

Cluster Creation on Websphere Application Server
Oracle Banking Enterprise Limits and Collateral
Management

Release 14.7.4.0.0

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1. Purpose

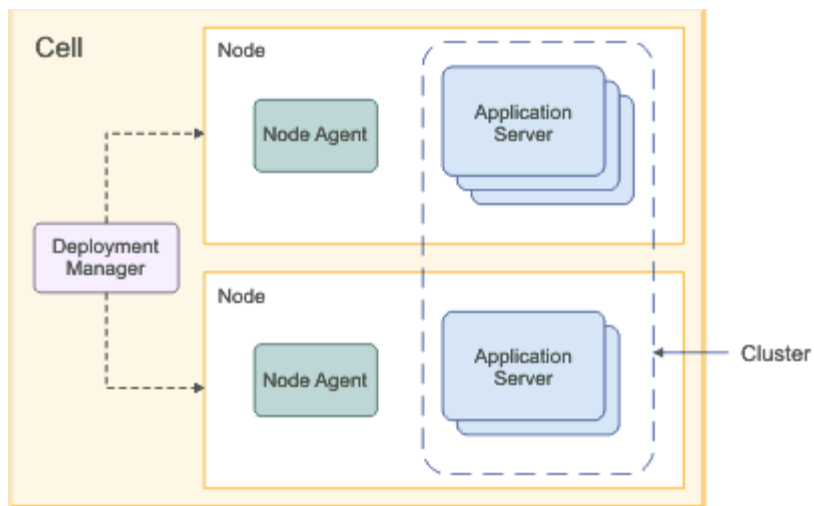
This document explains steps to create Cluster on Websphere Application Server 8.5 and also setup the proxy.

2. Introduction to Websphere

IBM websphere application server cluster deployment contains the below key elements

- Cell
- Nodes
 - Deployment Manager Node- “DMGR”
 - Node- “NodeXX”
 - Node Agent- “NAXX”
- Profiles
- Cluster
- Cluster Members
- Data Sources

Profile



- **Cell:** A cell is a grouping of nodes into a single administrative domain. In a Network Deployment environment, a cell can consist of multiple nodes (and node groups), which are all administered from a single point, the deployment manager.
- **Node:** A node is an administrative grouping of application servers for configuration and operational management within one operating system instance
- **Node Agent:** In distributed server configurations, each node has a node agent that works with the deployment manager to manage administration processes. A node agent is created automatically when you add (federate) a stand-alone node to a cell.
- **Cluster:** A cluster is a logical collection of application server processes that provides workload balancing and high availability. Application servers that belong to a cluster are members of that cluster and must all have identical application components deployed on them.
- **A profile** is a Websphere runtime environment formed by collection of User data and Product files. Product Files are shared application binaries for Websphere. User data is set of user customizations for a specific runtime environment.

Prominent profile types are:

- **Stand-alone Application Server:** An application server environment runs Enterprise Application. Application server is managed from its own administrative console and functions independently from other application server.
- **Deployment Manager:** A Deployment Manager manages operations for a logical group or cell of other servers. It is the central administration point of a cell that consists of multiple nodes and node groups in a distributed server configuration. The deployment manager uses the node agent to manage the application servers within one node. A deployment manager provides management capability for multiple federated nodes and can manage nodes that span multiple systems and platforms. A node can only be managed by a single deployment manager and must be federated to the cell of that deployment manager.

Note ** Deployment Manager is part of Network Deployment Edition of Websphere.

3. Pre-requisites:

Before proceeding with the cluster setup ensure that the below resources are created

- JDBC Provider
- Datasource
- Queue Connection Factory
- JMS Queue

The instructions for resource creation are available in document

<installer>\Docs\WEBSPPHERE\Resource_Creation_WAS.doc

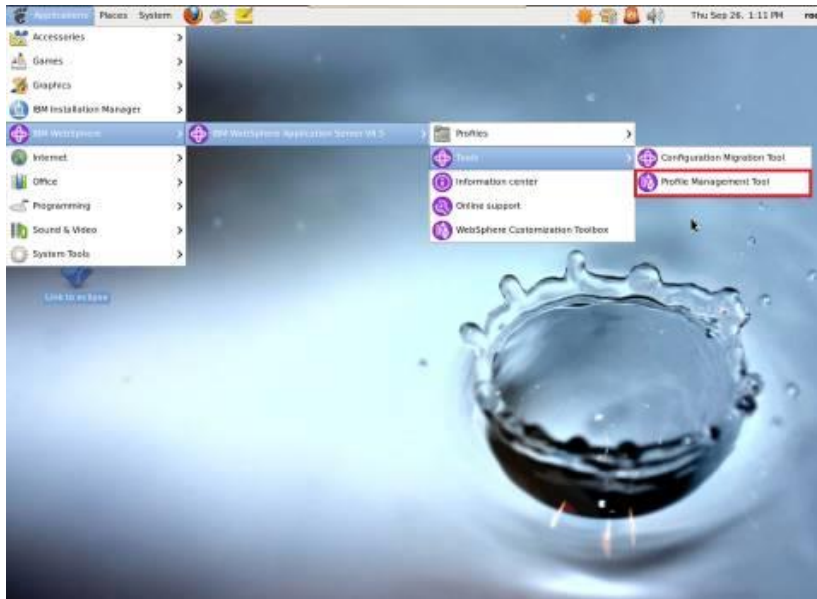
- For SSL configuration in Websphere, refer to the document SSL_Configuration_WAS.doc
- For application deployment, refer to document FCUBS_Application_WAS.doc
- For deployment of Gateway applications, refer to document GATEWAY_Applications_WAS.doc

4. Steps involved for Clustering

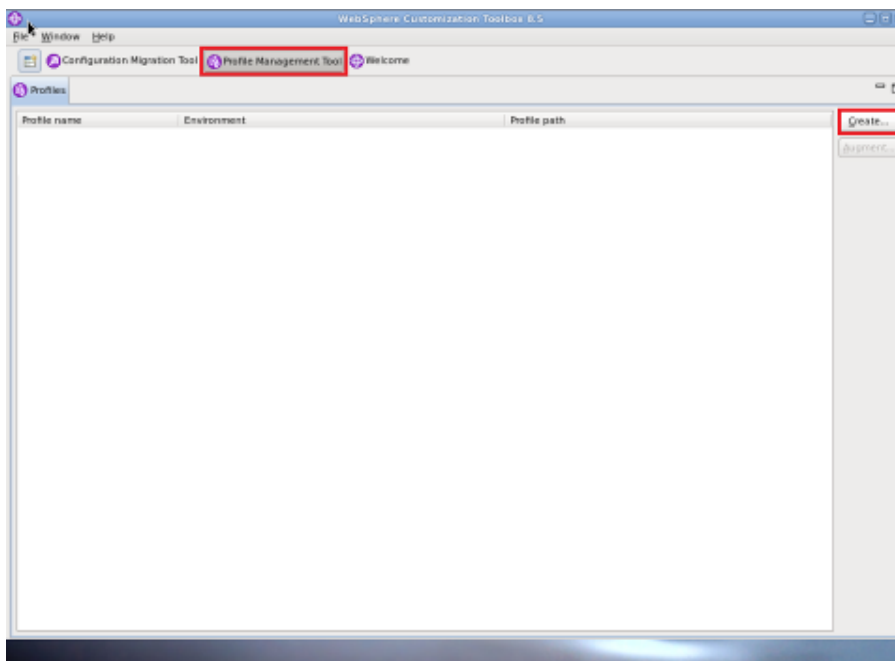
4.1 Create Profile

Go to Profile Management Tool

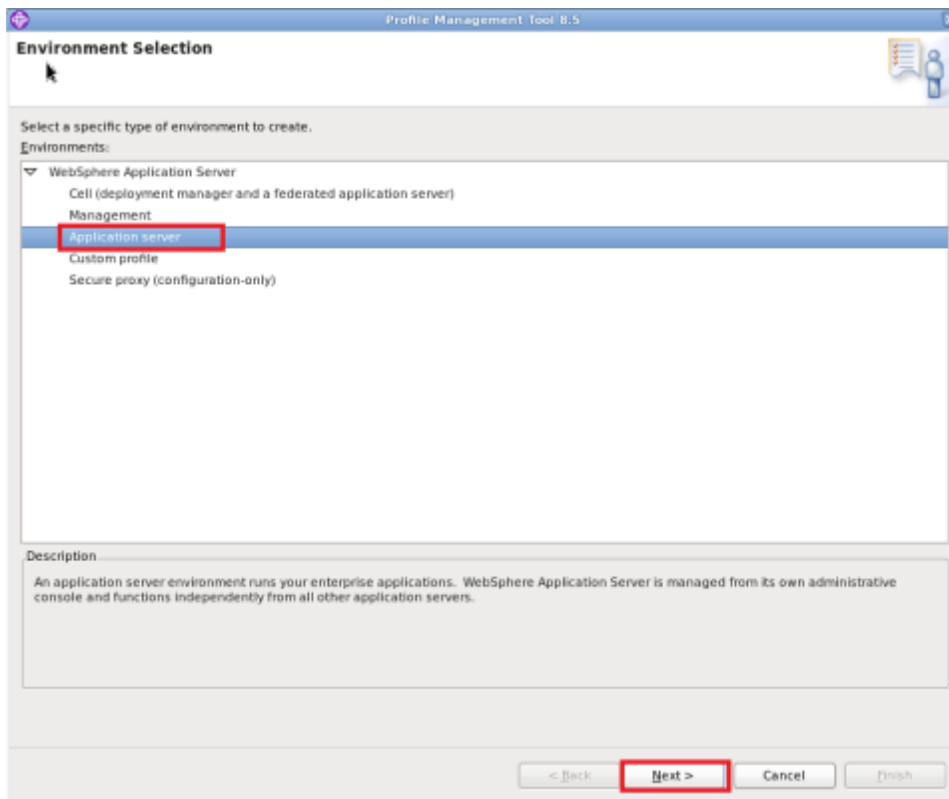
Navigation: IBM WebSphere > *IBM WebSphere Application Server V8.5* > *Tools* > *Profile Management Tool*



Navigation : *Profile Management Tool* > *Create*



Navigation : *Application Server > Next*



Navigation : *Typical profile creation > Next*

Profile Creation Options

Choose the profile creation process that meets your needs. Pick the Typical option to allow the Profile Management Tool to assign a set of default configuration values to the profile. Pick the Advanced option to specify your own configuration values for the profile.

☒ **Typical profile creation**

Create an application server profile that uses default configuration settings. The Profile Management Tool assigns unique names to the profile, node, and host. The tool also assigns unique port values. The administrative console and the default application will be installed. You can optionally select whether to enable administrative security. The tool might create a system service to run the application server depending on the operating system of your machine and the privileges assigned to your user account.

Note: Default personal certificates expire in one year. Select Advanced profile creation to create a personal certificate with a different expiration.

☐ **Advanced profile creation**

Create an application server using default configuration settings or specify your own values for settings such as the location of the profile and names of the profile, node, and host. You can assign your own port values. You can optionally choose whether to deploy the administrative console and Sample applications, and create a Web server definition. You might have the option to run the application server as a system service depending on the operating system of your machine and the privileges assigned to your user account.

< Back **Next >** Cancel Finish

Navigation: *Enable administrative security > Next*

Administrative Security

Choose whether to enable administrative security. To enable security, supply a user name and password for logging into administrative tools. This administrative user is created in a repository within the application server. After profile creation finishes, you can add more users, groups, or external repositories.

☒ **Enable administrative security**

User name:
websphere

Password:

Confirm password:

See the information center for more information about administrative security.
[View the online information center](#)

< Back **Next >** Cancel Finish

Navigation : *Create Summary*

Profile Management Tool 8.5

Profile Creation Summary

Review the information in the summary for correctness. If the information is correct, click **Create** to start creating a new profile. Click **Back** to change values on the previous panels.

Application server environment to create: Application server
 Location: /opt/IBM/WebSphere/AppServer/profiles/AppSrv06
 Disk space required: 200 MB

Profile name: AppSrv06
 Make this profile the default: True
 Performance tuning setting: Standard

Node name: ofss220367Node01
 Server name: server1
 Host name: ofss220367.in.oracle.com

Deploy the administrative console (recommended): True
 Deploy the default application: True

Enable administrative security (recommended): True

Administrative console port: 9060
 Administrative console secure port: 9043
 HTTP transport port: 9080
 HTTPS transport port: 9443
 Bootstrap port: 2809
 SOAP connector port: 8880

Run application server as a service: False

< Back Create Cancel Finish

Navigation : *Finish*

Profile Management Tool 8.5

Profile Creation Complete

The Profile Management Tool created the profile successfully.

The next step is to decide whether to federate the application server into a deployment manager cell.

To federate the application server, use either the **addNode** command or the administrative console of the deployment manager. Using the administrative console requires the application server to be running.

You can start and stop the application server from the command line or the First steps console. The First steps console also has links to an installation verification test and other information and features that relate to the application server.

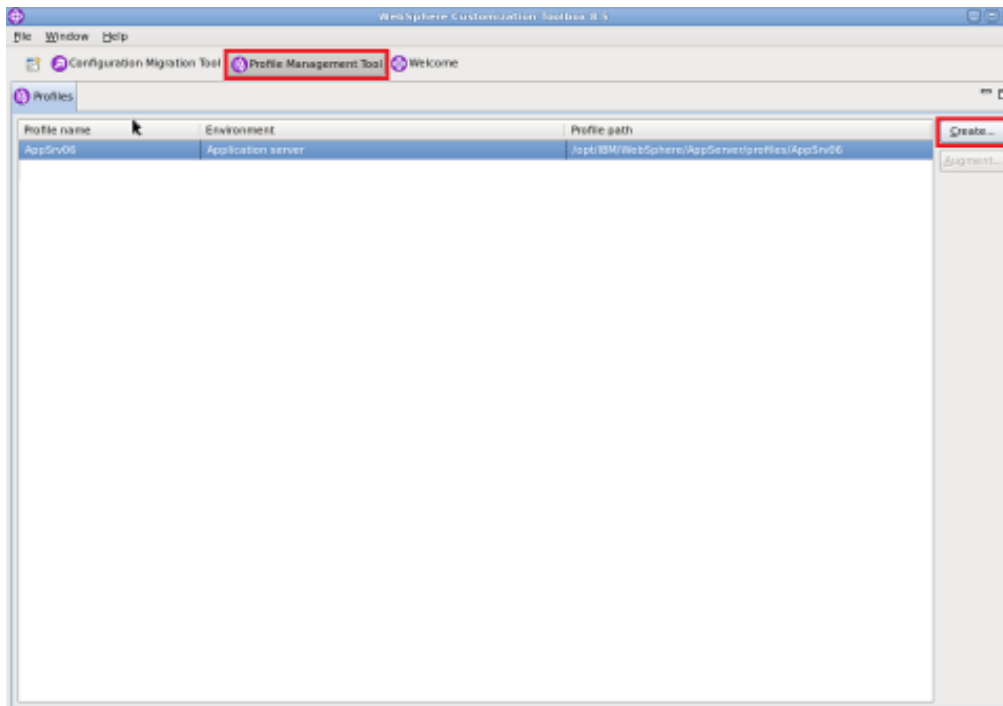
☒ Launch the First steps console.

To start the Profile Management Tool later, use the **PMT** command in the `app_server_root/bin/ProfileManagement` directory or the option in the First steps console.

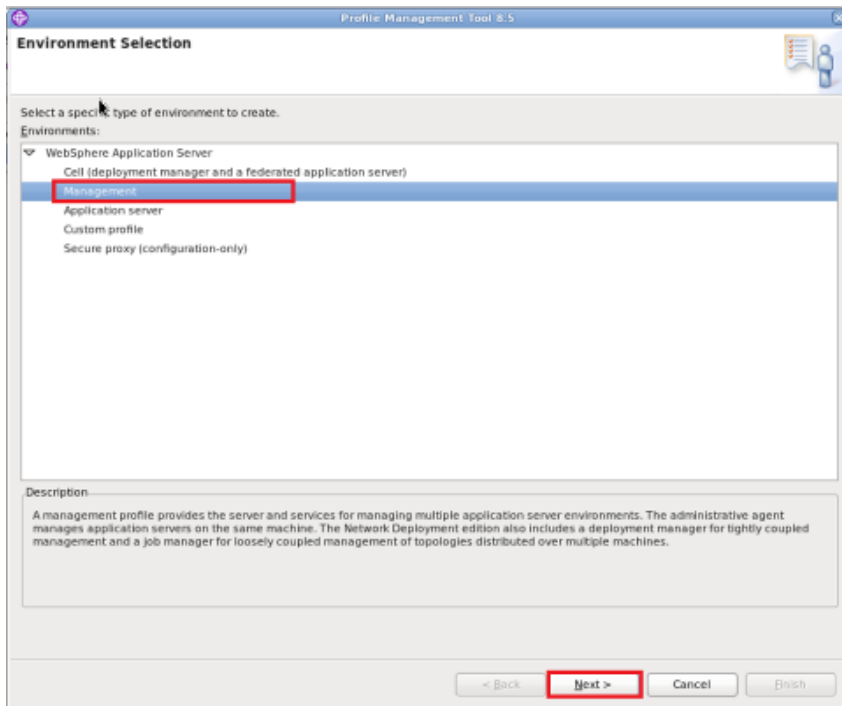
< Back Next > Cancel Finish

4.1.1 Create Deployment Manager Profile

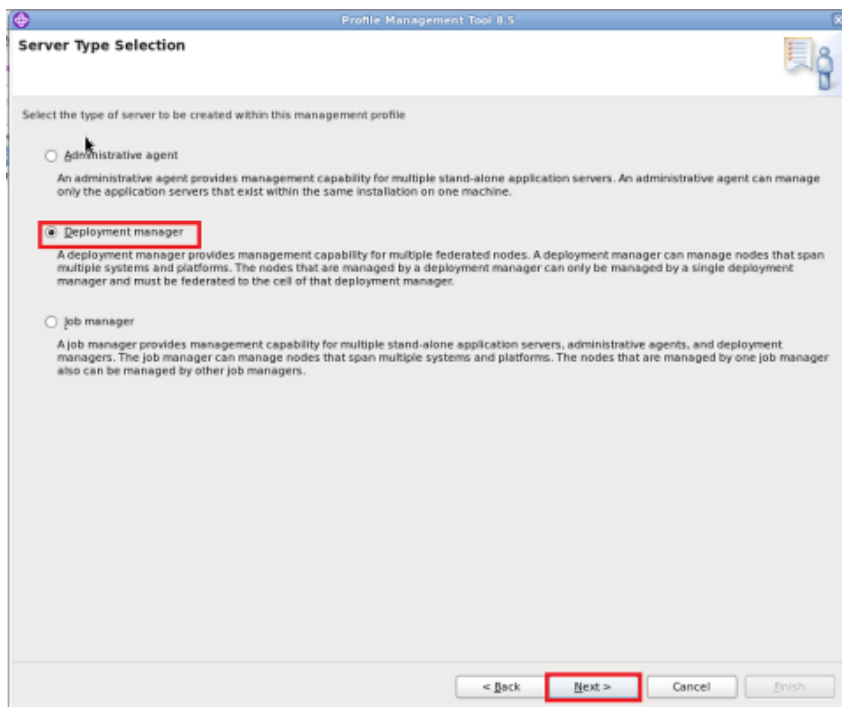
Navigation : *Profile Management Tool > Create*



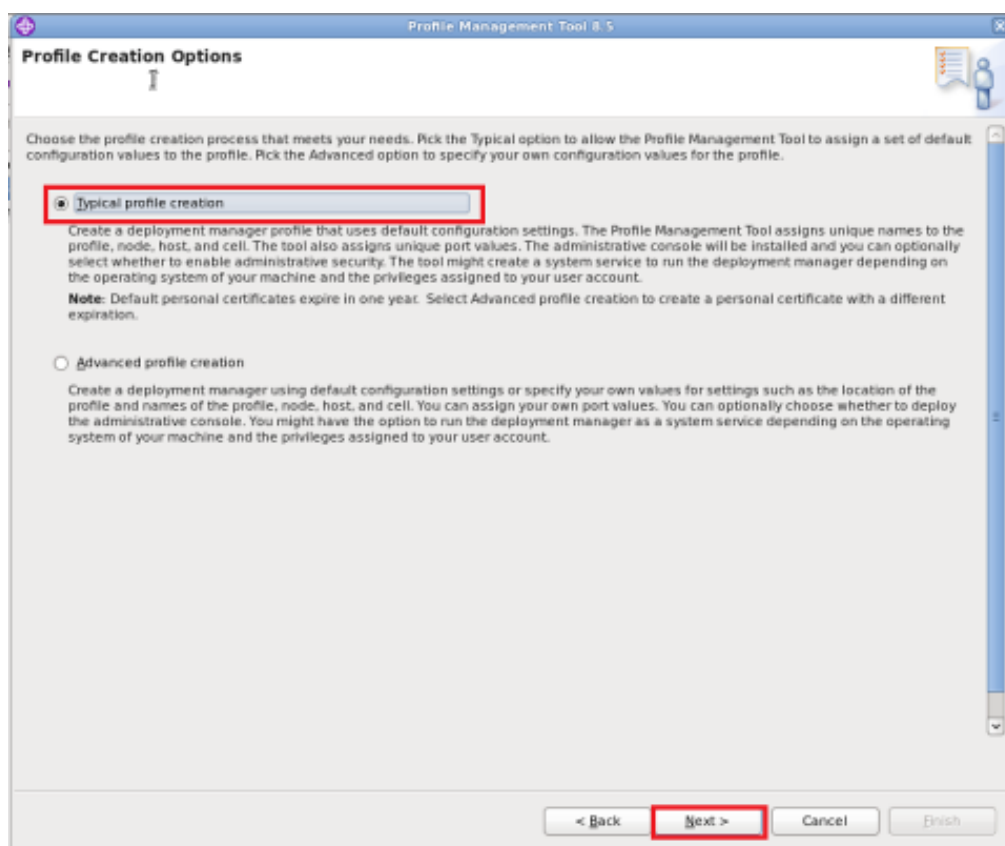
Navigation : *Management >Next*



Navigation : *Deployment Manager > Next*



Navigation: *Typical profile creation > Next*



Navigation: *Enable administrative security > Next*

Profile Management Tool 8.5

Administrative Security

Choose whether to enable administrative security. To enable security, supply a user name and password for logging into administrative tools. This administrative user is created in a repository within the application server. After profile creation finishes, you can add more users, groups, or external repositories.

☒ Enable administrative security

User name:
admin

Password:

Confirm password:

See the information center for more information about administrative security.
[View the online information center](#)

< Back **Next >** Cancel Finish

Navigation : Create

Profile Management Tool 8.5

Profile Creation Summary

Review the information in the summary for correctness. If the information is correct, click **Create** to start creating a new profile. Click **Back** to change values on the previous panels.

Application server environment to create: Management
Server type: Deployment manager
Location: /opt/IBM/WebSphere/AppServer/profiles/Dmgr04
Disk space required: 30 MB

Profile name: Dmgr04
Make this profile the default: False

Cell name: ofss220367Cell01
Node name: ofss220367CellManager01
Host name: ofss220367.in.oracle.com

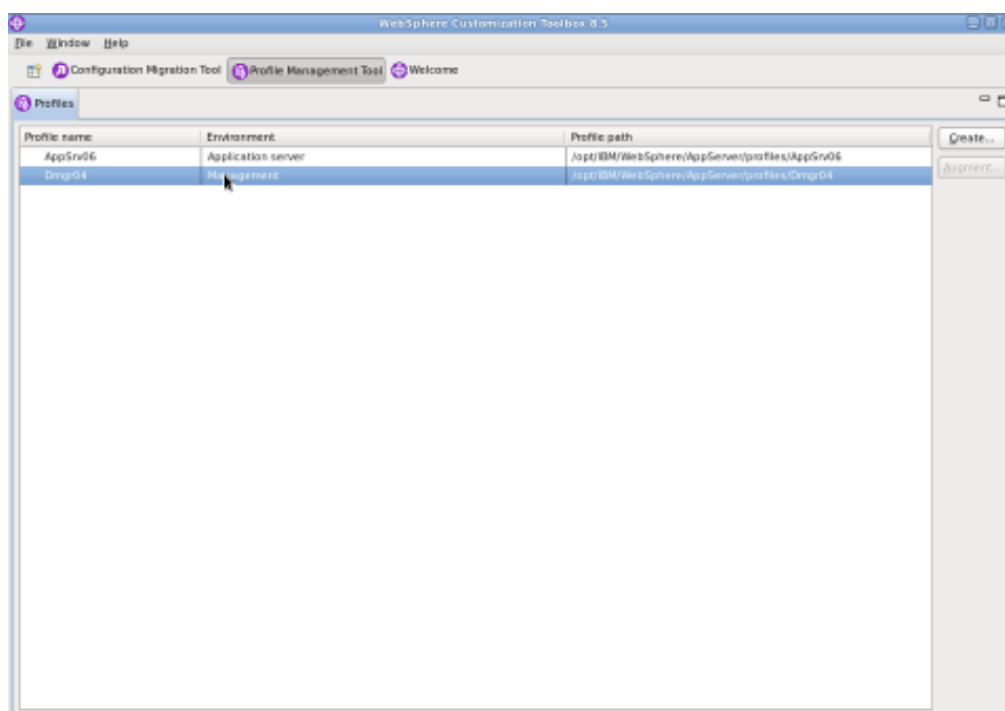
Deploy the administrative console (recommended): True

Enable administrative security (recommended): True

Administrative console port: 9061
Administrative console secure port: 9044
Deployment manager bootstrap port: 9809
Deployment manager SOAP connector port: 8879

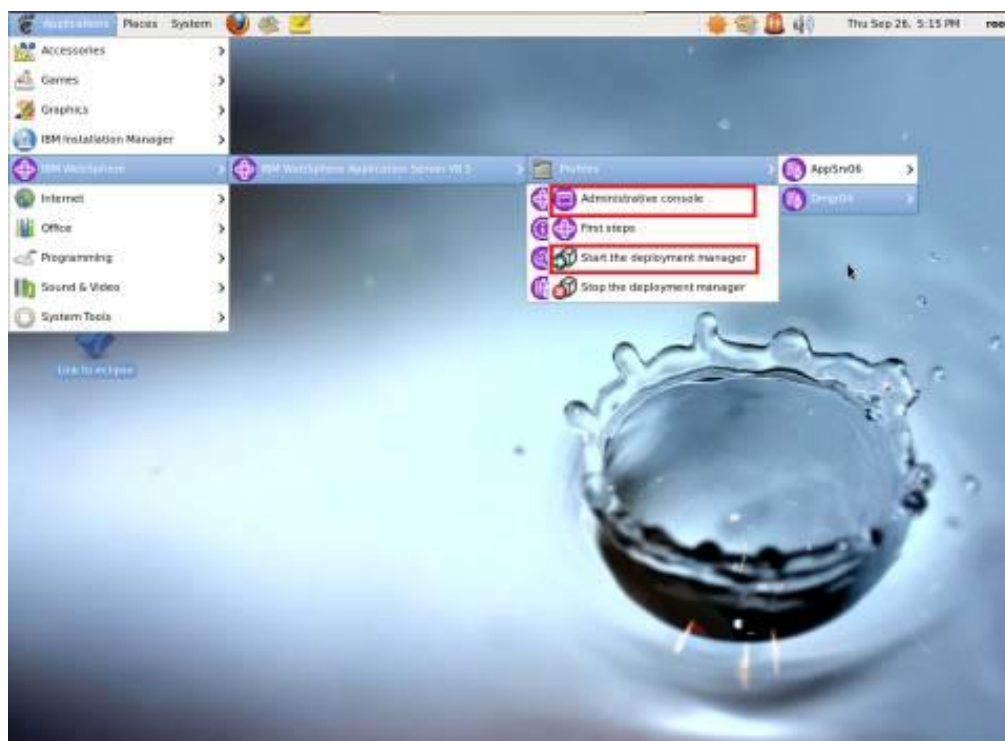
Run deployment manager as a service: False

< Back Create Cancel Finish



Start Deployment Manager & Open Administrative Console

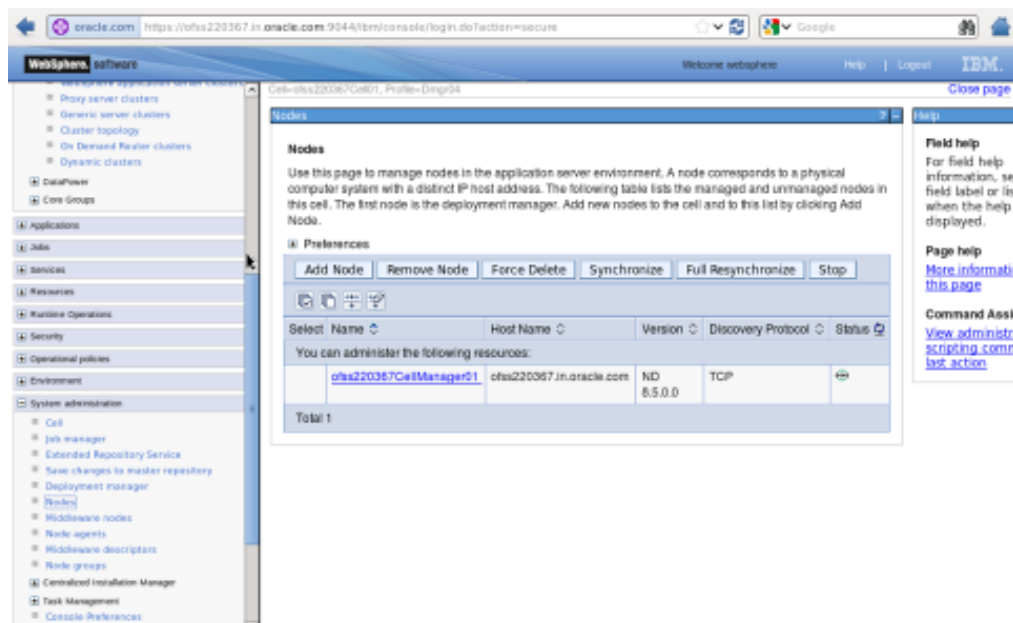
Navigation : IBM WebSphere > IBM WebSphere Application Server V8.5 > Profiles > Dmgr[i]>Start the deployment *manager* > *Administrative console*



Log into Deployment Manager Console

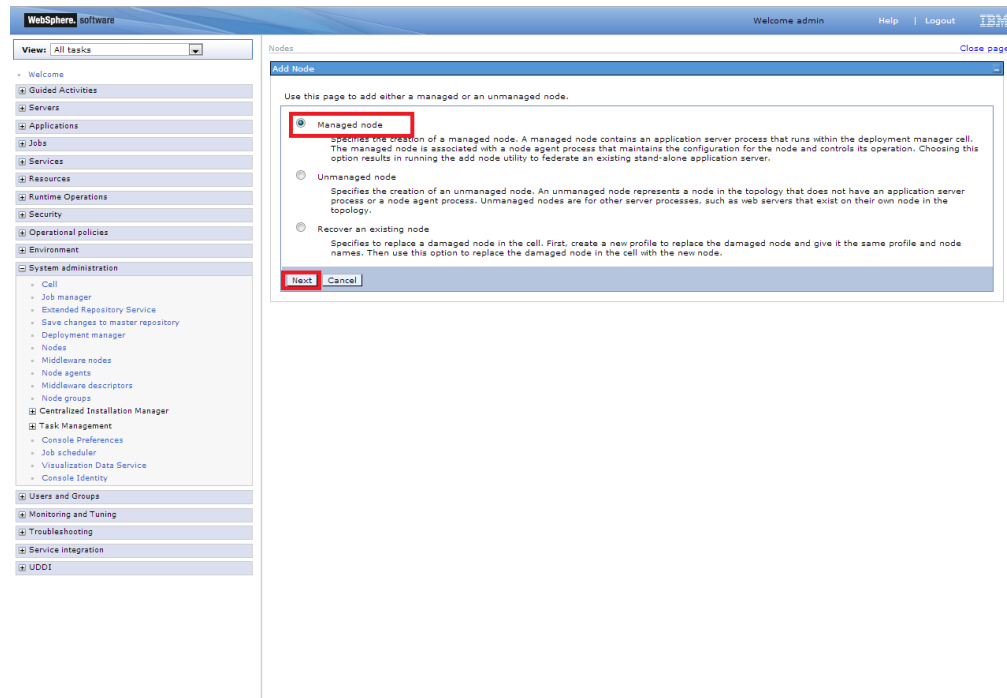


Navigation : System administration > Nodes > Add Node



4.2 Create Node

Navigation : *System administration > Nodes > Add Node*



Provide the following field information and Click 'OK'

Host	: Host Machine with running Application Server
JMX Connector type	: SOAP
JMX Connector Port	: SOAP_CONNECTOR_ADDRESS of Application Server
Application server user name	: Application server user id
Application server password	: Application server password
Deployment manager user name	: Deployment manager user id
Deployment manager password	: Deployment manager password

WebSphere software Welcome admin Help | Logout IBM

Views: All tasks

- Welcome
- Guided Activities
- Servers
- Applications
- Jobs
- Services
- Resources
- Runtime Operations
- Security
- Operational policies
- Environment
- System administration
 - Cell
 - Job manager
 - Extended Repository Service
 - Save changes to master repository
 - Deployment manager
 - Nodes
 - Middleware nodes
 - Node agents
 - Middleware descriptors
 - Node groups
- Centralized Installation Manager
- Task Management
 - Console Preferences
 - Job scheduler
 - Visualization Data Service
 - Console Identity
- Users and Groups
- Monitoring and Tuning
- Troubleshooting
- Service integration
- UDDI

Nodes

Add Managed Node

Use this page to identify a stand-alone application server process that is running. Start the application server, if necessary, or add the node from the command line by running the addnode command from the bin directory of the stopped application server profile.

Node connection

Host: ofss220367

JMX connector type: SOAP

JMX connector port: 8880

Application server user name: webosphere

Application server password: *****

Deployment manager user name: admin

Deployment manager password: *****

Config URL: file:\${USER_INSTALL_ROOT}/properties/sas.dll

Options

☐ Include applications

☐ Include buses

Starting port

☒ Use default

☐ Specify

Port number:

OK Cancel

Field help: For field help information, select a field label or list marker when the help cursor is displayed.

Page help: More information about this page

Oracle.com https://ofss220367.in.oracle.com:9544/evm/console/login.do?act&en=secure

WebSphere software Welcome admin Help | Logout IBM

Generic server clusters

Cluster topology

On Demand Router clusters

Dynamic clusters

DataPower

Core Group

Applications

Jobs

Services

Resources

Runtime Operations

Security

Operational policies

Environment

System administration

- Cell
- Job manager
- Extended Repository Service
- Save changes to master repository
- Deployment manager
- Nodes
- Middleware nodes
- Node agents
- Middleware descriptors
- Node groups

Centralized Installation Manager

Task Management

- Console Preferences
- Job scheduler
- Visualization Data Service

Adding node

ADMU0001: Begin federation of node ofss220367Node01 with Deployment Manager at ofss220367.in.oracle.com:8879.

ADMU0006: Successfully connected to Deployment Manager Server: ofss220367.in.oracle.com:8879

ADMU0505: Servers found in configuration:

ADMU0506: Server name: server1

ADMU0104: Stopping all server processes for node ofss220367Node01

ADMU0510: Server server1 is now STOPPED

ADMU0024: Deleting the old backup directory.

ADMU0015: Backing up the original cell. Please Wait...

ADMU0012: Creating Node Agent config. Node01

ADMU0014: Adding node ofss220367Node01 configuration to cell: ofss220367Cell01

ADMU0016: Synchronizing configuration between node and cell.

Transferring data from ofss220367.in.oracle.com...

Nodes

Use this page to manage nodes in the application server environment. A node corresponds to a physical computer system with a distinct IP host address. The following table lists the managed and unmanaged nodes in this cell. The first node is the deployment manager. Add new nodes to the cell and to this list by clicking Add Node.

Preferences

Add Node Remove Node Force Delete Synchronize Pull Resynchronize Stop

Select	Name	Host Name	Version	Discovery Protocol	Status
<input checked="" type="checkbox"/>	ofsa220367CellManager01	ofsa220367.in.oracle.com	ND 8.5.0.0	TCP	+
<input type="checkbox"/>	ofsa220367Node01	ofsa220367.in.oracle.com	ND 8.5.0.0	TCP	+

Total: 2

Create necessary number of nodes following same instructions above:

Messages

Your workspace has been auto-refreshed from the master configuration. You can disable auto-refresh in your user preferences.

Nodes

Use this page to manage nodes in the application server environment. A node corresponds to a physical computer system with a distinct IP host address. The following table lists the managed and unmanaged nodes in this cell. The first node is the deployment manager. Add new nodes to the cell and to this list by clicking Add Node.

Preferences

Add Node Remove Node Force Delete Synchronize Pull Resynchronize Stop

Select	Name	Host Name	Version	Discovery Protocol	Status
<input checked="" type="checkbox"/>	ofsa220367CellManager01	ofsa220367.in.oracle.com	ND 8.5.0.0	TCP	+
<input type="checkbox"/>	ofsa220367Node01	ofsa220367.in.oracle.com	ND 8.5.0.0	TCP	+
<input type="checkbox"/>	ofsa220555Node01	ofsa220555.in.oracle.com	ND 8.5.0.0	TCP	+

Total: 3

4.2.1 Start Node Agents

Navigation : *System administration> Node agents>Restart*

The screenshot shows the WebSphere Administration Console interface. The left-hand navigation pane is expanded to 'System administration' > 'Node agents'. The main content area is titled 'Node agents' and contains a description of the node agent process. Below the description are buttons for 'Stop', 'Restart', and 'Restart all Servers on Node'. A table lists the resources managed by the node agents:

Select	Name	Node	Host Name	Version	Status
<input type="checkbox"/>	nodeagent	ots222555Node01	ots222555.jn.oracle.com	ND 8.5.0.0	+
<input type="checkbox"/>	nodeagent	ots220367Node01	ots220367.jn.oracle.com	ND 8.5.0.0	+

The table indicates a total of 2 resources. On the right side, there are links for 'Field help' and 'Page help'.

4.3 Create Cluster

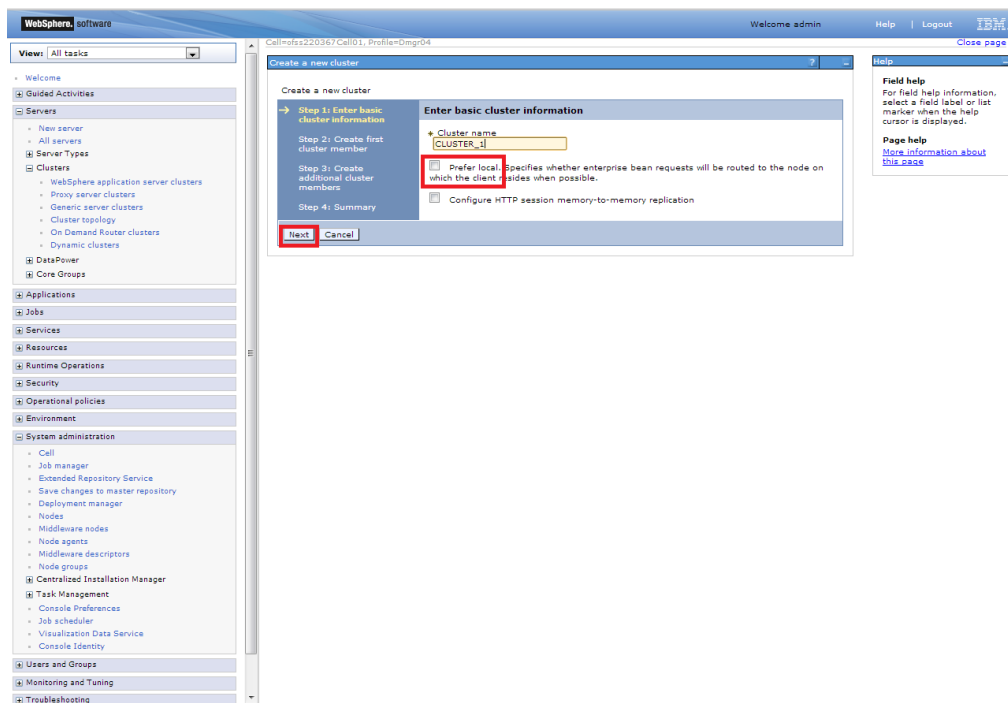
Navigation: *Servers>Clusters> WebSphere application server clusters > New*

The screenshot shows the WebSphere Administration Console interface. The left-hand navigation pane is expanded to 'Servers' > 'Clusters' > 'WebSphere application server clusters'. The main content area is titled 'WebSphere application server clusters' and contains a description of the cluster configuration. Below the description are buttons for 'New...', 'Delete', 'Start', 'Stop', 'Ripplestart', and 'ImmediateStop'. A table lists the clusters:

Select	Name	Status
<input type="checkbox"/>	None	

The table indicates a total of 0 clusters. On the right side, there are links for 'Field help', 'Page help', and 'Command Assistant'.

Navigation : *Uncheck [Prefer Local] > Next*



4.3.1 Add Cluster Members

WebSphere software

Welcome admin Help Logout IBM

Cell=ofsa220367/Cell01, Profile=Omgr04

Create a new cluster

Step 1: Enter basic cluster information

Step 2: Create first cluster member

Step 3: Create additional cluster members

Step 4: Summary

Create first cluster member

The first cluster member determines the server settings for the cluster members. A server configuration template is created from the first member and stored as part of the cluster data. Additional cluster members are copied from this template.

Member name: MS_1

Select node: ofsa220367Node01 (ND 8.5.0.0)

Weight: 2 (0..100)

☒ Generate unique HTTP ports

Select how the server resources are promoted in the cluster: Cluster

Select basis for first cluster member:

- ☒ Create the member using an application server template.
default
- ☐ Create the member using an existing application server as a template.
ofsa220367Cell01/ofsa220367Node01 (ND 8.5.0.0)/MS_1
- ☐ Create the member by converting an existing application server.
ofsa220367Cell01/ofsa220367Node01 (ND 8.5.0.0)/MS_1
- ☐ None. Create an empty cluster.

Previous Next Cancel

Field help: For field help information, select a field label or list marker when the help cursor is displayed.

Page help: More information about this page

Add required number of cluster members

Navigation : Add Member > Next

WebSphere software

Welcome admin Help Logout IBM

Cell=ofsa220367/Cell01, Profile=Omgr04

Create a new cluster

Step 1: Enter basic cluster information

Step 2: Create first cluster member

Step 3: Create additional cluster members

Step 4: Summary

Create additional cluster members

Enter information about this new cluster member, and click Add Member to add this cluster member to the member list. A server configuration template is created from the first member, and stored as part of the cluster data. Additional cluster members are copied from this template.

Member name: MS_2

Select node: ofsa220367Node01 (ND 8.5.0.0)

Weight: 2 (0..100)

☒ Generate unique HTTP ports

Add Member

Use the Edit function to modify the properties of a cluster member in this list. Use the Delete function to remove a cluster member from this list. You are not allowed to edit or remove the first cluster member.

Select	Member name	Nodes	Version	Weight
<input type="checkbox"/>	MS_1	ofsa220367Node01	ND 8.5.0.0	2
Total: 1				

Previous Next Cancel

Field help: For field help information, select a field label or list marker when the help cursor is displayed.

Page help: More information about this page

Navigation : Next

Create a new cluster

Step 1: Enter basic cluster information
Step 2: Create first cluster member
→ **Step 3: Create additional cluster members**
Step 4: Summary

Create additional cluster members

Enter information about this new cluster member, and click Add Member to add this cluster member to the member list. A server configuration template is created from the first member, and stored as part of the cluster data. Additional cluster members are copied from this template.

Member name:

Select node:

Weight: (0..100)

☒ Generate unique HTTP ports

Add Member

Use the Edit function to modify the properties of a cluster member in this list. Use the Delete function to remove a cluster member from this list. You are not allowed to edit or remove the first cluster member.

Edit Delete

Select	Member name	Nodes	Version	Weight
<input type="checkbox"/>	MS_1	ofss220367Node01	ND 8.5.0.0	2
<input type="checkbox"/>	MS_2	ofss22555Node01	ND 8.5.0.0	2

Total 2

Previous Next Cancel

Field help
For field help information, select a field label or list marker when the help cursor is displayed.

Page help
[More information about this page](#)

Navigation : Finish

Create a new cluster

Step 1: Enter basic cluster information
Step 2: Create first cluster member
Step 3: Create additional cluster members
→ **Step 4: Summary**

Summary

Summary of actions:

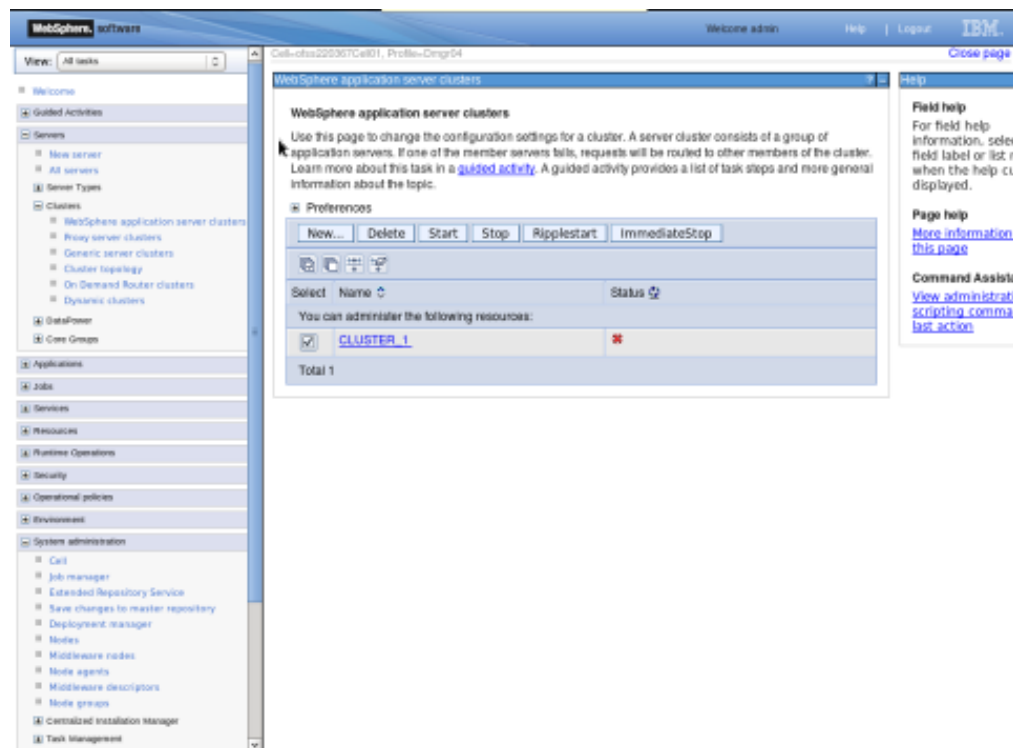
Options	Values
Cluster Name	CLUSTER_1
Core Group	DefaultCoreGroup
Node group	DefaultNodeGroup
Prefer local	false
Configure HTTP session memory-to-memory replication	false
Server name	MS_1
Node	ofss220367Node01(ND 8.5.0.0)
Weight	2
Clone Template	default
Clone Basis	Create the member using an application server template.
Select how the server resources are promoted in the cluster.	cluster
Generate unique HTTP ports	true
Server name	MS_2
Node	ofss220367Node01(ND 8.5.0.0)
Weight	2
Clone Template	Version 8.5 member template
Generate unique HTTP ports	true

Previous Finish Cancel

Field help
For field help information, select a field label or list marker when the help cursor is displayed.

Page help
[More information about this page](#)

4.3.2 Start Cluster



WebSphere application server clusters

Use this page to change the configuration settings for a cluster. A server cluster consists of a group of application servers. If one of the member servers fails, requests will be routed to other members of the cluster. Learn more about this task in a [guided activity](#). A guided activity provides a list of task steps and more general information about the topic.

Preferences

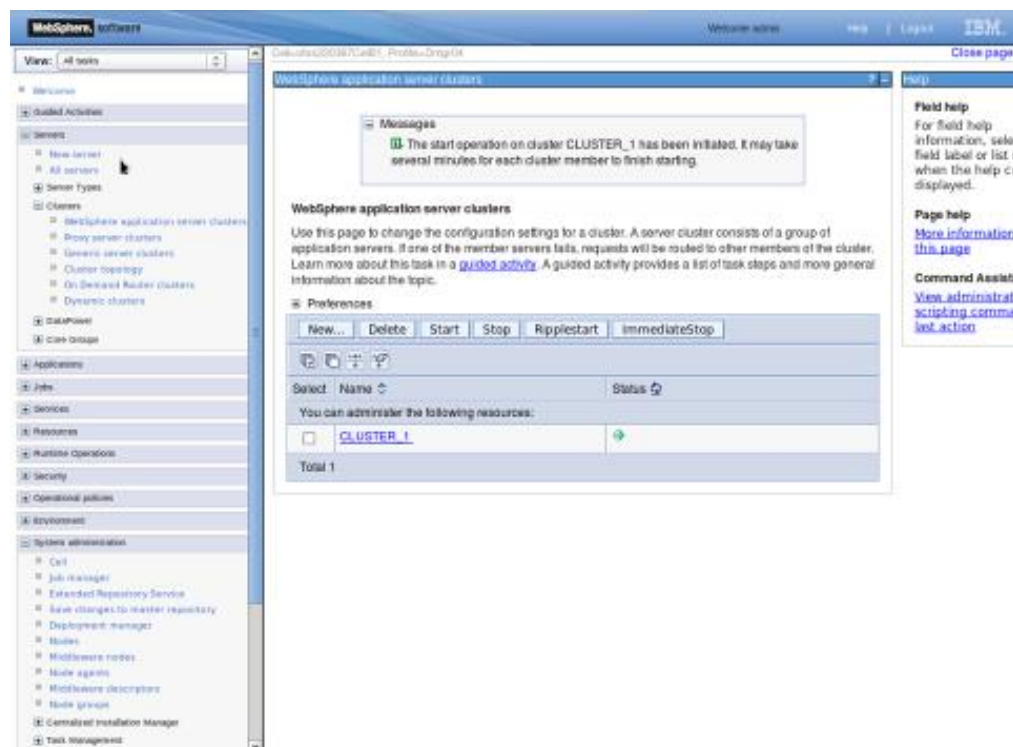
New... Delete Start Stop Ripplestart ImmediateStop

Select	Name	Status
<input checked="" type="checkbox"/>	CLUSTER_1	
Total 1		

Field help
For field help information, select field label or list item when the help is displayed.

Page help
[More information, this page](#)

Command Assistant
[View administrative scripting command action](#)



WebSphere application server clusters

Use this page to change the configuration settings for a cluster. A server cluster consists of a group of application servers. If one of the member servers fails, requests will be routed to other members of the cluster. Learn more about this task in a [guided activity](#). A guided activity provides a list of task steps and more general information about the topic.

Preferences

New... Delete Start Stop Ripplestart ImmediateStop

Select	Name	Status
<input type="checkbox"/>	CLUSTER_1	
Total 1		

Messages

The start operation on cluster CLUSTER_1 has been initiated. It may take several minutes for each cluster member to finish starting.

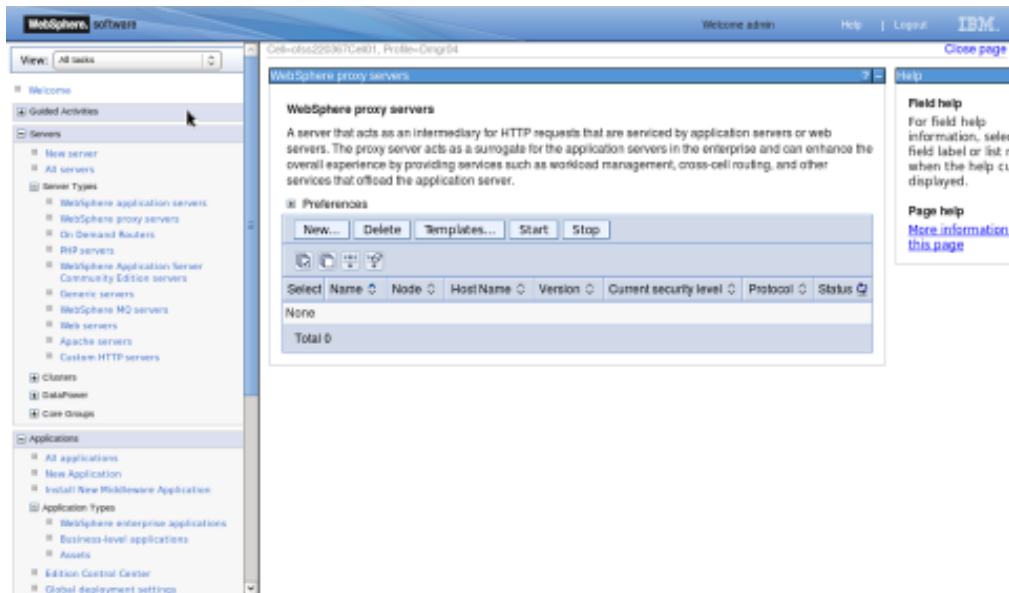
Field help
For field help information, select field label or list item when the help is displayed.

Page help
[More information, this page](#)

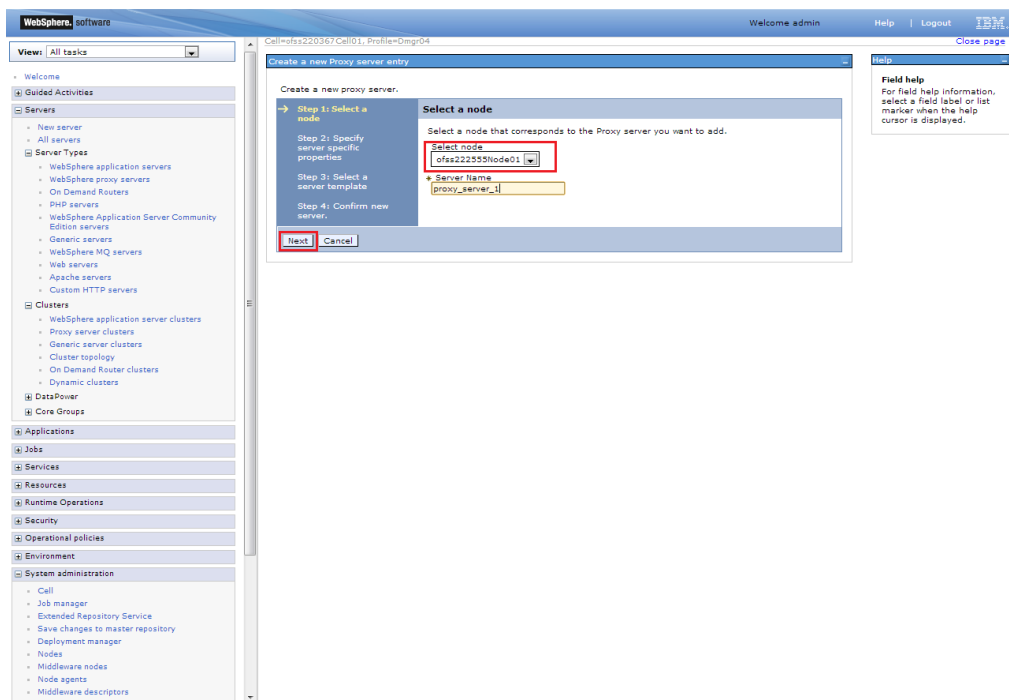
Command Assistant
[View administrative scripting command action](#)

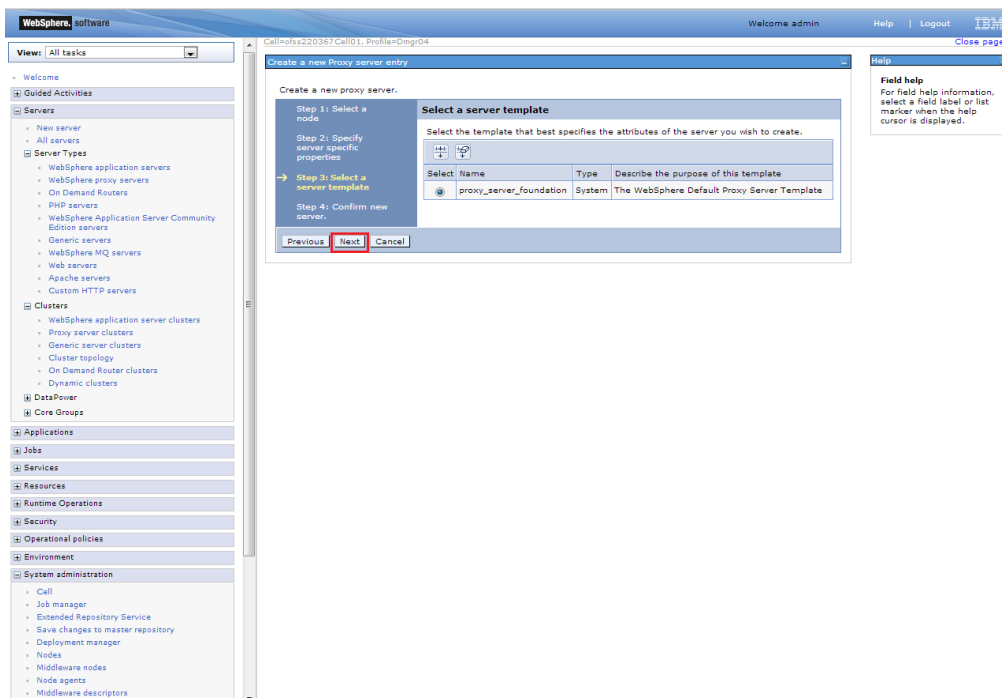
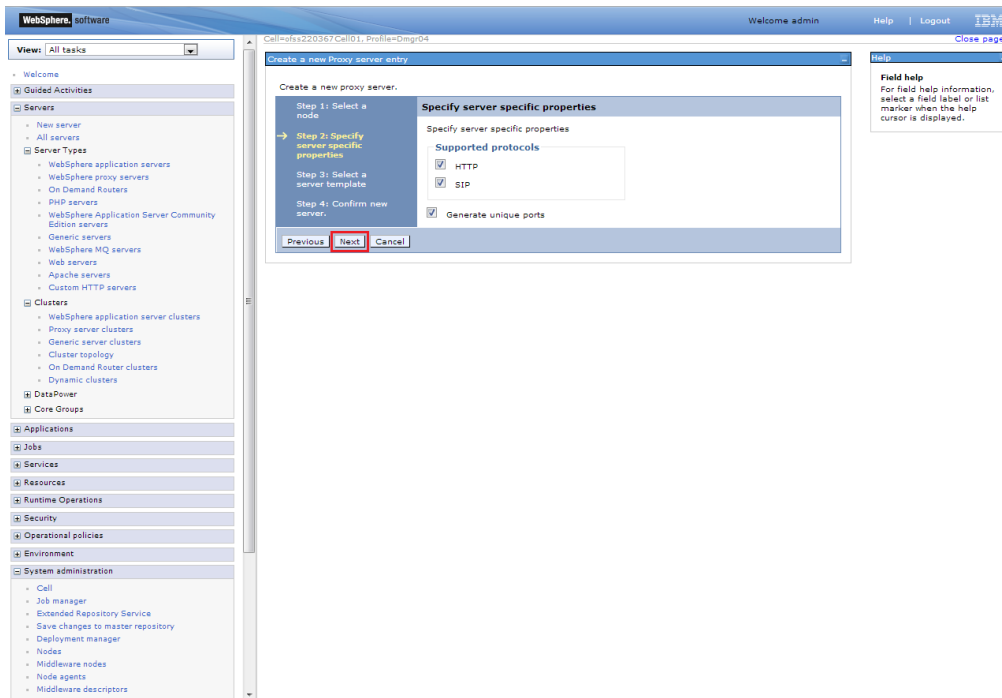
4.4 Create Proxy Server

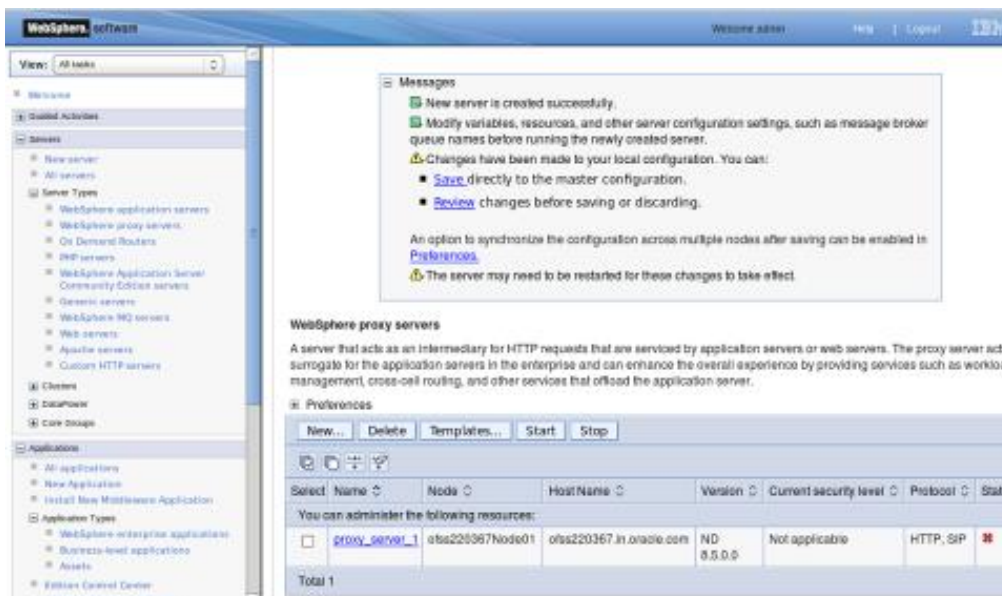
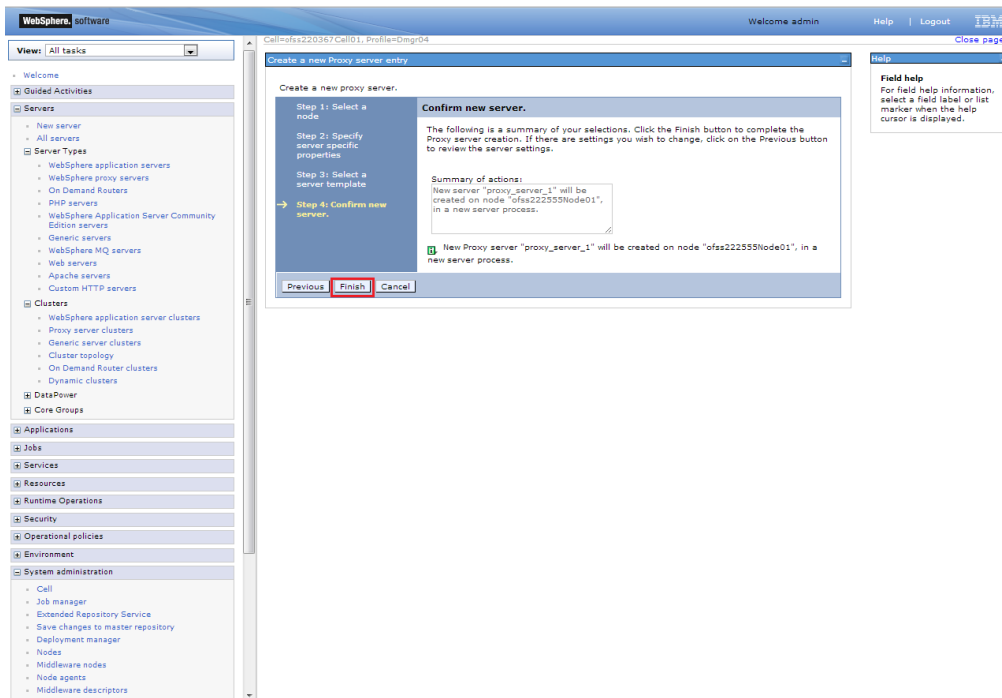
Navigation : Servers > Server Types > WebSphere proxy servers > New



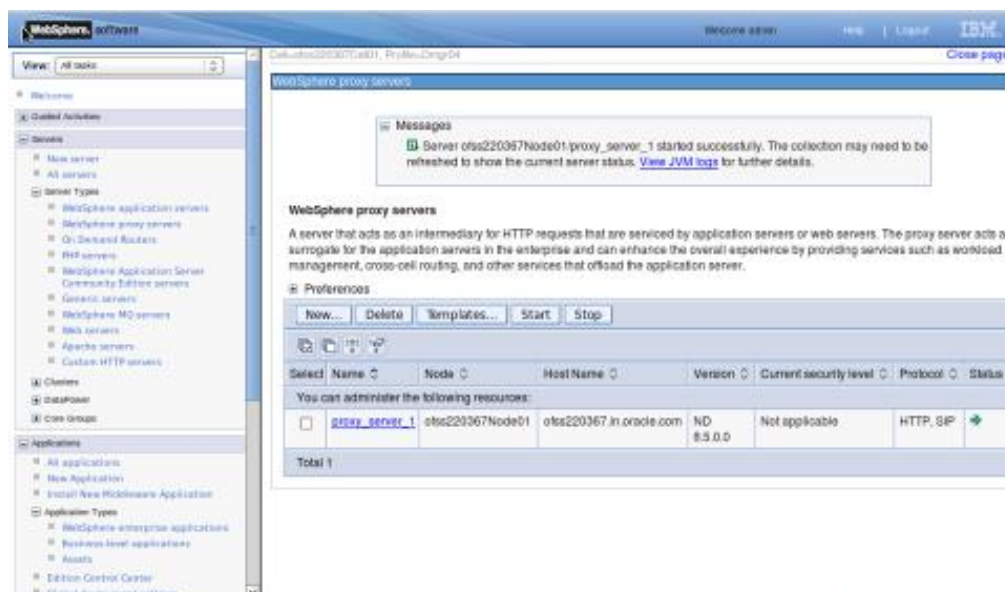
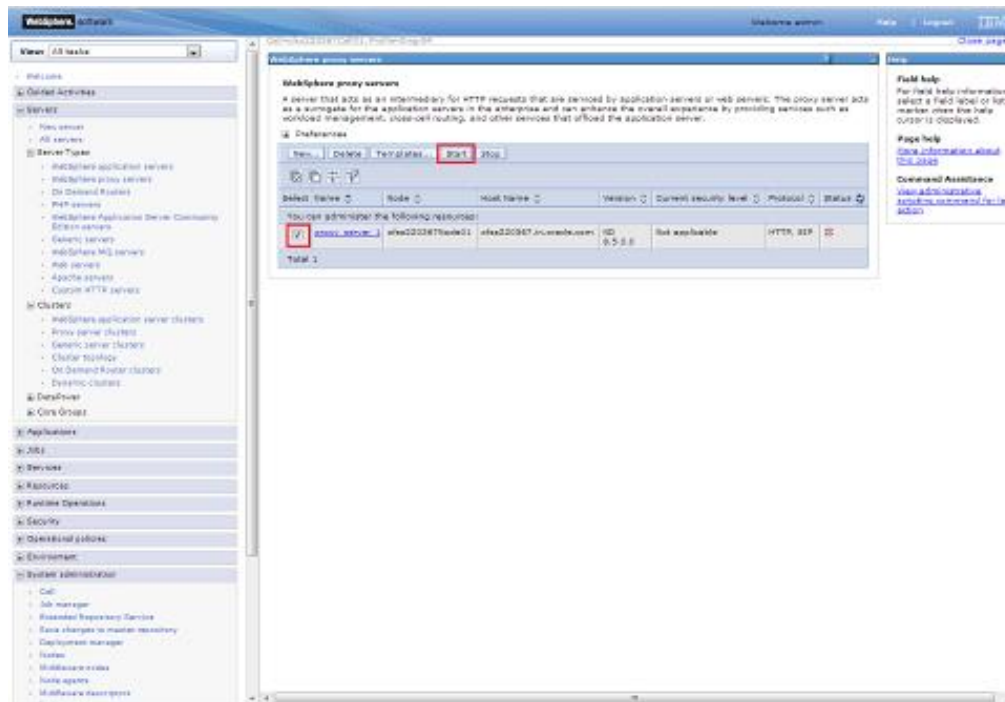
Navigation : [Select appropriate Node] > Next







4.4.1 Start Proxy Server



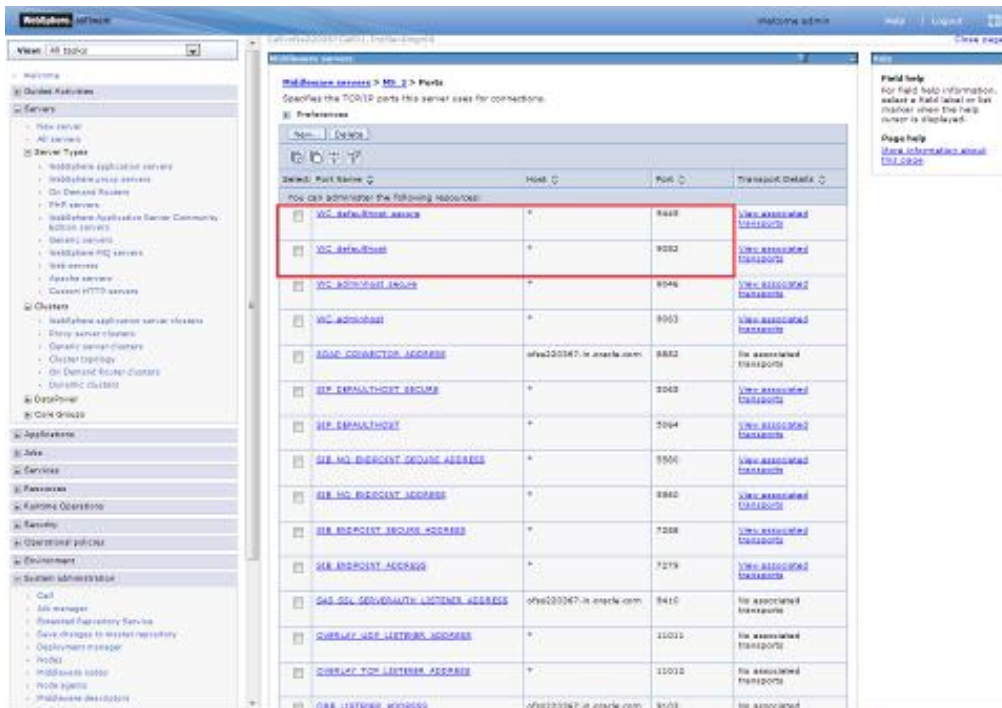
4.5 Configure Virtual Host

Make a note of “WC_defaulthost”/”WS_defaulthost_secure” port for server MS1 : 9081/9444

The screenshot displays the Oracle WebLogic Server Administration Console. The left sidebar shows the navigation tree with 'Servers' selected. The main panel shows the 'Virtual Hosts' configuration for 'MS1'. A table lists the following virtual hosts:

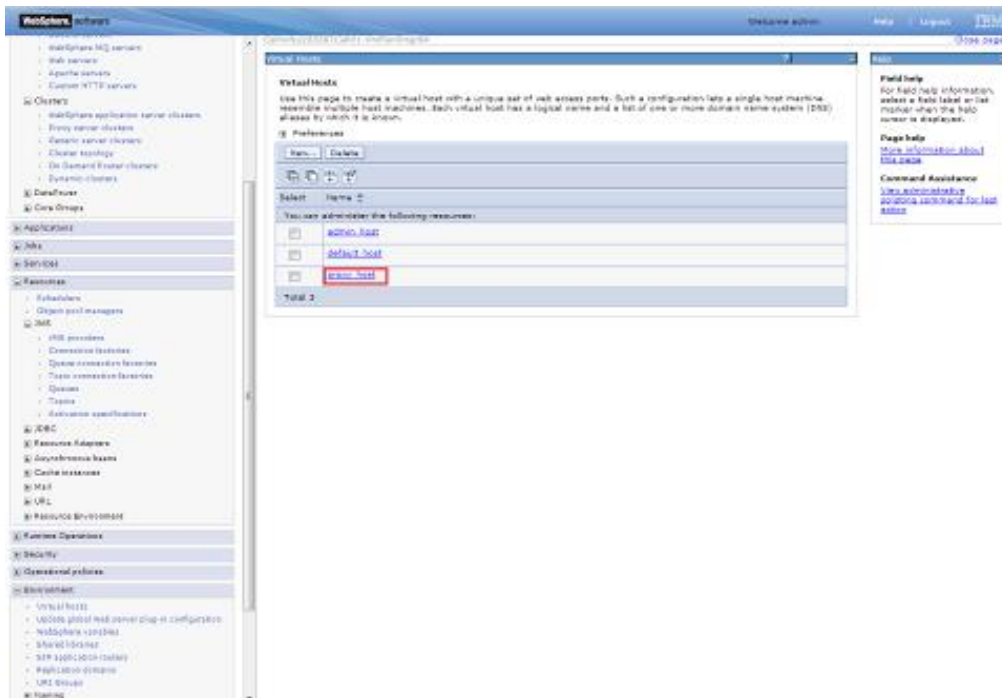
Virtual Host Name	Port	Transport Details
WC_defaulthost_secure	9444	Not associated with SSL
WC_defaulthost	9081	Not associated with SSL
WC_defaulthost_secure	9043	Not associated with SSL
WC_defaulthost	9042	Not associated with SSL
WC_CONNECTOR_ADDRESS	http://203.167.1.10:8081	Not associated with SSL
WC_DEFAULTHOST_SECURE	9082	Not associated with SSL
WC_DEFAULTHOST	9081	Not associated with SSL
WC_HTTP_ENDPOINT_SECURE_ADDRESS	8079	Not associated with SSL
WC_HTTP_ENDPOINT_ADDRESS	8080	Not associated with SSL
WC_ENDPOINT_SECURE_ADDRESS	7287	Not associated with SSL
WC_ENDPOINT_ADDRESS	7278	Not associated with SSL
WC_HTTP_SERVER_LISTENER_ADDRESS	http://203.167.1.10:8081	Not associated with SSL
WC_HTTP_LISTENER_ADDRESS	11009	Not associated with SSL
WC_HTTP_LISTENER_ADDRESS	11010	Not associated with SSL
WC_HTTP_LISTENER_ADDRESS	http://203.167.1.10:8081	Not associated with SSL

Make a note of “WC_defaulthost”/”WS_defaulthost_secure” for MS2 : 9082/9445

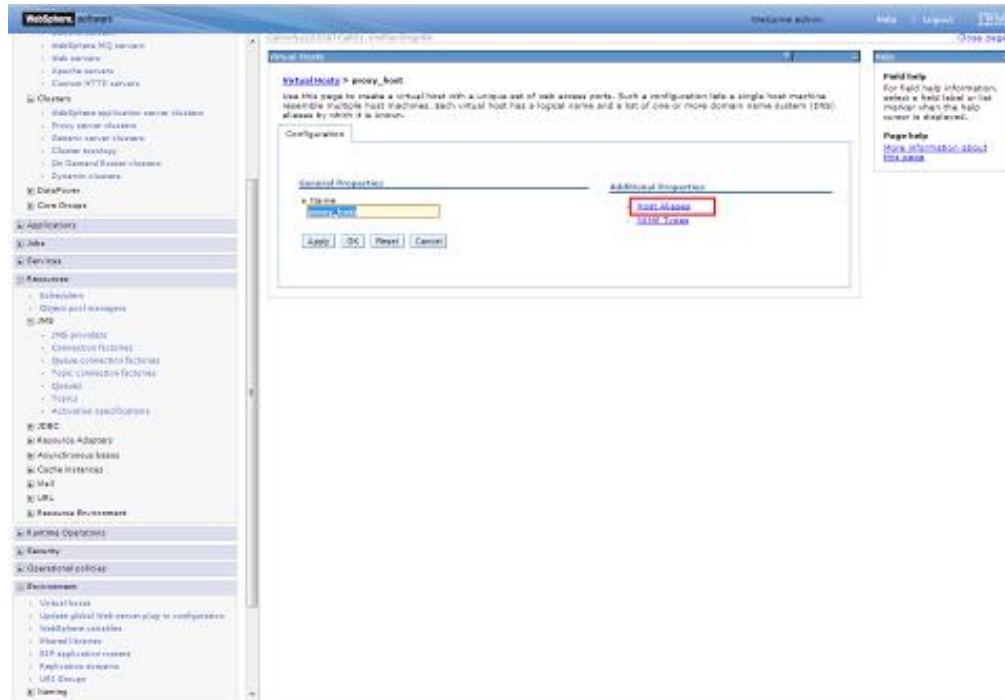


4.5.1 Virtual Host Setup

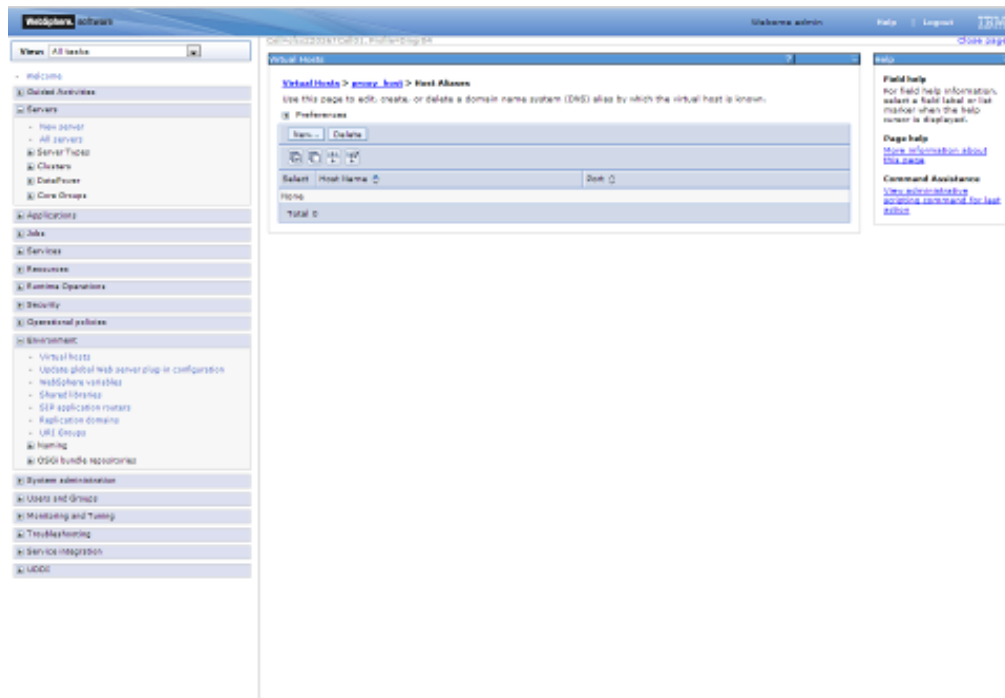
Navigation : *Environment>Virtual hosts>proxy_host*



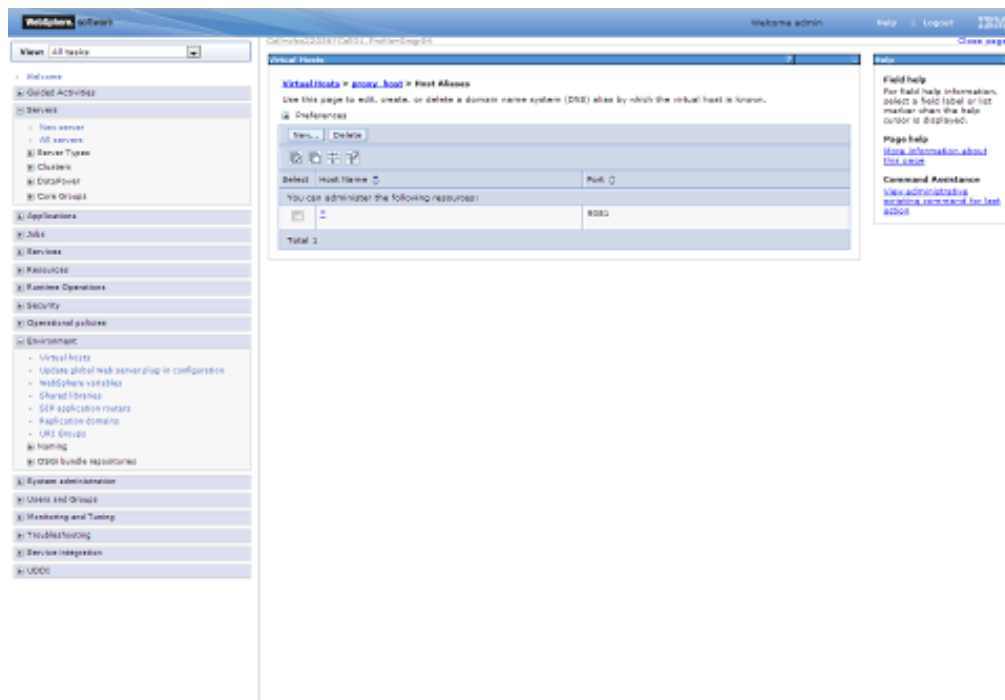
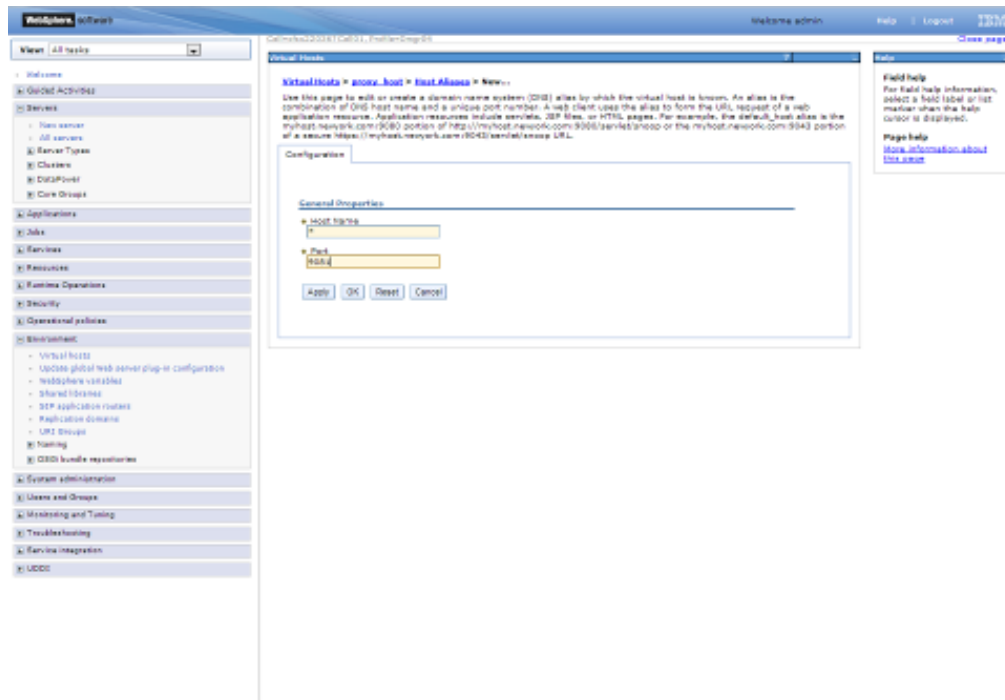
Navigation : Host Aliases



Navigation : Environment>Virtual hosts>proxy_host>Host Aliases > New



Create New Alias for default port in managed server <<9081>>:



Similarly create proxy alias for all cluster related server default ports

Virtual Hosts

Use this page to edit, create, or delete a domain name system (DNS) alias by which the virtual host is known.

Dependencies

New... Delete Refresh

Host Name	Port
9080	
9084	
9082	
9448	
Total 4	

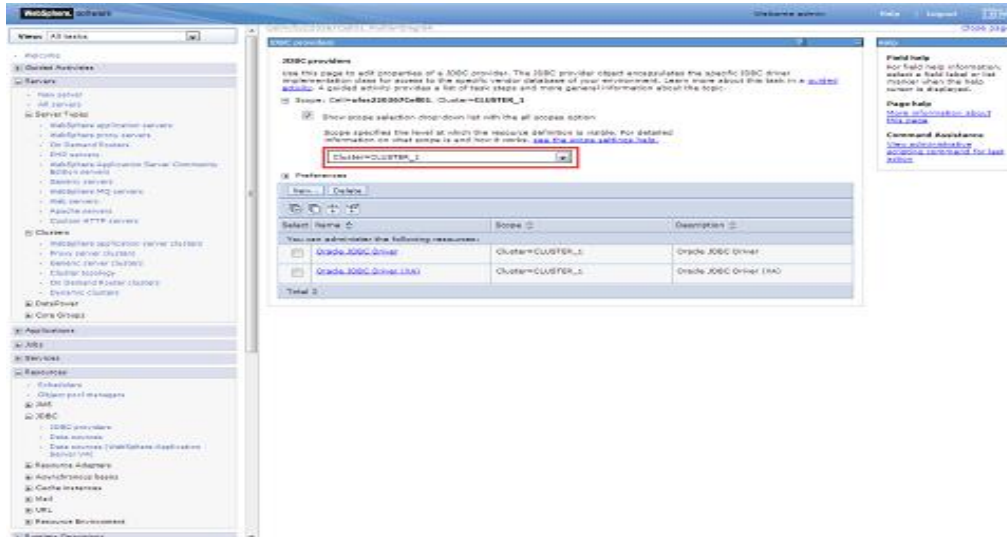
Field Help
For field help information, select a field label or list marker when the help cursor is displayed.

Page Help
[More information about this page](#)

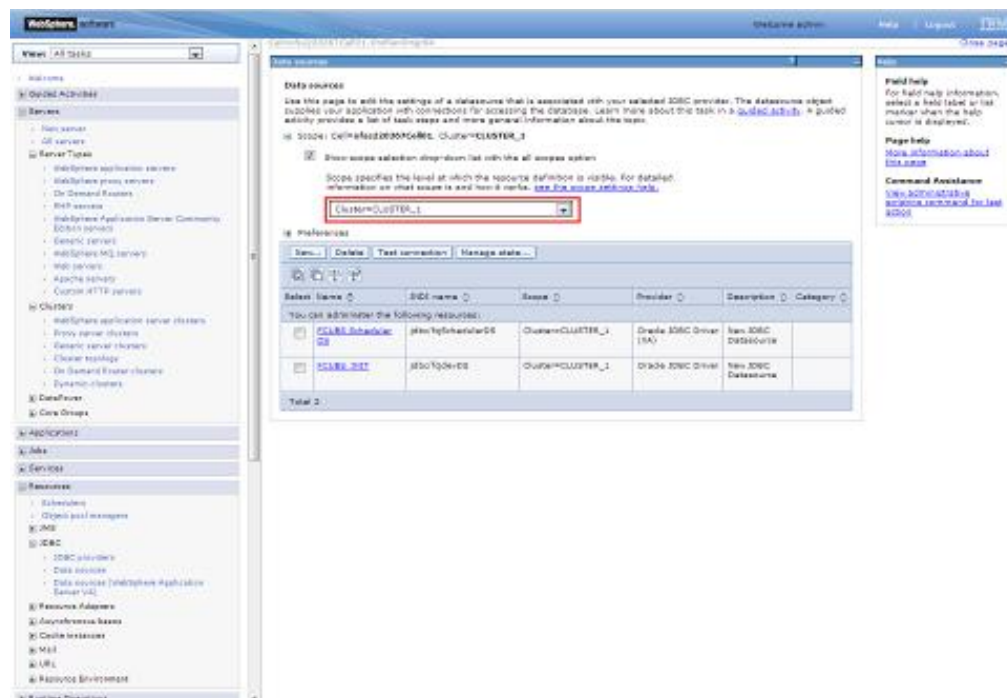
Command Reference
[View command reference for this page](#)

5. Create Resources in Cluster Scope

JDBC Provider :



Datasource :



Queue Connection Factory

Queue connection factories

A queue connection factory is used to create connections to the associated JMS provider of the JMS queue destinations, for point-to-point messaging.

Scope: Cell=cell1234567890, Cluster=CLUSTER_1

☒ Show scope selection dropdown list with the all scopes option

Scope specifies the level at which the resource definition is visible. For detailed information on what scope is and how it works, see the [scope and scope help](#).

Cluster=CLUSTER_1

References

Name	JMS name	Provider	Description	Scope
EmailQCF	EmailQCF	WebSphere MQ messaging provider		Cluster=CLUSTER_1
PC_QCF	PC_QCF	WebSphere MQ messaging provider		Cluster=CLUSTER_1
HDFS_QCF	HDFS_QCF	WebSphere MQ messaging provider		Cluster=CLUSTER_1
WebSphereMQ_QCF	WebSphereMQ_QCF	WebSphere MQ messaging provider		Cluster=CLUSTER_1

Total: 4

JMS Queue:

JMS Queue

A JMS queue is used as a destination for point-to-point messaging.

Scope: Cell=cell1234567890, Cluster=CLUSTER_1

☒ Show scope selection dropdown list with the all scopes option

Scope specifies the level at which the resource definition is visible. For detailed information on what scope is and how it works, see the [scope and scope help](#).

Cluster=CLUSTER_1

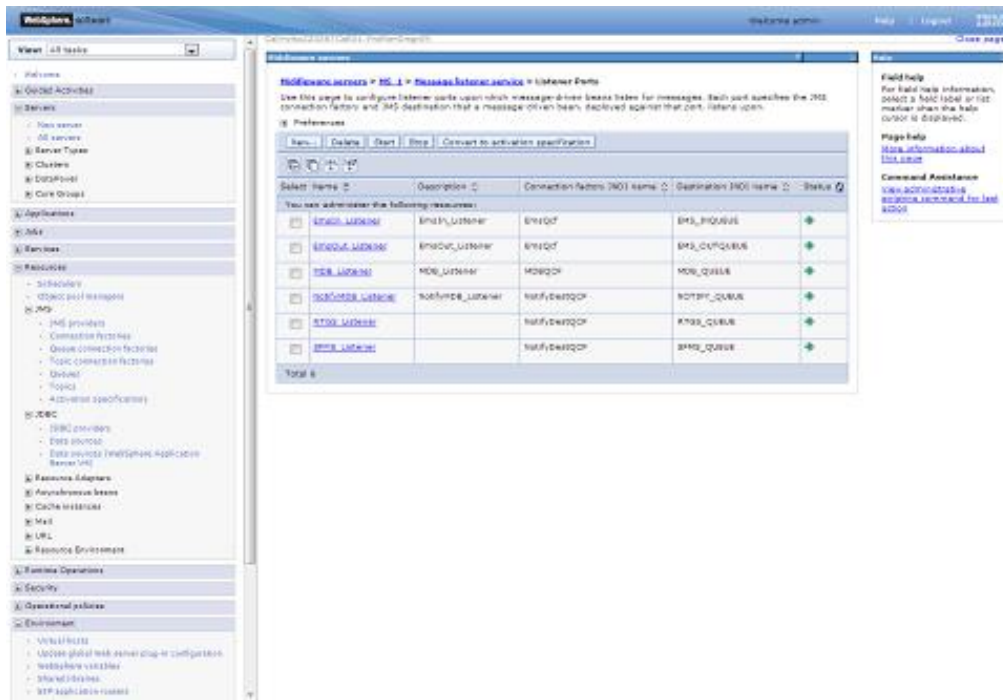
References

Name	JMS name	Provider	Description	Scope
JMS_IN_QUEUE	JMS_IN_QUEUE	WebSphere MQ messaging provider		Cluster=CLUSTER_1
JMS_OUT_QUEUE	JMS_OUT_QUEUE	WebSphere MQ messaging provider		Cluster=CLUSTER_1
JMS_QUEUE	JMS_QUEUE	WebSphere MQ messaging provider		Cluster=CLUSTER_1
JMS_QUEUE_PQ	JMS_QUEUE_PQ	WebSphere MQ messaging provider		Cluster=CLUSTER_1
JMS_QUEUE_RESPONSE	JMS_QUEUE_RESPONSE	WebSphere MQ messaging provider		Cluster=CLUSTER_1
NOTIFY_DEST_QUEUE	NOTIFY_DEST_QUEUE	WebSphere MQ messaging provider		Cluster=CLUSTER_1
NOTIFY_QUEUE	NOTIFY_QUEUE	WebSphere MQ messaging provider	NOTIFY Queue	Cluster=CLUSTER_1
NOTIFY_QUEUE_PQ	NOTIFY_QUEUE_PQ	WebSphere MQ messaging provider		Cluster=CLUSTER_1

Total: 9

Create Message Listeners for individual Servers in Cluster

Navigation : *Middleware servers > MS_1 > Message listener service > Listener Ports*



Navigation : *Middleware servers > MS_2 > Message listener service > Listener Ports*

WebLogic Server Administration Console

Home > Environment > Servers > **MS_2** > **MessageListenerService** > **Listener Ports**

Use this page to configure listener ports upon which message-driven beans listen for messages. Each port specifies the JMS connection factory and JMS destination that a message-driven bean deployed against that port listens upon.

Preferences

Items:

Select Items: Description: Connection factory JNDI name: Destination JNDI name: Status:

You can administer the following resources:

Select	Description	Connection factory JNDI name	Destination JNDI name	Status
<input type="checkbox"/>	EMQ_IN_QUEUE	emq2cf	EMQ_IN_QUEUE	
<input type="checkbox"/>	EMQ_OUT_QUEUE	emq2cf	EMQ_OUT_QUEUE	
<input type="checkbox"/>	MDB_QUEUE	mqscf	MDB_QUEUE	
<input type="checkbox"/>	NOTIFY_QUEUE	notifscf	NOTIFY_QUEUE	
<input type="checkbox"/>	ERROR_QUEUE	notifscf	ERROR_QUEUE	
<input type="checkbox"/>	EMQ_QUEUE	notifscf	EMQ_QUEUE	

Total: 6

Field Help
For field help information, point to the field or list marker when the help cursor is displayed.

Page Help
[More information about this page](#)

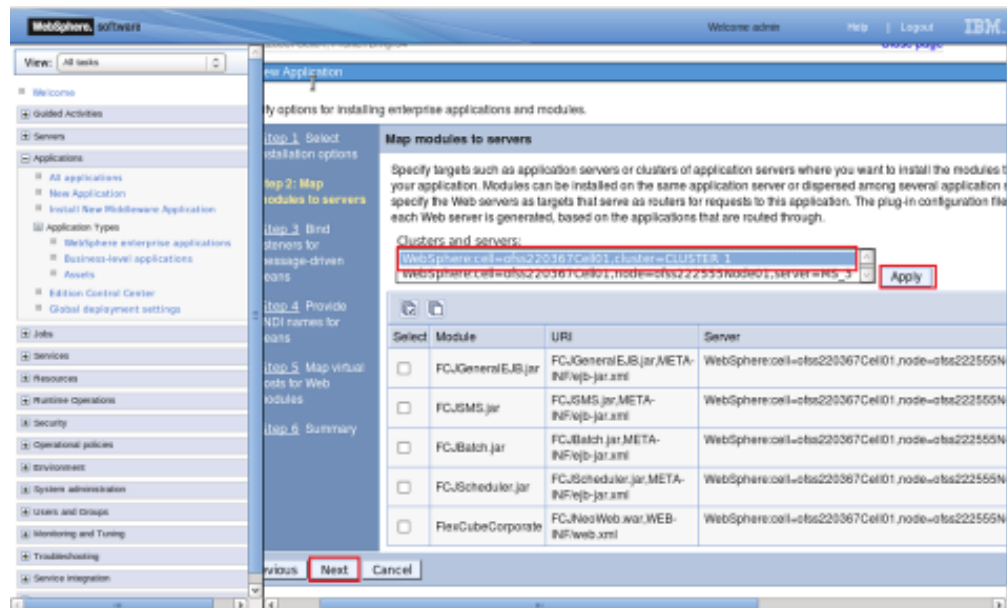
Command Assistance
[View administration commands associated with this page](#)

Left Navigation Panel:

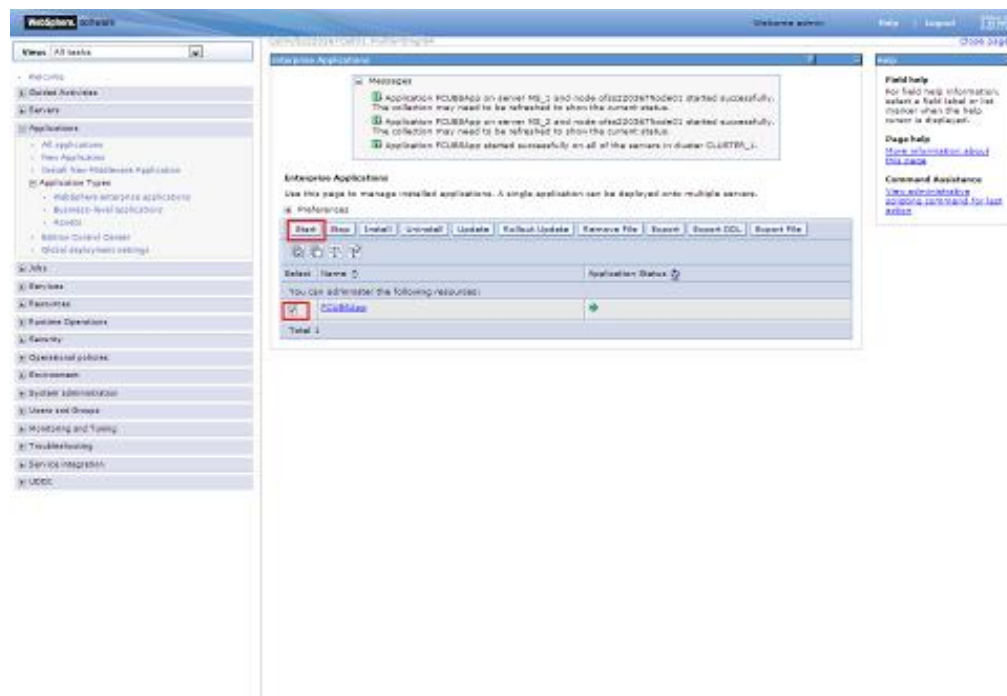
- Home
- Environment
- Servers**
 - View servers
 - All servers
 - Server Types
 - Clusters
 - Deployment
 - Work Groups
- Applications
 - Applications
- MS
 - MS
- Services
 - Services
- Resources
 - Resources
 - MS
 - MS providers
 - Connection factories
 - Queue connection factories
 - Topic connection factories
 - Global
 - Topics
 - Activation specifications
 - MS
 - MS providers
 - MS providers
 - Data sources (WebLogic Application Server)
 - Resource Adapters
 - Resource beans
 - Cache instances
 - Mail
 - URL
 - Resource Environment
- Runtime Operations
- Security
- Operational policies
- Environment
 - Virtual hosts
 - Upgrade global web services configuration
 - Web services listeners
 - Shared libraries
 - HTTP application routers

6. Deploy Application to Cluster

While deploying ensure the application is installed to Cluster



Start FCUBS application



6.1.1 Test the application

Make a note of the ports `PROXY_HTTPS_ADDRESS/PROXY_HTTP_ADDRESS` to access the application.

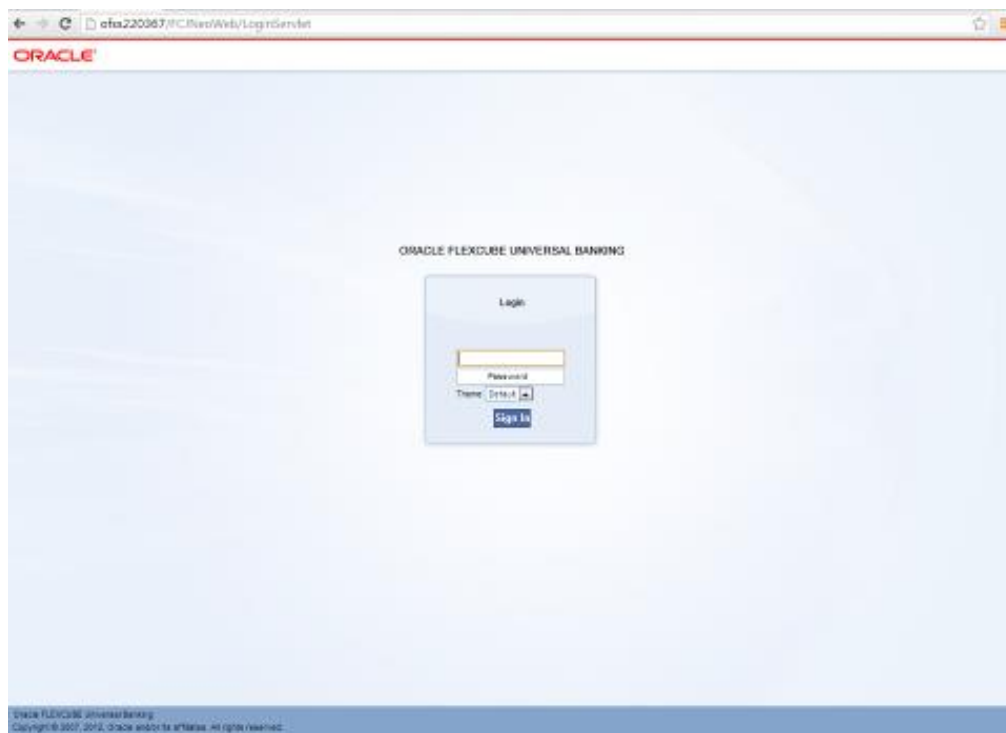
Navigation : *Servers > Server Types > WebSphere proxy servers > [proxy_server_1] > Ports*

The screenshot shows the WebSphere Admin Console interface. On the left is a navigation tree with categories like Servers, Clusters, Applications, and more. The main panel displays the 'Ports' configuration for 'proxy_server_1'. A table lists the following ports:

Select	Port Name	Host	Port	Transport Details
<input type="checkbox"/>	ROOTSTAMP_ADDRESS	afba223567.in.oracle.com	8813	No associated transports
<input type="checkbox"/>	CERT SSL MUTUALAUTH_LISTENER_ADDRESS	afba223567.in.oracle.com	0	No associated transports
<input type="checkbox"/>	CERT SSL SERVERAUTH_LISTENER_ADDRESS	afba223567.in.oracle.com	0	No associated transports
<input type="checkbox"/>	RPC_LISTENER_ADDRESS	*	9337	No associated transports
<input type="checkbox"/>	RPC_CLIENT_ADDRESS	*	7874	No associated transports
<input type="checkbox"/>	RPC_CONNECTOR_ADDRESS	localhost	9436	No associated transports
<input type="checkbox"/>	SOAP_LISTENER_ADDRESS	afba223567.in.oracle.com	0	No associated transports
<input type="checkbox"/>	SOAP_VIA_HTTP_LISTENER_ADDRESS	*	10014	No associated transports
<input type="checkbox"/>	SOAP_VIA_HTTP_LISTENER_ADDRESS	*	10013	No associated transports
<input type="checkbox"/>	PROXY_HTTPS_ADDRESS	*	443	No associated transports
<input type="checkbox"/>	PROXY_HTTP_ADDRESS	*	80	No associated transports
<input type="checkbox"/>	PROXY_SIP_ADDRESS	*	5061	No associated transports
<input type="checkbox"/>	PROXY_SIP_ADDRESS	*	5060	No associated transports
<input type="checkbox"/>	SOAP SSL SERVERAUTH_LISTENER_ADDRESS	afba223567.in.oracle.com	0	No associated transports
<input type="checkbox"/>	RPC_CONNECTOR_ADDRESS	afba223567.in.oracle.com	8883	No associated transports

Launch Application:

URL : `http://<host>:<PROXY_HTTP_ADDRESS>/FCJNeoWeb` or
`https://<host>:<PROXY_HTTPS_ADDRESS>/FCJNeoWeb`



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Cluster Creation on Websphere
[June] [2024]
Version 14.7.4.0.0

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