Configuring JMS on Weblogic Server 12c Oracle FLEXCUBE Universal Banking Release 14.5.5.0.0 Part No. F56689-01 [May] [2022]

FINANCIAL SERVICES

Table of Contents

1. IN	TRODUCTION	1-1
1.1	INTRODUCTION	
1.2	PURPOSE	
1.3	WEBLOGIC 12C NEW FEATURES	
1.4	COMPONENTS DIAGRAM & DATA FLOW	1-3
2. PR	RE-REQUISITES	2-1
2.1	MACHINES	
2.2	DYNAMIC CLUSTERS AND MANAGED SERVERS	
2.3	DATASOURCE	
2.4	SHARED FOLDER	2-2
3. JM	IS CONFIGURATION	3-1
3.1	PERSISTENCE STORE CREATION	
3.2	JMS SERVER CREATION	
3.3	CLUSTER CONFIGURATION FOR SERVICE MIGRATION	3-5
4. JM	IS MODULE CREATION	4-6
4.1	Module Creation	4-6
4.2	SUB DEPLOYMENT CREATION	4-8
4.3	RESOURCE CREATION	4-10
4.3	3.1 Queue Creation	4-10
4.3		
5. SE	RVER RESTART	5-17
6. FO	DREIGN SERVER CREATION	6-1
6.1	MODULE CREATION	6-1
6.2	FOREIGN SERVER CREATION	
6.3	FOREIGN SERVER CONFIGURATION	6-7
7. AP	PPLICATION DEPLOYMENT	7-1
8. FR	REQUENTLY ASKED QUESTIONS	8-2
8.1	APPLICATION AND JMS CLUSTER DEPLOYED ON SAME CLUSTER	
8.2	APPLICATION SHOWS WARNING UPON RESTART OF MANAGED SERVERS	
8.3	SECURING FILE STORE DATA	8-3
8.4	T3s Protocol	8-3
8.5	How TO TEST THE DEPLOYMENT	8-3
8.6	INCREASE MAXIMUM NUMBER OF MESSAGE-DRIVEN BEAN THREADS	8-5
8.6		8-5
8.6	0	
8.7	How High Availability is achieved	
8.8	How to setup for Scheduler/Notifications	
8.9	WHAT OTHER MODULES USES JMS QUEUE'S	
8.10	REFERENCES	

1. Introduction

1.1 Introduction

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

1.2 Purpose

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

- 1) FCUBS 12.1
- 2) WebLogic Server 12.1.3.0.0

JMS Server

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

JMS Module

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

Subdeployment

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

JMS Resources

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



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

Persistence store

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

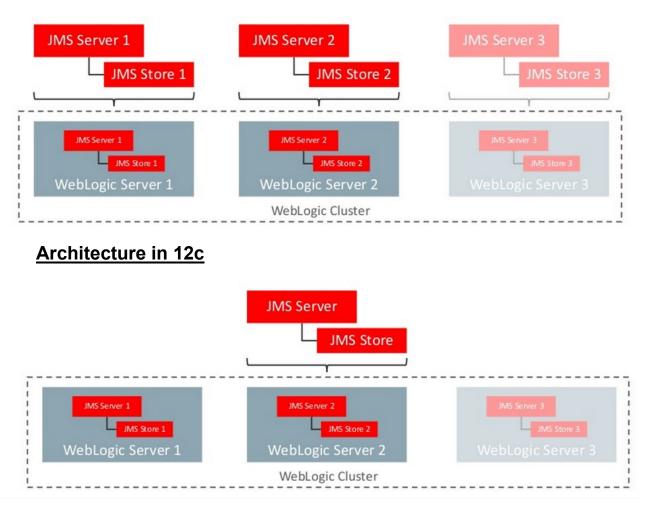
- 1) File based persistence store -> Message is stored in a file
- 2) DB based persistence store -> Message is stored in Database.

1.3 Weblogic 12c New Features

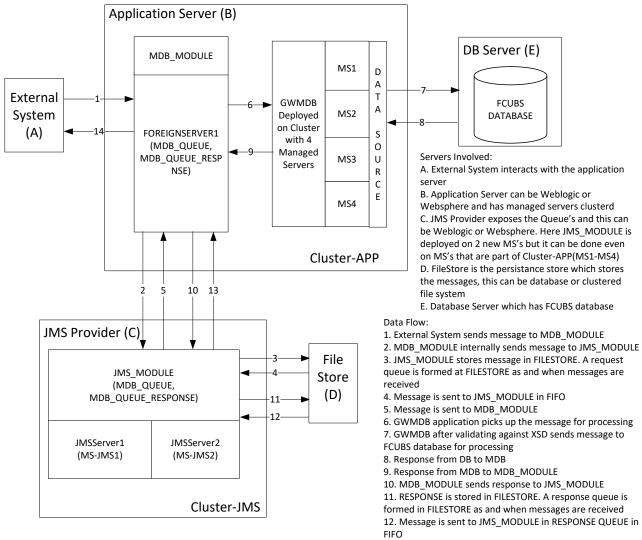
Before weblogic 12c JMS Servers and stores are targeted to individual WLS Servers. Scaling up requires configure the JMS server, the store and target it to new WLS Server

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

Architecture previous to 12c







1.4 Components Diagram & Data Flow

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

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



2. Pre-Requisites

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

2.1 <u>Machines</u>

MAC-1 & MAC-2

ORACLE WebLogic Server Ad	ministration Console 12c	Q		
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms		
View changes and restarts Home >Summary of Servers >Summary of Machines				
Configuration editing is enabled. Future	Summary of Machines			
changes will automatically be activated as you modify, add or delete items in this domain. Domain Structure A machine is the logical representation of the computer that hosts one or more WebLogic Server instances (servers). WebLogic Server uses configured mad optimum server in a cluster to which certain tasks, such as HTTP session replication, are delegated. The Administration Server uses the machine definition in Manager to start remote servers.				
🖨-Environment	This page displays key information about each machine that has been configured in the current WebLog	gic Server domain.		
Servers				
Coherence Clusters	Customize this table			
Machines	Machines			
Virtual Hosts	Machines			
Work Managers	New Clone Delete	Showing 1 to 2 of 2 Previous Next		
Deployments		showing to zor z menodo mexe		
E-Services	🔲 Name 🗞	Туре		
Security Realms	MAC-1	Machine		
Interoperability				
-Diagnostics	MAC-2	Machine		
How do I 🖂	New Clone Delete	Showing 1 to 2 of 2 Previous Next		
Create and configure machines				
Assign server instances to machines				

2.2 Dynamic Clusters and Managed Servers

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

	dministration Console 12c						
Change Center	🚹 Home Log Out Preferences 🔤 Re	ecord Help	٩			Welcome, weblogic Co	nnected to: FCUBSDor
View changes and restarts	Home >Summary of Servers >Summary of Clusters >Summary of Servers > Summar	Home >Summary of Servers >Summary of Clusters >Summary of Server Templates >Summary of Clusters >Summary of Clusters >Summary of Clusters >Summary of Server Templates >Summary of Server Templat					
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages All changes have been activated. N						
Lock & Edit Release Configuration	Summary of Clusters						
Domain Structure	This page summarizes the clusters that	t have been configured in the cu	rrent WebLogic Serv	er domain.			
-Environment Servers Clusters Verver Templates Wigratable Targets Coherence Clusters Work Managers Work Managers Work Managers Startup and Shutdown Classes	A duster defines groups of WebLogic : Customize this table Clusters (Filtered - More Columns Click the Lock & Editbutton in the Ch New Cone Delete	Exist)		lity and reliability.	1	Showing 1 to	2 of 2 Previous Next
Deployments +-Services	🗌 Name 🗞 Cluster Address	Cluster Messaging Mode	Migration Basis	Default Load Algorithm	Replication Type	Cluster Broadcast Channel	Servers
How do L	Cluster-App	Unicast	Database	Round Robin	(None)		DC_FCUBS_1, DC_FCUBS_2, DC_FCUBS_3, DC_FCUBS_4
Assign server instances to dusters	Cluster-JMS	Unicast	Database	Round Robin	(None)		DC_JMS_1, DC_JMS_2
Configure server migration in a duster Configure cross-duster replication Create dynamic dusters	New - Clone Delete					Showing 1 to	2 of 2 Previous Next



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

2.3 DataSource

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

ORACLE WebLogic Server® Administration Console					
Change Center	🕜 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: base_domai			
View changes and restarts	Home >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE Sources	E >Summary of JMS Messages >Summary of Deployments >Summary of JDBC Data			
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.					
Domain Structure Services -Servers -JMS Servers -JMS Modules -Path Services B-Bridges -Data Sources -Persistent Stores	A JDBC data source is an object bound to the JNDI tree that provides database connectivity through a pool of JDBC 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 Name	Targets			
-jCOM -	FLEXTEST.WORLD Generic FLEXTEST.WORLD	Cluster-App			
·······	idhe/feidauDC Conste idhe/feidauDC	AdminEquer			

2.4 Shared Folder

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



3. JMS Configuration

3.1 Persistence Store Creation

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

ORACLE WebLogic Server Administration Console 12c							
Change Center	🏦 Home Log Out Preferences 🖂 Record Help						
View changes and restarts	Home >Summary of Servers >Summary of Persistent Stores						
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.							
	Summary of Persistent Stores						
Domain Structure Concerne Clusters Machines Writual Hosts Work Managers Startup and Shutdown Classes Deployments Governments Definition	 A persistent store is a physical repository for storing subsystem data, such as persistent JMS messages. It can be a JDBC-accessible database, disk-based file, or replicated memory storage. This page summarizes the persistent stores that have been created for this domain. Customize this table Persistent Stores 						
Data Sources	New ~ Delete	Showing 0 to 0 of 0 Previous Next					
	🔲 Name 🗞 🛛 Type	Target					
	There are no items to display						
How do I	New ~ Delete	Showing 0 to 0 of 0 Previous Next					
Create File Stores							

	Administration Console 12c			Q			
Change Center	🏠 Home Log Out Preferences 🔤 R	ecord Help	Welcome, weblogic Con	nnected 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.					
Domain Structure	Summary of Persistent Stores						
Er-Custers Coherence Clusters Coherence Clusters Machines Vrtual Hosts Work Managers Startup and Shutdown Classes	A persistent store is a physical repository for storing subsystem data, such as persistent JMS messages. It can be a JDBC-accessible database, disk-base file, or replicated memory storage. This page summarizes the persistent stores that have been created for this domain.						
⊕-Messaging Data Sources	New - Delete		Showing 0 to 0 of 0	Previous Next			
Persistent Stores Foreign JNDI Providers Work Contexts	Create FileStore	Туре	Target				
XML Registries	Create ReplicatedStore (Exalogic) There are no items to display						
How do I	New - Delete		Showing 0 to 0 of 0	Previous Next			
Create File Stores							
	1						



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

	dministration Console 12	c		Q
Change Center	Home Log Out Pre	ferences 🔯 Record Help	٩	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Clu of Persistent Stores	sters >Summary of Servers >Su	immary of Clusters >Summary of Serv	vers >Summary of Clusters >Cluster-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 Properti The following properti	es es will be used to identify your	new file store.	
Domain Structure	* Indicates required fiel	ds		
Environment Servers Clusters Viserver Templates Wigratable Targets	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 💌		
Startup and Shutdown Classes	The pathname to the d	irectory on the file system whe	ere the file store is kept. This directo	ory must exist on your system, so be sure to create it before completing this tab.
Services H-Messaging	Directory:	/scratch/work_area/	JMS_FILESTORE	
How do I 🗉	OK			
Create File Stores	OK Cancel			
 Monitor persistent stores 				

3) FileStore-1 is created

ORACLE WebLogic Server Administration Console 120						
Change Center	🔒 Home Log Out Preferences 🖾 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain			
View changes and restarts	Home >Summary of Clusters >Summary of Servers >Summary of Clusters of Persistent Stores	>Summary of Servers >Summary of Clusters >Cluster-JMS >	Summary of Servers >Summary of Clusters >Summary of Servers > Summary			
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages					
Lock & Edit	All changes have been activated. No restarts are necessary.					
Release Configuration	Summary of Persistent Stores					
Domain Structure -Servers -Server Server S	A persistent store is a physical repository for storing subsystem data summarizes the persistent stores that have been created for this dor Customize this table Persistent Stores Click the Lock & Editbutton in the Change Center to activate all the	ain.	issible database, disk-based file, or replicated memory storage. This page			
Work Managers Startup and Shutdown Classes	New - Delete		Showing 1 to 1 of 1 Previous Next			
Deployments Services Messaging	Name 🌣	Туре	Target			
Data SourcesPersistent Stores	FileStore-1	FileStore	Cluster-JMS			
How do I	New v Delete		Showing 1 to 1 of 1 Previous Next			
Create File Stores						



3.2 JMS Server Creation

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

ORACLE WebLogic Server Administration Console 12c						
Change Center	🏦 Home Log Out Preferences 🔛 Record Help					
View changes and restarts	Home >Summary of Servers >Summary of Persistent Stores >Sur	mary of JMS Servers				
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 JMS Servers created.					
Domain Structure	Summary of JMS Servers					
Environment Servers D-Clusters Coherence Clusters Virtual Hosts Virtual Hosts Virtual Hosts Startup and Shutdown Classes Deployments D-Services	JMS servers act as management containers for the queues and topics in JMS modules that are targeted to them. This page summarizes the JMS servers that have been created in the current WebLogic Server domain. Customize this table JMS Servers (Filtered - More Columns Exist) Delete Showing 0 to 0 of 0 Previous Next					
E-Messaging	📄 Name 🗞 Persistent Store	Target	Current Target	Health		
Store-and-Forward Agents	There are no items to display					
How do I 🗆	New Delete Showing 0 to 0 of 0 Previous Next					
Configure JMS servers						
Configure JMS system modules						

2) .Select FileStore-1 , Click Next

	dministration Console 12c		Ģ
Change Center	🚹 Home Log Out Preferences 🔤 Record I	Help	Welcome, weblogic Connected to: FCUBSDoma
View changes and restarts	Home >Summary of Servers >Summary of Cluste Stores >Summary of JMS Servers	ers >Summary of Servers >Summary of Clusters >Cluste	~JMS >Summary of Servers >Summary of Clusters >Summary of Servers >Summary of Persistent
No pending changes exist. Click the Release Configuration button to allow others to edit the	Create a New JMS Server		
domain.	Back Next Finish Cancel		
Release Configuration	JMS Server Properties		
Domain Structure	The following properties will be used to identif * Indicates required fields	fy your new JMS Server.	
E-Environment	What would you like to name your new JMS Se	rver?	
ClustersServer TemplatesMigratable Targets	街 * Name:	JMSServer-1	
Coherence Clusters Machines	Specify persistent store for the new JMS Serve	r.	
Virtual Hosts Work Managers	Persistent Store:	FileStore-1 Create a New Store	
Startup and Shutdown ClassesDeploymentsServices	Back Next Finish Cancel	(none) FileStore-1	
- Hessaning			

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

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



	dministration Console 12c		Q
Change Center	Home Log Out Preferences [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

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

5) In NFS below filestores can be seen

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



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

		Preferences			Q	wexon	se, weblogic Conner	sen mi beithe
iew changes and restarts	Hone > Summary of Servers > Summary of Pensistent Stones > Summary of 2HS Servers > Summary of Clusters > Summary of Migratable Targets > Summary of Clusters > Cluster: 3HS > Summary of Migratable Targets > Semmary of Clusters							
onfiguration editing is enabled. Puture langes will automatically be activated as you odify, add or delete items in this domain.	Summary of Clusters							
main Structure	This page summarizes the dusters that have been configured in the current WebLogic Server domain.							
Environment	A duster defines g	roups of WebLo	ogic Server server	that work togeth	er to increase scalabi	lity and reliability.		
Servers Chasters -Cohe Costers	© Customize this	table						
Machi Clusters, Level 2, Collapsed, 2 of Virtual rusio	7, Selected rs (Filtere	d - Hore Colu	mes Exist)				owing 1 to 2 of 2 Pre	and the state
-Work Managers -Startup and Shutdown Classes Deployments	Name o	and the second second	ress Cluster H	essaging Hode	Higration Basis	Default Load Algorithm	-	in the second
Services Security Realms Intersperability Disconstics	Custer-App		Unicest		Database .	Round Robin	(None)	
n do L B					And the second s	0.0000000	25510	-
Configure dusters	Custer-36		Unicast		Database	Round Robin	(None)	
2) Click on Mig DRACLE WebLogic Server hange Center iew changes and restarts	Administration Consol	Preferences 2	Record Help		M5 Servers >Summar		ne, weblogic Connec	
2) Click on Mig DRACLE WebLogic Server hange Center iew changes and restarts onfiguration editing is enabled. Future hanges will automatically be activated as you	Administration Consol Administration Consol Meme Log Out Home >Summary or Clusters >Cluster-31 Settings for Clust	Preferences f Servers >Sumn IS >Summary of er-JMS	Record Help	>Summary of Clust	M5 Servers >Summar rs >Cluster-JM5	Welcon	ne, weblogic Connec	ted to: pegjn
2) Click on Mig ORACLE WebLogic Server ange Center we changes and restarts onfiguration editing is enabled. Future anges will automatically be activated as you addiv, add or delete items in this domain.	Administration Consol Administration Consol Mome Log Out Home > Summary or Clusters > Cluster > II Settings for Clust Configuration	Preferences f Servers >Summ //S >Summary of er-JMS Monitoring C	Record Help nary of Persistent St Migratable Targets	>Summary of Clust ents Services	MS Servers > Summar rs > Cluster-JMS	Welcon y of Clusters >Summary of Migu	ne, weblogic Connec atable Targets >Summar	ted to: pegjn y of
2) Click on Mig DRACLE WebLogic Server hange Center iew changes and restarts onfiguration editing is enabled. Future	Administration Consol Administration Consol Meme Log Out Home >Summary or Clusters >Cluster-31 Settings for Clust	Preferences f Servers >Summ //S >Summary of er-JMS Monitoring C	Record Help	>Summary of Clust ents Services	MS Servers > Summar rs > Cluster-JMS	Welcon y of Clusters >Summary of Migu	ne, weblogic Connec atable Targets >Summar	ted to: pegjn

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



4. JMS Module Creation

4.1 Module Creation

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

	dministration Console 12c	Q
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable Targets >MS- Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets > Summary o	
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages The JMS module configuration was canceled.	
Domain Structure	Summary of JMS Modules	
Deployments Services	JMS system resources are configured and stored as modules similar to standard JZEE modules, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and administratively configure and manage JMS system modules as global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JMS Modules	
Persistent Stores Foreign JNDI Providers	New Delete	Showing 0 to 0 of 0 Previous Next
How do I	Name 🏟	Туре
Configure JMS system modules	There are no items to display	
Configure resources for JMS system modules	New Delete	Showing 0 to 0 of 0 Previous Next
System Status 😑		

2) Enter name as JMS_MODULE and Click on Next

	ministration Console 12c	Q						
Change Center	🔒 Home Log Out Preferences 🖂 Record Help	Welcome, weblogic Connected to: pegjms						
View changes and restarts	Home >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Migratable Targets > Summary of JMS Modules							
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create JMS System Module Back Nrg Finish Cancel							
Domain Structure	The following properties will be used to identify your new module.							
B→Environment →Deployments B→Services B→Messaging →JMS Servers →Store-and-Forward Agents →JMS Modules →JMS Modules	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	<u>o</u>
Change Center	A Home Log Out Preferences 🖂 Record Help	Welcome, weblogic Connected to: FCU8SDomain
View changes and restarts	Home >Summary of Server Templates >DC_3HS_Template-0 >Summary of Servers >Summary of Migratable Targets >Summary of 3HS Modules	f Higratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of
No pending changes exist. Click the Release Configuration builton to allow others to edit the domain. Lock & Edit Release Configuration	Create JHS System Hodule Back Net The following properties will be used to target your new JHS system module.	
Domain Structure	Use this page to select the server or cluster on which you would like to deploy this 3MS syn	
Environment Servers Ousters Server Templates Monatable Targets	Targets : Servers	
Coherence Clusters Machines Virtual Hosts	AdminServer	
Work Managers Startup and Shutdown Classes	Clusters	
-Ceployments 9-Services 9-Mersaninn	Cluster-App All servers in the cluster	
How do L. 🛛 🖂 • Configure 245 system modules • Configure 245 servers	Cluster-JHS All servers in the cluster	

4) Select the checkbox and Click on Finish

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

5) JMS_MODULE is created

	r Administration Console 12c		Q					
Change Center	Home Log Out Preferences 🔤 Record Hel	The Home Log Out Preferences 🖾 Record Help 🔍 Welcome, weblogic Connected to: pegjms						
View changes and restarts		Home >MG-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JMS1 (migratable) >Summary of Clusters >Summary of Alusters >Summary of Migratable Targets >Summary of Alusters >JMS Modules >JMS						
Configuration editing is enabled. Future changes will automatically be activated as yo	editing is enabled. Future Messages							
modify, add or delete items in this domain.	 All changes have been activated. However 1 is The JMS module was created successfully. 	items must be restarted for the changes to	take effect.					
Jomain Structure	Settings for JMS_Module							
-Environment Deployments	Configuration Subdeployments Targets	Security Notes						
È-Services È-Messaging →-JMS Servers →-Store-and-Forward Agents →-JMS Modules	E This page displays general information about a J resources.	MS system module and its resources. It also	allows you to configure new resources and access existing					
Path Services Path Services	Name:	JMS_Module	The name of this JMS system module. More Info					
Data Sources Persistent Stores	Descriptor File Name:	jms/jms_module-jms.xml	The name of the JMS module descriptor file. More Info					
Foreign JNDI Providers Work Contexts	 This page summarizes the JMS resources that ha JMS templates, destination sort keys, destination 		e, including queue and topic destinations, connection factories, ervers, and store-and-forward parameters.					



4.2 Sub Deployment Creation

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

ORACLE WebLogic Server Ad	Iministration Console 12c				Q		
Change Center	Home Log Out Preferences	Record Help	Q	v	Velcome, weblogic Connected to: pegjme		
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_Modules					
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages All changes have been activated. However 1 items must be restarted for the changes to take effect.						
Domain Structure		d successfully.					
	Settings for JMS_Module						
Deployments	Configuration Subdeployme	ents Targets	Security Notes				
Services Servers Servers Servers Servers Stre-and-Forward Agents Servers Servers		odeployments- Ta		ources. It also allows you to configure	new resources and access existing		
Path Services ⊡-Bridges	Name:	Name: JMS_Module			The name of this JMS system module. More Info		
Data Sources Persistent Stores Foreign JNDI Providers					S module descriptor file. More Info		
How do I				system module, including queue and to ns, foreign servers, and store-and-for	pic destinations, connection factories, ward parameters.		
No task help found.	Customize this table						
System Status 🗉	Summary of Resources						
Health of Running Servers	New Delete				Showing 0 to 0 of 0 Previous Next		
Failed (0) Critical (0)	🔲 Name 🗇	Туре	JNDI Name	Subdeployment	Targets		
Overloaded (0)	Д,		There are no	items to display			
Warning (0) OK (1)	New Delete				Showing 0 to 0 of 0 Previous Next		
WebLogic Server Version: 12.1.3.0.0							
Copyright (c) 1996,2014, Oracle and/or its affiliates. All Oracle is a registered trademark of Oracle Corporation							

2) Enter name as JMS_SUB and click on Next

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



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

	dministration Console 12c	Q
Change Center	🏦 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summary of Migratable Targets > JMS Modules >JMS MODULE	iummary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New Subdeployment	
Lock & Edit	Back Next Finish Cancel	
Release Configuration	Targets	
Domain Structure	Please select targets for the Subdeployment	
	Servers	
⊖-Environment Servers ⊖-Clusters	AdminServer	
Server Templates	Clusters	
Coherence Clusters Machines	☑ Cluster-JMS ◎ All servers in the cluster	
Virtual Hosts Work Managers	• All servers in the cluster	
LStartup and Shutdown Classes	JMS Servers	
-Services	JM55erver-1	
How do I 🗉	Back Next Finish Cancel	
 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		Home >MS-JMS1 (migratable) >Summary of Migratable Targets >MS-JMS2 (migratable) >Summary of Olusters >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	Messages								
changes will automatically be activated as you modify, add or delete items in this domain.	All changes ha	ave been activated. He	owever 1 item	is must be res	tarted for the chang	iges to take effect.			
	Subdeploymer	nt created successfully	<i>.</i>						
Domain Structure									
	Settings for JMS	_Module							
-Environment Deployments	Configuration 5	5ubdeployments	Targets S	ecurity Not	es				
Services Messaging Messaging Missaging Missaging Missaging Missaging Store-and-Forward Agents Missaging Missaging		ection factories) are g s table				ent is a mechanism by which JMS module resources (such as queues, ch as JMS servers, server instances, or duster).			
Foreign JNDI Providers	New Delet	e				Showing 1 to 1 of 1 Previous Next			
How do I 🗆	🔲 Name 🗞			Resources		Targets			
Configure subdeployments in JMS system	JMS_SUB					Cluster-JMS			
modules 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

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

2) Select Distributed Queue and Click on Next

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

3) Enter the queue name and Click on Next



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

4) Click on Advance Targeting

Change Center	🟦 Home Log Out Preferences 🐼 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home > DC_2HS_Template-0 > Summary of Servers > Summary of Highstable Tangets > Summary of 2HS Servers > Tangets > Summary of 2HS Modules >3HS 14000UE	MSServer-1 >Summary of IMS Servers >IMSServer-1 >Summary of Mgratable
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JHS System Hodule Resource	
Lock & Edit	Back Next Finish Advanced Targeting Cancel	
Release Configuration	The following properties will be used to target your new JMS system module resource	
Domain Structure	Use this page to view and accept the default targets where this JMS resource will be targeted. The default accept the default targets, then dick Advanced Targeting to use the subdeployment mechanism for tar	
Onversion Server Templates Orderence Ousters Monatable Targets Otherence Ousters Manual States	The following JMS module targets will be used as the default targets for your new JMS system module reso, appropriately. Targets :	rce. If the module's targets are changed, this resource will also be retargeted
- Wrtuel Hosts Work Managers	Clusters	
- Startup and Shutdown Classes - Deployments B Services	Cluster-JHS	

5) Select Subdeployement as JMS_SUB and Click on Finish

ORACLE WebLogic Server A	dministration Console 12c	0
Change Center	Home Log Out Preferences Record Help	Welcome, weblogic Connected to: FCUBSDomai
View changes and restarts	Home xOC_3HS_Template-0 xSummary of Servers xSummary of Mignabile Temple xSummary of JMS Servers x3HSServer1 x Targets xSummary of JMS Module x3HML MODBLE	Summary of JHS Servers x3HSServer 1 xSummary of Migratable
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JHS System Hodule Resource Back Net Frank Cancel	
Lack & Edt Release Configuration	The following properties will be used to target your new JHS system module resource	
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by whi SAF agent. If necessary, you can create a new subdeployment by closing the Create a New Subdeployment buttor module's subdeployment management page.	
Servers 8 Outers 9 Server Templates Mgratable Targets - Coherence Outers	Select the subdeployment you want to use. If you select (none), no targeting will occur. Subdeployments: JMS_SUB Case a New Subdeployment.	
- Machines - Wink Managers - Startup and Shutdown Classes - Deployments B - Services	What targets do you want to assign to this subdeployment? Targets :	
R Messager	Servers	
How do L. B	AdminServer	
Configure quotas for destinations Configure 3MS templates	Clusters	
Configure destination keys Configure topics Configure topics	Cluster 3HS All servers in the cluster	

6) MDB_QUEUE is created



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

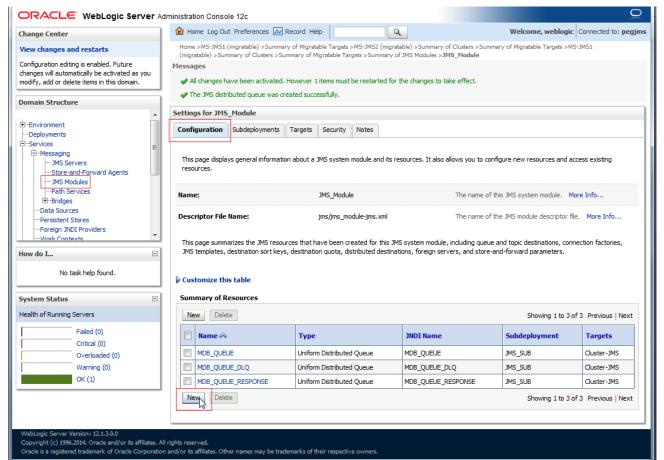
7) Similarly Create MDB_QUEUE_RESPONSE and MDB_QUEUE_DLQ

	Iministration Conso	ole 12c						õ
Change Center	Home Log Ou	it Preferences 🔤	Record Help		Q		Welcome, weblogic	Connected to: FCUBSDomain
View changes and restarts	Home >DC_JMS_ JMS Modules >JM		y of Servers >	Summary of Mi	gratable Targets >Summary of JM	5 Servers >JMSServer-1 >Summary of JMS	Servers >JMSServer-1 >Summary of Mig	ratable Targets >Summary of
Click the Lock & Edit button to modify, add or delete items in this domain.	Messages	-						
Lock & Edit	Settings for JMS	ave been activated.	. No restarts a	are necessary.				
	Configuration	Subdeployments	Targets	Security No	otes			
Domain Structure	1							
Environment Servers	This page displa	iys general informatio	ion about a JN	4S system mod	ule and its resources. It also all	ows you to configure new resources and	access existing resources.	
Clusters Server Templates	Name:			MC	S_MODULE	The name of t	his JMS system module. More Info	
Migratable Targets Coherence Clusters Machines	Descriptor File Name: jms/jms_module-jms.xml Th				The name of t	The name of the JMS module descriptor file. More Info		
-Virtual Hosts -Vork Managers -Startup and Shutdown Classes -Deployments					d for this JMS system module, i d store-and-forward parameters	ncluding queue and topic destinations, co s.	nnection factories, JMS templates, des	tination sort keys,
E-Services	Customize th	is table						
How do I 🖃	Summary of R	esources						
No task help found.	Click the Lock &	& Edit button in the (Change Cente	er to activate a	all the buttons on this page.			
	New Dele	te					Showing 1	to 3 of 3 Previous Next
System Status	Name 🔗			Туре		JNDI Name	Subdeployment	Targets
Health of Running Servers		IF		Liniform Distr	ibuted Oueue	MDB QUEUE	JMS SUB	Cluster-JMS
Failed (0)	MDB OUE			Uniform Distr		MDB QUEUE DLO	JMS_SUB	Cluster-JMS
Critical (0)		UE RESPONSE			ibuted Queue	MDB_QUEUE_RESPONSE	JMS_SUB	Cluster-JMS
Overloaded (0) Warning (0)	New Dele							to 3 of 3 Previous Next
OK (5)								



4.3.2 Connection Factory Creation

1) In JMS_MODULE, Click on New



2) Select Connection Factory and click on Next

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



3) Enter the Name and Click on Next

	dministration Console 12c		Q
Change Center	🙆 Home Log Out Preferences 🔤 Record	Help	Welcome, weblogic Connected to: pegjms
View changes and restarts		gratable Targets >MS-JMS2 (migratable) >Summary of of Migratable Targets >Summary of JMS Modules > JI	of Clusters >Summary of Migratable Targets >MS-JMS1 MS_Module
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resou	irce	-
modify, add or delete items in this domain.	Back Next Finish Cancel		
Domain Structure	Connection Factory Properties		
Environment Deployments Services E	The following properties will be used to iden * Indicates required fields	ify your new connection factory. The current mo	dule is JMS_Module.
	What would you like to name your new conne	ction factory?	
JMS Modules Path Services	* Name: MDBC	CF <	
	What JNDI Name would you like to use to lool	up your new connection factory?	
Foreign JNDI Providers	JNDI Name: MDBC	QCF	

4) Click on Advance Targeting

	dministration Console 12c Q
Change Center	🏦 Home Log Out Preferences 🐼 Record Help
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summary of Migratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JMS System Module Resource
Lock & Edit Release Configuration	Back Next Finish Advanced Targeting Cancel The following properties will be used to target your new JMS system module resource Image: Cancel Image: C
Domain Structure	Use this page to view and accept the default targets where this JMS resource will be targeted. The default targets are based on the parent JMS system module targets. If you do not want to accept the default targets, then click Advanced Targeting to use the subdeployment mechanism for targeting this resource.
-Environment -Servers -Clusters -Server Templates	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 ClassesDeploymentsServicesMessaging	Image: Cluster-JMS Image: State of 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 Record Help Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >DC_JMS_Template-0 >Summary of Servers >Summary of Migratable Targets >Summary of JMS Servers >JMSServer-1 >Summary of JMS Servers >JMSServer-1 >Summary of Migratable Targets >Summary of JMS Modules >JMS_MODULE
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JMS System Module Resource
Lock & Edit	Back Next Finish Cancel
Release Configuration	The following properties will be used to target your new JMS system module resource
Domain Structure	Use this page to select a subdeployment to assign this system module resource. A subdeployment is a mechanism by which JMS resources are grouped and targeted to a server instance, duster, or SAF agent. If necessary, you can create a new subdeployment by dicking the Create a New Subdeployment button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.
⊖-Environment Servers ⊖-Clusters ≡	Select the subdeployment you want to use. If you select (none), no targeting will occur.
Server Templates Migratable Targets Coherence Clusters	Subdeployments: JMS_SUB Create a New Subdeployment
Machines Virtual Hosts Work Managers	What targets do you want to assign to this subdeployment?
Startup and Shutdown ClassesDeploymentsServices	Targets :
-Messaning 🔻	Servers
How do I 🖃	AdminServer
Configure quotas for destinations	
Configure JMS templates Configure destination keys	Clusters
Configure topics	☑ Cluster-JM5
Configure queues	All servers in the cluster
Configure connection factories	
Configure uniform distributed topics	JMS Servers
Configure uniform distributed queues	3 JMSServer-1
Configure foreign servers	
Configure JMS SAF	Back Next Finish Cancel
System Status	

6) Connection Factory is **Created**



ORACLE WebLogic Server Ad	ministration Console 12c				Q			
Change Center	🚹 Home Log Out Preferences 🔼	Record Help	Q	Welcome, weblogic	Connected to: pegjms			
View changes and restarts		Home >M5-JM51 (migratable) >Summary of Migratable Targets >M5-JM52 (migratable) >Summary of Clusters >Summary of Migratable Targets >MS-JM51 (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 	d. However 1 items must be restarted fi cessfully.	or the changes to take effect.					
	Settings for JMS_Module							
Environment Deployments	Configuration Subdeployments	Targets Security Notes						
E→Services E → Messaging → JMS Servers → JMS Modules → Path Services E → Bridges	This page displays general informa resources.	tion about a JMS system module and its JMS_Module	•	nfigure new resources and ac	-			
Data SourcesPersistent StoresForeign JNDI ProvidersWork Contexts How do I		jms/jms_module-jms.xml purces that have been created for this ys, destination quota, distributed desti	JMS system module, including queue					
No task help found.	Customize this table							
System Status	Summary of Resources							
Health of Running Servers	New Delete			Showing 1 to 4 o	f 4 Previous Next			
Failed (0) Critical (0)	🔲 Name 🐟	Туре	JNDI Name	Subdeployment	Targets			
Overloaded (0)		Connection Factory	MDBQCF	JMS_SUB	Cluster-JMS			
Warning (0)	MDB_QUEUE	Uniform Distributed Queue	MDB_QUEUE	JMS_SUB	Cluster-JMS			
OK (1)	MDB_QUEUE_DLQ	Uniform Distributed Queue	MDB_QUEUE_DLQ	JMS_SUB	Cluster-JMS			
	MDB_QUEUE_RESPONSE	Uniform Distributed Queue	MDB_QUEUE_RESPONSE	JMS_SUB	Cluster-JMS			
	New Delete			Showing 1 to 4 o	f4 Previous Next			



5. Server Restart

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

	Admini	stration Console 12c						õ
Change Center	1 🕯	Home Log Out Preferences 🔺	Record Help	Q			Welcome, we	blogic Connected to: FCUBSDomai
View changes and restarts		Home >Summary of JMS Servers >JM Modules >JMS_MODULE >Connectio			mmary of Migratable Tar	gets >Summary of JMS		
Click the Lock & Edit button to modify, add or delete items in this domain.		mmary of Servers		indiary of betters				
Lock & Edit	C	Configuration Control						
Release Configuration		A server is an instance of WebLog	ic Server that runs in its own	Java Virtual Machine (JVN	4) and has its own conf	iguration.		
Domain Structure		This page summarizes each server	that has been configured in	the current WebLogic Ser	ver domain.			
Environment -Servers Clusters -Server Templates -Migratable Targets		℃ustomize this table						
Coherence Clusters Machines Wirtual Hosts Work Managers Startup and Shutdown Classes	Servers (Filtered - More Columns Exist) Click the Lock & Editbutton in the Change Center to activate all the buttons on this page. New Clone Delete Showing 1 to 7 of 7 Previous N					owing 1 to 7 of 7 Previous Next		
DeploymentsServices		🔲 Name 🗇	Туре	Cluster	Machine	State	Health	Listen Port
How do I		AdminServer(admin)	Configured Dynamic	Cluster-App	MAC-1	RUNNING	✓ OK Not reachable	7001
Create Managed Servers		DC_FCUBS_2	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7102
Clone servers		DC_FCUBS_3	Dynamic	Cluster-App	MAC-1	SHUTDOWN	Not reachable	7103
Delete Managed Servers Delete the Administration Server		DC_FCUBS_4	Dynamic	Cluster-App	MAC-2	SHUTDOWN	Not reachable	7104
Start and stop servers		DC_JMS_1	Dynamic	Cluster-JMS	MAC-1	SHUTDOWN	Not reachable	7106
		DC_JMS_2	Dynamic	Cluster-JMS	MAC-2	SHUTDOWN	Not reachable	7107
System Status 🖂		New Clone Delete					Sh	owing 1 to 7 of 7 Previous Next
Health of Running Servers								
Epiled (0)								

2) Select the cluster 'DC_JMS_Template-0' and

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



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

		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_JMS_Template-0	
domain.	Configuration Protocols Logging Debug Notes	
Lock & Edit		
Release Configuration	General Cluster Services Keystores SSL Federation Services Deployment Migration	Tuning Overload Health Monitoring Server Start Web Services Coherence
3	Save	
Domain Structure		
⊖-Environment ├Servers ⊖-Clusters └Server Templates	Node Manager is a WebLogic Server utility that you can use to start, suspend, shut down, and restart is that Node Manager will use to start this server on a remote machine. Java Home:	servers in normal or unexpected conditions. Use this page to configure the startup settings The Java home directory (path on the machine running Node Manager) to
Migratable Targets		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

	dministration Console 12c	Q		
Change Center	🔒 Home Log Out Preferences 🚵 Record Help	Welcome, weblogic Connected to: pegjms		
View changes and restarts	Home >Summary of Servers >MS-JMS2 >Summary of Virtual Hosts >Summary of Servers >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments >Summary of JMS Modules Summary of JMS Modules			
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.				
Domain Structure Work ManagersStartup and Shutdown ClassesDeploymentsServicesServicesStore-and-Forward AgentsStore-and-Forward Agents	 WS system resources are configured and stored as modules similar to standard J2EE modules. Such resources induc quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You ca global system resources. This page summarizes the JMS system modules that have been created for this domain. Customize this table JMS Modules 			
	Selected Delete	Showing 1 to 1 of 1 Previous Next		
Data Sources Persistent Stores Foreign JNDI Providers	Name A	Type System		
How do I	New Delete	Showing 1 to 1 of 1 Previous Next		
Configure resources for JMS system modules				

2) Enter name as MDB_MODULE and click on Next

	ninistration Console 12c C	⊇
Change Center	🟦 Home Log Out Preferences 🔤 Record Help	jms
View changes and restarts Configuration editing is enabled. Future	Home >Summary of Migratable Tarnet < MC-1MC1 (minratable) < Cummary of Migratable Tarnet < MC-1MC7 (minratable) < Cummary of Migratable Targets >MS-1MS1 (migratable) >S Create JMS System Module	_
changes will automatically be activated as you modify, add or delete items in this domain.	Back Rnish Cancel	
B Environment Deployments Services B Messaging JMS Servers JMS Modules	The following properties will be used to identify your new module. JMS system resources are configured and stored as modules similar to standard JZEE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS store-and-forward (SAF) parameters. You can administratively configure and manage JMS system modules as global system resources. * Indicates required fields	
iPath Services ⊡-Bridges Data Sources Persistent Stores Foreign JNDI Providers Work Contexts	What would you like to name your System Module? * Name: MDB_MODULE	
How do I	What would you like to name the descriptor file name? If you do not provide a name, a default will be assigned. Descriptor File Name:	
Configure JMS servers	Where would like to place the descriptor for this System Module, relative to the jms configuration sub-directory of your domain?	
System Status	Location In Domain:	
Health of Running Servers	Back Next Finish Cancel	-
Failed (0)		



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

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

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

	dministration Console 12c	õ
Change Center	🏦 Home Log Out Preferences 🔤 Record Help	: 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

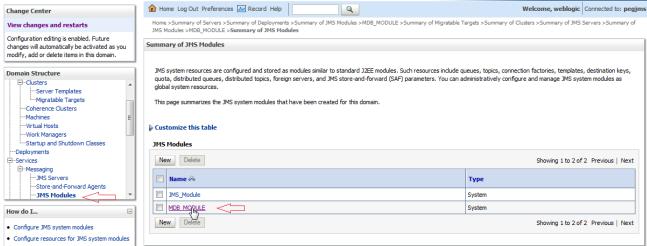
ORACLE' WebLogic Server Administration Console 12c				
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: pegjms		
View changes and restarts	Home >Summary of Clusters >Summary of Migratable Targets >Summary of Servers >Summary of Deployments >Summary of JMS Modules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



6.2 Foreign Server Creation

In MDB_MODULE, Click on New Resource, Select Foreign Server

ORACLE WebLogic Server Administration Console 12c



1) Click on Configuration → New

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



 \circ

2) Select Foreign Server and Click on Next

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

3) Enter name and Click on Next

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



4) Click on Advanced Targeting

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

5) Click on Create New SudDeployment

ORACLE' WebLogic Server Administration Console 12c								
Change Center	Home Log Out Preferences 🖾 Record Help							
View changes and restarts	Home >Summary of Deployments >Summary of JMS Modules >MDB_MODULE >Summary of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary of JMS Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE							
Configuration editing is enabled. Future changes will automatically be activated as you	Create a New JMS System Module Resource							
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 by which JMS resources are grouped and targeted to a server instance, duster, or SAF agent. If necessary, you can create a new subdeployment by clicking the Create a New Subdeployment button. You can also reconfigure subdeployment targets later by using the parent module's subdeployment management page.							
Coherence Clusters Machines	Select the subdeployment you want to use. If you select (none), no targeting will occur.							
Virtual Hosts Work Managers Startup and Shutdown Classes	Subdeployments:							
Deployments	What targets do you want to assign to this subdeployment?							

6) Enter Name as MDB_SUB and Click on OK

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



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

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

8) Foreign Server is created

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



6.3 Foreign Server Configuration

1) Click on ForeignServer-1

ORACLE WebLogic Server Ad	ministration Console 12	c				õ
Change Center	🏠 Home Log Out Preferences 🖾 Record Help					eblogic Connected to: pegjme
View changes and restarts				nmary of Migratable Targets >Sum	mary of Clusters >Summary of JMS Servers >Su	mmary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Modules >MDB_MODULE >Summary of JMS Modules >MDB_MODULE Messages					
Domain Structure	The foreign server	was created successfully.				
	Settings for MDB_MO	DULE				
Environment Servers	Configuration Sub	deployments Targets	Security Notes			
-Custers -Server Templates -Migratable Targets -Coherence Clusters -Machines -Virtual Hosts	This page displays ger	neral information about a .	JMS system module and its reso	urces. It also allows you to confi	gure new resources and access existing r	
Work Managers Startup and Shutdown Classes Deployments	Descriptor File Name	e:	jms/mdb_module-jms.x	ni	The name of the JMS module descriptor file.	More Info
How do I	sort keys, destination quota, distributed destinations, foreign servers, and store-and-forward parameters.					
No task help found.	Customize this tab	le				
	Summary of Resou	rces				
System Status Health of Running Servers	New Delete Showing 1 to 1 of 1 Previous Next					
Failed (1)	🔲 Name 🗠 🞵	Ту	pe	JNDI Name	Subdeployment	Targets
Critical (0)	Eoreignfierver-1	For	eign Server	N/A	MDB_SUB	Cluster-App
Overloaded (0) Warning (0)	New Delete				Showing	1 to 1 of 1 Previous Next

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

	Home Log Out Preferences 🐼 R	lacond Help	Welcome, weblogic Connected to: FCUBSDoma				
hange Center		States and a second					
New changes and restarts	Home > Summary of Custers > Summary Modules > NDB_MODULE > ForeignServ	of Server Templates > Summary of Servers > Summary of 3MS Modules > MDE ren 1	5_MODULE >Foregriserver-1 >Summary of Servers >Summary of JMS				
ick the Lock & Edit button to modify, add or elete items in this domain.	Messages # All changes have been activated. It						
Lock & Edit	Settings for ForeignServer-1						
Release Configuration	Settings for ForeignServer-1						
	Configuration Subdeployment 1	Notes					
imain Structure	General Destinations Connection	n Factories					
Chickonnent Servers Cuters Cuters Server Templates Monable Targets Coherence Cuters Machines What Nots What Nots What Nots	Click the Lock & Editbutton in the O	hange Center to modify the settings on this page.					
- Machines Wrtual Hosts Work Managers	connection factory and destination ob	bjects (queues or topics) can be defined on one 3NDL directory. Use this p					
-Machines -Virtual Hosts -Work Managers -Startup and Shutdown Classes							
- Machines Wrtual Hosts Work Managers	connection factory and destination of del Name: 2MDT Initial Context Factory:	bjects (queues or topics) can be defined on one 3NDL directory. Use this p	page to configure a foreign server.				
Hachines Virtual Nots Virtual Nots Virtual Nots Virtual Nots Status and Shutdown Classes Services Services Services Services Caboversite Create foreign connection factories Create foreign connection factories Create foreign destinations	connection factory and destination of Connection factory and destination of MIDI Initial Context Factory: Connection URL:	sjects (queues or topics) can be defined on one 2400 directory. Use this ; ForeignGerver-1	page to configure a foreign server. The name of this foreign server. More brilo The name of the class that must be instantiated to access the JNDI provider. This class mane depends on the JNDI provider and the vendor				
-Machines -Virbal Hosts -Virbal Hosts -Work Managers -Sarbup and Shutdown Classes -Sarbup Services -Ser	connection factory and destination of Connection factory and destination of MIDI Initial Context Factory: Connection URL:	sjects (queues or topics) can be defined on one 2402 directory. Use this j ForeignGerver-1 [weblogic_indi.WLInitialK]	page to configure a foreign server. The name of this foreign server. More Info The name of the class that must be instantiated to access the JNDI provider. This class name depends on the JNDI provider and the vendor that are being used. More Info The LRL, that WebLopic Server will use to contact the JNDI provider. The syntax of this LRL depends on which JNDI provider is being used. For WebLopic JPS, leave this field blank if you are referenced yield-go.245				



3) Click on Connection Factories

	ministration Cons	sole 12c					Q
Change Center	Home Log C	🏠 Home Log Out Preferences 🖾 Record Help					
View changes and restarts		ODULE >Summary of MODULE >ForeignSe			nary of JMS Servers >Summa	rry of JMS Modules >MDB_MODU	JLE >Summary of JMS
Configuration editing is enabled. Future changes will automatically be activated as you	Settings for Fo	reignServer-1					
modify, add or delete items in this domain.	Configuration	Subdeployment	Notes				
Domain Structure	General Des	tinations Conne	ction Factories]			
ServersServer TemplatesMigratable TargetsCoherence ClustersMachinesVirtual HostsWork ManagersStartup and Shutdown ClassesStartup	another instar This page sum Customize t	nce of WebLogic Serv marizes the foreign	ver running in a di	fferent duster or server, or	a foreign provider, as long a	iccessible via JNDI. A remote o as that provider supports JNDI	onnection factory can be used to refer to
Deployments	New De	lete					Showing 0 to 0 of 0 Previous Next
How do I	Name 4	ŵ	Local JN	DI Name		Remote JNDI Name	
	There are no items to display						
Configure foreign servers Create foreign destinations	New De	lete					Showing 0 to 0 of 0 Previous Next
System Status							

4) Create MDBQCF Connection Factory

ORACLE WebLogic Server	dministration Console 12c		0				
Change Center	🙆 Home Log Out Preferences 🖂 Record I	Help Q	Welcome, weblogic Connected to: pegjms				
View changes and restarts	Home >HDB_HODULE >Summary of Highstable Hodules >HDB_HODULE > PonsionServer-1 >Ex	Home >HDB_WODULE >Summary of Migratelia Tampes >Summary of Custers >Summary of 3HS Servers >Summary of 3HS Modules >HDB_WODULE >Summary of 3HS Modules >HDB_WODULE >Summary of AMS					
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 Connection Fac						
Domain Structure	Foreign Connection Factory Properties The following properties will be used to identif * Indicates required fields * Name: MDD						
Deployments Services Di Messarion *	Remote 3NDI Name: MDI	BQCF					
How do L_	OK Cancel						

5) Click on Destination

	Help Q		Welcome, weblogic Connected to: peggin	
		of 3MS Servers > Summary of 3MS Modules > HDB_MODUU	L >Summary of IMS	
Hessages		pes to take effect.		
Settings for ForeignServer-1				
Configuration Subdeployment Notes				
General Destpations Connection Factories				
A foreign connection factory represents a co another instance of livible.cgc.Server running This page summarizes the foreign connection IP Contomize this table	nnection factory that resides on another g in a different duater or server, or a for factories that have been created for th	eign provider, as long as that provider supports 3HDL.	nection factory can be used to refer to	
New Dalata			Showing 1 to 1 of 1 Previous Next	
🗖 Name 🙃 🛛 🗠	scal 3ND1 Name	Remote JNDI Name		
MORCO?	8007	MDBCCP		
	Hookes HOR, HODULE - Foreign Server-1 + C Hessages ✓ All changes have been activated. However Settings for Foreign/Server-1 Configuration Subdoployment Postes General Configuration - Destinati A foreign connection factory represents a co another instance of WebLopic Server numer This page summarizes the foreign connector © Contomize this table Foreign Connection Factories (Filtered New Distance Mane June Low	Notion +KCE_HCOLE + Foregrifer-in-1 - Configuration Pressages # All changes have been activated. However 1 items must be restarted for the changes Settings for Foreign/Server-1 Configuration - Subdoployment - Notes Configuration - Destinations- Tab A foreign connection factories Configuration - Destinations- Tab A foreign connection factory and there due on another another instance of WebLogic Server nurring in a different due to resiver, or a for This page summarizes the foreign connection factories that have been created for the Configuration Factories (Filtered - Hore Columns Exist) New Constant - Hore Columns Exist) New Configuration - Local 2001 Itame	Hessages All charges have been activated. However 1 items must be restarted for the charges to take effect. Settings for Foreign/Server-1 Configuration Subdeployment Restartion Subdeployment Configuration Connection Factories Configuration Connection Factories Configuration Configuration - Tab A foreign connection factories fractories instance of lifeLogic Server numming in a different charber or server, or a foreign provider, as long as that provider supports 3PCL. This page summarizes the foreign connection factories that have been created for this domain. Customize this table Foreign Connection Factories (Filtered - Hore Columns Doist) Image: Local 30D1 Name	



6) Create MDB_QUEUE

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

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

7) Similarly Create MDB_QUEUE_RESPONSE, MDB_QUEUE_DLQ

	dministration Console 12c		Ŏ
Change Center	Home Log Out Preferences	s 🔊 Record Help	Welcome, weblogic Connected to: pegjms
View changes and restarts	Home >MDB_MODULE >Summar Modules >MDB_MODULE >Forei	ry of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Summary onServer-1 > 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	estination	
modify, add or delete items in this domain.	OK Cancel		
Domain Structure	Foreign Destination Prope	erties	
-Environment -Servers -Ousters -Server Templates -Migratable Targets	The following properties will be * Indicates required fields	e used to identify your new foreign destination.	
Coherence Clusters Machines Virtual Hosts	* Name:	MDB_QUEUE_RESPC	
Work Managers Startup and Shutdown Classes Deployments	Local JNDI Name:	MDB_QUEUE_RESPONSE	
Services	Remote JNDI Name:	MDB_QUEUE_RESPONSE	
How do I 🖃	OK Cancel		
Configure foreign servers	72		
Create foreign connection factories			
Contra Cata			



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

ORACLE WebLogic Server Administration Console 12c

Change Center	and there are and the state of the		and a second sec
View changes and restarts	Home >MD8_MODULE >Summa Modules >MD8_MODULE >Fore	ry of Migratable Targets >Summary of Clusters >Summary of JMS Servers >Sun IonServer:1 >Coefficientation	mary of IMS Modules >MD8_MODULE >Summary of IMS
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Create a New Foreign JHS D		
Domain Structure	OK Cancel	erties	
Environment Servers Ousters		e used to identify your new foreign destination.	
Server Templates Migratable Targets Coherence Clusters Machines	* Indicates required fields	MDB_QUEUE_DLQ	
Wirtual Hosts Work Managers Startup and Shutdown Classes Deckyments	Local JNDI Name:	MDB_QUEUE_DLQ	
B-Services	, Remote JNDI Name:	MDB_QUEUE_DLQ	
How do L.	Of Cancel		
Configure foreign servers	F		

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

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



7. Application Deployment

1) Deploy the EAR with Target as Cluster-App

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

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



Change Center	🟦 Home Log Out Preferences 🔤 Record Help		Welcome, weble	ogic Connected to: base_do
View changes and restarts	Home >Summary of Environment >Summary of Servers >Summary of Deployments >JMS Modules >MDB_MODUL of Deployments	E >Summary of Environmen	t >Summary of Servers >Summary of De	ployments >GWMDB > 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 SubDeployment Creation

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

Managed Servers Start Order

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

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

	Adm	ninist	tration Console					õ	
Change Center	1	🔒 Ho	ome Log Out Preferences 🔤 Record Help	Q			Welcome, wel	ologic Connected to: base_domain	
View changes and restarts	1.	Home >Summary of Deployments							
Configuration editing is enabled. Future changes will automatically be activated as you	5	umm	ary of Deployments						
modify, add or delete items in this domain.		Cont	rol Monitoring						
Domain Structure ⊕ -Environment ⊕ -Depoyments ⊕ -Services ⊕ -Services ⊕ -Services ⊕ -Toragnostics	This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page. To install a new application or module for deployment to targets in this domain, click the Install button.								
			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 		Instal Update Delete Start Stop Next							
Deploy EJB modules	11								
Install a Web application	<u> </u>								
System Status 🗉	1								

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



8.3 Securing File Store Data

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

8.4 t3s Protocol

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

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

8.5 How to Test the Deployment

1) Navigate to Services → JMS Modules → JMS_MODULE → MDB_QUEUE → MONITORING

View changes and restarts	Home >ForeignServer-1 >Configuration >MDBQCF >JMS_Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE					
Configuration editing is enabled. Future	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 Use this page to view statistics about all of the members of a uniform distributed queue. Click on the individual member destination name in the table below to manage the messages on the destination. To access the uniform distributed queue's message management page, select the check box next to its name, and then click the Show Messages button. Outsters Clusters Wingratable Targets Customize this table						manage the messages on that
Coherence Servers	Destinations (Filtered	- More Columns Exist)				
Machines	Show Messages					Showing 1 to 2 of 2 Previous Next
	🔲 Name 🗇			Consumers Current	Consumers High	Consumers Total
-Services	JMS_MODULE!JMS	Server-1@MDB_QUEUE		64	64	64
How do I	JMS_MODULE!JMS	Server-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	This page summarizes the available m selected messages, move messages to messages from a destination.	essages for a stand-alone que another destination, export r	ue, a distributed queue, or a topic o nessage contents in XML format to a	durable subscriber. Use this page to view mess another file, import XML formatted message co	age details, create new messages, delete ontents from another file, or drain all the
₽-Environment	Click on a message to view its content	i.			
ServersVirtual HostsVirtual HostsV	Message Selector:	imns Exist)		Apply	
Green Services Green Services Green Services The Service Ser	New Delete v Move v Imp	Export ~			Showing 1 to 0 of 0 Previous Next
How do I	🔲 ID 🔅 CorrId	Time Stamp	State String	JMS Delivery Mode	Message Size
Manage queue messages			There are no items	to display	
Manage distributed queue messages Manage topic durable subscribers	New Delete V Move V Imp	Export ~			Showing 1 to 0 of 0 Previous Next
System Status					



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

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

4) Message is Sent

change center							
View changes and restarts		Home >Configuration >MDBQCF >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages >JMS Modules >JMS_MODULE >MDB_QUEUE >Summary of JMS Messages					
Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.	Messages # JMS message sent successfully.						
	Summary of JMS Messages						
Domain Structure							
	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 message selected messages from a destination, export message contents in XML format to another file, import XML formatted message contents from another file, or draws a message to view its contents. Message Selector: Customize this table						
- Messaning	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	ID:<257876.1411126889162.0>		Fri Sep 19 17:11:29 IST 2014	receive transaction	Persistent	472	
System Status	New Delete V Move V Import Export	New Delete V Move V Import Export V Showing 1 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> <u>threads</u>

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

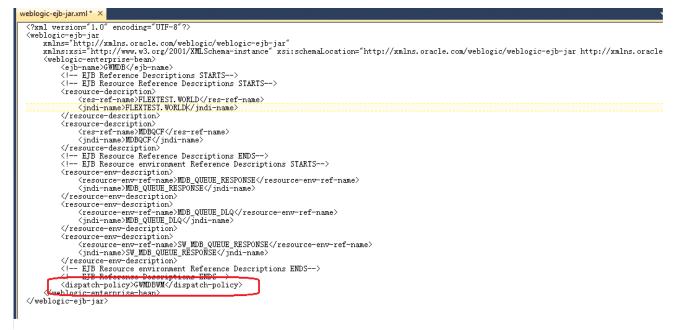
The solution is to create a work manager with a max threads constraint and assign the proxy services dispatch policy to this work manager.

Steps to create custom work manager

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

8.6.1 Modify weblogic-ejb-jar.xml

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



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

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



8.6.2 Work Manager Creation

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

WEDLOGIC SEIVER AU	Innsulation Console 120							
Change Center	🏠 Home Log Out Preferences 🔤 Record Help		Q	Welcome, weblogic Connected to: FCUBSDomain				
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrain	t-0 >Summary of Work Ma	nagers >WorkManager-0 >Summary of Work Managers >MaxThreadsCon	straint-0 >Summary of Servers >Summary of				
No pending changes exist. Click the Release Configuration button to allow others to edit	Environment >Summary of Servers >Summary of Work N Create a New Work Manager Component	nvironment >Summary of Servers >Summary of Work Managers ate a New Work Manager Component						
the domain.	Back Next Finish Cancel	ck Next Finish Cancel						
Lock & Edit								
Release Configuration	Select Work Manager Definition type							
Domain Structure	What type of Work Manager, Request Class or Constr	aint do you want to creat	te?					
FCUBSDomain	🖲 Work Manager							
Servers	Response Time Request Class	sponse Time Request Class						
ClustersCoherence Clusters								
Machines	Fair Share Request Class							
Virtual Hosts Work Managers	Context Request Class							
Startup and Shutdown Classes	Maximum Threads Constraint							
Deployments Services								
Security Realms	Minimum Threads Constraint							
Diannostics	Capacity Constraint							
How do I								
Create application-scoped constraints	Back Next Finish Cancel							
Create application-scoped request classes								
ORACLE WebLogic Server Adr	ninistration Console 12c			<u> </u>				
Change Center	💼 Home Log Out Preferences 🔤 Record Help		Q	Welcome, weblogic Connected to: FCUBSDomain				
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstraint	nt-0 >Summary of Work Ma	nagers >WorkManager-0 >Summary of Work Managers >MaxThreadsCons	straint-0 >Summary of Servers >Summary of				
No pending changes exist. Click the Release	Environment >Summary of Servers >Summary of Work I	lanagers						
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							
Demain Structure	The following properties will be used to identify your	new Work Manager.						
Domain Structure FCUBSDomain	* Indicates required fields							
Environment								
+ Servers Clusters	What would you like to name your new Work Manager							
Coherence Clusters	* Name: GWMDBWM							
Virtual Hosts								
Work Managers Startup and Shutdown Classes	Back Next Finish Cancel							
Deployments								
Services Security Realms								
-								
Change Center	🏠 Home Log Out Preferences 🔤 Record Help		٩	Welcome, weblogic Connected to: FCUBSDomain				
View changes and restarts	Home >Summary of Work Managers >MaxThreadsConstrain Environment >Summary of Servers > Summary of Work M		nagers >WorkManager-0 >Summary of Work Managers >MaxThreadsCons	traint-0 >Summary of Servers >Summary of				
No pending changes exist. Click the Release Configuration button to allow others to edit	Create a New Work Manager Component	anagers						
Lock & Edit	Back Next Finish Cancel							
Release Configuration	Select deployment targets							
		Logic Server instances o	or Clusters. Select the same targets on which you will deploy applica	tions that reference the Work Manager.				
Domain Structure FCUBSDomain			······································					
Environment	Available targets :							
Servers Clusters	Common		7					
Coherence Clusters	Servers		-					
Machines Virtual Hosts	AdminServer							
Work Managers	Clusters		7					
Startup and Shutdown Classes			-					
Services Security Realms	Cluster-App All servers in the cluster							
Interoperability			-					
Lt* Diagnostics	Cluster-JMS All servers in the cluster							
How do I	An servers in the cluster							
Create application-scoped constraints	Back Next Finish Cancel							
Create application-scoped request classes Create application-scoped Work Managers								
Create application-scoped work managers				1				



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

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

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

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



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

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

Street States Street States Street St	View changes and restarts	Home >MaxThreadsConstrant-0 >Summary o	f Work Managers >WorkManager-0 >Summary of Work Managers >MaxThreads	Constraint-0 >Summary of Servers >Summary of Environment >Summary of	
Is take effect. I data with changes Undo Al Changes Sections for CWMDOWH Cenfiguration Targets Note Control		Servers - Summary of Titork Managers - SWHMOBWH			
Undex All Changes Demain Structure Collections Collections Collections Collections Collections Collections Structure Collections Collections Structure Collections Productions Structure Option Option Structure Option Structure Option Structure Option Option Option Option Option <td></td> <td colspan="3">Settings for GWMD8WM</td>		Settings for GWMD8WM			
Some in Structure CutoConstruction CutoConstruction <td< td=""><td>Activate Changes</td><td>Configuration Targets Notes</td><td></td><td></td></td<>	Activate Changes	Configuration Targets Notes			
CuteSDDemain Use this page to define the request diases and constraints for the selected global Work Hanager. Disconcenter Interview of this Hilling in the second of the second of this Hilling in the second of t	Undo All Changes	Save			
Servers We value specified) The user-specified name of this HBean instance. More Enfance Coherence Clusters (None configured) • Nem A request class associated with this Work Hanager. This may be a FairDareRequestClass, Here Enfance Write Headgers Statup and Shuddene Classes (None configured) • Nem The minimum number of threads allocated to resolve deadlock. Mere Enfance Security Realins (None configured) • Nem The minimum number of threads allocated to resolve deadlock. Mere Enfance Security Realins (None configured) • Nem The maximum number of threads allocated to resolve deadlock. Mere Enfance Center application-scoped constraints (None configured) • Nem The maximum number of concurrent threads that can be allocated to resolve deadlock. Mere Enfance Center application-scoped constraints (None configured) • Nem The maximum number of concurrent threads that can be allocated to resolve deadlock. Mere Enfance Center application-scoped constraints (None configured) • Nem The total number of resource that can be queued or executing before Center application-scoped constraints (None configured) • Nem The stating and the declased as total. Here Enfance Center application-scoped constraints (None configured) • Nem The stating and the declased as total. Here Enfance Center application-scoped constraints (None configured) • Nem The stating and the declased as total. Here Enfance Center application-scoped constraints (None configured) • Nem The addition to tas total number of resource threads that can be allocated as total. Here Enfance Center applicatio	CU85Domain -	Use this page to define the request class	ses and constraints for the selected global Work Nanager.		
Coherence Clusters Writel Heads Writel Heads Writel Heads Considered Studiene Classes Descoutery Relations Security Relations Security Relations Considered Studiene Classes Descoutery Relations Considered Studiene Classes Considered Studiene Classes Descoutery Relations Considered Studiene Classes Considered Studi	Servers	Name:	(No value specified)	The user-specified name of this MBean instance. More Info	
Startup and Shutdown Classes Operation and Shutdown Classes The mainmum number of threads allocated to resolve deadlocls. More Service Se	Coherence Clusters Machines Machines Wirk Henks Work Hanagers Startup and Shuddown Classes Degloyments Be Senvices Security Realms Be Thereopensibility	🛃 Request Class:	(None configured)	FairShareRequestClass, ResponseTimeRequestClass, or a	
Security Realins Decomposability Constraint: (None configured) New The maximum number of concurrent threads that can be allocated to requests. More Info The maximum number of concurrent threads that can be allocated to requests. More Info Constraint: (None configured) New (None configured) New The maximum number of concurrent threads that can be allocated to requests. More Info (None configured) New (None configured) (None c		👩 Minimum Threads Constraint:	(None configured) New	The minimum number of threads allocated to resolve deadlocks. Hore Info.	
None Configured) • New The total number of recents that can be queued or executing before Weblager Server degrads that can be queued or executing before Weblager Server degrads that can be queued or executing before Weblager Server degrads that can be queued or executing before Weblager Server degrads that can be queued or executing before Weblager Server degrads that can be queued or executing before Weblager Server degrads that can be queued or executing before Weblager Server degrads the data with threads should be detected, and what action to the Create application-scoped Work Managers Create application-scoped Work Managers If server default behavior • Specify how stuck threads should be detected, and what action to the Create global request classes Create global request classes 0 True after which a rescating thread is declared as stuck. Here brief clear the stuck thread is a stuck. Here brief clear the stuck thread is a stuck thread is a stuck thread is a stuck thread in a stuck thread is stuck thread is a stuck thread is a stuck thread is a s		🚯 Maximum Threads Constraint:	(None configured)	The maximum number of concurrent threads that can be allocated to execute requests. Hore Info	
Create application-scoped request disses Create application-scoped work Managers Create application-scoped Work Managers Max Stuck Thread Time: Max Stuck Thread Time: 0 Stuck Thread Count: 0 Stuck Thread Count: 0 When Unstuck When Unstuck were dealer work manager and threads were dealer work w		de Capacity Constraint:	(None configured)	The total number of requests that can be queued or executing before WebLogic Server begins rejecting requests. Hore Info	
Create global constraints Max Stuck Thread Time: 0 Trou after which a consulting thread to declared as stuck. Here before the stuck threads after which the Worktlanager is shutcher after which the shutcher after after after after which the shutcher after a	Contraction of the second s	😸 Stuck Thread Action:	Use server default behavior	Specify how stuck threads should be detected, and what action to take should they occur. Hore Defo	
Create global Work Hanagers Stuck Thread Count: Iteration Number of stuck threads after which the WorkTanager is shaddown Info ystems Status We Resume When Unstuck When Unstuck When Unstuck	Create application-scoped Work Managers Create global constraints Create global request classes Create global Work Managers	Max Stuck Thread Time:	0	Treat after which a concuting thread is declared as stack. Here ${\rm Drfo}_{\rm em}$	
Info_		Stuck Thread Count:	0	. Herefore of stuck threads after which the Workthinsaper is shutdown. Here, ${\rm Defe}_{\rm m}$	
		2 Resume When Unstuck		Whather to resource such manager area the stack threads some cleared. Here Info	
Bath of Kunning Jarvers	tealth of Running Servers	(fave			



Change Center	🙆 Home Log Out Preferences 🔤 R	ecord Help		Welcome, weblogic Connected to: FCUBSDor
View changes and restarts	None SMartThreadsContraint-0 -Summary of Work Managers SWorkManager 0 -Summary of Work Managers -MartThreadsContraint-0 -Summary of Servers -Summary of Environment -Summary of Servers -Summary of Work Managers -SWMDDWH			
Pending changes exist. They must be activated to take effect.	Settings for GWMDBWM			
Activate Changes	Configuration Targets Notes			
Undo All Changes	Save			
Domain Structure				
FCUBSDomain	Use this page to define the request d	asses and constraints for the selected global Work Han	ager.	
B-Environment Servers B-Clusters	Name:	(No value specified)		The user-specified name of this Mbean instance. Hore Info
Coherence Clusters Hachines Virtual Hoots Virok Managers Startup and Shutdown Classes Security Realms Security Realms Security Realms 	🛃 Request Class:	(None configured) • New		A request class associated with this Work Manager. This may be a FairShareRequestClass, ResponseTimeRequestClass, or a ContextRequestClass. More Info
	🛃 Minimum Threads Constraint:	(None configured)		The minimum number of threads allocated to resolve deadlocks. More Info
	Haximum Threads Constraint:	MaxThreadsConstraint-0 • New)	The maximum number of concurrent threads that can be allocated to execute requests. More Info
E fracentics	🕂 Capacity Constraint:	(None configured) * tiew		The total number of requests that can be queued or executing before WebLogic Server begins rejecting requests. More Info
Create application-scoped constraints Create application-scoped request classes	🛃 Stuck Thread Action:	Use server default behavior	•]	Specify how stuck threads should be detected, and what action to take should they occur. More Info
Create application-scoped Work Managers Create global constraints	Max Stuck Thread Time:	0		Time aftar which a conciding thread is declared as stuck. Here before
Create global request classes Create global Work Managers	Stack Thread Count:	0		Number of stuck threads after which the WeikHamaper is shutdown. Here ${\sf Mot}_{\rm ext}$
System Status 🖂	🗹 Resume When Unstuck			Whether in resume work manager size the stack threads were cleared. Here to be-
Health of Running Servers				
Failed (0)	Save			

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

8.7 How High Availability is achieved

1) Application Server:

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

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



8.8 How to setup for Scheduler/Notifications

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

8.9 What other modules uses JMS Queue's

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

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

8.10 References

- 1) FCUBS_12.1_Weblogic12c_Middleware_Practices.doc
- 2) GATEWAY_Applications_WL.doc
- 3) Resource_Creation_WL.doc





Configuring JMS on Weblogic Server 12c [May] [2022] Version 14.5.5.0.0

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

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

Copyright © [2007], [2022], Oracle and/or its affiliates. All rights reserved.

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

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

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

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

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

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