

FCUBS JMS Configuration Using Websphere Default Messaging  
Provider

Oracle FLEXCUBE Universal Banking

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# 1. Purpose

The purpose of this document is to explain the steps required for JMS Configuration in cluster mode using WEBSHERE DEFAULT MESSAGING PROVIDER for Websphere 8.5.5

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## 2. Introduction

The default messaging provider is installed and runs as part of WebSphere Application Server, and needs no further administration. WebSphere administrative console is used to configure JMS resources for applications and can manage messages and subscriptions associated with JMS destinations.

The default messaging provider is the Java™ Message Service (JMS) API implementation for messaging (connection factories, JMS destinations, and so on). The concrete destinations (queues and topic spaces) behind the default messaging provider interface are implemented in a service integration bus.

The default messaging provider is based on service integration technologies., this document deals with

- Service Bus Creation

A service integration bus consists of one or more bus members. A bus member can be an application server or a cluster. Each bus member will have one (or possibly more in the case of clusters) messaging engine that manages connections to the bus and messages.

- JMS connection factories and service integration

A JMS connection factory is used to create connections to JMS resources on a service integration bus.

- JMS queue resources and service integration

Creation of JMS queue resources provided by the default messaging provider for JMS point-to-point messaging and supported by a service integration bus.

- Application access to JMS resources

Describes the application access to Java Message Service (JMS) resources provided by the default messaging provider.

## 3. Pre-Requisites

The document assumes that the below are created before proceeding JMS creation.

### 3.1 Nodes

2 nodes are created

WebSphere, software

Views: All tasks

Cell=ofss222565Cell01, Profile=Dmgr01

### 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, Full Resynchronize, Stop

Select	Name	Host Name	Version	Discovery Protocol	Status
<input type="checkbox"/>	ofss220239Node02	ofss220239.in.oracle.com	Base 8.5.5.0	TCP	+
<input type="checkbox"/>	ofss222565CellManager01	ofss222565.in.oracle.com	ND 8.5.5.0	TCP	+
<input type="checkbox"/>	ofss222565Node03	ofss222565.in.oracle.com	ND 8.5.5.0	TCP	+

Total 3

### 3.2 Node Agents

Both the Node Agents are started.

WebSphere, software

Views: All tasks

Cell=ofss222565Cell01, Profile=Dmgr01

### Node agents

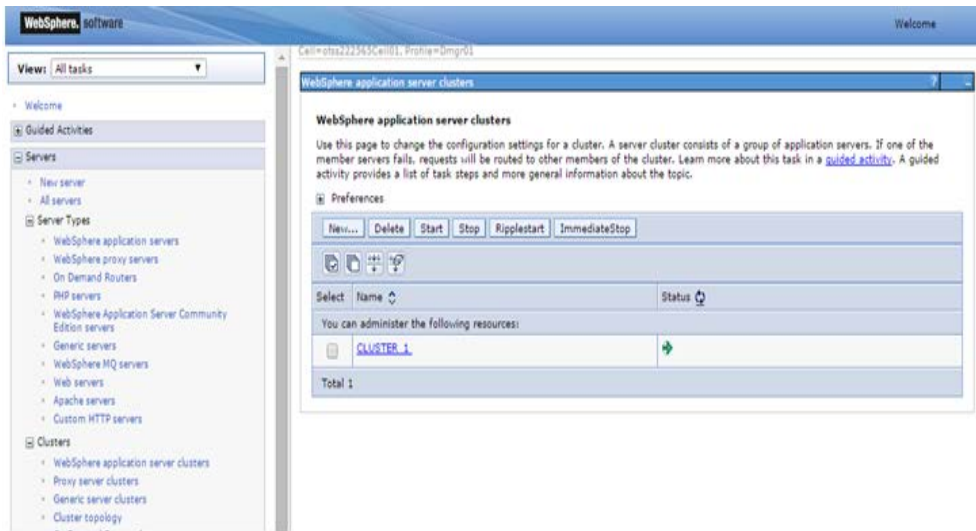
Use this page to manage node agents and application servers on the node that a node agent manages. The node agent process serves as an intermediary between the application servers on the node and the deployment manager. The node agent process runs on every node and is specialized to perform node-specific administration functions, such as server process monitoring, configuration synchronization, file transfer, and request routing.

Preferences: Stop, Restart, Restart all Servers on Node

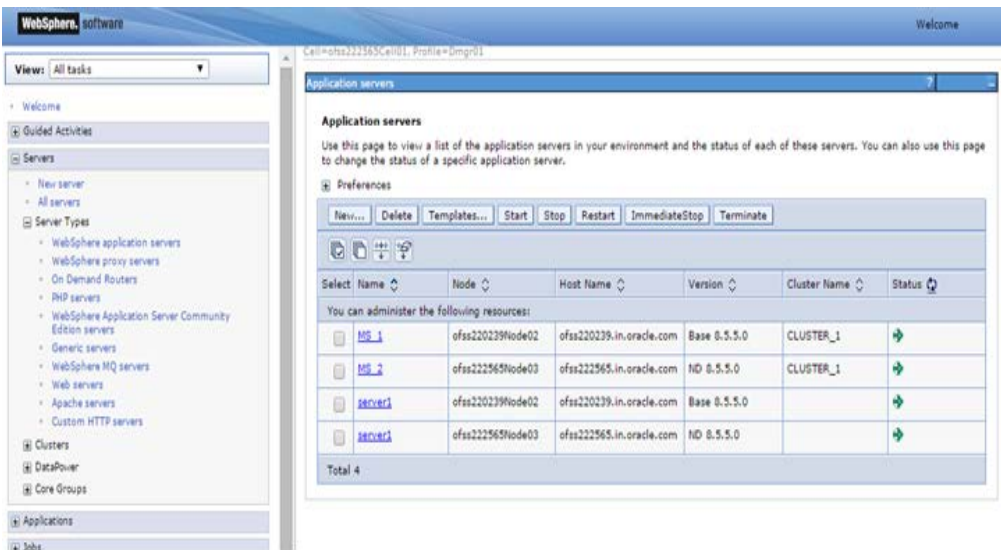
Select	Name	Node	Host Name	Version	Status
<input type="checkbox"/>	nodeagent	ofss220239Node02	ofss220239.in.oracle.com	Base 8.5.5.0	+
<input type="checkbox"/>	nodeagent	ofss222565Node03	ofss222565.in.oracle.com	ND 8.5.5.0	+

Total 2

### 3.3 Cluster

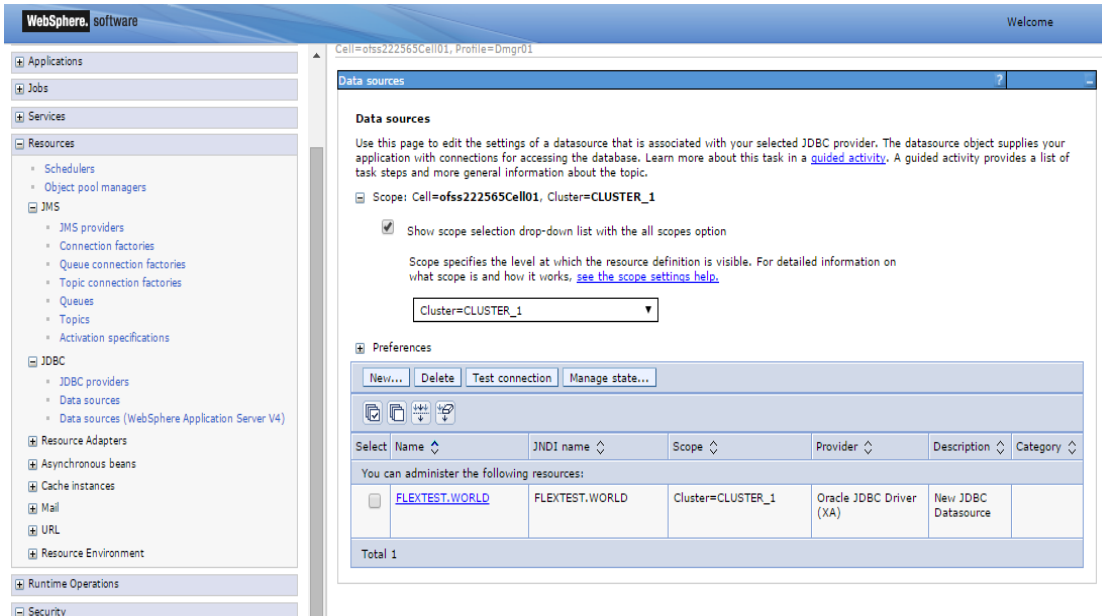


### 3.4 Managed Servers



### 3.5 DataSource

Ensure that DataSource required for the MDB ear is created with Target as Cluster\_1



### 3.6 Shared Folder

Shared folders for File Store Creation are required and this folder should be accessible across both the servers (eg, NFS mount). For fail over of messaging engines to another, all servers in cluster require a separate folder. If there are 4 Managed Servers in the clusters then 4 separate folders are required.

Eg,

/scratch/MessageStore/JMS\_1/

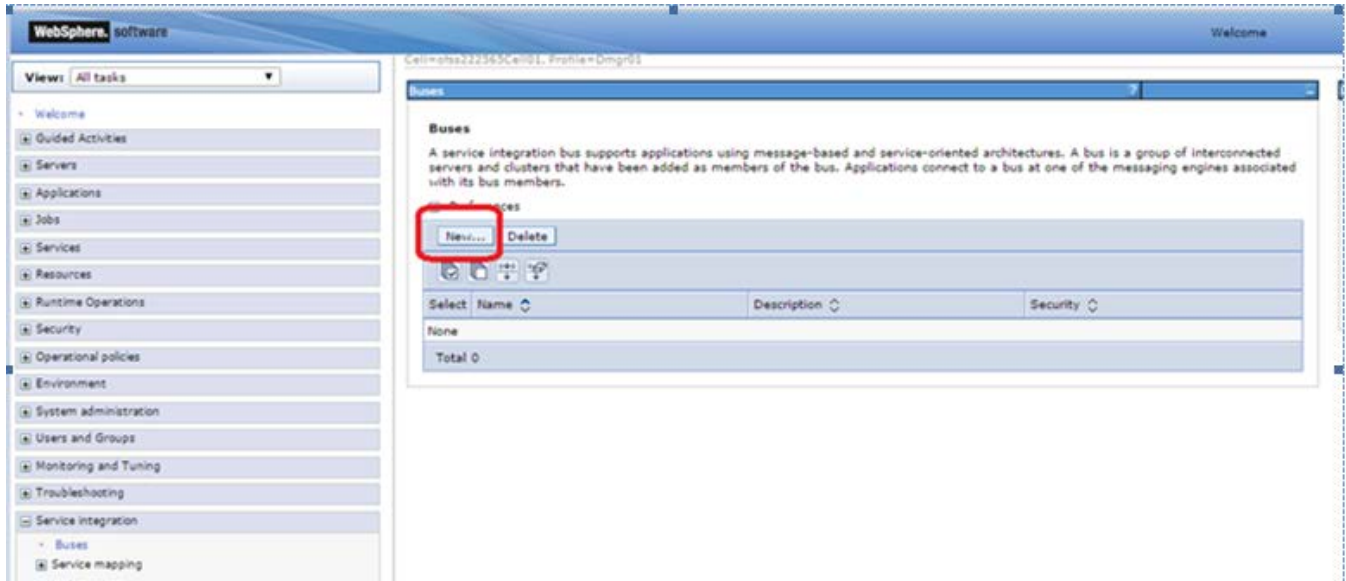
/scratch/MessageStore/JMS\_2/

/scratch/ MessageStore /JMS\_3/

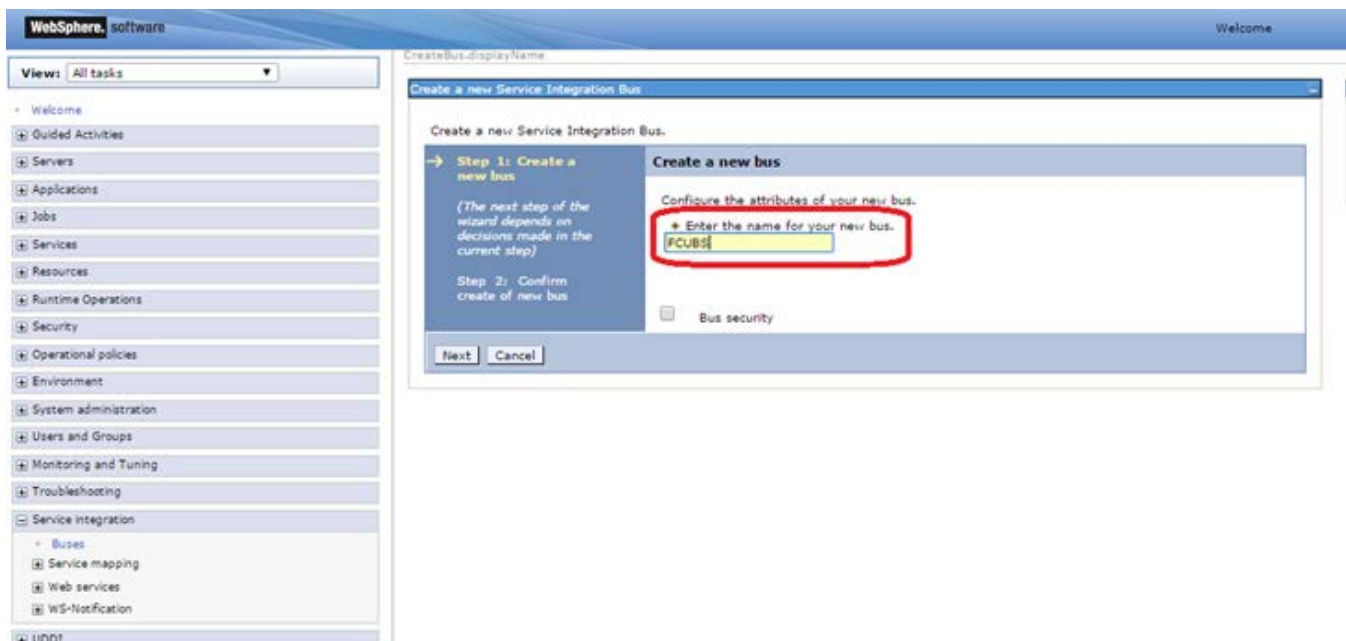
## 4. JMS Configuration

### 4.1 Service Integration Bus Creation

- 1) Navigate to Service Integration > Buses > Click on New

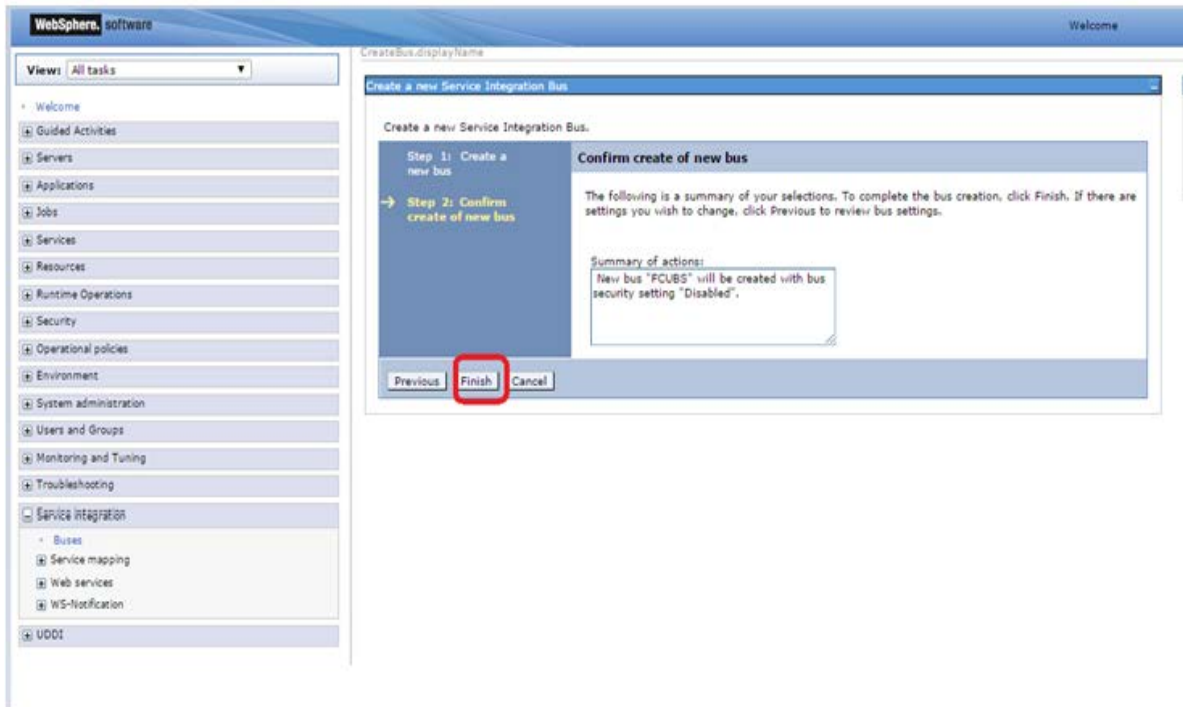


- 2) Enter Name for the new Bus, Uncheck "Bus Security" if security is not enabled during FCUBS property file build and click on Next

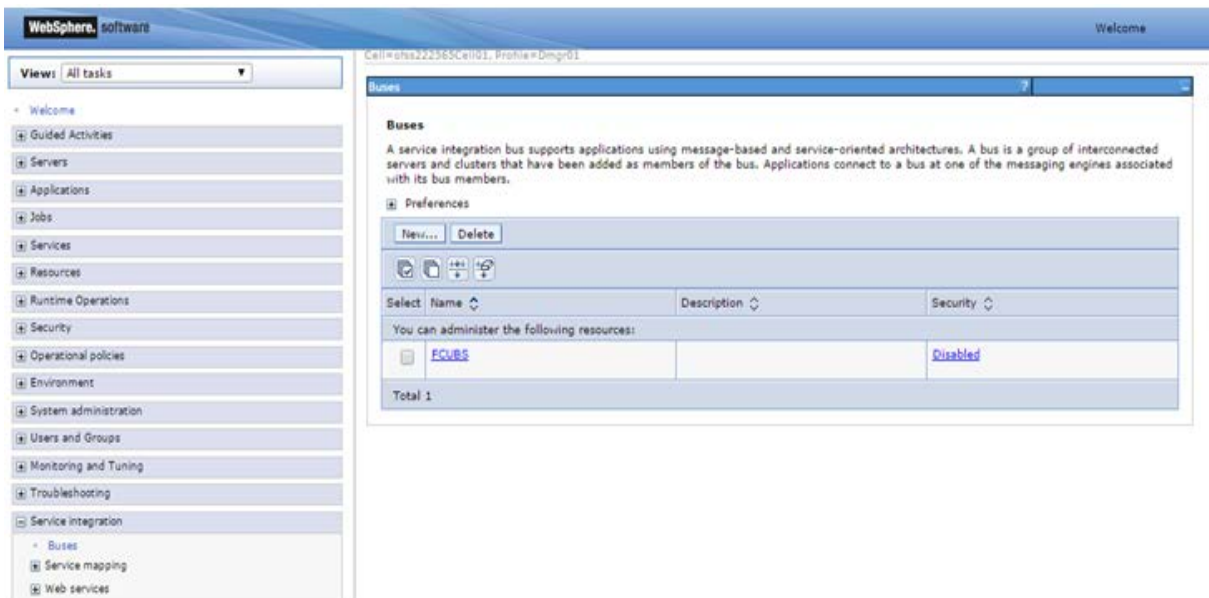




3) Click on Finish

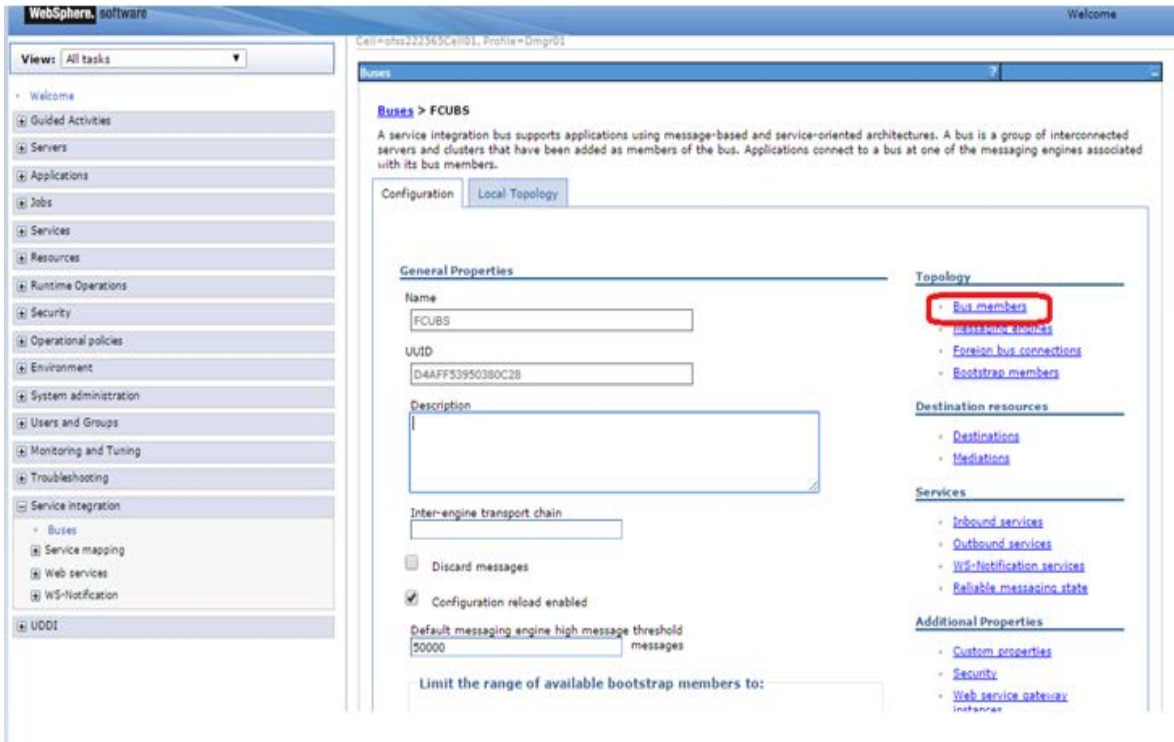


4) New Bus FCUBS is created



## 4.2 Bus Member (File Store Creation)

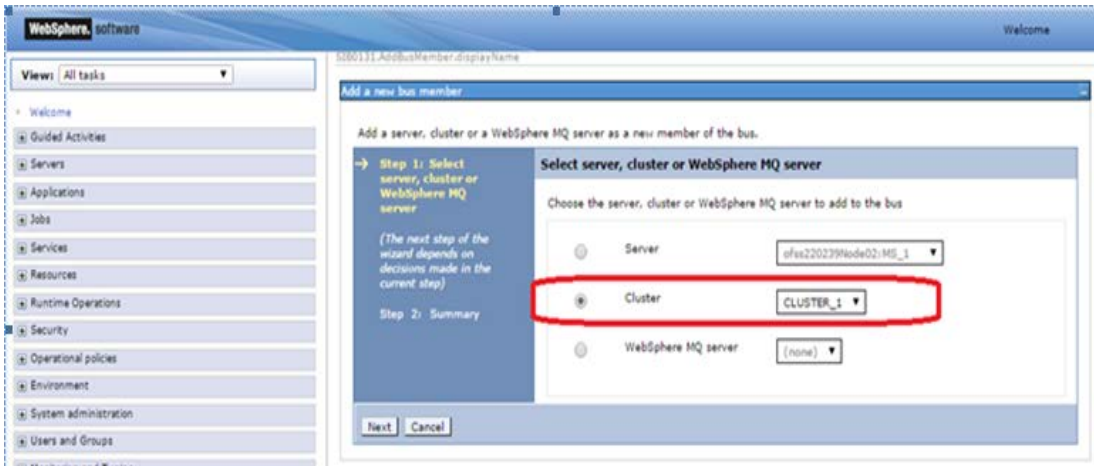
- 1) Navigate to Service Integration > Buses > Click on FCUBS(new bus Created) > Click on Bus Member under Topology



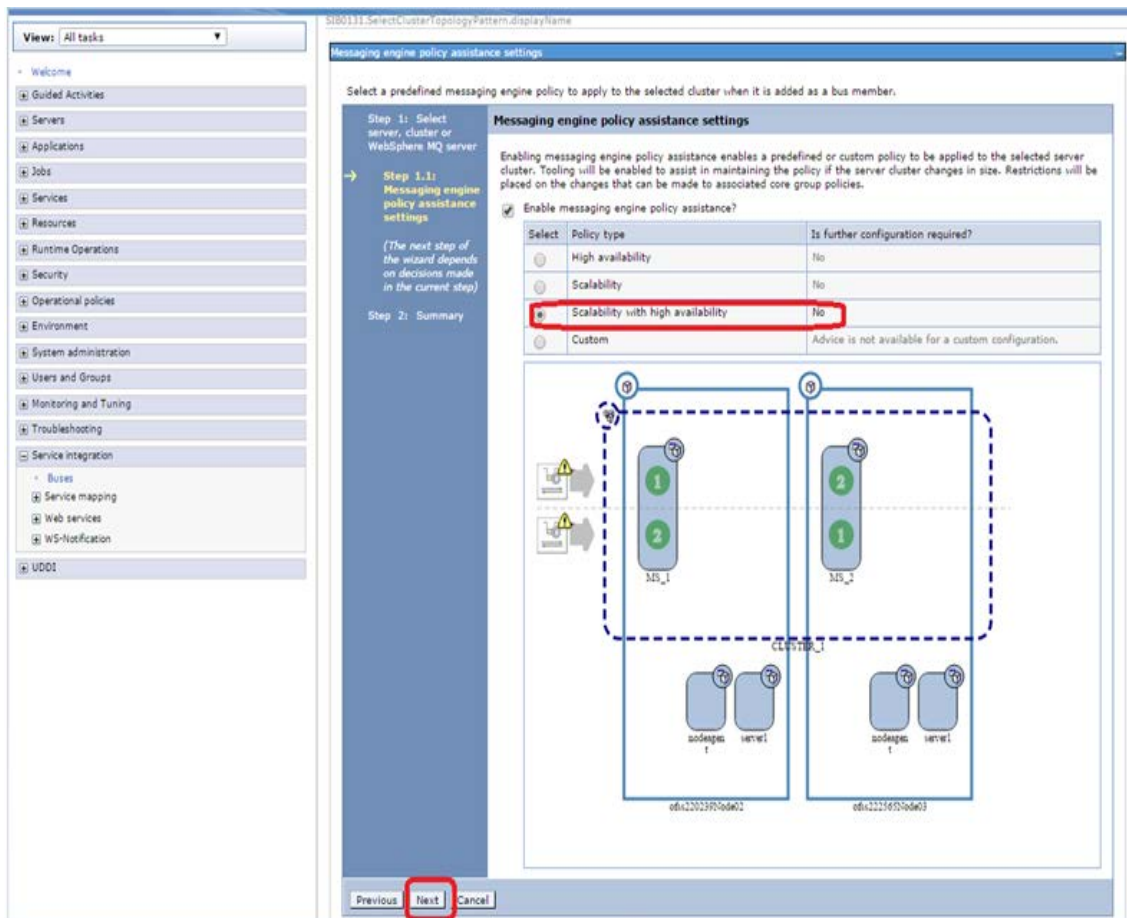
- 2) Click On Add



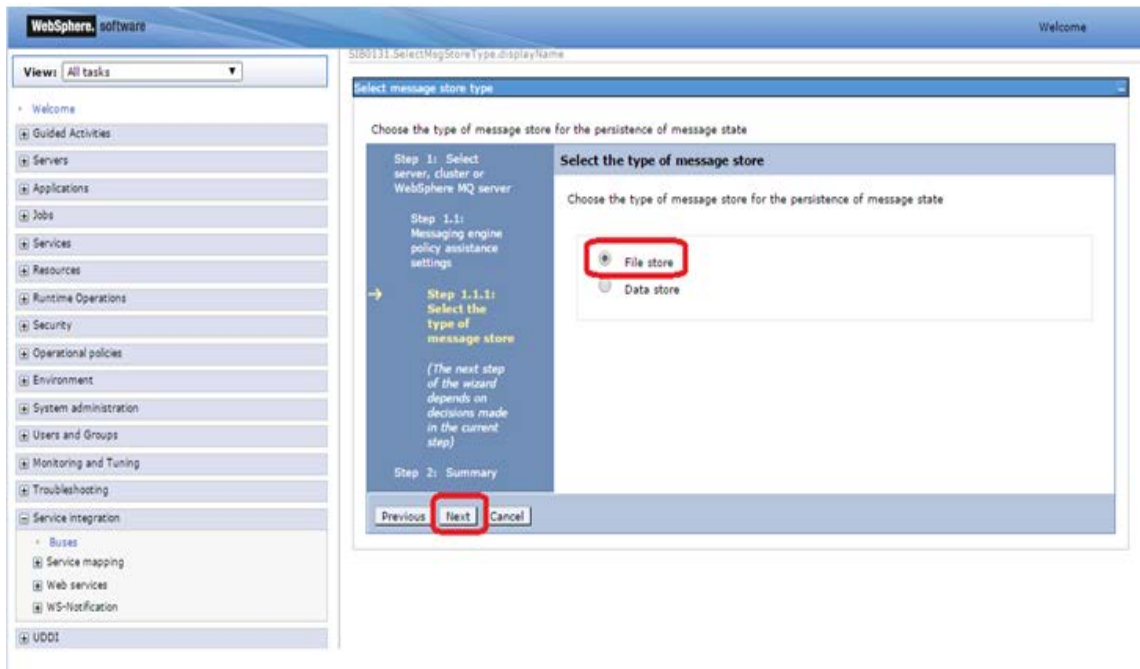
3) Select Cluster and Click on Next



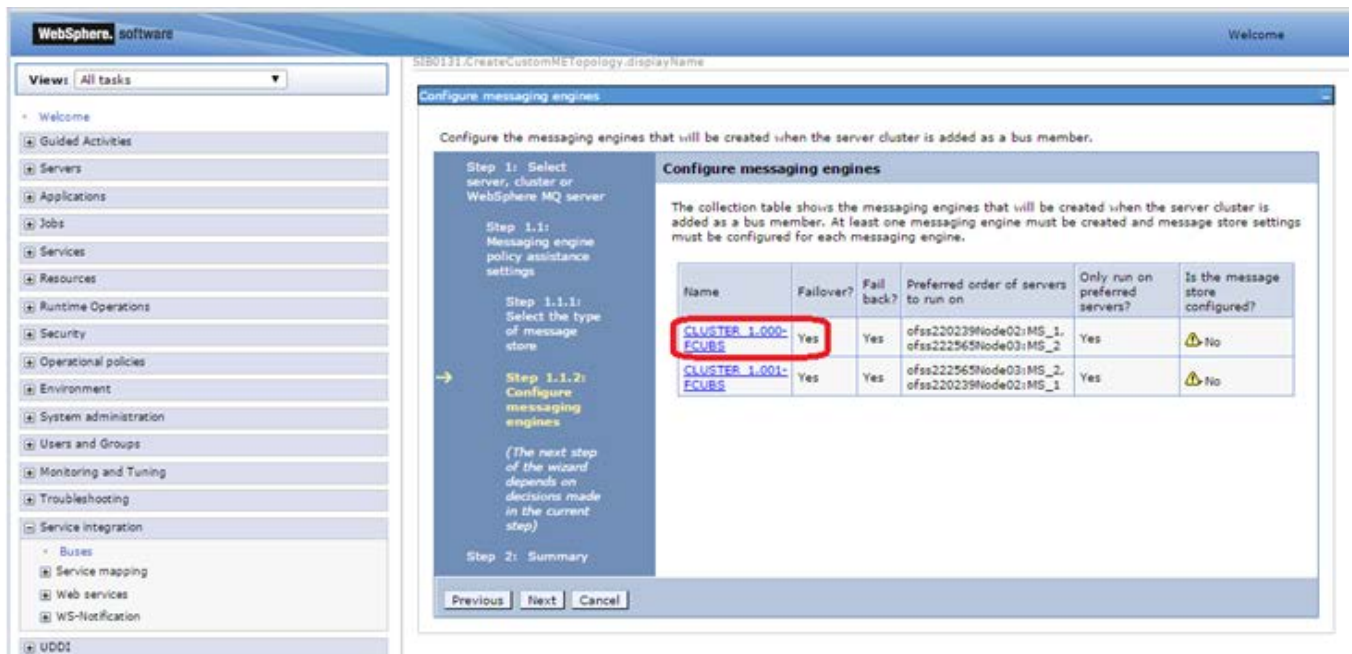
4) Select Scalability and High Availability Policy Type and Click on Next.



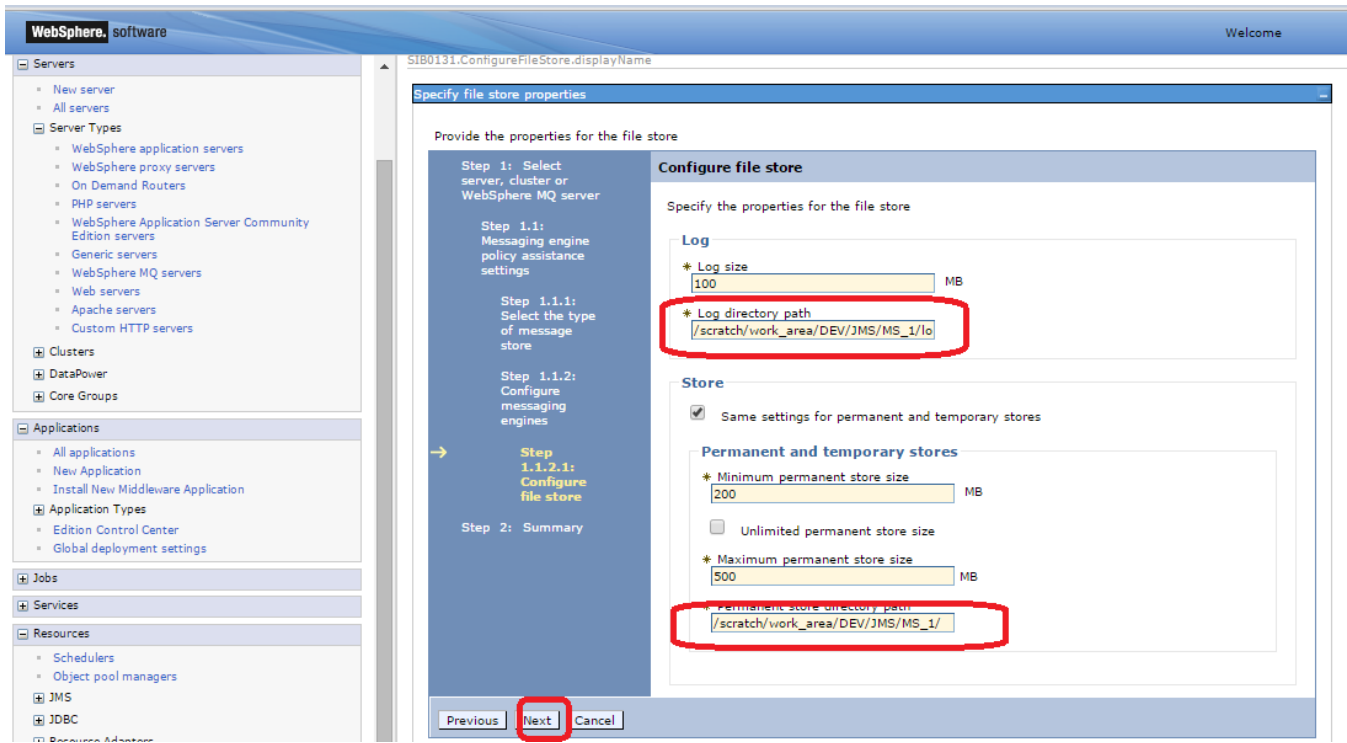
5) Select File Store and Click on Next



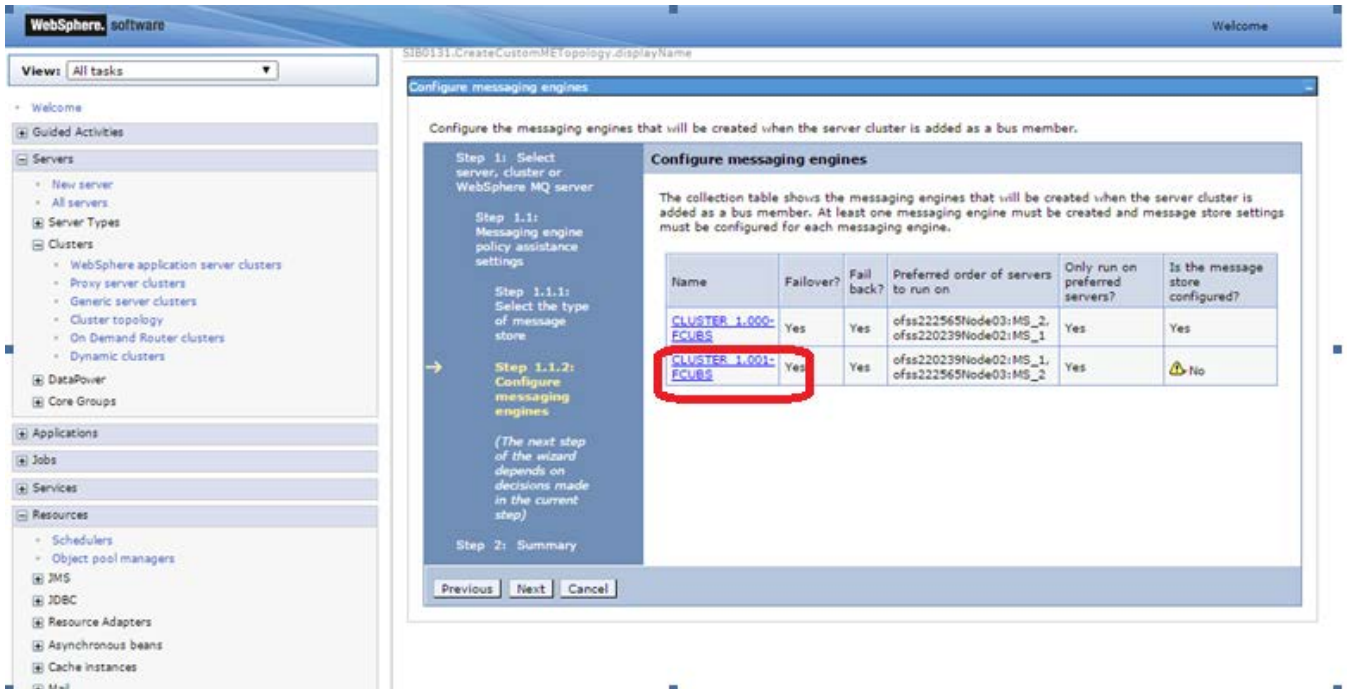
6) Select the Node 1 Message Engine



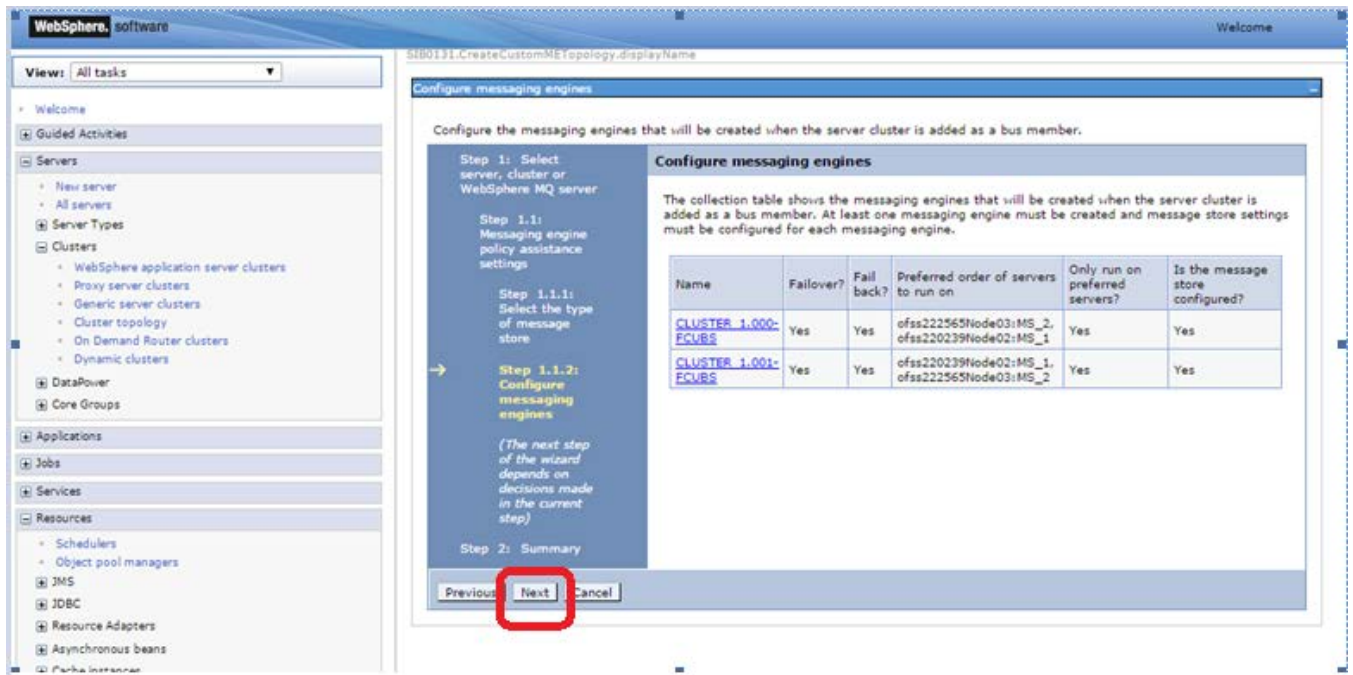
- 7) Enter the Log Directory Path and Permanent store directory path(shared path across the nodes) and Click on Next



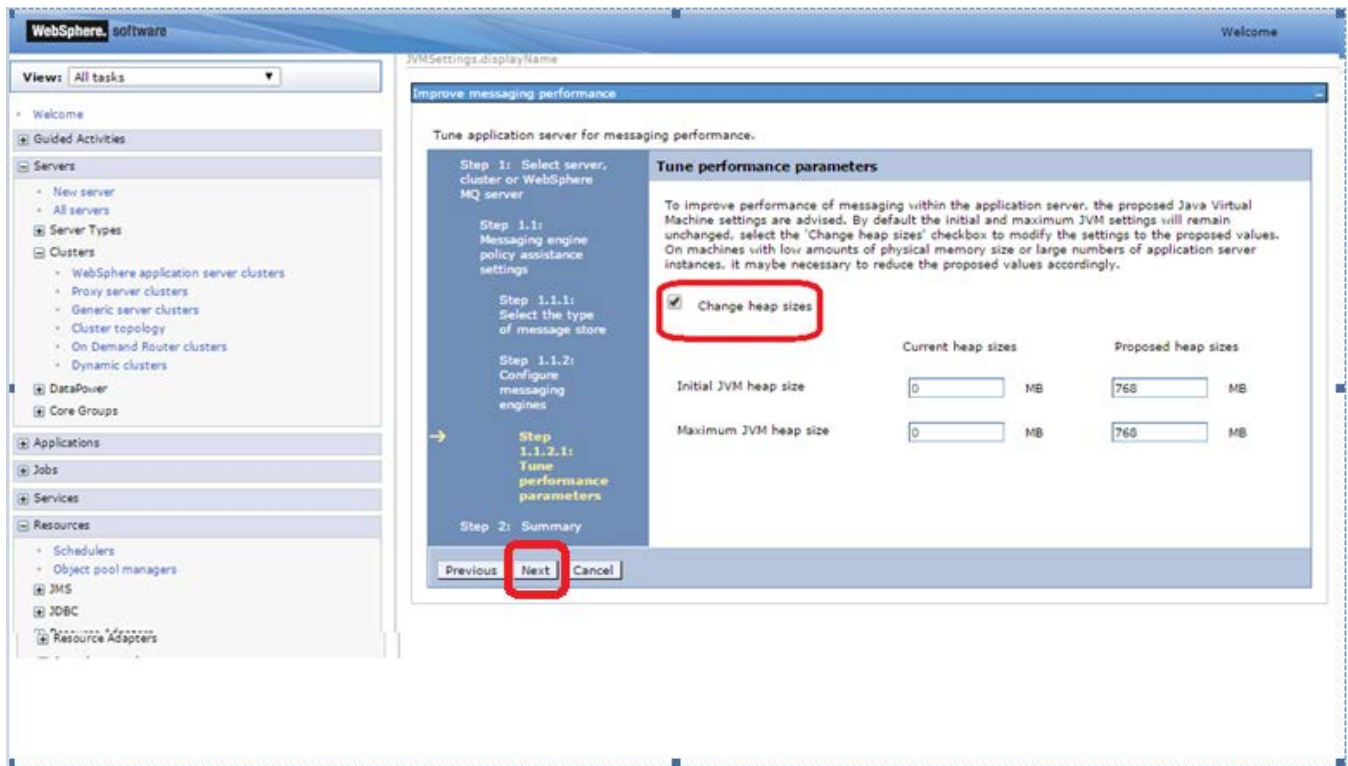
- 8) Click on other message engine and set the FileStore



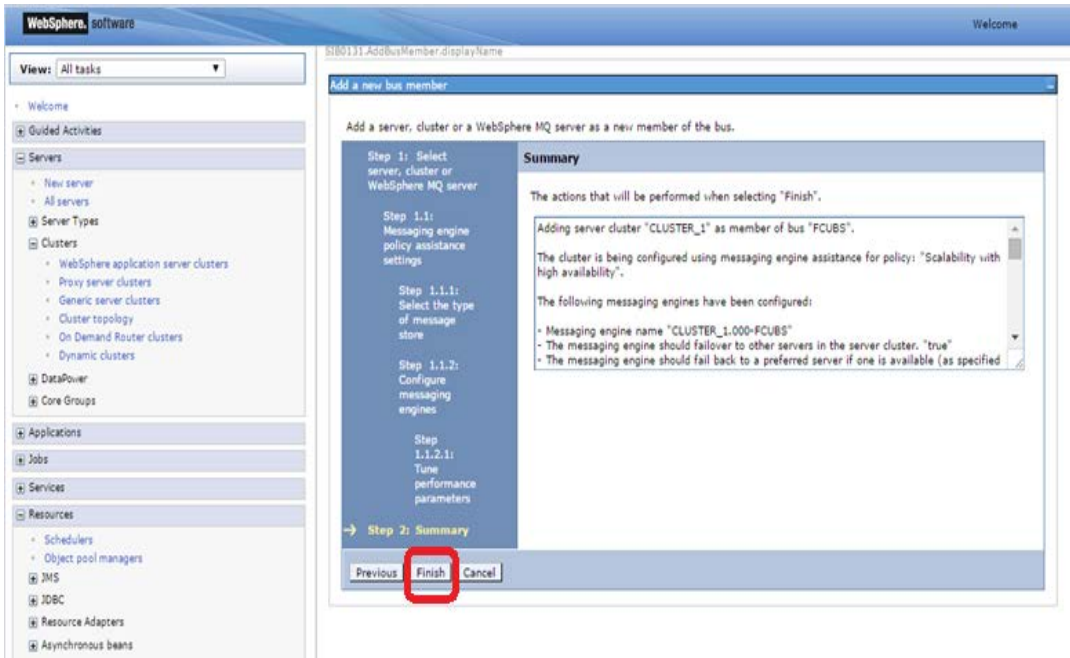
9) Click on Next after Setting FileStore for all messaging engines



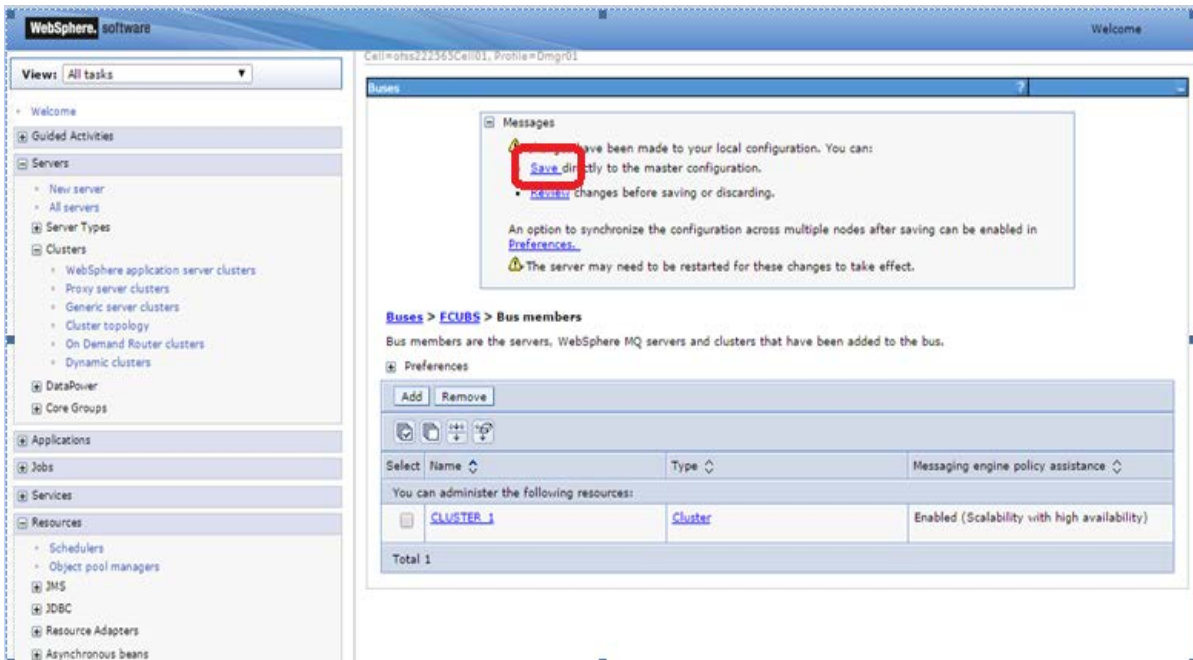
10) Select Change Heap Sizes and Click on Next



11) Click on Finish



12) Click on Save





## 4.3 Destination Queue Creation

- 1) Navigate to Service Integration > Buses > Click on FCUBS(new bus Created) > Click on Destination under Destination Resources

The screenshot shows the WebSphere software interface. On the left is a navigation tree with categories like Clusters, DataPower, Core Groups, Applications, Jobs, Services, and Resources. The main area displays the configuration for a bus named 'FCUBS'. The 'General Properties' section includes fields for Name (FCUBS), UUID (D4AFF53950380C28), and Description. The 'Topology' section has links for Bus members, Messaging engines, Foreign bus connections, and Bootstrap members. The 'Destination resources' section is highlighted with a red box and contains links for Destinations and Mediations. The 'Services' section has links for Inbound services, Outbound services, WS-Notification services, and Reliable messaging state.

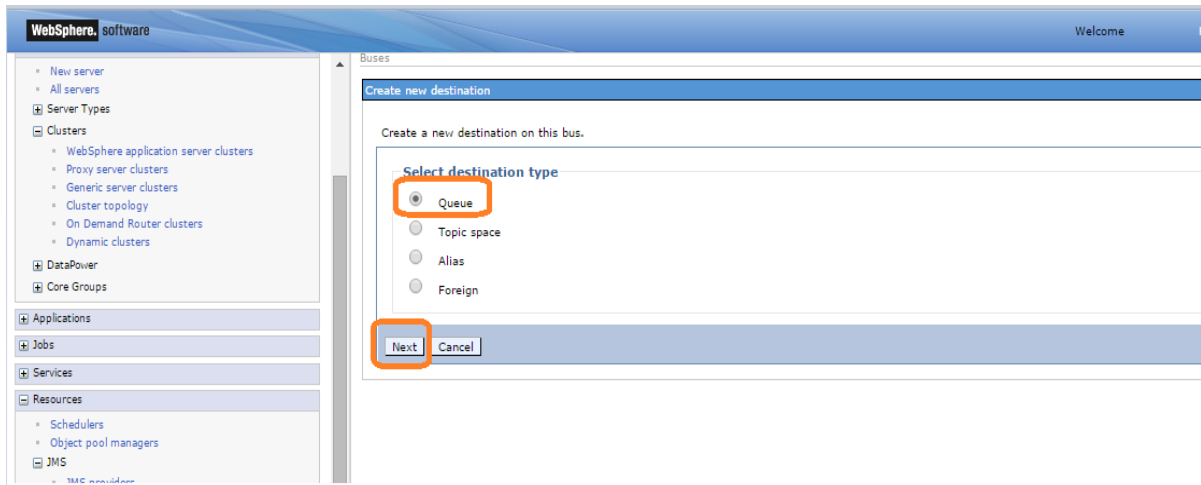
- 2) Click on New

The screenshot shows the 'Destinations' page for the FCUBS bus. The 'New...' button is highlighted with a red box. Below the button is a table of existing destinations. The table has columns for Select, Identifier, Bus, Type, Description, and Mediation. There are three entries in the table, all with Bus type 'FCUBS' and Type 'Queue'. The total count is 3.

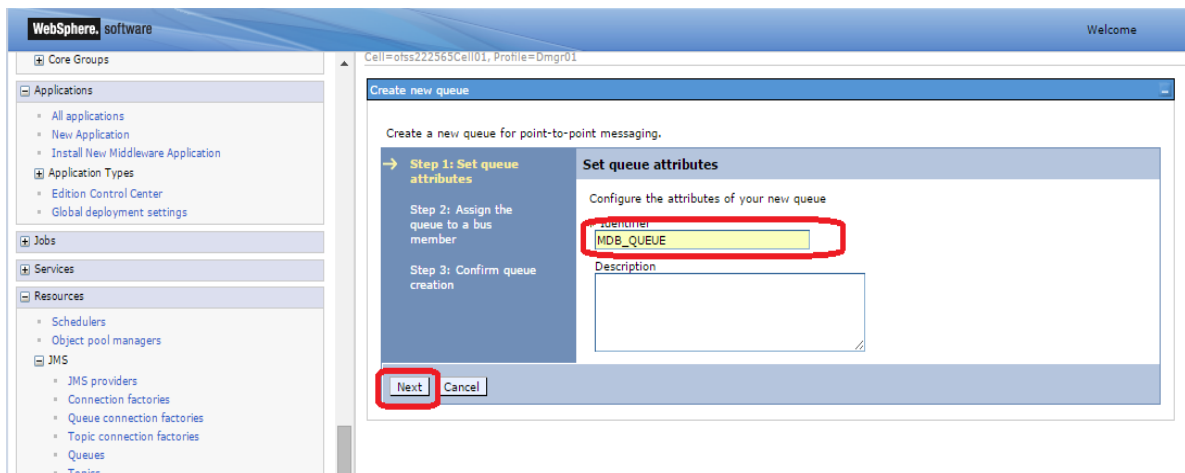
Select	Identifier	Bus	Type	Description	Mediation
<input type="checkbox"/>	<a href="#">Default.Topic.Space</a>	FCUBS	Topic space		
<input type="checkbox"/>	<a href="#">SYSTEM.Exception.Destination.CLUSTER_1.000-FCUBS</a>	FCUBS	Queue		
<input type="checkbox"/>	<a href="#">SYSTEM.Exception.Destination.CLUSTER_1.001-FCUBS</a>	FCUBS	Queue		

Total 3

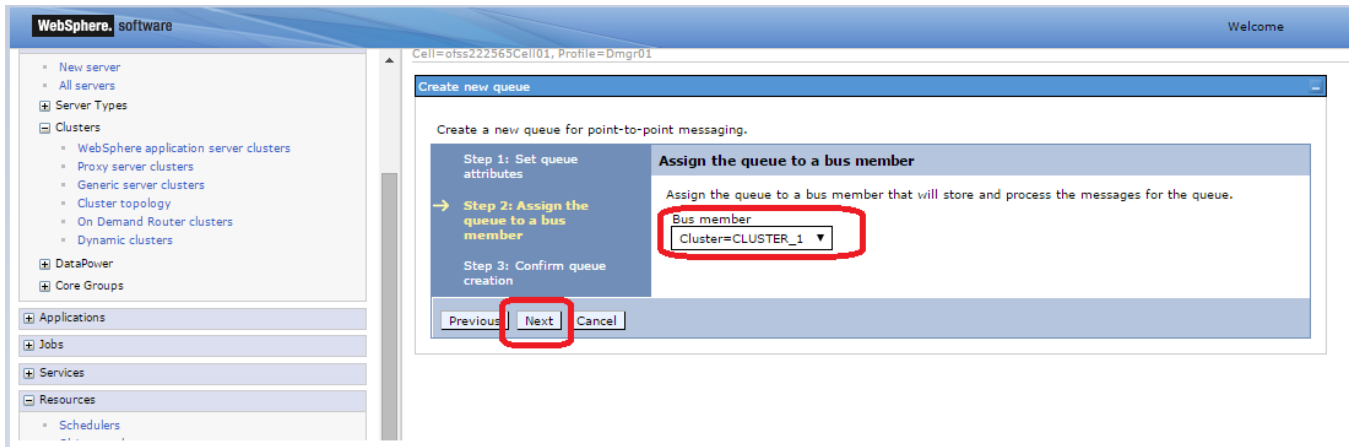
### 3) Select Queue and Click on Next



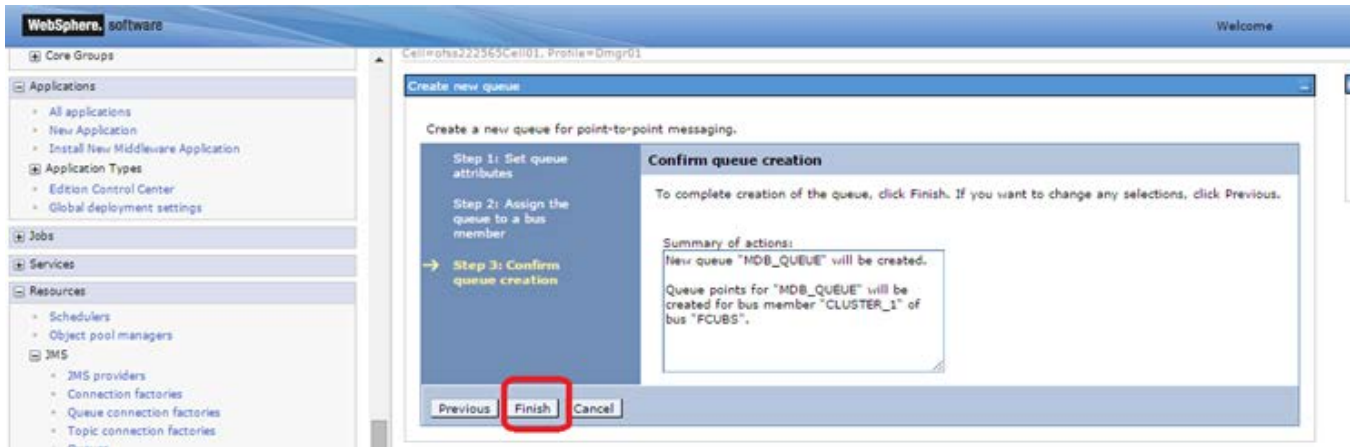
### 4) Enter Identifier as MDB\_QUEUE and Click on Next



### 5) Select Bus Member as Cluster and Click on Next



6) Click on Finish



7) Click on Save

WebSphere, software

Cell=otss222565Cell01, Profile=Dmgr01

Messages

Changes have been made to your local configuration. You can:

- Save directly to the master configuration.
- Review changes before saving or discarding.

An option to synchronize the configuration across multiple nodes after saving can be enabled in [Preferences](#).

The server may need to be restarted for these changes to take effect.

Buses > FCUBS > Destinations

A bus destination is defined on a service integration bus, and is hosted by one or more locations within the bus. Applications can attach to the destination as producers, consumers, or both to exchange messages.

Preferences

New... Delete Mediate Unmediate

Select	Identifier	Bus	Type	Description	Mediation
<input type="checkbox"/>	<a href="#">Default.Topic.Space</a>	FCUBS	Topic space		
<input type="checkbox"/>	<a href="#">MQB_QUEUE</a>	FCUBS	Queue		

8) Similarly create Destinations for all the other Queue's required

WebSphere, software

Cell=otss222565Cell01, Profile=Dmgr01

Buses > FCUBS > Destinations

A bus destination is defined on a service integration bus, and is hosted by one or more locations within the bus. Applications can attach to the destination as producers, consumers, or both to exchange messages.

Preferences

New... Delete Mediate Unmediate

Select	Identifier	Bus	Type	Description	Mediation
<input type="checkbox"/>	<a href="#">Default.Topic.Space</a>	FCUBS	Topic space		
<input type="checkbox"/>	<a href="#">MQB_QUEUE</a>	FCUBS	Queue		
<input type="checkbox"/>	<a href="#">MQB_QUEUE_DLO</a>	FCUBS	Queue		
<input type="checkbox"/>	<a href="#">MQB_QUEUE_RESPONSE</a>	FCUBS	Queue		
<input type="checkbox"/>	<a href="#">_SYSTEM.Exception.Destination.CLUSTER_1.000-FCUBS</a>	FCUBS	Queue		

## 5. Resource Creation

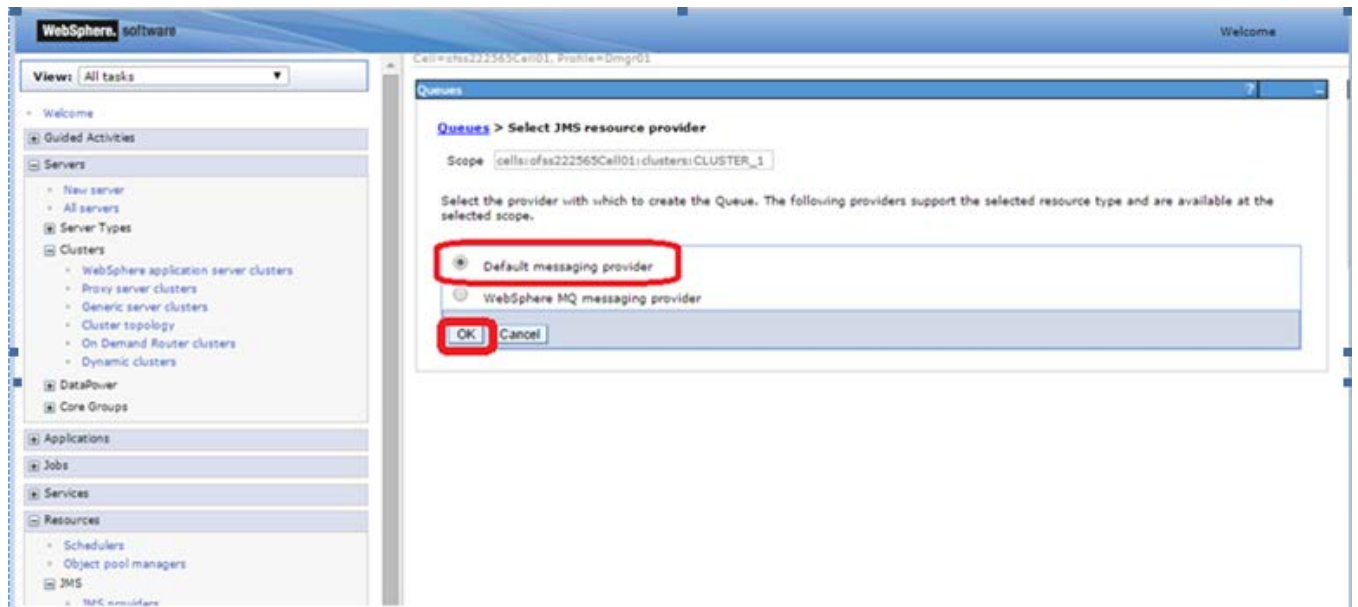
### 5.1 Queue Creation

- 1) Navigate to Resources > JMS > Queues > Select Scope as Cluster and Click on New

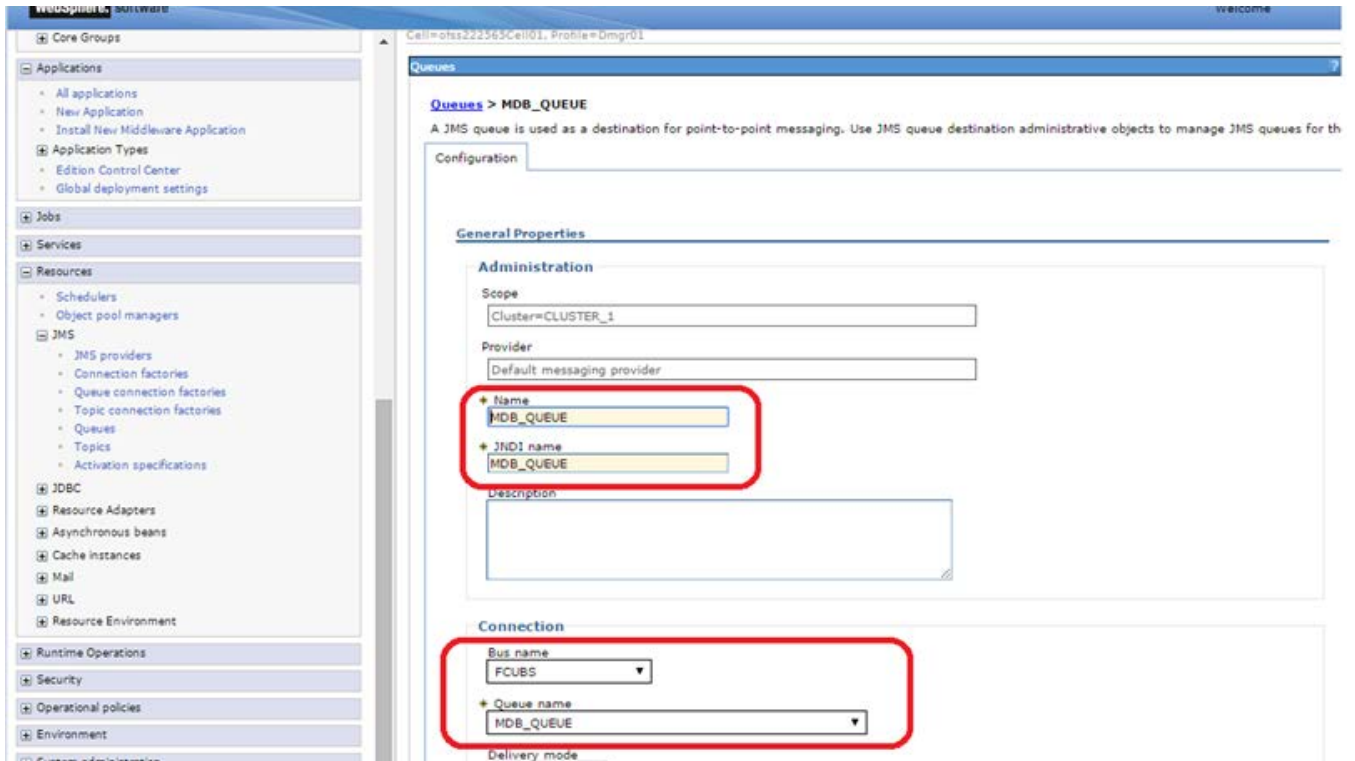
The screenshot displays the WebSphere Administration Console interface. On the left, a navigation tree shows the path: Resources > JMS > Queues, with 'Queues' highlighted by a red box. The main content area shows the 'Queues' configuration page. The 'Scope' is set to 'Cell=ofss222565Cell01, Cluster=CLUSTER\_1'. A 'Show scope selection drop-down list with the all scopes option' checkbox is checked. Below this, a dropdown menu shows 'Cluster=CLUSTER\_1'. In the 'Preferences' section, the 'New' button is highlighted with a red box. Below the preferences, there is a table with columns: Select, Name, JNDI name, Provider, Description, and Scope. The table currently shows 'None' and a 'Total 0'.

Select	Name	JNDI name	Provider	Description	Scope
	None				
Total 0					

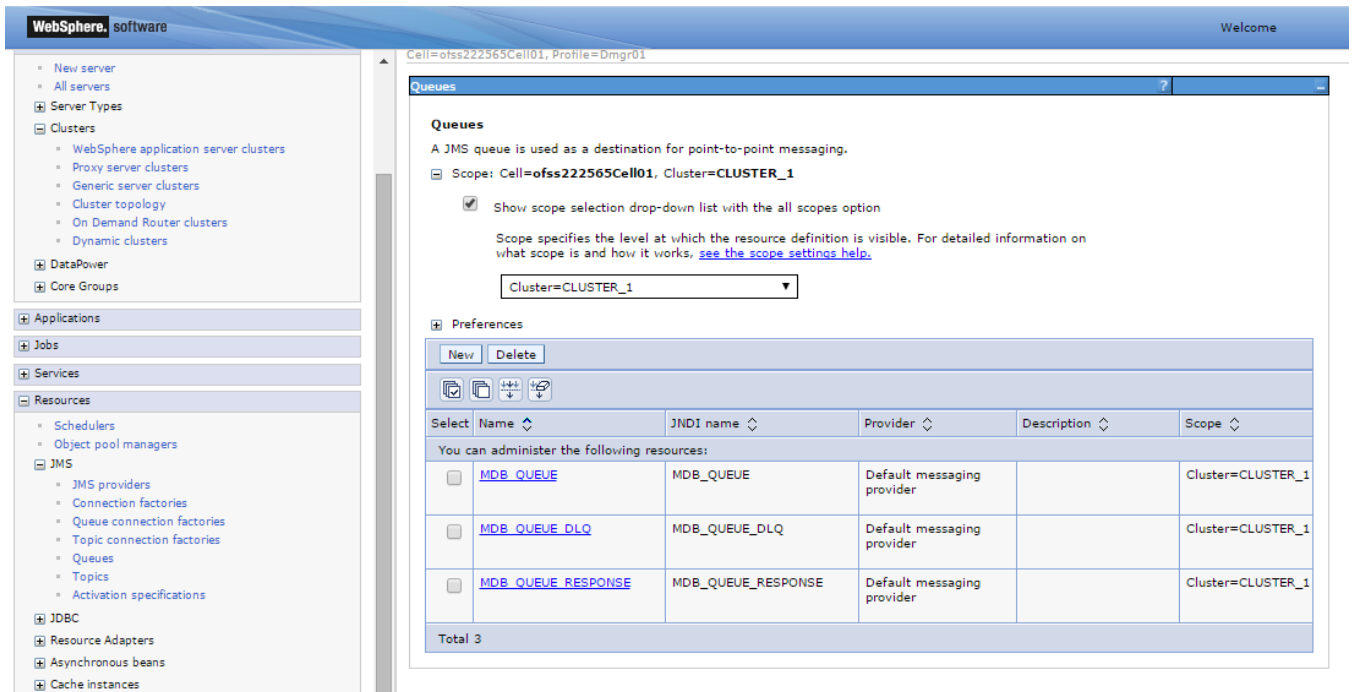
2) Select "Default messaging provider" and Click on OK



3) Enter The Name, JNDI Name. Select Bus and Queue Name accordingly and Click on OK

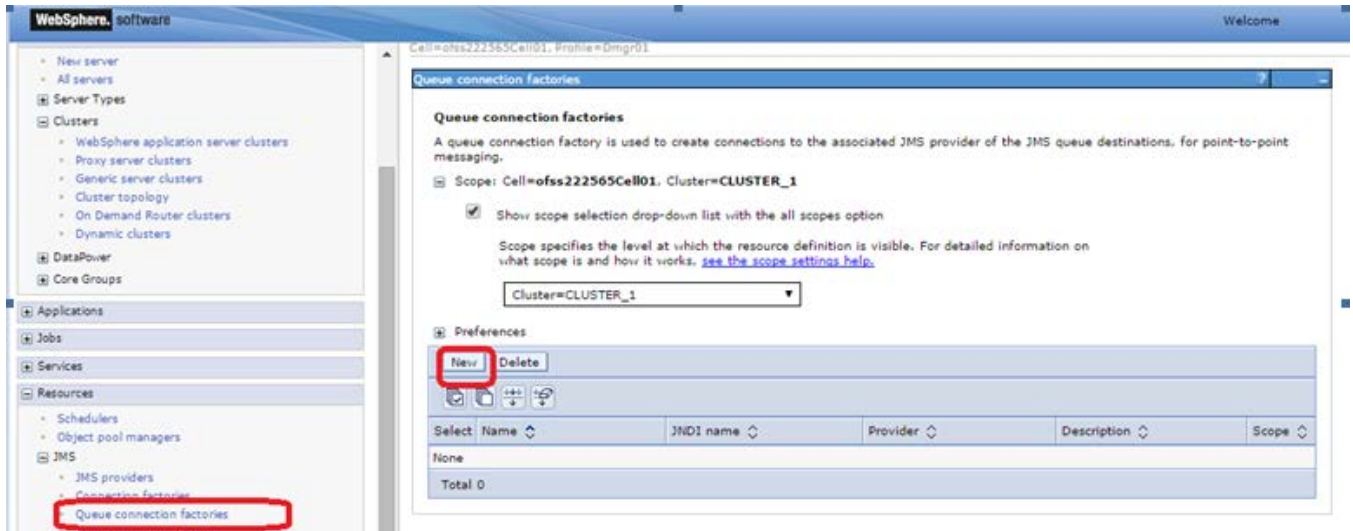


4) Similarly create other Queue's required

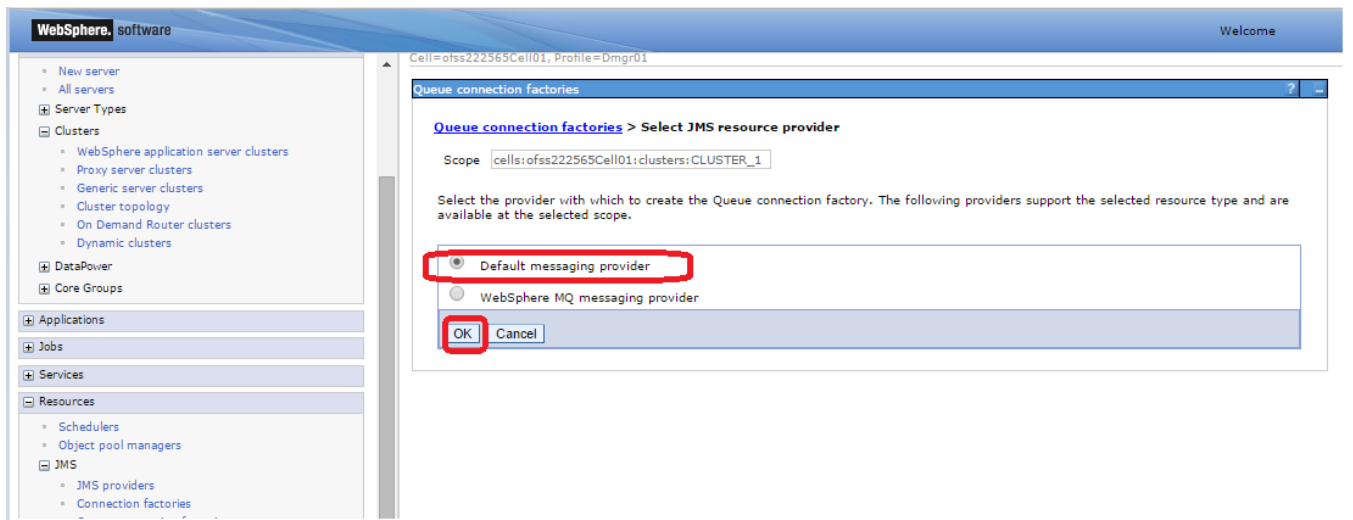


## 5.2 Connection Factory Creation

- 1) Navigate to Resources > JMS > Queue Connection Factory > Select Scope as Cluster and Click on New



- 2) Select "Default messaging provider" and Click on OK



Enter Name, JNDI Name, Select Bus Name and Click on OK



WebSphere software

Cell=ofss222565Cell01, Profile=Dmgr01

Queue connection factories

**Queue connection factories > MDBQCF**

A JMS queue connection factory is used to create connections to the associated JMS provider of JMS queues, for point-to-point messaging. Use queue connection factory administrative objects to manage JMS queue connection factories for the default messaging provider.

Configuration

**General Properties**

**Administration**

Scope: Cluster=CLUSTER\_1

Provider: Default messaging provider

**Name**: MDBQCF

**JNDI name**: MDBQCF

Description:

Category:

**Connection**

**Bus name**: FCUBS

Target:

Target type: Bus member name

**Additional Properties**

- Connection pool properties

**Related Items**

- J2C - J2C authentication data
- Buses

3) Click on Save

Cell=ofss222565Cell01, Profile=Dmgr01

Queue connection factories

**Messages**

Changes have been made to your local configuration. You can:

- Save directly to the master configuration.
- Revert changes before saving or discarding.

An option to synchronize the configuration across multiple nodes after saving can be enabled in [Preferences](#).

The server may need to be restarted for these changes to take effect.

**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=ofss222565Cell01, Cluster=CLUSTER\_1

Show scope selection drop-down 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 test/notes help](#).

Cluster=CLUSTER\_1

**Preferences**

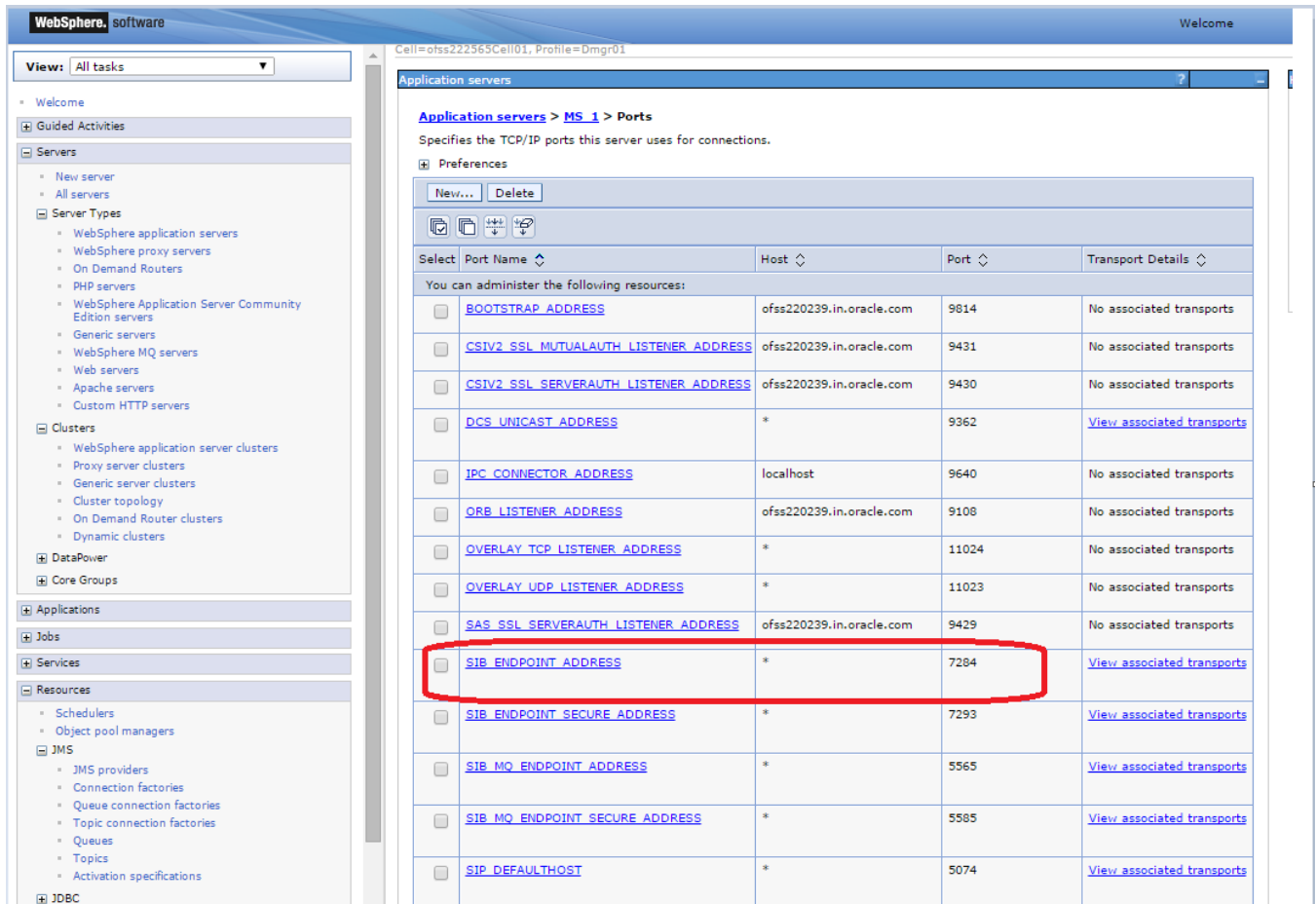
New Delete

Select	Name	JNDI name	Provider	Description	Scope
<input type="checkbox"/>	MDBQCF	MDBQCF	Default messaging provider		Cluster=CLUSTER_1

You can administer the following resources:

## 5.2.1 Managed Servers SIB Ports

- 1) Navigate to Servers > Websphere Application Servers > SERVER\_NAME > Click on Ports under Communications > Note down the port of SIB\_ENDPOINT\_ADDRESS



The screenshot shows the WebSphere Administration Console interface. The left sidebar contains a navigation tree with categories like Servers, Clusters, DataPower, Applications, Jobs, Services, and Resources. The main content area displays the 'Ports' configuration for an application server. A table lists various ports and their associated transports. The 'SIB\_ENDPOINT\_ADDRESS' row is highlighted with a red rectangle.

Select	Port Name	Host	Port	Transport Details
<input type="checkbox"/>	<a href="#">BOOTSTRAP_ADDRESS</a>	ofss220239.in.oracle.com	9814	No associated transports
<input type="checkbox"/>	<a href="#">CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS</a>	ofss220239.in.oracle.com	9431	No associated transports
<input type="checkbox"/>	<a href="#">CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS</a>	ofss220239.in.oracle.com	9430	No associated transports
<input type="checkbox"/>	<a href="#">DCS_UNICAST_ADDRESS</a>	*	9362	<a href="#">View associated transports</a>
<input type="checkbox"/>	<a href="#">IPC_CONNECTOR_ADDRESS</a>	localhost	9640	No associated transports
<input type="checkbox"/>	<a href="#">ORB_LISTENER_ADDRESS</a>	ofss220239.in.oracle.com	9108	No associated transports
<input type="checkbox"/>	<a href="#">OVERLAY_TCP_LISTENER_ADDRESS</a>	*	11024	No associated transports
<input type="checkbox"/>	<a href="#">OVERLAY_UDP_LISTENER_ADDRESS</a>	*	11023	No associated transports
<input type="checkbox"/>	<a href="#">SAS_SSL_SERVERAUTH_LISTENER_ADDRESS</a>	ofss220239.in.oracle.com	9429	No associated transports
<input type="checkbox"/>	<a href="#">SIB_ENDPOINT_ADDRESS</a>	*	7284	<a href="#">View associated transports</a>
<input type="checkbox"/>	<a href="#">SIB_ENDPOINT_SECURE_ADDRESS</a>	*	7293	<a href="#">View associated transports</a>
<input type="checkbox"/>	<a href="#">SIB_MO_ENDPOINT_ADDRESS</a>	*	5565	<a href="#">View associated transports</a>
<input type="checkbox"/>	<a href="#">SIB_MO_ENDPOINT_SECURE_ADDRESS</a>	*	5585	<a href="#">View associated transports</a>
<input type="checkbox"/>	<a href="#">SIP_DEFAULTHOST</a>	*	5074	<a href="#">View associated transports</a>

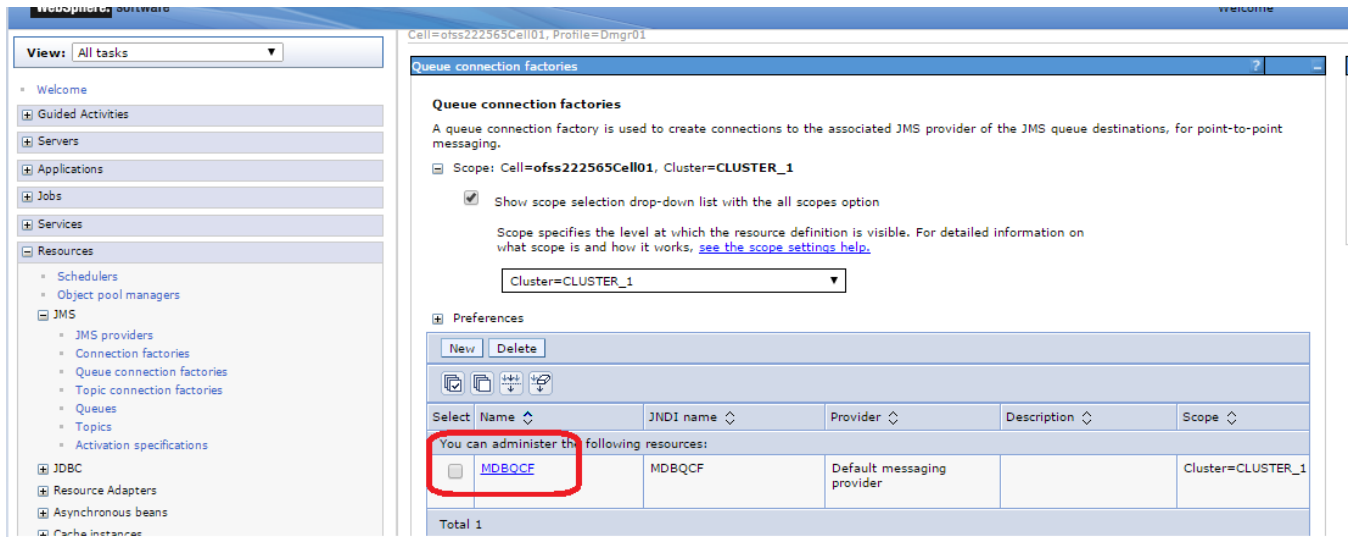
- 2) Similarly navigate to all other managed servers in the cluster and note down the port of SIB\_ENDPOINT\_ADDRESS
- 3) Prepare the "Provider Endpoint" String as below

<hostname1/IP Address1>:<PORT of SIB\_ENDPOINT\_ADDRESS>:BootstrapBasicMessaging

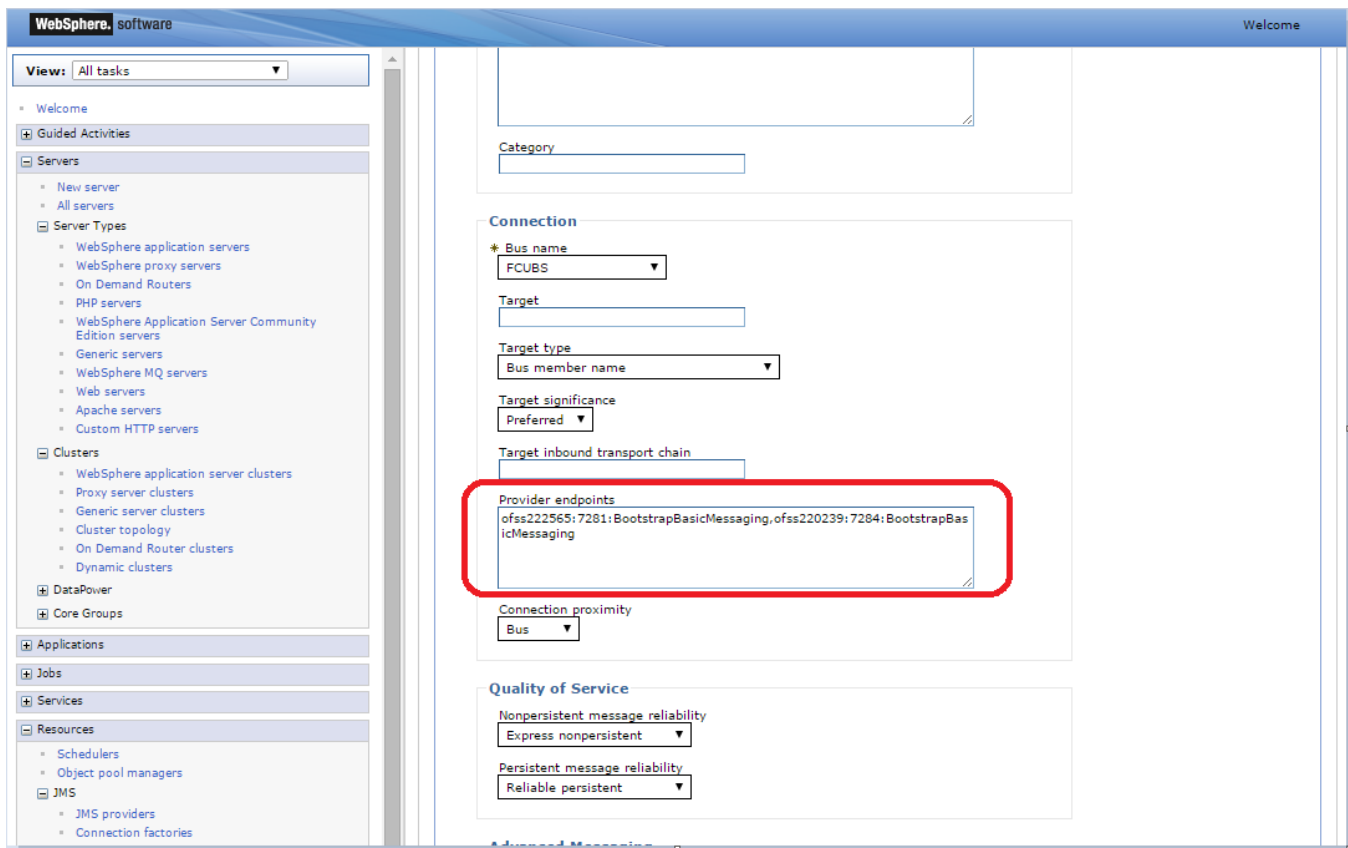
In this case the Provider Endpoint String would be

ofss222565:7281:BootstrapBasicMessaging,ofss220239:7284:BootstrapBasicMessaging

Navigate to Resources > JMS > Queue Connection Factory > Click on newly created connection factory



4) Update the Provider endpoints as prepared above and Click on OK



## 5.3 JMS Activation Specifications for Cluster

- 1) Navigate to Resources > JMS > JMS Providers > Click Default messaging provider for the cluster created

WebSphere software Welcome

Cell=otss222565Cell01, Profile=Dmgr01

JMS providers

**JMS providers**

A JMS provider enables messaging based on the Java Message Service (JMS). It provides J2EE connection factories to create connections for JMS destinations.

Scope: =All scopes

Show scope selection drop-down 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 settings help](#).

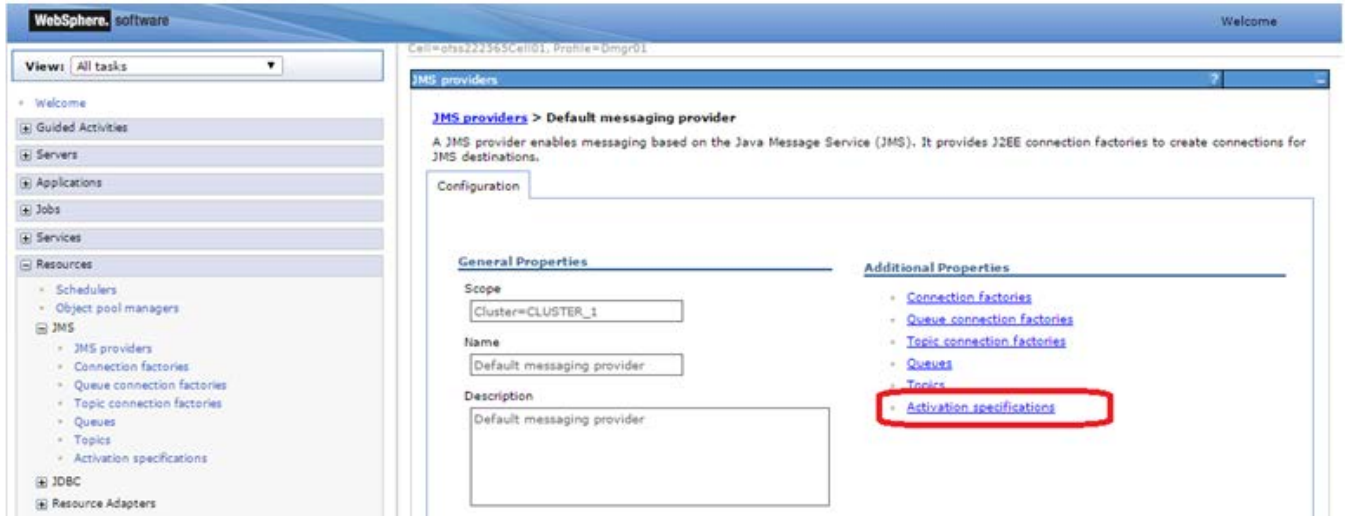
All scopes

Preferences

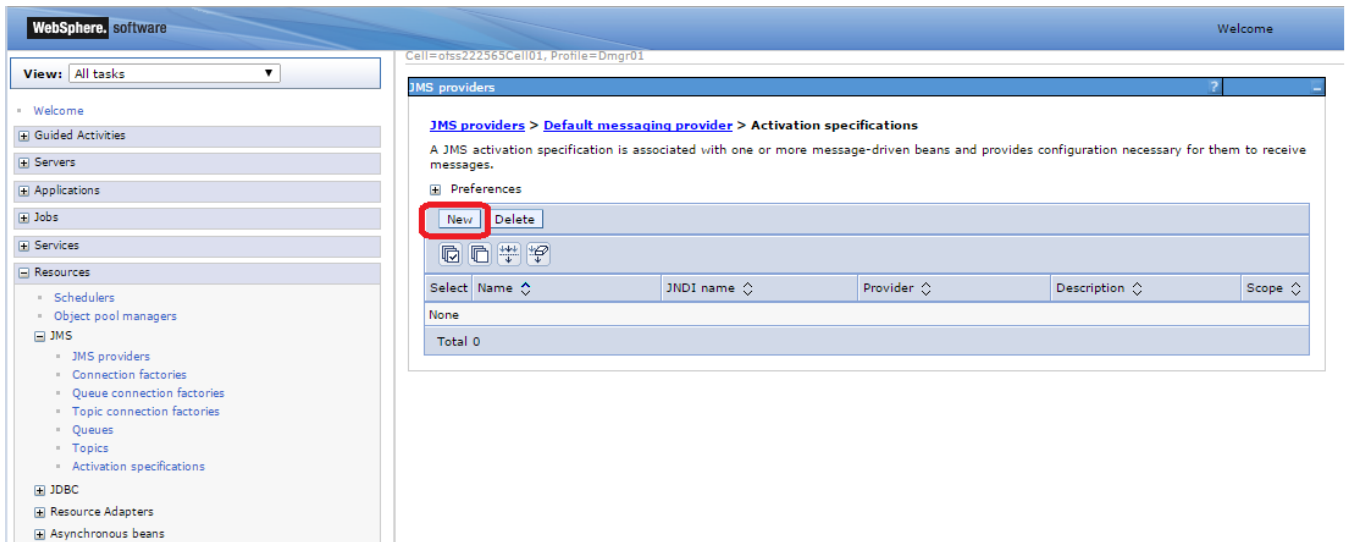
New Delete

Select	Name	Description	Scope
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss222565Node03,Server=server1
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss222565CellManager01
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss220239Node02,Server=server1
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss222565Node03
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss220239Node02
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss222565Node03,Server=MS_2
	<a href="#">Default messaging provider</a>	Default messaging provider	Cell=ofss222565Cell01
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss220239Node02,Server=MS_1
	<a href="#">Default messaging provider</a>	Default messaging provider	Node=ofss222565CellManager01,Server=dmgr
	<a href="#">Default messaging provider</a>	Default messaging provider	Cluster=CLUSTER_1

- 2) Under Additional Properties, click Activation specifications



3) Click on New



4) Enter Name, JNDI Name, Select Destination Type as Queue and Enter Queue Name, Select Bus and Click on OK

WebSphere, software

Cell=otss222565Cell01, Profile=Dmgr01

View: All tasks

Resources > JMS > JMS providers > Default messaging provider > Activation specifications > New...

A JMS activation specification is associated with one or more message-driven beans and provides the configuration necessary for them to receive messages.

Configuration

**General Properties**

**Administration**

Scope: Cluster=CLUSTER\_1

Provider: Default messaging provider

Name: **MDB\_Listener**

JNDI name: **MDB\_Listener**

Description:

**Destination**

Destination type: Queue

Destination JNDI name: **MDB\_QUEUE**

Message selector:

Bus name: **FCUBS**

Acknowledge mode: Auto-acknowledge

Target:

**Related Items**

- JAAS - J2C authentication data
- Buses

## 5) Click on Save

WebSphere, software

Cell=otss222565Cell01, Profile=Dmgr01

View: All tasks

Resources > JMS > JMS providers > Default messaging provider > Activation specifications

A JMS activation specification is associated with one or more message-driven beans and provides configuration necessary for them to receive messages.

**Messages**

Changes have been made to your local configuration. You can:

- Save directly** to the master configuration.
- Review changes before saving or discarding.

An option to synchronize the configuration across multiple nodes after saving can be enabled in [Preferences](#).

The server may need to be restarted for these changes to take effect.

**Preferences**

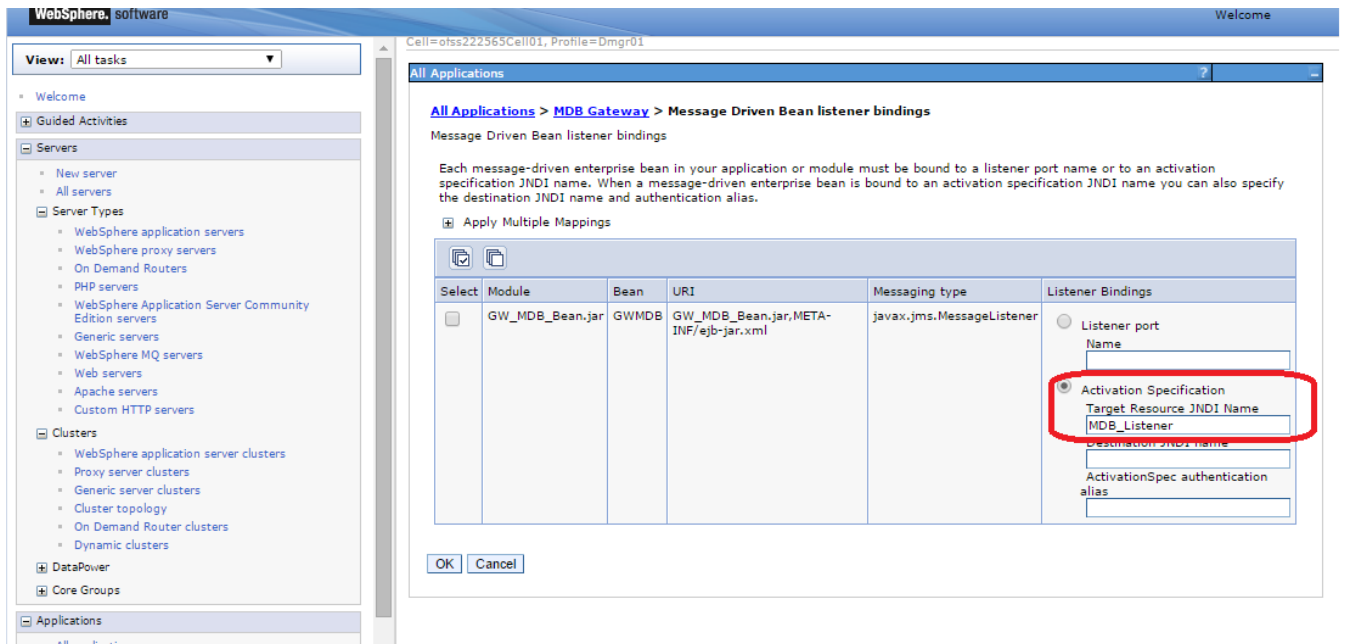
New Delete

Select	Name	JNDI name	Provider	Description	Scope
<input type="checkbox"/>	<a href="#">MDB_Listener</a>	MDB_Listener	Default messaging provider		Cluster=CLUSTER_1

Total 1

## 6. Application Deployment

- 1) Deploy the EAR with Target as Cluster\_1. Except below step rest is usual way of deploying the EAR.
- 2) During deployment give the Activation Specification Created above in the Activation Specification.



### 6.1 Restart Servers

Restart the Admin and Managed Servers.

---

## 7. Frequently Asked Questions

### 7.1 How to Test the Deployment

- 1) Send a sample message from the any third party application by connecting to  
iiop://<hostname or ip>:<BOOTSTRAP\_ADDRESS>  
eg: iiop://ofss222565:9811
- 2) Verify at backend or in the MDB log if the message is processed successfully.

Or

- 1) Use the below java program to send a sample message.
- 2) Set Java Home
- 3) Set \$WAS\_HOME/runtimes/com.ibm.ws.ejb.thinclient\_8.5.0.jar, \$WAS\_HOME/runtimes/com.ibm.ws.sib.client.thin.jms\_8.5.0.jar and javaee.jar in the CLASSPATH.
- 4) Change the URL, USER, PASSWORD, messageText in the Java Program and Compile.
- 5) Run the program and verify at backend or in MDB log.

```
import java.util.Hashtable;

import javax.jms.JMSEException;

import javax.jms.Queue;

import javax.jms.QueueConnection;

import javax.jms.QueueConnectionFactory;

import javax.jms.QueueSender;

import javax.jms.QueueSession;

import javax.jms.Session;

import javax.naming.Context;

import javax.naming.InitialContext;

import javax.naming.NamingException;
```



```

import javax.jms.TextMessage;

public class JMSQueueTest {

    public JMSQueueTest() {

        super(); }

    private Context ctx;

    private InitialContext initialContext;

    private QueueConnectionFactory queueCF;

    private QueueConnection queueConn;

    private QueueSession queueSession;

    private Queue queue;

    private QueueSender queueSender;

    private final static String JNDI_FACTORY =
"com.ibm.websphere.naming.WsnInitialContextFactory";

    private final static String JMS_FACTORY = "MDBQCF";

    private final static String QUEUE = "MDB_QUEUE";

    private final static String URL = "iiop://ofss222565:9811";

    private TextMessage txtMessage;

    private static String USER = "wasadmin";

    private static String PASSWORD = "wasadmin123";

    private static String messageText = "Hello!";

    private InitialContext getInitialContext(String url) throws Exception {

        Hashtable envHash = new Hashtable();

        envHash.put(Context.INITIAL_CONTEXT_FACTORY, JNDI_FACTORY);

        envHash.put(Context.PROVIDER_URL, url);

        envHash.put(Context.SECURITY_PRINCIPAL, USER);

        envHash.put(Context.SECURITY_CREDENTIALS, PASSWORD);

```

```

try {
    return new InitialContext(envHash);
} catch (NamingException e) {
    e.printStackTrace();    }
return new InitialContext(envHash);    }

private void init(Context ctx, String queueName) {

try {

    ctx = getInitialContext(URL);

    queueCF = (QueueConnectionFactory)ctx.lookup(JMS_FACTORY);

    queueConn = queueCF.createQueueConnection();

    queueSession = queueConn.createQueueSession(false,Session.SESSION_TRANSACTED);

    queue = (Queue)ctx.lookup(queueName);

    queueSender = queueSession.createSender(queue);

    txtMessage = queueSession.createTextMessage();

    queueConn.start();

} catch (Exception e) {
    e.printStackTrace();    }    }

private void close() throws JMSEException {

    queueSender.close();

    queueSession.close();

    queueConn.close();    }

private void sendMessage(String message) throws JMSEException {

    txtMessage.setText(messageText);

    queueSender.send(txtMessage);    }

public static void main(String[] args) throws Exception {

    JMSQueueTest jmsq = new JMSQueueTest();

    InitialContext ico = jmsq.getInitialContext(URL);

```

```

try {
    jmsq.init(ico, QUEUE);
    jmsq.sendMessage(messageText);
} catch (JMSEException jmse) {
    jmse.printStackTrace();
} finally {
    jmsq.close();
}
}

```

## 7.2 Warning during Bus Member Creation

During Bus member creation Warning is shown in “Is Further configuration Required?”

The screenshot shows the WebSphere software interface with the 'Messaging engine policy assistance settings' dialog open. The dialog title is 'SIB0131.SelectClusterTopologyPattern.displayName' and the subtitle is 'Messaging engine policy assistance settings'. The main text reads: 'Select a predefined messaging engine policy to apply to the selected cluster when it is added as a bus member.'

The 'Messaging engine policy assistance settings' section contains the following table:

Select	Policy type	Is further configuration required?
<input checked="" type="radio"/>	High availability	The current configuration has a single point of failure because there is only a single node. Consider adding a cluster member configured on a separate node.
<input type="radio"/>	Scalability	No
<input type="radio"/>	Scalability with high availability	The current configuration has a single point of failure because there is only a single node. Consider adding a cluster member configured on a separate node.
<input type="radio"/>	Custom	Advice is not available for a custom configuration.

Below the table is a diagram showing a cluster named 'CLUSTER\_1' with two nodes: 'nodesgen1' and 'server1'. A dashed box highlights the cluster, and a warning icon is shown next to it. The diagram also shows a 'MS\_2' node and a '2' node, indicating a single node configuration.

Examine the resulting diagram and the messages for the selected messaging engine policy type. Act on the messages as follows:

- 1) To add a server or a node, go back and change the cluster topology before you continue with the current procedure.
- 2) To add or remove messaging engines, under Additional Properties, click Messaging engines and use the options on the resulting pane.
- 3) To correct messaging engine policies, under Additional Properties, click Messaging engine policy maintenance and use the options on the resulting pane.

When the "Is further configuration required" column for the selected messaging engine policy type displays No, the configuration is complete.

### **7.3 Message Engines Not Getting Started**

Message engine fail to start and gives SIB Service Bus Unavailable error.

- 1) Ensure that shared folders are empty
- 2) Restart the Managed Servers
- 3) Check the Status of message engines

### **7.4 Cannot Establish Connection Error**

When a message is received on the Queue it throws below error

*Caused by: com.ibm.websphere.sib.exception.SIResourceException: CWSIC1001E: A client attempted to connect with a remote messaging engine but the connection cannot be completed. Ensure the messaging engine is started: exception com.ibm.ws.sib.jfapchannel.JFapConnectFailedException: CWSIJ0063E: A network connection to host name localhost/127.0.0.1, port 7,276 cannot be established.*

- 1) Ensure that Provider EndPoint contains the SIB\_ENDPOINT\_ADDRESS of all the servers comma separated
- 2) Eg: <hostname1>:<port1>:BootstrapBasicMessaging, <hostname2>:<port 2>:BootstrapBasicMessaging,
- 3) Restart the servers after making changes

## **7.5 How to setup for Scheduler/Notifications**

The above document can be used for setting up JMS for scheduler/notifications but additional queues and connection factory needs to be created. Also the FCUBS application needs to be deployed.

## **7.6 What other modules uses JMS Queue's**

JMS is used by following modules, relevant queues and factories needs to be created additionally

- EMS for swift messages
- GI for upload
- ELCM
- BIP

---

## 8. References

- 1) GATEWAY\_Applications\_WAS.doc
- 2) Resource\_Creation\_WAS.doc
- 3) FCUBS\_Application\_WAS.doc
- 4) [http://129.33.205.81/support/knowledgecenter/SSAW57\\_8.5.5/com.ibm.websphere.nd.iseries.doc/ae/welc6topmanaging.html](http://129.33.205.81/support/knowledgecenter/SSAW57_8.5.5/com.ibm.websphere.nd.iseries.doc/ae/welc6topmanaging.html)
- 5) [http://publib.boulder.ibm.com/infocenter/wsdoc400/v6r0/index.jsp?topic=/com.ibm.websphere.pmc.iseries.doc/tasks/tjn9999\\_.html](http://publib.boulder.ibm.com/infocenter/wsdoc400/v6r0/index.jsp?topic=/com.ibm.websphere.pmc.iseries.doc/tasks/tjn9999_.html)



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