Websphere profile installation manual in cloud server

Contents

[Document History 2](#_Toc451876850)

[Pre-requisites 3](#_Toc451876851)

[Virtual host 3](#_Toc451876852)

[Dependency libraries 6](#_Toc451876853)

[Class Loader 8](#_Toc451876854)

[CloneSeparatorChange 9](#_Toc451876855)

[Configuring JNDI 10](#_Toc451876856)

[Setup RCM folders 15](#_Toc451876857)

[Update the attached file here to 16](#_Toc451876858)

[Configure JVM 17](#_Toc451876859)

Configure ports…………………………………………………………………………………………………………………………………… 19

[War file deployment 21](#_Toc451876860)

optional configuration ………………………………………………………………………………………………………………………….25

[Jreport Installation 27](#_Toc451876861)

[AIS Installation 28](#_Toc451876862)

[Appendix 28](#_Toc451876863)

[Linux Commands 28](#_Toc451876864)

[Source code 29](#_Toc451876865)

[IBM Console URL 29](#_Toc451876866)

[Sample Files 29](#_Toc451876867)

[Common Issues 29](#_Toc451876868)

# Document History

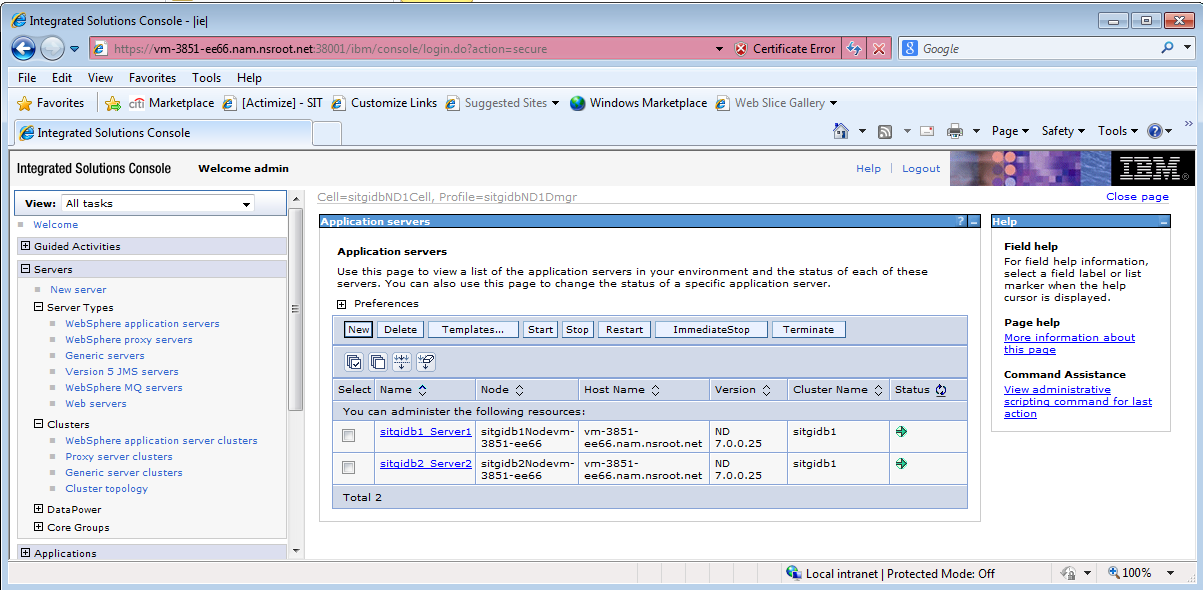
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Status** | **Author** | **Comment / Changes from Prior Version** |
| 0.1 | 04/15/2014 | Draft | Prakash Mani | Initial Version |
| 0.2 | 04/28/2014 | Draft | Prakash Mani | Updated the screen shots |
| 0.3 | 04/29/2014 | Draft | Prakash Mani | Update the profile creation |
| 0.4 | 05/24/2016 | Draft | Ravi Abhishek | Update the profile creation |

# Pre-requisites

1. Database for RCM and Extension
2. Websphere profile should be created using CAS Request

Refer the below document to create the profile using CAS Request





Open the IBM console and enter below user details

https://vm-3851-ee66.nam.nsroot.net:38001/ibm/console/logon.jsp

User : CellNameAdmin/Default password

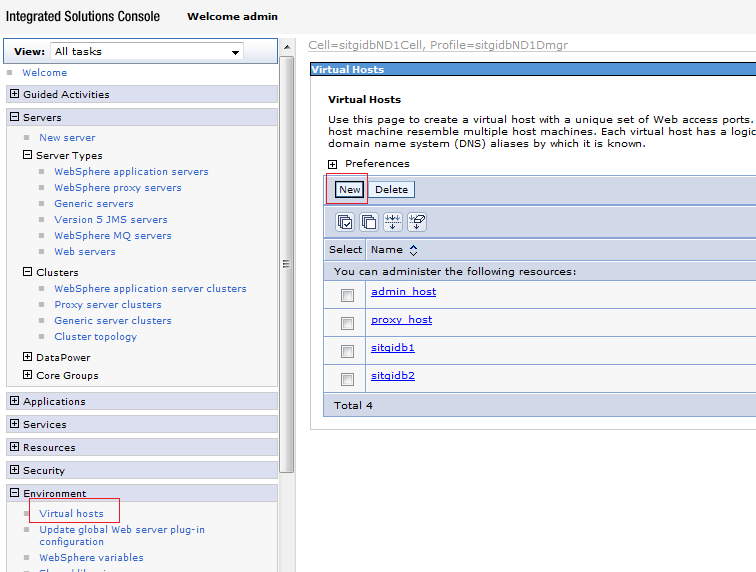
Example : sitgidbND1Admin/alakazotland123

Create the admin account under Administrator group.

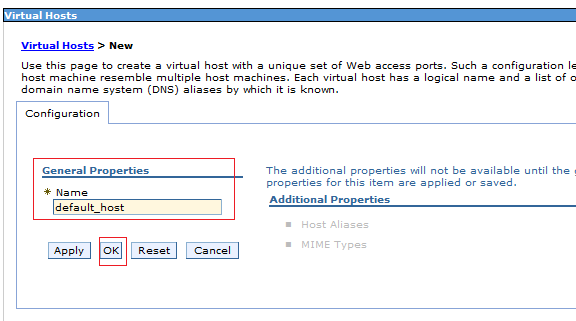
\*\*Sample xml file and logs attached under Appendix.

# Virtual host

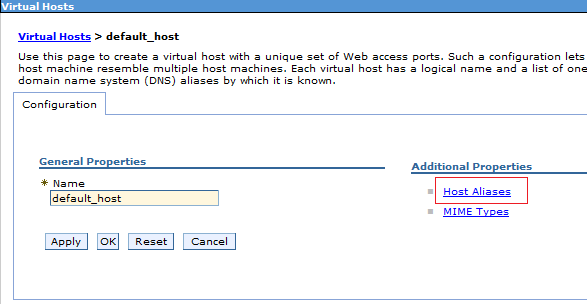
1. Create “default\_host” if not exist



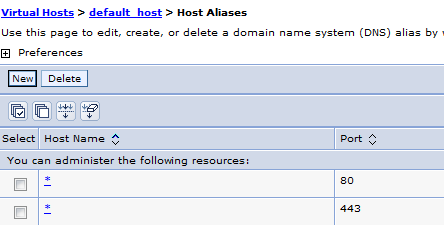
1. Enter “default\_host” and click ok. Save the changes to master configuration.



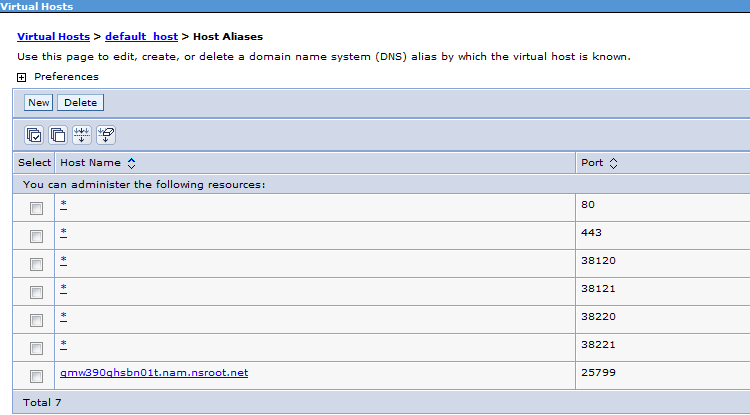
1. Select the default\_host and select Host\_Aliases



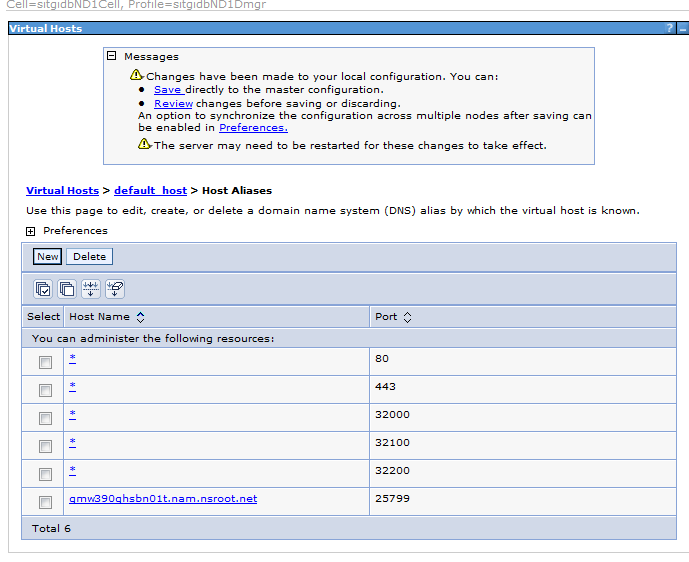
1. Create new entries for default http and https port numbers (80 & 443)



1. Create new entries for application port numbers



1. Save all entries into master configuration



# Dependency libraries

1. Create new folder acmlib under profile directory and copy dependency libraries

Example:

[amldevg@vm-3851-ee66 sitgidb1]$ pwd

/opt/middleware/cloudapp/cloudapp\_Runtime/profiles/sitgidbND1Cell/sitgidb1

[amldevg@vm-3851-ee66 sitgidb1]$ mkdir acmlib

[amldevg@vm-3851-ee66 sitgidb1]$ cd acmlib

[amldevg@vm-3851-ee66 acmlib]$ ls -l

total 5276

-rw-r--r-- 1 amldevg amldevg 2111220 Oct 22 2012 ojdbc6.jar

-rw-r--r-- 1 amldevg amldevg 278281 Oct 22 2012 serializer-2.7.1.jar

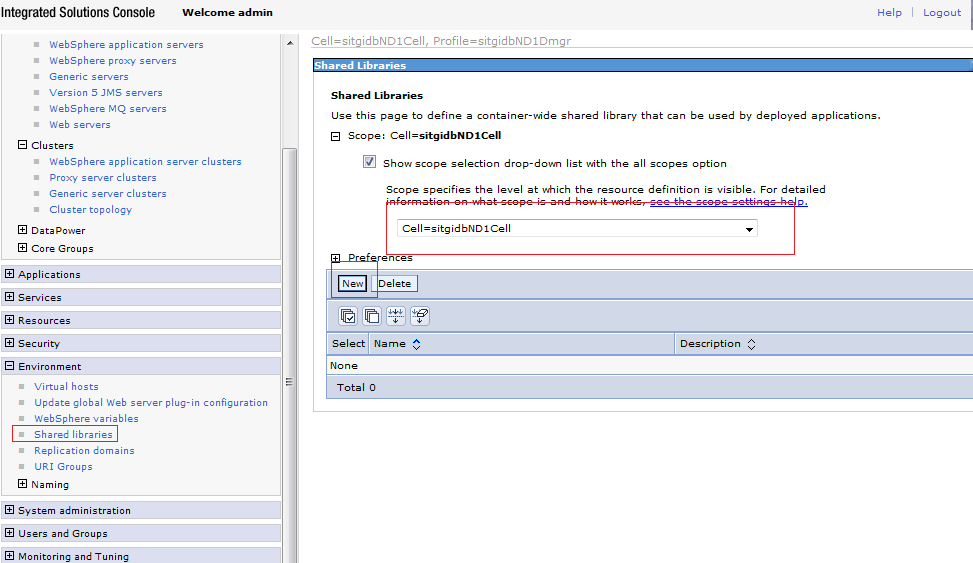
-rw-r--r-- 1 amldevg amldevg 1760887 Oct 22 2012 xalan-2.7.1.jar

-rw-r--r-- 1 amldevg amldevg 1229289 Oct 22 2012 xercesImpl-2.9.1.jar

[amldevg@vm-3851-ee66 acmlib]$

Note: Repeat above steps for all application servers

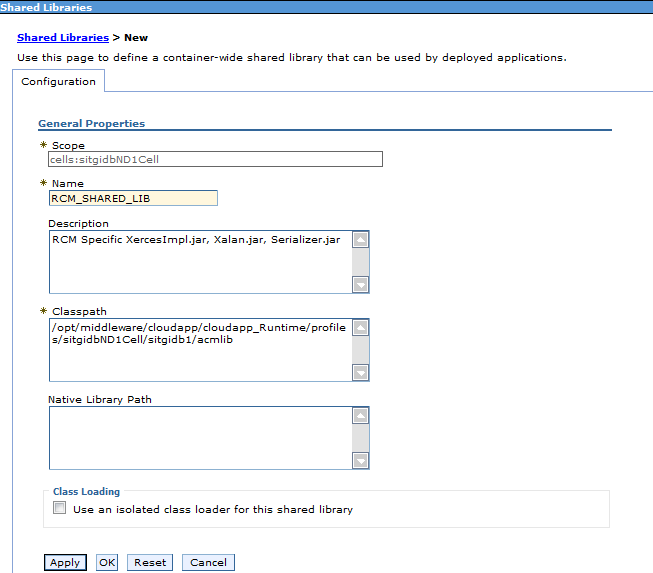
1. Add the shared libraries



Name: RCM\_SHARED\_LIB

Description: RCM Specific XercesImpl.jar, Xalan.jar, Serializer.jar

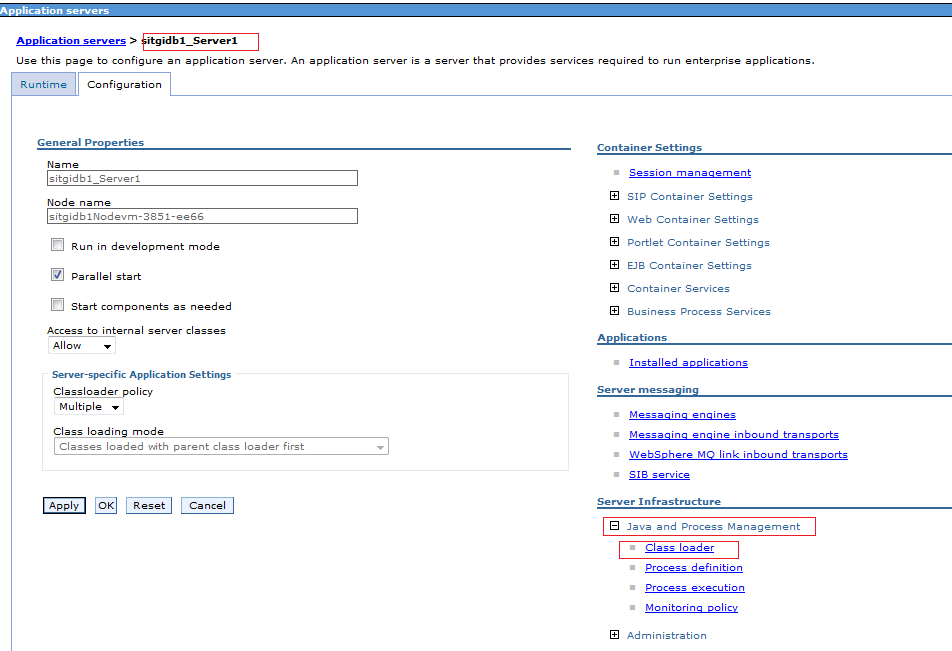
Classpath: /opt/middleware/cloudapp/cloudapp\_Runtime/profiles/sitgidbND1Cell/sitgidb1/acmlib



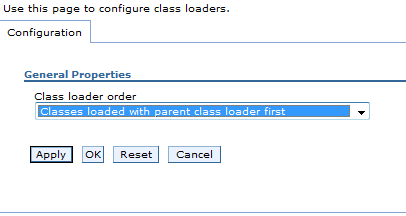
Save the above steps to update in master configuration

# Class Loader

Update the shared library details for application servers.

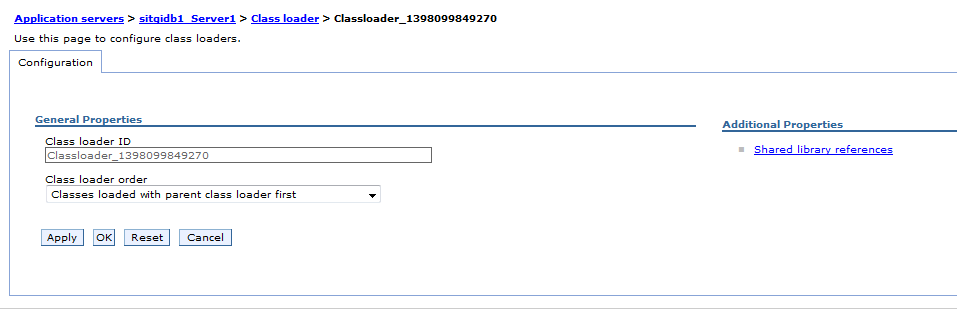


1. Select “Classes loaded with parent class loader first” and then click on Apply and save to the Master Configuration

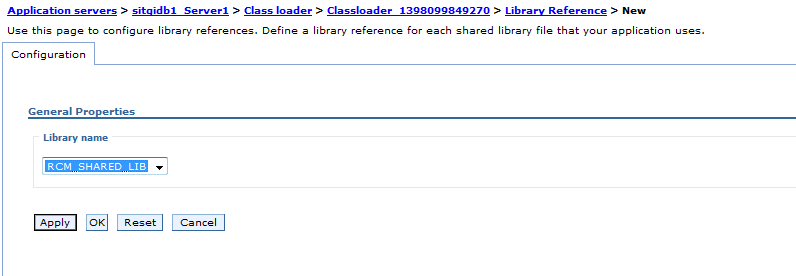


1. Select the class loader and select Shared library references





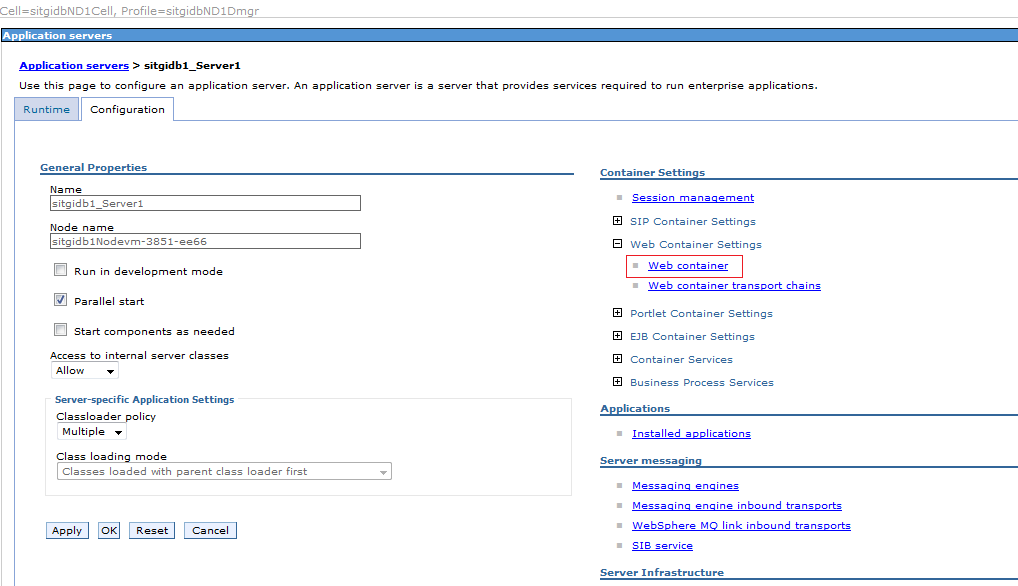
1. Add the new library reference and select RCM\_SHARED\_LIB



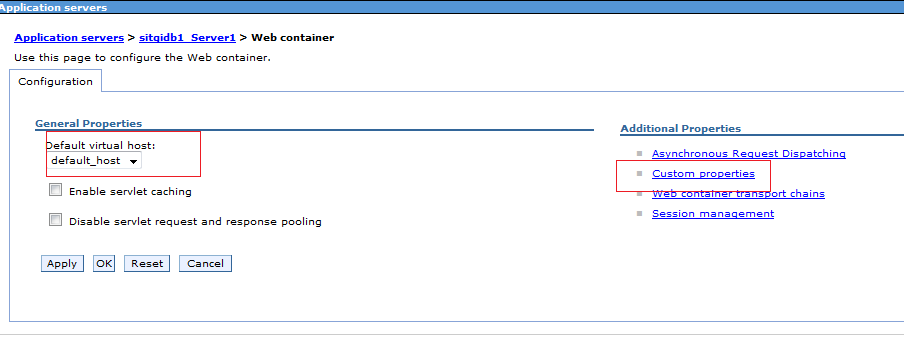
Note: Repeat above steps for all servers and restart application servers

# CloneSeparatorChange

1. Select Web container for server



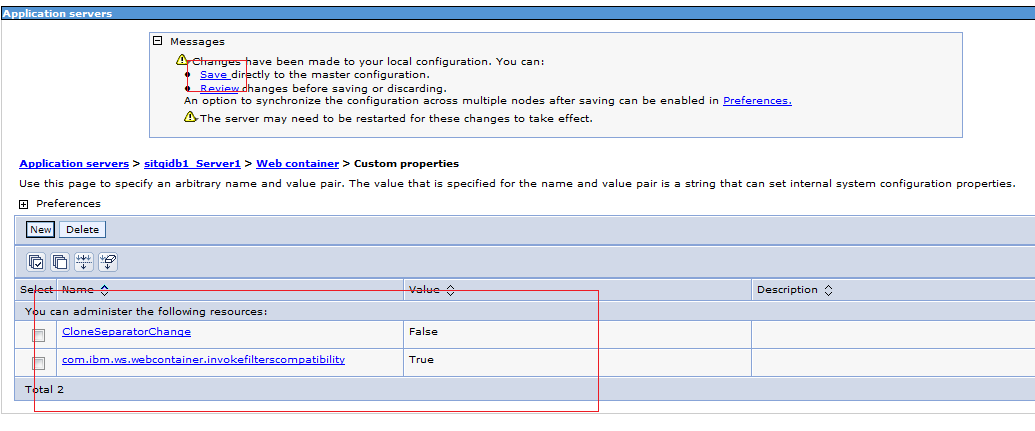
1. Select default virtual host dropdown to “dfault\_host” and click Apply



1. Select Custom Properties link and create

[CloneSeparatorChange](https://amlmme2d.nam.nsroot.net:50001/ibm/console/propertyCollection.do?EditAction=true&refId=Property_1325887450361&contextId=cells%3AdevcbnaqsNDCell%3Anodes%3Adevcbnaqsnd1Nodeamlmme2d%3Aservers%3Adevcbnaqsnd1_Server1&resourceUri=server.xml&perspective=tab.configuration)  False

[com.ibm.ws.webcontainer.invokefilterscompatibility](https://amlmme2d.nam.nsroot.net:50001/ibm/console/propertyCollection.do?EditAction=true&refId=Property_1325887491796&contextId=cells%3AdevcbnaqsNDCell%3Anodes%3Adevcbnaqsnd1Nodeamlmme2d%3Aservers%3Adevcbnaqsnd1_Server1&resourceUri=server.xml&perspective=tab.configuration)  true

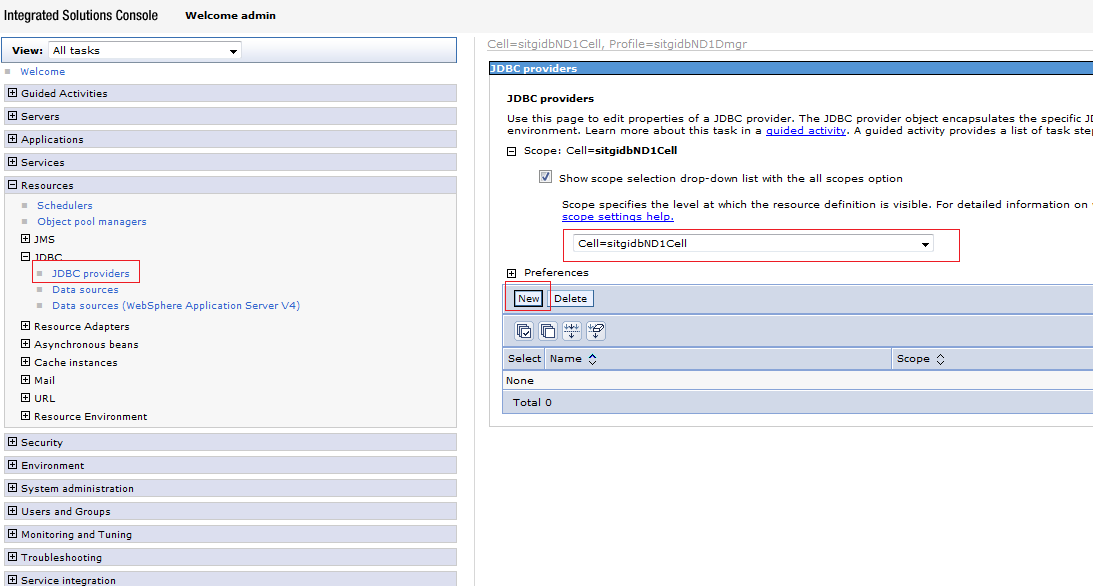


1. Save the configuration to master configuration

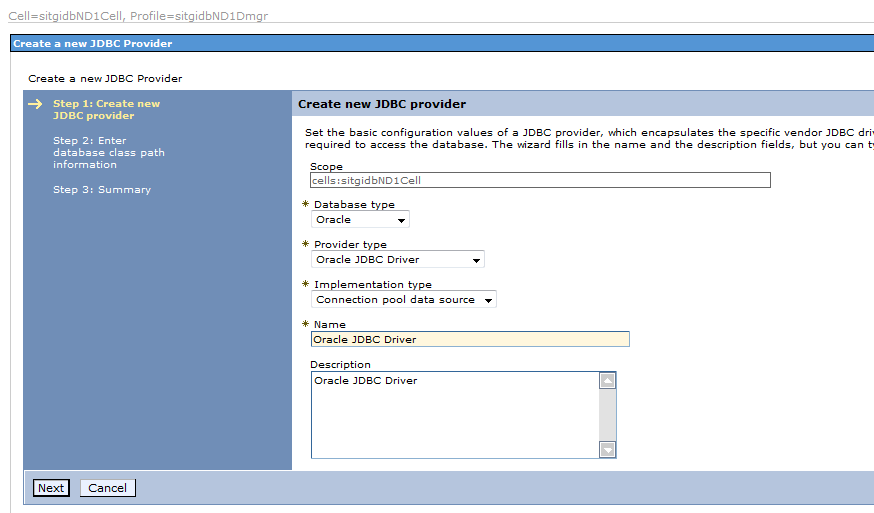
Note: Repeat steps 1 to 4 for all servers

# Configuring JNDI

1. Open the JDBC provides and add Oracle JDBC provider

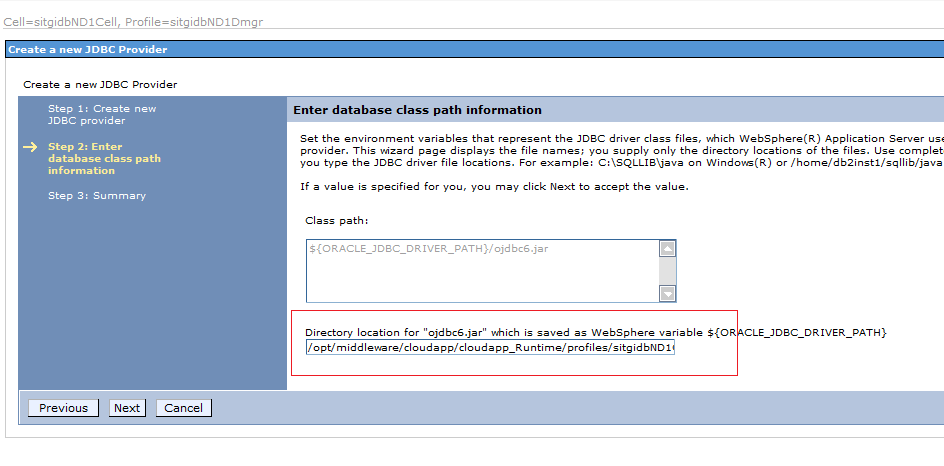


1. Select Oracle provider and implementation type as “Connection pool data source”

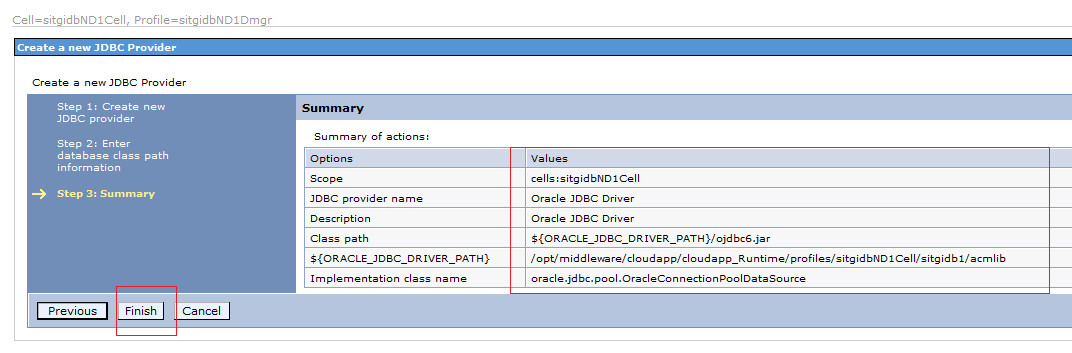


1. Enter the ojdbc6.jar file location

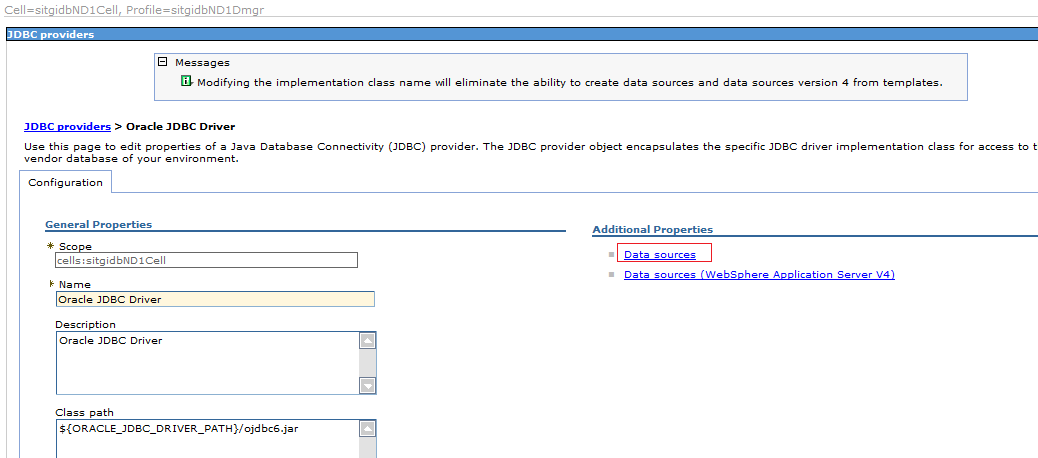
For example : /opt/middleware/cloudapp/cloudapp\_Runtime/profiles/sitgidbND1Cell/sitgidb1/acmlib



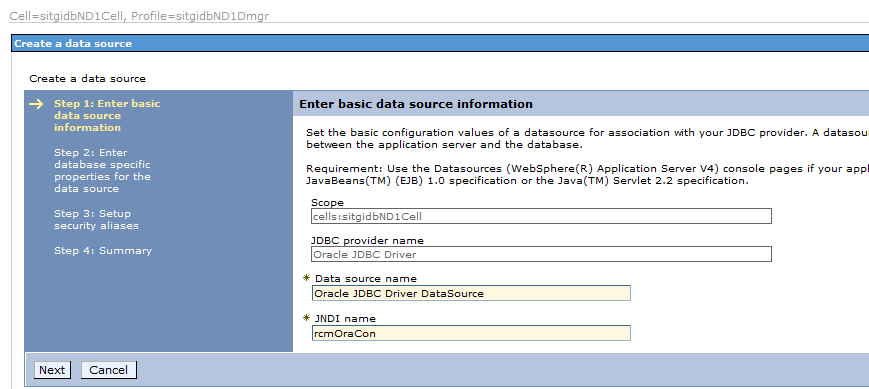
1. Verify the settings and click Finish

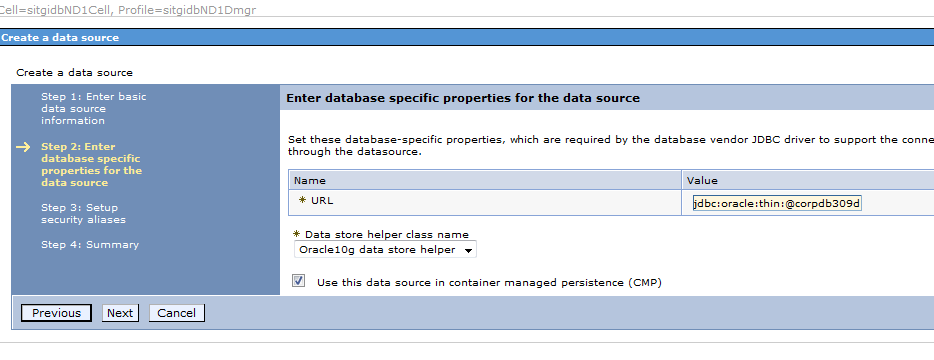


1. Click the JDBC provider and click data source to add database connections

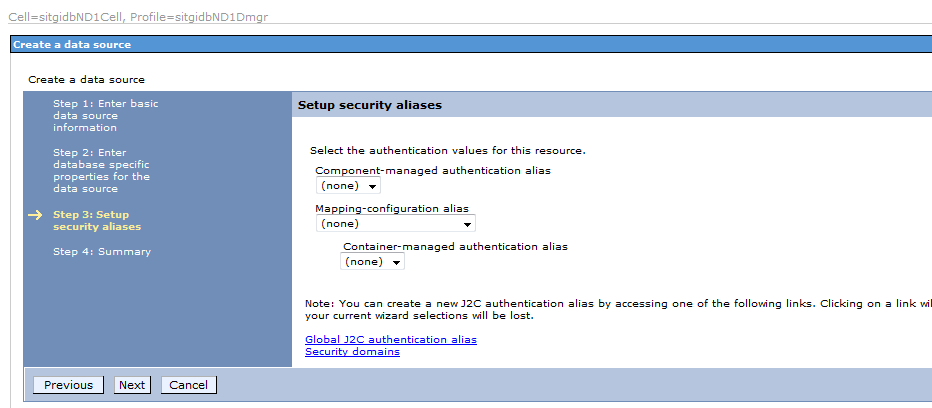


1. Enter JNDI name as “rcmOraCon” (make sure this name matches in acm.ini)

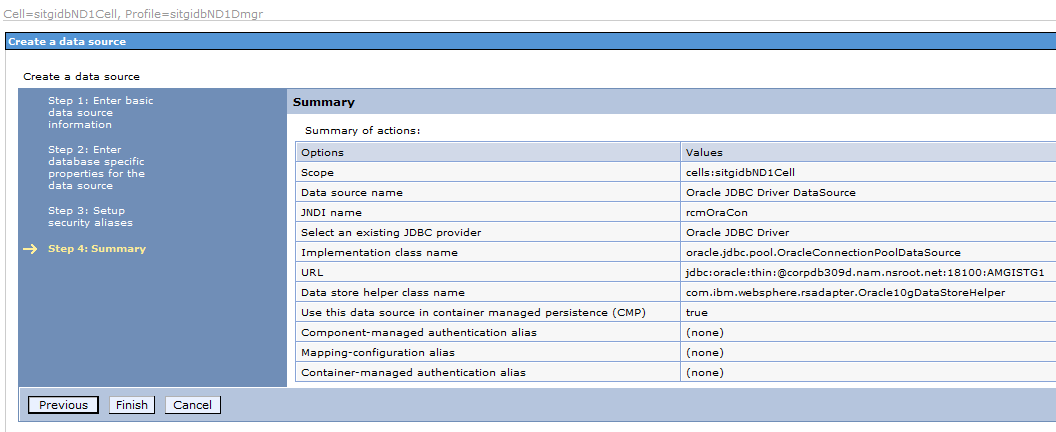




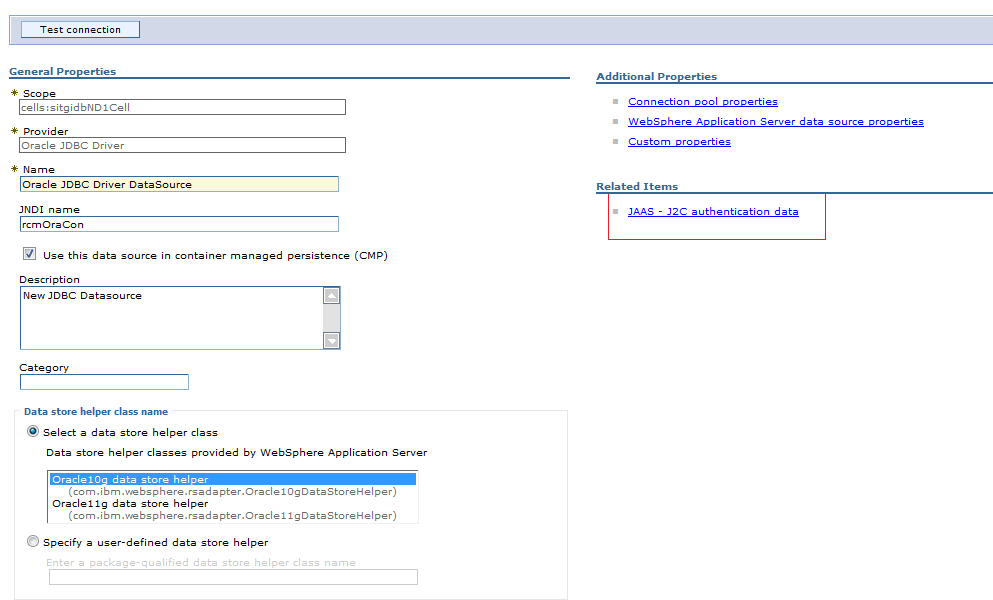
Skip below step



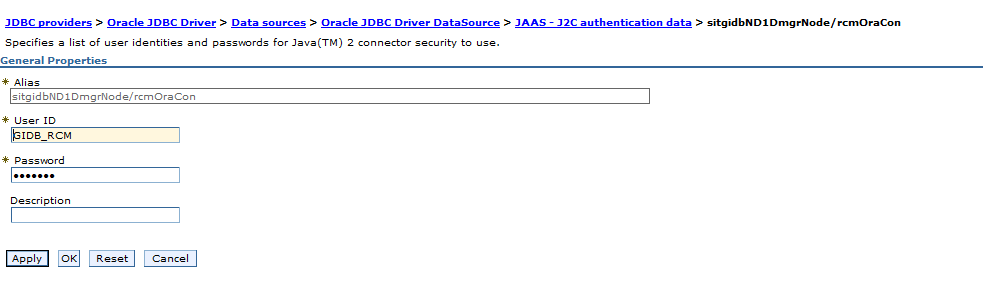
Verify and click finish



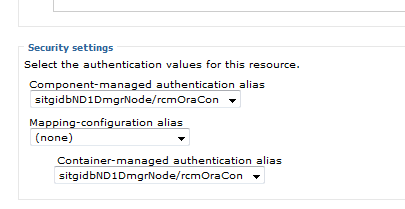
1. Open the JDNI connection “rcmOraCon” and select “JAAS-J2c authentication data”



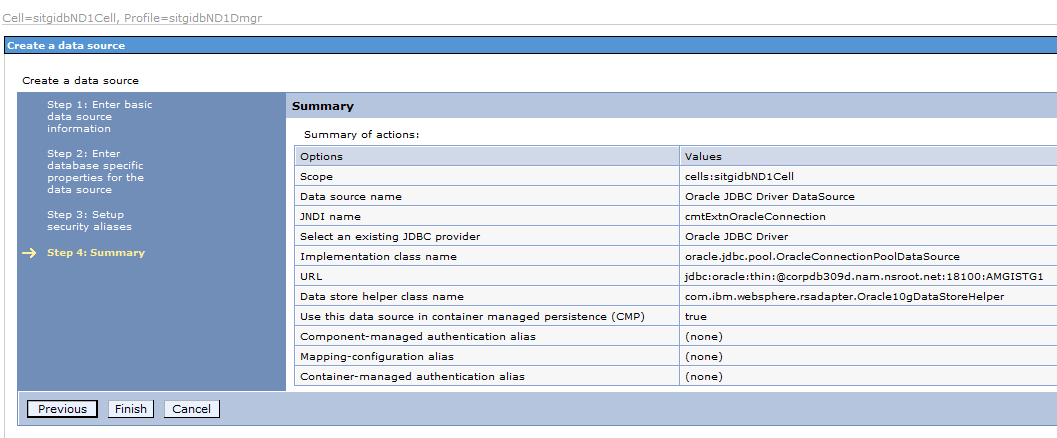
Add the database connection as below



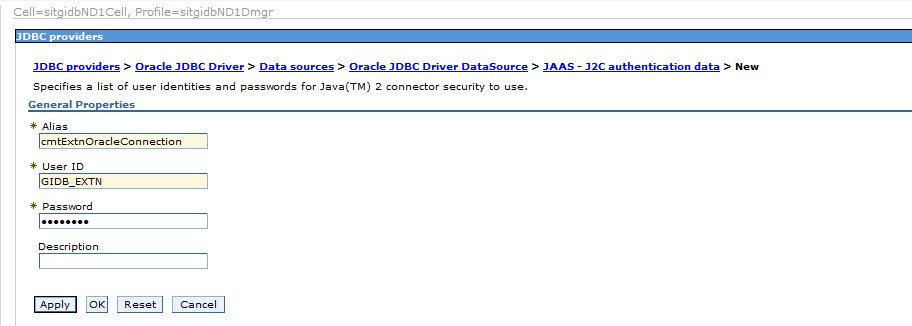
1. Update the security settings for “rcmOracCon” and test the connection



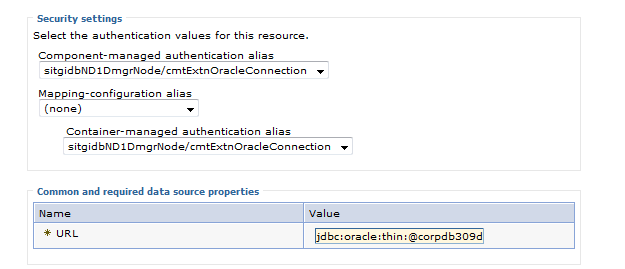
1. Create new JNDI connection for “cmtExtnOracleConnection” (follow same steps as step 6)



1. Create authentication data for “cmtExtnOracleConnection”



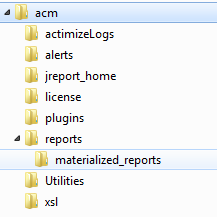
1. Update the security settings for “cmtExtnOracleConnection” and test the connection



# Setup RCM folders

1. Create empty folders as below under profiles (copy below empty folders in all profiles)





1. Configure acm.ini files



Update the attached file here to

1. Uncomment the lines for

actimize.repository.url = jndi:acm\_repository

1. Uncomment the line for RCM repository url and edit the url for the specific details for connection

actimize.repository.url = jdbc:oracle:thin:@<DB-SERVER>:1521:<DB-NAME>

1. Uncomment the line for repository type as oracle

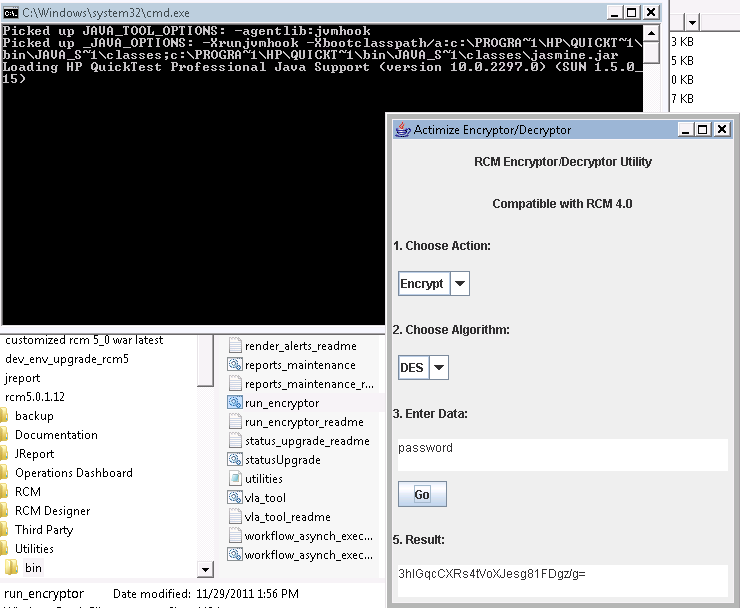
actimize.repository.type = oracle

1. Uncomment the line for user name and password for the RCM repository

actimize.repository.username = <DB-USER>

actimize.repository.password = <ENCRYPTED-DB-PASSWORD>

Enter the encrypted password for RCM db. Encrypt the password using the run\_encryptor.bat file in the /Utilities/bin in the RCM bundle.



1. Uncomment the line for RCM’s license and copy the license file from the RCM bundle to the ${Actimize\_Working\_Dir }/license and enter this path in the acm.ini file

actimize.license=/optware/WebSphere/70/profiles/rcmgidb\_sit/acm/license/license.lic

1. Uncomment actimize.mode=development and comment actimize.mode=production
2. Uncomment the below lines for enabling distributed cache

actimize.cache = distributed

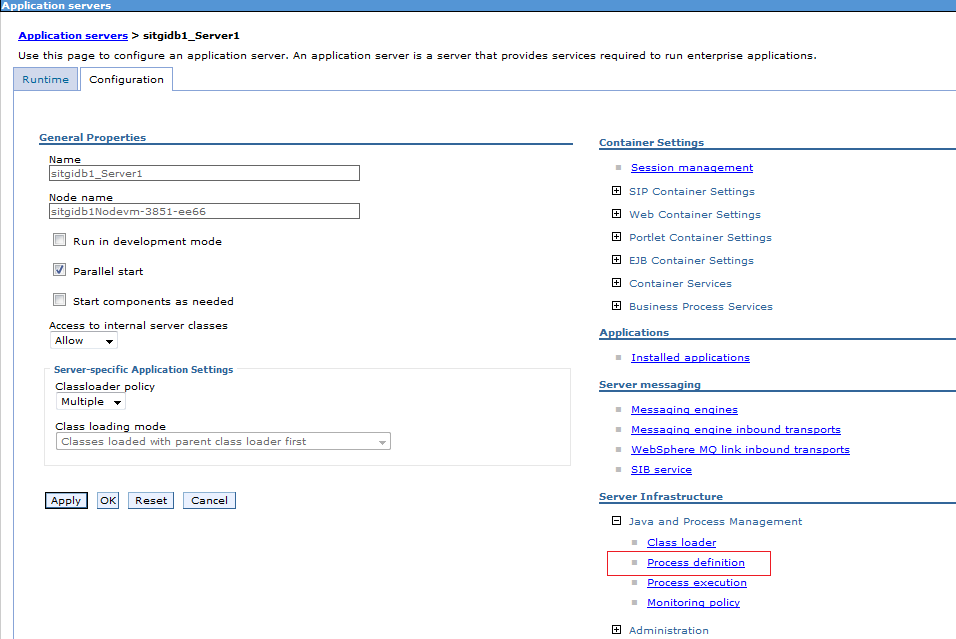
actimize.cache.distribution.host=239.0.0.0

actimize.hibernate.cache.distribution.port=45566

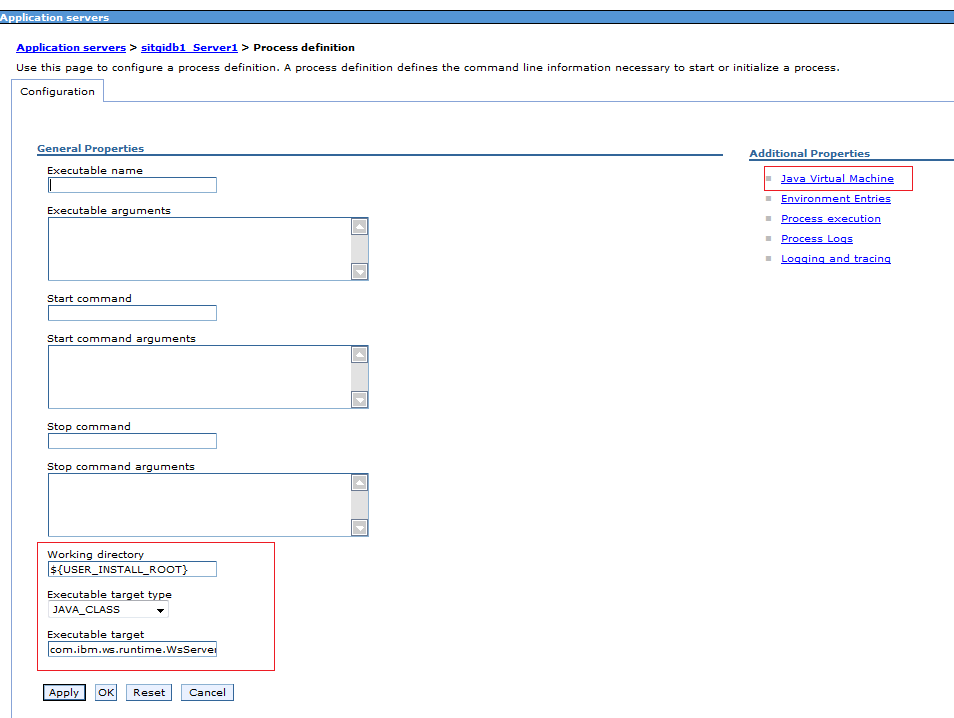
actimize.navigation.cache.distribution.port=48866

# Configure JVM

1. Select the server and open the “Process definition” under “Java and Process Management”



1. Select Java Virtual Machine



1. Update Heap size and JVM aruguments

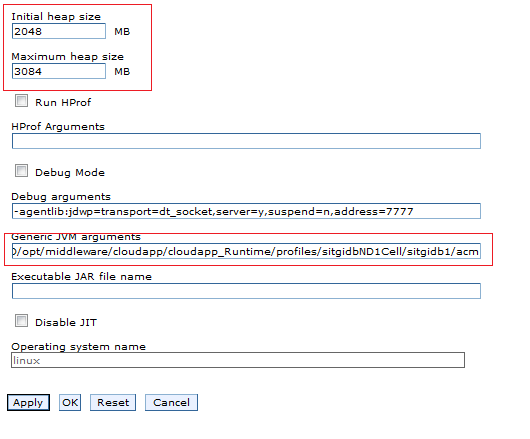
Initial heap : 2048

Maximum heap : 3084

In “Generic JVM arguments”, append acm.ini file location for this server

Example :

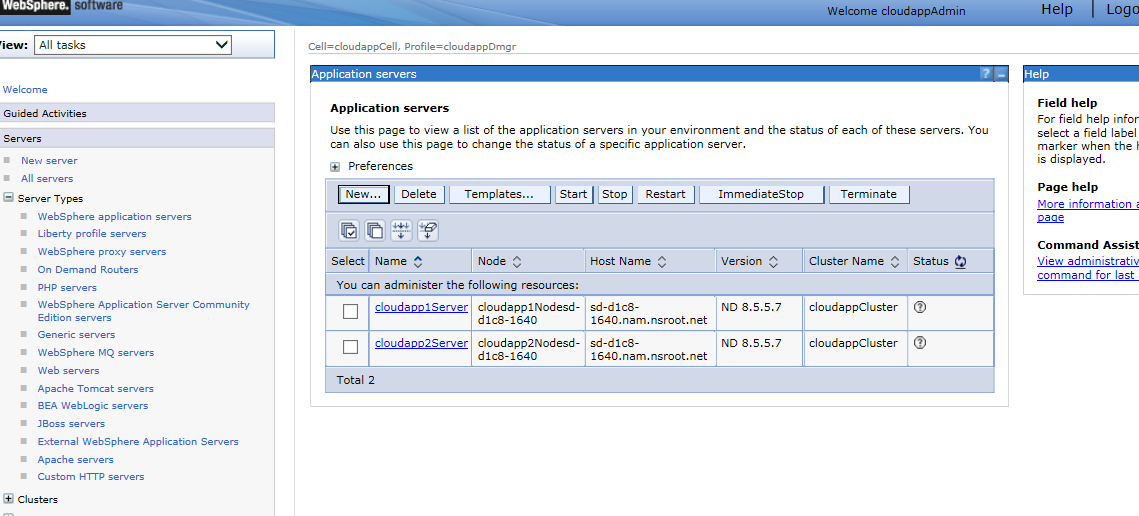
**-Dactimize.ini.location=/opt/middleware/cloudapp/cloudapp\_Runtime/profiles/sitgidbND1Cell/sitgidb1/acm/acm.ini**



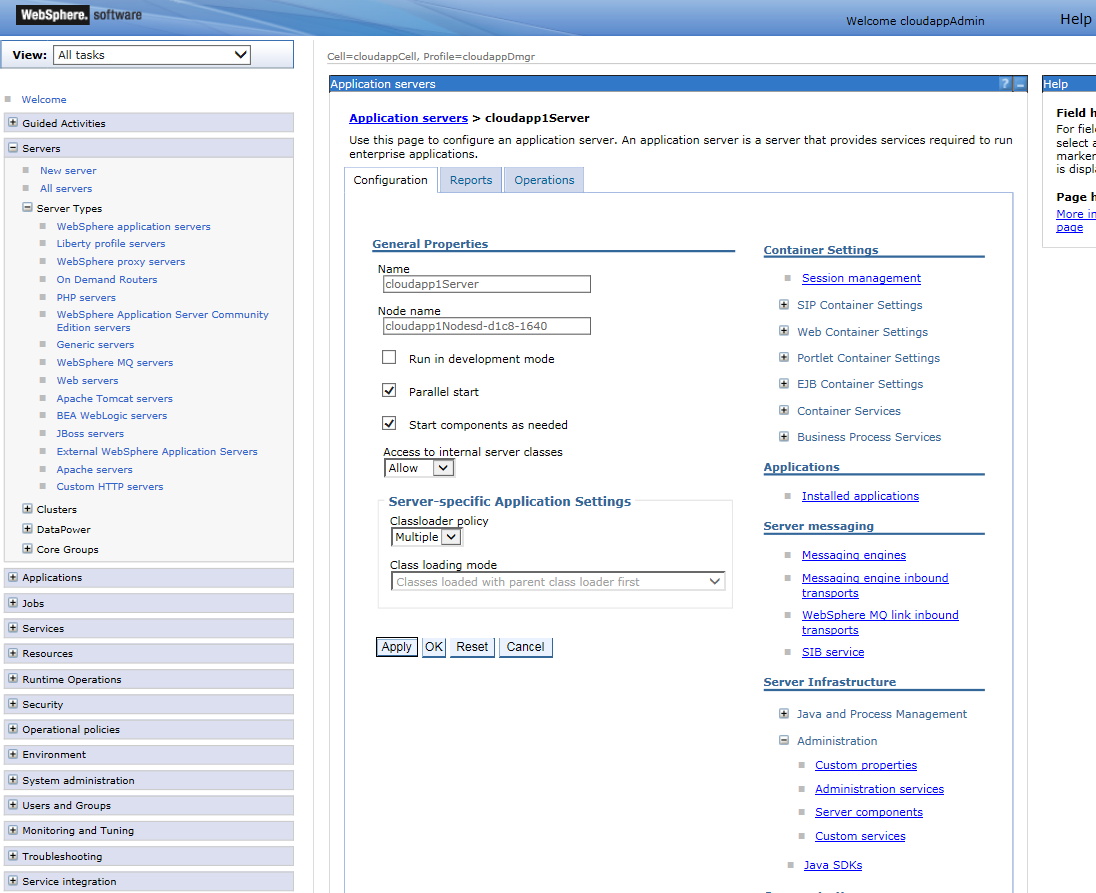
Note: Repeat steps 1 to 3 for all servers

**Configure ports**

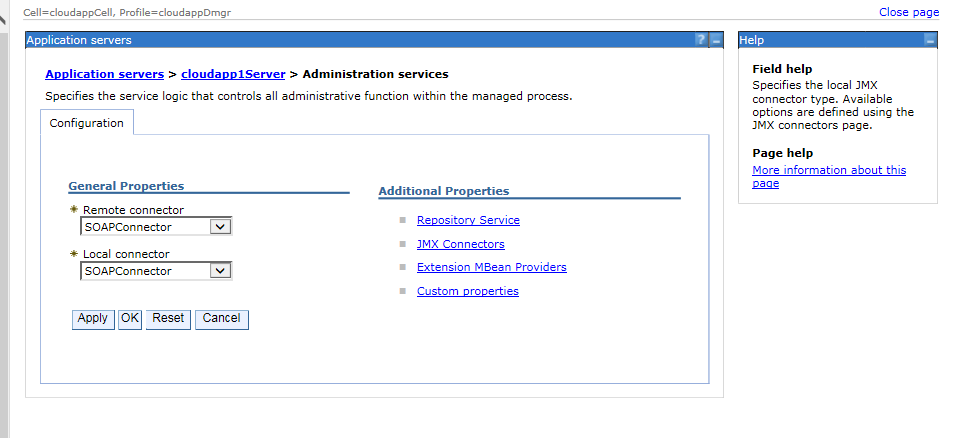
1. Select the server you want to apply on



1. Expand Administration and click on Administrative services

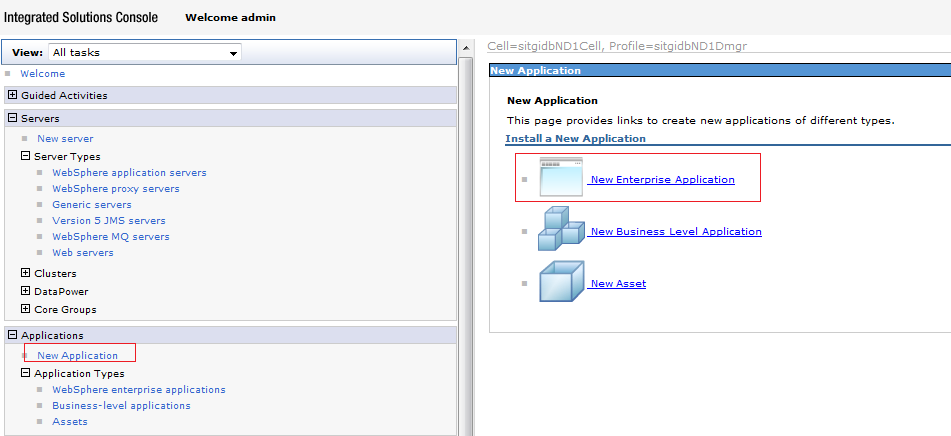


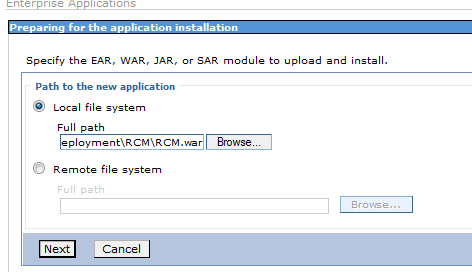
1. Select “SoapConnector” for both Remote Connector and local Connector and save to master configurations.



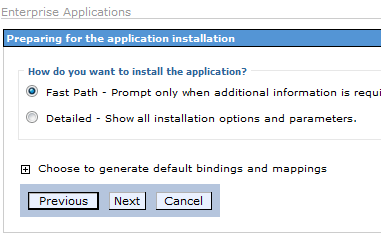
# War file deployment

1. Deploying RCM.war file

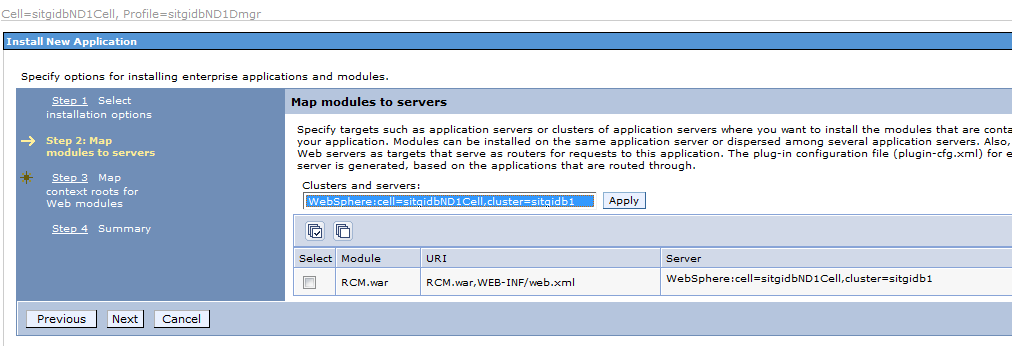




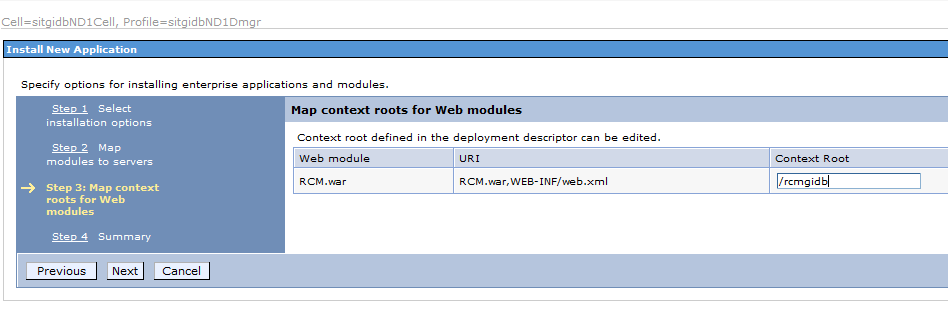
Select Fast path and continue



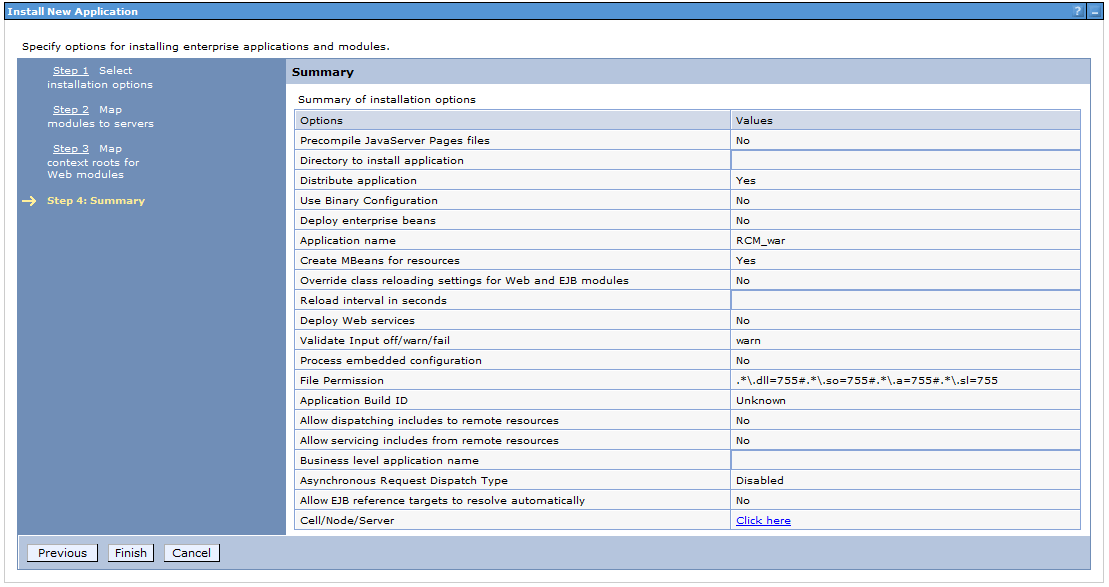
Select servers and continue



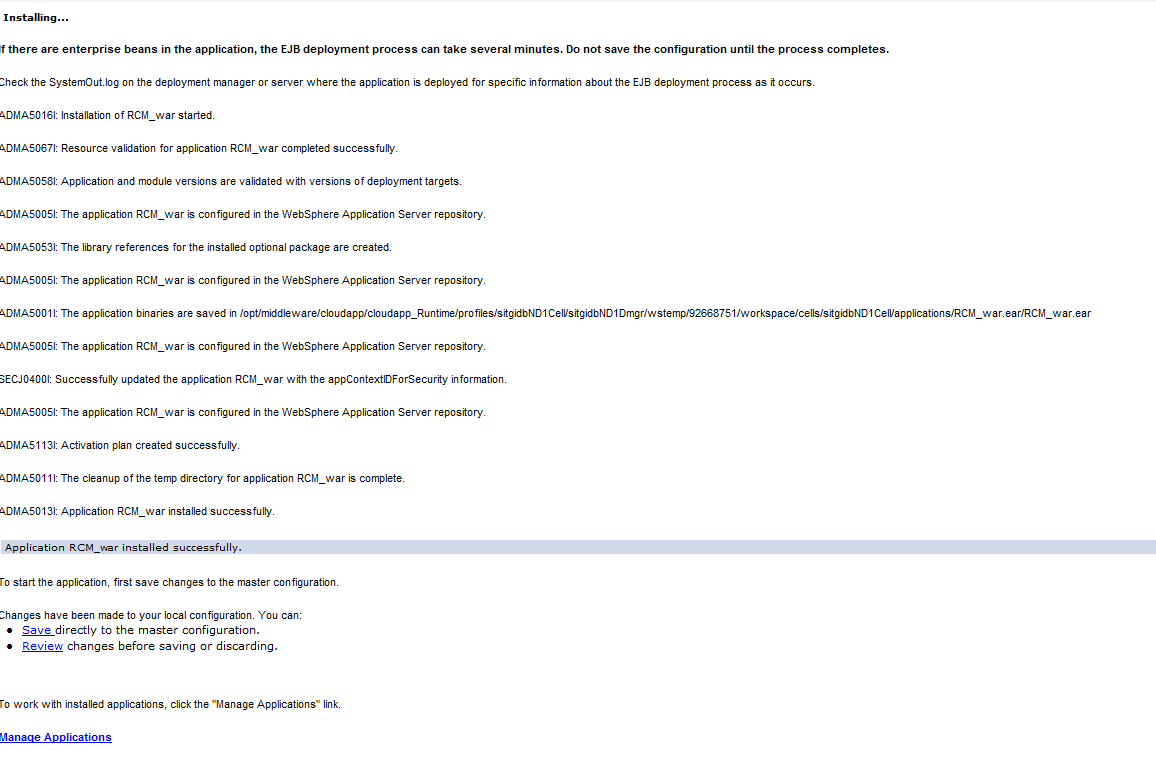
Enter Context root and continue



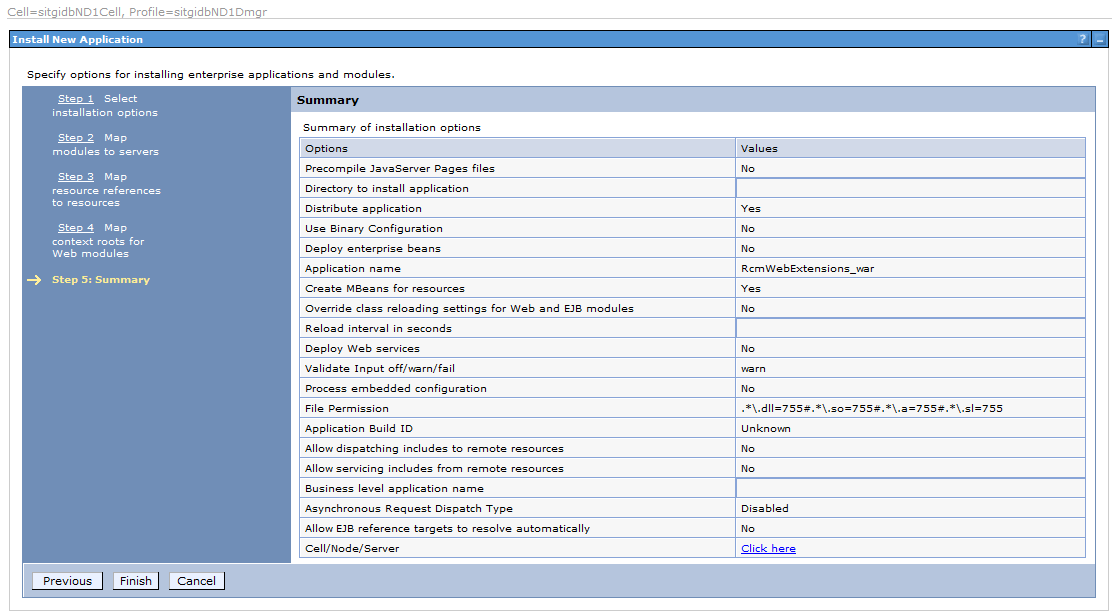
Click finish to install the war file



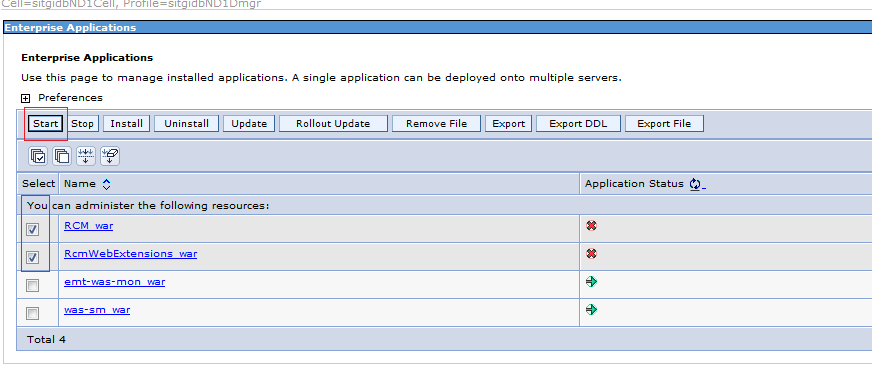
Click Save to proceed



1. Follow above steps for RCMWebExtensions.war



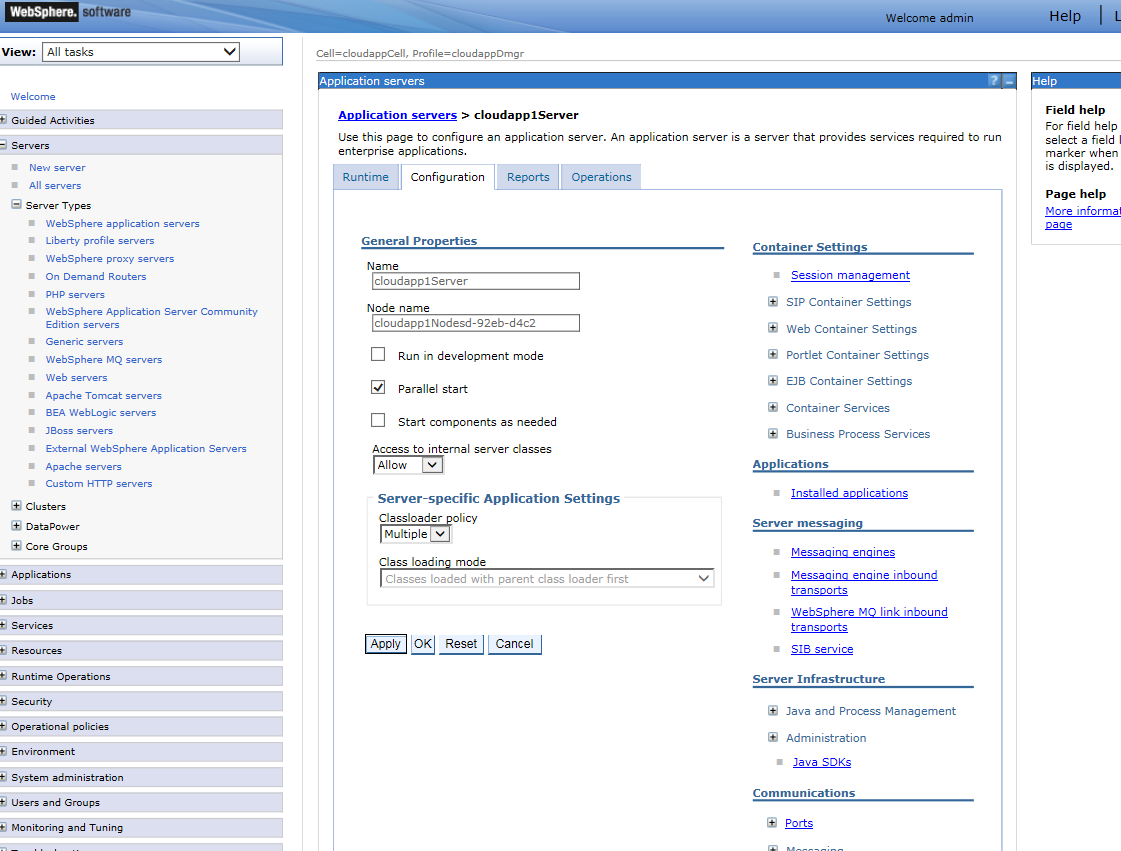
1. Start the RCM and RcmWebExtensions



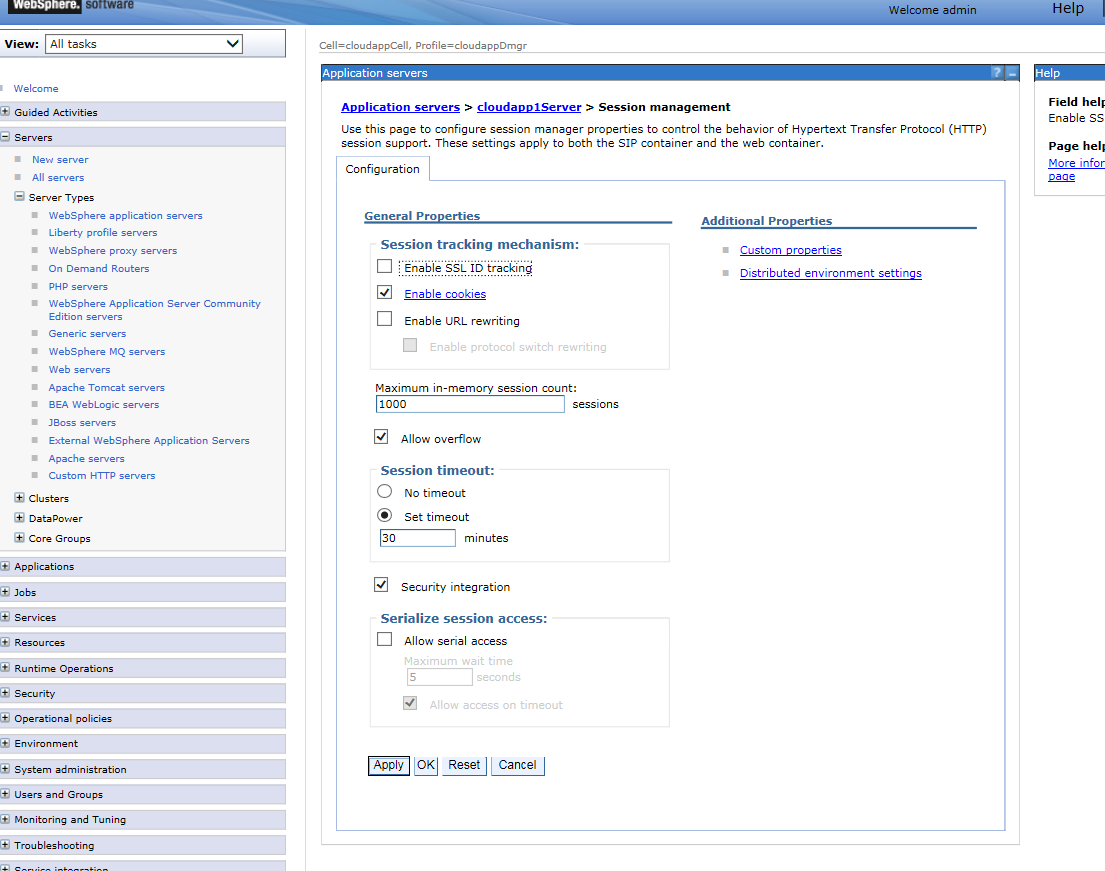
1. Check the status of all applications and restart the application servers

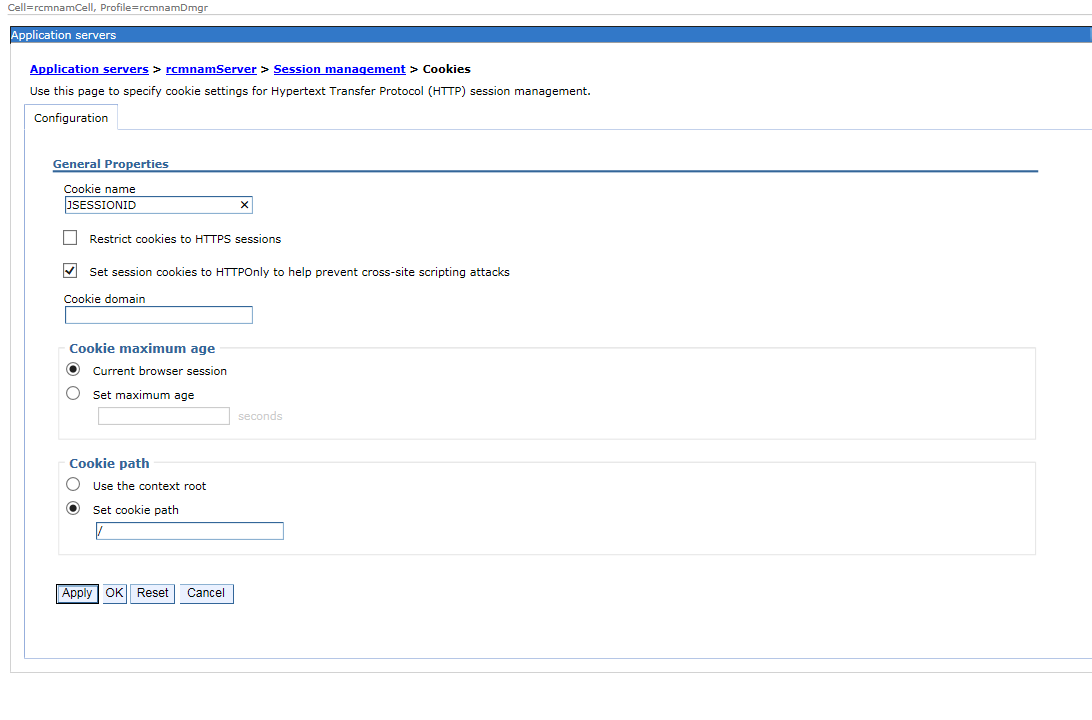
**Configuring Cookies**

1. select the server and click on “Session Management”.



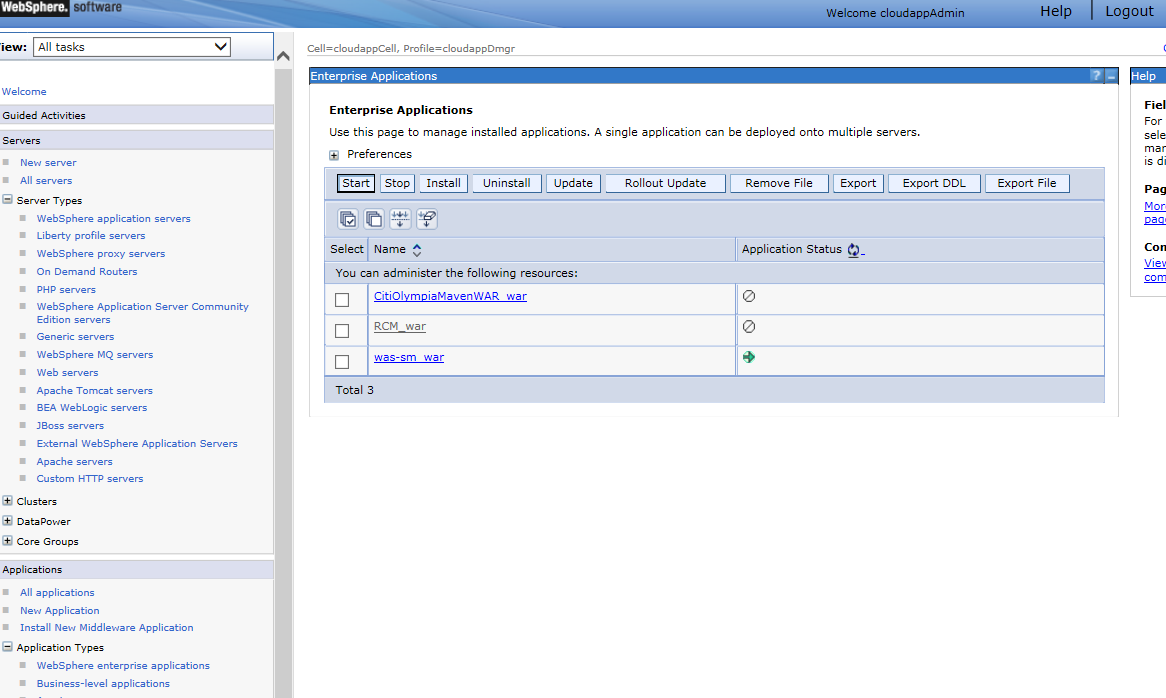
1. click on Enable cookies link



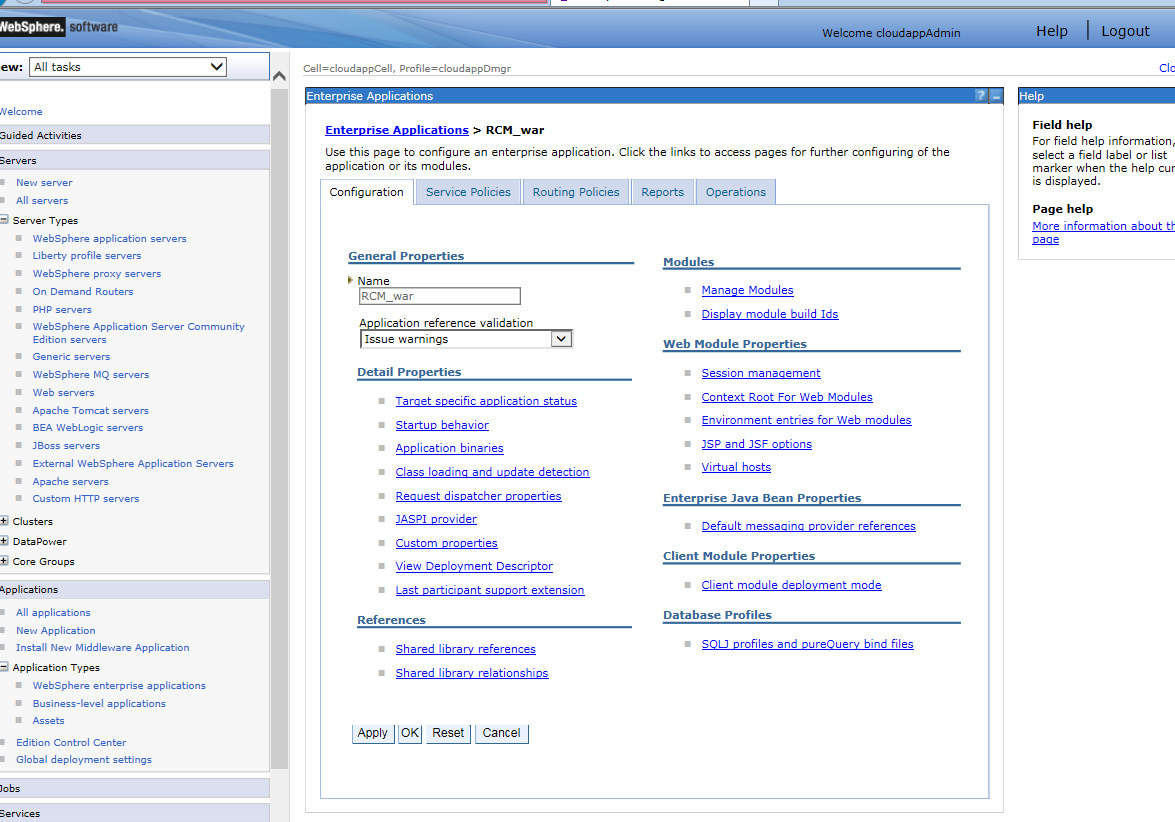
1. use the configuration as shown in below screenshot. Click on apply and save to master configuration and restart the servers and repeat for all the servers. 

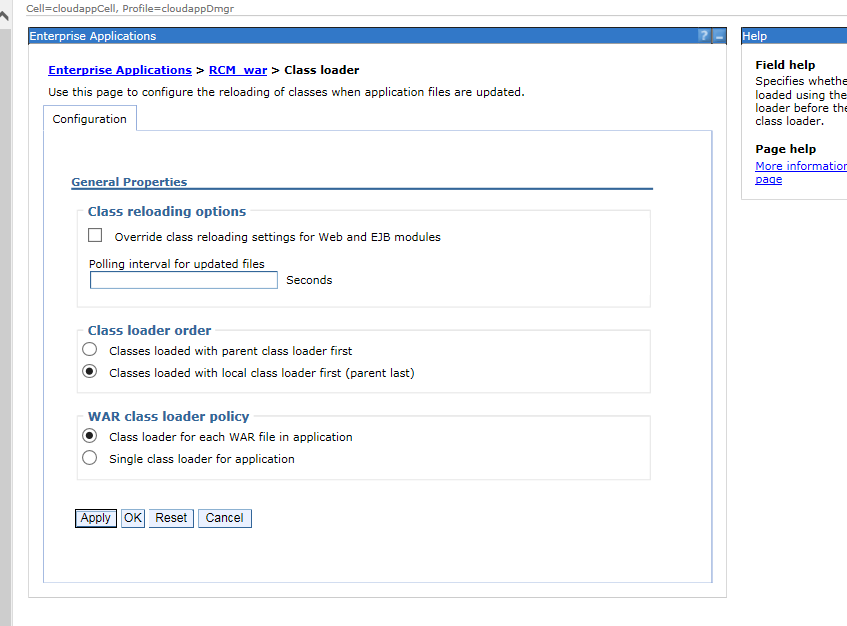
**Optional Configuration**

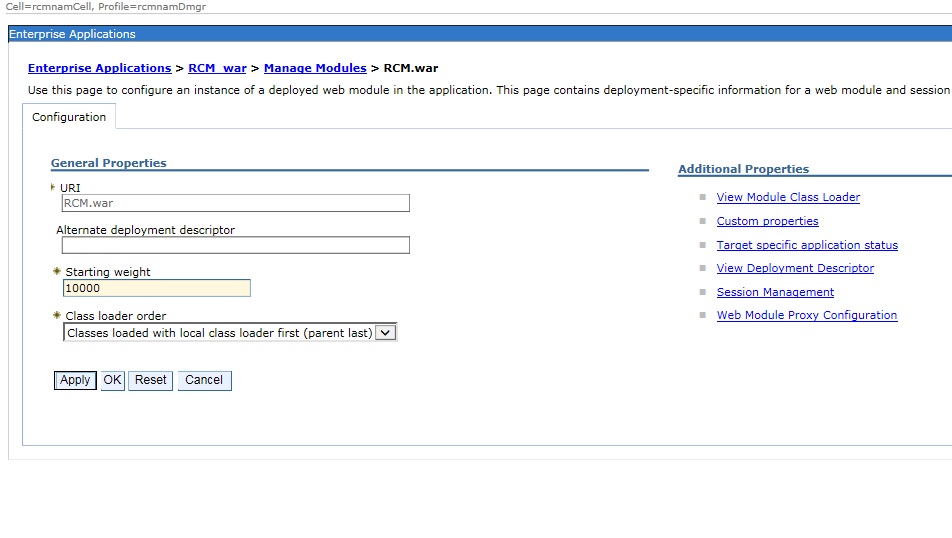
1. Expand Applications and Click Websphere Enterprise Applications and click on RCM related war file.



1. Click on link class loading and update detection



1. Use the settings for the RCM war file as shown in below screenshot.
2. Change the below setting also at RCM.war level



1. Restart the servers.

# Jreport Installation

To install the reports, (repeat steps for all the nodes)

1. Copy Utilities folder to acm folder
2. Create appropriate folders for JReport
3. Update acm.ini file with below param

actimize.jreport.home=/opt/middleware/cloudapp/cloudapp\_Runtime/profiles/DvgidbND1Cell/dvgidb2/jreport\_home

actimize.reports.ReportArchivePath=/opt/middleware/cloudapp/cloudapp\_Runtime/profiles/DvgidbND1Cell/dvgidb2/reports/archived\_reports

actimize.reports.ReportMaterializationPath=/opt/middleware/cloudapp/cloudapp\_Runtime/profiles/DvgidbND1Cell/dvgidb2/reports/materialized\_reports

1. Install the reports under Utilities/unix folder. Keep all report files in /Utilities/ManagementReports folder. Also the extension should be oracle.arp

Example : ./install\_mgt\_reports.sh oracle -acm=http://vm-3851-ee66.nam.nsroot.net:38120/rcmgidb -user=admin -password=password

# AIS Installation

cd /opt/AIS/ais\_server/instances\_manager

**DEV**

./instances\_manager /opt/AIS/ais\_server add --name=AIS\_GIDB\_DEV\_1 --port=9345 --wsport=9346 --license=/opt/AIS/ais\_server/license.lic

**SIT**

./instances\_manager /opt/AIS/ais\_server add --name=AIS\_GIDB\_SIT\_1 --port=9345 --wsport=9346 --license=/opt/AIS/ais\_server/license.lic

Copy or generate ExtenalConfiguration.ini file to Instance folder

Update ExternalConfiguration path in ais\_config.xml file

# Appendix

## Linux Commands

unzip \\*.zip *- Unzip all files in the directory*

Ps –ef | grep sitgidbND1Cell *- get the list of process for server*

Kill -9 process-id *- Kill the process*

*To stop server (****Dev****)*

cd /opt/middleware/cloudapp/emt-was/70/bin

./emt -Action Stop -xml /opt/middleware/xml/devgidb.xml

*To start server (Dev)*

cd /opt/middleware/cloudapp/emt-was/70/bin

./emt -Action Start -xml /opt/middleware/bounce/devgidb.xml

*To stop server (****SIT****)*

cd /opt/middleware/cloudapp/emt-was/70/bin

./emt -Action Stop -xml /opt/middleware/bounce/sitgidb1.xml

*To start server (SIT)*

cd /opt/middleware/cloudapp/emt-was/70/bin

./emt -Action Start -xml /opt/middleware/bounce/sitgidb1.xml

## Source code

SVN : https://svn.nam.nsroot.net:9050/svn/165022/GIDB/Projects/Deployment

## IBM Console URL

<https://vm-3851-ee66.nam.nsroot.net:38001/ibm/console/logon.jsp> (SIT)

<https://vm-4138-b72d.nam.nsroot.net:38001/ibm/console/logon.jsp> (Dev)

User : admin

Password : gidbdev123

To login into server : amldevg/amldevg

## Sample Files

1. XML file used to create profile



1. Sample execution log



## Common Issues

1. Issue in web server profile

* Locate server.xml file for profile.

Example : /opt/middleware/cloudapp/cloudapp\_Runtime/profiles/sitgidbND1Cell/sitgidbND1Dmgr/config/cells/sitgidbND1Cell/nodes/sitgidbND1DmgrNode/servers/dmgr/

* Check “addressIncludeList” property. The values should be “\*.\*.\*.\*”
* If not modify for all properties (totally 4 location in xml file)
* Restart the server

1. Issue in AIS server

* Check ExternalConfiguration.ini file available. If not copy under AIS instance folder
* Check ais\_config.xml file and update correct path for ExternalConfiguration.ini
* Connect the database manually once using sqlplus
* If database connection failed, check database name updated in tnsnames.ora
* Check odbc.ini file for profile details. If details not exist enter the details for the database

Example : /opt/AIS/unixODBC/etc/odbc.ini

* Check odbcinst.ini, and verify valid path given for libraries
* Stop and start the server