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IBM Connections 4 Public Deployment Scenarios

Deployment Scenarios ERC 1.0



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# **IBM Connections 4: PDS SiteMinder and SPNEGO**

## About the author



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### Overview

This scenario explains how to deploy IBM® Connections 4.0 in a network deployment that involves multiple computers with one IBM WebSphere® cell that contains two nodes, both of which host IBM® Connections 4.0. This scenario is typical of an enterprise-level production deployment with SiteMinder and SPNEGO enabled.

Computer host name	Applications	Version#	OS/version	RAM/ CPU	VM or HW
connections.example.co m	WebSphere Application Server Deployment Manager IBM HTTP Server	WebSphere Application Server v7.0.0.21 (64 bit) IBM HTTP Server v7.0.0.21 (32 bit)	SUSE 10 SP 4 (64 bit)	4 G /2 CPUs	VM
node1.example.com	Node1 (WebSphere Application Server)	WebSphere Application Server v7.0.0.21		8 G /2 CPUs	
node2.example.com	Node2 (WebSphere Application Server)	WebSphere Application Server v7.0.0.21		8 G /2 CPUs	
db2server.example.com	DB2 Tivoli Directory Integrator	DB2 v9.7+FP6 Tivoli Directory Integrator v9.1+FP5		4 G /2 CPUs	
msad2008.example.com	MS Active Directory 2008	2008	Win2008 R2 EE Server		
domino.example.com	Domino Mail-in server	Domino 8.5.3	Win2008 R2 EE Server	4 G /2 CPUs	VM

## Systems and naming conventions used throughout this document

PreConnections installation work

Assuming: WebSphere Application Server and nodes are set up

## **PreConnections installation work**

It is assumed that WebSphere Application Server and nodes are set up.

## **Deployment-specific information**

- 1. Check the security on the admin console: that in Global security enable admin security and enable app security are checked. In the writer's VM image, enable app security is not checked.
- 2. Set the max JVM value for the DMGR or you get OOMs when configuring the remote http server.
  - In the Admin console, go to system admin \deployment manager\Java process management\process definition\JVM

Deployment manager > Process definition > Java Virtual Machine

Figure 1. Deployment manager > Process definition > Java Virtual Machine

- Set the maximum heap size to 1024.

Maximum heap size 1024 MB

Figure 2. Maximum heap size

## Contents

- 1. Cognos configuration
- 2. Connections installation
- 3. Configuring the remote HTTP server
- 4. SiteMinder setup
- 5. Post-agent installation actions
- 6. SPNEGO setup

# 1. Cognos configuration

# Requirements before you start the setup of Cognos

- 1. Ensure that the Deployment Manager is running and that the time difference between the node that hosts Cognos BI Server and the Deployment Manager does not exceed 5 minutes so that the addNode action succeeds.
- \_\_\_\_2. The node that hosts Cognos BI Server must not already be federated to the Deployment Manager. It is done later.
- \_\_\_\_3. For Cognos and Connections to work, you must use an LDAP user as the admin on Cognos. A local WebSphere user, wasadmin, does not work. So, plan to use an LDAP user, for example wpsbind.
- \_\_\_\_4. Download both the Cognos BI Server and Cognos Transformer to your test systems where you install them. You might install them to the same system as the deployment manager. Here are the names and part numbers to download from Xpertise Library.

OS	BI Server	Transformer	Full eAssembly (includes BI Server and Transformer)
AIX	IBM Cognos Business Intelligence	IBM Cognos Business Intelligence	IBM Cognos Business Intelligence
	Server 64-bit 10.1.1 AIX	Transformer 10.1.1 AIX Multilingual	10.1.1 AIX Multilingual eAssembly
	Multilingual (CI5VTML)	(CI2Q4ML)	(CRFY4ML)
Linux	IBM Cognos Business Intelligence	IBM Cognos Business Intelligence	IBM Cognos Business Intelligence
	Server 64-bit 10.1.1 x86	Transformer 10.1.1 Linux x86	10.1.1 Linux x86 Multilingual
	Multilingual (CI5W7ML)	Multilingual (CI2Q6ML)	eAssembly (CRFY8ML)
Linux (System z)	IBM Cognos Business Intelligence Server 64-bit 10.1.1 Linux on System z Multilingual (CI5W5ML)	IBM Cognos Business Intelligence Transformer 10.1.1 Linux on System z Multilingual (CI2QHML)	IBM Cognos Business Intelligence 10.1.1 Linux on System z Multilingual eAssembly (CRFZ6ML)
Windows	IBM Cognos Business Intelligence	IBM Cognos Business Intelligence	IBM Cognos Business Intelligence
	Server 64-bit 10.1.1 Windows	Transformer 10.1.1 Windows	10.1.1 Windows Multilingual
	Multilingual (CI5VVML)	Multilingual (CI2Q1ML)	eAssembly (CRFY3ML)

# **Create Connections databases on DB2 server**

C 🚺 Linux

Before you can use the wizard to create databases for your IBM® Connections deployment, prepare the database server. Follow these steps.

- \_\_\_1. Log in to your database server as the root user:
  - \_\_\_a. export DISPLAY=<hostname:displaynumber.screennumber>.
  - \_\_\_\_b. echo \$DISPLAY // Echo the value of DISPLAY under the root user. Ensure that the current user is qualified or else switch to a qualified user by running the following commands.
- \_\_\_2. Grant display authority to all users by running the following commands under the root user or system administrator:
  - \_\_\_\_a. xhost + // Grant display authority to other users
- \_\_3. su: db2user:
  - \_\_\_\_a. export DISPLAY=<hostname:displaynumber.screennumber> where <hostname:displaynumber.screennumber> represents the client system, monitor number, and window number.
  - \_\_\_\_b. xclock // Display the clock, confirming that the current user has display authority and can run the wizard

The creation of the Connections databases is done by a wizard.

\_\_\_\_1. Copy the Lotus\_Connections\_4.0\_wizards\_lin\_aix.tar to your computer and extract it. Do it as the db2user user on the OS and **not** root. Then, go into the Wizard folder and run ./dbWizard.sh. The following screen is shown. Select **Next** to continue.



Figure 3. Database wizard for IBM Connections 4.0

\_\_\_\_2. You are then asked what you want to do: Create, delete, or upgrade. Click Create and Next to continue.

Database without for IBN	Connections 4.0
Database task selection	
Select the database task:	
Create	IBM.
O Delete	
Update operation only for IBM Connections database 3.0.1.x to 4.0	

Figure 4. Database task selection

\_\_\_\_3. Select the path of your database installation location and the database instance name. Click **Next** to continue.

	Database wizard for IBM Connections 4.0	- 0
atabase selection		
Select the database type, installation location, and	database instance.	
DB2 Universal Database (TM)		IBM.
Oracle Enterprise Edition		
Database installation location:		
/opt/ibm/db2/V9.7		Browse
Database instance:		
db2		

Figure 5. Database selection

\_\_\_\_4. Ensure that all databases are selected and then click **Next** to continue.

	1
9	IBM.
111	
•	
	Cancel

Figure 6. Applications selection

\_\_\_\_5. Click **Create** from the summary screen.

Database wizard for IBM Connections 4.0	- 0 -
Pre-configuration task summary	
IBM Connections is ready to create databases for the following applications.	
Action: Create IBM Connections database Database type: DB2 Universal Database (TM) Database install location: /opt/bm/db2/V9.7 Database install location: /opt/bm/db2/V9.7 Database instance: db2inst1 The selected applications are: Activities, Blogs, Communities, Bookmarks, Profiles, Home page, Wikis, Files, Forums, Mobile, Metrics, Cognos	LEM.
Activities Database name: OPNACT Database user: LCUSER Sgl scripts to run: createDo.sgl, appGrants.sgl	
Blogs Database name: BLOGS Database user: LCUSER Sql scripts to run: createDb.sql, appGrants.sql	
Communities Database name: SNCOMM Database user: LCUSER Sgl scripts to run: createDb.sgl, appGrants.sgl, calendar-reateDb.sgl, calendar-appGrants.sgl	
Bookmarks Database name: DOGEAR Database user 1 CLISER	•
✓ Show the detailed database commands.	
Back	1
There Massa	- Server

Figure 7. Pre-configuration task summary

\_\_\_\_6. Finally, click **Execute** to create the DBs.

A	Database wizard for it	IM Connections 4.0		- 8 2
Database creation detailed command				1
The following commands will be execut	ed, click "Execute" to run them.			
Activities 1. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 2. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 Biogs 1. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 2. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 2. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 2. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 4. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 Bookmarks 1. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 2. /opt/ibm/db2/V9.7/bin/db2.4d@ 4 Dookmarks 1. /opt/ibm/db2/V9.7/bin/db2.4d0 4 Dookmarks 2. /opt/ibm/db2/V9.7/bin/db2.	connections.sql/activitiesi/db2/createDb.sql connections.sql/activitiesi/db2/appGrants connections.sql/biogsi/db2/appGrants.sql connections.sql/biogsi/db2/appGrants.sql connections.sql/communitiesi/db2/create connections.sql/communitiesi/db2/calend connections.sql/communitiesi/db2/cale	ql sql Db.sql ants.sql ar-createDb.sql ar-appGrants.sql l gl s/connections.sql/profiles/db2/createl s/connections.sql/profiles/db2/createl s/connections.sql/profiles/db2/createl	Do. sql ants. sql	IBM.
		Back E	xecute	Cancel

Figure 8. Database creation detailed command

The database is now created and you see the following:

Database wizard for IBM Connections 4.0	_ = ×
ard/log/dbWizard/dbConfig_20120726_122319_activities_createDb.log.	IBM.
	Databarus witzard for IBM Connections 2 0 and/log/dbWizard/dbConfig_20120726_122319_activities_createDb.log.

Figure 9. Database creation task: Creation in progress

After some time, the databases are created successfully.

Database wizard fo	r IBM Connections 4.0	- 0
Post configuration task summary		
The database creation task comoleted. The following configuration was used:		_
the database contacts take competence. The reasoning consignments was used.		
Action: Create IBM Connections database Database type: DB2 Universal Database (TM) Database instal location: /opt/bm/db2/V9.7 Database instance: db2 The selected anolications are: Activities, Blogs, Communities, Bookmarks, Pir	ofiles Home pape Wiks Files Forums Mobile Metrics	
Cognos	nan, ranne page, man, rann, ranna, avere, marsa,	
Activities Database name: OPNACT Database user: LCUSER Sql scripta ran: createDb sql, appGrants.sql Result: The database creation was successful. Biogs Database name: BLOGS		
Sql scripts ran: createDb.sql, appGrants.sql Result The database relation was successful		
Communities Database name: SNCOMM Database user: LCUSER Sql scripts ran: createDb.sql, appGrants.sql, calendar-createDb.sql, calendar- Result: The database creation was successful.	appGrants.sq1	
Bookmarks		•
	Enah	Girlat

Figure 10. Post configuration task summary

The databases are now created. If you run db2 list database directory, you should see that each database is created.

### Install the DB2 client on to your Cognos node

\_\_\_1. Add the following lines to your .profile file to allow the root db2 commands:

```
if [ -f /home/db2user/sqllib/db2profile ]; then
   . /home/db2user/sqllib/db2profile
   fi
```

\_\_\_\_2. Run the following commands to catalog the databases to your node:

db2 catalog tcpip node db2server remote db2server.example.com server 50001 db2 catalog database metrics at node db2server db2 catalog database cognos at node db2server

- \_\_\_3. In the DB2 client installation directory, open the /etc/ld.so.conf file for editing.
- \_\_\_\_4. Add the library /opt/ibm/db2/V9.7/lib32 to the file.
- \_\_\_5. Save and close the file.
- \_\_\_6. Run the Idconfig command to regenerate dynamic link libraries (DLLs).

# Creating the WebSphere Application Server profile for Cognos server

Cognos needs its own dedicated WebSphere Application Server setup. You can either set up another server for it or create a profile under an existing WebSphere Application Server you set up. If you do choose to set up a new server, then make sure to install all the WebSphere Application Server fix packs, and so on, so it is at the same level as the Deployment Manager you plan to federate into later.

In this document, you create a profile on the existing node one application server that you use for Connections later. So, this node will then run node one for Connections and the cognos\_server.

\_\_\_\_1. On node one of your Application Server, run the following command from /opt/IBM/WebSphere/AppServer/bin:

```
./manageprofiles.sh -create -templatepath
/opt/IBM/WebSphere/AppServer/profileTemplates/default -adminUserName admin
-adminPassword password
```

You should see something like the following:

```
dslvm768:/opt/IBR/WebSphere/AppServer/hin # ./wanayeprofiles.sh -create -templatepath /opt/IBR/WebSphere/AppServer/profileTemplates/default -
dwinUserName Ammr_001_077 +adminPassword passw0rd
HNSTO(MFSUCCESS: Success: Profile AppSrv02 now exists. Please consult /opt/IBR/WebSphere/AppServer/profiles/AppSrv02/logs/AboutThisProfile.tx
for more information about this profile.
dslvm768:/opt/IBR/WebSphere/AppServer/bin # _____
```

#### Figure 11. Running the command on the Application Server

Also, if you look under /opt/IBM/WebSphere/AppServer/profiles you should see AppSrv01 (your Connections Application server profile) and AppSrv02 (your cognos\_server Application server profile).

# Setup and configuration of Cognos BI Server and Cognos Transformer

The setup of both the Cognos BI Server and Cognos transformer is automated for Connections so you do not need to set them up manually.

- 1. Using the Connections installers, look under /opt/software/LCI4.0\_Gold/IBM\_Connections\_Install for example and you see a folder called Cognos. Under here, there is a CognosConfig.tar/zip (depending on your operating system) which is what is used to set up these pieces.
- 2. However, before you do that you must copy the Cognos BI Server and Cognos Transformer to your system. Copy them into the WebSphere Application Server that you created the previous profile. Create the following and copy the installation files for each installation type (you must extract the installation files from what you downloaded from Xpertise Library in the first step previously):

/opt/software/cognos/BI /opt/software/cognos/TF

When complete, you should see something like this:

dslvm768:/opt/software/Cognos # pwd /opt/software/Cognos dslvm768:/opt/software/Cognos # ls ./BI bisrvr\_linuxi8664h\_10.1.1\_ml.tar.gz documentation linuxi38664h zipfiles dslvm768:/opt/software/Cognos # ls ./TF bitrsfrmr\_linuxi38632\_10.1.1\_ml.tar.gz documentation linuxi38632 zipfiles dslvm768:/opt/software/Cognos #

- \_\_\_3. Copy the Cognos.zip from the virtual machine where you extracted /opt/software/Cognos/GC.
- 4. Now, under /opt/software/Cognos/Gold extract the CognosConfig.tar/zip. When extracted, go to /opt/software/Cognos/Gold/BI-Customization/JDBC and copy the JDBC drivers for your database back end to this location. Copy all the .jar files from /home/db2user/sqllib/java/ to this location. They are needed to make a database connection to the Cognos and metrics databases.
- \_\_\_\_5. Next, configure the cognos-set-up.properties file which is used to provide the settings that are needed to perform the installation of the Cognos server and Cognos transformer. Following are the settings that you must supply.

### Settings that are needed for cognos-setup.properties

These settings are needed for cognos-setup.properties: # # # Licensed Materials: Property of IBM # # 5724-S68 # # Copyright IBM Corp. 2012 All Rights Reserved. # # US Government Users Restricted Rights: Use, duplication or # disclosure restricted by GSA ADP Schedule Contract with # IBM Corp. # # Location of the already installed WebSphere Application Server where you will deploy Cognos Business Intelligence # Examples: C:\Program Files\IBM\WebSphere\AppServer # /opt/IBM/WebSphere/AppServer was.install.path=/opt/IBM/WebSphere/AppServer # Profile name of the Application Server # Important: This must not be the Deployment Manager profile # Default profile is located here: <was.install.path>/profiles/<Profile\_Name> # Example: /opt/IBM/WebSphere/AppServer/profiles/AppSrv01 uses the profile name AppSrv01 was.profile.name=AppSrv02 # Local WebSphere Application Server administrator username was.local.admin.username=admin # Local WebSphere Application Server administrator password # Note: Password is stored in clear text; leave setting blank to supply it at run time was.local.admin.password=password # The following property is only required for Windows systems. # The fully qualified host name of this Application Server # Example: host.example.com was.fqdn.hostname=node1.example.com # The WebSphere Application Server node where the Cognos BI server instance will be created (this must be an existing node) # The node name can be found in <was.install.path>/profiles/<Profile\_Name>/logs/AboutThisProfile.txt cognos.was.node.name=Node1Node02 # The server instance name where Cognos BI EAR will be deployed; this server instance will be created during installation cognos.was.server.name=cognos\_server

```
# Location of issetup installer for Cognos BI Server
# The installer is stored below the directory where you expanded the BI Server
package
# Note: Include installer in the path: issetup.exe for Windows; issetup for
non-Windows
# Examples: C:\biserver 10.1.1\winx64h\issetup.exe
            /opt/biserver_10.1.1/linuxi38664h/issetup
#
cognos.biserver.issetup=/opt/software/Cognos/BI/linuxi38664h/issetup
# Location of issetup installer for Cognos Transformer
# The installer is stored below the directory where you expanded the Transformer
package
# Note: Include installer in the path: issetup.exe for Windows; issetup for
non-Windows
# Examples: C:\transformer_10.1.1\win32\issetup.exe
            /opt/transformer 10.1.1/linuxi38632/issetup
#
cognos.transformer.issetup=/opt/software/Cognos/TF/linuxi38632/issetup
# To deploy and configure the product, fill in the desired install location
#
# Important: BI Server and Transformer cannot share the same install location
# Install location of Cognos BI Server
# Examples: C:\Program Files\IBM\Cognos
            /opt/IBM/Cognos64
#
cognos.biserver.install.path=/opt/IBM/Cognos/BI
# Install location of Cognos Transformer
# Examples: C:/Program Files (x86)/IBM/Cognos
#
            /opt/IBM/Cognos
cognos.transformer.install.path=/opt/IBM/Cognos/TF
# Cognos installation language
# Valid values:
       : English (Default)
# EN
# ZH_CN: Chinese (PRC)
# ZH TW: Chinese (Taiwan)
# FR
       : French
# DE
     : German
# IT : Italian
# JA
       : Japanese
# KO
       : Korean
# PT_BR: Portuguese (Brazil)
       : Spanish
# ES
cognos.locale=EN
# Context root of Cognos BI Server application; do not include leading '/'
cognos.contextroot=cognos
```

# The LDAP user name and password chosen to be the Cognos administrator # Note: Password is stored in clear text; leave blank to supply at run time cognos.admin.username=ldap\_admin cognos.admin.password=password # The Cognos name space to be used by IBM Connections cognos.namespace=IBMConnections # Location where PowerCubes generated by the Transformer are stored # Examples: C:\Program Files\IBM\Cognos\PowerCubes # /opt/IBM/Cognos/PowerCubes cognos.cube.path=/opt/IBM/Cognos/PowerCubes # Information for the Cognos Content Store database # Supported database types: # DB Type : Value : db2 # DR2 # Oracle : oracle # SOL Server : sqlserver cognos.db.type=db2 # Format the cognos.db.host property as: host\_name:port cognos.db.host=db2server.example.com cognos.db.name=COGNOS cognos.db.user=db2user # Note: Password is stored in clear text; leave blank to supply at run time cognos.db.password=password # Information for the Metrics database # Supported database types: # DB Type : Value : db2 DB2 # # Oracle : oracle # SQL Server : sqlserver metrics.db.type=db2 # Format the metrics.db.host property as: host\_name:port metrics.db.host=db2server.example.com metrics.db.name=METRICS # The local database name is used by the database client on the Transformer server to reference the Metrics database. # For DB2, this is the Metrics database local catalog alias name. # For Oracle, this is the Metrics database local TNS name. # For SQL Server, this is the Metrics database instance name. metrics.db.local.name=METRICS metrics.db.user=db2user # Note: Password is stored in clear text; leave blank to supply at run time metrics.db.password=password

\_\_\_6. When all of the settings are entered, run the following command to set up the Cognos server from within /opt/software/Cognos/Gold: ./cognos-set-up.sh.

Assuming that it runs OK, you should see the following when it is finished.



Figure 12. Command to set up the Cognos server

\_\_\_7. Next, configure the cognos\_server. Run the following within /opt/software/Cognos/Gold: ./cognos-configure.sh.

Assuming that it runs OK, you should see the following when it is finished.

Fr: 06 Jul 2012 12:24:25 PM 3 Fr: 06 Jul 2012 12:24:25 PM 3 Dosiness Intelligence Transformer Transformer(Transformer) Fr: 06 LogFileDirectory=/opt/IBM/CognosTr ModelSaveDirectory=/opt/IBM/CognosTr ModelSaveDirectory=/opt/IBM/CognosTr ModelSaveDirectory=/opt/IBM/CognosTr ModelWorkDirectory=/opt/IBM/CognosTr ModelWorkDirectory=/opt/IBM/CognosTr ModelWorkDirectory=/opt/IBM/CognosTr ModelWorkDirectory=/opt/IBM/CognosTr ModelWorkDirectory=/opt/IBM/CognosTr	0000000 0000000 0000000 00042A8 00042A8 00042A8 00042A8 00042A8 00042A8 00042A8 jul 2012 12:24:26 PM ansformer/logs/ Transformer/lemp/ Transformer/temp/ Transformer/temp/	Command Line: /opt/IBM/CognosTransformer/bin/cogtr -m/tmp/signoh.mdl [->OK] Processing MDL file /tmp/signon.mdl Creating model file /opt/IBM/CognosTransformer/temp/ppd09917.qyj Saving model in MDL file /opt/IBM/CognosTransformer/metricsmodel/MetricsTrxEube.mdl Completed processing of MDL file /tmp/signon.mdl Closing model file /opt/IBM/CognosTransformer/temp/ppd09917.qyj Transformer exiting - OK
Fr1 06 Jul 2012 12:24:26 PM 3	6000000	Command Line: /opt/IBM/CognosTransformer/bin/cogtr -m/tmp/signon.mdl [->OK] Procession MNI file /tmo/signon.mdl
Fri 66 Jul 2012 12:24:26 PM 3	4444440	Creation model file /ont/TEN/comestransformer/temo/nod09048 ovi
Fri 66 Jul 2012 12:24:26 PM 3	66664350	Saving model in MDL file (ont/IBB/ConnesTransformer/metricsBuditCube mdl
Fri 06 Jul 2012 12:24:26 PM 3	00004350	Completed processing of MDL file /tmp/signon.adl
Fri 66 Jul 2012 12:24:26 PM 3	00004350	Closing model file /opt/IBM/CoopesTransformer/temp/ped09948.gv1
Fr1 06 Jul 2012 12:24:26 PM 3	00004350	Transformer exiting - 0K
Finished Setup Cube Models	Contraction (	
no cremtab for root		
Finished Cube refresh scheduler		
configuring Cognes Transformer	completed	
[root@dubxpcvm766 Cognos]#		

Figure 13. Configuring the Cognos server

# Federate the Cognos application server into Deployment Manager

Next, federate the application server into the deployment manager, by running the following commands:

- 1. Ensure that the clocks are in synch between your Deployment Manager and application server. Run ntpdate clock.redhat.com to on your Deployment Manager and application server.
- \_\_\_\_2. Make sure that the Deployment Manager is started and the application server is stopped.
- \_\_\_3. Then, from within your /opt/IBM/WebSphere/AppServer/profiles/AppSrv02/bin run the following command (make sure to use the -includeapps flag):

./addNode.sh connections.example.com 8879 -includeapps -user admin -password password

If all goes well, you should see something like this reported:



Figure 14. Federating the Cognos Application Server into Deployment Manager

If you log in to your Deployment Manager at

https://connections.example.com:9043/ibm/console/logon.jsp and go to Servers > Server Types > WebSphere Application Servers, you should see something like this.

	cognos server	dslvm768Node02	dslvm768.litbg02.svg.usma.ibm.com	dslvm768.example.com
Г	server1	dslvm771Node01	dslvm771.litbg02.svg.usma.ibm.com	dsivm771.example.com
	server1	dslvm768Node01	dslvm768.litbg02.svg.usma.ibm.com	dslvm768.example.com
Е	server1	dslvm768Node02	dslvm768.litbg02.svg.usma.ibm.com	dslvm763.example.com

Figure 15. WebSphere Application Servers

# **Configure Cognos LDAP security**

\_\_\_\_1. Next, add the LDAP security information into the Cognos configuration tool. Start the Cognos configuration tool.



On Linux, this tool is found under /opt/IBM/CognosServer/bin64/cogconfig.sh but you must export JAVA\_HOME first before it can be run. Use "export JAVA\_HOME first before it can be run. Use "export JAVA\_HOME=/opt/IBM/WebSphere/AppServer/java".

Then, run the cogconfig.sh from the same terminal window on VNC.

2. Right-click Local Configuration > Security > Authentication and select New resource > Namespace.

8	New Resource - Namespace	×
<u>N</u> ame:		
IBMConne	ctions	
<u>T</u> ype:		
LDAP		•
	OK Cancel	

Figure 16. New Resource: Namespace

\_\_\_3. Call it IBMConnections and select LDAP as the Type. Then, complete the LDAP information. In the following figure, you can see what you must set to get security enabled on Cognos by using MS Active Directory.

Ш	BMConnections - Namespace -	- Re	source Properties
	Name		Value
	Туре		LDAP
*	Namespace ID		IBMConnections
*	Host and port		w2k8.example.com:389
*	Base Distinguished Name		OU=SharedLDAP,OU=Lotus,OU=Software G
	User lookup	3	(sAMAccountName=\${userID})
	Use external identity?	6	True
	External identity mapping	8	(sAMAccountName=\${environment("REMOT
	Bind user DN and password		*********
	Size limit		-1
	Time out in seconds		-1
	Use bind credentials for search?	3	True
	Allow empty password?		False
	Unique identifier	8	ObjectGUID
	Data encoding		UTF-8
	SSL certificate database		
	Advanced properties		<click button="" edit="" the=""></click>
	Folder mappings (Advanced)		
	Object class	8	organizationalunit,organization,container
	Description		description
	Name	8	ou,o,cn
	Group mappings (Advanced)		^
	Object class	8	Group
	Description		description
	Member	8	Member
	Name		cn
1			

Figure 17. IBM Connections: Namespace: Resource Properties

Account mappings (Advance	ed)	
Account object class	8	user
Business phone		telephonenumber
Content locale	8	
Description		description
Email		mail
Fax/Phone		facsimiletelephonenumber
Given name		givenname
Home phone		homephone
Mobile phone		mobile
Name	8	displayName
Pager phone		pager
Password	3	unicodePwd
Postal address		postaladdress
Product locale	8	
Surname		sn
User name	8	sAMAccountName
Custom properties		<click button="" edit="" the=""></click>

Figure 18. IBM Connections: Namespace: Resource Properties

\_\_\_\_4. Save it now by selecting **File > Save**.



Figure 19. Saving properties

\_\_\_\_5. Then, right-click **IBMConnections** and click **Test**.

л	Actions Help
	Truch Trub
	<u>S</u> tart
i.	St <u>o</u> p
1	<u>R</u> estart
5	Edit <u>G</u> lobal Configuration
١	Test N
e	ہج Build Application Files
1.14	

Figure 20. IBMConnections: Test

Tasks should be successful.

🚷 івм с	ognos Configuration
<b>i</b>	<ul> <li>IBM Cognos Configuration is performing the following tasks:</li> </ul>
	<ul> <li>Generating cryptographic information</li> <li>Testing "IBMConnections" namespace.</li> </ul>
	<u>C</u> lose <u>D</u> etails >>

Figure 21. IBM Cognos Configuration

\_\_\_\_6. Finally, click Local Configuration > Security > Authentication > Cognos and set "Allow anonymous access?" to False.

С	ognos – Namespace – Resource Properties				
	Name		Value		
	Туре		Cognos		
	Allow anonymous access?	3	False		

Figure 22. Cognos: Namespace: Resource Properties

\_\_\_\_7. Save and close the configuration tool.

Note

When exiting Cognos Configuration tool, a message opens and asks you a question. Click No.

ЫВ	M Cognos Configurati	on			
	The service 'IBM Cog can use it your comp Do you want to star	nos' is no puter mu: t this serv	ot running st start the vice before	on the local compu service. exiting?	iter. Before you
		Yes	No	Cancel	

Figure 23. IBM Cognos Configuration warning message

## Edit virtual hosts

- \_\_\_1. First, check what ports Cognos is using: in the WebSphere Application Server admin console that is, https://connections.example.com:9043/ibm/console/logon.jsp.
- $\label{eq:general} \underline{\qquad} 2. \quad Go \ to \ \texttt{servers} \ \texttt{websphere applications servers} \ \texttt{cognos-server} \ \texttt{communications}.$
- \_\_\_\_3. Click + at ports and look for the following hosts:

WC\_defaulthost 9082

9445

Figure 24. WC\_defaulthost

WC\_defaulthost\_secure

Figure 25. WC\_defaulthost\_secure

- \_\_\_\_4. Go to environment\Virtual hosts and look for nodel.example.com 9082 and nodel.example.com 9445 and delete these entries.
- $\_$  5. Add in two entries for \* and 9082 and \* + 9445.
- \_\_\_6. Click Save.
- \_\_\_\_7. For it to take effect, restart the nodes and the deployment manager.

## **Verification step**

Cognos is now set up. You can now start the Cognos server and validate that it is working.

- 1. Log in to your deployment manager and go to Servers/Server Types/WebSphere Application Servers and start up the cognos\_server application. It should start cleanly. If you have an HTTP configured against your system, generate the plug-in, and start up the HTTP server.
- \_\_\_\_2. Go to the URL https://nodel.example.com:9445/cognos/servlet/ you should see the following which confirms that Cognos is set up.

# IBM Cognos

# **Content Manager**

Build: 10.1.6235.601 Start time: Friday, July 20, 2012 12:58:02 PM IST Current time: Friday, July 20, 2012 1:44:48 PM IST State: Running

Figure 26. IBM Cognos: Content Manager

\_\_\_3. Enter https://nodel.example.com:9445/cognos/servlet/dispatch. You should be able to log in to the BI Content Manager as user \ password: this proves that the LDAP security is configured correctly:

Log on Please type your credentials for authentication.

Namespace: IBMConnections	
User ID:	
Password:	
OK Cancel	

Figure 27. Logging in to the BI Content Manager

When you log in as the admin, you see:

BM Cognos Connection	X Search Que Search Options X Home Que tons
x Tab Menu Public Folders	My Folders
Public Folders	
Name <sup>®</sup>	
IBMConnectionsMetrics	

Figure 28. Logging in to the BI Content Manager as the admin

## **Building the Power Cubes on Cognos**

- \_\_\_1. To build the Power Cubes, go to the /opt/IBM/CognosTransformer/metricsmodel/ and run build-all.sh to build the cubes.
- \_\_\_2. When done, run the build-all.sh/bat to build the cubes.
- \_\_\_3. Check the file trxschelog.log file under /opt/IBM/CognosTransformer/metricsmodel for errors and success. You should see:

```
Thu 19 Jul 2012 11:47:10 AM 3 0000000 Command Line:

/opt/IBM/Cognos/TF/bin/cogtr -c -s -g

-f/opt/IBM/Cognos/TF/metricsmodel/promptStartBuild.xml

-m/opt/IBM/Cognos/TF/metricsmodel/MetricsAuditCube.mdl [->OK]

Thu 19 Jul 2012 11:47:10 AM 3 0000000 Processing MDL file

/opt/IBM/Cognos/TF/metricsmodel/MetricsAuditCube.mdl

Thu 19 Jul 2012 11:47:10 AM 3 0000000 Creating model file

/opt/IBM/Cognos/TF/temp/ppd31792.qyj

Thu 19 Jul 2012 11:47:10 AM 3 0000435D Completed processing of MDL file

/opt/IBM/Cognos/TF/metricsmodel/MetricsAuditCube.mdl

Thu 19 Jul 2012 11:47:10 AM 4 0000435D Start cube update.

Thu 19 Jul 2012 11:47:10 AM 4 0000435D Initializing categories.

Thu 19 Jul 2012 11:47:10 AM 4 0000435D Timing,
```

INITIALIZING CATEGORIES,00:00:00

If it goes well, you should see:

20120719114803 : build all data success

# 2. Connections installation

# Installation of Connections 4.0



The installation of Lotus Connections 4.0 is done on the Deployment Manager server and then synched with the nodes.

Make sure that your Deployment Manager and the nodes are started.

If you are installing the Metrics application, ensure that you installed and configured Cognos.

Ensure that the directory paths that you enter contain no spaces.

Ensure that the Open File Descriptor limit is 8192.

Follow these steps for how to set the limit.

- \_\_\_\_1. Open a command line and enter the following command to find the current open file limit: ulimit -a.
- \_\_\_\_2. Add the following line to the user's profile file: ulimit -n 8192.
- \_\_\_3. Check the previous item on Node 1 and Node 2 as well.
- 4. Ensure that the GTK library is available on your system. If you are installing on a 64-bit system, you also need the 32-bit version of the GTK library. Check it on Deployment Manager, Node 1 and Node 2. To check, run rom -qa | grep gtk.
- \_\_\_\_5. You must install the interim fixes
  - PM53930
  - PM56596
  - PM60895
  - WebSphere Application Server PK 7.0.0.21-WS-WAS-TFPM65486.pak

\_\_\_6. Copy the installation files to you server and extract the

Lotus\_Connections\_4.0\_lin\_aix.tar file. Start the installation by running

./launchpad.sh under Lotus\_Connections\_Install. The following wizard is displayed:



Figure 29. IBM Connections 4.0.0: Welcome

\_\_\_\_7. In the left pane of the launchpad, click **Install IBM Connections 4.0** and then click **Launch the IBM Connections 4.0 install wizard** in the right pane.

M <sup>e</sup> Connections 4.0.0	Select a language English <u> </u>
Welcome Documentation Pre-installation tasks • Install IBM Connections 4.0.0 Post-installation tasks Exit	Install IBM Connections 4.0.0 What is IBM Installation Manager? Installation Manager is an application that makes it easier for you to download and install many IBM software products. If you have not previously installed installation Manager, you will be prompted to install it upon starting the IBM Connections install wizard. Ref. Launch the IBM Connections 4.0.0 install wizard Note: Start the WebSphere Application Server Deployment Manager before proceeding with the wizard. View the IBM Connections 4.0.0 install wizard tasks

Figure 30. Install IBM Connections 4.0.0

\_\_\_8. In the Select packages to install window, select the packages that you want to install and click **Next** to continue.

	Constant of Medicine Constitutions (		
install Packages			
Select packages to initial			7
Installation Packages	Status	Vendor	License Key Type
🗢 💽 🗊 10MB (rotaliator Manager			
V Verson 1.44	With the order and	BM-	Fab key reported
C C C, Verson 4000	Will be installed		

Figure 31. Install packages

\_9. Review and accept the license agreement by clicking I accept the terms in the license agreements. Click Next.



Figure 32. License agreement

\_\_\_\_ 10. Specify the location of shared directories for IBM Installation Manager. Click **Next** to continue.

	d resources directory and a location for installation Manager	70
Install 🗦 Licenses	Loodon Feature Summary	
When you initial ( 1) The shared res 2) The installation important. You ca space because it in	packages, files are stored in two locations. ouroes directiny - resources that can be shared by multiple packages. In only which the shared resources directory the first time you install a package with the IBM Installation Manager. For best results much have adequate space for the shared resources of future packages.	select the drive with the most available
ared Besources Directory	SpetIBM/SSPShared	Broga
Once installed, IBA	M Installation Manager will be used to install, update, modify, manage and uninstall your packages.	
		and the second s
tallation Manager Directory	Appl/IBWIImtallationManagemeclipte	Brgota
tallation Manager Directory	Pop/TOM/InstallationManagemet/pae	Tryon
tallation Manager Directory sk Space Information Vlume Available Space	rop/IIOWIIntellation/Managemechpie	Tryon
tallation Manager Directory sk Space Information Volume Available Space 34.00 GB	Cop/TioN/Tiotaliator/Managemechpie	Trove
tallation Manager Directory sk Space Information Uturne Available Space 34.08 GB	Cop/TioN/Tiotaliator/Managemetipse	Trove
atlation ganager Directory ak Space Information Uturne Avariable Space 34.00 GB	Cop/TioN/Tiontaliation/Managemethpae	Trove
atlation ganager Directory ek Space Information Olume Avariable Space 34.06 GB	pop/file/Witestaflation/Managemechipse	Trove
tallation Manager Directory ak Space Information Utome Available Space 34.00 GB	rop/IEM/InitializationManagement pae	Trave

Figure 33. Shared directories location

\_\_\_\_11. Choose to use the existing package group or to create a package group. Click **Next** to continue.

12. Specify the location of the installation directory for IBM Connections. You can accept the default directory location, or enter a new directory name, or click **Browse** to select an existing directory. Click **Next**.

A package group is a locat witting package group, or	ton that contains one or more packages. Some create a new one	comparible packages can be initialled into a common package group and will share	a a common user interface. Select an
Itetal 2 Loshi	m (Lacation ) Features )	Summary	
Sume source party	On thursday		
Create a new package	group		
Package Group Name		Installation Drectory	Architecture
C INTE Conversion			
Package Group Name 18	MMD Connections		
Package Group Name 18 restallation <u>E</u> nectory	M& Connections		Bgover
Package Group Name IB Installation Enectory	M& Connections opr18M/Connections		Repose
Package Group Name IB Installation Enectory A	M& Connections opeTEM/Connections	Disk Space Information	Bgovee
Package Group Name IB Installation geneticity A Details Shared Resources Detecto	M& Connections ope18M/Connections ry: rops16M/SSPShared	Disk Space Information Volume Available Space	Bgowee

Figure 34. Installation directory location

13. Confirm all the applications that you want to install. As Cognos is enabled, Metrics is selected. If Cognos is not enabled, clear Metrics and click **Next** to continue.

Calart the features to restall		
		100
Install ) Locanos / Pennans ) Summary )()		
Peatures		
2 1 ISM Instatutor Menager 1 4 4		
🗢 🐼 👔 IBM Connections A 0.0.0		
🐨 🗹 🦍 Core Peatures		
Search Search		10
News repository		
Home page		
🔻 🛃 🛼 Alt Features		
Activities		
🗹 fliogs		
Communities		
Bookmarks		
Files		3
Show dependencies	Expand All Collapse All	Bestore Default
g- Selected by Installation Manager because of dependencies		And and a second se
Detaits		
8M® Installation Manager 1.4.4		
EM0 Installation Manager		

Figure 35. Confirming the applications to install

nstall Packa	iges	
Select the featu	rres to install.	
Install	Learner Location Practice Summary	
Features		
* 1 B	All Features	
	Activitian	
12	Blogs	
	Communities	
	Bookmarks	
2	Files	
	Forums	
	Metrics	
1	Mobile	
	Moderation	
1	Profiles	
1	Wikis	
Show depe	ndencies	Expand All Collapse All Bestore Detaut
- Selected by	y Installation Manager because of dependencies	Commenced Commenced - Commencement
Petalis:		
BMB Installati	on Manager 1.4.4	
BM® Initaliate	on Manager	

Figure 36. Confirming the applications to install

- \_\_\_\_14. Select the path to the WebSphere Application Server instance that is running on your deployment manager. For example, /opt/IBM/WebSphere/DeploymentManager. Enter the host name.
- \_\_\_\_15. The admin user name and password. Ensure that it is the admin user (that you use to log in to WebSphere Application Server) that you set when you enabled security previously and not the default user, wasadmin.
- \_\_\_\_16. Click **Validate** at the bottom.

17. If you get an error on validation, check that you pointed to the correct Deployment ManagerGR, the user and password are correct, and administrative and application security boxes were checked when you enabled security.

Fill in the configurations for the packag	ps.		
tratif ) Lorus >	Location Features Summary		
Common Configurations	Common Configurations		
🚭 Weich (mere	WebSphere		
Topology	WebSohere Application Server Selection		
Cistabase	lastell location		
Content Store			
O Notfication	vote intervenes operatives	Lintheater	
	Deployment manager profile		
	Dmgr01 🗘		
	Hott name:		
	ds lum 768 evample com		
	Contract Contract Contract Contract		
	Deployment Manager Credentials		
	These credentials must exist for the selected Profile.		
	Administrator user ID		
	Aamir_001_077		
	Administrator password		
	SOAP port number		
	8079		
	Validate		

Figure 37. Configurations for the packages

\_\_\_\_18. This retrieves the SSL certificate from the Deployment Manager and confirm if all is **OK**.

<u>(1)</u>	Progress Information X
	Retrieving SSL certificate
1111	
	Cancel

Figure 38. Retrieving SSL certificate

\_\_\_\_19. Click **Topology Configuration** on the left side. Choose **Medium** configuration. Click **Next** when done.





Remember that you must install metrics to the Connections server, on Node1Node1 and Node2Node1.

Install Packages					
Fill in the configurations for the packa	iges				
Install > Licenses >	Location Features	Summary 0			
🕈 📋 Common Configurations	Common Configuration	•			
WebSphere	Topology				
Concepty 1	Annual Providence of the Annual Providence of				SN20
O Database	you want to change	any settings, you must en	ther all of the information again. If you do	not want to change your initial settin	ngs.
O Cognos	click Next				
O Content Store	Cluster				
O Notification					
	Enter a cluster na	ne or select an existing cl	uster name. Then select the nodes for each	b element and anter a memory manual pe	
	the defined server	Arrest.		consider and enter a server name or	accept
	the default server	UATHR .		n chaster and enter a server name or	accept
	the default server	ыте		n unager and enter a server name or	acceja
	Restore Defaults Application	Chuster	Node	Sener	accept
	the default server Restore Defaults Application & Activities	Chuiter Chuiter	Node Mole dol-m 706Node01	Server Cluster1_server1	accela
	the detault server Restore Defaults Application & Activities	Chutter Chutter	Node dsilvm768Node01	Server Cluster1_server1	P .
	the detault server Restore Defaults Application V Activities	Chuder Chuder	Node dishm768Node01 accorr familiana dishm771Node01	Cluster1_server1 Cluster1_server1 Cluster1_server2	accela
	the default server of Restore Defaults Application P Activities P Blogs	Choter Choter1 Choter2	Node dishm 768Node01 dishm 778Node01 dishm 771Node01 dishm 708Node01	Cluster1_server1 Cluster1_server1 Cluster1_server3 Cluster1_server3 Cluster1_server1	accept
	the default server of Restore Defaults Application	Chuber Chuber Chuber1 Chuber2	Node dalwm 768Nade01 dalwm 721Nade01 dalwm 708Nade01	Cluster1_server1 Cluster1_server1 Cluster1_server1 Cluster2_server1	accept
	the default server Restore Defaults Application & Activities	Chuber Chuber Chuber1 Chuber2	Node V dhivm 708Node01 dhivm 708Node01 dhivm 701Node01 dhivm 708Node01 dhivm 71Node01	Cluster1_server1 Cluster1_server1 Cluster2_server1 Cluster2_server3 Cluster2_server3	accept
	eter detault sever Reistore Defaults Application & Activities Blogs & Communities	Chuber Chuber Chuber1 Cluster2 Cluster1	Node (thivm 708Node01 doi/vm 708Node01 doi/vm 708Node01 doi/vm 708Node01 doi/vm 708Node01 doi/vm 71Node01 doi/vm 71Node01	Cluster1_server1 Cluster1_server1 Cluster1_server1 Cluster2_server1 Cluster2_server3 Cluster2_server3 Cluster2_server1	accept
	Paintone Defaults Reintone Defaults Application P Activities Blogs Communities	Chutter - Chutter 1 Chutter 1 Chutter 1	Node dtslvm 708Node01 dtslvm 708Node01 dtslvm 708Node01 dtslvm 708Node01 dtslvm 708Node01 dtslvm 708Node01 dtslvm 708Node01	Cluster1_server1 Cluster1_server1 Cluster1_server1 Cluster2_server1 Cluster1_server1 Cluster1_server1	accept
	Painter Communifier	Clutter Clutter Clutter1 Clutter1	Node distum 706Node01 distum 706Node01 distum 706Node01 distum 706Node01 distum 708Node01 distum 708Node01 distum 708Node01 distum 708Node01 distum 771Node01	Cluster1_server3 Cluster1_server3 Cluster2_server3 Cluster2_server3 Cluster1_server3 Cluster1_server3	accela
	the default server Restore Defaults Application Application Activities Restore Defaults Application Communities Restore Defaults Restore Defa	Chutter1 Chutter1 Chutter1 Chutter1	Node           Ø stilvm.708Node01           Ø stilvm.771Node01           Ø stilvm.771Node01           Ø stilvm.771Node01           Ø stilvm.771Node01           Ø stilvm.771Node01           Ø stilvm.771Node01           Ø stilvm.771Node01	Cluster1_server1 Cluster1_server3 Cluster1_server3 Cluster2_server3 Cluster1_server3 Cluster1_server3 Cluster1_server3 Cluster1_server3	accept

Figure 39. Topology configuration

\_\_\_\_ 20. Next is the database configuration. Ensure that your database server is started. Click Yes, the applications are on the same database instance. Enter the host name and port of your database server.

\_\_\_\_21. Then, scroll down and enter the JDBC driver location, /opt/ibm/db2/V9.7/java in this example. Create your databases as db2user so the user ID and password are db2user.

		-
todati ) Exercise )	Launa Sumary	
Netlal)     Licenses       Common Configurations.     WebSphere       Topology     Topology       Content Store     Ocontent Store       Netification	Contracts Configurations           Database           Database           Contracts Configurations           Database           Database           Contracts Configurations           Database           Database           Contracts Configurations are point and point and another and database instance.           Image: The applications are not on the same database instance.           Image: The applications are not on the same database instance.           Image: The applications are not on the same database instance.           Database Type           Catabase Server Information           Database Server Information           Catabase Server Information           Database Server Information           Catabase Server Information           Catabase Server Information           Database Server Information           Database Server Information	4
	lop/10M/tb2jars Resource	

Figure 40. Configuring the packages

#### \_\_\_22. Click Validate.

U NUMBLANN	Application	Database Name	User ID	Password
	Activities	OPNACT	db2inst1	
	Biogs	BLOGS	db2imt1	
	Communities	SNCOMM	db2inst1	
	Bookmarks	DOGEAR	db2ind1	••••••
	Metrics	METRICS	db2ind1	•••••
	Mobile	MOBILE	db2imst1	
	Filles	FILES	db2iest1	
	Forums	FORUM	db2iest1	*******
	Home page	HOMEPAGE	db2imit1	
	Profiles	PEOPLEDB	db2imit1	•••••
	Wikis	WIKIS	db2inst1	********

Figure 41. Validating the configuration for the packages

This is then displayed.

💽 Prog	ress Information
	Validating BLOGS database
	Cancel

Figure 42. Validating BLOGS database

When the validation is complete, you should see the following.

💽 Infor	rmation Dialog 민	
	Validation successful.	
	obile MOBILE de Direct	******

Figure 43. Validation successful

\_\_\_\_23. Click **Next** to continue.

\_\_\_\_24. Now you are asked for Cognos information. Enter your admin ID for Cognos, click Load node info to select the Cognos node and click Validate.

Common Configurations	Common Configurations Cognos			
Contactage	Administrator user ID wpsbind	1		6
Content Store O Kontent Store O Notification	Administrator password	1		
	Node Select the node where the Cognox BI Server is installed Name			
	dulven 708Node02	Load node info		
	Host name			
	Server name			
	cognol_server \$		N	
	Port		H	
	1012			
	Web-context root			
	cognos			
	Validate			
	Please click the "Validate" button to continue			

Figure 44. Entering ID for Cognos, loading node info and validating

\_\_\_\_25. Now you are asked about the content store. In a cluster or where the Deployment Manager and Nodes are not installed on the same computer. It should be a shared location were full read/write access is granted.

<ul> <li>Common Configurations</li> <li>WeeSphere</li> <li>Topology</li> <li>Delatase</li> <li>Cognos</li> <li>Costinuit Street</li> <li>Notrification</li> </ul>	Common Configurations Content Store
	Shared Content Store Content that is shared among all nodes. Ensure each node in the cluster can access the network location Select a network shared location
	Local Content Store Content is stored locally on each node. Ensure the path exists on each node Select a local location.
	Validate

Figure 45. Content store information

\_\_\_\_26. Change the shared content store to /opt/IBM/LC\_Share which both nodes have access to. Click **OK** when ready.
\_\_\_\_27. Click Validate, OK, and then Next.



Figure 46. Validation successful

\_\_\_\_28. Finally, if mail is not configured, click **None** to not enable notification from the notification configuration screen. Otherwise, click **Enable notification and ReplyTo**.

WebSphere	Common Configurations Notification	
Topology Costabase Cograc Costent Store Factorization	Modification allows both IBM Connections applications and users to seed mail retrifications. ReplyTo allows users to reply to notifications ting amail. Replice appear in the retreatent application in IBM Connections. <ul> <li>Enable Notification only.</li> <li>Enable Notification and ReplyTo.</li> <li>None</li> </ul> <b>Notification</b> <ul> <li>Modification only.</li> <li>None</li> </ul> <b>Notification Notification Notification</b>	

WebSphere		
Database	ReplyTo	
Cognes.	Email Address	
Content Store	A unique email address is created for each Notification	
Notification	Domain name.	
	smtpserver277.example.com	
	None - Use a system generated unique ID for each ReplyTo email address	
	Prefix - Use a prefix with the system generated unique ID.	
	Suffix - Use a suffix with the system generated unique ID.	
	Prefix: (Example: prefix_ <your_user_id> SmtpServer277.example.com)</your_user_id>	
	prefix	
	Mail file Information	à.
	Mail Nie that receives all ReplyTo emails.	,
	Server	
	smtpserver277 example.com	
	User ID	
	Aamir_001_100	
	Pattword	

Figure 48. Enabling notification

\_\_\_\_29. Lastly, the summary screen. When ready, click Install.

Review the summary information		
Install ) License ) Location ) Features ) Sammar		
Target Location		
Package Group Name IBMID Connections		
Installation Directory Jopt18AA/Connections		
Shared Resources Directory Apt/IBM/SSPShared		
Packages		
Packages		
IDM0 Installation Manager 1.4.4		
V 10 IBM Connections 40.00		
> B Core Features		
b B. All Contains		
Environment	Disk Space Information	
Environment	Disk Space Information	Total Australia Space
Environment English	Disk Space Information	Total Available Space
Environment English	Disk Space Information	Totel Available Space 3407 CB
Environment English	Disk Space Information	Total Available Space 3407 GB
Environment English	Disk Space Information	Total Available Space 3407 GB
Environment English	Disk Space Information / Total Dewnload Size 1.16 GB Total Installation Size 1.84 GB	Totel Available Space 3407 GB
Environment English	Disk Space Information / Total Dewnload Size 1.16 GB Total Installation Size 1.38 GB	Totel Available Space 3407 GB

Figure 49. Summary information

#### The installation starts.

the second se			
deview and internally restriction.			1
Install ( Location ) Fastures ) Turning			
Target Location			
Package Group Name IBM® Connections			
Installation Directory /opt/IBM/LotusConnections			
Shared Resources Directory /opt18M/SSPShared			
Packages			
Packages			
13M0 Installation Manager 1.4.4			
TIBM Connections 40.0.0			
D Core Features			
D Pa All Peatures			
(Avironment	Disk Space Information		
Environment English	Disk Space Information		Total Available Space
Environment	Disk Space Information		Total Available Space 31.08 GB
Environment English	Diak Space Information J Total Download Size 121G8		Total Anailable Space 31 68 GB
Environment English	Disk Space Information J Total Download Size: 121GB Total Installance Size: 128GB		Total Available Space 31.68 GB
Environment English Inglish	Disk Space Information J Total Download Size: 121GB Total Installation Size: 128GB		Total Available Space 31.68 GB
Environment English • Repository Information	Disk Space Information J Total Download Size 121G8 Total Installation Size 189G8		Total Available Space 31.68 GB
Eevironmant Inglah • Rapesitlery Information	Disk Space Information J Total Download Size 121GB Total Installation Size 180GB	< Back	Total Available Space 31.68 GB

Figure 50. Installation in progress

When complete, you should see the following result:

Install results News installed successfully Search installed successfully Postine installed successfully. Activities installed successfully.	
The following package was installed	
V 🐁 IBMB Connections	
18M Connections 4 0.0 0	
stallation Manager was successfully installed into: Apt/IBM/I	instaliation Manager lecilgee
ide. If the packages support rollback, the temporary directory	contains rollback files for installed packages. You can delete the file
the Poles for rollback preference page.	

Figure 51. Install successful

\_\_\_\_ 30. Click **Finish** to close the Connections installer.

# Quick check of your Connections 4.0 installation and server definitions

- \_\_\_1. Stop your Node Agents and Deployment Manager.
- \_\_\_\_2. Then, start up your Deployment Manager, and when it is started, start up your Node Agents.
- \_\_\_\_3. Wait sometime for synchronization to complete.
- \_\_\_\_\_4. After your Node Agents start up, check their logs, and you should see many messages:

[7/19/12 14:15:52:850 IST] 00000031 NodeSyncTask A ADMS0003I: The configuration synchronization completed successfully. [7/19/12 14:15:55:183 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Common completed successfully. [7/19/12 14:15:58:811 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Mobile completed successfully. [7/19/12 14:16:01:010 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Mobile Administration completed successfully. [7/19/12 14:16:25:335 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application WidgetContainer completed successfully. [7/19/12 14:16:27:581 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Metrics completed successfully. [7/19/12 14:16:31:021 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Search completed successfully. [7/19/12 14:16:34:469 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Profiles completed successfully. [7/19/12 14:16:39:191 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Activities completed successfully. [7/19/12 14:16:40:561 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Moderation completed successfully. [7/19/12 14:16:43:496 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Files completed successfully. [7/19/12 14:16:49:322 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Communities completed successfully. [7/19/12 14:16:49:448 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application ibmasyncrsp completed successfully. [7/19/12 14:16:52:061 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application News completed successfully. [7/19/12 14:16:53:075 IST] 0000003b NodeSyncTask A ADMS0003I: The configuration synchronization completed successfully. [7/19/12 14:16:55:061 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Homepage completed successfully. [7/19/12 14:16:58:410 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Forums completed successfully. [7/19/12 14:17:00:692 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Wikis completed successfully. [7/19/12 14:17:05:040 IST] 00000032 AppBinaryProc I ADMA70211: Distribution of application Blogs completed successfully. [7/19/12 14:17:14:570 IST] 00000032 AppBinaryProc I ADMA70211:

Distribution of application Help completed successfully. [7/19/12 14:17:18:073 IST] 00000032 AppBinaryProc I ADMA7021I: Distribution of application Dogear completed successfully. [7/19/12 14:17:52:981 IST] 00000040 NodeSyncTask A ADMS0003I: The configuration synchronization completed successfully. [7/19/12 14:18:52:989 IST] 00000042 NodeSyncTask A ADMS0003I: The configuration synchronization completed successfully.

\_\_\_\_5. Then, start the Connections servers.

## Setting path variables for search

During the installation, you set /opt/IBM/LC\_Share which then set

/opt/IBM/LC\_Share/search/stellent/dcs/oiexport as the location for the stellent converters. In a multi-node cluster, it is recommended to run it on the nodes themselves and not the shared area.

- 1. Copy the folder /opt/IBM/LC\_Share/search/stellent to /opt/IBM/Connections/stellent on both nodes in your cluster. Change the rights on the folder to 777.
- \_\_2. In /opt/IBM/Connections/stellent, run cp -rf /opt/IBM/LC\_Share/search/stellent/\*.
- \_\_\_3. Run chmod 777 -R \*.
- \_\_\_\_4. Set up that share and then goto Environment > WebSphere Variables and FILE\_CONTENT\_CONVERSION. Change the path from the shared area to the local area on your nodes. This should be the same across both nodes.

Г	FILES EVENT CONTENT DIR	\${FILES_CONTENT_DIR}	Cell=dslvm767Cell01	
Г	FILE CONTENT CONVERSION	/opt/18M/Connections/stellent/dcs/oiexport /exporter	Cell=dslvm767Cell01	
Г	FORUM CONTENT DIR	/opt/I8M/LC_Share/forums/content	Cell=dslvm767Celi01	
г	FORUM HOME	/opt/18M/Connections/forum/forum/forum	Cell=dslvm767Cell01	

Figure 52. Environment > WebSphere Variables and FILE\_CONTENT\_CONVERSION

- \_\_\_5. Then, add /opt/IBM/Connections/stellent/dcs/oiexport to your PATH variable in .profile for the root user.
- 6. Either add export LD\_LIBRARY\_PATH=/opt/IBM/Connections/stellent/dcs/oiexport to /opt/IBM/WebSphere/AppServer/bin/set-upCmdLine.sh and run . ./set-upCmdLine.sh before you start the nodes or add export LD\_LIBRARY\_PATH=/opt/IBM/Connections/stellent/dcs/oiexport and add the line to the PATH in .profile.

```
export LD_LIBRARY_PATH=/usr/local/staf/lib:/opt/IBM/Connections/stellent/dcs/oiexporg
ulimit -n 8192
PATH=/opt/IBM/WebSphere/AppServer/java/jre/bin:/opt/IBM/Connections/stellent/dcs/oiexport:SPATH:SHOME/bin
export PATH
~
```

Figure 53. Adding the PATH variable in .profile

\_\_\_7. To check that LD\_LIBRARY\_PATH is checked, enter echo \$LD\_LIBRARY\_PATH.

dslvm771:~ # echo \$LD\_LIBRARY\_PATH /usr/local/staf/lib:/opt/IBM/Connections/stellent/dcs/oiexport dslvm771:~ #

Figure 54. Checking that LD\_LIBRARY\_PATH is checked



Do it on all nodes of your cluster.

\_\_\_8. Restart the server. Then, to make sure that the variables take effect or in /root/ folder run .profile.

✓ *i* Info

### Information

#### For more information about this extra step, see

http://www-10.lotus.com/ldd/lcwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Connections+ 4.0+documentation#action=openDocument&res\_title=Copying\_Search\_conversion\_tools\_to \_local\_nodes\_ic40&content=pdcontent.

# Populate the PROFILES database with LDAP user information



#### How to avoid an OOM when populating PROFILES database with 300K users

Previously the defect 59044: Profile Tivoli Directory Integrator Population OOM against IC 4.0 Builds to fix an OOM issue with profiles when populating large LDAP directories. Unfortunately this defect is deferred as there is a work-around. The work-around is to increase the JVM size of the Tivoli Directory Integrator process that does the population into the PROFILES database. This is done by adding -Xms256M -Xmx3072M to ibmdisrv/ibmdisrv.bat on your Tivoli Directory Integrator server.

This is documented for customers at the following link, so if you have any problems with populating your systems, this is how to do it:

http://www-10.lotus.com/ldd/lcwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Connections+ 4.0+documentation#action=openDocument&res\_title=Configuring\_Tivoli\_Directory\_Integ rator\_ic40&content=pdcontent.

This example uses a 3 GB heap size. If you have more available memory on your systems, then you should increase the -XmxXXXXM to reflect your own memory.

Do it on the server where you installed Tivoli Directory Integrator. In this example, it is on the DB2 server.

Populating the PROFILES database with LDAP user can now be done by a wizard.

\_\_\_1. Copy the Lotus\_Connections\_4.0\_wizards\_lin\_aix.tar to your server and extract it. Then, go into the Wizard folder and run ./populationWizard.sh. The following screen is shown. Click **Next** to continue. \_\_\_\_2. On the Welcome page of the wizard, click **Launch Information Center** to open the IBM Connections Information Center in a browser window. Click **Next** to continue.

elcome to Profiles population wizard for IBM Connections 4.0	
his wizard populates the Profiles database for IBM Connections with users from your LDAP directory.	IBM.
ick Next to continue.	
censed Materials - Property of BM. License L-/15/N-BUNPY2	
Capyright BM Corporation and its licensors 2007, 2012. All Rights Reserved. BML Re BM logo, don sum and Lotus are trademarks of BM Corporation i Stes, other countries, or both. Other company, product or service names may be trademarks or service marks of others. A current list of BM trademarks in	n the United 5 available we Contract

Figure 55. Profiles population wizard for IBM Connections 4.0

\_\_\_\_3. Click Default settings or, if you are resuming an earlier session, click Last successful default settings and click Next.

4	Profiles population wizard for IBM Connections 4.9	_ = ×
Profiles database type		Lotus. Connections
Select the Profiles database type.		TBW
DB2 Universal Database(TM)		
Oracle Enterprise Edition		
SQL Server Enterprise Edition		
	Back	Cancel Next
	La company	

Figure 56. Profiles database type

\_\_\_\_\_4. Next, enter the database information for where your PEOPLEDB database is located and click **Next** to continue.

4	Profiles population wizard for IBM Connections 4.0.	_ 🖻 ×
Profiles database properties		
Enter the Profiles database prope	rties. The wizard uses this information to access the Profiles database.	TRM.
	com	
Port		
50001		
Database name:		
PEOPLEGO		
JDBC driver library path:		
/opt/lbm/db2/V9.7/java	Decive	54
User ID (Account used to write to o	database):	
db2		
Password:		
•••••		
	6	~
	Back	Gancel Next

Figure 57. Profile database properties

\_\_\_5. Enter your LDAP server and port and then click **Next** to continue.

A	Profiles population wiz.	ard for IBM Connections (	60	_ a ×
LDAP server connection				Lotus, Connections
Specify the LDAP host name and port to enable th LDAP server name:	e Profiles population wizard	to connect to the LDAP s	erver.	IBM.
LDAP server port:				
389				
Select to use SSL communication for secured acce	19.5			
			Back	Gancel Bert

Figure 58. LDAP server connection

\_\_\_\_6. You are then asked about your bind user and Bind password and select **Next** to continue.

4	Profile's populat	ion wizard for IBM Connections 4.0	_ © X
LDAP authentication prop	serbes		Lotus. Connections
Enter the bind distinguishe	d name and password to to allow the wizard	to access the LDAP directory.	
Bind distinguished name (	DNa:		IBM.
CN=	04	7C=com	
Bind password:			
		Back	Cancel N. Next
			- 8 -

Figure 59. LDAP authentication properties

\_\_\_\_7. Enter the search base and search filter. Click **Next** to continue.

4		Profiles popul	ation wittant for	HIM Connections 4.0			_ = ×
Base distinguished name	and fliter for searches					Lotus	. Connections
Enter the base distinguishe	ed name and filter for this	s wizard to begin	searching for us	ers in the LDAP director	y tree.		
LDAP user search base:							IBM.
OU+			<b>PC</b>	ncom		*	
LDAP user search filter.							
(&(uid=*)(objectclass=user	r0)						
					Back	Cance	d Next
					Buck		5

Figure 60. Base distinguished name and filter for searches

\_\_\_\_8. Select the default database mapping for this example. Click **Next** to continue.

<b>b</b> y.	Pite				CHE
Profiles database ma	pping			otus	Connection
elect an LDAP attribu ou can sort the colum anction.	te or a JavaScript function for each ins by selecting the column heade	field in the Profiles database. or select each row to add, remove, or edit the LDAP attribute o	r Javascript		IBM.
Database Fields	LDAP Attributes or JS Functions	Description		A	
alternateLastname		Alternate last name			
bidgld		Building		=	
blogUtl		Blog link			
calendarUit		Calendar link			
countryCode	c	Country code			
courtesyTitle		Courtesy title			
deptNumber		Department number			
description	description	About me			
displayName	cn	Name			
distinguishedName	Sdn	LDAP distinguished name			
email	mail	Office email			
employeeNumber	employeenumber	Employee number			
employeeTypeCode	employeetype	Employee type			
experience		Background			
faxNumber	facsimiletelephonenumber	Fax number		•	
		Bac	k)	Gancel	Next

Figure 61. Profiles database mapping

\_\_\_9. Do not select any of the optional database tasks. Then, click **Next** to continue.

1	Profiles population wizard for (BM Connections 4	0		- 0
ptional database tasks				
elect the check box for eac formation type.	h type of optional information that you want to add. You must supply a CSV t	fie with data for each	-	TRM
Countries				
/opt/software/LCI4.0_20	120817-2146/Witards/TDIPopulation/linux/TDI/isocc.csv	Bgowse		
Departments				
/opt/software/LCH4.0_20	120817-2146/Wittards/TDIPopulation/Inus/TDI/deptinfo.csv	Bgome		
Organizations			1	
Jopt/software/LCI4.0_20	120817-2146/Witards/TDIPopulation/Inus/TDI/orginto.cov	Digene		
Employee types				
/opt/software/LCI4.0_20	120817-2146/Witards/TDIPopulation/Imus/TDI/emptype.csv	Prome		
Work locations				
iupt/software/LCI4.0_20	120817-2146/Wgards/TDIPopulation/linus/TDI/workloc.csv	(Billioner)		
Discussion in the same the start			4	
<ul> <li>Yes</li> </ul>	k usas mainta ung protega unganar managenn			
			0	
			-	
		Back	Sance	Next

Figure 62. Optional database tasks

\_\_\_\_10. Review the summary page to ensure that the information you entered in the previous panels is correct. To make changes, click **Back** to return to the relevant page and edit the information. Otherwise, click **Configure** to begin populating the database.

3	Profile's population wizard for IBM Connections 4.0	_ = >
rofiles population configuration summary		Lotus. Connections
Profile population wizard is ready to run the pop	rulation with the following configuration.	TEM.
Configuration details: Database host name: cc Database name: DECIDI EDD	ना	
Database port: 50001 Database port: 50001 DBC driver library path: /opt/libm/db2/V9.7/java Database user ID: db2 Database type: DB2 Universal Database(TM)		
LDAP best name:		
LDAP user search flare: (&ud=*)(objectclass=u LDAP user search flare: (&ud=*)(objectclass=u Tiveli Directory Integrator installation location: /e Use SSL communication: No Optional task list:	ser() pUIBM/TDI/V7.1	
To change any settings, click Back. To begin th	e configuration, click Configure	

Figure 63. Profiles population configuration summary

Then, you see the execution of the population task:

4	Profiles population wizant for IBM Connections 4.9	_ (7 ×
Executing population task		Lotus, Connections
This task may take several minutes or Populating Logging into /root/ktWizard/log/tdi/tdi_	hours, depending on the size of your LDAP directory. 20111007_133020.leg	IBM.
gpen Log		
	Bid	Garcel Best

Figure 64. Executing population task

This task can take a long time (3 - 4 hours) so tail the previous log which is being referenced. Click **Finish** to exit the wizard. When the installation completes, you should see the following summary:

	Profiles population wizard for IBM Connections 4.0	)	
Profiles population configura	lion summary		
Profile population wizard is re	ady to run the population with the following configuration.		IBM.
Configuration details:			
Database host name: Database name: PEOPLEDE Database port: 50001 J08C driver library path: /opU Database user ID: db2inst1 Database user ID: db2inst1 Database user ID: db2inst1 DAP host name: LDAP server port: 389 Brid distinguished name: LDAP user search fiber: (Aluk Tvo8 Directory Integrator inst Use SSL communication: No Optional task list: Fill countrie Country code CSV file: /opt/si	.com bm/db2/V9.7/java I Database(TM) '* com i**Nobjectclass=user() ilation location: /opt/IBM/TDI/V7.1 Mark managers shtware/LCI4.0_20120817-2146/Wizards/TDIPopulation/linux/TDI/isocc.csv		
To change any settings, click	Back. To begin the configuration, click Configure		
		Back	Cancel Configure

Figure 65. Profiles population configuration summary

\_\_\_\_11. When the installation completes, click **Finish** to exit the wizard.

4	Profiles population wizard for IBM Connections 4.0	_ O ×
Executing population task		
This task may take several minutes or	nours, depending on the size of your LDAP directory.	72925
Populating		1017L e
Logging into /root/icWizard/log/tdi/tdi_	20120830_091818.log	
110000		
Open Log		
	Back	Gencel Lien

Figure 66. Executing population task

\_\_\_\_12. When populating, you must check whether the users are in the PROFILES database. To do so, check on the DB2 server check by running:

```
db2 connect to PEOPLEDB
db2 select prof_uid from empinst."Employee" order by prof_uid fetch first 20
ROWS ONLY
```

- \_\_\_\_13. When Connections is running, run http://connections.example.com/profiles in a browser so a search for some users. A list should come back.
- \_\_\_\_14. Finally, start the Connections servers. Check for errors in the Logs > /opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs on each node.

# 3. Configuring the remote HTTP server

The next section is about HTTP configuration and must be completed as HTTP is required for login by default on Connections.

To start the administration server, go to HTTPServer/bin directory and issue the command ./adminctl start.

## Add web server as unmanaged node

- \_\_\_\_1. After the administration server is started, open the Deployment Manager and add the web server to the cell as an unmanaged node. Open the administrative console at <a href="https://connections.example.com">https://connections.example.com</a>: 9043/admin.
  - \_ 2. Go to **System Administration > Nodes** and click **Add Node**.

#### Nodes

Use this page to manage nodes in the application server environment. A node corresponds to a physical comput following table lists the managed and unmanaged nodes in this cell. The first node is the deployment manager. clicking Add Node.

#### Preferences

Add	Node	Remove Node	Force Delete	Synchronize	Full Resynchronize	Stop
C	6#	Ŷ		······································		
Select	Name	٥	н	ost Name 🗘		Version 🗘
You c	an admi	inister the followi	ng resources:			

#### Figure 67. Adding a node

\_\_\_3. Click **Unmanaged node** and click **Next**.

C.	Managad node
	Specifies the creation of a managed node. A managed node contains an application server process that runs within the deployment manager cell. The managed node is associated with a node agent process that maintains the configuration for the node and controls to operation. Choosing this aption results in running the add node utility to federate an existing standatione application agent.
8	Urmanaged node
	Bpecifies the creation of an unmanaged node. An unmanaged node represents a node in the topology that does not have an application server process or a node egent process. Unmanaged nodes are first ther server processes, such as Web servers that exist on their own node in the topology.

Figure 68. Adding an unmanaged node

\_\_\_\_4. Provide a name and host name of the HTTP server and click **OK**.

onfiguration	
Ceneral Properties	The additional properties will not be available until the general properties for this item are applied or saved. Additional Properties
+ Host Name vebserver.ibm.com	<ul> <li>Curton Préparois</li> </ul>
Platform Type     Unux	

Figure 69. Entering the node's general properties

Messages	
Changes have been	n made to your local configuration. You can:
• Save directly to the	master configuration.
• Review changes bef	ore saving or discarding.

#### Figure 70. Saving the node's properties

On the nodes panel, the web server is displayed in the list.

vebserver1	connections.example.com	Not applicable	тср
		P-C	



## Add web server as a server

Next, add the web server as a server in the figuration. To do so, do the following:

Use th	ervers is page to vie	w a list of the installed W	eb servers.			
Ger	ierate Plug-in	Propagate Plug-in Ne	w Delete	Templates Star	t Stop T	erminate
0.1.4	Name 🗘	Web server Type 💲	Node 🐎	Host Name 🗘 _	Version 🗘 _	Status (
Select			and the second se		the second se	

Figure 72. Adding a web server as a server in the figuration

\_\_\_\_6. From Servers > Server Types > Web Servers, click New.

Rep I: Select a code for the Web	Select a node for the Web server and select the Web server type	
he Web server. ype	Select a node that corresponds to the Web server you want to add. Select node	
Hep 2: Select a Veb server emplate	vebserver1  + Server name vebserver1	
tep 3: Enter the roperties for the new Web server	+ Type IBM HTTP Server	
tep 4: Confirm new Veb server		

Figure 73. Creating new web server definition

\_\_\_7. Select the web server node and provide the name of this server as webserver1. This is the same name that is provided during the plug-ins installation on the web server. Click Next to continue.

\_\_\_\_8. The IHS option is selected, click **Next**.

Step 1: Select a	Select	a Web server templat	e)	
server and select the Web server type	Select	the template that corresp	onds to the server th	nat you want to create.
Step 2: Select a	20	\$		
Web server template	Select	Template Name	Туре	Description
Step 3: Enter the properties for the new Web server Step 4: Confirm new		IHS	System	The IHS Web Server Template

Figure 74. Selecting a Web server template

\_\_\_\_9. Provide all of the web server details as previously and click Next.

Step 1: Select a	Enter the properties for the new Web server	
server and select	Enter the Web server properties.	
the was rever type	+ Port	
Step 2: Select a Web server	60	
tamplate	Web server installation location	
Step 3: Enter the	/op//IBM/HTTPServer	
properties for the	Plugrin installation location     (ons/IBM/WTTPSesses/Duplos	
new metricer.	Application managing to the Web second	
Step 4: Confirm nev Web terver	All .	
	Enter the IBM Administration Server properties.	
	Administration Server Port	
	8008	
	• Usemame	
	+ Password	
	+ Comm batteord	
	E un an	
	1 Use SSL	

Figure 75. Entering the properties for the new web server

\_\_\_\_10. Confirm the new web server and click **Finish**.



Figure 76. Confirming the new web server

\_\_\_\_11. Save this change. Before proceeding, do a full synchronization between nodes in the deployment.

Ξ	Messages
	B New server is created successfully.
	🕰 Changes have been made to your local configuration. You can:
	<ul> <li><u>Save</u> directly to the master configuration.</li> </ul>
	<ul> <li><u>Review</u> changes before saving or discarding.</li> <li>An option to synchronize the configuration across multiple nodes after saving can be enabled in <u>Preferences.</u></li> </ul>
	The server may need to be restarted for these changes to take effect.

Figure 77. Saving the changes in the new web server

\_\_\_\_ 12. Return to **Servers > Server Types > Web Servers**. Generate and propagate the plug-in file to the web server.

	🖂 Message	s			
	U- Suco	ssfully initiated synchronization	of the repository o	in node node01Node	
	with the	deployment manager's reposito	ory.	n nada nada02Nada	
	with the	deployment manager's reposite	or the repository of ry,	in node nodecznode	
odes Ise ti yster	s his page to manage m vith a distinct IP h	nodes in the application server e ost address. The following table	invironment. A nod lists the managed to the cell and to	le corresponds to a physic and unmanaged nodes in this list bu clicking Add No	al compute h this cell.
ne n	irst node is the deplo	yment manager. Add new node:		and have by cheating Add the	
] Pre	irst node is the deplo eferences	yment manager. Add nev node:		and not by cheaning had no	
Pre Ad	irst node is the deplo eferences Id Node Remove No	de Force Delete Synchroniz	e Full Resynchro	nize Stop	
Ad	irst node is the deplo eferences Id Node Remove No	de Force Delete Synchroniz	e Full Resynchro	nize Stop	
Ad December	irst node is the deplo eferences Id Node Remove No The second second second Remove Second second Remove Second second Remove Second second Remove Second second Remove Second second Remove Second second Remove Second sec	de Force Delete Synchroniz Host Name 🛇	e Full Resynchro	nize Stop Discovery Protocol 🗘	Status (
Ad Ad elect You	irst node is the deplo eferences Id Node Remove No The second se	de Force Delete Synchroniz Host Name 🔅	e Full Resynchro	nize Stop Discovery Protocol 🗘	Status (
Ad Ad elect You	irst node is the deplo eferences id Node Remove No t Name \$ can administer the fi dmCellManager01	de Force Delete Synchroniz Host Name 🛇 bllowing resources: dm.example.com	e Full Resynchro Version \$ ND 7.0.0.11	nize Stop Discovery Protocol 🗘	Status (
Ad Ad elect You	irst node is the deplo eferences Id Node Remove No The second second second the Name Control Second can administer the for dmCellManager01 node01Node	de Force Delete Synchroniz Host Name billowing resources: dm.example.com node1.example.com	e Full Resynchro Version ≎ ND 7.0.0.11 ND 7.0.0.11	nize Stop Discovery Protocol 🗘 TCP TCP	Status (
Ad Pro Ad elect You	irst node is the deplo eferences Id Node Remove No The second second second Remove No Remove No the second second second the second second second second the second second second second second the second second second second second the second secon	de Force Delete Synchroniz Host Name 🛇 Most Name C Most Name C dm.example.com node1.example.com node2.example.com	e Full Resynchro Version \$ ND 7.0.0.11 ND 7.0.0.11 ND 7.0.0.11	nize Stop Discovery Protocol 🗘 TCP TCP TCP	Status (

Figure 78. Generating and propagating the plug-in file to the web server

\_\_\_\_13. To do so, select the check box beside webserver1 and click Generate Plug-in.

	E Me	issages				
		PLGC00051: Plug-in c profiles\Dmgr02\config\ rebserver1\plugin-cfg.>	onfiguration cells\connec ml	file = C:\IBM\WebSphere\Aj tionsCell01\nodes\webserve	ppServer r\servers	
	s.	PLGC00521: Plug-in c erver. connectionsCell0	onfiguration 1. vebserver.	file generation is complete f webserver1.	for the Web	
Web se	ervers					rminate
Web se Jse thi Pref Gen	ervers Is page to vid ferences erate Plug-in	ew a list of the installed	d Web serve	rs, lete Templates Start	Stop Te	rminate
Web sethi Jse thi Gen Gen	ervers is page to vie ferences erate Plug-in D + P P Name 🔇	ev a list of the installed Propagate Plug-in	d Web serve	rs, ete Templates Start Host Name 🐎	Stop Te	rminate Status ሷ
Veb so Jse thi Pref Gen Di l Select You c	ervers is page to vio ferences erate Plug-in D + + + Name an administe	ew a list of the installed Propagate Plug-in Web server Type O <sub>2</sub> or the following resource	d Web serve	rs, lete Templates Start Host Name Ç_	Stop Te	rminate Status ሷ

Figure 79. Generating plug-in

\_\_\_\_14. Select the check box again and click **Propagate Plug-in**.

	E Me	ssages					
	1 // 1/	PLGC00621: The plug WebSphere\AppServer\ nodes\webserver\serve Plugins\config\webserve	-in configura profiles\Dmg rs\webserver er1\plugin-cf	ition file is propagati gr02\config\cells\con 1\plugin-cfg.xml to o g.xml on the Web se	ed from nections c:\IBM\H erver con	C:\IBM Cell01 TTPServer nputer.	
	fo	\nodes\webserver\servers\webserver1\p \Plugins\config\webserver1\plugin-cfg.x PLGC0048I: The propagation of the p for the Web server. connectionsCell01.w	he plug-in configurat 1. vebserver. vebserv	tion file i ver1.	s complete		
<b>Veb s</b> e Jse th	ervers is page to vie	ew a list of the installe	d Web serve	rs.			
Veb so Ise th Pref Gen	ervers is page to vi ferences erate Plug-in	ew a list of the installer	d Web serve	rs. ete Templates	Start	Stop 7	Ferminate.
Veb si Ise th Pref Gen	ervers is page to vie ferences ierate Plug-in	ew a list of the installer	d Web serve New Del	rs. ete Templates	Start	Stop 7	Ferminate
Veb so Jse th Pret Gen	ervers is page to vie ferences erate Plug-in The state Name \$	ew a list of the installer Propagate Plug-in Web server Type 🐎	d Web serve	rs. ete Templates Host Name 💝 _	Start	Stop 7	Ferminate
Veb so Jse th Pret Gen De l Select You c	ervers is page to vie ferences erate Plug-in D +++ ++++++++++++++++++++++++++++++++	ew a list of the installer Propagate Plug-in Web server Type 🐎	d Web serve New Del Node O_ es:	rs. ete Templates Host Name 🐎	Start	Stop 7	Status i

Figure 80. Propagating plug-in

\_\_\_\_15. Click **webserver1** and click Plug-in properties.

Configuration	
General Properties	Configuration settings     Web Server Virtual Hosts
Type IBM HTTP Server	Global Directives  Additional Properties  Log file
80 + Web server installation location C:/IBM/HTTPServer	Configuration File     Plug-in properties     Remote Web server management     Custom properties
Configuration file name     (WEB_INSTALL_ROOT)/conf/httpd.cor     Edit     Service name	Ports

Figure 81. Plug-in properties

\_\_\_\_16. From the repository copy of web server plug-in files section, click **Copy to Web server key store directory**.

Panasitani sanu of Wah samar plua-in filosi
Repository copy of the server plug-in mes.
* Plug-in configuration file name
plugin-cfg.xml View
Automatically generate the plug-in configuration file
E
🗹 Automatically propagate plug-in configuration file
* Plug-in key store file name
plugin-key.kdb
P3
Manage kous and certificates
Manage Keys and cerdificates
Copy to Web server key store directory

Figure 82. Copying to web server key store directory

\_\_\_\_17. The following message is displayed to indicate the successful copying of these keys. Again, restart the web server for the plug-in changes to take effect.

Ξ	Messages
	PLGC0064I: The plug-in keyring file is propagated from /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config /cells/dslvm767Cell01/nodes/webserver1/servers/webserver1/plugin-key.kdb to /opt/IBM/HTTPServer/Plugins /config/webserver1/plugin-key.kdb on the Web server computer.
	PLGC00691: The propagation of the plug-in keyring is complete for the Web server. dslvm767Cell01.vebserver1.vebserver1.
	*

Figure 83. Message indicating the successful copying of the keys

# **Configuring IBM HTTP Server for SSL**

To support SSL, create a self-signed certificate and then configure IBM HTTP Server for SSL traffic. If you use this certificate in production, users might receive warning messages from their browsers.

In a typical production deployment, you would use a certificate from a trusted certificate authority.

The first step is to create a key file.

\_\_\_1. Start the iKeyman utility by ikeyman.sh from /opt/IBM/HTTPServer/bin. The following panel is displayed when you run this utility.

) 🚅 🖵 😴 🖾 🖙 —		
	Kov database information	
8-Type:		
le Name:		
oken Labet:		
	Key database content	
Personal Certificates		Recepte_
		Delete
		Viem Edit
		Import
		Recregte Request
		Bename
		Bename
		Benagan
		Renarge New Self-Signed



\_\_\_\_2. Click Key Database File > New...

🎒 IB	M Key Manage	ment		
Key [	Database <u>F</u> ile	<u>C</u> reate	⊻iew	Help
$\square$	<u>N</u> ew		Ctr	I-N
Ê	O Create a n	ew key da	atabase	file
÷	N <u>e</u> w Provide	r	Ctr	I-E
	<u>C</u> lose			

Figure 85. Creating a database file

\_\_\_\_3. Ensure that the key database type is selected as CMS. Input a name for the key file and location to store it.

New		×
<u>K</u> ey database type	CMS 👻	
<u>F</u> ile Name:	webserver-key.kdb	Browse
Location:	C:\IBM\Keyfiles	
	<u>O</u> K <u>C</u> ancel	

Figure 86. Providing a name and location for the key file

\_\_\_\_4. Enter a password and check **Stash password to a file**.

Password Prompt	×
<u>P</u> assword:	•••••
Co <u>n</u> firm Password:	•••••
Expiration time ✓ Stash password	60 Days
<u>o</u> ĸ	<u>R</u> eset <u>C</u> ancel

Figure 87. Password prompt

You are returned to the iKeyman panel with the webserver-key.kdb opened.

STATISTICS AND INCOMENTS			
) 🥟 🖡	a 😤 强 💶		
	Key database inform	mation	
l-Type:	CMS		
e Name:	C XBM Keyfiles webserver-key kdb		
ken Label:			
	Key database con	nternt	
ersonal Certr	ficates	-	Receive
			Genero
			ViewEdit
			ViewEdit
			ViewEdit Import Rocregte Request
			ViewEdit Import Rocregte Request Ronage
			Rename
			VergEdit., Import., Recregte Request., Remarge

Figure 88. IBM Key Management

\_\_\_\_5. Create a self-signed certificate by using **Create > New Self-Signed Certificate**.



Figure 89. Creating a New Self-Signed Certificate

\_\_\_\_6. Input the label and other details as appropriate. Click **OK** to save the certificate.

🚇 Create New Self-Signed Certil	ficate 🔀
Please provide the following:	
Key Label	SelfSignedCertificate
Version	X509 V3 💌
K <u>e</u> y Size	1024 💌
Signature Algorithm	SHA1WithRSA 💌
Common Name (optional	connections.example.com
Organization (optional	
Organizational Unit (optional	
Locality (optional	
State/Province (optional	
Zipcode (optional	
Country or region (optional	)
Validity Period	365 Days
<u>o</u> ĸ	<u>R</u> eset <u>C</u> ancel

Figure 90. Create New Self-Signed Certificate: Details

The certificate now appears in the key file.

IBM Key Man	gement - [C:\IBM\Keyfiles\webserver-key.kdb]	
ley Database 🖯	le Greate View Help	
🗅 🧀 🖡	3 😤 🚯 💶	
	Key database information	)
DB-Type:	(CMS	
File Name:	C-18MiKeyfiestwebserver-key.kdb	
Token Labet		
	Key database content	
Personal Certi	ficates 💌	Receive
* SelfSignedCo	rificate	Delete
		ViewEdit

Figure 91. IBM Key Management showing the certificate created

\_\_\_7. Stop the IBM HTTP Server, if started. When verified as stopped, log in to the administrative console and configure the web server for SSL. From the Web servers panel, click **webserver1**.

Web servers Use this page to v ① Preferences	iew a list of the installed	d Web serve	rs.		
Generate Plug-in	Propagate Plug-in	New Del	ete Templates Start	Stop Te	rminate
Select Name 🗘	Web server Type 🐎	Node 01	Host Name 🐎	Version 🐎	Status 🖞
You can administ	er the following resource	151			
	TOM LITTO Comes	vebserver	connections.example.com	Not	

Figure 92. Configuring the web server for SSL

\_\_\_\_8. Click **Configuration File** to open the httpd.conf from the administrative console.

guration	
neral Properties	Configuration settings
Veb server name	Web Server Virtual Hosts
vebserver1	Global Directives
ype	
IBM HTTP Server	Additional Properties
Port	Log file
80	Configuration File
NUM STOLEN AND AND AND AND AND AND AND AND AND AN	Plug-in properties
and the second sec	

Figure 93. Configuration File
The httpd.conf opens in the browser as shown in the figure.

Configuration file
#
#
# This is the main IBM HTTP server configuration file. It contains the
# configuration directives that give the server its instructions.

# See <URL:http://publib.boulder.ibm.com/httpserv/manual70/> for detailed

\_\_\_\_9. Scroll to the bottom of the configuration file. At the end of the httpd.conf, add the previous lines to load the SSL module by using the newly created key file:

LoadModule ibm\_ssl\_module modules/mod\_ibm\_ssl.so <IfModule mod\_ibm\_ssl.c> Listen 0.0.0.0:443 <VirtualHost \*:443> ServerName connections.example.com SSLEnable AllowEncodedSlashes On </VirtualHost> </IfModule> SSLDisable Keyfile "/opt/IBM/Keyfiles/webserver-key.kdb" SSLStashFile "/opt/IBM/Keyfiles/webserver-key.sth"

\_\_\_\_10. Click **OK** to save this change.

Figure 94. httpd.conf

11. Next, start the IBM HTTP Server. To verify that the SSL settings took effect correctly, type https://connections.example.com into a browser. If the IBM HTTP Server page appears over https, then this step was successful. You might need to accept the certificate to your browser as it is not signed.



Figure 95. Website's security certificate

12. Click Continue to this website (not recommended). The WebSphere software start page is displayed.



Figure 96. WebSphere software start page

### Adding certificates to the WebSphere truststore

\_\_\_\_1. On the administrative console go to **Security > SSL Certificate and Key Management**. Click **CellDefaultTrustStore** as shown in the figure.

certif	icate and key manageme	int		
SSL ce	rtificate and key manage	ment > Key stores and ce	ertificates	
efine	s keystore types, includin	g cryptography, RACF(R),	CMS, Java(TM), and all tru	ststore types.
eveto				
veysco	ie usages			
SSL	. keystores	-		
Pret	ferences			
New	Delete II Chappe has	sword Exchange signer	•	
1164	li weiece li onande pas	saoram I Evenange signer	200	
Select	Name 🗘	Description 🗘	Management Scope 🗘	Path 🗘
You c	an administer the following	ng resources:		
	CMSKevStore	CMSKeyStore for web server webserver1.	(cell):dmCell01: (node):webserver: (server):webserver1	\${CONFIG_ROOT}/cells /dmCell01/nodes /webserver/servers /webserver1/plugin- key.kdb
	CellDefaultKeyStore	Default key store for dmCell01	(cell):dmCell01	\${CONFIG_ROOT}/cells /dmCell01/key.p12
Г	CellDefaultTrustStore	Default trust store for dmCell01	(cell):dmCell01	\${CONFIG_ROOT}/cells /dmCell01/trust.p12
	1. 1. a. 1. 1611	and the second	2 m 1	1.0 m m m m m m m m m m m m m m m m m m m

Figure 97. SSL certificate and key management

\_\_\_\_2. From within CellDefaultTrustStore, click **Signer Certificates** from the right side.

certificate and key management > Key stores and certificates >	CellDefaultTrustStore
nes keystore types, including cryptography, RACF(R), CMS, Java(T	M), and all truststore types.
neral Properties	Additional Properties
lame	Signer certificates
CellDefaultTrustStore	Barranal
escription	certificates
	Personal
Default trust store for dmCell01	cartificate
Default trust store for dmCell01 Nanagement scope	requests



\_\_\_\_3. To add the webservers signer to the truststore, click **Retrieve from Port**.

Lcertifica	ate and	key mana	gement > Key stor	and certificates > CellDefault	TrustStore > Signer certificates
nages si	gner cer	tificates in	key stores.		
Preferen	ces				
	silve 1		Davis da su d		
Mad	Jelete	Extract	Ketrieve from port		
	11/100				

Figure 99. Retrieving from port

4. Enter the host name of the web server and its SSL port (typically 443). Then, click **Retrieve Signer Information**, which retrieves the information that is shown at the bottom of the screen capture. Provide an alias for this signer certificate and click **OK** to add this certificate to the list of signers.

Figure 100. Retrieved signer information

\_\_\_\_5. Save this change and restart the HTTP server to apply the changes.

# Update web addresses used by Lotus Connections to access content

1. Using the wsadmin client, check out the LotusConnections-config.xml to a temporary directory. From this directory, this file must be edited so that all href and ssl\_href values are updated to reflect the host name of the HTTP Server and do not include any port numbers. An example is as follows:



Figure 101. LotusConnections-config.xml

\_2. Convert the following original values of the hrefs ssl\_hrefs from their previous default values to their new values. In this case, all that is done is to drop the port numbers 9081 and 9044 from these URLs.



Figure 102. LotusConnections-config.xml

\_\_\_3. Repeat this process for all href and ssl\_hrefs that are currently set to connections.example.com.



For the metrics and Cognos entries:

The metrics interlock settings change as per all the other applications, the Cognos settings keep the port numbers. This is because there are the port numbers to point to the BI Cognos server.

Figure 103. LotusConnections-config.xml

4. After this process is complete, save the file and check the file back in using the wsadmin client. After the file is checked back in, resynchronize the node so that this change is pushed out.

This completes the web server, SSL, and certificate configuration for this scenario. Now, when the application is started it can be accessed at

https://connections.example.com/<component, where <component represents any of the Connections applications. The commands to do all of the above are shown below (the above updates take place after the check out command):



Figure 104. Administrator: Command Prompt

The following list provides the previous commands in a text format so that they can be copied and used again in your own deployment:

```
1: wsadmin.bat -lang jython -username wasadmin -password wasadmin -port 8879
2:
```

execfile("C:\IBM\WebSphere\AppServer\profiles\Dmgr01\config\bin\_lc\_admin\connec tionsConfig.py")

```
3. LCConfiguService.checkOutConfig("C:/temp","connectionsCell01")
```

<Make changes to the checked out file>

```
4: LCConfigService.checkInConfig()
```

```
5: synchAllNodes()
```

# Add users or all authenticated in application realm to metrics application

Now you add users who can generate metrics.

- \_\_\_\_1. Log in to your admin console and select **Applications > Application Types > Websphere** enterprise applications and then click **Metrics**.
- \_\_\_\_2. Then, select **Security role to user/group mapping** and add the users to the admin and metrics-report-run roles.

rprise	Applications			
nterpri	ise Applications > <u>Metrics</u> > Security	role to user/group mapping		
ecurity	role to user/group mapping			
Each ro when u on the using t inform the act	No that is defined in the application using cross realm communication in a user or group name. The accessEds he WabSphere default authorization ation in these fields will cause authorizes. AllAuthenticated: This indicates	or module must map to a user or group from the domain multi domain scenario. For all other scenarios the accer represent the user and group information that is used fi engine. The format for the accessids is urestrealm/unic risation to fail. AllfuthenticatedInTrustedRealmys This in that any valid user in the current realm be given the ac	n user registry, accessIds: The sId will be determined during or Java Platform, Enterprise Ed gueUserID, group:realm/uniqu dicates that any valid user in cess.	e accessIds are required on the application start based lition authorization when rediroupID. Entering wrong the trusted realms be given
Mag	Users Map Groups Map Spe	cial Subjects *		
0	Ô			
Select	Role	Special subjects	Mapped users	Mapped groups
Г	everyone	Everyone		
Г	person	All Authenticated in Application's Realm		
Г	reader	Everyone		
Г	everyone-authenticated	All Authenticated in Application's Realm		
Г	community-metrics-run	All Authenticated in Application's Realm		
Г	admin	None	Aamir_001_077	

Figure 105. Security role to user/group mapping

\_\_\_\_3. Save the application and synch the nodes.

### Enabling fast downloads for files and wikis

The last item is to enable fast download for files and wikis.

- \_\_\_1. On your deployment manager, go to /opt/IBM/Connections/plugins/ihs/mod\_ibm\_local\_redirect/linux\_ia32-ap22. You see a file that is called mod\_ibm\_local\_redirect.so located there.
- \_\_\_2. Copy this file to your HTTP server under /opt/IBM/HTTPServer/modules/.



Reminder

You must remember to do this; otherwise when you download files the file size is 0.

\_\_\_3. Now edit the httpd.conf under /opt/IBM/HTTPServer/conf:

LoadModule ibm\_local\_redirect\_module modules/mod\_ibm\_local\_redirect.so

```
LoadModule env_module modules/mod_env.so (it might already exit to check your existing file).
```

\_\_\_\_4. Also, add the following sections. Paths must change based on installation.

```
Alias /downloadfiles /opt/IBM/LC_Share/files/upload/
Alias /downloadwikis /opt/IBM/LC_Share/wikis/upload/
<Directory /opt/IBM/LC Share/files/upload/>
Order Deny, Allow
Deny from all
Allow from env=REDIRECT_FILES_CONTENT
</Directory>
<Directory /opt/IBM/LC_Share/wikis/upload/>
Order Deny, Allow
Deny from all
Allow from env=REDIRECT_WIKIS_CONTENT
</Directory>
<Location /files>
IBMLocalRedirect On
IBMLocalRedirectKeepHeaders
X-LConn-Auth, Cache-Control, Content-Type, Content-Disposition, Last-Modified, ET
ag, Content-Language, Set-Cookie
SetEnv FILES CONTENT true
</Location>
<Location /wikis>
IBMLocalRedirect On
IBMLocalRedirectKeepHeadErs
X-LConn-Auth, Cache-Control, Content-Type, Content-Disposition, Last-Modified, ET
ag, Content-Language, Set-Cookie
SetEnv WIKIS_CONTENT true
</Location>
```

\_\_\_5. Finally, edit the files-config.xml and wikis-config.xml files under /opt/IBM/WebSphere/DeploymentManager/profiles/Dmgr01/config/cells/connection sCell01/LotusConnections-config/ on your deployment manager and change:

```
<download>
<modIBMLocalRedirect enabled="true"
hrefPathPrefix="/downloadfiles" />
<stats>
and:
```

<download> <modIBMLocalRedirect enabled="true" hrefPathPrefix="/downloadwikis" /> <stats>



Figure 106. files-config.xml

```
<download>
    <modIBMLocalRedirect enabled="true"
    hrefPathPrefix="/downloadwikis" />
    <stats>
        <logging enabled="false" />
        </stats>
        </download>
```

Figure 107. wikis-config.xml

- \_\_\_6. When changed, make sure to synch the changes to your nodes.
- \_\_\_\_7. Restart HTTP server and Connections cluster servers.

### Verification checkpoint

1. Restart the configuration. Verify that you can log on to the home page and you can access all applications as an admin and as a non-admin user: and do things: create a community, blog, wiki, forum, upload files, and so on.

https://connections.example.com/activities https://connections.example.com/forums https://connections.example.com/profiles https://connections.example.com/blogs https://connections.example.com/dogear https://connections.example.com/files https://connections.example.com/wikis https://connections.example.com/homepage https://connections.example.com/homepage https://connections.example.com/mobile https://connections.example.com/search https://connections.example.com/news

### 4. SiteMinder setup



Important

Be sure to use the installation directories in the screen captures and not the default folders.

This section explains how to enable Computer Associates SiteMinder with an already deployed Connections 4 system. Before beginning the SiteMinder installation and enablement work, make sure that the following prerequisites are completed:

- Lotus Connections 4.0 is set up and working with the IBM HTTP Server without issue.
- The J2C Authentication Alias connectionsAdmin is a user who exists on the LDAP and has administrative rights on the administrative console.



### Information

See the information center on how to change this post-installation if not implemented during the installation:

http://www-10.lotus.com/ldd/lcwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Connections+ 4.0+documentation#action=openDocument&res\_title=Changing\_references\_to\_administrat ive\_credentials\_ic40&content=pdcontent

### Installing the SiteMinder Agents

This document describes a configuration that uses SiteMinder Policy Server 6.0 SP6, SiteMinder ASA 6.0 Agent for WebSphere Application Server (with CR00011 test fix), and SiteMinder Web Agent v6qmr6-cr007. The following sections detail how to install the web agent on the HTTP Server and the application server agents on all of the nodes in your configuration.



For SiteMinder Policy server setup, see the information center.

### **Preparing WebSphere Application Server for SiteMinder**

1. If not already done, you must ensure that single sign-on is enabled on the Deployment Manager. On the deployment manager, go to Security > Global Security > Web and SIP Security > Sign Sign-On (SSO). Ensure that the following is set:

Global security
<u>Global security</u> > Single sign-on (SSO)
Specifies the configuration values for single sign-on.
General Properties
Enabled
Requires SSL
Domain name
myserver.example.com
Interoperability Mode
✓ Web inbound security attribute propagation
Apply OK Reset Cancel

Figure 108. Global security

# Copy unrestricted JCE policy files to WebSphere Application Server

Download and apply the Unrestricted JCE policy files:

- 1. Go to the J2SE 5 SDK Security information web page (https://www14.software.ibm.com/webapp/iwm/web/preLogin.do?source=jcesdk).
- \_\_\_\_2. Authenticate with your universal IBM user ID and password.
- \_\_\_\_3. Download the Unrestricted JCE Policy files for SDK for all newer versions package.
- \_\_\_\_4. Extract the files from the downloaded package.
- \_\_\_\_5. Back up your existing copies (if any) of the US\_export\_policy.jar and local\_policy.jar files, in the app\_server\_root/java/jre/lib/security directory.
- \_\_\_6. Copy the new JAR files from the extracted package to the same directory, overwriting any existing files.
- \_\_\_7. All servers, node agents, and deployment manager's must be restarted in order for this change to take effect.

### Set up SiteMinder policy server

- 1. Create agents on the SiteMinder Policy Server, including Web Agents for IBM HTTP Server and Microsoft IIS, and an Application Server Agent for WebSphere Application Server:
  - \_\_\_\_a. Open the SiteMinder Administration console.
  - \_\_\_\_b. Right click **Agents** and click **Create Agent**.
  - \_\_\_\_c. Enter details of the Name and Description of the Web Agent for IBM HTTP Server.
  - \_\_\_\_d. Repeat these steps for the Web Agent for IIS.
  - \_\_\_\_e. Repeat these steps for the Application Server Agent.
- \_\_\_\_2. Create Agent Configuration Objects on the SiteMinder Policy Server. In the SiteMinder Administration Console, open the Agent Configuration Objects pane and complete the following steps:
  - \_\_\_\_a. Configure the Web Agent for IBM HTTP Server:
    - i. Right click Apache Default Settings Agent and click Duplicate Configuration Object.
    - ii. Enter the Name and description of the Agent Configuration Object.
    - iii. Update the following parameters to match your environment:

### - DefaultAgentName

Name of the Apache Agent that was created earlier

### - CookieDomain

your\_domain

where your\_domain is your IBM Connections domain. If, for example, the URL is
http://activities.example.com/activities, your host name is
activities.example.com and your domain is example.com. In this example, you would
set CookieDomain=example.com.

- RequireCookies NO

This parameter configures the Web Agent to support basic authentication but without requiring all API client programs to support cookies.

- BadCSSChars <,>

This parameter enables the Invite colleagues function in Profiles.

- LogOffUri URI

Configure SiteMinder to recognize only one web address as the logout web address. Uncomment one of the following URIs by removing the number sign (#) character:

```
#LogOffUri="/activities/service/html/ibm_security_logout"
#LogOffUri="/blogs/ibm_security_logout"
#LogOffUri="/communities/communities/ibm_security_logout"
#LogOffUri="/dogear/ibm_security_logout"
#LogOffUri="/files/ibm_security_logout"
#LogOffUri="/forums/ibm_security_logout"
```

#LogOffUri="/homepage/web/ibm\_security\_logout"
#LogOffUri="/moderation/ibm\_security\_logout"
#LogOffUri="/news/ibm\_security\_logout"
#LogOffUri="/profiles/ibm\_security\_logout"
#LogOffUri="/search/ibm\_security\_logout"
#LogOffUri="/wikis/ibm\_security\_logout"

- \_\_\_\_b. Under the System tab, update the Agent Configuration Object with the following value: FCCCompatMode: NO.
- \_\_\_\_c. Configure the Web Agent for IIS:
  - i. Right-click IIS Default Settings Agent and select Duplicate Configuration Object.
  - ii. Enter the Name and description of the Agent Configuration Object.
  - iii. Update the following parameters to match your environment:

### - DefaultAgentName

Name of the Apache Agent that was created earlier

### - CookieDomain

your\_domain

where your\_domain is your IBM Connections domain. If, for example, the URL is
http://activities.example.com/activities, your host name is
activities.example.com and your domain is example.com. In this example, you
would set CookieDomain=example.com.

### - RequireCookies NO

This parameter configures the Web Agent to support basic authentication but without requiring all API client programs to support cookies.

### - BadCSSChars <,>

This parameter enables the Invite colleagues function in Profiles.

### \_\_\_\_d. Configure the Application Server Agent:

## i. Right click Apache Default Settings Agent and select Duplicate Configuration Object.

- ii. Enter the name and description of the Agent Configuration Object.
- iii. Update the following parameters to match your environment:

### - DefaultAgentName

Name of the Apache Agent that was created earlier

### - CookieDomain

your\_domain

where your\_domain is your IBM Connections domain. If, for example, the URL is http://activities.example.com/activities, your host name is activities.example.com and your domain is example.com. In this example, you would set CookieDomain=example.com.

- AssertionAuthResource

/siteminderassertion

- AssertbyUserID

True



1. When activated, the LogOffUri parameter clears the SMSESSION cookie and ensures that the user is logged out of all IBM Connections browser sessions.

2. To add parameters, edit the Agent Configuration Object on the SiteMinder Policy Server. Alternatively, you can edit the LocalConfig.conf file on the HTTP server if the Web Agent is configured to use it.

3. If you are editing the SiteMinder configuration file directly, you must surround the values of SiteMinder configuration parameters with quotation marks ("); for example: BadCSSChars="<,>". If you are changing these parameters within the SiteMinder Policy Server, do not use quotation marks.

- \_\_\_3. Specify your SiteMinder Authentication Scheme configuration:
  - \_\_\_\_a. Open the SiteMinder Administration Console and go to the Authentication Scheme Properties dialog box.
  - \_\_\_\_b. From the Authentication Scheme type list, click **Windows Authentication template**.
  - \_\_\_\_c. Clear the **Use Relative Target** check box.
  - \_\_\_\_d. Enter the URL of your IIS server in the web Server Name field.
  - \_\_\_\_e. Complete the User DN Lookup field with the appropriate information for your domain. For example, (sAMAccountName=%{UID}).
- \_\_\_\_4. On the SiteMinder Policy Server, create a domain for the IBM HTTP Server web agent.
- \_\_\_\_5. Create protected realms under the IBM HTTP Server Web Agent domain:
  - \_\_\_\_a. Using the IBM HTTP Server Agent Object and Windows Authentication Scheme that you created earlier, create SiteMinder realms that Windows forms authentication protects.

### Table 1: Realms that require forms authentication

Application	Protected URL resource
ConnectionsDefaultRealm	1
Activities	/activities/follow/atomfba /activities/service/atom2/forms /activities/service/atom2/communityEvent /activities/service/download/forms /activities/service/getnonce/forms

Blogs	/blogs/api_form /blogs/atom_form /blogs/follow/atomfba /blogs/roller-ui/blog
	/blogs/roller-ui/teed_torm /blogs/roller-ui/rendering/api_form /blogs/roller-ui/rendering/feed_form /blogs/services/atom_form
Bookmarks	/dogear/atom_fba
Common resources	/connections/opensocial/rest
Communities	/communities/calendar/atom_form /communities/follow/atomfba /communities/forum/service/atom/forms /communities/recomm/ajax /communities/recomm/atom_form /communities/service/atom/forms
Files	/files/follow/atomfba /files/form/cmis/repository
Forums	/forums/atom/forms /forums/follow/atomfba
Metrics	/metrics /cognos
Profiles	/profiles/atom/forms /profiles/atom2/forms /profiles/follow/atomfba
Wikis	/wikis/follow/atomfba

\_\_\_\_6. Using the IBM HTTP Server Agent Object that you created earlier, create SiteMinder realms that basic authentication protects.

### Table 2: Realms that require basic authentication

Application	Protected URL resource
Activities	/activities/follow/atom /activities/service/download /activities/service/html/autocompleteactivityname /activities/service/html/autocompleteentryname /activities/service/html/autocompletemembers /activities/service/atom /activities/service/getnonce
Blogs	/blogs/api /blogs/atom /blogs/follow/atom /blogs/issuecategories /blogs/roller-ui/BlogsWidgetEventHandler.do /blogs/roller-ui/feed /blogs/roller-ui/rendering/api /blogs/roller-ui/rendering/feed /blogs/services/atom
Bookmarks	/dogear/api/app /dogear/api/deleted /dogear/api/notify /dogear/atom
Common resources	/connections/opensocial/basic/rest

Communities	/communities/calendar/atom
	/communities/calendar/handleEvent
	/communities/calendar/ical
	/communities/follow/atom
	/communities/forum/service/atom
	/communities/recomm/atom
	/communities/recomm/handleEvent
	/communities/service/atom
	/communities/service/json
Files	/files/basic/api
	/files/basic/cmis
	/files/basic/opensocial
	/files/follow/atom
Forums	/forums/atom
	/forums/follow/atom
Home page	/homepage/atom/search
	/homepage/atom/mysearch
News	/news/atom/service
	/news/atom/stories/newsfeed
	/news/atom/stories/public
	/news/atom/stories/saved
	/news/atom/stories/statusupdates
	/news/atom/stories/top
	/news/atom/watchlist
	/news/atomfba/stories/public
Profiles	/profiles/atom
	/profiles/atom2
	/profiles/audio.do
	/profiles/follow/atom
	/profiles/json
	/profiles/photo.do
	/profiles/vcard
Wikis	/wikis/basic/api
	/wikis/follow/atom



### Protect login credentials with encryption

Using the Basic over SSL Template scheme, create a SiteMinder Authentication Scheme and apply the new Authentication Scheme to all the SiteMinder realms that require basic authentication.

### く

- \_\_\_\_7. Create Delete and Head actions for the Web Agent. By default, the Web Agent has only the Get, Post, and Put actions available. To add the Delete and Head actions, complete the following steps:
  - \_\_\_\_a. In the SiteMinder Administration Console, click **View** and click **Agent Types**.
  - \_\_\_\_b. Click **Agent Types** in the Systems pane.
  - \_\_\_\_c. Double-click **Web Agent** in the Agent Type list.
  - \_\_\_\_d. In the Agent Type Properties dialog box, click **Create**.
  - \_\_\_\_e. Enter Delete in the New Agent Action dialog box and click OK.

- \_\_\_\_f. Enter Head in the New Agent Action dialog box and click OK.
- \_\_\_\_g. Click **OK** again to save the new action.
- 8. Create the following rules for each realm:

### Table 3: Rules for the IBM HTTP Server realmsGetPostPutDelHead rule

GetPostPutDelHead rule	OnAuthAccept rule
Realm: CurrentRealm	Realm: CurrentRealm
Resource: * (not /*)	Resource: * (not /*)
Action: Web Agent actions > Get,Post,Put,Delete,Head	Action: Authentication events > OnAuthAccept
When this Rule fires: Allow Access	When this Rule fires: Allow Access
Enable or Disable this Rule: Enabled	Enable or Disable this Rule: Enabled

\_\_\_\_9. Create a policy and add the users who can access the server to the policy. You can allow all users in the LDAP directory or a subset of users; for example: an LDAP branch, individual users, or groups of users.

- \_\_\_\_10. Add the new rules to the new policy.
- \_\_\_\_11. Specify realms that SiteMinder does not protect.



You must configure notification templates and some Atom feeds as unprotected URLs. The Blogs footer page must also be unprotected because Blogs uses the Velocity template to extract footer pages.

### Table 4: Realms that do not require authentication

Application	Unprotected URL resource
Activities	/activities/auth /activities/images /activities/oauth /activities/service/html/images /activities/service/html/mainpage /activities/service/html/styles /activities/service/html/themes /activities/service/html/servermetrics /activities/service/html/serverstats /activities/serviceconfigs /activities/static/
Blogs	/blogs/serviceconfigs /blogs/static/
Bookmarks	/dogear/oauth /dogear/peoplelike /dogear/serviceconfigs /dogear/static/

Common resources	/connections/bookmarklet/tools/blet.js
	/connections/bookmarklet/tools/discussThis.js
	/connections/bookmarklet/tools/rlet.js
	/connections/core/oauth
	/connections/oauth
	/connections/resources/ic
	/connections/resources/socmail-client
	/connections/resources/web
	/nav/common
Communities	/communities/calendar/Calendar xml
Communities	/communities/calendar/cauth
	/communities/comm widget
	/communities/naye
	/communities/recomm/cauth
	/communities/recommodulin
	/communities/resourcestings.do
	/communities/service/ntm/community/autoCompleterviernoers.do
	/communities/service/ntml/singleas
	/communities/serviceconfigs
	/communities/static/
	/communities/stylesheet
	/communities/tools/embedAS.html
	/communities/widgets
Files	/files/app
	/files/basic/anonymous/api
	/files/basic/anonymous/cmis
	/files/basic/anonymous/opensocial
	/files/form/anonymous/api
	/files/form/anonymous/cmis
	/files/form/anonymous/opensocial
	/files/oauth
	/files/static/
Forums	/forums/oauth
	/forums/serviceconfigs
	/forums/static/
Home page	/homenage/oauth
nome page	/homepage/oauth
	/homepage/search
	/homepage/servicecomigs
	/homepage/static/
Matula a	
Metrics	/metrics/service/eventiracker
	/metrics/service/oautn
	/cognos/servlet
Moderation	/moderation/app
	/moderation/oauth
	/moderation/static
News	/help
	/news/microblogging/isPermitted.action
	/news/follow/oauth
	/news/oauth
	/news/serviceconfigs
	/news/shareboy/config action
	/news/static/
	/10/00/514110/
OAULI Provider	//Jaulii2

Profiles	/profiles/atom/forms/connections.do
	/profiles/images
	/profiles/oauth
	/profiles/serviceconfigs
	/profiles/static/
Search	/search/atom/search
	/search/oauth
	/search/static/
Widget container	/connections/opensocial/anonymous/rest
	/connections/opensocial/common
	/connections/opensocial/gadgets
	/connections/opensocial/ic
	/connections/opensocial/oauth
	/connections/opensocial/rpc
	/connections/opensocial/social
	/connections/opensocial/xrds
	/connections/opensocial/xpc
Wikis	/wikis/basic/anonymous/api
	/wikis/form/anonymous/api
	/wikis/home
	/wikis/js
	/wikis/oauth
	/wikis/static/

\_\_\_\_12. On the SiteMinder Policy Server, create a domain for the Application Server Agent.

\_\_\_\_13. Add the following realm to the new WebSphere Application Server domain:

### Table 5: SiteMinder realms for WebSphere Application Server

Protected resource
/siteminderasssertion
P /s



You must configure the Protected Resource of this realm to match the AssertionAuthResource parameter that you configured earlier for the Application Server Agent.

-			
•			
•			
•	-		
	_	_	

\_\_\_\_14. On the SiteMinder Policy Server, create a domain for the IIS Server Agent.

\_\_\_\_15. Using the IIS Agent Object and Windows Authentication Scheme that you created earlier, create a SiteMinder realm that Windows authentication protects.

### Table 6: SiteMinder realms that require Windows authentication

Realm name	Protected resource
IIS_Realm	/

\_\_\_\_16. Create the following rules for this realm:

GetPostPutDelHead rule	OnAuthAccept rule		
Realm: CurrentRealm	Realm: CurrentRealm		
Resource: * (not /*)	Resource: * (not /*)		
Action: Web Agent actions -> Get,Post,Put,Delete,Head	Action: Authentication events -> OnAuthAccept		
When this Rule fires: Allow Access	When this Rule fires: Allow Access		
Enable or Disable this Rule: Enabled	Enable or Disable this Rule: Enabled		

### Table 7: Rules for the IIS realm

- \_\_\_\_17. Set the timeout value of the session for each realm.
  - \_\_\_\_a. In the SiteMinder Policy Server, open the **Realm Dialog** and click **Session**.
  - \_\_\_\_b. In the Session Timeouts Group Box, enter timeouts for each realm. Enter the following values, if they are not already present:

### **Maximum Timeout Enabled**

2 Hours 0 Minutes

### Idle Timeout Enabled

1 Hours 0 Minutes



The maximum timeout and the idle timeout must be longer than the LTPA token timeout, which is defined in WebSphere Application Server. The LTPA token timeout is set to 120 minutes by default.

### Install the web agent on the IBM HTTP server

You must uninstall and reinstall the web agent to enable SiteMinder. After uninstallation, delete the /opt/netegrity folder and install to the same place.

- \_\_\_1. Extract the web agent files to a folder on your directory. Run chmod 777 nete.. to make it executable on Linux to run the installation.
- \_\_\_\_2. Wait for it to complete.
- <u>3</u>. Close the installation.
- \_\_\_\_4. Run the web agent installation wizard from the files that are downloaded from WTI.



Figure 109. CA SiteMinder Web Agent

\_\_\_\_5. Click **Next** at the following panel.



Figure 110. CA SiteMinder Web Agent: Introduction

\_\_\_\_6. Accept the license agreement and click **Next**.

License Agreemen Installation and use of CA SiteMinder Web Agent v6QMR6 Hotfix 7 requires acceptance of the following License CA, Inc. ("CA") End User License Agreement (the "Agreement") for the CA software product that is being installed as well as the associated documentation and any SDK, as defined below, included within the product ("the Product"). Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee." Inscrept the terms of the License Agreement	<u>M</u>	CA SiteMinder Web Agent
Installation and use of CA SiteMinder Web Agent v6QMR6 Hotfix 7 requires acceptance of the following License CA, Inc. ("CA") End User License Agreement (the "Agreement") for the CA software product that is being installed as well as the associated documentation and any SDK, as defined below, included within the product ("the Product"). Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee."		License Agreement
CA, Inc. ("CA") End User License Agreement (the "Agreement") for the CA software product that is being installed as well as the associated documentation and any SDK, as defined below, included within the product ("the Product"). Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee."	Ca.	Installation and use of CA SiteMinder Web Agent v6QMR6 Hotfix 7 requires acceptance of the following License
End User License Agreement (the "Agreement") for the CA software product that is being installed as well as the associated documentation and any SDK, as defined below, included within the product ("the Product"). Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee."		CA, Inc. ("CA")
Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee."		End User License Agreement (the "Agreement") for the CA software product that is being installed as well as the associated documentation and any SDK, as defined below, included within the product ("the Product").
I accept the terms of the License Agreement		Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee."
I do NOT accept the terms of the License Agreement		<ul> <li>I accept the terms of the License Agreement</li> <li>I do NOT accept the terms of the License Agreement</li> </ul>
		Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee."

Figure 111. CA SiteMinder Web Agent: License Agreement

\_\_\_\_7. Click **Next** at the information panel to continue.

CA	Please read before continuing:
	INSTALLATION NOTES
	Installation instructions for this CA product reside in one of these documents: o The product's Installation Guide
	o The product guide's installation chapter o The relnotes <product_version>.pdf file</product_version>
	DOCUMENTATION NOTES
	CA provides release notes and manuals as PDF files. See the instructions below for viewing and printing PDF files, especially for viewing PDF files

Figure 112. CA SiteMinder Web Agent: Important information

\_\_\_\_8. Select a path to install the web agent and click **Next** to continue.

Sec.	CA SiteMinder Web Agent
	Choose Install Locatio
Ca.	Specify a location for the Web Agent. If the path does not contains the word "webagent," the installation program will create a folder called "webagent" and appends it to the end of your path.
	Where would you like to install?
	/opt/netegrity/webagent
	Restore Default Folder Choose
Install Amurhara	
Cancel	Previous
Cancel	Previous Next

Figure 113. CA SiteMinder Web Agent: Choose Install Location

The Web Agent starts configuring for your system.

54	CA SiteMinder Web Agent _ X
TAI	Please Wait Please wait, CA SiteMinder Web Agent v6QMR6 Hotfix 7 is being configured for your system. This may take a moment
InstallAnywhere Cancel	Previous

Figure 114. CA SiteMinder Web Agent: Wait

\_\_\_9. Click **Install** to begin the web agent installation.



Figure 115. CA SiteMinder Web Agent: Pre-Installation Summary

The CA SiteMinder web agent starts installing.

901	CA SiteMinder Web Agent 🗙
	Installing CA SiteMinder Web Agent v6QMR6 Hotfix 7
Ca.	C2.
InstallAnywhere	Extracting duplicates

Figure 116. CA SiteMinder Web Agent: Installation in progress

\_\_\_\_10. Click **Done** when installation completes.

In this case the installation log at

/opt/netegrity/webagent/install\_config\_info/CA\_SiteMinder\_Web\_Agent\_v6QMR6\_I
nstallLog.log reports the following, there are no unrecoverable errors so it is safe to
proceed:

Installation: Successful.

- 474 Successes
- 0 Warnings
- 0 NonFatalErrors
- 0 FatalErrors

### Registration

- \_\_\_1. CD to /opt/netegrity/webagent.
- \_\_\_2. Run . ./nete\_wa\_env.sh.
- \_\_3. Register the web agent with the policy server where < ./smreghost -i SM policy server -u admin\_id -p admin\_pwd -hn webagent\_hostname -hc hostconfig\_object> for example < ./smreghost -i SM\_Policy\_Server -u RegHost -p RegHost -hn connections -hc host\_connections>.
- \_\_\_\_4. Check the webagent.config file in /opt/IBM/HTTPServer/conf that EnableWebAgent="YES".

- \_\_\_5. Start the HTTP server:
  - \_\_\_a. Run . ./envars-std
  - \_\_\_b. ./apachectl start
  - \_\_\_\_c. SiteMinder should prompt you to link to the HTTP web server page.

-		Note
$\boldsymbol{\mathcal{C}}$	1	

You can check that SiteMinder is enabled only if the SiteMinder policy server is enabled for SiteMinder. If SPNEGO is enabled on the policy server, then you do not see a SiteMinder screen.

6. After configuring the web agent as previously, find the WebAgent.conf in the HTTPServer/conf directory. Open this file and edit it so EnableWebAgent=YES. Now restart your HTTP Server. When attempting to access the HTTP Server root, you should now see the SiteMinder login screen and be able to log in to get the IBM HTTP Server Splash Screen. It indicates that SiteMinder is set up correctly with the WebAgent.

dward Smyth 190					
	WebSphere. software	9			IBM.
Login	IBM HTTP Ser	Ver Version 7.0			
	Administration	Information center	l @ Support	E Release	
	(Login)	Login IBM HTTP Ser	Login IBM HTTP Server Version 7.0	Login         IBM HTTP Server Version 7.0           IBM HTTP Server Version 7.0         Information           Administration         Center	Login         IBM HTTP Server Version 7.0           IBM HTTP Server Version 7.0         Imformation           Administration         Imformation           Support         Imformation

Figure 117. IBM HTTP Server: Login

### **Install Application Server Agent**

Install the Application Server Agent on both nodes -node1.example.com and node2.example.com.

\_\_\_1. Run the TAI agent installation by using the following JAR command: <java: jar ca-asa-6.0-cr11-was.jar > for the application server agent. Click **Next** to continue.



Figure 118. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere

\_\_\_\_2. Click **Next** to continue.

	CA eTrust SiteMinder Agent v6.0 for WebSphere
	Introduction
Ca	InstallAnywhere will guide you through the installation of CA eTrust SiteMinder Agent v6.0 for WebSphere. It is strongly recommended that you quit all programs before continuing with this installation. Click the 'Next' button to proceed to the next screen. If you want to change something on a previous screen, click the 'Previous' button. You may cancel this installation at any time by clicking the 'Cancel' button.
Cancel	Previous Next

Figure 119. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Introduction

\_\_\_\_3. Accept the license agreement, click **Next** to continue.

Ca	Installation and Use of CA eTrust SiteMinder Agent v6.0 for WebSphere Requires Acceptance of the Following License Agreement:					
	Computer Associates International, Inc. ("CA") End User License Agreement (the "Agreement") for the CA software product that is being installed as well as the associated documentation and any SDK, as defined below, included within the product ("the Product"). Carefully read the following terms and conditions regarding your use of the Product before installing and using the Product. Throughout this Agreement, you will be referred to as "You" or "Licensee."					
	<ul> <li>I accept the terms of the License Agreement</li> <li>I do NOT accept the terms of the License Agreement</li> </ul>					

Figure 120. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: License Agreement

4.	Choose an	installation	location	and click	K Next to	continue.
----	-----------	--------------	----------	-----------	-----------	-----------

ase choose the folder where the product will be installed. re would you like to install? It/smwasasa Restore Default Folder Choose
ere would you like to install? ht/smwasasa <u>R</u> estore Default Folder Ch <u>o</u> ose
<u>R</u> estore Default Folder Ch <u>o</u> ose
Restore Default Folder Choose

Figure 121. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Choose Install Folder

\_\_\_5. Specify where WebSphere is installed.

oServer	
ore Default Folder	Ch <u>o</u> ose
	Previous

Figure 122. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Choose WebSphere Folder

6.	Click Yes,	create	trusted	host to	create a	trusted	host.
----	------------	--------	---------	---------	----------	---------	-------

	Host Registration
Ca.	Would you like to create a trusted host?
	<ul> <li>Yes, create trusted host.</li> <li>No, use existing file.</li> </ul>
InstallAnywhere	
Cancel	Previous Next

Figure 123. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Host Registration

7	Enter the	information	of the	SiteMinder	server	Click Next	to continue
/.		mormation		Olleiviiriuei	301001.		lo continue.

	0 <u></u>	Host Registration
Ca	SiteMinder Host Infor Policy Server IP Address SM Admin Username:	mation s:
	SM Admin Password: Host Name: Host Config Object:	[••••••••
stallAnywhere		Previous <u>N</u> ext

Figure 124. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Host Registration
\_\_\_\_8. Allow the wizard time to register the host.

1		CA eTrust SiteMinder Agent v6.0 for WebSphere	Please Wait
		CA eTrust SiteMinder Agent v6.0 for WebSphe X Please wait - registering host	ler Agent v6.0 for our system. This may 
InstallAny Cance	where	E	revious

Figure 125. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Registering the host

\_\_\_9. Enter the agent configuration object name and click Next.

	Agent Configuration				
Ca.	Please enter the agent configuration object name.				
	Agent configuration object name: dslvm768_tai_conf				
installAnywhere	and the second				

Figure 126. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Agent Configuration

\_\_\_\_10. Review any errors messages in the installation log. In this case, there are benign errors. Click **Done** to exit the wizard.

	Install Complete
	Congratulations! CA eTrust SiteMinder Agent v6.0 for WebSphere has been successfully installed to: /opt/smwasasa Press "Done" to quit the installer.
InstallAnywhere	Previous Done

Figure 127. eTrust SiteMinder: Application Server Agent v6.0 for WebSphere: Install Complete

In this case the installation log at

/opt/smwasasa/log/CA\_eTrust\_SiteMinder\_Agent\_v6.0\_for\_WebSphere\_InstallLog.l
og reports the following, again there are no unrecoverable errors so it is safe to proceed:

```
Summary
-----
Installation: Successful.
54 Successes
0 Warnings
0 NonFatalErrors
0 FatalErrors
```

# 5. Post-agent installation actions

After you installed the various SiteMinder agents on your nodes and web server, turn your attention to the following tasks. The trust association interceptor must be enabled from the deployment manager and various rules must be put in place on the web server to handle logging out from SiteMinder correctly. Here, the SiteMinder authenticator is not being set, because you are enabling SPNEGO. SiteMinder and SPNEGO configuration use the default authenticator. In a stand-alone SiteMinder configuration, you would normally set the SiteMinder authenticator.

# Actions on WebSphere Application Server post-agent installation

1. When the Application Server Agent is configured ensure to copy smagent.properties from the agent installation directory: smwasasa\conf to AppServer\profiles\AppSrv01\properties on each node. That is, to the nodes and to the Cognos node.

:/opt/smwasasa/conf # ls -1								
total 20								
-rwxrr 1 root root 273 Jul 20 09:49 AsaAgent-assertion.conf								
-rwxrr 1 root root 273 Jul 20 09:49 AsaAgent-auth.conf								
-rwxrr 1 root root 273 Jul 20 09:49 AsaAgent-az.conf								
_rw-rr 1 root root 706 Jul 20 09:49 SmHost.conf								
-Iwxrr 1 root root 459 Jul 20 09:49 smagent.properties								
:/opt/smwasasa/conf # cp smagent.properties /opt/IBM/WebSphere/AppServer								
/profiles/AppSrv01/properties/								
/profiles/AppSrv02/properties/								
:/opt/smwasasa/conf #								

								Termina	0	_ 0
<u>F</u> ile	<u>E</u> dit	V	liew	<u>T</u> ermir	nal Ta	<u>b</u> s	<u>H</u> el	р		
-IWXI	-xr-x	1	root	root	5738	Mar	21	20:29	ipc.client.props	
drwxr	-xr-x	5	root	root	4096	Mar	21	20:55	linuxMenu	
-IM-I	r	1	root	root	520	Mar	21	20:55	portdef.props	
-IM-I	r	1	root	root	304	Mar	21	20:55	profileKey.metadata	
-rwxr	-xr-x	1	root	root	291	Mar	21	20:40	rrdSecurity.props	
-rw-r	r	1	root	root	12147	Mar	21	20:54	sas.client.props	
-rwxr	-xr-x	1	root	root	8437	Mar	21	20:32	sas.server.props	
-rw-r	r	1	root	root	7482	Mar	21	20:54	sas.stdclient.properties	
-rw-r	r	1	root	root	7482	Mar	21	20:54	sas.tools.properties	
drwxr	-xr-x	2	root	root	4096	Mar	21	20:55	script	
-IWXI	-xr-x	1	root	root	1703	Mar	21	20:32	server.policy	
-IWXI	-xr-x	1	root	root	999	Mar	21	20:45	sib.client.ssl.properties	
TWXI	1	1	root	root	459	Jul	20	09:52	smagent.properties	
-IM-I	1	1	IOOL	IOOL	5667	Mar	21	20:54	soap.client.props	
-IM-I	r	1	root	root	5050	Mar	21	20:55	ssl.client.props	
-IWXI	-xr-x	1	root	root	3127	Mar	21	20:32	sslbitsizes.properties	
drwxr	-xr-x	2	root	root	4096	Mar	21	20:54	version	
-IWXI	-xr-x	1	root	root	663	Mar	21	20:32	was.policy	
-IWXI	-xr-x	1	root	root	103	Mar	21	20:45	wmq.client.props	
-rw-r	r	1	root	root	7000	Mar	22	11:18	wsadmin.properties	
-rwxr	-xr-x	1	root	root	7105	Mar	21	20:32	wsjaas.conf	
-rwxr	-xr-x	1	root	root	3161	Mar	21	20:32	wsjaas_client.conf	
-rwxr	-xr-x	1	root	root	846	Mar	21	20:32	wsserver.key	
dslvm768:/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/properties #										

Figure 128. Copying smagent.properties from the agent installation directory to the application server

\_\_\_\_2. Next, on the Deployment Manager configure Trust Association Interceptor on WebSphere Application Server, from the deployment manager administrative console for WebSphere Application Server, click Security > Global security > Web and SIP security, click Trust association. Click Enable Trust Association and then click Save.

Global security	? -
<u>Global security</u> > Trust association	
Enables trust association. Trust association is used to a application server. Use of TAIs for SPNEGO authenticati authentication panels provide a much easier and less a	connect reversed proxy servers to the on is deprecated. The SPNEGO Web error-prone way to configure SPNEGO.
General Properties	Additional Properties
Enable trust association	Interceptors
Apply OK Reset Cancel	

Figure 129. Enabling trust association

\_\_\_\_3. Next, back in the trust association screen, click Interceptors. Click New and add an interceptor with the following name

(com.netegrity.SiteMinder.websphere.auth.SmTrustAssociationInterceptor). Click OK and save the change.

Global security	2. –								
<u>Global security</u> > <u>Trust association</u> > <u>Interceptors</u> > New									
Specifies the trust information for reverse proxy servers.									
General Properties									
* Interceptor class name									
com.netegrity.siteminder.websphere.auth.SmTrustAssociationInterceptor									
Custom properties	\$								
Select Name Value	New								
	Delete								
Apply OK Reset Cancel									

Figure 130. Creating an interceptor

4. It is OK to delete Tivoli Access Manager and SPNEGO interceptors. Leaving these interceptors in place causes no issues but results in error messages in the logs during startup so it makes sense to delete these interceptors. Click **Delete** and save this change.



You must not delete the oauth interceptor (com.ibm.ws.security.oauth20.tai.OAuthTAI) it is required for oauth to work properly. After this step you have two interceptors for oauth and for SiteMinder.

bal securi	ty
<u>Global sec</u>	urity > <u>Trust association</u> > Interceptors
Specifies t	he trust information for reverse proxy servers.
🕀 Prefere	nces
New	Delete
ē	****
Select	Interceptor Class Name 🛟
You can	administer the following resources:
	com.ibm.ws.security.oauth20.tai.OAuthTAI
	$\underline{com.netegrity.siteminder.websphere.auth.SmTrustAssociationInterceptor}$
Total 2	

Figure 131. Global security > Trust association > Interceptors

## Actions on HTTP server after the agent installation

Create rewrite rules to remap Atom API requests and to redirect URLs when users log out of Lotus Connections.

- \_\_\_1. Open the IBM HTTP Server httpd.conf configuration file. The file is stored in the C:\IBM\HTTPServer\conf directory on the web server.
- \_\_\_2. The extracted section of the following httpd.conf file shows these rules being implemented in both the HTTP and HTTPS sections of this file. In this extract, the logout rules redirect users to the home page logout screen and when they are logged out they are redirected to the page at home.example.com.
- \_\_\_3. When this change is made, save and close the httpd.conf file.
- \_\_\_\_4. Restart the IBM HTTP Server.



Uncomment LoadModule rewrite\_module modules/mod\_rewrite.so line in the httpd.conf file.

This line is commented out by default. When the line is commented out, the web server does not start.

```
RewriteEngine On
RewriteCond %{REQUEST_URI} /(.*)/ibm_security_logout(.*)
RewriteCond %{QUERY_STRING}
!=logoutExitPage=https://connections.example.com/homepage
RewriteRule /(.*)/ibm_security_logout(.*)
/homepage/web/ibm_security_logout?logoutExitPage=https://connections.example
.com/homepage [noescape,L,R]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/api/(.*) /blogs/roller-ui/rendering/api/$1/api/$2
[R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/tags/atom(.*)
/blogs/roller-ui/rendering/feed/$1/tags/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/entries/atom(.*)
/blogs/roller-ui/rendering/feed/$1/entries/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/comments/atom(.*)
/blogs/roller-ui/rendering/feed/$1/comments/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/blogs/atom(.*)
/blogs/roller-ui/rendering/feed/$1/blogs/atom/ [R,L]
LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
<IfModule mod_ibm_ssl.c>
Listen 0.0.0:443
<VirtualHost *:443>
ServerName connections.example.com
```

```
SSLEnable
AllowEncodedSlashes On
RewriteEngine On
RewriteCond %{REQUEST_URI} /(.*)/ibm_security_logout(.*)
RewriteCond %{QUERY_STRING}
!=loqoutExitPage=https://connections.example.com/homepage
RewriteRule /(.*)/ibm_security_logout(.*)
/homepage/web/ibm_security_logout?logoutExitPage=https://connections.example
.com/homepage [noescape,L,R]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/api/(.*) /blogs/roller-ui/rendering/api/$1/api/$2
[R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/tags/atom(.*)
/blogs/roller-ui/rendering/feed/$1/tags/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/entries/atom(.*)
/blogs/roller-ui/rendering/feed/$1/entries/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/comments/atom(.*)
/blogs/roller-ui/rendering/feed/$1/comments/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/blogs/atom(.*)
/blogs/roller-ui/rendering/feed/$1/blogs/atom/ [R,L]
</VirtualHost>
</IfModule>
SSLDisable
```

# Enabling and disabling SiteMinder and other troubleshooting steps

When attempting to debug any SiteMinder issues, a good tactic is first to disable SiteMinder to verify that the problem is not an underlying configuration problem on Connections that SiteMinder masks. When you verify that everything works correctly outside the SiteMinder environment, you can be confident that the introduction of SiteMinder caused the problems that are experienced. The following steps describe how to enable or disable SiteMinder and detail some other common troubleshooting techniques in this environment.

## Enabling and Disabling SiteMinder

If you need to enable or disable SiteMinder at any point, do the following steps:

- \_\_\_1. Edit the WebAgent.conf on the HTTP Server (HTTPServer/conf/WebAgent.conf) and set "EnableWebAgent=NO". Restart the IBM HTTP Server.
- \_\_\_\_2. Change the custom authenticator back to the default authenticator in the LotusConnections-config.xml.
- \_\_\_3. Edit smwasasa/conf/AsaAgent-assertion.conf on both nodes and set EnableWebAgent=NO.
- \_\_\_\_4. Resynchronize nodes and restart Lotus Connections.
- \_\_\_\_5. Repeat this process to enable SiteMinder and instead set EnableWebAgent=YES where you previously set it to NO. You must also re-enable the custom authenticator in the LotusConnections-config.xml and restart the deployment.
- \_\_\_\_6. When SiteMinder is enabled, the following message should appear in the SystemOut.log for all Lotus Connections application servers to indicate SiteMinder loaded correctly with the configuration:

[10/11/10 12:45:23:225 EDT] 00000000 TrustAssociat A SECJ0121I: Trust Association Init class com.netegrity.SiteMinder.websphere.auth.SmTrustAssociationInterceptor loaded successfully

## Troubleshooting SiteMinder issues

### **Enable trace**

Most errors that are encountered in this environment are typically interservice issues: communication errors between the back-end servers often because of authorization issues caused by the introduction of SiteMinder to the configuration. The following trace is appropriate in this circumstance to help diagnose issues: com.ibm.connections.httpClient.\*=all.

ponents. Cl	op of the list	nent or group name to select a log detail level. Log detail levels are cumulative t includes all the subsequent levels.
nfiguration	Runtime	
General Pro	perties	
	nuntima char	ages to configuration as well
Save I	unume chai	
Change Lo	g Detail Level	ls
Change Lo	g Detail Level	

Figure 132. Change Log Detail Levels

### Log files to help diagnose issues

To get a complete overview of any issues on the system with SiteMinder enabled, consult the following log files:

- \_\_\_\_1. Lotus Connections Server log files:
  - \_\_\_a. SystemOut.log
  - \_\_\_b. trace.log (if applicable)
- 2. SiteMinder log files (on Nodes):
  - \_\_\_\_a. smwasasa/log/smasa.log
  - \_\_\_\_b. smwasasa/log/sm\_tai.log
- \_\_3. SiteMinder log files (on web server):
  - \_\_\_a. nnetegrity/webagent/log/wa.log
  - \_\_\_b. netegrity/webagent/log/wa\_trace.log
- \_\_\_\_4. SiteMinder Server log files:
  - \_\_\_\_a. Consult the SiteMinder documentation to uncover what traces and logs can be enabled / referenced on the SiteMinder server side.

## SiteMinder configuration files created by Web Agent and TAI/ASA

Here is a sample of the key configuration files on the nodes which are correctly configured. Note the relationship between all of the following files. Changes to these files require a restart to the web server in case of web agent and application server in case of ASA/TAI.

#### WebAgent.conf

WebAgent.conf is found in <https://conf/WebAgent.conf and refers to the AgentConfigObject and SmHost.conf (which contains the policy server connection details). Also, note the EnableWebAgent parameter.

```
# WebAgent.conf: configuration file for SiteMinder Web Agent
# Web Agent Version = 6QMR6, Build = 667, Update = 0
#agentname="<AgentName>, <IPAddress>"
HostConfigFile="/opt/netegrity/webagent/config/SmHost.conf"
AgentConfigObject="connections_wa_conf"
EnableWebAgent="YES"
ServerPath="/opt/IBM/HTTPServer/conf"
localconfigfile="/opt/IBM/HTTPServer/conf/LocalConfig.conf"
LoadPlugin="/opt/netegrity/webagent/bin/libHttpPlugin.so"
#LoadPlugin="/opt/netegrity/webagent/bin/libAffiliate10Plugin.so"
#LoadPlugin="/opt/netegrity/webagent/bin/libSAMLAffiliatePlugin.so"
#LoadPlugin="/opt/netegrity/webagent/bin/libETSSOPlugin.so"
#LoadPlugin="/opt/netegrity/webagent/bin/libETSSOPlugin.so"
#LoadPlugin="/opt/netegrity/webagent/bin/libETSSOPlugin.so"
```

#### SmHost.conf

SmHost.conf is found at <SiteMinder ASA Home>/bin/SmHost.conf, refers to the policy server by IP address. It also contains the host name and hostconfigobject reference.

```
# Host Registration File: SmHost.conf
 #
 # This file contains bootstrap information required by
 # the SiteMinder Agent API to connect to Policy Servers
 # at startup. Be sure the IP addresses and ports below
 # identify valid listening Policy Servers. Please do not
 # hand edit the encrypted SharedSecret entry.
 #
hostname="nodel.example.com"
sharedsecret="{RC2}8DqJaGN/EnhNuEEqLiCieN/NHfSFKGAESra62kiN7B9az9Gni68XKbOgB
yaYNVNK7qsLUezwlimpMsViG/qfPZee7PYMl9A+LfcQkmDbhWsBOe1uNfEScvSyH7ysfiryHd5YU
fOVMNnGE jE jOhQioTwf7h2N26KqeuS0I6lZswv1KQTBBw7UXCPnlENF8DWl"
 sharedsecrettime="0"
 enabledynamichco="NO"
 hostconfigobject="host_node_TAI"
 # Add additional bootstrap policy servers here for fault tolerance.
 policyserver="policy_server_ip.40,44441,44442,44443"
 requesttimeout="60"
cryptoprovider="BSAFE"
# <EOF>
```

#### AsaAgent-assertion.conf

AsaAgent-assertion.conf, found at <SiteMinder ASA Home>/conf/AsaAgent-assertion.conf, contains an EnableWebAgent flag and references SmHost.conf and holding the value of the agent configuration object.

#### **Smagent.properties**

SmAgent.properties, found at <SiteMinder ASA Home>/conf/smagent.properties, is created when the ASA is registered. It contains the location of the AsaAgent-assertion.conf and is copied to <Application Server Home>/profiles/AppSrv01/properties on both nodes during the SiteMinder configuration.

Following are a few issues which occurred in the production of this document and might help in the resolution of other issues that are encountered in subsequent deployments.

#### Linux 64-bit issues

In addition to the windows known common issues above the following were found when integrating SiteMinder on a RedHat 5 64-bit configuration.

## HTTP server does not start

If you already updated the httpd.conf file to point to

/opt/netegrity/webagent/bin/libmod\_sm22.so from

/opt/netegrity/webagent/bin/libmod\_sm20.so and the http server still does not start. Here is
what to do:

- \_\_\_1. Edit the envvars-std file in /opt/IBM/HTTPServer/bin and add the location of the SiteMinder agent to the library path:
  - \_\_\_a. LD\_LIBRARY\_PATH="/opt/IBM/HTTPServer/lib:/opt/IBM/HTTPServer/gsk7/lib:/opt/ netegrity/webagent/bin:\$LD\_LIBRARY\_PATH".
  - \_\_\_b. Export LD\_LIBRARY\_PATH.
  - \_\_\_\_c. Save and close
  - \_\_\_d. Run <. ./envars-std>.
  - \_\_\_\_e. HTTP server should now start.

## LLAWP error in the error\_log



[17/Jun/2011:14:23:01] [Error] SiteMinder Agent

Failed to send close message to LLAWP. Execlp failed: 'Invalid argument'. LLAWP.exe must be callable from the system path. CSmLowLevelAgent: No such file or directory

If an LLAWP error (similar to previously) appears in error\_log, check your netegrity paths, as they might not be set. To set them:

- \_\_\_1. Change directory to /opt/netegrity/webagent.
- \_\_\_2. Run nete\_wa\_env.sh.
- \_\_\_\_3. Check they are set by typing each of the following:
  - \_\_\_a. NETE\_WA\_ROOT
  - \_\_\_b. PATH
  - \_\_\_\_c. NETE\_WA\_PATH
  - \_\_\_\_d. LD\_LIBRARY\_PATH

# 6. SPNEGO setup

## How to configure SPNEGO over HTTPS

- \_\_\_1. Install the Web Agent on IIS:
  - \_\_\_\_a. Download the latest version of the Web Agent from the CA website (http://www.ca.com/us/default.aspx).
  - \_\_\_b. Install the Web Agent. For instructions, go to the SiteMinder BookShelf (https://support.ca.com/cadocs/0/CA%20SiteMinder%20r6%200%20SP6-ENU/Books helf.html).
  - \_\_\_\_c. When you are prompted for the Agent Configuration details, specify the Agent Configuration Object that you created earlier.
- \_\_\_\_2. Stop the Connections servers. Leave the deployment manager and the nodes running.
- \_\_\_3. In /opt/IBM/HTTPServer/conf, edit http.conf and add the following lines to the bottom of the file:

```
Listen 444
<VirtualHost *:444>
ServerName connections.example.com
SSLEnable
#KeyFile /local/IBM/HTTPServer/conf/wildcard/key.kdb
Keyfile "/opt/IBM/KeyFiles/webserver-key.kdb"
SSLStashFile "/opt/IBM/KeyFiles/webserver-key.sth"
</VirtualHost>
```

4. In the admin console, go to WebSphere Application Server: Environment > Virtual Hosts > default\_host > Host Aliases > New, and enter the host name and Port.

Virtual Hosts
<u>Virtual Hosts</u> > <u>default_host</u> > <u>Host Aliases</u> > New
Use this page to edit or create a domain name system (DNS) alias by which the vir port number. A Web client uses the alias to form the URL request of a Web applica For example, the default_host alias is the myhost.newyork.com:9080 portion of ht portion of a secure https://myhost.newyork.com:9043/servlet/snoop URL.
Configuration
General Properties
* Host Name
dsivm767 example com
* Port
444
Apply OK Reset Cancel

Figure 133. Virtual Hosts

This setting is added:

444 dslvm767.example.com

Figure 134. Setting to be added



This causes a new plugin-cfg.xml to be generated as there is a change to the Virtual Hosts. Make sure that you have a backup of the plugin-cfg.xml.

\_\_\_5. Go to system administration \nodes a. Highlight the nodes \. Click Full resynchronize.

Messages	
B Successfully initiated synchronization of the repository on node dslvm768Node01 with the deployment manager's repository.	
B Successfully initiated synchronization of the repository on node dslvm768Node02 with the deployment manager's repository.	

Figure 135. Messages

Ξ

\_\_\_\_6. If the HTTP server administrator is running, the updated plugin-cfg.xml is copied from /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/connectionsCell01/ nodes/webserver1/servers/webserver1 to /opt/IBM/HTTPServer/Plugins/config/webserver1. If the plugin-cfg.xml was not copied, copy it now.

- \_7. In /opt/IBM/HTTPServer/conf/WebAgent.conf:
  - \_\_\_\_a. Copy to make a backup of this file.
  - \_\_\_b. Uncomment the LocalConfig.conf location:

localconfigfile="/opt/IBM/HTTPServer/conf/LocalConfig.conf"

- \_\_\_\_c. Save and close.
- 8. In /opt/IBM/HTTPServer/conf/LocalConfig.conf:
  - \_\_\_\_a. Copy to make a backup of this file.
  - \_\_\_b. Uncomment IgnoreHost="connections.example.com:444". SiteMinder then ignores any traffic through this virtual host to it.
  - \_\_\_\_c. Comment out ALL other entries in the file. If you do not, the entries might cause confusion with what is set on the SiteMinder policy server.
  - \_\_\_\_d. Save and close.
- \_\_\_9. Start the HTTP server.
- \_\_\_\_10. Verification point:
  - \_\_\_\_a. If you go to https://connections.example.com:444 you get the HTTP landing page not the SiteMinder page.
  - \_\_\_b. If you go to https://connections.example.com you get the SiteMinder page, only if SPNEGO is not enabled on the SiteMinder policy server.
- \_\_\_\_11. The LotusConnections-config.xml must be updated to update the interservice url and to set the Authenticator:
  - \_\_\_\_a. On the Deployment Manager, go to /opt/IBM/WebSphere/AppServer/profiles/Dmgr01/config/cells/ConnectionsCell 01/LotusConnections-config and edit LotusConnections-config.xml.
  - \_\_\_b. Add "444" to all entries of interService URL.

Your entries are changed from <sloc:interService href="https://connections.example.com"/>:



Figure 136. Changing the entries

To <sloc:interService href="https://connections.example.com:444"/>:

```
<sloc:serviceReference enabled="true" serviceName="bookmarklet" ssl_enabled="true">
        <sloc:hrefPathPrefix>/connections/bookmarklet</sloc:hrefPathPrefix>
        <sloc:static href="http://connections.example.com" ssl_href="https://connections.example.com"/>
        <sloc:interService href="https://connections.example.com:444"/>
        <sloc:serviceReference>
```

Figure 137. Changing the entries

- \_\_\_\_C. Check the customAuthenticator is set to default: <customAuthenticator name="DefaultAuthenticator"/>.
- \_\_\_\_d. Save and close.
- \_\_\_\_12. Stop the config: Connections, nodes and the Deployment Manager.
- \_\_\_\_13. Restart the Deployment Manager and the nodes. Allow them to synch to copy the LotusConnections-config.xml to the nodes.
- \_\_\_\_14. Start Connections.
- \_\_\_\_15. Verification point:
  - \_\_\_\_a. Check a user can access the config. Try to go to https://connections.example.com/homepage. You should be able to log in through SiteMinder and do some testing.

Config is now enabled for SiteMinder and SPNEGO over https.

\_\_\_\_b. After all that, here is an example of working HTTP files:

#### LocalConfig.conf:

# LocalConfig.conf: sample local configuration file for SiteMinder Web Agents # # Make a copy of this file and modify that copy with desired local configuration settings. # '#' is used as a comment character at the beginning of a line. Values commented out # can be uncommented once proper values are specified. Many such values in this # sample file are verbose explanations of what values should be used and not the # values themselves. To uncomment a line simply remove the '#' from the beginning # of the line. # # Most parameters in this file are also valid in an Agent Configuration Object. # The exceptions are AgentConfigObject, EnableWebAgent, and HostConfigFile. # AcceptTPCookie="NO" #AgentName="<Agent Name>,<IPAddress>" #AppendIISServerLog="NO"For IIS and SharePoint #BadCSSChars="<,>,',;" #BadQueryChars="" #BadUrlChars="//,./,/.,/\*,\*.,~,\,%00-%1f,%7f-%ff,%25" #BadFormChars="<,>,&,%22" #CacheAnonymous="NO" #CCCExt=".ccc" #CookieDomain="" #CookieDomainScope="0" #CookieProvider="<cookie provider URL>" #CSSChecking="YES" #CSSErrorFile="<File path to error text, or URL to redirect to>" #DecodeQueryData="NO" #DefaultAgentName="" #DefaultPassword="NO"For IIS and SharePoint #DisableAuthSrcVars="NO" #DisableDotDotRule=NO #DisablePostDataLimit="NO"For IIS and SharePoint #DisableSessionVars="NO" #DisableUserNameVars="NO" #EnableAuditing="NO" #EnableFormCache="YES" #EnableMonitoring="NO" #EnforceRealmTimeouts="NO"

#ExpireForProxy="NO" #FccCompatMode="NO" #FCCExt=".fcc" #FCCForceIsProtected="YES" #ForceCookieDomain="NO" #ForceFQHost="NO" #ForceIISProxyUser="NO" IIS ONLY #FormCacheTimeout="600" #HTTPHeaderEncodingSpec="" #IgnoreExt=".ccc" #IgnoreQueryData="NO" IgnoreHost="connections.example.com:444" #IgnoreUrl="<URL to ignore>" #LegacyVariables="NO" #LogAppend="NO" #LogFile="NO" #LogFileName="<File Path to write log to>" #LogOffUri="<Your Logoff Uri>" #MaxResourceCacheSize="700" #MaxSessionCacheSize="700" #MaxUrlSize="4096" #NTCExt=".ntc" #OverrideIqnoreExtFilter="" **#P3PCompactPolicy=""IIS ONLY** #PersistentCookies="NO" #PersistentIPCheck="YES" #PreserveHeaders="NO" #ProxyAgent="NO"Apache 2.0 ONLY #ProxyTrust="NO" #ProxyTimeout="NO"Apache 2.0 ONLY #PSPollInterval="30" #RemoteUserVar="" #ReqCookieErrorFile="<File path to error text, or URL to redirect to>" #RequireCookies="YES" #ResourceCacheTimeout="600" #SaveCredsTimeout="720" #SCCExt=".scc" #ServerErrorFile="<File path to error text, or URL to redirect to>" #SPAuthenticatedGroup="SMAuthenticatedGroup"SharePoint only #SPCacheEntryExpireMinute="30"SharePoint only #SPDisambiguateGroup="NO"SharePoint only #SPDisambiguateGroupRule="\$groupname{\$directoryname}" SharePoint only #SPDisambiguateUser="YES"SharePoint only #SPDisambiguateUserRule="\$username{\$directoryname}" SharePoint only #SPEnableImpersonation=SharePoint only #SPFormsTimeOut="30"SharePoint only #SPImpersonateResponseVarName=SharePoint only #SPIncludeMySiteSSP=SharePoint only

#SPNumCacheItem="1000"SharePoint only #SPPersonalSiteTemplate=SharePoint only #SPSortVirtualAttribute="UniversalID"SharePoint only #SPToolsLogLocation=SharePoint only #SPVirtualAttributeMapList="email=Emailgroup=GroupIDusername=Universal IDdisplayname=DisplayName" SharePoint only #SessionGracePeriod="30" #SessionUpdatePeriod="60" #SetRemoteUser="NO" #SFCCExt=".sfcc" #SSOZoneName="SM" #SSOTrustedZone="SM" #TraceAppend="NO" #TraceConfigFile="<Path to WebAgentTrace.conf file>" #TraceFile="NO" #TraceFileName="<File Path to write trace log to>" #TransientIDCookies="NO" #TransientIPCheck="NO" #UseAnonAccess="NO"For IIS and SharePoint #UseSecureCookies="NO" 

#Newly Added Parameters: Mar 23rd, 2010

#AllowCacheHeaders="NO" #ConstructFullPwsvcURL="NO" #EnforcePolicies="YES" #LogFileSize="0" #SecureApps="NO" #TargetAsRelativeURI="NO" #TraceDelimiter="" #TraceFileSize="0" #TraceFormat="default" #CookiePath="/" #CookiePathScope="0" #CookieValidationPeriod="" #Custom401ErrorFile="" #CustomIpHeader="" #EncryptAgentName="YES" #ExpiredCookieURL="<URL to redirect to>" #FCCCompatMode="" #IdleTimeoutURL="<URL to redirect to>" #IgnoreCPFornotprotected="NO" #LegacyCookieProvider="NO" #LegacyEncoding="" #LoqLocalTime="YES" #MasterCookiePath="/" #MaxTimeoutURL="<URL to redirect to>"

#OverlookSessionForMethods="" #OverlookSessionForMethodUri="" #OverlookSessionForUrls="" #PreservePostData="YES" #SecureURLs="NO" #UseServerRequestIp="NO" #ValidTargetDomain="" #ConformToRFC2047="YES" #AgentNamesAreFQHostNames="NO" #4xcompatmode="" #autoauthorizeoptions="" #defaulthostname="" #DisableDNSLookups="" #disallowutf8noncanonical="" #enableaccounting="" #enablentchallengeresponse="" #forcegetsessiondata="" #httpserviceprincipal="" #IgnoreXMLSDK="" #kccext="" #LegacyPostPreservationEncoding="NO" #legacytransferencoding="" #legalhostnamechars="" #LowerCaseHTTP="YES" #LowerCaseProtocolSpecifier="NO" #LogFilesToKeep="0" #PostPreservationFile="" #ProxyDefinition="" #ProxyHeadersAutoAuth="" #ProxyHeadersAutoAuth10="" #ProxyHeadersDefaultTime="" #ProxyHeadersProtected="" #ProxyHeadersProtected10="" #ProxyHeadersTimeoutPercentage="" #ProxyHeadersUnprotected="" #ProxyHeadersUnprotected10="" #ServerPath="" #smpsserviceprincipal="" #sharedsecret="" #StoreSessioninServer="NO" #TraceFilesToKeep="0" #TrackSessionDomain="NO" #UseHTTPOnlyCookies="NO" #UseSecureCPCookies="NO" #usesessionforanonymous=""

#For Apache

#DeleteCerts="NO"
#GetPortFromHeaders="NO"
#HttpsPorts=""

#For IIS

#DefaultUserName="" #InsecureServer="NO"

#For Domino

#DominoDefaultUser=""
#DominoSuperUser=""
#SkipDominoAuth=""
#UseDominoUserForUnprotected=""
#dominofinalizefilter=""
#dominofinalizefilter=""
#DominoLegacyDocumentSupport="NO"
#DominoLookUpHeaderForLogin="NO"
#DominoMapUrlForRedirect="YES"
#DominoNormalizeUrls="YES"
#DominoUseHeaderForLogin=""

#### httpd.conf:

```
# This is the main IBM HTTP server configuration file. It contains the
# configuration directives that give the server its instructions.
# See <URL:http://publib.boulder.ibm.com/httpserv/manual70/> for
detailed
# information about the Apache directives.
#
# The instructions provided in this configuration file are only hints
or
# reminders. Consult the online docs for definitive information.
#
# The configuration directives are grouped into three basic sections:
#
  1. Directives that control the operation of the web server process
as a
      whole (the 'global environment').
#
  2. Directives that define the parameters of the 'main' or 'default'
#
server,
     which responds to requests that aren't handled by a virtual host.
#
#
      These directives also provide default values for the settings
      of all virtual hosts.
#
#
  3. Settings for virtual hosts, which allow Web requests to be sent
to
#
      different IP addresses or hostnames and have them handled by the
#
      same web server process.
# Configuration and logfile names: If the filenames you specify for
many
# of the server's control files begin with "/" (or "drive:/" for
Win32), the
# server will use that explicit path. If the filenames do *not* begin
# with "/", the value of ServerRoot is prepended -- so "logs/foo.log"
# with ServerRoot set to "/opt/IBM/HTTPServer" will be interpreted by
the
# server as "/opt/IBM/HTTPServer/logs/foo.log".
#
### Section 1: Global Environment
#
# The directives in this section affect the overall operation of IBM
HTTP
# Server, such as the number of concurrent requests it can handle or
where
# it can find its configuration files.
#
#
# ServerRoot: The top of the directory tree under which the server's
```

```
# configuration, error, and log files are kept.
#
# Do NOT add a slash at the end of the directory path.
#
ServerRoot "/opt/IBM/HTTPServer"
#
# The accept serialization lock file MUST BE STORED ON A LOCAL DISK.
#
#LockFile logs/accept.lock
#
# PidFile: The file in which the server should record its process
# identification number when it starts.
PidFile logs/httpd.pid
#
# Timeout: The number of seconds before receives and sends time out.
#
Timeout 300
#
# KeepAlive: Whether or not to allow persistent connections (more than
# one request per connection). Set to "Off" to deactivate.
#
KeepAlive On
#
# MaxKeepAliveRequests: The maximum number of requests to allow
# during a persistent connection. Set to 0 to allow an unlimited
amount.
# We recommend you leave this number high, for maximum performance.
#
MaxKeepAliveRequests 100
#
# KeepAliveTimeout: Number of seconds to wait for the next request from
the
# same client on the same connection.
#
KeepAliveTimeout 10
##
## Server-Pool Size Regulation (MPM specific)
##
# worker MPM
```

```
#
# For tuning recommendations, refer to <NEWINFOCENTERURL>.
#
# ThreadLimit: maximum setting of ThreadsPerChild
# ServerLimit: maximum setting of StartServers
# StartServers: initial number of server processes to start
# MaxClients: maximum number of simultaneous client connections
# MinSpareThreads: minimum number of worker threads which are kept
spare
# MaxSpareThreads: maximum number of worker threads which are kept
spare
# ThreadsPerChild: constant number of worker threads in each server
process
# MaxRequestsPerChild: maximum number of requests a server process
serves
<IfModule worker.c>
ThreadLimit
                    25
ServerLimit
                    64
StartServers
                     1
MaxClients
                   600
MinSpareThreads
                    25
                    75
MaxSpareThreads
ThreadsPerChild
                    25
MaxRequestsPerChild 0
</IfModule>
#
# Listen: Allows you to bind the web server to specific IP addresses
# and/or ports, in addition to the default. See also the <VirtualHost>
# directive.
#
# Change this to Listen on specific IP addresses as shown below to
# prevent the web server from accepting connections on all interfaces
\# (0.0.0.0)
#
# Change this to "Listen 0.0.0.0:port" to restrict the server to
# IPv4.
#
#Listen 12.34.56.78:80
Listen 80
#
# Dynamic Shared Object (DSO) Support
#
# To be able to use the functionality of a module which was built as a
DSO you
# have to place corresponding `LoadModule' lines at this location so
the
```

# directives contained in it are actually available \_before\_ they are used. # Statically compiled modules (those listed by `httpd -l') do not need # to be loaded here. # # Example: # LoadModule foo\_module modules/mod\_foo.so LoadModule sm\_module "/opt/netegrity/webagent/bin/libmod\_sm22.so" SmInitFile "/opt/IBM/HTTPServer/conf/WebAgent.conf" LoadModule authz\_host\_module modules/mod\_authz\_host.so LoadModule auth basic module modules/mod auth basic.so LoadModule authn file module modules/mod authn file.so LoadModule authz user module modules/mod authz user.so #LoadModule authz\_groupfile\_module modules/mod\_authz\_groupfile.so LoadModule include module modules/mod include.so LoadModule log\_config\_module modules/mod\_log\_config.so LoadModule ibm\_local\_redirect\_module modules/mod\_ibm\_local\_redirect.so LoadModule env\_module modules/mod\_env.so #LoadModule mime\_magic\_module modules/mod\_mime\_magic.so #LoadModule expires\_module modules/mod\_expires.so #LoadModule headers\_module modules/mod\_headers.so LoadModule unique\_id\_module modules/mod\_unique\_id.so LoadModule setenvif module modules/mod setenvif.so #LoadModule proxy module modules/mod proxy.so #LoadModule proxy\_connect\_module modules/mod\_proxy\_connect.so #LoadModule proxy ftp module modules/mod proxy ftp.so #LoadModule proxy\_http\_module modules/mod\_proxy\_http.so LoadModule mime\_module modules/mod\_mime.so #LoadModule dav\_module modules/mod\_dav.so #LoadModule dav fs module modules/mod dav fs.so LoadModule autoindex\_module modules/mod\_autoindex.so #LoadModule asis\_module modules/mod\_asis.so #LoadModule info module modules/mod info.so LoadModule cgid\_module modules/mod\_cgid.so LoadModule dir module modules/mod dir.so LoadModule actions module modules/mod actions.so #LoadModule speling\_module modules/mod\_speling.so #LoadModule userdir\_module modules/mod\_userdir.so LoadModule alias module modules/mod alias.so LoadModule rewrite\_module modules/mod\_rewrite.so #LoadModule deflate\_module modules/mod\_deflate.so

#

# ExtendedStatus controls whether the web server will generate "full"
# status information (ExtendedStatus On) or just basic information
# (ExtendedStatus Off) when the server status page is formatted or
# when IBM HTTP Server diagnostic modules report information. The
# default is Off.

```
#
LoadModule status module modules/mod status.so
<IfModule mod_status.c>
ExtendedStatus On
</IfModule>
### Section 2: 'Main' server configuration
±
# The directives in this section set up the values used by the 'main'
# server, which responds to any requests that aren't handled by a
# <VirtualHost> definition. These values also provide defaults for
# any <VirtualHost> containers you may define later in the file.
#
# All of these directives may appear inside <VirtualHost> containers,
# in which case these default settings will be overridden for the
# virtual host being defined.
#
#
# If you wish httpd to run as a different user or group, you must run
# httpd as root initially and it will switch.
#
User nobody
Group nobody
#
# ServerAdmin: Your address, where problems with the server should be
# e-mailed. This address appears on some server-generated pages, such
# as error documents. e.g. admin@your-domain.com
ServerAdmin you@your.address
# ServerName gives the name and port that the server uses to identify
itself.
# This can often be determined automatically, but we recommend you
specify
# it explicitly to prevent problems during startup.
# If this is not set to valid DNS name for your host, server-generated
# redirections will not work. See also the UseCanonicalName directive.
# If your host doesn't have a registered DNS name, enter its IP address
here.
# You will have to access it by its address anyway, and this will make
# redirections work in a sensible way.
#
ServerName connections.example.com:80
```

# # UseCanonicalName: Determines how the web server constructs self-# referencing URLs and the SERVER NAME and SERVER PORT variables. # When set "Off", the web server will use the Hostname and Port supplied # by the client. When set "On", it will use the value of the ServerName # directive. # UseCanonicalName Off # # DocumentRoot: The directory out of which you will serve your # documents. By default, all requests are taken from this directory, but # symbolic links and aliases may be used to point to other locations. # DocumentRoot "/opt/IBM/HTTPServer/htdocs" ± # Each directory to which the web server has access can be configured # with respect to which services and features are allowed and/or disabled # in that directory (and its subdirectories). # # First, we configure the "default" to be a very restrictive set of # features. # <Directory /> Options FollowSymLinks AllowOverride None </Directory> # # Note that from this point forward you must specifically allow # particular features to be enabled: so if something's not working as # you might expect, make sure that you have specifically enabled it # below. # # # This should be changed to whatever you set DocumentRoot to. # <Directory "/opt/IBM/HTTPServer/htdocs"> # # Possible values for the Options directive are "None", "All",

```
# or any combination of:
    Indexes Includes FollowSymLinks SymLinksifOwnerMatch ExecCGI
#
Multiviews
# Note that "MultiViews" must be named *explicitly* --- "Options All"
# doesn't give it to you.
#
# The Options directive is both complicated and important. Please see
#
http://publib.boulder.ibm.com/httpserv/manual70/mod/core.html#options
# for more information.
#
    Options Indexes FollowSymLinks
#
# AllowOverride controls what directives may be placed in .htaccess
files.
# It can be "All", "None", or any combination of the keywords:
    Options FileInfo AuthConfig Limit
#
#
   AllowOverride None
#
# Controls who can get stuff from this server.
#
    Order allow, deny
    Allow from all
</Directory>
#
# UserDir: The name of the directory that is appended onto a user's
home
# directory if a ~user request is received.
#
<IfModule mod_userdir.c>
UserDir public_html
#
# Control access to UserDir directories. The following is an example
# for a site where these directories are restricted to read-only.
#<Directory /home/*/public_html>
     AllowOverride FileInfo AuthConfig Limit Indexes
#
#
     Options MultiViews Indexes SymLinksIfOwnerMatch IncludesNoExec
     <Limit GET POST OPTIONS PROPFIND>
#
#
         Order allow, deny
         Allow from all
#
```

```
</Limit>
#
#
     <LimitExcept GET POST OPTIONS PROPFIND>
         Order deny,allow
#
         Deny from all
#
#
     </LimitExcept>
#</Directory>
</IfModule>
#
# DirectoryIndex: sets the file that the web server will serve if a
# directory is requested.
#
# The index.html.var file (a type-map) is used to deliver content-
# negotiated documents. The MultiViews Option can be used for the
# same purpose, but it is much slower.
#
DirectoryIndex index.html index.html.var
#
# AccessFileName: The name of the file to look for in each directory
# for additional configuration directives. See also the AllowOverride
# directive.
#
AccessFileName .htaccess
#
# The following lines prevent .htaccess and .htpasswd files from being
# viewed by Web clients.
#
<Files ~ "^\.ht">
    Order allow, deny
    Deny from all
</Files>
#
# TypesConfig describes where the mime.types file (or equivalent) is
# to be found.
±
TypesConfig conf/mime.types
#
# DefaultType is the default MIME type the server will use for a
document
# if it cannot otherwise determine one, such as from filename
extensions.
# If your server contains mostly text or HTML documents, "text/plain"
is
# a good value. If most of your content is binary, such as
```

```
applications
# or images, you may want to use "application/octet-stream" instead to
# keep browsers from trying to display binary files as though they are
# text.
#
DefaultType text/plain
#
# The mod_mime_magic module allows the server to use various hints from
the
# contents of the file itself to determine its type. The MIMEMagicFile
# directive tells the module where the hint definitions are located.
#
<IfModule mod_mime_magic.c>
    MIMEMagicFile conf/magic
</IfModule>
# HostnameLookups: Log the names of clients or just their IP addresses
# e.g., www.apache.org (on) or 204.62.129.132 (off).
# The default is off because it'd be overall better for the net if
people
# had to knowingly turn this feature on, since enabling it means that
# each client request will result in AT LEAST one lookup request to the
# nameserver.
#
HostnameLookups Off
#
# EnableMMAP: Control whether memory-mapping is used to deliver
# files (assuming that the underlying OS supports it).
# The default is on; turn this off if you serve from NFS-mounted
# filesystems. On some systems, turning it off (regardless of
# filesystem) can improve performance; for details, please see
# http://httpd.apache.org/docs/2.2/mod/core.html#enablemmap
#
# EnableMMAP off
# EnableSendfile: Control whether the sendfile kernel support is
# used to deliver files (assuming that the OS supports it).
# The default is on; turn this off if you serve from NFS-mounted
# filesystems. Please see
# http://httpd.apache.org/docs/2.2/mod/core.html#enablesendfile
EnableSendfile off
#
```

```
# ErrorLog: The location of the error log file.
# If you do not specify an ErrorLog directive within a <VirtualHost>
# container, error messages relating to that virtual host will be
# logged here. If you *do* define an error logfile for a <VirtualHost>
# container, that host's errors will be logged there and not here.
ErrorLog logs/error_log
#
# LogLevel: Control the number of messages logged to the error log.
# Possible values include: debug, info, notice, warn, error, crit,
# alert, emerg.
#
LogLevel warn
#
# The following directives define some format nicknames for use with
# a CustomLog directive (see below).
#
LogFormat "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\"
\"%{User-Agent}i\"" combined
LogFormat "%h %l %u %t \"%r\" %>s %b" common
LogFormat "%{Referer}i -> %U" referer
LogFormat "%{User-agent}i" agent
#
# The location and format of the access logfile (Common Logfile
Format).
# If you do not define any access logfiles within a <VirtualHost>
# container, they will be logged here. Contrariwise, if you *do*
# define per-<VirtualHost> access logfiles, transactions will be
# logged therein and *not* in this file.
CustomLog logs/access_log common
# If you would like to have agent and referer logfiles, uncomment the
# following directives.
#CustomLog logs/referer_log referer
#CustomLog logs/agent_log agent
#
# If you prefer a single logfile with access, agent, and referer
information
# (Combined Logfile Format) you can use the following directive.
#
#CustomLog logs/access_log combined
```

```
#
# AddServerHeader
# This directive provides a means to enable or disable ServerHeader
values.
# The default value is "On". This provides a server header according to
the
# values specified in the ServerTokens and ServerSignature directives.
# Setting this directive to "Off" results in no server header
information
# being returned to clients.
# Set to one of: On | Off
#
#AddServerHeader Off
#
# ServerTokens
# This directive configures what you return as the Server HTTP response
# Header. The built-in default is 'Full' which sends information about
# the OS-type and compiled in modules. The recommended value is 'Prod'
# which sends the least information.
# Set to one of: Full | OS | Minor | Minimal | Major | Prod
# where Full conveys the most information, and Prod the least.
#
ServerTokens Prod
# Optionally add a line containing the server version and virtual host
# name to server-generated pages (internal error documents, FTP
directory
# listings, mod_status and mod_info output etc., but not CGI generated
# documents or custom error documents).
# Set to "EMail" to also include a mailto: link to the ServerAdmin.
# Set to one of: On | Off | EMail
#
ServerSignature On
±
# Aliases: Add here as many aliases as you need (with no limit). The
format is
# Alias fakename realname
# Note that if you include a trailing / on fakename then the server
will
# require it to be present in the URL. So "/icons" isn't aliased in
this
# example, only "/icons/". If the fakename is slash-terminated, then
the
```

# realname must also be slash terminated, and if the fakename omits the # trailing slash, the realname must also omit it. # # We include the /icons/ alias for FancyIndexed directory listings. If you # do not use FancyIndexing, you may comment this out. # Alias /siteminderagent/pwcgi/ "/opt/netegrity/webagent/pw/" <Directory "/opt/netegrity/webagent/pw/"> Options Indexes MultiViews ExecCGI AllowOverride None Order allow, deny Allow from all </Directory> Alias /siteminderagent/pw/ "/opt/netegrity/webagent/pw/" <Directory "/opt/netegrity/webagent/pw/"> Options Indexes MultiViews ExecCGI AllowOverride None Order allow, deny Allow from all </Directory> Alias /siteminderagent/ "/opt/netegrity/webagent/samples/" <Directory "/opt/netegrity/webagent/samples/"> Options Indexes MultiViews AllowOverride None Order allow, deny Allow from all </Directory> Alias /icons/ "/opt/IBM/HTTPServer/icons/" <Directory "/opt/IBM/HTTPServer/icons"> Options Indexes MultiViews AllowOverride None Order allow, deny Allow from all </Directory> # # ScriptAlias: This controls which directories contain server scripts. # ScriptAliases are essentially the same as Aliases, except that # documents in the realname directory are treated as applications and # run by the server when requested rather than as documents sent to the client. # The same rules about trailing "/" apply to ScriptAlias directives as to # Alias. # ScriptAlias /cgi-bin/ "/opt/IBM/HTTPServer/cgi-bin/"

```
<IfModule mod cqid.c>
# Additional to mod_cgid.c settings, mod_cgid has Scriptsock <path>
# for setting UNIX socket for communicating with cgid.
#Scriptsock
                       logs/cgisock
</TfModule>
#
# "/opt/IBM/HTTPServer/cgi-bin" should be changed to whatever your
ScriptAliased
# CGI directory exists, if you have that configured.
#
<Directory "/opt/IBM/HTTPServer/cqi-bin">
    AllowOverride None
    Options None
    Order allow, deny
    Allow from all
</Directory>
#
# Redirect allows you to tell clients about documents which used to
exist in
# your server's namespace, but do not anymore. This allows you to tell
the
# clients where to look for the relocated document.
# Example:
# Redirect permanent /foo http://www.example.com/bar
#
# Directives controlling the display of server-generated directory
listings.
#
#
# IndexOptions: Controls the appearance of server-generated directory
# listings.
IndexOptions FancyIndexing VersionSort
#
# AddIcon* directives tell the server which icon to show for different
# files or filename extensions. These are only displayed for
# FancyIndexed directories.
#
AddIconByEncoding (CMP,/icons/compressed.gif) x-compress x-gzip
```

```
AddIconByType (TXT,/icons/text.gif) text/*
AddIconByType (IMG,/icons/image2.gif) image/*
AddIconByType (SND,/icons/sound2.gif) audio/*
AddIconByType (VID,/icons/movie.gif) video/*
AddIcon /icons/binary.gif .bin .exe
AddIcon /icons/binhex.gif .hqx
AddIcon /icons/tar.gif .tar
AddIcon /icons/world2.gif .wrl .wrl.gz .vrml .vrm .iv
AddIcon /icons/compressed.gif .Z .z .tgz .gz .zip
AddIcon /icons/a.gif .ps .ai .eps
AddIcon /icons/layout.gif .html .shtml .htm .pdf
AddIcon /icons/text.gif .txt
AddIcon /icons/c.gif .c
AddIcon /icons/p.gif .pl .py
AddIcon /icons/f.gif .for
AddIcon /icons/dvi.gif .dvi
AddIcon /icons/uuencoded.gif .uu
AddIcon /icons/script.gif .conf .sh .shar .csh .ksh .tcl
AddIcon /icons/tex.gif .tex
AddIcon /icons/bomb.gif core
AddIcon /icons/back.gif ..
AddIcon /icons/hand.right.gif README
AddIcon /icons/folder.gif ^^DIRECTORY^^
AddIcon /icons/blank.gif ^^BLANKICON^^
#
# DefaultIcon is which icon to show for files which do not have an icon
# explicitly set.
#
DefaultIcon /icons/unknown.gif
#
# AddDescription allows you to place a short description after a file
in
                             These are only displayed for FancyIndexed
# server-generated indexes.
# directories.
# Format: AddDescription "description" filename
#
#AddDescription "GZIP compressed document" .gz
#AddDescription "tar archive" .tar
#AddDescription "GZIP compressed tar archive" .tgz
#
# ReadmeName is the name of the README file the server will look for by
# default, and append to directory listings.
#
```
```
# HeaderName is the name of a file which should be prepended to
# directory indexes.
ReadmeName README.html
HeaderName HEADER.html
#
# IndexIgnore is a set of filenames which directory indexing should
iqnore
# and not include in the listing. Shell-style wildcarding is
permitted.
#
IndexIgnore .??* *~ *# HEADER* README* RCS CVS *,v *,t
#
# AddEncoding allows you to have certain browsers (Mosaic/X 2.1+)
uncompress
# information on the fly. Note: Not all browsers support this.
# Despite the name similarity, the following Add* directives have
nothing
# to do with the FancyIndexing customization directives above.
#
AddEncoding x-compress Z
AddEncoding x-gzip gz tgz
#
# AddType allows you to add to or override the MIME configuration
# file mime.types for specific file types.
#
AddType application/x-tar .tgz
AddType image/x-icon .ico
±
# AddHandler allows you to map certain file extensions to "handlers":
# actions unrelated to filetype. These can be either built into the
server
# or added with the Action directive (see below)
#
# To use CGI scripts outside of ScriptAliased directories:
# (You will also need to add "ExecCGI" to the "Options" directive.)
#
#AddHandler cgi-script .cgi
#
# For files that include their own HTTP headers:
#AddHandler send-as-is asis
#
```

```
# For server-parsed imagemap files:
#
#AddHandler imap-file map
#
# For type maps (negotiated resources):
#
#AddHandler type-map var
#
# Filters allow you to process content before it is sent to the client.
#
# To parse .shtml files for server-side includes (SSI):
# (You will also need to add "Includes" to the "Options" directive.)
#AddType text/html .shtml
#AddOutputFilter INCLUDES .shtml
#
# Action lets you define media types that will execute a script
whenever
# a matching file is called. This eliminates the need for repeated URL
# pathnames for oft-used CGI file processors.
# Format: Action media/type /cgi-script/location
# Format: Action handler-name /cgi-script/location
#
#
# Customizable error responses come in three flavors:
# 1) plain text 2) local redirects 3) external redirects
#
# Some examples:
#ErrorDocument 500 "The server made a boo boo."
#ErrorDocument 404 /missing.html
#ErrorDocument 404 "/cgi-bin/missing_handler.pl"
#ErrorDocument 402 http://www.example.com/subscription_info.html
#
#
# Putting this all together, we can internationalize error responses.
#
# We use Alias to redirect any /error/HTTP_<error>.html.var response
to
# our collection of by-error message multi-language collections. We
use
# includes to substitute the appropriate text.
#
# You can modify the messages' appearance without changing any of the
```

```
# default HTTP_<error>.html.var files by adding the line:
#
#
    Alias /error/include/ "/your/include/path/"
#
# which allows you to create your own set of files by starting with the
# /opt/IBM/HTTPServer/error/include/ files and copying them to
/your/include/path/,
# even on a per-VirtualHost basis. The default include files will
display
# your IBM HTTP Server version number and your ServerAdmin email
address
# regardless of the setting of ServerSignature.
#
# The internationalized error documents require mod_alias, mod_include
# and mod negotiation. To activate them, uncomment the following 30
lines.
#
     Alias /error/ "/opt/IBM/HTTPServer/error/"
#
#
     <Directory "/opt/IBM/HTTPServer/error">
#
         AllowOverride None
#
         Options IncludesNoExec
#
         AddOutputFilter Includes html
#
         AddHandler type-map var
#
         Order allow, deny
#
         Allow from all
         LanguagePriority en de es fr it nl sv
#
         ForceLanguagePriority Prefer Fallback
#
#
     </Directory>
#
#
     ErrorDocument 400 /error/HTTP_BAD_REQUEST.html.var
#
     ErrorDocument 401 /error/HTTP_UNAUTHORIZED.html.var
#
     ErrorDocument 403 /error/HTTP FORBIDDEN.html.var
#
     ErrorDocument 404 /error/HTTP_NOT_FOUND.html.var
#
     ErrorDocument 405 /error/HTTP METHOD NOT ALLOWED.html.var
#
     ErrorDocument 408 /error/HTTP REQUEST TIME OUT.html.var
     ErrorDocument 410 /error/HTTP_GONE.html.var
#
#
     ErrorDocument 411 /error/HTTP_LENGTH_REQUIRED.html.var
     ErrorDocument 412 /error/HTTP PRECONDITION FAILED.html.var
#
#
     ErrorDocument 413 /error/HTTP_REQUEST_ENTITY_TOO_LARGE.html.var
#
     ErrorDocument 414 /error/HTTP_REQUEST_URI_TOO_LARGE.html.var
#
     ErrorDocument 415 /error/HTTP_SERVICE_UNAVAILABLE.html.var
#
     ErrorDocument 500 /error/HTTP_INTERNAL_SERVER_ERROR.html.var
#
     ErrorDocument 501 /error/HTTP_NOT_IMPLEMENTED.html.var
#
     ErrorDocument 502 /error/HTTP BAD GATEWAY.html.var
#
     ErrorDocument 503 /error/HTTP SERVICE UNAVAILABLE.html.var
#
     ErrorDocument 506 /error/HTTP_VARIANT_ALSO_VARIES.html.var
```

```
#
# The following directives modify normal HTTP response behavior to
# handle known problems with browser implementations.
#
BrowserMatch "Mozilla/2" nokeepalive
BrowserMatch "MSIE 4\.0b2;" nokeepalive downgrade-1.0
force-response-1.0
BrowserMatch "RealPlayer 4\.0" force-response-1.0
BrowserMatch "Java/1\.0" force-response-1.0
BrowserMatch "JDK/1\.0" force-response-1.0
#
# The following directive disables redirects on non-GET requests for
# a directory that does not include the trailing slash. This fixes a
# problem with Microsoft WebFolders which does not appropriately
handle
# redirects for folders with DAV methods.
# Same deal with Apple's DAV filesystem and Gnome VFS support for DAV.
#
BrowserMatch "Microsoft Data Access Internet Publishing Provider"
redirect-carefully
BrowserMatch "^WebDrive" redirect-carefully
BrowserMatch "^WebDAVFS/1.[012]" redirect-carefully
BrowserMatch "^gnome-vfs" redirect-carefully
#
# Allow server status reports generated by mod_status,
# with the URL of http://servername/server-status
# Change the ".example.com" to match your domain to enable.
#
<IfModule mod_status.c>
<Location /server-status>
    SetHandler server-status
    Order deny, allow
    Deny from all
# Add an "Allow from" directive to provide access to the server status
page.
#
# Examples:
#
# 1. Allow any client with hostname *.example.com to view the page.
# Allow from .example.com
#
# 2. Allow the local machine to view the page using the loopback
address.
#
# Allow from 127.0.0.1
```

```
#
# 3. Allow any machine on the local network to view the page.
# Allow from 192.168.1
</Location>
</IfModule>
#
# Allow remote server configuration reports, with the URL of
# http://servername/server-info (requires that mod_info.c be loaded).
# Change the ".example.com" to match your domain to enable.
#
#<Location /server-info>
     SetHandler server-info
±
#
     Order deny,allow
    Deny from all
#
     Allow from .example.com
#
#</Location>
#
# Proxy Server directives. Uncomment the following lines to
# enable the proxy server:
#
#<IfModule mod_proxy.c>
#Enable the forward proxy server. Note: Do not use the ProxyRequests
directive if
#all you require is reverse proxy.
#
#ProxyRequests On
#<Proxy *>
#
     Order deny,allow
     Deny from all
#
     Allow from .example.com
#
#</Proxy>
±
# Enable/disable the handling of HTTP/1.1 "Via:" headers.
# ("Full" adds the server version; "Block" removes all outgoing Via:
headers)
# Set to one of: Off | On | Full | Block
#
#ProxyVia On
#</IfModule>
# End of proxy directives.
```

```
### Section 3: Virtual Hosts
#
# VirtualHost: If you want to maintain multiple domains/hostnames on
your
# machine you can setup VirtualHost containers for them. Most
configurations
# use only name-based virtual hosts so the server doesn't need to worry
about.
# IP addresses. This is indicated by the asterisks in the directives
below.
#
# Please see the documentation at
# <URL:http://httpd.apache.org/docs/2.2/vhosts/>
# for further details before you try to setup virtual hosts.
#
# You may use the command line option '-S' to verify your virtual host
# configuration.
#
# Use name-based virtual hosting.
±
#NameVirtualHost *
#
# VirtualHost example:
# Almost any Apache directive may go into a VirtualHost container.
# The first VirtualHost section is used for requests without a known
# server name.
#
#<VirtualHost *>
     ServerAdmin webmaster@dummy-host.example.com
#
     DocumentRoot /www/docs/dummy-host.example.com
#
#
     ServerName dummy-host.example.com
#
     ErrorLog logs/dummy-host.example.com-error_log
     CustomLog logs/dummy-host.example.com-access_log common
#
#</VirtualHost>
# Example SSL configuration which supports SSLv3 and TLSv1
# To enable this support:
#
   1) Create a key database with ikeyman
   2) Update the KeyFile directive below to point to that key database
#
    3) Uncomment the directives up through the end of the example
#
#
#LoadModule ibm_ssl_module modules/mod_ibm_ssl.so
#Listen 443
#<VirtualHost *:443>
#SSLEnable
#SSLProtocolDisable SSLv2
```

```
#</VirtualHost>
#KeyFile /opt/IBM/HTTPServer/ihsserverkey.kdb
#SSLDisable
# End of example SSL configuration
#
# Enable IBM HTTP Server diagnostic features.
#
# CoreDumpDirectory directory: Sets the location where the server will
# attempt to put a core dump. The child processes running as 'User'
# (see User config directive above) must have permission to write to
# this directive. The filesystem will have to be large enough to hold
# potentially large core files.
#
# The /tmp directory is often sufficient.
#
#CoreDumpDirectory /tmp
# mod_mpmstats logs statistics about server activity to the main
# error log. No records are written while the server is idle.
LoadModule mpmstats_module modules/debug/mod_mpmstats.so
<IfModule mod mpmstats.c>
# Write a record every 10 minutes (if server isn't idle).
# Recommendation: Lower this interval to 60 seconds, which will
# result in the error log growing faster but with more accurate
# information about server load.
ReportInterval 600
# Include details of active module in the statistics.
TrackModules On
</IfModule>
# EnableExceptionHook allows modules such as mod backtrace and
# mod_whatkilledus to run after a crash and gather additional
# diagnostic information.
# EnableExceptionHook must be "on" in order to use mod_backtrace or
# mod whatkilledus.
EnableExceptionHook On
# mod_backtrace will record a backtrace of the crashing thread to the
# error log at the time of a crash. This is important information for
# diagnosing the cause of the crash.
LoadModule backtrace_module modules/debug/mod_backtrace.so
# mod whatkilledus will record information about the current request
# and connection to the error log at the time of a crash. This is
# important information for diagnosing the cause of the crash.
```

LoadModule whatkilledus\_module modules/debug/mod\_whatkilledus.so

# mod net trace will record actual data sent/received from the client # and on proxy connections, even for SSL connections. Unlike an IP # trace, interaction with the platform network APIs can be seen. # The following example configuration can be activated by uncommenting # the LoadModule directive. #LoadModule net\_trace\_module modules/debug/mod\_net\_trace.so <IfModule mod\_net\_trace.c> NetTraceFile /tmp/nettrace NetTrace client \* dest file event senddata=65535 event recvdata=65535 </IfModule> LoadModule was ap22 module /opt/IBM/HTTPServer/Plugins/bin/mod\_was\_ap22\_http.so WebSpherePluginConfig /opt/IBM/HTTPServer/Plugins/config/webserver1/plugin-cfg.xml # # Dynamic Shared Object (DSO) Support # # To be able to use the functionality of a module which was built as a DSO you # have to place corresponding `LoadModule' lines at this location so the # directives contained in it are actually available \_before\_ they are used. # Statically compiled modules (those listed by `httpd -l') do not need # to be loaded here. # # Example: # LoadModule foo module modules/mod foo.so # # Alias: Maps web paths into filesystem paths and is used to # access content that does not live under the DocumentRoot. # Example: # Alias /webpath /full/filesystem/path # AddHandler allows you to map certain file extensions to "handlers": # actions unrelated to filetype. These can be either built into the server # or added with the Action directive (see below) # # To use CGI scripts outside of ScriptAliased directories: # (You will also need to add "ExecCGI" to the "Options" directive.) # #AddHandler cgi-script .cgi RewriteEngine On RewriteCond %{REQUEST\_URI} /(.\*)/ibm\_security\_logout(.\*)

```
RewriteCond %{QUERY_STRING}
!=logoutExitPage=https://connections.example.com/homepage
RewriteRule /(.*)/ibm_security_logout(.*)
/homepage/web/ibm_security_logout?logoutExitPage=https://connections.e
xample.com/homepage [noescape,L,R]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/api/(.*)
/blogs/roller-ui/rendering/api/$1/api/$2 [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/tags/atom(.*)
/blogs/roller-ui/rendering/feed/$1/tags/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/entries/atom(.*)
/blogs/roller-ui/rendering/feed/$1/entries/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/comments/atom(.*)
/blogs/roller-ui/rendering/feed/$1/comments/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/blogs/atom(.*)
/blogs/roller-ui/rendering/feed/$1/blogs/atom/ [R,L]
LoadModule ibm ssl module modules/mod ibm ssl.so
<IfModule mod ibm ssl.c>
Listen 0.0.0:443
<VirtualHost *:443>
ServerName connections.example.com
SSLEnable
AllowEncodedSlashes On
RewriteEngine On
RewriteCond %{REQUEST_URI} /(.*)/ibm_security_logout(.*)
RewriteCond %{QUERY_STRING}
!=logoutExitPage=https://connections.example.com/homepage
RewriteRule /(.*)/ibm_security_logout(.*)
/homepage/web/ibm_security_logout?logoutExitPage=https://connections.e
xample.com/homepage [noescape,L,R]
RewriteCond %{REQUEST URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/api/(.*)
/blogs/roller-ui/rendering/api/$1/api/$2 [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/tags/atom(.*)
/blogs/roller-ui/rendering/feed/$1/tags/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/entries/atom(.*)
/blogs/roller-ui/rendering/feed/$1/entries/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
```

```
RewriteRule ^/blogs/(.*)/feed/comments/atom(.*)
/blogs/roller-ui/rendering/feed/$1/comments/atom/ [R,L]
RewriteCond %{REQUEST_URI} !^/blogs/roller-ui/rendering/(.*)
RewriteRule ^/blogs/(.*)/feed/blogs/atom(.*)
/blogs/roller-ui/rendering/feed/$1/blogs/atom/ [R,L]
Alias /downloadfiles /opt/IBM/LC_Share/files/upload/
Alias /downloadwikis /opt/IBM/LC_Share/wikis/upload/
<Directory /opt/IBM/LC_Share/files/upload/>
Order Deny, Allow
Deny from all
Allow from env=REDIRECT_FILES_CONTENT
</Directory>
<Directory /opt/IBM/LC_Share/wikis/upload/>
 Order Deny, Allow
Deny from all
 Allow from env=REDIRECT_WIKIS_CONTENT
</Directory>
<Location /files>
 IBMLocalRedirect On
 IBMLocalRedirectKeepHeaders
X-LConn-Auth, Cache-Control, Content-Type, Content-Disposition, Last-Modif
ied, ETag, Content-Language, Set-Cookie
 SetEnv FILES CONTENT true
</Location>
<Location /wikis>
 IBMLocalRedirect On
 IBMLocalRedirectKeepHeadErs
X-LConn-Auth, Cache-Control, Content-Type, Content-Disposition, Last-Modif
ied, ETag, Content-Language, Set-Cookie
 SetEnv WIKIS CONTENT true
</Location>
</VirtualHost>
</IfModule>
SSLDisable
Keyfile "/opt/IBM/Keyfiles/webserver-key.kdb"
SSLStashFile "/opt/IBM/Keyfiles/webserver-key.sth"
Listen 444
```

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<VirtualHost \*:444>

```
ServerName connections.example.com

SSLEnable

Keyfile "/opt/IBM/Keyfiles/webserver-key.kdb"

SSLStashFile "/opt/IBM/Keyfiles/webserver-key.sth"

</VirtualHost>
```

## WebAgent.conf

```
# WebAgent.conf: configuration file for SiteMinder Web Agent
# Web Agent Version = 6QMR6, Build = 667, Update = 0
#agentname="<AgentName>, <IPAddress>"
HostConfigFile="/opt/netegrity/webagent/config/SmHost.conf"
AgentConfigObject="dslvm767_wa_conf"
EnableWebAgent="YES"
ServerPath="/opt/IBM/HTTPServer/conf"
localconfigfile="/opt/IBM/HTTPServer/conf/LocalConfig.conf"
LoadPlugin="/opt/netegrity/webagent/bin/libHttpPlugin.so"
#LoadPlugin="/opt/netegrity/webagent/bin/libAffiliate10Plugin.so"
```

#LoadPlugin="/opt/netegrity/webagent/bin/libeTSSOPlugin.so"

#LoadPlugin="/opt/netegrity/webagent/bin/libIntroscopePlugin.so"

## IIV.