Configuring JMS on Weblogic Server 12c Oracle FLEXCUBE Universal Banking Release 14.4.0.3.0 [February] [2021]



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# 1. Introduction

## 1.1 Introduction

Below is brief description on major components in Weblogic JMS Server architecture.

## 1.2 Purpose

The purpose of this document is to explain the steps required for JMS Configuration in cluster mode for

- 1) FCUBS 12.1
- 2) WebLogic Server 12.1.3.0.0

### JMS Server

JMS server acts as management container for JMS queue and topic resources defined within JMS modules that are targeted to specific that JMS server. A JMS server's main responsibility is to maintain persistent storage for these resources, maintain the state of durable subscriber and etc. JMS servers can host a defined set of modules and any associated persistent storage that reside on a WebLogic Server instance

### JMS Module

JMS modules are application-related definitions that are independent of the domain environment. JMS modules group JMS configuration resources (such as queues, topics, and connections factories). These are outside domain configuration. JMS modules are globally available for targeting to servers and clusters configured in the domain and therefore are available to all the applications deployed on the same targeted. JMS modules contain configuration resources, such as standalone queue and topic destinations, distributed destinations, and connection factories.

### **Subdeployment**

Subdeployment is also known as Advanced Targeting. Subdeployment resource is a bridge between the group of JMS resources and JMS Servers. When you create a JMS resource you need to choose one Subdeployment.

### **JMS Resources**

- 1) **Queue** defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to queue is distributed to only one customer.
- 2) **Topic** defines a publish/subscribe destination type, which are used for asynchronous peer communication. A message delivered to topic is distributed to all topic consumers
- 3) **Distributed queue** defines a set of queues that are distributed on multiple JMS servers, but are accessible as a single, logical queue to JMS clients
- 4) **Distributed topic** defines a set of topics that are distributed on multiple JMS servers, but which as accessible as a single, logical topic to JMS clients.



5) **Uniform Distributed Queue**: queue members are created uniformly from a common configuration.

### Persistence store

A persistent store provides a built-in, high-performance storage solution for weblogic server subsystems and services that required persistence. There are two type of mechanism to store the message

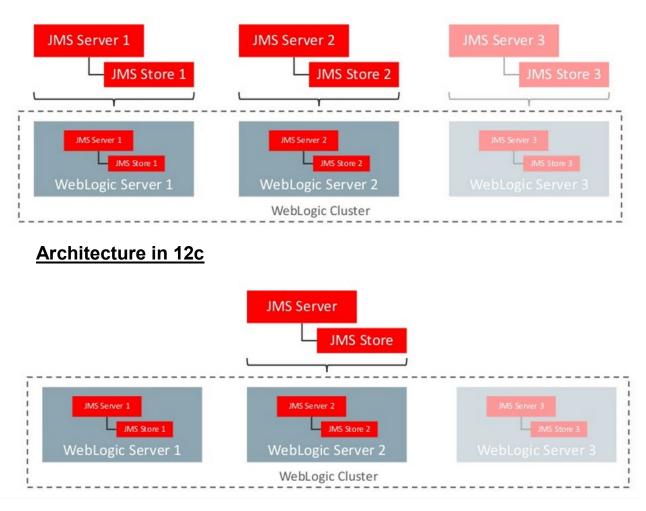
- 1) File based persistence store -> Message is stored in a file
- 2) DB based persistence store -> Message is stored in Database.

## 1.3 Weblogic 12c New Features

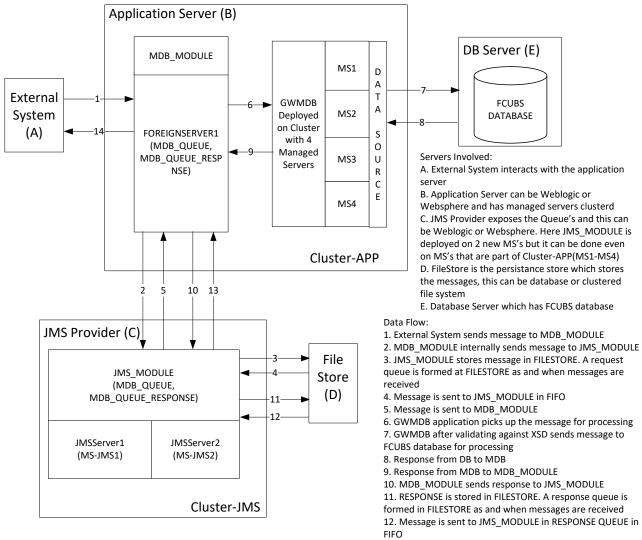
Before weblogic 12c JMS Servers and stores are targeted to individual WLS Servers. Scaling up requires configure the JMS server, the store and target it to new WLS Server

In 12c JMS Servers and stores are targeted to WLS cluster. Scaling up requires to add a WLS server to the cluster.

### Architecture previous to 12c







## 1.4 Components Diagram & Data Flow

Below is the flow diagram which indicates various components that are used and the document explain steps to create.

13, 14. External system to read the response message from Response Queue



# 2. Pre-Requisites

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

## 2.1 <u>Machines</u>

#### MAC-1 & MAC-2

ORACLE WebLogic Server Ac	ministration Console 12c	Q		
Change Center	🔒 Home Log Out Preferences 🔤 Record Help			
View changes and restarts	Home >Summary of Servers >Summary of Machines			
Configuration editing is enabled. Future	Summary of Machines			
changes will automatically be activated as you modify, add or delete items in this domain.	A machine is the logical representation of the computer that hosts one or more WebLogic Server instand optimum server in a cluster to which certain tasks, such as HTTP session replication, are delegated. The Manager to start remote servers.			
🖻 - Environment	This page displays key information about each machine that has been configured in the current WebLog	ic Server domain.		
Servers				
Clusters				
Coherence Clusters	Customize this table			
Machines	Machines			
Virtual Hosts E	machines			
Startup and Shutdown Classes	New Clone Delete	Showing 1 to 2 of 2 Previous   Next		
Deployments				
E-Services	🔲 Name 🗇	Туре		
Security Realms				
🕀 - Interoperability	MAC-1	Machine		
- Diagnostics	MAC-2	Machine		
How do I	New Clone Delete	Showing 1 to 2 of 2 Previous   Next		
Create and configure machines				
<ul> <li>Assign server instances to machines</li> </ul>				

## 2.2 Dynamic Clusters and Managed Servers

Ensure Dynamic cluster for FCUBS (4 Managed Servers) and Dynamic cluster for JMS Deployment (2 Managed Servers)

ORACLE WebLogic Server	Administration Console 12c				<u> </u>			
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Q		Welcome, weblogic Co	nnected to: FCUBSDor			
View changes and restarts	Home >Summary of Servers >Summary of Clusters >Sum Clusters >Summary of Servers > <b>Summary of Clusters</b>	mary of Server Templates >Summary of Cluste	ters >Summary of Servers >Summary of Clusters >	Summary of Server Templates >Su	mmary of			
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages  All changes have been activated. No restarts are n	ecessary.						
Lock & Edit Release Configuration	Summary of Clusters							
Domain Structure	This page summarizes the dusters that have been cor	nfigured in the current WebLogic Server don	main.					
Environment    Servers    Clusters    Server Templates    Coherence Clusters    Virtual Hosts    Virtual Hosts    Work Managers	A duster defines groups of WebLogic Server servers I Customize this table Clusters (Filtered - More Columns Exist) Click the <i>Lock &amp; Edit</i> button in the Change Center to New Cone Delete		nd reliability.	Showing 1 to	2 of 2 Previous   Next			
Startup and Shutdown Classes	🗌 Name 🗞 Cluster Address Cluster Me	ssaging Mode Migration Basis Def	fault Load Algorithm Replication Type	Cluster Broadcast Channel	Servers			
B-Services Security Realms How do I	Cluster-App Unicast	Database Rour	ind Robin (None)		DC_FCUBS_1, DC_FCUBS_2, DC_FCUBS_3, DC_FCUBS_4			
Configure dusters     Assign server instances to dusters     Configure dusters	Cluster-JMS Unicast	Database Rour	und Robin (None)		DC_JMS_1, DC_JMS_2			
Configure server migration in a duster     Configure cross-duster replication     Create dynamic dusters	New - Clone Delete	· · · · ·		Showing 1 to	2 of 2 Previous   Next			



	ministration Console 12c						Õ
Change Center	館 Home Log Out Preferences 🖂	Record Help	Q			Welcome, we	blogic Connected to: FCUBSDomai
View changes and restarts	Home >Summary of Server Templates : Clusters >Summary of Servers	Summary of Clusters >Summ	ary of Servers >Summary	of Clusters >Summary o	f Servers >Summary of Cl	usters >Cluster-JMS >Summary	of Servers >Summary of
Click the Lock & Edit button to modify, add or delete items in this domain.	Summary of Servers						
Lock & Edit	Configuration Control						
Release Configuration							
Domain Structure	A server is an instance of WebLogic				guration.		
	This page summarizes each server t	hat has been configured in t	he current WebLogic Ser	ver domain.			
E-Environment	<u>2</u> 5						
ClustersServer Templates	Customize this table						
Migratable Targets	-						
Coherence Clusters Machines	Servers (Filtered - More Colum Click the Lock & Edit button in the		all the huttens on this on				
Virtual Hosts Work Managers		Change Center to activate	all the buttons on this pa	ye.			
Startup and Shutdown Classes	New Clone Delete					Sho	owing 1 to 7 of 7 Previous   Next
Deployments	🔲 Name 🗞	Туре	Cluster	Machine	State	Health	Listen Port
Security Realms	AdminServer(admin)	Configured			RUNNING	🖋 ок	7001
How do I 🗉	DC_FCUBS_1	Dynamic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7101
Create Managed Servers	DC_FCUBS_2	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7102
Clone servers	DC_FCUBS_3	Dynamic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7103
Delete Managed Servers     Delete the Administration Server	DC_FCUBS_4	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7104
Start and stop servers	DC_JMS_1	Dynamic	Cluster-JMS	MAC-1	SHUTDOWN	Not reachable	7106
	DC_JMS_2	Dynamic	Cluster-JMS	MAC-2	SHUTDOWN	Not reachable	7107
System Status	New Clone Delete					She	owing 1 to 7 of 7 Previous   Next
Health of Running Servers							
Failed (0)							

## 2.3 DataSource

Ensure that DataSource required for the MDB ear is created with Target as Cluster-App

	Administration Console	Q			
Change Center	🕜 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: base_domai			
View changes and restarts	Home >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE Sources	E >Summary of JMS Messages >Summary of Deployments >Summary of JDBC Data			
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	you Summary of JDBC Data Sources				
Domain Structure  Services  -Servers -Store-and-Forward Agents -Path Services B-Bridges -Data Sources -Persistent Stores	A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC borrow a database connection from a data source. This page summarizes the JDBC data source objects that have been created in this domain. Customize this table Data Sources (Filtered - More Columns Exist)	connections. Applications can look up a data source on the JNDI tree and then			
Foreign JNDI Providers Work Contexts	New Delete Showing 1 to 3 of 3 Previous   Next				
XML Registries XML Entity Caches	🗌 Name 🔅 Type JNDI Name	Targets			
-jCOM -	FLEXTEST.WORLD Generic FLEXTEST.WORLD	Cluster-App			
·······	idhe/feidauDC Conste idhe/feidauDC	AdminEquer			

## 2.4 Shared Folder

A shared folder for File Store Creation is required and this folder should be accessible across both the servers (eg, NFS mount).



# 3. JMS Configuration

## 3.1 Persistence Store Creation

#### 1) Navigate to Services → Persistent Stores→New → Create FileStore

ORACLE WebLogic Server Administration Console 12c							
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms					
View changes and restarts Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Home >Summary of Servers >Summary of Persistent Stores Messages © Create operation cancelled - no file store created. Summary of Persistent Stores						
Domain Structure	A persistent store is a physical repository for storing subsystem data, such as persistent JMS messages. It can be a JDBC-accessible database, disk-based file, or replicated memory storage. This page summarizes the persistent stores that have been created for this domain.						
⊕-Messaging	New ~ Delete	Showing 0 to 0 of 0 Previous   Next					
	🔲 Name 🌣 🛛 Type	Target					
XML Registries	There are no items to display						
How do I	New ~ Delete	Showing 0 to 0 of 0 Previous   Next					
Create File Stores							

	Administration Console 12c			Q
Change Center	🚹 Home Log Out Preferences 🔤 R	ecord Help	Welcome, weblogic Connecte	ed to: <b>pegjms</b>
View changes and restarts	Home >Summary of Servers >Summary	of Persistent Stores		
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages © Create operation cancelled - no file	e store created.		
Domain Structure	Summary of Persistent Stores			
Coherence Clusters     Coherence Clusters    Coherence Clusters    Vrtual Hosts    Work Managers    Startup and Shutdown Classes    Deployments     G-Services		ory for storing subsystem data, such as persiste is page summarizes the persistent stores that ha	t JMS messages. It can be a JDBC-accessible database, disk- e been created for this domain.	-based
Data Sources	New v Delete		Showing 0 to 0 of 0 Previo	ous   Next
<b>Persistent Stores</b> Foreign JNDI Providers Work Contexts	Create FileStore	Туре	Target	
XML Registries	Create ReplicatedStore (Exalogic) There are no items to display			
How do I	New > Delete		Showing 0 to 0 of 0 Previo	ous   Next
Create File Stores				



### 2) Select **Cluster-JMS** under target dropdown and Click on OK

	dministration Console 12	c			Q
Change Center	Home Log Out Pre	ferences 🔤 Record Help	٩		Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Clu of Persistent Stores	sters >Summary of Servers >Su	ummary of Clusters >Summary of Ser	rvers >Summary of Clusters >Cluster	-JMS >Summary of Servers >Summary of Clusters >Summary of Servers > <b>Summary</b>
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New File Sto	re			
domain.  Lock & Edit  Release Configuration	OK Cancel File Store Propertie The following propertie	≥s ≥s will be used to identify you	r new file store.		
Domain Structure	* Indicates required field				
Environment    Servers    Clusters    Viserver Templates    Wigratable Targets	What would you like to * Name:	name your new file store? FileStore-1			
Coherence Clusters Machines	Select a server instance	e for this file store.			
Virtual Hosts Work Managers Startup and Shutdown Classes	Target:	Cluster-JMS -			
Deployments	The pathname to the d	rectory on the file system wh	ere the file store is kept. This direc	tory must exist on your system, so	be sure to create it before completing this tab.
-Services	Directory:	/scratch/work_area/	JMS_FILESTORE		
How do I 🗉	OK Canad				
Create File Stores	OK Cancel				
<ul> <li>Monitor persistent stores</li> </ul>					

#### 3) FileStore-1 is created

ORACLE WebLogic Server Administration Console 12c							
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain				
View changes and restarts	Home >Summary of Clusters >Summary of Servers >Summary of Clusters >S of Persistent Stores	Summary of Servers >Summary of Clusters >Cluster-JMS >S	Summary of Servers >Summary of Clusters >Summary of Servers >Summary				
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages All changes have been activated. No restarts are necessary.						
Lock & Edit Release Configuration	Summary of Persistent Stores						
Domain Structure           →Servers           →Clusters           →Migratable Targets           →Coherence Clusters           →Machines	A persistent store is a physical repository for storing subsystem data, s summarizes the persistent stores that have been created for this domain Customize this table Persistent Stores		ssible database, disk-based file, or replicated memory storage. This page				
Virtual Hosts Work Managers	Click the Lock & Editbutton in the Change Center to activate all the buttons on this page.						
Startup and Shutdown Classes	New ~ Delete		Showing 1 to 1 of 1 Previous   Next				
-Services -Messaging	🔲 Name 🔅	Туре	Target				
Data Sources	FileStore-1	FileStore	Cluster-JMS				
How do I	New > Delete Showing 1 to 1 of 1 Previous Next						
Create File Stores							



## 3.2 JMS Server Creation

1) Navigate to Services  $\rightarrow$  Messaging  $\rightarrow$  JMS Servers  $\rightarrow$  Click on **New** 

	dministration Console 12c	Q				
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms				
View changes and restarts Configuration editing is enabled. Future	Home > Summary of Servers > Summary of Persistent Stores > Summary of JMS Servers Messages					
changes will automatically be activated as you modify, add or delete items in this domain.	Create operation cancelled - no JMS Servers created.					
Domain Structure	Summary of JMS Servers					
Environment     Servers     Observers     Coherence Clusters    Virbal Hosts	Servers     E    Coherence Clusters    Machines    Machines    Machines    Machines					
Work Managers Startup and Shutdown Classes	JMS Servers (Filtered - More Columns Exist)					
Deployments	Nw Delete	Showing 0 to 0 of 0 Previous   Next				
E-Services	Image: Name ↔         Persistent Store         Target         Current	t Target Health				
Store-and-Forward Agents	There are no items to display					
How do I	New Delete Showing 0 to 0 of 0 Previous   Next					
Configure JMS servers						
Configure JMS system modules						

#### 2) .Select FileStore-1 , Click Next

	dministration Console 12c		Q
Change Center	🏠 Home Log Out Preferences 🔤 Record He	elp Q	Welcome, weblogic Connected to: FCUBSDoma
View changes and restarts	Home >Summary of Servers >Summary of Clusters Stores >Summary of JMS Servers	s >Summary of Servers >Summary of Clusters >Cluster	-JMS >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Persistent
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS Server		
domain.	Back Next Finish Cancel		
Release Configuration	JMS Server Properties		
Domain Structure	The following properties will be used to identify	your new JMS Server.	
Domain Structure	* Indicates required fields		
Environment     Servers	What would you like to name your new JMS Serv	/er?	
ClustersServer TemplatesMigratable Targets	任 王 * Name:	JMSServer-1	
Coherence Clusters Machines	Specify persistent store for the new JMS Server.		
Virtual Hosts Work Managers	Persistent Store:	FileStore-1  Create a New Store	
Startup and Shutdown ClassesDeploymentsServices	Back Next Finish Cancel	(none) FileStore-1	

#### 3) Select Target as Cluster-JMS and click on Finish

	ministration Console 12c	Q
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Clusters >Summary of JMS Servers	sters >Cluster-JMS >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Persistent
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS Server	
domain.	Back Next Finish Cancel	
Release Configuration	Select targets	
Domain Structure	Select the server instance or migratable target on which you would like to deploy this	MS Server.
Domain Structure	Target: (none)	
Environment    Servers    Clusters    Server Templates    Migratable Targets	Back Next Finish Cancel (none) AdminServer Cluster-App Cluster-MS	



	dministration Console 12c		Q
Change Center	🔒 Home Log Out Preferences 🔤 R	Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Servers >Summary Stores >Summary of JMS Servers	of Clusters >Summary of Servers >Summary of Clusters >	Cluster-JMS >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Persistent
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS Server		
domain.	Back Next Finish Cance	el	
Release Configuration	Select targets		
	Select the server instance or migratab	ble target on which you would like to deploy this JMS Se	rver.
Domain Structure	Target:	Cluster-JMS 💌	
Environment     Servers     Clusters     Server Templates     Minatable Targets	Back Next Finish Cance	el	

#### 4) JMS-Server-1 is created

hange Center		A Home Log Out Preferences	Record Help	Q	Welcon	me, weblogic Connected to: FCUBSDor		
/iew changes and restarts		Home >Summary of Servers >Su Stores >Summary of JMS Server		mmary of Clusters >Cluster-JMS >Su	immary of Servers >Summary of Clusters >Summary o	of Servers >Summary of Persistent		
lick the Lock & Edit button to modify, add o lelete items in this domain.	r	Messages						
Lock & Edit		All changes have been activ	ated. No restarts are necessary.					
Release Configuration		Summary of JMS Servers						
omain Structure		JMS servers act as management	nt containers for the queues and topics in	IMS modules that are targeted to t	hem.			
-Environment Servers Clusters	^	This page summarizes the JMS servers that have been created in the current WebLogic Server domain.						
Server Templates Migratable Targets	E	Customize this table						
Coherence Clusters		JMS Servers (Filtered - Mo	re Columns Exist)					
Virtual Hosts Work Managers		Click the Lock & Edit button in	the Change Center to activate all the but	tons on this page.				
Startup and Shutdown Classes		New Delete				Showing 1 to 1 of 1 Previous   Next		
-Services		🔲 Name 🗇	Persistent Store	Target	Current Target	Health		
JMS Servers	Ŧ	JMSServer-1	FileStore-1	Cluster-JMS	Cluster-JMS			
low do I	-	New Delete				Showing 1 to 1 of 1 Previous   Next		

#### 5) In NFS below filestores can be seen

```
[root@ JMS_FILESTORE]# 11
total 2056
-rw-r----- 1 wl12c oinstall 1049088 Jun 16 14:10 FILESTORE-1@DC_JMS_1000000.DAT
-rw-r----- 1 wl12c oinstall 1049088 Jun 16 14:10 FILESTORE-1@DC_JMS_2000000.DAT
[root@ JMS_FILESTORE]# pwd
/scratch/work_area/JMS_FILESTORE
[root@ JMS_FILESTORE]#
```



## 3.3 <u>Cluster Configuration for Service Migration</u>

inge Center	A Home Log O	ut Preferences	Reco	rd Help		Q	We	come, weblogic Corne	thed to: pegge	
w changes and restarts	Home > Summary Outlans > Outlan						y of Outers >Summary d	Mgratable Targets >Summe	ry of	
figuration editing is enabled. Future nges will automatically be activated as you Sfy, add or delete items in this domain.	Summary of Clu	Summary of Clusters								
nain Structure	This page summarizes the dusters that have been configured in the current WebLogic Server domain.									
Environment Servers	A duster define	is groups of the	bLogic Ser	ver servers that	work togethe	er to increase scalabi	ity and reliability.			
Conters	© Customize th									
Machel Chusters, Level 2, Collapsed, 2 of	7, Selected PS (Filte	red - Hore Co	olumns Ex	ost)						
-Work Managers	New v. O	lone Delete				_		Showing 1 to 2 of 2 Pre	vious   Next	
Startup and Shutdown Classes Deployments Services	🔳 Name 🖉	Cluster A	ddress (	Cluster Hessa	ging Hode	Higration Basis	Default Load Algorit	hm Replication Type	Cluster Bri	
Security Realms	E Ouster-A	00		incest		Detabase	Round Robin	(None)		
a do L 🛛	Cater-J			incest		Database	Round Robin	(None)	-	
2) Click on Mig	-	sole 12c	s 🖂 Rec	ord Help		٩	We	come, weblogic Connec	eted to: pegjm	
iew changes and restarts						MS Servers >Summary ers > <b>Cluster-JMS</b>	y of Clusters >Summary of	Migratable Targets >Summa	ry of	
onfiguration editing is enabled. Future nanges will automatically be activated as you	Settings for Clu	ister-JMS								
odify, add or delete items in this domain.	Configuration	Monitoring	Control	Deployments	Services	Notes				
	1	A Messaging	Servers	Replication	Migration	Singleton Services	Scheduling Overla	ad Health Monitoring	HTTP	
omain Structure	General JTA									
- Environment - Servers	General JTA Coherence	Coherence								

1) Click on Environment  $\rightarrow$  Clusters  $\rightarrow$  Cluster-JMS



# 4. JMS Module Creation

## 4.1 Module Creation

1) Navigate to Services  $\rightarrow$  Messaging  $\rightarrow$  JMS Modules and Click on **New**.

ORACLE WebLogic Server Administration Console 12c								
Change Center	🚹 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: pegjms					
View changes and restarts		me >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable rgets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules						
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages Of the JMS module configuration was canceled.	ssages						
Domain Structure	Summary of JMS Modules							
Deployments     Deployments     Deployments     Dervices     Devices     Devices		ues, distributed topics, foreign servers, and modules as global system resources.	Such resources include queues, topics, connection factories, JMS store-and-forward (SAF) parameters. You can					
Persistent Stores Foreign JNDI Providers	New Delete		Showing 0 to 0 of 0 Previous   Next					
How do L	Name 🗞	Name ↔ Type						
Configure JMS system modules	There are no items to display							
Configure resources for JMS system modules	New Delete		Showing 0 to 0 of 0 Previous   Next					
System Status								

#### 2) Enter name as JMS\_MODULE and Click on Next

	ministration Console 12c	Q
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable Targets Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets > <b>Summ</b>	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain. Domain Structure	Create JMS System Module           Back         Nrgt         Finish         Cancel           The following properties will be used to identify your new module.	
B-Environment    Deployments     B-Services    JMS Servers    JMS Servers    JMS Modules	JMS system resources are configured and stored as modules similar to standard J2EE mod templates, destination keys, quota, distributed queues, distributed topics, foreign servers administratively configure and manage JMS system modules as global system resources. * Indicates required fields	
Path Services Data SourcesData SourcesPersistent StoresForeign JNDI ProvidersWork Contexts	What would you like to name your System Module?  * Name: JMS_Module What would you like to name the descriptor file name? If you do not provide a name, a defa	ault will be assigned
How do I   • Configure JMS system modules	Descriptor File Name:	aut viii De assigned.
Configure JMS servers	Where would like to place the descriptor for this System Module, relative to the jms configu	ration sub-directory of your domain?
System Status	Location In Domain:	
Health of Running Servers	Back Next Finish Cancel	
Failed (0)		

3) Select Target as Cluster-JMS and Click on Next



ORACLE WebLogic Server A	dministration Console 12c	<u>o</u>
Change Center	A Home Log Out Preferences 🖂 Record Help	Welcome, weblogic Connected to: FCU8SDomain
View changes and restarts	Home >Summary of Server Templates >DC_3HS_Template-0 >Summary of Servers >Summary of Migratable Targets >Summary of 3HS Modules	f Higratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of
No pending changes exist. Click the Release Configuration builton to allow others to edit the domain. Lock & Edit Release Configuration	Create JHS System Hodule           Back         Net           The following properties will be used to target your new JHS system module.	
Domain Structure	Use this page to select the server or cluster on which you would like to deploy this 3MS syn	
Environment     Servers     Ousters     Server Templates     Monatable Targets	Targets : Servers	
Coherence Clusters Machines Virtual Hosts	AdminServer	
Work Managers Startup and Shutdown Classes	Clusters	
-Ceployments 9-Services 9-Mersaninn	Cluster-App All servers in the cluster	
How do L. 🛛 🖂 • Configure 245 system modules • Configure 245 servers	Cluster-JHS All servers in the cluster	

### 4) Select the checkbox and Click on Finish

	Iministration Console 12c
Change Center	🏦 Home Log Out Preferences 🖾 Record Help
View changes and restarts	Home >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules
Configuration editing is enabled. Future changes will automatically be activated as you	Create JMS System Module
modify, add or delete items in this domain.	Back Next Finish Cancel
Domain Structure	Add resources to this JMS system module
⊕-Environment     →Deployments     ⊖-Services     ☐-Messaging	Use this page to indicate whether you want to immediately add resources to this JMS system module after it is created. JMS resources include queues, topics, connection factories, etc.
JMS Servers Store-and-Forward Agents	Would you like to add resources to this JMS system module?
Jinis Modules Path Services ⊕-Bridges	Back Next Finish Cancel
Data Sources Persistent Stores Foreign JNDI Providers	

### 5) JMS\_MODULE is created

	r Administration Console 12c		Q				
Change Center	Home Log Out Preferences 🔤 Record Hel	P	Welcome, weblogic Connected to: pegjn				
View changes and restarts	Home >MS-JMS1 (migratable) >Summary of Migratal (migratable) >Summary of Clusters >Summary of Mi		v of Clusters >Summary of Migratable Targets >MS-JMS1 JMS Module				
Configuration editing is enabled. Future Messages hanges will automatically be activated as you							
modify, add or delete items in this domain.	<ul> <li>All changes have been activated. However 1 is</li> <li>The JMS module was created successfully.</li> </ul>	items must be restarted for the changes to	take effect.				
Jomain Structure	Settings for JMS_Module						
-Environment Deployments	Configuration Subdeployments Targets	Security Notes					
È-Services È-Messaging →-JMS Servers →-Store-and-Forward Agents →-JMS Modules	E This page displays general information about a J resources.	MS system module and its resources. It also	allows you to configure new resources and access existing				
Path Services Path Services	Name:	JMS_Module	The name of this JMS system module. More Info				
Data Sources Persistent Stores	Descriptor File Name:	jms/jms_module-jms.xml	The name of the JMS module descriptor file. More Info				
How do I  This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factor JMS templates, destination queta, distributed destinations, foreign servers, and store-and-forward parameters.							



## 4.2 Sub Deployment Creation

#### 1) In JMS\_MODULE, Click on Sub Deployment tab , Click on New

	Administration Console 12c				Q				
Change Center	Home Log Out Preference	s 🟊 Record Help	Q	Welcome, web	logic Connected to: pegjms				
View changes and restarts		iome >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules > <b>JMS_Module</b>							
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	1	✓ All changes have been activated. However 1 items must be restarted for the changes to take effect.							
Domain Structure	The JMS module was created	ed successfully.							
	Settings for JMS_Module								
⊡-Environment       └-Deployments       ⊡-Services       □-MS Servers       └-JMS Servers       └-JMS Modules		bdeployments- Ta		s. It also allows you to configure new resources a	and access existing				
Path Services ⊕-Bridges	Name:	זכ	1S_Module	The name of this JMS system module	The name of this JMS system module. More Info				
Data Sources Persistent Stores Foreign JNDI Providers Work Contexts		S resources that hav		m module, including queue and topic destinations	The name of the JMS module descriptor file. More Info				
How do I 🖂 No task help found.	Customize this table	rt keys, desunation	quota, distributed destinations, fi	reign servers, and store-and-forward paramete	s.				
System Status 🗆	Summary of Resources								
Health of Running Servers	New Delete			Showing 0	to 0 of 0 Previous   Next				
Failed (0) Critical (0)	🔲 Name 🗇	Туре	JNDI Name	Subdeployment	Targets				
Overloaded (0)	Л		There are no items	to display					
Warning (0) OK (1)	New Delete Showing 0 to 0 of 0 Previous   Next								
WebLogic Server Version: 12.1.3.0.0 Copyright (c) 1996,2014, Oracle and/or its affiliates. / Oracle is a registered trademark of Oracle Corporatio		be trademarks of the	r respective owners.						

### 2) Enter name as JMS\_SUB and click on Next

	dministration Console 12c Q
Change Center	Home Log Out Preferences 🗠 Record Help     Gonnected to: pegjm     Welcome, weblogic     Connected to: pegjm
View changes and restarts	Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules >JMS_Module
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New Subdeployment           Back         Inish         Cancel           Subdeployment Properties         Subdeployment Properties
Deployments    Services    Messaging	The following properties will be used to identify your new subdeployment. * Indicates required fields
JMS Servers Store-and-Forward Agents JMS Modules Path Services B-Bridges Data Sources Persistent Stores	* Subdeployment Name: JMS_SUB Back Next Finish Cancel



### 3) Select Target as Cluster-JMS and Click on Finish

	ninistration Console 12c		Q
Change Center	쉂 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summ JMS Modules >JMS_MODULE	nary of Migratable Targets >Su	ummary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New Subdeployment Back Next Finish Cancel		
Release Configuration	Targets Please select targets for the Subdeployment		
Domain Structure			
Environment     Servers     Ousters     Observer Templates     Migratable Targets     Coherence Ousters    Machines    Wirtual Hosts    Wirtual Hosts    Work Managers	Servers Clusters Cluster-JMS All servers in the cluster		
Startup and Shutdown Classes Deployments	JMS Servers		
-Messaning 👻	JMSServer-1		
How do I • Configure subdeployments in JMS system modules	Back Next Finish Cancel		

### 4) Sub-Deployment is created

	dministration Con	sole 12c						Q	
Change Center		Dut Preferences 📐 I	Record Help			٩	Welcome, weblogic	Connected to: pegjms	
View changes and restarts		Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules >JMS Module							
Configuration editing is enabled. Future changes will automatically be activated as you	Messages								
modify, add or delete items in this domain.		All changes have been activated. However 1 items must be restarted for the changes to take effect.							
Domain Structure		ment created successfu	lly.				J		
	Settings for JM	15_Module							
Environment    Deployments	Configuration	Subdeployments	Targets	Security	Notes				
□→Services     ■       □→Messaging     □→JMS Servers       □→Store-and-Forward Agents     □       □→JMS Modules     □→JMS Modules       □→JMS Path Services     □	MS Servers This page displays subdeployments created for a JMS system module. A subdeployment is a mechanism by which JMS module resources (such as queues, topics, and connection factories) are grouped and targeted to a server resource (such as JMS servers, server instances, or duster).							uch as queues,	
Bridges     Total Sources	Customize								
Persistent Stores	Subdeploym	ents							
Foreign JNDI Providers    Work Contexts	New De	elete					Showing 1 to 1 c	of 1 Previous   Next	
How do I 🖃	Name 🛛	~		Resource	25		Targets		
Configure subdeployments in JMS system	JMS_SU	B D					Cluster-JMS		
modules <ul> <li>Configure JMS system modules</li> </ul>	New De	alete					Showing 1 to 1 c	of 1 Previous   Next	
System Status									



## 4.3 **Resource Creation**

### 4.3.1 Queue Creation

1) In JMS\_MODULE Click on New

ORACLE WebLogic Server Ad	ministration Conso	le 12c							Q
Change Center	🔒 Home Log Out	t Preferences 📐	Record Hel	p		Q	Welcome, w	eblogic	Connected to: pegjms
View changes and restarts							ummary of Clusters >Summary of Migratable Ta dules >JMS_Module	rgets >M9	-JMS1
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for JMS_Module								
modify, add or delete items in this domain.	Configuration	Subdeployments	Targets	Security	Notes				
Domain Structure	This page display resources.	ys general informat	ion about a J	MS system	module an	d its resources.	It also allows you to configure new resourc	es and ac	cess existing
E-Services	Name:			JMS_Module The name			The name of this JMS system mo	of this JMS system module. More Info	
JMS Servers Store-and-Forward Agents JMS Modules Path Services	Descriptor File Name:			jms/jms_ma	ns/jms_module-jms.xml The name o		The name of the JMS module des	criptor fil	e. More Info
Yath Services B-FidgesData SourcesPersistent StoresForeign JND2 ProvidersWork Contexts		lestination sort key					module, including queue and topic destinati eign servers, and store-and-forward param		ection factories,
How do I	Summary of R	esources							
No task help found.	New Delet	е					Showin	g 0 to 0 o	f 0 Previous   Next
System Status	🔲 Name 🐟	Ту	/pe	JNDI N	ame		Subdeployment	Tar	jets
Health of Running Servers					There	are no items t	o display		
Failed (0) Critical (0) Overloaded (0)	Nev Delet	е					Showin	g 0 to 0 o	f0 Previous   Next

#### 2) Select Distributed Queue and Click on Next

	dministration Console 12c	Q
Change Center	Home Log Out Preferences      Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (m (migratable) >Summary of Clusters >Summary of Migratable Targets >Summa	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New JMS System Module Resource Back Next Finish Cancel	
Domain Structure	stand-alone queues and topics, connection factories, distributed queues	er basic information for creating the resource. For targetable resources, like and topics, foreign servers, and JMS SAF destinations, you can also proceed to sociate targetable resources with subdeployments, which is an advanced
Bridges     Total Sources     Persistent Stores	Connection Factory	Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info
How do I	🔘 Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info
Configure quotas for destinations     Configure JMS templates     Configure destination keys     Configure topics     Configure topics	© Topic	Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info
Configure queues     Configure connection factories     Configure uniform distributed topics     Configure uniform distributed queues	Distributed Queue	Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info

3) Enter the queue name and Click on Next



ORACLE WebLogic Server	The second se			and the second design of the second sec	Commentaria and Commentaria
Change Center	Prome Log Out Pre	ferences 🔜 Record Help	Q	welcome, weblogic	Connected to: pegjm
View changes and restarts		stable) >Summary of Migratable Targets : of Clusters >Summary of Migratable Tar		Clusters >Summary of Migratable Targets >M _Module	5-3MS1
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.		stem Module Resource			
Domain Structure					
		estimation Properties les will be used to identify your new Di ds	stributed Queue. The current module	e is JMS_Module	
JMS Servers Store-and-Forward Agents	What would you like to	name your new destination?			
	* Name:	MDB_QUEUE	$\langle \neg$		
-Data Sources	What JNDI Name would	d you like to use to look up your new d	estination?	~	
-Foreign JNDI Providers	JNDI Name:	MDB_QUEUE		$\langle \neg \rangle$	

### 4) Click on Advance Targeting

Change Center	Home Log Out Preferences 🖾 Record Help     Q	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >DC_3H5_Template-0 >Summary of Servers >Summary of Migratobia Targets >Summary of JN Targets >Summary of JNS Hodyles >3MS_HODDULE	S Servers >3MSServer-1 >Summary of 3MS Servers >3MSServer-1 >Summary of Mgnatable
to pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JHS System Hodule Resource	
domain. Lock & Edit	Back Next Finish Advanced Targeting Cancel	
Release Configuration	The following properties will be used to target your new JHS system module reso	Narce
Iomain Structure	Use this page to view and accept the default targets where this JMS resource will be targeted, accept the default targets, then dick Advanced Targeting to use the subdeployment mech	The default targets are based on the parent IMS system module targets. If you do not want to niam for targeting this resource.
Griveorent     Servers     Generates     Governee Ousters     Magnatable Targets     Governee Ousters     Magnatable Targets     Governee Ousters     Magnatable Targets     Governee Ousters     Magnatable	The following 3HS module targets will be used as the default targets for your new 3HS system m appropriately. Targets :	odule resource. If the module's targets are changed, this resource will also be retargeted
Writual Hosts Work Managers Startup and Shutdown Classes Deployments	Clusters Cluster-3H5 @ All servers in the cluster	
B-Services	An PETTER II DIE CARDET	

### 5) Select Subdeployement as JMS\_SUB and Click on Finish

ORACLE WebLogic Server A	dministration Console 12c	0
Change Center	😰 Hone Log Out Preferences 🔛 Record Help	Welcome, weblogic Connected to: FCU85Doma
View changes and restarts	Home xOC_3HS_Template-0 xSummary of Servers xSummary of Montable Targets xSummary of 3HS Servers x3HSServer Targets xSummary of 3HS Modules x3HS_HODBLE	en1 >Summary of IHS Servers >JHSServen1 >Summary of Migratable
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JHS System Hodule Resource	
Lock & Edit	Back, Ned Finah Cancel	
Release Configuration	The following properties will be used to target your new JHS system module resource	
Somain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism b SAF agent. If necessary, you can create a new subdeployment by clicking the <b>Create a New Subdeployment</b> to module's subdeployment management page.	
Servers 8 Server Templates Mystable Targets - Coherence Ousters	Select the subdeployment you want to use. If you select (none), no targeting will occur. Subdeployments: JMS_SUB  Create a New Subdeployment.	
Machines     What Hosts     What Hosts     Startup and Skutdown Classes     Deployments     Services	What targets do you want to assign to this subdeployment? Targets :	
R Messarini How do L. B	Servers	
Configure quotas for destinators	AdminServer	
Configure 345 templates	Custers	
Configure destination keys     Configure topics     Configure topics	Cluster-JHS # Al sorvers in the cluster	

6) MDB\_QUEUE is created



	ministration Console 12c				Õ			
Change Center	🔒 Home Log Out Preferences 🔤 Rec	cord Help	2	Welcome, weblog	ic Connected to: pegjms			
View changes and restarts		Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules >JMS_Module						
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	automatically be activated as you							
Domain Structure								
+-Environment	Settings for JMS_Module							
Deployments	Configuration Subdeployments Ta	argets Security Notes						
Ervices     Forward Agents								
Data Sources Persistent Stores Foreign JNDI Providers Work Contexts	Descriptor File Name: jms/jms_module-jms.xml     The name of the JMS module descriptor file. More Info     This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories,							
How do I 🗆	JMS templates, destination sort keys, d							
No task help found.	Customize this table							
System Status 🗉	Summary of Resources							
Health of Running Servers	New Delete			Showing 1 to 1	l of 1 Previous   Next			
Failed (0) Critical (0)	🔲 Name 🗞 🛛 Type		JNDI Name	Subdeployment	Targets			
Overloaded (0)	MDB_QUEUE Uniform Di	stributed Queue	MDB_QUEUE	JMS_SUB	Cluster-JMS			
Warning (0) OK (1)	New Delete			Showing 1 to 1	l of 1 Previous   Next			

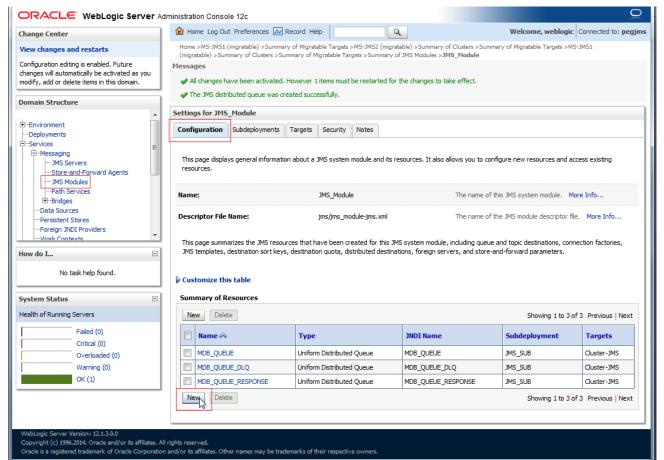
### 7) Similarly Create MDB\_QUEUE\_RESPONSE and MDB\_QUEUE\_DLQ

ORACLE WebLogic Server Ad	ministration Conso	ble 12c								õ
Change Center	Home Log Ou	it Preferences 🟊	Record Hel	lp 📃	(	2			Welcome, weblogic	Connected to: FCUBSDomain
View changes and restarts	Home >DC_JMS_ JMS Modules >JM		y of Servers >	>Summary o	of Migratable Targ	jets >Summary of JM	IS Servers >JMSServer-1 >Sur	mmary of JMS Serve	ers >JMSServer-1 >Summary of M	igratable Targets >Summary of
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages	-								
Lock & Edit		ave been activated.	No restarts	are necessi	ary.					
Release Configuration	Settings for JMS	Settings for JMS_HODULE								
Domain Structure	Configuration	Subdeployments	Targets	Security	Notes					
Environment     -Servers     -Olusters     -Server Templates     -Migratable Targets     -Coherence Clusters     -Work Managers     -Work Managers    Strutup and Shutdown Classes    Deployments    Services    Services	Name: Descriptor File This page summ destination quo	Name: narizes the JMS reso ta, distributed destir is table	urces that ha	ave been cre	JMS_MODULE jms/jms_modu	le-jms.xml 1S system module, i	T including queue and topic de:	he name of this אנ he name of the JM	is existing resources. IS system module. More Info IS module descriptor file. More tion factories, JMS templates, de	Info
How do I 😑	Summary of R									
No task help found.		& Edit button in the	Change Cent	ter to activa	ate all the butto	ns on this page.				
System Status	New Dele	te							Showing	1 to 3 of 3 Previous   Next
Health of Running Servers	📃 Name 🗞			Туре			JNDI Name		Subdeployment	Targets
-	MDB_QUE	UE		Uniform D	Distributed Queu	ie	MDB_QUEUE		JMS_SUB	Cluster-JMS
Failed (0) Critical (0)	MDB_QUE	UE_DLQ		Uniform D	Distributed Queu	ie -	MDB_QUEUE_DLQ		JMS_SUB	Cluster-JMS
Overloaded (0)	MDB_QUE	UE_RESPONSE		Uniform D	Distributed Queu	ie	MDB_QUEUE_RESPONSE		JMS_SUB	Cluster-JMS
. Warning (0) OK (5)	New Dele	te							Showing	1 to 3 of 3 Previous   Next



### 4.3.2 Connection Factory Creation

1) In JMS\_MODULE, Click on New



#### 2) Select Connection Factory and click on Next

ORACLE WebLogic Server Administration Console 12c								
Change Center	€ Home Log Out Preferences ≧ Record Help Second Help Control	nnected to: pegjms						
View changes and restarts Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Clusters >Summary of Migratable) >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable) >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable) >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable) >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable) >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable) >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable) >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable) >Summary of Migratable Targets >Summary of Migratable) >Summary of Migratable) >Summary of Migratable Targets >Summary of Migratable) >Summary of Migratable) >Summary of Migratable Targets >Summary of Migratable) >Summary of Migratable) >Summary of Migratable Targets >Summary of Migratable) >Summary of Migratable) >Summary of Migratable Targets >Summary of Migratable) >Summary of Migratable) >Summary of Migratable Targets >Summary of Migratable) >Summary of Migratabl								
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resource							
modify, add or delete items in this domain.	Back Next Finish Cancel							
Domain Structure	Choose the type of resource you want to create.							
⊕-Environment     ··Oeployments     ⊖-Services     ←-Messaging     ··-JMS Servers     ··-JMS Modules     ··-JMS Modules     ··-JMS Modules     ··-JMS Path Services	Use these pages to create resources in a JMS system module, such as queues, topics, templates, and connection factories. Depending on the type of resource you select, you are prompted to enter basic information for creating the resource. For targetable resour stand-alone queues and topics, connection factories, distributed queues and topics, foreign servers, and JMS SAF destinations, you can als targeting pages for selecting appropriate server targets. You can also associate targetable resources with subdeployments, which is an adv mechanism for grouping JMS module resources and the members to server resources.	so proceed to						
Data Sources    Persistent Stores	Connection Factory Defines a set of connection configuration para are used to create connections for JMS clients							
Foreign JNDI Providers	Queue     Defines a point-to-point destination type, whi     for asynchronous peer communications. A me							



#### 3) Enter the Name and Click on Next

	dministration Console 12c			Q		
Change Center	Home Log Out Preferen	ces 📐 Record Help	٩	Welcome, weblogic Connected to: pegjms		
View changes and restarts			Targets >MS-JMS2 (migratable) >Summary table Targets >Summary of JMS Modules >J	of Clusters >Summary of Migratable Targets >MS-JMS1 J <b>MS_Module</b>		
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resource					
modify, add or delete items in this domain.	Back Next Finish	Cancel				
	Connection Factory Pro	perties				
-Environment     -Deployments     -Services     -Messaging	The following properties will * Indicates required fields	be used to identify you	r new connection factory. The current me	odule is JMS_Module.		
	What would you like to name	your new connection fa	actory?			
MS ModulesPath ServicesPath ServicesPersistent StoresForeign JNDI ProvidersWork Contexts	* Name:	MDBQCF	<			
	What JNDI Name would you like to use to look up your new connection factory?					
	JNDI Name:	MDBQCF				

### 4) Click on Advance Targeting

	dministration Console 12c Q
Change Center	🔒 Home Log Out Preferences 🗟 Record Help
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summary of Migratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JMS System Module Resource           Back         Next         Fnish         Advanced Targeting         Cancel
Release Configuration	The following properties will be used to target your new JMS system module resource
Domain Structure	Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then click Advanced Targeting to use the subdeployment mechanism for targeting this resource.
Environment     Servers     Ousters     Gusters     Migratable Targets     Coherence Clusters	The following JMS module targets will be used as the default targets for your new JMS system module resource. If the module's targets are changed, this resource will also be retargeted appropriately. Targets :
MachinesVirtual HostsWork ManagersStartup and Shutdown ClassesDeploymentsServicesServices	Clusters         Image: Cluster-JMS         Image: Optimized and the cluster
How do I 😑	Back Next Fnish Advanced Targeting Cancel
Configure quotas for destinations	



5) Select JMS\_SUB and Click on Finish

	ministration Console 12c Q								
Change Center	Home Log Out Preferences Record Help     Welcome, weblogic     Connected to: FCUBSDomain								
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summary of Migratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE								
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JMS System Module Resource								
Lock & Edit	Back Next Finish Cancel								
Release Configuration	The following properties will be used to target your new JMS system module resource								
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, duster, or SAF agent. If necessary, you can create a new subdeployment by dicking the <b>Create a New Subdeployment</b> button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.								
⊖-Environment Servers ⊖-Clusters ≡	Select the subdeployment you want to use. If you select (none), no targeting will occur.								
Server Templates Migratable Targets Coherence Clusters	Subdeployments: JMS_SUB  Create a New Subdeployment								
Machines Virtual Hosts Work Managers	What targets do you want to assign to this subdeployment?								
Startup and Shutdown ClassesDeploymentsServices	Targets :								
-Messaning 🔻	Servers								
How do I 🖃	AdminServer								
Configure quotas for destinations									
Configure JMS templates     Configure destination keys	Clusters								
Configure topics	☑ Cluster-JM5								
Configure queues	All servers in the cluster								
Configure connection factories									
Configure uniform distributed topics	JMS Servers								
Configure uniform distributed queues	3 JMSServer-1								
Configure foreign servers									
Configure JMS SAF	Back Next Finish Cancel								
System Status									

6) Connection Factory is **Created** 



ORACLE WebLogic Server Ad	ministration Console 12c				Q
Change Center	🚹 Home Log Out Preferences 🔼	Record Help	Q	Welcome, weblogic	Connected to: pegjms
View changes and restarts		nary of Migratable Targets >MS-JMS2 (mig Summary of Migratable Targets >Summary		mary of Migratable Targets >MS	-JMS1
Configuration editing is enabled. Future changes will automatically be activated as you	Messages				
modify, add or delete items in this domain.	<ul> <li>All changes have been activated</li> <li>Connection factory created succession</li> </ul>	d. However 1 items must be restarted fi cessfully.	or the changes to take effect.		
	Settings for JMS_Module				
Environment     Deployments	Configuration Subdeployments	Targets Security Notes			
E→Services E → Messaging → JMS Servers → JMS Modules → Path Services E → Bridges	This page displays general informa resources.	tion about a JMS system module and its JMS_Module	•	nfigure new resources and ac	-
Data SourcesPersistent StoresForeign JNDI ProvidersWork Contexts How do I		JMS system module, including queue	The name of the JMS module descriptor file. More Info em module, including queue and topic destinations, connection factories, oreign servers, and store-and-forward parameters.		
No task help found.	Customize this table				
System Status	Summary of Resources				
Health of Running Servers	New Delete			Showing 1 to 4 o	f 4 Previous   Next
Failed (0) Critical (0)	🔲 Name 🐟	Туре	JNDI Name	Subdeployment	Targets
Overloaded (0)		Connection Factory	MDBQCF	JMS_SUB	Cluster-JMS
Warning (0)	MDB_QUEUE	Uniform Distributed Queue	MDB_QUEUE	JMS_SUB	Cluster-JMS
OK (1)	MDB_QUEUE_DLQ	Uniform Distributed Queue	MDB_QUEUE_DLQ	JMS_SUB	Cluster-JMS
	MDB_QUEUE_RESPONSE	Uniform Distributed Queue	MDB_QUEUE_RESPONSE	JMS_SUB	Cluster-JMS
	New Delete			Showing 1 to 4 o	f4 Previous   Next



## 5. Server Restart

### 1) Increase the heap size of both DC\_JMS\_1 and DC\_JMS\_2 cluster

	Adminis	tration Console 12c						Ď
Change Center		Home Log Out Preferences 🔤	Record Help	Q			Welcome, we	blogic Connected to: FCUBSDoma
View changes and restarts		ome >Summary of JMS Servers >JM Iodules >JMS_MODULE >Connection			mmary of Migratable Tan	gets >Summary of JMS		
Click the Lock & Edit button to modify, add or delete items in this domain.		nmary of Servers	,,					
Lock & Edit	C	onfiguration Control						
Release Configuration		A server is an instance of WebLogic	Server that runs in it	ts own Java Virtual Machine (JVM	1) and has its own confi	iguration.		
Domain Structure		This page summarizes each server	hat has been configu	red in the current WebLogic Ser	ver domain.			
⊖-Environment →Servers ⊖-Clusters →Server Templates →Migratable Targets	Customize this table							
Coherence ClustersMachinesWarkal HostsWork ManagersStartup and Shutdown Classes		Servers (Filtered - More Colur Click the <i>Lock &amp; Edit</i> button in the New Clone Delete		ctivate all the buttons on this pa	ge.		Sh	owing 1 to 7 of 7 Previous   Next
Deployments		🔲 Name 🗞	Туре	Cluster	Machine	State	Health	Listen Port
How do I		AdminServer(admin)	Configure Dynamic	d Cluster-App	MAC-1	RUNNING	✓ OK Not reachable	7001
Create Managed Servers		DC FCUBS 2	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7102
Clone servers		DC_FCUBS_3	Dynamic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7103
Delete Managed Servers     Delete the Administration Server		DC_FCUBS_4	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7104
Delete the Administration Server     Start and stop servers		DC_JMS_1	Dynamic	Cluster-JMS	MAC-1	SHUTDOWN	Not reachable	7106
		DC_JMS_2	Dynamic	Cluster-JMS	MAC-2	SHUTDOWN	Not reachable	7107
System Status		New Clone Delete		1		1	Sh	owing 1 to 7 of 7 Previous   Next
Health of Running Servers								
Eailed (0)								

### 2) Select the cluster 'DC\_JMS\_Template-0' and

	dministration Console 12c				Ď
Change Center	🏠 Home Log Out Preferences 🔤 Record H	Help			Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >JMSServer-1 >Summary of Migratable Ta Templates >DC JMS Template-0 >Summary of 5		OULE >ConnectionFactory-0 >	placeholder >Summary of Servers >	Summary of Server
Click the Lock & Edit button to modify, add or delete items in this domain.	Summary of Server Templates				
Lock & Edit Release Configuration Domain Structure	This page summarizes each server template the server template the server template contains common, non-defi manage configuration for a group of server in	ault attributes that you can apply to a set	-	hen inherit the template configurat	tion. Server templates enable you to easily
Environment     Servers     Ousters     Government     Server Templates     Outers     Coherence Clusters     Machines	Customize this table Server Templates Click the Lock & Editbutton in the Change C New Clone Delete	enter to activate all the buttons on this pa	ıge.		Showing 1 to 2 of 2 Previous   Next
Virtual Hosts Work Managers	□ Name ↔	Cluster	Machine	Listen Port	Listen Address
Startup and Shutdown Classes	DC_FCUBS_Template	Cluster-App		7100	
-Services	DC_JMS_Template-0	Cluster-JMS		7105	
How do I 🖃	New Clone Delete				Showing 1 to 2 of 2 Previous   Next
Create server templates					



3) Click on Server Start Tab and in Arguments Section enter -XX:MaxPermSize=512m

ange Center Content of	ange Center	Home Lu	og Out Pre	ferences	Record H	Help	6					w	elcome, weblog	ic Connected to	: FCUBSDo
Server Templates JDC_2NE_Template-0   Server Templates JDC_2NE_Template-0 Server Start Templates JDC_2NE_TEMPLATE Server Start Template JDC_2NE_TEMPLATE Server Server Start Template JDC_2NE_TEMPLATE Server S	-		-		_	. 15								1	
Settings for CC_INS_Template-0   main   Icod & Edit   Release Configuration     Save     Modeling   Configuration     Save     Node Manager is a Web logic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup settings   Output   Save     Node Manager is a Web logic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup settings   Understart Sarets   Wook Manager is a Web logic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup settings   Understart Sarets   Wook Manager is a Web logic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup settings   Understart Sarets   Wook Manager is a Web logic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup settings   Understart Sarets   Wook Manager   Services   Services   Services   Start Managed Sarvers from the dimension Consider   Minor Sarver Sartup   Sartup and Shutown Classes   Bit down a server Instance   Start Managed Sarvers from the dimension Consider   Minor Sarver Sartup   Sartup Sa	ew changes and restarts					y of JMS I	Modules >JM5_MODU	.E >ConnectionF	-actory-0 >pla	ceholder >	summary of 5	servers >Summary of !	server Templates >D	C_JMS_Template-	) >Summary
Interview															
Lock & Edd         Release Configuration         main Structure         main Structure         Servers         Custers         Servers         Coherence Custers         Modines         Wvtual Hoats         Work Managers         Save Vendor:         The Java Home:         Java Vendor:         The Java None directory (path on the machine running Node Manager) to use when starting this server. More Info         With Managers         Save solution         Coherence Custers         Machines         Work Managers         The Java Nome directory (path on the machine running Node Manager) to use when starting this server. More Info         Work Managers         Rescandor         Work Managers         Rescandor         Work Managers         Rot Directory:         EKA Home:         Deloy meth         Servers         Britter Status         Rot Directory:         The directory water those Manager if you do not specify Roet Directory value, the doanand networy is used by Atlanger if you do not specify Roet Directory value, the doanand networy is used by Roet Directory value, the doanand networy is used by Roet Directory value, the doanand netcory is usee throw is used in		Settings for	DC_JMS_	l emplat	e-0										
Release Configuration       Services       Services       Services       Services       Coherent         Bit Association       Services       Services       Services       Services       Coherent         Services       Services       Services       Services       Services       Coherent         Services       Services       Services       Services       Services       Services       Coherent         Services       Services       Services       Services       Services       Services       Services       Services       Coherent       Services       Services <td< td=""><td></td><td>Configurat</td><td>tion Prot</td><td>tocols L</td><td>ogging Deb</td><td>oug No</td><td>otes</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		Configurat	tion Prot	tocols L	ogging Deb	oug No	otes								
Reisses Configuration         hain Structure         invoronment         Servers         Obstrues         -Server Templetes         Modulines         -Virtual Hosts         -Virtual Hosts         -Ware Manager Status         Total Local         Difference Status         th of Running Servers         Failed (0)	Lock & Edit	General	Cluster	Services	Keyetores	551	Federation Services	Deployment	Migration	Tuning	Overload	Health Monitoring	Server Start	Wab Services	Coherenc
ain Structure   worment   Servers   Custers   Servers   Coherence Custers   Machines   With Managers   Machines   With Managers   Startup and Shutdown Classes   Biogramments for Managed Servers from the maskine running Node Manager) to use when starting this server. More Info   Directory:   The Java Vendor:   The Java Vendor value to use when starting this server. More Info   Java Vendor:   The Java Vendor:   The Java Vendor value to use when starting this server. More Info   Directory:   The Java Vendor:   The directory (jath on the machine running Node Manager) to use when starting this server:   Machines   The directory value, the domain directory is used by default. More Info   Colorence Conside   ut down a server instance   mistration Console   tit down a server instance   The family this server:   More Info   The arguments to use when starting this server. More Info   The arguments to use when starting	Release Configuration	General	Cluster	Jei vices	Reystores	331	rederation services	Deployment	Migrauon	Turing	Overioau	rieard monitoring	Server Start	Web Services	Conerent
wroment   Servers		Save													
wironnent   -Servers   -Custers   -Myratable Targets   -Coherence Custers   -Machines   -Virtual Hosts   -Servers   -Startup and Shutdown Classes   peloyments   -Work Managers   -Startup and Shutdown Classes   peloyments   -Work Managers   -Work Managers   -Work Managers   -Work Managers   -Startup and Shutdown Classes   peloyments   -Work Managers   -Work Managers   -Work Managers   -Work Managers   -Startup and Shutdown Classes   peloyments   -Startup and Shutdown Classes   peloyments   -Manager Startup and Shutdown Classes   peloyments   -Work Managers   -Manager Startup and Shutdown Classes   peloyments   -Work Managers   -Manager Startup and Shutdown Classes   peloyments   -Manager Startup and Shutdown Classes   peloyments   -Manager Startup and Shutdown Classes   peloyments   -Manager Startup and Shutdown Classes   pelooments   -Manager Startup and Shutdown Classes   peloyments   -Manager Startup and Shutdown Classes   peloyments   -Manager Startup and Shutdown	ain Structure														
wiroment   Servers   -Servers   -Wathines   -Wathines <td></td> <td>Node Man</td> <td>ager is a W</td> <td>ebl onic Se</td> <td>rver utility tha</td> <td>at you car</td> <td>use to start, susper</td> <td>nd, shut down</td> <td>and restart se</td> <td>ervers in pr</td> <td>ormal or uper</td> <td>xpected conditions</td> <td>lse this name to con</td> <td>figure the startu</td> <td>n settings</td>		Node Man	ager is a W	ebl onic Se	rver utility tha	at you car	use to start, susper	nd, shut down	and restart se	ervers in pr	ormal or uper	xpected conditions	lse this name to con	figure the startu	n settings
••• Clusters         ·•• Stratus         modelines         model								ia, shacaown, e	ana restare se	civera in ric	indi or drie.	xpected contrations, c	se ans page to con	inguie the starta	pacturiga
Server Templates   Ordprence Clusters   -Machines   -Work Managers   -Work Managers   -Startus   -Machines   -Machines   -Work Managers   -Startus   -Machines   -Machines   -Machines   -Machines   -Work Managers   -Startus   -Machines   -Machines <tr< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>			-												
L-Migratable Targets   -Coherence Clusters   -Machines   -Wind Managers   -Work Managers   -Startup and Shutdown Classes   ployments   rocks   BEA Home:   Dava Vendor:   BEA Home:   Dava Vendor:   BEA Home:   Dava Vendor:   Dava Vendor:   BEA Home:   Dava Vendor:   Dava Vendor:   BEA Home:   Dava Vendor:   Dava Vendor:   Dava Vendor:   Dava Vendor:   BEA Home:   Dava Vendor:															
Coherine Custers  Machines  Machines  Machines  Machines  Work Managers  Managed Servers from the ministration Console at down as server instance  Main Status  Main Status  Main Status  Main Status		Java Hom	e:											running Node Mar	nager) to
-Machines       -Watchines       The Java Vendor:       The Java Vendor:         -Witch Hosts       -Witch Magers       The Java Vendor value to use when starting this server. More Info         -Work Managers       -Startup and Shutdown Classes       The EEA home directory (path on the machine running Node Manager) to use when starting this server. More Info         bit Mescanine       The directory that this server uses as its root directory. This directory. Search use when starting this server. More Info         Infouring Servers       The daspath (path on the machine running Node Manager) to use when starting this server. More Info         Failed (0)       Arguments:       The arguments to use when starting this server. More Info											use whe	en starting this server	. More Info		
-Wrule Hosts       -Work Managers         -Work Managers       -Work Managers         -Work Managers       -Work Managers         -Work Managers       -Work Managers         -Work Managers															
-Work Managers       -Startup and Shutdown Classes         -Startup and Shutdown Classes       Image: Comparison of the server of the ser		Java Vend	lor:								The Jav	a Vendor value to us	e when starting this	s server. More I	nfo
Startup and Shutdown Classes ployments survices The BEA home elinectory (path on the machine running Node Manager) to use when starting this server. More Info Root Directory: BEA Home: Construction BEA Home: BEA															
eployments       use when starting this server. More Info         wrices          do I          nfigure startup arguments for Managed rvers          restriction Console          ut down a server instance          Faled (i)															
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indessanion <ul> <li>Indessanion</li> <li>Root Directory:</li> </ul> The directory that this server uses as its root directory. This directory must be on the computer that hosts Node Manager. If you do not specify a Root Directory value, the domain directory is used by default. More Info           figure startup arguments for Managed Servers from the inministration Console at down a server instance              The dasspath (path on the machine running Node Manager) to use when starting this server. More Info           failed (0)              Arguments:											use whe	en starting this server	. More Info		
i.Messanin       Root Directory:       The directory that this server uses as its root directory, must be on the computer that this server uses as its root directory, must be on the computer that hose Node Manager. If you do not specify a Root Directory value, the domain directory is used by default. More Info         Infigure startup arguments for Managed Servers from the immistration Console ut down a server instance       The daspath (path on the machine running Node Manager) to use when starting this server. More Info         Faled (0)       Arguments:       The arguments to use when starting this server. More Info															
ao L.       Directory value, the domain directory is used by default. More Info         infigure startup arguments for Managed Servers from the initiation Console it down a server instance       The dasspath (path on the machine running Node Manager) to use when starting this server. More Info         em Status          r falled (0)       Arguments:         Y. May De ym 51 zee 51 2ml       The arguments to use when starting this server. More Info	Messaninn		ctory:								The dire	ctory that this serve	r uses as its root di	rectory. This dire	ctory must
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Veris       Class Path:       The dasspath (path on the machine running Node Manager) to use when starting this server. More Info         In of Running Servers           Failed (0)       Arguments:       The arguments to use when starting this server. More Info											Director	y value, the domain o	directory is used by	default. More I	info
art Managed Servers from the dministration Console uut down a server instance tem Status tem Status Failed (0) Failed (0) The arguments to use when starting this server. More Info															
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nut down a server instance     Image: server instance       tem Status     Image: server instance       th of Running Servers     Image: server instance       Falled (0)     Image: server instance       Y: May Derm Strame 51 zerver     The arguments to use when starting this server. More Info	ervers										starting	this server. More I	nto		
	art Managed Servers from the														
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Arguments:     The arguments to use when starting this server. More Info       Failed (0)     L_YY May DaymeSt gameSt 2 million	art Managed Servers from the ministration Console														
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	art Managed Servers from the Immistration Console ut down a server instance em Status in th of Running Servers Failed (0)	Argument		ze=510r	n				.::		The arg	uments to use when :	starting this server	. More Info	

4) **Restart** the AdminServer and DC\_JMS\_1 and DC\_JMS\_2 managed servers.



# 6. Foreign Server Creation

## 6.1 Module Creation

#### 1) JMS\_Modules and Click on New

	ministration Console 12c	Q			
Change Center	🟦 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegime			
View changes and restarts	me >Summary of Servers >MS-JMS2 >Summary of Virtual Hosts >Summary of Servers >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of ployments >Summary of JMS Modules				
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Summary of JMS Modules				
Domain Structure  Work Managers Startup and Shutdown Classes Deloyments Services  Messaging Services Structure and-Forward Agents Structure and-Forward Agents Structure and-Forward Agents Structure and Services Structure and Services Ser	JMS system resources are configured and stored as modules similar to standard JZEE modules. Such resources quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAP) parameters. It global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JHS Modules				
Path Vices     JMS Modules, Level 3, 3 of 5, S	lected	Showing 1 to 1 of 1 Previous   Next			
Data Sources Persistent Stores Foreign JNDI Providers	Image: Name ↔       Image: Mathematical State       Image: Mathematical State	Type System			
How do I	New Delete	Showing 1 to 1 of 1 Previous   Next			
Configure resources for JMS system modules					

### 2) Enter name as MDB\_MODULE and click on Next

	Iministration Console 12c	Q
Change Center	Anne Log Out Preferences      Record Help     Q     Welcome, web     Welcome, web	logic Connected to: pegjms
View changes and restarts	Home >Summary of Migratable Tarnete \MG-1MG1 (minratable) \Gummany of Minratable Tarnete \MG-1MG1 (minratable) \Gummary of Oluste Targets >MG-1MG1 (migratable) >S	rs >Summary of Migratable
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create JMS System Module Back Nrg Finish Cancel	
Environment     Deployments     Services	The following properties will be used to identify your new module. JMS system resources are configured and stored as modules similar to standard J2EE modules. Such resources include queues, topic templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) param administratively configure and manage JMS system modules as global system resources. * Indicates required fields	
iPath Services	What would you like to name your System Module?  * Name: MDB_MODULE	
How do I	What would you like to name the descriptor file name? If you do not provide a name, a default will be assigned. Descriptor File Name:	
Configure JMS servers	Where would like to place the descriptor for this System Module, relative to the jms configuration sub-directory of your domain?	
System Status	Location In Domain:	
Health of Running Servers	Back Next Finish Cancel	
Failed (0)		



### 3) Select target as Cluster-App and click on Next

	dministration Console 12c	Q
Change Center	A Home Log Out Preferences 🖂 Record Help	Welcome, weblogic Connected to: FCU8SDomain
View changes and restarts	Nome splaceholder >Summary of Servers >Summary of Server Templates >DC_IRS_Tem Nodules >INS_NOOULE >Summary of IRS Nodules	plate-0 >Summary of Server Templates >DC_JHS_Template-0 >Summary of Servers >Summary of JHS
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create JHS System Hodule	
domain.	Back Neet Finish Cancel	
Release Configuration	The following properties will be used to target your new JMS system m	sdule.
Domain Structure	Use this page to select the server or cluster on which you would like to deploy this 3	MS system module. You can reconfigure targets later if you wish.
B-Environment  -Servers B-Ousters	Targets :	
-Server Templates Migratable Targets	Servers	
Coherence Ousters Machines	AdminServer	
	Clusters	
Deployments     Services     P-Messaging	Cluster-App O All servers in the cluster	
How do I 🛞	Cluster-JHS	
Configure JMS system modules     Configure JMS servers	All servers in the cluster	

### 4) Select CheckBox and Click on **Finish**

	dministration Console 12c	õ
Change Center	Home Log Out Preferences Record Help     Welcome, weblogic     Connected I	to: pegjms
View changes and restarts	Home >Summary of Servers >MS-JMS2 >Summary of Virtual Hosts >Summary of Servers >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments >Summary of JMS Modules	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create JHS System Madule Back Next Finish Cancel	
	Add resources to this JMS system module	
Environment     Servers     Clusters	Use this page to indicate whether you want to immediately add resources to this JMS system module after it is created. JMS resources include queues, topics, connection factories	, etc.
Server Templates Migratable Targets Coherence Clusters	Would you like to add resources to this JMS system module?	
Machines Virtual Hosts	Back Next Finish Cancel	
Work Managers Startup and Shutdown Classes		

#### 5) MDB\_MODULE is created

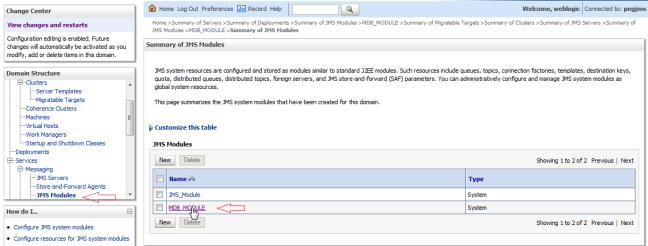
	ORACLE WebLogic Server Administration Console 12c					
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms				
View changes and restarts	Home >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments >Summary of J Targets >Summary of Clusters >Summary of JMS Servers > <b>Summary of JMS Modules</b>	MS Modules >MDB_MODULE >Summary of Migratable				
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Summary of JMS Modules					
Domain Structure       □-Clusters       □-Server Templates       □-Migratable Targets       □-Oberence Clusters       □-Machines       □-Virtual Hosts       □-Work Managers       □-Startup and Shutdown Classes	JMS system resources are configured and stored as modules similar to standard J2EE modules. Such resources include q quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can a global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JMS Modules					
Deployments	New Delete	Showing 1 to 2 of 2 Previous   Next				
	□ Name ↔	Type System				
How do I		System				
Configure JMS system modules     Configure resources for JMS system modules	New Delete	Showing 1 to 2 of 2 Previous   Next				



## 6.2 Foreign Server Creation

#### In MDB\_MODULE, Click on New Resource, Select Foreign Server

ORACLE' WebLogic Server Administration Console 12c



#### 1) Click on Configuration → New

	dministration Console 1	12c				Q
Change Center	Home Log Out P	Preferences 🔀 Record Help	• 🔍 🔍		Welcome, weblogi	Connected to: pegjms
View changes and restarts		Deployments >Summary of JMS ULE >Summary of JMS Module		mmary of Migratable Targets >Summary of	Clusters >Summary of JMS Servers >Summary	of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for MDB_M	IODULE				
modify, add or delete items in this domain.	Configuration Su	ubdeployments Targets	Security Notes			
Domain Structure						
Environment	This page displays g	general information about a J	MS system module and its res	ources. It also allows you to configure ne	w resources and access existing resources.	
Servers ⊟Clusters Server Templates	Name:		MDB_MODULE	The na	ame of this JMS system module. More Info.	
Migratable Targets Coherence Clusters	Descriptor File Na	me:	jms/mdb_module-jms.	anl The na	ame of the JMS module descriptor file. More	Info
Machines Virtual Hosts Work Managers Startup and Shutdown Classes		This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.				plates, destination
Deployments Services	Customize this t	able				
How do I	Summary of Reso	ources				
No task help found.	New Delete	]			Showing 0 to 0	of 0 Previous   Next
	🔲 Name 🗇	Туре	JNDI Name	Subdeployment	Targe	ts
System Status 🖂				There are no items to display	· · · · ·	
Health of Running Servers	New Delete				Showing 0 to 0	of 0 Previous   Next
Failed (1)	h3					
Critical (0)						



 $\circ$ 

### 2) Select Foreign Server and Click on Next

	Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: peg
nange Center		
iew changes and restarts	Home >Summary of Deployments >Summary of JMS Modules >MDB_MODU Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	ULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS
onfiguration editing is enabled. Future	Create a New JMS System Module Resource	
anges will automatically be activated as you odify, add or delete items in this domain.	Create a new 5H3 System House Resource	
any, and of delete remain and domain.	Back Next Finish Cancel	
main Structure		
	Choose the type of resource you want to create.	
Environment		
Servers	Use these pages to create resources in a JMS system module, such as	queues, topics, templates, and connection factories.
⊡-Clusters	Depending on the type of resource you select, you are promoted to en	nter basic information for creating the resource. For targetable resources, like stand-alone queues and topics,
Server Templates Migratable Targets		and JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You
Coherence Clusters	can also associate targetable resources with subdeployments, which is	s an advanced mechanism for grouping JMS module resources and the members to server resources.
Machines		
Virtual Hosts	Connection Factory	Defines a set of connection configuration parameters that are used to
Work Managers		
Charten and Chutdown Classes		create connections for JMS clients. More Info
LStartup and Shutdown Classes -Deployments		
-Deployments -Services	© Queue	Defines a point-to-point destination type, which are used for
LStartup and Shutdown Classes -Deployments -Services IMessaning	• Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue
-Deployments -Services		Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info
Deployments Services I <sup></sup> Messarinn w <b>do I</b>		Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for
Deployments Services In Messaninn w do L Configure quotas for destinations		Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is
Deployments Services M-Messaninn w do I Configure quotas for destinations Configure JMS templates		Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for
Deployments Services <b>in-Messacion</b> <b>w do I</b> Configure quotas for destinations Configure JMS templates Configure destination keys		Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is
Deployments Services I <sup>th</sup> -Messarina W of L Configure quotas for destinations Configure JMS templates Configure destination keys Configure topics	Topic	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. Mor
Deployments Services ( <del>c): Messavinn</del> Configure quotas for destinations Configure and templates Configure etaplates Configure topics Configure queues	Topic	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers,
Deployments Services (F1-Messanin <b>w do I</b> Configure quotas for destinations Configure Quotas for destinations Configure destination keys Configure topics Configure queues Configure connection factories	Topic     Distributed Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info
Deployments Services (E)-Messaninn w do I Configure quotas for destinations Configure Quotas for destinations Configure duotas for destination keys Configure duotas Configure duotas Configure quotas Configure quotas	Topic	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info           Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info           Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS dients. Mor Info           Defines a set of topics that are distributed on multiple JMS servers, but which are accessible as a single, logical topic to JMS dients. Mor
Deployments Services In Messanin A do L Configure quotas for destinations Configure JMS templates Configure destination keys Configure topics Configure topics Configure uniform distributed topics Configure uniform distributed queues	Topic     Distributed Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS dients. More Info Defines a set of topics that are distributed on multiple JMS servers,
-Deployments -Services I=Messaning	Topic     Distributed Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info Defines a set of topics that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More

#### 3) Enter name and Click on Next

DRACLE WebLogic Server Administration Console 12c				
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms		
View changes and restarts Home >Summary of Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS Modules >MDB_MODULE >SUMMARY MODULE >SUMMARY of JMS Modules >MDB_MODULE >SUMMARY of JMS MODULE >SUMMARY		of Clusters >Summary of JMS Servers >Summary of JMS		
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resource			
modify, add or delete items in this domain.	Back Next Finish Cancel			
Domain Structure	Foreign Server Properties			
-EnvironmentServers -Clusters	The following properties will be used to identify your new foreign server. The current module is MDB_MODULE.			
Server Templates	* Indicates required fields			
Coherence Clusters Machines Virtual Hosts	* Name: ForeignServer-1			
Work Managers Startup and Shutdown Classes Deployments	Back Neg Finish Cancel			
E-Services				



4) Click on Advanced Targeting

	Iministration Console 12c Q
Change Center	🟦 Home Log Out Preferences 🔝 Record Help
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Server Templates >DC_JMS_Template-0 >Summary of Servers >Summary of JMS Modules >JMS_MODULE >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >JMS Mod
No pending changes exist. Click the Release Configuration button to allow others to edit the domain. Lock & Edit Release Configuration	Create a New JMS System Module Resource           Back         Next         Fnish         Advanced Targeting         Cancel           The following properties will be used to target your new JMS system module resource         Image: Cancel         Cancel
Domain Structure	Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then dick <b>Advanced Targeting</b> to use the subdeployment mechanism for targeting this resource. The following JMS module targets will be used as the default targets for your new JMS system module resource. If the module's targets are changed, this resource will also be retargeted appropriately. Targets :
Virtual HostsViork ManagersStrutup and Shutdown ClassesDeploymentsServicesServicesServicesConfigure quotas for destinations	Clusters Cluster-App © All servers in the cluster Back. Next Finish Advanced Targeting Cancel

#### 5) Click on Create New SudDeployment

	ministration Console 12c	
Change Center	Home Log Out Preferences 🖾 Record Help     Connected to: pegjm     Welcome, weblogic     Connected to: pegjm	15
View changes and restarts	Home >Summary of Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resource	1
modify, add or delete items in this domain.	Back Next Finish Cancel	1
Domain Structure	The following properties will be used to target your new JMS system module resource	
-Environment     -Servers     -Clusters     -Server Templates     -Migratable Targets	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, duster, or SAF agent. If necessary, you can create a new subdeployment by dicking the <b>Create a New Subdeployment</b> button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.	
Coherence Clusters	Select the subdeployment you want to use. If you select (none), no targeting will occur.	
Virtual Hosts Work Managers Startup and Shutdown Classes	Subdeployments:	
Deployments	What targets do you want to assign to this subdeployment?	

### 6) Enter Name as MDB\_SUB and Click on OK

	dministration Console 12c		Q
Change Center	🔒 Home Log Out Preferences 🔤 Record	d Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >Summary of Deployments >Summary of Modules >MDB_MODULE >Summary of JMS M		table Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New Subdeployment	-	
modify, add or delete items in this domain.  Domain Structure	OK Cancel Subdeployment Properties		
Environment	The following properties will be used to iden	ntify your new subdeployment.	
Servers E ClustersServer Templates	Subdeployment Name:	MDB_SUB	
LMigratable Targets Coherence Clusters Machines	OK Cancel		
Virtual Hosts Work Managers Startup and Shutdown Classes			G



### 7) Select Target as Cluster-App and Click on Finish

	dministration Console 12c Q
Change Center	🏦 Home Log Out Preferences 🖉 Record Help
View changes and restarts	Home >DC_JMS_Template=0 >Summary of Server Templates >DC_JMS_Template=0 >Summary of Servers >Summary of JMS Modules >JMS_MODULE >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >JMS Modules >JMS Modules >JMS Modules >SUMMARY of JMS Modules >SUMMARY of JMS Modules >MDB_MODULE >SUMMARY of JMS Modules >MDB_MODULE >SUMMARY of JMS Modules >MDB_MODULE >SUMMARY of JMS Modules >JMS Modules >JMS Modules >JMS Modules >SUMMARY of JMS Modules >SUMMAR
Pending changes exist. They must be activated to take effect.	Create a New JMS System Module Resource
Activate Changes	Back Next Finish Cancel
Undo All Changes	The following properties will be used to target your new JMS system module resource
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, cluster, or
⊡-Environment ↓Servers ⊟-Clusters	SAF agent. If necessary, you can create a new subdeployment by clicking the Create a New Subdeployment button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.
	Select the subdeployment you want to use. If you select (none), no targeting will occur. Subdeployments: MDB_SUB Create a New Subdeployment
Machines Virtual Hosts	
Work Managers Startup and Shutdown Classes	What targets do you want to assign to this subdeployment?
Deployments Services	Targets :
How do I	Servers
Configure quotas for destinations	AdminServer
Configure JMS templates     Configure destination keys	Clusters
Configure topics	☑ Cluster-App
Configure queues     Configure connection factories	All servers in the cluster
Configure uniform distributed topics	JMS Servers
Configure uniform distributed queues	Jris servers
Configure foreign servers	JMSServer-1
Configure JMS SAF	
System Status	Back Next Finish Cancel
System Status	

#### 8) Foreign Server is created

	nistration Console 12c	õ		
Change Center	🔒 Home Log Out Preferences 🐼 Record Help	ted to: <b>pegjms</b>		
View changes and restarts	Home >Summary of Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS Modules >MDB MODULE >Summary of JMS Modules >MDB_MODULE >			
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Iessages ✔ All changes have been activated. No restarts are necessary. ✔ The foreign server was created successfully.			
Domain Structure	iettings for MDB_MODULE			
Environment     Servers	Configuration Subdeployments Targets Security Notes			
Clusters    Server Templates    Migratable Targets    Coherence Clusters	This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.			
Machines Virtual Hosts	Name: MDB_MODULE The name of this JMS system module. More Info			
Work Managers Startup and Shutdown Classes Deployments	Descriptor File Name: jms/mdb_module-jms.xml The name of the JMS module descriptor file. More Info			
How do I	This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, des sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.	itination		
No task help found.	Customize this table			
	Summary of Resources			
System Status	New Delete Showing 1 to 1 of 1 Prev	ious   Next		
Health of Running Servers				
Failed (1)	Name     Type     JNDI Name     Subdeployment     Targets			
Critical (0)	ForeignServer-1     Foreign Server     N/A     MDB_SUB     Cluster-App			
Overloaded (0) Warning (0)	New Delete Showing 1 to 1 of 1 Prev	ious   Next		
OK (3)				



## 6.3 Foreign Server Configuration

### 1) Click on ForeignServer-1

ORACLE WebLogic Server Ad	ministration Conso	le 12c					õ
Change Center	Home Log Ou	t Preferences 🔤 Reco	ord Help	٩		Welcome, w	eblogic Connected to: pegjms
View changes and restarts					nmary of Migratable Targets >Sum	mary of Clusters >Summary of JMS Servers >Su	mmary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Modules >MD8_MODULE >Summary of JMS Modules >MD8_MODULE Messages # All changes have been activated. No restarts are necessary.						
Domain Structure	The foreign s	erver was created succe	ssfully.				
	Settings for MDB	_MODULE					
Environment     Servers	Configuration	Subdeployments Ta	rgets Security	Notes			
Server Templates Migratable Targets Coherence Clusters Machines Virtual Hosts Virtual Hosts	This page displa Name:	ys general information al	•	n module and its reso	urces. It also allows you to confi	gure new resources and access existing resources and access existi	
Vork ManagersStartup and Shutdown ClassesDeploymentsServices	Descriptor File Name: jms/mdb_module-jms.xml The name of the JMS module descriptor file. More Info This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.						
How do I 🖂 No task help found.	Customize this table						
System Status	New Delet					Showing	1 to 1 of 1 Previous   Next
Health of Running Servers			_				
Failed (1)	🔲 Name 🐟	4	Туре		JNDI Name	Subdeployment	Targets
Critical (0)	E Foreignfier	ver-1	Foreign Serve	r	N/A	MDB_SUB	Cluster-App
Overloaded (0) Warning (0)	New Delet	e				Showing	1 to 1 of 1 Previous   Next

#### 2) Enter the JNDI URL as Cluster URL(JMS Managed Servers) and Click on Save

ORACLE WebLogic Server			
Change Center	A Home Log Out Preferences 🐼 R	econd Help	Welcome, weblogic Connected to: FCUBSDoma
View changes and restarts	Home >Summary of Custers >Summary Modules >MDE_MODULE >ForeignServ	of Server Templates > Summary of Servers > Summary of JMS Modules > MOI er-1	8_MODULE > ForeignServer-1 > Summary of Servers > Summary of 3HS
3kk the Lock & Edit button to modify, add or lefete items in this domain.	Hessages All changes have been activated. N	io restarts are necessary.	
Release Configuration	Settings for ForeignServer-1		
revease Computation	Configuration Subdeployment N	iotes	
Iomain Structure	General Destnations Connectio	n Factories	
Converse     Conters     Conters     Conters     Monable Trapets     Coherence Clusters     Machines     Watual Nots     Work Nanagers	A foreign server represents a 3/DE pr	ange Center to modify the settings on this page. ovider that resides outside a WebLogic Server. It contains information to jects (queues or topics) can be defined on one JRDI directory. Use this	hat allows WebLogic Server to reach the remote 3KDI provider. This way, a number of page to configure a foreign server.
-Startup and Shutdown Classes	🖑 Name:	ForeignServer-1	The name of this foreign server. More Info
9-Services 9-Messacing	JMDT Initial Context Factory:	weblogic ind.WLInitiaK	The name of the class that must be instantiated to access the JNDI provider. This class name depends on the JNDI provider and the vendor that are being used. More Info
Oreate foreign connection factories Oreate foreign destinations	() JNDI Connection URL:	[G,//10.184.148.185.7106,10.184.148.189.7107	The URL that WebLogic Server will use to contact the 3HDI provider. The syntax of this URL depends on which 3HDI provider is being used. For WebLogic 3HS, leave this field blank if you are referencing WebLogic 3HS objects within the same cluster. <b>Hore 3n6</b>
ystem Status	8		



#### 3) Click on Connection Factories

	ministration Cons	ole 12c					Q
Change Center	🟦 Home Log O	Home Log Out Preferences 🖾 Record Help					
View changes and restarts		DULE >Summary of MODULE >ForeignSe			mary of JMS Servers >Summa	ry of JMS Modules >MDB_MODULE >	Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for For	eignServer-1	-				
modify, add or delete items in this domain.	Configuration	Subdeployment	Notes				
Domain Structure	General Dest	tinations Connec	tion Factories				
ServersServer TemplatesMigratable TargetsMachinesWirtual HostsWirtual HostsWirtual HostsStartup and Shutdown ClassesStartup and Shutdown ClassesDeclaused	another instan This page sum Customize th	ce of WebLogic Serv	er running in a di onnection factori	ifferent duster or server, or	a foreign provider, as long a	ccessible via JNDI. A remote conne as that provider supports JNDI.	ction factory can be used to refer to
Deployments	New Del	ete					Showing 0 to 0 of 0 Previous   Next
How do I	🔲 Name 🖉	\$	Local JN	IDI Name		Remote JNDI Name	
				т	nere are no items to display	1	
Configure foreign servers     Create foreign destinations	New Del	ete					Showing 0 to 0 of 0 Previous   Next
System Status							

### 4) Create MDBQCF Connection Factory

ORACLE WebLogic Server	Administration Console 12c			0
Change Center	A Home Log Out Preferences	Record Help	9	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >HDB_HODULE >Summary Modules >HDB_HODULE >Foreig		ry of Ousters >Summary of 2HS Servers >Su	nemary of 3HS Modules + MDB_MODULE + Summary of 3HS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New Foreign JHS Co			
Domain Structure	Foreign Connection Factor	y Properties		
Environment     Servers     Custers     Genver Templates     Migratable Targets	The following properties will be * Indicates required fields	used to identify your new fore	ign connection factory,	
Coherence Clusters Machines Virtual Hosts	"Name:	MDBQCF		
Work Managers Startup and Shutdown Classes Deployments	Local JNDI Names	MDBQCF		
B-Services	Remote 3NDI Name:	MDBQCF[		
How do L.	OK Cancel			
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

#### 5) Click on Destination

Change Center	😰 Home Log Out Preferences 🔛 Record H	**P Q		Welcome, weblogic	Connected to: pegge
View changes and restarts	Home >HOB_HODULE >Summary of Highlable 1 Hodules >HOB_HODULE >ForeignServer-1 >Can		ery of IMS Servers >Summary of IMS Hodules >HOB_H	ODULE >Summary of IMS	
Configuration editing is enabled. Puture changes will automatically be activated as you modify, add or delete items in this domain.	Hessages # All changes have been activated. However		larges to take effect.		
Domain Structure	Settings for ForeignServer-1				
Benarment	Configuration Subdeployment Notes				
Servers	General Destgagtors Connection Factories				
Di Ousters	Configuration - Destinations- Tab				
Migratable Targets Coherence Clusters			ther server, and which is accessible via 3401. A remo foreign provider, as long as that provider supports 3		ed to refer to
Machines				£1.	
Wrbuel Hosts Work Managers	This page summarizes the foreign connection	factories that have been created for	r this domain.		
Startup and Shutdown Classes	& Customize this table				
Oepkyments     Bi-Services					
	Foreign Connection Factories (Filtered -	More Columns Exist)			
R Messager				and the second se	
	New Delate			Showing 1 to 1 a	f 1 Previous   Next
Now do L. 🛛		cal JND1 Name	Remote 3401 Name	Showing 1 to 1 e	f 1. Previous   Next
	🗇 Name 🕫 🛛 Lo	cal 3ND1 Name	Remote 3001 Name	Showing I to I a	f 1. Previous   Next



### 6) Create MDB\_QUEUE

View changes and restarts	Home >JMS Modules >MDB_MODU	E >ForeignServer-1 >MDB_MODULE >ForeignServer-1 >S	Summary of Servers >JMS Modules >MDB_MODULE >ForeignServer-1 >Configuration	
Configuration editing is enabled. Future	Settings for ForeignServer-1			
changes will automatically be activated as you modify, add or delete items in this domain.	Configuration Subdeployment	t Notes		
Domain Structure	General Destinations Con	nection Factories		
Environment     Servers     Custers     Custers     Witrual Hosts     Writual Hosts     Writual Hosts     Writual Hosts     Work Managers     Work Managers     Startup and Shutdown Classes     "Deployments	directory, and the object will be		destination is looked up on the local server, a look-up will be performed automatically on the remote JNDI ain. Showing 0 to 0 of 0 Previous	Next
-Services	🔲 Name 🖘	Local JNDI Name	Remote JNDI Name	
How do I		т	There are no items to display	
Configure foreign servers	New Delete		Showing 0 to 0 of 0 Previous	Next
Create foreign connection factories				
System Status				
Health of Running Servers				

	dministration Console 12c			Ŏ
Change Center	Home Log Out Preferences	Record Help		Welcome, weblogic Connected to: pegjm
View changes and restarts	Home >MDB_MODULE >Summary Modules >MDB_MODULE >Foreign	of Migratable Targets >Summary of Clusters >Summary of JMS 1Server-1 >Configuration	Servers >Summary of JMS Modules >MDB_MODULE >	Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New Foreign JMS Des	-		
modify, add or delete items in this domain.	Cancel			
Domain Structure	Foreign Destination Proper	ties		
Environment     Servers     Servers     Server Templates    Migratable Targets    Coherence Clusters    Machines    Virtual Hosts	The following properties will be a * Indicates required fields * Name:	used to identify your new foreign destination.		
Work Managers Startup and Shutdown Classes Deployments	Local JNDI Name:	MDB_QUEUE		
E-Services	Remote JNDI Name:	MDB_QUEUE		
How do I 🗉	OK Cancel			
Configure foreign servers				
Create foreign connection factories				

### 7) Similarly Create MDB\_QUEUE\_RESPONSE, MDB\_QUEUE\_DLQ

	dministration Console 12c		Q
Change Center	Home Log Out Preferences	Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MDB_MODULE >Summar Modules >MDB_MODULE >Foreig	y of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary inServer-1 > <b>Configuration</b>	y of JMS Modules >MDB_MODULE >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New Foreign JMS De	stination	
modify, add or delete items in this domain. Domain Structure	OK		
	Foreign Destination Prope	rties	
Environment     Servers     Clusters     Gevent remplates     Migratable Targets	The following properties will be * Indicates required fields	used to identify your new foreign destination.	
Coherence Clusters Machines Virtual Hosts	* Name:	MDB_QUEUE_RESPC	
Work Managers Startup and Shutdown Classes	Local JNDI Name:	MDB_QUEUE_RESPONSE	
Deployments Services Messaning	Remote JNDI Name:	MDB_QUEUE_RESPONSE	
How do I	O,K Cancel		
Configure foreign servers	OK Cancel		
<ul> <li>Create foreign connection factories</li> </ul>			
Custom Chattan	1		



Change Center	😭 Home Log Out Preferences 🔛 Record Help	Q	Welcome, weblogic Connected to: pegin
View changes and restarts	Home >HDB_MODULE >Summary of Migratable Targets >Sum Nodules >HDB_MODULE >ForeignServer-1 >Configuration	nary of Oustans >Summary of JMS Servers >Summ	rry of IMS Modules >MDB_MODULE >Summary of IMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages All changes have been activated. However 1 items must	be restarted for the changes to take effect.	
Domain Structure	Settings for ForeignServer-1		
	Configuration Subdeployment Notes		
Environment     Servers     B-Ousters	General Destinations Connection Factories		
Coherence Ousters	JNDI directory, and the object will be returned from that d	rectory.	
Machines Wrbuil Hosts Work Managers Startup and Shutdown Classes Deployments	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations		
-Machines -Vielk Managers -Startup and Shutdown Classes -Deployments -Services -R-Messanion -	This page summarizes the foreign destinations that have b © Customize this table		Showing 1 to 2 of 2 Previous   Next
-Machines -Vick Managers -Startup and Shutdown Classes -Deployments -Services -Messanion	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations		Showing 1 to 2 of 2 Previous   Next Remote 3NDI Name
-Machines -Vick Managers -Startup and Shutdown Classes -Deployments -Services -Messanion	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations New Delete	een created for this domain.	
Machines     Webuil Managers     Startup and Shutdown Classes     Deployments     Services     RitMessacion  How do L.      Configure foreign servers     Create foreign connection factories	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations New Delete Hame &	tocal 3ND1 Name	Remote JNDI Name

ORACLE WebLogic Server Administration Console 12c

Change Center			and a second sec
View changes and restarts	Home >MD8_MODULE >Summa Modules >MD8_MODULE >Fore	ry of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Sur or/Server-1 >Configuration	nmary of IMS Modules >MD8_MODULE >Summary of IMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New Foreign JHS D		
Domain Structure	OK Cancel Foreign Destination Prop	rties	
- Environment    Servers     -Ousters     -Server Templates	The following properties will b	e used to identify your new foreign destination.	
Migratable Targets Coherence Custers Machines	* Name:	MDB_QUEUE_DLQ	
Work Managers Startup and Shutdown Classes Deployments	Local JND1 Name:	MDB_QUEUE_DLQ	
Services     Services     Services	Remote JNDI Name:	MDB_QUEUE_DLQ	
How do I	Of Cancel		
Configure foreign servers			

Change Center	A Home Log Out Preferences In Record Help	Q	Welcome, weblogic Connected to: peg
View changes and restarts	Home >MDB_MODULE >Summary of Migratable Targets > Modules >MDB_MODULE >ForeignServer-1 >Coefigurat		ry of 3HS Modules >MDB_MODULE >Summary of 3HS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Hessages Al changes have been activated. However 1 items	must be restarted for the changes to take effect.	
Domain Structure	Settings for ForeignServer-1		
8 Environment	Configuration Subdeployment Notes		
-Servers II	General Destinations Connection Factories		
Machines	This page summarizes the foreign destinations that ha	we been created for this domain.	
Work Managers     Work Managers     Startup and Shutdown Classes     Deployments     Service     Pl-Mressarion     **	This page summarizes the foreign destinations that he © Customize this table Foreign Destinations	we been created for this domain.	
Wrbuel Hosts Work Managers Startup and Shutdown Classes Deployments Services	Customize this table	we been created for this domain.	Showing 1 to 3 of 3 Previous   Next
Wrtuel Hosts     Work Managers     Work Managers     Startup and Stuttown Classes     Opployments     Services     Amessarion     text do L.     Configure foreign servers	© Customize this table Foreign Destinations	we been created for this domain.	Showing 1 to 3 of 3 Previous   Next Remote JNDI Name
Wrtual Hosts  Work Managers  Startup and Service  Startup and Service  Services  Mow do L  Configure foreign servers	Customize this table Foreign Destinations New Delete		
Wrtuel Hosts     Work Managers     Work Managers     Startup and Setutionin Classes     Org/oyments     Services     Antessanion     two do L	© Customize this table Foreign Destinations New Delote Rame @	Local JND1 Name	Remote JHDI Name
Wrtuel Hosts     Wirk Managers     Starting and Shutdown Classes     Oreployments     Senices     Senices     Configure foreign servers     Oreate foreign connection factories	© Customize this table Foreign Destinations           New         Delete           Rame %         Mone %           Mone %         Mone %	Local JHD1 Name MD8_QUBUE	Remote 3HDI Name MDS_QUEUE

8) After all the resources are created, **Restart** the Admin and Managed Servers.



# 7. Application Deployment

1) Deploy the EAR with Target as Cluster-App

Change Center	î Home Log Out Preferences 🖂 Record Help		Welcome, weblogic Connected to: base_domain
View changes and restarts	Home >JMS Modules >MDB_MODULE >ForeignServer-1 >JMS Modules >Summary of Deploym	ents >Summary of Servers >Summary of Deployments >	Summary of Servers >Summary of Deployments >GWMDB
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Settings for GWMDB Overview Deployment Plan Configuration Security Targets Control T	esting Monitoring Notes	
Domain Structure	Use this page to specify the WebLogic Server instances and clusters to which you wa startup time.		is determine where the application is deployed at server
ClustersVirtual HostsMigratable TargetsCoherence ServersCoherence Clusters	Change Targets Component  Type		Showing 1 to 1 of 1 Previous   Next
Machines Work Managers	GWMDB Enterprise	Application	Cluster-App
Startup and Shutdown Classes Deployments Services Messaning	GW_MDB_Bean.jar EJB Change Targets		(None specified) Showing 1 to 1 of 1 Previous   Next
How do I • Start and stop a deployed Enterprise application			

2) Health Should be OK if JMS is configured properly, otherwise Warning will be displayed



Change Center	🟦 Home Log Out Preferences 🔤 Record Help		Welcome, weble	ogic Connected to: base_do
View changes and restarts	Home >Summary of Environment >Summary of Servers >Summary of Deployments >JMS Modules >MDB_MODUL of Deployments	E >Summary of Environmen	t >Summary of Servers >Summary of De	ployments >GWMDB > <b>Summar</b>
Configuration editing is enabled. Future hanges will automatically be activated as you nodify, add or delete items in this domain.	Summary of Deployments Control Monitoring			
omain Structure				
Green and a services     Services     Services     Services     Services     Services     Store-and-Forward Agents     T-3MS Modules     HPath Services     B-Bridges     T-Data Sources	This page displays a list of Java EE applications and stand-alone application modules that have been ins (redeployed), or deleted from the domain by first selecting the application name and using the controls To install a new application or module for deployment to targets in this domain, click the Install button. Customize this table Deployments Install Update Delete Start Stop >	talled to this domain. Inst on this page.		e started, stopped, updated
Persistent Stores Foreign JNDI Providers	🗋 Name 🗇	State Health	Туре	Deployment Order
w do I	FCUBSApp	Active 🖋 OK	Enterprise Application 1	00
Install an Enterprise application	GWEJB	Active 🖋 OK	Enterprise Application 1	00
Configure an Enterprise application		Active 🖋 OK	Enterprise Application 1	00
Jpdate (redeploy) an Enterprise application	<b>a</b> sjax-rs(1.1,1.9)	Active	Library 1	00
pplication	E TR SWEIB	Active V OK		00
<ul> <li>Start and stop a deployed Enterprise application</li> <li>Monitor the modules of an Enterprise application</li> </ul>			Enterprise Application 1	

Showing 1 to 5 of 5 Previous Next



# 8. Frequently Asked Questions

## 8.1 Application and JMS Cluster Deployed on Same Cluster

Application and JMS Module can be deployed on the same cluster. In this document both are on different clusters, however it is possible to deploy on the one cluster. When it is deployed on same cluster then

- 1) Foreign Server Creation is not required
- 2) Targets should be given accordingly during SubDeployment Creation

## 8.2 <u>Application Shows Warning upon Restart of Managed</u> <u>Servers</u>

Managed Servers Start Order

- 1) Stop all managed servers.
- 2) Start only the JMS Cluster managed servers.
- 3) After these are started then start the App Cluster managed servers.

Even after proper JMS setup when the managed servers are restarted Health of the Application is Warning

	Adm	ninist	tration Console					õ
Change Center	1	🔒 Ho	ome Log Out Preferences 🔤 Record Help	Q			Welcome, wel	ologic Connected to: base_domain
View changes and restarts	1.	Home	Summary of Deployments					
Configuration editing is enabled. Future changes will automatically be activated as you	5	umm	ary of Deployments					
modify, add or delete items in this domain.		Cont	rol Monitoring					
Domain Structure          ⊕ -Environment       ⊕ -Depoyments       ⊕ -Services       ⊕ -Services       ⊕ -Services       ⊕ -Toragnostics	I .	(red To i Cus	deployed), or deleted from the domain by first se	I stand-alone application modules that have been in electing the application name and using the control ent to targets in this domain, click the Install buttor	s on this pag	nis domain. Installe le.	ed applications and modules ca	n be started, stopped, updated
			stall Update Delete Start v Stop v				Sho	wing 1 to 5 of 5 Previous   Next
			Name 🐵		State	Health	Туре	Deployment Order
			E FCUBSApp (12.0.3.0)		Active	🖋 ок	Enterprise Application	100
How do I 😑			E GWEJB		Active	🖋 ок	Enterprise Application	100
Install an Enterprise application     Configure an Enterprise application			E GWMDB		Active	A Warning	Enterprise Application	100
Update (redeploy) an Enterprise application			1)dx-rs(1.1,1:9)		Active		Library	100
<ul> <li>Start and stop a deployed Enterprise application</li> </ul>			E SWEB		Active	🖋 ок	Enterprise Application	100
<ul> <li>Monitor the modules of an Enterprise application</li> </ul>		Instal Update Delete Start Stop Next						
Deploy EJB modules	11							
Install a Web application	<u> </u>							
System Status 🗉	1							

- 1) Force Stop the Application
- 2) Then Start the Application, this would resolve the Warning and the Health of Deployment is changed to OK.



## 8.3 Securing File Store Data

In order to properly secure file store data, set appropriate directory permissions on all file store directories. If data encryption is required, use appropriate third-party encryption software.

### 8.4 t3s Protocol

To secure the communication with the JMS Server use t3s protocol instead of t3. This is applicable when connecting to the connection factory to send or receive messages and also in the JNDI Connection URL provided in foreign server creation.

NOTE: when using the t3s protocol SSL Listen Port Enabled should be checked in server template and the port number used in the URL should be secure port.

### 8.5 How to Test the Deployment

1) Navigate to Services → JMS Modules → JMS\_MODULE → MDB\_QUEUE → MONITORING

View changes and restarts	Home >ForeignServer-1 >Configuration >MDBQCF >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS_Modules >JMS_MODULE >MDB_QUEUE						
Configuration editing is enabled. Future							
changes will automatically be activated as you modify, add or delete items in this domain. Configuration Security Monitoring Subdeployment Notes							
Domain Structure	Use this page to view statistics about all of the members of a uniform distributed queue. Click on the individual member destination name in the table below to manage the messages on that destination. To access the uniform distributed queue's message management page, select the check box next to its name, and then click the Show Messages button. Customize this table Destinations (Filtered - More Columns Exist)						
Work Managers Startup and Shutdown Classes	Show Messages						Showing 1 to 2 of 2 Previous   Next
Deployments	🔲 Name 🐟				Consumers Current	Consumers High	Consumers Total
-Services	JMS_MODULE	IJMSServer-1@MDB_Q	UEUE		64	64	64
	JMS_MODULE	IJMSServer-2@MDB_Q	UEUE		64	64	64
How do I 😑	Show Messages	Show Messages Showing 1 to 2 of 2 Previous   Next					
<ul> <li>Manage distributed queue messages</li> </ul>							
Configure uniform distributed queues							
	1						

#### 2) Select any one Server and Click on Show Messages

Configuration editing is enabled. Future	Summary of JMS Messages				
changes will automatically be activated as you modify, add or delete items in this domain. Domain Structure				subscriber. Use this page to view message deta r file, import XML formatted message contents fr	
Environment     Custers	Click on a message to view its contents				
	Message Selector:			Apply	
Work Managers	Customize this table				
Deployments	JMS Messages (Filtered - More Colu	ımns Exist)			
➡ Services ➡ Messaging	New Delete v Move v Impo	ert Export ~			Showing 1 to 0 of 0 Previous   Next
How do I 🖂	□ ID ↔ CorrId	Time Stamp	State String	JMS Delivery Mode	Message Size
Manage queue messages			There are no items to disp	blay	
Manage distributed queue messages     Manage topic durable subscribers	New Delete v Move v Impo	rt Export ~			Showing 1 to 0 of 0 Previous   Next
System Status					



### 3) Click on New and enter the Message in Body and Click on OK

Change Center	Tome Log out Treferences - Record Trep	<u> </u>	welcome, weblogie   connected to: base_domain
View changes and restarts	Home >Configuration >MDBQCF >JMS Modules >JMS_MOD	OULE >MDB_QUEUE >Summary of JMS Mes	sages >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages
Configuration editing is enabled. Future changes will automatically be activated as you	Produce JMS Message		
modify, add or delete items in this domain.	OK		
Domain Structure	JMS Message		
È-Environment	The following properties will be used to produce a JM	5 message.	
Servers Clusters Virtual Hosts	Туре:		
Migratable Targets Coherence Servers	Correlation ID:		
Coherence Clusters Machines Work Managers	Expiration:		
LStartup and Shutdown Classes Deployments Services	Priority:	4 🔻	
Services     Messaging	Delivery Mode:	Persistent •	
How do I	Delivery Time:	-1	
Manage queue messages			
Manage distributed queue messages	Redelivery Limit:	-1	
<ul> <li>Manage topic durable subscribers</li> </ul>	Body:		
System Status			
Health of Running Servers			
Failed (0)			
Critical (0) Overloaded (0)		1	
	1		

#### 4) Message is Sent

change center					1	
View changes and restarts	Home >Configuration >MDBQCF >JMS Modules >JMS_M	ODULE >MDB_O	QUEUE >Summary of JMS Messages >JMS Module	es >JMS_MODULE >MDB_QUEU	JE >Summary of JMS Messages	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages  # JMS message sent successfully.					
	Summary of JMS Messages					
Domain Structure						
Coherence Servers     Cutsters     Virtual Hosts     Wirghable Targets     Coherence Servers     Coherence Cutsters     Work Managers     Work Managers     Statup and Shutdown Classes     Deployments     De-Services     Cherence Servers	<ul> <li>This page summarizes the available messages for a stand-alone queue, a distributed queue, or a topic durable subscriber. Use this page to view message details, create new messages, or selected messages, more messages to another destination, export message contents in XML format to another file, import XML formatted message contents from another file, or drain all message to view its contents.</li> <li>Click on a message to view its contents.</li> <li>Message Selector:</li> <li>Customize this table</li> <li>JMS Messages (Filtered - More Columns Exist)</li> </ul>					
How do I						
	New Delete V Move V Import Export	×			Showing 1 t	to 1 of 1 Previous   Next
Manage queue messages     Manage distributed queue messages	□ ID ↔	CorrId	Time Stamp	State String	JMS Delivery Mode	Message Size
<ul> <li>Manage topic durable subscribers</li> </ul>	D:<257876.1411126889162.0>		Fri Sep 19 17:11:29 IST 2014	receive transaction	Persistent	472
System Status	New Delete V Move V Import Export	×		,	Showing 1 t	to 1 of 1 Previous   Next
Health of Running Servers						
Failed (0) Critical (0) Critical (0)						

5) Verify at backend or in the MDB log if the message is processed successfully.



## 8.6 <u>Increase maximum number of message-driven bean</u> threads

Default number of consumers for an MDB is 16. To increase or restrict this number create Custom Work Manager with a Max Threads Constraint in conjunction with MDBs.

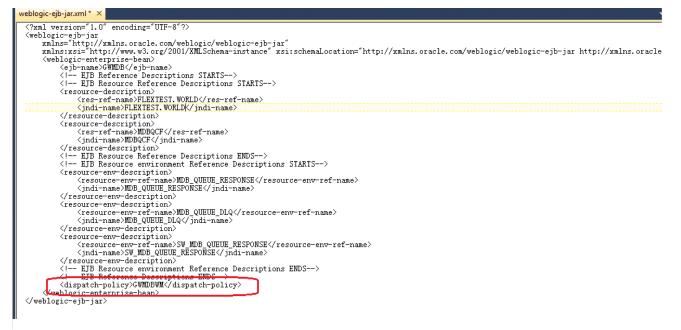
The solution is to create a work manager with a max threads constraint and assign the proxy services dispatch policy to this work manager.

Steps to create custom work manager

- 1) Modify the MDB deployment descriptior and redploy the EAR
- 2) Create Custom Workmanager and add constraints to limit the number of the max MDB threads

#### 8.6.1 Modify weblogic-ejb-jar.xml

1) Add below line to the weblogic-ejb-jar.xml of the MDB Ear </br/>dispatch-policy>GWMDBWM</dispatch-policy>



2) Remove if any of the below tags present in weblogic-ejb-jar.xml max-beans-in-free-pool and initial-beans-in-free-pool

3) Save the ear file and redeploy the EAR file.



### 8.6.2 Work Manager Creation

 Login into weblogic console, navigate to Domain → Environment → WorkManager Create new workmanager with the name GWMDBWM(as mentioned in property file) by following below steps

WEDLOgic Server Aut	IIIISII AUUII CUIISUIE 120			$\sim$					
Change Center	💼 Home Log Out Preferences 🔤 Record Help	G		Welcome, weblogic Connected to: FCUBSDomain					
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrain	t-0 >Summary of Work Mana	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsCons	traint-0 >Summary of Servers >Summary of					
No pending changes exist. Click the Release Configuration button to allow others to edit	Environment > Summary of Servers > Summary of Work Managers Create a New Work Manager Component								
the domain.	Back Next Finish Cancel								
Release Configuration	Select Work Manager Definition type	Select Work Manager Definition type							
Domain Structure	What type of Work Manager, Request Class or Constr	aint do you want to create	?						
FCUBSDomain  CUBSDomain  Converse  Coherence Clusters  Coherence Clusters  Machines  Virtual Hosts  Virtual Hosts  Vork Managers  Startup and Shutdown Classes  Deployments  Security Realms	Work Manager     Response Time Request Class     Fair Share Request Class     Context Request Class     Maximum Threads Constraint     Minimum Threads Constraint								
-Interoperability									
Diagnostics	Capacity Constraint								
How do I     Image: Create application-scoped constraints       • Create application-scoped request classes	Back Finish Cancel								
	ninistration Console 12c			<u> </u>					
Change Center	î Home Log Out Preferences 🔤 Record Help	C	2	Welcome, weblogic Connected to: FCUBSDomain					
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrai Environment >Summary of Servers > <b>Summary of Work I</b>	nt-0 >Summary of Work Mana Managers	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsCons	traint-0 >Summary of Servers >Summary of					
No pending changes exist. Click the Release Configuration button to allow others to edit	Create a New Work Manager Component	Turingera							
the domain.	Back Next Finish Cancel								
Lock & Edit Release Configuration									
Recease Comiguration	Work Manager Properties	new Work Manager							
Domain Structure	The following properties will be used to identify your * Indicates required fields	new work Manager.							
FCUBSDomain									
Servers	What would you like to name your new Work Manager	?							
Clusters     Coherence Clusters	* Name:								
Machines	* Name: GWMDBWM								
····Virtual Hosts	Back Next Finish Cancel								
Work Managers Startup and Shutdown Classes									
Deployments									
⊕-Services									
Security Realms									
-									
Change Center	🟦 Home Log Out Preferences 🔤 Record Help	0		Welcome, weblogic Connected to: FCUBSDomain					
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrain Environment >Summary of Servers >Summary of Work N		igers >WorkManager-0 >Summary of Work Managers >MaxThreadsCons	raint-0 >Summary of Servers >Summary of					
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New Work Manager Component								
Lock & Edit	Back Next Finish Cancel								
Release Configuration	Select deployment targets								
Domain Structure	You can target the Work Manager to any of these We	Logic Server instances or	Clusters. Select the same targets on which you will deploy applica	tions that reference the Work Manager.					
FCUBSDomain									
Ep-Environment	Available targets :								
Servers			1						
Clusters     Coherence Clusters	Servers								
Machines	AdminServer								
Virtual Hosts Work Managers			1						
Startup and Shutdown Classes	Clusters								
Deployments Deployments	Cluster-App								
Security Realms	All servers in the cluster								
Interoperability			1						
How do I	Cluster-JMS All servers in the cluster								
			1	[					
Create application-scoped constraints     Create application-scoped request classes	Back Next Finish Cancel								
Create application-scoped request classes     Create application-scoped Work Managers									



	dministration Console 12c		<u> </u>					
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain					
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrain Environment >Summary of Servers >Summary of Work N		f Work Managers >MaxThreadsConstraint-0 >Summary of Servers >Summary of					
Pending changes exist. They must be activated to take effect.	Messages							
Activate Changes		S Work Manager created successfully						
Undo All Changes	Summary of Work Managers							
Domain Structure  FCU850main  G-Environment  G-Clusters  Coherence Clusters  Machines  Work Managers  Startup and Shutdown Classes	A Work Manager defines a set of request classes and thread constraints that manage work performed by WebLogic Server instances. This page displays the global Work Managers, request classes and thread constraints defined for this domain. Global Work Managers are defined at the domain level. You can also define application-level and module-level Work Managers. Customize this table Global Work Managers, Request Classes and Constraints New Clone Delete Showing 1 to 1 of 1 Previous   Next							
Deployments	🔲 Name 🗞	Туре	Targets					
Security Realms	GWMDBWM	Work Manager	Cluster-App					
Diagnostics	New Clone Delete		Showing 1 to 1 of 1 Previous   Next					
How do I								
Create application-scoped constraints								

### 2) Create new Max Thread Constraint and in the Count field give the desired thread count

WebLogic Server Ad	ministration Console 120		<u> </u>			
Change Center	💼 Home Log Out Preferences 🔤 Record Help		Welcome, weblogic Connected to: FCUBSDomai			
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Work Environment >Summary of Servers > <b>Summary of Work Managers</b>	Home Scummary of Work Managers - ManThreadsConstraint-0 - Scummary of Work Managers - WorkManager-0 - Scummary of Work Managers - MaxThreadsConstraint-0 - Scummary of Servers - Scummary of Servers - Scummary of Servers - Serve				
Pending changes exist. They must be activated to take effect.	Create a New Work Manager Component					
Activate Changes  Undo All Changes	Back Next Finish Cancel Select Work Manager Definition type					
Domain Structure	What type of Work Manager, Request Class or Constraint do you want to cr	eate?				
FCUBSDomain	🔘 Work Manager					
	Response Time Request Class					
Machines Virtual Hosts	Fair Share Request Class					
Work Managers Startup and Shutdown Classes	Context Request Class					
Deployments Services	Maximum Threads Constraint					
	Minimum Threads Constraint					
How do I	Capacity Constraint					
Create application-scoped constraints	Back Next Finish Cancel					
Create application-scoped request classes						
Create application-scoped Work Managers						

_ · · · · · · · · · · · · · · · · ·	
Change Center	🏦 Home Log Out Preferences 🖾 Record Help
View changes and restarts	Home >Summary di Work Managers >MarThreadsConstraint=0 >Summary of Work Managers >WorkManager=0 >Summary of Work Managers >MarThreadsConstraint=0 >Summary of Servers >Servers >Se
Pending changes exist. They must be activated to take effect.	Create a New Work Manager Component
Activate Changes Undo All Changes	Back Next Cancel
	Maximum Threads Constraint Properties
Domain Structure	The following properties will be used to identify your new Max Threads Request Class.
FCUBSDomain  Every  Coherence Clusters Coherence Clusters Work Managers Virtual Hosts Work Managers Startup and Shutdown Classes	Indicates required fields     What would you like to name the new Maximum Threads Constraint?     * Name: MaxThreadsConstraint-0     What is the maximum number of concurrent threads to allocate for requests? Enter either a fixed thread count or the name of a Data Source whose size will be used for the constraint.
Deployments	Count: 25
	Data Source:
How do I	Back Next Finish Cancel
Create annlication-scoped constraints	



Hestogio certer /um	111384801 O013010 120			<u> </u>	
Change Center	î Home Log Out Preferences 🛃 Record Help	Q	Welco	me, weblogic Connected to: FCUBSDomain	
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Work Managers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Servers				
Pending changes exist. They must be activated to take effect.	Create a New Work Manager Component				
Activate Changes	Back Next Finish Cancel				
Undo All Changes					
Domain Structure	Select deployment targets You can target the Work Manager to any of these WebLogic Server instances or Clusters. Select the same targets on which you will deploy applications that reference the Work Manager.				
FCUBSDomain	You can target the work manager to any of these we	eblogic Server Instances or i	Clusters. Select the same targets on which you will deploy applications that	reference the work Manager.	
⊕-Environment	Available targets :				
Servers	······································				
			1		
Coherence Clusters	Servers				
Machines Virtual Hosts	AdminServer				
Work Managers	- Adminiserver				
Startup and Shutdown Classes			1		
Deployments	Clusters				
Services	Cluster-App				
Security Realms	All servers in the cluster				
Interoperability     Diagnostics					
	Cluster-JMS				
How do I 🖃	All servers in the cluster				
Create application-scoped constraints			I		
Create application-scoped request classes	Back Next Finish Cancel				
Create application-scoped Work Managers					
Change Center	â Home Log Out Preferences 🖂 Record Help		Welco	me, weblogic Connected to: FCUBSDomain	
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrain	nt-0 >Summary of Work Mana	sers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >S		
Pending changes exist. They must be activated	Environment >Summary of Servers >Summary of Work I Messages	Managers			
to take effect.	<ul> <li>Maximum Threads Constraint created successfull</li> </ul>	v			
Activate Changes	-				
Undo All Changes	Summary of Work Managers				
Domain Structure	A Work Managar definer	throad construints that	ana werk performed by Webt asis Commission with a second state	alabal Wark Managara	
FCUBSDomain	A Work Manager defines a set of request classes and thread constraints that manage work performed by WebLogic Server instances. This page displays the global Work Managers, request classes and thread constraints defined for this domain.				
É-Environment	Global Work Managers are defined at the domain level. You can also define application-level and module-level Work Managers.				
Servers	Global work managers are defined at the domain lev	er, tou can also define appi	ication-level and module-level work managers.		
■ Clusters					
Coherence Clusters	Customize this table				
Virtual Hosts	Global Work Managers, Request Classes and C	onstraints			
Work Managers					
Startup and Shutdown Classes	New Clone Delete			Showing 1 to 2 of 2 Previous   Next	
Deployments	🔲 Name 🗇	ту	pe	Targets	
Security Realms					
Interoperability	GWMDBWM	Wo	ork Manager	Cluster-App	
Diagnostics	MaxThreadsConstraint-0	Ma	ximum Threads Constraint	Cluster-App	
How do I 🗉	New Clone Delete			Showing 1 to 2 of 2 Previous   Next	

3) Modify the newly created workmanager and assign the Maximum Thread Constraint that is created in above step.

None sMacThread/Content® 5 Summary of Work Managers sWorkManager® sConnerry of Work Managers sMacThread/Content® 0 Summary of Servers sSummary of Environment sSummary of Servers s Summary of Work Managers sWORKDOWM					
Settings for GWHDBWH					
Configuration Targets Notes					
Sare					
Use this page to define the request class	es and constraints for the selected global Work Manager.				
Name:	(No value specified)	The user-specified name of this MBean instance. More Info			
🛃 Request Class:	(None configured)	A request class associated with this Work Manager. This may be a FairShareDequestClass, ResponseTimeRequestClass, or a ContextRequestClass. More Info			
👩 Hinimum Threads Constraint:	(None configured)	The minimum number of threads allocated to resolve deadlocks. Hore Info.			
👩 Haximum Threads Constraint:	(None configured)	The maximum number of concurrent threads that can be allocated to execute requests. More Drfo			
Capacity Constraint:	(None configured)	The total number of requests that can be queued or executing before WebLogic Server begins rejecting requests. Hore Info			
😸 Stuck Thread Action:	Use server default behavior	Specify how stuck threads should be detected, and what action to take should they occur. Here Info			
Max Stuck Thread Time:	0	True after which a executing thread is declared as stack. Here $Defo_{exe}$			
Stuck Thread Count:	0	Number of stuck threads after which the Worktlanager is shutdown. Here, $\mathbf{More}$			
🗷 Resume When Unstuck		infaulter to resome such manager over the stack threads sever charact. Here, to $\mathbf{f}_{0,\ldots}$			
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	🛃 Minimum Threads Constraint:	(None configured) • [Hew]		The minimum number of threads allocated to resolve deadlocks. Here Info	
	🛃 Maximum Threads Constraint:	MaxThreadsConstraint-0 • New	]	The maximum number of concurrent threads that can be allocated to execute requests. Hore Info	
E fizzenetics	🕂 Capacity Constraint:	(None configured) * Hex		The total number of requests that can be queued or executing before WebLogic Server begins rejecting requests. Hore Info.,	
Create application-scoped constraints     Create application-scoped request classes	🛃 Stuck Thread Action:	Use server default behavior	•]	Specify how stuck threads should be detected, and what action to take should they occur. More Info	
Create application-scoped Work Managers     Create global constraints	Max Stuck Thread Time:	0		Time after which a concuting thread is declared as stuck. Here $\ensuremath{Infe}_{m}$	
Create global request classes     Create global Work Hanagers	Stack Thread Count:	0		Number of stuck threads after which the WeikHanaper is shutdown. Here, $More$	
System Status 🛛	🗹 Resume When Unstuck			Whether to remove work manager ance the stuck threads were chosen. Here $2\pi f \sigma_{\rm er}$	
Health of Running Servers	Save				
Failed (0)					

4) Restart managed servers and notice the change in the number of consumers for the QUEUE's.

## 8.7 How High Availability is achieved

1) Application Server:

MDB\_MODULE and the GWEJB ear are deployed in a cluster. Cluster has 4 managed servers, if any server goes down then the messages are processed by other managed servers.

- JMS Provider: JMS is deployed on 2 managed servers, JMSServer1 and JMSServer2, if any one goes down other will handle the messages.
- FileStore: File store is a cluster file system or database where if one node goes down then other will handle the requests.
- DB Server: Database is installed in RAC mode where it has more than 1 node, if a node goes down then other nodes will handle messages.



## 8.8 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.

## 8.9 What other modules uses JMS Queue's

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

- 1) EMS for swift messages
- 2) GI for upload
- 3) ELCM
- 4) BIP

### 8.10 References

- 1) FCUBS\_12.1\_Weblogic12c\_Middleware\_Practices.doc
- 2) GATEWAY\_Applications\_WL.doc
- 3) Resource\_Creation\_WL.doc





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Oracle Financial Services Software Limited Oracle Park Off Western Express Highway Goregaon (East) Mumbai, Maharashtra 400 063 India

Worldwide Inquiries: Phone: +91 22 6718 3000 Fax: +91 22 6718 3001 https://www.oracle.com/industries/financial-services/index.html

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