Configuring JMS on Weblogic Server 12c Oracle Banking Treasury Management Release 14.4.0.0.0 [April] [2020]



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1. Introduction

1.1 Introduction

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

1.2 Purpose

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

- 1) OBTR 14.4.0.0.0
- 2) WebLogic Server 12.1.4.0.0

JMS Server

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

JMS Module

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

Subdeployment

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

JMS Resources

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



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

Persistence store

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

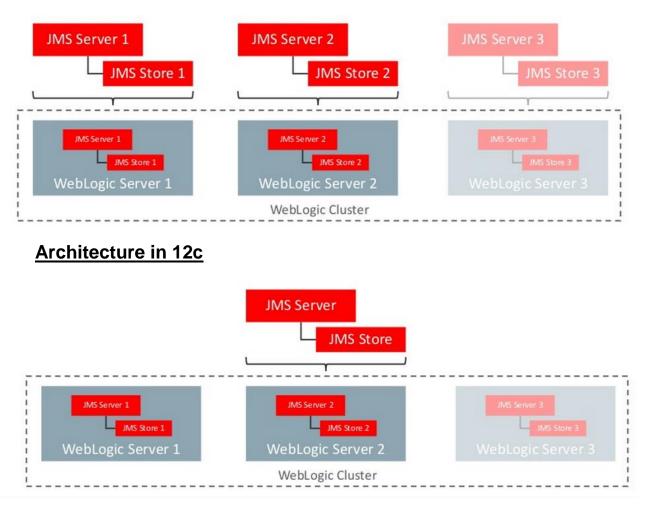
- 1) File based persistence store -> Message is stored in a file
- 2) DB based persistence store -> Message is stored in Database.

1.3 Weblogic 12c New Features

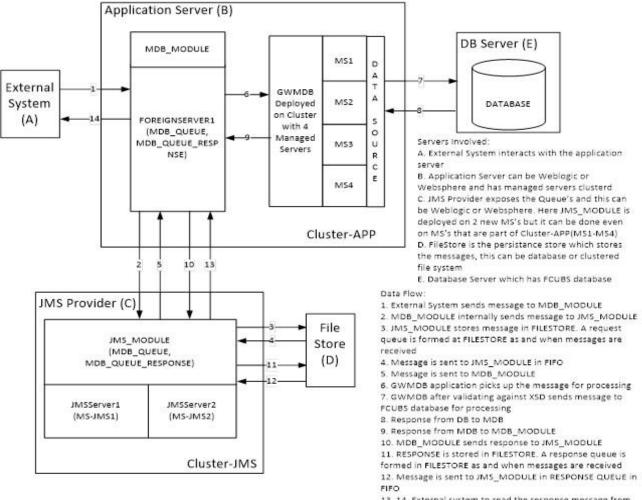
Before weblogic 12c JMS Servers and stores are targeted to individual WLS Servers. Scaling up requires configure the JMS server, the store and target it to new WLS Server

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

Architecture previous to 12c







1.4 Components Diagram & Data Flow

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

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



2. Pre-Requisites

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

2.1 <u>Machines</u>

MAC-1 & MAC-2

	Iministration Console 12c	Q				
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms				
View changes and restarts	w changes and restarts Home > Summary of Servers > Summary of Machines					
Configuration editing is enabled. Future	Summary of Machines					
changes will automatically be activated as you modify, add or delete items in this domain.	A machine is the logical representation of the computer that hosts one or more WebLogic Server instances (s optimum server in a duster to which certain tasks, such as HTTP session replication, are delegated. The Adm Manager to start remote servers.					
Customize this table Customize this table Customize this table						
Virtual Hosts E	Machines					
Work Managers Startup and Shutdown Classes	New Clone Delete	Showing 1 to 2 of 2 Previous Next				
DeploymentsSecurity RealmsSecurity Realms	🔲 Name 🗞 🛛 Tyj	pe				
Interoperability	MAC-1 Mac	hine				
+-Diagnostics	MAC-2 Mac	hine				
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 OBTR (4 Managed Servers) and Dynamic cluster for JMS Deployment (2 Managed Servers)

	dministration Console 12c						õ	
Change Center	🟦 Home Log Out Preferen	nces 🔤 Record Help	٩			Welcome, weblogic Co	onnected to: FCUBSDomai	
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 Servers >Summary Servers >Summary of							
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Domain Structure	This page summarizes the c	dusters that have been configured	in the current WebLogic Serve	er domain.				
	Customize this table Clusters (Filtered - More Click the Lock & Editbutto	f WebLogic Server servers that wor re Columns Exist) ton in the Change Center to activate elete				Showing 1 to	0 2 of 2 Previous Next	
Deployments Services	🗌 Name 🗞 Cluster	er Address Cluster Messaging	g Mode Migration Basis	Default Load Algorithm	Replication Type	Cluster Broadcast Channel	Servers	
How do L Configure dusters	Cluster-App	Unicast	Database	Round Robin	(None)		DC_FCUBS_1, DC_FCUBS_2, DC_FCUBS_3, DC_FCUBS_4	
Configure clusters Assign server instances to dusters Configure server migration in a duster	Cluster-JMS	Unicast	Database	Round Robin	(None)		DC_JMS_1, DC_JMS_2	
Configure server migration in a duster Configure cross-cluster replication Create dynamic clusters	New v Clone De	elete				Showing 1 to	2 of 2 Previous Next	



hange Center	🟦 Home Log Out Preferences 📐	Record Help	Q			Welcome, we	blogic Connected to: FCUBSDom	
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lick the Lock & Edit button to modify, add or elete items in this domain.	Summary of Servers							
Lock & Edit	Configuration Control							
Release Configuration								
	A server is an instance of WebLogic	Server that runs in its own Java	Virtual Machine (JVM)	and has its own confi	guration.			
omain Structure	This page summarizes each server t	hat has been configured in the cu	urrent WebLogic Serv	er domain.				
-Environment	ζ 5							
Servers								
	Customize this table							
Server Templates	V Customize this table	P CONTINUE OF OUR						
Migratable Targets								
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2.3 DataSource

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

ORACLE WebLogic Server® Administration Console						
Change Center	🏦 Home Log Out Preferences 🔤 Record Help					
View changes and restarts	Home >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >Summary of Deployments >Summary of JDBC Data Sources					
Configuration editing is enabled. Future changes will automatically be activated as you Summary of JDBC Data Sources						
modify, add or delete items in this domain.	Configuration Monitoring					
Bornessgiing Servers Store-and-Forward Agents 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 connections. Applications can look up a data source on the JNDI tree and then 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)					
Foreign JNDI Providers Work Contexts	New Delete Showing 1 to 3 of 3 Previous Next					
XML Registries XML Entity Caches	🗌 Name 🔅 Type JNDI Na	ame Targets				
ŢCOM ▼	FLEXTEST.WORLD Generic FLEXTEST	T.WORLD Cluster-App				
n	idhe/feidauDC Conorie idhe/feida	AdminEnsur				

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 Q						
Change Center	🔒 Home Log Out Preferences 🔤 Record H		Welcome, weblogic Connected to: pegjms			
View changes and restarts	Home >Summary of Servers >Summary of Persi Messages	istent Stores				
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	-	Create operation cancelled - no file store created.				
	Summary of Persistent Stores					
Domain Structure	A persistent store is a physical repository for storing subsystem data, such as persistent JMS messages. It can be a JDBC-accessible database, disk-based file, or replicated memory storage. This page summarizes the persistent stores that have been created for this domain.					
Data Sources	New ~ Delete		Showing 0 to 0 of 0 Previous Next			
Foreign JN/Providers	🔲 Name 🗞	Туре	Target			
Work Contexts XML Registries	There are no items to display					
How do I	New					
Create File Stores						

ORACLE WebLogic Server Administration Console 12c							
Change Center	🚹 Home Log Out Preferences 🔤 R	ecord Help	Welcome, weblogic Connected to: pegjms				
View changes and restarts	Home >Summary of Servers >Summary	of Persistent Stores					
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages © Create operation cancelled - no file	e store created.					
	Summary of Persistent Stores						
Domain Structure Converses Coherence Clusters Machines Work Managers Startup and Shutdown Classes Deployments Corrices		ory for storing subsystem data, such as persistent JM is page summarizes the persistent stores that have be	S messages. It can be a JDBC-accessible database, disk-based en created for this domain.				
	New v Delete		Showing 0 to 0 of 0 Previous Next				
Persistent Stores Foreign JNDI Providers Work Contexts	Create FileStore	Туре	Target				
	Create ReplicatedStore (Exalogic)						
How do I	New V Delete		Showing 0 to 0 of 0 Previous Next				
Create File Stores							



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

	Iministration Console 1	?c			Q
Change Center	Home Log Out Pre	ferences 💽 Record Help	٩		Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Cl of Persistent Stores	isters >Summary of Servers >Su	ummary of Clusters >Summary of	Servers >Summary of Clusters >C	luster-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	Create a New File Sto	re			
domain. Lock & Edit Release Configuration	OK Cancel File Store Property				
Domain Structure	The following propert * Indicates required fie	ies will be used to identify your ds	r new file store.		
	What would you like to * Name:	name your new file store? FileStore-1			
Coherence Clusters	Select a server instance	e for this file store.			
Virtual Hosts Work Managers	Target:	Cluster-JMS -			
	The pathname to the o	irectory on the file system wh	ere the file store is kept. This dir	ectory must exist on your syste	em, so be sure to create it before completing this tab.
-Messaning	Directory:	/scratch/work_area/	JMS_FILESTORE		
How do I 🗉	OK Cancel				
Create File Stores Monitor persistent stores					

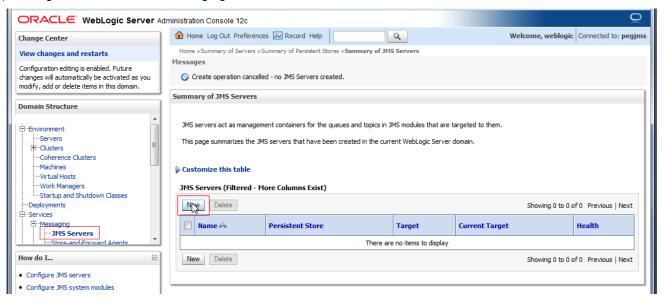
3) FileStore-1 is created

	Administration Console 12c			õ	
Change Center	🔒 Home Log Out Preferences 🔤 Record He	P Q	Welcome, weblogic Co	onnected to: FCUBSDomain	
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Click the Lock & Edit button to modify, add or delete items in this domain.	Messages All changes have been activated. No restarts 	are necessary.			
Release Configuration	Summary of Persistent Stores				
Domain Structure Servers Clusters Colusters Congratable Targets Co	A persistent store is a physical repository for st summarizes the persistent stores that have bee Customize this table Persistent Stores		is. It can be a JDBC-accessible database, disk-based file, or replicated mem	iory storage. This page	
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 Deployments	New v Delete		Showing 1 to	0 1 of 1 Previous Next	
E-Services	🗌 Name 🔅	Туре	Target		
Data Sources Persistent Stores	FileStore-1	FileStore	Cluster-JMS		
How do I	New v Delete		Showing 1 to	0 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



2) Select FileStore-1 , Click Next

	dministration Console 12c	Q			
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: FCUBSDoma			
View changes and restarts Home > Summary of Servers > Summary of Clusters > Summary of Servers > Summary of Personal Stores > Summary of Miss Servers					
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JHS Server				
Lock & Edit	Back Next Finish Cancel				
Release Configuration	JHS Server Properties The following properties will be used to identify your new JMS Server.				
Domain Structure	* Indicates required fields				
EnvironmentServers	What would you like to name your new JMS Server?				
ClustersServer TemplatesMigratable Targets	a∰ * Name: JMSServer-1				
Coherence Clusters Machines	Specify persistent store for the new JMS Server.				
Virtual Hosts Work Managers	Persistent Store: FileStore-1 Create a New Store				
LStartup and Shutdown Classes	(none) Back Next Finish Cancel FileStore-1				

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

ORACLE WebLogic Server Administration Console 12c	Q
Change Center 🕼 Home Log Out Preferences 🖾 Record Help	: FCUBSDomai
View changes and restarts Home > Summary of Servers > Summary of Olusters > Summary of Olusters > Summary of Olusters > Summary of Olusters > Summary of Servers > Summary of Persists Stores > Summary of JMS Servers	.nt
No pending changes exist. Click the Release Configuration button to allow others to edit the Create a New JMS Server	
domain. Lock & Edit Back Next Finish Cancel	
Release Configuration Select targets Select the server instance or migratable target on which you would like to deploy this JMS Server.	
Domain Structure	



	dministration Console 12c		Q
Change Center	Home Log Out Preferences [Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Servers >Sum Stores >Summary of JMS Servers		ter-JMS >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Persistent
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS Server		
domain.	Back Next Finish C	Cancel	
Release Configuration	Select targets		
	Select the server instance or mig	ratable target on which you would like to deploy this JMS Server	r.
Domain Structure	Target:	Cluster-JMS 💌	
Environment Servers Clusters Server Templates Mingatable Targets	Back Next Finish C	Cancel	

4) JMS-Server-1 is created

-										
	Administration Console 12c				õ					
Change Center	🔒 Home Log Out Preferences 🔤 R	Record Help		Welcon	ne, weblogic Connected to: FCUBSDomain					
View changes and restarts	Home >Summary of Servers >Summary Stores >Summary of JMS Servers	of Clusters >Summary of Servers >Summary of Clu	sters >Cluster-JMS >Summary of	f Servers >Summary of Clusters >Summary o	f Servers >Summary of Persistent					
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages									
Lock & Edit	All changes have been activated. I	No restarts are necessary.								
Release Configuration	Summary of JMS Servers									
Domain Structure	JMS servers act as management cont	tainers for the queues and topics in JMS modules	that are targeted to them.							
-Environment -Servers -Clusters	This page summarizes the JMS server	This page summarizes the JMS servers that have been created in the current WebLogic Server domain.								
Server Templates	Customize this table									
Machines	JMS Servers (Filtered - More Col	umns Exist)								
Virtual Hosts Work Managers	Click the Lock & Edit button in the C	hange Center to activate all the buttons on this p	age.							
Startup and Shutdown Classes	New Delete				Showing 1 to 1 of 1 Previous Next					
Services B-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	Home Log Out	Preferences	Recor	rd Help		Q	Wek	ome, weblogic Cor	nected to: pegjm	
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ionfiguration editing is enabled. Future hanges will automatically be activated as you odify, add or delete items in this domain.	Summary of Clust	ummary of Clusters								
omain Structure						ment WebLogic Serv				
Environment Servers Chasters	A cluster defines groups of WebLogic Server servers that work together to increase scalability and reliability. Customize this table									
Cond ¹ De Custers MoO ¹ Chusters, Level 2, Collapsed, 2 of 7, Selected Ins (Filtered - Hore Columns Exist)										
Work Managers	New v Oor	Delete						Showing 1 to 2 of 2	Previous Next	
-Startup and Shutdown Classes -Deployments -Services	🔲 Name 🕫	Cluster Ad	Mress (Juster Hessa	ging Hode	Higration Basis	Default Load Algorith	m Replication Ty	pe Cluster Bri	
Security Realms	Custer-App		U	nicast		Database	Round Robin	(None)		
rw do L. B Configure clusters	Custer-345		U	nicast		Database	Round Robin	(None)		
2) Click on Mig			s 🚵 Reco	ord Help		٩	Welc	ome, weblogic Con	ected to: pegjm	
/iew changes and restarts	Home >Summary Clusters >Cluster-						y of Clusters >Summary of N	ligratable Targets >Sum	mary of	
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for Clus	ter-JMS								
nodify, add or delete items in this domain.	Configuration	Monitoring	Control	Deployments	Services	Notes				
Oomain Structure	General JTA	Messaging	Servers	Replication	Migration	Singleton Services	Scheduling Overloa	d Health Monitoring	HTTP	
Environment	Coherence					-				
Servers ⊡Clusters Coherence Clusters	Save									
 Change Migr 	ation Basis	to Con	sensi	us and (Click or	n Save				

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	ed 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 I Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets > Summary of JMS Modules	Migratable							
Configuration editing is enabled. Future changes will automatically be activated as you	Messages								
modify, add or delete items in this domain.	The JMS module configuration was canceled.								
Domain Structure	Summary of JMS Modules								
B-Environment Deployments B-Services MS Servers MS Servers MS Servers	JMS system resources are configured and stored as modules similar to standard J2EE modules. Such resources include queues, topics, connection far 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. This page summarizes the JMS system modules that have been created for this domain. Customize this table JHS Modules	ictories,							
Persistent Stores Foreign JNDI Providers	New Delete Showing 0 to 0 of 0 Previo	ous Next							
How do L	☐ Name ŵ Type								
Configure JMS system modules	There are no items to display								
Configure resources for JMS system modules	New Delete Showing 0 to 0 of 0 Previous	ous Next							
System Status 🖂									

2) Enter name as JMS_MODULE and Click on Next

	ministration Console 12c	Q
Change Center	🔒 Home Log Out Preferences 🖂 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable Targets : Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets > Summa	
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	JMS system resources are configured and stored as modules similar to standard J2EE modu templates, destination keys, quota, distributed queues, distributed topics, foreign servers, administratively configure and manage JMS system modules as global system resources. * Indicates required fields	
⊕-Bridges Data Sources Persistent Stores Foreign JNDI Providers	What would you like to name your System Module? *Name: JMS_Module	
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		Q
Change Center	🙆 Home Log Out Preferences 📈 Record Help	Q.	Welcome, weblogic Connected to: FCU8SDomai
View changes and restarts	Home >Summery of Server Templates >DC_3HS_Template-0 >So Mignitude Targets >Summary of 3HS Hodules	mmary of Servers xSommary of Highstable	Targals >Summary of 3HS Servers >3HSServer3 >Summary of 3HS Servers >3HSServer3 >Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the domain. Lock & Edit	Create JHS System Hodale		
Release Configuration	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	e. You can reconfigure targets later if you wish.
Environment Genvers Genver Services	Targets :		
Server Templates Migratable Targets	Servers		
- Coherence Clusters - Machines - What Hosts	AdminServer		
Work Managers Startup and Shutdown Classes	Clusters		
Deployments Diservices Differences	Clester-App O 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

	dministration 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 Olusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Olusters >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?
JMS Modules Path Services EBridges	Back Next Finip Cancel
Data Sources Persistent Stores	
Foreign JNDI Providers	

5) JMS_MODULE is created

	r Administration Console 12c		Q									
Change Center	Home Log Out Preferences 🔤 Record Hel	P	Welcome, weblogic Connected to: pegjn									
View changes and restarts		Home >M5-JM51 (migratable) >Summary of Migratable Targets >M5-JM52 (migratable) >Summary of Clusters >Summary of Migratable Targets >M5-JM51 (migratable) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules > JM5_Module										
Configuration editing is enabled. Future	onfiguration editing is enabled. Future Messages hanges will automatically be activated as you											
modify, add or delete items in this domain.	 All changes have been activated. However 1 items must be restarted for the changes to take effect. The JMS module was created successfully. 											
Jomain Structure	Settings for JMS_Module											
-Environment Deployments	Configuration Subdeployments Targets	Security Notes										
È-Services È-Messaging →-JMS Servers →-Store-and-Forward Agents →-JMS Modules	E This page displays general information about a J resources.	MS system module and its resources. It also	allows you to configure new resources and access existing									
Path Services Pathdes	Name:	JMS_Module	The name of this JMS system module. More Info									
Data Sources Persistent Stores	Descriptor File Name:	jms/jms_module-jms.xml	The name of the JMS module descriptor file. More Info									
Foreign JNDI Providers Work Contexts This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection fact JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.												



4.2 Sub Deployment Creation

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

	r Administration Console 12c				Ç			
Change Center	Home Log Out Preferen	ces 📐 Record Help	Q	Welcome, wel	ologic Connected to: pegj			
View changes and restarts			e Targets >MS-JMS2 (migratable) > atable Targets >Summary of JMS N	Summary of Clusters >Summary of Migratable Targ fodules >JMS_Module	ets >MS-JMS1			
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	All changes have been a		ems must be restarted for the ch	anges to take effect.				
Oomain Structure								
	Settings for JMS_Module							
D-Environment →Deployments →Services →Messaging →JMS Servers →Store-and-Forward Agents →JMS Modules		ubdeployments- Ta		es. It also allows you to configure new resources	and access existing			
Path Services	Name:	זכ	1S_Module	The name of this JMS system module. More Info				
Data Sources Persistent Stores Foreign JNDI Providers	Descriptor File Name: This page summarizes the J		is/jms_module-jms.xml e been created for this JMS syste		The name of the JMS module descriptor file. More Info			
low do I No task help found.	JMS templates, destination Customize this table	sort keys, destination	quota, distributed destinations, 1	oreign servers, and store-and-forward paramete	rs.			
ystem Status	Summary of Resources							
ealth of Running Servers	New Delete			Showing 0	to 0 of 0 Previous Next			
Failed (0) Critical (0)	🔲 Name 🐟	Туре	JNDI Name	Subdeployment	Targets			
Overloaded (0)	Į Į		There are no item	s to display				
Warning (0) OK (1)	New Delete			Showing C	to 0 of 0 Previous Next			
VebLogic Server Version: 12.1.3.0.0								
Copyright (c) 1996,2014, Oracle and/or its affiliate Oracle is a registered trademark of Oracle Corpor		av be trademarks of the	r respective owners.					

2) Enter name as JMS_SUB and click on Next

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



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

	Iministration Console 12c	Q						
Change Center	🔒 Home Log Out Preferences 🔝 Record Help	Welcome, weblogic Connected to: FCUBSDomain						
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summary of Migratable Targe JMS Modules >JMS_MODULE	ts >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of						
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New Subdeployment							
domain.	Back Next Finish Cancel							
Release Configuration	Targets							
Domain Structure	Please select targets for the Subdeployment							
Environment Servers E-Clusters	Servers AdminServer							
Server Templates	Clusters							
Coherence Clusters Machines Virtual Hosts Work Managers	Cluster-JMS All servers in the cluster							
LStartup and Shutdown Classes	JMS Servers							
-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	Iministration Conso	le 12c				Q				
Change Center	Home Log Out	t Preferences 📐 Re	ecord Help		Q	Welcome, weblogic Connected to: pegjms				
View changes and restarts		ne >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_Modul e								
Configuration editing is enabled. Future	Messages									
changes will automatically be activated as you modify, add or delete items in this domain.	All changes ha	ave been activated. He	owever 1 item	is must be res	tarted for the chang	iges to take effect.				
	Subdeploymer	Subdeployment created successfully.								
Domain Structure										
	Settings for JMS	_Module								
-Environment Deployments	Configuration 5	5ubdeployments	Targets S	ecurity Not	es					
Services Messaging Messaging Missaging Missaging Missaging Store-and-Forward Agents Store-and-Forward Agents		ection factories) are g s table				ent is a mechanism by which JMS module resources (such as queues, ch as JMS servers, server instances, or duster).				
Foreign JNDI Providers	New Delet	e				Showing 1 to 1 of 1 Previous Next				
How do I 🗆	🔲 Name 🗞			Resources		Targets				
Configure subdeployments in JMS system	JMS_SUB					Cluster-JMS				
modules Configure JMS system modules 	New Delet	e V				Showing 1 to 1 of 1 Previous Next				
System Status										



4.3 **Resource Creation**

4.3.1 Queue Creation

1) In JMS_MODULE Click on New

	ministration Consol	le 12c							Q
Change Center	Home Log Out	t Preferences 📐	Record Help	,		Q	v	Velcome, weblog	ic Connected to: pegjms
View changes and restarts							ummary of Clusters >Summary of dules > JMS_Module	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	eployments Targets Security Notes						
Domain Structure	This page display resources.	vs general informat	tion about a J	MS system r	nodule an	d its resources	. It also allows you to configure	new resources and	access existing
-Messaging	Name:	:	IMS_Module	S_Module The name of this JMS system mod			S system module.	More Info	
JMS Servers Store-and-Forward Agents JMS Modules Path Services Path Services	Descriptor File Name: jms/jms_module-jms.xml The name of the JMS module descriptor file. More Info This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories,								
How do I	JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters. Customize this table Summary of Resources								
No task help found.	New Delet							Showing 0 to	0 of 0 Previous Next
System Status 🖂	Image: Name ↔ Type JNDI Name Subdeployment Targets							argets	
Health of Running Servers					There	e are no items f	to display		
Failed (0) Critical (0) Overloaded (0)	Nev Delet	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.

Thange Center	A Home Log Out Pre	eferences 🔝 Record Help	Q	Welcome, weblogic Connected to: pegin
View changes and restarts			argets >MS+JMS2 (migratable) >Sv able Targets >Summary of JMS Mo	ummary of Clusters >Summary of Migratable Targets >MS-JMS1 cluies >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 JHS Sy Back Next J JHS Distributed D	stem Module Resource inish Cancel estination Properties les will be used to identify your	new Distributed Queue. The cur	
Messaging	What would you like to * Name:	mame your new destination? MDB_QUEUE		
Bridges Data Sources Persistent Stores	What JNDI Name would	d you like to use to look up your	new destination?	
Foreign JNDI Providers	JNDI Name:	MDB_QUEUE		\neg

4) Click on Advance Targeting.

Change Center	Home Log Out Preferences Record Help Q	Welcome, weblogic Connected to: FCU8SDomain
View changes and restarts	Home >DC_PRG_Template=0 >Summary of Servers >Summary of Migratable Targets >Summar Targets >Summary of 2HS Modeles >3HS_MODULE	y of IMS Servers x IMSServer 1 x Summary of IMS Servers x IMSServer 1 x Summary of Highstable
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New 3115 System Hodule Resource	
domain.	Back Net Frish Advanced Targeting Cancel	
Release Configuration	The following properties will be used to target your new JHS system modul	le resource
Domain Structure	Use this page to view and accept the default targets where this JHG resource will be tan accept the default targets, then dick Advanced Targeting to use the subdeployment	geted. The default targets are based on the parent JMS system module targets. If you do not want to mechanism for targeting this resource.
Environment Serviers Clusters Servier Templates High stable Targets Coherene Clusters	The following JMS module targets will be used as the default targets for your new JMS syn appropriately. Targets :	sten module resource. If the module's targets are changed, this resource will also be retargeted
Machines Virtual Hosts Work Managers	Clusters	
Startup and Shutdown Classes Deployments Bismices Ri Messacion	Cluster-JHS M All servers in the cluster	

5) Select Subdeployement as JMS_SUB and Click on Finish.

ORACLE WebLogic Server A	menistration Console 12c	0
Change Center	R Hane Log Cut Preferences 🕢 Record Help	Welcome, weblogic Connected to: PCUBSDomail
View changes and restarts	Huma x OC_3HS_Tamplate-B x Summary of Servers x Summary of Highdabia Tampes x Summary of 3HS Servers Tampes x Summary of 3HS Mislue x 3HK_HODOLE	s Millerver 1 sSummery of IMS Servers s Millerver 1 sSummery of Highlable
to pending thanges exist. Ock the Release Configuration button to allow others to edit the domain.	Create a New JPIS System Hodale Resource	
Release Configuration	The following properties will be used to target your new 2HS system module resource	
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a m SAF agent. If necessary, you can create a new subdeployment by choing the Create a New Subdepl module's subdeployment management page.	
Churannent Servers Ousters Server Templates Monatable Targets	Select the subdeployment you want to use. If you select (none), no targeting will occur. Subdeployments: Bit Still Desire a New Subdeployment	
- Coherence Clusters - Madrines - White Heats - Work Managers	Subdeployments: JMS_SUB	
Startup and Shutdown Classes Deployments Services	Tangets :	
R Messaren *	Servers	
ton de L. E	C AdminServer	
Configure 345 templates	Oasters	
Configure destination keys Configure topics	Claster 3HS Rail servers is the cluster	
Conformations		



6) MDB_QUEUE is created

Change Center	🔒 Home Log Out Preferences 🔤 Re	cord Help	2	Welcome, weblogi	Connected to: pegjm					
View changes and restarts	Home >MS-JMS1 (migratable) >Summary (migratable) >Summary of Clusters >Sumr				IS-JMS1					
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. He	wever 1 items must be restarted for	the changes to take effe	ct.						
	The JMS distributed queue was created and the state of	The JMS distributed queue was created successfully.								
Oomain Structure										
-Environment	Settings for JMS_Module									
Deployments	Configuration Subdeployments T	argets Security Notes								
B-Bridges Data Sources Persistent Stores Foreign JNDI Providers	Descriptor File Name:	Name: JMS_Module The name of this JMS system module. More Info Descriptor File Name: jms/jms_module-jms.xml The name of the JMS module descriptor file. More Info								
tForeign JNDI Providers	This page summarizes the JMS resource JMS templates, destination sort keys, d				nnection factories,					
	Customize this table									
No task help found.	-									
No task help found. iystem Status	Summary of Resources									
ystem Status 🛛	Summary of Resources New Delete			Showing 1 to 1	of 1 Previous Next					
· ·	New Delete	istributed Queue	JNDI Name	Showing 1 to 1 Subdeployment	of 1 Previous Next Targets					

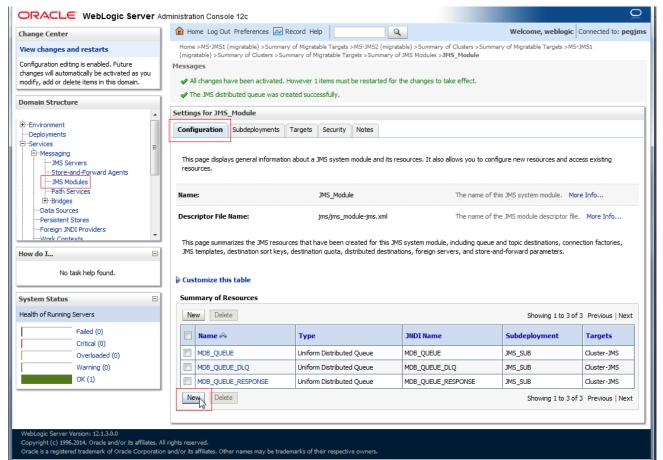
7) Similarly Create MDB_QUEUE_RESPONSE and MDB_QUEUE_DLQ

	nistration Conso	le 12c							Q	
Change Center	🚹 Home Log Ou	t Preferences 🔤	Record Help	,	Q			Welcome, weblogic	Connected to: FCUBSDomain	
View changes and restarts		Home >DC_JMS_Template=0 >Summary of Servers >Summary of Migratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE								
Click the Lock & Edit button to modify, add or delete items in this domain.	essages									
Lock & Edit	All changes have been activated, to restarts are necessary. iettings for JMS_MODULE									
Toronto Configuration	Configuration	Subdeployments	Targets	Security Note	•S					
Domain Structure										
Environment Servers	This page displa	ys general informatio	on about a JN	MS system modul	e and its resources. It	also allows you to configure ne	ew resources and acce	ss existing resources.		
ClustersServer Templates	Name:			JMS	MODULE		The name of this J	4S system module. More Info		
LMigratable Targets Coherence Clusters Machines	Descriptor File	Name:		jms/j	ms_module-jms.xml		The name of the J№	IS module descriptor file. More	Info	
Work Managers Startup and Shutdown Classes Deployments					for this JMS system m tore-and-forward para		c destinations, connec	tion factories, JMS templates, de	estination sort keys,	
-Services	Customize the	s table								
How do I	Summary of R	esources								
No task help found.	Click the Lock 8	<i>Edit</i> button in the C	Change Cent	er to activate all	the buttons on this pa	ge.				
	New Dele	te						Showing	1 to 3 of 3 Previous Next	
System Status	🔲 Name 🗞			Туре		JNDI Name		Subdeployment	Targets	
Health of Running Servers		JE		Uniform Distribu	ited Queue	MDB QUEUE		JMS SUB	Cluster-JMS	
Failed (0)	MDB_QUE	JE_DLQ		Uniform Distribu	ited Queue	MDB_QUEUE_DLQ		JMS_SUB	Cluster-JMS	
Critical (0) Overloaded (0)	MDB_QUE	JE_RESPONSE		Uniform Distribu	ited Queue	MDB_QUEUE_RESPO	ONSE	JMS_SUB	Cluster-JMS	
Warning (0) OK (5)	New Dele	te				I		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

	ministration Console 12c	<u>Ď</u>
Change Center	Home Log Out Preferences Record Help Wele We	come, 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) >Summary of Clusters >Summary of Migratable Targets >Summary of JMS Modules > JMS_Module	Migratable Targets >MS-JMS1
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 B-Environment	Back Next Finish Cancel Choose the type of resource you want to create. Choose the type of resource you want to create. Choose the type of resource you want to create.	
DeploymentsServices	Use these pages to create resources in a JMS system module, such as queues, topics, templates, and connection fac Depending on the type of resource you select, you are prompted to enter basic information for creating the resource stand-alone queues and topics, connection factories, distributed queues and topics, foreign servers, and JMS SAF de targeting pages for selecting appropriate server targets. You can also associate targetable resources with subdeploy mechanism for grouping JMS module resources and the members to server resources.	e. For targetable resources, like estinations, you can also proceed to
D-Bridges Data Sources Persistent Stores		ection configuration parameters that nections for JMS dients. More Info
Foreign JNDI Providers		nt destination type, which are used r communications. A message



3) Enter the Name and Click on Next

	Iministration Console 12c			Ç
Change Center	Home Log Out Preference	s 📐 Record Help	Q	Welcome, weblogic Connected to: pegj
View changes and restarts			Targets >MS-JMS2 (migratable) >Sun table Targets >Summary of JMS Modu	nmary of Clusters >Summary of Migratable Targets >MS-JMS1 iles > JMS_Module
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System N	Iodule Resource		
modify, add or delete items in this domain.	Back Next Finish	Cancel		
Domain Structure	Connection Factory Prop	erties		
Environment Deployments Services E	The following properties will b * Indicates required fields	e used to identify your	r new connection factory. The curre	ent module is JMS_Module.
	What would you like to name y	our new connection fa	ctory?	
JMS Modules Path Services	* Name:	MDBQCF		$\langle \neg \rangle$
	What JNDI Name would you lik	e to use to look up you	Ir new connection factory?	
Foreign JNDI Providers	JNDI Name:	MDBQCF		

4) Click on Advance Targeting

	tministration Console 12c
Change Center	🏦 Home Log Out Preferences 🔤 Record Help
View changes and restarts	Home >DC_JMS_Template=0 >Summary of Servers >Summary of Migratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JMS System Module Resource Back Next Fnish Advanced Targeting Cancel
Release Configuration	The following properties will be used to target your new JMS system module resource
Domain Structure	Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then click Advanced Targeting to use the subdeployment mechanism for targeting this resource.
-Environment -Servers -Ousters -Server Templates	The following JMS module targets will be used as the default targets for your new JMS system module resource. If the module's targets are changed, this resource will also be retargeted appropriately.
Migratable Targets Coherence Clusters Machines	Targets :
Virtual Hosts Work Managers	Clusters
Startup and Shutdown ClassesDeploymentsServicesMessaning	☑ Cluster-JMS ◎ All servers in the cluster
How do I 🖂	Back Next Finish Advanced Targeting Cancel
Configure quotas for destinations	



5) Select JMS_SUB and Click on Finish

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

6) Connection Factory is **Created**.



	ministration Console 12c				Q					
Change Center	🔒 Home Log Out Preferences 🔤	Record Help	2	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	,								
modify, add or delete items in this domain.	 All changes have been activated. Connection factory created succession 	However 1 items must be restarted for ssfully.	r the changes to take effect.							
	Settings for JMS_Module									
Environment Deployments	Configuration Subdeployments	Targets Security Notes								
□-Services □-Messaging JMS Servers JMS Store-and-Forward Agents JMS Modules Path Services	This page displays general information resources.	n about a JMS system module and its r JMS_Module	•	figure new resources and ac						
Henidges Data Sources Parsistent Stores Foreign JNDI Providers Work Contexts How do I	Descriptor File Name: jms/jms_module-jms.xml The name of the JMS module descriptor file. More Info This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factorie JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.									
No task help found.	Customize this table									
System Status	Summary of Resources									
Health of Running Servers	New Delete			Showing 1 to 4 o	f 4 Previous Next					
Failed (0) Critical (0)	🔲 Name 🗞	Туре	JNDI Name	Subdeployment	Targets					
Overloaded (0)		Connection Factory	MDBQCF	JMS_SUB	Cluster-JMS					
Warning (0)	MDB_QUEUE	Uniform Distributed Queue	MDB_QUEUE	JMS_SUB	Cluster-JMS					
OK (1)	MDB_QUEUE_DLQ	Uniform Distributed Queue	MDB_QUEUE_DLQ	JMS_SUB	Cluster-JMS					
	MDB_QUEUE_RESPONSE	Uniform Distributed Queue	MDB_QUEUE_RESPONSE	JMS_SUB	Cluster-JMS					
	New Delete			Showing 1 to 4 o	f 4 Previous Next					



5. Server Restart

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

	dministrati	on Console 12c						Ď
Change Center	Hor	me Log Out Preferences 🔼	Record Help	٩			Welcome, we	blogic Connected to: FCUBSDoma
View changes and restarts		>Summary of JMS Servers >JM es >JMS_MODULE >Connection				e Targets >Summary of JMS		
Click the Lock & Edit button to modify, add or delete items in this domain.		ary of Servers		,				
Lock & Edit	Config	juration Control						
Release Configuration	A ser	ver is an instance of WebLogi	c Server that runs i	n its own Java Virtual Mach	ine (JVM) and has its own	configuration.		
Domain Structure	This p	oage summarizes each server	that has been conf	igured in the current WebL	ogic Server domain.			
⊖-Environment Servers ⊖-Clusters	52							
Server Templates		tomize this table vers (Filtered - More Colu	mar Evict)					
	Click	the Lock & Edit button in th	-	activate all the buttons or	n this page.			
Startup and Shutdown Classes	Ne	ew Clone Delete					Sh	owing 1 to 7 of 7 Previous Next
-Services		Name 🗇	Туре	Cluster	Machine	State	Health	Listen Port
Messaninn		AdminServer(admin)	Configu	red		RUNNING	🖋 ОК	7001
How do I 🖃		DC_FCUBS_1	Dynami	c Cluster-Ap	p MAC-1	SHUTDOWN	Not reachable	7101
Create Managed Servers		DC_FCUBS_2	Dynami	c Cluster-Ap	p MAC-2	SHUTDOWN	Not reachable	7102
Clone servers		DC_FCUBS_3	Dynami	c Cluster-Ap	p MAC-1	SHUTDOWN	Not reachable	7103
Delete Managed Servers		DC_FCUBS_4	Dynami	c Cluster-Ap	p MAC-2	SHUTDOWN	Not reachable	7104
Delete the Administration Server Start and stop servers		DC_JMS_1	Dynami	c Cluster-JM	S MAC-1	SHUTDOWN	Not reachable	7106
Start and stop servers		DC_JMS_2	Dynami		S MAC-2	SHUTDOWN	Not reachable	7107
System Status 🖂	Ne		- /					owing 1 to 7 of 7 Previous Next
Health of Running Servers								
Eailed (0)								

2) Select the cluster 'DC_JMS_Template-0' and

	dministration Console 12c				Q
Change Center	Home Log Out Preferences 🖂 Record Help	Q		We	Icome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >JMSServer1 >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				
Click the Lock & Edit button to modify, add or delete items in this domain.	Summary of Server Templates				
Lock & Edit Release Configuration Domain Structure	This page summarizes each server template that l A server template contains common, non-default manage configuration for a group of server instar	attributes that you can apply to a set o	-	n inherit the template configuration.	Server templates enable you to easily
Environment Servers Clusters Coherence Clusters Coherence Clusters Magnatable Targets Machines	Customize this table Server Templates Click the Lock & Editbutton in the Change Cente New Clone Delete	er to activate all the buttons on this pag	e.		Showing 1 to 2 of 2 Previous Next
Virtual Hosts Work Managers Startup and Shutdown Classes	🗌 Name 🔅	Cluster	Machine	Listen Port	Listen Address
Deployments	DC_FCUBS_Template	Cluster-App		7100	
-Services -Messaning -	DC_JMS_Template-0	Cluster-JMS		7105	
How do I	New Clone Delete				Showing 1 to 2 of 2 Previous Next
Create server templates					



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

		Ο
-		
Change Center	Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE >ConnectionFactory-0 >pi Server Templates >DC_JMS_Template-0	laceholder >Summary of Servers >Summary of Server Templates >DC_JMS_Template-0 >Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the Settings for DC_IMS_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		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

	Iministration Console 12c	Q	
Change Center	🏦 Home Log Out Preferences 🔝 Record Help	Welcome, weblogic Connected to: pegjme	
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 ClassesDeploymentsDeplo	JMS system resources are configured and stored as modules similar to standard J2EE modules. Such resources include quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JMS Modules		
Path Vices Bridg JMS Modules, Level 3, 3 of 5,	elected	Showing 1 to 1 of 1 Previous Next	
Data Sources Persistent Stores Foreign JNDI Providers	□ Name ↔ 1	Type ystem	
How do I	New Delete	Showing 1 to 1 of 1 Previous Next	
Configure resources for JMS system modules			

2) Enter name as MDB_MODULE and click on Next

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



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

ORACLE WebLogic Server	dministration Console 12c		Q	
Change Center	1 Home Log Out Preferences 🐼 Record Help	Q	Welcome, weblogic Connected to: PCU8SDomain	
View changes and restarts	Home >placeholder >Summary of Servers >Summary of Server Modules >345_MODULE >Summary of 2H5 Hodules	Templetes >OC_3H5_Templete 0 >Summary of Server	Templetes +DC_2HS_Templeter0 +Summary of Servers +Summary of JMS	
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create JHS System Hodule			
domain.	Back Nest First Cancel			
Release Configuration	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 car	n reconfigure targets later if you wish.	
B-Environment -Servers B-Custers	Targets :			
Server Templates	Servers			
-Coherence Ousters -Machines	AdminServer			
Writual Hosts Work Managers Startup and Shutdown Classes	Ousters			
Deployments Services R: Messager	Cluster-App All servers in the cluster			
How do L	La Capiter 3rts			
Configure IMS system modules Configure IMS servers	O All servers in the cluster			

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

	dministration Console 12c	õ
Change Center	🏦 Home Log Out Preferences 🔤 Record Help	: 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 Decloyments >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 Fidule Back Next Finish Cancel	
A	Add resources to this JMS system module	
Environment Servers E-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, e	etc.
Server TemplatesMigratable TargetsCoherence ClustersMachinesWittuit Hosts	Would you like to add resources to this JHS system module?	
Work Managers Startup and Shutdown Classes		

5) MDB_MODULE is created

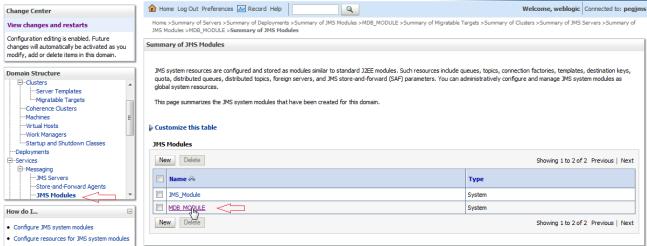
	ministration Console 12c	Q	
Change Center	🏫 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms	
View changes and restarts	Home >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments >Summary of J Targets >Summary of Clusters >Summary of JMS Servers > Summary of JMS Modules	MS Modules >MDB_MODULE >Summary of Migratable	
Configuration editing is enabled. Future changes will automatically be activated as you	Summary of JMS Modules		
modify, add or delete items in this domain. Domain Structure Colusters Colver are a construction of the second	tet items in this domain. The reaction of the sources are configured and stored as modules similar to standard J2EE modules. Such resources include queues, topics, connection factoric global system resources, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and man global system resources. This page summarizes the JMS system modules that have been created for this domain. Custers s gers s		
Deployments	New Delete	Showing 1 to 2 of 2 Previous Next	
	🖻 Name 🌣	Туре	
JMS Modules	JMS_Module	System	
How do I		System	
Configure JMS system modules	New Delete	Showing 1 to 2 of 2 Previous Next	
Configure resources for JMS system modules			



6.2 Foreign Server Creation

In MDB_MODULE, Click on New Resource, Select Foreign Server

ORACLE' WebLogic Server Administration Console 12c



1) Click on Configuration → New

	dministration Consol	le 12c				Q
Change Center	🔒 Home Log Out	t Preferences 🔤 Record He	p	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 Modules > MDB_MODULE				
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 Targets	Security Notes			
Domain Structure						
Environment	This page display	ys general information about a .	IMS system module a	nd its resources. It also allow	s you to configure new resources and ac	cess existing resources.
Servers ⊟-Clusters Server Templates	Name:		MDB_MODULI		The name of this JMS sys	tem module. More Info
Migratable Targets Coherence Clusters	Descriptor File Name: jms/mdb_module-jms.xml The name of the JMS module descriptor file. More Info			ule descriptor file. More Info		
Machines Virtual Hosts Work Managers Startup and Shutdown Classes						
Deployments Services Messaging	Customize this	s table				
How do I	Summary of Re	esources				
No task help found.	New Delete	e				Showing 0 to 0 of 0 Previous Next
	🔲 Name 🐟	Туре	JNDI Na	me	Subdeployment	Targets
System Status 🗆	There are no items to display					
Health of Running Servers	New Delete	е				Showing 0 to 0 of 0 Previous Next
Failed (1)						
Critical (0)						



 \circ

2) Select Foreign Server and Click on Next

	Administration 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_MOD Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	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. Domain Structure	Create a New JHS System Module Resource Back Next Finish Cancel Choose the type of resource you want to create.			
	Use these pages to create resources in a JMS system module, such as Depending on the type of resource you select, you are prompted to e connection factories, distributed queues and topics, foreign servers, i	s queues, topics, templates, and connection factories. Inter basic information for creating the resource. For targetable resources, like stand-alone queues and topics, and JMS SAF destinations, you can also proceed to targeting pages for selecting appropriate server targets. You s an advanced mechanism for grouping JMS module resources and the members to server resources.		
Virtual Hosts Work Managers Startup and Shutdown Classes	Connection Factory	Defines a set of connection configuration parameters that are used to create connections for JMS clients. More Info		
How do I	© Queue	Defines a point-to-point destination type, which are used for asynchronous peer communications. A message delivered to a queue is distributed to only one consumer. More Info		
Configure quotas for destinationsConfigure JMS templates	а () Торіс	Defines a publish/subscribe destination type, which are used for asynchronous peer communications. A message delivered to a topic is distributed to all topic consumers. More Info		
Configure destination keys Configure topics Configure topics Configure queues Configure queue				
Configure uniform distributed topics Configure uniform distributed queues Configure foreign servers	Distributed Topic Defines a set of topics that are distributed on multiple JMS servers, but which are accessible as a single, logical topic to JMS dients. More Info			
Configure JMS SAF System Status	Foreign Server	Defines foreign messaging providers or remote WebLogic Server instances that are not part of the current domain. More Info		

3) Enter name and Click on Next

ORACLE' WebLogic Server Admi	nistration Console 12c		Q
Change Center	🔒 Home Log Out Preferences 🔤 Record Help 📃 🔍 Welco	ome, 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		
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 Fnish Cancel		
A	Foreign Server Properties		
È-Environment ↓Servers È-Clusters	The following properties will be used to identify your new foreign server. The current module is MDB_MODULE.		
Server Templates	* Indicates required fields		
Coherence ClustersMachinesWritval HostsWritval HostsWitval ManagersStartup and Shutdown ClassesDeploymentsDeploymentsDeployments	* Name: ForeignServer-1		



4) Click on Advanced Targeting

	Iministration Console 12c Q
Change Center	🏦 Home Log Out Preferences 🗟 Record Help
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Server Templates >DC_JMS_Template-0 >Summary of Servers >Summary of JMS Modules >JMS_MODULE >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >JMS_MODULE >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >JMS_MODULE >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >JMS_MODULE >Summary of JMS_MODULE >SUMMA
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS System Module Resource
domain.	Back Next Advanced Targeting Cancel
Release Configuration	The following properties will be used to target your new JMS system module resource
Domain Structure	Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then click Advanced Targeting to use the subdeployment mechanism for targeting this resource.
Environment Servers Ousters Server Templates	The following JMS module targets will be used as the default targets for your new JMS system module resource. If the module's targets are changed, this resource will also be retargeted appropriately.
LMigratable Targets Coherence Clusters Machines	Targets :
Virtual Hosts Work Managers	Clusters
LStartup and Shutdown Classes Deployments B-Services Messaging	 ✓ Cluster-App ● All servers in the cluster
How do I 🖂	Back Next Finish Advanced Targeting Cancel
Configure quotas for destinations	

5) Click on Create New SudDeployment

	dministration Console 12c	Q
Change Center	🔒 Home Log Out Preferences 🖾 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >Summary of Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets >Summa Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE	ary of Clusters >Summary of JMS Servers >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resource	
modify, add or delete items in this domain.	Back Next Finish Cancel	
Domain Structure	The following properties will be used to target your new JMS system module resource	
Environment Servers Clusters Server Templates Migratable Targets	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism cluster, or SAF agent. If necessary, you can create a new subdeployment by clicking the Create a New Subdep later by using the parent module's subdeployment management page.	
Coherence Clusters	Select the subdeployment you want to use. If you select (none), no targeting will occur.	
Virtual Hosts Work Managers Startup and Shutdown Classes	Subdeployments:	
Deployments	What targets do you want to assign to this subdeployment?	

6) Enter Name as MDB_SUB and Click on OK

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



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

ORACLE WebLogic Server Ad	ministration Console 12c Q	
Change Center	🕜 Home Log Out Preferences 🔤 Record Help	
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Server Templates >DC_JMS_Template-0 >Summary of Servers >Summary of JMS Modules >JMS_MODULE >Summary of JMS Modules >MDB_MODULE >Summary 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	
Undo All Changes	The following properties will be used to target your new JMS system module resource	
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, cluster, or	
	SAF agent. If necessary, you can create a new subdeployment by clicking the Create a New Subdeployment button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.	
Server Templates	Select the subdeployment you want to use. If you select (none), no targeting will occur.	
Coherence Clusters Machines	Subdeployments: MDB_SUB Create a New Subdeployment	
Virtual Hosts Work Managers	What targets do you want to assign to this subdeployment?	
LStartup and Shutdown Classes	Targets :	
-Services		
How do I	Servers	
Configure quotas for destinations	AdminServer	
Configure JMS templates Configure destination keys	Clusters	
Configure topics	Cluster-App	
Configure queues	Output in the duster	
Configure connection factories		1
Configure uniform distributed topics	JMS Servers	1
Configure uniform distributed queues	JHSServer-1	1
Configure foreign servers Configure JMS SAF		
- Comigare 3M3 3M1		1
System Status	Back Next Finish Cancel	1

8) Foreign Server is created

	ministration Console 12c				Q
Change Center	🟠 Home Log Out Preferences 🔤 Record	d Help		Welcome, w	eblogic Connected to: pegjms
View changes and restarts	Home >Summary of Deployments >Summary of Modules >MDB_MODULE >Summary of JMS M		nmary of Migratable Targets >Sum	mary of Clusters >Summary of JMS Servers >Su	mmary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages All changes have been activated. No res The foreign server was created success				
Domain Structure	<u></u>	indiy.			
·	Settings for MDB_MODULE				
E-Environment	Configuration Subdeployments Target	ets Security Notes			
-Clusters -Server Templates -Migratable Targets -Coherence Clusters	This page displays general information abo	ut a JMS system module and its reso	urces. It also allows you to confi	gure new resources and access existing resou	urces.
Machines Virtual Hosts	Name:	MDB_MODULE		The name of this JMS system module. More	e Info
Work Managers Startup and Shutdown Classes Deployments	Descriptor File Name:	jms/mdb_module-jms.x	nl	The name of the JMS module descriptor file.	More Info
E-Services i E-Messarion ▼ How do L	This page summarizes the JMS resources the sort keys, destination quota, distributed de			and topic destinations, connection factories, J	MS templates, destination
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)	🔲 Name 🐟	Туре	JNDI Name	Subdeployment	Targets
Critical (0)	ForeignServer-1	Foreign Server	N/A	MDB_SUB	Cluster-App
Overloaded (0) Warning (0)	New Delete			Showing	g 1 to 1 of 1 Previous Next
OK (3)					



6.3 Foreign Server Configuration

1) Click on ForeignServer-1

	Iministration Conso	le 12c					õ
Change Center	Home Log Ou	t Preferences 🔤 Rec	ord Help	٩		Welcome, w	eblogic Connected to: pegjm
View changes and restarts		of Deployments >Summa ODULE >Summary of JM!			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.	Messages	ave been activated. No	restarts are nece				
Domain Structure	The foreign set	erver was created succe	essfully.				
A	Settings for MDB	MODULE					
Environment EServers	Configuration	Subdeployments Ta	argets Security	V Notes			
Clusters Server Templates Migratable Targets Coherence Clusters Machines Machines Writhal Hosts	This page display	ys general information a	•	m module and its reso	ources. It also allows you to confi	gure new resources and access existing reso The name of this JMS system module. Mor	
Work Managers Startup and Shutdown Classes Deployments	Descriptor File	Name:	jn	ns/mdb_module-jms.x	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, 1	IMS templates, destination
No task help found.	Customize thi	s table					
System Status	Summary of R	esources					
System Status	New Delet	e				Showin	g 1 to 1 of 1 Previous Next
Failed (1)	🔲 Name 🗞	Л	Туре		JNDI Name	Subdeployment	Targets
Critical (0)	E Foreignfier	ver-1	Foreign Serve	er	N/A	MDB_SUB	Cluster-App
Overloaded (0) Warning (0)	New Delet	e				Showin	g 1 to 1 of 1 Previous Next

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

ORACLE WebLogic Server	Administration Console 12c			<u> </u>
Change Center	A Home Log Out Preferences 🐼 R	ecard Help	Q	Welcome, weblogic Connected to: FCUBSDomail
View changes and restarts	None >Summary of Dutters >Summary > Nodules >NDE MODULE >Foreignferve		y of Servers > Summary of IMS Modules > MOR	(MODULE shareprilement sturmary of tensors informary of IMS
lick the Lock & Edit button to modify, add or lefete items in this domain.	Messages Al changes have been activated. N	to restarts are nocessary.		
Release Configuration	Settings for ForeignServer-1			
remains Consideration	Configuration Subdeployment N	Notes		
Domain Structure	General Destinations Connection	n Factories		
Griveonment Soviets Griveon Griveon Griveon Griveon Griveon Gusters Governee Gusters Madrines Work Managers Work Managers		ovider that resides outside a		hat allows WebLogic Server to reach the remote 3KDI provider. This way, a number of page to configure a foreign server.
-Startup and Shutdown Classes	de Name:	ForeignServer-1		The name of this foreign server. More Info
Services -	. JNDI Initial Context Factory:	weblogic indi WI	InitaK	The name of the class that must be instantiated to access the 3401 provider. This class name depends on the 3401 provider and the vendor that are being used. More Info
Oreate foreign connection factories Oreate foreign destinations	JHDI Connection URL:	13,//10,184,145,18	15 7106 10 184 148 189 7107	The URL that WebLogic Server will use to contact the JRDI provider. The syntax of this URL depends on which JRDI provider is being used. For WebLogic JRD, leave the field blank if you are referencing WebLogic JRD objects within the same cluster. More JMb
System Status II	3MDI Properties Credential:			Any Gredentals that must be set for the JHDI provider. These Gredentals



3) Click on Connection Factories

	dministration Cons	ole 12c						Q
Change Center	Home Log O	ut Preferences 📐	Record Help	Q			Welcome, weblogic	Connected to: pegjm
View changes and restarts		DULE >Summary of IODULE >ForeignSe			nmary of JMS Servers >Summa	rry of JMS Modules >MDB_MODU	ILE >Summary of JMS	
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for For	eignServer-1	-					
modify, add or delete items in this domain.	Configuration	Subdeployment	Notes					
Domain Structure	General Dest	inations Connec	tion Factories					
Environment Servers Colusters Server Templates Migratable Targets	another instand This page sumn Customize th	e of WebLogic Serv	er running in a di onnection factor	ifferent duster or server, c	a foreign provider, as long a	iccessible via 3NDI. A remote co as that provider supports 3NDI.		ised to refer to
Deployments	New Dele	ete					Showing 0 to 0 d	of 0 Previous Next
	Name 🔗	\$	Local JN	IDI Name		Remote JNDI Name		
How do I					here are no items to display			
Configure foreign servers Create foreign destinations	New Dele	ete					Showing 0 to 0 d	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	1.0		0
Change Center	1 Home Log Out Preferences 🔛 Record	1982	Q	Welcome, weblogic Connected to pegge
View changes and restarts	None sHDE,HODULE >Summery of Highelds Hostulas SHDE, HODULE >ForeignBerver-5 >D		i s Summery of 2MS Servers s Summary of 2MS H	tobules +HDB_MODULE +Summary of 3HS
Configuration editing is enabled. Puture changes will automatically be activisted as you modify, add or delete items in this domain.	Messages At dranges have been activated. However		for the changes to take effect.	
Domain Structure	Settings for ForeignServer-1			
Benament	Configuration Subdeployment Notes			
Servers	General Designations Connection Fac	tories		
Outers Server Templates Machines Watal Noiss With Noiss		prinection factory that reside g in a different duster or ser	ver, or a foreign provider, as long as that prov	a 2011. A remote cannection flactory can be used to refer to ader supports 3401.
- Startup and Shutdown Classes - Ceptoyments B: Services - Fit temporer •	© Customize this table Foreign Connection Factories (Filtered	- Hore Columns (xist)		
How do L. 🗄	New Datas			Showing 1 to 1 of 1 Previous Next
Configure foreign servers	🔄 Name 🖧 🛛 🛛	ocal JNDE Name	Remote	JHDI Name
Oreale foreign destinations	MORQCY M	08007	HD6Q0 ⁴	
System Status 8	New Drine		1000	Showing 1 to 1 of 1. Previous Next



6) Create MDB_QUEUE

and the second sec	Home >JMS Modules >	>MDB_MODULE >ForeignSe	rver-1 >MDB_MODULE >ForeignServer-1 >Summary of Servers >JMS Module	s >MDB_MODULE >ForeignServer-1 >Configuration
View changes and restarts			The second s	a crow and crow and crow a conservation of the second second second second second second second second second s
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for Foreign	Server-1		
modify, add or delete items in this domain.	Configuration Su	ubdeployment Notes		
Domain Structure	General Destinat	tions Connection Factor	ories	
EnvironmentServersClustersVirtual HostsWigratable TargetsCoherence ClustersCoherence ClustersMachinesWork Managers	directory, and the o	object will be returned fro zes the foreign destination able		ocal server, a look-up will be performed automatically on the remote JNDI
Startup and Shutdown Classes	New Delete			Showing 0 to 0 of 0 Previous Next
DeploymentsServicesMessaning	🔲 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				

	Administration Console 12c			Q
Change Center	Home Log Out Preferences	Record Help	Welcome	, weblogic Connected to: pegjme
View changes and restarts	Home >MDB_MODULE >Summary of Modules >MDB_MODULE >Foreign		S Servers >Summary of JMS Modules >MDB_MODULE >Summary of	of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New Foreign JMS Dest	-		
modify, add or delete items in this domain.	OK Cancel			
	Foreign Destination Properti	ies		
Environment Servers Custers Moralized Targets Conterne Custers	The following properties will be us * Indicates required fields	sed to identify your new foreign destination.		
Machines	* Name:	MDB_QUEUE		
Work Managers Startup and Shutdown Classes Deployments	Local JNDI Name:	MDB_QUEUE		
El-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		õ
Change Center	Home Log Out Preferences	s 📨 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MDB_MODULE >Summar Modules >MDB_MODULE >Foreix	ry of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summar onServer-1 > Configuration	y of JMS Modules >MDB_MODULE >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New Foreign JMS De		
modify, add or delete items in this domain.	OK Cancel		
Domain Structure	Foreign Destination Prope	rties	
-Environment -Servers -Ousters -Server Templates -Migratable Targets	The following properties will be * Indicates required fields	e used to identify your new foreign destination.	
Coherence Clusters Machines Virtual Hosts	* Name:	MDB_QUEUE_RESPC	
Work Managers Startup and Shutdown Classes Deployments	Local JNDI Name:	MDB_QUEUE_RESPONSE	
E-Services	Remote JNDI Name:	MDB_QUEUE_RESPONSE	
How do I	OK Cancel		
Configure foreign servers			
Create foreign connection factories			
Curture Chatra			



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 > Coefficientities	nary of Oluters >Summary of JMS Servers >Summ	ry of 3HS Nodules >HOB_MODULE >Summary of 3HS
Configuration editing is enabled. Puture changes will automatically be activated as you modify, add or delete items in this domain.	Hessages # All changes have been activated. However 1 items must	be restarted for the changes to take effect.	
Domain Structure	Settings for ForeignServer-1		
	Configuration Subdeployment Notes		
B-Environment	General Destinations Connection Factories		
- Coherence Clusters - Machines	JPCI directory, and the object will be returned from that di This page summarizes the foreign destinations that have be		
Vitual Hosts - Work Managers - Startup and Shutdown Classes - Deployments - Services - Messanon	Customize this table	een created for the domain.	
-Work Managers - Startup and Shutdown Classes - Deployments - Services - St. Messacon	P Customize this table	een created for the domain.	Showing 1 to 2 of 2 Previous Next
Work Managers Startup and Shutdown Classes P-Services B-Services How do L. S • Configure foreign servers	© Customize this table Foreign Destinations	Local JHDI Name	Showing 1 to 2 of 2 Previous Next Remote 3HDI Name
Work Managers Startup and Shutdown Classes P-Services B-Services How do L. S • Configure foreign servers	Customize this table Foreign Destinations New Delete	Transferrer	and the convert
Work Managers Startup and Shutdown Classes Opployments Greaters Greater foreign servers Creater foreign connection factories	© Customize this table Foreign Destinations	Local 30D1 Name	Remote JNDI Name

 ORACLE
 WebLogic Server
 Administration Console 12c

 Change Center
 Image Center
 Image Context
 Image Center
 WebCould > Summary of Monthle Targets >Summary of Clutters >Summary of 2MS Servers >Summary of 2MS Module >MDB_MODULE >Summary of 2MS
 Connected to: pegims

 View changes and restarts
 Home >MDB_MODULE >Summary of Monthle Targets >Summary of 2MS Servers >Summary of 2MS Module >MDB_MODULE >Summary of 2MS
 Connected to: pegims

changes will automatically be activated as you	ted as you Create a New Foreign JHS Destination						
modify, add or delete items in this domain.	OK Cancel			L			
Domain Structure	and the second se						
	Foreign Destination Prope	rties		L			
B Environment Servers B-Ousters 8	Sham	used to identify your new foreign destination.		l			
Server Templates Migratable Targets Coherence Clusters	* Indicates required fields			ſ			
- Machines Virtual Hosts Work Managers	* 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. 🛙	OK Cancel			L			
Configure foreign serviers	4						

ORACLE WebLogic Serve	r Administration Console 12c		¢				
Change Center	Anne Log Out Preferences 🔝 Record Help	9	Welcome, weblogic Connected to: pegi				
New changes and restarts	Home xMDB_MODULE xSummary of Migratable Targets Modules xMDB_MODULE xForegriserver-1 xCoefigural	Hone xMDB_MCDDLE x Summary of Highlight Targets x Summary of Clutters x Summary of 2HS Servers x Summary of 2HS Modules x MDB_MCDDLE x Summary of 2HS Modules x MDB_MCDDLE x Summary on L Configuration					
ionfiguration editing is enabled. Future hanges will automatically be activated as you iodify, add or delete items in this domain.	Messages						
omain Structure	Settings for ForeignServer-1						
- Environment	Configuration Subdeployment Notes						
-Servers B-Clusters	General Destinations Connection Factories						
Wrbuil Hosts Work Managers Startup and Shutdown Classes Opployments Services Antessanon	This page summarizes the foreign destinations that h Customize this table Foreign Destinations	ave been created for this domain.					
low do L.	E New Delete	1	Showing 1 to 3 of 3 Previous Next				
Configure foreign servers	📳 Rame 🚓	Local JNDI Name	Remote JNDI Name				
Create foreign connection factories	MOE_QUEUE	MD6_QUEUE	M06_QUEUE				
ystem Status	B MOB_QUELE_DLQ	MD8_QUEUE_DLQ	MD6_QUEUE_DLQ				
realth of Running Servers	HOB_QUELE_RESPONSE	MD8_QUEUE_RESPONSE	MDB_QUEUE_RESPONSE				
Faled (1)	New Delete		Showing 1 to 3 of 3 Previous Next				

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



7. Application Deployment

1) Deploy the EAR with Target as Cluster-App

Change Center	🟦 Home Log Out Preferences 🔤 Record Help	٩	Welcome, weblogic Connected to: base_domain
View changes and restarts	Home >JMS Modules >MDB_MODULE >ForeignServer-1 >JMS Modules >Summary of D	Deployments >Summary of Servers >Summary of Deployments >S	ummary of Servers >Summary of Deployments >GWMDB
Configuration editing is enabled. Future	Settings for GWMDB		
changes will automatically be activated as you modify, add or delete items in this domain.	Overview Deployment Plan Configuration Security Targets Contro	ol Testing Monitoring Notes	
Domain Structure	Use this page to specify the WebLogic Server instances and clusters to which y	you want to deploy this Enterprise application. These settings	determine where the application is deployed at server
Environment Servers	startup time.		
Clusters Virtual Hosts Migratable Targets	Change Targets		Showing 1 to 1 of 1 Previous Next
Coherence Servers	Component 🗞 Type	e	Current Targets
Machines Work Managers	GWMDB Enter	rprise Application	Cluster-App
Startup and Shutdown Classes	GW_MDB_Bean.jar EJB		(None specified)
Deployments 曰-Services 白-Messaning	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	🟦 Home Log Out Preferences 🔤 Record Help		Welcome, weble	ogic Connected to: base_do
View changes and restarts	Home >Summary of Environment >Summary of Servers >Summary of Deployments >JMS Modules >MDB_MODUL of Deployments	E >Summary of Environmen	t >Summary of Servers >Summary of De	ployments >GWMDB > Summar
Configuration editing is enabled. Future hanges will automatically be activated as you nodify, add or delete items in this domain.	Summary of Deployments Control Monitoring			
omain Structure				
Green and a services Services Services Services Services Services Store-and-Forward Agents T-3MS Modules HPath Services B-Bridges T-Data Sources	This page displays a list of Java EE applications and stand-alone application modules that have been ins (redeployed), or deleted from the domain by first selecting the application name and using the controls To install a new application or module for deployment to targets in this domain, click the Install button. Customize this table Deployments Install Update Delete Start Stop >	talled to this domain. Inst on this page.		e started, stopped, updated
Persistent Stores Foreign JNDI Providers	🗋 Name 🗇	State Health	Туре	Deployment Order
w do I	FCUBSApp	Active 🖋 OK	Enterprise Application 1	00
Install an Enterprise application	GWEJB	Active 🖋 OK	Enterprise Application 1	00
Configure an Enterprise application		Active 🖋 OK	Enterprise Application 1	00
Jpdate (redeploy) an Enterprise application	a sjax-rs(1.1,1.9)	Active	Library 1	00
pplication	E TR SWEIB	Active V OK		00
 Start and stop a deployed Enterprise application Monitor the modules of an Enterprise application 			Enterprise Application 1	

Showing 1 to 5 of 5 Previous Next



8. Frequently Asked Questions

8.1 Application and JMS Cluster Deployed on Same Cluster

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

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

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

Managed Servers Start Order

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

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

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

View changes and restarts	Home >ForeignServer-1 >Configuration >MDBQCF >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE					
Configuration editing is enabled. Future	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	destination.	tributed queue's message manag		d queue. Click on the individual member d		manage the messages on that Showing 1 to 2 of 2 Previous Next
Work Managers Startup and Shutdown Classes Deployments	🔲 Name 🐟			Consumers Current	Consumers High	Consumers Total
-Services	JMS_MODULEIJMSS	erver-1@MDB_QUEUE		64	64	64
How do I	JMS_MODULE!JMSS	erver-2@MDB_QUEUE		64	64	64
	Show Messages					Showing 1 to 2 of 2 Previous Next
Manage distributed queue messages Configure uniform distributed queues						

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 detai file, import XML formatted message contents fro	
	Click on a message to view its contents				
Virtual Hosts Migratable Targets Coherence Servers Coherence Clusters Machines	Message Selector:			Apply	
Work Managers	Customize this table				
Startup and Shutdown Classes	JMS Messages (Filtered - More Colu	ımns Exist)			
-Services	New Delete v Move v Impo	ert Export v			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 v			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			Thereonic, theorogic connected to, base_domain
View changes and restarts	Home >Configuration >MDBQCF >JMS Modules >JMS_MOD	DULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MO	DULE >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	5 message.	
Servers Clusters Virtual Hosts	Туре:		
Migratable Targets Coherence Servers	Correlation ID:		
Coherence Clusters Machines Work Managers	Expiration:		
LStartup and Shutdown Classes	Priority:	4 🔻	
Services Hessaning	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)		h	
Overloaded (0)			

4) Message is Sent

change center		L					
View changes and restarts	Home >Configuration >MDBQCF >JMS Modules >JMS_MO	DULE >MDB_C		es >JMS_MODULE >MDB_QUEU	JE >Summary of JMS Messages		
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages Ø JMS message sent successfully,						
	Summary of JMS Messages						
Domain Structure	1						
Environment Servers Clusters Virtual Hosts Wingrabile Targets Coherence Servers Coherence Clusters Work Managers Startup and Shutdown Classes Deployments Environments Environments	This page summarizes the available messages for a stand-alone queue, a distributed queue, or a topic durable subscriber. Use this page to view message details, create new messages, dele selected messages, move messages to another destination, export message contents in XML format to another file, import XML formatted message contents from another file, or drain all the messages to view its contents. Message Selector: Customize this table						
	JMS Messages (Filtered - More Columns Exist)						
How do I	New Delete V Move V Import Export	~			Showing 1 t	o 1 of 1 Previous Next	
 Manage queue messages 		-					
Manage distributed queue messages	🗆 ID 🐟	CorrId	Time Stamp	State String	JMS Delivery Mode	Message Size	
Manage topic durable subscribers	D:<257876.1411126889162.0>		Fri Sep 19 17:11:29 IST 2014	receive transaction	Persistent	472	
System Status	New Delete v Move v Import Export	~			Showing 1 t	to 1 of 1 Previous Next	
Health of Running Servers							
Failed (0) Critical (0)							

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



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

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

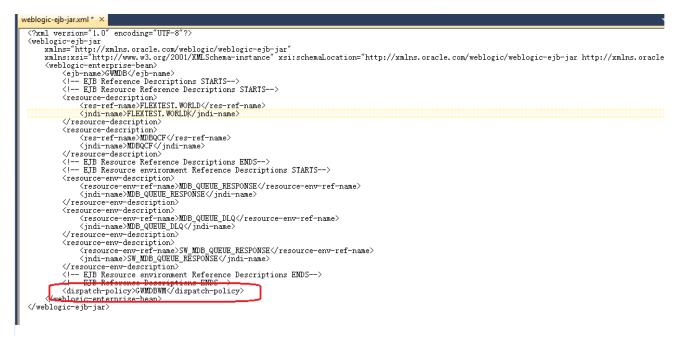
The solution is to create a work manager with a max threads constraint and assign the proxy services dispatch policy to this work manager.

Steps to create custom work manager

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

8.6.1 Modify weblogic-ejb-jar.xml

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



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

Wencodic server A	anninsulation Console 120	÷
Change Center	🏠 Home Log Out Preferences 🖾 Record Help	ain
View changes and restarts	Home >Summary of Work Managers >MarThreadsConstraint+0 >Summary of Work Managers >WorkManager-0 >Summary of Work Managers >MarThreadsConstraint+0 >Summary of Servers >Summary of Servers >Summary of Mork Managers >Managers >WorkManager > Managers >WorkManagers >WorkMan	
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New Work Manager Component	1
Lock & Edit	Back Next Finish Gancel	
Release Configuration	Select Work Manager Definition type	
Domain Structure	What type of Work Manager, Request Class or Constraint do you want to create?	
FCUBSDomain	Work Manager	
	Response Time Request Class	
Machines	Fair Share Request Class	
Virtual Hosts Work Managers Startup and Shutdown Classes	Context Request Class	
Startup and Shutdown Classes Deployments Dervices	Maximum Threads Constraint	
Security Realms	Minimum Threads Constraint	
⊕-Diagnostics	Capacity Constraint	
How do I 🗆	Back Next Finish Cancel	
 Create application-scoped constraints 		
 Create application-scoped request classes 		_

	Iministration Console 12c	
Change Center	🏦 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Work Managers >WorkManager-0 >Summary of V Environment >Summary of Servers > Summary of Work Managers	Work Managers >MaxThreadsConstraint=0 >Summary of Servers >Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New Work Manager Component	
Lock & Edit	Back Next Finish Cancel	
Release Configuration	Work Manager Properties	
Domain Structure	The following properties will be used to identify your new Work Manager. * Indicates required fields	
FCUBSDomain	Indicates required ricitis	
Servers	What would you like to name your new Work Manager?	
B-Clusters Coherence Clusters Machines Wirtual Hosts Startup and Shutdown Classes Deployments B-Services	* Name: GWMDBWM Back Next Finish Cancel	
Security Realms		

d a l	🏦 Home Log Out Preferences 🔤 Record Help	Welcome weblogic	Connected to: FCUBSDomain
Change Center		-	1
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Work Manage Environment >Summary of Servers > Summary of Work Managers	ers >WorkManager-0 >Summary of Work Managers >MaxThreadsConstraint-0 >Summary of Server	rs >Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New Work Manager Component		
Lock & Edit	Back Next Finish Cancel		
Release Configuration	Select deployment targets		
Domain Structure	You can target the Work Manager to any of these WebLogic Server instances or Cl	usters. Select the same targets on which you will deploy applications that reference the W	Vork Manager.
FCUBSDomain	Available targets :		
I −Clusters	Servers		
Coherence Clusters			
Machines	AdminServer		
Virtual Hosts			
Work Managers Startup and Shutdown Classes	Clusters		
Deployments			
ter-Services	Cluster-App		
Security Realms	All servers in the cluster		
Interoperability			
Diagnostics	Cluster-JMS		
How do I 🖂	O All servers in the cluster		
Create application-scoped constraints			
	Back Next Finish Cancel		
Create application-scoped request classes			
Create application-scoped Work Managers			1



	dministration Console 12c		<u> </u>	
Change Center	🙆 Home Log Out Preferences 🖾 Record Help			
View changes and restarts	Home >Summary of Work Managers >MaxThread Environment >Summary of Servers >Summary of		iummary of Work Managers >MaxThreadsConstraint-0 >Summary of Servers >Summary of	
Pending changes exist. They must be activated to take effect.	Messages			
Activate Changes Undo All Changes	Summary of Work Managers			
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2) Create new Max Thread Constraint and in the Count field give the desired thread count

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

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

8.7 How High Availability is achieved

1) Application Server:

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

- JMS Provider: JMS is deployed on 2 managed servers, JMSServer1 and JMSServer2, if any one goes down other will handle the messages.
- FileStore: File store is a cluster file system or database where if one node goes down then other will handle the requests.
- 4) 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

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