

UGS Teamcenter Engineering 2007 Server installation guide

Including step-by-step configuration information on AIX servers

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Abstract

This guide provides detailed step-by-step installation and configuration instructions for a Teamcenter Engineering server for the IBM System p (IBM Power Systems) family of systems. Also included in this guide are explicit instructions on how to create an Oracle database for Teamcenter Engineering and the deployment of the Web application in IBM WebSphere Application Server. This guide is intended as a mechanism to educate Advanced Technical Support (ATS) and Field Technical Support Specialist (FTSS) personnel, in support of sales engagements.

Introduction

This guide supplements existing Teamcenter Engineering installation documentation. It does not replace it. The focus here is on the installation and configuration of a Teamcenter Engineering server.

Resource planning

Teamcenter Engineering supports two types of clients and two architecture models (two- and four-tier). The basic architecture of Teamcenter Engineering 2005 SR1 has substantially changed from previous versions, significantly impacting multitier deployment options. The two types of clients are:

- A thin, browser-based client provides access to the most common features and functions needed by users to reference or consume Teamcenter information. It requires only a commercial browser.
- A rich, Java[™] technology-based client provides access to all Teamcenter Engineering features and functions, requiring a Java Runtime Environment (JRE) and a local (or mapped) install on the user's desktop machine. The rich client can either be deployed in a two- or four-tier architecture.

Teamcenter Engineering two-tier architecture

In the two-tier deployment, the Java based rich client, the enterprise-tier server and the supporting software run on the users' workstations. Database, volumes and other resource-tier components run on separate systems. (See Figure 1.)



Figure 1. Rich-client two-tier architecture



Where: **1** is the Teamcenter Engineering two-tier rich client

2 is the database server (Oracle or SQL server on the Microsoft® Windows® platform)



Teamcenter Engineering four-tier architecture

In the four-tier deployment, only the Java based rich client runs on the users' workstations. The enterprise tier, database, volumes and other resource-tier components run on separate systems. (See Figure 2.)



Figure 2. Rich-client four-tier architecture

Where: 1 is the resource tier (database, file management system and volume servers)

- 2 is the Teamcenter Engineering server tier
- 3 is the Java 2 Platform, Enterprise Edition (J2EE) Web application-server tier
- 4 is the Teamcenter Engineering client tier

Client-server database environment

If the Oracle database server is on a separate system than the Teamcenter Engineering server processes (configured with an Oracle client), you must configure the Teamcenter Engineering server with the Oracle



Net Configuration assistant (netca) management tool to create the configuration files that are necessary for remote-database access.



Teamcenter Engineering installation environment

Teamcenter Engineering 2005 SR1 was successfully installed on an IBM® POWER6[™] processor-based IBM System p[™] server. This involved setting up a four-tier architecture that was implemented using three logical partitions (LPARs).

- IBM System p570 Model 9117-MMA server running IBM AIX® Version 5.3 TL7 with SP1
- XL C Enterprise Edition for AIX C++ runtime (xIC.aix50.rte) at 9.0.0.3
- Oracle Database 10.2.0.1 and IBM WebSphere Application Server 6.0.2.25
- Teamcenter Engineering Server Manager was configured for multicast
- FlexLM V10.8 license server (from Acresso Software)

Assumptions

This guide assumes Oracle 10g Release2 (server and client code) and WebSphere Application Server 6.0.2.25 have already been installed and configured. If not, refer to the following documents; *Oracle Database 10g Release 2 (10.2.0.1.0) Installation Guide for PDM Applications* and *WebSphere Application Server V6.0.2 FP25 Install Guide for PDM Applications*.

Creating Oracle Database for Teamcenter

It is necessary to create a database instance by using UGS Corporation-provided templates with the Oracle Database Configuration Assistant (DBCA).

- The templates populate the database with the required Oracle user accounts and table spaces.
- The templates create a single database user (infodba) per Oracle system identifier (SID).
- After the DBCA steps are completed, an eng2007 database is created and used for the installation of Teamcenter Engineering, which includes an infodba user with an Oracle password of infodba.

Copying UGS templates

Perform the following steps to copy the UGS-supplied Oracle 10g template files:

Access the Teamcenter Engineering CD-ROM or CD-ROM images.

Copy all files in the /dbscripts/oracle directory on the Teamcenter Engineering CD-ROM to the templates directory of the Oracle installation. For example:

cp /cdrom/~/db_scripts/oracle/* to \$ORACLE_HOME/assistants/dbca/templates



Creating Teamcenter Engineering database instance with DBCA

Perform the following processes to create a Teamcenter Engineering database instance.

1. Start the DBCA utility by typing the following command: **#/home/oracle/ora10/bin/dbca**.

DBCA displays the Welcome page (screen image is not shown here). Click Next .

On the Operations page, select Create a Database, then click Next. (See Figure 3.)

-	Database Configuration Assistant, Step 1 of 12 : Operations	•
	Select the operation that you want to perform: Create a Database Configure Database Options Delete a Database Manage Templates Configure Automatic Storage Management	
Cancel Help	Back Next >	

Figure 3. Operations page

- 2. On the Database Templates page (screen image is not shown here), select **Teamcenter Engineering Oracle 10g**. Then, click **Next**.
- 3. On the Database Identification page, enter the Global Database Name (**eng2007**). Then click **Next**. (See Figure 4.)

		Database Configuration Assist	lant, Step 3 of 12 : Database Identification	• -
		An Oracle database is i "name.domain". Global Database Name A database is reference any other instance on th	uniquely identified by a Global Database Name, typically of the forr [eng2007] ed by at least one Oracle instance which is uniquely identified from is computer by an Oracle System Identifier (SID).	n
				_
		SID:	eng2007	
ķ				
Ca	incel H	lelp	🕜 <u>B</u> ack	

Figure 4. Database Identification page



- 4. On the Management Options page (screen image is not shown here), click Next.
- 5. On the Database Credentials page, select **Use the Same Password for All Accounts**. Then click **Next**. (See Figure 5.)

Password: Confirm Password:	***		
C Use Different Passv	vords		
User Name	Password	Confirm Password	
ุ ราร			
SYSTEM			
DBSNMP			
SYSMAN			
L			

Figure 5. Database Credentials page

- 6. On the Storage Options page (screen image is not shown here), click Next.
- 7. On the Database File Location page (screen image is not shown here), select **Use Database File Locations** from Templates. Then click **Next**.
- 8. On the Recovery Configuration page (screen image is not shown here), accept the defaults. Then click **Next**.
- 9. On the Database Content page (screen image is not shown here), click Next.



Next. (See Fig	ure 6.) Configuration Assistant,	Step 10 of 12 :	Initialization Pa	arameters	-	
	Memory (Sizing	Character Sets	Connection Mode		
	Typical - Allocate men Percentage: 40 +	nory as a percen	itage of the total / Distribution	l physical memory (4096 MB))	
	C Custom Shared Memory Mana	igement: 🔍 Au	tomatic 🖲 Manu	al		
	Shared Pool: Buffor Cache:	48		M Bytes		
	Java Pool:	0		M Bytes		
	Large Pool: PCA Size:	8		M Bytes		
	Total Memory for Ora	ucle: 144 M	1 Bytes			
	Total memory empty parame	rincludes 40MB eters, if any.	of Oracle Proces	is Size and the defaults for t	ie	
	All Initialization Paramete	rs)				
Cancel Help			S Ba	ack Next »	sh).

10. On the Initialization Parameters page, select Typical with a percentage of 40. Then click

Figure 6. Initialization Parameters page

- 11. On the Database Storage page (screen image is not shown here), click Next.
- 12. On the Create Options page (screen image is not shown here), select **Create Database**. Then click **Next**.
- 13. On the General Purpose page (not shown here), click Next.
- 14. On the Database Credentials page (screen image is not shown here), select Use the Same Password for All Accounts, then click **Next**.
- 15. On the Database Creation Complete page (screen image is not shown here), click **Exit**.



Installing Teamcenter Engineering

This section of explains how to install Teamcenter Engineering.

Installation images

Before beginning the installation, mount the CD-ROMs or hard-disk devices on the network node that runs Teamcenter Environment Manager. You can either locally mount, or use NFS to remotely mount, the CD-ROM or hard-disk devices.

In the following instructions, the entire contents of the Teamcenter Engineering CD-ROMs are copied to the hard disk. The installation directories are then NFS-mounted from a remote NFS server. You must run Teamcenter Environment Manager on the local server node.

The installation image directory (/MNT2/tc2007) is then NFS-mounted from a remote NFS server.

Preinstallation setup

Before installing the Teamcenter Engineering code, do the following:

16. Create a user named *infodba* that belongs to the UNIX group named *infodba*.

Create the /home/infodba directory with 3 GB of storage and specify that the directory is owned by the infodba user with group ownership of infodba.

Increase the size of the /tmp directory so that it has 500 MB free.

Starting Teamcenter Engineering Manager

To install Teamcenter Engineering, you must perform the following steps:

- 1. As root, run the AIX autoconf6 command to enable IP V6.
- 2. Start the database and listener.
- 3. Start WebSphere Application Server.
- 4. Log in as infodba to install and maintain the Teamcenter Engineering installation.
- 5. To start Teamcenter Environment Manager, access the directory (/MNT2/tc2007/aix) of the Teamcenter Engineering NFS-mounted file system. Run the tem.sh script.
- 6. From the Choose Install Language dialog page, select a language for the installation program and click **OK** (see Figure 7). (This language is used only for the installation program.)

E	Choose Install Language	а.
	English	

Figure 7. Choose Install Language dialog page



7. From the Getting Started page, select Create a new installation of the product. Then, click Next. (See Figure 8.)



Figure 8. Getting Started page

- 8. From the Copyright Notice page (screen image is not shown here), click Next.
- 9. From the New Configuration page (screen image is not shown here), enter a unique ID for the description and ID. Then, click **Next**.

Note: Record the description and ID that you enter for this configuration. When uninstalling this configuration or performing other maintenance tasks, you must select this configuration from a list. In addition, installation log files use the ID you enter in their names.



- 10. From the Solutions page (screen image is not shown here), select **Corporate Server** and **Rich Client**. Then, click **Next**.
- 11. On the Select Features page (see Figure 9), deselect **NX UG Integration**, then select **J2EE Based Server Manager**.

Note: These features are commonly installed with the corporate server, but are optional. This example deploys WebSphere Application Server, so the J2EE Server Manager feature is selected.

- 12. If this corporate server is also a Teamcenter Engineering license server, scroll down the Select Features page and select Flex License Server. (Note: If you do not select this option, you must provide information about the license server later in this installation.)
- 13. At the bottom of the Select Features page, in the Installation Directory field, enter the absolute path to the directory where you want to install Teamcenter Engineering. In this example, the directory that is entered is **/home/infodba/2007**. Click **Next**.

Note: You must install Teamcenter Engineering in a new directory. If you want to upgrade an existing installation, return to the Getting Started page and select an upgrade installation.

-	Teamcenter	· 🗆
TEAMCENTER	engineering process management	
Steps Getting Started Copyright Notice New Configuration Solutions Select Features	Select Features Select the features you wish to install from the list below. Teamcenter Corporate Server Teamcenter Foundation File Management System Teamcenter File Services NX UG Integration J2EE Based Server Manager Engineering Translation Services Full Text Search Engine SCM Clear Case for Foundation Teamcenter Security Service Global Services Adapter rane Space Required Space Available Space Available Installation Directory //home/infodbal/2007	•
Help	Cancel < Prev Next	>

Figure 9. Select Features page



14. On the Configure TC_DATA page, select Create a new directory. (See Figure 10.)

Note: This step creates the Teamcenter Engineering shared-data subdirectories and files.

15. Also on the Configure TC_DATA page, in the Data Directory Location field, enter the absolute path to a new directory where you want to create shared-data subdirectories and files. Then, click **Next**.

- Teamcer	nter Engineering 2005 SR1 (10.0.1.0) 🔹 🗖
	APARTER CONTRACTOR
enginee	ering process management
Steps	Configure TC_DATA
 ✓ Getting Started ✓ Copyright Notice ✓ New Configuration ✓ Solutions ✓ Solutions ✓ Select Features ✓ Configure TC_DATA Teamcenter Administrative Us FSC Service Operating System User TCFS Service Rich Client Settings Server Manager TcServer Character Encoding S Confirm Selections Install Features 	Enter the path to the data directory. This is the directory where database-specific configuration and application encapsulation files will be stored. Create a new data directory Connect to an existing data directory Data Directory Location /home/infodba/tcdata WARNING: If you choose to create a new data directory and the directory already exists, the contents will be overwritten. Connecting to an existing data directory will not change the contents of any files in the directory.
Help	Cancel < Prev Next >

Figure 10. Configure TC_DATA page



16. On the Database Configuration page (see Figure 11), enter the database server details, which includes the database user and password information. Do not select any options or fill in any fields in the Database Creation section. Click **Next**.

- Teamcenter		
	ATHA	THHAHHH
TEAMCENTER	HIH	/// engineering process management and
Steps	Database Config	juration
✓ Getting Started	Please select the type	of database engine to use and the associated parameters. You
Copyright Notice	have the option of crea	ating the database as well.
New Configuration	Database Server	
✓ Solutions	Database Engine	Oracle 🗸 🗸
☑ Select Features	Host	omicrawn.austin.ibm.com
Configure TC_DATA	Port	1521
✓ Database Configuration	Service	eng2007
🔲 Flex License Client	Database User	infodba
🗌 Teamcenter Administrative Us	Database Password	*****
FSC Service	Database Creation-	
Operating System User	🗌 🗌 Create Tablespac	es and User
TCFS Service	Database System	User system
Rich Client Settings	Database System	Password
Server Manager for J2EE	Tablespace Direct	tory on Database Server
Server Manager for J2EE Perfo	Tablespace Sizes	(MB)
TcServer Character Encoding S	IDATA Size	90
Confirm Selections	ILOG Size	5
🔲 Install Features	INDX Size	5
	TEMP Size	5
Halp		Concol Prov. Nove s
негр		Cancel < Prev Next >

Figure 11. Database Configuration page

- 17. On the Volume Specification page (screen image is not shown here), in the Volume Name field, enter the name to use for the Teamcenter Engineering volume that is being created.
- 18. Also on the Volume Specification page, in the Volume Location field, enter the absolute path to the directory for the volume, ensuring that the parent directory exists. Click **Next**.

Note: UGS recommends not defining the volume location under the Teamcenter Engineering root directory. Doing this leads to complications when upgrading to a new version.

19. On the Transient Volume page (screen image is not shown here), click Next.

Now, you have completed the various steps required to install a corporate server: choosing the required components, creating an installation root directory, creating a data directory and creating a volume.



Configuring file-management services

Teamcenter Environment Manager displays additional pages that request information for configuring the file-management services, Flex-license services and optional components. (**Note:** For information on filling in these fields, click **Help**.)

- 1. When the default Site Web Server page is presented, click **Next**.
- 2. On the Flex License Client page (see Figure 12), enter the Flex Host name, then click Next.

- Teamce	nter Engineering 2005 SR1 (10.0.1.0)
La Contraction	ATHAM MAN AND AND AND AND AND AND AND AND AND A
enginee	ering process management
Steps	Flex License Client
Getting Started	Please enter the information about the Flex Server.
Copyright Notice	License Information
New Configuration	Here indeb012 outtin ibm com
☑ Solutions	Port 27000
Select Features	
Configure TC_DATA	
Database Configuration	
Volume Specification	
☑ Transient Volume Settings	
🗹 Default Site Web Server	
✓ Flex License Client	
Teamcenter Administrative Us	
FSC Service	
Operating System User	
TCFS Service	
Rich Client Settings	
🗌 Server Manager	
TcServer Character Encoding S	
Confirm Selections	
🔲 Install Features	
2000/01/2010/01/01/01	
Help	Cancel < Prev Next >

Figure 12. Flex License Client page

- 3. On the Teamcenter Administrative User page (screen image is not shown here), enter the password, then click **Next**.
- 4. On the file-system cache (FSC) Service page (screen image is not shown here), click Next.
- 5. On the FSC Service: Connections page (screen image is not shown here), click Next.
- 6. On the FSC Service: FCC Defaults page (screen image is not shown here), click Next.
- 7. On the FSC Service: Additional Sites page (screen image is not shown here), click Next.



- 8. On the FSC Deployment Model page (screen image is not shown here), click Next.
- 9. On the Operating System User page (screen image is not shown here), enter the password, then click **Next**.
- 10. On the Transparent Cryptographic File System (TCFS) Service page (see Figure 13), enter the port number (for example: 11528), then click **Next**.

		Teamo	enter		•
		ATHAT	TITHE	THEFT	
	TEAMCENTER	H-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	/ engineering	process manage	ment
St	teps	TCFS Service			
Ŀ	Getting Started	The Teamcenter TCFS se	rvice is used by the FSC p	rocess to handle disk ac	tess. If a
	Copyright Notice	volume is to be created may choose to install the	during this install, the TCFS TCFS service if you intend	5 service is required; oth I to create a volume on th	erwise, you bis server in
Þ	New Configuration	the future.	r ero service il you interiu		
	Solutions	Name	tcfs		
Þ	Select Features	Port	11528		
	Configure TC_DATA		11920		
Þ	Database Configuration				
	Volume Specification				
F	Transient Volume Settings				
Í	Default Site Web Server				
	Flex License Client				
Þ	Teamcenter Administrative Us				
	FSC Service				
Þ	FSC Service: Connections				
	FSC Service: FCC Defaults				
Ŀ	FSC Service: Additional Sites				
	FSC Deployment Model				
	Operating System User				
 •	TCFS Service				
	Rich Client Settings				
	Server Manager for J2EE				
	Server Manager for J2EE Perfo				
] TcServer Character Encoding S				
	Confirm Selections				
	Install Features				
•					
	Help			Cancel < Prev	Next >
<u> </u>					





- 11. On the Rich Client Settings page (screen image is not shown here), click Next.
- 12. On the Online Help page (screen image is not shown here), select Do not configure Online Help. Then click **Next**.
- 13. On the Rich Client Server Settings page (screen image is not shown here), click Next.
- 14. On the FCC Settings page (screen image is not shown here), click Next.
- 15. On the Rich Client FSC Parent Settings page (screen image is not shown here), click Next.
- 16. On the Server Manager page (see Figure 14), select Multicast Mode, then click Next.

- Teamcenter - 🗆			
1	HHHHH	HEALERH	
TEAMCENTER	A A A A A A A A A A A A A A A A A A A	neering process managen	nent
Steps	Server Manager for J2EE		
Cetting Started	The Server Manager process controls the	e Teamcenter Engineering servers by	starting Assigner
Copyright Notice	can assign available servers to user ses	isions.	-osigner
☑ New Configuration	Configuration		
✓ Solutions	Pool ID	PoolA	
Select Features	TreeCache Cluster Name	Cluster	
Configure TC_DATA	JMX HTTP Adaptor Port	8082	
Database Configuration	Server Host		
Volume Specification	Multicast Mode		
✓ Transient Volume Settings	TreeCache Cluster Port	45566	
☑ Default Site Web Server	🔘 TCP Mode		
✓ Flex License Client	Local Service Port	17800	
✓ Teamcenter Administrative	Fort Kange Connection Timeout	20000	
✓ FSC Service	TreeCache Peers	20000	
FSC Service: Connections	Host	Port	Add
✓ FSC Service: FCC Defaults			Delete
FSC Service: Additional Sites			Derece
FSC Deployment Model			
✓ Operating System User			
✓ TCFS Service			
Rich Client Settings			
✓ Online Help			
Rich Client Server Settings			
✓ FCC Settings			
☑ Rich Client FSC Parent Settin			
Server Manager for J2EE			
•			
Help		Cancel < Prev	Next >



17. On the Character Encoding Settings page (screen image is not shown here), click Next.



- 18. When Teamcenter Environment Manager displays the Confirm Selections page (see Figure 15), you can redisplay previous pages and change values. For steps and pages you do not change, Teamcenter Environment Manager maintains the values and the options you selected previously.
- 19. When you are satisfied with the selections you have made, click **Next**. Teamcenter Environment Manager begins installing Teamcenter Engineering.

-	Teamcenter
**	HATTELER HER HER HER HER HER HER HER HER HER H
TEAMCENTER	244777777777777 éngineering process management
Steps	Confirm Selections
Getting Started	The list below shows features that were selected including the data entered. You may return to a previous window to change your selections or continue forward to perform
Copyright Notice	the install.
✓ New Configuration	
☑ Solutions	Getting Started
☑ Select Features	Copyright Notice
Configure TC_DATA	Configuration Name: My Database, ID: MYDB
☑ Database Configuration	Solutions
✓ Volume Specification	Select Features
☑ Transient Volume Settings	TC_DATA Path: /home/infodba/tcdata
Default Site Web Server	Create a new data directory
Flex License Client	Database Configuration Database Engine: Oracle
Teamcenter Administrative	Host: omicrawn.austin.ibm.com:1521
	Volume Specification
ESC Service: Connections	Volume Name: volume1
E ESC Service: Connections	Volume Location: /home/infodba/volume1
Schervice: FCC Defaults	Transient Volume Directory (Windows): C:\temp\transientVolume_infodba
FSC Service: Additional Sites	Transient Volume Directory (UNIX): /tmp/transientVolume_infodba
FSC Deployment Model	Set the Preferences: false
Uperating System User	Flex License Client
CFS Service	Host: isvlab013.austin.ibm.com
Rich Client Settings	Teamcenter Administrative User
🗹 Online Help	User: infodba
Rich Client Server Settings	FSC Service Server ID: FSC ensilawn infodba
✓ FCC Settings	Read Cache Directory. /tmp/FSCCache
Rich Client FSC Parent Settin	Read Cache Size (MB): 10 MB
Server Manager for J2EE	Write Cache Size (MB): 10 MB
	FSC Log File: /home/infodba/2007/logs/\$FSC_ID.log
Halm	Concel Prov. News
нер	Cancei < Prev Next >

Figure 15. Confirm Selections page

Note: If an installation problem occurs, Teamcenter Environment Manager displays a message that includes the path to the installation log file that describes the problem.



20. During the installation of Teamcenter Engineering 2007, you are prompted to locate the branding.jar file (see Figure 16). Browse to the correct location, then click **Open**.

-	Prompting for branding.jar 🔹 🗖
Look <u>I</u> n: 🗖 b	oranding 🔹 🖬 🖿 🔡 📇
	▶
File <u>N</u> ame:	/MNT2/tc2007/aix/tceng2005/branding
Files of <u>T</u> ype:	All Files (*.*) 🔻
	<u>O</u> pen <u>C</u> ancel

Figure 16. Prompting for branding.jar dialog page



21. On the Install Features: Successful page (see Figure 17), click Close.



Figure 17. Install Features: Successful page

- 22. As root, run the Post_task shell script by typing the following command (substituting the name provided on the installation completion page): ./home/infodba/2007/install/root_post_tasks_0802191444ksh
- 23. To confirm a successful installation of Teamcenter Engineering 2005 SR1, start the rich client by typing the following command: /home/infodba/2007/portal/start_portal
- 24. Exit the rich client.
- 25. Also, to confirm a successful installation, start the pool manager by typing the following command: /home/infodba//pool_manager/mgrstartMYDB



Generating the Web-tier application

This section of the guide explains how to generate the Web-tier application.

Installing Web Application Manager

To install Web Application Manager, follow these instructions:

- 1. As infodba user on your system, under the Teamcenter Engineering install location (for example: /home/infodba/2007), create a directory that is named <u>Web tier.</u>
- 2. Locate the INSTALL_TCWEB.TZ file in the install directory (/MNT2tc2007/aix/Web_tier).
- 3. Change the directory (using the cd command) to the Web_tier directory (for example: /home/infodba/2007/Web_tier).
- Use the uncompress command on the Web_tier/INSTALL_TCWEB.TZ file to put it into the newly created Web_tier directory. See the following example (where image_path is similar to /MNT2/tc2007/aix):

```
cat ~image_path/Web_tier/INSTALL_TCWEB.TZ | uncompress -c | tar -xvf -
```

Before starting Web Application Manager

Perform the following tasks prior to starting Web Application Manager:

- 1. Install the Teamcenter Engineering server and server manager by using Teamcenter Environment Manager.
- 2. Install Web Application Manager (explained in the previous step *Installing Web Application Manager*).
- 3. Install a supported third-party J2EE application server (for example, *WebSphere Application Server*).
- 4. Obtain the information that is required to install the Web-tier application (refer to Figure 11 through Figure 15).

Starting Web Application Manager

Perform the following tasks to start Web Application Manager:

- 1. As user infodba, start Web Application Manager.
- 2. Change the directory (by using the cd command) to the local Web_tier directory.
- 3. Ensure that *java* is in the path.
- 4. Run the java -version command. (Note: This command must return 142 or above.)
- 5. Run the **insweb** command.



6. On the Welcome page, click Copy ICDs. (See Figure 18.)

Teamcenter Web Application Manag	jer 🕛
Welcome to the Teamcenter Web Application Mar	nager
Web Applications	
	Add
	Remove
	Modify
UGS	Copy ICDs
Transforming the process of innovation	Reload ICDs
Help Exit	

Figure 18. Welcome to the Teamcenter Web Application Manager dialog page

- Browse to and select the portal_otw/icd subdirectory in the Teamcenter Engineering NFSmounted file system (screen image is not shown here), ensuring that ICD Sources is displayed in the Files of Type field. Click **Open**.
- 8. Web Application Manager displays the path that you have chosen in the Source field of the Copy ICD Files dialog page (see Figure 19). Click **OK**.

Teamcenter Web Application Manag	er 🗖 🗖
Welcome to the Teamcenter Web Application Mar	lager
Web Applications	
	Add
Copy ICD Files	•
Source	
/MNT2/tc2007/aix/Web_tier/icd	Browse
OK Cancel Help	
UGS	Copy ICDs
Transforming the process of inscretion	Reload ICDs
Help Exit N	





9. Web Application Manager copies the ICD files and displays a Progress dialog page (see Figure 20). When copying is complete, click **OK**.

_	-	$\overline{\uparrow}$	Progress	•	
	M M M	NT2/tc200 NT2/tc200 NT2/tc200	7/aix/Web_tier/icd/teamcenter_wae.icd copied to /home/infodba/2007/Web_tier/icd. 7/aix/Web_tier/icd/teamcenter_webdav.icd copied to /home/infodba/2007/Web_tier/ic 7/aix/Web_tier/icd/teamcenter_webtier_110n.icd copied to 200070.veb_tier/icd	d.	
	СІ	D file copy	complete.		
		oading ICE Os are relo) files from 'Icd' directory please be patient aded.		
			ontinue.		
			ОК		

Figure 20. Progress dialog page

10. Web Application Manager displays the Teamcenter Web Application Manager dialog page (see Figure 21). Click **Add**.

Tear	ncenter Web Application Manag	ger	•
Welcome to the T	eamcenter Web Application Ma Web Applications	nager	
		Add	
428- 3		Remov	e
and the same		Modify.	
independent of			
1			
UGS		Copy ICD	S
process of indevation		Reload IC	Ds
	Help Exit		

Figure 21. Teamcenter Web Application Manager dialog page



- 11. On the Add Web Application dialog page (see Figure 22), in the Name field, enter the name of this application, for example, TCEng2007.
- 12. In the Staging Location field, enter the path to the location where the application files will reside.
- 13. Typically, you would install the Web-tier application in a directory under the Web_tier directory. Web Application Manager creates the directory you specify if it does not exist.
- 14. Optionally, in the Description field, enter a brief description of this application.
- 15. Select Add (this button is located to the right of the field titled Disk Locations for Install Images).

_	Add Web Application		• [
Name	TCEng2007			
Staging Location	/home/infodba/2007/Web_tier/staging1	Brows	<u></u>	
Description				
	Advanced Web Application Options			
Disk Locations f	or Install Images			
/MNT2/tc2007/	aix/Web_tier	Add	,	
/cdrom/UNIX		Remov	e	
		Modify		
Solution Type:	Thin Client 🗸			
Selected Solution	15			
Teamcenter Pres	entation Tier Infrastructure			
Teamcenter - Pr	esentation Tier			_
		Solution	IS	
	OK Cancel Help			

Figure 22. Add Web Application dialog page

16. Web Application Manager displays the Add Disk Location dialog page (screen image is not shown here).

In the **Disk Location To Add** field, enter the path to the Web_tier directory. (/MNT2/tc2007/aix/Web_tier) on the Teamcenter Engineering NFS-mounted file system, then click OK. (Note: This location holds source images that are required to generate the Web-tier application.)

- 17. Web Application Manager redisplays the Add Web Application dialog page with the path that you just entered (it is displayed in the Disk Locations for Install Images field).
- 18. In the pull-down list that is adjacent to the Solution Type field, select **Thin Client**. Then, the Web Application Manager displays Thin Client in the Solution Type field.
- 19. Click **Solutions** (this button is located to the right of the Selected Solutions field, see Figure 22).



- 20. Web Application Manager displays the Select Solutions dialog page (see Figure 23). Select the following required solutions, then click **OK**:
 - Teamcenter Enterprise Tier
 - Teamcenter Presentation Tier Infrastructure
 - Teamcenter Presentation Tier



Figure 23. Select Solutions dialog page

21. On the Add Web Application dialog page (see Figure 24), ensure that the solutions that you select are displayed in the Selected Solutions field, then click **OK**.

	Add Web Application		•
Name	TCEng2007		
Staging Location	/home/infodba/2007/Web_tier/staging1	Browse	·
Description			
	Advanced Web Application Options		
Disk Locations f	or Install Images		
/MNT2/tc2007/	aix/Web_tier	Add	
/cdrom/UNIX		Remov	e
•		Modify	
ſ			
Solution Type:	Thin Client 👻		
Selected Solution	15		
Teamcenter Ente	rprise Tier		
Teamcenter Presentation Tier Infrastructure			
Teamcenter - Pr	esentation Tier	Solution	S
	OK Cancel Help		

Figure 24. Add Web Application dialog page



- 22. On the Modify Required Context Parameters dialog page (see Figure 25), you can accept the default values for most parameters. However, you must supply or modify the values for the following parameters, and then click **OK**:
 - TreeCache Cluster Name => Cluster
 - TreeCache Mode => Mcast
 - TreeCache Cluster Port (when using the multicast-communication protocol) => 45566

Modify Required Context	Parameters 🔹 🗖				
Context Parameters					
Name	Value				
TreeCache Cluster Name	Cluster 🔺				
TreeCache Mode	Mcast				
TreeCache Cluster Port	45566				
Local Service Port	17800				
TreeCache Peers	localhost[17800]				
Port Range	5				
Connection Timeout	30000				
DEPLOYABLE-FILE-NAME	tc				
MAX-POOL-SIZE	500				
IS_SSO_ENABLED	false				
SSO_APPLICATION_ID	TCEngineering				
SSO_LOGIN_SERVICE_URL	http://host/tessols				
SSO_SERVICE_URL	http://host/tcssoservice				
webdav.useHybrid	true 👻				
Tree Cooke Med	-				
Description for Selected Parameter. TreeCache Mod	e				
Mode of the TreeCache communication protocol. If T	CP mode is selected,				
these parameters should also be configured: "Local Se	ervice Port",				
"TreeCache Peers", "Port Range" and "Connection Time	eout".				
The value wave her of the VTDM/CL, he defends a los					
The value must be of type STRING'. Its default value	The value must be of type 'STRING'. Its default value is 'TCP'.				
OK Cancel	Help				

Figure 25. Modify Required context Parameters dialog page

23. At this point, Web Application Manager begins installing files and displays the Progress dialog page. Click **OK** (to close the Progress dialog page). (See Figure 26.)

Progress	
Done with processing PARAM_FILES tags Starting generation of mld_log4j.xml at /home/infodba/2007/Web_tier/staging1/webapp_ Done with generation of mld_log4j.xml at /home/infodba/2007/Web_tier/staging1/webapp Starting generation of WAR file Done with generation of WAR file Starting generation of EAB file	
Done with generation of EAR file	
Click OK to continue.	
ОК	

Figure 26. Progress dialog page



24. Web Application Manager displays the Welcome dialog page again (see Figure 27). Click Modify.

🗕 Team	center Web Application Manag	jer	•		
Welcome to the Teamcenter Web Application Manager					
2899-Y -	Web Applications				
	TCEng2007	Add			
		Remov	e		
		Modify.	••		
		R.			
-					
UGS		Copy ICD	s		
Transforming the process of innovation		Reload IC	Ds		
	Help Exit				

Figure 27. Modify Web Application dialog page

25. On the Modify Web Application dialog page (see Figure 28), click Generate Deployable File.

-	Modify Web A	pplication	• [
Name	TCEng2007	Modify Web Application Information		
Staging Location	n Iba/2007/Web_tier/staging1	Modify Disk Locations		
Description		Modify Context Parameters		
Columbus Tanas	This Oliver	Modify Tables		
Solution Type:	Thin Client			
Installed Solutio	ons	Add Solutions		
Teamcenter Ent	erprise Tier	Reinstall Solutions		
Teamcenter Pres	sentation Tier Infrastructure			
Teamcenter - P	resentation Tier	Generate Deployable File		
	Copy ICD Files			
ICD Files Last Copied: <no copy="" done=""> View Component Versions</no>				
OK Cancel Help				





26. In the Generate Deployable File dialog page (see Figure 29), enter a name for the Web-tier enterprise archive (EAR) file in the Deployable File Name field, then click **OK**.

Note: Web Application Manager adds the file extension. For example, if you enter TCEng2007 as the file name, Web Application Manager creates a file named *TCEng2007.ear*.

-		Modify Web A	oplication	•
Name		TCEng2007	Modify Web A	pplication Information
Staging Lo	catio	n ba/2007/Web_tier/staging1	Modify	Disk Locations
Descriptio	-	Generate Deployable F	ïle 🔹 🗖	ontext Parameters
Columba T	Dep	oloyable File Name TCEng2007		dify Tables
Solution 1 Installed S	2	Set As Default		d Solutions
Teamcent		OK Cancel	Help 📐	tall Solutions
Teamcente	r - P	resentation Tier	Generat	e Deployable File
			Co	py ICD Files
ICD Files L	ICD Files Last Copied: <no copy="" done=""> View Component Versions</no>			
		OK Canc	el Help	

Figure 29. Generate Deployable File dialog page

- 27. Web Application Manager begins building the EAR file (and the WAR file that is contained within the EAR file) and also shows a Progress dialog page (see Figure 30).
- 28. When Web Application Manager indicates that file generation is complete, click **OK** to close the Progress dialog page.
- 29. Then, click **OK**. to close the Modify Web Application dialog page and click **Exit** to close Web Application Manager.

Note: Web Application Manager creates the **TCEng2007.ear** file in the deployment directory under the staging locations. (that is, /home/infodba/2007/Web-teir/staging1/deployment).

	Modify Web Application	•
Name TCEng200	7 Modify W	eb Application Information
-	Progress	· 🗆
Building WAR file File generation complete. Building EAR file File generation complete. Click OK to continue.		I
	ОК	
	OK Cancel Help	

Figure 30. Progress dialog page



Deploying WebSphere Application Server

This section explains how to deploy a Web application and how to start the required server-manager processes. There is also information regarding installing and running WebSphere Application Server.

The following example deploys one instance of WebSphere Application Server 6.0.2.25, which hosts the Teamcenter Engineering Web tier application (EAR file). For a list of currently supported Web-application servers for each operating system, see the Teamcenter Engineering Release Bulletin and the UGS Global Technical Access Center (<u>http://support.ugs.com/docs/i-deas/hw_req</u>).

Starting WebSphere Application Server and HTTP Server processes

Start WebSphere Application Server and the WebSphere administration console by following these steps:

- 1. Start the WebSphere Application Server administration console by running the following command (as root): **autoconf6**.
- Start WebSphere Application Server by running the following command (as root): /usr/IBM/WebSphere/AppServer/bin/startServer.sh server1 /usr/IBMHTTPserver/bin/apachectI start
- 3. Open WebSphere Application Server Integrated Solution Console in a browser by entering the following address: http://was_server_name:9060/ibm/console.

Installing and configuring TCEng2007 EAR file into WebSphere

Installing and configuring the TCEng2007 EAR file into WebSphere Application Server 6.0.2.25 involves three steps. It is necessary to install the Teamcenter Engineering 2007 application. You must perform additional configuration processes. Additionally, you must start the Teamcenter Engineering 2007 application. These three steps are explained next.



Installing a new application

To install a new application, perform the following steps:

- 1. After logging into the WebSphere administration console, on the Preparing for the application installation page, select **Install New Application** (from the options provided on the left side of the page shown in Figure 31).
- Provide the path to the location of the Teamcenter Engineering Web-tier EAR file (TCEng2007.ear) that has been copied from the system (where TCEng2007 is installed) onto the system (where WebSphere Application Server is installed.
- 3. If the Web-tier EAR file is named TCEng2007, specify the context root as TCEng2007. After the context root and location for the TCeng2007.ear file have been provided, click **Next**.

Welcome	Enterprise Applications
⊕ Guided Activities ■	Prenaring for the application installation ?
	repaining for the application installation
Applications	Specify the EAR, WAR or JAR module to upload and install.
Enterprise Applications	Path to the new application.
Install New Application	O Local file system
	Specify path
	Browse
Environment	Remote file system
System administration	Specify path
Monitoring and Tuning	
	Context root
Service integration	TCEng2007 Used only for standalone Web modules (.war files)
	Next Cancel

Figure 31. Preparing for the application installation page



4. On the continuation of the Preparing for the application installation page (see Figure 32), select **Generate Default Bindings** and **Use default virtual host name for Web Modules**, then click **Next**.

Welcome admin Logout Support	Help	
 Welcome 	Enterprise Applications	Close page
Guided Activities		
Servers	Preparing for the application installation	2 -
Applications	Choose to generate default bindings and mappings.	
 Enterprise Applications Install New Application 	Generate Default Bindings	
E Resources	Prefixes:	
Security	O not specify unique prefix for beans	
Environment	O Specify Prefix:	
System administration	Prefix eib	
Monitoring and Tuning		
	Override:	
Service integration	O not override existing bindings	
IDDI 🗄	Override existing bindings	
	Virtual Host Do not use default virtual host name for Web modules Use default virtual host name for Web modules: Host name default_host Specific bindings file Browse Previous Next Cancel	

Figure 32. Continuation of the Preparing for the application installation page

5. The Application Security Warning is informational and requires no action (no screen image is shown here); click **Continue**.



6. You are presented with Step 1, (the Select installation options page, see Figure 33). Verify that the application name being shown is the expected value, click **Next**.



Figure 33. Select installation options page



 Next, you are presented with Step 2 (the Map modules to servers page, see Figure 34). Select both lines in Clusters and Servers, then ensure that the box next to TCEng2007 is selected. Click Apply and Next.

Note: The TCEng2007 module should have both server1 and webserver1 selected; in contrast, the other two modules are only serviced by server1.

Welcome admin Logout Support	Help				
 Welcome 	Enterprise Application	5			Close page
Guided Activities		-			
Servers	Install New Applicati	on			
Applications	Specify options for	installing ent	erprise applications and r	nodules.	
Enterprise Applications Testell New Applications	Step 1 Sele	t Map	modules to servers		
	installation op	stions Spe	cify targets such as appli	ation servers or clusters	s of application servers where you want to install the mode
E Security	 Step 2: Map modules to se 	rvers We	lication. Modules can be i servers as targets that i	nstalled on the same a will serve as routers for i	pplication server or dispersed among several application s requests to this application. The plug-in configuration file
Environment	<u>Step 3</u> Provi	ide Clu	n web server is generate isters and Servers:	d based on the applicati	ions which are routed through it.
 System administration 	the EJB Deploy		ebSphere:cell=epsilawnN ebSphere:cell=epsilawnN	ode01Cell,node=epsilav ode01Cell,node=webser	vnNode01,server=server1 ver1_node,server=webserver1 Apply
Monitoring and Tuning	<u>Step 4</u> Provi INDI Names fr	ide	h		
Troubleshooting ■	Beans				
Service integration	<u>Step 5</u> Map	JCA	ect Module	URI	Server
UDDI	resource refer to resources	ences	Generated by XDoclet	JETIGateway- ejb.jar,META-INF/ejb- jar.xml	WebSphere:cell=epsilawnNode01Cell,node=epsilawnNod Work Area Frame
	<u>Step 6</u> Map references to	EJB beans	TCEng2007	TCEng2007.war,WEB- INF/web.xml	WebSphere:cell=epsilawnNode01Cell,node=epsilawnNod WebSphere:cell=epsilawnNode01Cell,node=webserver1_
	<u>Step 7</u> Map resource refer	ences	JETIResourceAdapter	JETIAdapter.rar,META- INF/ra.xml	WebSphere:cell=epsilawnNode01Cell,node=epsilawnNod
	to resources				
	<u>Step 8</u> Map				
	virtual hosts fo Web modules	DF			
	<u>Step 9</u> Sum	mary			
	Previous Ne	ext Cance			

Figure 34. Map modules to servers page



- 8. Continue to click **Next** for Steps 3 through 7 (these screen images are not shown here), which means that you are accepting all the default values shown on these pages.
- 9. After selecting **Next** for Step 7, an Application Resource Warnings dialog page is displayed (no screen image is shown here), click **Continue**.
- 10. In Step 8, click **Next**, then click **Finish** in Step 9. You will then be shown an Installing dialog page (see Figure 35 and Figure 36).

Welcome admin Logout Support	Help
= Welcome	Installing
Guided Activities	
Servers	If there are enterprise beans in the application, the EJB deployment process can take several minutes. Please do not save the configuration until the process completes.
Applications	
Enterprise Applications	Check the SystemOut.log on the Deployment Manager or server where the application is deployed for specific information about the EJB deployment process as
Install New Application	occurs.
Resources	ADMA5016I: Installation of TCEng2007 started.
Security	
Environment	ADMA0115W: Resource Assignment of name jca/JET/Adapter and type com.teamcenter.jeti.resourceadapter.spi.UetiConnectionFactory, with JNDI name jca/JET/Adapter is not found within scope of module Generated by XDoclet with URI JETIGateway-ejb.jar,META-INF/ejb-jar.xml deployed to target
System administration	WebSphere.cell=epsilawnNode01Cell,node=epsilawnNode01,server=server1.
Monitoring and Tuning	ADMA5068I: The resource validation for application TCEng2007 completed successfully, but warnings occured during validation.
Troubleshooting	
	ADMA5058I: Application and module versions validated with versions of deployment targets.
IDDI	ADMA5018I: The EJBDeploy command is running on enterprise archive (EAR)
	file /usr/IBM/WebSphere/AppServer/profiles/default/wstemp/92668751/upload/TCEng2007.ear.

Figure 35. Installing page

11. After the Installation has been completed, at the bottom of the Installing dialog page (see Figure 35), select **Manage Applications** to proceed to additional changes that are required.

ADMA5007I: The EJBDeploy comm	and completed on /usr/IBIMWebSphere/AppServer/profiles/default/wstemp/wstemp/app_118478a4200/dpl/dpl_TCEng2007.ear
ADMA5005I: The application TCEn	2007 is configured in the WebSphere Application Server repository.
ADMA5053I: The library reference	s for the installed optional package are created.
ADMA5005I: The application TCEn	2007 is configured in the WebSphere Application Server repository.
ADMA50011: The application binan in /usr/IBM/WebSphere/AppServe	ss are saved /profiles/default/wstemp/92668751/workspace/cells/epsilawnNode01Cell/applications/TCEng2007.ear/TCEng2007.ear
ADMA5005I: The application TCEn	2007 is configured in the WebSphere Application Server repository.
SECJ0400I: Successfuly updated	he application TCEng2007 with the appContextIDForSecurity information.
ADMA5011I: The cleanup of the te	mp directory for application TCEng2007 is complete.
ADMA5013I: Application TCEng20	17 installed successfully.
Application TCEng200	' installed successfully.
To start the application, first save	changes to the master configuration.
Save to Master Configuration	
To work with installed applications	, click the "Manage Applications" button.
Manage Applications	
ê	Second intranet





12. After installing the Teamcenter Engineering Web-tier application EAR file, it is necessary to manually configure the Jeti resource adapter. To start this configuration, on the Enterprise Applications page (see Figure 37), select **TCEng2007** to manage the Teamcenter Web Application that you have just installed.

Welcome admin Logout Support H	elp				
= Welcome	Enterprise	Applications	Clo		
Guided Activities	Enterprise	e Applications	? _		
Servers		E Messages			
Applications	Changes have been made to your local configuration. Click <u>Save</u> to apply changes to				
 Enterprise Applications Install New Application 	The master configuration.				
E Resources	Entorn	vice Applications			
1 Security	Lists in	stalled applications. A single application can be deployed	onto multiple servers.		
Environment	Pref	erences , , , , , , , , , , , , , , , , , , ,			
System administration	Start Stop Install Uninstall Update Rollout Update Remove File Export Export DDL				
Monitoring and Tuning					
Service integration	Select	Name 🛟	Status ሷ		
E UDDI		DefaultApplication_	€)		
		PlantsByWebSphere	<₽		
		SamplesGallery	<₽		
		TCEng2007	0		
		ivtApp_	◆		
		guery	◆		
	Total	6			

Figure 37. Enterprise Applications page



13. On the Enterprise Applications Configuration tab (see Figure 38), select **Connector Modules** (which is located in the lower-right portion of the page).

Nelcome	effect.	re restances for these thanges to take
Guided Activities		
Gervers	Enterprise Applications > TCEng2007	
Applications	Enterprise Applications	
Enterprise ApplicationsInstall New Application	Configuration Local Topology	
Resources	General Properties	
Security	* Name	Additional Properties
Environment	TCEng2007	Session management
System administration	- Binary Management	Application profiles
Monitoring and Tuning	* Application binaries	Libraries
	\$(APP_INSTALL_ROOT)/epsil	Target mappings
		Last participant support extension
Service integration	Use metadata from binaries	View Deployment Descriptor
UDDI	Enable distribution	Provide JMS and EJB endpoint URL information
	Validation	Publish WSDL files
	warn	 Provide HTTP endpoint URL information
		 Provide JNDI Names for Beans
	Class Loading and File Update Detection	Map resource references to
	Parent First V	resources
	* WAR class loader policy	Map EJB references to beans
	Module V	Map virtual hosts for Web modules
		Map modules to servers
	Enable class reloading	
	Reloading interval	Related Items
	3	Web modules
		= EJB Modules
	Startup Options	Connector Modules
	* Starting weight	
	L	
	Enable background application	
	Create MBeans for resources	

Figure 38. Enterprise Applications Configuration tab



14. On the Connector Modules page (see Figure 39), select the connector module that is named *JETIResourceAdapter.rar*.

Welcome admin Logout Support F	telp		
= Welcome	Enterprise Applications		
	Enterprise Applications	2 🖂	
1 Servers	Messages		
Applications	Changes have been made to yo to apply changes to the master con	ur local configuration. Click <u>Save</u> figuration.	
 Enterprise Applications Install New Application 	The server may need to be resta effect.	arted for these changes to take	
	Enterprise Applications > <u>TCEng2007</u> > Connector	Modules	
🗄 Environment	An instance of ConnectorModuleDeployment is created application.	ted for every connector module (RAR) in the	
System administration	Preferences		
Monitoring and Tuning	Remove Undate Remove File		
Service integration			
I UDDI	Select URI 🗘	Name 🛟	
	JETIAdapter.rar		
	Total 1		

Figure 39. Connector Modules page



15. On the JETIAdapter.rar page (see Figure 40), under Additional Properties, select **Resource Adapter**.

Welcome admin Logout Support F	Help
Welcome	Enterprise Applications
	citterprise Applications
± Servers	Messages
Applications	Δ Changes have been made to your local configuration. Click <u>Save</u>
 Enterprise Applications Install New Application 	 The server may need to be restarted for these changes to take effect.
Resources	
1 Security	Enterprise Applications > <u>TCEng2007</u> > <u>Connector Modules</u> > JETIAdapter.rar
Environment	An instance of ConnectorModuleDeployment is created for every connector module (RAR) in the application.
System administration	Configuration
Monitoring and Tuning	
	General Properties Additional Properties
Service integration	* URI
I UDDI	JETIAdapter.rar
	* Name
	Alternate deployment descriptor
	* Deployment Id
	* Starting weight 1000
	Apply OK Reset Cancel

Figure 40. JETIAdapter.rar page



 On the TCEng2007.JETIResourceAdapter page (see Figure 41), select J2C connection factories (which is located on the right side of the page, under Additional Properties). Then, on the next page (screen image not shown here), select New.

	changes to the master contiguration	
Welcome	The server may need to be restarted for these changes to take eff	fect.
5 Servers	Enterprise Applications > TCEng2007 > Connector Modules > JETIAdapter.rar > TCEng2	2007.JETIResourceAdapter
Applications	A resource adapter is an implementation of the J2EE Connector Architecture Specification	that provides access for
Enterprise Applications	applications to resources outside of the server or provides access for an Enterprise Infor applications on the server. It can provide application access to resources such as DB2.	mation System (EIS) to
Install New Application	can provide an EIS with the ability to communicate with message driven beans that are	configured on the server.
Resources	Some resource adapters are provided by IBM; however, third party vendors can provide A resource adapter implementation is provided in a resource adapter archive file; this fil	their own resource adapters le has an extension of .rar.
Security	resource adapter can be provided as a standalone adapter or as part of an application,	in which case it is referred t
Equirequest	are installed as part of the application install.	re mer Embedded adapters
Environment	Configuration	
System administration		
Monitoring and Tuning		
Troubleshooting	General Properties	Additional Properties
Service integration	* Scope	= 12C
UDDI	cells:epsilawnNode01Cell:applications:TCEng2007.ear:deployments:TCEng2007	connection
	* N	factories
	TCEng2007.JETIResourceAda	Custom properties
		View
		<u>Deployment</u> <u>Descriptor</u>
	* Archive path \$(APP_INSTALL_ROOT)/epsilawnNode01Cell/TCEng2007.ear/JETIAdapt	
	Class path	
	\$(APP_INSTALL_ROOT)/epsilawnN ode01Cell/TCEng2007.ear/JETIAd apter.rar	
	Native path	
	Thread pool alias Default Apply OK Reset Cancel	

Figure 41. TCEng2007.JETIResourceAdapter page



17. On the New page (see Figure 42), name the connection factory *JETIResourceAdapter*. The Java Native directory Interface (JNDI) name is *jca/JETI/Adapter*. Click **Apply**.

Integrated Solutions Console	Welcome admin		Help Logout
View: All tasks Welcome	v	Enterprise Applications > <u>TCEnq2007</u> > <u>Manage Modules</u> > <u>JETIAdapter.rar</u> > <u>TCEnq2007</u> connection factories > New	.JETIResourceAdapter > J2C
Guided Activities Servers Applications		Use this page to create a connection factory for use with the resource adapter. The connect configuration values that define a WebSphere(R) Application Server connection to your Ent (EIS). The connection pool manager uses these properties as directions for allocating con- configure multiple connection factories for each resource adapter.	tion factory is a collection of erprise Information System nections during runtime. You can
Enterprise ApplicationsInstall New Application		Configuration	
		General Properties	The additional properties
E Security		* Scope	will not be available until
Environment		cells:isvlab116Node01Cell:applications:TCEng2007.ear:deployments:TCEng2007	for this item are applied or saved.
System administration		* Provider	Additional Properties
		TCEng2007.JETIResourceAdapter	Connection pool
Honitoring and Tuning		* Name	properties
		JETIResourceAdapter	 Advanced connection
Service integration		JNDI name	factory properties
1 UDDI		jca/Jeri/Adapter	 Custom properties
		Description	Related Items

Figure 42. New page

18. On the next page, (screen image is not shown here), click **Connection pool properties**.



- 19. On the Connection pools page (see Figure 43), enter the following values:
 - 1000 for Maximum connections
 - 0 for Minimum connections
- 20. Save the application-server configuration changes that were made to the TCEng2007 connectionpool properties by clicking **Apply**. Then, click **OK**.
- 21. On the next page, click **Save** to confirm that you want to apply the changes to the master configuration. (No screen image is shown here for the Save step, as this is self-explanatory.)

Welcome admin Logout Support	Help			
= Welcome	Enterprise Applications			
Guided Activities	Enterprise Applications ? -			
Servers	Messages			
Applications	Changes have been made to your local configuration. Click <u>Save</u> to apply			
Enterprise ApplicationsInstall New Application	changes to the master configuration.			
Resources	Enternaine Augliantiane N TCE = 2007 N Connector Medules N JETTAdopter ann N TCE = 2007 JETTBerryse Adopter			
E Security	> <u>J2C connection factories</u> > JETIResourceAdapter > Connection pools			
Environment	Connection pool properties that can be modified to change the behavior of the J2C connection pool manager. Default values are provided for pon-production use. Review and possible modification of these configuration values			
System administration	are recommended.			
Monitoring and Tuning	Configuration			
Troubleshooting ■				
Service integration	General Properties Additional Properties			
E UDU	Scope = Advanced connection pool Connection timeout = Connection pool 180 seconds Maximum connections = Connection pool outporties 1000 connections Minimum connections = connections D connections B0 connections D connections D connections B0 seconds Unused timeout seconds Aged timeout o 0 seconds Purge policy FailingConnectionOnly FailingConnectionOnly M			

Figure 43. Connection pools page



22. On the Enterprise Applications page (see Figure 44), if the TCEng2007 application is not running (which you can determine by checking its status), select the check box next to the application. Then, click **Start** (located near the top of the page).

Nelcome admin Logout Support Help							
Kelcome Enterprise Applications							
Guided Activities	Enterpris	e Applications	2 -				
Servers	Enterp	rise Applications					
Applications	Lists in	stalled applications. A single application can be deployed	onto multiple servers.				
 Enterprise Applications Install New Application 	+ Pret						
Resources	Start	Stop Install Uninstall Update Rollout	Update Remove File Export Export DDL				
E Security ■							
Environment	Select	Name 💠	Status ሷ				
System administration		DefaultApplication	⇒				
Monitoring and Tuning		PlantsByWebSphere					
		SamplesGallery	⇒				
Service integration							
I UDDI		1CEng2007	*				
		ivtApp_					
		<u>query</u>	•				
	Total	6					

Figure 44. Enterprise Applications page

23. On the Web servers page (see Figure 45), regenerate and propagate the Web-server plug-in to support Jeti applications. First, select **Generate Plug-in**, then select **Propagate Plug-in**. (**Note:** This is required to access the TCEng2007 Jeti application through the HTTP Server.)

Welcome admin Logout Support Help						
= Welcome	Web servers					
Guided Activities	Web	serve	e r 5			? 🗆
Servers		Veb se	Prvers			
Application serversWeb servers	A list of installed Web servers.					
Applications		Generate Plug-in Propagate Plug-in				
Resources				hopogete hog m		
Security						
Environment	s	elect	Name 🛟	Node 😂 _	Version 😂 _	Status ሷ
System administration	[✓	webserver1	webserver1_node	6.0.0.0	€>
Monitoring and Tuning		Total :	1			
Troubleshooting ■						
Service integration						
E UDDI						

Figure 45. Web servers page

Accessing the thin client

To access the thin client, perform the following steps:

1. Verify the connection by accessing the following URL:

http://isvlab116.austin.ibm.com:9080/TCEng2007/webclient

 Verify that the application is accessible through the default Web server by using the IBM HTTP Server as the front end — with port of 80 using the following URL (Note: Substitute the name of your WebSphere server system for isvlab116.austin.ibm.com.): http://isvlab116.austin.ibm.com/TCEng2007/webclient



Installing and configuring distribution server

Note: There is UGS documentation for installing and configuring the distribution server and server instance that is used for the Web installation of the client application. (See the document entitled *Installation on UNIX and Linux Servers*, Part IV: Web Application Installation, Section 12: Rich Client Distribution Server/Instance Installation. **Note:** This document is delivered with the Teamcenter Engineering installation CDs.)

After installing and configuring the distribution server and server instance according to the documentation just mentioned, you can install the four-tier rich client on a client workstation by simply invoking the otwweb/otw.html page from a Web browser.

The distribution server installation provides utility programs to listen for requests to install software. The installation of the distribution-server instance defines the files to install on the rich client, as well as the files to add to the HTTP Server to allow a client workstation to request the initial installation.

Preparing to install the distribution server for a four-tier rich client

Follow these steps to prepare for the installation of the distribution server for a four-tier client:

1. As user infodba, type in the following command:

cd /home/infodba/2007. mkdir Webclient_tier cd Webclient_tier

Use the untar command on the Web_tier/INSTALL_TCWEB.TZ file to the Web_tier directory you just created, by typing the following (where image_path is similar to /MNT2/tc2007/aix, see Figure 46):

cat ~image_path/Web_tier/INSTALL_TCWEB.TZ | uncompress -c | tar -xvf -



3. Start the insweb program and then copy the files from portal_otw/icd.

Teamcenter Web Application Manager					
Welcome to the Teamcenter Web Application Manager					
Web Applications					
Add					
Copy ICD Files					
Source The second se					
/MNT2/tc2007/portal_otw/icd Browse					
OK Cancel Help					
UGS Copy ICDs					
Reload ICDs					
Help Exit					

Figure 46. Copy ICD Files dialog page

- 4. Run the./insweb command. Then, select Copy ICDs, browse to where the portal_otw/icd directory is, then click OK.
- 5. After the copy is complete (see the Progress dialog page shown in Figure 47), click **OK**.



Figure 47. Progress dialog page



Creating the distribution server

Follow these steps to create the distribution server:

1. From the Welcome dialog page, click Add.

 Teamcenter Web Application Manag 	jer 🕒	ו
Welcome to the Teamcenter Web Application Mar	nager	
Web Applications		
	Add	Ĩ
	Remove	
at the second	Modify	
V		1
UGS	Copy ICDs	ļ
Provide of Internation	Reload ICDs	
Help Exit		

Figure 48. Welcome dialog page,



- 2. It is necessary to add the disk location where the files that are needed to install the distribution server can be found. In the Add Disk Location dialog page (see Figure 49), browse to the correct location, then click **OK**.
- 3. For the Web application name, enter a unique value (such as TCEng2007DistServer).
- 4. On the Add Web Application page (see Figure 49), click OK.

-	Add Web Application	•					
Name	TCEng2007DistServer						
Staging Location	/home/infodba/2007/Webclient_tier/staging1	Browse					
Description	Description						
	Advanced Web Application Options						
-	Add Disk Location						
Disk Location to	Add	Add					
/MNT2/tc2007/p	oortal_otw Browse	Remove					
0	K Apply Cancel Help	Modify					
Solution Type: Selected Solution	Distribution Server						
Distribution Ser	/er						
	Solutions						
OK Cancel Help							

Figure 49. Add Disk Location dialog page

5. The values in the Modify Required Context Parameters dialog page (see Figure 50) are left as default. Click **OK**.

		_			
Modify Required Context Parameters					
Context Parameters					
Name Value					
RMI Port	12099				
Remote Object Port	0				
File Transfer Port	0				
Description for Selected Parameter:	Help				

Figure 50. Modify Required Context Parameters dialog page

6. In the Progress page (no screen image is shown here), after the creation of the distribution server is finished, click **OK**.



Creating the distribution server instance

Follow these steps to create the distribution server instance:

1. From the Welcome dialog page (see Figure 51), click Add.

🗕 Team	center Web Application Manag	ger	•
Welcome to the T	eamcenter Web Application Ma	nager	
28000.2	Web Applications		
	TCEng2007DistServer	Add	
		Remove	:
Service of a		Modify.	•
	▶		
LICE		Conv ICD	c
UGS			3 D
process of innovation		Reload IC	DS
	Help Exit		

Figure 51. Welcome dialog page

- 2. On the Add Web Application dialog page (see Figure 52), change the application name to something unique (such as **TCEng2007DistServerInstance**).
- 3. Change Solution Type to *Distribution Server Instance by selecting it from the pulldown menu.*
- 4. In the Selected Solutions box, verify that the list includes at least the two solutions that are shown in Figure 52, then click **OK**.

_	Add Web Application		•	
Name	TCEng2007DistServerInstance			
Staging Location	/home/infodba/2007/Webclient_tier/staging2	Brows	e	
Description				
	Advanced Web Application Options			
Disk Locations f	or Install Images			
/MNT2/tc2007/	portal_otw	Add		
/cdrom/UNIX		Remove		
		Modify		
Solution Type:	Distribution Server Instance 🔹			
Selected Solution	15			
Over-the-Web I	nstaller			
Rich Client 4-Ti	er			
		Solution	15	
	OK Cancel Help			

Figure 52. Add Web Application dialog page



5. In the Modify Required Context Parameters dialog page (see Figure 53), change the context parameters if necessary, then click **OK**.

-	Modify Required Cont	ext Parameters	· · [
Context Parameters							
	Name Value						
RMI Port		12099					
WindowsLocation		C:\Program Files\UGS\Teamce	nter\				
UnixLocation		/UGS/Teamcenter/OTW/2005	SR1				
WebBrowserUnixLocatio	n	/usr/local/bin/mozilla					
RichClientHelpWebServe	er	http://host:8080					
RichClientHelpLocation		/richclienthelp					
HTTPUseGZip		true					
Description for Select	ed Parameter: UnixLocation	n					
The default directory fo	r a UNIX installation.	hua is 1/UCS/Teamconter/OTW/2005	CD 11				
The value must be of ty		ade is 7003/realificenter/01w/2003	581.				
OK Cancel Help							

Figure 53. Modify Required Context Parameters dialog page

6. In the Modify Required Context Parameters dialog page (see Figure 54), enter the host where the FSC is running, then click **OK**.

	- Mo	dify Required Table – Pare	entFSCAddressTable	•			
	Table: ParentFSCAddressTa	able					
I	Protocol	Host	Port				
	http://	epsilawn.austin.ibm.com	4444				
				Add Row Remove Row			
	Table Description						
	The list of parent FSC addresses in the form of protocol://host:port. Column Descriptions: * Protocol: Protocol used by the parent FSC.						
	The value must be of type 'STRING'. This column requires a value in each field. * Host: Host where the parent FSC runs.						
		OK Cancel	Help				

Figure 54. Modify Required Context Parameters dialog page



7. On the Modify Required Table — HTTPServer Table dialog page, in the <u>Uniform</u> <u>Resource Identifier</u> (URI) field, enter the following URL, then click OK. (Substitute the name of the WebSphere server system that is hosting the Web application): http://isvlab116.austin.ibm.com/TCEng2007/services/PLMGatewayService

-	Modify Required Table - H	ITTPServerTable		
Table: HTTPServerTable				
URI	Name	SSOAppID		
http://isvlab116.austin.ibm.	PLMGatewayService 1	TCEngineering		
Table Description			Add Row Remove Row	
A list of Presentation tier web server to login. Column Descriptions: * URI: URI of Presentation- Presentation-tier is deployed Usualy it has the form of http	o servers. The first server wil tier SOAP endpoint. Its value ://host:port/tc/services/PLM	I be used as the default depends on where the GatewayService.		

Figure 55. Modify Required Table — HTTPServer Table dialog page

- 8. On the Progress Page (no screen image is shown here), click **OK**.
- 9. On the Web Application Manager page (no screen image is shown here), click Exit.

Placing files in HTTP Server

To place the files in the HTTP Server, do the following steps:

1. On the Teamcenter Engineering Server, as user infodba, enter the following command:

cd /home/infodba/2007/Webclient_tier/staging2/webapp_root tar -cvf /tmp/OTWWEB.tar otwweb

2. As root, copy the OTWWEB.tar file to the HTTP Server machine by using the following commands:

cd /usr/IBM/HTTPServer/htdocs/en_US tar -xvf /tmp/OTWWEB.tar



Starting and verifying the processes

To start and verify the processes, do the following steps:

1. On the Teamcenter Engineering Server system, run the following commands as user infodba, ensuring that the java command is in the \$PATH.

cd /home/infodba/2007/Webclient_tier/staging1/webapp_root ./start_rmi ./start_server

2. From a Windows system, connect to the following URL with a browser, substituting the name of the system where the HTTP Server is running:

http://isvlab116.austin.ibm.com/otwweb/otw.html

This runs an application that downloads the files for the four-tier rich client to the desktop (see Figure 56). (This can take several minutes, depending on network traffic and latency.)



Figure 56. Application that downloads the four-tier client

This also causes the files to be installed and an icon to be added to the desktop so that it is easy to start Teamcenter Engineering 2007. (See Figure 57.)



3. Double-click the Teamcenter Engineering icon on your Windows desktop to start the rich client.



Figure 57. Teamcenter Engineering icon on the desktop

4. Select **My Navigator**, which prompts you to provide the user and password (infodba with infodba for this example installation) as shown in the screen image of the rich-client GUI. (shown in Figure 58).

Default Application - Teamcenter for engineering process manage	ement	
ile Desktop Help		<u>L</u> .
1		Теамсе
Back - Default Application		ŝ
Teamcenter		
Wy Navigator		
CAE SE		
PSE		
Platform Designer		
A DesignContext		
Collaboration Context		
CM Viewer		
Classification	User ID: infodba	
🖓 Workflow Viewer	Password:	
2 Referencers	Group:	
🙀 Simulation Process Studio	Role:	
A MSE	Database: 🌉 PLMGatewayService 1 💌	
🖱 Resource Manager		
Report Generator		
A Multiple View Editor		
N FSE	FFR III - IIII - III - IIII - IIIII - IIII - IIIIII	
Part Planner	1997 - Alexandre Alex	
Structure Map Builder		
UGS trademarks of UGS or its jubidan	ies. This software and related documentation are proprietary to UGS Corp.	
Manufacturing		
Admin		
Utilities		
Log-in for application My Navigator		

Figure 58. Teamcenter rich client

Congratulations, you have just successfully verified the over-the-Web installer and the running of the fourtier rich client.



Installing MP4 updates

This section explains how to make MP4 updates to your Teamcenter Engineering application.

Summary and files needed to perform the upgrade

The TcEng2005_SR1_2007_MP4_patching_process.pdf file contains the UGS steps that are necessary to install the patch set. This document describes specific steps that you need to perform on AIX to accomplish the upgrade. It also provides additional clarification as appropriate.

The required files for the upgrades that are performed in this guide are available for download from the GTAC UGS Web site (http://support.ugs.com).

- TcEng2005_SR1_2007_MP4_install.zip (used to upgrade the installer)
- TcEng2005_SR1_2007_MP4_aix.zip (contains Teamcenter Engineering Server, rich client, and Web-tier patches)
- TcEng2005_SR1_2007_MP4_otw.zip (contains the over-the-Web [OTW] rich-client patches and Teamcenter Engineering Distribution Server patches)

Updating Teamcenter Engineering Server (two-tier)

To update the two-tier Teamcenter Engineering Server, perform the following steps:

1. Stop all infodba processes that are related to Teamcenter Engineering 2007. Then, as root, run a slibclean process to provide a smoother upgrade.

Note: The following steps are all run as infodba.

2. Set the Teamcenter Engineering 2007 environment variables by entering the following commands:

export IMAN_ROOT=~infodba/2007 export IMAN_DATA=~infodba/tcdata .\$IMAN_DATA/iman_profilevars`

3. Run the following commands to update the installer:

cd \$IMAN_ROOT/install unzip –o "path_to_install_zip_file"/ TcEng2005_SR1_2007_MP4_install.zip chmod 755 tem.sh

4. Invoke the installer by entering the following command: tem.sh



5. On the Maintenance page (see Figure 59), select Updates Manager, then click Next.



Figure 59. Maintenance page



6. On the Apply Updates page (see Figure 60), browse to the path of TcEng2005_SR1_2007_MP4_aix.zip, then click **Next**.

Note: A warning-status message page might be displayed (no screen image is shown here), click **Close**.

-	Teamcenter 🗾
* <u>-</u>	STATITIE HALLEN
TEAMCENTER	224-22777777777777° engineering process management 22
Steps	Apply Updates
 Maintenance Apply Updates 	Select an update to apply. A backup of the files being updated will be created prior to applying the update. If there are services currently running, they must be stopped prior to starting the update process.
	Update file
	//MN12/tc2007_mp4/1CEng2005_SK1_2007_MP4_aix.zip
	▶
Help	Cancel < Prev Next >
	Carter Real Press

Figure 60. Apply Updates page



7. On the Confirm Selections page (see Figure 61), view the summary of the selected features, then click **Next**.



Figure 61. Confirm selections



8. An Update Features page provides the status of the progress for several minutes while this update is applied. Eventually, the Status Message dialog window (see Figure 62) is displayed. Click **Close** then click **Close** in the Update Features page, also.

	Teamcenter	· [
* XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
TEAMCENTER	Z TTTT énginee	ring process management	
Stops	to Features		
opual Opual	le realures		
This m	ay take several minutes depending on) the speed of your computer.	
Vel Cardina Selections	rall Progress		
Mes	sage		
Status M	lessage		
Additional Patch Informat	ion		
Patch Readme Information Please be sure to consult the ReadMe, loc /home/infodba/2007/additional_patch_in patch as it may contain additional instruction manually to complete this patch. Patching TC_DATA TC_DATA was not updated as a part of th complete this step manually. Please consule located in /home/infodba/2007/additional order to obtain information regarding upd Files Not Patched Not all of the files in '/MNT2/tc2007_mp4/TcEng2005_SR1_222 into '/home/infodba/2007'. For your convin in '/home/infodba/2007'. For your convin in 'home/infodba/2007'. It is u these files should be manually copied into removed completely.	Ated in fo/release_info, document for this ons that will need to be done is process. Thus, you will need to It the patching process document, al_patch_info/release_info, in ating TC_DATA directories. DO7_MP4_aix.zip' were patched enience, these files have been left p to you to decide whether or not your installed environment or	p/aix/portal/compressed_tiles, recurse p/aix/additional_documentation, recurse p/aix/tceng2005/ets, recurse: true p/aix/tceng2005/ets, recurse: true p/aix/tceng2005/web/cci/client, recur p/aix/release_info, recurse: true p/aix/tceng2005/web, recurse: true p/aix/tceng2005/web, recurse: true p/aix/tceng2005/pool_manager, recur p/aix/tceng2005/pool_manager, recur p/aix/tceng2005/reference_files, recur p/aix/tceng2005/sample, recurse: true p/aix/tceng2005/sample, recurse: true p/aix/tceng2005/sample, recurse: true p/aix/tceng2005/gn_web, recurse: true p/aix/tceng2005/gn_web, recurse: true p/aix/tceng2005/gn_web, recurse: true p/aix/tceng2005/erp, recurse: true p/aix/tceng2005/erp, recurse: true p/aix/tceng2005/erp, recurse: true p/aix/toeng2005/erp, recurse: true	
Heln	Close	b/aix/tceng2005/lang, recurse: true b/aix/tceng2005/data, recurse: true b/aix/tceng2005/lib, recurse: true b/aix/tceng2005/bin, recurse: true	





Manually merging tcdata files and setting database version

To manually merge the Teamcenter data files and to set the database version, perform the following steps:

1. Create a backup of the current **TC_DATA** directory.

cd ~infodba ; tar –cvf TCDATA.tar tcdata

2. Copy the content of the **TC_ROOT\data** directory to the **TC_DATA** directory and copy iman_profilevars from the backup to the TC_DATA directory.

cd ~infodba/2007/data tar –cvf- ./ | (cd ~infodba/tcdata && tar –xvf-)

- 3. Update the version information in the database.
- 4. The following command works, as long as the environment variables are set, otherwise an error is written to the sqlnet.log file.

install -set_version "INFORMATION MANAGER V10.0.2.4"

Verifying that the rich client can start (two-tier)

To confirm that the Teamcenter Engineering rich client can start on the two-tier implementation, perform the following steps:

17. Enter the following commands:

export LDR_CNTRL=NAMEDSHLIB=tceng cd ~infodba/TC2007/portal ./start_portal

Hint: Errors that relate to not finding volumes can occur during log in to the rich client, because these processes were terminated prior to applying patches. This is not critical and is fixed later when restarting all the processes (after the application of MP4 is complete).

Patching files related to Web installer in Web client_tier directory

To patch the files that are related to the Web installer in the Web client-tier directory, perform the following steps. (**Note:** A critical file [TcEng2005_SR1_2007_MP4_otw.zip] is needed. The

TcEngPatchingProcess.pdf document refers to two files [dist_server and otw_installer] that are contained in this ZIP file.)

1. Enter the following commands:

mkdir /tmp/otw_scratch cd /tmp/otw_scratch unzip /MNT/tc2007_mp4/TcEng2005_SR1_2007_MP4_otw.zip PATH=\$PATH:/usr/java14/bin

(Note: This adds java14 to the PATH variable, if it is not already present.)

cd ~infodba/2007/Webclient_tier

(Note: This is the location where the OTW distribution server was installed.)

insweb



- 2. On the Copy ICD files dialog page (see Figure 63), browse to /tmp/otw_scrtach/otw/icd to copy the ICD files.
- 3. Select TCEng2007DistServerInstance as the application, then select **Modify** (no screen image is provided here).

- Teamcenter Web Application Manag	ler	- [
Welcome to the Teamcenter Web Application Manager				
Web Applications				
TCEng2007DictConvor	r			
Copy ICD Files		•		
Source				
/tmp/otw_scratch/otw/icd	Browse	2		
OK Cancel Help				
THES.	Conv ICD	IS		
Thereforming the process of intervalian	Reload IC	Ds		
Help Exit				

Figure 63. Copy ICD files dialog page

- On the Modify Disk Locations dialog page (see Figure 64), change Disk Locations for Install Images to remove any locations that are already there (by selecting them and then clicking **Remove)**. Next, add /tmp/otw_scratch/otw as the location by typing it in and then clicking Add. Then, click OK.
- 5. In the Modify Web Application dialog page (see Figure 64), select Add Solutions.

-	Modify Web	o Appl	lication	· 🗆
Name	CEng2007DistServerInstanc	e	Modify Web Application	Information
Staging Location	2007/Webclient_tier/staging	2	Modify Disk Loca	ations
Description		-	Modify Disk Locatio	ins 🔽 🗖
		Disk	Locations for Install Im	ages
Solution Type:	Distribution Server Instar	/tmp	/ otw_scratch/ otw	Add
Installed Solutio	ns			Demonstra
Over-the-Web I	nstaller			Remove
Rich Client 4-Ti	er			Modify
			OK Cancel	Help
ICD Files Last Copied: <no copy="" done=""> View Component Versions</no>				
OK Cancel Help				

Figure 64. Modify Disk Locations dialog page



6. In the Add Solutions dialog page (see Figure 65), select **Rich Client Patch** and click **OK**.

	Add Solu	tions	•
🗹 1) Over-the-	-Web Installer		
☑ 2) Rich Client 4-Tier [1]			
🗌 3) EDA for R	ich Client 4-Tier (Configuratio	on Only) [1, 2]	
🗌 4) Embeddeo	d Software Manager for Rich C	lient 4-Tier [1, 2]	
🗌 5) Engineerii	ng Translation Service for Rich	n Client 4-Tier [1, 2]	
🗌 6) Engineerii	ng Visualization for Rich Clien	t 4-Tier (Configuration Only) [1, 2]	
🗌 7) Engineerii	ng Visualization for Rich Clien	t 4-Tier (Install and Configuration) [1, 2	2]
🗌 8) GM Overla	ay for Rich Client 4-Tier [1, 2]	1	
🗌 9) MS Office	Integration for Rich Client 4-	Tier [1, 2]	٠
🗌 10) NX Mana	ger for Rich Client 4-Tier [1,	2]	
🗹 11) Rich Clie	nt Patch [1, 2]		
🗌 12) SCM Cle	arCase for Rich Client 4-Tier	[1, 2]	
🗌 13) Teamcen	iter Integration Interface to iW	ay for Rich Client 4-Tier [1, 2]	
🗌 14) Teamcen	iter Link for Rich Client 4–Tie	r [1, 2]	
🗌 15) Teamcen	ter Linking for Rich Client 4-	Tier [1, 2]	
🗌 16) Teamcen	ter Visualization for Rich Clie	nt 4-Tier [1, 2]	
	OK Can	cel Help	
Description		Modify Context Parameters	
		Modify Tables	
Solution Type:	Distribution Server Instance	Add Calusiana	
Installed Solutions Add Solutions			
Rich Client 4-Tier			
Generate Deployable File			
Copy ICD Files			
ICD Files Last Copied: <no copy="" done=""> View Component Versions</no>			
OK Cancel Help			

Figure 65. Add Solutions dialog page

- 7. In the Progress page (screen image is not shown here), click **OK**.
- 8. In the Modify Web Application dialog page, click **OK**.
- 9. In the Teamcenter Web Application Manager page, click Exit.



Updating and deploying files used by otw.html

To update the files that are used by otw.html and to deploy them on the HTTP Server, use the following steps:

1. As root, type the following command:

chmod 777 /tmp/otw_scratch/otw

- As user infodba, type the following command: cd /tmp/otw_scratch/otw unzip -o TcEng2005_SR1_MP4_build_7995_otw_installer_image.zip tar -cvf /tmp/OTWEB_PATCH.tar otwweb
- 3. Using the File Transfer Protocol (FTP),_copy the /tmp/OTWEB_PATCH.tar file to the HTTP Server system
- 4. On the HTTP Server system, as root, change the directory into doc root /usr/IBMHttpServer/htdocs/en_US. Then, use the TAR command to extract the /tmp/OTWEB_PATCH.tar file.
- 5. Ensure that the HTTP Server is running. If it is not running, enter the following command: use /usr/IBM/HTTPServer/bin/apachectl start

Updating distribution server with the latest jar file

To update Teamcenter Distribution Server with the latest jar file, perform the following steps:

1. Enter the following command to change the directory:

cd /tmp/otw_scratch/otw

- 2. Extract the Teamcenter engineering file by entering the following command: unzip TcEng2005_SR1_2007_MP4_build_7995_dist_server_image.zip
- 3. Copy the dist_server.jar file into the following directory: /home/infodba/2007/Webclient_tier/staging1/webapp_root



Updating TCEng2007.ear in WebSphere Application Server

It is important to update the TCEng2007.ear file that is deployed in WebSphere Application Server. This EAR file contains the application that is used for the four-tier architecture; it is stored in the Web_tier directory structure.

1. As user infodba, enter the following:

cd ~infodba/2007/Web_tier insweb

- 2. In Web Application Manager dialog box (see Figure 66), select **Copy ICDs**.
- 3. In the Copy ICD Files dialog page (see Figure 66), browse to the home/infodba/2007/additional_patch_info/Web_tier/icd directory and click **OK**.

🗕 🗾 Teamcenter Web Application Manager 🗾 🔹 🗖				
Welcome to the Teamcenter Web Application Manager				
Web Applications				
TCEng2007 Add				
Copy ICD Files 🔹 🗖				
Source				
home/infodba/2007/additional_patch_info/Web_tier/icd Browse				
OK Cancel Help				
UGS Copy ICDs				
Reload ICDs				
Help Exit				

Figure 66. Copy ICD Files dialog page

- 4. In the Progress Page (no screen image is shown here), click OK.
- 5. In the Web Application Manager dialog box, select **TCEng2007** and **Modify** (no screen image is shown here).



- 6. In the Modify Disk Locations dialog box (see Figure 67), click Add.
- In the Add Disk Locations dialog page (see Figure 67), browse to /home/infodba/2005SR1/additional_patch_info/Web_tier and click OK.
- 8. In the Modify Disk Locations dialog box (see Figure 67), click OK.
- 9. In the Modify Web Application dialog box (see Figure 67), select **Reinstall Solutions** for all three currently installed solutions.

Note: DEPLOYABLE_FILE_NAME should again be **TCEng2007**, and **Mcast** mode should be selected for Pool Manager.

- 10. In the Modify Web Application dialog box (see Figure 67), select Generate Deployable File.
- 11. After the deployable file is created, exit the Modify Web Application and Web Application Manager dialog boxes by clicking **OK** (twice).

-	_	Modify Web Application	•			
Na	n	Add Disk Location				
Sta	ιç	Disk Location to Add				
De	s	/home/infodba/2007/additional_patch_info/Web_tier Browse				
		OK Apply Cancel Help				
So	h.					
Ins	ta	lled Solutions Illutions				
Te	ar	ncenter Enterr Solutions				
Te	an ar	ncenter Preser				
l le	ar	icenter - Pres OK Cancel Help ployable File				
	Copy ICD Files					
ICD Files Last Conjed: <no conv.done=""> View Component Versions</no>						
OK Cancel Help						

Figure 67. Add Disk Location dialog page



Redeploying in WebSphere Application Manager

To redeploy the application in WebSphere Application Manager, you must copy the TCEng2007.ear file onto the WebSphere Application Server system and then reinstall the Web application. Use the following instructions:

1. On the Enterprise Applications page (see Figure 68), stop TCEng2007, then uninstall TCEng2007.

Integrated Solutions Console Welcome	dmin Help Logout	IBM.					
View: All tasks	Enterprise Applications	Close page					
Welcome	Enterprise Applications						
Guided Activities Guided Activities Guided Activities Subscript Activities Guided Activities Subscript Activities Subscrite Subscript	Enterprise Applications						
⊕ Servers	Use this page to manage installed applications. A single application can be deployed onto multiple servers.						
Applications	Preferences						
Enterprise ApplicationsInstall New Application	Start Stop Install Update Rollout Update Remove File Export Exp	ort DDL Export File					
1 Resources							
E Security	Select Name 🗘 Application Status 👲						
1 Environment	DefaultApplication 🕈						
System administration	IBMUTC &						
	PlantsByWebSphere						
Monitoring and ⊤uning							
Troubleshooting							
Service integration	✓ TCEng2007. ♥						
E UDDI	ivtApp 🕈						
	□ <u>avery</u> .						
	Total 7						

Figure 68. Enterprise Applications page

2. Follow the steps that are documented in the section of this guide that is entitled *Installing and configuring TCEng2007 EAR file into WebSphere* to reinstall the TCEng2007.ear file.

Reminder: Ensure that autoconf6 has run on WebSphere Application Server before starting WebSphere Application Server.



Starting the processes for the four-tier architecture

To start the processes for the four-tier architecture, perform the following steps:

1. On the Teamcenter Engineering server, restart the remote-method invocation (RMI) and distribution-server processes.

Hints: As a reminder, autoconf6 is required for multicast IPV6 when it is used by pool_manager and the Web application. Make sure to set LDR_CNTRL to use a named shared library in the shell page that is used to launch the pool-manager process.

- Start the processes that are used to support the four-tier architecture by entering the following: cd /home/infodba/2007/Webclient_tier/staging1/webapp_root ./start_rmi & ./start server &
- 3. Restart the other processes.
- Ensure that the TCFS and FMS processes are running by entering the following commands:
 cd ~infodba/2007/bin

./rc.ugs.tcfs & cd ~infodba/2007/fms ./rc.ugs.FSC_epsilawn_infodba &

 Restart the pool_manager process by entering the following three commands: cd ~infodba/2005SR1/pool_manager Export LDR_CNTRL=NAMEDSHILB=tceng ./mgrstartMYDB &

Verifying the installation

To verify the successful installation, perform the following steps:

1. To test the thin client, enter the following URL (**Note:** Substitute the name of your WebSphere server for isvlab116.austin.ibm.com):

http://isvlab116.austin.ibm.com/tc/webclient

2. To test the rich client on the Web, enter the following URL: http://isvlab116.austin.ibm.com/otw.html

Comment: On a client that has previously been installed with the rich client from the OTW distribution server, launching the Teamcenter Engineering application by selecting the desktop icon should cause it to be auto updated.



Summary

This guide has provided detailed installation and configuration instructions for Teamcenter Engineering on an IBM System p server, including the steps required to configure the over-the-Web installer and apply the MP4 service. It also provided information on how to create an Oracle database instance for Teamcenter. In all, this guide provides easy-to-follow instructions for ATS and FTSS personnel, who want to install and configure Teamcenter Engineering on IBM System p servers.

For more information about the Teamcenter Engineering products or other information that is not covered in this guide, see the list of resources provided in the Resources section of this guide.



Resources

These Web sites provide useful references to supplement the information contained in this document:

- IBM System p and AIX Information Center
 http://publib.boulder.ibm.com/infocenter/pseries/index.jsp
- IBM Power Systems on IBM PartnerWorld® ibm.com/partnerworld/systems/p
- IBM AIX on IBM PartnerWorld ibm.com/partnerworld/aix
- IBM Publications Center www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi?CTY=US
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- IBM WebSphere support site ibm.com/software/webservers/appserv/was/support
- UGS Global Technical Access Center Web site http://support.ugs.com
- Oracle Web site
 www.oracle.com/index.html
- Teamcenter Engineering Release Bulletin and the UGS Global Technical Access Center http://support.ugs.com/docs/i-deas/hw_req

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