Configuring JMS on Weblogic Server 12c Oracle FLEXCUBE Universal Banking Release 14.1.0.0.0 [May] [2018]



Table of Contents

1. IN	TRODUCTION	1
1.1	Purpose	
1.2	INTRODUCTION	
1.3	WEBLOGIC 12C NEW FEATURES	
1.4	COMPONENTS DIAGRAM & DATA FLOW	
2. PR	RE-REQUISITES	4
2.1	Machines	Λ
2.1	DYNAMIC CLUSTERS AND MANAGED SERVERS	
2.2	DATASOURCE	
2.4	Shared Folder	
	IS CONFIGURATION	
3.1	PERSISTENCE STORE CREATION	
3.1	JMS SERVER CREATION	
3.2	CLUSTER CONFIGURATION FOR SERVICE MIGRATION	
4. JM	IS MODULE CREATION	11
4.1	Module Creation	11
4.2	SUB DEPLOYMENT CREATION	13
4.3	RESOURCE CREATION	15
4.3		
4.3	3.2 Connection Factory Creation	18
5. SE	ERVER RESTART	21
6. FO	DREIGN SERVER CREATION	23
6.1	Module Creation	23
6.2	Foreign Server Creation	25
6.3	Foreign Server Configuration	29
7. AP	PPLICATION DEPLOYMENT	
8. FR	REQUENTLY ASKED QUESTIONS	
8.1	APPLICATION AND JMS CLUSTER DEPLOYED ON SAME CLUSTER	34
8.2	APPLICATION SHOWS WARNING UPON RESTART OF MANAGED SERVERS	
8.3	SECURING FILE STORE DATA	
8.4	T3s Protocol	
8.5	How to Test the Deployment	
8.6	INCREASE MAXIMUM NUMBER OF MESSAGE-DRIVEN BEAN THREADS	
8.6	6.1 Modify weblogic-ejb-jar.xml	37
	6.2 Work Manager Creation	
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	42

1. Introduction

1.1 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

1.2 Introduction

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

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

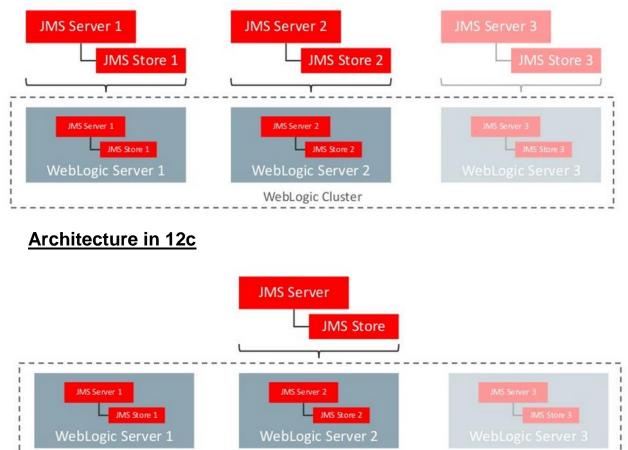
- 1) File based persistence store -> Message is stored in a file
- 2) DB based persistence store -> Message is stored in Database.

1.3 Weblogic 12c New Features

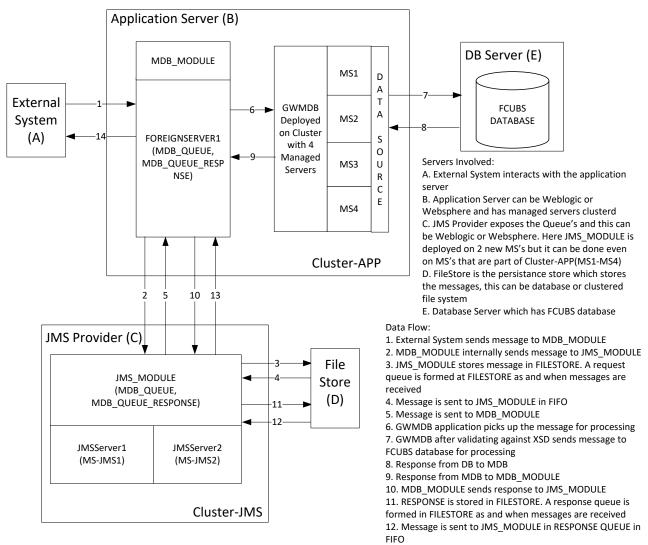
Before weblogic 12c JMS Servers and stores are targeted to individual WLS Servers. Scaling up requires configure the JMS server, the store and target it to new WLS Server

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



WebLogic Cluster



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

	dministration Console 12c	Ŏ				
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjme				
View changes and restarts	Home >Summary of Servers >Summary of Machines	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						
Coherence Clusters	Customize this table					
··· Machines						
Virtual Hosts	Machines					
Work Managers	New Clone Delete	Showing 1 to 2 of 2 Previous Next				
LStartup and Shutdown Classes		Showing 1 to 2 of 2 Previous Next				
Deployments Services	🔲 Name 🗞	Туре				
Security Realms						
Interoperability	MAC-1	Machine				
+-Diagnostics	MAC-2	Machine				
How do I	New Clone Delete	Showing 1 to 2 of 2 Previous Next				
 Create and configure machines 						
 Assign server instances to machines 						

2.2 Dynamic Clusters and Managed Servers

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

	Administration Console 12c						Ç		
Change Center	🔒 Home Log Out Preferences 🖂	Record Help	Q			Welcome, weblogic	onnected to: FCUBSDoma		
View changes and restarts		Home >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.	Messages								
Lock & Edit Release Configuration	Summary of Clusters	All changes have been activated. No restarts are necessary. Summary of Clusters							
Domain Structure	This page summarizes the dusters the	at have been configured in the cu	rrent WebLogic Serv	er domain.					
Environment Servers Server Templates Machines Virtual Hosts Work Managers	A duster defines groups of WebLogi Customize this table Clusters (Filtered - More Column Click the Lock & Editbutton in the C New OCone Delete	ıs Exist)				Showing 1 to	2 of 2 Previous Next		
Startup and Shutdown Classes	🗌 Name 🐟 🛛 Cluster Addres	s Cluster Messaging Mode	Migration Basis	Default Load Algorithm	Replication Type	Cluster Broadcast Channel	Servers		
Services Services How do I	Cluster-App	Unicast	Database	Round Robin	(None)		DC_FCUBS_1, DC_FCUBS_2, DC_FCUBS_3, DC_FCUBS_4		
Configure dusters Assign server instances to dusters Configure dusters	Cluster-JMS	Unicast	Database	Round Robin	(None)		DC_JMS_1, DC_JMS_2		
Configure server migration in a duster Configure cross-duster replication Create dynamic dusters	New v Clone Delete					Showing 1 to	2 of 2 Previous Next		

	dministration	Console 12c						Ç
Change Center	🔒 Home	Log Out Preferences	Record Help	٩			Welcome, we	blogic Connected to: FCUBSDom
View changes and restarts		ummary of Server Template Summary of Servers	es >Summary of Cluster	s >Summary of Servers >Summar	y of Clusters >Summary (of 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.		of Servers						
Lock & Edit	Configur	ation Control						
Release Configuration	A server	is an instance of WebLog	gic Server that runs in	its own Java Virtual Machine (J\	M) and has its own conf	iguration.		
omain Structure	This pag	e summarizes each serve	r that has been config	ured in the current WebLogic Se	rver domain.	-		
- EnvironmentServersClustersServer Templates	دًي ♦ Custor	mize this table						
└Migratable Targets Coherence Clusters Machines Virtual Hosts								
Work Managers	New	Clone Delete					Sh	owing 1 to 7 of 7 Previous Next
Deployments Services		ame 💫	Туре	Cluster	Machine	State	Health	Listen Port
ow do I	- A	dminServer(admin)	Configure	ed		RUNNING	🖋 ОК	7001
	D	C_FCUBS_1	Dynamic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7101
Create Managed Servers	D	C_FCUBS_2	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7102
Clone servers	D	C_FCUBS_3	Dynamic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7103
Delete Managed Servers	D	C_FCUBS_4	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7104
Delete the Administration Server	D	C_JMS_1	Dynamic	Cluster-JMS	MAC-1	SHUTDOWN	Not reachable	7106
	D	C_JMS_2	Dynamic	Cluster-JMS	MAC-2	SHUTDOWN	Not reachable	7107
ystem Status 🖂	New	Clone Delete		1	1		Sh	owing 1 to 7 of 7 Previous Next
Health of Running Servers								
Failed (0)								

2.3 DataSource

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

	Administration Console	9		
Change Center	🕜 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: base_domai		
View changes and restarts Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS_MODULE >MDB_QUEUE >SUMMARY of JMS_MODULE >SUMMARY of JMS_MODULE >MDB_QUEUE >SUMMARY of JMS_MODULE >S				
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Summary of JDBC Data Sources Configuration Monitoring			
Domain Structure Services -Servers -JMS Servers -JMS Modules -Path Services B-Bridges -Data Sources -Persistent Stores	A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC borrow a database connection from a data source. This page summarizes the JDBC data source objects that have been created in this domain. Customize this table Data Sources (Filtered - More Columns Exist)	connections. Applications can look up a data source on the JNDI tree and then		
Foreign JNDI Providers Work Contexts	New v Delete	Showing 1 to 3 of 3 Previous Next		
XML Registries XML Entity Caches	🗌 Name 🔅 Type JNDI Name	Targets		
-jCOM -	FLEXTEST.WORLD Generic FLEXTEST.WORLD	Cluster-App		
·······	idhe/feidauDC Conste idhe/feidauDC	AdminEquer		

2.4 Shared Folder

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

3. JMS Configuration

3.1 Persistence Store Creation

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

ORACLE' WebLogic Server Administration Console 12c					
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms			
View changes and restarts	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.					
	Summary of Persistent Stores				
Domain Structure	A persistent store is a physical repository for storing subsystem data, such as persistent JMS messages. It can be a JDBC-accessible database, disk-based file, or replicated memory storage. This page summarizes the persistent stores that have been created for this domain. Customize this table Persistent Stores				
Messaging Data Sources	New -	Showing 0 to 0 of 0 Previous Next			
	🖻 Name 🗞 🛛 Type	Target			
XML Registries	There are no items to display				
How do I	New V Delete	Showing 0 to 0 of 0 Previous Next			
Create File Stores					

	Administration Console 12c			Q		
Change Center	🚹 Home Log Out Preferences 🔤 R	tecord 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		tory for storing subsystem data, such as persister is page summarizes the persistent stores that hav	t JMS messages. It can be a JDBC-accessible database, disk-based e been created for this domain.	1		
⊕-Messaging Data Sources	New - Delete		Showing 0 to 0 of 0 Previous N	Vext		
Persistent Stores Foreign JNDI Providers Work Contexts	Create FileStore	Туре	Target			
XML Registries	Create ReplicatedStore (Exalogic) There are no items to display					
How do I	New - Delete		Showing 0 to 0 of 0 Previous N	Vext		
Create File Stores						
	1					

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 >Sumr	mary of Clusters >Summary of	Servers >Summary of Clusters >Clus	ter-JMS >Summary of Servers >Summary of Clusters >Summary of Servers > Summary	
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New File Store					
Lock & Edit	OK Cancel					
Release Configuration	File Store Propertie					
Domain Structure	The following propertie * Indicates required field	s will be used to identify your no	ew file store.			
⊟-Environment -Servers ⊟-Clusters ≡	What would you like to r	ame your new file store?				
Server Templates	* Name:	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 where	e the file store is kept. This di	rectory must exist on your system,	so be sure to create it before completing this tab.	
Services H-Messaging	Directory:	/scratch/work_area/JN	IS_FILESTORE			
How do I	OK Cancel					
Create File Stores Monitor persistent stores						

3) FileStore-1 is created

	Administration Console 12c		Q				
Change Center	🔒 Home Log Out Preferences 💽 Record Help	🟦 Home Log Out Preferences 🖂 Record Heb					
View changes and restarts	Home >Summary of Olusters >Summary of Servers >Summary of Olusters >Summary of Servers >Summary of Olusters >Oluster-3MS >Summary of Servers >Summary of Olusters >Summary of Servers >Summary of Servers >Summary of Olusters >Summary of Servers >Summary of Olusters >Summary of Oluste						
Click the Lock & Edit button to modify, add or delete items in this domain.							
Lock & Edit Release Configuration	All Changes have been activated, no restarts are Summary of Persistent Stores	necessary.					
Domain Structure Servers Server Templets Migratable Targets Coherence Clusters E	A persistent store is a physical repository for storing summarizes the persistent stores that have been or Customize this table Persistent Stores		. It can be a JDBC-accessible database, disk-based file, or replicated memory storage. This page				
Machines Virtual Hosts Work Managers	Click the Lock & Edit button in the Change Center to activate all the buttons on this page.						
Startup and Shutdown Classes	New v Delete		Showing 1 to 1 of 1 Previous Next				
-Services -Messaging	🗌 Name 🏟	Туре	Target				
Data SourcesPersistent Stores	FileStore-1	FileStore	Cluster-JMS				
How do I	New v Delete		Showing 1 to 1 of 1 Previous Next				
Create File Stores							

3.2 JMS Server Creation

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

	Iministration Console 12c		õ		
Change Center	🚹 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Con	nected to: pegjms		
View changes and restarts Home > Summary of Servers > Summary of Persistent Stores > Summary of JMS Servers Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain. Home > Summary of Persistent Stores > Summary of JMS Servers					
Domain Structure	Summary of JMS Servers				
Environment Servers Colsters Coherence Clusters Machines Virtual Hosts Work Managers Startup and Shutdown Classes Deployments	JMS servers act as management containers for the queues and topics in JMS modules that are targeted to them This page summarizes the JMS servers that have been created in the current WebLogic Server domain. Customize this table JMS Servers (Filtered - More Columns Exist) Delete	1. Showing 0 to 0 of 0 F	Previous Next		
EServices	□ Name	get Hea	lth		
There are no items to display					
How do I	New Delete	Showing 0 to 0 of 0 F	Previous Next		
Configure JMS servers Configure JMS system modules					

2) .Select FileStore-1 , Click Next

ORACLE WebLogic Server Ad	dministration Console 12c		Ģ
Change Center	🏠 Home Log Out Preferences 🔤 Record H	Help	Welcome, weblogic Connected to: FCUBSDoma
View changes and restarts	Home >Summary of Servers >Summary of Cluste Stores >Summary of JMS Servers	rs >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 identif * Indicates required fields	y your new JMS Server.	
Environment Servers	What would you like to name your new JMS Ser	rver?	
ClustersServer TemplatesMigratable Targets	* Name:	JMSServer-1	
Coherence Clusters Machines	Specify persistent store for the new JMS Serve	т.	
Virtual Hosts Work Managers	Persistent Store:	FileStore-1 Create a New Store	
Startup and Shutdown Classes Deployments Services	Back Next Finish Cancel	(none) FileStore-1	
-Messaninn			

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 >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Clusters >Cluster-JMS >Summary of Serv Stores >Summary of JMS Servers	ers >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.	
Environment Servers Clusters Clusters Custers Custers	Target: (none) (none) Back Next Finish Cancel Cluster-App Cluster-JMS	

	dministration Console 12c		Q
Change Center	Home Log Out Preference	es 📐 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Servers >S Stores >Summary of JMS Ser		ster-JMS >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Persistent
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS Server		
domain.	Back Next Finish	Cancel	
Release Configuration	Select targets		
	Select the server instance or	migratable target on which you would like to deploy this JMS Serve	er.
Domain Structure	Target:	Cluster-JMS 💌	
Environment Servers Clusters Server Templates Mirratable Targets	Back Next Finish	Cancel	

4) JMS-Server-1 is created

	Administration Console 12c				õ				
Change Center	🔒 Home Log Out Preferences 🔤 Re	cord Help		Welcome, weblogic	Connected to: FCUBSDomain				
View changes and restarts	Home >Summary of Servers >Summary of Stores >Summary of JMS Servers	Home >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Clusters >Cluster-JMS >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Persistent Stores >Summary of JMS Servers							
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages	-							
Lock & Edit	All changes have been activated. No	✓ All changes have been activated. No restarts are necessary.							
Release Configuration	Summary of JMS Servers								
Domain Structure	JMS servers act as management containers for the queues and topics in JMS modules that are targeted to them.								
-Environment -Servers -Clusters	This page summarizes the JMS servers that have been created in the current WebLogic Server domain.								
Server Templates Migratable Targets	Customize this table								
Coherence Clusters	JMS Servers (Filtered - More Colu	mns Exist)							
Virtual Hosts	Click the Lock & Edit button in the Cha	ange Center to activate all the buttons on this page.							
Work Managers Startup and Shutdown Classes Deployments	New Delete			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									
 Configure JMS system modules 									

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

Change Center	A Home Log Out P	references 🔝 Rec	ord Help		Q	Welcom	e, weblogic Cornec	ted to: pegjms		
View changes and restarts	Hone >Summary of Servers >Summary of Pensistent Stones >Summary of 2HS Servers >Summary of Custers >Summary of Migratable Targets >Summary of Custers >Custers >Summary of Migratable Targets >Summary of Clusters									
Configuration editing is enabled. Puture changes will automatically be activated as you modify, add or delete items in this domain.	Summary of Cluster	n								
Domain Structure	This page summaria	es the dusters that h	vave been config	yed in the cy	ment WebLogic Serv	er domain.				
8-Environment	A duster defines gr	oups of WebLogic Se	rver servers that	work togethe	er to increase scalab	ity and relability.				
Cohe Costers		© Customize this table								
Machi Clusters, Level 2, Collapsed, 2 of 7, Withamson	Selected New v Cone		xost)			0	owing 1 to 2 of 2 Prev	ing best		
-Work Managers Startup and Shutdown Classes -Deployments			Cluster Hessa	ging Hode	Higration Basis		Replication Type	Cluster Bri		
Services Security Realms Scheroperability Characteris	Custer-App		Unicast		Detabase	Round Robin	(tione)			
How do L.		1								
Configure dusters	Custer-345		Unicast		Database	Round Robin	(None)			
2) Click on Mig	r ation Tab									
	Iministration Console	12c						<u> </u>		
Change Center	Home Log Out	Preferences 📐 Ree	cord Help		٩	Welcom	e, weblogic Connec	ted to: pegjms		
View changes and restarts		Servers >Summary of S >Summary of Migrat				y of Clusters >Summary of Migra	atable Targets >Summar	y of		
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Settings for Cluste	er-JMS								
	Configuration M	Monitoring Control	Deployments	Services	Notes					
Domain Structure		Messaging Servers	s Replication	Migration	Singleton Services	s Scheduling Overload	Health Monitoring	HTTP		
EnvironmentServers	Coherence									
ClustersCoherence Clusters	Save									
Change Migra	ation Basis to	o Consens	sus and (Click o	n Save					
	Sec. 1				- Second and					
View changes and restarts Configuration editing is enabled. Future		Servers is summary of High				ry of Outlen +Summery of Hig	Cardina La Sala Yoshina	ey 0		
changes will automatically be activated as you modify, add or delete items in this domain.	Settings for Cluste	or 3815								
	Configuration 3	Monitoring Control	Deployments	Services	Notes					
Domain Structure	General JTA	Messaging Server	s Replication	Higration	Singleton Service	s Scheduling Overload	Health Monitoring	HTP		
P Environment	Coherence									
R Custers	Save									
Cohemics Outless Machines Walk Notabors Work Managers Surtup and Shutdown Oasses	and all the second second and	a de adamente and alle	and interaction in the local		and the state of	ices on another machine. This irce used during server migrat		edy the		
- Ceployments IP: Services	Candidate Ha	achines For Higrat	able Servers:			The set of medianes (and				
Security Realma	Available:		Chosen:			Node Manager sill restart enable each server for au				
R Intersperability + R Champaters +	E HAC-1 E HAC-2		5							
How do I			30		10					
Configure dusters			4		2					
Configure server regration in a duster Oreate XBC generic data sources			38		X					
Configure cross-cluster replication										
System Status 8	E Higration Bar	she		Databa Databa	Concession of the local division of the loca	Controls the mechanismu migration. More Info	ond for server and ser	vice		
Health of Running Servers	C Data Source I	for Automatic Hig	ration	Contraction of the	- Lan	The data source used by	servers in the duster i	Ling		

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

4. JMS Module Creation

4.1 Module Creation

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

ORACLE WebLogic Server Administration Console 12c 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 >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets > Summary of JMS Modules								
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages								
Domain Structure	Summary of JMS Modules								
Ceployments Services Store-and-Forward Agents	JMS system resources are configured and stored as modules similar to standard J2EE modules. templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and administratively configure and manage JMS system modules as global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JMS Modules								
Persistent Stores Foreign JNDI Providers	New Delete	Showing 0 to 0 of 0 Previous Next							
How do L	Name 🌣	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 >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules									
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create JMS System Module Back Nrg Finish Cancel									
Domain Structure	The following properties will be used to identify your new module.									
B→Environment →Deployments B→Services B→Messaging →JMS Servers →Store-and-Forward Agents →JMS Modules →JMS Modules	Image: System resources are configured and stored as modules similar to standard J2EE modules. Such resources include queues, topics, connection templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources. * Indicates required fields What would you like to name your System Module? * Name: JMS_Module									
⊕-Bridges Data Sources Persistent Stores Foreign JNDI Providers										
Work Contexts	What would you like to name the descriptor file name? If you do not provide a name, a defau	ult will be assigned.								
How do I Configure JMS system modules	Descriptor File Name:									
Configure JMS servers	Where would like to place the descriptor for this System Module, relative to the jms configure	ation sub-directory of your domain?								
System Status	Location In Domain:									
Health of Running Servers	Back Next Finish Cancel									
Failed (0)	DOUR IYEAL FINISH CONCEN									

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

ORACLE WebLogic Server A	dministration Console 12c		0
Change Center	🙆 Home Log Out Preferences 📈 Record Help		Welcome, weblogic Converted to: FCU8SDomain
View changes and restarts	Home >Summery of Server Templates >DC_3HS_Template-0 >Su Migratable Targets >Summary of 3HS Modules	mmary of Servers x Summary of Higratable Targe	ds > Summary of 3HS Servers > 3HSServer 1 > Summary of 3HS Servers > 3HSServer 1 > Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the domain. Lock & Edit	Create JHS System Hodule		
Release Configuration	The following properties will be used to target your	new JMS system module.	
Domain Structure	Use this page to select the server or cluster on which you we	auld like to deploy this 345 system module. You	u can reconfigure targets later if you wish.
B Enversment -Servers B-Ousters	Targets :		
Server Templates Migratable Targets	Servers		
- Coherence Ousters - Machines - Wrball Hosts	AdminServer		
Work Managers Startup and Shutdown Classes	Chusters		
Deployments Disenses Ditestation	Cluster-App All servers in the cluster		
How do I 🖂	Cluster-JHS		
Configure 345 system modules Configure 345 servers	All servers in the cluster		

4) Select the checkbox and Click on Finish

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

5) JMS_MODULE is created

Change Center	Home Log Out Pre	ferences 🔁	Record He	lp		Q	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	Messages	Messages							
modify, add or delete items in this domain.	 All changes have b The JMS module was 			l items must	be restart	ed for the changes	to take effect.		
Domain Scructure	Settings for JMS_Mo	lule							
-Environment -Deployments	Configuration Sub	deployments	Targets	Security	Notes				
ÈServices ÈMessaging JMS Servers Store-and-Forward Agents	This page displays ge resources.	This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and accer resources.							
JMS Modules							where the second s		
JMS Modules Path Services BBridges	Name:			JMS_Module	2		The name of this JMS system module. More Info		
Path Services	Name: Descriptor File Nam	2:		JMS_Module		cml	The name of this JMS system module. More Info		

4.2 Sub Deployment Creation

1) In JMS_MODULE, Click on Sub Deployment tab , Click on New

ORACLE' WebLogic Server Administration Console 12c										
Change Center	Home Log Out Preferences	Necord Help	Q	Welcome, web	logic Connected to: pegjms					
View changes and restarts		Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules > JMS_Module								
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages All changes have been activated. However 1 items must be restarted for the changes to take effect. The JMS module was created successfully.									
Domain Structure										
+-Environment	Settings for JMS_Module									
Deployments	Configuration Subdeployme	<u>ents</u> Targets S	ecurity Notes							
Services Messaging Missaging		deployments- Tab rmation about a JMS		s. It also allows you to configure new resources a	and access existing					
Path Services	Name:	MC	S_Module	The name of this JMS system module	e. More Info					
Data SourcesPersistent StoresForeign JNDI ProvidersWork Contexts	Descriptor File Name:	-	s/jms_module-jms.xml	The name of the JMS module descrip						
How do I No task help found.				oreign servers, and store-and-forward paramete						
System Status	Summary of Resources									
Health of Running Servers	New Delete			Showing 0	to 0 of 0 Previous Next					
Failed (0) Critical (0)	🔲 Name 🗇	Туре	JNDI Name	Subdeployment	Targets					
Overloaded (0)	Į,		There are no items	s to display						
Warning (0) OK (1)	New Delete Showing 0 to 0 of 0 Previous Next									
	WebLogic Server Version: 12.1.3.0.0 Copyright (c) 1996.2014, Oracle and/or its affiliates. All rights reserved. Oracle is a registred trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.									

2) Enter name as JMS_SUB 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 >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 Next Finish Cancel Subdeployment Properties The following properties will be used to identify your new subdeployment.								
→ Deployments → Services → Messaging → JMS Servers → Stor-and-Forward Agents → JMS Modules → Path Services ⊕ Pridges → Def Sources → Persistent Stores	* Indicates required fields * Subdeployment Name: 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	٩	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summary of JMS Modules >JMS_MODULE	of Migratable Targets >Summary of JMS Ser	vers >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	Create a New Subdeployment		
domain.	Back Next Finish Cancel		
Domain Structure	Please select targets for the Subdeployment		
-Environment -Servers Ousters -Server Templates -Migratable Targets Coherence Clusters Migratable Targets Migratable Targets	Servers AdminServer Clusters Cluster-JMS		
Virtual Hosts Work Managers Startup and Shutdown Classes Deployments	All servers in the cluster JMS Servers		
E-Services	JMSServer-1		
How do I 🖂 • Configure subdeployments in JMS system modules	Back Next Finish Cancel		

4) Sub-Deployment is created

ORACLE WebLogic Server Ad	ministration Con	sole 12c							Q	
Change Center	Home Log	Dut Preferences 🔤 F	lecord Help			Q	w	elcome, weblogic	Connected to: pegjms	
View changes and restarts		e >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 ratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules > JMS_Module								
Configuration editing is enabled. Future	Messages									
changes will automatically be activated as you modify, add or delete items in this domain.	All changes	have been activated. I	However 1 ite	ems must be	restarted	for the changes to take effe	ect.			
	Subdeployr	Subdeployment created successfully.								
Domain Structure										
t∄-Environment	Settings for JN	15_Module								
er-Environment	Configuration	Subdeployments	Targets	Security	Notes					
Generation G									ich as queues,	
Foreign JNDI Providers	New De	elete						Showing 1 to 1 of	f 1 Previous Next	
How do I 🗉	Name (~		Resource	5		Targets			
Configure subdeployments in JMS system	JMS_SUI	в					Cluster-JN	MS		
modules Configure JMS system modules 	New De	elete						Showing 1 to 1 of	f1 Previous Next	
System Status										

4.3 **Resource Creation**

4.3.1 Queue Creation

1) In JMS_MODULE Click on New

	ministration Consol	le 12c							Q
Change Center	Home Log Out	t Preferences 📐	Record Help			Q		Welcome, weblog	ic Connected to: pegjms
View changes and restarts							ummary of Clusters >Summary o dules > JMS_Module	of Migratable Targets >	MS-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.	vs general informat	ion about a JM	1S system r	nodule and	l its resources.	. It also allows you to configure	e new resources and	access existing
-Messaging	Name:		t	MS_Module			The name of this JM	MS system module.	More Info
JMS Servers JMS Modules JMS Modules Path Services BBridges	Descriptor File			ms/jms_moo			The name of the JM n module, including queue and t	MS module descriptor	
How do I	JMS templates, of Customize this	s table	s, destination	ı quota, dis	tributed de	estinations, for	eign servers, and store-and-fo	orward parameters.	
No task help found.	New Delet							Showing 0 to 0	of 0 Previous Next
System Status 🖂	🔲 Name 🗞	Ту	pe	JNDI Na	me		Subdeployment	Та	irgets
Health of Running Servers					There	are no items t	to display		
Failed (0) Critical (0) Overloaded (0)	Nev	e						Showing 0 to 0	of 0 Previous Next

2) Select Distributed Queue and Click on Next

	dministration Console 12c	Ŏ
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 (migrata (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of	
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 New JMS System Module Resource Choose the type of resource you want to create. Use these pages to create resources in a JMS system module, such as queue Depending on the type of resource you select, you are prompted to enter ba stand-alone queues and topics, connection factories, distributed queues and targeting pages for selecting appropriate server targets. You can also associ mechanism for grouping JMS module resources and the members to server re Connection Factory Queue	sic information for creating the resource. For targetable resources, like topics, foreign servers, and JMS SAF destinations, you can also proceed to te targetable resources with subdeployments, which is an advanced
Configure quotas for destinations Configure JMS templates Configure destination keys Configure topics Configure topics	© Topic	Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info
Configure queues Configure connection factories Configure uniform distributed topics Configure uniform distributed queues	Distributed Queue	Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info

3) Enter the queue name and Click on Next

	dministration Console 12c	Q
Change Center	😰 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MS-3MS1 (migratable) >Summary of Migratable Targets >MS-3MS2 (migratable) >Summary (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of 3MS Modules >	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain. Domain Structure	Create a New JHS System Module Resource Back Finish Cancel JHS Distributed Destination Properties The following properties will be used to identify your new Distributed Queue. The current m * Indicates required fields	odule is JMS_Module
IMS Servers Store-and-Forward Agents IMS Modules Parti Services Data Sources Persistent Stores Persistent Stores Foreign INDI Providers Work Contexts	What would you like to name your new destination? * Name: MDB_QUEUE What INDI Name would you like to use to look up your new destination? JNDI Name: MDB_QUEUE	

4) Click on Advance Targeting

ORACLE WebLogic Server A	dministration Console 12c		O
Change Center	Home Log Out Preferences Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home xDC_PHS_Template-0 xSummary of Servers xSummary of Templa xSummary of 2HS Hodyles x3HS HODHUS	(Higratable Targets > Summary of 245 Servers >2	MSServer 1 - Summary of IMS Servers > IMSServer 1 - Summary of Highstable
to pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JPtS System Hodule Resource		
domain.	Back Net Finah Advanced Targeting C	Incel	
Release Configuration	The following properties will be used to target your	new 3HS system module resource	
Domain Structure	Use this page to view and accept the default targets where accept the default targets, then dick Advanced Targetin		targets are based on the parent IMS system module targets. If you do not want to artino this resource.
Environment Servers Clusters Clusters Hografable Targets Clatters Hografable Targets Clatters Hodreses	The following 245 module targets will be used as the default t appropriately. Yargets :	argets for your new 345 system module resour	ror. If the module's targets are changed, this resource will also be retargeted
- Virtual Hosts Work Managers	Clusters		
Startup and Shutdown Classes Deployments B Services 9 Messadon	Cluster-JHS All servers in the cluster		
tow do L. 🛛	Back Net Finsh Advanced Targeting Co	encel	

5) Select Subdeployement as JMS_SUB and Click on Finish

ORACLE WebLogic Server A	triinistration Console 12c		0
Change Center	😧 Hame Log Out. Preferences 🔛 Record Help	9	Welcome, weblogic Grovected to POURSDomain
View changes and restarts	Huma +OC_3H5_Tamplate-0 +Summary of Servers +Summary + Targets +Summary of 3H5 Midules +3H5_M0008.8	of Highstable Targets +Summary of JHS Servers +JHS	Densel 1 Summery of 3HS Servers s2HSServer 1 vSummery of Highdalie
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JHS System Hodule Resource		
Look & Edit	Back Net Freh Carol		
Release Configuration	The following properties will be used to target you	r new 2015 system module resource	
Benain Structure			nam by which JMS resources are grouped and targeted to a server instance, cluster, or ent button. You can also reconfigure subdeployment targets later by using the parent.
-Servers 8 -Server Tenglates -Mgratable Targets -Cohemics Gutters	Select the subdeployment you want to use. If you select (no Subdeployments:	one), no targeting will occur. 8 💌 Ceate a New Subdeployment.	
- Nachanes - Wrbud Hosts - Work Managers - Startup and Shutdown Caspes	What targets do you want to assign to this subdeployment? Targets :		
Ceptionents B-Services	Servers		
How do L.	Administerver		
Configure quotes for destinations Configure 3HS templates	Clasters		
Configure destination keys Configure topics Configure topics	Cluster-3HS All servers in the cluster		

6) MDB_QUEUE is created

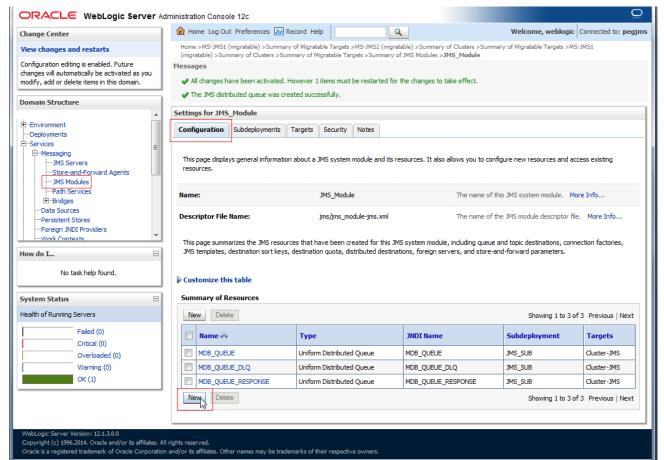
	Iministration Console 12c	õ
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	gjms
View changes and restarts	Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules >JMS	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages All changes have been activated. However 1 items must be restarted for the changes to take effect.	
Domain Structure	The JMS distributed queue was created successfully.	
A	Settings for JMS_Module	
-Environment Deployments	Configuration Subdeployments Targets Security Notes	
	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.	
⊞-Bridges	Name: JMS_Module The name of this JMS system module. More Info	
Data Sources Persistent Stores Foreign JNDI Providers Work Contexts	Descriptor File Name: jms/jms_module-jms.xml The name of the JMS module descriptor file. More Info	
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.		
System Status	Summary of Resources	_1
Health of Running Servers	New Delete Showing 1 to 1 of 1 Previous Nex	:t
Failed (0) Critical (0)	Name Type 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 of 1 Previous Nex	t

7) Similarly Create MDB_QUEUE_RESPONSE and MDB_QUEUE_DLQ

	dministration Conso	ole 12c							õ
Change Center	🔒 Home Log Ou	it Preferences 🔤	Record Help		Q			Welcome, weblogic Cor	nnected to: FCUBSDomain
View changes and restarts	Home >DC_JMS_ JMS Modules >JM		r of Servers >Sum	nmary of Migratab	le Targets >Summary of JM!	5 Servers >JMSServer-1 >Summary	of JMS Servers :	>JMSServer-1 >Summary of Migrat	able Targets >Summary of
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages	ave been activated.	No costarte area	20000201					
Lock & Edit Release Configuration	Settings for JMS		NO TESTALS ALE	riccessary.					
Domain Structure	Configuration	Subdeployments	Targets Sec	curity Notes					
Environment	This page displa	ys general informatio	on about a JMS s	system module a	nd its resources. It also all	ows you to configure new resource	es and access e	existing resources.	
Clusters Server Templates	Name:			JMS_MC	DULE	The nar	me of this JMS s	system module. More Info	
Migratable Targets Coherence Clusters Machines	Descriptor File	Descriptor File Name: jms/jms_module-jms.xml The name of the JMS module descriptor file. More Info							
Virtual Hosts Work Managers Startup and Shutdown Classes Deployments					this JMS system module, ir e-and-forward parameters	nduding queue and topic destination.	ons, connection	factories, JMS templates, destin	ation sort keys,
-Services	Customize th	is table							
How do I	Summary of R	esources							
No task help found.	Click the Lock &	& Edit button in the C	Change Center to	o activate all the	buttons on this page.				
	New Dele	te						Showing 1 to	3 of 3 Previous Next
System Status	🔲 Name 🗇	,	т	уре		JNDI Name	<u> </u>	Subdeployment	Targets
Health of Running Servers	MDB QUE	UE	Ur	niform Distribute	1 Oueue	MDB QUEUE	J	IMS SUB	Cluster-JMS
Failed (0)	MDB_QUE			niform Distribute		MDB_QUEUE_DLQ		IMS_SUB	Cluster-JMS
Critical (0) Overloaded (0)	MDB_QUE	UE_RESPONSE	Ur	niform Distribute	d Queue	MDB_QUEUE_RESPONSE	J	MS_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 Help	Q Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS- (migratable) >Summary of Clusters >Summary of Migratable Targets >	-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 >Summary of JMS Modules > 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 Cancel Choose the type of resource you want to create.	
Environment Deployments Devices Devices Devices Devices Devices Devices Devices Devices Devices	Use these pages to create resources in a JMS system module, su Depending on the type of resource you select, you are prompted stand-alone queues and topics, connection factories, distributed	d to enter basic information for creating the resource. For targetable resources, like d queues and topics, foreign servers, and JMS SAF destinations, you can also proceed to an also associate targetable resources with subdeployments, which is an advanced
El-Bridges Data Sources Persistent Stores	စ္ Connection Factory	Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info
Foreign JNDI Providers	O 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	nces 🟊 Record Help	Q	Welcome, weblogic Connected to: pegjms
View changes and restarts			>MS-JMS2 (migratable) >Summary of rgets >Summary of JMS Modules >JM	f Clusters >Summary of Migratable Targets >MS-JMS1 I S 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		
	The following properties wil * Indicates required fields	ll be used to identify your new co	onnection factory. The current mod	ule is JMS_Module.
	What would you like to name	e your new connection factory?		
JMS Modules Path Services	* Name:	MDBQCF	\Box <	
⊡-Bridges Data Sources	What JNDI Name would you	like to use to look up your new o	connection factory?	
Persistent Stores Foreign JNDI Providers Work Contexts	JNDI Name:	MDBQCF		

4) Click on Advance Targeting

	tministration Console 12c Q
Change Center	🔒 Home Log Out Preferences 🗟 Record Help
View changes and restarts	Home >DC_JMS_Template=0 >Summary of Servers >Summary of Migratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JMS System Module Resource Back Next Finish Advanced Targeting Cancel
Release Configuration Domain Structure	The following properties will be used to target your new JMS system module resource 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 Golusters Migratable Targets Coherence Clusters Mines	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 :
Work Managers Work Managers Work Managers Structure pand Shutdown Classes Deployments Services Services Services	Clusters Cluster-JMS Image: Second
How do I • Configure quotas for destinations	Back Next Finish Advanced Targeting Cancel

5) Select JMS_SUB and Click on Finish

	dministration Console 12c Q	1
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	
Lock & Edit	Back Next Finish Cancel	
Release Configuration	The following properties will be used to target your new JMS system module resource	
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, cluster, 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	
-Environment -Servers E	module's subdeployment management page.	
	Select the subdeployment you want to use. If you select (none), no targeting will occur.	
Migratable Targets Coherence Clusters Machines	Subdeployments: JMS_SUB Create a New Subdeployment	
Virtual Hosts	What targets do you want to assign to this subdeployment?	
Work Managers Startup and Shutdown Classes	Targets :	
Deployments E-Services		
- Alessaning	Servers	
How do I 🗉	AdminServer	
Configure quotas for destinations		
Configure JMS templates Configure destination keys	Clusters	
Configure topics	Cluster-JMS	
Configure queues	All servers in the cluster	
Configure connection factories		
Configure uniform distributed topics	JHS Servers	
Configure uniform distributed queues	DMSServer-1	
Configure foreign servers		
Configure JMS SAF	Back Next Finish Cancel	
System Status 🗉		

6) Connection Factory is **Created**

Change Center	THOME LOG O	ut Preferences 📐	Record Help	' L	9		Welcome, weblogic	Connected to: pegjr
View changes and restarts						>Summary of Clusters > Modules > JMS_Module	Summary of Migratable Targets >M	IS-JMS1
Configuration editing is enabled. Future	Messages	minary or clusters 25	initially of Mig	natable nargets	> Summary or SHS	Houses 20113_House		
changes will automatically be activated as you modify, add or delete items in this domain.		have been activated	However 1 i	tems must be re	estarted for the d	anges to take effect.		
	Connection	factory created succ	essfully.			2		
omain Structure	Colling for The							
-Environment		- 2						
Deployments	Configuration	Subdeployments	Targets	Security No	tes			
JMS Modules Path Services ⊡-Bridges	Name:		I	MS_Module		The nam	e of this JMS system module. N	lore Info
Deployments Services Messaging	E							
Data Sources	Descriptor File	Name:		ms/jms_module	-ims. xml		e of the JMS module descriptor f	
Persistent Stores Foreign JNDI Providers	Descriptor File	- Name:	J	ns/jins_mouue	-jms.xm	The hair	le of the JMS module descriptor i	ie. More mio
Work Contexts	This page summ	narizes the JMS reso	irces that ha	ve been create	d for this JMS sys	tem module, including a	ueue and topic destinations, con	nection factories,
	This page summ						ueue and topic destinations, con tore-and-forward parameters.	nection factories,
	This page sum	, destination sort key						nection factories,
tow do I No task help found.	This page sumr JMS templates,	, destination sort key nis table						nection factories,
low do I No task help found. System Status	This page summ JMS templates,	, destination sort key nis table Resources					tore-and-forward parameters.	nection factories, of 4 Previous Next
tow do I No task help found. System Status Health of Running Servers Failed (0)	This page summer JMS templates, Customize the Summary of I	, destination sort key nis table Resources			ited destinations,		tore-and-forward parameters.	
How do I No task help found. System Status Health of Running Servers Failed (0) Critical (0)	This page sum JMS templates, Customize th Summary of I	destination sort key nis table Resources ete	s, destination		Ited destinations,	foreign servers, and s	tore-and-forward parameters. Showing 1 to 4	of 4 Previous Next
How do I No task help found. System Status Health of Running Servers Failed (0)	This page sum JMS templates, Customize th Summary of I	destination sort key iis table Resources ete	s, destination Type Connect	quota, distribu	Ited destinations,	foreign servers, and s	Showing 1 to 4	of 4 Previous Next
w do I No task help found. ystem Status lealth of Running Servers Failed (0) Critical (0) Overloaded (0)	This page sum JMS templates, Customize th Summary of I Name & MDBQCF MDB_QUE	destination sort key nis table Resources ete	s, destination Type Connect Uniform	ion Factory	Ited destinations, JN MD sue MD	DI Name 3_QUEUE	Showing 1 to 4 Subdeployment JMS_SUB	of 4 Previous Next Targets Cluster-JMS
How do I No task help found. System Status Health of Running Servers Failed (0) Critical (0) Overloaded (0) Warning (0)	This page sum JMS templates, Customize th Summary of I New Del MDBQCF MDBQUE MDBQUE	destination sort key nis table Resources ete	s, destination Type Connect Uniform Uniform	ion Factory Distributed Que	Ited destinations, JN MD sue MD sue MD	foreign servers, and s DI Name	Showing 1 to 4 Subdeployment JMS_SUB JMS_SUB	of 4 Previous Nex Targets Cluster-JMS Cluster-JMS

5. Server Restart

1) Increase the heap size of both DC_JMS_1 and DC_JMS_2 cluster

ORACLE WebLogic Server Administration Console 12c									
Change Center	Home Lo	og Out Preferences [Record Help		Q			Welcome, webl	ogic Connected to: FCUBSDomain
View changes and restarts		imary of JMS Servers >: 45_MODULE >Connecti				immary of Migratable Targ	gets >Summary of JMS		
Click the Lock & Edit button to modify, add or delete items in this domain.	Summary of	-	on actory or place		y or betters				
Lock & Edit	Configurat	tion Control							
Release Configuration	A server is	an instance of WebLo	gic Server that ru	ns in its own Java) Virtual Machine (JV	M) and has its own confi	guration.		
Domain Structure	This page :	summarizes each serve	er that has been c	onfigured in the c	urrent WebLogic Se	rver domain.			
-Environment -Servers -Clusters -Server Templates -Migratable Targets	ই⊇ ₽ Customi	ize this table							
Coherence Clusters	Servers	(Filtered - More Col	umns Exist)						
Wachines Virtual Hosts Work Managers Startup and Shutdown Classes	Click the L	Clone Delete	the Change Cente	r to activate all t	ne buttons on this p	age.		Show	ing 1 to 7 of 7 Previous Next
Deployments Services	🗆 Nar	ne 🔗	Ту	pe	Cluster	Machine	State	Health	Listen Port
	Adm	iinServer(admin)	Con	figured			RUNNING	🖋 ОК	7001
How do I	DC	FCUBS_1	Dyn	amic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7101
Create Managed Servers	DC	FCUBS_2	Dyn	amic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7102
Clone servers	DC	FCUBS_3	Dyn	amic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7103
Delete Managed Servers Delete the Administration Server	DC	FCUBS_4	Dyn	amic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7104
Delete the Administration Server Start and stop servers	DC	JMS_1	Dyn	amic	Cluster-JMS	MAC-1	SHUTDOWN	Not reachable	7106
Start and stop servers		JMS_2	Dvn	amic	Cluster-JMS	MAC-2	SHUTDOWN	Not reachable	7107
System Status	New	Clone Delete			1			Show	ing 1 to 7 of 7 Previous Next
Health of Running Servers									
Eailed (0)									

2) Select the cluster 'DC_JMS_Template-0' and

	ministration Console 12c				Ŏ
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Q		Wel	Icome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >JMSServer-1 >Summary of Migratable Targets : Templates >DC JMS Template-0 >Summary of Server		E >ConnectionFactory-0 >pla	ceholder >Summary of Servers >Sumr	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 he A server template contains common, non-default a manage configuration for a group of server instanc	ttributes that you can apply to a set of	-	inherit the template configuration.	Server templates enable you to easily
Environment Servers Clusters Coherence Clusters Coherence Clusters Machines	Customize this table Server Templates Cick the Lock & Editbutton in the Change Center New Cone Delete	to activate all the buttons on this page	2.		Showing 1 to 2 of 2 Previous Next
Virtual Hosts Work Managers	□ Name ↔	Cluster	Machine	Listen Port	Listen Address
Startup and Shutdown ClassesDeploymentsServicesMessaring	DC_FCUBS_Template DC_INS_Template-0	Cluster-App Cluster-JMS		7100 7105	
How do I	New Clone Delete			1	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

		Ο					
-							
Change Center	Home Log Out Preferences 🔤 Record Help	Log Out Preferences 🖉 Record Help Q Welcome, weblogic Connected to: FCUBSDomain					
View changes and restarts	Home >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE >ConnectionFactory-0 >placeholder >Summary of Servers >Summary of Server Templates >DC_JMS_Template-0 >Summary of Server Templates >DC_JMS_Template-0 >Summary of Server Templates >DC_JMS_Template-0 >Summary of Servers >Servers >Serv						
No pending changes exist. Click the Release Configuration button to allow others to edit the	Settings for DC_JMS_Template-0						
domain.	Configuration Protocols Logging Debug Notes						
Lock & Edit							
Release Configuration	General Cluster Services Keystores SSL Federation Services Deployment Migration	Tuning Overload Health Monitoring Server Start Web Services Coherence					
3	Save						
Domain Structure							
⊖-Environment ├Servers ⊖-Clusters └Server Templates	Node Manager is a WebLogic Server utility that you can use to start, suspend, shut down, and restart is that Node Manager will use to start this server on a remote machine. Java Home:	servers in normal or unexpected conditions. Use this page to configure the startup settings The Java home directory (path on the machine running Node Manager) to					
Migratable Targets	Java Home: The Java home directory (path on the machine running Node Manag use when starting this server. More Info						
Machines Virtual Hosts Work Managers	Java Vendor:	The Java Vendor value to use when starting this server. More Info					
	BEA Home:	The BEA home directory (path on the machine running Node Manager) to use when starting this server. More Info					
E-Messaning	Root Directory:	The directory that this server uses as its root directory. This directory must					
How do I	3	be on the computer that hosts Node Manager. If you do not specify a Root Directory value, the domain directory is used by default. More Info					
Configure startup arguments for Managed Servers	Class Path:	The classpath (path on the machine running Node Manager) to use when starting this server. More Info					
 Start Managed Servers from the Administration Console 							
Shut down a server instance							
System Status E	a						
Health of Running Servers							
Failed (0)	Arguments:	The arguments to use when starting this server. More Info					
Critical (0)	-XX: <u>MaxPermSize</u> =512m						
Overloaded (0)							

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

ORACLE WebLogic Server Administration Console 12c									
Change Center	1	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 >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 Work ManagersStartup and Shutdown ClassesDeploymentsD	•	JNS system resources are configured and stored as modules similar to standard JZEE modules. Such resources indu quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You c global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JMS Modules							
Prating JMS Modules, Level 3, 3 of 5,	5. Sel	cted ew Delete	Showing 1 to 1 of	1 Previous Next					
Data Sources Persistent Stores Foreign JNDI Providers	-	□ Name ↔	Type System						
How do I		New Delete	Showing 1 to 1 of	1 Previous Next					
Configure resources for JMS system modules									

2) Enter name as MDB_MODULE and click on Next

	dministration Console 12c 📮	2
Change Center	🟦 Home Log Out Preferences 🔤 Record Help	ns
View changes and restarts	Home >Summary of Migratable Tarnete <ms-1ms1 (minratable)="" <ms-1ms1="" <summany="" <summary="" clusters="" minratable="" of="" tarnete="">Summary of Migratable Targets >MS-1MS1 (migratable) >S</ms-1ms1>	
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 Mag Rnish Cancel	
B Environment Deployments Services H-Messaging Messaging	The following properties will be used to identify your new module. JMS system resources are configured and stored as modules similar to standard JZEE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources. * Indicates required fields	
Path Services Data SourcesPersistent StoresForcign JNDI ProvidersWork Contexts	What would you like to name your System Module? * Name: MDB_MODULE What would you like to name the descriptor file name? If you do not provide a name, a default will be assigned.	
How do I • Configure JMS system modules	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		9
Change Center	Home Log Out Preferences Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >pigcaholder >Summary of Servers >Summary of Server Modules >3HS MODULE >Summary of 3HS Hodules	Tanpieles >OC_JMS_Template-0 >Summary of Server 1	Templetex +DC_JHS_Templete 0 +Summary of Servers +Summary of JHS
No pending changes exist. Cick the Release Configuration button to allow others to edit the domain. Lack & Edit Release Configuration	Create JHS System Hodule Back Inst Canot The following properties will be used to target your	new JHS 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 can	reconfigure targets later if you wish.
B-Environment Servers Outlets Server Templates	Targets:		
Migratable Targets Coherence Ousters Machines - Wathines	Servers AdminServer		
Work Managers Startup and Shutdown Classes	Clusters		
Deployments Deployments Defloyments Defloymen	Cluster-App All servers in the cluster		
How do L	Cluster-JHS		
Configure 3MS system modules Configure 3MS servers	O All servers in the cluster		

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

	dministration Console 12c	2
Change Center	🏦 Home Log Out Preferences 🔤 Record Help	ns
View changes and restarts	Home >Summary of Servers >MS-JMS2 >Summary of Virtual Hosts >Summary of Servers >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments -Summary of JMS Modules	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create JMS System Module Back Next Inish Cancel	1
Domain Structure	Add resources to this JMS system module	
⊖-Environment Servers ⊖-Clusters	Use this page to indicate whether you want to immediately add resources to this JMS system module after it is created. JMS resources include queues, topics, connection factories, etc.	
Server Templates Migratable Targets Coherence Clusters	Would you like to add resources to this JMS system module?	
Machines Virtual Hosts	Back Next Finish Cancel	
Work Managers Startup and Shutdown Classes		-

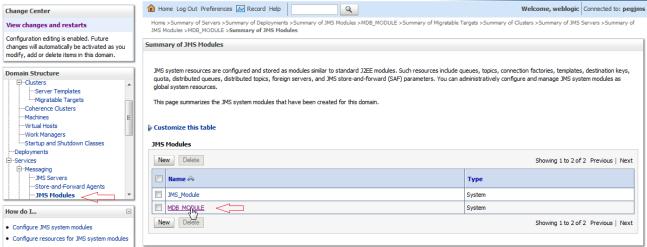
5) MDB_MODULE is created

ORACLE WebLogic Server Administration Console 12c									
Change Center	🏫 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms							
View changes and restarts	Home >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS Modules								
Configuration editing is enabled. Future changes will automatically be activated as you	s 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	JMS system resources are configured and stored as modules similar to standard J2EE modules. Such resources include q quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can a global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JMS Modules								
Deployments	New Delete	Showing 1 to 2 of 2 Previous Next							
	🖻 Name 🌣	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



 \circ

1) Click on Configuration → New

ORACLE' WebLogic Server Adr	ministration Conso	le 12c				Õ		
Change Center	🚹 Home Log Ou	t Preferences 📐 Rec	ord Help	Q		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 Servers >Summary of JMS Serve							
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for MDB_MODULE							
modify, add or delete items in this domain.	Configuration	Subdeployments Ta	argets Security	Notes				
Domain Structure		J						
-Environment	This page display	ys general information a	bout a JMS system	module and its resources. It als	o allows you to configure new resources an	d access existing resources.		
Servers ⊟Clusters Server Templates	Name:		MD	B_MODULE	The name of this JMS	system module. More Info		
Migratable Targets Coherence Clusters	Descriptor File	Descriptor File Name:		/mdb_module-jms.xml	The name 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.					connection factories, JMS templates, destination		
Deployments D-Services	Customize thi	s table						
How do I	Summary of R	esources						
No task help found.	New Delet	e				Showing 0 to 0 of 0 Previous Next		
	🔲 Name 🗞	Ту	rpe	JNDI Name	Subdeployment	Targets		
System Status	There are no items to display							
Health of Running Servers	New Delete Showing 0 to 0 of 0 Previous Next							
Failed (1) Critical (0)								

2) Select Foreign Server and Click on Next

hange Center	🟦 Home Log Out Preferences 🔤 Record Help	Q Welcome, weblogic Connected to: peg
/iew changes and restarts	Home >Summary of Deployments >Summary of JMS Modules >MDB_MOD Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	DULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS
Configuration editing is enabled. Future	Create a New JMS System Module Resource	
hanges will automatically be activated as you nodify, add or delete items in this domain.		
	Back Next Finish Cancel	
omain Structure		
	Choose the type of resource you want to create.	
-Environment		
Servers	Use these pages to create resources in a JMS system module, such a	s queues, topics, templates, and connection factories.
Server Templates		enter basic information for creating the resource. For targetable resources, like stand-alone queues and topics,
Migratable Targets		and JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You is an advanced mechanism for grouping JMS module resources and the members to server resources.
Coherence Clusters	can also associate targetable resources with subdeployments, which	is an advanced mechanism for grouping JPIS module resources and the members to server resources.
Virtual Hosts		
Work Managers	Connection Factory	Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info
Startup and Shutdown Classes		
Deployments	O Queue	Defines a point-to-point destination type, which are used for
Services	▼ © Queue	asynchronous peer communications. A message delivered to a queue
-Services		
-Services . -Messaning . ow do I E		asynchronous peer communications. A message delivered to a queue
- Services · - Messaring · · · · · · · · · · · · · · · · · · ·		asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is
I-Services		asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for
- Services . → Messaninn		asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info
S-services . D-Messaninn	 ▼ © Торіс 	asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More
In Services	 ▼ © Торіс 	asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers,
-Services - -Services - w do L E Configure quotas for destinations Configure JMS templates Configure destination keys Configure topics Configure queues Configure connection factories	 Topic Distributed Queue 	asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info
→Services → Messaninn w do I Configure quotas for destinations Configure JMS templates Configure topics Configure conection factories Configure connection factories Configure uniform distributed topics	 ▼ © Торіс 	asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More
-Services -Mescaninn ow do L Configure quotas for destinations Configure JMS templates Configure destination keys Configure quotes Configure quotes Configure connection factories Configure uniform distributed topics Configure uniform distributed quotes	 Topic Distributed Queue 	asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info Defines a set of topics that are distributed on multiple JMS servers,
-Services	 Topic Distributed Queue 	asynchronous peer communications. À message delivered to a queue is distributed to only one consumer. More Info Defines a publich/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info Defines a set of queues that are distributed on multiple JMS servers, but which are accessible as a single, logical queue to JMS clients. More Info Defines a set of topics that are distributed on multiple JMS servers, but which are accessible as a single, logical topic to JMS clients. More

3) Enter name 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 Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets : Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	>Summary of Clusters >Summary of JMS Servers >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resource	
modify, add or delete items in this domain.	Back Next Finish Cancel	
Domain Structure	Foreign Server Properties	
⊡-Environment Servers ⊡-Clusters	The following properties will be used to identify your new foreign server. The current module is MDB_MOD	ule.
Server Templates	* Indicates required fields	
Coherence Clusters Machines Virtual Hosts	* Name: ForeignServer-1	
Work Managers Startup and Shutdown Classes Deployments	Back Neg Finish Cancel	
-Services		

4) Click on Advanced Targeting

	Administration 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 Server Templates >DC_JMS_Template=0 >Summary of Servers >Summary of JMS Modules >JMS_MODULE JMS Modules >MDB_MODULE	>Summary of JMS Modules >MDB_MODULE >Summary of
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 Finish 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 accept the default targets, then click Advanced Targeting to use the subdeployment mechanism for targeting this resource.	: JMS system module targets. If you do not want to
Environment Servers Clusters 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 c appropriately.	hanged, this resource will also be retargeted
LMigratable Targets Coherence Clusters Machines	Targets :	
Virtual Hosts Work Managers	Clusters	
└Startup and Shutdown Classes Deployments B-Services H-Messaring	Cluster-App	
How do I	Back Next Finish Advanced Targeting Cancel	
Configure quotas for destinations		

5) Click on Create New SudDeployment

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 Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets >Summary of C Modules >MDB MODULE >Summary of JMS Modules >MDB MODULE	lusters >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 Cancel					
A	The following properties will be used to target your new JMS system module resource					
Environment Servers Clusters Server Templates Migratable Targets	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by whi duster, or SAF agent. If necessary, you can create a new subdeployment by dicking the Create a New Subdeploym later by using the parent module's subdeployment management page.					
Coherence Clusters Machines	Select the subdeployment you want to use. If you select (none), no targeting will occur.					
Virtual Hosts Work Managers Startup and Shutdown Classes	Subdeployments: (none) Create a New Subdeployment					
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		ratable Targets >Summary of Olusters >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		
ė-Environment	Subdeployment Properties The following properties will be used to ider	ntify your new subdeployment	
Servers ⊟-Clusters Server Templates	Subdeployment Name:	MDB_SUB	
LMigratable Targets Coherence Clusters Machines	OK Cancel		
Virtual Hosts Work Managers Startup and Shutdown Classes	<u>_</u>		6

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

	dministration Console 12c	
Change Center	B Home Log Out Preferences 🗟 Record Help Connected to: FCUBSDoma Welcome, weblogic Connected to: FCUBSDoma	in
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 o	
Pending changes exist. They must be activated to take effect.	Create a New JMS System Module Resource	1
Activate Changes	Back Next Finish Cancel	Ш
Undo All Changes	The following properties will be used to target your new JMS system module resource	Ш
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	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	Ш
Virtual Hosts Work Managers	What targets do you want to assign to this subdeployment?	Ш
Startup and Shutdown Classes Deployments	Targets :	Ш
-Messaninn T	former .	
How do I	Servers	
Configure quotas for destinations	AdminServer	Ш
Configure JMS templates Configure destination keys	Clusters	Ш
Configure topics	✓ Cluster-App	ш
Configure queues Configure connection factories	All servers in the cluster	Ш
Configure uniform distributed topics	JMS Servers	ш
Configure uniform distributed queues	J15 361V615	ш
Configure foreign servers	JMSServer-1	
Configure JMS SAF		
System Status	Back Next Finish Cancel	

8) Foreign Server is created

	Iministration Console 12c	Q			
Change Center	🏦 Home Log Out Preferences 🔤 Record Help	o: pegjn			
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.	Messages I changes have been activated. No restarts are necessary. The foreign server was created successfully.	Messages All changes have been activated. No restarts are necessary.			
Domain Structure	Settings for MDB_MODULE				
Environment Servers E→Clusters	Configuration Subdeployments Targets Security Notes				
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 Services	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, destina sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.	1011			
No task help found.	₽ Customize this table				
	Summary of Resources				
System Status	New Delete Showing 1 to 1 of 1 Previous	Next			
Health of Running Servers Failed (1)	Image: Name → Type JNDI Name Subdeployment Targets				
Critical (0)	ForeignServer-1 ForeignServer N/A MDB SUB Cluster-App	_			
Overloaded (0) Warning (0)	New Delete Showing 1 to 1 of 1 Previous	Next			
OK (3)					

6.3 Foreign Server Configuration

1) Click on ForeignServer-1

ORACLE WebLogic Server Ad	Iministration Conso	le 12c						õ
Change Center	Home Log Ou	t Preferences 📐	Record He	lp	٩		Welcome, w	eblogic Connected to: pegjm
View changes and restarts						mmary 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 All changes have been activated. No restarts are necessary. The foreign server was created successfully.							
	Settings for MDB	_MODULE						
EEnvironment	Configuration	Subdeployments	Targets	Security	Notes			
Ousters 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	Name:			MDB.	MODULE		The name of this JMS system module. Mor	e Info
	Descriptor File	Name:		jms/r	ndb_module-jms.>	ml	The name of the JMS module descriptor file.	More Info
How do I						system module, including queue a re-and-forward parameters.	and topic destinations, connection factories, :	IMS templates, destination
No task help found.	Customize thi	s table						
	Summary of R	esources						
System Status	New Delete Showing 1 to 1 of 1 Previous Next							
Failed (1)	🔲 Name 🗞	Д	Ту	pe		JNDI Name	Subdeployment	Targets
Critical (0)	Foreignfier	Foreign Server N/A MDB_SUB Cluster-App				Cluster-App		
Overloaded (0) Warning (0)	New Delet					1	Showin	g 1 to 1 of 1 Previous Next

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

DIRACLE WebLogic Server	Administration Console 12C		
hange Center	Hone Log Out Preferences 🐼 R	ecard Help	Welcome, weblogic Connected to: FCUBSDoma
iew changes and restarts	None +Summary of Dutters +Summary Nodules >NOE_NOOULE +ForeignBerry		a xND8_MODULE xForegriteroer1 x3ummary of Servers x5ummary of 3MS
Ick the Lock & Edit button to modify, add or leter items in this domain. Lock & Edit	Hessages # All changes have been activated. h	lo restarta are necessary.	
Release Configuration	Settings for ForeignServer-1		
Construction of the second sec	Configuration Subdeployment M	iotes	
amain Structure	General Destinations Connection	n Factories	
Christoment Conterns Co	A foreign server represents a 34DL pr	ange Center to modify the settings on this page. ovider that resides outside a WebLogic Server. It contains inform pects (gueues or topics) can be defined on one JADI directory. U PoreignServer-1 (webliogic judi WLInitial)	The name of this foreign server. More Info The name of the class that must be instantiated to access the 3401
			provider. This class name depends on the 2KDI provider and the vendor that are being used. More Info
Create foreign connection factories Create foreign destinations	A INDI Connection URL:	13,//10 184 148 185 7106,10 184 148 189 7107	The LPB, that WebLogs: Server will use to contast the JHCI provider. The syntax of this LPB, depends on which JHCI provider is being used. For WebLogs: JHC, leave this field blank if you are referencing WebLogs: JHC objects within the same dustor. More SMB
CREATE CONTRACTOR OF			
ystem Status i ealth of Rummo Servers	MDI Properties Credential	20a	Any Gredentals that must be set for the 34DE provider. These Gredentals

3) Click on Connection Factories

ORACLE WebLogic Server Ad	ministration Cons	ole 12c					õ
Change Center	🟦 Home Log O	🕯 Home Log Out Preferences 🔝 Record Help					onnected to: pegjms
View changes and restarts		DULE >Summary of Migratab MODULE >ForeignServer-1 >		Summary of JMS Servers >Summa	ary of JMS Modules >MDB_MODULE	= >Summary of JMS	
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for For	eignServer-1	-				
modify, add or delete items in this domain.	Configuration	Subdeployment Notes	3				
Domain Structure	General Dest	tinations Connection Fa	actories				
ServersServer Templates	another instan This page sum Customize th	ce of WebLogic Server runn narizes the foreign connecti nis table	connection factory that resides (ing in a different cluster or serve on factories that have been crea d - More Columns Exist)	, or a foreign provider, as long a	accessible via JNDI. A remote con as that provider supports JNDI.	nection factory can be used	to refer to
Deployments	New Del	ete				Showing 0 to 0 of 0	Previous Next
How do L.	🔲 Name 🖉	\$	Local JNDI Name		Remote JNDI Name		
				There are no items to display			
Configure foreign servers Create foreign destinations	New Del	ete				Showing 0 to 0 of 0	Previous Next
System Status							

4) Create MDBQCF Connection Factory

ORACLE WebLogic Server A	dministration Console 12c			õ
Change Center	A Home Log Out Preferences	Record Help	Welcome, web	Aogic Connected to: pegjms
View changes and restarts	Home >MDB_HOOULE >Summary Modules >NDB_MOOULE >Foreig		of 3HS Servers >Summary of 3HS Modules >MD8_MODULE >Summary of 3HS	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New Foreign JHS Co	-		
Domain Structure	Foreign Connection Factor	y Properties used to identify your new foreign connection factory.		
Coherence Clusters Machines Wrtual Hosts	* Name:	MDBQCF		
	Local JNDI Name:	MDBQCF	<hr/>	
B-Services R-Messaring	Remote JNDI Name:	MDBQCF[$\langle \neg$	
How do L.	OK Cancel			

5) Click on Destination

ORACLE WebLogic Server	dministration Console 12c		0		
Change Center	😰 Hone Log Out Welevences 🔛 Record Help	9	Welcome, weblogic Connected In: peggm		
View changes and restarts	Home s1808, NODULE > Summery of Highebolk Target Historie >NOB_MCOULE > Foregotianser-1 > Configur		S Servers s Surreary of 2MS Hodules vHDB_MODULE a Surreary of 2MS		
Configuration editing is enabled. Puture changes will automatically be activisted as you modify, add or delete items in this domain.	Messages All dranges have been activated. However, 1 fee	munual be restarted for the changes t	take effect.		
Domain Structure	Settings for ForeignServer-1				
B Environment	Configuration Subdeployment Notes				
-Servers ID-Clusters	General Designations Consection Factories				
- Server Templates - Migratole Tempts - Cohemic Custors - Machines - Wital Horse - Work Haragers	Configuration - Destinations- A foreign connection factory represents a connect another instance of WebLopic Server running in a C This page summarizes the foreign connection factor	on factory that resides on another serv offerent duster or server, or a foreign:			
-Startup and Shutdown Classes Opployments	© Customize this table				
B Services	Foreign Connection Factories (Filtered - Hor	e Columns Exist)			
How do L. 🗄	New Datas		Showing 1 to 1 of 1 Previous Next		
Configure foreign servers	🐑 Name 🖧 Local 3	NDE Rame	Remote JHDI Name		
Onate foreign destinations	E MORQOY MORQOY		MOBQCP		
System Status 🛛	New Drints		Showing 1 to 1 of 1. Previous Next		

6) Create MDB_QUEUE

View changes and restarts	Home >JMS Modules >MDB_MODULE >Foreig	Home >JNS Modules >MDB_MODULE >ForeignServer-1 >MDB_MODULE >ForeignServer-1 >Summary of Servers >JNS Modules >MDB_MODULE >ForeignServer-1 >Configuration			
Configuration editing is enabled. Future	Settings for ForeignServer-1	ttings for ForeignServer-1			
changes will automatically be activated as you modify, add or delete items in this domain.	Configuration Subdeployment Note	15			
Domain Structure	General Destinations Connection F	iactories			
Environment Servers Clusters Wirdul Hosts Wirdul Hosts Work Managers Work Managers Work Managers Work Managers Servers Deployments Servers Servers	A foreign destination (topic or queue) can be found on a remote server. When this destination is looked up on the local server, a look-up will be performed automatically on the remote JNDI directory, and the object will be returned from that directory. This page summarizes the foreign destinations that have been created for this domain. Customize this table Foreign Destinations New Delete Showing 0 to 0 of 0 Previous				
-Messaning *	Name 🗞	Local JNDI Name	Remote JNDI Name		
How do I		There are no items to display			
Configure foreign servers	New Delete		Showing 0 to 0 of 0 Previous Next		
Create foreign connection factories					
System Status					
Health of Running Servers					

ORACLE WebLogic Server Ad	ministration Console 12c			ğ
Change Center	Home Log Out Preferences	Record Help		Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MDB_MODULE >Summary of Modules >MDB_MODULE >ForeignSe	Migratable Targets >Summary of Clusters >Summary of erver-1 >Configuration	IMS Servers >Summary of JMS Modules >MDB_M	ODULE >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New Foreign JMS Destin	nation		
É-Environment	Foreign Destination Propertie	5		
Servers E	The following properties will be use	ed to identify your new foreign destination.		
Server Templates	* Indicates required fields			
Machines Virtual Hosts	* Name:	MDB_QUEUE		
Work Managers Startup and Shutdown Classes Deployments	Local JNDI Name:	MDB_QUEUE		
E-Services	Remote JNDI Name:	MDB_QUEUE		
How do I 🗉	OK Cancel			
Configure foreign servers				
Create foreign connection factories	·			

7) Similarly Create MDB_QUEUE_RESPONSE, MDB_QUEUE_DLQ

	dministration Console 12c		Q
Change Center	Home Log Out Preferences	Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MDB_MODULE >Summar Modules >MDB_MODULE >Foreig	y of Migratable Targets >Summary of Clusters >Summary of JMS Serve gnServer-1 > Configuration	ers >Summary of JMS Modules >MDB_MODULE >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New Foreign JMS De	estination	
modify, add or delete items in this domain.	OK Cancel		
Domain Structure	Foreign Destination Prope	rties	
-Environment -Servers -Clusters	The following properties will be	used to identify your new foreign destination.	
Server TemplatesMigratable TargetsCoherence Clusters	* Indicates required fields		
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	L	
Configure foreign servers			
Create foreign connection factories			
Curture Chatra D			

Change Center	😭 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: pegin
View changes and restarts	Home >MD8_MODULE >Summary of Migratable Targets >Sum Modules >MD8_MODULE >ForeignServer 1 >Configuration	many of Quaters >Summary of JMS Servers >Summ	ary of IMS Modules >MOB_MODULE >Summary of IMS
Configuration editing is enabled. Puture changes will automatically be activated as you modify, add or delete items in this domain.	Messages Al changes have been activated. However 1 items mus	t be restarted for the changes to take effect.	
Domain Structure	Settings for ForeignServer-1		
	Configuration Subdeployment Notes		
Environment Servers B-Ousters	General Destinations Connection Factories		
		Snectory.	
Coherence Clusters -Machines -Machines -Work Managers -Startup and Shutdown Classes -Ceployments -Services	3REI drectory, and the object will be returned from that of This page summarizes the foreign destinations that have b Customize this table Foreign Destinations		
Machines - Virbuel Hosts - Virok Managers - Startup and Shutdown Classes - Deployments - Services - Strikes - Stri	This page summarizes the foreign destinations that have b		Showing 1 to 2 of 2 Previous Next
Machines Michael Hosts Michael Hosts Survice and Shutdown Classes Deployments Services Gut Messandon tow do L. Configure foreign servers	This page summarizes the foreign destinations that have b © Customize this table Foreign Destinations		Showing 1 to 2 of 2 Previous Next Remote JIIDI Name
Machines Hirtual Hosts Hirtual Hosts Survive Managers Startup and Shutdown Classes Deployments Porvices Survives Ruthesanton	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations New Colors	veen created for this domain.	
Machines Hirbuil Hosts Hirbuil Hosts Survice and Shutdown Classes Deployments Services Other Services town do L. Configure foreign servers	This page summarizes the foreign destinations that have b Customize this table Foreign Destinations New Colors Name &	teen created for this domain.	Remote JIIDI Name

ORACLE WebLogic Server Administration Console 12c

Change Center	In none tog out menerences g	si keroko nep		weicome, webiopic (consected to: pegims
View changes and restarts	Home >MD6_MODULE >Summary o Modules >MD8_MODULE >Foreign5		ary of Clutters >Summary of 3HS Servers >Summe	ry of IMS Modules >MDB_MODULE >Summery of IMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New Foreign 3HS Dest	ination		
Domain Structure	OK Cancel			
Comain Scructure	Foreign Destination Propertie	es		
B Environment	The following properties will be us	ed to identify your new fo	reign destination.	
Server Templates Migratable Targets Coherence Clusters	* Indicates required fields			-
Madures 	* Name:	MDB_QUEUE_	DLQ	
Startup and Shutdown Classes	Local JNDI Name:	MDB_QUEUE_	DLQ	
P-Services	. Remote JNDI Name:	MDB_QUEUE_	DLQ	
How do L.	Cancel			
Configure foreign servers	<u>_</u>			

Change Center	😰 Home: Log Out: Preferences 🐼 Record: Help	Q	Welcome, weblogic Connected to: pegin
View changes and restarts	Home > NDE_MODULE > Summary of Migratable Targets > Modules > MDE_MODULE > ForeignServer-1 > Configuration		ry of 3HS Modules >HDB_MODULE >Summery of 3HS
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		
Domain Structure	Settings for ForeignServer-1		
B-Environment	Configuration Subdeployment Notes		
Servers	General Destinations Connection Factories		
Ousters Server Templates Migratable Targets Coherence Ousters	A foreign destination (topic or queue) can be found on 34D1 directory, and the object will be returned from th		in the local server, a look up will be performed automatically on the remote
Server Templates Migratable Targets		at drectory.	in the local server, a look up will be performed automatically on the remote
-Server Templates - Migratolic Targets - Coherence Clusters - Machines - Machines - Machines - Machines - Startup and Shutdown Classes - Depoyments - Services - Services	200 directory, and the object will be returned from th This page summarizes the foreign destinations that ha is Customize this table Foreign Destinations	at drectory.	in the local server, a look-up will be performed automatically on the remote Showing 1 to 3 of 3 ' Previous Next
Servier Templates Migratolic Targets Migratolic Targets	200 directory, and the object will be returned from th This page summarizes the foreign destinations that ha is Customize this table Foreign Destinations	at drectory.	
- Server Templates - Migratole Targets - Migratole Targets - Coherence Clusters - Middhines - With Managers - Startup and Shutdown Classes - Deployments - Enviros - Configure foreign servers	POI directory, and the object will be returned from the This page summarizes the foreign destinations that has Customize this table Foreign Destinations	at directory. ve been created for this domain.	Showing I to 3 of 3 Previous Next
Servier Templates Migratible Targets Coherence Clusters Middlenes Mitrual Hosts Mitrual Hosts Mitrual Hosts Siturbu and Shutdown Classes Starbup and Shutdown Classes Coheressone Chiteressone Mow do L.	POI directory, and the object will be returned from the This page summarizes the foreign destinations that has Customize this table Foreign Destinations Time: Rame via. Rame via. Noc.gueue	et directory. ve been created for this domain. Local JNDJ Name	Showing 1 to 3 of 3 Previous Next Remote JNDJ 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	館 Home I	🖀 Home Log Out Preferences 🖻 Record Help							:o: base_domain				
View changes and restarts	Home >JMS	Home >IMS Modules >MDB_MODULE >ForeignServer1 >IMS Modules >Summary of Deployments											
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Settings for Overview	ttings for GWMDB											
Domain Structure	startup tir	ne. signments	ebLogic Server in	stances and	d clusters to	which you	want to de	ploy this Enter	rprise app	lication. These settings	determine where t	he application is deployed Showing 1 to 1 of 1 Pre	
Coherence Servers Coherence Clusters	Con	nponent 🐟				Туре					Current Targets	•	
Machines Work Managers		SWMDB				Enterpr	ise Applicat	ion			Cluster-App		
Startup and Shutdown Classes		GW_MDB_Bean.jar				EJB					(None specified)		
Deployments 曰-Services - 白-Messaning	Change	Change Targets Showing 1 to 1 of 1 Previous Next											
How do I • Start and stop a deployed Enterprise application													

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

Change Center	6	Home Log Out Preferences 📐	Record Help	Q			Welcome, we	blogic Connected to: base_dom
View changes and restarts		Home >Summary of Environment >Sur of Deployments	mmary of Servers >Summary of Deployme	nts >JMS Modules >MDB_MODU	LE >Summary	of Environment	>Summary of Servers >Summary of	Deployments >GWMDB >Summary
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Su	mmary of Deployments						
modify, add or delete items in this domain.	C	ontrol Monitoring						
Domain Structure								
B-Environment 		(redeployed), or deleted from the (E applications and stand-alone applicati domain by first selecting the applicatio dule for deployment to targets in this d	n name and using the controls	s on this page		Illed applications and modules car	be started, stopped, updated
Store-and-Forward Agents		Customize this table						
JMS Modules		Deployments						
⊞-Bridges Data Sources		Install Update Delete S	Start v Stop v				Sho	wing 1 to 5 of 5 Previous Next
Persistent Stores Foreign JNDI Providers		🔲 Name 🗇			State	Health	Туре	Deployment Order
work Contexts		FCUBSApp			Active	🖋 ок	Enterprise Application	100
Install an Enterprise application		□ 🗄 📑 GWEJB			Active	🖋 ок	Enterprise Application	100
Configure an Enterprise application		□ 🗄 📑 GWMDB			Active	🖋 ОК	Enterprise Application	100
Update (redeploy) an Enterprise application		jax-rs(1.1,1.9)			Active		Library	100
Start and stop a deployed Enterprise application								
Monitor the modules of an Enterprise		□ E SWEJB			Active	🖋 ок	Enterprise Application	100
application		Install Update Delete S	Start × Stop ×					wing 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

	Admi	inistrati	ion Console					õ
Change Center	1	Home	Log Out Preferences 🔤 Record Help	Q			Welcome, web	logic Connected to: base_domain
View changes and restarts	-	Home >Su	ummary of Deployments					
Configuration editing is enabled. Future changes will automatically be activated as you	Su	ımma ry (of Deployments					
modify, add or delete items in this domain.	C	Control	Monitoring					
Domain Structure	Þ	This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page. To install a new application or module for deployment to targets in this domain, click the Install button.						
		Deployn Install	Update Delete Start v Stop v				Sho	wing 1 to 5 of 5 Previous Next
		🔲 Na	ame 🕎		State	Health	Туре	Deployment Order
	1	III 🗉	FCUBSApp (12.0.3.0)		Active	🖋 ок	Enterprise Application	100
How do I 😑		•	GWEIB		Active	🖋 ок	Enterprise Application	100
Install an Enterprise application Configure an Enterprise application		•	GWMDB		Active	A Warning	Enterprise Application	100
Update (redeploy) an Enterprise application			jax-rs(1.1,1.9)		Active		Library	100
 Start and stop a deployed Enterprise application 		•	G SWEIB		Active	🖋 ок	Enterprise Application	100
 Monitor the modules of an Enterprise application 		Install	Update Delete Start v Stop v				Sho	wing 1 to 5 of 5 Previous Next
Deploy EJB modules	11.							
Install a Web application	<u> </u>							
System Status	1							

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

8.3 Securing File Store Data

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

8.4 t3s Protocol

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

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

8.5 How to Test the Deployment

1) Navigate to Services \rightarrow JMS Modules \rightarrow JMS_MODULE \rightarrow MDB_QUEUE \rightarrow MONITORING

View changes and restarts	Home >ForeignServer-1 >	Home >ForeignServer-1 >Configuration >MDBQCF >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE						
Configuration editing is enabled. Future	Settings for MDB_QUEU	Settings for MDB_QUEUE						
changes will automatically be activated as you modify, add or delete items in this domain.	Configuration Security Monitoring Subdeployment Notes							
Domain Structure	1							
€-Environment	Use this page to view st destination.	atistics about all of the members of	of a uniform distribu	ted queue. Click on the individual member o	lestination name in the table below to) manage the messages on that		
Servers	To access the uniform o	istributed queue's message mana	gement page, select	the check box next to its name, and then c	lick the Show Messages button.			
Virtual Hosts Migratable Targets								
····Coherence Servers ····Coherence Clusters	Destinations (Filtered	- More Columns Exist)						
Machines Work Managers	Show Messages					Showing 1 to 2 of 2 Previous Next		
LStartup and Shutdown Classes Deployments	🔲 Name 🗇			Consumers Current	Consumers High	Consume r s Total		
-Services	JMS_MODULEIJMS	Server-1@MDB_QUEUE		64	64	64		
		Server-2@MDB_QUEUE		64	64	64		
How do I	Show Messages Showing 1 to 2 of 2 Previous Next							
 Manage distributed queue messages 								
Configure uniform distributed queues								
Cushun Chahua	1							

2) Select any one Server and Click on Show Messages

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

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

Change Center	Tome Log out references En Record help		recome, reploye connected to, base_doman
View changes and restarts	Home >Configuration >MDBQCF >JMS Modules >JMS_MOD	OULE >MDB_QUEUE >Summary of JMS Messa	ges >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages
Configuration editing is enabled. Future	Produce JMS Message		
changes will automatically be activated as you modify, add or delete items in this domain.	OK		
Domain Structure	JMS Message		
Environment	The following properties will be used to produce a JM	S message.	
Servers Clusters Virtual Hosts	Туре:		
Migratable Targets Coherence Servers	Correlation ID:		
Coherence Clusters Machines Work Managers	Expiration:		
Startup and Shutdown Classes	Priority:	4 🔻	
E-Services	Delivery Mode:	Persistent •	
How do I	Delivery Time:	-1	
Manage queue messages			
Manage distributed queue messages	Redelivery Limit:	-1	
 Manage topic durable subscribers 			
	Body:		
System Status			
Health of Running Servers			
Failed (0)			
Critical (0)		4	
Overloaded (0)			

4) Message is Sent

change center						
View changes and restarts	Home >Configuration >MDBQCF >JMS Modules >JMS_	MODULE >MDB_(QUEUE >Summary of JMS Messages >JMS Modul	es >JMS_MODULE >MDB_QUEL	JE >Summary of JMS Messages	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages JMS message sent successfully.					
	Summary of JMS Messages					
Domain Structure						
Environment Servers Clusters Vitual Hosts Migratable Targets Coherence Servers Coherence Clusters Machines Work Managers Startup and Shutdown Classes	This page summarizes the available messages for selected messages, move messages to another de messages from a destination. Click on a message to view its contents.	a stand-alone c Istination, expo	queue, a distributed queue, or a topic durable rt message contents in XML format to anothe	e subscriber. Use this page to r file, import XML formatted	view message details, create new message contents from another file	messages, delete e, or drain all the
Deployments	Customize this table					
P-Services	Customize this table					
E-Messading *	JMS Messages (Filtered - More Columns Exis	•>				
How do I					Showing 1 t	to 1 of 1 Previous Next
 Manage queue messages 						
Manage distributed queue messages	🗆 ID 🐟	CorrId	Time Stamp	State String	JMS Delivery Mode	Message Size
Manage topic durable subscribers	ID:<257876.1411126889162.0>		Fri Sep 19 17:11:29 IST 2014	receive transaction	Persistent	472
System Status	New Delete v Move v Import Expo	rt v			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 Increase maximum number of message-driven bean 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.

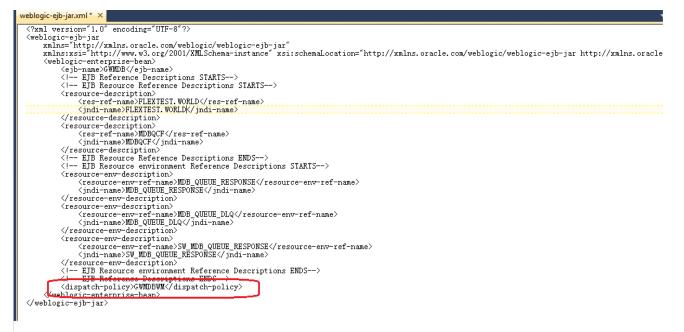
The solution is to create a work manager with a max threads constraint and assign the proxy services dispatch policy to this work manager.

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 <dispatch-policy>GWMDBWM</dispatch-policy>



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

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

8.6.2 Work Manager Creation

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

WEDLOGIC SEIVEL AU	ministration Consule 120			\sim
Change Center	🏦 Home Log Out Preferences 🔤 Record Help	¢	2	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrain	1t-0 >Summary of Work Man	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsCor	istraint-0 >Summary of Servers >Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit	Environment >Summary of Servers >Summary of Work N Create a New Work Manager Component	lanagers		
the domain.	Back Next Finish Cancel			
Release Configuration	Select Work Manager Definition type			
Domain Structure	What type of Work Manager, Request Class or Constr	aint do you want to create	e?	
FCUBSDomain	🖲 Work Manager			
-Environment				
÷Servers ⊕Clusters	Response Time Request Class			
Coherence Clusters	Fair Share Request Class			
····Machines ····Virtual Hosts				
Work Managers	Context Request Class			
LStartup and Shutdown Classes	Maximum Threads Constraint			
	Minimum Threads Constraint			
+-Interoperability				
Diagnostics	Capacity Constraint			
How do I 🗆	Back Next Finish Cancel			
Create application-scoped constraints				
Create application-scoped request classes				
	levisistation Oscarda 40a			
	Ministration Console 12C		a	Welcome, weblogic Connected to: FCUBSDomain
Change Center			▲ agers >WorkManager-0 >Summary of Work Managers >MaxThreadsCon	l l
View changes and restarts No pending changes exist. Click the Release	Environment >Summary of Servers >Summary of Work I	Managers		
Configuration button to allow others to edit the domain.	Create a New Work Manager Component			
Lock & Edit	Back Next Finish Cancel			
Release Configuration	Work Manager Properties			
Domain Structure	The following properties will be used to identify your	new Work Manager.		
FCUBSDomain	* Indicates required fields			
Environment Servers	What would you like to name your new Work Manager	2		
Clusters				
Coherence Clusters Machines	* Name: GWMDBWM			
Virtual Hosts	Back Next Finish Cancel			
Work Managers Startup and Shutdown Classes				
Deployments				
Services				
-				
Change Center	Home Log Out Preferences Record Help		agers >WorkManager-0 >Summary of Work Managers >MaxThreadsCon	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts No pending changes exist. Click the Release	Environment >Summary of Servers >Summary of Work M			contract a contract y durinitiery of
Configuration button to allow others to edit the domain.	Create a New Work Manager Component			
Lock & Edit	Back Next Finish Cancel			
Release Configuration	Select deployment targets			
Domain Structure	You can target the Work Manager to any of these We	bLogic Server instances or	Clusters. Select the same targets on which you will deploy applica	itions that reference the Work Manager.
FCUBSDomain	Available targets :			
Environment Servers			_	
Clusters Coherence Clusters	Servers			
Machines	AdminServer			
Virtual Hosts Work Managers			1	
Startup and Shutdown Classes	Clusters		4	
Deployments Services	Cluster-App			
Security Realms	All servers in the cluster			
Interoperability The constant of the	Cluster-JMS]	
How do I	All servers in the cluster			
Create application-scoped constraints			_	[
Create application-scoped request classes	Back Next Finish Cancel			
Create application-scoped Work Managers				1

	Administration Console 12c		ğ
Change Center	🔒 Home Log Out Preferences 🔤 Record H	lelp	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Work Managers >MaxThreads Environment >Summary of Servers >Summary of		>Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Servers >Summary of
Pending changes exist. They must be activated to take effect.	Messages		
Activate Changes	Work Manager created successfully		
Undo All Changes	Summary of Work Managers		
Domain Structure FCUBSDomain FCUBSDomain FCUBSDomain Custers Coherence Clusters Coherence Clusters Virtual Hosts Work Managers Startup and Shutdow Classes	and thread constraints defined for this domai	n. nain level. You can also define application-level and mod	d by WebLogic Server instances. This page displays the global Work Managers, request classes dule-level Work Managers. Showing 1 to 1 of 1 Previous Next
Deployments 	□ Name ↔	Туре	Targets
	GWMDBWM New Clone Delete	Work Manager	Cluster-App 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

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

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

Hestogio serrer /				
Change Center	î Home Log Out Preferences ⊵ Record Help		Q Welcon	e, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstraint0 >Summary of Work Managers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Servers >			
Pending changes exist. They must be activated to take effect.	Create a New Work Manager Component			
Activate Changes	Back Next Finish Cancel			
Undo All Changes	Select deployment targets			
Domain Structure		hl onic Server instances or	r Clusters. Select the same targets on which you will deploy applications that r	eference the Work Manager
FCUBSDomain	Available targets :	budgie beiver instances of	r clusters. Jerett the same targets on which you will deproy applications that i	erence die work nanager.
Coherence Clusters	Servers		1	
Machines			-	
Virtual Hosts	AdminServer			
Startup and Shutdown Classes	Clusters			
Deployments Services			-	
Security Realms	Cluster-App			
Interoperability	All servers in the cluster			
± Diannostics	Cluster-JMS			
How do I	All servers in the cluster			
Create application-scoped constraints			_]	
Create application-scoped request classes	Back Next Finish Cancel			
Create application-scoped Work Managers				
Change Center	🔒 Home Log Out Preferences 🛃 Record Help		۲. Welcom	e, weblogic Connected to: FCUBSDomain
Change Center View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrai	nt-0 >Summary of Work Man	Welcom agers >WorlManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su	
View changes and restarts Pending changes exist. They must be activated		nt-0 >Summary of Work Man		
View changes and restarts Pending changes exist. They must be activated to take effect.	Home >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers > Summary of Work	nt-0 >Summary of Work Man Managers		
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages @ Maximum Threads Constraint created successful	nt-0 >Summary of Work Man Managers		
View changes and restarts Pending changes exist. They must be activated to take effect.	Home >Summary of Work Managers >MaxThreadsConsta Environment >Summary of Servers >Summary of Work Messages	nt-0 >Summary of Work Man Managers		
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers	t-to⊃Summary of Work Man Managers Y		mmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers	t-to⊃Summary of Work Man Managers Y	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su	mmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an	nt-0 >Summary of Work Man Managers Y d thread constraints that m	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su agers work performed by WebLogic Server instances. This page displays the g	mmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain.	nt-0 >Summary of Work Man Managers Y d thread constraints that m	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su agers work performed by WebLogic Server instances. This page displays the g	mmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain.	nt-0 >Summary of Work Man Managers Y d thread constraints that m	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su agers work performed by WebLogic Server instances. This page displays the g	mmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect. Undo All Changes Undo All Changes Domain Structure FCUSSDomain FCUSSDomain Convers Clusters Coherence Clusters Wachines	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Bevers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table	nt 0 >Summary of Work Man Managers y J thread constraints that m rel. You can also define app	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su agers work performed by WebLogic Server instances. This page displays the g	mmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table Global Work Managers, Request Classes and C	nt 0 >Summary of Work Man Managers y J thread constraints that m rel. You can also define app	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su agers work performed by WebLogic Server instances. This page displays the g	nmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Bevers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table	nt 0 >Summary of Work Man Managers y J thread constraints that m rel. You can also define app	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su agers work performed by WebLogic Server instances. This page displays the g	mmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Servers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table Global Work Managers, Request Classes and C	nt 0 >Summary of Work Man Managers y d thread constraints that m rel. You can also define app onstraints	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su agers work performed by WebLogic Server instances. This page displays the g	nmary of Servers >Summary of
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsCondra Environment >Summary of Bevers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table Global Work Managers, Request Classes and C New Cone Delete Name &	nt 0 >Summary of Work Man Managers y d thread constraints that m rel. You can also define app onstraints	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su nanage work performed by WebLogic Server instances. This page displays the g plication-level and module-level Work Managers.	Innery of Servers >Summary of Iobal Work Managers, request classes Showing 1 to 2 of 2 Previous Next
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsCondra Environment >Summary of Bevers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table Global Work Managers, Request Classes and C New Cone Delete Name & GWMDBWM	the D-Summary of Work Man Managers y d thread constraints that m rel. You can also define app onstraints	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su nanage work performed by WebLogic Server instances. This page displays the g plication-level and module-level Work Managers.	Innery of Servers >Summary of Iobal Work Managers, request classes Showing 1 to 2 of 2 Previous Next Targets Cluster-App
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsConstra Environment >Summary of Bevers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table Global Work Managers, Request Classes and C New Cone Delete Name GWMDBWM MaxThreadsConstraint-0	the D-Summary of Work Man Managers y d thread constraints that m rel. You can also define app onstraints	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su nanage work performed by WebLogic Server instances. This page displays the g plication-level and module-level Work Managers.	Iobal Work Managers, request classes Showing 1 to 2 of 2 Previous Next Targets Cluster-App Cluster-App Cluster-App Cluster-App
View changes and restarts Pending changes exist. They must be activated to take effect.	Hone >Summary of Work Managers >MaxThreadsCondra Environment >Summary of Bevers >Summary of Work Messages Maximum Threads Constraint created successful Summary of Work Managers A Work Manager defines a set of request classes an and thread constraints defined for this domain. Global Work Managers are defined at the domain lev Customize this table Global Work Managers, Request Classes and C New Cone Delete Name & GWMDBWM	the D-Summary of Work Man Managers y d thread constraints that m rel. You can also define app onstraints	agers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Su nanage work performed by WebLogic Server instances. This page displays the g plication-level and module-level Work Managers.	Innery of Servers >Summary of Iobal Work Managers, request classes Showing 1 to 2 of 2 Previous Next Targets Cluster-App

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

View changes and restarts	hime utantheadschuteart-0 sciencer of Wash Managers WashManager-0 sciencery of Bash Managers sMacTheadsCandhaid-0 sciencery of Servers sciencery of Servers and Servers sciencery of Servers and Serve				
Pending changes exist. They must be activated to take effect.	Settings for GWHDBWH				
Activate Changes	Configuration Targets Notes				
Undo All Changes	(Sen				
CUBSDemain -	Use this page to define the request class	ies and constraints for the selected global Work Nanager.			
-Servers B Clusters	Name:	(No value specified)	The user-specified name of this Mbean instance. Here Info		
Coherence Ousters Notices Note Nets Work Managers Startup and Shubdown Classes Deployments Security Realma Proceses Security Realma	👩 Request Class:	(None configured)	A request class according with this Work Manager. This may be a FairShareRequestClass, ResponseTimeRequestClass, or a CostextRequestClass. Here Infa		
	😸 Hinimum Threads Constraint:	(None configured) • New	The minimum number of threads allocated to resolve deadlocks. Hore Info.		
	Haximum Threads Constraint:	(None configured) • New	The maximum number of concurrent threads that can be allocated to execute requests. Hore lafo		
in Disconsting	Capacity Constraint:	(None configured) New	The total number of requests that can be quoted or executing before WebLogic Server begins rejecting requests. Place Info		
Create application-scoped constraints Create application-scoped request classes	Stuck Thread Action:	Use server default behavior *	Specify how stuck threads should be detected, and what action to take should they occur. Here before.		
Create application-scoped Visik Managers Create global constraints Create global request classes Create global Work Managers	Max Stock Thread Time:	0	. This after which a second ing thread is the basis of at the ${\bf h}$. Here ${\bf h} {\bf f} {\bf s}_{-}$		
	Stuck Thread Count:	0	. Herefore, of shack threads after which the Weekbersger's shaddows. Here, ${\bf More}$		
iystem Status	C Resume When Unitack		strating in master with ranges and the shall break uses shared. Here, Man.		
reacts of Hunning Servers	Save				

WEDLOgic Server Ad	dministration Console 12c			
Change Center	🙆 Home Log Out Preferences 🔛 R	ecard Help		Welcome, weblogic Connected to: FCUBSDom
New changes and restarts	Hare > HarThreadsCondraint-0 > Summar Servers > Summary of Work Managers > 0		Nanagers -MacThreodeO	initiality clammary of Sarvera is Sammary of Environment is Sammary of
Pending changes exist. They must be activated to take effect.	Settings for GWMDBWM			
Activate Changes	Configuration Targets Notes			
Undo All Changes	Save			
Domain Structure				
FCUBSDomain -	Use this page to define the request d	asses and constraints for the selected global Work Na	nager.	
E Environment Servers B-Clusters	Name:	(No value specified)		The user-specified name of this Milean instance. Here Info
Coherence Clusters Hackines Work Hends Work Hanagers Startup and Shutdown Classes Deployments REServices Security Realms P. Tateropenability	Request Class:	(None configured) • [New]		A request class associated with this Work Nanager. This may be a FairdhareFrequestClass, ResponseTimeRequestClass, or a ContextRequestClass. Hore Info
	👩 Minimum Threads Constraint:	(None configured) + New		The minimum number of threads allocated to resolve deadlocks. More bris-
	de Maximum Threads Constraint;	MaxThreadsConstraint-0 • Mex	כ	The maximum number of concurrent threads that can be allocated to execute requests. Hore befa
How do L	Capacity Constraint:	(None configured) * time:		The total number of requests that can be queued or executing before WebLopic Server begins rejecting requests. More Info
Create application-scoped constraints Create application-scoped request classes Create application-scoped Work Managers Create global constraints Create global request classes Create global Work Managers	de Stuck Thread Action:	Use server default behavior		Specify how stuck threads should be detected, and what action to take should they accur. Here lafe
	Max Slack Thread Time:	0		True after which a seconding thread is decident as study. Here $lofe_{-}$
	Stuck Thread Count:	0		Norther of study through after which the bindthamager is shallows. Here below
System Status	🔄 Bename When Omtuck			Multiple to many with manager over the shark threads seen descent. Here been
Health of Running Servers	Save			
Failed (0)	- man			

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 [May] [2018] Version 14.1.0.0.0

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

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

Copyright © 2007, 2018, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products.