Configuring JMS on Weblogic Server 12c Oracle FLEXCUBE Universal Banking Release 14.4.0.2.0 [November] [2020]

FINANCIAL SERVICES

# **Table of Contents**

1. IN	TRODUCTION	1-1
1.1	INTRODUCTION	1-1
1.2	Purpose	
1.3	WEBLOGIC 12C NEW FEATURES	
1.4	COMPONENTS DIAGRAM & DATA FLOW	1-3
2. PR	RE-REQUISITES	2-1
2.1	Machines	
2.2	DYNAMIC CLUSTERS AND MANAGED SERVERS	
2.3	DATASOURCE	
2.4	Shared Folder	2-2
3. JN	IS CONFIGURATION	3-1
3.1	PERSISTENCE STORE CREATION	
3.2	JMS Server Creation	
3.3	CLUSTER CONFIGURATION FOR SERVICE MIGRATION	3-5
4. JN	IS MODULE CREATION	4-6
4.1	MODULE CREATION	4-6
4.2	SUB DEPLOYMENT CREATION	4-8
4.3	RESOURCE CREATION	
4.3	3.1 Queue Creation	4-10
4.3	3.2 Connection Factory Creation	4-13
5. SE	RVER RESTART	5-17
6. FC	DREIGN SERVER CREATION	6-1
6.1	MODULE CREATION	6-1
6.2	FOREIGN SERVER CREATION	6-3
6.3	FOREIGN SERVER CONFIGURATION	6-7
7. AF	PLICATION DEPLOYMENT	7-1
8. FR	REQUENTLY ASKED QUESTIONS	8-2
8.1	APPLICATION AND JMS CLUSTER DEPLOYED ON SAME CLUSTER	
8.2	APPLICATION SHOWS WARNING UPON RESTART OF MANAGED SERVERS	
8.3	SECURING FILE STORE DATA	8-3
8.4	T3s Protocol	8-3
8.5	How TO TEST THE DEPLOYMENT	
8.6	INCREASE MAXIMUM NUMBER OF MESSAGE-DRIVEN BEAN THREADS	
8.6		
8.6	5	
8.7	How High Availability is achieved	
8.8	How to setup for Scheduler/Notifications	
8.9	WHAT OTHER MODULES USES JMS QUEUE'S	
8.10	REFERENCES	8-10

# 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

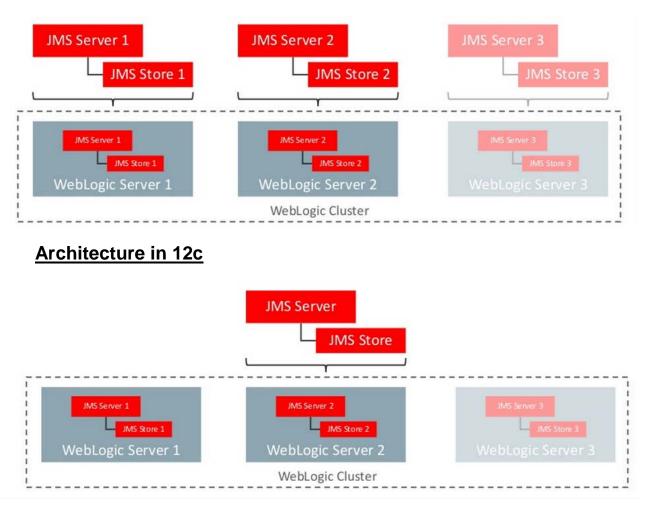
- 1) File based persistence store -> Message is stored in a file
- 2) DB based persistence store -> Message is stored in Database.

## 1.3 Weblogic 12c New Features

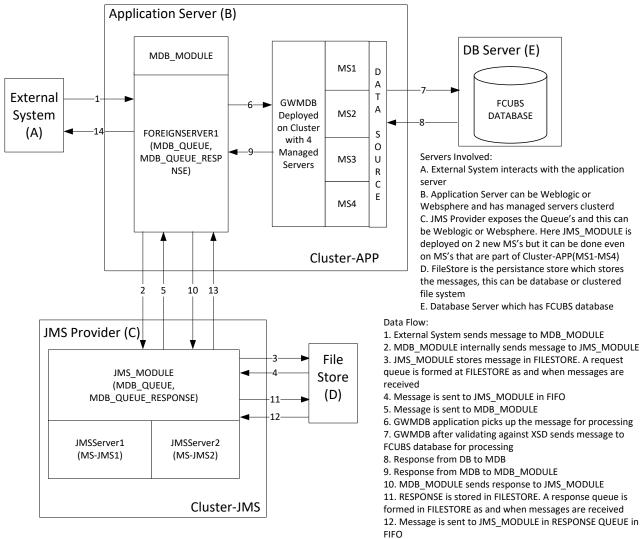
Before weblogic 12c JMS Servers and stores are targeted to individual WLS Servers. Scaling up requires configure the JMS server, the store and target it to new WLS Server

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	Welcome, weblogic Connected to: pegjms		
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 instan 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	gic Server domain.		
Servers				
Clusters				
Coherence Clusters	Customize this table			
	Machines			
Work Managers Startup and Shutdown Classes				
Deployments Services	🔲 Name 🗇	Туре		
Security Realms     Description:	MAC-1	Machine		
III-Diagnostics	MAC-2	Machine		
How do I   • Create and configure machines	New Clone Delete	Showing 1 to 2 of 2 Previous   Next		
Assign server instances to 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	r Adminis	stration Console	12c						ç
Change Center		Home Log Out Preferences 🐼 Record Help							
View changes and restarts			tome >Summary of Servers >Summary of Clusters >Summary of Server Templates >Summary of Clusters >Summary of Servers >Summary of Clusters >Summary of Server Templates >Summary of Clusters >Summary of Servers >Summary of Clusters						
Click the Lock & Edit button to modify, add or delete items in this domain.	Me	essages		o restarts are necessary.					
Release Configuration	Su	immary of Cluste	ers						
Domain Structure		This page summari	zes the dusters that	have been configured in the cu	rrent WebLogic Serv	er domain.			
Environment     Servers     Clusters     Server Templates     Migratable Targets     Coherence Clusters     Midnines     Work Managers     Startup and Shutdown Classes	= (	Customize this Clusters (Filterer Click the Lock & E New ~ Clone	table d - More Columns ditbutton in the Cha	ange Center to activate all the b	uttons on this page.			-	2 of 2 Previous   Next
Deployments		📃 Name 🗞	Cluster Address	Cluster Messaging Mode	Migration Basis	Default Load Algorithm	Replication Type	Cluster Broadcast Channel	Servers
Security Realms	-	Cluster-App		Unicast	Database	Round Robin	(None)		DC_FCUBS_1, DC_FCUBS_2, DC_FCUBS_3, DC_FCUBS_4
Assign server instances to clusters		Cluster-JMS		Unicast	Database	Round Robin	(None)		DC_JMS_1, DC_JMS_2
Configure server migration in a duster     Configure cross-duster replication     Create dynamic dusters		New ~ Clone	e 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

DRACLE WebLogic Server® Administration Console					
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.					
Domain Structure  Services  -Servers -Store-and-Forward Agents -Path Services B-Bridges -Data Sources -Persistent Stores	ture A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then borrow a database connectivity through a pool of JDBC connections. Applications can look up a data source on the JNDI tree and then sources of the source objects that have been created in this domain. Customize this table Customize this table				
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	🏦 Home Log Out Preferences 🔤 Record Help					
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.         Home >Summary of Servers >Summary of Persistent Stores							
Domain Structure	Summary of Persistent Stores 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. Customize this table Persistent Stores						
⊕-Messaging    Data Sources	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							

ORACLE WebLogic Server Administration Console 12c						
Change Center	🏠 Home Log Out Preferences 🔤 R	ecord Help	Welcome, weblogic Connected to: pegjms			
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 store created.					
	Summary of Persistent Stores					
Domain Structure  Coherence Clusters  Machines  Work Managers  Startup and Shutdown Classes  Deployments  Services		ory for storing subsystem data, such as persistent : is page summarizes the persistent stores that have I	MS messages. It can be a JDBC-accessible database, disk-based seen created for this domain.			
	New 🗸 Delete		Showing 0 to 0 of 0 Previous   Next			
<b>Persistent Stores</b> Foreign JNDI Providers Work Contexts	Create FileStore	Туре	Target			
	Create ReplicatedStore (Exalogic) There are no items to display					
How do I	New ✓ Delete		Showing 0 to 0 of 0 Previous   Next			
Create File Stores						



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

	dministration Console 120	:			Q
Change Center	Home Log Out Pref	erences 📐 Record Help	٩		Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Clus of Persistent Stores	ters >Summary of Servers >Su	immary of Clusters >Summary of S	Servers >Summary of Clusters >0	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 Stor	e			
domain.  Lock & Edit  Release Configuration	OK Cancel File Store Propertie	s s will be used to identify your	new file store.		
Domain Structure	* Indicates required field				
Environment    Servers    Clusters    Viserver Templates    Wigratable Targets	What would you like to r * Name:	name your new file store? FileStore-1			
Coherence Clusters Machines	Select a server instance	for this file store.			
Virtual Hosts Work Managers Startup and Shutdown Classes	Target:	Cluster-JMS 💌			
Deployments	The pathname to the dir	ectory on the file system whe	ere the file store is kept. This dire	ectory must exist on your syste	em, so be sure to create it before completing this tab.
Services     H-Messaning     T	Directory:	/scratch/work_area/J	JMS_FILESTORE		
How do I	OK Cancel				

#### 3) FileStore-1 is created

	dministration Console 12c			õ
Change Center	🔒 Home Log Out Preferences 🔤 Record He	elp Q	Welcome, webla	ogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Clusters >Summary of Servers of Persistent Stores	>Summary of Clusters >Summary of Servers >Summary of	of Clusters >Cluster-JMS >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			
Lock & Edit	<ul> <li>All changes have been activated. No restarts</li> <li>Summary of Persistent Stores</li> </ul>	s are necessary.		
Release Configuration	Summary of Persistent Stores			
Domain Structure	A persistent store is a physical repository for st summarizes the persistent stores that have bee		s. It can be a JDBC-accessible database, disk-based file, or replica	ted memory storage. This page
Server TemplatesMigratable TargetsCoherence Clusters E	Customize this table			
Machines Virtual Hosts Work Managers				
Startup and Shutdown Classes	New ~ Delete		Show	wing 1 to 1 of 1 Previous   Next
-Services -Messaging	🗌 Name 🗇	Туре	Target	
Data SourcesPersistent Stores	FileStore-1	FileStore	Cluster-JMS	
How do I 😑	New ~ Delete		Show	wing 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

ORACLE WebLogic Server Administration Console 12c						
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	🏦 Home Log Out Preferences 🔊 Record Help				
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	<ul> <li>JMS servers act as management containers for the queues and topics in JMS modules that are targeted to them.</li> <li>This page summarizes the JMS servers that have been created in the current WebLogic Server domain.</li> <li>Customize this table</li> </ul>					
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 * Indicates required fields	your new JMS Server.	
EnvironmentServers =	What would you like to name your new JMS Serv	ver?	
	🎳 * 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	
- Messaning -			

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

	Iministration 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 >Cluster-JMS Stores > <b>Summary of JMS Servers</b>	>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 JMS Server.	
Domain Structure	Target: (none)	
Environment    Servers    Clusters    Server Templates    Migratable Targets	Back Next Finish Cancel (none) AdminServer Cluster-App Cluster-JMS	



	dministration Console 12c		Q
Change Center	Home Log Out Preferences [	Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Servers >Sum Stores >Summary of JMS Servers		ter-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 C	Cancel	
Release Configuration	Select targets		
	Select the server instance or mig	ratable target on which you would like to deploy this JMS Server	r.
Domain Structure	Target:	Cluster-JMS 💌	
Environment     Servers     Clusters     Server Templates     Mingatable Targets	Back Next Finish C	Cancel	

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

	Administration Console 12c				õ
Change Center	Home Log Out Preferences 🔤 Re	ecord Help		Welcome, weblogic	Connected to: FCUBSDomai
View changes and restarts	Home >Summary of Servers >Summary of Stores >Summary of JMS Servers	of Clusters >Summary of Servers >Summary of Clusters >	Cluster-JMS >Summary of Servers >	Summary of Clusters Summary of Servers Sum	mary of Persistent
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages				
Lock & Edit Release Configuration	All changes have been activated. No     Summary of JMS Servers	o restarts are necessary.			
Domain Structure	JMS servers act as management conta	ainers for the queues and topics in JMS modules that a	are targeted to them.		
-Environment -Servers -Clusters	This page summarizes the JMS servers	that have been created in the current WebLogic Ser	ver domain.		
Server Templates Migratable TargetsCoherence ClustersCoherence Clusters	Customize this table				
Machines Virtual Hosts	JMS Servers (Filtered - More Colu Click the Lock & Edithutton in the Chi	Imns Exist) ange Center to activate all the buttons on this page.			
Work Managers Startup and Shutdown Classes Deployments	New Delete	ange center to activate an the bactoris on this page.		Showing	1 to 1 of 1 Previous   Next
-Services -Messaging	🗌 Name 🗞	Persistent Store	Target	Current Target	Health
JMS Servers	JMSServer-1	FileStore-1	Cluster-JMS	Cluster-JMS	
How do I	New Delete			Showing	1 to 1 of 1 Previous   Next
Configure JMS servers					
<ul> <li>Configure JMS system modules</li> </ul>					

#### 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 Cluster Configuration for Service Migration

uange Center	Plane Log Out	Preferences	Record Help		Q	Welcon	ne, weblogic Corner	ted to: pegje	
ew changes and restarts		Hore >Summary of Servers >Summary of Persteet Stone >Summary of JHS Servers >Summary of Clusters >Summary of Highlight >Summary of Clusters >Cluster: 3HS >Summary of Highlight >Serversary of Clusters							
onfiguration editing is enabled. Future anges will automatically be activated as you odify, add or delete items in this domain.	Summary of Clusters								
omain Structure	This page summarizes the dusters that have been configured in the current WebLogic Server domain.								
Environment	A duster defines (	proups of WebLog	c Server servers that	work togethe	r to increase scalabl	ity and reliability.			
Cheters	© Customize this								
Machi Chusters, Level 2, Collapsed, 2 of Witkers was Work Managers	7, Selected Prs (Filtere	d - Hore Colum	is Exist)			9	nowing 1 to 2 of 2 Pre	Anus   Next	
Startup and Shutdown Classes Deployments	🗈 Name 🙃	Cluster Addres	as Cluster Hessa	ging Mode	Higration Basis	Lesson company with	-	Lassa and	
Security Realms Interoperability Deconstrut	Custer-4co		Unicast		Database	Round Robin	(Nore)		
ow do L. 🗄	Custer-36		Uncest		Database	Round Robin	(None)		
2) Click on <b>Mig</b>			Record Help		٩	Welcon	ne, weblogic Connec	ed to: pegjm	
-			y of Persistent Stores : igratable Targets >Sun			y of Clusters >Summary of Mig	ratable Targets >Summar	y of	
Change Center View changes and restarts Configuration editing is enabled. Future changes will automatically be activated as you		MS >Summary of M				y of Clusters >Summary of Mig	ratable Targets >Summar	y of	
View changes and restarts Configuration editing is enabled. Future	Clusters >Cluster-J	MS >Summary of M				y of Clusters >Summary of Mig	ratable Targets >Summar	y of	
View Changes and restarts Configuration editing is enabled. Future changes will automatically be activated as you nodify, add or delete items in this domain.	Clusters >Cluster-J	MS >Summary of M cer-JMS Monitoring Cor	igratable Targets >Sun	nmary of Cluster	rs >Cluster-JMS		-	y of HTTP	
View changes and restarts Configuration editing is enabled. Future changes will automatically be activated as you	Clusters > Cluster-J Settings for Clust Configuration	MS >Summary of M cer-JMS Monitoring Cor	igratable Targets >Sun	Services	rs >Cluster-JMS		-		

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**.

	dministration Console 12c		Q
Change Center	🚹 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >Summary of Migratable Targets >MS-JMS1 (mig Targets >MS-JMS1 (migratable) >Summary of Clusters >		-JMS2 (migratable) >Summary of Clusters >Summary of Migratable f 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.		
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			Туре
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	sministration Console 12c		Q
Change Center	1 Home Log Out Preferences 🔜 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomail
View changes and restarts	Home vSummary of Server Templates +DC_3HS_Template-0 vSummary of Highstatile Targets vSummary of 3HS Hadales	d Servers x Summary of Higratable	Targets > Summary of JMS Servers > JMSServer-1 > Summary of JMS Servers > JMSServer-1 > Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create JHS System Hodule Back Net Trinn Canol		
Release Configuration	The following properties will be used to target your new 30	t5 system module.	
Domain Structure	Use this page to select the server or cluster on which you would like	to deploy this JMS system module	. You can reconfigure targets later if you with.
Environment     Servers     Outlers	Targets :		
Server Templates Higratable Targets	Servers	1.1	
-Coherence Clusters Machines Virtual Hosts	AdminServer		
Work Managers Startup and Shutdown Classes	Clusters		
Ceployments     Services     Attestance	Cluster-App C All servers in the cluster		
How do L	Cluster-JHS		
Configure 345 system modules     Configure 345 servers	All servers in the cluster		

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

ORACLE WebLogic Server Ad	ninistration 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 >M Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets > <b>Summary</b>	
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	
B-Environment →Deployments B-Services D-Messaging	Use this page to indicate whether you want to immediately add resources to this JMS system n connection factories, etc.	module after it is created. JMS resources include queues, topics,
JMS Servers Store-and-Forward Agents	Would you like to add resources to this JMS system module?	
JMS Modules Path Services ⊡Bridges	Back Next Finipp Cancel	
Data Sources Persistent Stores Foreign JNDI Providers		

### 5) JMS\_MODULE is created

Change Center	Home Log Out Preferences 🔤	Record Help	Welcome, weblogic Connected to: pegjm
View changes and restarts		ary of Migratable Targets >MS-JMS2 (migratable) >Sumn summary of Migratable Targets >Summary of JMS Module	nary of Clusters >Summary of Migratable Targets >MS-JMS1 is >J <b>MS_Module</b>
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>The JMS module was created sug</li> </ul>	<ol> <li>However 1 items must be restarted for the changes ccessfully.</li> </ol>	to take effect.
Domain Structure	Colling for the hole		
	Settings for JMS_Module		
E-Environment	Configuration Subdeployments	Targets Security Notes	
⊖-Services →-Messaging →-JMS Servers →-Store-and-Forward Agents →-JMS Modules	This page displays general informat resources.	tion about a JMS system module and its resources. It	also allows you to configure new resources and access existing
Path Services Paridges	Name:	JMS_Module	The name of this JMS system module. More Info
Data Sources Persistent Stores Foreign JNDI Providers	Descriptor File Name:	jms/jms_module-jms.xml	The name of the JMS module descriptor file. More Info
Work Contexts		purces that have been created for this JMS system mo ys, destination quota, distributed destinations, foreign	dule, including queue and topic destinations, connection factories, n servers, and store-and-forward parameters.



## 4.2 Sub Deployment Creation

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

		<b>— — — — — — — — — —</b>						
hange Center		Home Log Out Preferences 🔤 Record Help     Generation Second Help     Welcome, weblogic Connected to: pegjms						
iew 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 > <b>JMS_Module</b>						
onfiguration editing is enabled. Future nanges will automatically be activated as you odify, add or delete items in this domain.		✓ All changes have been activated. However 1 items must be restarted for the changes to take effect.						
omain Structure	✓ The JMS module was created	d successfully.						
·	Settings for JMS_Module							
Deployments	Configuration Subdeployme	<u>nts</u> Targets S	ecurity Notes					
-)-Services ⊟-Messaging JMS Servers Store-and-Forward Agents JMS Modules		deployments- Tab mation about a JM		ources. It also allows you to configur	e new resources an	d access existing		
Path Services ⊞-Bridges	Name:	MC	IS_Module	The name of this J	MS system module.	More Info		
Data Sources Persistent Stores Foreign JNDI Providers	Descriptor File Name:	jm	s/jms_module-jms.xml	The name of the JI	MS module descripto	r file. More Info		
w do I	This page summarizes the JMS			system module, including queue and ns, foreign servers, and store-and-f				
No task help found.	Customize this table							
ystem Status	Summary of Resources							
ealth of Running Servers	New Delete				Showing 0 to	0 of 0 Previous   Next		
Failed (0) Critical (0)	🔲 Name 🗞	Туре	JNDI Name	Subdeployment	١	argets		
Overloaded (0)	Į,		There are no	items to display				
Warning (0) OK (1)	New Delete				Showing 0 to	0 of 0 Previous   Next		
	-							

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

	dministration Console 12c Q
Change Center	Home Log Out Preferences 🗠 Record Help     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

	dministration 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 > JMS Modules >JMS MODULE	iummary 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	
Lock & Edit	Back Next Finish Cancel	
Release Configuration	Targets	
Domain Structure	Please select targets for the Subdeployment	
	Servers	
⊖-Environment Servers ⊖-Clusters	AdminServer	
Server Templates	Clusters	
Coherence Clusters Machines	☑ Cluster-JMS ◎ All servers in the cluster	
Virtual Hosts Work Managers	• All servers in the cluster	
LStartup and Shutdown Classes	JMS Servers	
-Services	JM55erver-1	
How do I 🗉	Back Next Finish Cancel	
<ul> <li>Configure subdeployments in JMS system modules</li> </ul>	Back Next Finish Cancel	

### 4) Sub-Deployment is created

ORACLE WebLogic Server Ad	Iministration Conso	le 12c				Q
Change Center	Home Log Out	t Preferences 📐 Re	ecord Help		Q	Welcome, weblogic Connected to: pegjms
View changes and restarts		(migratable) >Summary imary of Clusters >Sumi				ummary of Clusters >Summary of Migratable Targets >MS-JMS1 vdules > <b>JMS_Module</b>
Configuration editing is enabled. Future	Messages					
changes will automatically be activated as you modify, add or delete items in this domain.	All changes ha	ave been activated. He	owever 1 item	is must be res	tarted for the chang	iges to take effect.
	Subdeploymer	nt created successfully	<i>.</i>			
Domain Structure						
	Settings for JMS	_Module				
-Environment    Deployments	Configuration 5	5ubdeployments	Targets S	ecurity Not	es	
Services     Messaging    Messaging    Missaging    Missaging    Missaging    Missaging    Store-and-Forward Agents    Missaging    Missaging		ection factories) are g s table				ent is a mechanism by which JMS module resources (such as queues, ch as JMS servers, server instances, or duster).
Foreign JNDI Providers	New Delet	e				Showing 1 to 1 of 1 Previous   Next
How do I 🗆	🔲 Name 🗞			Resources		Targets
Configure subdeployments in JMS system	JMS_SUB					Cluster-JMS
modules <ul> <li>Configure JMS system modules</li> </ul>	New Delet	e V				Showing 1 to 1 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	e		The name of this JMS system mo	dule. Mo	ore Info
JMS Servers Store-and-Forward Agents JMS Modules Path Services	Descriptor File Name:			jms/jms_ma	dule-jms.x	ml	The name of the JMS module descriptor file. More In		e. More Info
Yath Services B-FidgesData SourcesPersistent StoresForeign JND2 ProvidersWork Contexts						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	e					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

	Iministration 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 (migratable) >Summary of Clusters >Summary of Migratable Targets >Sum	(migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 mary of JMS Modules >J <b>MS_Module</b>					
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						
Environment     Deployments     Services	Choose the type of resource you want to create. 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 resources, like stand-alone queues and topics, connection factories, distributed queues and topics, foreign servers, and JMS SAF destinations, you can also procees targeting pages for selecting appropriate server targets. You can also associate targetable resources with subdeployments, which is an advanced mechanism for grouping JMS module resources and the members to server resources.						
⊕-Bridges Data 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	© Торіс ↓	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. <b>More Info</b>					
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. <b>More Info</b>					

3) Enter the queue name and Click on Next



-	Home Log Out Preferences Reco	vd Help	Q	Welcome weblook	Connected to: pegim
Change Center			- Antonia		
View changes and restarts	Home >MS-3MS1 (migratable) >Summary of (migratable) >Summary of Clusters >Summa			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.	Create a New JHS System Module Res Back Nexts Prish Cancel	source			
Domain Structure					
Environment     Deployments     Services     E	3MS Distributed Destination Proper The following properties will be used to id * Indicates required fields		uted Queue. The current modul	e is JMS_Module	
Messaging	What would you like to name your new der		~		
Path Services  -BridgesData Sources	What JNDE Name would you like to use to li		vation?		
Persistent Stores Foreign JNDI Providers	JNDI Name: MDB_QL				

#### 4) Click on Advance Targeting

Change Center	A Home Log Out	Preferences 🔛 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain				
View changes and restarts		emplate-0 > Summary of Servers >Sur of 2HS Hodoles >3HS_HODULE	wary of Highstable Targets > Summary of 2HS Server	s 3MSServer 1 > Summary of 2MS Servers > 3MSServer 1 > Summary of Migratelia				
to pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JHS	Create a New JHS System Hodule Resource						
domain.	Back Ned	Finish Advanced Targeting	Cancel					
Release Configuration	The following p	properties will be used to targe	t your new JMS system module resource					
Nomain Structure			where this JMS resource will be targeted. The define rgeting to use the subdeployment mechanism for	will targets are based on the parent IMS system module targets. If you do not want to targeting this resource.				
Orwonnent     Servers     Servers     Server Templates     Morstable Targets     Gaterine Outlets     Mores	The following 345 module targets will be used as the default targets for your new 345 system module resource. If the module's targets are changed, this resource will also be reta appropriately. Targets :							
-Virtual Hosts -Work Managers	Clusters							
- Startup and Shutdown Classes - Deployments B Services R: Messector	Cluster-JHS All servers in the cluster							

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

ORACLE WebLogic Server A	dministration Console 12c	0
Change Center	Record Help	Welcome, weldogic Convected to: FCUESDoma
View changes and restarts	Home xOC_3HS_Tamplater8 x Summary of Servers x Summary of Highstable Tampets x Summary of 3HS Servers x3HSServer Tampets v Summary of 3HS Notices x3HS_HIGDDALE	-1 sSummary of INS Servers sINSServer-1 sSummary of Highstable
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JHS System Hodule Resource	
Look & Edit	Back Not Freeh Canoel	
Release Configuration	The following properties will be used to target your new 2HS system module resource	
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by SAF agent. If necessary, you can create a new subdeployment by diding the <b>Create a New Subdeployment</b> by module's subdeployment management page.	
Servers     Server Templates     Monable Targets     Coherence Outles	Select the subdeployment you want to use. If you select (none), no targeting will occur. Subdeployments: JANS_SLID • Grade a New Subdeployment	
Machines     Wachines     Without Resids     Work Managers     Sinchay and Shutdown Classes     Ceptinyments	What targets do you want to assign to this subdeployment? Targets :	
B Services	Servers	
tow do L. 🛛	AdminServer	
Configure quotes for destinations     Configure 34G templates	Ousters	
Configure destruction keys     Configure topics     Configure topics	Charter-3HS # All servers in the cluster	

6) MDB\_QUEUE is created



	Iministration Console 12c			Õ				
Change Center	🔒 Home Log Out Preferences 📐 Record Help	Q	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 > <b>JMS_Module</b>						
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.							
The JMS distributed queue was created successfully.								
A	Settings for JMS_Module							
-Environment    Deployments	Configuration Subdeployments Targets	Security Notes						
Services    Messaging    Messaging    Messaging    Store-and-Forward Agents    Store-and-Forward Agents    Data Sources    Data Sources	Name:	IS system module and its resources. It also allows y MS_Module The	ou to configure new resources and an name of this JMS system module. M	-				
Persistent StoresForeign JNDI ProvidersWork Contexts How do L	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, JMS templates, destination sort keys, destination quota, distributed destinations, foreign 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 1 o	of 1 Previous   Next				
Failed (0) Critical (0)	🔲 Name 🗞 🛛 Туре	JNDI Name	Subdeployment	Targets				
Overloaded (0)	MDB_QUEUE Uniform Distributed	Queue MDB_QUEUE	JMS_SUB (	Cluster-JMS				
Warning (0) OK (1)	New Delete		Showing 1 to 1 o	of 1 Previous   Next				

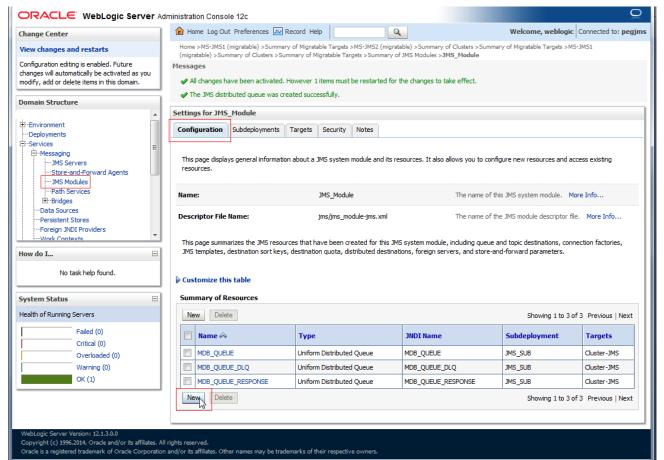
### 7) Similarly Create MDB\_QUEUE\_RESPONSE and MDB\_QUEUE\_DLQ

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 JHS_MODULE								
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

	dministration Console 12c		Q =						
Change Center	🔒 Home Log Out Preferences 🔤 Record Hel	p	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 > <b>JMS 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. Domain Structure	Back Next Finish Cancel Choose the type of resource you want to	create.							
Environment     Deployments    Services    JMS Servers    JMS Servers    JMS Modules    JMS Modules	es, and connection factories. r creating the resource. For targetable resources, like ervers, and JMS SAF destinations, you can also proceed to sources with subdeployments, which is an advanced								
B-Bridges    Data Sources    Persistent Stores	Connection Factory		Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info						
Foreign JNDI Providers	Queue		Defines a point-to-point destination type, which are used for asynchronous peer communications. A message						



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

	dministration Console 12c			Q	
Change Center	Home Log Out Preferen	ces 📐 Record Help	Q	Welcome, weblogic Connected to: pegjms	
View changes and restarts			Targets >MS-JMS2 (migratable) >Summary table Targets >Summary of JMS Modules >J	of Olusters >Summary of Migratable Targets >MS-JMS1 JMS_Module	
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. Domain Structure	Back Next Finish Connection Factory Pro	Cancel			
⊕-Environment     ⊡Deployments     ⊖-Services     ⊖-Messaging	The following properties will * Indicates required fields	be used to identify your	r new connection factory. The current me	odule is JMS_Module.	
JMS Servers Store-and-Forward Agents	What would you like to name	your new connection fa	actory?		
JMS Modules Path Services	* Name:	MDBQCF	<		
⊡-BridgesData Sources	What JNDI Name would you like to use to look up your new connection factory?				
Persistent StoresForeign JNDI ProvidersWork Contexts	JNDI Name:	MDBQCF			

### 4) Click on Advance Targeting

	dministration Console 12c Q	Â
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     Clusters    Server Templates    Migratable Targets    Coherence Clusters    Machines	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 HostsWork ManagersStrutup and Shutdown ClassesDeploymentsServicesTi-Messaring	Clusters          Cluster-JMS         Image:	ш
How do I	Back Next Finish Advanced Targeting Cancel	
Configure quotas for destinations		



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

	ministration Console 12c
Change Center	🟦 Home Log Out Preferences 🔊 Record Help
View changes and restarts	Home >DC_IMS_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. Lock & Edit Release Configuration	Create a New JMS System Module Resource           Back         Next         Fnish         Cancel           The following properties will be used to target your new JMS system module resource         Cancel
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 clicking the Create a New Subdeployment button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.
-Clusters -Server Templates -Migratable Targets -Coherence Clusters	Select the subdeployment you want to use. If you select (none), no targeting will occur. Subdeployments: JMS_SUB T Create a New Subdeployment
Machines Virtual Hosts Work Managers Startup and Shutdown Classes Deployments	What targets do you want to assign to this subdeployment? Targets :
-Services	Servers
How do I	AdminServer
Configure quotas for destinations     Configure JMS templates	Clusters
Configure destination keys     Configure topics     Configure queues	Image: Cluster-JHS         Image: All servers in the cluster
Configure connection factories     Configure uniform distributed topics	JM5 Servers
Configure uniform distributed queues     Configure foreign servers	JMSServer-1
Configure JMS SAF	Back Net Finish Cancel
System Status	

6) Connection Factory is **Created** 



	ministration Console 12c				Q
Change Center	🏠 Home Log Out Preferences 📐	Record Help	٩	Welcome, weblogic	Connected to: pegjm
View changes and restarts		ary of Migratable Targets >MS-JMS2 (migr ummary of Migratable Targets >Summary		nary of Migratable Targets >M	5-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>	. However 1 items must be restarted fo essfully.	or the changes to take effect.		
	Settings for JMS_Module				
Environment     Deployments	Configuration Subdeployments	Targets Security Notes			
MessagingJMS ServersJMS ServersJMS ModulesPath ServicesPath ServicesData Sources	Name:	ion about a JMS system module and its JMS_Module	The name of	this JMS system module. M	ore Info
How do I		jms/jms_module-jms.xml urces that have been created for this J rs, destination quota, distributed destin	IMS system module, including queue		
System Status	Summary of Resources				
Health of Running Servers	New Delete			Showing 1 to 4 c	of 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 c	of 4 Previous   Next



## 5. Server Restart

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

	dministrati	on Console 12c						Ď
Change Center	Hor	me Log Out Preferences 🔼	Record Help	٩			Welcome, we	blogic Connected to: FCUBSDoma
View changes and restarts		>Summary of JMS Servers >JM es >JMS_MODULE >Connection				e Targets >Summary of JMS		
Click the Lock & Edit button to modify, add or delete items in this domain.		ary of Servers		,				
Lock & Edit	Config	juration Control						
Release Configuration	A ser	ver is an instance of WebLogi	c Server that runs i	n its own Java Virtual Mach	ine (JVM) and has its own	configuration.		
Domain Structure	This p	oage summarizes each server	that has been conf	igured in the current WebL	ogic Server domain.			
⊖-Environment Servers ⊖-Clusters	62							
Server Templates	Customize this table							
	Servers (Filtered - More Columns Exist) Click the Lock & Editbutton in the Change Center to activate all the buttons on this page.							
Startup and Shutdown Classes	Ne	ew Clone Delete					Sh	owing 1 to 7 of 7 Previous   Next
-Services		Name 🗇	Туре	Cluster	Machine	State	Health	Listen Port
Messaninn		AdminServer(admin)	Configu	red		RUNNING	🖋 ОК	7001
How do I 🖃		DC_FCUBS_1	Dynami	c Cluster-Ap	p MAC-1	SHUTDOWN	Not reachable	7101
Create Managed Servers		DC_FCUBS_2	Dynami	c Cluster-Ap	p MAC-2	SHUTDOWN	Not reachable	7102
Clone servers		DC_FCUBS_3	Dynami	c Cluster-Ap	p MAC-1	SHUTDOWN	Not reachable	7103
Delete Managed Servers		DC_FCUBS_4	Dynami	c Cluster-Ap	p MAC-2	SHUTDOWN	Not reachable	7104
Delete the Administration Server     Start and stop servers		DC_JMS_1	Dynami	c Cluster-JM	S MAC-1	SHUTDOWN	Not reachable	7106
Start and stop servers		DC_JMS_2	Dynami		S MAC-2	SHUTDOWN	Not reachable	7107
System Status 🖂	Ne		- /					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				Q
Change Center	Home Log Out Preferences 🖂 Record Help	Q		We	Icome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >JMSServer-1 >Summary of Migratable Targets Templates >DC JMS Template-0 >Summary of Serv		LE >ConnectionFactory-0 >pla	aceholder >Summary of Servers >Sum	mary 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 that l A server template contains common, non-default manage configuration for a group of server instar	attributes that you can apply to a set o	-	n inherit the template configuration.	Server templates enable you to easily
Environment     Servers     Clusters     Coherence Clusters     Coherence Clusters     Magnatable Targets     Machines	Customize this table Server Templates Click the Lock & Editbutton in the Change Cente New Clone Delete	er to activate all the buttons on this pag	e.		Showing 1 to 2 of 2 Previous   Next
Virtual Hosts Work Managers Startup and Shutdown Classes	Name 🔅	Cluster	Machine	Listen Port	Listen Address
Deployments	DC_FCUBS_Template	Cluster-App		7100	
-Services -Messaning -	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

	Home	Log Out P	references	Record H		0					14	elcome, weblogi	Connected to	FCURSDo
nge Center		-		_	·								1	
v changes and restarts			ligratable Ta C JMS Tem		of JMS Mod	dules >JMS_MODUL	.E >ConnectionF	actory-0 >pla	ceholder >	Summary of 9	ervers >Summary of S	Server Templates >D	C_JMS_Template-(	) >Summary
ending changes exist. Click the Release	[	· · · ·		·										
iguration button to allow others to edit the ain.	Settings in	OF DC_JPE	5_remplat	.e-0										
Lock & Edit	Configura	ration Pr	otocols L	ogging Debu	ug Notes	5								
LOCK & Edit	General	Cluster	Services	Keystores	SSL Fee	deration Services	Deployment	Migration	Tuning	Overload	Health Monitoring	Server Start	Web Services	Coherenc
Release Configuration														
	Save													
ain Structure														
vironment	Node Ma						nd, shut down, a	and restart se	ervers in no	ormal or unex	pected conditions. U	se this page to con	figure the startup	o settings
Servers	that Nod	de Manager	will use to s	tart this server	on a remot	te machine.								
Clusters	2													
Server Templates	Java Hor	me:									a home directory (pa		unning Node Man	ager) to
Migratable Targets -Coherence Clusters										use whe	n starting this server	. More Info		
Coherence Clusters Machines		_												_
Virtual Hosts	Java Ver	ndor:								The Jav	a Vendor value to use	e when starting this	server. More I	nfo
Work Managers														
Startup and Shutdown Classes	BEA Hom	ne:									home directory (pat		unning Node Mana	ager) to
ployments										use whe	n starting this server	. More Info		
rvices	-													
		ectory:									ctory that this server			
Messaning	- Root Dire										e computer that host			
	Root Dire										wwalue, the demain o			
	_									Director	y value, the domain o	irectory is used by	default. More I	nio
do I E		the												
do I E onfigure startup arguments for Managed rvers	_	th:								The das	y value, the domain of spath (path on the m this server. More Ir	achine running Nod		
do I E		th:								The das	spath (path on the m	achine running Nod		
do I E onfigure startup arguments for Managed rvers art Managed Servers from the ministration Console		th:								The das	spath (path on the m	achine running Nod		
do I E infigure startup arguments for Managed rivers art Managed Servers from the ministration Console		th:								The das	spath (path on the m	achine running Nod		
do I E onfigure startup arguments for Managed revers art Managed Servers from the ministration Console ut down a server instance	Class Pat	th:								The das	spath (path on the m	achine running Nod		
do I E Infigure startup arguments for Managed rivers art Managed Servers from the ministration Console ut down a server instance		th:								The das	spath (path on the m	achine running Nod		
do I E orifigure startup arguments for Managed strivers art Managed Servers from the dministration Console uut down a server instance	Class Pat	th:								The das	spath (path on the m	achine running Nod		
do I E onfigure startup arguments for Managed rivers art Managed Servers from the ministration Console ut down a server instance erem Status E th of Running Servers	Class Pat									The das starting	spath (path on the m	achine running Nod	le Manager) to us	
do L E	Class Par	nts:	128=5121	14						The das starting	spath (path on the m this server. More Ir	achine running Nod	le Manager) to us	

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: pegjms			
View changes and restarts	Home >Summary of Servers >MS-IMS2 >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.	Summary of JMS Modules				
Domain Structure	JMS system resources are configured and stored as modules similar to standard J2EE modules. Such resource quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table IMS Modules				
	New Delete	Showing 1 to 1 of 1 Previous   Next			
Data Sources Persistent Stores	🗖 Name 🗞	Туре			
Foreign JNDI Providers	JMS_Module	System			
How do I	New Delete	Showing 1 to 1 of 1 Previous   Next			
Configure JMS system modules     Configure resources for JMS system modules	<u> </u>				

#### 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		0			
Change Center	1 Home Log Out Preferences 🐼 Record Help	Q	Welcome, weblogic Connected to: PCU85Domain			
View changes and restarts	Hore > placeholder >Summary of Servers >Summary of Server Hodules >3HS_HODULE >Summary of 3HS Hodules	Templates >OC_IMS_Template 0 >Summary of Server	Templates +OC_3HS_Template-0 +Summary of Servers +Summary of 3HS			
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create 3HS System Hodule					
domain.	Back Next Front Cancel					
Release Configuration	The following properties will be used to target your	new 3MS system module.				
Domain Structure	Use this page to select the server or duster on which you w	ould like to deploy this JMS system module. You ca	n reconfigure targets later if you wish.			
B-Environment     -Servers     B-Custers	Targets :					
Server Templates	Servers					
Pograduce Largets     Coherence Outlers     Machines     Writwal Hosts     Work Managets     Startup and Shutdown Classes	AdminServer					
	Clusters					
- Deployments E Services FL Mesandon +	Cluster-App Call servers in the cluster					
How do L.	Consider and					
Configure 345 system modules     Configure 345 servers	O All servers in the cluster					

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

	dministration Console 12c	Q
Change Center	🟦 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected 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 > Deployments >Summary of JMS Modules	>Summary of Servers >Summary of
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create JMS System Madule Back Next Finish Cancel	
Domain Structure	Add resources to this JMS system module	
È-Environment └-Servers È-Clusters	Use this page to indicate whether you want to immediately add resources to this JMS system module after it is created. JMS resources ind	lude queues, topics, connection factories, etc.
Server TemplatesMigratable TargetsCoherence Clusters	Would you like to add resources to this JMS system module?	
Machines Virtual Hosts Work Managers Startup and Shutdown Classes	Back Next Finish Cancel	

#### 5) MDB\_MODULE is created

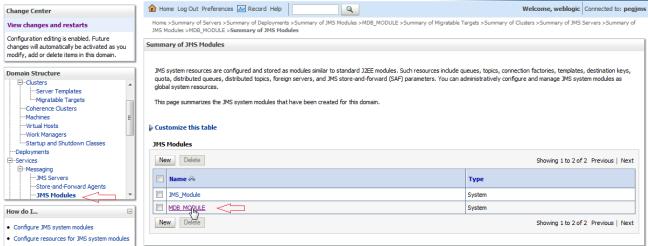
ORACLE' WebLogic Server Administration Console 12c						
Change Center	🏫 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms				
View changes and restarts	Home >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments >Summary of J Targets >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	Summary of JMS Modules					
modify, add or delete items in this domain.  Domain Structure  Colusters  Colver are a construction of the second	MS system resources are configured and stored as modules similar to standard J2EE modules. Such resources include queues, topics, connection factories, templates, des global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table IMS Hodules					
Deployments	New Delete	Showing 1 to 2 of 2 Previous   Next				
	🖹 Name 🌣	Туре				
JMS Modules	JMS_Module	System				
How do I		System				
Configure JMS system modules	New Delete	Showing 1 to 2 of 2 Previous   Next				
Configure resources for JMS system modules						



## 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		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	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	₽ Customize this table				
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

ange Center	🔒 Home Log Out Preferences 🔤 Record Help	Q Welcome, weblogic Connected to: pegji
iew changes and restarts	Home >Summary of Deployments >Summary of JMS Modules >MDB_MODULE Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	>Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS
onfiguration editing is enabled. Future nanges will automatically be activated as yo odify, add or delete items in this domain.	U Create a New JMS System Module Resource Back Next Finish Cancel	
omain Structure	Choose the type of resource you want to create.	
-Environment Servers E-Clusters Server Templates Migratable Targets Coherence Clusters	connection factories, distributed queues and topics, foreign servers, and	eues, topics, templates, and connection factories. · basic information for creating the resource. For targetable resources, like stand-alone queues and topics, JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You advanced mechanism for grouping JMS module resources and the members to server resources.
Machines Virtual Hosts Work Managers Startup and Shutdown Classes	Connection Factory	Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info
-Deployments -Services 나-Messaning	v 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
w do I Configure quotas for destinations Configure JMS templates	© Торіс	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 destination keys Configure topics Configure 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
Configure connection factories Configure uniform distributed topics	O Distributed Topic	Defines a set of topics that are distributed on multiple JMS servers, but which are accessible as a single, logical topic to JMS clients. More Info
Configure uniform distributed queues Configure foreign servers		100

#### 3) Enter name 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 >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 >Summary of JMS Modules >MDB MODULE >Summary of JMS Servers >Summary of JMS Ser		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_MODULE >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >JMS_MODULE >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >JMS_MODULE >Summary of JMS_MODULE >SUMMA
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS System Module Resource
domain.	Back Next 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    Server Templates	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.
LMigratable Targets Coherence Clusters Machines	Targets :
Virtual Hosts Work Managers	Clusters
LStartup and Shutdown Classes Deployments D-Services Messaging	<ul> <li>✓ Cluster-App</li> <li>● All servers in the cluster</li> </ul>
How do I 🖂	Back Next Finish Advanced Targeting Cancel
Configure quotas for destinations	

#### 5) Click on Create New SudDeployment

	dministration Console 12c	Q
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 >Summa Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	ary 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	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 cluster, or SAF agent. If necessary, you can create a new subdeployment by clicking the <b>Create a New Subdep</b> 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

	ministration Console 12c Q							
Change Center	🔒 Home Log Out Preferences 🖾 Record Help							
View changes and restarts	iome >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 >MD8_MODULE >Summary of JMS Modules >SUMMARY of JMS Modules >SUMMARY of JMS Modules >MD8_MODULE >SUMMARY of JMS Modules >S							
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, duster, 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.							
Server Templates	Select the subdeployment you want to use. If you select (none), no targeting will occur.							
Coherence Clusters Machines	Subdeployments: MDB_SUB  Create a New Subdeployment							
Virtual Hosts Work Managers	What targets do you want to assign to this subdeployment?							
LStartup and Shutdown Classes Deployments E-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								
Configure uniform distributed queues	JMS Servers							
Configure foreign servers	JHSServer-1							
Configure JMS SAF								
System Status	Back Next Finish Cancel							

#### 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.	Modules >MU0E_MODULE >summary of JMS Modules >MU0E_MODULE         Messages							
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, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.							
No task help found.								
	Summary of Resources							
System Status	New Delete Showing 1 to 1 of 1 Previous 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

	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 >MDB_MODULE >Summary of JMS Modules >MDB_MODULE Messages						
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		arizes the JMS resources	that have been o			The name of the JMS module descriptor file.	
How do I 🖂 No task help found.	Customize thi Summary of R						
System Status	New Delete Showing 1 to 1 of 1 Previous   Next					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

DRACLE WebLogic Server	Administration Console 12c			2						
hange Center	🕜 Home Log Out Preferences 🔛 R	ecord Help	Q.	Welcome, weblogic Connected to: FCUBSDom						
iew changes and restarts	Hore sSummary of Dutters >Summary of Server Templates >Summary of Servers >Summary of 3MS Mobiles >HDR_MODULE >ForegoTienver-1 >Summary of Servers >Summary of 3MS Modules >HDR_MODULE >ForeignGerver-1									
ck the Lock & Edit button to modify, add or lete items in this domain.	Hessages	Messages								
Lock & Edit		✓ Al changes have been activated. No restarts are necessary.								
Release Configuration	Settings for ForeignServer-1									
	Configuration Subdeployment 1	Notes								
main Structure	General Destinations Connection	n Factories								
Environment Servers B-Ousters Server Templates	Click the Lock & Editbutton in the C	hange Center to modify the	e settings on this page.							
- Migratable Targets - Coherence Clusters - Machines - Virtual Hosts			e a WebLogic Server. It contains information in be defined on one JRDI directory. Use the	that allows WebLogic Server to reach the remote 3HDI provider. This way, a number of page to configure a foreign server.						
Work Managers Startup and Shutdown Classes Deployments	de Name:	ForeignServer-1		The name of this foreign server. More Info						
Services R: Messacion	. JNDI Initial Context Factory:	weblogic indi	VLInitalC	The name of the class that must be instantiated to access the JHOI provider. This class name depends on the JHOI provider and the vendor that are being used. More Info						
Oreate foreign connection factories	A JNDI Connection URL:	13://10.184.148	185:7106,10:184:148:189:7107	The LRL that WebLogd Server will use to contact the JRDI provider. The syntax of this LRL depends on which JRDI provider is being used. For						
				WebLogic 345, leave this field blank if you are referencing WebLogic 345						
				objects within the same cluster. More Info						
Greate foreign destinations	3001 Properties Credestial									



#### 3) Click on Connection Factories

	dministration Console 12c	0					
Change Center	🟦 Home Log Out Preferences 🖾 Record Help						
View changes and restarts	Home >MDB_MODULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS Modules Modules >MDB_MODULE >ForeignServer 1 > Configuration	s >MDB_MODULE >Summary of JMS					
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for ForeignServer-1						
modify, add or delete items in this domain.	Configuration Subdeployment Notes						
Domain Structure	General Destinations Connection Factories						
	A foreign connection factory represents a connection factory that resides on another server, and which is accessible via JND another instance of WebLogic Server running in a different duster or server, or a foreign provider, as long as that provider s This page summarizes the foreign connection factories that have been created for this domain. Customize this table Foreign Connection Factories (Filtered - More Columns Exist)						
Deployments		Showing 0 to 0 of 0 Previous   Next					
How do I	□ Name ↔ Local JNDI Name Remote JNDI	I Name					
	There are no items to display						
Configure foreign servers     Create foreign destinations	New Delete	Showing 0 to 0 of 0 Previous   Next					
System Status							

### 4) Create MDBQCF Connection Factory

ORACLE WebLogic Server A	dministration Console 12c		•
Change Center	🙆 Home Log Out Preferences 🖾 Record Help	9	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home HOR, HODULE clammary of Norstatin Targets clau Humber (HDR HODULE Proving larver), s-Camparation	many of Ousters »Summary of 3HS Servers »Summar	y of 3HS Modulus v MDR_MODULE v 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 Consection Factory		
Domain Structure	Foreign Connection Factory Properties The following properties will be used to identify your new * Indicates required fields * Name: MDBQCF	foreign connection factory.	
What North     What Nanagers     Startug and Shutdown Classes     Deployments     Sin Vession     Sin Vession	Local 3101 Name: MDBQCF Remote 3101 Name: MDBQCF		<b>₽</b>
Now do L.	OK Canod		

#### 5) Click on Destination

none Log Out Preferences 🔛 Record Help	Q	Welcome, weblogic Carne	Taxa and healths		
		rvers +Summery of 3HS Hodules +HDB_HODULE +Summery of 3HS			
Messages		in effect.			
Settings for ForeignServer-1					
Configuration Subdeployment Notes					
General Designations Connection Factories					
Configuration - Destinations-Tab					
A foreign connection factory represents a connection	factory that resides on another server,		effer to		
another instance of WebLogic Server running in a diff	ferent duster or server, or a foreign prov	ider, as long as that provider supports 3ICC			
This page summarizes the foreign connection factorie	s that have been created for this domain	S)			
& Contractor this table					
The second second second second second					
Foreign Connection Factories (Filtered - Plore	Columns Exist)				
New Deving 1to 1of 1 Previous Next					
🙁 Name 🗝 🛛 Local 340	I Rame	Remote 3NDI Name			
E M06007 M06007		MDBCOF			
	Nodula = NCR_NCOULE = Prespirance 1 + Coeffigure Messages # All changes have been activated. However 1 fem Settings for Foreign/Server-1 Configuration Subdoployment Netes General Destinguistics - Destinations-Tra A foreign connection factories Configuration - Destinations-Tra A foreign connection factories Consection factories connection factories Context instance of WebLogic Server running in a dif This page summarizes the foreign connection factories Context instance of WebLogic Server running in a diff This page summarizes the foreign connection factories Context instance of WebLogic Server running in a diff This page summarizes the foreign connection factories Context instance of WebLogic Server running in a diff This page summarizes the foreign connection factories Context instance of WebLogic Server running in a diff This page summarizes the foreign connection factories Context instance of WebLogic Server running in a diff This page summarizes the foreign connection factories Constanting of the stable Foreign Connection Factories (Filtered - Horee New Context instable New Context instable	Nocke HCE_HCCULE + Integriterine 1 - Configuration  Messages  All charges have been activated. However 1 items must be restarted for the charges to to  Settings for ForeignServer-1  Configuration Bubdphyment Netes  Configuration Continuations Contending Contending Contending Contending Contending Continuations  A foreign connection factor represents a connection factory that resides on another server, or a foreign prov.  This page summarizes the foreign connection factories that have been created for this domain  Constantiate this table  Foreign Connection Factories (Fiftered - Hore Columns Exist)  Netting  Name =  Local 2001 filame	Messages         If Margins have been activated. However, 1 terms must be restarted for the changes to take effect.         Settings for Foreign/Server-1         Configuration       Subdeplayment         Configuration       Subdeplayment         Configuration       Subdeplayment         Configuration       Destinations - Tab.         A foreign connection factory apprents a connection factory that resides on another server, and which is accessible via 2/DL. A remote connection factory can be used to rearret another instance of linking. Server running in a different duster or server, or a foreign provider, as long as that provider supports 2/DL.         This page summarizes the foreign connection factories that have been created for this domain.         Understand of linking connection factories that have been created for this domain.         Understand of linking connection factories that have been created for this domain.         Understand the constants (Fiftered - Hore Columnes Doist)         There is an other restarts (Fiftered - Hore Columnes Doist)         New Units       Second 1001 Name		



### 6) Create MDB\_QUEUE

View changes and restarts	Home >JMS Modules >MDB_MOD	ULE >ForeignServer-1 >MDB_MODULE >ForeignServer-1 >Sum	mary 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 Subdeployme	ent Notes	
Domain Structure	General Destinations Co	onnection Factories	
Environment     Servers     Clusters     Clusters     Wigratable Targets     Coherence Servers     Coherence Servers     Machines     Work Managers     Startup and Shutdown Classes     Depoloyments	directory, and the object will b		nation is looked up on the local server, a look-up will be performed automatically on the remote JNDI Showing 0 to 0 of 0 Previous   Next
⊖-Services ⊡-Messaning	🗐 Name 🗇	Local JNDI Name	Remote JNDI Name
How do I		The	e are no items to display
Configure foreign servers	New		Showing 0 to 0 of 0 Previous   Next
Create foreign connection factories			
System Status			
Health of Running Servers			

ORACLE WebLogic Server Ad	ministration Console 12c					Q
Change Center	Home Log Out Preferences	Record Help			Welcome, weblogic	Connected to: pegjm
View changes and restarts	Home >MDB_MODULE >Summary o Modules >MDB_MODULE >ForeignS			ummary of JMS Servers >Summar	ry 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 Desti	-				
modify, add or delete items in this domain.	Cancel					
Domain Structure	Foreign Destination Propertie	25				
Environment     Servers     Clusters     Server Templates     Migratable Targets     Conterne Clusters	The following properties will be us * Indicates required fields	ed to identify your n	new foreign destination			
Virtual Hosts	* Name:	MDB_QUE	EUE			
Work Managers Startup and Shutdown Classes	Local JNDI Name:	MDB_QUE	EUE			
Services	Remote JNDI Name:	MDB_QUE	EUE			
How do I	OK Cancel					
Configure foreign servers						
Create foreign connection factories						

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

	dministration Console 12c		Ŏ
Change Center	Home Log Out Preferences	s 🔊 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MDB_MODULE >Summar Modules >MDB_MODULE >Forei	ry of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary onServer-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	estination	
modify, add or delete items in this domain.	OK Cancel		
Domain Structure	Foreign Destination Prope	erties	
-Environment     -Servers     -Ousters     -Server Templates     -Migratable Targets	The following properties will be * Indicates required fields	e used to identify your new foreign destination.	
Coherence Clusters Machines Virtual Hosts	* Name:	MDB_QUEUE_RESPC	
Work Managers Startup and Shutdown Classes Deployments	Local JNDI Name:	MDB_QUEUE_RESPONSE	
Services	Remote JNDI Name:	MDB_QUEUE_RESPONSE	
How do I 🖃	OK Cancel		
Configure foreign servers	72		
Create foreign connection factories			
Contra Cata			



Change Center	😭 Home Log Out Preferences 🔛 Record Help	Q	Welcome, weblogic Connected to: pegim
View changes and restarts	Home >NDB_MODULE >Summary of Migratable Targets >Sum Modules >NDB_MODULE >ForeignServer1 > Configuration	nary of Outlans >Summary of JMS Servers >Summ	ary of 3HS Hodules >HDB_HODULE >Summary of 3HS
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 1 items must	be restarted for the changes to take effect.	
Domain Structure	Settings for ForeignServer-1		
S Environment	Configuration Subdeployment Notes		
i-Servers E	General Destinations Connection Factories		
Coherence Ousters	JNDI directory, and the object will be returned from that d	nectory.	on the local server, a look-up will be performed automatically on the remote
Coherence Custers  Machines  Work Managers  Sarbie and Shutdown Classes  Deployments  Services  Managers	3RDE directory, and the object will be returned from that d This page summarizes the foreign destinations that have b © Customize this table Foreign Destinations		
- Nachines - Virtual Hosts - Virok Managers - Startup and Shutdown Classes - Deployments (P-Services	This page summarizes the foreign destinations that have b		Showing 1 to 2 of 2 Previous   Next
Hoadhines     Him Hosts     Him Hosts     Him Managers     Startup and Shutdown Classes     Deployments     Grifferences     Grifferences     Configure foreign servers	This page summarizes the foreign destinations that have b © Customize this table Foreign Destinations		
Hostines     Hortual Hosts     Work Managers     Startup and Shutdown Classes     Deployments     Gr.Mesacoon     How do L.	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations New Doloite	een created for this domain.	Showing 1 to 2 of 2 Previous   Next
Hachines     Hirtuel Hosts     Hirtuel Hosts     Work Managers     Startup and Shutdown Classes     Deployments     Services     Hirtuel Hosts     Configure foreign servers     Create foreign connection factories	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations New Doloise Rame &	een created for this domain.	Showing 1 to 2 of 2 Previous (Next Remote 3NDI Name

ORACLE WebLogic Server Administration Console 12c 😰 Home Log Out Preferences 🔛 Record Help Welcome, weblogic Connected to: pegime Change Center sary of 3MS Home >HOB\_HODULE >Summary of Migratable Targets >Sur Modules >HOB\_HODULE >ForeignServer 1 >Coeffiguration HDB, HODULE >S View changes and restarts 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 Destination OK Cancel Domain Structure **Foreign Destination Properties** E Environment --Servers B-Clusters --Server Templates --Machines --Machines --Wack Nota --Work Managers --Startup and Shutdown Classes --Deployments The following properties will be used to identify your new foreign destination. \* Indicates required fields \* Name: MDB\_QUEUE\_DLQ Local JNDI Name: MDB\_QUEUE\_DLQ -Deployments B-Services B-Messanion Remote JNDI Name: MDB\_QUEUE\_DLQ . How do L. OK Cancel Configure foreign servers

Change Center	A Home Log Out Preferences 🖂 Record Help	Q	Welcome, weblogic Connected to: pegin
View changes and restarts	Home >NDE_MODULE >Summary of Migratable Targets >Sur Nodules >MDE_MODULE >ForeignServer1 >Configuration		ry of IMS Modules >NDB_MODULE >Summary of IMS
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 mu		
Domain Structure	Settings for ForeignServer-1		
B Environment	Configuration Subdeployment Notes		
Servers	General Destinations Connection Factories		
Ousters     Server Templates     Moratable Targets     Coherence Clusters			in the local server, a look-up will be performed automatically on the remote
Server Templates Mgratable Targets	A foreign destination (topic or queue) can be found on a JRDI directory, and the object will be returned from that This page summarizes the foreign destinations that have Customize this table Foreign Destinations	drectory.	in the local server, a look up will be performed automatically on the remote
-Server Templates - Migratable Tangets - Coherence Clusters - Machines - Wark Managers - Startup and Shutdown Classes - Deployments - Services - Demloyments - Services - Demloyments	RDI deectory, and the object will be returned from that This page summarizes the foreign destinations that have IP Customize this table	drectory.	in the local server, a look up will be performed automatically on the remote Showing 1 to 3 of 3 Previous   Next
- Server Templates - Migratobic Tangets - Migratobic Tangets - Coherence Clusters - Machines - Work Manages - Services - Deployments - Services - En Missoonn - How do L Configure foreign servers - Configure foreign servers	2kDI directory, and the object will be returned from that This page summarizes the foreign destinations that have Customize this table Foreign Destinations	drectory.	
- Server Templates - Migratolic Targets - Migratolic Targets - Coherence Clusters - Machines - Virtual Hosts - Virtual Hosts - Virtual Hosts - Virtual Hosts - Services - Servi	2kDI directory, and the object will be returned from that         This page summarizes the foreign destinations that have         Customize this table         Foreign Destinations         New       Destinations	drectory. been created for this domain.	Showing 1 to 3 of 3 Previous   Next
- Server Templates - Migratobic Targets - Migratobic Targets - Coherence Clusters - Machines - Michail Hosts - Work Managers - Startup and Shutdown Classes - Deployments - Startup and Shutdown Classes - Deployments - Services - Startup and Shutdown Classes - Deployments - Startup and Shutdown - Startup - Star	2kDI directory, and the object will be returned from that         This page summarizes the foreign destinations that have         © Customize this table         Foreign Destinations         New       Destinations         Image: New       Destinations	drectory. been created for this domain. Local JNDI Name	Showing 1 to 3 of 3 Previous   Next Remote 3ND1 Name

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	👔 Home Log Out Preferences 🚈 Record Help		Welc	ome, weblogic   Connected to: base_domain
View changes and restarts	Home >JMS Modules >MDB_MODULE >ForeignServer-	-1 >JMS Modules >Summary of Deployments >Summary of	Servers >Summary of Deployments >Summary of Server	rs >Summary of Deployments >GWMDB
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for GWMDB			
modify, add or delete items in this domain.	Overview Deployment Plan Configuration	Security Targets Control Testing Monitorin	ng Notes	
Domain Structure				
Environment    Servers    Clusters    Virtual Hosts    Mirtatable Targets	See ans page to specing the weakagic server insist startup time. Target Assignments Change Targets	tances and clusters to which you want to deploy this E	iterprise application. These settings determine whe	Showing 1 to 1 of 1 Previous   Next
Coherence Servers	🔲 Component 🗞	Туре	Current Targ	<b>jets</b>
Wachines		Enterprise Application	Cluster-App	
Startup and Shutdown Classes	GW_MDB_Bean.jar	EJB	(None specifie	:d)
Deployments 曰-Services 自一Messaning	Change Targets			Showing 1 to 1 of 1 Previous   Next
How do I				
<ul> <li>Start and stop a deployed Enterprise application</li> </ul>				

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

	Administration Console	Ç
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: base_dom
View changes and restarts	Home >Summary of Deployments	
Configuration editing is enabled. Future	Summary of Deployments	
changes will automatically be activated as you modify, add or delete items in this domain.	Control Monitoring	
Domain Structure          ⊕ -Environment       ⊕ -Services       ⊕ -Services       ⊕ -Security Realms       ⊕ -Interoperability       ⊕ -Diagnostics	This page displays a list of Java EE applications and stand-alone application modules that have be (redeployed), or deleted from the domain by first selecting the application name and using the co To install a new application or module for deployment to targets in this domain, click the Install b Customize this table Deployments	ntrols on this page.
	Install Update Delete Start v Stop v	Showing 1 to 5 of 5 Previous   Next
	□ Name ↔	State Health Type Deployment Order
	□	Active 🖌 OK Enterprise Application 100
How do I		Active 🖌 OK Enterprise Application 100
Install an Enterprise application     Configure an Enterprise application	□ E C GWMDB	Active A Warning Enterprise Application 100
Update (redeploy) an Enterprise application	ax-is(1-1,1-9)	Active Library 100
<ul> <li>Start and stop a deployed Enterprise application</li> </ul>	E BSWEJB	Active 🖌 OK Enterprise Application 100
<ul> <li>Monitor the modules of an Enterprise application</li> </ul>	Install Update Delete Start Stop >	Showing 1 to 5 of 5 Previous   Next
Deploy EJB modules		
Install a Web application		
System Status		

- 1) Force Stop the Application
- 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

Home >ForeignServer-1 >Configuration >MDBQCF >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE				
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)				
s   Next				
s   Next				
us				

#### 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	This page summarizes the available m selected messages, move messages to messages from a destination.	essages for a stand-alone que another destination, export r	ue, a distributed queue, or a topic o nessage contents in XML format to a	durable subscriber. Use this page to view mess another file, import XML formatted message co	age details, create new messages, delete ontents from another file, or drain all the
₽-Environment	Click on a message to view its content	i.			
ServersVirtual HostsVirtual HostsV	Message Selector:	imns Exist)		Apply	
Green Services     Green Services     Green Services     The Service Ser	New Delete v Move v Imp	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 display	
Manage distributed queue messages     Manage topic durable subscribers	New Delete V Move V Imp	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		L				
View changes and restarts	Home >Configuration >MDBQCF >JMS Modules >JMS_MO	DULE >MDB_C		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 Ø JMS message sent successfully,					
	Summary of JMS Messages					
Domain Structure	1					
Environment     Servers     Clusters     Virtual Hosts     Wingrabile Targets     Coherence Servers     Coherence Clusters     Work Managers     Startup and Shutdown Classes     Deployments     Environments     Environments	This page summarizes the available messages for a selected messages, move messages to another dest messages from a destination. Click on a message to view its contents. Message Selector: Customize this table	stand-alone q ination, expor	ueue, a distributed queue, or a topic durable t message contents in XML format to anothe	e subscriber. Use this page to r file, import XML formatted i Apply	view message details, create new nessage contents from another file	messages, delete 5, or drain all the
	JMS Messages (Filtered - More Columns Exist)					
How do I	New Delete V Move V Import Export	~			Showing 1 t	o 1 of 1 Previous   Next
<ul> <li>Manage queue messages</li> </ul>		-				
Manage distributed queue messages	🗆 ID 🐟	CorrId	Time Stamp	State String	JMS Delivery Mode	Message Size
Manage topic durable subscribers	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)						

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.

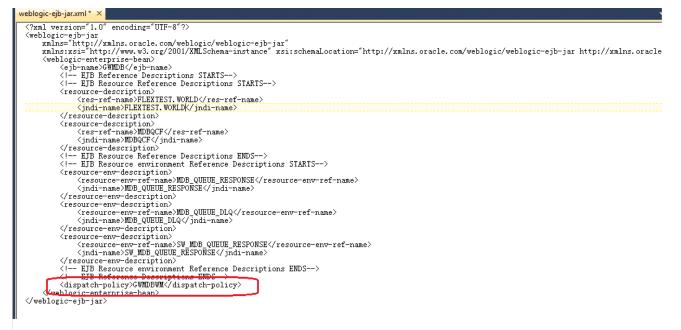
The solution is to create a work manager with a max threads constraint and assign the proxy services dispatch policy to this work manager.

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

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Change Center	🏦 Home Log Out Preferences 🔤 Record Help	¢	2	Welcome, weblogic Connected to: FCUBSDomain
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-Environment				
÷Servers ⊕Clusters	Response Time Request Class			
Coherence Clusters	Fair Share Request Class			
····Machines ····Virtual Hosts				
Work Managers	Context Request Class			
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	Minimum Threads Constraint			
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FCUBSDomain	* Indicates required fields			
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Clusters				
Coherence Clusters Machines	* Name: GWMDBWM			
Virtual Hosts	Back Next Finish Cancel			
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Virtual Hosts Work Managers			1	
Startup and Shutdown Classes	Clusters		4	
Deployments     Services	Cluster-App			
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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

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Machines Virtual Hosts	Fair Share Request Class			
Work Managers Startup and Shutdown Classes Deployments	Context Request Class			
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				

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

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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





FCUBS JMS Cluster Configuration 12c [November] [2020] Version 14.4.0.2.0

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