

Proven Practice

Application Servers - BEA WebLogic Configuration and IBM Cognos Application Deployment

Product(s): IBM Cognos 8.4, BEA WebLogic

Area of Interest: Infrastructure

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1 Introduction

1.1

Purpose

This document is for those who have limited experience with WebLogic and who wish to set up IBM Cognos 8 BI on a WebLogic Server environment. The primary goal is to set up a basic environment for testing purposes and not necessarily a high performance production environment.

1.2 Scope

The instructions in this document will work cross platform however the examples shown will be based on a Windows install. UNIX installations require slight modifications to syntax but should otherwise be identical. For example, regarding the syntax for variables, use ${VARIABLE}$ for UNIX and VARIABLE for Windows. Consult your UNIX documentation for more information regarding commands, syntax and scripting.

WebLogic is designed so that only one WebLogic Server instance in a domain can run the Administration Service. This server is called the Administration Server. All other servers in the domain are managed by the Administration Server and obtain their runtime configuration from it. These servers are called Managed Servers. IBM Cognos 8 BI is an application that will be deployed to a Managed Server.

The Administration Server is the single point of control for the entire domain, and it must be running for you to make changes to the configuration of any of the Managed Servers running beneath it.

This document will take you through the steps to configure WebLogic Server and deploy Cognos 8.

1.3 Definitions, Acronyms, and Abbreviation	ns
---	----

Term	Definition
JVM	Java Virtual Machine
	A software "execution engine" that safely and compatibly executes
	the byte codes in Java class files on a microprocessor (whether in a
	computer or in another electronic device). The JVM is responsible
	for the hardware and operating system independence of the J2SE
	platform, the small size of compiled code (bytecodes), and platform
	security.
J2SE	Java 2 Platform, Standard Edition
	There are two principal products in the J2SE platform family: J2SE
	Runtime Environment (JRE) and J2SE Development Kit (JDK).
JRE	Java Runtime Environment
	The JRE provides the Java APIs, Java virtual machine, and other
	components necessary to run applets and applications written in the
	Java programming language. It is also the foundation for the
	technologies in the Java 2 Platform, Enterprise Edition (J2EE) for
	enterprise software development and deployment. The JRE does
	not contain tools and utilities such as compilers or debuggers for
	developing applets and applications
JDK	Java Development Kit
	The JDK is a superset of the JRE, and contains everything that is in



	the JRE, plus tools such as the compilers and debuggers necessary
	for developing applets and applications.
J2EE	Java 2 Platform, Enterprise Edition
	Combines a number of technologies in one architecture with a
	comprehensive Application Programming Model and Compatibility
	Test Suite for building enterprise-class server-side applications.
	The Java 2 Platform, Enterprise Edition (J2EE) defines the standard
	for developing multitier enterprise applications. The J2EE platform
	simplifies enterprise applications by basing them on standardized,
	modular components, by providing a complete set of services to
	those components, and by handling many details of application
	behavior automatically, without complex programming.
WL	BEA WebLogic Server
WL_HOME	Path to the directory where WebLogic is installed
	(example e:\bea\)
WLS	WebLogic Server
WebLogic Domain	A domain is a collection of resources, such as servers, clusters,
	database connections, security services, and J2EE applications, that
	you manage as a unit. A domain must contain at least a definition
	for an Administration Server and an administrative user. You can
	define additional resources as part of the domain-creation process
	or at any time after creating the domain.
Administration Server	The Administration Server is the WebLogic Server used to
	configure and manage all the WebLogic Servers in its domain. A
	domain may include multiple WebLogic Server clusters and
	independent WebLogic Server instances. If a domain contains only
	one WebLogic Server, then that server is the Administration Server.
	In a domain with multiple instances of WebLogic Server, the first
	instance to start must be the Administration Server.
	For a typical production system DEA recommands that you donlay
	Your applications only on Managed Servers. This practice allows
	you to dedicate the Administration Server to configuration and
	you to dedicate the Administration Server to configuration and monitoring of the domain, while one or more Managed Servers
	service your applications
Managed Server	The Managed Server is a Webl ogic Server instance that retrieves
Wanaged Server	its configuration data from the domain's Administration Server
	There can be many Managed Servers in a domain but only one
	Administration Server Usually you create and start server
	instances as Managed Servers to run your business applications in a
	production environment. In this standard scenario, the server
	instance that you start as the Administration Server does not run
	business applications Instead it only manages resources in the
	domain
Administration Console	The WebLogic Server Administration Console runs in a Web
	browser. It displays the components of the domain it administers
	including clusters and independent WebLogic Servers in a
	graphical tree in the left pane. The right pane displays details about
	the object selected in the left pane.
Node Manager	Node Manager is a Java utility that runs as separate process from
	WebLogic Server and allows you to perform common operations
	tasks for a Managed Server, regardless of its location with respect
	to its Administration Server. Use of Node Manager is optional.
SSL	Short for Secure Sockets Layer, a protocol developed by Netscape
	for transmitting private documents via the Internet. SSL uses a



	cryptographic system that uses two keys to encrypt data – a public key known to everyone and a private or secret key known only to the recipient of the message. By convention, URLs that require an SSL connection start with HTTPS instead of HTTP.	
keytool	Key and Certificate Management Tool It enables users to administer their own public/private key pairs an associated certificates for use in self-authentication (where the use authenticates himself/herself to other users/services) or dat integrity and authentication services, using digital signatures. It als allows users to cache the public keys (in the form of certificates) of their communication	
Keystore	A keystore is a protected database that holds keys and certificates for an enterprise. Access to a keystore is guarded by a password (defined at the time the keystore is created, by the person who creates the keystore, and changeable only when providing the current password). In addition, each private key in a keystore can be guarded by its own password.	

Assumptions

Before continuing, make sure the following prerequisites have been met.

- That you have already installed WebLogic Server and have followed the steps outlined in <u>Application Servers</u> <u>BEA WebLogic Server</u>: <u>Installing the Application Server</u>.
- That you have already installed IBM Cognos 8 and have followed the steps outlined in <u>Application Servers Installing and Configuring the IBM Cognos Application</u>.
- That you have the necessary access rights to run WebLogic Server and to deploy IBM Cognos 8. It is best if the user used to install WebLogic Server is the same user used to setup and run IBM Cognos 8. You also need the userID and password required to access the WebLogic Administration Console.
- That you have the necessary system resources to perform the installation. There is considerably more memory, hard disk space and CPU power required to run any full Application Server than running Tomcat. The minimal requirements for WebLogic should be compared to available resources. Running with less than 768MB of RAM for the Max Heap Memory is not suggested (although it may be possible for testing purposes only), 1GB should be considered a minimum to ensure performance and reliability.

For WebLgoic 8.1.x, you should allot 1 GB of disk space for the application server installation. More space will be required for added Managed Servers and application files, logging and additional domains.

- The JVM used is the one shipped with WebLogic or one that is supported by WebLogic and IBM Cognos 8. If you are using version 8.1.x, then you can use the JVM shipped with WebLogic or an existing JDK 1.4.2 on the system. It is recommended that you use the JDK shipped with WebLogic, though.
- The WebLogic Server install for AIX does not provide a JVM.

1.4

- You must install this before installing WebLogic. Note: IBM Cognos 8 does not currently support JRockit.
- That you have the customer documentation available as a resource. You should have both the IBM Cognos 8 documentation as well as the BEA WebLogic documentation.
- That you are familiar with the operating system (OS) with which you are using. This document assumes you are familiar with the OS. This includes user commands at the command line, syntax and scripting.
- That you are familiar with IBM Cognos 8. You should already know how to setup and run the product using Tomcat.
- That you are familiar with SSL and security concepts. The WebLogic demonstration keystores are used as examples in this document. The user can obtain certificates from the appropriate sources. (For example, Verisign, Thawte, etc.) They are not provided by IBM Cognos Support.

2 Preparation for Cognos Application Deployment

Various configuration requirements must be met before running IBM Cognos 8 on any machine.

Steps general to all application servers are described in the <u>Application Servers – Installing and</u> <u>Configuring the IBM Cognos Application</u> document. You will need to set up the database clients that you intend to use with IBM Cognos 8. You should also consult your database documentation and the <u>IBM Cognos 8 Installation and Configuration Guide</u> included with the IBM Cognos 8 install for more information.

2.1 Setting up the Environment

For most simple installations, it is recommended that environment variables values be set globally. For Windows, these would be system environment variables. On UNIX, it could be a script to be sourced. WebLogic installs a script called setEnv.cmd (Windows) or setEnv.sh (UNIX) in the domain directory that can be altered to include the appropriate variable/value pairs. For UNIX, users should be sure to set the variables correctly according to their default shell. Different platforms and different shell environments use slightly different syntax to accomplish this task. You should consult your UNIX documentation for more information.

2.1.1 Steps to Modify the setEnv Script

The setEnv script can be used to set environment settings for the domain. Its use is optional.

Important: You must add a command to call the setEnv script when a server instance is started, otherwise it will be ignored.

Set environment variables such as JAVA_HOME, PATH or library path and your database environment variables. Variable names differ depending on the OS platform and the database vendor. You must append the <c8_install_location>/bin directory to the library path so that the Cognos library files can be accessed.

If you intend to use a single server install, you can set the PATH or library path environment variable, here. If you are installing separate components in different locations, you should set the PATH or library path for each Managed Server instance to its corresponding Cognos install.

2.1.1.1 WebLogic 8.1.x

You will need to add the same variable settings described in the "Steps to Modify the WebLogic 8.1.x Environment" section.

- set JAVA_OPTIONS
- set JAVA_VM
- set PRODUCTION_MODE
- set MEM_ARGS
- set library path

These variables are described later in this document.



Sample setEnv.sh script for HPUX

#!/bin/sh # This script is used to set up your environment for development with # WebLogic Server. It simply calls the commEnv.sh script under # /system_1/weblogic/8.1.3/weblogic81/common/bin. Add domain specific # configuration in this script below. # # set up WL_HOME, the root directory of your WebLogic installation WL_HOME="/system_1/weblogic/8.1.3/weblogic81" # Set Production Mode. When this is set to true, the server starts up in # production mode. When set to false, the server starts up in development # mode. If it is not set, it will default to false. PRODUCTION_MODE="true" # Set JAVA_VENDOR to java virtual machine you want to run on server side. JAVA_VENDOR="HP" # Set JAVA_HOME to java virtual machine you want to run on server side. JAVA_HOME="/system_1/weblogic/8.1.3/jdk142_03" # set up common environment PATH="\${PATH}:/system_1/weblogic/8.1.3/cognos/c8/bin" JAVA VM="-server" JAVA_OPTIONS="-Dweblogic.security.SSL.trustedCAKeyStore=\${WL_HOME}/server/lib/cacerts -Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParser -Dweblogic.management.discover=true" MEM_ARGS="-Xms768m -Xmx768m" # set up database environment # This is an example for Oracle ORACLE_HOME="/oracle/9.2.0.5" TNS_ADMIN="/system_1/weblogic/config" NLS_LANG="AMERICAN_AMERICA.UTF8" PATH="\${PATH}:\${ORACLE_HOME}/bin:/system_1/weblogic/8.1.3/jdk142_03/bin:/public/tools/Acr obat5/bin" SHLIB_PATH="\${ORACLE_HOME}/lib32:/system_1/weblogic/8.1.3/cognos/c8/bin:\${SHLIB_PATH}" . "\${WL_HOME}/common/bin/commEnv.sh" CLASSPATH="\${WEBLOGIC_CLASSPATH}\${CLASSPATHSEP}\${POINTBASE_CLASSPATH}\${CLASSPATHSEP}\${JAV A_HOME}/jre/lib/rt.jar\${CLASSPATHSEP}\${WL_HOME}/server/lib/webservices.jar"

export CLASSPATH

2.2 Steps to Modify the WebLogic 8.1.x Environment

For an Administration Server and Managed Server configuration, you will modify the startManagedWebLogic file. (*.cmd files are for Windows, *.sh files are for UNIX platforms.) These files are located in the directory for the WebLogic domain you created using the Domain Configuration Wizard. For example, if you installed WebLogic in C:\bea8 and created a domain called cognos, you would find these files in C:\bea8\user_projects\domains\cognos.



Note: For the UNIX platforms, when setting the variable values, you'll have to enclose the strings in quotes. This is not necessary for Windows.

1. Make sure you set the server name. For example, if you created a Managed Server called server1, set the SERVER NAME to server1.

set SERVER_NAME=server1

Note: The syntax used for UNIX is different. The set command is not used. Instead, use a variable assignment.

2. Append <cognos8_location>\bin to the appropriate environment variable.

Windows:	PATH
AIX:	LIBPATH
Solaris:	LD_LIBRARY_PATH
HPUX:	SHLIB_PATH

You can set this in the script or as part of your environment.

3. Set the JVM type if the JVM supports different modes. The JVM mode is a text string that indicates the mode in which you want the JVM to run. The values that you supply depend on the JVM that you are using. For example, the Sun JDK can run a -hotspot, -client or -server JVM. The default value is -hotspot. Change the default setting from

JAVA_VM=

to

JAVA_VM=-server

The IBM JRE does not support the -server option so no changes are required.

 Set the Java options by appending -Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParser and -Dweblogic.management.discover=false to the Java environment. The java options are one or more Java arguments that you want to pass to the JVM.

```
set JAVA_OPTIONS=-
Dweblogic.security.SSL.trustedCAKeyStore=d:\bea\weblogic813\server
\lib\cacerts -
Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParser -
Dweblogic.management.discover=false
```

Note: Forward slashes are used for UNIX.

5. You can start your domain in one of two modes, development or production. You use development mode while you are developing your applications. Development mode uses a relaxed security configuration. You use production mode when your application is running in its final form. A production domain uses full security and may use clusters or other advanced features.

Change the PRODUCTION_MODE variable to true to enable production mode. If the variable isn't set, the default is Development mode.

PRODUCTION_MODE=

to

PRODUCTION_MODE =true

6. Specify the minimum and maximum values (in megabytes) for Java heap memory. For example,

set MEM_ARGS=-Xms768m -Xmx768m

BEA recommends that the minimum and maximum values be the same so that the JVM does not resize the heap. The values assigned to these parameters can dramatically affect the performance of your WebLogic Server and are provided here only as general defaults.



In a production environment you should carefully consider the correct memory heap size to use for your applications and environment. The settings depend on the amount of memory available on your machine. For example, if you have a machine which has more than 2 GB of memory, a minimum of 1024m and a maximum of 1024m with the young generation values set to 256m are suggested starting values that you can adjust for your environment.

set MEM_ARGS=-XX:NewSize=256m -XX:MaxNewSize=256m -Xms1024m -Xmx1024m

7. Save and close the file.

Example of the startManagedWebLogic.cmd

```
@rem ***
@rem This script is used to start a managed WebLogic Server for the domain in
@rem the current working directory. This script reads in the SERVER_NAME and
@rem ADMIN_URL as positional parameters, sets the SERVER_NAME variable, then
@rem starts the server.
@rem
@rem Other variables that startWLS takes are:
@rem
@rem WLS_USER - cleartext user for server startup
@rem WLS_PW - cleartext password for server startup
@rem PRODUCTION_MODE
                        - Set to true for production mode servers, false for
                    development mode
@rem
@rem JAVA_OPTIONS - Java command-line options for running the server. (These
                      will be tagged on to the end of the JAVA_VM and MEM_ARGS)
@rem
               Will be tagged on to the the of the server,
- The java arg specifying the VM to run. (i.e. -server,
@rem JAVA_VM
@rem
                     -hotspot, etc.)
@rem MEM_ARGS - The variable to override the standard memory arguments
@rem
                     passed to java
@rem
@rem For additional information, refer to the WebLogic Server Administration
@rem Guide (http://e-docs.bea.com/wls/docs81/ConsoleHelp/startstop.html).
@rem *******
echo off
SETLOCAL
set WL_HOME=D:\bea813\weblogic81
@rem Set Production Mode. When this is set to true, the server starts up in
@rem production mode. When set to false, the server starts up in development
@rem mode. If it is not set, it will default to false.
set PRODUCTION MODE=true
@rem Set JAVA_VENDOR to java virtual machine you want to run on server side.
set JAVA_VENDOR=Sun
@rem Set JAVA_HOME to java virtual machine you want to run on server side.
set JAVA_HOME=D:\bea813\jdk142_04
call "%WL_HOME%\common\bin\commEnv.cmd"
@rem Set SERVER_NAME to the name of the server you wish to start up.
set ADMIN_URL=http://localhost:7001
set SERVER_NAME=server1
@rem Set WLS_USER equal to your system username and WLS_PW equal
@rem to your system password for no username and password prompt
@rem during server startup. Both are required to bypass the startup
@rem prompt.
```

Cognos. software

set WLS_USER=

set WLS_PW=

@rem Set JAVA_VM to java virtual machine you want to run on server side.

set JAVA_VM=-server

@rem Set JAVA_OPTIONS to the java flags you want to pass to the vm. i.e.:

@rem set JAVA_OPTIONS=-Dweblogic.attribute=value -Djava.attribute=value

```
set JAVA_OPTIONS=-Dweblogic.security.SSL.trustedCAKeyStore=%WL_HOME%\server\lib\cacerts -
Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParser -
Dweblogic.management.discover=false
```

@rem Set MEM_ARGS to the memory args you want to pass to java. For instance:

@rem if "%JAVA_VENDOR%"=="BEA" set MEM_ARGS=-Xms32m -Xmx200m

set MEM_ARGS=-Xms768m -Xmx768m

@rem Set SERVER_NAME and ADMIN_URL, they must by specified before starting

@rem a managed server, detailed information can be found at

@rem http://e-docs.bea.com/wls/docs81/adminguide/startstop.html.

if "%1" == "" goto checkEnvVars

set SERVER_NAME=%1

if "%2" == "" goto checkEnvVars

set ADMIN_URL=%2

goto callWebLogic

:checkEnvVars

if "%SERVER_NAME%" == "" goto usage

if "%ADMIN_URL%" == "" goto usage

set SERVER_NAME="%SERVER_NAME%"

set ADMIN_URL="%ADMIN_URL%"

goto callWebLogic

usage

echo Need to set SERVER_NAME and ADMIN_URL environment variables or specify

echo them in command line:

echo Usage: startManagedWebLogic [SERVER_NAME] [ADMIN_URL]

echo for example:

echo startManagedWebLogic managedserver1 http://localhost:7001

```
goto finish
```

:callWebLogic

@rem Start WebLogic Server

set

CLASSPATH=%WEBLOGIC_CLASSPATH%;%POINTBASE_CLASSPATH%;%JAVA_HOME%\jre\lib\rt.jar;%WL_HOME% \server\lib\webservices.jar;%CLASSPATH%

@echo.

@echo CLASSPATH=%CLASSPATH%

@echo.

@echo PATH=%PATH%

@echo.



Dweblogic.management.server=%ADMIN_URL% -Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy" weblogic.Server

finish

ENDLOCAL

2.3 Steps to Modify the WebLogic 9.x Environment

The startup scripts are located in %WL_HOME%\user_projects\domains\<*domain_name*>\bin. For example, if WebLogic Server is installed in D:\bea\9.0.0, and the domain name is cognos8, then the startup scripts would be located in D:\bea\9.0.0\user_projects\domains\cognos8\bin.

2.3.1

Serial Version UID

A serial version UID mismatch is encountered when using Weblogic Server 9.x with JDK 5.0 (version 1.5.0_03 or later). This affects all platforms. Before running WebLogic Server, implement the following workaround.

- 1. Navigate to \$BEA_HOME/weblogic9x/common/bin and locate the commEnv.sh file.
- 2. Open commEnv.sh in an editor and modify it to include the following command:

JAVA_OPTIONS="\${JAVA_OPTIONS} Dcom.sun.xml.namespace.QName.useCompatibleSerialVersionUID=1.0"
export JAVA_OPTIONS

3. Save and close the file.

2.3.2 Configuring the WebLogic 9.x Environment

The steps to modify the startWeblogic.cmd or startManagedWeblogic.sh script are similar to those for WebLogic Server 8.1.x. However, the recommended way to configure WebLogic Server 9.x is to use the Administration Server UI in conjunction with Node Manager. This allows you remotely start and stop the managed servers via the Administration Console, as well as manage resources.

NOTE: For WLS9.2 on AIX if you encounter core and java cores, use the WLS scripts to start the Managed Node and NOT the Administration Console.

 Since there is no way to set environment variables in the Administration Console, you will need to set your environment prior to starting WebLogic Server processes. You should set environment variables such as PATH or library path and your database environment variables. Variable names differ depending on the OS platform and the database vendor. You must append the <c8_install_location>/bin directory to the library path so that the Cognos library files can be accessed.



Windows:	PATH
AIX:	LIBPATH
Solaris or Linux:	LD_LIBRARY_PATH
HPUX:	SHLIB_PATH

You can set this in a separate script or as part of your environment.

- 2. Node Manager must be started in order to start and stop Managed Server instances via the Administration Console. In Windows, the Node Manager can be started as a service, via the Windows Services Console. In UNIX, it can be started from \${WL_HOME}/weblogic90/server/bin by running the startNodeManager.sh script. The default port used by Node Manager is 5556. There are no configuration steps required for Node Manager in order to run IBM Cognos 8.
- 3. The Administration Server must be started prior to accessing the Administration Console. To start the Administration Server, run startWebLogic.cmd (Windows) or startWebLogic.sh (UNIX) from %WL_HOME%\user_projects\domains\<domain_name>\bin.
- 4. To access the Administration Console, open a browser session and connect to http://<host_name>:port>/console. For example, if WebLogic Server is installed on a machine called "server1" using port number 7001 for the Administration Server, then you would access http://server1:7001/console. When the login page appears, enter the username and password used when creating the administrative user in the Domain Configuration Wizard.

 	WEBLOGIC SERVER ADMINISTRATION CONSOLE				
	Log in to wor	k with the WebLogic Server domain			
	Username:	weblogic			
	Password:	•••••			
		Log In			

4. Once authenticated, you will see the Administration Console UI. The following view is the Home page. Click on the Servers link to view the Managed Server instances created for the domain.

WEBLOGIC SERVER administration console						
Change Center	Welcome, system Cor	nnected to: cognos8	🟠 Home 🛛 Log Out 🛛 I	Preferences Help /		
View changes and restarts	Home	Home				
Click the Lock & Edit button to modify, add or delete items in this	Domain					
domain.	_Information and R	esources				
Lock & Edit	Helpful Tools	Ge	General Information			
Release Configuration	> Configure applicat	ons > C	ommon Administration Task Descriptions			
	> Recent Task Statu	s >S	Set your console preferences			
Domain Structure		> Read the d				
cognos8	Domain Configura	tions —				
E-Services	Domain	Serv	ices	Interoperability		
⊡Interoperability	🗏 Domain	■ Mes	saging	WTC Servers		
⊡-Diagnostics		>]	MS Servers	Jolt Connection Por		
	Environment	> 9	Store-and-Forward Agents			
How do I	■ Servers	>]	MS Modules	Diagnostics		
	■ Clusters	> E	Bridges	■ Log Files		
Use the Change Center	Virtual Hosts	≡ JDB	С	Diagnostic Modules		

5. You will see the Summary of Servers for this domain. The server instance operating as the Administration Server is displayed with the '(admin)' label after its name. Click on the Managed



Server instance to begin its configuration. In this example, we'll be using the Managed Server called c8.

elcome, systen	Connected to: c	cognos8	🟠 Home	Log Out	Preferences	Help AskBl
Home > Summary of Servers						
Summary of Servers						
A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration.						
This page sui domain.	mmarizes each serv	ver that has	been configur	ed in the cur	rent WebLo	gic Server
Customiz	e this table					
Servers						
Click the Lo	<i>ck & Edit</i> button in	the Change	e Center to act	ivate all the	buttons on th	nis page.
New	lone Delete			Showin	ng 1 - 2 of 2	Previous Next
☐ Name ↔ Cluster Machine State Health Listen Port						
🔲 Adm	inServer(admin)			RUNNING	ок	7001
C c8 Machine_1 Unknown Unknown 7021					7021	
New Clone Delete Showing 1 - 2 of 2 Previous Next						
Showing 1 - 2 of 2 Previous Next						

6. Under the Configuration tab, select the Server Start tab.

Settings for c8						
Configuration Protocols General Cluster S	Logging Debug Monitoring Services Keystores SSL	Control Deployments Services Security Notes Deployment Migration Tuning Overload Health Monitoring Server Start				
Click the Lock & Edit b	Click the Lock & Edit button in the Change Center to modify the settings on this page.					
Use this page to conf	igure general features of this se	erver such as default network communications.				
View JNDI Tree 🔎						
Name:	c8	An alphanumeric name for this server instance. More Info				
Machine:	Machine_1	The WebLogic Server host computer (machine) on which this server is meant to run. More Info				
Cluster:	(Standalone) 💌	The cluster, or group of WebLogic Server instances, to which this server belongs. More Info				
🐴 Listen Address:		The IP address or DNS name this server uses to listen for incoming connections. More Info				
🐴 🛛 Listen Port En	abled	Specifies whether this server can be reached through the default plain-text (non-SSL) listen port. More Info				
4 Listen Port:	7021	The default TCP port that this server uses to listen for regular (non-SSL) incoming connections. More Info				

The page will display the startup parameters that can be set for each server instance.



ettings for c8							
Configuration Protocols Logging Debug Monitoring C	Control Deployments Services Security Notes						
General Cluster Services Keystores SSL Deplo	oyment Migration Tuning Overload Health Monitoring Server Start						
Click the Lock & Edit button in the Change Center to modif	ify the settings on this page.						
Node Manager is a stand-alone Java program provided w restart servers in normal or unexpected conditions. Use t this server on a remote machine.	vith WebLogic Server that you can use to start, suspend, shut down, and this page to configure the startup settings that Node Manager will use to start						
📲 Java Home:	The Java home directory (path on the machine running Node Manager) to use when starting this server. More Info						
4 BEA Home:	The BEA home directory (path on the machine running Node Manager) to use when starting this server. More Info						
Root Directory:	The directory that this server uses as its root directory. This directory must be on the computer that hosts the Node Manager. If you do not specify a Root Directory value, the default Node Manager working directory is used (generally WL_HOMEcommon odemanager). More Info						

7. In order to edit the page, you must click the Lock & Edit button.

bea WEBLOGIC SERV	ER SOLE
Change Center	Welcome, system
View changes and restarts	Home > Summary of Servers > c8
Click the Lock & Edit button to modify, add or delete items in this domain.	Settings for c8
Lock & Edit Release Configuration	General Cluster Service
Domain Structure	Nodo Managor is a stand-
cognos8 ®-Environment Deployments ®-Services Services	restart servers in normal of this server on a remote m

Once in Edit mode, enter the Java Home value and the Java Arguments.

The Java Home path must be the same JAVA_HOME used for IBM Cognos 8. It is recommended to use the JVM included with the WebLogic install.

The Java Arguments include the memory settings, JVM type and the org.xml.sax.driver setting (-Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParser).

For memory, you need to specify the minimum and maximum values (in megabytes) for Java heap memory. For example, -Xms768m –Xmx768m. Also, you need to set the MaxPermSize.

BEA recommends that the minimum and maximum values be the same so that the JVM does not resize the heap. Also, you can set the MaxPermSize to a quarter of the heap size. The values assigned to these parameters can dramatically affect the performance of your WebLogic Server and are provided here only as an example.

-Xms768m -Xmx768m -XX:MaxPermSize=128m -server -Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParser

You can also enter values for the other properties if you do not wish to use the defaults. For example, you wish to use a different WebLogic userID to start the Managed Server.

Note: The IBM JRE does not support the –server option. If WebLogic is running on an IBM JRE, do not add the –server option.



Click the Save button to save the changes.

ging Debug	Monitorin	g Control	Deployments	Services	Security	Notes	
s Keystores	SSL (Deployment	Migration	Tuning	Overload	Health Monitoring	Server Star
lone 1ava nroi	oram provid	ded with \A/e	hl agir Server	that you c	an use to st	art. susnend. shut r	lown, and restar
ected conditio	ns. Use thi	s page to co	nfigure the sta	rtup settir	igs that Nod	e Manager will use	to start this serv
D:\hea\9	0 0\jdk150	03 The	Java home dir p starting this	ectory (pa	th on the m	achine running Nod	e Manager) to u
		wrie	ri startiriy tris	server, IM	ore mio		
		The	BEA home dire	ectory (pat	h on the ma	achine running Node	e Manager) to us
			n star ang ans				
		The the t	directory that computer that	this server hosts the I	' uses as its Node Manac	root directory. This aer. If you do not sp	directory must ecify a Root Dire
		valu	e, the default M	Node Mana	ager working	g directory is used (Info	generally
					igory, more		
		The	classpath (pat server, More)	h on the n Info	hachine runn	ning Node Manager)) to use when st
-Xms768r	m -Xmx768	m -XX: The	arquinents to	use when	starting this	s server. More Into.	
		The	security policy	file (direc	tory and file	name on the machi	ne running Node
		Man	ager) to use w	hen starti	ng this serve	er. More Info	
		The	user name to	use when	booting this	server. More Info.	
	ging Debug s Keystores lone Java pro- ected conditio	ging Debug Monitorin s Keystores SSL 1 lone Java program provi ected conditions. Use this Dishease D Digits 150 Conditions of the second second second Conditions of the second s	ging Debug Monitoring Control s Keystores SSL Deployment lone Java program provided with We ected conditions. Use this page to co D-\baa\9 0 0\bidk150_03 The whe D-\baa\9 0 0\bidk150_03 The whe	ging Debug Monitoring Control Deployments s Keystores SSL Deployment Migration idne Java program provided with WebLogic Server exted conditions. Use this page to configure the state District Server District Conditions Use this page to configure the state District Conditions The Java home dir When starting this The BEA home dir When starting this The directory that the computer that value, the default WL_HOMEcommon The classpath (pat this server. More 1 -Xms768m -Xmx768m -XX The arguments to The security policy The security policy Manager) to use w The user name to	ging Debug Monitoring Control Deployments Services s Keystores SSL Deployment Migration Tuning ione Java program provided with WebLogic Server that you certed conditions. Use this page to configure the startup setting D-MeaNIN Divide 150_03 The Java home directory (part when starting this server. M D-MeaNIN Divide 150_03 The Java home directory (part when starting this server. M The BEA home directory that this server M The directory that this server. M The directory that this server. M The directory that this server. M The directory that this server. M The directory that this server. M The directory that this server. M The directory that this server. M The directory that this server. M The directory that this server. M The directory that this server. M The classpath (path on the n this server. More Info Xms768m -Xmx768m -XX The arguments to use when The security policy file (direce Manager) to use when starting	ging Debug Monitoring Control Deployments Services Services Services Services Services Deployment Migration Tuning Overload Ione Java program provided with WebLogic Server that you can use to st exceed conditions. Use this page to configure the startup settings that Nod D-theat9 0.01jdk150_00 The Java home directory (path on the m when starting this server. More Info The BEA home directory (path on the m, when starting this server. More Info The directory that this server uses as its the computer that hosts the Node Manager workin WL_HOMEcommon odemanager). More use, the default Node Manager workin WL_HOMEcommon odemanager). More this server. More Info The classpath (path on the machine run this server. More Info The classpath (path on the machine run this server. More Info The security policy file (directory and file Manager vok in Manager) to use when starting this server.	ging Debug Monitoring Control Deployments Services Security Notes s Keystores SSL Deployment Migration Tuning Overload Health Monitoring lone Java program provided with WebLogic Server that you can use to start, suspend, shut cected conditions. Use this page to configure the startup settings that Node Manager will use Disbaard II Midk150_000 The Java home directory (path on the machine running Node when starting this server. More Info The BEA home directory (path on the machine running Node when starting this server. More Info The directory that this server uses as its root directory. This the computer that hosts the Node Manager. If you do not sp value, the default Node Manager. More Info The classpath (path on the machine running Node Manager, More Info The classpath (path on the machine running Node Manager, More Info The classpath (path on the machine running Node Manager, More Info The classpath (path on the machine running Node Manager). Mis server. More Info The security policy file (directory and filename on the machine Info The security policy file (directory and filename on the machine Manager) to use when starting this server. More Info The user name to use when booting this server. More Info

In order to activate the changes, click on the Activate Changes button. This will also release the configuration from Edit mode. Also, this is an opportunity to revert the changes. Click the Undo All changes button to restore the previous settings.

WEBLOGIC SERV Administration cons	ER
Change Center	Welcome, system Connected to
View changes and restarts	Home > Summary of Servers > c8
Pending changes exist. They must be activated to take effect.	Messages
Activate Changes Undo All Changes	Settings for c8
Domain Structure	Configuration Protocols Logging Debug Monitoring Control De
cognos8 B-Environment -Deployments B-Services -Security Realms B-Interoperability B-Diagnostics	General Cluster Services Keystores SSL Deployment N Save Node Manager is a stand-alone Java program provided with WebLo restart servers in normal or unexpected conditions. Use this page to this server on a remote machine. Node Manager is a stand-alone Java program provided with WebLo restart servers in normal or unexpected conditions. Use this page to this server on a remote machine.

8. To start the Managed Server instance, go to the Control tab. The current state of the Managed Server is listed at the bottom of the page.

To start the server instance, check the checkbox next to the Managed Server name and click on the Start button.



Settings for c8			
Configuration Protocols Loggin	g Debug Monitoring	Control Deployments	Services Security Notes
Start/Stop Remote Start O	utput Migration	\smile	
Click the <i>Lock & Edit</i> button in t	the Change Center to mo	dify the settings on this p	age.
Use this page to change the state server. (Some operations require	of the current server. Yo the Node Manager and t	u can also specify particu he domain-wide administ	llar shutdown settings or view the current status of this ration port.)
🗖 Ignore Sessions Durir	ng Shutdown	Indicates whether a immediately. More I	graceful shutdown operation drops all HTTP sessions nfo
Graceful Shutdown Timeout:	D	Number of seconds - down. A graceful shi certain application p complete processing server will force shu	a graceful shutdown operation waits before forcing a shut latdown gives WebLogic Server subsystems time to complete rocessing currently in progress. If subsystems are unable to within the number of seconds that you specify here, then the tdown automatically. More Info
4 Startup Timeout:	0	Timeout value for se in the timeout period	rver start and resume operations. If the server fails to start I, it will force shutdown. More Info
Click the <i>Lock & Edit</i> button in t	the Change Center to mo	dify the settings on this p	age.
Customize this table			
Start Resume Suspend	▼ Shutdown ▼ Resta	art SSL	Showing 1 - 1 of 1 Previous Next
Server 🗞	Machine	State	Status of Last Action
68	Machine_1	UNKNOWN	None
Start Resume Suspend	Shutdown Resta	art SSL	Showing 1 - 1 of 1 Previous Next

You will then be prompted to confirm the action. Click Yes to start the server instance or No to go back to the previous page.

Server Life Cycle Assistant
Yes No
Start Servers You have selected the following servers to be started. Press 'Yes' to continue or 'No' to cancel.
■ c8
Yes No

Once the start action has been confirmed, a message acknowledging the request is displayed, saying that the request has been sent to Node Manager.



Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes	Tylessages		
Settings for c8 Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes		in the Node Manager to start the selecter	
Settings for c8 Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes	A request has been sent t	u die Node Manager to start die selecter	
Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes	Settings for c8		
Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes			
	Configuration Protocols Log	gging Debug Monitoring Control D	eployments Services Security Notes
Start/Stop Remote Start Output Migration	Start/Stop Remote Star	rt Output Migration	
Click the Lock & Edit button in the Change Center to modify the settings on this page.	Click the Lock & Edit button	in the Change Center to modify the sett	ings on this page.

To view the status, refresh the page using the browser's refresh button.

;	Serve	r Status			
	Start	Resume Suspend	Shutdown 💌 🖡	Restart SSL	Showing 1 - 1 of 1 Previous Next
		Server 🚕	Machine	State	Status of Last Action
		с8	Machine_1	RUNNING	TASK COMPLETED
	Start	Resume Suspend	Shutdown 💌 🛛	Restart SSL	Showing 1 - 1 of 1 Previous Next

The Managed Server is now ready for use with Cognos 8.

2.4 Adding Server Instances in the Administration Console

If you need to add another Managed Server instance to your domain, you can create it via the Administration Console. You do not need to create a new domain.

1. Open the Administration Console and login. Navigate to <domain_name> -> Servers. Click on the Configure a new Server... link.





2. Replace MyServer with a unique name for the Managed Server identifier.



Unless you have a specific requirement, leave the Listen Address blank.

Replace 7001 with a Listen port. Use a port number that is not in use by any other application on the machine.



Scroll down to the bottom of the page and click on the Create button.





You will see the new Managed Server added to the domain configuration in the Administration Console. For example, a new Managed Server called 'gateway' with the port number of 7080 was created. Its status is listed as 'unknown', since it has not yet been activated in the domain.



3. If you intend to use the script method of starting and stopping server instances, you will need to create a new startup script for the newly created Managed Server. Follow the steps in the "Steps to Modify the WebLogic x.x.x Environment" to create a script for the new Managed Server instance and modify a copy of an existing startManagedWeblogic script.

If you intend to use the Node Manager to start and stop server instances via the Administration Console, you will need to modify the Remote Start options to set the environment settings required for running the Managed Server.

Note: If an IBM Cognos 8 component is to be deployed to the Managed Server instance, you must modify the Arguments to include the Java parameters required for running IBM Cognos 8. If these are not set, the application will not function properly.

The Java startup parameters include memory settings, JVM server mode setting and the org.xml.sax.driver setting. For example,

```
-Xms768m -Xmx768m -server -
Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParser -
Dweblogic.management.discover=false
```

The IBM JRE does not support the -server option. If WebLogic is running on an IBM JRE, do not add the -server option.



cognos8>	Servers> server1	🕂 🗖 ? 😤 A 🔂 🔂
Connected to	ion Protocols Log	You are logged in as : system <u>Logout</u> ging Monitoring Control Deployments Services Notes
General Node Mai monitor, a the startu	Cluster Keystores & nager is a stand-alone Ja and shut down Managed p settings that Node Ma	& SSL Upployment I uning Health Monitoring Remote Start ava program provided with WebLogic Server that you can use to start, restart, servers in normal or unexpected conditions. This page allows you to configure pager will use to start this server on a remote machine.
Δ	Java Home:	D:\bea\8.1.3\jdk142_04
Â	The Java home director	y (path on the machine running Node Manager) to use when starting this server.
	The BEA home directo	ry (path on the machine running Node Manager) to use when starting this server.
Δ	Root Directory:	
	The root directory (path	on the machine running Node Manager) to use when starting this server.
Δ	Class Path:	
	The classpath (path on	the machine running Node Manager) to use when starting this server.
Δ	Arguments	-Xms768m -Xmx768m -server -Dor
	The arguments to use	when starting this server.
Δ	Security Policy File:	
	The security policy file starting this server.	(directory and filename on the machine running Node Manager) to use when
Δ	User Name:	system
	The user name to use	when booting this server and performing server health monitoring.
Δ	Password:	•••••
	Confirm Password:	
	The password to use w	hen booting the server and performing server health monitoring.
		Apply

View server log View JNDI tree



3 Single Server Deployment

The following steps describe a basic single-server setup. IBM Cognos 8 has been installed with all components in one location. WebLogic Server has been installed on the same machine. Both IBM Cognos 8 and WebLogic Server need to be on the same machine in order to deploy IBM Cognos 8 as an application to WebLogic.

3.1 Pre-deployment Configuration

WebLogic Server should be started prior to deployment. You will not be able to access the Administration Console if the Administration Server isn't running. Make sure the Managed Server instance has been created and configured. It should be started prior to starting the deployment.

3.1.1 IBM Cognos 8 Setup

For detailed information regarding the configuration of IBM Cognos 8, refer to the <u>Application Servers –</u> <u>Installing and Configuring the Cognos Application</u> document and the IBM Cognos 8 user documentation.

Note:

- The JDK used when running Cognos Configuration **must** be the same as the one used for running WebLogic Server.
- The port number used by the IBM Cognos 8 Dispatcher and Content Manager is the Managed Server port that was set when the domain was created using the Domain Configuration Wizard. Do not use the Administration Server port.
- The steps outlined in ASCG05 **must** be completed prior to deploying the IBM Cognos 8 application. For example, database clients must be configured and the security provider file must be copied to the appropriate location.

3.2 Deploy IBM Cognos 8

In the Cognos Configuration tool, you can select the Expand files into a folder option when building the application files for IBM Cognos 8. The directory is the application that you will deploy to WebLogic Server. This is the recommended option for WebLogic Server. Do not use an *.ear file.

3.2.1 Steps for WebLogic 8.1.x

The following steps assume you have already expanded the application files to a folder using the Build Application Wizard in Cognos Configuration. If you did not expand the files to a folder, you should complete this step before proceeding with the deployment process.

The following steps use the default application name, p2pd. The context root can be changed by using a different name when creating the war file or expanded directory. Just remember to change this in your Cognos Configuration, as well.



 WebLogic Server should already be running. Start the WebLogic Console from the browser and login. The default address is <u>http://localhost:7001/console</u>. You can also use the server name. For example, <u>http://servername:7001/console</u>. Use the user and password created when you created the domain.



2. Make sure both your Administration Server and Managed Server are running. Select the Servers link in the left pane, and you will see the server state for each server in your WebLogic domain. They should be running.





3. Deploy the application using the name of p2pd.



Under Deployments, select the Web Applications Modules link Click the Deploy a new Web Application Module link

reportnet> Web . Iodule	Applications> Deploy a new Web Application 🛛 👘 📍
Connected to : wotth	ongj-2k :7001 You are logged in as : system <u>Logout</u>
Deploy a Web	Application Module
Select the arch	nive for this Web application module
Select the file p	ath that represents your archive or exploded archive directory.
Note: Only valid you should <u>uplo</u> valid descriptor	file paths are shown below. If you do not find what you are looking for, <u>ad your file(s)</u> and/or confirm your Web application module contains s.
Loc repo	ration: <u>wotthongi-2k\E:</u> \ <u>bea813</u> \ <u>user_projects</u> \ <u>domains</u> \ ortnet
	adminserver
	applications
	□ <u>cm</u>
	NodeManagerClientLogs
	@ p2pd
	Lest .
	Target Module

Browse to the p2pd directory. In this example, it is under $WL_HOME\%user_projects\domains, then click on Target Module button$



reportnet> Web Applications> Deploy a new Web Application Module	Logou
Deploy a Web Application Module	
Select targets for this Web application module	
Select the servers and/or clusters on which you want to deploy your new Web Application module.	
Independent Servers	
Continue	$\mathbf{>}$

Check the target server (crn in the example above)

Deplo	yment Targets
Your W	eb Application module will be deployed to the following locations:
	p2pd will be deployed to
	Servers - Crn
Sourc	e Accessibility
During be acc ocatio	runtime, a targeted server must be able to access this Web Application module's files. This access can omplished by either copying the Web Application module onto every server, or by defining a single n where the files exist.
How sh	nould the source files be made accessible?
	$^{ m C}$ Copy this Web Application module onto every target for me.
	During deployment, the files in this Web Application module will be copied automatically to each of the targeted
\langle	I will make the Web Application module accessible from the following location: E:\bea813\user_projects\domains\reportnet\p2pi
	Provide the location from where all targets will access this Web Application module's files. You must ensure the Web Application module's files exist in this location and that each target can reach the location.
Identi	ty
Enter a	a name to be used to identify this Web Application module.
	The name of this Web application deployment.
	Deplo

Select the "I will make the Web Application module accessible from the following location" option button. Enter the name if it isnot already "p2pd".

Note: If you use the default option "Copy this Web Application module onto every target for me", the application will be copied to the managed server target. If you choose to use this option, you don't need to extract the p2pd.war file into a separate location. (re. Step 2)



However, you will not be able to set the Servlet Reload Check Secs period property for performance enhancement, described later in this document.

🗿 WebLogic Server Console - Microsoft In	🗿 WebLogic Server Console - Microsoft Internet Explorer 📃 💌							
<u> </u>	lp 🖉							
🗘 Back 🔹 🔿 🗸 🙆 🚮 🗔 Search	h 🔝 Favorites 🎯 History 🔄 🚽 🗃 🔟 🕶 🗮 👯 📿							
Address a http://wotthongj-2k:7001/console	/ a/actions/mbean/MBeanFramesetAction?bodyFrameId=wl_console_frame_10987273228678isNew=false&frameId 🔽 🤗	Go						
Links 🙋 Customize Links 🙋 Free Hotmail	Windows Media Windows							
Console Con	 Back → → · · · · · · · · · · · · · · · · ·							
Done	Cocal intranet							

The Deploy option should occur automatically if not click the Deploy button.

Note: this may take 5 to 10 minutes.

Once the deployment has completed, the status should be "Success".

3.2.2 Steps for WebLogic 9.0.0

The following steps assume you have already expanded the application files to a folder using the Build Application Wizard in Cognos Configuration. If you did not expand the files to a folder, you should complete this step before proceeding with the deployment process.

The following steps use the default application name, p2pd. The context root can be changed by using a different name when creating the war file or expanded directory. Just remember to change this in your Cognos Configuration, as well.

1. WebLogic Server should already be running. Start the WebLogic Console from the browser and login. The default address is <u>http://servername:7001/console</u>. Use the user and password created when you created the domain.

 bea	WEBLOGIC SERVER ADMINISTRATION CONSOLE
	Log in to work with the WebLogic Server domain
	Username:
	Password:
	Log In



2. Make sure both your Administration Server and Managed Server are running. Select the Servers link in the left pane, and you will see the server state for each server in your WebLogic domain. They should be running.

			-	10.11			1			
Welcome, sy	stem	Connected to: c	ognos8	Home	Log Out	Preferences	Help	ASKBEA		
Home > Sum	Home > Summary of Servers									
Summary of Servers										
A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (XVM) and has its own configuration.										
This pag domain.	ge summ	harizes each serve	er that has l	been configun	ed in the cu	urrent WebLog	jic Server			
V Cust	tomize tr	nis table								
Server	rs									
Click th	ne <i>Lock</i>	& Edit button in 1	he Change	Center to acti	ivate all the	buttons on th	iis page.			
New	Clone	Delete			Show	ing 1 - 2 of 2	Previous	Next		
	Name «	*	Cluster	Machine	State	Health	Listen	ert (
	AdminS	erver(admin)			RUNNING	ОК	7001			
	c8			Machine_1	RUNNING	ОК	7021			
New	Clone	e Dolche			Show	ng 1 - 2 of 2	Previous	Next		

3. Deploy the application using the name of p2pd. Under Domain Structure click on Deployments.



You will see the Summary of Deployments page.

WEBLOGIC SERV ADMINISTRATION CONS	RVER MISOLE	
Change Center	Welcome, system Connected to: cognos8 & Home Log Out Preferences	Help AskBEA
View changes and restarts	Home > Summary of Servers > Summary of Deployments	
Click the Lock & Edit button to modify, add or delete items in this domain. Lock & Edt Release Configuration Domain Structure	Summary of Deployments Control Monitoring This page displays a list of 12EE Applications and standalone application modules that have been this domain. Installed applications and modules can be started, stopped, updated (redeployed), from the domain by first selecting the application name and using the controls on this page.	n installed to or deleted
cognos8 B-Environment - Deployments B-Services - Security Realms P-Interrore sullity	Denkovments	putton.
Diagnostics	Showing 1-1 of 1 P	revious Next
	□ Name	
	There are no items to display	
How do I Install an Enterprise application Configure an Enterprise	Install Update Delete Start Stop Showing 1 - 1 of 1 P	revious Next

Click the Lock & Edit button to enable Edit mode. Click the Install button to begin the deployment.



Insta	Application Assistant	
Back	Next Finish Cancel	
Lo	ate deployment to install and prepare for deployment	
Sel you	act the file path that represents the application root directory, archive file, explod want to install.	led archive directory, or application module descriptor that
No app	e: Only valid file paths are displayed below. If you cannot find your deployment i lication contains the required deployment descriptors.	files, upload your file(s) and/or confirm that your
Locat	ion: localhost	_
	Ω _{A:\}	
	□c:\	
(D:\	
	ΠEX	
	□G:\	
	⊡ _{H:\}	
]

You will need to browse to the location of the p2pd application.

	Welcome, system	Connected to: cognos8	🟠 Home	Log Out	Preferences	Help AskBEA			
	Home > Summary of :	Home > Summary of Servers > Summary of Deployments							
	Install Applicat	ion Assistant							
	Back Next Finish Cancel								
	Locate deplo	yment to install and pre	pare for depl	oyment					
	Select the file path that represents the application root directory, archive file, exploded archiv directory, or application module descriptor that you want to install.								
	Note: Only val your file(s) and	id file paths are displayed I I/or confirm that your appli	pelow. If you ca ication contains	nnot find yo the require	our deployment fi d deployment des	les, upload scriptors.			
<	Location: local	iost \ D: \ bea \ 9.0.0 \ use	r_projects \ do	mains \ app	16	>			
	⊙ 🖻 p2pc	I							
	Back Next	Finish Cancel							

In this example, it is under $WL_HOME \otimes user_projects \otimes apps$. Select the p2pd application and then click the Next button.

Install Application Assistant
Back Next Finish Cancel
Choose targeting style
Targets are the servers, clusters, and virtual hosts on which this deployment will run. There are several ways you can target an application.
© Install this deployment as an application
The application and its components will be targeted to the same locations. This is the most common usage.
$^{ m C}$ Install this deployment as a library
Application libraries are deployments that are available for other deployments to share. Libraries should be available on all of the targets running their referencing applications.
Back Next Finish Cancel

Select the Install this deployment as an application option.



Back N	ext	Cancel			
Select de	ployment tar	gets			
Select the reconfigur	servers and/or e deployment t	clusters to whic argets later).	n you want to deplo	by this application	. (You can
Available tar	gets for p2pd				
Servers					
Admin9	erver				
F (8)	>				

Check the target server (c8 in the example above).

ck Next Finish	
Optional Settings	
'ou can modify these set	ttings or accept the defaults
General	
What do you want to	name this deployment?
Name:	p2pd
Security	
What security model of	do you want to use with this application?
Ose the security	y roles and policies exactly as they are provided in the deployment descriptors
C Customize the s	security roles used by policies provided in the deployment descriptors later
C Use custom role	es and policies other than those in the descriptors
O Use security rea	alm configuration (advanced option)
- Source accessibility	
How should the sourc	e files be made accessible?
Our Search State Use the default	s defined by the deployment's targets
Recommended select	ion.
C Copy this applic	ation onto every target for me
During deployment, o	te files will be copied automatically to the managed servers to which the application is targeted.
C I will make the o	deployment accessible from the following location
Location:	D:\bea\9.0.0\user_projects\domains\apps\p2pd
Provide the location fr	rom where all targets will access this application's files. This is often a shared directory. You must ensure the

Select the "I will make the deployment accessible from the following location" option button. Enter the name, if it is not already "p2pd".



WEBLOGIC SERV	ER ^{OLE}				
Change Center	Welcome, system Connected	l to: cognos8 🛛 🟠 Home	Log Out	Preferences	Help AskBEA
View changes and restarts	Home > Summary of Servers > Summary of Dep	loyments > p2pd > Summary of De	eployments		
Pending changes exist. They must be activated to take effect. Activate Changes	Summary of Deployments Control Monitoring				
Unde All Changes Domain Structure	This page displays a list of JZEE Applications and standalone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.				
cognos8 Environment Deployments Services	To install a new application or module	for deployment to targets in thi	is domain, c	lick the Insta	ill button.
	Install Update Delete St.	art 💌 Rop 💌	Showing	g 1 - 1 of 1	Previous Next
	🗖 Name 🗞		State	Туре	Deployment Order
How do I	🗖 🗉 🍯 p2pd		distribute Initializing	Web Application	100
Configure an Enterprise application Update (redeploy) an Enterprise	Install Update Delete St.	art 💌 Stop 💌	Showing	g1-1of1	Previous Next

To activate the changes, click the Activate Changes button.

Note: this may take a few minutes.

Summary of Deployments							
Control Monitoring							
This page displays a list of J2EE Applications and standalone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.							
To install a new application or module for deployment to targets in th	iis domain, c	lick the Insta	ill button.				
Deployments							
Install Update Delete Start V Stop V	Showing	g 1 - 1 of 1	Previous Next				
□ Name 🌣	State	Туре	Deployment Order				
	Prepared	Web Application	100				
Install Update Delete Start V Stop V	Showing	g 1 - 1 of 1	Previous Next				

Once the deployment has completed, the status should be "Prepared". To start the application, check the p2pd checkbox. Click the Start button.

1	Deploy	yments					
	Insta	II Update Delete	Start 💌 Stop 💌		Showing	g1-1of1	Previous Next
		Name 🗞	Servicing all requests Servicing only administration reques	sts	ate	Туре	Deployment Order
	•	⊞ 🍯 p2pd		Pn	, epared	Web Application	100
	Insta	II Update Delete	Start 🖃 Stop 💌	1	Showing	g 1 - 1 of 1	Previous Next

In the drop down menu, select "Servicing all requests".



	Start Application Assistant				
$\boldsymbol{\zeta}$	Yes No				
	Start Deployments				
	You have selected the following deployments to be started. Click 'Yes' to continue, or 'No' to cancel.				
	■ p2pd				
	Yes No				

You will be asked to confirm that you wish to start the application. Click the Yes button to start the application.

		Connected to: cognos8	🟠 Home	Log Out	Preferences	Help	AskBE/	
Home > Sumr	nary of Servers	> Summary of Deployments > p2pd	> Summary of	Deployments	5			
Message	s							
🗹 Star	t requests ha	ave been sent to the selected De	ployments.					
Summary	of Deployr	nents						
Control	Monitoring							
This pag	e displays a	list of J2EE Applications and star	ndalone applica	tion modules	: that have be	en install	ed to	
this dom	ain. Installec	l applications and modules can b	be started, stop	ped, updated	d (redeployed), or dele	ted	
from the	domain by f	irst selecting the application nar	ne and using th	e controls or	n this page.			
Lo instal	l a new annl	ication or module for deploymer	t to targets in t	his domain.	click the Insta	all hutton.		
lo instal	ll a new appl	ication or module for deploymer	nt to targets in f	his domain,	click the Insta	all button.		
lo instal	ll a new appl	ication or module for deploymer	nt to targets in f	his domain,	click the Insta	all button.		
Deploy	ll a new appl ments	ication or module for deploymer	nt to targets in 1	his domain, i	click the Insta	all button.		
Deploy	II a new appl	ication or module for deploymer	it to targets in f	his domain, Showir	click the Instance	all button. Previous	Next	
Deploy	ments	ication or module for deploymer	nt to targets in t	his domain, Showir State	click the Instance of the Inst	Previous Deployi Order	Next	
Deploy	II a new appl	ication or module for deploymer	nt to targets in f	his domain, Showir State Active	ng 1 - 1 of 1 Type Web Application	Previous Deployi Order 100	Next ment	

The request will be sent to Node Manager and the status of the application will become Active.

3.3 Post Deployment Configuration

3.3.1 Performance

There is a slight UI difference in the Administration Console between WebLogic Server 7.0.x and 8.1.x. The UI changes are more significant for version 9.x.



3.3.1.1 WebLogic 8.1.x

3.3.1.1.1 Servlet Reload Setting

The Servlet Reload setting defines whether a WebLogic Server will check to see if a servlet has been modified, and if it has been modified, reloads it. The -1 value tells the server never to check the servlets, 0 tells the server to always check the servlets, and the default is to check each 1 second.

A value specified in the console will always take precedence over a manually specified value. If the reload setting has not been set do the following.

Set the reload period for the Web application to -1. Apply the change.

reportnet> Web Applications> p2pd	"
Connected to : wotthongj-2k :7001 You are logged in as : system <u>Logout</u>	
Configuration Targets Deploy Monitoring Testing Notes	
General Descriptor	
This page allows you to define the configuration of the application deployment descriptor file that is associated with this Web application module.	
Session Cookie Max Age Secs: -1	
The life span of the session cookie (in seconds) after which it expires on the client.	
Session Invalidation Interval Secs: 60	
The time (in seconds) that WebLogic Server waits between doing house-cleaning checks for timed-out and invalid sessions, and deleting the old sessions and freeing up memory.	J
Session Timeout Secs: 3600	
The amount of time (in coconde) that a coccion can remain inactive before it is invalidated.	
Servlet Reload Check Secs: -1	
The amount of time (in seconds) that WebLogic Server waits to check if a servlet was modified and needs to be reloaded.	

3.3.1.1.2 Modifying Default Thread Count

The default number of threads available to Execute Queues is 15 in Development mode. In Production mode the default is 25.

The thread count determines the number of simultaneous operations that can be performed by applications that use the specified execute queue. By default, all applications use the execute queue named default. You can create additional queues to exercise more control over the resources that your applications use.

To modify the default execute queue thread count using the Administration Console:

- 1. Start the Administration Server if it is not already running.
- 2. Access the Administration Console for the domain.
- 3. Expand the Servers node in the left pane to display the servers configured in your domain. Rightclick the name of the server instance that contains the execute queue you want to configure, and then select View Execute Queues on the pop-up menu to display a table of execute queues that can be modified.





Note: You can only modify the default execute queue for the server or a user-defined execute queue.

4. In the Name column, click directly on the default execute queue name to display the Configuration tab for modifying execute queues.

4	cognos8> Servers> CM_server> Execute Queue	3
	Configuration Monitoring	
	Requests to a WebLogic Server instance are placed in an execute queue. Each request is assigned to a thread within the queue that performs the work. By default, a new WebLogic Server instance is configured with a default execute queue, weblogic.kernel.default, that contains 15 threads. In addition, WebLogic Server provides two other pre-configured queues: weblogic.admin.HTTP and weblogic.admin.RTI. Because these queues are reserved for communicating with the Administrative traffic, you cannot reconfigure them. Unless you configure additional execute queues and assign applications to them, Web applications and RMI objects use weblogic.kernel.default.	
	Customize this view	
<	Name Queue Length Thread Priority Thread Count weblogic.kernel.Default 5536 5 15 15	

5. On the Configuration Tab, locate the Thread Count value and increase or decrease it, as appropriate. The appropriate value depends on the resources available on your machine. You are limited by the power of your processor and the available memory which is consumed by each thread.

Note: if the yellow icon is flashing the server must be stopped and restarted.



cognos8>	Servers> CM_server> Execute	e Queue> weblogic.kernel.Default 🛛 🕺 🛱 🗰 🌾							
Connected to :	localhost :7001 You are logg	ed in as : system <u>Logout</u>							
Configuration	Configuration Notes								
Requests the work.f contains1 weblogic you canno objects us this server	to a WebLogic Server instance are place By default, a new WebLogic Server inst 5 threads. In addition, WebLogic Serve admin.RMI. Because these queuest t reconfigure them. Unless you configu e weblogic.kernel.default.Thi , or to edit an existing execute queue.	ced in an execute queue. Each request is assigned to a thread within the queue that performs ance is configured with a default execute queue, weblogic.kernel.default, that r provides two other pre-configured queues: weblogic.admin.HTTP and s are reserved for communicating with the Administration Console and for administrative traffic, re additional execute queues and assign applications to them, Web applications and RMI s page allows you to configure a new, user-defined execute queue for use with applications on							
	Name:	weblogic.kernel.Default							
	The name of this execute queue.								
⚠	Queue Length:	65536							
	The maximum number of simultaneou	is requests that this server can hold in the queue.							
Δ	Queue Length Threshold Percent:	90							
	The percentage of the Queue Length	size that can be reached before this server indicates an overflow condition for the queue.							
Δ	Thread Count:	100							
	The number of threads assigned to th	is queue.							
	Threads Increase:	0							
	The number of threads to be added to	the queue when an overflow condition occurs.							
Δ	Threads Maximum:	400							
	The maximum number of threads that count in the queue in response to cor	this queue can have; this value prevents WebLogic Server from creating an overly high thread ntinual overflow conditions.							
Δ	Threads Minimum:	5							

6. Click Apply to save your changes. Restart the server to enable the new settings.

For more information regarding modifying the thread count and other performance tuning options, consult the WebLogic documentation. The following link may be useful.

http://e-docs.bea.com/wls/docs81/perform/WLSTuning.html#1139296

3.3.1.2 WebLogic 9.0.0

3.3.1.2.1 Servlet Reload Setting

The Servlet Reload setting defines the amount of time in seconds WebLogic Server waits to check if a servlet has been modified, and if it has been modified, reloads it. The -1 value tells the server never to check the servlets, 0 tells the server to always check the servlets, and the default is to check each 1 second.

A value specified in the console will always take precedence over a manually specified value. If the reload setting has not been set do the following.

- 1. Login to the Administration Console and stop the Managed Server instance hosting the p2pd application.
- 2. Navigate to the Summary of Deployments and select the p2pd application.
- 3. In the Setttings for p2pd view, select the Configuration tab. Click the Lock & Edit button to enter Edit mode.
- 4. Set the Servlet reload check period to -1. Save the change.



5. The Save Deployment Plan Assistant appears. Select p2pd and click Finish. Click the Activate Changes button.

erview Configuration Secur	ity Targets Con	Itrol Testing Monitoring Notes
Save In this page, you define the c	onfiguration of the	application deployment descriptor file that is associated with this Web application mod
Session cookies max age (in seconds):	-1	The life span of the session cookie (in seconds) after which it expires on the client. More Info
Session Invalidation Interval (in seconds):	60	The time (in seconds) that WebLogic Server waits between doing house-cle checks for timed-out and invalid sessions, and deleting the old sessions and freeing up memory. More Info
Session Timeout (in seconds):	3600	The amount of time (in seconds) that a session can remain inactive before invalidated. More Info
🗆 Debug Enabled		Specifies whether to add JSP line numbers to generated class files to aid in debugging. More Info
Maximum in-memory Sessions:	-1	The maximum number of sessions to retain in memory More Info
Monitoring Attribute Name:		The monitoring attribute. More Info
🗆 Index Directory Enabl	ed	Specifies whether the target should automatically generate an HTML director listing if no suitable index file is found. More Info
Index Directory Sort By:		Specifies the way in which index directories are sorted. More Info
Servlet Reload Check (in seconds):	-1	The amount optime (in seconds) that WebLogic Server waits to check if a s was medified and needs to be reloaded. More Info
Resource Reload Check (in seconds):	0	The amount of time (in seconds) that WebLogic Server waits to check if a resource was modified and needs to be reloaded. More Info
C Session Monitoring Er	abled	Specifies whether runtime MBeans will be created for session monitoring. M Info
Minimum Native File Size:	0	The minimum native file size. More Info

3.3.1.2.2

Modifying Default Thread Count

In WebLogic 9.0, Work Managers are introduced to help manage workload on Managed Servers. Work is prioritized and threads are allocated based on an execution model that takes into account administrator-defined parameters and actual run-time performance and throughput.

WebLogic Server now uses a single thread pool, in which all types of work are executed. Work is prioritized based on rules defined by the administrator, and run-time metrics, including the actual time it takes to execute a request and the rate at which requests are entering and leaving the pool.

The common thread pool changes its size automatically to maximize throughput. The queue monitors throughput over time and based on history, determines whether to adjust the thread count. For example, if historical throughput statistics indicate that a higher thread count increased throughput, WebLogic





increases the thread count. Similarly, if statistics indicate that fewer threads did not reduce throughput, WebLogic decreases the thread count. This new strategy implemented by BEA is meant to make it easier for administrators to allocate processing resources and manage performance, avoiding the effort and complexity involved in configuring, monitoring, and tuning custom executes queues.

To manage work in your applications, you define one or more of the following Work Manager components:

- Fair Share Request Class:
- Response Time Request Class:
- Min Threads Constraint:
- Max Threads Constraint:
- Capacity Constraint
- Context Request Class

There are three types of Work Managers, each one characterized by its scope and how it is defined and used. They are:

- The default Work Manager
- Global Work Managers
- Application-scoped Work Managers

To handle thread management and perform self-tuning, WebLogic Server implements a default Work Manager. This Work Manager is used by an application when no other Work Managers are specified in the application's deployment descriptors.

In many situations, the default Work Manager may be sufficient for most application requirements. WebLogic Server's thread-handling algorithms assign each application its own fair share by default. Applications are given equal priority for threads and are prevented from monopolizing them.

You can override the behaviour of the default Work Manager by creating and configuring a global Work Manager called default. This allows you to control the default thread-handling behaviour of WebLogic Server.

Refer to the link below for more information regarding Work Managers.

http://e-docs.bea.com/wls/docs91/config_wls/self_tuned.html

3.3.1.2.2.1

Enabling Execute Queues in WebLogic 9

WebLogic Server 8.1 used Execute Queues to handle thread management, allowing you to create threadpools to determine how workload was handled. WebLogic Server 9 still provides Execute Queues for backward compatibility, primarily to facilitate application migration. However, new application development should utilize Work Managers to perform thread management more efficiently.

You can enable Execute Queues in the following ways:

• Using the command line option

-Dweblogic.Use81StyleExecuteQueues=true

• Setting the Use81StyleExecuteQueues property via the Kernel MBean in config.xml.

Enabling Execute Queues disables all Work Manager configuration and thread self tuning. Execute Queues behave exactly as they did in WebLogic Server 8.1. Refer to the link below for more information regarding user-defined execute queues.



http://e-docs.bea.com/wls/docs91/perform/appb_queues.html#1042349

When enabled, Work Managers are converted to Execute Queues based on the following rules:

- If the Work Manager implements a minimum or maximum threads constraint, then an Execute Queue is created with the same name as the Work Manager. The thread count of the Execute Queue is based on the value defined in the constraint.
- If the Work Manager does not implement any constraints, the the global default Execute Queue is used.

When an application is migrated from WebLogic Server 8.1, any Execute Queues defined in the server configuration before migration will still be present. WebLogic Server does not automatically convert the Execute Queues to Work Managers.

When an 8.1 application implementing Execute Queues is deployed on WebLogic Server 9.x, the Execute Queues are created and used handle thread management for requests. However, only those requests whose dispatch-policy maps to an Execute Queue will take advantage of this feature.

To modify the default execute queue thread count using the Administration Console:

- 1. Start the Administration Server if it is not already running and login to the Administration Console for the domain.
- If you have not already done so, in the Change Center of the Administration Console, click Lock & Edit.
- 3. In the left pane of the console, expand Environment > Servers.
- 4. On the Summary of Servers page, select the server instance for which you will configure thread detection behavior.
- 5. On the Configuration > Queues tab, select the execute queue for which you will modify the default thread count.

Note: You can only modify the default execute queue for the server or a user-defined execute queue.

- 5. Locate the Thread Count value and increase or decrease it, as appropriate.
- 6. Click Save.
- 7. To activate these changes, in the Change Center of the Administration Console, click Activate Changes. Not all changes take effect immediately—some require a restart.
- 8. You must reboot the server to use the new thread detection behavior values.

3.4 Verify the Deployed Application

Once the deployment has completed successfully, you should see a message stating "The dispatcher is ready to process requests" in the Managed Server's console, if started via the startup script. This indicates that CM has started and the Dispatcher for Cognos 8 has been registered to CM and has started. You should also see an active BIBusTKServerMain process running when consulting the active processes on the machine. Use the appropriate utility for your OS to verify this.



ex C:\WINDOWS\system32\cmd.exe	_ 🗆 🗵
his server is being started as a dependent managed server.> <aug 11:58:24="" 2005="" 25,="" am="" edt=""> <info> <management> <bea-141107> <ve ic Server 8.1 SP3 Tue Jun 29 23:11:19 PDT 2004 404973 WebLogic XMLX Module 8.1 SP3 Tue Jun 29 23:11:19 PDT 2004 404973 > <aug 11:58:24="" 2005="" 25,="" am="" edt=""> <info> <configuration management=""> <h< td=""><td>rsion: WebLog</td></h<></configuration></info></aug></ve </bea-141107></management></info></aug>	rsion: WebLog
onnecting to the administration server http://localhost:7001 to ret	rieve the ini
tial configuration./ KAug 25, 2005 11:58:26 AM EDT> <notice> <log management=""> <bea-17001 r log file D:\bea\8.1.3\user_projects\domains\cognos8\crn\crn.log i</bea-17001 </log></notice>	9> <the serve<br="">s opened. All</the>
server side log events will be written to this file.> <aug 11:58:30="" 2005="" 25,="" am="" edt=""> <notice> <security> <bea-090082> <se liging using security wealm pruvealm ></se </bea-090082></security></notice></aug>	curity initia
KAug 25, 2005 11:58:30 AM EDT> <notice> <weblogicserver> <bea-00032 WebLogic Managed Server "crn" for domain "cognos8"></bea-00032 </weblogicserver></notice>	8> <starting< td=""></starting<>
(Aug 25, 2005 11:58:35 AM EDT> <notice> <weblogicserver> <bea-00035 istenThread Default" listening on nort 2021, in address * *></bea-00035 </weblogicserver></notice>	5> <thread "l<="" td=""></thread>
KAug 25, 2005 11:58:35 AM EDT> <notice> <weblogicserver> <bea-00033 ebLogic Managed Server "crn" for domain "cognos8" running in Develo</bea-00033 </weblogicserver></notice>	2> <started w<br="">pment Mode></started>
(Aug 25, 2005 11:58:35 AM EDT> <notice> <weblogicserver> <bea-00036 arted in PUBLING mode></bea-00036 </weblogicserver></notice>	0> <server st<="" td=""></server>
The dispatcher is ready to process requests.	-

Note: The server console output to the screen is only available when the server instances are started using the scripts. They are not available if the server instances are started via the Administration Console using Node Manager.

To verify that Content Manager has started, you can check the cogserver.log or open a browser and type in the Content Manager URI. The default is <u>http://localhost:<port_number>/p2pd/servlet</u> if you used p2pd as the context root.

For example, the Managed Server to which IBM Cognos 8 has been deployed is running on port number 7021. To verify that CM is running, you would enter <u>http://localhost:7021/p2pd/servlet</u>. If the Content Store was successfully created and CM started, then you should see a page similar to the figure below.



One last test to verify that the deployment was successful is to access the Portal. Open a new browser session and enter the URL for IBM Cognos Connection. The default is <u>http://localhost/cognos8</u>, if you are using a web server. IBM Cognos Connection should open and you should see the Welcome page.



If a 3rd party namespace (eg. LDAP) was configured in Cognos Configuration, then you would be prompted with the login page.





Undeploy IBM Cognos 8

Complete the following steps to remove IBM Cognos 8 from your WebLogic Server installation.

- 1. While the WebLogic Server processes are running, open the Administration Console and login.
- 2. In the left pane of the Administrator Console, under the domain, expand Deployments and then highlight Web Applications. In the right pane, click on the p2pd application.





3.5

3. Click on the Deploy tab. For WebLogic 8.1.x, click on the Stop button.

4	cognos8> Web Applications> p2pd							
(Connected to: localhost :7001 You are logged in as: system <u>Logout</u>							
ļ	Confi	guration	Targets	Deploy	Monitoring	Testing Notes	_	
This page allows you to view the deployment status of each Web application module, and to stop or redeploy individual Web application modules. (To configure additional deployment targets for these Web application modules, click the Targets tab.)								
		Module Status	Target	Target Type	Status of Last Action	Actions		
		Active	<u>crn</u>	Server	<u>Success</u>	Stop Redeploy		

Wait for the action to complete.

9	cognos8> Web Applications> p2pd							
C	connec	cted to : local	lhost :7001	Yo	⊔ are logged in	as: sy	/stem	l <u>Logout</u>
ļ	Confi	guration Ta	argets D	eploy M	onitoring Te	sting	Notes	
	Thi mo cor clic	s page allows dule, and to s figure additio k the Targets	you to viev top or rede nal deployr tab.)	w the deploy ploy individunent targets	ment status of Jal Web applica for these Web	feach V ation mo applica	Veb applic odules. (To ition modu	ation D Iles,
		Module Status	Target	Target Type	Status o Last Actio	f µ on	Actions	
		Inactive	<u>cm</u>	Server	<u>Success</u>		Deploy	
								_

4. Once the application has been rendered inactive, navigate to the Targets tab. Remove the Managed Server as a target by unchecking the checkbox next to the Managed Server.

cognos8> Web Ap	plications> p2pd	#□?
Connected to : localhos	st :7001 You are logged in as : system <u>Logou</u>	<u>t</u>
Configuration (Targ	ets peploy Monitoring Testing Notes	
This page allows you Web application mo deployed at server s if you change the ta application module u immediately without	leploy this dule will be ou wish, but / the Web ion module	
	Independent Servers	
Torreto	adminserver	
l'argets:	rrn →	
	□ gateway	
		Apply



5. In the right pane, click on <domain name> -> Deployments -> Web Applications. Click on the trash can for the p2pd application to remove it from the configuration.



You will be prompted to confirm that you wish to remove the application, select Yes and continue.

You will see a message written in the Managed Server console that indicates that CM is shutting down with active threads.

CM shutdown with active threads: CRN.CM.MultipleCMsSyncThread

This is normal and no action is required, other than shutting down the Managed Server instance.



Note: You can remove the application from the configuration without completing the initial cleanup steps, but an error message will be written to the Administration Server. The errors are not serious in nature. You should restart the WebLogic processes to release memory and threads.



4 Distributed Server Deployment

The following steps will describe setting up each IBM Cognos 8 component on separate Managed Server instances.

If deploying each IBM Cognos 8 component to a separate server, you will need to have WebLogic Server installed on each machine where you wish to run a IBM Cognos 8 component. You should make note of the Managed Server name and port number to be used on each machine.

If deploying each component on the same WebLogic Server install, make sure you have created Managed Server instances for each component and make note of the names and port numbers. You cannot deploy each component to the same Managed Server instance, since classes can only be loaded once.

Content Manager (CM) must be up and running before configuring the Application Tier Components (ATC) or Gateway (GW) distributed installs using IBM Cognos Configuration. The context root for CM and ATC must be the same. In this example, all the necessary steps to start the CM instance will be completed prior to performing any ATC or GW steps.

For this example, we will install each IBM Cognos 8 component in a separate location on the machine.

- Content Manager is installed in D:\cognos\cm
- Application Tier Components is installed in D:\cognos\atc
- Gateway is installed in D:\cognos\gw

Once installed, do not rename or change the installation directories for the IBM Cognos 8 components.

The WebLogic domain for this example is cognos8 and has the following configuration.

- Administration Server on port 7001
- CM_server on port 7011
- ATC server on port 7021
- Servlet Gateway on port 7080

Each Cognos component must be deployed to a separate Managed Server instance for distributed scenarios. You cannot deploy two IBM Cognos applications to the same Managed Server instance.

The same JDK must be used for configuring IBM Cognos 8 components and running the WebLogic Server instances. You cannot mix versions.





The steps to undeploy the IBM Cognos 8 components are the same as those used for the single server deployment. The only difference is that each component must be undeployed from its Managed Server instance.

4.1 Content Manager

You should have Content Manager (CM) installed in a separate location. The CM component is the first component to be configured and deployed. You cannot continue onto the other IBM Cognos 8 components until CM is up and running.

The deployment steps followed in the Administration Console are the same as those used for a single server deployment.

4.1.1 Pre-deployment Configuration

WebLogic Server should be started prior to starting the deployment. You will not be able to access the Administration Console if the Administration Server isn't running. Make sure the Managed Server instance has been created and configured.

Each IBM Cognos component must be deployed to a separate Managed Server instance for distributed scenarios.

4.1.1.1 Cognos 8 Setup

For detailed information regarding the configuration of IBM Cognos 8, refer to the <u>Application Servers –</u> <u>Installing and Configuring the IBM Cognos Application</u> document and the IBM Cognos 8 user documentation.

The steps to configure and deploy CM are similar to those for a full single-server install.

- The same environment variables need to be set.
- The JDK used when running Cognos Configuration **must** be the same as the one used for running WebLogic Server.
- The steps outlined in ASCG05 **must** be completed prior to deploying the IBM Cognos 8 application. For example, database clients must be configured and the security provider file must be copied to the appropriate location.
- The port number used by the IBM Cognos 8 Content Manager is the Managed Server port that was set when the domain was created using the Domain Configuration Wizard or when the new Server was added to the domain configuration via the Administration Console. Do not use the Administration Server port.



_			
E	nvironment - Group Properties		
	Name		Value
	Deployment files location		/deployment
	Data files location		/data
*	Map files location		/maps
	Temporary files location		/temp
	Encrypt temporary files?		False
*	Format specification file location		/configuration/cogformat.xml
	Sort buffer size in MB		4
	Dispatcher Settings		
*	External dispatcher URI	8	http://servername: 7011/p2pd/servlet/dispatch
*	Internal dispatcher URI	3	http://servername: 7011/p2pd/servlet/dispatch
	Other URI Settings		
*	Dispatcher URI for external applications	3	http://servername: 7011/p2pd/servlet/dispatch
*	Content Manager URIs	3	http://servername: 7011/p2pd/servlet
	Font Settings		
*	Physical fonts locations	3	/bin/fonts;C:\WINDOWS\FONTS
	Physical fonts map		<click button="" edit="" the=""></click>

- The application was created using the Build Application Wizard. You should use the Expand files into a folder option.
- The database instance to be used for the IBM Cognos 8 Content Store must be created and available. The user and password must also be created with suitable privileges.

4.1.2 Deployment

The deployment sequence in the Administration Console is the same as the steps for a single server setup. The difference here is that a deployment will occur for each component. Only the WebLogic 8.1.x dialogs will be displayed for this example. Refer to the single server steps for the WebLogic 7.0.x dialogs.

The default context root, p2pd, will be used for this example. It is important that you use the same context root for the CM and ATC component applications. The Servlet Gateway can use a different context root.

- WebLogic Server should already be running. Start the WebLogic Console from the browser and login. The default address is <u>http://localhost:7001/console</u>. You can also use the server name. For example, <u>http://servername:7001/console</u>. User the user and password created when you created the domain.
- 2. Under Deployments, select the Web Applications Modules link. Click the Deploy a new Web Application Module link.





3. Browse to the p2pd application and select it. In this example, it is under D:\cognos\cm. Click on Target Module button.

cognos8> Web Module	Applications> Deploy a new Web Application 🛛 🕇 🖶 🖀 📕
Connected to : loca	ilhost :7001 You are logged in as : system <u>Logout</u>
Deploy a Web	Application Module
Select the arc	hive for this Web application module
Select the file	path that represents your archive or exploded archive directory.
Note: Only vali you should up valid descripto	d file paths are shown below. If you do not find what you are looking for, oad your file(s) and/or confirm your Web application module contains rs.
Lo	cation: localhost \ D: \ cognos \ cm
	bin
	E cps
	sds

4. Check the target server. In this example, the target server is CM_server. Click on Continue

Deploy a \	Neb Application Module	
Select targ	gets for this Web application module	
Select the Application	servers and/or clusters on which you want to deploy your ne n module.	ew Web
	Independent Servers	
	□ adminserver	
	E ATC server	
	CM_server	
	Servlet_Gateway	
		Continue

5. Select the "I will make the Web Application module accessible from the following location" option button. Under the Identify section, the default name of the application is p2pd. Change this to cm. Each application must be identified with a unique name. This does not change the context root of the application. Click the Deploy button to continue.



cognos8> Web Applications> Deploy a new Web Application Module 🔒 🖃 ? 😤 a 🕡
Deploy a Web Application Module
Review your choices and deploy
Deployment Targets
Your Web Application module will be deployed to the following locations:
p2pd will be deployed to
Servers - CM_server
Source Accessibility
During runtime, a targeted server must be able to access this Web Application module's files. This access can be accomplished by either copying the Web Application module onto every server, or by defining a single location where the files exist.
C Copy this Web Application module onto every target for me.
During deployment, the files in this Web Application module will be copied automatically to each of the targeted locations.
• will make the Web Application module accessible from the following location:
D.\cognos\cm\p2pd
Provide the location from where all targets will access this Web Application modeles files. You must ensure the Web Application modeles files, and the each target can reach the location.
Identity
Enter a name to be used to identify this Web Application module.
Name: cm
The name of this type application deployment.

Note: If you use the default option "Copy this Web Application module onto every target for me", the application will be copied to the managed server target. If you choose to use this option, you don't need to extract the p2pd.war file into a separate location. However, you will not be able to set the Servlet Reload Check Secs period property for performance enhancement.

6. The Deploy option should occur automatically if not click the Deploy button. This may take a few minutes. Once the deployment has completed, the status should be "Success".

9	ogn	os8> Wel	o Application	ns> cm			#=?	
C	conne	cted to : loc	alhost :7001	You	are logged in as :	system <u>Logout</u>		
ļ	Confi	guration	Targets Dep	loy Mo	nitoring Testin	g Notes		
	Thi red We	is page allov leploy individ eb applicatio	vs you to view th Jual Web applic: n modules, clict	ne deployn ation modu k the Targe	nent status of eac ules. (To configure ets tab.)	h Web application modu additional deployment t	le, and to sto argets for the	por se
		Module Status	Target	Target Type	Status of Last Action	Actions		
		Active	<u>CM_server</u>	Serve	Success	Stop Redeploy		
					\smile		-	



Post Deployment Configuration

The post deployment steps are the same as those used for the single server installation.

4.2

4.2.1 Verify the Deployed Application

Once the deployment has completed successfully, you should see a message stating "The dispatcher is ready to process requests" in the Managed Server's console. This indicates that CM has started and the Dispatcher for IBM Cognos 8 has been registered to CM and has started. You should also see an active BIBusTKServerMain process running when consulting the active processes on the machine. Use the appropriate utility for your OS to verify this.

📾 C:\WINDOWS\system32\cmd.exe	l ×
his server is being started as a dependent managed server.> <aug 11:58:24="" 2005="" 25,="" am="" edt=""> <info> <management> <bea-141107> <version: td="" weblog<=""><td>9 🔺</td></version:></bea-141107></management></info></aug>	9 🔺
ic Server 8.1 SP3 Tue Jun 29 23:11:19 PDT 2004 404973 WebLogic XMLX Module 8.1 SP3 Tue Jun 29 23:11:19 PDT 2004 404973 >	
<pre><aug 11:58:24="" 2005="" 25,="" am="" edt=""> <info> <configuration management=""> <bea-150015> <(</bea-150015></configuration></info></aug></pre>	<u>c</u>
tial configuration.	
<pre><aug 11:58:26="" 2005="" 25,="" am="" edt=""> <notice> <log management=""> <bea-170019> <the al.<="" file_d:\bea\8.1.3\user_projects\domains\cognos8\crn\crn.log="" is="" log="" opened.="" pre="" r="" serve=""></the></bea-170019></log></notice></aug></pre>	e 1
_ server side log events will be written to this file.> <aug 11:58:30="" 2005="" 25,="" am="" edt=""> <notice> <security> <bea-090082> <security initia<="" td=""><td>a</td></security></bea-090082></security></notice></aug>	a
lizing using security realm myrealm.> <aug 11:58:30="" 2005="" 25,="" am="" edt=""> <notice> <weblogicserver> <bea-000328> <starting< td=""><td></td></starting<></bea-000328></weblogicserver></notice></aug>	
WebLogic Managed Server "crn" for domain "cognos8"> <aug 11:58:35="" 2005="" 25,="" am="" edt=""> <notice> <weblogicserver> <bfa-000355> <thread "<="" td=""><td>T.</td></thread></bfa-000355></weblogicserver></notice></aug>	T.
istenThread.Default" listening on port 7021, ip address *.*>	Ĩ
ebLogic Managed Server "crn" for domain "cognos8" running in Development Mode>	Ť
KAug 25, 2005 11:58:35 of knt> (Notice) (WebLogicServer) (BEA-000360) (Server st arted in RUNNING mode)	t
The dispatcher is ready to process requests.	-

Note: The server console output to the screen is only available when the server instances are started using the scripts. They are not available if the server instances are started via the Administration Console using Node Manager.

To verify that Content Manager has started, you can check the cogserver.log or open a browser and type in the Content Manager URI. The default is <u>http://localhost:<port_number>/p2pd/servlet</u> if you used p2pd as the context root.

For example, the Managed Server to which Content Manager has been deployed is running on port number 7021. To verify that CM is running, you would enter <u>http://localhost:7021/p2pd/servlet</u>. If the Content Store was successfully created and CM started, then you should see a page similar to the figure below.

IBM Cognos 8

Content Manager

Build: 8.4.2539.0 Start time: Wednesday, September 9, 2009 11:55:31 AM EDT Current time: Friday, September 18, 2009 10:31:33 AM EDT State: Running

If CM is not running, you must rectify the problem before you can continue with the setup of the other IBM Cognos 8 components.



4.3 Application Tier Components

You should have the Application Tier Components (ATC) installed in a separate location. The ATC component is the second component to be configured and deployed before the Gateway component can be configured and deployed. You cannot configure ATC until CM is up and running. You cannot configure GW until ATC has been configured and deployed.

4.3.1 Pre-deployment Configuration

WebLogic Server should be started prior to starting the deployment. You will not be able to access the Administration Console if the Administration Server isn't running. Make sure the Managed Server instance has been created and configured.

Each Cognos component must be deployed to a separate Managed Server instance for distributed scenarios.

4.3.1.1 IBM Cognos 8 Setup

For detailed information regarding the configuration of IBM Cognos 8, refer to the <u>Application Servers –</u> <u>Installing and Configuring the IBM Cognos Application</u> document and the IBM Cognos 8 user documentation.

The steps to configure and deploy ATC are similar to those for a full single-server install.

- The same environment variables need to be set.
- The JDK used when running IBM Cognos Configuration **must** be the same as the one used for running WebLogic Server.
- The steps outlined in ASCG05 **must** be completed prior to deploying the IBM Cognos 8 application. For example, database clients must be configured and the security provider file must be copied to the appropriate location.
- The port number used by the IBM Cognos 8 Dispatcher is the Managed Server port that was set when the domain was created using the Domain Configuration Wizard or when the new Server was added to the domain configuration via the Administration Console. Do not use the Administration Server port.

Er	wironment - Group Properties			
	Name		Value	
	Data files location		/data	
*	Map files location		/maps	
	Temporary files location		/temp	
	Encrypt temporary files?		False	
*	Format specification file location		/configuration/cogformat.xml	
	Sort buffer size in MB		4	
	Gateway Settings			
*	Gateway URI	8	http://servername:7080/ServletGateway/servlet/Gateway	
	Dispatcher Settings	Γ		١
*	External dispatcher URI	3	http://servername:7021/p2pd/servlet/dispatch	
*	Internal dispatcher URI	8	http://servername:7021/p2pd/servlet/dispatch	
	Other URI Settings			
*	Dispatcher URI for external applications	3	http://servername: 7011/p2pd/servlet/dispatch	/
*	Content Manager URIs	3	http://servername: 7011/p2pd/servlet	
	Font Settings			
*	Physical fonts locations	8	/bin/fonts;c .\WI NDOWS\FONTS	

- Make sure CM is running, before configuring ATC using the Cognos configuration tool. CM must also be running before starting the deployment in WebLogic Server.
- The application was created using the Build Application Wizard. You should use the Expand files into a folder option.

4.3.2 Deployment

The deployment sequence in the Administration Console is the same as the steps for a single server setup. The difference here is that a deployment will occur for each component. Only the WebLogic 8.1.x dialogs will be displayed for this example.

The default context root, p2pd, will be used for this example. It is important that you use the same context root for the CM and ATC component applications. The Servlet Gateway can use a different context root.

- WebLogic Server should already be running. Start the WebLogic Console from the browser and login. The default address is <u>http://localhost:7001/console</u>. You can also use the server name. For example, <u>http://servername:7001/console</u>. User the user and password created when you created the domain.
- 2. Under Deployments, select the Web Applications Modules link. Click the Deploy a new Web Application Module link. You should already have the CM application deployed and running.



cognos8> Web Applicatio	ns		Ə 🕇 🗖 📍 🗎
Connected to : localhost :7001	You are lo	ogged in as : system	l <u>Logout</u>
Configuration Monitoring			
A Web application module rep (JSPs), servlets, and HTML p WAR directory. A Web applic servers or clusters. Configurin domain enables WebLogic Se	presents a collec ages that are co ation module ca g and deploying erver to serve the	tion of Web resources ntained in a WAR (We n be deployed on one a Web application mo modules of the Web a	: such as JavaServer Pages tb Application Archive) file or or more targets, which can be dule in a WebLogic Server application to clients.
When one or more Web appli WebLogic Server domain, this them. To configure a Web app Application Module link.	cation modules : Web Applicatio plication module	are configured for deplo ns page displays key for deployment, click t	oyment in the current information about each of the Deploy a new Web
	plication Moc	lule	
Name Deployment Type	Context Root	Deployment Order	
cm Web Application	/p2pd	100	Û

3. Browse to the p2pd application and select it. In this example, it is under D:\cognos\atc. Click on Target Module button.

cognos8> Web A Nodule	pplications> Deploy a new Web Application 🛛 👘 👕 🍞 🏼 🖺
Connected to : localh	ost :7001 You are logged in as : system <u>Logout</u>
Deploy a Web /	Application Module
Select the arch	ive for this Web application module
Select the file pa	ath that represents your archive or exploded archive directory.
Note: Only valid you should <u>uploa</u> valid descriptors	file paths are shown below. If you do not find what you are looking for, ad your file(s) and/or confirm your Web application module contains 5.
Loca	ation: localhost \ <u>D:</u> \ cognos \ atc
	bin
	Cops (1)
	≥ p2pd
	sds

4. Check the target server. In this example, the target server is ATC_server. Click on Continue

cognos8> \ /lodule Connected to :	Web Applications> Deploy a new Web Application
Deploy a	Web Application Module
Select tar	gets for this Web application module
Select the Applicatio	servers and/or clusters on which you want to deploy your new Web on module.
	Independent Servers
	□ adminserver
	ATC_server
	CM_server
	□ Servlet_Gateway
	Continue



5. Select the "I will make the Web Application module accessible from the following location" option button. Under the Identify section, the default name of the application is p2pd. Change this to atc. Each application must be identified with a unique name. This does not change the context root of the application. Click the Deploy button to continue.

cognos8> Web Applications> Deploy a new Web Application Module 🕇 🗖 ? 😤 🛛 🍎 🔐
Connected to : localhost :7001 You are logged in as : system <u>Logout</u>
Deploy a Web Application Module
Review your choices and deploy
Deployment Targets
Your Web Application module will be deployed to the following locations:
p2pd will be deployed to
Servers - ATC_server
Source Accessibility
accomplished by either copying the Web Application module onto every server, or by defining a single location where the files exist. How should the source files be made accessible? Copy this Web Application module onto every target for me.
During deployment, the files in this Web Application module will be copied automatically to each of the targeted locations.
D:\cognos\atc\p2pd
Provide the location from where all targets will access this Web Application module's files. You must ensure the Web Application module's files exist in this location and that each target can reach the location.
Identity
Enter a name to be used to identify this Web Application module.
Name: atc
The name of this Web application deployment.

Note: If you use the default option "Copy this Web Application module onto every target for me", the application will be copied to the managed server target. If you choose to use this option, you don't need to extract the p2pd.war file into a separate location. However, you will not be able to set the Servlet Reload Check Secs period property for performance enhancement.

6. The Deploy option should occur automatically if not click the Deploy button. This may take a few minutes. Once the deployment has completed, the status should be "Success".





4.3.3 Post Deployment Configuration

The post deployment steps are the same as those used for the single server installation.

4.3.4 Verify the Deployed Application

Once the deployment has completed successfully, you should see a message stating "The dispatcher is ready to process requests" in the Managed Server's console. This indicates that the Dispatcher for the IBM Cognos 8 Application Tier Components has been registered to CM and has started. You should see an active BIBusTKServerMain process running when consulting the active processes on the machine. Use the appropriate utility for your OS to verify this.

🔤 C:\WINDOWS\system32\cmd.exe	
his server is being started as a dependent managed server.> <aug 11:58:24="" 2005="" 25,="" am="" edt=""> <info> <management> <bea-141107> <ve ic Server & 1 SP3 Tue Jun 29 23:11:19 PDT 2004 404973</ve </bea-141107></management></info></aug>	rsion: WebLog
WebLogic XMLX Module 8.1 SP3 Tue Jun 29 23:11:19 PDT 2004 404973 >	E0-1500153 /C
onnecting to the administration server http://localhost:7001 to ret	rieve the ini
<pre><ful></ful></pre> <pre><ful></ful></pre> <pre>Caug 25, 2005 11:58:26 AM EDT> <notice> <log management=""> <bea-17001< pre=""></bea-17001<></log></notice></pre>	9> <the serve<="" td=""></the>
r log file D:\bea\8.1.3\user_projects\domains\cognos8\crn\crn.log i server side log events will be written to this file.>	s opened. All
KAug 25, 2005 11:58:30 AM EDT> <notice> <security> <bea-090082> <security myrealm.="" realm="" security="" using=""></security></bea-090082></security></notice>	curity initia
(Aug Ž5, 2005 11:58:30 AM EDTŠ (Notice) (WebLogicServer) (BEA-00032) WebLogic Managed Server "crn" for domain "cognos8")	8> <starting< td=""></starting<>
<pre>KAug 25, 2005 11:58:35 AM EDT> <notice> <weblogicserver> <bea-00035 *="" 2001="" address="" default"="" in="" istenthwead="" listening="" on="" post=""></bea-00035></weblogicserver></notice></pre>	5> <thread "l<="" td=""></thread>
(Aug 25, 2005 11:58:35 AM EDT) (Notice) (WebLogicServer) (BEA-00033	2> <started td="" w<=""></started>
<pre>choose consistence contain cognoss running in Develo (Aug 25, 2005 11:58:35 AM EDT) (Notice) (WebLogicServer) (BEA-00036</pre>	pment node> 0> <server st<="" td=""></server>
arted in KUNNING mode≻ The dispatcher is ready to process requests.	
	_

Note: The server console output to the screen is only available when the server instances are started using the scripts. They are not available if the server instances are started via the Administration Console using Node Manager.

You can check the IBM Cognos 8 logs to verify that the Dispatcher has been registered and has started.

Another test to verify that the Dispatcher has started is to connect directly to the Dispatcher via a browser. Open a browser and type in the Dispatcher URI. If you used p2pd as the context root, the default is



<u>http://localhost:<port_number>/p2pd/servlet/dispatch/ext</u>. In this example, the address is <u>http://localhost:7021/p2pd/servlet/dispatch/ext</u>. You should see the Public Folders page. If you did not include the static webcontent when creating the application in the Build Application Wizard, the page will appear incomplete. This is normal.

🖉 Public Folders - Cognos Connection - Microsoft	Internet Explorer
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp	🦧
🕤 Back 🔪 🔁 👔 🎧 🔑 Search 😿 Fax	ronites 💐 Media 🛛 😥 ד 😓 📝 ד 🖵 🔞 🚉
Address http://localhost:7021/p2pd/servlet/dispatch	/ext?b_action=xts.run&m=portal/cc.xts&gohome= 💽 🔁 Go 🛛 Links 🎽
Cognos Connection Cognos Connection	Event Studio
	Home Home Options PreferencesHelp
Tab Menu Public Folders My Folders	× × Tools ×
Public Folders	
	Entries:
□ <u>Name</u>	Modified Actions
	No entries.
e Done	Local intranet

4.4 Servlet Gateway

You should have the Gateway (GW) installed in a separate location. The GW component is the last component to be configured and deployed once CM and ATC have been configured and deployed. You cannot configure ATC until CM is deployed and running, and you cannot not configure GW until ATC has been configured and deployed.

If you would prefer to use a web server instead of the Servlet Gateway, follow the steps outline in the IBM Cognos 8 user documentation.

4.4.1 Pre-deployment Configuration

WebLogic Server should be started prior to starting the deployment. You will not be able to access the Administration Console if the Administration Server isn't running. Make sure the Managed Server instance has been created and configured.

Each Cognos component must be deployed to a separate Managed Server instance for distributed scenarios. You cannot deploy two IBM Cognos applications to the same Managed Server instance. They must run on separate instances.



4.4.1.1 IBM Cognos 8 Setup

For detailed information regarding the configuration of IBM Cognos 8, refer to the <u>Application Servers –</u> <u>Installing and Configuring the Cognos Application</u> document and the IBM Cognos 8 user documentation.

The steps to configure and deploy the Servlet Gateway are similar to those for a full single-server install.

- The same environment variables need to be set.
- The JDK used when running Cognos Configuration **must** be the same as the one used for running WebLogic Server.
- The steps outlined in ASCG05 **must** be completed prior to deploying the IBM Cognos 8 application. For example, database clients must be configured and the security provider file must be copied to the appropriate location.
- The port number used by the IBM Cognos 8 Servlet Gateway is the Managed Server port that was set when the domain was created using the Domain Configuration Wizard or when the new Server was added to the domain configuration via the Administration Console. Do not use the Administration Server port. The Cognos Configuration for the Gateway component points to the Dispatcher URI for the ATC component.

Name	Value
Data files location	/data
Temporary files location	/temp
Encrypt temporary files?	False
Gateway Settings	
Gateway namespace	
* Dispatcher URIs for gateway	http://servername:7021/p2pd/servlet/dispatch/ext
* Controller URI for gateway	http://localhost:80/cognos8/controllerServer

- Make sure CM and ATC are running, before configuring the Gateway using the IBM Cognos Configuration tool. They must also be running before starting the deployment for the Servlet Gateway.
- The application was created using the Build Application Wizard. You should use the Expand files into a folder option.

4.4.2 Deployment

The deployment sequence in the Administration Console is the same as the steps for a single server setup. The difference here is that a deployment will occur for each component. Only the WebLogic 8.1.x dialogs will be displayed for this example. Refer to the single server steps for the WebLogic 7.0.x dialogs.

The default context root for the Servlet Gateway is ServletGateway. You can change this when creating the application in the Build Application Wizard of the IBM Cognos Configuration tool.

- WebLogic Server should already be running. Start the WebLogic Console from the browser and login. The default address is <u>http://localhost:7001/console</u>. You can also use the server name. For example, <u>http://servername:7001/console</u>. User the user and password created when you created the domain.
- 2. Under Deployments, select the Web Applications Modules link. Click the Deploy a new Web Application Module link. You should already have the CM and ATC applications deployed and running.





3. Browse to the ServletGateway application and select it. In this example, it is under D:\cognos\gw. Click on Target Module button.

cognos8> Web Applications> Deploy a new Web Application 👘 🗗 📍 🏙 🗛 🌔										
Connected to : localhost :7001 You are logged in as : system Logout										
	Deploy a Web Application Module									
Select the archive for this Web application module										
	Select the file path that represents your archive or exploded archive directory.									
	Note: Only valid file paths are shown below. If you do not find what you are looking for, you should <u>upload your file(s)</u> and/or confirm your Web application module contains valid descriptors.							, you		
	Location: localhost \ D: \ cognos \ gw									
		bin								
		🗅 <u>con</u>	figurati	<u>on</u>						
		🗅 <u>cm</u>	<u>11mr2</u>							
C ServletGateway										
		tem	D							

4. Check the target server. In this example, the target server is Servlet Gateway. Click on Continue

cognos8> Web Applications> Deploy a new Web Application 🛛 📫 🚍 🛟							
Connected to : localhost :7001 You are logged in as : system <u>Logout</u>							
	Deploy a V	Veb Application Module					
	Select targ	jets for this Web application module					
Select the servers and/or clusters on which you want to deploy your new W Application module.							
	Independent Servers						
□ adminserver							
	ATC_server						
		CM_server					
	6	I▼ Servlet_Gateway					
		Continue					



5. Select the "I will make the Web Application module accessible from the following location" option button. Under the Identify section, the default name of the application is ServletGateway. You can change the identifier name or leave the default. Click the Deploy button to continue.

cognos8> Web Applications> Deploy a new Web Application Module 🕂 🗗 ? 😤 🚺 🚺 🚺 🚺				
Deploy a Web Application Module				
Review your choices and deploy				
Deployment Targets				
Your Web Application module will be deployed to the following locations:				
ServletGateway will be deployed to				
Servers - Servlet_Gateway				
Source Accessibility				
During runtime, a targeted server must be able to access this Web Application module's files. This access can be accomplished by either copying the Web Application module onto every server, or by defining a single location where the files exist.				
How should the source files be made accessible?				
$^{ m C}$ Copy this Web Application module onto every target for me.				
During deployment, the files in this Web Application module will be copied automatically to each of the targeted locations.				
I will make the Web Application module accessible from the following location:				
D. (cognos) gwyserviercatieway				
Application module's files exist in this location and that each target can reach the location.				
Identity				
Enter a name to be used to identify this Web Application module.				
Nante: ServletGateway				
The name of this Web application deployment.				

6. The Deploy option should occur automatically if not click the Deploy button. This may take a few minutes. Once the deployment has completed, the status should be "Success".





4.4.3

Post Deployment Configuration

The post deployment steps are the same as those used for the single server installation.

4.4.4 Verify the Deployed Application

Access the Portal to verify that the deployment of the Servlet Gateway was successful. Open a new browser session and enter the Gateway URI. The Gateway URI for the Servlet Gateway is http://<servername>:<port>/<context_root>/servlet/Gateway. For example, if the Context root is ServletGateway, and the managed server is on the localhost using port 7080, then the Gateway URI for the Servlet Gateway would be http://localhost:7080/ServletGateway/servlet/Gateway. IBM Cognos Connection should open and you should see the Public Folders page.

IBM Cognos Connection	Log Off	Dov Art in Launch v ? '
Public Folders	My Folders	•
Public Folders		i 📽 👪 👗 📭 🛍 🗙 i 🛃 🧃
	Entries	- 0
□ Name ♦	Modified 😝	Actions
	No entries.	

If a 3rd party namespace (eg. LDAP) was configured in Cognos Configuration, then you would be prompted with the login page.



🖉 Log on - Microsoft Internet Explorer
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp
🕓 Back 👻 🕤 👻 📓 🔥 🔎 Search 🛭 👷 Favorites 🛯 Media 🚱 🔗 🛸 🔪
Address 🗃 http://localhost:7080/ServletGateway/servlet/Gateway?b_a 💽 Go 🛛 Links 👌
Log on Help 🗙
Please type your credentials for authentication.
Namespace:
User ID:
Password:
OK Cancel Copyright (C) 2005 Cognos Incorporated. All rights reserved Cognos (R) is a trademark of Cognos Incorporated
🔊 Done 📃 🔛 Local intranet



5 Troubleshooting

5.1

```
Using a WAR file
```

For WebLogic Server deployment, you should select the expand the application files to a folder option when using the Build Application Wizard in Cognos Configuration. However, if for some reason you cannot expand the files to a folder, you can use a WAR file. Do not use an EAR file.

The following steps use the default application name, p2pd. The context root can be changed by using a different name when creating the war file or application directory. Just remember to change this in your Cognos Configuration, as well.

- 1. Create the p2pd.war file using the Build Application Wizard in Cognos Configuration. Note the location of the file.
- 2. Create a directory called p2pd in a location accessible by the WebLogic Server. For example, you want to place the application in D:\bea\user_projects\apps. You can create the folder in Explorer or open a command prompt, navigate to D:\bea\user projects\apps and type

mkdir p2pd

3. Extract the p2pd.war file to a directory accessible to WebLogic Server using the following command.

Important: You must run the command from the p2pd directory created in the previous step. A space and then a period are required at the end of the command.

For example,

```
%JAVA_HOME%\bin\jar xvfm "<cognos8_location>/p2pd.war"
```

Note: this may take 2 to 8 minutes.



You will see that the files are extracted to a directory called WEB-INF under the p2pd directory. Once this action is complete, you can proceed with the IBM Cognos 8 deployment to WebLogic Server.

C:\	Command P	rompt	
e>	dracted:	WEB-INF/services/logclient.xml	A
e>	ctracted:	WEB-INF/services/logservice.xml	_
e>	ctracted:	WEB-INF/services/logservicereporter.xml	
e>	ctracted:	WEB-INF/services/monitor.xml	
e>	ctracted:	WEB-INF/services/pogo.xml	
e>	ctracted:	WEB-INF/services/presentationService.xml	
e>	ctracted:	WEB-INF/services/queryStudio.xml	
e>	ctracted:	WEB-INF/services/reportservice.xml	
e>	ctracted:	WEB-INF/services/reportStudio.xml	
e>	ctracted:	WEB-INF/services/root_handler.xml	
e>	ctracted:	WEB-INF/services/runTimeInfoPublisher.xml	
e>	ctracted:	WEB-INF/services/sampleService.xml.sample	
e>	ctracted:	WEB-INF/services/services.xsd	
e>	ctracted:	WEB-INF/services/setcookie.xml	
e>	ctracted:	WEB-INF/services/showerror.xml	
e>	ctracted:	WEB-INF/services/systemservice.xml	
e>	ctracted:	WEB-INF/Services/tempfilecieanup.xml	
e>	ctracted:	WEB-INF/Services/testping.xml	
e>	ctracted.	WEB-INF/Services/versions.txt	
e>	ctracted.	WEB-INF/SCRV1CCS/WSG1.XM1	
e)	tracted.	WED-INF/CCPMON.Dat UED-INF/CCPMON.Dat	
	tracted.	WED-INF/WED.XMI.HUGH.UFIGIHAI	
	tracted.	WED-INF/WED.XWI.UFIYIHAI	
	tracted.	WED-INF/XUS.propercies	T
le>	ceracted:	WED-IMEY WED.XHI	





6 Application Server References / Resources

6.1 Application Server Logs

Log files for Managed Servers can be found in the domain directory structure under user_projects. The log files are named after the Managed Server instance.

- WebLogic 8.1.x: %WL_HOME%\user_projects\domains\<domain_name>\<managed_server_name>
- Weblogic 9.x: %WL HOME%\user projects\domains\<domain_name>\servers\<managed_server_name>\logs

6.2 Useful Web Sites

BEA's main website: http://www.bea.com

Main page for WebLogic Server: http://www.bea.com/framework.jsp?CNT=index.htm&FP=/content/products/weblogic/server/

BEA's Developer's Resource site: <u>http://dev2dev.bea.com</u>

Main dev2dev page for WebLogic Server: http://dev2dev.bea.com/wlserver/

List of All Supported Configurations: http://e-docs.bea.com/platform/suppconfigs/index.html

6.3

Documentation

Online documentation can be found at the BEA website listed below. The documentation for all supported versions is available.

http://edocs.bea.com

