_EXPORT/PACKAGE/PACKAGE_S	PEC
Processing object type SCHEMA_EXPORT/FUNCTION/FUNCTION	
Processing object type SCHEMA_EXPORT/PROCEDURE/PROCEDU Processing object type SCHEMA_EXPORT/PACKAGE/COMPILE_P	RE
PACKAGE_SPEC	HCKHGE/FHCKHGE_SFEG/HLIEK_
Processing object type SCHEMA_EXPORT/FUNCTION/ALTER_FU	INCTION
Processing object type SCHEMA_EXPORT/PROCEDURE/ALTER_P	PROCEDURE
Processing object type SCHEMA_EXPORT/TABLE/INDEX/INDEX	
Processing object type SCHEMA_EXPORT/TABLE/INDEX/FUNCT	IONAL_INDEX/INDEX
Processing object type SCHEMA_EXPORT/TABLE/CONSTRAINT/	CONSTRAINT
Processing object type SCHEMA_EXPORT/TABLE/INDEX/STATI Processing object type SCHEMA_EXPORT/TABLE/INDEX/STATI	STICS/INDEX_STRIISTICS
EX_STATISTICS	STIGS/FUNGTIONEL_INDEN/IND
Processing object type SCHEMA_EXPORT/UIEW/UIEW	
Processing object type SCHEMA_EXPORT/PACKAGE/PACKAGE_B	ODY
Processing object type SCHEMA_EXPORT/TABLE/STATISTICS/	TABLE_STATISTICS
exported "CSIDBA". "ATTRIBUTE2"	4.947 MB 178747 rows
. exported "CSIDBH"."HIIKIBULE_UHKIHNI_ELEMENI"	3.008 MB 160265 rows 881.8 KB 6904 rows
exported "CSIDBA". "NODE2"	663.9 KB 7368 rows
exported "CSIDBA", "ALL_URL"	543.0 KB 7445 rows
exported "CSIDBA". "ROLLUP_EXPRESSION"	52.44 KB 312 rows
exported "CSIDBA"."AC_USERRIGHTS"	64.77 KB 4304 rows
exported "CSIDBA". "AC_GLOBALRIGHTS"	5.523 KB 1 rows
exported "CSIDBH". "HC_PHILENN"	8.75 KB 208 rows 7.023 KB 45 rows
 exported "CS IDBA". ATT RIBUTE UARIANT FLEDENT (1997) exported "CS IDBA". ATT RIBUTE UARIANT ELEMENT" exported "CS IDBA". "ATT RIBUTE UARIANT ELEMENT" exported "CS IDBA". "NODE2" exported "CS IDBA". "NODE2" exported "CS IDBA". "NOLLUP. EXPRESSION" exported "CS IDBA". "ROLLUP. EXPRESSION" exported "CS IDBA". "ACLUE LUSTRICHTS" exported "CS IDBA". "ACLUE EXPRESSION" exported "CS IDBA". "ACLUE EXPRESSION" exported "CS IDBA". "AC CLUSTRICHTS" exported "CS IDBA". "AC CLOSTRICHTS" exported "CS IDBA". "AC PATTERNDEFINITION" exported "CS IDBA". "AC TEMPLATE" 	21.35 KB 1064 rows
exported "CSIDBA". "ATTRIBUTE_NAME"	18.66 KB 589 rows

BACK TO FLOWCHART

11.3 Backup FileVault

The FileVault is a repository for all of the customer data. When you back up the FileVault, you create a backup of the directory sub-tree.



BACK TO FLOWCHART

11.3.1 Locate the FileVault path

1. Locate the FileVault installation folder.

For example: C:\Program Files\Centric Software\C8.

If you do not know the location of the FileVault folder, you can locate the folder in one of the following two ways:

- Search the pi-configuration.properties file, or
- Review the database table

BACK TO FLOWCHART

11.3.2 Search the pi-configuration.properties file

1. Open the file <u>pi-configuration.properties</u> in **Notepad**. The file is located in your Centric 8 program folder on your system:

<Centric8InstallDirectory>\Centric8\wildfly-8.1.0\Standalone\configuration

2. Search for the string:

'com.centricsoftware.server.FilePublisher.CENTRIC_FILE_VAULT.VaultFolder'

- 3. The FileVault folder location appears at the end of this line of code, for example:
 - = C:\\PROGRA~1\\CENTRI~1\\Centric 8\\FileVault
- BACK TO FLOWCHART

11.4 Database Restore Procedure

For a successful restoration, always back up the database and FileVault using the procedures described in <u>Database Backup</u> on page 120. Verify that you have an original backup and that the Oracle Server target instance and database used for restoration have the same collation as the source instance and database.

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11.5 Restore Database

If you are restoring the Database on the machine on which Centric 8 is installed, for example, you have a Test Server and you wish to restore a previous backup of the Test Server database, use the steps explained in the section <u>Restore the Database</u> on page 108.

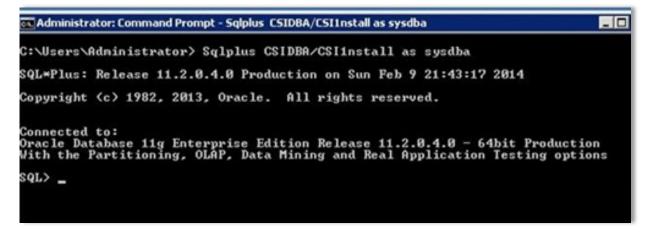
1. Stop the Wildfly service in the application server.

Figure 11-6: Services window

🔾 Services					_ 🗆 ×
File Action View	Help				
Services (Local)	Q Services (Local)				
			-		1
	Select an item to view its description.	Name 🔺	Description	Status	Startup Type
		Adobe Acrobat Update Ser		Started	Automatic
		Application Experience	Processes application compa		Manual
		Application Host Helper Se	Provides administrative servi	Started	Automatic
		Application Identity	Determines and verifies the i		Manual
		Application Information	Facilitates the running of int		Manual
		Application Layer Gateway	Provides support for 3rd par		Manual
		🎑 Application Management	Processes installation, remov		Manual
		🔍 ASP.NET State Service	Provides support for out-of		Manual
		🧟 Background Intelligent Tra	Transfers files in the backgro	Started	Manual
		🧟 Base Filtering Engine	The Base Filtering Engine (BF	Started	Automatic
		🧟 Centric WildFly-8.1.0 Service	Centric WildFly-8.1.0 Service		Automatic
		Certificate Propagation	Copies user certificates and	Started	Manual
		🎑 CNG Key Isolation	The CNG key isolation servic		Manual
		🎑 COM+ Event System	Supports System Event Notif	Started	Automatic
		🎑 COM+ System Application	Manages the configuration a	Started	Manual
		🎑 Computer Browser	Maintains an updated list of		Disabled
		🎑 Credential Manager	Provides secure storage and		Manual
		Cryptographic Services	Provides four management s	Started	Automatic
		CSImageService			Manual
	1	DCOM Server Process Lau	The DCOMLAUNCH service la	Started	Automatic
	1	Desktop Window Manager	Provides Desktop Window M	Started	Automatic
	1	OHCP Client	Registers and updates IP ad	Started	Automatic
	1	Diagnostic Policy Service	The Diagnostic Policy Service	Started	Automatic (E
			The Diagnostic Comise (Jack)	2.2.000	Macondele (2

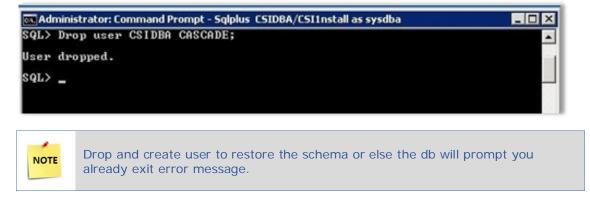
2. In local host command prompt, type Sqlplus CSIDBA/CSI1 nstall as sysbda.

Figure 11-7: Administrator: Command Prompt



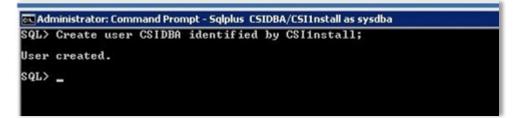
3. In the SQL command prompt, type *Drop user CSIDBA CASCADE;* and press on the Enter key.

Figure 11-8: Administrator Command (2)



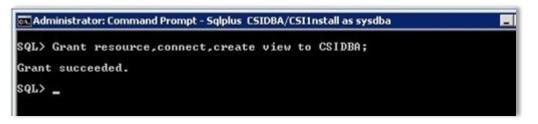
4. Type Create user CSIDBA identified by CSI1 nstall;

Figure 11-9: Administrator: Command Prompt (3)



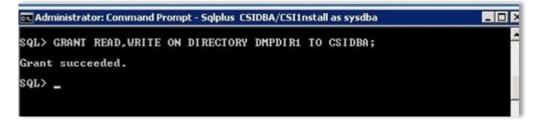
5. Type *Grant resource, connect, create view to CSIDBA;* and press on the **Enter** key.

Figure 11-10: Administrator: Command Prompt (4)



6. Type *GRANT READ*, *WRITE ON DIRECTORY DMPDIR1 TO CSIDBA*; and press on the Enter key.

Figure 11-11: Administrator: Command Prompt (5)



7. In the local host command prompt, type:

impdp CSIDBA/CSI1nstall schemas=CSIDBA directory=DMPDIR1 dumpfile=exp.DMP logfile=imp.log

Figure 11-12: Administrator: Command Prompt (6)

Administrator: Command Prompt			-1
C:\Users\Administrator>impdp CSIDBA/CSI1nstall schema	s=CSIDBA dire	ectory=D	HPDI R
dumpfile=jaiexp.DMP logfile=imp.log			
mport: Release 11.2.0.4.0 - Production on Sun Feb 9	21:54:29 2014	1	
opyright <c> 1982, 2011, Oracle and/or its affiliate</c>	s. All right	ts reserv	ved.
onnected to: Oracle Database 11g Enterprise Edition	Release 11.2	0.4.0 -	64bi
roduction lith the Partitioning, OLAP, Data Mining and Real App	lication Test	ing opt	ions
aster table "CSIDBA"."SYS_IMPORT_SCHEMA_01" successf tarting "CSIDBA"."SYS_IMPORT_SCHEMA_01": CSIDBA/****	ully loaded/u	inloaded	
tarting "CSIDBA"."SYS_IMPORT_SCHEMA_01": CSIDBA/***	WHNNH schenas	=CSIDBA	dire
ry=DMPDIR1 dumpfile=jaiexp.DMP logfile=imp.log	07.000744		
rocessing object type SCHEMA_EXPORT/PRE_SCHEMA/PROCA rocessing object type SCHEMA_EXPORT/TYPE/TYPE_SPEC	ICI_SCHEMH		
rocessing object type SCHEMA_EXPORI/ITE/ITE_SPEC rocessing object type SCHEMA_EXPORT/SEQUENCE/SEQUENC	·E		
rocessing object type SCHEMA_EXPORT/TABLE/TABLE	,E		
rocessing object type SCHEMA_EXPORT/TABLE/TABLE_DATA			
imported "CSIDRO" "ATTRIBUTE?"	4.947 MB	178747	rows
. imported "CSIDBA". "ATTRIBUTE_VARIANT_ELEMENT"	3.008 MB	160265	rous
. imported "CSIDBA". "REFLECTIONMODELSUMMARY"	881.8 KB	6904	
. imported "CSIDBA"."NODE2"	663.9 KB		rows
imported "CSIDBA"."ALL_URL" . imported "CSIDBA"."ROLLUP_EXPRESSION"	543.0 KB		rows
	52.44 KB 64.77 KB		rows
. imported "CSIDBA"."AC_USERRIGHTS" . imported "CSIDBA"."AC_GLOBALRIGHTS"	5.523 KB		rows
. inported "CSIDBA". "AC_PATTERN"	8.75 KB		rows
. imported "CSIDBA". "AC_PATTERNDEFINITION"	7.023 KB		rows
. imported "CSIDBA"."AC_TEMPLATE"	21.35 KB		rous
imported "CSIDRO" "ATTRIBUTE NOME"	18.66 KB		POWS
. imported "CSIDBA". "CENTRIC_FILE"	8.179 KB		rows
. imported "CSIDBA"."CENTRIC_FILE_VERSION"	7.875 KB		rows
 imported "CSIDBA". "DEPENDENCY_EXPRESSION" imported "CSIDBA". "KEYGENERATOR" 	6.125 KB		rows
	5.976 KB		rows
. imported "CSIDBA"."MODELPARAMETERS" . imported "CSIDBA"."NODE2_X"	17.96 KB 11.86 KB		rows
innowted "CSIDBO" "UM CREUOSSICNMENT"	6.015 KB		rows
. imported "CSIDBA". "UM_CREWHIERARCHY"	5.976 KB		rows
. imported "CSIDBA". "UM_IDENTITY"	7.25 KB		rows
innorted "CSIDBA", "IM ROLESECURITY"	7.039 KB		rous
imported "CSIDBA", "DEPENDENCY LEVELS"	0 KB		rows
. imported "CSIDBA". "ONETIMEEXPRESSIONNODES"	0 KB	0	rows
rocessing object type SCHEMA_EXPORT/PACKAGE/PACKAGE_			
rocessing object type SCHEMA_EXPORT/FUNCTION/FUNCTIO	NUDE		
rocessing object type SCHEMA_EXPORT/PROCEDURE/PROCEI rocessing object type SCHEMA_EXPORT/PACKAGE/COMPILE	PACKAGE/PACK	OCE SPEC	ALTE
ACKAGE_SPEC	THOMAGE/THOM	GE_OFEG	and the
Processing object type SCHEMA_EXPORT/FUNCTION/ALTER_F	UNCTION		
RA-39082: Object type ALIER_FUNCTION: "CSIDBA". "FN_GE	TDEPENDENCYLI	EVEL" cre	eated
th compilation warnings			
rocessing object type SCHEMA_EXPORT/PROCEDURE/ALTER_	PROCEDURE		

8. Create the cf_safeToNumber and safeToBoolean functions as CSIDBA user.

In C:\, type Sqlplus CSIDBA/password@SID

```
CREATE OR REPLACE

FUNCTION cf_safeToNumber

( str VARCHAR2

)

RETURN NUMBER DETERMINISTIC

AS

num NUMBER(37,10);

BEGIN
```

```
num: = TO_NUMBER(str);
RETURN num;
EXCEPTION
WHEN OTHERS THEN
RETURN NULL;
END;
/
```

```
CREATE OR REPLACE
FUNCTION cf_safeToBoolean
(str
         VARCHAR2
)
RETURN NUMBER DETERMINISTIC
AS
num NUMBER(37,10);
BEGIN
RETURN
 CASE
  WHEN str = 'true' THEN 1
  WHEN str = 'false' THEN 0
   ELSE NULL
 END
END cf_safeToBoolean;
/
```

9. Run impdp utility as the SYSTEM user credential.

```
In C:\, type impdp SYSTEM/password@SID schemas=CSIDBA directory=DMPDIR dumpfile=EXP052813.DMP logfile=exp.log
```

Clean up import errors: recreate IX_AVE_BOOLEAN ON index and recompile procedures.

- In C:\, type Sqlplus CSIDBA/password@SID
- Type SQL> DROP INDEX IX_AVE_BOOLEAN.
- Type SQL> CREATE INDEX IX_AVE_BOOLEAN ON ATTRIBUTE_VARIANT_ELEMENT (ValueBooleanTABLESPACE C8_index.
- Type SQL> exec dbms_utility.compile_schema('CSIDBA');)

```
BACK TO FLOWCHART
```

11.6 FileVault Restoration

Once you restore the database, you are ready to restore the FileVault.

BACK TO FLOWCHART

11.6.1 FileVault Location

The FileVault location is determined during installation. When restoring a server or duplicating a configuration on a different server, you must verify, and if necessary, update the FileVault location to reconnect the files with the application.

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11.6.2 Locate the FileVault path

- 1. Search the pi-configuration.properties file for the FileVault location:
- a. Open the file pi-configuration.properties in Notepad.
- b. Search for the string:

'com.centricsoftware.server.FilePublisher.CENTRIC_FILE_VAULT.VaultFolder'

- 2. The FileVault folder location is displayed at the end of this line of code, for example:
- = C:\\PROGRA~1\\CENTRI~1\\Centric8\\FileVault
- BACK TO FLOWCHART

11.6.3 FileVault Dependancy Script for Oracle DB

- 1. Open Notepad and paste the following content:
 - SET SERVEROUTPUT ON;
 - -- @D:\Insectarium\Database\CentricHub\Oracle10g\Filevault.sql

This standalone script must first be edited, to include correct 'before' and 'after' path details. Run this script against an Oracle database to synchronize the file vault paths stored in the database with the revised physical file vault paths, usually occurring when restoring the file vault on a different server.

*********************/

/* MSSQL T-SQL implementation

SET NOCOUNT ON

- SET ARITHABORT ON;
- SET CONCAT_NULL_YIELDS_NULL ON;

SET QUOTED_IDENTIFIER ON;

SET ANSI_NULLS ON;

SET ANSI_PADDING ON;

SET ANSI_WARNINGS ON;

SET NUMERIC_ROUNDABORT OFF;

DECLARE @ROWCOUNT INT;

DECLARE @TOTROWCOUNT INT;

SET @TOTROWCOUNT=0

DECLARE @BeforePartialString nvarchar(100);SET @BeforePartialString='<source File Vault path>\'

DECLARE @AfterPartialString nvarchar(100);SET @AfterPartialString='<target File Vault path>\'

SET ROWCOUNT 10000

SET @ROWCOUNT = -1

WHILE @ROWCOUNT <> 0

BEGIN

UPDATE dbo.Centric_file_version

SET VaultFullPath=REPLACE(VaultFullPath,@BeforePartialString,@AfterPartialString)

WHERE CHARINDEX(@BeforePartialString,VaultFullPath) > 0;

SET @ROWCOUNT =@@ROWCOUNT;

SET @TOTROWCOUNT=@TOTROWCOUNT + @ROWCOUNT;

IF @ROWCOUNT > 0

PRINT CONVERT(varchar(12),@TOTROWCOUNT)+' Centric_file_version.VaultFullPath columns updated so far'

END;

*/

SET SERVEROUTPUT ON;

/

DECLARE

v_rowcount number(12);

```
v_totrowcount number(12) := 0;
```

```
v_BeforePartialString varchar2(100) := '<source File Vault path>\'; /*** YOU MODIFY THIS PATH ***/
```

```
v_AfterPartialString varchar2(100) :='<target File Vault path>\'; /*** YOU MODIFY THIS PATH ***/
```

BEGIN

-- v_BeforePartialString := 'BEFORE'; -- DUMMY for testing

-- v_AfterPartialString := 'AFTER'; -- DUMMY for testing

 $v_rowcount := -1;$

```
WHILE v_rowcount <> 0
```

LOOP

```
v_rowcount := 0;
```

-- DBMS_OUTPUT.PUT_LINE('dummy stmt');

UPDATE Centric_file_version c1 SET VaultFullPath = REPLACE(VaultFullPath,v_BeforePartialString,v_AfterPartialString)

WHERE COALESCE(INSTR(c1.VaultFullPath, v_BeforePartialString),0)> 0 AND rownum <= 10000;

```
v_rowcount := SQL%ROWCOUNT; DBMS_OUTPUT.PUT_LINE('v_rowcount=' ||
COALESCE(v_rowcount,-88));
```

v_totrowcount := v_totrowcount + v_rowcount;

END LOOP;

COMMIT;

```
DBMS_OUTPUT.PUT_LINE('v_totrowcount='||COALESCE(v_totrowcount,-99));
```

END;

/

--list

--show errors

2. Define the Source and Target FileVault Path in the above mentioned code as shown below.

Figure 11-13: Source and Target FileVault Path defined in the Code

```
40 DECLARE
41 v_rowcount number(12);
42 v_totrowcount number(12);
43 v_BeforePartialString varchar2(100) :='<source File Vault pathb\'; /*** YOU MODIFY THIS PATH ***/
44 v_AfterPartialString varchar2(100) :='<target File Vault pathb\'; /*** YOU MODIFY THIS PATH ***/
45 B&SOIN
46 -- v BeforePartialString := 'BEFORE'; -- DUNMY for testing
</pre>
```

- 3. Under C:, create a directory named OracleBackup.
- 4. Save the notepad file under the name filevault.sql.
- 5. In the command line prompt execute the following line:

sqlplus csidba/manager@CSIC8 @c:\OracleBackup\filevault.sql



Login to the application and check whether the Export Definition and Export Jobs are listed properly. (Setup - Services - Export/Import - Export Jobs)

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12. UNINSTALL CENTRIC 8

How to uninstall Centric 8

- 1. Select your domain name and log into the domain as Administrator.
- 2. Close all Windows applications.
- 3. On the Start menu, navigate to Programs ► Centric 8 ► Administration and select Uninstall Centric 8. The Confirm File Deletion dialog box is displayed.
- 4. To confirm that you wish to uninstall the Centric 8 software, click on Yes.
- 5. The **Remove Programs From Your Computer** dialog box is displayed. On completion of the uninstall process, click on **OK**.

PART 1V: APPENDICES

Included in Part IV:

- <u>Appendix A: Oracle Admin</u>
- <u>Appendix B: Wildfly Cluster</u>
- <u>Appendix C: Wildfly Memory Usage</u>
- <u>Appendix D: Image Upload Timeout</u>
- <u>Appendix E: Configuring SMTP on Windows 2008</u>
 <u>Server</u>
- <u>Appendix F: Configuring SMTP on Windows 2012</u> <u>Server</u>
- <u>Appendix G: Licensing & Administrator Password</u>
 <u>Management</u>
- <u>Appendix H: PDF Print Service</u>
- <u>Appendix I: Image Service</u>
- <u>Appendix J: LDAP Setup</u>
- <u>Appendix K: HTTPS Support</u>
- Appendix L: Enable HTTP Compression in IIS
- <u>Appendix M: Change SMTP Server information in</u> <u>Wildfly</u>
- <u>Appendix N: Jasper Setup</u>
- <u>Appendix O: Configure HTTPS</u>

A. ORACLE ADMINISTRATOR

1. Pre-requisites

System Admin Privilege

To create and set up an Oracle database for Centric PLM software, the user who is preparing the database must have System Administration authority over the system and the database to be created.

Oracle 11G Software Installed

The Oracle Database 11g Enterprise Edition Release 2 (11.2.0.3+) 64-bit is recommended. The database hosting system has to meet the minimum hardware requirements specified in the Oracle database installation guide. To achieve better performance for Centric PLM software, the Oracle database should be configured on effective and efficient machine.

Before creating an Oracle database to serve Centric PLM, you must have installed the Oracle database software.

Database must be created with the AL32UTF8 CHARACTER SET.

Step 9 of Create Centric 8 Database

Minimum Required Oracle DB Components

This guide will provide a minimal list to create a database using DBCA or upgrade an existing database to meet Centric PLM requirement.

- Prior to Centric PLM version 4.9.5, there are only 3 Oracle database components required to have the software work.
 - Oracle Workspace Manager
 - Oracle Database Catalog Views
 - Oracle Database Packages and Types
 - Centric PLM version 4.9.5 will require Oracle XML Database component to successfully function.

2. Create Oracle Database for 11.2.0.3+

To install Oracle Software, refer Oracle installation software and manual available at <u>www.oracle.com</u>.

Prior to creating the Centric 8 database, users must verify whether or not RAC and ASM are installed.

RAC settings do not affect database creation. However, ASM impacts the storage method of the database. This Guide uses File System for storage.

▶ How to create an Oracle Database 11.2.0.3+

- 1. Go to (File path folder) and run the setup file.
- 2. The Database Configuration Assistant dialog box is displayed; to start the configuration process, click on Next.

Figure A - 1: Database Configuration Assistant – Welcome dialog box



3. In the Database Configuration Assistant, Step 1 of 12: Operations dialog box, select Create a Database option and click on Next.

Figure A - 2: Database Configuration Assistant, Step 1 of 12: Operations dialog box

Database Configuration Assi	tant, Step 1 of 12 : Operations	
	Select the operation that you want to perform.	
	Create a Database	
	Configure Databable Options	
A Contraction	Contente a Datationer	
N/S -	🥂 Manage Templates	
	ASM configuration operations must be performed usin Configuration Assistant (ASMCA) from Oracle Ond Info Configuration C	
Cancel) Help	<u>4 8</u>	ack (<u>tjest</u>)

4. In the Database Configuration Assistant, Step 2 of 12: Database Templates dialog box, select Custom Database option and click on Next.

Note: The following components will not be installed:

- Oracle JVM
- Oracle Text
- Oracle Multimedia
- Oracle OLAP
- Oracle Spatial
- Enterprise Manager Repository
- Oracle Application Express
- Oracle Warehouse Builder
- Oracle Database Extension for .NET

Figure A - 3: Database Configuration Assistant, Step 2 of 12: Database Templates dialog box

	after data	y, such as when you need to change attributes like block : base creation.	size, which cannot be allered
	Select	Template	Includes Datafiles
	0	General Purpose or Transaction Processing	Yes
	•	Custom Database	No
2000	THE .	Data Warehouse	Yes.

5. In the Database Configuration Assistant, Step 3 of 12: Database Identification dialog box, enter the Oracle Database name (ORACLE_SID) and click on Next.

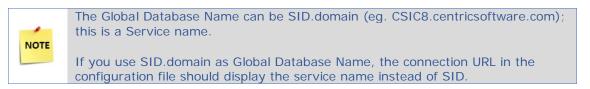


Figure A - 4: Database Configuration Assistant, Step 3 of 12: Database Identification dialog box

	domain".	iquely identified by a Global Database Name, typically of the form "nar		
	Global Database Name:	csica		
_		renced by at least one Oracle instance which is uniquely identified from any his computer by an Oracle System Identifier (SID).		

6. To install the Enterprise Manager, in the Database Configuration Assistant, Step 4 of 12: Management Options dialog box, select the Configure Enterprise Manager option. Oracle installs Automatic Maintenance Tasks to self-manage the database.

NOTE	Oracle Enterprise Manager is Oracle's single, integrated solution for managing all aspects of the Oracle Grid and the applications running on it. It aids managing the database.
	If not installed here, you can install the Enterprise Manager later.

Figure A - 5: Database Configuration Assistant, Step 4 of 12: Management Options dialog box

Enterprise Manager	Automatic Maintenance Tasks
Configure Enterprise M	anager
C Register with Orid Co	ntrol for centralized management
Management Service	No Agents Found *
Enable Daily Disk B	Control for local management Sackup to Recovery Area 02 + 00 + 6 AM C PM
-	

7. On Automatic Maintenance Tasks tab, select the Enable automatic maintenance tasks checkbox to enable the tasks.

-	Enterprise Manager	Automatic Maintenance Tasks
	tasks such as optimizer stat tasks are run in a predefiner throttled to prevent them fror maintenance windows are t	les the ability to automatically manage maintenance tistics collection and proactive advisor reports. These dimaintenance window and their CPU consumption is in interfering with normal user work. The default 10:00 PM - 2:00 AM on weekdays, and all weekend long, ged using Enterprise Manager at any time. nance tasks

Figure A - 6: Database Configuration Assistant, Step 4 of 12: Management Options dialog box

8. In the Database Configuration Assistant, Step 5 of 12: Database Credentials dialog box, select the Use the Same Administrative Password for All Accounts option. Enter details for the Password and Confirm Password fields. Click on Next.

Figure A - 7: Database Configuration Assistant, Step 5 of 12: Database Credentials dialog box

C Use Different Admin		
Uperfiame	Password	Confirm Password
SYS DYSTEM		
• Use the Same Adm	inistrative Password for All Ac	rounts
Password:		
Confirm Password		

9. In the Database Configuration Assistant, Step 6 of 12: Database File Locations dialog box, select the Use Database File Locations from Template option and click on Next.

Storage Type:	File System *
Storage Locations:	
• Use Database F	le Locations from Template
C Use Common Lo	ocation for All Database Files
Datatuse Files L	acaton Browse
OUse Oracle-Man	aged Files
Database Area:	Browse
Multiplex Redo	Logb and Control Files

Figure A - 8: Database Configuration Assistant, Step 6 of 12: Database File Locations dialog box

10. In the Database Configuration Assistant, Step 7 of 12: Recovery Configuration dialog box, select the Specify Fast Recovery Area check box and click on Next.



Figure A - 9: Database Configuration Assistant, Step 7 of 12: Recovery Configuration dialog box

	Choose the recovery options for t	he database:		
	Specify Fast Recovery Area			
	This is used as the default fo required for automatic disk bi the database files and recove and performance. Fast Recovery Area:	ased backup using Enters	orise Manager. C sically different d	vacle recommends
10000	Fast Recovery Area Size:	4977	1	M Bytes *
	Enable Archiving	Edit Archive Mode	Parametera)	
				le Location Variabi

11. In the **Database Configuration Assistant, Step 8 of 12: Database Content** dialog box, uncheck all displayed components as C8 PLM Software requires only Oracle XML DB.

Figure A - 10: Database Configuration Assistant, Step 8 of 12: Database Content dialog box

Database Components Custim B	(Auto)
	gure for use in your database. Provide the tablespi de. Components which appear disabled are either ch are not selected.
Coracte Text	DYDALAS =
Coracle OLAP	EVEALO: -
Cracle Spatial	EVEALOC +
T" Oracie Labert Berlehv	DYDTEM +
IT Sample Schemas	DYRAUX -
Enterprise Manager Repository	[PY[54],0; +]
E Oracle Warehouse Builder	(0ythAu/K =
T Oracle Detabase Vaut	GYBAUX =
Cracle Database Extensions for NE	T [IVIACK -

12. Click on the Standard Database Components button. In the Standard Database Components dialog box, select the Oracle XML DB option and click on OK.



Figure A - 11: Standard Database Components dialog box

Select the standard database co Oracle recommends that you alw Deselecting these components r components on the previous pag	ays install these nay cause you to	compone	nts in your database.
Cracle JVM	SYSTEM	3	
Oracle XML DB	SYSAUX	Ŧ	Customize)
Coracle Multimedia	SYSAUX	÷	
Oracle Application Express	SYSAUX	~	

13. In the Database Configuration Assistant, Step 9 of 12: Initialization Parameters dialog box, click on the Typical radio button. Select the Use Automatic Memory Management check box.



Figure A - 12: Database Configuration Assistant, Step 9 of 12: Initialization Parameters dialog box

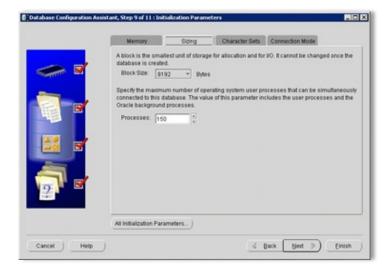
	Memory S	iding Char	acter Sets	Connection Mode	
	Typical				
.	Memory Size (SGA and	PGA): 3058 MB	<u> </u>		
-	Percentage:	100 %	390 MB		3058 M
	Use Automatic Mem	ory Management	Show Mem	ory Distribution)	
	Custom				
	Memory Management	Automatic Shares	i Memory Mari	egement -	
	SGA Size:	917	19	M Bytes	
	POA Size	305		M Bytes	
	Total Memory for Oracle	1223 M Dytes			
1					
1					
	All Initialization Parameters				

To view the default values, click on the Sizing tab.



Oracle provides 150 Processes as default. Processes parameter value should be set according to the size of Web Access Connection pool + 50 for Oracle Server's house- keeping processes.

Figure A - 13: Database Configuration Assistant, Step 9 of 12: Initialization Parameters dialog box



- 14. On the Character Sets tab, select the Use Unicode (AL32UTF8) option. Change other settings accordingly. Click on All Initialization Parameters button.
- Figure A 14: Database Configuration Assistant, Step 9 of 12: Initialization Parameters dialog box

ssistant, Step 9 of 11 : Initializat	
Memory	Sizing Character Sets Connection Mode
- Database Character Set	1
C Use the default	
The default character operating system: WE	set for this database is based on the language setting of this BMSWIN1252.
Use Unicode (AL32UT	IF 8)
Seding character sets groups.	to Unicode (AL32UTF8) enables you to store multiple language
C Choose from the list of	if character sets
Database Character 8	Set AL32UTF8 - Unicode UTF-8 Universal character set
Database Character 8	Set AL32UTF8 - Unicode UTF-8 Universal character set
Database Character S	
	Show recommended character sets only
National Character Set	Drow recommended character sets only AL16UTF16 - Unicode UTF-16 Universal character set

15. In the **All Initialization Parameters** table, change the value of *open_cursors* option to "400" and **processes** option to MaxConnectionSize + 50. Click on **Close**.

Name	Value	Override Def.	Category
cluster_database	FALSE		Cluster Database
compatible	11.2.0.0.0	×	Miscellaneous
control_files	C:10racleDBlo	×	File Configuration
db_block_size	8192	×	Cache and VO
db_create_file_dest			File Configuration
db_create_online_lo			File Configuration
db_create_online_lo			File Configuration
db_domain		×	Database identification
db_name	CSICB	×	Database identification
db_recovery_file_dest	(ORACLE_BAS	×	File Configuration
db_recovery_file_de	5218762752	×	File Configuration
db_unique_name			Miscellaneous
instance_number	0		Cluster Database
log_archive_dest_1			Archive
log_archive_dest_2			Archive
log_archive_dest_st	enable		Archive
log_archive_dest_st	enable		Archive
nis_language	AMERICAN		NLS
nis_territory	AMERICA		NLS
open_cursors	400	V	Cursors and Library Cache
pga_apgrepate_target	801112064		Sort, Hash Joins, Bitmap Indexes
processes	150	×	Processes and Sessions
remote_listener			Network Registration
remote_login_pass	EXCLUSIVE	*	Security and Auditing

Figure A - 15: All Initialization Parameters Table

16. Since this database is created using file system, it performs better if the Temp data file location and LOG files are separated from main Data files.

Increase Log file size and group number will reduce the log switch frequency and wait time for read consistency.

- Default setting:
- HD1: SYSTEM, SYSAUX, UNDOTBS, USERS, Control files
- HD2: TEMP TBS files, Flash back area
- HD3: Log files, future INDEX TBS
- HD4: future DATA TBS

17. In the Database Configuration Assistant, Step 10 of 12: Database Storage dialog box,

a. Enlarge TEMP Tablespace by:

- Moving temp file to 2nd HD.
- Increasing temp files for Temporary tablespace. Oracle 64bit default 8k block size has limitation on file size: up to 32G, therefore add the second temp file and/or third file to default Temporary tablespace (temp).

Figure A - 16: Database Configuration Assistant,	Step 10 of	^c 12:Data	base Storage	e dialog b	10X
--	------------	----------------------	--------------	------------	-----

	Opmeral Basrage				
0-Tablespaces	Name TEMP				
- Byerskux	Close bigfile tablespace				
-Sporstow	Tampfiles		12/11/		
-65-000	File Name	File Directory	Size		
-SUNDOTISIT	tob Migmet	D10racleO@oradate(08_U		MD	
Legueers	_ temp82 dbf	D10racleDBoredateCSICB	25	MD	
Cutaties Califiedo Log Groupe					
-Ga2 -Ga3	S 8				
	M Online IT Raad Only IT Others Repeat	-)			
	- Tige C Permanent				
	■ Temporary	orary Tableopace			
	· Temporary	orary Tableopace			
County Develo	■ Temporary	orary Tablespace	_		File Location Variable

b. Increase Redo Log Files by:

- Increasing File size from default 51200K to 512M.
- Moving files location to 3rd HD.
- Increasing file group number from 3 to 6 by clicking on the Create button.

Ottorage ↓-⊡Controttie	General Croup # 1	
О-Парерасев -Фуруталик -Фуруталик	File Size: 512	Withden *
-EytemP -Eyundottest	File Name	File Directory
Gusers	redo01.jog	EXPracted/Dorsenate(Ed_UNIOUE_New/E).
-94 -997 -997		
-Spik -Spis -Spis	9	
Crease Develo	-	Vie Location Variables

Figure A - 17: Database Configuration Assistant, Step 10 of 12: Database Storage dialog box

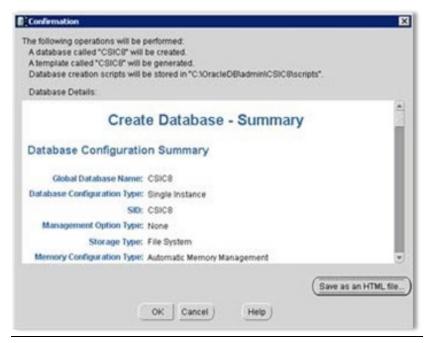
18. In the Database Configuration Assistant, Step 11 of 12: Creation Options dialog box, select the Create Database and Save as a Database Template checkbox and click on Finish.

Figure A - 18: Database Configuration Assistant, Step 11 of 12: Creation Options dialog box

Create Database Save as a Database Template
Name: CSIC8 Description (
Ovenerate Database Creation Stripts Destination ChOracleDBladminiCSICBisripts Browse

19. To create a database, in the Confirmation dialog box, click on OK.



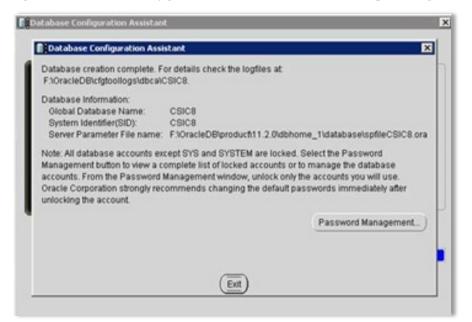


- 20. The **Database Configuration Assistant** dialog box is displayed as the database creation is in progress.
- Figure A 20: Database Configuration Assistant dialog box

Ideal Platform for Grid Computing Low cost servers and storage Highest availability Best scelability	Creating and starting Oracle instance Creating database files Creating data dictionary views Adding Oracle XML DB Completing Database Creation	
75-DS	Database creation in progress	
	Log files for the current operation are located at:	

21. On completion of the database creation process, click on Exit.

Figure A - 21: Database Configuration Assistant - Database creation complete dialog box



3. Create Oracle Database for 11.2.0.4+

How to create Oracle Database for 11.2.0.4+

1. Go to the Oracle Setup folder/database and run the Setup.exe file.

🍌 install	1/23/2014 1:51 AM	File folder
🗼 response	1/23/2014 1:51 AM	File folder
📕 stage	1/23/2014 1:53 AM	File folder
e readme	10/22/2013 12:34 AM	HTML Document
🛃 setup	10/22/2013 12:31 AM	Application
e welcome	10/22/2013 12:34 AM	HTML Document

 In the Oracle Database 11g Release 2 Installer – Installing Database – Step 1 of 11 dialog box, de-select the I wish to receive security updates via my oracle support checkbox and click on Next.

Configure Security Updates		nformed of security issues, install the product
Download Software Updates Apply Software Updates	and inflate configuration manager. Egait	verv detall. Easier for you if you use your My Cracle Support email address/username.
Installation Option Grid Installation Options	V I wish to receive security upda	des via My Oracle Support.
Install Type	My gracie Support Password	
Typical Installation		
Prerequiste Checks		
Summary		
Install Product		
Finish		

Figure A - 22: Oracle Database 11g Release 2 Installer – Installing Database – Step 1 of 11 dialog box

- 3. To continue installation, click on Yes.
- 4. In the Oracle Database 11g Release 2 Installer Installing database Step 2 of 11 dialog box, select Skip software updates and click on Next.

Figure A - 23: Oracle Database 11g Release 2 Installer – Installing Database – Step 2 of 11 dialog box

Oracle Database 11g Release 2 ownload Software Updates	nstaller - Installing database - Step 2 of 11		ORA	
Configure Security Ubdates Downfload Software Updates Acety Software Updates Anthon Option Ond Installation Options Install Type Typical Installation Peregulate Oncols	Download software updates for this installation. system requirement checks, PatchSet Updates (F Setect one of the following options: O Use My Oracle Support credentials for downlink My Oracle Support gase name.	PSUs), and other recomme		I updates to the install
/ Summary / Instal Product / Presh	Use pre-gownloaded software updates Locators			Biovese
Hep		< Back	Next>	Fettal Cance

5. In the Oracle Database 11g Release 2 Installer - Installing database – step 3 of 11 dialog box, select the Create and configure a database option and click on Next.

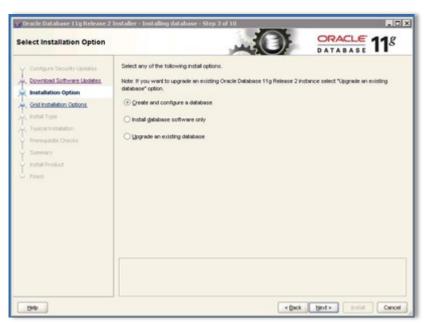


Figure A - 24: Oracle Database 11g Release 2 Installer – Installing Database – Step 3 of 11 dialog box

6. In the Oracle Database 11g Release 2 Installer - Installing database – Step 4 of 11 dialog box, select the Server Class option and click on Next.





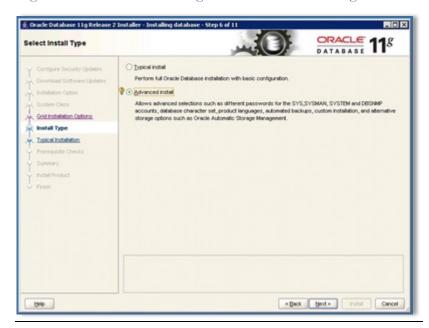
7. In the Oracle Database 11g Release 2 Installer - Installing database – step 5 of 11 dialog box, select the Single instance database installation option and click on Next.

Contigure Security Lipidates Select the type of diatabase installation you want to perform. Download Software Lipidates Installation Cyston Strint Class Oracle Real Application Clusters diatabase installation Crid Installation Options Oracle RAC Ong Node diatabase installation Prevalute Checks Summary Pathal Product Priotin	Oracle Database 11g Release 2 Frid Installation Options	Installer - Installing database - Step 5 of 11	1 ^g
	Download Software Updates Installation Option Sustem Class Grid Installation Options Install Type Typical Installation Prerequisite Checks Surveary Install Product	Select the type of database installation you want to perform.	

Figure A - 26: Oracle Database 11g Release 2 Installer – Installing Database – Step 5 of 11 dialog box

8. In the Oracle Database 11g Release 2 Installer - Installing database – step 6 of 11 dialog box, select the Advanced Install option and click on Next.

Figure A - 27: Oracle Database 11g Release 2 Installer – Installing Database – Step 6 of 11 dialog box



- 9. In the Oracle Database 11g Release 2 Installer Installing database dialog box,
- a. In the **Available Languages** box, click on a language and then click on the **»** arrow button. The selected language will be displayed in the **Select Languages** box.
- b. Repeat step a, to add one or more Languages.

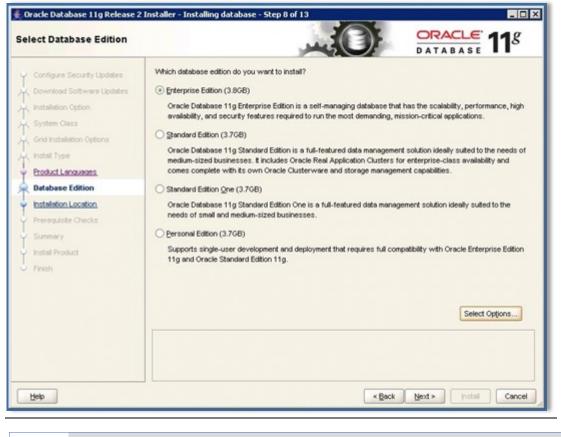
To continue the installation process, click on Next.

Figure A - 28: Oracle Database 11g Release 2 Installer – Installing Database – Step 7 of 13 dialog box

Select Product Languages	Installer - Installing database - Step		
Configure Security Updates Download Software Updates Installation Option System Class Grid Installation Options Install Type Product Languages Database Edition Installation Location Prerequisite Checks Summary Install Product Finish	Select the languages in which your prov <u>Available Languages:</u> Arabic Bengali Brazilian Portuguese Bulgarian Canadian French Catalan Croatian Czech Danish Dutch Egyptian English (United Kingdom) Estonian Finnish French German Greek Hebrew Hungarian Instandie	ted Languages: sh	
Help		< Back Next > Instell Canc	el

10. In the Oracle Database 11g Release 2 Installer - Installing database – step 8 of 13 dialog box, select the Enterprise Edition option and click on Next.







- 11. In the Oracle Database 11g Release 2 Installer Installing database step 9 of 13 dialog box,
- a. To accept the default destination folder, click on Next OR
- b. To select a different destination folder, click on Browse.

Click on Next.

NOTE

Oracle Database 11g Release 2	Installer - Installing database - Step 9 of 13	- 0 >
Specify Installation Location		11 ^g
Configure Security Updates	Specify a path to place all Cracle software and configuration-related files installed by this installation location is the Cracle base directory for the installation owner.	
Installation Option System Class Grid Installation Options Journal Type	Qracle Base: C: app\Administrator Specify a location for storing Cracle database software files separate from database configuration fi Oracle base directory. This software directory is the Cracle database home directory.	Browse
Product Languages	Software Location ClappiAdministrator/product/11.2.0/dbhome_1	Browse
Installation Location		
Prerequisite Checks Summary Install Product Finish		
Rep	< Back Next > Fundal	Cancel

Figure A - 30: Oracle Database 11g Release 2 Installer – Installing Database – Step 9 of 13 dialog box

12. In the Oracle Database 11g Release 2 Installer - Installing database – step 10 of 13 dialog box, select the General purpose/Transaction processing option and click on Next.

Download Software Updates 	elect Configuration Type	
	Configure Security Updates Download Software Updates Installation Option System Class Grid Installation Options Install Type Product Languages Detailbase Edition Installation Location Configuration Type Configuration Type Configuration Options Management Options Management Options Database Storage Database Storage Database Storage Database Storage	Select the type of database that you want to create. © <u>General Purpose / Transaction Processing</u> A starter database designed for general purpose use, or for transaction-heavy applications. C <u>Bata Warehousing</u>
Instal Product	Summary	

Figure A - 31: Oracle Database 11g Release 2 Installer – Installing Database – Step 10 of 20 dialog box

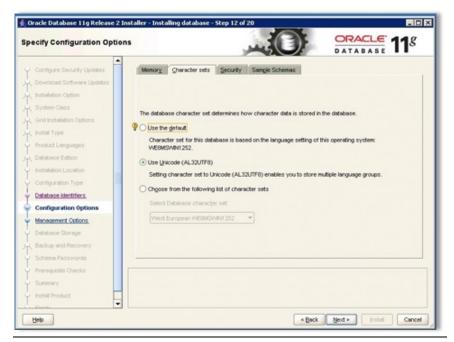
13. In the Oracle Database 11g Release 2 Installer - Installing database – step 11 of 20 dialog box, enter the Oracle database name: (ORACLE_SID)

Figure A - 32: Oracle Database 11g Release 2 Installer – Installing Database – Step 11 of 20 dialog box

pecify Database Identifier		g
Configure Security Updates	An Oracle database is uniquely identified by a Global Database Name, typically of the form "name.domain". Global database name: CSIC8.csi.local	
System Class Grid Installation Options	A database is referenced by at least one Oracle instance that is uniquely identified from any other instance this computer by an Oracle Service Identifier (SD).	on
Y Install Type Product Languages Y Database Edition	Qracle Service Identifier (SID)	
Configuration Type	Database Service name is used by applications to connect to RAC One Node database.	
Database Identifiers <u>Configuration Options</u> Management Options		
Database Storage Backup and Recovery		
Schems Passwords Prerequiste Checks Summery		
histal Product	< Back Next > Protoil	Cancel



- 14. In the Oracle Database 11g Release 2 Installer Installing database step 12 of 20 dialog box, on the Character sets tab, select the Use Unicode (AL32UTF8) option and click on Next.
- Figure A 33: Oracle Database 11g Release 2 Installer Installing Database Step 12 of 20 dialog box



15. In the Oracle Database 11g Release 2 Installer - Installing database – step 13 of 20 dialog box, select the Use Oracle Enterprise Manager Database Control for database management option and click on Next.

Oracle Database 11g Release 2	e Installer - Installing database - Step 13 of 20
	DATABASE
Configure Security Updates	You can use Oracle Enterprise Manager 11g Grid Control to manage each Oracle Database 11g centrally, or manage each database locally using Oracle Enterprise Manager 11g Database Control. For Grid Control, specify the Oracle Management Service to manage your database.
Grid Installation Options	Select the management options for your instance.
v, Install Type Product Languages	O Use an existing Oracle Enterprise Manager Grid Control for database management.
Database Edition	Management Service: No Agent found.
Configuration Type Database Identifiers	Use Oracle Enterprise Manager Database Control for database management.
Configuration Options	
Management Options	
Database Storeas Backup and Recovery Schema Passwords	
Prerequisite Checks Summary	
Install Product	
Help	< Back Next > Install Cancel

Figure A - 34: Oracle Database 11g Release 2 Installer – Installing Database – Step 13 of 20 dialog box

- 16. In the Oracle Database 11g Release 2 Installer Installing database step 14 of 20 dialog box,
- a. To accept the default destination folder, select the **File System** radio button and click on **Next**. Else, to select a different destination folder, click on **Browse**.

To continue the installation process, click on Next.

pecify Database Storage	Options		DATABASE 11
Configure Security Updates	File System Use a file system for database :	storage. For optimal database organization ar	d performance, Oracle recommends
L Installation Option		Oracle database software on different disk	
System Class	Specify gatabase file location:	C:\app\Administrator\oradata	Browse
Crid Installation Options	Oracle Automatic Storage M	anagement	
Product Languages	database files for optimal I/O per	gement (Oracle ASM) simplifies database sto rformance. Select this option if you intend to	
Database Edition Installation Location	Automatic Storage Management Specify password of ASMSN		
	 Specify password or Asware 		
Configuration Type			
Database Identifiers			
Database identifiers			
Database Identifiers Configuration Options			
Database Identifiers Configuration Options Management Options Database Storage Backup and Recovery.			
Database identifiers Configuration Options Management Options Database Storage Backue and Recovery Schema Passwords			
Database Identifiers Configuration Options Management Options Database Storage Backup and Recovery Schema Passwords Prerequistie Checks			
Database ktertifiers Configuration Options Management Options Database Storage Backup and Recovery Schema Passwords Prerequisté Checks Summery			
Database Identifiers Configuration Options Management Options Database Storage Backue and Recovery Schema Pasewords Prerequisté Checks Summery Instal Product			

Figure A - 35: Oracle Database 11g Release 2 Installer – Installing Database – Step 14 of 20 dialog box

17. In the Oracle Database 11g Release 2 Installer - Installing database – step 15 of 11 dialog box, select the Do not enable automated backups radio button and click on Next.

🛔 Oracle Database 11g Release 2 Installer - Installing database - Step 15 of 20 . O × DATABASE 118 **Specify Recovery Options** Enable or disable automated backups for your database. If you choose to enable automated backups, then the Backup Job uses the specified recovery area storage. Configure Security Updates Cownload Software Updates installation Option Do not enable automated backups K System Class O Enable automated backups Crist Installation Options Product Languages Recovery Area location: C.VapplAdministrator/recovery_area Installation Location Bacilup Job Operating System credentials Upername: Administrator Baseword. Management Options · Database Storage Backup and Recovery Schema Passwords . «Back Next» (rotal Cancel Help

Figure A - 36: Oracle Database 11g Release 2 Installer – Installing Database – Step 15 of 20 dialog box

18. In the Oracle Database 11g Release 2 Installer - Installing database – step 16 of 20 dialog box, select the Use the same password for all accounts radio button. Enter details in the Password field and click on Next.



When you choose this option, the same password will be used for "SYS", "SYSTEM", "SYSMAN", "DBSNMP".

	1	-		DATABASE
Configure Security Updates Download Software Updates Installation Option	The starter database contai the end of installation. After	installation is complete, y used for database manag	ou must unlock and set n gement and postinstallatio	words that are expired and locked at ew passwords for those accounts in functions are left unlocked, and se accounts.
System Class	O Use different password:	s for these accounts		
Celd Installation Options Install Type Product Languages Database Edition Installation Location Configuration Type Database Identifiers Configuration Options	Password SYS SYSTEM DESNAP OUse the same password		willim password	
Management Options Database Storage Backup and Recovery Schema Passwords	Bassword:		Confirm password	******
Prerenuiste Checks Summary Install Product				

Figure A - 37: Oracle Database 11g Release 2 Installer – Installing Database – Step 16 of 20 dialog box

19. In the Oracle Database 11g Release 2 Installer - Installing database – step 17 of 20 dialog box, the Installer will check for requirements based on your selection before proceeding with the installation.

Figure A - 38: Oracle Database 11g Release 2 Installer – Installing Database – Step 17 of 20 dialog box

🖞 Oracle Database 11g Release 2	Installer - Installing database - Step 17 of 20	-0
Perform Prerequisite Chec		
Configure Security Updates Download Software Updates Installation Option System Class Crist Installation Options Install Type Product Languages Database Edition Installation Location Configuration Type Database Identifiers Configuration Options Management Options Database Storage Backup and Recovery	Verifying that the target environment meets minimum installation and have selected. This can take time. Please wat.	
Schema Passwords Prerequisite Checks	r	
Summary Instal Product		
Help		< Back Next > Instal Cancel

20. In the Oracle Database 11g Release 2 Installer - Installing database step 18 of 20 dialog box, verify the details. To make changes to the changes to the settings, click on Back. Else, to continue to the next step, click on Save Response File button.

Figure A - 39: Oracle Database 11g Release 2 Installer – Installing Database – Step 18 of 20 dialog box

Summary	
Configure Security Updates	Oracle Database 11g Release 2 Installer
Download Software Updates	B-Global settings
Le Installation Option	Disk space: required 3.8 GB available 35.09 GB
	Source location: Cillaya Oracle/oracle_11.2.0.4_install/p13390677_112040_MSMN+x86-64_1of7\dat
Costen Class	Install method: Advanced installation
Crid Installation Options	-Database edition: Enterprise Edition (Create and configure a database)
k Install Type	-Oracle base: C'ApplAdministrator
Product Languages	-Software location: C/app/Administrator/product/i1 2.0/dbhome_1
L. Database Edition	OraMTS Port Number: 49157
	Inventory information
Installation Location	Inventory location: C/Program Files/Oracle/inventory
Configuration Type	Database information
Detabase Identifiers	-Configuration: General Purpose / Transaction Processing
Configuration Options	Global database name: CSIC8.csi.local
Management Options	Oracle system identifier (SD): CSIC8
Database Storage	-Allocated memory. 3277 MB
	tutomatic moment management option. TDLE
Backup and Recovery	
Scheme Pesswords	Save Response File
Prerequiste Checks	
Summary	
instal Product	
A. Datab	■

21. To save the db.rsp in the local location for reference, click on the **Save** button.

Figure A - 40: Save Response File dialog box

Location:	Ca Administrator	- 38 🐿 🖄 💌 😢
🗀 Contac	ts 🗀 Saved Games	
Deskto	p 🛄 Searches	
Docum	ents 🗀 Videos	
Downk	pads	
Favorê	es	
Links		
logs logs		
Music		
Picture	6	
File Name:	do rap	
File Type:	*/sp	•
		Save

22. The Installation progress is displayed on the screen as shown below:

Figure A - 41: Oracle Database 11g Release 2 Installer – Installing Database – Step 19 of 20 dialog box

stall Product		DATABASE 118
Configure Security Updates	Progress	
C Download Software Updates	0%	
Installation Option	Loading products list. Please wait.	
K, System Class		
Grid Installation Options	r Status	
k Install Type	Oracle Database installation	h Desman
Product Languages	Oracle Database installation Prepare	In Progress In Progress
L Database Edition	Copy files	Pending
Installation Location	Setup files Oracle Database configuration	Pending Pending
	Cracle Database comparation	Penalty
Configuration Type		
Database Identifiers		
Configuration Options		
Management Options		
Database Storage		
Backup and Recovery		
Schema Passwords		Qetails Setry Ski
Prerequiste Checks		
Summary	ORACLE 118	Consolidate
Install Product	DATABASE	Compress Control
- Carina	BUT ALL THE PARTY	

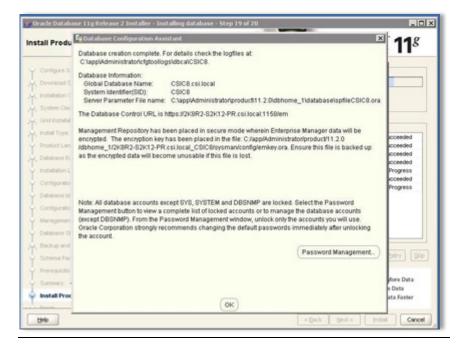
23. The Installation progress is displayed on the screen as shown below:

Figure A - 42: Oracle Database 11g Release 2 Installer – Installing Database – Step 19 of 20 (2) dialog box

Oracle Database	11g Release 2 Installer - 1	nstalling database - Step 19 of 20	
nstall Product			ACLE 11g
Contraine 5	Database Configuration As	sistant	
Download S			
Installation C			
K System Clac	Ideal Platform for	Copying database files	
Crid Installat	Grid Computing	Creating and starting Oracle instance	
Instal Type	Trank 1	Completing Database Creation	
Product Lan	Low cost servers and storage		cceeded
	and storage		cceeded
	Highest evailability	Alexandratika ang Kanja ang Kanja	cceeded
Installation L		Clone database creation in progress	Progress cceeded
Configuratio	Best scelability	2%	Progress
Detabase Id		Log files for the current operation are located at:	
Configuratio		C:\app\Administrator\cfgtoollogs\dbca\CSIC8	
Managemen			
Debabase St			
Eackup and		(Stop)	
Schema Pas			Betry Sa
Prerequisite			
Summery	DATAB		te en Fast,
Install Product		omputing	Reliable, and Scalable Low-Cost Grids
. Distain	•	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Serie Serie Group
Help		* Back Sect *	Instal Cance

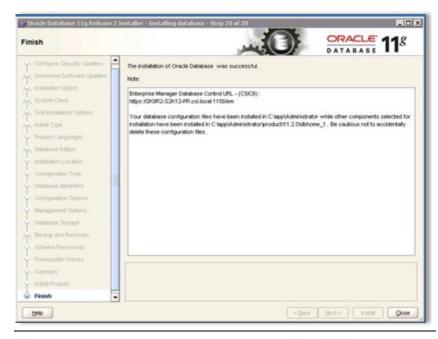
24. Click on OK.

Figure A - 43: Oracle Database 11g Release 2 Installer – Installing Database – Step 19 of 20 (3) dialog box



25. Save the Enterprise Manager Database URL and click on Close.

Figure A - 44: Oracle Database 11g Release 2 Installer – Installing Database – Step 20 of 20 dialog box



4. Create Centric8 Database by Script

Before installing Centric 8 Database, create an Oracle Instance and ensure that it is up and running. The ORACLE_SID and ORACLE_HOME variables should exist in the database Server.

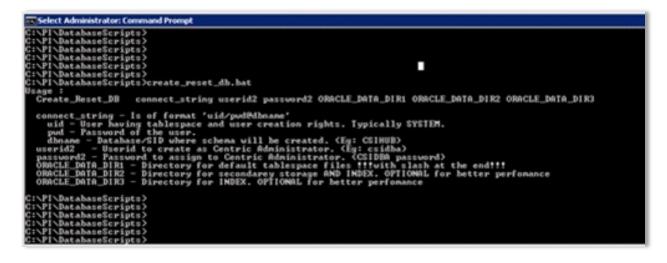
The Centric Software database scripts will create Centric 8 Database to serve PLM Server.

- create_reset_db.bat is a major script to be created in Centric 8 Database. It should be executed by Oracle SYSTEM User.
- 1. The script will check if the Oracle Instance is created to meet pre-requisites.
- 2. It will create 4 basic Tablespaces (CENTRICHUB, CFV_DATA, C8_DATA, C8_INDEX) if they do not exist.
- 3. It will create user (if the user does not exists) and create schema for Centric 8 Database.

C:\PI\DatabaseScripts>create_reset_db.bat

Usage:

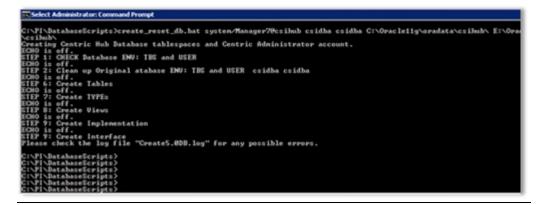
Create_RESET_DB connect_string userid2 password2 ORACLE_DATA_DIR1 [ORACLE_DATA_DIR2] [ORACLE_DATA_DIR3] connect_string - Is of format 'uid/pwd@dbname' uid - User having tablespace and user creation rights. Typically SYSTEM. pwd - Password of the user. dbname - Database/SID where schema will be created. (Eg: CSIHUB) userid2 - Userid to create as Centric Administrator. (Eq: csidba) password2 - Password to assign to Centric Administrator. (CSIDBA password) ORA_DATA_DIR1 - Directory for default tablespace files !!! with slash at the end!!! [ORA_DATA_DIR2] - Directory for secondary storage AND INDEX. OPTIONAL for better performance [ORA_DATA_DIR3] - Directory for INDEX. OPTIONAL for better performance



C:\PI\DatabaseScripts>create_reset_db.bat system/Manager7@csihub csidba csidba C:\Oracle11g\oradata\csihub\ E:\Oracle11g\oradata\csihub\

Creating Centric Hub Database tablespaces and Centric Administrator account. ECHO is off. STEP 1: CHECK Database ENV: TBS and USER ECHO is off. STEP 2: Clean up Original atabase ENV: TBS and USER csidba csidba ECHO is off. STEP 6: Create Tables ECHO is off. STEP 7: Create TYPEs ECHO is off. STEP 8: Create Views ECHO is off. STEP 9: Create Implementation ECHO is off. STEP 9: Create Interface

Check the log file Create5.0DB.log for any possible errors.



The C8 Database Installation is completed.

5. Create Centric 8 Database Manually

Before creating the Centric 8 database manually, the following two prerequisites must be verified:

- NLS_CHARACTERSET must be AL32UTF8.
- Ensure that the XML DB is installed.

1. Verify NLS_CHARACTERSET

When database instance is created, the NLS_CHARACTERSET should be set as AL32UTF8.

C:\sqlplus / as sysbda

SQL> SELECT value\$ FROM sys.props\$ WHERE name = 'NLS_CHARACTERSET';

It should return AL32UTF8.

If the answer is different, the database has to be recreated with appropriate initial parameters.

Install database instance with proper initial parameter as explained in section <u>Create Oracle</u> <u>Database</u>.

2. Install XML DB

Oracle XML DB is part of the seed database and is installed by Database Configuration Assistant (DBCA) by default. No additional steps are required to install Oracle XML DB.

How to verify that XML DB is installed in the database

- 1. Login in database as SYS user using SQL Plus.
- a. C:\ sqlplus sys/password as sysdba
- b. SQL>select comp_name from dba_registry where comp_name like '%XML%';

COMP_NAME

Oracle XML Database

Indicates XML DB is installed in the database and there is no additional step required.

- 2. "No rows selected" indicates that the XML database is not installed.
- 3. To install XML Database,
- a. SQL> @?/rdbms/admin/catqm password SYSAUX TEMP YES



xdbpnd is the password for xdb. It can be different from the system password. It will be a lengthy process.

- b. SQL> GRANT EXECUTE ON utl_file TO xdb;
- c. SQL> GRANT EXECUTE ON dbms_lob TO xdb;
- d. SQL> ALTER SYSTEM SET DISPATCHERS = "(PROTOCOL=TCP)(SERVICE=<SID>XDB)" SCOPE=both;
- 4. Use dbms_utility.compile_schema to compile invalid objects if there are any returned rows:

SQL> select distinct owner from all_objects where status='INVALID';

OWNER

CSIDBA

PUBLIC

SQL> exec dbms_utility.compile_schema('CSIDBA');

SQL> exec dbms_utility.compile_schema('PUBLIC');

- 5. Repeat Step 3 till "no rows selected" is no longer displayed.
- 6. To verify that the XML Database is installed, repeat step 1b (shown below):

SQL> select comp_name from dba_registry where comp_name like '%XML%';

COMP_NAME

Oracle XML Database

- 7. Create Required Tablespaces: CENTRICHUB, CFV_DATA, C8_DATA, C8_INDEX
- a. Use SQL Plus as **SYSTEM** user to create all tablespaces. For performance reason, separate CENTRICHUB and C8_INDEX into different devices.
- b. Manual Script:

C:\>Sqlplus SYSTEM/Password@SID SQL> CREATE TABLESPACE \$TABLESPACE LOGGING DATAFILE '\$DIRECTORY_FULL_PATH\\$TABLESPACE.ora' SIZE 2000M REUSE AUTOEXTEND ON NEXT 500M EXTENT MANAGEMENT LOCAL AUTOALLOCATE SEGMENT SPACE MANAGEMENT AUTO;



Replace *\$DIRECTORY_FULL_PATH* and *\$TABLESPACE*

c. Batch File:

C:\PI\DatabaseScripts\Admin>createTS.bat SYSTEM/Manager7 C:\OracleDB\ G:\OracleDB\ H:\OracleDB\

Update Tablespace

Creating Tablespace in C:\OracleDB\ G:\OracleDB\ H:\OracleDB\

Check the log file CREATE_TS.log for any possible errors.

d. Script File:

Use SQL Plus to login database as sys or system.

C:\PI\DatabaseScripts\Admin>sqlplus system/Manager7

SQL> @createTS C:\OracleDB\ G:\OracleDB\ H:\OracleDB\

- 8. Create Centric 8 Database User (CSIDBA)
- a. The CSIDBA must be created using SYSDBA role for granting SYS.DBMS_LOCK privilege.
- b. Manual Script

C:\>Sqlplus SYSTEM/Password@SID as SYSDBA

Type the following commands at the SQL Plus prompt:

CREATE USER **CSIDBA** PROFILE DEFAULT IDENTIFIED BY **CSIDBA** DEFAULT

TABLESPACE CENTRICHUB TEMPORARY TABLESPACE TEMP ACCOUNT UNLOCK;

GRANT ALTER SYSTEM TO CSIDBA;

GRANT CREATE PROCEDURE TO CSIDBA;

GRANT CREATE SEQUENCE TO CSIDBA;

GRANT CREATE TABLE TO CSIDBA;

GRANT CREATE TABLESPACE TO CSIDBA;

GRANT CREATE TRIGGER TO CSIDBA;

GRANT CREATE TYPE TO CSIDBA;

GRANT CREATE VIEW TO CSIDBA;

GRANT DROP TABLESPACE TO CSIDBA;

GRANT FORCE ANY TRANSACTION TO CSIDBA;

GRANT SELECT ANY DICTIONARY TO CSIDBA;

GRANT UNLIMITED TABLESPACE TO CSIDBA;

GRANT CONNECT TO CSIDBA;

GRANT RESOURCE TO CSIDBA;

GRANT EXECUTE ON SYS.DBMS_LOCK TO CSIDBA;

GRANT EXECUTE ANY PROCEDURE TO CSIDBA;

GRANT debug connect session to CSIDBA;

GRANT debug any procedure to CSIDBA;

c. Batch File

C:\PI\DatabaseScripts\Admin>createUser.bat SYSTEM/Password@SID CSIDBA password

d. Script File

Use SQL Plus to login database as sys or system C:\PI\DatabaseScripts\Admin>sqlplus system/password@SID as **sysdba** SQL> @admin createuser CSIDBA password

- —
- e. Create Database Schema

Database schema should be created as **CSIDBA** user.

Go to the SQL scripts location as following:

C:\>Sqlplus CSIDBA/password@SID @CreateSchema.sql

C:\>Sqlplus CSIDBA/password@SID @CreateSoftware.sql

6. Upgrade Centric 8 Database To Current Version

To upgrade the Centric PLM Software to a newer version, initially you need to migrate the Centric 8 Database to a newer version. Customer requires updating database environment to meet Centric 8 database prerequisites and run migration scripts to migrate Centric 8 database schema and software without losing data.

▶ How to upgrade the C8 Database

MigrateToCurrent.bat script provides a single process to migrate Centric 8 database to meet prerequisites. The script will execute following steps:

- 1. Export database using data pump before the upgrade process.
 - The exported damp file will stored in Oracle provided **DATA_PUMP_DIR** directory.
 - To verify the directory location:
 - SELECT directory_path FROM all_directories

Where directory_name = 'DATA_PUMP_DIR';

- 2. Verify NLS_CHARACTERSET parameter is set to be AL32UTF8
 - If the requirements are not met with, migration script will be terminated.
 - The database must be recreated if it has been created using any other CHARACTERSET other than AL32UTF8.
- 3. Verify XML DB component is installed.
 - If requirements are not met with, the migration script will be terminated. Users can install XML DB as per instructions provided in the section <u>How to install XML Database</u>.
- 4. Create new tablespaces: C8_DATA and C8_INDEX if these tablespaces do not exist.
- 5. Grant all required privileges.
- 6. Run Migrate script to migrate schema to current version.

7. Import/Export (Data Dump) Utility for Centric 8 Database

Before running the migration script, ensure that you take a database dump to avoid any mistakes and data lost. Before exporting data, you should the terminate application server and disconnect from the database to guarantee data consistency.

Oracle Data Dump utility provides an easy way to restore the database in case of errors that may occur during the migration process. It is executed on command prompt.

Centric 8 provides **ExportC8** and **ImportC8** utilities to import and export C8 database. Details are provided in the <u>Centric 8 Database Utilities</u> section. A typical Setup for Data Dump is as follows:

Use Oracle Directories

1. View database directories: Use all_directories to view default directories.

SQL> select directory_name from all_directories;

DIRECTORY_NAME

DMPDIR XMLDIR DATA_PUMP_DIR

ORACLE_OCM_CONFIG_DIR

2. Create your own directory as SYSTEM user and Grant to CSIDBA:

SQL>CREATE DIRECTORY DMPDIR AS 'F:\C8_DMP';

SQL>GRANT READ, WRITE ON DIRECTORY DMPDIR TO CSIDBA;

Export Database

- 1. **Expdp/Impdp** can be run at local host or remote server command prompt and the dump files will exist in the Database server directory.
- 2. Run expdp utility as the SYSTEM user credential. For exporting consistent data, users must use the *FLASHBACK_TIME* parameter

C:\> expdp SYSTEM/password@SID schemas=CSIDBA directory=DMPDIR dumpfile=EXP052813.DMP logfile=imp.log FLASHBACK_TIME=SYSTIMESTAMP

Import Database

- 1. Copy the dump file to directory before to be imported.
- 2. Drop CSIDBA user. Make sure there are no CSIDBA users connecting to database.

C:\>Sqlplus system/password@SID

SQL> drop user CSIDBA cascade;

- 3. Recreate the schema user.
- 4. Create the cf_safeToNumber and safeToBoolean functions as CSIDBA user.

```
C:\>Sqlplus CSIDBA/password@SID
CREATE OR REPLACE
FUNCTION cf_safeToNumber
( str VARCHAR2
)
RETURN NUMBER DETERMINISTIC
AS
num NUMBER(37,10);
BEGIN
```

```
num := CASE WHEN INSTR(str, 'E', 1, 1) > 0 THEN TO_NUMBER(str,
'90.99999999999999999EEEE') ELSE TO_NUMBER(str,
RETURN num:
EXCEPTION
 WHEN OTHERS THEN
 RETURN NULL:
END:
1
CREATE OR REPLACE
FUNCTION cf_safeToBoolean
(str VARCHAR2
)
RETURN NUMBER DETERMINISTIC
AS
BEGIN
 RETURN
  CASE
   WHEN str = 'true' THEN 1
   WHEN str = 'false' THEN 0
       FLSE NULL
END
END cf_safeToBoolean;
/
```

5. Run impdp utility as the SYSTEM user credential.

C:\> impdp SYSTEM/password@SID schemas=CSIDBA directory=DMPDIR dumpfile=EXP052813.DMP logfile=exp.log

6. Clean up import errors: recreate IX_AVE_BOOLEAN ON index and recompile procedures.

C:\>Sqlplus CSIDBA/password@SID
SQL> DROP INDEX IX_AVE_BOOLEAN;
SQL> CREATE INDEX IX_AVE_BOOLEAN ON ATTRIBUTE_VARIANT_ELEMENT
(ValueBoolean) TABLESPACE C8_index;
SQL> exec dbms_utility.compile_schema('CSIDBA');
7. Run UpdateSequence.sql script to fix any possible sequences out of sync issues.

C:\>Sqlplus CSIDBA/password@SID @\$PTAH/utility/updateSequence.sql

8. Run validateData.sql script to fix any possible data out of sync issues.

C:\>Sqlplus CSIDBA/password@SID @\$PTAH/utility/validateData.sql

Transfer data between schemas (REMAP_SCHEMA):

CSIDBA schema can be transferred to other Users through Oracle Data Pump import process.

- 1. Copy the dump file to directory before to be imported.
- 2. Create the new schema user (ex. NEWUSER) to import to.
- 3. Create the cf_safeToNumber and safeToBoolean functions as NEWUSER user.

```
C:\>Sqlplus NEWUSER/password@SID
CREATE OR REPLACE
FUNCTION cf_safeToNumber
        VARCHAR2
(str
)
RETURN NUMBER DETERMINISTIC
AS
 num NUMBER(37,10);
BEGIN
 num := CASE WHEN INSTR(str, 'E', 1, 1) > 0 THEN TO_NUMBER(str,
'90.99999999999999999EEEE') ELSE TO_NUMBER(str,
RETURN num;
EXCEPTION
 WHEN OTHERS THEN
 RETURN NULL;
END:
/
CREATE OR REPLACE
FUNCTION cf_safeToBoolean
(str
        VARCHAR2
)
RETURN NUMBER DETERMINISTIC AS
BEGIN
 RETURN
  CASE
   WHEN str = 'true' THEN 1
   WHEN str = 'false' THEN 0
       ELSE NULL
  END
END cf_safeToBoolean;
```

4. Run impdp utility as the SYSTEM user credential. Require **REMAP_SCHEMA** keyword

C:\> impdp SYSTEM/password@SID schemas=CSIDBA directory=DMPDIR REMAP_SCHEMA=CSIDBA:NEWUSER dumpfile=EXP052813.DMP logfile=imp.log

5. Recreate virtual columns for ATTRIBUTE_VARIANT_ELEMENT table

C:\>Sqlplus NEWUSER/password@SID @updateAVE.sql OR Type the following commands at the SQL Plus prompt: ALTER TABLE ATTRIBUTE_VARIANT_ELEMENT drop (VALUENUMBER, VALUEBOOLEAN); ALTER TABLE ATTRIBUTE_VARIANT_ELEMENT ADD (VALUENUMBER NUMBER(37,10) AS (cf_safeToNumber(ValueString))); ALTER TABLE ATTRIBUTE_VARIANT_ELEMENT ADD (VALUEBOOLEAN NUMBER(1,0) AS (cf_safeToBoolean(ValueString))); CREATE INDEX IX_AVE_BOOLEAN ON ATTRIBUTE_VARIANT_ELEMENT (ValueBoolean) TABLESPACE C8_index;

6. Execute DropSoftware.sql and CreateSoftware.sql scripts to create Objects and Types not created via impdp.

C:\>Sqlplus NEWUSER/password@SID @DropSoftware.sql

- C:\>Sqlplus NEWUSER/password@SID @CreateSoftware.sql
- 7. Recompile procedures and gather statistics for NEWUSER user by executing following commands as SYSTEM user:

exec dbms_utility.compile_schema('NEWUSER');

exec dbms_stats.gather_schema_stats('NEWUSER');

8. Run UpdateSequence.sql script to fix any possible - sequences not in sync - issues.

C:\>Sqlplus NEWUSER/password@SID @\$PTAH/utility/updateSequence.sql

9. Run validateData.sql script to fix any possible - data out of sync - issues.

C:\>Sqlplus CSIDBA/password@SID @\$PTAH/utility/validateData.sql

8. Centric 8 Database Utilities

ExportC8.bat

ExportC8 script uses Oracle Data Pump expdp utility to export C8 database to an Oracle directory with an export user default dmp file name.

Usage

ExportC8 ORACLE_SID systempassword Userid DirectoryName

ORACLE_SID	Database/SID where schema created. (Eg.: CSIHUB)
Systempassword	Oracle SYSTEM user's password
UserID	Userid to create as Centric Administrator. (Eg.: csidba)
DirectoryName	Oracle Directory Name to store the export file. (Eg.: DATA_PUMP_DIR)

Result

A Data PUMP dump file (EXP_CSIDBA_MMDDYYHH.DMP) will be stored in DATA_PUMP_DIR directory.



ImportC8.bat

ImportC8 script uses Oracle Data Pump impdp utility to import a C8 database from a User's dmp file.

Usage

ImportC8 ORACLE_SID systempassword Userid Password DirectoryName DumpFileName

ORACLE_SID	Database/SID where schema created. (Eg.: CSIHUB)
Systempassword	Oracle SYSTEM user's password
UserPassword	Password for Centric Administrator
DirectoryName	Oracle Directory Name to store the import file. (Eg.: DATA_PUMP_DIR)
DumpFileName	Oracle Dump file to be imported into database.

NOTE

Import C8 only supports same username import.

RebuildIdx.sql

RebuildIdx.sql is an SQL script which will rebuild indexes online. It should be executed by the Centric Administrator (CSIDBA).

Usage

SQLPlus CSIDBA/password @rebuildIdx.sql

UpdateSequence.sql

UpdateSequence.sql is an SQL script which will update all sequences used by Centric Administrator (CSIDBA) to sync the sequences number to avoid primary key non- unique constraint violation.

Usage

SQLPlus CSIDBA/password @ updateSequence.sql

9. Tuning Consideration

C8 Import/Export Integration Process

Avoid running both these activities during peak hour. Exporting process should setup the process to export data to a different database which also is better located in a different server.

Online Redo Log consideration

Centric PLM software is an online transaction oriented application which actively modifies data. A few guidelines are available for configuring the redo log file.

Log file size

Oracle database default file size is 52MB. C8 recommends enlarging file size to 200MB at first.

- Log file member: Oracle database default member number is 3. C8 recommends increasing member number to 12 first.
- Log file location: It will be the best to move all log files to an isolated location to reduce IO contention.
- C8 exporting process should export data to different database.

After the modification, verify the alert log to check whether or not the setting is proper. The checking period should be during the C8 usage peak time but exclude the import/export process.

- "Checkpoint not complete" should not exist. When the messages appear, increase log file member.
- Log switch frequency should be under 10 times per hour. To reduce the log switch frequency, the log file size should be increased.

B. WILDFLY CLUSTER

1. Requirements

It is recommended to contact Centric before proceeding with the Wildfly Cluster Setup.

- 1. Filevault folder must be shared between clustered Wildfly Application servers.
- 2. WebAccess folder must be shared between clustered Wildfly Application servers. Both Read and Write permissions must be enabled on shared WebAccess folder.
- 3. The following Ports must be open between clustered Application servers:

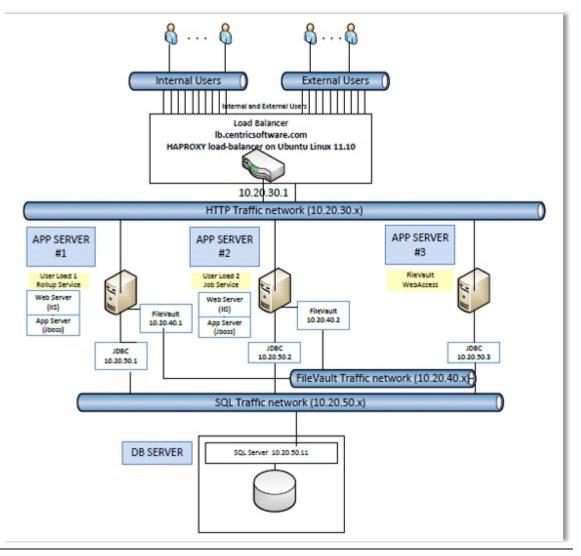
ТСР

- 7700
- 8009
- 57700
- 4. To open TCP ports, refer Open TCP Ports on Windows Firewall.
- 5. To set up SQL Environment, refer Setup SQL Database Server.
- 6. To set up Oracle Environment, refer Setup Oracle Database Server.

2. Environment Setup

The picture in the following page depicts a typical Wildfly Cluster Setup.

Figure (Appendix B) - 1: A typical Wildfly Cluster Setup



Open TCP Ports on Windows Firewall

1. On the Start menu, select Administrator Tools > Windows Firewall > Advanced Security option.

Notepad Mozilla Firefox Event Viewer Network Policy Server	Control Panel Devices and Printers Administrative Tools Help and Support Run	 Network Policy Server Performance Monitor Security Configuration Wizard Server Manager Services Share and Storage Management Storage Explorer System Configuration
All Programs	Windows Security	 Task Scheduler Windows Firewall with Advanced Security
Search programs and files	Log off	Windows Memory Diagnostic
ystart 🐫 ⊿ 🚞 🧔		Windows Server Backup WINS

Figure (Appendix B) - 2: Administrator Tools menu

2. In the Windows Firewall with Advanced Security dialog box, click on Inbound Rules on the left side. Then, on the right-side, under Actions, click on New Rule.

Figure (Appendix B) - 3: New Rule

• • 2 • 3 •						
Windows Finewall with Advanced S	Inbound Rules					Actions
C Outbound Rules	Name	Group A	Profile	Enabled	Action +	Inbound Rules
Connection Security Rules	NSClient++ Monitoring Agent		AL	Yes	Allow	Stat. New Rule
E S Monitoring	C Radius-TCP		AL	Yes	Allow	-
	C Radus-UDP		AL	Yes	Allow	Filter by Profile
	Active Directory Domain Controller - Echo R	Active Directory Domain Services	Al	Yes	Allow	V Filter by State
	O Active Directory Domain Controller - Echo R	Active Directory Domain Services	Al	Yes	Allow	
	Active Directory Domain Controller - LDAP (T	Active Directory Domain Services	Al	Yes	Allow	Filter by Group

3. In the New Inbound Rule Wizard dialog box, click on the Port radio button. Click on Next.

Figure (Appendix B) - 4: New Inbound Rule Wizard

Steps	
Rule Type	What type of rule would you like to create?
Rule Type Protocol and Ports Action Profile Name	What type of nue would you like to cleate? • Program Rule that controls connections for a program. • Pot Rule that controls connections for a TOP or UDP port. • Prodefined: Rule that controls connections for a Windows experience. • Custom Rule more about sule hores

4. In the **Protocol and Ports** window, click on the **TCP and Specific local ports** radio button and then click on **Next**.

Figure (Appendix	: B) - 5:	Inbound Rule	Wizard	(2)
------------------	-----------	--------------	--------	-----

🍻 New Inbound Rule Wizar	d 🗙
Protocol and Ports	
Specify the protocols and ports	to which this rule applies.
Steps: Bule Type	Does this rule apply to TCP or UDP?
Protocol and Ports	© TCP
Action Profile	CUDP
 Name 	Does this rule apply to all local ports or specific local ports?
	© Specific local ports: 7700,8009,57700 Example: 80, 443, 5000-5010
	Learn more about protocol and ports
	< Back Next > Cancel

5. In the Action window, click on Allow the connection radio button and click on Next.

Figure (Appendix B) - 6: Inbound Rule Wizard (3)

💣 New Inbound Rule Wizar	d 🛛						
Action							
Specify the action to be taken a	when a connection matches the conditions specified in the rule.						
Steps:							
Rule Type Protocol and Ports	What action should be taken when a connection matches the specified conditions?						
Action	This includes connections that are protected with IPsec as well as those are not.						
a Profile	C Allow the connection if it is secure						
a Name	This includes only connections that have been authenticated by using IPsec. Connections will be recurred using the settings in IPsec properties and rules in the Connection Security Rule node.						
	Learn more about actions						
	< Back Next > Cancel						

6. In the Profile window, select all the check boxes and click on Next.

Figure (Appendix B) - 7: Inbound Rule Wizard (4)

💣 New Inbound Rule Wizar	d 🗵
Profile	
Specify the profiles for which thi	s n.le applies.
Steps:	
Rule Type Protocol and Ports Action Profile	When does this rule apply? Domain Applies when a computer is connected to its corporate domain.
@ Name	 Private Applies when a computer is connected to a private network location. Public Applies when a computer is connected to a public network location.
	Learn more about profiles < Back

- 7. In the Name window, type *Wildfly Cluster TCP Ports* and click on Finish.
- Figure (Appendix B) 8: Inbound Rule Wizard (6)

Name	
	al this a la
ipecity the name and description	or this rule.
Steps	
Rule Type	
Protocol and Ports	
Action	
Profile	Name:
Name	Wildly Cluster TCP Ports
	Description (optional):
	< Back Finish Cancel

8. Click on **Outbound Rules** and repeat steps 3 - 7.

Figure (Appendix B) - 9: Windows Firewall with Advanced Security

Windows Firewall with Advance	rd Security						-
File Action View Help							
** 2 🖬 🕃 🖬							
Windows Finewall with Advanced 5	Outbound Rules						Actions
	Name	Group ~	Profile	Enabled	Action	•	Outbound Rules
Connection Security Rules	Active Directory Domain Controller - Echo R	and the second se	Al	Yes	Allow		Mew Rule

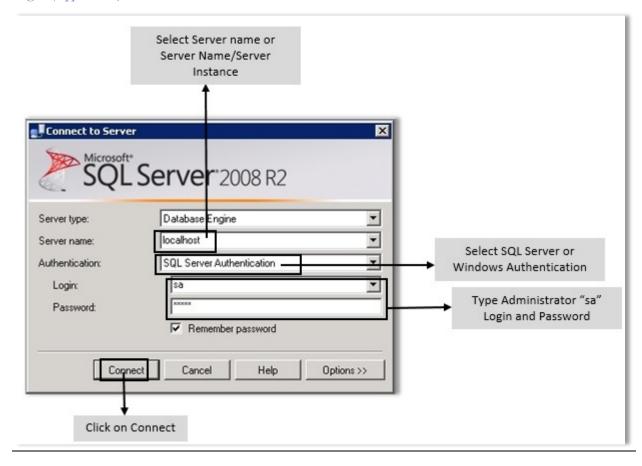
Setup SQL Database Server

- 1. Run C8 server Installer, choose to install Database only option, create new database options.
- 2. Click on Finish to complete the installation.

Refer Chapter 4, Dual Server Software Installation and Computer 2 Installation

 On the Start menu, select Programs > Microsoft SQL Server 2008 R2 > SQL Server Management Studio. The Connect to Server dialog box is displayed.

Figure (Appendix B) - 10: Connect to Server



4. In the **Object Explorer** window, connect to the correct C8 database and open Query window.

Type the following script and click on Execute

IF OBJECT_ID('dbo.JGroup_Ping') IS NOT NULL

DROP TABLE dbo.JGroup_Ping;

GO

-- SQL Server equivalent

CREATE TABLE dbo.JGroup_Ping

(Own_Address VARCHAR(200) NOT NULL

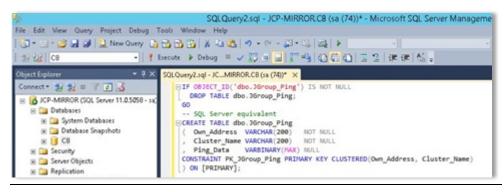
, Cluster_Name VARCHAR(200) NOT NULL

, Ping_Data VARBINARY(MAX) NULL

CONSTRAINT PK_JGroup_Ping PRIMARY KEY CLUSTERED(Own_Address, Cluster_Name)

) ON [PRIMARY];

Figure (Appendix B) - 11: SQL Query Window



Setup Oracle Database Server

- 1. Run C8 server Installer, choose to install **Database only** option, create new database options.
- 2. To complete installation, click on Finish.

Refer DUAL SERVER SOFTWARE INSTALLATION page 40 and Computer 2 Installation on page 54

3. Open Oracle developer.

Drag a column header here to group by that co CSIDBA PLMP	Database C8FR1	CSIDBA Password:
CSIDBA		Password:
	CRED 1	
PLMP	SM PA	•••••
	C8FR1	TNS Direct LDAP
		Database:
		C8FR1
✓ Save passwords Show favorites or Tracle Home: OraDb11g, home1 (version: 11.2.0		Connect as: Cglor: Normal Clients Connect Using: Orabbilig_home1 Make this the TOAD default home SQUNET Editor LDAP Editor Connect Close

Figure (Appendix B) - 12: Oracle Developer window

- 4. From the **Database** dropdown list, select the appropriate Database and enter the User/Schema and Password.
- 5. Click on Connect to Centric 8 PLM database and open Query window.
- 6. Type the following script and click on **Execute**.

CREATE TABLE JGroup_Ping

- (Own_Address VARCHAR(200) NOT NULL
- , Cluster_Name VARCHAR(200) NOT NULL
- , Ping_Data LONG RAW DEFAULT NULL

);

ALTER TABLE JGroup_Ping ADD CONSTRAINT PK_JGroup_Ping PRIMARY KEY (Own_Address, Cluster_Name)

USING INDEX TABLESPACE C8_index;

Figure (Appendix B) - 13: Query Window

Editor	
	B × Y Y Y Y Y Y i • □ CREATE TABLE JGroup Ping NOT NULL i • □ . Cluster_Name NOT NULL i • □ . Cluster_Name DEFAULT NULL i • □ ALTER TABLE JGroup Ping ADD CONSTRAINT PK_JGroup Ping PRIMARY KEY (Own_Address, Cluster_Name) i • □ SING INDEX TABLESPACE C8_index;

Setup Cluster App1

- 1. Run C8 Server Installer, choose to install Wildfly, remote database, and enter Filevault.
- 2. For WebAccess shared folder path installation refer <u>WebAccess Shared Directory Installation</u> on page 185.
- 3. To complete installation, click on Finish.
- 4. To update Wildfly Settings for Shared WebAccess refer WebAccess Wildfly Settings
- 5. To update WebAccess folder path in IIS Settings refer <u>WebAccess IIS Settings</u>. Mention the server credentials of the server that holds the WebAccess shared folder.

How to verify WebAccess Shared Directory installation

1. Open standalone-pi-db-ha-tcp.xml file (can be located in:..\C8\ wildfly-8.1.0\standalone\configuration folder) in notepad.

In the file name, "db" refers to mssql or oracle depending upon the database used

- 2. Verify that the shared WebAccess folder path is updated here: com.centricsoftware.AppServer.WebAccessLocalPath = SHARED_WEBACCESS_FOLDER_PATH com.centricsoftware.AppServer.NavigationFile = SHARED_WEBACCESS_FOLDER_PATH\\Scripts\\Navigation.xml
- **3.** For example, if Shared WebAccess Folder path is \\LB-APP03\WebAccess, then it will be updated as \\\\LB-APP03\\WebAccess.
- 4. Run C8 Applications Installer, select Centric 8 and the optional modules. To complete installation, click on **Finish**.
- 5. Login to C8.

NOTE



Refer DUAL SERVER SOFTWARE INSTALLATION: Computer 2 Installation on page 54.

Enable / Disable Services

- 1. In Notepad, open standalone-pi-mssql-ha-tcp.xml (for SQL Database) or standalone-pi-oracle-ha-tcp.xml (for Oracle Database) located in ...\C8\wildfly-8.1.0\standalone\configuration folder.
- 2. Look for the following lines:

<service name="RollupService" class='com.centricsoftware.pi.service.rollup.RollupService' active='true'>

<dependency name="com.centricsoftware.pi.Registration"/>

</service>

<service name="JobService" class='com.centricsoftware.pi.service.job.JobService' active='true'>

<Dependency name="com.centricsoftware.pi.Registration"/>

</service>

- 3. If you want to disable the service, on the service line, change 'true' to 'false'.
- 4. Save and close the file.

Enable Wildfly Clustering in Wildfly Service

- 1. In Notepad, open Standalone.conf.bat (located in..\C8\wildfly-8.1.0\bin folder).
- 2. Look for the following lines:

set "JAVA_OPTS=%JAVA_OPTS% -Dwildfly.server.default.config=standalone-pi- oracle.xml"

- **3.** Change standalone-pi-oracle.xml to standalone-pi-oracle-ha-tcp.xml for oracle database. In case you are using SQL database, change it to standalone-pi-mssql-ha-tcp.xml file.
- 4. Save and close the file.

Setup Cluster App2

- 1. Run C8 Server Installer, choose to install Wildfly, remote database, and enter Filevault.
- 2. For WebAccess shared folder path installation refer <u>WebAccess Shared Directory Installation</u> on page 185.
- 3. To complete installation, click on Finish.
- 4. To update Wildfly Settings for Shared WebAccess refer WebAccess Wildfly Settings
- 5. To update WebAccess folder path in IIS Settings refer <u>WebAccess IIS Settings</u>. Mention the server credentials of the server that holds the WebAccess shared folder.

▶ How to verify WebAccess Shared Directory Installation

1. In Notepad, open standalone-pi-db-ha-tcp.xml file (located in..\C8\wildfly-8.1.0\standalone\configuration folder). 2. Verify that the shared WebAccess folder path is updated here:

com.centricsoftware.AppServer.WebAccessLocalPath = SHARED_WEBACCESS_FOLDER_PATH
com.centricsoftware.AppServer.NavigationFile =
SHARED_WEBACCESS_FOLDER_PATH\\Scripts\\Navigation.xml

For example, if Shared WebAccess Folder path is $\LB-APP03\WebAccess$, then it will be updated as $\\LB-APP03\WebAccess$

3. Save and close the file.

Enable / Disable Services

- 1. In Notepad, open standalone-pi-mssql-ha-tcp.xml (for SQL Database) or standalone-pi-oracle-ha-tcp.xml (for Oracle Database) located in..\C8\wildfly-8.1.0\standalone\configuration folder.
- 2. Look for the following lines:

```
<service name="RollupService" class='com.centricsoftware.pi.service.rollup.RollupService' active='true'>
```

<dependency name="com.centricsoftware.pi.Registration"/>

</service>

```
<service name="JobService" class='com.centricsoftware.pi.service.job.JobService'
active='true'>
```

```
<dependency name="com.centricsoftware.pi.Registration"/>
```

</service>

- 3. If you want to disable the service, on the service line, change 'true' to 'false'.
- 4. Save and close the file.

Enable Wildfly Clustering in Wildfly Service

- 1. In Notepad, open Standalone.conf.bat (located in..\C8\wildfly-8.1.0\bin folder).
- 2. Look for the following lines:

Set "JAVA_OPTS=%JAVA_OPTS% -Dwildfly.server.default.config=standalone-pi- oracle.xml"

- **3.** Change standalone-pi-oracle.xml to standalone-pi-oracle-ha-tcp.xml for oracle database. If you are using SQL database, change it to standalone-pi-mssql-ha-tcp.xml file.
- 4. Save and close the file.

Start Wildfly on Cluster App 1

- 1. Ensure that Wildfly started successfully.
- **2.** Check for errors in the pi_centric.log file.
- 3. Wait for Centric Initialization Completed message to be displayed.

Start Wildfly on Cluster App 2

- 1. Ensure that Wildfly started successfully.
- 2. Check for errors in the pi_centric.log file.

3. Wait for Centric Initialization Completed message to be displayed.

Configure Load Balancer

- 1. Setup Load Balancer URL.
- 2. Configure load balancer settings to redirect requests between Cluster App servers.

Login to Centric 8 using Load Balancer URL

1. Ensure that the login is successful.

Setup Print and Image Service on any Cluster APP servers

Use local machine name for Print and Image service configuration.

Ensure that the following is used:

- 1. Load Balancer URL in Server URL parameter
- 2. Cluster all server name in Service Name parameter.
- 3. Shared folder for Output parameter.

Refer PDF Print Service Guide and Image Service Install Guide documents.

WebAccess Shared Directory Installation

Pre-requisites

- 1. Create a WebAccess shared folder.
- 2. Ensure that the server in which the shared directory is created is able to communicate with the server in which the C8 application is going to be installed.



3. Make sure the Directory is accessible by typing //servername/WebAccess in Run. Also, ensure that you have full rights to that shared folder.

Figure (Appendix B) - 14: Choose WebAccess Location

centric eight	Please choose the directory that will contain the Client WebAccess files.
	Note: We recommend the WebAccess folder should reside on application server machine.
CENTRIC	Destination Folder C._\CENTRI/~1\C8\WebAccess Browse

- 4. To select a different destination folder, click on **Browse**.
- 5. Enter the shared folder path\\server-name\WebAccess

WebAccess Wildfly Settings



- 1. Select Start > Administrative tools > Services.
- 2. In the Services window, right click on Centric Wildfly 8.1.0 Service and select Properties.
- 3. In the Centric Wildfly 8.1.0 Services Properties dialog box, on the Log On tab, in the Log on as section, click on this account.
- 4. Click on **Browse** and locate the Administrator who performed the installation on this machine.
- 5. In the **Centric Wildfly 8.1.0 Service Properties** dialog box, enter details in the **Password** and **Confirm Password** fields. To close the dialog box, click on **OK**.
- 6. The **Service** dialog box is displayed with a confirmation message stating that the user is granted the Log on as a service right. Click on **OK**.

WebAccess IIS Settings

- 1. Select Start > Administrative tools > Internet Information Services (IIS) Manager.
- 2. Expand Servername > Sites > Default website.
- Under Default Website, right-click on WebAccess and select Manage Virtual Directory
 Advance Settings.
- 4. Under the **Physical Path**, change the existing directory path to the shared directory \\servername\WebAccess.

- 5. Under Physical Path Credentials:
 - Select Specific user and click on **Set**
 - Under user name, enter with the user account who has permission to see the network shared folder.
 - In the password field, enter the password for the user mentioned above.
 - Re-enter the password and click on **OK**.
- 6. Restart IIS.

3. Cache Mechanism

C8 uses Wildfly standard cache mechanism. In cluster node, when a piece of information is updated on one Wildfly node, all other nodes must be informed of that modification to update their local cache. This communication is configured using tcp protocol.

This protocol guarantees that communication is made between all nodes. In case of failure, a new try will happen until correct information is sent from one node and all the other nodes receive it.

Issues with the cache mechanism

It may happen that after a long period of execution (months), one cluster node does not synchronize anymore with the other nodes. This can be detected by users, depending on different information displayed on the cluster node they are redirected to. A lot of NAKACK (Negative Acknowledgements) warning messages can be viewed as Cache is not 100% reliable. Restarting one node does not fix the issue. The issue can be fixed only with a full C8 restart.

Reset Cache

> To reset cache with a full C8 restart

- 1. Stop all Wildfly Services.
- 2. Stop all additional services (image services, PDF services).
- 3. Ensure wildfly cluster configuration files are all set as expected.
- 4. Start Wildfly services.
- 5. Start all additional services (image services, PDF services).

On completion of the above step, cache will behave as expected.

Cache test process

NOTE

It is assumed here that there are 3 nodes in the cluster, but the process can apply to any number of nodes.

- 1. On AppServer1, login to Centric 8 using localhost/WebAccess URL.
- 2. Navigate to Home > Documents tab; create new document.
- 3. On AppServer2, login to PLM using localhost/WebAccess URL.
- 4. Navigate to **Home > Documents** tab; ensure that the document created on **AppServer1** can be viewed.
- 5. On AppServer3, login to PLM using localhost/WebAccess URL.
- 6. Go to Home > Documents tab; ensure that the document created on AppServer1 can be viewed.
- 7. Change document name from **AppServer3** app server.
- 8. Navigate to AppServer1 and AppServer2 and verify that you can see the updated document name.
- 9. Change the document name from AppServer2 app server.
- 10. Verify that the document name is updated on other app servers.

In case the document is not visible on other nodes, or the document name is not up to date on other nodes, it indicates that the cache is not working properly.

It is therefore important to check the following:

- 1. Verify that emptying the browser cache on each server works properly.
- 2. Page refresh gives expected results.
- 3. Verify the cluster configuration files are set properly.
- 4. Ensure that no other cluster can interfere.



If any of the points listed above are not verified, there is a chance that cache is not working properly. You must then contact Support.

C. WILDFLY MEMORY USAGE

1. Changing Wildfly Usage

You can change the Wildfly usage in Centric 8 by changing the standalone.conf.bat file located in your Centric 8 program folder on your system.

> To change the standalone.conf.bat file

- 1. In Notepad, open the standalone.conf.bat file. The file is located in your installation directory in the following location: <Centric8InstallDirectory>\C8\wildfly-8.1.0\bin
- 2. Search for the following string in the standalone.conf.bat file:

rem JVM memory allocation pool parameters. Modify as appropriate. set "JAVA_OPTS=-Xms512M -Xmx2048M -XX:MaxPermSize=512M"

Where Xms is the minimum memory requirement for Wildfly service, and Xmx is the maximum memory requirement for Wildfly service. The value of Xmx should not exceed half of the physical RAM. For example, if you have a 32GB machine, the Xmx maximum value is 16GB.

- 3. Update the Xmx value to change the Wildfly usage.
- 4. Save and close the standalone.conf.bat file.
- 5. Restart the Wildfly service.

2. Troubleshoot Wildfly Service

Wildfly is the application server used in Centric 8. When you start the Wildfly service, batch files run in the background. You must allow this processing to complete before taking any additional action on the server. If you stop the Wildfly service before the batch files finish running, the batch files are suspended; the Wildfly service cannot start until the batch files finish running.

Java Memory Error

If you are unable to log into Centric 8, java may have run out of memory. Open the pi_centric.log file and look for the following error message:

java.lang.OutOfMemoryError

Each business object has an associated java class. These classes are stored in java permanent heap memory. By default this value is set to a maximum value of 64MB. Because there are numerous java classes, this memory may run out.

To avoid this error, you can increase the java permanent heap memory settings using the Wildfly standalone.conf.bat file:

- 1. Select Start > Programs > Administrative Tools > Services.
- 2. Right-click on Centric Wildfly-8.1.0 Service and select Stop.

- **3.** In Notepad, open the standalone.conf.bat file. The file is located in your installation directory in the following location: <Centric8InstallDirectory>\C8\wildfly-8.1.0\bin
- 4. Search for the following string in the standalone.conf.bat file:

rem JVM memory allocation pool parameters. Modify as appropriate. set "JAVA_OPTS=-Xms512M -Xmx2048M -XX:MaxPermSize=512M"

The parameter is already set to "-XX:MaxPermSize=512m" so that this line of code appears as:

set "JAVA_OPTS=-Xms512M -Xmx2048M -XX:MaxPermSize=512M"

- 5. Save and close the standalone.conf.bat file.
- 6. Restart the Wildfly service.

Wildfly Service Warning

During installation, if you encounter the following warning message when you attempt to start the Wildfly service, Wildfly service is likely suspended and you must stop the batch files and restart the Wildfly service.

Figure (Appendix C) - 1: Services dialog box

rvices	
	Windows could not stop the Centric WildFly-8.1.0 Service service on Local Computer.
	Error 1053: The service did not respond to the start or control request in a timely fashion.
	OK

To stop the suspended batch files:

- 1. Open the **Task Manager** on the server where you are installing or upgrading the Centric 8 server.
- 2. In the Task Manager, click on the Processes tab.
- 3. Locate and select Java.exe.
- 4. Click End Process. In the Task Manager Warning dialog box, click on Yes.
- 5. Close the Task Manager.

Batch File Suspension

To avoid forcing the Java.exe file to end using the **Task Manager**, once you start the Wildfly service, do not attempt to stop the service during processing.

The **Service Control** progress window is displayed (as shown below) until processing is complete:

Figure (Appendix C) - 2: Service Control Window

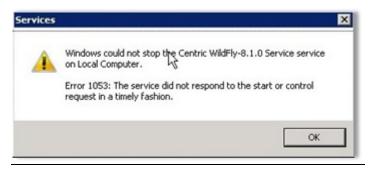
Service Control	
	p the following service on Local Computer
Centric WildFly-8.1.0 Service	
	Close
	Close

Always allow the service to start and stop without interference, allowing a few extra moments for the batch files to finish any additional background processing once the **Service Control** window no longer displays.

Wildfly Failure to Stop

If you attempt to stop the **Wildfly service in the Services** window, the following warning message is displayed:

Figure (Appendix C) - 3: Services window



This warning message indicates that the Wildfly service has timed out which may due to one of the following reasons:

- Centric 8 was partially uninstalled, or the uninstaller froze midway through the process; Use the **Task Manager** to end this process, and then stop the Wildfly service.
- You attempted to close the Services window before Wildfly stopped the service. Use the Task Manager to end the Java.exe process as described in the section, <u>Wildfly Service</u> <u>Warning</u>.

D. LARGE FILE UPLOAD TIMEOUT

1. IIS Connection Settings

If users uploading large files are experiencing connection timeout, you can adjust the Internet Information Service (IIS) connection settings to accommodate large file size and slow network connection speed.

Use the following steps to adjust the IIS connection settings:



These steps can be used to adjust the IIS connections settings on Windows Server 2003 (IIS6), 2008(IIS7) and 2012(IIS8).

- 1. On the Centric 8 application server open IIS Manager.
- 2. In the left pane, expand the local computer and expand Web Sites.
- 3. Under Web Sites, right-click on the Default Web Site and select Properties.
- 4. In the **Properties** dialog box, in the **Connections** section, enter the maximum number of seconds for which IIS should maintain an idle connection before resetting in the **Connection timeout** field; the default value is 120 seconds.
- 5. Click on OK.
- 6. Click the Action menu and select Refresh. Close the IIS Manager.
- 7. Once you update the connection settings, adjust the maximum content length:
 - Adjust Content Length for IIS7 and IIS8

2. Adjust Content Length for IIS7 and IIS8

- 1. On the Centric 8 application server open IIS Manager.
- 2. In the left pane, expand the local computer and expand Web Sites.
- 3. Under Web Sites, select Default Website.
- 4. Open feature on Request Filtering.
- 5. Click on Edit Feature Settings and modify the field Maximum allowed content length to a value of '500000000'.
- 6. Restart IIS and close IIS Manager.

Increase Max Post Limit in Wildfly

This setup is common for both IIS7 and IIS8.

How to increase Max Post Limit in Wildfly

- 1. Navigate to C:/ Program Files → Centric Software → C8 → wildfly-8.1.0 → Standalone → Configuration.
- 2. If you are using a MSSQL database,
 - Click on Standalone-pi-mssql.xml.

Figure (Appendix D) - 1: Standalone-pi-mssql.xml file

Open 👻 New folde	r			
	Name 1	Date modified	Туре	Size
	acertificates	7/13/2015 6:10 AM	File folder	
\$	standalone-pi-mssql_xml_history	7/1/2015 10:43 PM	File folder	
ices	application-roles.properties	7/13/2015 6:10 AM	PROPERTIES File	1 88
	application-users.properties	7/13/2015 6:10 AM	PROPERTIES File	1 KE
	importer.csv	6/10/2015 2:13 PM	CSV File	19 KE
s	logging.properties	7/13/2015 6:15 AM	PROPERTIES File	9 KE
	imgmt-groups.properties	7/13/2015 6:10 AM	PROPERTIES File	1 KE
	mgmt-users.properties	7/13/2015 6:10 AM	PROPERTIES File	2 82
	pi-configuration, properties	7/13/2015 6:14 AM	PROPERTIES File	19 KE
R2-PR	pi-initialpermissions.properties	5/21/2015 10:56 PM	PROPERTIES File	2 82
(C:)	pi-wildfly-8.1.0.properties	7/13/2015 6:11 AM	PROPERTIES File	3 KE
	💼 standalone.xml	7/13/2015 6:10 AM	XML Document	20 KE
	🖹 standalone-full.xml	7/13/2015 6:10 AM	XML Document	25 KE
	💼 standalone-full-ha.xml	7/13/2015 6:10 AM	XML Document	29 KE
	💼 standalone-ha.xml	7/13/2015 6:10 AM	XML Document	23 KE
	😁 standalone-pi-mssql.xml	7/13/2015 6:11 AM	XML Document	23 KE
	📄 standalone-pi-mssql-ha.xml	7/2/2015 12:23 AM	XML Document	26 KE
	standalone-pi-mssql-ha-tcp.xml	7/13/2015 6:11 AM	XML Document	26 KE

• In the **max-post-size** parameter, type the maximum size as required (see figure below).

Figure (Appendix D) - 2: max-post-size parameter details



- 3. Else, if you are using an Oracle database,
 - Click on Standalone-pi-oracle.xml.

Figure (Appendix D) - 3: Standalone-pi-oracle.xml file

Name *	Date modified	Туре	Size
3 certificates	7/13/2015 6:10 AM	File folder	
standalone-pi-mssql_xml_history	7/1/2015 10:43 PM	File folder	
application-roles.properties	7/13/2015 6:10 AM	PROPERTIES File	1 KB
application-users.properties	7/13/2015 6:10 AM	PROPERTIES File	1 KB
importer.csv	6/10/2015 2:13 PM	CSV File	19 KB
logging.properties	7/13/2015 6:15 AM	PROPERTIES File	9 KB
imgmt-groups.properties	7/13/2015 6:10 AM	PROPERTIES File	1 KB
mgmt-users.properties	7/13/2015 6:10 AM	PROPERTIES File	2 KB
pi-configuration.properties	7/13/2015 6:14 AM	PROPERTIES File	19 KB
pi-initialpermissions.properties	5/21/2015 10:56 PM	PROPERTIES File	2 KB
pi-wildfly-8.1.0.properties	7/13/2015 6:11 AM	PROPERTIES File	3 KB
💼 standalone.xml	7/13/2015 6:10 AM	XML Document	20 KB
💼 standalone-full.xml	7/13/2015 6:10 AM	XML Document	25 KB
💼 standalone-full-ha.xml	7/13/2015 6:10 AM	XML Document	29 KB
💼 standalone-ha.xml	7/13/2015 6:10 AM	XML Document	23 KB
💼 standalone-pi-mssql.xml	7/13/2015 6:11 AM	XML Document	23 KB
💼 standalone-pi-mssql-ha.xml	7/2/2015 12:23 AM	XML Document	26 KB
standalone-pi-mssql-ha-tcp.xml	7/13/2015 6:11 AM	XML Document	26 KB
🖀 standalone-pi-oracle.xml	5/21/2015 10:56 PM	XML Document	23 KB
📧 standalone-pi-oracle-ha.xml	7/2/2015 12:23 AM	XML Document	26 KB

• In the **max-post-size** parameter, type the maximum size, as required.

Figure (Appendix D) - 4: max-post-size parameter

```
</subsystem>
</subsystem xmins="urn:jboss:domain:undertow:1.1">
</subsystem xmins="urn:jboss:domain:und
```

- 4. Restart Wildfly Services.
- 5. Navigate to Start > Services. Right-click on Centric Wildfly 8.1.0 Service.

Figure (Appendix D) - 5: Services Window

	S 🕑 🖬 💷 🕨 💷						
Services (Local)	Q, Services (Local)						
	Centric WildFly-8.1.0 Service	Name -		Description	Status	Startup Type	Log(
		Active Directory	Domain Services	AD DS Dom		Disabled	Local
	Stag the service	Active Directory	Web Services	This servic		Disabled	Local
	Eastart the service	Application Exper	rience	Processes	Started	Manual	Local
		Application Host	Helper Service	Provides a	Started	Automatic	Local
	Description:	Application Ident	Ry	Determines		Manual	Local
	Centric WildPly-8.1.0 Service/Platform: Windows x64	Application Inform	mation	Facilitates	Started	Manual	Local
	THEODING AD-4	Application Layer	Gateway Service	Provides s		Manual	Local
		Application Mana	gement	Processes L		Manual	Local
		ASP.NET State S	ervice	Provides s		Disabled	Netro
		ashi bruorgkas	ligent Transfer S	Transfers f	Started	Manual	Local
		ase Fikering Eng	gine	The Base F	Rarted	Automatic	Local
		2.00	0 Service	Centric WI	Started	Automatic	Loca
		\$ 900	tion	Copies use	Started	Manual	Local
		2 Passe		The CNG k		Manual	Local
		Resme	-	Supports 5	Started	Automatic	Local
		Restart	kation	Manages t	Started	Manual	Local
		2 Monar	-	Maintains a		Disabled	Local
		Al Tasks	•	Provides s		Manual	Local
		Refresh	koes	Provides fo	Rarted	Automatic	Netw
		2 Herreso				Automatic	JAd:
		8 Properties	ss Launcher	The DCOM	Started	Automatic	Local
		2 martin	mager Sessio	Provides D	Rated	Automatic	Local
		g Help		Enables yo	Started	Automatic	Local

6. To restart Wildfly Services, click on Restart.

IIS Connection Timeout (for IIS7 and IIS8)

Requests by Centric 8 server that last longer than the set limit will be automatically terminated. You need to increase the set limit in environments that use large files and/or have slower network speeds. The default value is set to 120 seconds.

- 1. To open the IIS Manager, from the Start menu, select Administrative Tools > Internet Information Services (IIS) Manager.
- 2. Expand the Connections tree and select Sites > Default Web Site.

Figure (Appendix D) - 6: Connections tree



3. Right-click on the **Default Web Site** and select **Manage Web Site > Advance Settings**.

Figure (Appendix D) - 7: Connections tree - Advanced Settings

Connections	9.	💓 2K	SORA Home					
Start Page 2KBORA (2KBORA 2 Application Po	N/Administrator	Fiter:	- 00 🖷 - 🖓	Show All Gr	oup by: Area		• 12 •	
8) Stes 8) 🗣 Teda 19 19 () () () () () () () () () ()	Explore Edit Permissio Add Applicatio	n rectory	Authentication CGI	Compression Compression ISAPI Filters	Default Document Logging	Directory Browsing	Error Pages	FactCGI Settings Output Caching
×	Remove Rename		Restart Start Stop Browse Advanced Settings					

4. In the Advance Settings dialog box, under the Behavior section, expand Connection Limits.

Figure (Appendix D) - 8: Advanced Settings

🗄 (General)	
Application Pool	DefaultAppPool
Bindings	http:*:80:
ID	1
Name	Default Web Site
Physical Path	%SystemDrive%\inetpub\wwwroot
Physical Path Credentials	
Physical Path Credentials Logon Type	ClearText
Start Automatically	True
3 Behavior	
Connection Limits	
Connection Time-out (seconds)	120
Maximum Bandwidth (Bytes/second	4294967295
Maximum Concurrent Connections	4294967295
Enabled Protocols	http

- 5. Update the value for Connection Time-out (seconds) to 900 and click on OK.
- 6. To restart the Web Site through IIS Manager, click on Restart.

2К	SORA Hor	ne						Actions Manage Server
Fiber:			Show Al G	oup by: Area		• 22 •		2 Restart
115								 Rat Stop
ASP		CGI	Compression	Defait	Directory	Error Pages	FestCGI	Vew Application Pools View Sites
				Document	Browsing		Settings	🕡 Help
2	-	5	۷		1700	4	pe -	Online Help
Handler Mappings	HTTP Respo	ISAPI and CGI Restrictions	ISAPI Filters	Logging	MIME Types	Modules	Output Caching	

IIS Maximum Allowed Content Length (for IIS7 and IIS8)

Requests by Centric 8 server that last longer than the set limit will be automatically terminated. You need to increase this value in environments that use large files. The default value is 30000000 bytes (about 28.6 MB).

1. From the Start menu, right-click on the Command Prompt and select Run as Administrator.

Figure (Appendix D) - 9: Start Menu

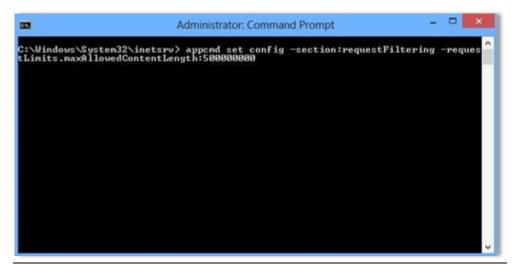
comm trol Pa	Open Open file location	
Show a 🔫	Run as administrator	
ljust ouble	Pin to Taskbar Pin to Start Menu	
nt 🧿 era	Scan cmd.exe Open with	
nia ka	Share with Restore previous versions	,
	Send to	,
	Cut	
dika	Сору	
t	Delete	
aran	Properties	

2. In the Command Prompt dialog box, go to the C:\Windows\system32\inetsrv directory.

3. Run the following command:

appcmd set config -section:requestFiltering requestLimits.maxAllowedContentLength:500000000

Figure (Appendix D) - 10: Command Prompt



This example sets a limit of 500000000 bytes (about 477MB). Adjust the value as per the requirement.

4. From the Start menu, select Administrative Tools > Services.

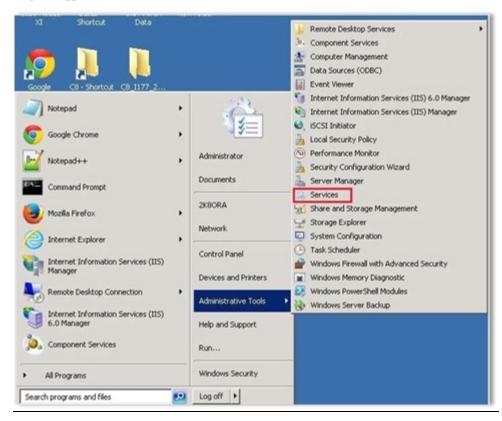


Figure (Appendix D) - 11: Start Menu

5. To restart IIS, right-click on IIS Admin Service and select Restart.

Figure (Appendix D) - 12: Restart IIS Admin Service

IIS Admin Service	Name +	Description	Status	Startup Type	Log On As
<u>Stop</u> the service <u>Restart</u> the service	Google Update Ser Google Update Ser Google Update Ser Google Policy Client Ghealth Key and Cer	Keeps your Keeps your The servic Provides X	Started	Automatic (D Manual Automatic Manual	Local System Local System Local System Local System
Description:	All Human Interface D	Enables ge		Manual	Local System
Enables this server to administer the IIS metabase. The IIS metabase stores	IIS Admin Service	Enables thi	Star	tart	Local System
services the instruction for the SMTP and FTP services. If this service is stopped, the server will be unable to configure SMTP or FTP. If this service is disabled, any services that explicitly depend on it will fail to start.	IKE and AuthIP IPs Interactive Service Internet Connectio Internet Explorer E IP Helper IPSec Policy Agent KtmRm for Distribut Link-Layer Topolog	The IKEEX Enables us Provides n ETW Collec Provides tu Internet Pr Coordinate Creates a	Star S P Star R Star A	top ause esume estart Il Tasks	Local System Local System Local System Local System Local System Network S Network S Local Service
	Microsoft .NET Fra	Microsoft	Р	roperties	Local System
	Microsoft .NET Fra	Microsoft Registers t	н	lelp	Local System Local Service

E. CONFIGURING SMTP ON WINDOWS 2008 SERVER

1. Configuring SMTP Server with IIS 6.0 Manager

If you are using the recommended 64-bit operating system with Windows 2008 server, and Microsoft IIS Web Server version 6.0, you must configure the SMTP Server.

This appendix describes how to complete the SMTP Server configuration on Windows 2008 using the following steps:

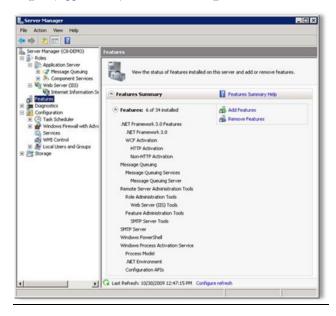
- <u>Step 1: Install SMTP Server Service</u>
- <u>Step 2: Install IIS 6.0 Manager</u>
- <u>Step 3: Configure SMTP with IIS 6.0 Manager</u>
- <u>Step 4: Configure Centric 8 SMTP Server Properties</u>

Step 1: Install SMTP Server Service

To install the SMTP Server service OR to verify that it is already installed

- 1. Locate and start the Windows Server Manager application. From the Start menu, select Programs ▶ Administrative Tools ▶ Server Manager.
- 2. In the **Server Manager** window, in the left pane, click on **Features**; the Features list is displayed in the right pane, as shown in the figure below:

Figure (Appendix E) - 1: Server Manager Window

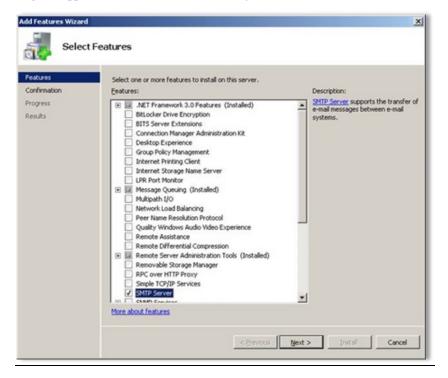


3. In the Features list, if the SMTP Server is displayed, it indicates that the SMTP Server Service is installed; proceed to <u>Step 2: Install IIS 6.0 Manager</u>

ELSE, continue with step 4 below.

- 4. In the right pane, click on Add Features; the Add Features Wizard is displayed.
- 5. In the Features list, to turn the SMTP Server on, select the SMTP Server checkbox.

Figure (Appendix E) - 2: Add Features Wizard – Select Features



- 6. To continue, click on Next.
- 7. In the Add features required for SMTP Server? Dialog box, click on the Add Required Features button,

Figure (Appendix E) - 3: Add Features Wizard (2)

C1	Add features required for SMTP S You cannot install SMTP Server unless the required		
	Eeatures:	Description	
	 Remote Server Administration Tools Feature Administration Tools SMTP Server Tools 	Remote Server Administration Tools includes snap-ins and command-line tools for remotely managing roles and features.	
		Add Required Features Cancel	1

8. In the Add Features Wizard - Confirm Installation Selections dialog box, click on the Install button,

Add Features Wizard	X
Confirm Inst	tallation Selections
Features Confirmation Progress	To install the following roles, role services, or features, click Install. () 1 informational message below
Results	This server might need to be restarted after the installation completes. Remote Server Administration Tools
	Feature Administration Tools SMTP Server Tools SMTP Server
	Print, e-mail, or save this information
	< Brevious (Jest > Install Cancel

Figure (Appendix E) - 4: Add Features Wizard - Confirm Installation Selections

9. You will see the following dialog as the installation proceeds.

Figure (Appendix E) - 5: Add Features Wizard - Installation Progress

Add Features Wizard Installatio	n Progress
Pestures Confirmation Progress Results	The following roles, role services, or features are being installed: Remote Server Administration Tools SMIP Server
	Initializing installation

 Once the installation is complete, close the Wizard. The SMTP Server is displayed in the Features list in the Server Manager window. Proceed to the IIS 6.0 Manager installation as described in <u>Step 2: Install IIS 6.0 Manager</u>.

Step 2: Install IIS 6.0 Manager

To install the Microsoft IIS 6.0 Manager, or to verify that it is already installed, use the following steps:

- 1. To start the Windows Server Manager application, from the **Start** menu, select **Programs** Administrative Tools Server Manager menu item.
- 2. Click on the Web Server (IIS) in the left-pane.
- 3. In the right-pane look for IIS 6 Management Compatibility in the list of features, under Management Tools.
- 4. If the **IIS 6 Management Compatibility and sub-features** shows up as installed in the list, proceed directly to <u>Step 3. Configure SMTP w/ IIS Manager</u>.
- 5. To add the **IIS 6 Management Compatibility**, click on the **Add Role Services** link, located in the right pane, on the right side of the dialog box.

Figure (Appendix E) - 6: Services Manager Window - Add Role Services

Web Server (IIS)			
- 20-			
mitra Provides a reliable, manageable, and scalable	Web application infrastructure.		
Services			
B Tale Services: 41 rotaled		Add Pulle Services	- 3
	Inc.	Amore Apie Services	
Rule Service	Statua System		
2. Web Server 2. Common HTTP Reatures	trutaled		
	butaled		
nh Advi 2. Substantion 2. Substantion 2. Substantion 2. Substantion 2. Substantion 2. Substantion 2. Substantion 2. Advisor 2. Advisor 2. Advisor 2. Coll 2. Substantion 2. Substantion 2. Advisor 2. Coll 2. Coll 2. Coll 2. Coll 2. Coll 2. Coll 2. Coll 2. Substantion 2. Substantio	butaled		
Exectory Browsing	Installed		
aga E HTP from	Installed		
infTP Redeedant	Installed		
Application Development	Installed		
ASP NET	Instalad		
A MET Extendelity	Instaled		
E. ASP	Installed		
Sa 09	Installed		
La ISA/I Criterezze	but aled		
La DAVI7Rms	Installed		
Server Sile Excludes	Installed		
Health and Diagnostics	Initialed		
ATTF Sigano	3'silated		
🖧 singene Toole	I'nt diet		
🚑 Repuest Monitor	Initialed		
	Fotabed		
Custom Gogging	Aut installed		
COBC Logging	National and a second s		
Ça Secuty	Subaled		
San Automotion	Systaked Systaked		
Carl Wildows Authentication	Sixtaled Sixtaled		
Sevalt	brotaled		
2 Dent Certificate Happing Authentication			
Lin Adhoration	butaled		
En Repart Flamo	butaked		
P and Domain Restrictions	Induked		
2. Performance	Instaled		
E. Static Content Compression	Installed		
E Dynamic Content Compression	Installed		
A Hanagement Tools	bratale-d		
El Management Console	Installed		
a III Management Scripts and Tools	Installed		
Ca Havagement Service	Installed		
El 4 Management Compatibility	Installed		
ES 6 Metabase Compatbility	Installed		
IIS 6 wHI Compatibility	Installed		
ED 6 Scripting Tools	Installed		
🚑 ES & Management Console	Installed		
+ G Last Reheals: 10/30/2009 1:56-54 PM Configure reheal	6 ¹		

6. From the Add Features Wizard dialog box, in the Role Services list, select the IIS 6 Management Compatibility checkbox.



7. To continue, click on Next.

Figure (Appendix E) - 7: Role Services Window

Role Services		Þ
Role Services Select Role Ser Confirmation Progress Results	vices Tc one or more installed role services for Web Server (IIS), Role services:	Description: 1.115.6 Macazement Compatibility
	Panagement Service If is 6 Management Compatibility If is 6 Management Compatibility If is 6 Management Compatibility If is 6 Scripting Tools If is 6 Management Console FTP Publishing Service (Not Installed) FTP Server (Not Installed) FTP Management Console (Not Installed) FTP Management Console (Not Installed) More about role services	> <u>Remove</u> Cancel

- 8. To continue, on the Confirm Installation Selections dialog box, click on the Install button.
- 9. Close the wizard when the completion message is displayed. The IIS 6 Management Compatibility is now installed.

Step 3: Configure SMTP with IIS 6.0 Manager

- 1. To start the Windows Server Manager Application, from the Start menu, select Programs Administrative Tools → Internet Information Services (IIS) 6.0 Manager menu item.
- 2. Expand the Server Name object (ex. C8-DEMO)
- 3. Right-click on [SMTP Virtual Server #..1] object and choose Properties.

Internet Information Services (115)		_D× _8×
Current Sessions	Name Corrent Sessions	

Figure (Appendix E) - 8: Internet Information Services (IIS) 6.0 Manager Menu item

- 4. In the **Properties** dialog box, click on the **Access** tab.
- 5. Click on the Authentication button.

Figure (Appendix E) - 9: Properties dialog box

MTP Vir	tual Server #1] Properties	2
General	Access Messages Delivery LDAF	Routing
Acce	ss control	
	the authentication methods for this urce.	Authentication
Secu	re communication	
TLS	is not available without a certificate.	
Г	Require TLS encryption	
Conn	ection control	
	nt or deny access to this resouce using ddresses or Internet domain names.	Connection
Relay	v restrictions	
	nt or deny permissions to relay e-mail ugh this SMTP virtual server.	Relay
	OK Cancel	And L Has
	OK Cancel	Apply Help

6. Verify that the Anonymous access checkbox is selected and then click on OK.

Figure (Appendix E) - 10: Authentication dialog box – Anonymous access

Auth	entication	×
Sele	ect acceptable authentication methods for this resouce.	
₽.	Anonymous access	
1	No user name or password required.	
Г	Basic authentication	
	The password will be sent over the network in clear text using standard commands.	Ľ.
1	Requires TLS encryption	
1	Default domain:	
[
Г	Integrated Windows Authentication	
	The client and server negotiate the Windows Security Support Provide Interface.	r:
	OK Cancel Help	

- 7. On the **Properties** dialog, click on the **Connection**... button.
- 8. Select the Only the list below radio button.
- 9. Click on the Add... button.

Figure (Appendix E) - 11: Connection dialog box

Select which con	puters may access this virtual server:
C All except	
Computers:	
Access	IP Address (Mask) / Domain Name
Granted	127.0.0.1
Add	Remove
CIQUA-+	Tremove
	and the second second

- 10. Click on the Single Computer radio button.
- 11. In the IP address: text box, enter 127.0.0.1.
- 12. To return to the Properties dialog box, click on OK.

Figure (Appendix E) - 12: Computer dialog box

	ne of the following to the list. Single computer	
	IP address:	
	127.0.0.1	DNS Lookup
C	Group of computers	
	Subnet address:	Subnet mask:
	1 K K K	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C	Domain	
	Name	

- 13. In the Properties dialog, click on the Relay... button.
- 14. Select the Only the list below radio button.
- 15. Click on the Add... button.

Figure (Appendix E) - 13: Relay Restrictions dialog box

lay Restrictions		3
Select which compu	ter may relay through this virtual server:	
· Only the list t	elow	
C All except the	a list below	
Computers:		
Access	IP Address (Mask) / Domain Name	
of Granted	127.0.0.1	
Add	Flemove:	, regardless
	ers which successfully authenticate to relay	, regardless

- 16. Click on the Single Computer radio button.
- 17. In the IP address text box, enter 127.0.0.1.
- 18. To return to the Properties dialog box, click on OK.

Figure (Appendix E) - 14: Computer dialog box

Compu	iter	×
	IP address: 127.0.0.0.1	kup
C	Group of computers Subnet address Subnet mat	<u></u>
C	Domain Name	
	OK Cancel	Help

- 19. On the Properties dialog box, click on the Messages tab.
- 20. In the **Send copy of Non-Delivery Report to:** text box, enter the email address of the person responsible for managing this Centric8 server.

Figure (Appendix E) - 15: Properties dialog box – Messages tab

MTP Virtual Server #1] Properties	?
General Access Messages Delivery LDAP Routi	ng Security
Specify the following messaging information.	
F Limit message size to (KB):	2048
Limit session size to (KB):	10240
Limit number of messages per connection to:	20
Limit number of recipients per message to:	100
Send copy of Non-Delivery Report to:	85
somename@somecompany.com	
Badmail directory.	
C:\inetpub\mailroot\Badmail	Browse
OK Cancel App	w Help

- 21. On the **Properties** dialog box, click on the **Delivery** tab.
- 22. Click on the Advanced... button.

Outbound	-	- 51
First retry interval (minutes):	Œ	
Second retry interval (minutes):	30	
Third retry interval (minutes):	60	
Subsequent retry interval (minutes):	240	
Delay notification:	12	Hours 💌
Expiration timeout:	2	Days 💌
Local		
Delay notification:	12	Hours 💌
Expiration timeout:	2	Day: 💌
Dutbound Security	nections	Advanced.

Figure (Appendix E) - 16: Properties dialog box – Delivery tab

23. Set the Masquerade domain to the domain name of the business running Centric 8.

Examples:

- Any Centric Software servers should display centricsoftware.com
- Charlotte Russe would display charlotterusse.com, etc.
- 24. The Fully-qualified domain name: should be set to match the DNS name this server is known as.

Examples:

- C8-DEMO is an internal machine, which is how users will reference the machine. (i.e. c8-demo.centricsoftware.com).
- Charlotte Russe's mirror site is known as crmirror, so this field would be set to crmirror, and along with the Masquerade domain field, it would yield as crmirror.charlotterusse.com.
- This is name that the SMTP server will provide to destination email servers, as it sends emails from Centric 8.

Figure (Appendix E) - 17: Advanced Delivery dialog box

	_		2
Maximum hop count			
15			
Masquerade domain:			
centricsoftware.com			
Fully-qualified domain r	name:		
C8-DEMO			Check DNS
Smart host:			
-		ing to small host	
C Attempt direct d			
Attempt direct d Perform reverse D			

- 25. To return to the Properties dialog box, click on OK.
- 26. To exit, in the Properties dialog box, click on OK.
- 27. Restart the SMTP service to apply this settings.



The SMTP service on this server is now configured to accept mails only from applications running on this machine (i.e. Centric 8) and will send mails to email addresses with different domain names, without any relaying errors.

Configure SMTP to connect to email servers that require authentication

To send email(s) through an email server that requires authentication, such as an Exchange Server, or an outsourced service, such as google mail, etc., the following additional configuration steps are required.

- 1. To start the Windows Server Manager Application, from the Start menu, select Programs Administrative Tools Internet Information Services (IIS) 6.0 Manager Menu item.
- 2. Expand the Server Name object (ex. C8-DEMO)
- 3. Right-click on [SMTP Virtual Server #..1] Object and select Properties.

16 X

Figure (Appendix E) - 18: Internet Information Services (IIS) 6.0 Manager Menu

- 4. In the Properties dialog box, click on the Delivery tab.
- 5. Click on the **Outbound Security**... button.

Figure (Appendix E) - 19: Properties dialog box

eneral Access Messages Delivery	LDAP Routing Securit	1
Outbound		
First retry interval (minutes):	Œ	
Second retry interval (minutes):	30	
Third retry interval (minutes):	60	
Subsequent retry interval (minutes):	240	
Delay notification:	12 Hours	•
Expiration timeout:	2 Days	•
Local		
Delay notification:	12 Hours	•
Expiration timeout:	2 Days	•
Outbound Security Outbound con	nections Advan	ced
OK Cancel	Apply	Help

6. In the **Outbound Security** dialog box, select the **Basic authentication** radio button.

- 7. In the **User name:** text box, enter the user name details (given to you by your email Administrator for connecting to your Exchange or outsourced email server).
- 8. In the **Password:** field, enter details of the account password received from your email Administrator.
- 9. If the Exchange Server or the Outsourced Server requires TLS encryption, select the **TLS** encryption checkbox.

utbound Security		×
C Anonymous acco	ess	
No user name or	password required.	
· Basic authentica	ation	
The password wi commands.	Il be sent over the network in clear	text using standard
User name:		Browse
Password:	******	_
C Integrated Winds	ows Authentication	
The client and se Interface.	erver negotiate the Windows Secu	ity Support Provider
	erver negotiate the Windows Secu	Browse
Interface.	erver negotiate the Windows Secu	

Figure (Appendix E) - 20: Outbound Security dialog box - TLS encryption

- 10. To exit the Properties dialog box, click on OK.
- 11. To apply the settings, restart the SMTP service.



Step 4: Configure Centric 8 SMTP Server Properties

For Wildfly 8.1.0

For Wildfly 8.1.0, the default file name and location are in the C:\Program Files\Centric Software\C8\wildfly-8.1.0\standalone\configuration folder.

The SMTP information can be found in:

MSSQL

Wildfly-8.1.0\standalone\configuration\standalone-pi-mssql.xml

Oracle

Wildfly-8.1.0\standalone\configuration\standalone-pi-oracle.xml

- 1. Locate and open the appropriate xml file for Centric 8 using WordPad.
- 2. Locate the following section:

<outbound-socket-binding name="mail-smtp">

<remote-destination host="localhost" port="25"/>

</outbound-socket-binding>

3. Update the parameters highlighted in bold as is necessary (as shown below):

```
<remote-destination host="localhost" port="25"/>
```

- 4. Exit WordPad, saving the changes you have made.
- 5. To apply/activate the revised settings, restart the Centric 8 Wildfly service.



The Centric 8 server will now use the Windows SMTP server to send email notifications to users.

2. Configuring SMTP Server with IIS 7.0 Manager

If you are using the recommended 64-bit operating system with Windows 2008 server, and Microsoft IIS Web Server version 7.0, you must configure the SMTP Server.

This section describes how to complete the SMTP Server configuration on Windows 2008 using the following steps:

- <u>Step 2: Install IIS 7.0 Manager</u>
- <u>Step 3: Configure SMTP with IIS Manager</u>
- <u>Step 4: Configure SMTP with IIS 7.0 Manager</u>

Step 1: Install SMTP Server Service

To install the SMTP Server service, or to verify that it is already installed, use the following steps:

- 1. From the Start menu select Programs > Administrative Tools > Server Manager.
- 2. In the **Server Manager** window, in the left pane, click on **Features**; the Features list is displayed in the right pane:

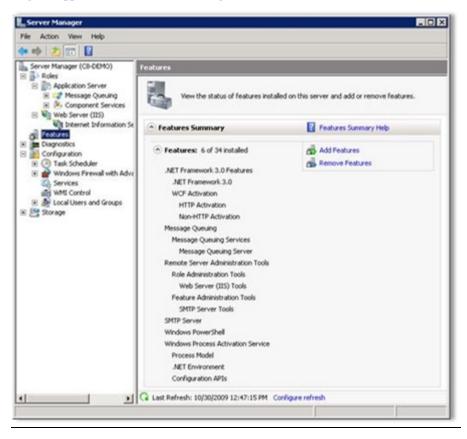


Figure (Appendix E) - 21: Server Manager Window

3. In the Features list, if SMTP Server is displayed then it indicates that the SMTP Server Service is installed; proceed to <u>Step 2: Install IIS 7.0</u> Manager on page 216

ELSE continue with step 4 below.

- 4. In the right pane, click on the Add Features link; the Add Features Wizard is displayed.
- 5. In the Features list, to turn on the SMTP Server, select the SMTP Server checkbox.

Features Confirmation	Select one or more features to install on this server. Eeatures:	Description:
Progress Results	MET Framework 3.0 Features (Installed) BRLocker Drive Encryption BRTS Server Extensions Connection Manager Administration KR Desktop Experience Group Policy Management Internet Storage Name Server URR Port Monitor Multipath I/O Network Load Balancing Peer Name Resolution Protocol Quality Windows Audio Video Experience Remote Differential Compression Remote Differential Compression Removable Storage Manager RPC over HTTP Proxy Simple TCP/IP Services V	Sette Server supports the transfer of e-mail messages between e-mail systems.

Figure (Appendix E) - 22: Add Features Wizard - Select Features

- 6. To continue, click on Next.
- 7. In the Add features required for SMTP Server? dialog box, click on the Add Required Features: button.

Figure (Appendix E) - 23: Add Features Wizard

C(1)	Add features required for SMTP Server? You cannot install SMTP Server unless the required features are also installed.		
	Eealuzes:	Description	
	Remote Server Administration Tools Feature Administration Tools SMTP Server Tools	Remote Server Administration Tools includes snap-ins and command-line tools for remotely managing roles and features.	
		Add Required Features Cancel	

8. In the Add Features Wizard – Confirm Installation Selections dialog box, click on the Install button,

Add Features Wizard	on Selections	×
Features Confirmation Progress Results	Install the following roles, role services, or features, dick Install. Informational message below Image: Image: Informational message below Image: Imag	

Figure (Appendix E) - 24: Add Features Wizard - Confirm Installation Selections dialog box

 Once the installation is complete, you can close the Wizard; the SMTP Server now displays in the Features list in the Server Manager Window. Proceed to the IIS 7.0 Manager installation as explained in <u>Step 2: Install IIS 7.0 Manager</u>.

Step 2: Install IIS 7.0 Manager

> To install the Microsoft IIS 7.0 Manager OR to verify that it is already installed

- 1. From the Start menu, select Programs > Administrative Tools > Server Manager.
- 2. In the Server Manager window, in the left pane, click on Web Server (IIS); the Role Services list is displayed in the right pane.

anager (CB-DEMO) Web Se	river (IIS)	_		
Application Server Message Queung Component Services web Server (115)	Provides a reliable, manageable, and scalable W	ieb application infrastru	chure.	
Internet Information Se	Role Services: 41 installed		Add Role Services	
ures B	le Service	Status	Remove Role Services	
Inestics Guration	Web Server	Installed		
Task Scheduler	a Common HITTP Features	Installed		
Windows Firewall with Adve	Static Content	Installed		
Services C		Installed		
WHE Control		Installed		
ocal Users and Groups		Installed		
190 C	HTTP Redrection	Installed		
9	a vépecación Development.	Installed Installed		
19	ASP.NET NET Extensibility	Installed		
5	ASP	Installed		
9	cg	Installed		
	ISAPI Extensions	Installed		
	ISAPI Fibers	Installed		
	Server Side Includes	Installed		
	Health and Diagnostics	Installed		
	HTTP Logging	Installed		
	Logging Tools	Installed		
	Request Monitor	Installed		
	Tracing	Installed		
	Custom Logging	Not installed		
	COBC Logging	Not installed		
2	a Security	Installed		
2	 Basic Authentication 	Installed		
5	Windows Authentication	Installed		
5	Digest Authentication	Installed		
5	 Clent Certificate Mapping Authentication 	Installed		
	 IIS Client Certificate Mapping Authentication 			
	 UFL Authorization 	Installed		
	 Request Filtering 	Installed		
	a IP and Domain Restrictions	Installed		
	a Performance	Installed		
9	Static Content Compression	Installed		
9	Dynamic Content Compression	Installed		
2	Management Tools	Installed Installed		
5	a manadement counce	Installed		
19	 IIS Management Scripts and Tools Management Service 	Installed		
19	 Management Service IIS 6 Management Compatibility 	Installed		
9	 IIS 6 Metabase Compatibility 	Installed		
1	 IIS 6 Pecabase Companiency IIS 6 WMI Compatibility 	Installed		
1	IIS 6 Scripting Tools	Installed		
19	IIS 6 Scripting Tools IIS 6 Management Console	Installed		
6	a management Conside	and determined		

Figure (Appendix E) - 25: Services Manager Window

3. In the **Role Services** list, expand **Management tools**; if IIS 7 Management Compatibility is displayed it indicates that the IIS 6.0 Manager is already installed and you can proceed to <u>Step 3</u>: <u>Configure SMTP with IIS Manager</u> on page 222

ELSE, continue with step 4 below.

- 4. In the right pane, click on Add Role Services; the Role Services Wizard is displayed.
- 5. In the **Role Services** list, to turn on the IIS 7 Management Compatibility, select the **IIS7 Management Compatibility** checkbox.

Role Services	Role Services		×
Role Services Confirmation Progress Results	Bole services: Image: Service Services Image: Service Service Image: Service Service Image: Service Service Image: Service Service Image: Service Service Service Image: Service Service Service Image: Service Service Service Image: Service Service Service Service Image: Service	pro you the (Ai Int IIS	scription: 16 Management Compatibility prides forward compatibility for ur applications and scripts that use s two IIS APIs, Admin Base Object BO) and Active Directory Service erface (ADSI). You can use existing 16 scripts to manage the IIS 7 Web rver.
	< Brevious	ext >	RemoveCancel

Figure (Appendix E) - 26: Role Services - Select Role Services dialog box

- 6. Click on Next.
- 7. To continue the installation, in the **Confirm Installation Selections** dialog box, click on **Install**.
- Once the installation is complete, you can close the Wizard; the IIS 7 Management compatibility service now displays in the Role Services list in the Server Manager Window. Proceed to the SMTP configuration as explained in <u>Step 3: Configure SMTP with IIS Manager</u> on page 204.

Step 3: Configure SMTP with IIS Manager

To configure the SMTP with the IIS Manager, or to verify that it is already installed, use the following steps:

- 1. From the Start menu, select Programs > Administrative Tools > Server Manager.
- 2. In the Server Manager Window, in the left pane, expand the Web Server (IIS) and click on Internet Information Services (IIS) Manager; the Connections list is displayed in the right pane.
- 3. In the Connections list, click on the Server Name; the Server Home Page is displayed.
- 4. Under ASP.NET, double-click on the SMTP E-Mail icon.

• • 2 10 2						
Server Manager (CB-DEMO) Roles	Internet Information Service:		100 - 10 100			
Application Server If I I Message Oueung	() () () () () () () () () () () () () ((C) (1) + (3) (2000)				
 Web Server (US) Polytochics Event Viewer Relation y and Performance Configuration Configuration Configuration Configuration Windows Frends His Adve Service Windows frends His Adve Service Windows frends His Adve Service Strate Strate 	Concelon Area ASP-NT	Actions Coon Feature Manage Server Result Stat Stat Stat Stat Stat Stat Stat St				

Figure (Appendix E) - 27: Service Manager

5. The SMTP E-mail pane is displayed as shown below,

Figure (Appendix E) - 28: SMTP E-mail pane

Point Content of	Internet Information Services	(IIS) Mahager	
	(30) S+ CROEMO	,	W - Q 10
With Server (13) With	Connections Connections Dart Page Connection Pads R & Stes Connection Pads R & Stes	SMTP E-mail Use its feature to specify the e-mail address and delivery options its use when sending e-mail address C-mail add	Actions By Apply By Canol P Heb Online Heb

- 6. In the SMTP E-mail pane, enter the following information:
- In the E-mail address text box, enter the email address that identifies the server; this address must match the address for the server's email domain. For example, address@customerdomain.com
- b. Select Deliver e-mail to SMTP server.
- c. To turn on the Use localhost, select the **Use localhost** checkbox, and in the **Port** field, accept the default value (25).
- d. In the **Actions** pane, click on the **Apply to verify your selections** option and then close the Server Manager.
- 7. To apply the settings, restart IIS.

Step 4: Configure SMTP with IIS 7.0 Manager

You can reset all of your directory paths using the IIS Manager. For this section, open the IIS Manager and reset the following:

- ISAPI filter path,
- ISAPI filter properties path,
- Virtual directory path and
- WebAccess path

Then, restart the IIS Manager.

> To open the IIS Manager (for updating the path details)

- 1. From the Start menu, select Programs > Administrative Tools > Internet Information Services (IIS) Manager.
- 2. In the **IIS Manager Window**, in the left panel, expand the server name. Proceed with the directory path updates to C8.

F. CONFIGURING SMTP ON WINDOWS 2012 SERVER

1. Configuring SMTP Server

If you are using the recommended 64-bit operating system with Windows 2012 server, and Microsoft IIS Web Server version 8.0, you must configure the SMTP Server.

This appendix describes how to complete the SMTP Server configuration on Windows 2012 using the following steps:

- <u>Step 1: Install SMTP Server Service</u>
- <u>Step 2: Install IIS 8.0 Manager</u>
- <u>Step 3: Configure SMTP with IIS Manager</u>
- Step 4: Configure SMTP with IIS 8.0 Manager

Step 1: Install SMTP Server Service

To install the SMTP Server service, or to verify that it is already installed, use the following steps:

- 1. From the Start menu, select Programs > Administrative Tools > Server Manager.
- 2. In the Server Manager Window, in the left pane, click on Features; the Features list displays in the right pane.
- 3. In the Features list, if the SMTP Server is displayed, it indicates that the SMTP Server Service is installed; proceed to <u>Step 2: Install IIS 8.0 Manager</u> on page 221,

ELSE, continue with step 4 below.

- 4. In the right pane, click Add Features; the Add Features Wizard is displayed.
- 5. To turn on the SMTP Server option, in the Features list, select the SMTP Server checkbox.
- 6. To continue, click on Next.
- 7. In the Add features required for SMTP Server pane, click on Add Required Features.
- 8. In the Confirm Installation Selections pane, click on Install.
- Once the installation is complete, you can close the Wizard; the SMTP Server is displayed in the Features list in the Server Manager Window. Proceed to the IIS 8.0 Manager installation as explained in <u>Step 2: Install IIS 8.0 Manager</u> on page 221.

Step 2: Install IIS 8.0 Manager

▶ How to install the Microsoft IIS 8.0 Manager OR verify that it is already installed

- 1. From the Start menu, select Programs > Administrative Tools > Server Manager.
- 2. In the Server Manager Window, in the left pane, click on Web Server (IIS); the Role Services list is displayed in the right pane.

 In the Role Services list, expand Management tools; if IIS 8 Management Compatibility is displayed, it indicates that the IIS 8.0 Manager is already installed and you can proceed to <u>Step</u> <u>3: Configure SMTP with IIS Manager</u> on page 222,

ELSE, continue with step 4 below.

- 4. In the right pane, click on Add Role Services; the Role Services Wizard is displayed.
- 5. In the **Role Services** list, to turn on the IIS 8 Management Compatibility, select the **IIS 8** Management Compatibility checkbox.
- 6. Click on Next.
- 7. To continue installation, in the **Confirm Installation Selections** pane, click on **Install**.
- 8. Once the installation is complete, you can close the Wizard; the IIS 8 Management compatibility service is displayed in the **Role Services** list in the **Server Manager Window**. Proceed to the SMTP configuration as explained in <u>Step 3: Configure SMTP with IIS Manager</u>.

Step 3: Configure SMTP with IIS Manager

> To configure the SMTP with the IIS Manager, or to verify that it is already installed

- 1. From the Start menu, select Programs > Administrative Tools > Server Manager.
- In the Server Manager Window, in the left pane, expand the Web Server (IIS), and select Internet Information Services (IIS) Manager; the Connections list is displayed in the right pane.
- 3. In the **Connections** list, click on the server name; the server home page is displayed.
- 4. Under ASP.NET, double-click on the SMTP E-Mail icon,

Figure (Appendix F) - 1: Server Manager Window



5. The SMTP E-mail pane is displayed as shown below,

Figure (Appendix F) - 2: Server Manager Window

Internet Balager (26 CBN) States Hanger (26 CBN) Replaced in Service (115) Manager Replaced in	Server Manager			.0.
Server Manager (CA COMO) Adds	File Action View Help			
Adverse mail in pickup directory: Image: State of the state of th	🕨 🔶 🗊 🖬			
Application Server Application Server (15) Description Configuration Storage St	a Server Manager (C8-DEMO)	Internet Information Services	(IIS) Manager	
We before the formation is Connections Products Image: Second	🛞 🎆 Application Server	C C C C C C C C C C C C C C C C C C C	,	m - (316)
Organization Image: Series Page Daysonics Start Page Configuration Image: Series Page December 2 Start Page December 2 December 2 December 2 Start Page December 2 December 2 Decembe	Internet Information Se	Connections	On ame	Actions
Image: Configuration Image: Sole range Image: Configuration Image: Configuration Image: Configura		Q	SMIP E-mail	By Acoly
Storage			The flip fashing to marify the a mult address and delivery orders to use when carding	Bg Cancel
Statistics Create address: Ordere Help Image: Statistic statistics Promotive com Image: Statistic statistics Image: Statistic statistic statistics Image: Statistic statistic statistics Image: Statistic statistic statistics Image: Statistic statist				@ Heb
C Store e-mail in pickup directory:		8 a Stes		
Server: Sociabot IP: Use (pashot) Bot: IS: Authentication Settings IP: Species IP: Species Set Set IP: Species Set IP: Species IP: Species Set			noreply@centricsoftware.com	
Important				
Vue localnost Port Sec Sec Sec Sec Sec Sec Sec Se				
Bart: Authentication Settings If byt required C tyledows Specify condentials: Set C gtore e-mail in pickup directory: Bitwise				
S Authentication Settings © type required © specify opdentials:				
Authentication Settings @ typic required C typicdows C Specify cgedwritule: 			and the second se	
G typedows C Speedy opdentials:			A Mushrubus Suttone	
C Specify cyclentials: C Specify cyclentials: C Store e-mail in pickup directory: 				
C Store e-mail in pickup directory:			C windows	
C Store e-mail in pickup directory:				
C Store e-mail in pickup directory:				
Bposte				
Bposte				
			C Store e-mail in pickup directory:	
			Browse	
			165. 1 Denne Kater et	
Description of the second se				
x x Fedures Vew Content Vew		1	Features View Content View	

- 6. In the SMTP E-mail pane, enter the following information:
- In the E-mail address text box, enter the email address that identifies the server; this address must match an address for the server's email domain. For example, address@customerdomain.com
- b. Select Deliver e-mail to SMTP server.
- c. Turn on Use localhost, and in the Port field, accept the default value (25).
- 7. To verify your selections, in the **Actions** pane, click on **Apply** and then close the **Server Manager**.
- 8. To apply/activate the settings, Restart IIS.

Step 4: Configure SMTP with IIS 8.0 Manager

You can reset all of the directory paths using the IIS Manager. For this section, open the IIS Manager and reset the following:

- ISAPI filter path,
- ISAPI filter properties path,
- Virtual directory path and WebAccess path.

Then, restart the IIS Manager.

> To open the IIS Manager (to update the path details)

- 1. From the Start menu, select Programs > Administrative Tools > Internet Information Services (IIS) Manager.
- 2. In the **IIS Manager Window**, in the left panel, expand the server name. Proceed with the directory path updates to C8.

G. LICENSING AND ADMINISTRATOR PASSWORD MANAGEMENT

1. Managing User Licenses

If users, suddenly, find that they are unable to log in to Centric 8, it is possible that the organization may have exceeded the maximum number of allowable user licenses set up during installation. All active users in the system are measured against the total number of allowable user licenses.



To make more licenses available, you can set a user's status to inactive. For more information refer to the *Centric 8 Administrator Guide*.

2. Install New User License

To install a new user license in Centric 8

- 1. From the Start menu, select Programs > Administrative Tools > Services.
- 2. Unzip the C8.lic to the certificates folder in the following location:

<Centric8InstallDirectory>\C8\wildfly-8.1.0\standalone\configuration\certificates

- **3.** Once the file C8.lic has successfully been added to the certificates folder, restart the Wildfly service.
 - To restart the Wildfly Service,
 - From the Start menu, select Programs Administrative Tools Services.
 - In the Services Window, right-click on Centric Wildfly Service and select Start.
 - Allow a few moments for the batch files to finish running in the background.

Change Admin Password: Post Installation Steps

To change your Administrator password, you must first log into Centric 8 with Administrator rights and modify the password in the UI.

Change Password in Centric 8 UI

How to change the password in the UI

- 1. Log into Centric 8 as the site administrator.
- 2. On the User Management tab, in the User Login column, click on the Administrator User Login Name. The User Profile tab is displayed.
- 3. On the User Profile tab, click on Change User Login/Password. The Change User Login/Password dialog box is displayed.
- 4. Enter details in the Password and Confirm Password fields, and click on Save.

Confirmation

On completing the <u>Change Password in Centric 8 UI</u> procedure, confirm that the password is properly reset in Centric 8.

How to confirm that the password is reset properly

- 1. Log into Centric 8 as the site Administrator.
- 2. If you are unable to log in, verify that you entered the correct user name and new password. If you continue to receive the message User Name and/or password is invalid, verify that no errors exist in the pi_sessions.log file located in the <Centric8InstallDirectory>\C8\Log folder.
- 3. If no errors exist, try logging in again.



The C8 Print and Image Services use the C8 Administrator password. Whenever the C8 Administrator password is changed, make sure to change the password information in the relevant files for C8 Print and Image Services.

3. Install Mobile App License

To Install Mobile App license

- 1. Unzip the license file to the ios folder in the following location:
 - ..\C8\WebAccess\ios folder



- 2. Rename that file to C8MobilePermissions.plist
- 3. Open IIS Manager and select the computer name from the left pane
- 4. In IIS section, right click on MIME Types and select Open Feature

Internet Information Services (I	IS) Manager							peri
PERFLAB3 >								
File View Help								
onnections		RFLAB3 Ho	me					Action
,▼ 🛃 🖄 😪			JIIIC					Op
PERFLAB3 (PERFLAB3\Administra	Filter:		• 00 Go • (Show All	Froup by: Area		-	M
	ASP.NET						_	₽ Re St
	10		404	۲	٩,	ý=		St.
	.NET	NET	.NET Error	NET	.NET Trust	Application		Vie
	Authorizati	Compilation	Pages	Globalization	Levels	Settings		Vie
	ab	7		62	5			🕜 He
	Connection	Machine Key	Pages and Controls	Providers	Session State	SMTP E-mail		Or
	Strings		Controls					
	115							
		~	CGI	A	2			
	ASP	Authentication	CGI	Compression	Default	Directory		
					Document	Browsing		
	404			1	:			
		Failed Request	FastCGI	Handler	HTTP Redirect	HTTP		
		Tracing Rules	Settings	Mappings		Rospo		
	2	3		124				
	ISAPI and CGI	ISAPI Filters	Logging		Modules	Outnut	1	
	Restrictions				Open Feature			
	3	<u>i</u>	2	3	Restart			
	Request	Server	Worker		Start Stop		-	
	Features Vie	w 💦 Content '	/iew	-	View Application	Pools		
ady					View Application	TROUIS		
					Help			
					Online Help			

Figure (Appendix G) - 1: IIS Manager Window

5. From the Actions column, click on Add

Figure (Appendix G) - 2: IIS Manager Window

File View Help					
Connections	AT MATA				Actions
Start Page PERFLAB3 (PERFLAB3)Administre Application Pools	as static files by the We	age the list of file name e b server.	xtensions and associat	ed content types that are served	Add Help Online Help
E Sites	Group by: No Groupin	9 *			
	Extension +	MIME Type	Entry Type	<u>^</u>	
	.323	text/h323	Local		
	.aaf	application/loctet-st	Local		
	.aca	application/octet-st	Local		

6. Enter the following in the Add MIME Type dialog box:

File name extension – .plist

MIME type – application/xml

Figure (Appendix G) - 3: Add MIME Type Dialog box

Add MIME Type		? ×
File name extension:		
JI MIME type:		
	OK	Cancel

7. Click on OK and restart IIS

H. PDF PRINT SERVICE

For information on the PDF Print Service, refer to the PDF Print Service Installation Guide.

I. IMAGE SERVICE

For information on Image Service, refer Image Service Installation Guide.

J. LDAP SETUP WITH SSL

This section explains the configuration requirements for enabling LDAP Authentication with SSL.

1. Pre-requisite

LDAP Administrator must create a user group in LDAP of Users allowed to access Centric8 through LDAP.

2. SSL CERTIFICATE INSTALLATION

- 1. If a SSL Certificate is required to be deployed, obtain the certificate file from the Customer and copy it to the Centric 8 server machine.
- 2. Install the Certificate in the C8 jre certificate store, as follows:
 - Open a command prompt as Administrator and navigate to Centric 8 Installation folder\jdk1.8.0_45\bin
 - Type: keytool -import -trustcacerts -alias %COMPANY_NAME% -file% PATH_TO _CERTIFICATE_FILE% -keystore

%C8_INSTALL%\%JAVA_DIR%\lib\security\cacerts

- Default keytool password is "changeit"
- Type 'YES' to install the certificate
- The following parameters need to be updated for LDAP configuration

Pi-configuration.properties file (found in ...\C8\wildfly-8.1.0\standalone\configuration folder)

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPAddress =
##LDAP_SERVER_ADDRESS##

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPSearchBase =
##LDAP_SEARCH_BASE##

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPGroupBase =
##LDAP_GROUP_BASE##

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPBindUser =
##LDAP_BIND_USER##

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPBindPassword =
##LDAP_BIND_PASSWORD##

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPGroupType =
##LDAP_GROUP_TYPE##

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPUserType = ##LDAP_USER_TYPE##

com.centricsoftware.server.IdentityProvider.CENTRIC_IDENTITY_PROVIDER.LDAPType =
##LDAP_TYPE##

Refer to the table below for a description of the parameters and some example settings for these parameters.

Table (Appendix J)	- 1: Description of	f Parameters and	' example settings i	for Pi-configuration	broperties file
			8.1		property in

Configuration Settings	Example OpenLDAP Settings	Configuratio n Defaults	Setting Details (and available Options)	Requirements
LDAP_SERVER_ADDRESS=	ldap://192.168. 10.174:389	set during config	Idap:// or Idaps:// +ip/port or server name	
LDAP_SEARCH_BASE	cn=CentricUser s,ou=Groups,dc =centricsoftwar e,dc=com	set during config	Distinguished name' of root search directory (could be base LDAP domain or lower directory)	This is like a file path in reverse notation, where cn is the end of the path ou is the parent path and dc is the 'drive
LDAPGroupBase=	cn=TestGroup1 ,cn=Users,dc=I ab,dc=frametec h,dc=com	set during config	Distinguished name of group object containing C8 users to import	This is like a file path in reverse notation, where cn is the end of the path ou is the parent path and dc is the 'drive
LDAP_GROUP_BASE	cn=CentricUser s,ou=Groups,dc =centricsoftwar e,dc=com	set during config	Distinguished name' of root search directory (could be base LDAP domain or lower directory)	This is like a file path in reverse notation, where cn is the end of the path ou is the parent path and dc is the 'drive
LDAP_BIND_USER	cn=admin,dc=c entricsoftware,d c=com	set during config	Either distinguished name of binding user (OpenLDAP), or username@domain (Active Directory)	
LDAP_BIND_PASSWORD	2:C^K(?"B=%	set during config	Encrypted password (generated as part of install process but need to regenerate if binduser is changed on LDAP server)	
LDAP_GROUP_TYPE	groupOfNames	groupOfNames (OpenLDAP)Grou p (Active Directory)	Object type for group container (Variable for OpenLDAP, Group for Active Directory)	User DNs contained in member attribute list (OpenLDAP), or in memberOf attribute list of Group (AD).
LDAP_USER_TYPE	posixAccount	posixAccount (OpenLDAP)User (Active Directory)	Object type for user object (Variable for OpenLDAP, User for Active Directory)	User must have username set in sAMAccountName (AD) or uid (OpenLDAP). Foreign ID taken from objectGUID (AD) or uidNumber (OpenLDAP)
LDAP_TYPE	OpenLDAP	Left blank (implies Active Directory)	Active Directory (or blank), OpenLDAP	
PAGESIZE	LDAPPageSize= 500		If no value is specified, then the default is 500	This option is used when synchronizing a large number of LDAP users, i.e. 1000+ users

3. Once the parameters are updated, save and close the file. Restart Centric Wildfly service.

- 4. Confirm the certificate has been installed correctly.
 - Enter the following command in the command prompt (navigate to the same directory used when installing the certificate)

keytool -list -keystore %JAVA_HOME%\lib\security\cacerts

Example:

keytool -list -keystore C:\C8\jdk1.8.0_45\jre\lib\security\cacerts

- No password is required, but 'changeit' should work if desired.
- In the displayed list, search for the alias name you entered in the section <u>SSL Certificate</u> <u>Installation - Step 2</u> on page 231 in the list that is displayed.

Import Users from LDAP

- 1. Log into C8, navigate to Setup > User Management > LDAP tab.
- 2. Verify the LDAP server details like Server address, search base string etc.
- 3. Verify whether the Force SSL checkbox has been selected, if SSL is enabled on LDAP Server.
- 4. On the toolbar, click on the **Synchronize** icon. You can view a message saying how many users are imported, in the lower right corner of the page.

Optional Steps

- 1. To synchronize users daily, select **Job Enabled** checkbox. To change the Job schedule, navigate to **Setup → Service → Job Service** tab. In the Job Schedule table, change the execution time.
- 2. To import LDAP users as active, click Import As Active User.

K. HTTPS SUPPORT

Configuration Files

server.

NOTE

After the SSL Certificate has been installed on IIS, change the following configuration files:

This section applies only if you have already installed SSL Certificate in your

<program files>\Centric Software\C8\wildfly-8.1.0\standalone\configuration\standalone-pi-mssql.xml to com.centricsoftware.AppServer.HomeURL

Image Services

- 1. Update the CSImageService.cfg file.
- 2. # Server URL for obtaining print requests
- 3. Server URL=https://HostUrl/csi-requesthandler/RequestHandler

PDF Print Services

- **1.** Update the PDFService.cfg file.
- 2. # Server URL for obtaining print requests
- 3. Server URL=https://HostUrl/csi-requesthandler/RequestHandler

If Firewalls are installed on the Windows Server and network, update it to allow traffic through on port 443 (https).



The Centric 8 server must be able to resolve the Host name to an IP address on this machine.

There are cases where Administrators do not have external names resolved to an IP address inside their own network.

- 4. After making changes to the configuration file, ensure that a valid IP address that matches the IP address on the server is returned. Else, the Centric8 application will not function properly.
- 5. Ensure that each of the configuration files uses **https://HostUrl**. Note that inserting an IP address instead of the host URL, will prevent the Centric8 application from functioning properly.
- 6. The URL must match the certificate name (i.e. Host Url).
- 7. For example, if the certificate name is example.somecompany.com, the URL must start with https://example.somecompany.com/....
- 8. If the URL does not match the certificate name, then the Print and Image services will not work as expected.

How to test whether or not the hostname returns a valid IP address

- 1. Open a command prompt and type PING Host Url. Press ENTER.
- 2. An IP address is displayed.
- 3. Type IPCONFIG and press Enter.
- 4. Verify that the IP address returned by the PING is displayed in the IPCONFIG report.

If the PING response is *unknown host* or an IP address that does not match with that of the server, complete the following steps given below:



- 1. Edit the Windows system hosts file and add the following line (The hosts table can be found in C:\Windows\System32\drivers\ etc)
- 2. In the Start menu, locate the Notepad app icon.
- 3. Right-click on the Notepad app, and select Run As Administrator option.
 - If you do not select the Run As Administrator option, the file will be opened in Readonly mode and the changes will not be saved.
- 4. At the end of the file, type the line (IP address) 127.0.0.1 Customer name, save the changes and exit notepad.
- 5. Now, when you type **PING Customer name** and press **Enter**, the following IP address will be displayed:

127.0.0.1

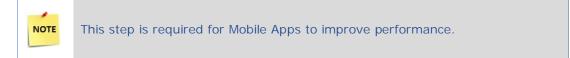


This is a special IP address which refers to the machine you are currently logged on. Any reference to 127.0.0.1 will point back to the machine you are currently system on which you are currently logged in.

6. Restart Wildfly; the Print, and Image services will pick up the changes made to the configuration files.

L. ENABLE HTTP COMPRESSION IN IIS

Enable HTTP Compression in IIS to improve client performance slow networks.



1. Open Internet Information Service (IIS).

```
Figure (Appendix L) - 1: Internet Information Service (IIS)
```

		🕌 Remote Desktop Services 🔹 🕨
		. Component Services
		😓 Computer Management
		🔄 Data Sources (ODBC)
		Event Viewer
-	005	👣 Internet Information Services (IIS) 6.0 Manager
Notepad +	, China and a start and a start a star	😜 Internet Information Services (IIS) Manager
124		😪 iSCSI Initiator
Services	~ <u>~</u>	🚡 Local Security Policy
	Administrator	N Performance Monitor
C Internet Explorer		🚡 Security Configuration Wizard
Command Prompt	Documents	🚠 Server Manager
Command Prompt	(<u></u>	Services
SQL Server Management Studio	IT-TEST	📆 Share and Storage Management
Line SQL Server Management Stadio	Network	🛫 Storage Explorer
Internet Information Services (IIS)	Network	System Configuration
Manager	Control Panel	🕑 Task Scheduler
🧭 Paint 🕨		Indows Firewall with Advanced Security
	Devices and Printers	Windows Memory Diagnostic
(+) Task Scheduler		🛃 Windows PowerShell Modules
	Administrative Tools	🛞 Windows Server Backup
SQL Server Configuration Manager	Help and Support	
Thternet Information Services (IIS)		
5.0 Manager	Run	
	Windows Security	
 All Programs 	Windows beconcy	
Search programs and files	Log off	
Arstart 🐫 ⊿ 🚞 📀	۱	

2. On the left pane, click on a server name. On the right hand side, under IIS, right-click on **Compression** and select the **Open Feature** option.

🖣 IТ-	TEST Hor	ne					
Filter:	Filter:						
IIS							
		CGI	Ð	0		404	
ASP	Authentication	CGI	Compression	Default Document	Directory Browsing	Error Pages	
	2		8	3		1	
FastCGI Settings	Handler Mappings	HTTP Respo	ISAPI and CGI Restrictions	ISAPI Filters	Logging	MIME Types	
		2	P				
Modules	Output Caching	Request Filtering	Server Certificates	Worker Processes			
Management							
		¥=					
Configuration Editor	Feature Delegation	Shared Configuration					

Figure (Appendix L) - 2: IIS Window

3. Select the **Enable dynamic content compression** and **Enable static content compression** checkboxes. Click on **Apply** on the right hand side. Go to Step 7.

Figure (Appendix L) - 3: Compression Window

Comprossion	Alerts
Use this feature to configure settings for compression of responses. This can improve the perceived performance of a Web site greatly reduce bandwidth-related charges.	Use of dynamic compression may increase processor utilization and reduce the overall performance of the server.
Enable dynamic content compression Enable static content compression	The dynamic content compression module is not installed.
- Static Compression	Actions
 Only compress files larger than (in bytes): 2700 	E√ Apply Ex Cancel
	 Help Online Help
Per application pool disk space limit (in MB):	

4. If dynamic content compression module is not installed, open Server Manager.

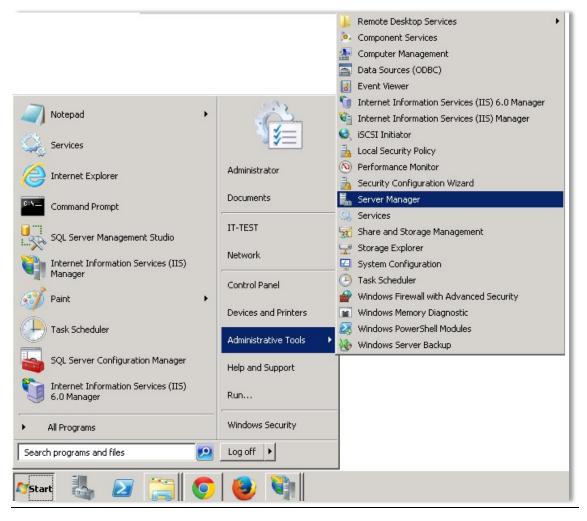


Figure (Appendix L) - 4: Server Manager

5. Click on Roles. In the Roles Window, in the Web Server (IIS) section, click on Add Role Services.

Figure (Appendix L) - 5: Roles Window

Server Manager			_ (2)
<u>File Action View H</u> elp			
🗢 🔿 🖄 📊 🛛			
Server Manager (IT-TEST) Roles Roles Diagnostics Roley Storage	Roles View the health of the roles instal	led on your server and add or remove roles and features.	
	Roles Summary		👔 Roles Summary Help
	 Roles: 1 of 17 installed Web Server (IIS) 		Add Roles
	• Web Server (IIS)		Web Server (IIS) Help
	Provides a reliable, manageable, and scalab Role Status Messages: None System Services: All Running Events: 1 informational in the last 2 Best Practices Analyzer: To start a tile on this role's homepage and clic	24 hours Best Practices Analyzer scan, go to the Best Practices Analyzer	Go to Web Server (IIS)
	Role Services: 27 installed Role Service Web Server Common HTTP Features Static Content Default Document Directory Browsing	Status Installed Installed Installed	Add Role Services
	befault Document	Installed Installed	

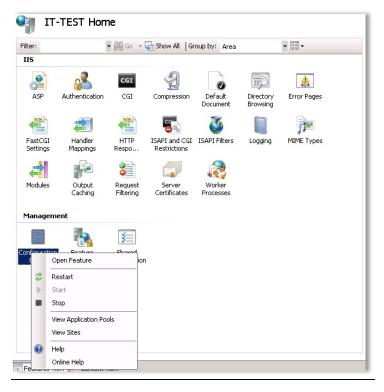
6. In the Add Roles Service dialog box, under Performance, select Static Content Compression and Dynamic Content Compression checkboxes and click on the Install button.

Figure (Appendix L) - 6: Select Roles Window

Select Rol	Select the role services to install for Web Server (IIS):	
Ionfirmation	Role services:	Description:
rogress lesults	Irracing (Installed) Custom Logging (Installed) Costom Logging (Installed) Cost Logging (Installed) Good Loggin	

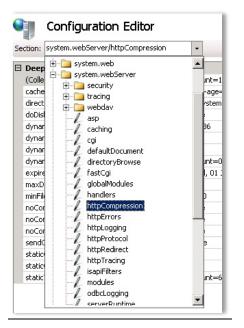
7. From the **Start** menu, select **IIS Manager**. In the **Connections** section on the left, click on the server name in IIS. On the right hand side, under the **Management** section, right-click on the **Configuration Editor** and select **Open Feature**.

Figure (Appendix L) - 7: Configuration Editor - Open Feature



8. From the Section drop-down list, expand System.webServer and select httpCompression

Figure (Appendix L) - 8: Configuration Editor



9. Select dynamicTypes and click on the Browse button.

Figure (Appendix L) - 9: Configuration Editor (2)

(Collect		HOST (Count=1)
cacheC		(Count-1)
		(Count=1)
director	ontrolHeader	max-age=86400
	Y	%SystemDrive%\inetpub\temp\IIS Temporary Compressed Files
doDiskS	spaceLimiting	True
dynamic	cCompressionBufferLimit	65536
	cCompressionDisableCpuUsage	90
dynamic	cCompressionEnableCpuUsage	50
dynamic	сТурез	(Count=0)
expires	Header	Wed, 01 Jan 1997 12:00:00 GMT
maxDisł	kSpaceUsage	100
minFileS	5izeForComp	2700
noComp	pressionForHttp10	True
noComp	pressionForProxies	True
noComp	pressionForRange	True
sendCa	cheHeaders	False
staticCo	ompressionDisableCpuUsage	100
staticCo	ompressionEnableCpuUsage	50
staticTy	/pes	(Count=6)

10. No changes are required if,

 In the Collection Editor dialog box, if you see the mimeType */* and the enabled field is set to *True*, no changes are required.

Figure (Appendix L) - 10: Collection Editor (3)

Colle	Collection Editor - system.webServer/httpCompression/dynamicTypes/					
Ite	Items:					
	mimeType	enabled	Entry Path			
	/	True				

ELSE,

- In the Collection Editor dialog box, if you see this mimeType */* and the enabled field is set to False,
 - Click on it.
 - In the **Properties** section, from the **enabled** drop-down list, select *True*.

Figure (Appendix L) - 11: Collection Editor - Properties section

ollection Ec	ditor - syster	m.webServer/httpCompression/dynamicTypes/				
Items:	ems:					
mimeTy	/pe enabled	Entry Path				
/	True					
Properties:						
enabled		🔹 True 💽				
mimeType		* True				
		False				

- 11. If no mimeType is available,
 - In the **Collection Editor** dialog box, on the right –hand side, in the **Actions** section, click on **Add**.

Figure (Appendix L) - 12: Collection Editor - Properties

Coll	ection Edito	r - syster	n.webServer/httpCompression/dynamicTypes/	? ×
Ite	ms:			Actions:
	mimeType	enabled	Entry Path	Collection Add Clear All
				Item Properties 🗆
				Lock Item
				Help Online Help
Pro	perties:			
	nabled himeType		9 9	<u> </u>

12. In the **Properties** window, in the **enabled** drop-down list, select *True* and type */* in **mimeType** field.

 Collection Editor - system.webServer/httpCompression/dynamicTypes/

 Items:

 mimeType
 enabled
 Entry Path

 a
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 True
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Figure (Appendix L) - 13: Properties Window

13. Close the Configuration window and restart the IIS.

* True ? */*

Offline App Cache

Properties: enabled

mimeType

Centric 8 5.5 release uses HTML5 which introduces application cache, which means that a web application is cached, and accessible without an internet connection.

Advantages of Setting Offline App Cache

Application cache gives the following advantages:

- Offline browsing : Users can use the application when they're offline
- Speed : Cached resources load faster
- **Reduced server load:** The browser will only download updated/changed resources from the server

Supported Browsers for Offline App Cache

The numbers in the table specify the first browser version that fully supports Application Cache

Browser	Chrome	IE	Firefox	Safari
Application Cache	4.0	10.0	3.5	5.0
		1		

NOTE

The Application Cache is not supported in IE9 version

► To setup Offline Cache

- 1. Open IIS manager
- 2. Click on machine name from the Connections pane
- 3. In the IIS section, right-click on MIME Types and select Open Feature

Figure (Appendix L) - 14: IIS Manager Window

Filter:		• 00 Go - 🖣	Show All G	roup by: Area		•			
ASP.NET									
-		404	۲		1	ab	7		<u> </u>
.NET Authorizati	.NET Compilation	.NET Error Pages	.NET Globalization	.NET Trust Levels	Application Settings	Connection Strings	Machine Key	Pages and Controls	Providers
Session State	SMTP E-mail								
115									
	2	CGI	Ð	0		404	(2	
ASP	Authentication	CGI	Compression	Default Document	Directory Browsing	Error Pages	FastCGI Settings	Handler Mappings	HTTP Respo
-	3		22.5	4		0	P	2	
SAPI and CGI Restrictions	ISAPI Filters	Logging		oen Feature		quest ering	Server Certificates	Worker Processes	
Manageme	int		-	estart art					
	14	¥=	St	op					
Configuration Editor	Feature Delegation	Shared Configuration		ew Application Po ew Sites	ools				
			Ct	ange .NET Fram	ework Version				

4. Click on Add from the Actions pane

113	Types manage the list of file name e	Actions Add @ Help	
Group by: No Gro	ouping •	Online Help	
Extension 🔺	MIME Type	Entry Type	•
.323	text/h323	Local	
.aaf	application/octet-st	Local	
aca	application/octet-st	Local	
accdb	application/msaccess	Local	
accde	application/msaccess	Local	
accdt	application/msaccess	Local	
.acx	application/internet	Local	
.afm	application/octet-st	Local	
.ai	application/postscript	Local	
af	audio/x-aiff	Local	
.aifc	audio/aiff	Local	
aiff	audio/aiff	Local	
application	application/x-ms-ap	Local	
.art	image/x-jg	Local	
asd	application/octet-st	Local	
asf	video/x-ms-asf	Local	
.asi	application/octet-st	Local	
.asm	text/plain	Local	
asr	video/x-ms-asf	Local	
asx	video/x-ms-asf	Local	
atom	application/atom+xml	Local	
au	audio/basic	Local	
avi.	video/x-msvideo	Local	
axs.	application/olescript	Local	
bas	text/plain	Local	
.bcpio	application/x-bcpio	Local	
.bin	application/octet-st	Local	-

Figure (Appendix L) - 15: MIME Types Window

5. Enter the following in the Add MIME Type dialog box:

File name extension: .appcache

MIME type: text/cache-manifest

Figure (Appendix L) - 16: Add MIME Type Window

Add MIME Type		? ×
File name extensio	n:	
J		
MIME type:		
1		
	OK	Cancel

6. Click on **Ok** and restart IIS. To restart IIS, click on the machine name and click **Restart** from the right pane

• To clear Browser Cache

- In Chrome:
 - 1. Navigate to Options > More Tools > Clear Browsing Data
 - 2. From the Obliterate the following items from: drop-down menu, choose the beginning of time
 - 3. Enable Cookies and other site and plugin data and Cached images and files checkboxes
 - 4. Click on Clear browsing data

Figure (Appendix L) - 17: Clear Browsing Data Window

Clear browsing data		×
Obliterate the following items from: the beginni	ng of time 🔻	
Browsing history		
Download history		
Cookies and other site and plugin data		
Cached images and files		
Passwords		
Autofill form data		
Hosted app data		
Content licenses		
Learn more	Clear browsing data	Cancel
Saved content settings and search engines will no browsing habits.	t be cleared and may reflect	your

- In Firefox:
 - 1. Navigate to Tools > Options > History > Clear Recent History
 - 2. From the Time range to clear: drop-down menu, choose Everything
 - 3. From the Details section, enable Cache and Offline Webisite Data
 - 4. Click on Clear Now to clear the borswer cache

Figure (Appendix L) - 18: Clear All History Window

Clear All History	×
Time range to clear Everything	~
All selected items will be cleared. This action cannot be undone.	
∧ D <u>e</u> tails	
Browsing & Download History	^
Form & Search History	
Cookies	
Cache	
Active Logins	
Offline Website Data	
Site Preferences	~
Clear Now Can	cel

- In Internet Explorer:
 - 1. Navigate to Tools > Internet Options > Browsing History > Delete
 - 2. In the Delete Browsing History popup, enable Temporary Internet files and website files and Cookies and website data
 - 3. Click on **Delete** to clear the browswer cache

Figure (Appendix L) - 19: Delete Browsing History Window

General Security Privacy Content Connections Programs Ac	Delete Browsing History
Home page To create home page tabs, type each address on its own http://go.microsoft.com/fwlink/?LinkID=394657	Preserve Favorites website data Keep cooldes and temporary Internet files that enable your favorite websites to retain preferences and display faster.
Use current Use default Use new	Iemporary Internet files and website files Copies or weopages, images, and media that are saved for faster viewing.
Startup	Cookies and website data Files or databases stored or your preferences or improve website performance.
Tabs Change how webpages are displayed in tabs. Tabs	History List of websites you have visited.
Browsing history	Download History List of files you have downloaded.
Delete temporary files, history, cookies, saved passwords, and w form information.	<u>Form data</u> Saved information that you have typed into forms.
Delete browsing history on exit Delete Setting Appearance	Passwords Saved passwords that are automatically filled in when you sign in to a website you've previously visited.
Colors Languages Fonts Accessib	Tracking Protection, ActiveX Filtering and Do Not Track A list of websites excluded from filtering, data used by Tracking Protection to detect where sites might automatically be sharing deta about your visit, and exceptions to Do Not Track requests.
OK Cancel	About deleting browsing history Delete Cancel

M. CHANGE SMTP SERVER INFORMATION IN WILDFLY

> To change SMTP Server information in Centric 8

1. In the Services window, stop Wildfly Services.

Figure (Appendix M) - 1: Services Window

File Action View Help						
**	G 🕞 🖬 🗊 🕨 🖩 🛯 🔛					
Services (Local)	Q. Services (Local)					
	Centric WildPly-8.1.0 Service	Note -	Description	Saha	Startup Type	Logonte
		Centric WildFly-8.1.0 Service	Centric WILL	Started	Manual	Administ
	Stop the service	Certificate Propagation	Copies use	Sated	Manual	Local Syr
	Restart the service	CNG Key Isolation	The CNG k	Sated	Manual	Local Sys
		Q COM+ Everit System	Supports 5	Sated	Automatic	Local Ser
	Description:	COM+ System Application	Manages t	Started	Manual	Local Sys
	Centric WildFly-8.1.0 Service/Platform	Computer Browser	Mandans a		Disabled	Local Sys
	Windows x64	Credential Manager	Provides s		Manual	Local Syn
		Cryptographic Services	Provides fo	Started	Automatic	Network
		CibnageService		Started	Manual	.\Admine
		CSPrintService		Rated	Manual	.\Admine
		COM Server Process Launc	The DCOM	Rated	Automatic	Local Syr
		Desktop Window Manager 5	Provides D	Started	Automatic	Local Sys
		Check Clerk	Registers a	Stated	Automatic	Local Ser
		Diagnostic Policy Service	The Diagno	Started	Automatic (D	Local Ser
		Chagnostic Service Host	The Diagno		Manual	Local Ser
		Chagnostic System Host	The Diagno		Manual	Local Sys.
		Cisk Defragmenter	Provides Di		Manual	Local Syn
		Costributed Link Tracking Client	Mantains 8	Rated	Automatic	Local Sys
		Clatributed Transaction Coor	Coordinate	Started	Automatic (D	Network
	1	CNS Clerk	The DNS Cl	Started	Automatic	Network
	1	Chargeting File System (UPS)	Provides th	Started	Automatic	Local Sys
		Extensible Authentication Pr	The Extens		Manual	Local Sy

2. If using SQL Server, edit Standalone-pi-mssql.xml file (located in ..\C8\wildfly-8.1.0\standalone\configuration folder) in XML editor application (Notepad++).

gankze 🔹 🏹 Open 🤉	 New folder 			
Favorites	Name -	Date modified	Type	Size
E Desitop	🔒 certificates	2/25/2015 8:23 PM	File Folder	
Downloads	standalone_xml_history	10/6/2014 9:11 PM	File Folder	
Recent Places	👃 standalone-pi-missql_xml_history	2/19/2015 2:30 PM	File folder	
Libraries	e application-roles.properties	2/25/2015 8:21 PM	PROPERITIES File	1 #2
Documents	application-users.properties	2/25/2015 8:21 PM	PROPERTIES File	1 43
J Music	importer.csv	2/25/2015 7:29 PM	CSV File	18 13
Richares	kgging properties	2/25/2015 8:34 PM	PROPERTIES File	911
Videos	ingnt-groups.properties	2/25/2015 8:21 PM	PROPERTIES File	1.62
2x8264-52x81-53	📄 ngnt-users properties	2/25/2015-8:21 PM	PROPER TIES File	2 12
Local Disk (Ci)	pi-configuration properties	2/25/2015 8:23 PM	PROPERTIES File	18 42
and coca part (ci)	i pi-initialpermissions properties	2/25/2015 7:26 PM	PROPERTIES File	2 82
Metwork	pi-widtly-6.1.0.properties	2/25/2015 8:23 PM	PROPERTIES File	3 12
	standalone.xml	2/25/2015 8:21 PM	XML File	20 KI
	📄 standalone-full.xni	2/25/2015 8:21 PM	XML File	25 13
	standalone-full-ha.xml	2/25/2015 8:21 PM	XML File	29 83
	📄 standalone-ha.xmi	2/25/2015 8:21 PM	XML File	23 13
	standslone-pi-misql.xml	2/26/2015 2:54 AM	XML File	22.03
	standalone-pi-mssql-ha.xml	2/25/2015 8:23 PM	XML File	27 KI
	standalone-pi-orade.xml	2/8/2015 4:03 PM	XML File	23 KB

Figure (Appendix M) - 2: Configuration Window

3. If you are using SQL Server with wildfly Cluster Setup, then edit Standalone-pi-mssql- ha-tcp.xml in all Cluster Servers. (located in ..\C8\wildfly-8.1.0\standalone\configuration folder) in XML editor application (Notepad++).

Figure (Appendix M) - 3: Configuration Window (2)

rganize • 📝 Open	New folder			
* Favortes	Name *	Date modified	Туре	500
E Desktop	L certificates	2/25/2015 8:23 PM	File folder	
La Downloads	🗼 standalone_xml_history	10/6/2014 9:11 PM	File folder	
32 Recent Places	👃 standalone-pi-mssql_xml_history	2/19/2015 2:30 PM	File folder	
Libraries	application-roles.properties	2/25/2015 8:21 PM	PROPERTIES File	1.63
P Documents	application-users.properties	2/25/2015 8:21 PM	PROPERTIES File	1 83
A Music	importer.csv	2/25/2015 7:29 PM	CSV File	18 KI
Retures	Rogang.properties	2/25/2015 8:34 PM	PROPERTIES File	983
Videos	mgnt-groups.properties	2/25/2015 0:21 PM	PROPERTIES File	1.63
-	imgnit-users.properties	2/25/2015 8:21 PM	PROPERTIES File	2.83
208264-52081-53 Local Disk (C:)	🥑 pi-configuration, properties	2/25/2015 8:23 PM	PROPERTIES File	18 KI
and roca par (c.)	grinitialpermissions.properties	2/25/2015 7:26 PM	PROPERTIES File	2 83
W Network	gi-wildfly-8.1.0.properties	2/25/2015 8:23 PM	PROPERTIES File	3 83
	standaloneml	2/25/2015 0:21 PM	104. File	20 81
	standalone-full.xml	2/25/2015 0:21 PM	30% File	25 KI
	standalone-full-ha.xml	2/25/2015 8:21 PM	304. File	29 KI
	📄 standalone-ha.xmi	2/25/2015 0:21 PM	304, File	23 ×1
	itandalone-pi-mssql.xml	2/26/2015 2:54 AM	X04. File	22 KI
	standalone-pi-mssql-ha.xml	2/25/2015 8:23 PM	104, File	27 KI
	standalone-pi-orade.xml	2/8/2015 4:03 PM	30%, File	23 KI
	standalone-pi-oracle-ha.xml	2/25/2015 8:23 FM	354, File	27 KS

4. If you are using Oracle Server, edit Standalone-pi-oracle.xml (located in ..\C8\wildfly-8.1.0\standalone\configuration folder) in XML editor application (Notepad++).

Organize = 📝 Open 🕚	New folder			
* Favortes	Name *	Date modified	Type	Size
E Desktop	L certificates	2/25/2015 8:23 PM	File folder	
Downloads	🗼 standalone_vml_history	10/6/2014 9:11 PM	File folder	
22 Recent Places	🗼 standalone-pi-mssql_xml_history	2/19/2015 2:30 PM	File folder	
Lbraries	application-roles.properties	2/25/2015 8:21 PM	PROPERTIES File	1.8
Documents	application-users properties	2/25/2015 8:21 PM	PROPERTIES File	1.8
Music	importer.csv	2/25/2015 7:29 PM	CSV File	18 K
Pictures	logging.properties	2/25/2015 8:34 PM	PROPERTIES File	98
Videos	ingent-groups.properties	2/25/2015 8:21 PM	PROPERTIES File	18
-	mgmt-users.properties	2/25/2015 8:21 PM	PROPERTIES File	28
A 2K8264-52K81-53	i pi-configuration properties	2/25/2015 8:23 PM	PROPERTIES File	18 *
Local Dek (C:)	ji pi-initiabermissions.properties	2/25/2015 7:26 PM	PROPERTIES File	28
A Network	pi-wildfly-8.1.0.properties	2/25/2015 8:23 PM	PROPERTIES File	38
	standalone.xml	2/25/2015 8:21 PM	X21. File	20 K
	standalone-full.xml	2/25/2015 8:21 PM	XML File	251
	standalone-full-ha.xml	2/25/2015 8:21 PM	XML File	29 8
	standalone-ha.umi	2/25/2015 8:21 PM	339. File	23 8
	ins.lpsse-ip-mssql.xml	2/26/2015 2:54 AM	33%, File	22 K
	standalone-pi-masql-ha.uml	2/25/2015 8:23 PM	33%, File	27 K
	standalone-pi-orade.xml	2/8/2015 4:03 PM	XML File	23 K
	standakone-pi-orade-ha.xmi	2/25/2015 8:23 PM	XML File	27 K

Figure (Appendix M) - 4: Configuration Editor (3)

5. If you are using Oracle Server with Wildfly Cluster Setup, then edit Standalone-pi-oracle- ha-tcp.xml in all Cluster Servers. (located in ..\C8\wildfly-8.1.0\standalone\configuration folder) in XML editor application (Notepad++).

Figure (Appendix M) - 5: Configuration Editor (5)

Organize 👻 🧾 Open 🕚	New folder			
Favorites	Name +	Date modified	Туре	Size
E Desktop	🔔 certificates	2/25/2015 8:23 PM	File folder	
Downloads	standalone_xml_history	10/6/2014 9:11 PM	File folder	
2 Recent Places	🗼 standalone-gi-mssd_xml_history	2/19/2015 2:30 PM	File folder	
Lbraries	application-roles.properties	2/25/2015 8:21 PM	PROPERTIES File	11
Documents	application-users.properties	2/25/2015 0:21 PM	PROPERTIES File	11
J Music	importer.csv	2/25/2015 7:29 PM	CSV File	189
Fictures	kogging.properties	2/25/2015 8:34 PM	PROPERTIES File	91
Videos	imgmt-groups.properties	2/25/2015 8:21 PM	PROPERTIES File	19
<u></u>	ingent-users.properties	2/25/2015 8:21 PM	PROPERTIES File	21
208264-52081-53 Local Disk (C:)	ji pi-configuration, properties	2/25/2015 8:23 PM	PROPERTIES File	189
LOCAL DOX. (C:)	pi-initialpermissions.properties.	2/25/2015 7:26 PM	PROPERTIES File	28
Wetwork	pi-widfly-8.1.0.properties	2/25/2015 8:23 PM	PROPERTIES File	38
and the second	standalone.xml	2/25/2015 8:21 PM	324L File	201
	standalone-full.xmi	2/25/2015 8:21 PM	304L File	25)
	standalone-full-ha.xml	2/25/2015 8:21 PM	XML File	293
	📄 standalone-ha.uni	2/25/2015 8:21 PM	324L File	231
	standalone-pi-mosolmi	2/26/2015 2:54 AM	XML File	22 8
	standalone-pi-mssql-ha.uni	2/25/2015 8:23 PM	XML File	27 8
	standalone-gi-oracle.xml	2/8/2015 4:03 PM	XML File	23 8
	standalone-pi-oracle-ha.xml	2/25/2015 8:23 PM	XML File	27 K

- 6. Search for the following lines and make changes as explained below:
- a. Change the Local Host to your SMTP Server name
- b. Change the Port number 25 to your SMTP Port number

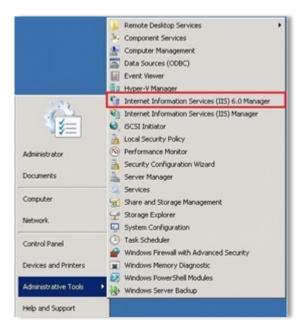
Make sure your SMTP Port number is open in your local Firewall settings. If you modify Host and Port information, remove standalone-pi- mssql_xml_ (located in ..\C8\Wildfly-8.1.0-\standalone\configuration\folder).

Figure (Appendix M) - 6: Modify host and port information in the Wildfly-8.1-0 folder

socket-binding-group name="standard-sockets" default-interface="public">
<socket-binding name="ajp" port="\${jboss.ajp.port:8009}"></socket-binding>
<socket-binding name="http" port="\${jboss.http.port:8080}"></socket-binding>
<socket-binding name="https" port="\${jboss.https.port:8443}"></socket-binding>
<socket-binding interface="management" name="management-http" port="\${jboss.management.http.port:9990}"></socket-binding>
<socket-binding <="" interface="management" name="management-https" port="\${jboss.management.https.port:9993}" td=""></socket-binding>
<socket-binding name="txn-recovery-environment" port="4712"></socket-binding>
<socket-binding name="txn-status-manager" port="4713"></socket-binding>
<outbound-socket-binding name="mail-smtp"></outbound-socket-binding>
<remote-destination host="localhost" port="25"></remote-destination>
:/socket-binding-group>

- 7. Check whether or not your SMTP Server accepts anonymous authentication.
 - > To check whether your SMTP Server accepts anonymous authentication,
 - From the Start menu, select Administrative Tools > Internet Information Services (IIS) 6.0 Manager.





 In the Internet Information Services (IIS) 6.0 Manager window, click on the expand button before your server name. Right-click on [SMTP Virtual Server#1] and select Properties.

Figure (Appendix M) - 8: SMTP Server

File Action Vie	Hon Services (EIS) 6.0 w Window Help □ □ □ □ □ □ □ + =				LOX LØX
Internet Informatio			Computer	Local Yes	Version IIS v7.5
H 🏷 (SHTP WI)	Stort Stop Pause New				
	New Window from P	lore			
	Rename Refresh				
	Properties				

• In the **Properties** window, on the **Access** tab, click on the **Authentication** button.

Figure (Appendix M) - 9: SMTP Virtual Server #1 Properties dialog box

Access co	lottne	
Edit the a resource	authentication methods for this	Authentication
Secure co	mmunication]
TLS is no	ot available without a certificate.	
E Req.	ire TLS encryption	
Connectio	n control	
	deny access to this resouce using sses or Internet domain names.	Connection
Relay rest	rictions	
	deny permissions to relay e-mail his SMTP virtual server.	Relay

• Make a note of the type of authentication selected and click on **OK**.

Figure (Appendix M) - 10: SMTP Virtual Server #1 Properties - Authentication dialog box

SMTP Virtual Server #1] Properties
Authentication
Select acceptable authentication methods for this resouce.
Anonymous access
No user name or password required.
Basic authentication
The password will be sent over the network in clear text using standard commands.
E Requires TLS encyption
Default domain:
Integrated Windows Authentication
The client and server negotiate the Windows Security Support Provider Interface.
OK Cancel Help
OK Cancel Apply Help

 In [SMTP Virtual Server # 1 Properties] window, on the Delivery tab, click on the Outbound Security button.

Figure (Appendix M) - 11: SMTP Virtual Server #1 1	Properties	dialog box
--	------------	------------

Outbound	_		
First retry interval (minutes):	æ		
Second retry interval (minutes):	30		
Third retry interval (minutes):	60	1	
Subsequent retry interval (minutes):	240		
Delay notification:	12	Hours	*
Expiration timeout:	2	Days	•
Local			
Delay notification:	12	Hours	•
Expiration timeout:	2	Days	*
Dutbound Security Outbound con	nections	Advan	ced

• Make a note of the type of authentication selected and click on **OK**.

Figure (Appendix M) - 12: Outbound Security dialog box

Anonymous acc	cess
No user name o	or password required.
C Basic authentic	cation
The password w commands.	will be sent over the network in clear text using standard
Uper name:	Browse
Password	NERVICEON.
C Integrated Wind	dows Authentication
and a state of the state	
	server negotiate the Windows Security Support Provider
The client and s	server negotiate the Windows Security Support Provider Browse
The client and s Interface.	
The client and s Interface. Account:	Browse

 If on the Access and Outbound Security tabs, the Anonymous access radio button is selected, then the next step is not required.

ELSE, continue.

8. If the SMTP server does not accept anonymous authentication, then enter SMTP user/password details as follows,

<subsystem xmlns="urn:jboss:domain:mail:2.0">

<mail-session name="default" jndi-name="java:/Mail/Default">

<!--<smtp-server outbound-socket-binding-ref="mail-smtp" username="##SMTP_SERVER_USERID##"

```
password="##SMTP_SERVER_PASSWORD##" />-->
```

</mail-session>

</subsystem>

9. Add the following line and change ## values to correct values.

For Example -

<subsystem xmlns="urn:jboss:domain:mail:2.0">

<mail-session name="default" jndi-name="java:/Mail/Default">

<smtp-server outbound-socket-binding-ref="mail-smtp" username="MySMTPUser"

```
password="MySMTPUserPassword" />
```

</mail-session>

</subsystem>

- 10. Save and close the file.
- 11. Restart Wildfly Service.

N. JASPER SETUP

Pre-requisite Installation Files

MSSQL JDBC Driver: sqljdbc4.jar

JasperServer + iReports 4.2 Installer (either x86 or x64, operating system dependent)

Setup Instructions

- <u>Creating a Report DB in SQL Management Studio</u>
- JasperServer / iReport Installation

Creating a Report DB in SQL Management Studio

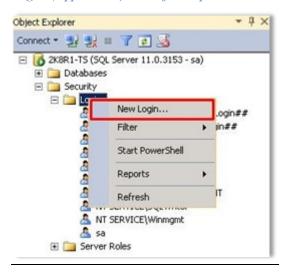
1. From the Start menu, select SQL Server Management Studio. Enter the Server name, User login Id and Password. Then, click on Connect.

Figure (Appendix N) - 1: Connect to Server dialog box

| Server type: | Database Engine | - |
|-----------------|---------------------------|---|
| Server name: | 2K8-S2K8R2-AR | |
| Authentication: | SQL Server Authentication | • |
| Login: | sa | - |
| Password: | [man] | |

- 2. On the **Object Explorer** window, drill-down on the **Security** folder and right-click on the **Login** folder.
- 3. To create a new login id, select New Login.

Figure (Appendix N) - 2: Object Explorer Window - New Login



- 4. In the Login New dialog box, select the SQL Server Authentication button.
- 5. Enter the login name as Reportuser.

| NOTE | It is possible to create a login in any name. |
|------|---|
|------|---|

- 6. In the Password and Confirm Passwords fields, type Reportuser.
- 7. De-select the Enforce password policy checkbox.

Figure (Appendix N) - 3: Login – New dialog box – Enforce password policy checkbox

| elect a page
General | Script - D Help | | | | | |
|--|---|--------------------|----------|---|---------|--|
| Server Roles
User Mapping
Securables
Status | Login name Preportuser C Windows authentication C SQL Server authentication | | 1 | | Septi. | |
| | Password | | | _ | | |
| | Confirm password | | | _ | | |
| | Cid password | | | | | |
| | Enforce parsword polic | 1 | | | | |
| | Enforce password expe | ation | | | | |
| | C Macced to certificate | word at new! login | | - | | |
| | C Mapped to asymmetric key | | | 2 | | |
| | Map to Credential | <u></u> | | 2 | | |
| Connection | Mapped Credentials | Deteritial | Provider | | | |
| Server.
2K8R1-TS | | | | | | |
| Connection: | | | | | | |
| Vew connection properties | | | | | | |
| nogens | | | | | Ferrove | |
| Ready | Default database: | nater | | • | | |
| 11.00 | Default language: | cdefaulto | | • | | |

- 8. On the Login New dialog box, in the left pane, click on Server Roles.
- 9. Select the sysadmin check box and click on OK.

Figure (Appendix N) - 4: Login – New dialog box

| Login - New | | |
|--------------------------------------|---|--------|
| Gelect a page
General | 📓 Soviet + 🚺 Help | |
| User Mapping
Securables
Status | Server role is used to grant server-side security privileges to a use. | |
| | bukadan
dituadan
dituadan
percenadan
percenadan
percenadan
remeadan | |
| Server
Server
25911-15 | | |
| Connection: | | |
| Wex correction properties | | |
| hagense | | |
| O Ready | | |
| | 06 | Cancel |

10. In the Object Explorer window, click on the Disconnect icon.

Figure (Appendix N) - 5: Object Explorer window

| bject E | plorer |
|---------|---|
| Connect | • 🛃 = 🝸 🖬 🔏 |
| - 62 | K8-52K8R <u>2-AR (SOL</u> Server 10.50.2500 - sa) |
| • | Databa Disconnect |
| ÷ [| Security |
| • | Server Objects |
| ÷ [| Replication |
| Đ 🕻 | Management |

11. To connect into SQL Server with login id as *Reportuser*, in the **Object Explorer** window, click on the **Connect** icon.

Figure (Appendix N) - 6: Object Explorer Window (Connect)

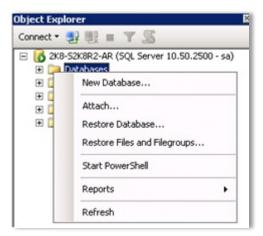


| Server type: | Database Engine | - |
|----------------|---------------------------|---|
| gerver name: | 2K8R1-TS | |
| uthentication: | SQL Server Authentication | • |
| Login | Reportuser | • |
| Password: | | |

Figure (Appendix N) - 7: Connect to Server dialog box

12. In the **Object Explorer** window, right-click on the **Database** folder and select the **New Database...** option.

Figure (Appendix N) - 8: Object Explorer dialog box - New Database..



13. In the **New Database** dialog box, in the **Database Name** field, enter the Database name and click on **OK**.

| Select a page | Script + 🚺 Help | | | | | |
|---|-------------------------|-----------|----------------|-------------------|------------------------------------|--|
| General
Options
Filegroups | Database pame | | Report | | | |
| | <u>Ω</u> wner: | | odetauto | | 122 | |
| | 🖬 Use hik text indexing | | | | | |
| | Database files: | | | | | |
| | Logical Name | File Type | Filegroup | Initial Size (MB) | Autogrowth | |
| | Report | Rows | PRIMARY | 2 | By 1 MB, unrestricted growth | |
| | Report_log | Log | Not Applicable | 1 | By 10 percent, unrestricted growth | |
| onnecten | | | | | | |
| Server
2K8-52K8R2AR | | | | | | |
| Server
2K8-S2K8R2AR
Connection: | | | | | | |
| Server
2K852K8R2AR
Connection
ta
Vew connection properties | | | | | | |
| | • | | | ₿¢4 | Estatione | |
| Server
2KB-52KBR2AR
Connection
ta
Versionnection properties | - | | | | | |

Figure (Appendix N) - 9: New Database dialog box



JasperServer / iReport Installation

- 1. If you are on a 64 bit server, click on the file jasperreports-server-cp-4.2.1-windows-x64-installer.exe ELSE, if you are on a 32 bit server, click on jasperreports-server-cp-4.2.1-windows-x86-installer.exe
- 2. Right-click and select **Run As Administrator** to run the Jasper Report exe file, if supported by your OS.
 - Default folder is fine
 - Use bundled Tomcat
 - Use bundled PostgreSQL (the SQL datasource will be added after installation)
 - Tomcat Server Port : 8081
 - Tomcat Shutdown Port : 8006
 - Database Server Port : 5433
 - Install sample reports : No
 - Install iReport : Yes

| Program Files (x86) | Open | |
|---------------------|---|----|
| ProgramData | 😚 Run as administrator | |
| Question | Troubleshoot compatibility | |
| Report Export | Edit with Notepad++ | |
| _ | Add to archive | |
| reports' | Add to "jasperreports-server-cp-4.2.1-windows-x64-installer.rar" | |
| Sample | Compress and email | |
| SQL_Queries | Compress to "Jasperreports-server-cp-4.2.1-windows-x64-installer.rar" and ema | E. |
| saljdbc4 | Restore previous versions | |
| 10.000 | Send to | |
| user_login | Cut | |
| Users | | |
| vig | Сору | |
| Windows | Create shortcut | |
| | Delete | |
| jslc | Rename | |
| def1.csv | Bronautian | |
| def1.csv | Properties | |

Figure (Appendix N) - 10: Run as administrator option

- 3. In the Setup dialog box, click on Next.
- Figure (Appendix N) 11: Setup dialog box

| C Setup | |
|-----------|--|
| | Setup - JasperReports Server CP 4.2.1 |
| | Welcome to the JasperReports Server CP 4.2.1 Setup Wizard. |
| | |
| JASPERSOF | τ |
| | < Back. Next > Cancel |

4. In the Setup License Agreement dialog box, select I accept the agreement option and click on Next.

Figure (Appendix N) - 12: License Agreement dialog box

| Setup | | | | - 🗆 🗙 |
|---|---|---|--|------------------|
| License Agreement | | | JAS | PERSOFT |
| Please read the following Lic
with the installation. | ense Agreement. You i | must accept the terms | s of this agreement b | efore continuing |
| PLEASE READ THIS AGR
INSTALLING OR USING
ALL THE TERMS AND CO
LIMITATION THE GNU A
AGREE THAT THIS AGRE
AGREEMENT SIGNED BY
YOU AND ANY LEGAL EN
BEHALF IT IS USED: F
IF YOU DO NOT AGREE | ALL OR ANY PORT
INDITIONS OF THIS
IFFERO CENERAL PU-
IEMENT IS LIKE AN
YOU. THIS AGREEN
TITY THAT OBTAIN
OR EXAMPLE, IF J | ION OF THIS PRO
S AGREEMENT, IN
UBLIC LICENSE V
WY WRITTEN NECO
MENT IS ENFORCE
NED THIS PROGRA
APPLICABLE, YOU | GRAM YOU ACCEP
CLUDING WITHOU
ERSION 3. YOU
TIATED
ABLE AGAINST
M AND ON WHOSE
R EMPLOYER. | Ť |
| Do you accept this license? | I accept the agree I do not accept to | | | |
| | | < Back | Next > | Cancel |

5. In the **Setup Installation Folde**r dialog box, select a folder to install JasperReports Server CP 4.2.1 and click on **Next**.

Figure (Appendix N) - 13: Installation Folder dialog box

| Setup | | _ | |
|--|--------|---------------|---|
| Installation folder | | JASPERSO | T |
| Please, choose a folder to install JasperReports Server CP | 4.2.1 | | |
| Select a folder Et\Program Files\jasperreports-server-cp | 6 | | |
| | | | |
| | | | |
| | | | |
| BitRock Installer | | | |
| | < Back | Next > Cancel | |

6. Select I wish to use the bundled Tomcat option and click on Next.

| Setup | _ [] × |
|--|---------------|
| Please select the Tomcat configuration you wish to use | JASPERSOFT |
| Tomcat installation: | |
| ☞ I wish to use the bundled Tomcat | |
| C I wish to use an existing Tomcat | |
| BitRock Installer | Next > Cancel |

Figure (Appendix N) - 14: Setup dialog box

7. Select I wish to use the bundled PostgreSQL database option and click on Next.

Figure (Appendix N) - 15: Setup dialog box - Database Installation

| Setup | |
|--|------------------|
| Database Installation | JASPERSOFT |
| Please select which database configuration you wish to use | |
| I wish to use the bundled PostgreSQL database | |
| C I wish to use an existing PostgreSQL database | |
| | |
| BiRock Installer | ick Next> Cancel |

8. Enter the Tomcat Port Configuration. Enter *8081* in the **Tomcat Server Port** field and *8006* in **Tomcat Shutdown Port** field. Click on **Next**.

| Torncat Port Configuration | | | JASPERSOFT |
|----------------------------|-------------------------------|--------------|------------|
| Please enter the Tomcat o | onfiguration parameters you v | vish to use. | |
| Tomcat Server Port: | 8081 | _ | |
| Tomcat Shutdown Port: | 8006 | | |
| | | | |
| | | | |
| | | | |
| BiRock Installer | | | |

Figure (Appendix N) - 16: Setup dialog box - Tomcat Port Configuration

9. In the **Database Server port** field, enter the port of your database as *5433*. Click on **Next**.

Figure (Appendix N) - 17: Setup dialog box - Database Server Parameters

| Ger Setup | |
|---|------------------------------|
| Database Server Parameters | JASPERSOFT |
| Please enter the port of your database. | |
| Database Server port 5433 | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| BiRock Installer | |
| | <back next=""> Cancel</back> |

10. In the section Would you like to install sample databases and sample reports, click on the No radio button. Click on Next.

Figure (Appendix N) - 18: Setup dialog box - Install Sample Data

| e. | Setup | X |
|---------------------------------------|---------------------------|---------------|
| Install Sample Data | | JASPERSOFT |
| Would you like to install sample data | bases and sample reports? | |
| () Yes | | |
| No | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| P.P. 11.1.1 | | |
| BiRlock Installer | | |
| | < Back | Next > Cancel |

11. In the Setup – Install iReport Designer dialog box, select the Yes radio button. Click on Next.

Figure (Appendix N) - 19: Setup dialog box - Install iReport Designer

| • | Setup | X |
|--|---|---------------|
| Install iReport Designer | | JASPERSOFT |
| The Report Designer application is a g
Report Designer connects to JasperSe | raphical designer for JasperReports.
erver to upload and download reports. | |
| Would you like to install Report? | | |
| Yes | | |
| ○ No | | |
| | | |
| | | |
| | | |
| BitRock Installer | | |
| A set of the set of the set of the | < Back | Next > Cancel |
| | | Carco |

12. The progress of iReport installation is displayed in the progress bar.

Figure (Appendix N) - 20: Setup dialog box – Installation progress bar

| oft Business Intelligence. | |
|-----------------------------------|--|
| you can access: | |
| Product demos | |
| | |
| forge.org/register | 1 |
| Installing | |
| ls\pg_standby.pdb | |
| | you can access:
• Product demos
forge.org/register |

13. On completion of the Installation process, click on Finish.

Figure (Appendix N) - 21: Setup dialog box - Completion of the JasperReports Server CP 4.2.1 Setup Wizard



- 14. Navigate to Start > Services.
- **15.** Right-click on Centric Wildfly-8.1.0, select **Stop**.

Figure (Appendix N) - 22: Services Window

| File Action View | resp | | | | | |
|---------------------|-----------------------------------|-------------|-----------|---------------------|---------------|--|
| ** | S - E | | | | | |
| G, Services (Local) | Name - | Description | Status | Statup Tope | Leg On As | |
| | Active Directory Web Services | The pervic | | Developed | Local System | |
| | Adube Acrubat Update Service | Adobe Acr | Started | Automatic | Local System | |
| | Application Experience | Processes | Started | Manual | Local System | |
| | Application Host Helper Service | Provides a | Started | Automatic | Local System | |
| | Application Stlentity | Determines | | Manual | Local Service | |
| | Application Information | Facilitates | | Manual | Local System | |
| | Application Layer Gateway Service | Provides s | | Manual | Local Service | |
| | Application Management | Processes I | | Manual | Local System | |
| | ASP.NET State Service | Provides s | | Detabled | Network 5 | |
| | Background Inteligent Transfer 5 | Transfers f | Started | Mahual | Local System | |
| | Categore Filtering Engine | The Base F | Started | Automatic | Local Service | |
| | Centre with | Centric WE | Started | Manual | Webweb | |
| | Certificate Program | Capes use | Started - | Manual | Local System | |
| | Chickey hot Ship | The OVER | Started | Manual | Local System | |
| | COM+ Event | Seports 5 | Started | Automatic | Local Service | |
| | COMA System Restart | Manages 1 | Started | Manual | Local System | |
| | Computer Br. Messart | Mantania | | Deabled | Local System | |
| | Codental N All Tasks + | Provides n | | Manual | Local System | |
| | Cryptographi
Clinaprien Raheah | Provides fa | Started | Automatic
Manual | Nativorii.5 | |

16. Right-click on JasperreportsTomcat, and select Stop.

Figure (Appendix N) - 23: Services Window (2)

| asperreportsTomcat | None - | Description | Skahus | Startup Type | Log On As | |
|--|----------------------------|-------------|---------|--------------|---------------|--|
| | IIS Admin Service | Enables thi | Started | Automatic | Local System | |
| Stop the service
Restart the service
Description: | 2 DE and AuthOP IPs | The DEEX | Started | Automatic | Local System | |
| | Californative Service | Enables us | | Manual | Local System | |
| | Shitemet Connectio | Provides n | | Deabled | Local System | |
| Description:
Apache Tonxat 6.0.26 Server -
http://tonxat.epache.org/ | C P Holper | Provides a | Started | Automatic | Local System | |
| | SPsec Policy Agent | Internet Pr | Started | Automatic | Network 5 | |
| | impereportsPostg | | Started | Automatic | Local System | |
| | anpereports Torrent | As who To | Started | Adonatic | Local System | |
| | CAttraition for Distribu | | Started | Automatic (D | Network 5 | |
| | CLARK LAYER TODOROG | 9mp | | Manual | Local Service | |
| | Personage (Automp) | P2.08 | Started | Automatic | Network 5 | |
| | CALIFIC DESCRIPTION OF THE | Response | | Manual | Local System | |
| | Microsoft NET Fre | Restart | | Manual | Local System | |
| | Amoush NET Fra | All Tasks . | | Automatic (D | Local System | |
| | Mcrosoft .NET Fre | Relvesh | 8 | Automatic (D | Local System | |

17. Go C:\Program Files\jasperreports-server-cp-4.2.1\ireport\modules\ext

Delete the following .jar files:

- batik-anim.jar
- batik-awt-util.jar
- batik-bridge.jar
- batik-css.jar
- batik-dom.jar
- batik-ext.jar
- batik-gvt.jar
- batik-LICENSE.txt
- batik-parser.jar
- batik-script.jar
- batik-svg-dom.jar
- batik-svggen.jar
- batik-util.jar
- batik-xml.jar

Figure (Appendix N) - 24: Delete .jar files

| | Carl Construction of the | modules + ext | • 🕮 | 1417 | _ | - |
|---|--------------------------|-----------------------|-----------------|--------------|---|---|
| Fér Edit Vew Tools Help
Organize ● Véwa ● () (Open | | | | | | |
| Pavorte Loka | Name - | · Date modified - | Tipe | + 500 + Tags | - | _ |
| | art-1.7.1.jar | #/11/2011 10:10 | 3AR File | 1,292.80 | | |
| Documents | art-1.7.1-00088 | 8/11/2011 10:10 | Text Document | 25.40 | | |
| Pictures | ante-2,7.6.3w | 8/11/2015 10:10- | 344.Pie | 434 ×0 | | |
| Han: | #19-2.7.6-00945E | #/11/2011 10:18 | Text Document | 2 STORES | | |
| Hare # | aum.jar | 8/11/2011 10:10 | 394 Pile | 26.80 | | |
| | estin-etitys. Ser | 8/11/2011 10:18 | JAN File | 17.40 | | |
| folders 🗸 | betecue 1.5-beta1 | 8/11200110-12- | SAR File | 89.48 | | |
| Distant Copierer | babeoue-1.5-betal | and the second second | Test Document | 2.48 | | |
| appropriative gra | bercode4)-2.0.jer | #/11/2011 10:10- | 344 File | 211.40 | | |
| aparte-art | barodet+2.0400C | A/11/2011 10:15 | Text Document | 32×0 | | |
| | barcode4+2.0-M073CE | | Test Document | 110 | | |
| apache-tonicat | California (m. 197 | W11/2011 10-10- | 34EPH | 9410 | | |
| buildomatic | batk-ave-util.ter | 6/11/2015 10:13 | JAP File | 39H X3 | | |
| docs 1 | batik-bridge.jar | 8/11/2011 10:12 | 344.File | 549 KB | | |
| A Pepper | batk-cos.jar | 8/11/2011 10:10 | 340 File | 305 KB | | |
| 🙀 ben | batk-don.av | A/11/2014 10:10- | 344.Pile | 170.48 | | |
| 🗼 etc. | batk-ext.sar | 8/11/2011 10:10 | SAR File | 35 ×0 | | |
| adw10 | batk-pvt.iar | 8/11/2011 10:10 | 3AR File | 238.88 | | |
| export. | DARK-LICENSE | 8/11/2011 10:10 | Text Document | 12×8 | | |
| a config | back-parsel.se | A/11/2015 10:10 | 34A File | 72.88 | | |
| A core | batk-script.sw | 8/11/2011 10:10 | 348.996 | 62 ×3 | | |
| database | batk-s-g-don.jar | 6/11/2011 10:10 | 344.1% | 590 XB | | |
| Fires | batk-si-ggen.lar | 8/11/2011 10:18 | 348.1% | 211.48 | | |
| 1 85 | batk-util.tw | 8/11/2011 10:10 | Jan Pile | 126.40 | | |
| in modules. | batk-uni.jar | #/11/2011 10:10 | 348 Pile | 30 × 20 | | |
| | boel-5-2.jar | 8/11/2011 10:10 | Jak Pile | 521.40 | | |
| -1 est | boel-5.2-LICENSE | 8/11/2011 10:10 | Test Document | 12×0 | | |
| 🔒 łocałe 🛛 🗮 | And a Castron | ALL COLL IN CO. | Tank Prov. 4144 | 1.15 | | |

18. To restart the previously stopped Services (Wildfly-8.1.0 and JasperreportsTomcat), in the left pane, click on the **Restart** link.

Figure (Appendix N) - 25: Services dialog box - Restart (Wildfly)

| Q, Services | | | | | | | 0. |
|------------------|--------------------------------|----------------------|-------------|---------|-------------|---------------|----|
| File Action View | Help | | | | | | |
| ** = . | | | | | | | |
| Service (Local) | Q Service (Local) | | | | | | |
| | jasperreportsToescat. | Note 1 | Description | 200 | Satip Tope | Log On Ar | |
| | | Queersponding | | Rated | Admatic | Local System | |
| | | BungereportsTancel | | Rated | Adoratic | Local System. | |
| | fastat the service | Cattolie for Dabibut | Coordinate | Stated. | Automatic D | Network 5 | |
| | | Curk-Layer Topolog | Creates a | | Hanual | Local Service | |
| | Description | Co.Message Oueung | Provides a | Sated | Adonatic | Network 5 | |
| | Apache Torncat 6.0.26 Server - | Monadt NET Fra | House | | Dealied | Local System | |
| | http://toncet.apache.org/ | Monsoft ACT Pra. | Marsauft | | Daubied | Local System | |

Add SQL Datasource Support to JasperServer

- 1. Go to C:\Program Files\jasperreports-server-cp-4.2.1\apache-tomcat\lib
- **2.** Copy the file sqljdbc4.jar to this directory.



- **3.** Navigate to C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\META-INF\context.xml
- 4. Add the following Resource parameter before the </Context> tag:

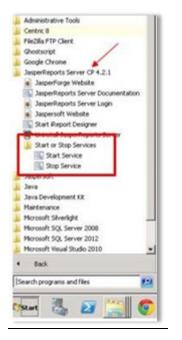
<Resource name="jdbc/SQL" auth="Container" type="javax.sql.DataSource"

maxActive="100" maxIdle="30" maxWait="10000"

username="Reportuser" password="Reportuser" driverClassName="com.microsoft.sqlserver.jdbc.SQLServerDriver" validationQuery="SELECT 1" testOnBorrow="true" url="jdbc:sqlserver://localhost:1433;databaseName=Report"/>

| Resource | name='jdbc/foodmart' auth='Container' type='jarax.sgl.DataSource' |
|--|---|
| maxle | tive='100' maxIdle='30' maxWait='10000' |
| ween | me"'jasperdb' password"'password' |
| drive | rClassName='org.postgresgl.Driver' |
| valid | stionQuery="SELECT 1" |
| testo | aBorrow='true' |
| ur 1=* | idbc:postgresgl://localhost:5432/foodmart?useUnicode=true6amp;characterEncodi |
| <resou< td=""><td>rce name='jdbc/SQL' auth='Container' type='jayax.sgl.DataSource'</td></resou<> | rce name='jdbc/SQL' auth='Container' type='jayax.sgl.DataSource' |
| maxActive-'10 | 0' maxIdle='30' maxWait='10000' |
| username**Rep | ortuser' password='Reportuser' |
| driverClassNa | e**com.microsoft.sglserver.jdbc.SQLServerDriver* |
| validationQue | EY='SELECT 1' |
| testOnBorrow. | "true" url="jdbg:sglserver://localhost:1433;databaseName-Report"/> |
| | |
| | |
| | |

- 5. Navigate to Services > All Programs > JasperReports Server CP 4.2.1.
- 6. Click on Start or Stop Services.
- 7. To stop the service, click on Stop Service.
- 8. To start the service, click on Start Service.



- 9. Launch Jasper Report client in your browser: http://localhost:8081/jasperserver/
- a. Login as jasperadmin with password as jasperadmin.

Figure (Appendix N) - 26: Login to Jaspersoft

| | | 1000 |
|---------------------------------|------------------------|--------------------------|
| Welcome | to Jaspersoft | (44.5) |
| Trail Base Sec. | Partness of Statistics | And a second |
| Hereette | | ******** |
| Andrea ware to some their lower | | Prote State & State Case |
| | 8 8 stern 1 10 1 | |
| | | |

b. In the **Server Repository** dialog box, in the **Folders** pane, right-click on **Root** folder and select **Add Folder**.

Figure (Appendix N) - 27: Server Repository dialog box

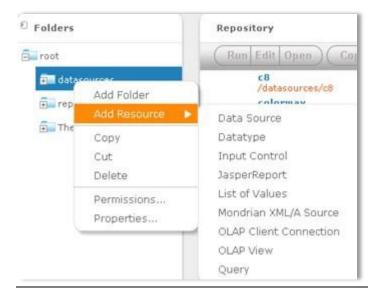
| JASPERSOFT | | | |
|------------|--------------------------|----------|--|
| ٠ | View 🖕 | Manage 🖕 | |
| © Fol | ders | | Repository |
| E ro | n# | | (Run Edit Open) |
| | Add Folder | | and the second s |
| | Permission
Properties | | |

- c. In the Add Folder dialog box, in the Name (required): text box, type *datasources*.
- d. Click on the Add button.

Figure (Appendix N) - 28: Add Folder dialog box

| Name (requi |
 |
|--------------|------|
| Description: | |
| | |
| | |

e. Right-click on **Datasources** and select **Add Resources > Data source**.



f. In the Add Source dialog box, enter the following details:

| Туре | : JDBC Data Source |
|------------------------|--|
| Name (required) | :C8_Reporting |
| Resource ID | : C8_Reporting |
| Description (Optional) | : Driver. Com.microsoft.sqlserver.jdbc.SQLServerDriver |
| URL | : jdbc:sqlserver://localhost:1433;databaseName=Report |
| User Name | : Reportuser |
| Password | : Reportuser |
| Time Zone | : Use database setting. |
| Save Location | : /datasources |

Figure (Appendix N) - 29: Add Data Source dialog box

| • | View - | Nanage 2 |
|---|---------------|---|
| | f Data Source | |
| | | Set Data Source Type and Properties |
| | | First, select the type of data source you mish to add, then enter the required property value |
| | | Type: X0bC Date Source • |
| | | Name (required) |
| | | C8_Reporting |
| | | Resource ID (resource): |
| | | Cit_Reporting |
| | | Descruton |
| | | |
| | | Driver (required): |
| | | commicrosoft.adoerver.jdbc.SQLServerDriver |
| | | Made ang pertyrated teasor
1981 (teasoned): |
| | | and the second se |

g. To verify the new connection, click on the **Test Connection** button.

Figure (Appendix N) - 30: Test Connection

| URL (required): |
|---|
| jdbc:sqlserver://localhost:1433;databaseName=Report |
| Hint. Jdb:::postgread.//locallvosti5432/mydb |
| User Name (required): |
| Reportuser |
| Pessword: |
| ******** |
| Time Zone: |
| Use database setting. |
| Hint: Do not change the time zone setting unless you know the database timestamp data is incorrec |
| Save Location: |
| /datasources |
| Browse |
| Test Connection |
| |

h. Click on the **Submit** button.



Configuration Setups in iReport

1. From the Start menu, select All Programs. Click on iReport 4.1.1, to launch the iReport.



2. Navigate to **Tools ▶ Options**.

Figure (Appendix N) - 31: Jasper iReport Designer 4.1.1



3. In the **Options** dialog box, select the **Classpath** tab. Click on the **Add JAR** button on the right. Navigate to the SQL Server jar file and select it. Click on **OK**.

| Fati | Tubulda I | Add Sell |
|--|-------------------|---------------|
| this part file (- h) (approximation of the part (- h) (| Concession of the | Mat Jam |
| This an File (1963) aspecutify layor 4.1. (properfored later of pager sports a tension 1.1.1 or | | AlgPublic |
| Wrop an Piles (-MI), laparce #GR-port 4.1. (preport (nodule (and page-reports 4.1.1.) a | 0 0 | |
| (Program Pies (-bk))/aperad/(dropol-4.1./(proport)-colubeign-fragmensports-chart-thereas-4.1 | C 1 | Battore |
| (Proper Files (vik),/aperad/(dispot 4.1.1)/apprt/problec(a-fipager-spots-cire-rendere.ce | C 17 | Realize |
| (hop in this (chi)/approx/sport 4.1.(propri) roblectinit paper sports funts 4.1.1.pr | - C | 1000 |
| (https://www.internet.com/in | | Phone denset. |
| | | |
| | | |

4. Click on the Report Datasources icon.

| Edit | view Format | signer 4.1.1
Preview Tools Window Help | |
|----------|-------------|---|---|
| b 4 | | Empty datasource | • |
| elcome W | Indow x | Report Datasources | |

5. In the Connections/Datasources dialog box, click on New.

Figure (Appendix N) - 32: Connections/Datasources dialog box



6. Select the Database JBDC connection option and click on Next.

| 6 | X |
|--|--------------------|
| Datasource | |
| Select the datasource type | |
| Abbitistic SUBC connection
NetBearb Database 3DBC connection
2014, Re datasource
ERC SY datasource
3RDataSourceProvider
Custom RDataSource
Empty data source
Hibernate connection
Soring loaded Hibernate connection
EBQL connection
DMLA Server
Mondrisin OLAP connection
Query Executer mode
Microsoft Excel (xis) data source
Sample Database Connection
Remote 3016, Rei datasource | |
| - | Test Next > Cancel |

- 7. To check if the connection is successful, enter the details and click on Test.
- 8. The Connection test successful message box is displayed. Click on OK.
- 9. Click on Save.

| | Database JDBC connection | |
|------------------------|---|-----------------------|
| ame CB_R | sporting | |
| 308C Driver | SQLServer (2005) (com.microsoft.sqlserver.)d | bc.SQLServerDriver) · |
| JOBC URL
JOBC URL W | sdbc:sqlserver://localhost:1433;databaseName-
/zard | -Report |
| Server Add | ress liocalhost | |
| Database | Report | Weard |
| Username | Reportuser | - |
| Password | | Save password |
| | ONI Passwords are stored in clear text. If you do
port will ask you for one only when required and y
Connection test successful | nil not save it. |
| | Test | Save Cancel |

10. In the Connections/ Datasource dialog box, click on Close.



Wildfly8 Jasper Reports Setup Instructions

- 1. **Open Edit module.xml (path:** %Wildfly8 Installation%\modules\com\centricsoftware\pi\main\module.xml)
 - In between the <resources> tags, add:

<resource-root path="com-jaspersoft-ireport.jar"/>

<resource-root path="com-jaspersoft-ireport-jasperserver.jar"/>

<resource-root path="commons-beanutils-1.8.0.jar"/>

<resource-root path="commons-digester-1.7.jar"/>

<resource-root path="commons-logging-1.0.4.jar"/>

<resource-root path="itext-2.1.7.jar"/>

<resource-root path="jasperreports-4.1.2.3.jar"/>

<resource-root path="jasperserver-api-common-4.2.0.jar"/>

<resource-root path="jasperserver-api-common-impl-4.2.0.jar"/>

<resource-root path="jasperserver-common-ws-4.2.0.jar"/>

<resource-root path="jcommon-1.0.15.jar"/>

<resource-root path="jfreechart-1.0.12.jar"/>

<resource-root path="poi-3.6.jar"/>

- 2. Copy the following jar files to C8 modules directory (**path**: %Wildfly8 Installation%\modules\com\centricsoftware\pi\main) :
 - C:\Program Files\jasperreports-server-cp-4.2.1\ireport\ireport\modules\com-jaspersoftireport.jar
 - C:\Program Files\jasperreports-server-cp-4.2.1\ireport\ireport\modules\com-jaspersoftireport-jasperserver.jar
 - C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\commons-beanutils-1.8.0.jar
 - C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\commons-digester-1.7.jar
 - C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\commons-logging-1.0.4.jar
 - C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\itext-2.1.7.jar
 - C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\jasperreports-4.1.2.3.jar
 - C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\jasperserver-api-common-4.2.0.jar

- C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\jasperserver-api-common-impl-4.2.0.jar
- C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\jasperserver-common-ws-4.2.0.jar
- C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\jcommon-1.0.15.jar
- C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\jfreechart-1.0.12.jar
- C:\Program Files\jasperreports-server-cp-4.2.1\apachetomcat\webapps\jasperserver\WEB-INF\lib\poi-3.6.jar
- 3. Restart the Centric Wildfly service to complete the changes



With the given changes there are no additions made to C8\wildfly-8.1.0\bin\standalone.conf.bat as there were previously

Excel Export Format

The following settings are available for Excel export format:

External viewer

An absolute path to the executable to use for Excel preview.

Remove empty space between rows

Flag that indicates whether the empty space should be suppressed.

White page background

Flag that indicates whether white page background should be used in the export generated document.

Auto-detect cell type

Flag that indicates whether excel cell type should auto-detect and set in the generated Excel document.

Ignore pagination

Flag that indicates that the report should be printed on a single page. If true, the height of the page is increased automatically to fit the whole document.

O. CONFIGURE HTTPS

Pre-requisites

1. SSL Certificate should be in the .pfx format.



NOTE

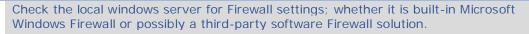
Adobe PLM Connect, requires an SSL certificate issued from only one of the three Certificate Authorities namely GlobalSign, Verisign, and Thawte. Adobe does NOT support any other Certificate Authority, such as GoDaddy.

If you are using Adobe PLM Connect with Centric, you MUST have a certificate issued from one of these three Certificate Authorities (GlobalSign, Verisign, and Thawte).

- 2. Installation Password for the SSL Certificate .pfx file is required. The password is generated at the time SSL Certificate is created by the Certificate Authority.
- 3. Download the URL Rewrite 2.x from Microsoft Download Site

(http://www.iis.net/downloads/microsoft/url-rewrite)

4. Verify that all Firewalls are set to allow traffic on the https port (443)



If you have any hardware firewalls, ensure that https port (443) traffic is allowed through to the Windows Server. These firewall settings may require actions by the Customers IT Support and Network Administrators. Ensure that these settings are made prior to attempting installation of the certificate.

Install URL Rewrite Extension

Once you have the SSL Certificate in .pfx format and the Certificate password, install the URL Rewrite module.

How to install the URL Rewrite module

1. Browse to the URL <u>http://www.iis.net/downloads/microsoft/url-rewrite</u> and click on **Install this** extension button.



Figure (Appendix O) - 1: URL Rewrite module URL details

2. To install the Web Platform Installer, click on the Install Now button.

Figure (Appendix O) - 2: Web Platform Installer dialog box



3. To install the .exe file, in the **Open File > Security Warning** dialog box, click on **Run**.

Figure (Appendix O) - 3: Open File - Security Warning dialog box

| Do you | want to run this file? |
|--------|---|
| | Name:sers\Administrator\Downloads\urlrewrite2 (1).exe |
| | Publisher: Microsoft Corporation |
| | Type: Application |
| | From: C:\Users\Administrator\Downloads\urlrewrite2 (1) |
| | Run Cancel |
| Alwa | ys ask before opening this file |
| • | While files from the Internet can be useful, this file type can
potentially harm your computer. Only run software from publishers
you trust. What's the risk? |

4. To begin the Installation process, in the Web Platform Installer 5.0 dialog box, click on Install.

 Image: State State
 Image: State State

Figure (Appendix O) - 4: Web Platform Installer 5.0 dialog box

5. To accept the License terms and conditions, Click on I Accept.

Figure (Appendix O) - 5: Web Platform Installer 5.0 dialog box (2)

| REREQUISITES | INSTALL | CONFIGURE | FINISH |
|---|------------------------------|---|--------------------|
| oftware identified below to be
roducts are provided by the t | e installed and Windows comp | vicrosoft products and components, a
onents to be turned on. Third party ap
oft grants you no rights for third party
hese third party license terms. | plications and |
| X URL Rewrite 2.0 | | | i di sawari |
| <u>Viewlicense terms</u> | | 0 | rect Download Link |
| Total file download size: | | | 5.98 MB |
| lick here to see additional sol | | wthe associated Microsoft license term | |

6. To complete the installation process, click on Finish.

Figure (Appendix O) - 6: Web Platform Installer 5.0 dialog box (3)

| PREREQUISITES | INSTALL | CONFIGURE | FINISH |
|--|---------------------------|-----------|--------|
| The following produ
URL Rewrite 2.0 | ucts were successfully ir | istalled. | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | Finish |

7. To exit from the application, click on Exit.

Import the SSL Certificate

1. From the Start menu, open Internet Information Services (IIS) Manager.

Figure (Appendix O) - 7: Start Menu



2. Click on a server name in the left pane.

- 3. In the middle pane, under the **IIS** section, click on **Server Certificates**.
- 4. In the right pane, click on **Open Feature**.

Figure (Appendix O) - 8: Connections Window

| Ele Vew Help | | | | | | | | | | | | | |
|--|-------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------|------------------------|---------------------|---------------------|---------------|-------------------------------|---|---|
| Connections | Sec. 26 | 8R2-52K8 | R2-QA Ho | ome | | | | | | | | 1 | Open Feature |
| Start Page
Start Page
2KBR2-52KBR2-QA (2KBR2-52KE
Application Pools | Filter: | | • #1 50 • 5 | Show Al Gr | oup by: Area | | • | | | | | | Manage Server |
| B- o Stes | ASP | Authentication | CGI
CGI | 2
Compression | Default
Document | Directory
Browsing | Error Pages | FastCGI
Settings | Handler
Mappings | HTTP
Respo | ISAPI and CGI
Restrictions | | Stort
Stop
View Application Pools
View Sites |
| | ISAPI Filters | Logging | MIME Types | Modules | Output
Caching | Request
Filtering | Server
Certificates | URL Rewrite | Worker
Processes | | | | Help Online Help |
| | Manageme | ent | | | | | | | | | | | |
| | Configuration
Editor | Feature
Delegation | Shared
Configuration | Web Platform
Installer | | | | | | | | | |

- 5. The middle pane displays Server Certificates...
- 6. In the right pane, under Actions, click on Import...

Figure (Appendix O) - 9: Connections Window - Actions pane

| Server Ce | | Web server can use with Web sites co | nfigured for 59. | Actions Import Greate Certificate Request |
|-----------|-----------|--------------------------------------|------------------|---|
| Name - | Issued To | Issued By | Expiration Date | Complete Certificate Request |
| | | | | Create Domain Certificate
Create Self-Signed Certificate |
| | | | | Help Online Help |

- 7. In the Import Certificate dialog box, click on the Browse button.
- 8. Browse to the location where you have saved the SSL Certificate in .pfx format.

Figure (Appendix O) - 10: Import Certificate dialog box

| Certificate file (.p | 5x): | | |
|----------------------|-------------------|-------|---|
| | | | |
| Password: | | | |
| | | | |
| Select Certificate | Store: | | |
| Personal | | | ~ |
| Allow this cert | ificato to ho ove | orted | |
| | incate to be exp | onteu | |
| | | | |

9. Select the required Certificate name and click on the **Open** button.

Figure (Appendix O) - 11: Select Certificate

| Open | are then tree | | | × |
|-----------------------|--|------------------------|----------|--------|
| GOO - 🕨 + CP_DRIVE | (E:) • Install • GlobalSign-Wildcard • | Search GlobalSign-Wild | ard | 2 |
| Organize 👻 New folder | | 8= | - 🔳 | 0 |
| ★ Favorites | Name * | Date modified | Туре | |
| E Desktop | 😼 CEDS1503062994.pfx | 3/7/2015 7:10 PM | Personal | Inform |
| 🔢 Recent Places | | | | |
| 🧊 Libraries | | | | |

10. The selected certificate is displayed in the **Certificate file (.pfx)** field in the **Import Certificate** dialog box.

11. In the **Password:** text box, type the password for the SSL Certificate.

The SSL Certificate password is generated during the SSL Certificate creation and is NOTE provided by the Certificate Authority.

12. From the Select certificate store drop down box, choose Web Hosting and click on OK.



Figure (Appendix O) - 12: Import Certificate dialog box (2)

| Certificate file (.pfx) | | |
|--------------------------------------|----------------------|-----|
| F:\GlobalSign-Wildo | card\CEDS1503062994. | pfx |
| assword: | | |
| | | |
| | | |
| Select Certificate St | ore: | |
| Select Certificate St
Web Hosting | ore: | ~ |

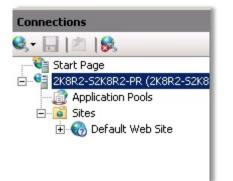
13. Verify that the Imported Certificate appears in the middle frame of the Server Certificates window.

Figure (Appendix O) - 13: Server Certificates Window

| Ele Yew Help Connections | Server Certi | ficates | | Actions
Import
Create Certificate Request |
|--|--------------|--|---|--|
| I ■ ■ and a classic classi | | I search a so da o la never de la deverte carlos de la never
- contributivare con | I travel by
Goodsbyn Stronin Valdaton (A - 944266 - G2 | Complete Centricate Request
Orean Domain Centricate
Centricate Service Control
Service Centricate
Control Help |

14. In the left frame of the Internet Information (IIS) Manager Window, drill-down into the Sites folder and click on Default Web Site.

Figure (Appendix O) - 14: Connections Window



15. In the right frame, under Actions, click on the Bindings... menu item.

Figure (Appendix O) - 15: Actions section - Bindings

| | efault Web S | Site Hon | | | | | | Actions | |
|---------------|----------------|-------------------|--------------|---------------------|-----------------------|----------------------|-----------------------------|--|---|
| Filters | | Gran Show All ∣Gr | oup by: Area | | * III • | | Explore
Edit Permissions | | |
| IIS
ASP | Authentication | CGI
CGI | Compression | Default
Document | Directory
Browsing | Error Pages | Handler
Mappings | Edit Site
Dindings
Basic Settings
View Applications
View Virtual Directories | |
| HTTP
Respo | TSAPI Filters | Logging | MINE Types | Modules | Output
Caching | Request
Filtering | SSL Settings | Manage Web Site
C Restart
Start
Stop | ۲ |

16. In the Site Bindings dialog box, click on the Add... button.

Figure (Appendix O) - 16: Site Bindings dialog box

| Туре | Host Name | Port | IP Address | Binding | <u>A</u> dd |
|-------------------|-----------|------|------------|---------------|-------------|
| http
net.tcp | | 80 | • | 808:* | Edit |
| net.pipe
net.m | | | | *
localhos | Remove |
| msmq | | | | localho: | Browse |
| • | | | | Þ | |
| | | | | | ⊈lose |

17. In the Add Site Binding dialog box, add the following:

- From the Type: drop-down list, select https
- From the **IP address:** drop-down list, select **All Unassigned** unless the customer identifies a specific IP address.
- In the **Port:** text box, type 443
- The **Host name:** field is either greyed out or empty.
- From the SSL certificate: drop-down list, select the certificate that you just imported.

18. To accept the settings, click on OK.

Figure (Appendix O) - 17: Add Site Binding dialog box

| Add Site Binding | | | ? × |
|--------------------|--|----|--------|
| Type:
https | IP address: IP address: All Unassigned | | Port: |
| Host name: | | | |
| SSL certificate: | | | |
| *.centricsoftware. | .com | | View |
| | | ОК | Cancel |

19. In the **Site Bindings** dialog box, in the **Site Bindings** table, verify that the **Type** *https* with **Port** *443*.

| Туре | Host Name | Port | IP Address | Binding | Add |
|---------------------|-----------|------|------------|------------------------|--------|
| net.tcp
net.pipe | | | | 808:*
* | Edit |
| net.m
msmq | | | | localhos
localhos – | Remove |
| http | | 80 | * | | Browse |
| https | | 443 | * | - | |
| • | | | 1 | | |

Figure (Appendix O) - 18: Site Bindings dialog box - Site Bindings table

20. To complete the Certificate configuration, click on the Close button.



The URL Rewrite icon will now be displayed in the Internet Information Services (IIS) Manager Window in the Default Web Site Home pane.



Configure Automatic HTTP to HTTPS rewrite

1. Open Internet Information Services (IIS) Manager.

Figure (Appendix O) - 19: Start menu



2. In the left frame, drill-down the Sites folder and click on the Default Web Site.

Figure (Appendix O) - 20: Sites folder



3. In the **IIS** section, select **URL Rewrite**.

Figure (Appendix O) - 21: IIS section - URL Rewrite

| lter: | | · 00 50 - | Show All Gr | oup by: Area | | | |
|---------------|----------------|-----------|---------------|--------------|-----------------------|----------------------|---------------------|
| ASP | Authentication | CGI | Scompression | Default | Directory
Browsing | A04
Error Pages | Handler
Mappings |
| HTTP
Respo | ISAPI Filters | Logging | MIME Types | Modules | Output
Caching | Request
Filtering | SSL Settings |

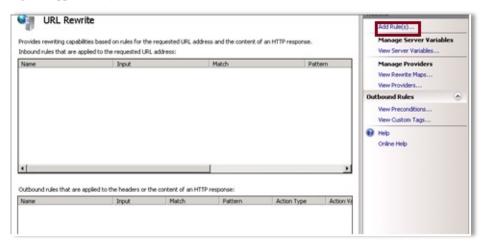
4. In the right-hand pane, under Actions section, click on Open Feature.

Figure (Appendix O) - 22: IIS - Actions section

| Filter: | | - 02 60 - 4 | Show All Gn | oup by: Area | | • III • | | | Manage Server |
|-------------------------|------------------------|-------------------------------|---------------------------|--------------|------------|-------------|-------------------|-----|--|
| IIS
ASP | Authentication | CGI | Compression | Default | Directory | Error Pages | FastCGI | 2 ⊨ | Restart
Start
Stop
View Application Pools |
| | | Cal | | Document | Browsing | Error Pages | Settings | | View Sites |
| | - 10 C | | 3 | | 1200 | 4 | | | Change .NET Framework Versio |
| Handler
Mappings | HTTP
Respo | ISAPI and CGI
Restrictions | ISAPI Filters | Logging | MIME Types | Modules | Output
Caching | 0 | Help
Online Help |
| 3 | | - | 2 | | | | | | |
| Request
Filtering | Server
Certificates | URL Rewrite | Worker
Processes | | | | | | |
| Manageme | ent | | | | | | | | |
| | 1 | ¥= | 0 | | | | | | |
| Configuration
Editor | Feature
Delegation | Shared
Configuration | Web Platform
Installer | | | | | | |

- 5. The center pane displays the URL Rewrite details.
- 6. In the right pane, in the Actions section, click on Add Rule(s)

Figure (Appendix O) - 23: URL Rewrite details window



- 7. The Add Rule(s) dialog box is displayed.
- 8. In the Inbound Rules section, click on Blank Rule and then click on the OK button.

Figure (Appendix O) - 24: Add Rule(s) dialog box

| Inbound rules | |
|----------------------------------|---|
| Blank rule | Rule with rewrite map |
| Request blocking | |
| Inbound and Outbound Rules | |
| User-friendly URL | |
| Dutbound rules | |
| Blank rule | |
| Search Engine Optimization (SEO) | |
| Enforce lowercase LIRLs | 2 |
| | le without any preset values. This template opens the "Edit Rule"
rule for changing the requested URL address. |

- 9. In the Edit Inbound Rule dialog box, add the following:
 - In the Name: text box, enter a descriptive name, such as Redirect http to https
 - In the Match URL frame, from the **Requested URL**: drop-down list, select *Matches the Pattern*.
 - From the **Using:** drop-down list, select *Regular Expressions*.
 - In the Pattern: to text box, type (.*)
 - The Ignore case checkbox is selected by default.

Figure (Appendix O) - 25: Edit Inbound Rule dialog box

| atch URL | | | |
|--------------------------|---|---------------------|--------------|
| equested URL: | | U <u>s</u> ing: | |
| Matches the Pattern | - | Regular Expressions | - |
| | | | |
| | | | |
| | | | |
| a <u>t</u> tern: | | | - |
| a <u>t</u> tern:
(.*) | | | Test pattern |
| | | | Test pattern |

10. In the Conditions frame, from the Logical Grouping: drop-down list, select Match All.

Figure (Appendix O) - 26: Conditions Window

| Conditions
Logical grouping
Match All | | | |
|---|-----------------------------|---------|-----------|
| Input | Туре | Pattern | Add |
| | | | Edit |
| | | | Remove |
| | | | Move Up |
| | | | Move Down |
| Trac <u>k</u> captu | ure groups across condition | 5 | |

11. In the Add Conditions dialog box, add the following:

- In the **Condition input:** dialog box, type {*HTTPS*}
- From the **Check if input string:**, select *Matches the Pattern*
- In the **Pattern:** field, type ^OFF\$
- Verify that the **Ignore case** checkbox is selected.

12. Click on the **OK** button.

Figure (Appendix O) - 27: Add Condition dialog box

| Add Condition | | ? × |
|--------------------------|----|--------------|
| <u>C</u> ondition input: | | |
| {HTTPS} | | |
| Check if input string: | | |
| Matches the Pattern | ▼ | |
| Pa <u>t</u> tern: | | |
| ^OFF\$ | | Test pattern |
| ✓ Ignore case | | |
| | ОК | Cancel |
| | | |

13. In the Edit Inbound Rule dialog box, add the following:

- In the Action frame, from the Action type: drop-down list, select Redirect
- In the Action Properties section,

- In the **Redirect URL**: type *https://{HTTP_HOST}/{*R:*1*}
- Verify that the Append query string checkbox is selected.
- From the **Redirect type:** drop-down list, select *Permanent (301)*.

14. In the right pane, in the Actions sections,

- Click on Apply.
- Click on **Back to Rules**.

Figure (Appendix O) - 28: Actions section

| Actions | |
|-----------------|--|
| Ev Apply | |
| 🖹 Cancel | |
| 두 Back to Rules | |
| 🕜 Help | |
| Online Help | |

Figure (Appendix O) - 29: Web Platform Installer Window

| Web Platform | Installer 5.0 | | - 0 : |
|--------------|---|-----------------|---------|
| Spotlight | Products Applications | | Q |
| | Name | Released | Install |
| | Microsoft Azure PowerShell | 7/28/2015 | Add |
| × | Microsoft Azure SDK for .NET (VS 2015) - 2.7 | 7/28/2015 | Add |
| M | Visual Studio Community 2015 with Microsoft Azure SDK - 2.7 | 7/28/2015 | Add |
| × | Microsoft Azure SDK for .NET (VS 2013) - 2.7 | 7/28/2015 | Add |
| M | Visual Studio Community 2013 with Microsoft Azure SDK - 2.7 | 7/28/2015 | Add |
| | Microsoft Azure Cross-platform Command Line Tools | 7/28/2015 | Add |
| | | | |
| | | | |
| 0 Items to b | es installed | Options [nstall | foit |

Modify Centric 8 configuration files to function properly using the https protocol



- 1. Edit standalone-pi-mssql-xml and change the following two configuration lines,
 - com.centricsoftware.AppServer.HomeURL = http://XXXX/WebAccess/home.html
 Change as follows:

 com.centricsoftware.AppServer.HomeURL= https://xxxx.centricsoftware.com/WebAccess/home.html

com.centricsoftware.AppServer.HomeExternalURL = http://XXXX/WebAccess/home.html

Change as follows:

com.centricsoftware.AppServer.HomeExternalURL=https://xxxx.centricsoftware.com/WebAccess/ home.html

- 2. Edit PDFService.cfg and change the following two configuration lines:
 - Service Name=XXXX

Change as follows:

Service Name=xxxx.centricsoftware.com

Server URL=http://XXXX/csi-requesthandler/RequestHandler

Change as follows:

Server URL=https://xxxx.centricsoftware.com/csi-requesthandler/RequestHandler



Failure to make these changes will result in PDF generation failure, especially when using Internet Explorer to generate PDF files.

- 3. Edit ImageService.cfg and change the following two configuration lines:
 - Service Name=XXXX

Change as follows:

Service Name=xxxx.centricsoftware.com

Server URL=http://XXXX/csi-requesthandler/RequestHandler

Change as follows:

Server URL=https://xxxx.centricsoftware.com/csi-requesthandler/RequestHandler



Failure to make these changes will result in Image generation failure.

Change PDF and Image Service Protocol to HTTPS

Do the following changes to PDF and Image Service Protocol in the Centric Software:

- 1. Navigate to Service > Image/PDF tab.
- 2. In the Image Service Settings and PDF Service Settings sections, click on Edit icon from the Actions column

Figure (Appendix O) - 30: Image/PDF Service Protocol

| | Brand 🚽 Search | Q 🔶 🔶 🖗 🛣 🖪 👗 🖉 | ● (All) ▼ |
|---|---|--|-----------|
| Setup | | | |
| Configuration Localization Service User Management Company Companion Applicat | ions Workflow Management WBS Management | | |
| Rollup Job Service Upload Image/PDF Slicer Stores Export/Import Prune Lab | oels Reports | | |
| Image Service Settings | | | |
| Auto Assign Images Active Request Max Reby Count Active Request Timeout (sec) Cleanup Inter- | val (hr) Request Query Min Interval (sec) Service Proto | ocol Supported Extensions Actions | |
| 1 1200 | 24 30 http | .ai).pdfj.psdj.psj.svgj.tifj.tiffj.jpegj.jpg 🏻 🄊 | |
| Displaying 1 result(s). | | | |
| PDF Service Settings | | | |
| Active Request Max Retry Count Active Request Timeout (sec) Cleanup Interval (hr) PDF Service I | Protocol Notify When PDF Service Timeout (sec) | Email Group Actions | |
| 1 1200 24 http | PDF Request Failed 300 | SiteAdministrator | |
| Displaying 1 result(s). | | | |

3. In the Edit dialog box, from the Service Protocol (for Image Service)/PDF Service Protocol (for PDF Service) drop-down menu choose https and click on Save

Figure (Appendix O) - 31: Image Service Protocol Edit window

| | * Required |
|-----------------------------------|--------------|
| Auto Assign Images: | \checkmark |
| Active Request Max Retry Count: | 1 |
| Active Request Timeout (sec): | 1200 |
| Cleanup Interval (hr): | 24 |
| Request Query Min Interval (sec): | 30 |
| Service Protocol: | ★ http |
| Supported Extensions: | * |
| | http |

Figure (Appendix O) - 32: PDF Service Protocol Edit window

| | ★ Required |
|------------------------------------|------------|
| Active Request Max Retry Count: 1 | |
| Active Request Timeout (sec): 1200 | |
| Cleanup Interval (hr): 24 | |
| PDF Service Protocol: * http | ▼ |
| Notify When: ★ | |
| PDF Service Timeout (sec): http | |
| Email Group: + Storage | |
| | |

Activate changes

- 1. Navigate to Start > Control Panel.
- 2. Click on Administrative Tools.
- 3. Click on Services.

| Name * | Date modified | Туре | Size |
|--|-------------------|----------|------|
| ADSI Edit | 4/9/2015 1:09 AM | Shortcut | 2 KB |
| R Component Services | 7/13/2009 6:58 PM | Shortcut | 2 KB |
| 🛃 Computer Management | 7/13/2009 6:57 PM | Shortcut | 2 KB |
| Data Sources (ODBC) | 7/13/2009 6:57 PM | Shortcut | 2 KB |
| Event Viewer | 7/13/2009 6:58 PM | Shortcut | 2 KE |
| 🔊 Internet Information Services (IIS) 6.0 Mana | 7/5/2012 8:44 AM | Shortcut | 2 KB |
| 🚵 Internet Information Services (IIS) Manager | 7/5/2012 8:44 AM | Shortcut | 2 KB |
| 🔝 iSCSI Initiator | 7/13/2009 6:57 PM | Shortcut | 2 KB |
| Local Security Policy | 7/13/2009 6:58 PM | Shortcut | 2 KB |
| Performance Monitor | 7/13/2009 6:57 PM | Shortcut | 2 KB |
| a Security Configuration Wizard | 7/13/2009 6:58 PM | Shortcut | 2 KE |
| Server Manager | 7/13/2009 6:58 PM | Shortcut | 2 KB |
| Services | 7/13/2009 6:57 PM | Shortcut | 2 KB |
| Share and Storage Management | 7/13/2009 6:58 PM | Shortcut | 2 KB |

Figure (Appendix O) - 33: Start Menu - Services

- 4. In the Name column, locate the Centric WildFly-8.1.0 Service.
- 5. Right-click on this service and choose the **Restart** option.

Figure (Appendix O) - 34: Services Window - Wildfly Restart option

| Centric WildFly-8.1.0 Service | Name | Description | Status | Startup Type |
|--|---|-------------|---------|--------------|
| | Active Directory Domain Services | AD DS Dom | | Disabled |
| Stop the service | Active Directory Web Services | This servic | | Disabled |
| Restart the service | Application Experience | Processes | Started | Manual |
| | Application Host Helper Service | Provides a | Started | Automatic |
| Description: | Application Identity | Determines | | Manual |
| Centric WildFly-8.1.0 Service/Platform:
Vindows x64 | Application Information | Facilitates | Started | Manual |
| Vindows X64 | Application Layer Gateway Service | Provides s | | Manual |
| | Application Management | Processes i | | Manual |
| | ASP.NET State Service | Provides s | | Disabled |
| | Background Intelligent Transfer Service | Transfers f | Started | Manual |
| | Base Filtering Engine | The Base F | Started | Automatic |
| | Centric WildEt | Centric Wil | Started | Automatic |
| | Certificate Pro Stop | Copies use | Started | Manual |
| | CNG Key Isola Pause | The CNG k | | Manual |
| | COM+ Event S Resume | Supports S | Started | Automatic |
| | COM+ System Restart | Manages t | Started | Manual |
| | Computer Brox | Maintains a | | Disabled |
| | 🔄 Credential Mar 🛛 All Tasks 🔹 🕨 | Provides s | | Manual |
| | Cryptographic Refresh | Provides fo | Started | Automatic |
| | CSImageServi | | | Automatic |
| | OCOM Server Properties | The DCOM | Started | Automatic |
| | Desktop Windk Help 1a | Provides D | Started | Automatic |
| | CFS Namespac | Enables yo | Started | Automatic |
| | C DFS Replication | Enables yo | Started | Automatic . |

- 6. View the pi_centric.log file. When it indicates Centric 8 has successfully started, in the Name column, locate the World Wide Web Publishing Service.
- 7. Right-click on this service and select the **Restart** option.

| World Wide Web Publishing Service | Name | | Description | Status | Startup Type |
|---|------------------------|----------------|-------------|---------|--------------|
| for a mac meet abiliting service | Wolume Shadow Copy | | Manages a | | Manual |
| Stop the service | Windows Audio | | Manages a | | Manual |
| Restart the service | Windows Audio Endpoin | t Builder | Manages a | | Manual |
| | Windows CardSpace | | Securely e | | Manual |
| Description: | Windows Color System | | The WcsPl | | Manual |
| rovides Web connectivity and | Windows Driver Foundal | tion - User-mo | Manages u | | Manual |
| idministration through the Internet
Information Services Manager | Windows Error Reportin | g Service | Allows erro | | Manual |
| in of the cost is a number | Windows Event Collecto | r | This servic | | Manual |
| | Windows Event Log | | This servic | Started | Automatic |
| | Windows Firewall | | Windows Fi | Started | Automatic |
| | Windows Font Cache Se | rvice | Optimizes | Started | Automatic (D |
| | Windows Installer | | Adds, modi | | Manual |
| | Windows Management | Start | rovides a | Started | Automatic |
| | 🔍 Windows Modules Inst | Stop | nables ins | | Manual |
| | Windows Presentation | Pause | Optimizes | | Manual |
| | Windows Process Acti | Resume | he Windo | Started | Manual |
| | 🔍 Windows Remote Man | Restart | Windows R | Started | Automatic (D |
| | Windows Time | All Tasks | faintains d | | Manual |
| | Windows Update | All Tasks | Inables th | Started | Automatic (D |
| | WinHTTP Web Proxy # | Refresh | WINHTTP I | | Manual |
| | 🖓 Wired AutoConfig 👘 | | he Wired | | Manual |
| | WMI Performance Ada | Properties | rovides p | | Manual |
| | Workstation | Help | creates an | Started | Automatic |
| | World Wide Web Publish | ing Service | Provides W | Started | Automatic |
| | 4 | | | | |

Figure (Appendix O) - 35: Services Window - WWW Publishing Service Restart option

Verify that you can access the Centric 8 application

1. The following URL will display the Centric 8 login page:

https://xxxx.centricsoftware.com/webaccess

2. The following URL will re-direct you to <u>https://xxxx.centricsoftware.com/webaccess</u> and display the Centric 8 login page:

http://xxxx.centricsoftware.com/webaccess

3. The following two URLs will display an error message – This is no longer a valid URL to use.

http://XXXX//WebAccess

http://localhost/webaccess

4. The only valid URL is as follows:

https://xxxx.centricsoftware.com/webaccess

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