Configuring Weblogic Server 12c Oracle Banking ELCM Release 14.4.0.0.0 [Apr] [2020]



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1. Introduction

1.1 Purpose of this Document

The purpose of this document is to explain the steps required for Configuration and applying best practices in cluster mode for

- FCUBS 14
- Weblogic Version 12.2.1.2.0
- JDK 1.8.0_131

1.2 WebLogic Server Overview

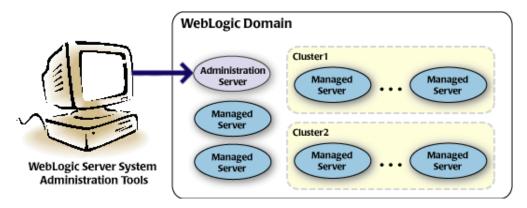
This section of the document provides brief explanation on the main components involved in WebLogic server

Domain

A domain is the basic administration unit for WebLogic Server instances. A domain consists of one or more WebLogic Server instances (and their associated resources) that is managed with a single Administration Server. Multiple domains can be defined based on different system administrators' responsibilities, application boundaries, or geographical locations of servers. Conversely, a single domain can be used to centralize all WebLogic Server administration activities.

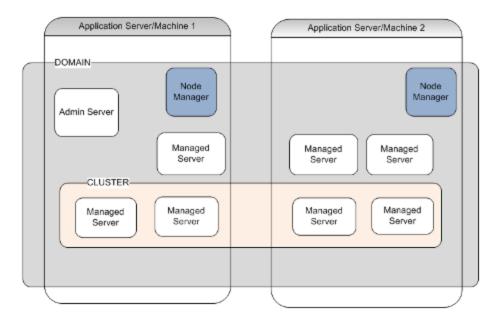
Each WebLogic Server domain must have one server instance that acts as the Administration Server. Administration Server can be used via the Administration Console or using the command line for configuring all other server instances and resources in the domain.

WebLogic Domain Structure



Weblogic 12c Domain Overview





Administration Server

A domain includes one WebLogic Server instance that is configured as an Administration Server. All changes to configuration and deployment of applications are done through the Administration Server. The Administration Server provides a central point for managing the domain and providing access to the WebLogic Server administration tools.

These tools include the following:

- WebLogic Server Administration Console: Graphical user interface to the Administration Server.
- WebLogic Server Node Manager: A Java program that lets you start and stop server instances - both Administration Servers and Managed Servers - remotely, and to monitor and automatically restart them after an unexpected failure.

Admin server start mode needs to be configured as Production Mode.

Managed Server

In a domain, server instances other than the Administration Server are referred to as Managed Servers. Managed servers host the components and associated resources that constitute your applications—for example, JSPs and EJBs.

When a Managed Server starts up, it connects to the domain's Administration Server to obtain configuration and deployment settings. In a domain with only a single WebLogic Server instance, that single server works as both the administration server and managed server.

Node Manager



The Managed Servers in a production WebLogic Server environment are often distributed across multiple machines and geographic locations.

Node Manager is a Java utility that runs as separate process from WebLogic Server and allows you to perform common operations tasks for a Managed Server, regardless of its location with respect to its Administration Server. While use of Node Manager is optional, it provides valuable benefits if your WebLogic Server environment hosts applications with high availability requirements.

If you run Node Manager on a machine that hosts Managed Servers, you can start and stop the Managed Servers remotely using the Administration Console or from the command line. Node Manager can also automatically restart a Managed Server after an unexpected failure.

Machine

A machine in the Weblogic Serve context is the logical representation of the computer that hosts one or more Weblogic Server instances(servers). The Admin Server uses the machine definitions to start remote servers through the Node Managers that run on those servers. A machine could be a physical or virtual server that hosts an Admin or Managed Server that belongs to a domain.

Managed Server Cluster

Two or more Managed Servers can be configured as a WebLogic Server cluster to increase application scalability and availability. In a WebLogic Server cluster, most resources and services are deployed to each Managed Server (as opposed to a single Managed Server,) enabling failover and load balancing.

The servers within a cluster can either run on the same machine or reside in different machines. To the client, a cluster appears as a single WebLogic Server instance.

Dynamic Cluster

A dynamic cluster is any cluster that contains one or more dynamic servers. Each server in the cluster will be based upon a single shared server template. The server template allows you to configure each server the same and ensures that servers do not need to be manually configured before being added to the cluster. This allows you to easily scale up or down the number of servers in your cluster without the need for setting up each server manually. Changes made to the server template are rolled out to all servers that use that template.

You cannot configure dynamic servers individually; there are no server instance definitions in the config.xml file when using a dynamic cluster. Therefore, you cannot override the server template with server-specific attributes or target applications to an individual dynamic server instance.

When configuring your cluster you specify the maximum number of servers you expect to need at peak times. The specified number of server instances is then created, each based upon your server template. You can then start up however many you need and scale up or down over time according to your needs. If you need additional server instances on top of the number you originally specified, you can increase the maximum number of servers instances (dynamic) in the dynamic cluster configuration.

Server Templates

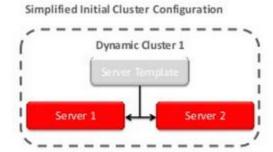


A single server template provides the basis for the creation of the dynamic servers. Using this single template provides the possibility of every member being created with exactly the same attributes. Where some of the server-specific attributes like Servername, listen-ports, machines, etc. can be calculated based upon tokens.

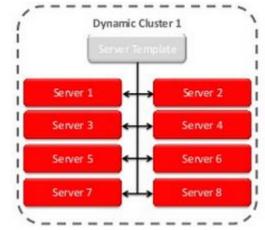
You can pre-create server templates and let Weblogic clone one when a Dynamic Cluster is created.

When none is available a server template is created with the Dynamic Cluster. The name and the listen ports are the only server template attributes that you provide during Dynamic Cluster creation.

Simplified Configuration with Scalability and Elasticity



Simplified Operations for Cluster Scale Out





1.3 **Pre-Requisites**

In this document, we are going to create a domain with two managed servers. The managed servers are going to be created on two different physical servers (nodes). Note that, this document has been prepared based on a test conducted in Linux servers.

This requires Weblogic Server of same version to be installed on both the machines and services

Environment

2 servers where linux is installed, 1 will be primary where admin console will be running along with managed servers and the other where only managed servers will be.

Softwares

- 1) Oracle Weblogic Server 12.2.1.2 installed on both the machines under same folder structure.
- 2) JDK 1.8 Latest available version installed on both the machines. In this document JDK1.8.0_131 version is used.

Clock Synchronization

The clocks of both the servers participating in the cluster must be synchronized to within one second difference to enable proper functioning of jobs otherwise it will lead to session timeouts.

Enable Graphical User Interface (GUI)

Establish a telnet or SSH connection to primary server. Start X-manager (or any similar tool) in windows desktop. Export DISPLAY environment variable to the machine IP where x-manager is running.

Syntax: export DISPLAY=<ip-address>:<port>

Test using xclock



2. Domain Configuration

2.1 **Domain Creation**

Weblogic domain creation and configuration will be done from primary server.

From primary server, launch the fusion Middleware configuration wizard using the command **config.sh** available under \$WLS_HOME/common/bin directory.

1) In the Welcome screen, select "Create a new domain" option. Enter the domain name and Click on **Next**.

Configuration Type	
🙊 Create Domain	
🗼 <u>Templates</u>	
Administrator Account	
Domain Mode and JDK	
Advanced Configuration	
Configuration Summary	What do you want to do?
Configuration Progress	
U End Of Configuration	 Create a new <u>d</u>omain Update an existing domain
	Domain Location: /scratch/app/w12c/user_projects/domains/FCUBSDomain Browse
<u>H</u> elp	Create a new domain.



2) Select the required templates from **Available Templates** and click **Next**.

Templates			
Create Domain Templates Administrator Account Domain Mode and JDK Advanced Configuration Configuration Summary Configuration Progress End Of Configuration	Create Domain Using Product Templates: Template Categories: All Templates Available Templates Basic WebLogic Server Domain - 12.1.3.0 [Wserver] * WebLogic Advanced Web Services for JAX-RPC Extension - 12.1.3.0 [oracle_common] WebLogic Advanced Web Services for JAX-WS Extension - 12.1.3.0 [oracle_common] WebLogic Coherence Cluster Extension - 12.1.3.0 [wserver] WebLogic JAX-WS SOAP/JMS Extension - 12.1.3.0 [oracle_common]		
	Create Domain Using Custom Template: Template location: /scratch/app/wl12c Browse		
Help	< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel		

- 3) Specify Administrator User Name and Password.
 - > The specified credentials are used to access Administration console.
 - You can use this screen to define the default WebLogic Administrator account for the domain. This account is used to boot and connect to the domain's Administration Server. Click Next.



Administrator Account	
A Create Domain	1
Templates	
Administrator Account	
Domain Mode and JDK	
Advanced Configuration	
Configuration Summary	
Configuration Progress	
U End Of Configuration	Name weblogic
	Password ••••••
	Confirm Password
	Must be the same as the password. Password must contain at least 8 alphanumeric characters with at least
	one number or special character.
Help	< <u>Back</u> <u>Next</u> Einish Cancel



4) Select Server Startup as **Production Mode** and the available **JDKs**. Click **Next**.

Create Domain Templates Administrator Account Domain Mode and JDK Advanced Configuration Administration Server Node Manager Configuration Summary Configuration Progress End Of Configuration	Domain Mode and JDK	
	Templates Administrator Account Domain Mode and JDK Advanced Configuration Administration Server Node Manager Configuration Summary Configuration Progress	Domain Mode Development Utilize boot.properties for username and password, and poll for applications to deploy. Production Require the entry of a username and password, and do not poll for applications to deploy. JDK Oracle HotSpot 1.7.0_75 /usr/java/jdk1.7.0_75
	Help	



5) Select the check box adjacent to Administration Server and Node Manager. Click Next.





6) Specify the Administration server Listen address and Listen port.

Administration Server		_
Create Domain Templates Administrator Account Domain Mode and JDK Advanced Configuration Administration Server Node Manager Configuration Summary Configuration Progress End Of Configuration	Server Name AdminServer Listen Addresss All Local Addresses Listen Port 7001 Enable SSL V SSL Listen Port 7101 Port number must be between 1 and 65535, and different from listen port and coherer	
Help	< Back Next > E	inish Cancel

Note: The default Listen port is 7001 and SSL port is 7101. This could be changed to any other available port. Ensure to make a note, of this port since the same is required for launching the Admin console, post domain creation.

Note: Check for the port availability using the command - netstat -anp |grep <Port no>

The next screen navigates to NodeManager configuration.



7) Configure Node Manager

Select **Per Domain Default Location** option from **Node Manager Type.** And in the **Node Manager Credentials**, provide the username and password for the nodemanager. Click **Next**.

Node Manager				
A Create Domain	1			
Templates				
ddministrator Account				
Domain Mode and JDK				
Advanced Configuration	Node Manager Type			
Administration Server	Pr <u>D</u> omain Default	Location		
Node Manager	OPer Domain <u>C</u> ustom	Location		
Configuration Summary	Node Manager Hom	e: pp/wll2c/user_projects/domains/FCUBSDomain/nodemanager Browse		
Configuration Progress	🔿 <u>M</u> anual Node Manag	er Setup		
U End Of Configuration	Node Manager Credenti	alc		
	Username:	weblogic		
	Password:	••••••		
	Confirm Password:	••••••		
	Must be the same as the password. Password must contain at least 8 alphanumeric characters with at least one number or special character.			
	one number or special character.			
Help		< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel		



8) Verify the details and click **Create**. The domain creation process is initiated and the progress of completion is indicated.

		FUSIC	N MIDDLEWA	
Create Domain Templates Administrator Account Domain Mode and JDK Advanced Configuration Administration Server Node Manager Configuration Summary Configuration Progress End Of Configuration	View: Deployment FCUBSDomain (/scratch/app/w12c/user_projects/ Server AdminServer	Name Description Author Location	Create a basi Oracle Corpo	gic Server Domain c WebLogic Server don oration o/w12c/wIserver/com



9) Click Next.





10) The **Configuration Success** message will be displayed as follows:

Configuration Success		
A Create Domain	•	
A Templates	Oracle Weblogic Server Configuration Succeeded	
4 Administrator Account	New Domain FCUBSDomain Creation Successful	
Oomain Mode and JDK	Domain Location	
Advanced Configuration	/scratch/app/wl12c/user_projects/domains/FCUBSDomain	
4 Administration Server	Admin Server URL	
V Node Manager	http://ofss222565:7001/console	
Configuration Summary		
Configuration Progress		
Configuration Success		
Help	< <u>B</u> ack <u>N</u> ext > <u>Einish</u>	Cancel

The Admin Server console URL is as indicated below:

http://<IP address>:<admin console port>/console

- <IP address >: Host on which domain was created.
- <admin console port> : Port specified in Administration Server configuration page.

In this case the Admin Console URL is: <u>https://<server1hostname>:7101/console</u>



2.2 Pack and Unpack Domain

The domain structure is expected to be copied to the second server during domain creation. To copy the same, you can use pack and unpack utility provided under \$WLSHOME/common/bin.

<u>Pack</u>

Pack domain in primary server:

./pack.sh -managed=true -domain=/scratch/app/wl12c/user_projects/domains/FCUBSDomain - template=/tmp/FCUBSDomain.jar -template_name="FCUBSDomain"

<u>Unpack</u>

Unpack FTP FCBUSDomain.jar in binary mode to secondary server under /tmp area and unpack the domain using unpack utility provided under \$WLSHOME/common/bin

./unpack.sh -domain=/scratch/app/wl12c/user_projects/domains/FCUBSDomain - template=/tmp/FCUBSDomain.jar

2.3 Start Admin server

Admin server is started on the primary server. Login to primary server and navigate to folder \$DOMAIN_HOME/bin and execute startWeblogic.sh.

2.4 Start Node Manager

Node Manager needs to be started on both the servers. Before starting the node mananger update ListenAddress to the Hostname/IP Address of the machine in nodemanager.properties located in folder \$DOMAIN_HOME/nodemanager

To start the node manager login to the servers and navigate to folder \$DOMAIN_HOME/bin and execute **NodeManager.sh**



3. Cluster Configuration

Dynamic Cluster configuration involves below steps

- 1) Machine Configuration
- 2) Dynamic Cluster Creation: In a normal WebLogic Cluster you define Managed Server and add them to Cluster. In Dynamic Cluster, you select number of Servers you want in Cluster and Server Template you wish to assign to Servers in this WebLogic Dynamic Cluster.
- Server template modification: Servers (or Managed Server) that are part of WebLogic Dynamic Cluster will have properties taken from Server Template.
 Modify server template for best practices parameters for Dynamic Servers (part of Dynamic Cluster), you modify Server Template that is applicable to Dynamic Cluster. These settings are applicable to all the managed servers.
- 4) Activate Changes which would automatically create the managed servers(as mentioned in the number of servers required parameter).

Calculate Number of Servers Required:

For every 50 logged in FLEXCUBE users require one managed server of size 8GB. i.e. for 300 logged in FLEXCUBE users, it is recommended to have 6 managed servers. Based on the logged in users that needs to be supported decide on the number of the managed servers required. This parameter is required later in the dynamic cluster creation.



3.1 Machines Configuration

 Login into Admin Console and Navigate to FCUBSDomain → Environment → Machine and Click New

ORACLE WebLogic Server Ad	dministration Console 12c	Q
Change Center	🔒 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Summary of Machines	
Click the Lock & Edit button to modify, add or delete items in this domain.	Summary of Machines	
Lock & Edit Release Configuration	A machine is the logical representation of the computer that hosts one or more WebLogic Server instances (servers). server in a cluster to which certain tasks, such as HTTP session replication, are delegated. The Administration Server servers.	WebLogic Server uses configured machine names to determine the optimum uses the machine definition in conjunction with Node Manager to start remote
Domain Structure	This page displays key information about each machine that has been configured in the current WebLogic Server dom	nain.
FCUBSDomain Denorment -Servers Coherence Clusters -Chorence Clusters -Machines -Virtual Hosts -Work Managers	Customize this table Machines Click the Lock & Edit button in the Change Center to activate all the buttons on this page. New Clone Delete	Showing 0 to 0 of 0 Previous Next
Startup and Shutdown Classes Deployments	Name 🗞	Туре
Services Security Realms	There are no items to display	
-Interoperability -Diagnostics	New Clone Delete	Showing 0 to 0 of 0 Previous Next
How do I		
 Create and configure machines Assign server instances to machines Clone machines 		

2) Enter the machine name and click Next

ORACLE WebLogic Server A	dministration Console 12c	0
Change Center	🕼 Home Lag Dut. Preferences 🚾 Record: Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Hore -Summary of Machines	
No pending changes exist. Click the Palease Configuration button to allow others to edit the domain. Lock & ESI Release Configuration	Create a New Machine Back Image: Cancel Hachine Identify Cancel The following smeetices will be used to identify your new Machine. The following smeetices will be used to identify your new Machine.	
Donaia Structure	* Indicates required fields	
FOIBDenais FOIBDenais FOIBDenais Formanent Severs Custers Custers Custers Custers Vitual Hosts Vitual Hosts Vitual Hosts Soft Service Formation Fo	What would you like to name your new Hachine? * Marne: Specify the type of machine operating cystem. Machine OSI Differ Back Jack Fronte Cancel	
How do I		



3) Enter the Listen Address and Listen Port(this is the port mentioned in nodemanager.properties file) and click Finish

WebLogic Server Att	Inistation Console 120	<u> </u>
Change Center	🏦 Home Lag Out Preferences 🖾 Record Help	Welcome, weblogic Connected to: FCUBSDomain
Wew changes and restarts	Home >Summary of Machines	
No pending changes exist. Click the Release Configuration battan to allow others to edit the domain. Look & Edit Release Configuration	Back Print Cancel Node Hanager Properties The following properties will be used to configure the Node Hanager on this machine.	
Domain Structure	What type of Node Hanager is running on this server, and what protocol should be used to communicate with it?	
FCUBSDomain A Environment	Type: SSL *	
B-Clusters	For a Java based node manager, what address and part is this Jinda Manager configured to listen at?	
"Machines "Virtual Hests "Work Managers	Listen Address:	
Startup and Shutdown Classes	Listen Port: 5556	
B Services Security Realins B Interoperability	For a script based node manager, additional propurties no, be configured.	
Theoretics *	Node Manager Home:	
How do I	Shell Command:	
Create and configure machines Assign server instances to machines	Debug Enabled	
Assign server instances to machines Delete machines	Deolog Ensoles	
	Back New Finish Cancel	
System Status		
Health of Running Servers		

4) Machine is created

ORACLE WebLogic Server	Administration Console 12c		<u> </u>
Change Center	A Hene Lag Out. Preferences 🖾 Hourd Help	A.	Welcome, weblagic Gameted to: PCUB5Donai
View changes and restarts Click the Lack & Edit button to modify, add or delete items in this domain.	Harte - Serrervey of Machines Messages # All changes have been activated. No restarts are necessar	P	
Lock & Edit	Summary of Hachines		
Consists Structure PCUBSCensis CUBSCensis Content Convers Co	server in a cluster (s which certain tasks, such as HTTP seas servers This page displays ley information about each machine that is Castomize this table Hachines Chick the Lock & Pale button in the Change Center to activit	en replication, are delegated. The Administration S has been configured in the current WebLugic Serve	went), Weblicogie Server aues configured muchine names to determine the optimum ever uses the machine definition in conjunction with Hode Manager to start remate r domain.
B-Services	New Close Detete		Showing 1 to 1 of 1 Previous Next
Security Realins Theraperability	Name &	1	yee
R-Rainastics	Machine1		lachine
How do I_	Rame Clene Dolete		Showing 1 to 3 of 5 Previous Next
Create and configure machines Assign server instances to machines Over machines Delete machines			



5) Similarly create a new machine entry for the other server

Change Center	a Home Log Out: Preferences IM Record Help	R Welcome, weblogic Connected to: PCUBSDom
Wew changes and restarts	Home -Semmary of Plachines	
Click the Lock & Edit batton to modify, add or delete items in this domain.	Pressages # All changes have been activated. No restarts are recessary.	
Lock & Eot	Summary of Machines	
Release Centigotation		
Domain Structure		more WebLogic Server instances (servers). WebLogic Server som configured machine names to determine the optimum
Cutto Domain	 server in a duster to which certain tasks, such as HTTP session replication servers. 	are delegated. The Administration Server uses the machine definition in conjunction with Node Manager to start remote
Bwironnert	This page displays key information about each machine that has been com	Envirad in the connect Middl axis Cancer devision
Servers	They page another they international above, each machine that they been can	Altered of the Context Medicality, Served annuality
B-Cluttern Coherence Chotern		
Bachines	Customize this table	
Virtual Hests	Machines	
	Click the Lock & Edif better in the Change Center to activate all the butt	ans on this page.
-Deployments	and a second s	
B-Services	New Clove Delete	Shaving 1 to 2 of 2 Previous Next
Security Realing	Name A	Title
-Interiourskille	• Nadisel	
B Interoperability B Observation		Machine
B Ownerfin	EL PROPERTY AND A STATE OF A STAT	
B Oswantin	E Padrez	Madine
B-Character	EL DESERVICES	Madhine Showing Lto 2 of 2. Presian Next
B-Diversettint lever de L Create and configure machines	E Padiez	1
B Oswantin	E Padiez	1

Verifying machine status

Before starting the managed servers, ensure that the Node manager Status of all the machines are "Reachable".

In the console, navigate through Domain structure \rightarrow Machines \rightarrow machine1 \rightarrow Monitoring \rightarrow Node Manager Status. Status should be **Reachable.**

ORACLE WebLogic Server	dministration Console 12c		õ
Change Center	A Home Log Dut Pheferences 🖾 Incond	Helo Q	Welcome, weblagic Connected to PCUBSDomain
Wew changes and restarts	Home -Summary of Plachimes -Plachime1 -Summ	many of Hachines >Hachine2 >Summary of Hachines >Hac	chine1.>Summery of Rechines.>Rechine2.>Summery of Mechines.>Machine1.
Click the Lock & Edit betten to modify, add or delete items in this domain.	Settings for Machine1		
Lack & Edit	Configuration Homboring Notes		
Release Carliguration	Node Manager Status Node Manager L	45	
Domain Structure	This page allows you to view current status	information for the Node Manager instance configure	d for this machine.
Brevers Servers BrClusters	Status:	Reschable	Context status of this Node Hanager. Hore Jafu
Server Templates 	Version:	12.1.3	Version string returned from the Node Manager. More Info
Hackenes Wind Hists Wink Hanagers Starbup and Shutdown Classes Starbup and Shutdown Classes			

3.2 **Dynamic Cluster Creation**

1) Login into Admin Console and Navigate to FCUBSDomain → Environment → Clusters → New → select **Dynamic Cluster**



ORACLE WebLogic Server	dministration Console 12c						ຼ
Change Center	🙆 Here Log Out Preferences 🖾 Rec	ord Help	9			Welcome, weblogic Connected	··· FOUBSDoesai
Were changes and restarts No pening changes exist. Click the Balease Configuration button to allow others to edit the domain.	Rame -Hachinel -Summary of Hachines of Hessages Operation cancelled.	techinel »Summary of Machines	-Rachinić -Surimery d	Servers - Sammary of Hachines >	Hachine2 >Summery of S	ever - Summary of Chatteet	
Lock & Edit	Summary of Clusters						
Release Configuration Domain Structure FCUESCenses Dressinament Servers Clasters -Magnatalie Targets	This page summarizes the clusters that A duster defines groups of WebLagic St P Clusters (Fiftered - Hore Columns E Nessary Cluster (Doorse)	ever servers that work togethe				Skewing 0 to 0 ef 0 .	Yevious Next
Coherence Clusters Hachines	Cluster Daster Address	Ouster Hessaging Mode	Migration Basis	Default Load Algorithm	Replication Type	Guster Broadcast Channel	Servers
Virtual Hosts Work Hanagers	Dynamic Cluster	1	There an	e ne items to display	1 N		
Santup and Shubdown Classes Deployments Sension Sension	Nev Clene Dakis					Shewing 0 to 0 of 0 . A	revious Next
How do I							
Configure dusters							

2) Enter the Cluster Name and Click on Next

	ninistration Console 12c		9
Change Center	🏠 Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Machine2 >Summary of Machines >Machine1 >Summary of Machine	nes >Machine2 >Summary of Servers >Summary of Machine	s >Machine2 >Summary of Servers >Summary of Clusters
No pending changes exist. Click the Release Configuration button to allow others to edit the domain. Lock & Edit Release Configuration	Create a New Dynamic Cluster Back Next Finish Cancel Specify Cluster Identity and Properties The following properties will be used to identify your new dynamic	cluster and specify how cluster members should comm	unicate with each other to coordinate work.
Domain Structure	* Indicates required fields		
FCUB50cmain FCUB50cmain FCUB50cmain FcUsters Custers Fungratable Targets Custers Custers Machines Machines Work Managers Startup and Shutdown Classes Tobelownents	simple broadcast technology that enables multiple applications to su does not have these requirements. What messaging mode should thi Messaging Mode:	bscribe to a given IP address and port number and list	ers. Clusters can use either unicast or multicast messaging. Multicast is a en for messages, but requires hardware configuration and support. Unicast
Services	Unicast Broadcast Channel:		
How do I	Multicast Address:	239.192.0.0	
Create dynamic clusters Configure clusters Configure server migration in a cluster Configure cross-cluster replication Create server templates	Multicast Port: Back Next Finish Cancel	7001	



3) Enter the number of dynamic servers you want to configure, enter the server name prefix and click on Next

ORACLE WebLogic Server Ad	Iministration Console 12c	Q
Change Center	💼 Home Log Out Preferences 🔤 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Machine2 >Summary of Machines >Machine1 >Summary of Machines >Machine2 >Summary of Servers >Summary of Mach	nnes >Machine2 >Summary of Servers >Summary of Clusters
No pending changes exist. Click the Release Configuration button to allow others to edit	Create a New Dynamic Cluster	
the domain.	Back Next Finish Cancel	
Lock & Edit Release Configuration	Specify Dynamic Server Properties	
	The following properties will be used to specify the size and characteristics of your new dynamic cluster.	
Domain Structure	How many dynamic servers will you need at peak load?	
FCUBSDomain Environment Servers	Number of Dynamic Servers:	
Clusters Server Templates	What naming convention would you like to use for new dynamic servers in this cluster?	
	Server Name Prefix: FCUBSMS	
Virtual Hosts Work Managers	Server templates are used to configure the characteristics that are common to all dynamic servers in this cluster. Server new server template will be created to support this new cluster.	templates are unique to a cluster and cannot be shared across clusters, so a
Startup and Shutdown Classes Deployments Services	Back Next Finish Cancel	
Security Realms		
How do I		

4) Select Machines that participate in domain, in this case all machines will be part of the domain, select **Use any machine configured in this domain** and click on **Next**

ORACLE WebLogic Server Ad	dministration Console 12c		<u> </u>
Change Center	🏠 Home Log Out Preferences 🖂 Record	d Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >Machine2 >Summary of Machines >Mac	hines >Summary of Plachines >Plachine2 >Summary of Servers >Summa	y of Plachines >Plachine2 >Summary of Servers >Summary of Clusters
No pending changes exist. Click the Release Configuration button to allow others to edit	Create a New Dynamic Cluster		
Lock & Edit	Back Next Finish Cancel		
Release Configuration	Specify Machine Bindings		
	Associating dynamic servers with machine	s is essential if you intend to use Node Manager and the Administra	tion Console (or WLST) to start server instances.
Domain Structure	How do you want to distribute dynamic serv	ers across machines?	
PCUBSDomain PCUBSDomain Forwironment Servers	🖲 Up any machine configured in this	domain	
B-Clusters Server Templates	Use a single machine for all dynamic	ic servers	
	Selected Machine:	Machine1 •	
Wirtual Hests	Use a subset of machines in this do	main	
	Machine Name Match Expression:		
B-Services	Back Next Finish Cancel		
How do I 🖯			
Create dynamic dusters			
 Conference destant 	1		



5) Select the **listen port for the first server** in the dynamic cluster and then the **SSL listener port** for the first server in the dynamic cluster. The subsequent servers will be assigned with an incremental port number. Click **Next**

Change Center	🙆 Home Log Out: Preferences 💹 Record Help	9	Welcome, weblagic Corrected to: PCUBSDomain
View changes and restarts	Home -Marinez -Summery of Nachman -Marinez -Summery of Place	nes >Plachene2 >Sormery of Servers >Sormery of Placks	ras Michinez -Summery of Servers -Summary of Clusters
No pending changes exist. Click the Refease Cooffganation button to allow others to edit the domain.	Create a New Dynamic Cluster Back Next Front Cancel		
Lock & Edit Release Configuration	Specify Linten Port Bindings Select how these dynamic servers should be bound to listen ports.		
Donate Structure PCUSCensis Custors Custors Custors Custors Sever Tenglates Sever Te	Uster ports for dynamic servers can be specified in a server templat # Assign each dynamic server unique listen ports Linten Port for Pirut Server: SGL Linten Port for Pirut Server: B Assign each dynamic server fixed listen ports Listen Port: SSL Linten Port:	7002	
How do 1_		8100	
Create dynamic clusters Configure clusters	Each Next Frink Cancel		

6) Summary of new Dynamic Cluster configuration is presented. Click Finish to create

ORACLE WebLogic Server A	dministration Console 12c		<u> </u>
Change Center	🍘 Herne Log Out: Preferences 🖂 Record Help		Welcome, webkagic Connected to: PCUBSDomain
View changes and restarts	Here sMachine2 stemmary of Machines sHachine1 stemmary of P	Authors offended of services of Services of Services	mary of Mechines -Mechines -Sammary of Servers -Sammary of Clusters
No pending changes exist. Click the Rolesse Configuration batton to allow others to adit the domain. Lock & Edit Rolesse Configuration	Create a New Dynamic Cluster Bick, Stell, Frenk, Gancel. Review Your Dynamic Cluster Configuration You have exclude a new dynamic cluster with the fell	leven certionation	
Domain Structure	Configuration details for new dynamic cluster:		
FCUBEDensin	Configuration defails for ever dimense obtains: Name of New Dynamic Cluster: Haximum Hamber of Dynamic Servers: Server Name Prefix: Enable Calculated Listen Ports: Enable Calculated Listen Ports: Configuration defails for eve server template: Name of New Server Template:		FCUBSCLaster 4 FCUBSMS true true FCUBSMSTemplate
How do 1	Listen Port:		7662
Configure dusters Configure server migration in a duster Configure cross-cluster reglication Configure cross-cluster reglication	SSL Laten Port: Back Next Fresh Cancel		7182



7) The **Summary of Clusters** screens should show the recently created Dynamic Cluster.

Change Center	😰 Hume Lig Out Preferences 🔛 Re	ecord Help	A		W	leicome, weblogic Connected to	FOUR5Dona
New changes and restarts Peeding changes exist. They must be activated to take effect.	Hume uttachered vitammery of Hactaren Messiages A server template samed PCUBSM					vera > Seetmany of Charless	
Activate Changes	Cluster created successfully.						
Undo Al Changes	Summary of Clusters						
Consist Structure COSConven Costrument Seners Contens Contens Sener Implates Sener Implates Seners Seners Seners Seners Seners Seners Seners Se	This page summarizes the clusters the A cluster defines groups of WebLogic () Customize this table	Server servers that work together to					
Caherence Clusters	Clusters (Filtered - More Columns	1.000					10.00
- Caherence Clusters - Machines - Virtual Hosts	Clusters (Filtered - More Colorans			Terrere and the second second		Showing 1 to 1 of 1 Pro	Nous Next
Coherence Clusters Hachines Virtual Hosts Weik Managers Startup and Shutdown Classes			Magnation Basis	Default Load Algorithm	Replication Type	Showing 1 to 1 of 1 Pro	servers
- Coherence Clusters - Machines - Virtual Houts - Work Manapers	[New [Clime] (Delete]		Magnation Basis Database	Default Load Algorithms Pound Robin	Replication Type (None)	Contraction of the Contraction of the	1200000
Coherence Clusters Machines Machines Michael Hoots Work Managers Startug and Shubdown Classes Deployments	Jens v. [Clinik] Dame v. Christer Addre	ss Cluster Nessaging Hode	Contraction of the local sector	and the second second	Constant of the State of the	Contraction of the Contraction of the	Servers

8) Upon Activate Changes would automatically create 4 managed servers.

Juange Center		time log Dut P	aferron 🖬 📖	of twise	1.4			Welcome, weblagit Com	rected to: FCMISDown
New changes and restarts	Harr	a)-POURSHSTamp	ide clummery of Sec-	er Tangiates (PCL80P0Tergia	s - Summery of Chat	ters (
Club the Lock 5.601 button to modify, add ar delete items in this domain.	See	wry of Oestern							
Lock & Ext	1	i hade ministeril	er the clusters that h	ave been configured in the cur	ment Washi colo Terre	- former			
Ratease Configuration				ver servers that work together					
Ionain Structure	1								
Cuttilumain	1 k Ce	showing this tai	to ite						
Energy Servers	0.	ters (Filtered	Nore Columns Ex Rebutton in the Char	out) ge Center Is activate all the b	uttors on this page.				
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Charlensen Charlens Char	0.	iters (Filtered i the Locit A Ed	(Flutton in the Chan Dente)	100	diors so this pape. Migration Basis	Default Loud Algorithm	Replication Type		

9) Navigate to FCUBSDomain → Environment → Servers tab and 4 new servers are created

Change-Center	Rome Log-Out Pref	renzes 🚠 Faciali Help		9			Welcome, weblag	R: Connected to: FCGRSDoma
View changes and restarts	Here HOURSTANSIA	charmency of Server Template	a PORTA	risk -Summery of Os	ters charactery of Ser			
Chik the Lock & Edit buttor to modify, add or	Summary of Servers							
delete items in this dumain. Lack & Edit	Configuration Contr	4						
Release Configuration	A server is an instance	of thebLogic Server that non	e in the south Java	Virtual Machine (DV	() and has its sum cord	liguration.		
Donaia Mnicture	This page summarizes	each server that has been so	infigured in the o	unwet lineblage: Ser	ver domain.			
PCUBIDumain	 							
0 Environment	0							
Custors Server Templates Highedulie Targets Culterence Outers	© Contornize this table Servers (Filtered - 1	ture Columns Exist)						
Hachines	Cio the Lock & Edd	Sulture in the Change Center	to activate all th	he buttons on this pa	ge.			
- Victual Hosts Stort Hanapers	(New) (Chess) (De		r to activate all th	he buttons on this p	ų.		Sheete	gits Sof S. Previous New
-Virtual Handpers Startup and Shutdower Classes Conferences				Ounter	p. Pachee	State	Sheet	g 1 to 5 of 5 Previous Next
- Virtual Hanagers - Starting and Shutdowik Classes	(New) (Chee) (De	ini) Type				State PUMDNG		
Visual Pasts Visual Pastgers Staftig and Stutebook Classes Splowners B. Services Services	Nexe in	ini) Type	gred			11212	Nealth	Lates Port
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3.3 Managed Server Template configuration

The server template created is modified to apply the below parameters

3.3.1 Logging

The process of log file writing in a Weblogic server can impact the performance. Hence, you need to keep the logging to minimum in a production environment.

Update below parameters by in Logging Screen

Minimum Severity to log	Warning
Log file Severity level	Warning
Standard Out Severity level	Critical
Domain broadcaster Severity level	Critical

1) Navigate to FCUBSDomain \rightarrow Environment \rightarrow Clusters

VVEDLOGIC Server Ad	iministration Console 120				—
Change Center	🟦 Home Log Out Preferences 🔤 Reco	rd Help	Q	We	elcome, weblogic Connected to: FCUBSDoma
View changes and restarts	Home >Machine2 >Summary of Servers >Sum Templates	mary of Machines >Machine2 >Summ	ary of Servers >Summary of Clusters >Sum	mary of Servers >Summary of Server Te	emplates >FCUBSMSTemplate >Summary of Server
Pending changes exist. They must be activated to take effect.	Summary of Server Templates				
Activate Changes Undo All Changes Domain Structure	This page summarizes each server templ- A server template contains common, non manage configuration for a group of serv	- default attributes that you can ap	ply to a set of server instances, which t	hen inherit the template configuratio	on. Server templates enable you to easily
FCUBSDomain	Customize this table Server Templates New, Clone Delete				Showing 1 to 1 of 1 Previous Next
	□ Name ↔	Cluster	Machine	Listen Port	Listen Address
Virtual Hosts	FCUBSMSTemplate	FCUBSCluster		7002	
Startup and Shutdown Classes Deployments B-Services	New Clone Delete				Showing 1 to 1 of 1 Previous Next
How do I					

2) Select FCUBSTemplate and naviage to Logging \rightarrow General

Home Log Out Preference	es 🐼 Record Help	9	Welcome, weblogic Connected to: FCUBSDoma
Home >RCUBSHSTemplate >Sur	mmary of Server Templates >FCUB5MSTe		
Settings for FCUBSMSTemp	late		
Configuration Protocols	Logging Debug Notes		
General HTTP Data So	urce Diagnostic Images		
Save			
Use this page to define the p	peneral logging settings for this server	Fe .	
🕂 Log file name:	logs/FCUBSMSTemplate	e log	The name of the file that stores current log messages. Usually it is a computed value based on the name of the parent of this MBean. For example, for a server log, it isSERVER_NAME.log. More Info
- Rotation			
D Datables have	1.00		And the second difference of the second differ



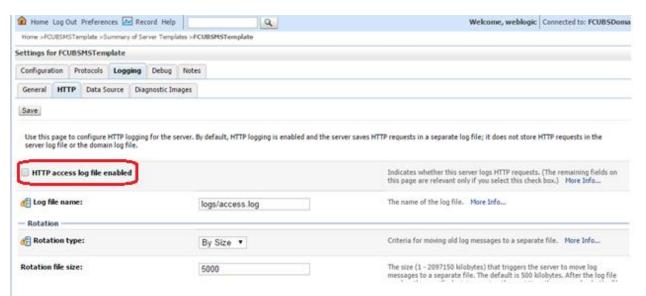
— ♥ Advanced ———		
🁸 Date Format Pattern:	MMM d, yyyy h:mm:ss a z	The date format pattern used for rendering dates in the log. The DateFormatPattern string conforms to the specification of thejava.text.SimpleDateFormat class. More Info
Minimum severity to log:	Warning 🔻	The minimum severity of log messages going to all log destinations. By default all messages are published. More Info
ଣୁ Logger severity properti	ies: 	The configuration of the different logger severities keyed by name. The values are one of the predefined Severity strings namely Emergency, Alert, Critical, Error, Warning, Notice, Info, Debug, Trace. More Info
Log file :		
Severity level:	Warning 🔻	The minimum severity of log messages going to the server log file. By default all messages go to the log file. More Info
Filter:	None •	The filter configuration for the server log file. More Info
👸 Log File Buffer:	8	Gets the underlying log buffer size in kilobytes More Info
Standard out :		
Severity level:	Critical	The minimum severity of log messages going to the standard out. Messages with a lower severity than the specified value will not be published to standard out. More Info
Filter:	None v	The filter configuration for \log events being sent to the standard out. More \mbox{Info}
Domain log broadcaster :		
Severity level:	Critical	The minimum severity of log messages going to the domain log from this server's log broadcaster. Messages with a lower severity than the specified value will not be published to the domain log. More Info
Filter:	None v	The filter configuration for log events being sent to the domain log. More Info
Buffer Size:	10	Broadcasts log messages to the domain log in batch mode. More Info
Stack Traces to stdout		Specifies whether to dump stack traces to the console when included in logged message. More Info
stdout Stack Trace Depth:	5	Determines the no of stacktrace frames to display on standard out. All frames are displayed in the log file. * -1 means all frames are displayed. More Info
🎢 stdout Format:	standard	The output format to use when logging to the console. More Info
Save		

3) Under Advanced Tab, update the below parameters and Click on Save



3.3.2 HTTP Logging

 FCUBSDomain → Environment → Clusters → FCUBSTemplate → Logging → HTTP → Uncheck the Access Logs Flag



3.3.3 Stuck Tread Max Time

 FCUBSDomain → Environment → Clusters → FCUBSTemplate → Tuning, update the stuck thread max time to 18000 and Click on Save

🛿 Home Log Out Preferences 🔤 Reco	nd Help	Welcome, weblogic Connected to: FCUBSDo
Home >PCU8SMSTemplate >Summary of Ser	er Templates >FCUBSMSTemplate	
ettings for FCUBSMSTemplate		
Configuration Protocols Logging	Debug Notes	
General HTTP Data Source Diag	nostic Images	
Save		
2023		
	for the server. By default, HTTP logging is enabled and th	e server saves HTTP requests in a separate log file; it does not store HTTP requests in the
Use this page to configure HTTP logging server log file or the domain log file.	for the server. By default, HTTP logging is enabled and th	e server saves HTTP requests in a separate log file; it does not store HTTP requests in the
server log file or the domain log file.	for the server. By default, HTTP logging is enabled and th	
	for the server. By default, HTTP logging is enabled and th	e server saves HTTP requests in a separate log file; it does not store HTTP requests in the Indicates whether this server logs HTTP requests. (The remaining fields on this page are relevant only if you select this check box.) More Info
server log file or the domain log file.		Indicates whether this server logs HTTP requests. (The remaining fields on this page are relevant only if you select this check box.) Hore Info
server log file or the domain log file.	for the server. By default, HTTP logging is enabled and th logs/access.log	Indicates whether this server logs HTTP requests. (The remaining fields on
server log file or the domain log file. HTTP access log file enabled		Indicates whether this server logs HTTP requests. (The remaining fields on this page are relevant only if you select this check box.) Hore Info
server log file or the domain log file.		Indicates whether this server logs HTTP requests. (The remaining fields on this page are relevant only if you select this check box.) Hore Info
server log file or the domain log file. HTTP access log file enabled	logs/access.log	Indicates whether this server logs HTTP requests. (The remaining fields on this page are relevant only if you select this check box.) More Info The name of the log file. More Info



4. Tuning

4.1 **General Parameters**

PARAMETER	VALUE	Navigate To
JTA Time out seconds	18000	Login to Weblogic Server console.
		Click on the domain name (ex: FCUBSDomain) which is under 'Domain Structure'.
		Go to Configuration > JTA, parameter and values is found on the right side panel of console.
Session Timeout	900	Login to Weblogic Server console
		Click on Deployments which is under 'Domain Structure'.
		Click on the deployed FCJ application from right side panel.
		Click on FCJNeoWeb from 'Modules and components'
		Go to Configuration General, the parameter values can be found here.

4.2 JVM Tuning

This section of the document provides JVM optimization for Oracle FLEXCUBE Universal Banking Solution.

Basically the JAVA minimum and maximum heap size needs to be reset for 32 and 64 bit environments. Both the minimum and maximum heap size is set to 1.5GB and 4GB in case of 32 bit and 64 bit environments respectively.

How to find whether the JVM is 32bit or 64bit?

Go to \$JAVA_HOME/bin directory. Check java version using command ./java –d64 –version 64 bit JVM shows the version details where as 32bit throws an error.

How to modify the JVM heap parameters?

To change the JVM heap parameters modify setDomainEnv.sh under domain FCUBSCL in both servers. This file is located at "**\$WL_HOME/user_projects/domains/\$WLS_DOMAIN/bin**" in both the servers.

Use below USER_MEM_ARGS variable to override the standard memory arguments passed to java for **SUN JDK.**



32 bit JDK

```
USER_MEM_ARGS="-
Dorg.apache.xml.dtm.DTMManager=org.apache.xml.dtm.ref.DTMManagerDefault
-
Dorg.apache.xerces.xni.parser.XMLParserConfiguration=org.apache.xerces.
parsers.XML11Configuration -Dweblogic.threadpool.MinPoolSize=100 -
Dweblogic.threadpool.MaxPoolSize=100 -Xms1536M -Xmx1536M -
XX:MaxPermSize=256m -server -XX:+UseParallelOldGC -
XX:ParallelGCThreads=4"
export USER_MEM_ARGS
```

64 bit JDK

```
USER_MEM_ARGS="-
Dorg.apache.xml.dtm.DTMManager=org.apache.xml.dtm.ref.DTMManagerDefault
-Dorg.a
pache.xerces.xni.parser.XMLParserConfiguration=org.apache.xerces.parser
s.XML11Configuration -Dweblogic.threadpool.MinPoolSize=100 -
Dweblogic.threadpool.MaxPoolSize=100 -Xms8g -Xmx8g -Xmn4g -server
-XX:+UseParallelOldGC -XX:ParallelGCThreads=4"
export USER_MEM_ARGS
```

Note: Take a backup of the files before modifying the same.



5. Start Managed Servers

Starting using scripts

Managed Servers can be started by executing startManagedWebLogic.sh script present in folder **\$DOMAIN_HOME/bin**

Usage: ./startManagedWebLogic.sh SERVER_NAME {ADMIN_URL}

Eg: ./startManagedWeblogic.sh FCUBSMS1 https://<hostname1>/console

Starting using console

Alternatively, login to admin console, navigate to FCUBSDoamin \rightarrow Environment \rightarrow Servers \rightarrow Control, select the managed servers to be started and click on **Start**

Change Center	😰 Hume Lag Out Proferences 🐼 Natural Help	9		Welcome, weblog	ic Converted to: FCUBSDoew
West changes and restarts	Hare HOUBINSTemplate -Summary of Server Templa	tes xPCL/EDHSTemplate xSummary i	/ Clubes - Summary of Servers		
Click the Lock & Edit button to modify, add or delete items in this domain.	Summary of Servers				
Lock & Evill	Configuration Control				
Rokase Configuration	One this page to change the state of the servers in mode requires the domain-wide administration po		ntrol operations on Managed Serv	ers require starting the Node Manager. Starting He	naged Servers in Standby
CuttiDoman -	(**				
	0				
B-Environment Servers B-Clusters Server Templates Higuitable Targets	© Contoeste this table Servers (Fibered - Hore Columns Exist)				
B Environment Servers B Clusters Server Templates	© Centoexize this table	(Restart SSL)		Davin	1 to 5 of 5 Previous Red
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Environment Serviers Colutions Serviers Colutions Thyratable Targets Colevence Quaters Hachung Works Insta Work Nenagers Startig and Shotown Classes Coleployments	© Contonice this table Servers (Filtered - Hore Columns Exist) Statt Resone Suspend v Shuttmer v	Constant Constant	1 - A -	Status of Last Action) 1 to 5 of 5 Previous Next
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Upon successful startup, the status of Managed servers is changed to "RUNNING".

ORACLE WebLogic Server Administration Console 12c

Change Center	😰 Home Log Out Preferences 🛃 Tim	coli Help	.9.			Welcome, weblog	ic Connected to: FCU85Dom
New changes and restarts	mma iPCUBIPETempleta -Summary of Sa	river Templates >PCUSSPECTar	gilate - Gummary of Clusters - d	Sammary of Servers			
Click the Lock & Edit button to modify, add or belate items in this domain.	Summary of Servers						
Lock & Edit	Configuration Control						
Restance Configuration	A server is an instance of WebLogic Ser	ver that runs in its own Jaw	Vitual Hachine (JVH) and	has its own configuration			
onain Structure	This page summarizes each server that	has been configured in the	oirrent WebLogic Server dor	nain.			
UBSDomain -							
Environment	C Last Refreshed: Jun 11, 2015 2	157139 PM					
Clusters - Server Templates - Regutable Targets - Coherence Clusters - Mutal Heats - 'Virtual Heats - 'Virtual Heats	© Contronice this table Servers (Filtered - Hore Columns I Olich the Lock # Edit button in the Ol [New] [Dawn] [Delm]	Contraction of the second s	the buttoms on this page,			Showing	1 to 5 of 5 Previous Next
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ew do L_	POUBSP51	Dynamic	FCUBSCluster	Plachine1	PLIVADVG	₩ OK	2003
	CU65H52	Dynamic	PCUB/Custer	Hechine2	RUNADING	or or	7004
Create Planaged Servers Close servers	POLIESHS3	Dynamic	FCUBSCluster	Hachine1	RUNADIG	or ⊲	7005
Delete Managed Servers	S POUBSHS4	Dynamic	FCUBSCluster	Hachine2	PLINADIG	I OK	7006
Delete the Administration Server	New Chris Datele	district of the		- Marine Co		Showing	1 to 5 of 5 Previous Next

6. Data Source creation and JDBC Configuration

Following are the JNDI names of those data sources used by FLEXCUBE application.

- jdbc/fcjdevDS This datasource is used by FLEXCUBE online screen excluding branch screens.
- jdbc/fcjdevDSBranch This datasource is used by Branch screens.
- jdbc/fcjSchedulerDS This datasource is used by Quartz scheduler.

Note:

- jdbc/fcjdevDS should be NonXA and make use of OCI driver.
- jdbc/fcjdevDSBranch and jdbc/fcjSchedulerDS should be XA

6.1 Setup Required for OCI Driver

Data sources are created with OCI enabled. For this, Oracle Instant Client is required, below steps needs to be followed

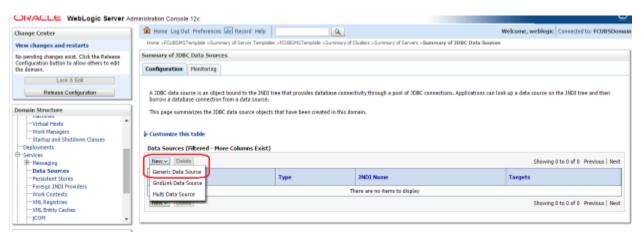
Download Oracle Instant Client corresponding to the used Oracle DB and java (x64 or x32):

http://www.oracle.com/technetwork/database/features/instant-client/index-097480.html

- Set {ORACLE_HOME} in the environment variable.
- Update the environment variable LD_LIBRARY_PATH as {ORACLE_HOME}/lib. This is to load all the .so files.
- Ensure that the ojdbc*.jar file in {WL_HOME}/server/lib/ojdbc*.jar is the same as the file {ORACLE_HOME}/jdbc/lib/ojdbc*.jar. This is to ensure compatibility.
- Update LD_LIBRARY_PATH in StartWebLogic.sh or in setDomainEnv.sh. This must be the path of directory where Oracle Instant Client is installed.
- If you are still not able to load the .so files, then you need to update the EXTRA_JAVA_PROPERTIES by setting Djava.library.path as {ORACLE_HOME}/lib in StartWebLogic.sh or in setDomainEnv.sh.

6.2 Data source creation: non XA

 Navigate to FCUBSDomain → Services → Data Sources → select New > Generic data source



2) Enter the Name and JNDI Name and Click on Next

ORACLE WebLogic Server	dministration Console 12c	õ
Change Center	🙆 Haine Ling Out Pheferences 🔤 Record Help	Welcome, weblogic Currected to: FCUBSDomain
View changes and restarts	Horse >PCUBGHGTemplate >Summary of Server Templates >POUBGHSTemplate >Summary of Clusters >Summary of Se	rveci >Sianstaary of JDBC Data Sources
No pending changes extrt. Click the Release Configuration button to allow others to edit the domain.	Create a New JDBC Data Source	
Release Configuration	The following properties will be used to identify your new JOBC data source.	
Domain Structure	* Indicates required fields	
FCUBSOnnian Environment Forevers Foreve	What would you like to name your sen 2080 data source?	
How do I_		
Create JDBC generic data sources Create LLR-enabled JDBC data sources	What database type would you like to select? Database Type: Oracle •	
System Status 8	Tac Next Filth Carcel	
Health of Running Servers		
Failed (0)		

3) Select the Driver as "Oracle's Driver(thin) for Instance connection: Versions: Any" and Click on Next

ORACLE WebLogic Server	Administration Console 12c			Q
Change Geeter	A Horse Log Out Prefe	reaces 🔤 Record Help	19	Welcome, weblogic Connected to: PCUBSDome
Wew changes and restarts	Home >PGU83M3Template	Summary of Server Tamplates >PCU85	Receiption - Summary of Clusters - Summary of Serv	es -Serenary of 208C Data Searces
No pending changes exist. Click the Release Configuration batton to allow others to edit the domain.	Create a New JOBC Dat			
Lock & Edil	second second literation	(Jerrinana		
Release Configuration	JDBC Data Source Pr The following propertie	reperties t will be used to identify your new 100	IC data source.	
Domain Structure				
PCUEDoran D-Servicement -Servicement Clasters -Coherene Templates -Keystable Targets -Coherene Clasters -Sociations -Vistual Heats -Table Managers	Detabase Type: What database driver we Dotabase Driveri Back Nant Primit		connections? Note: * indicates that the driver is stance connections; Versions Any	explicitly supported by Oracle Weblingic Server.
Startup and Shutdown Oasses Deployments Servicee B-Servicee	-			

4) Uncheck the "Supports Global Transactions" and click on Next

ORACLE WebLogic Server Ad	Iministration Console 12c		Ŏ
Change Center	🔒 Home Log Out Preferences 🖂 Record Help	Q	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >FCUBSMSTemplate >Summary of Server Template	ss >FCUBSMSTemplate >Summary of Clusters >Summary	of Servers >Summary of JDBC Data Sources
No pending changes exist. Click the Release Configuration button to allow others to edit the domain. Lock & Edit Release Configuration	Create a New JDBC Data Source Back Next Finish Cancel Transaction Options You have selected non-XA JDBC driver to create data	abase connection in your new data source.	
Domain Structure	Does this data source support global transactions? If	yes, please choose the transaction protocol for this	data source.
FCUBSDomain FCUBSDomain FCUBSDomain FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBST FCUBS	Select this option if you want to enable non-XA JDBC Recommended in place of Emulate Two-Phase Comm		global transactions using the Logging Last Resource (LLR) transaction optimization.
LMigratable Targets Coherence Clusters Machines	Logging Last Resource		
Virtual Hosts Work Managers Startup and Shutdown Classes	Select this option if you want to enable non-XA JDBC heuristic conditions.	connections from the data source to emulate partic	ipation in global transactions using JTA. Select this option only if your application can tolerate
Deployments	Emulate Two-Phase Commit		
E-Services	Select this option if you want to enable non-XA JDBC other resources can participate in the global transact		global transactions using the one-phase commit transaction processing. With this option, no
How do I 🗉	_		
Create JDBC generic data sources	One-Phase Commit		
Create LLR-enabled JDBC data sources	Back Next Finish Cancel		
System Status 🖂			

5) Enter the Database Name, Host Name, Port, User Name, Password, Confirm Password and Click on **Next**

Change Center	😰 Home Log Out Preferences 🐼 Record Help	9.	Welcome, weblogic Connected to: FCUBSDonnal
View changes and restarts	Have -PCURSHSTampida -Summary of Server Tempides -PCURSHSTe	oplate stammery of Cluster's stammery of Servers -Sam	mary of 30BC Duta Sources
No pending changes exist. Club the Release Configurations button to allow others to add the domain. Lock & Edd Release Configuration	Create a New 3DBC Data Source Back Proof Team		
Domain Structure	What is the name of the database you would like to connect to?		
PCUBSDomain	Database Name:		
E-Clusters Server Templates Reputable Targets Coherence Clasters	What is the name or IP address of the database server? Host Name:		
Hadviers 	What is the port on the detabase server used to connect to the deta	ibase7	
Startup and Stubdown Classes	Port:	1521	
B Services B Hessacion	What database account user name do you want to use to create dat	abase connections?	
How do I	Database User Name:		
Create 100C generic data sources Create LLR-enabled JDBC data sources	What is the database account password to use to create database o	wredeet?	
System Status 🛛		1	
Health of Running Servers	Confirm Password:	E SI	
Failed (0) Critical (0)	Additional Connection Properties:	<u></u>	
Overlanded (0) Werning (0)	oracle_idbc_DRCPConnectionClass:		
Warning (0)	Bask Next From Carcel		

6) Replace the JDBC URL in the below format and click on Next

Default URL: jdbc:oracle:thin:@<IP_Adress>:<Port>:<INSTANCE_NAME>.

Change the default URL to:

jdbc:oracle:oci:@(DESCRIPTION=(ADDRESS_LIST=(ADDRESS=(PROTOCOL=TCP)(HOS T=xxxxxx.com)(PORT=1521)))(CONNECT_DATA=(SERVICE_NAME=fcubs)))

Where,

Scan IP = xxxxxx.com

Service Name = fcubs

Port = 1521

Make sure that in URL, we make the changes to reflect oci.

Then Click on Test Configuration. The connection test should be successful.

ORACLE WebLogic Server Adm	inistration Console 12c		<u> </u>
Change Center	🙆 Home Lug Out Preferences 🔤 Record Help	Q.	Welcome, weblogic Connected to: FOUBSDomain
View changes and restarts	Home >FCURSHSTemplate >Summary of Server Templates >FC	CUBSPISTemplate >Summary of Clusters >Summary of Servers >S	iummary of 3DBC Data Sources
Na pending changes exist. Click the Release Configuration batton to allow others to exist the densitie. Lock & Edit Roleane Configuration	Create a New JDBC Data Source Tent Configuration Back Next Pminh Cance Test Database Connection Test the database availability and the connection proper	-	
Domain Structure	What is the full package name of JDBC driver class used to	a create database connections in the connection road?	
FOUBSDomain B-Environment Servers	(Note that this driver class must be in the classpath of any		
BClusters Server Templates Higratable Targets	Driver Class Name:	oracle.jdbc.OracleDriver	
Coherence Clusters Machines	What is the URL of the database to connect to? The ferma	of the URL varies by JDBC driver.	
Virtual Hosts Work Managers	URL:	idbc.oracle.oc/@(DESCRIP)	
Startup and Shutdown Classes Deployments	What database account user name do you want to use to	eabe database connections?	
E-Services	Database User Name:	FCUBS121DB	
How do L. 🗉	What is the database account password to use to create d	tabase connections?	
Create 3DBC generic data sources Create LUR-enabled 3DBC data sources	(Note: for secure password management, enter the passw	and in the Password field instead of the Propertie. field bek	(ow)
System Status 🖂	Password:		
Health of Running Servers	Confirm Password:		
Patied (8) Critical (0) Overloaded (8) Warning (0) Or (5)	What are the properties to pass to the JCBC driver when a Properties : USER+ECUBS121USER	reading database connections?	

7) Select Target as FCUBSCluster and click on Finish

ORACLE WebLogic Server A	dministration Console 12c		•
Change Center	伦 Haine Lug Out. Preferences 🔤 Record Help	Q.	Welcome, weblogic Connected to: FCUBSDomail
View changes and restarts	Inone >PCUBSP(STemplate >Summary of Server Templates >PCUBSMSTemplate	-Sammary of Clusters -Summary of Ser	we >Summary of 10BC Data Sources
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Create a New JOBC Data Source Back Beell (Faint) Cancel Select Targets Cancel Cancel Cancel		
Release Configuration	1 DURACE CONTRACT TO A CONTRACT OF A DESCRIPTION OF A	e. If you don't select a target, the data	source will be created but not deployed. You will need to deploy the data source at a
FCURSDemain FCURS	Servers AdminServer Choters Choters Conters Conters Conters Conters Conters Conter Con		

6.3 XA Datasource

 Navigate to FCUBSDomain → Services → Data Sources → select New > Generic data source



2) Enter the Name and JNDI Name and Click on Next

ORACLE WebLogic Server An	ninistration Console 12c	9
Change Center	Hume Lag Out Preferences And Record Help	Welcome, weblogic Connected to: FCUBSDoma
View changes and restarts	Hane >FCU85HSTemplate >Summary of Server Template >FCU85HSTemplate >Summary of Quatere >Su	mmary of Servera - Sammary of 200C Data Soarons
Pending changes exist. They must be activated to take effect.	Greate a New JDBC Data Source	
Activate Changes	Back Next First Carcel	
Undo All Changes	JDBC Data Source Properties	
Desisin Structure FCU85Demain FCU85Demain Forwars FCusters FSarver Templates FSgratable Tangets Cubreme Classes FArdylase Week Wanagers Deplayments Forgets Forget	The following properties will be used to identify your new JDBC data source. * Indicates required fields What would you like to name your new JDBC data source? # Name: FCUBSBranchDS What JHCI name would you like to assign to your new JDBC Data Source? # INDIX Name: Jdbc / fcjdevOSBranch]
How do L.		
Create IDBC generic data sources Create LLR-enabled IDBC data sources	What database type would you ble to select? Database Type: Oracle •	
System Status 🛛 🖂 Health of Razeing Servers	Bain Rent Frank Gancel	
Failed (0)		

3) Select the Driver as "Oracle's Driver(thin XA) for Instance connection: Versions: Any" and Click on Next

ORACLE WebLogic Server Ad	ministration Console 12c			Q
Change Center	1 Horse Lag Out Preference	es Ged Record Help	9	Welcome, weblogic Connected to: FOUBSDomain
Wew changes and restarts	Home >PCUBSHSTemplate >Skit	many of Server Templates -FCU25P	STemplete >Summary of Clusters >Summary o	f Servers >Semenary of JDBC Data Sources
Pending changes exist. They must be activated to take effect.	Greate a New JDBC Data So	sece.		
Activate Changes	Back Heat Present C	lancal		
Unda All Changes	108C Data Source Proper	rties		
Domain Structure	The following properties will	be used to identify your new 3080	data seurce.	
POUBSDonan Provincest Servers Provincest Provincest Province Prov	What database driver would y Database Driver:		onnections? Note: " indicates that the dil Instance connections: Versions An	ver is explicitly supported by Orade WebLogic Server. y

4) Click on Next

ORACLE WebLogic Server Ad	ministration Console 12c	<u>ŏ</u>
Change Center	🏦 Home Log Out Preferences 🔛 Record Help	Welcome, weblogic Connected to: FCUBSDomain
View changes and restarts	Home >POUBSMSTemplate >Summary of Server Templates >POUBSMSTemplate >Summary of Clusters >Summary of Servers >Se	mmary of 300C Data Sources
Pending changes exist. They must be activated to take effect.	Create a New JOBC Data Source	
Activate Changes	Back Next Frinh Cancel	
Undo All Changes	Transaction Options	
Domain Structure	You have selected an XA JDBC driver to use to create database connection in your new data source. The data source v transaction protocol. No other transaction configuration options are available.	vill support global transactions and use the 'Two-Phase Commit' global
PCUBSDomain A B-Environment D-Ousters B-Ousters Server Templates	Back Red Print Cancel	
- Handakes - Rapstable Targets - Coherence Clusters - Wirtwal Hosts - Wirtwal Hosts - Wirtwal Hosts		

5) From this step to target setting step follow as mentioned in non-xa

	ministration Console 12c						
Change Center	🏠 Home Log Out Preferences 🖂 Record Help	Q.	Welcome, weblogic Connected to: FCUBSDomain				
View changes and restarts	Home >PCUBSHSTemplate >Summary of Server Templates >PCU	JBSMSTemplate >Summary of Outlets >Summary of Servers >Summary	of JDBC Data Sources				
Pending changes exist. They must be activated to take effect.	Create a New JDBC Data Source						
🖌 Activate Changes	Back Next Finish Cancel	Back Next Print Cancel					
Undo All Changes	Connection Properties						
Domain Structure	Define Connection Properties.						
FCUBSDomain A	What is the name of the database you would like to connect	t to?					
Environment Servers	Database Name:						
E-Clusters	What is the name or IP address of the database server?						
	Host Name:						
Hachines Virtual Hosts	nost name:						
Work Managers	What is the port on the database server used to connect to	the database?					
Startup and Shutdown Classes Deployments	Port:	1621					
P-Services							
How do I	What database account user name do you want to use to cr	reate database connections?					
	Database User Name:						
Create JDBC generic data sources Create LLR-enabled JDBC data sources	What is the database account password to use to create da	stabase connections?					
	Password:						
System Status 🛛	Part of the second s						
Health of Running Servers	Confirm Password:						
Failed (0) Critical (0)	Additional Connection Properties:						
Overleaded (8)							
Warning (0) OK (5)	oracle.jdbc.DRCPConnectionClass:						
OK(3)	Back Next Finish Cancel						
ORACLE' WebLogic Server A Change Center	🙆 Have Log Out Preferences 🚾 Record Hela	<u>a</u>	Welcome, weblogic Connected to: FOUBSDomain				
Vew changes and restarts		40.025HSTemphile >Summary of Clusters >Summary of Servers >Search	sary of 309C Data Societies				
Pending dranges exist. They must be activated to take effect.	Create a New JDBC Data Source						
Activale Changes	Test Configuration Back Next Finish Carr	cel					
Undo All Changes	Test Database Connection						
Domain Structure	Test the database availability and the connection prop-	erties you provided.					
PCUBSDansia -	What is the full package name of 3DBC driver class used	to create database connections in the connection goal?					
B:Environment Servers	Otoria that this shiver class must be in the classpath of a	er corver to which it is depicyed.)					
El-Clusters Server Templates	100000000000000000000000000000000000000						
	Driver Class Name:	oracle.jdbc.xa.client.OracleX.					
Coherence Clusters Hachines	What is the URL of the database to connect to? The form	nat of the URL varies by 3DBC driver.					
Virtual Hists Work Hanagers	URL:	jdbc anade act @iDESCRIP					
Startup and Shubdown Classes							
Deployments G-Senioes	What database account user name do you want to use to	a create database connections?					
B Nessains	Database User Name:	FC121D8					
How do I	What is the database account password to use to create	Contractor of Contractor					
 Create JOBC generic data sources 		wand in the Passward field instead of the Properties field below)					
 Create LLK-enable# ID8C data sources 	(Vertilling Recard Department and all the base	and a me resonant repertment of the respective reception)					
System Status 🖂	Password:						
Health of Running Servers		10000000000000000000000000000000000000					
Telled (0)	Confirm Password:						
Critical (0)	What are the properties to pass to the JDBC driver when	CONFORT SELECTION CONTINUES OF					
Overloaded (0) Werning (2)	Properties						
08(5)	user=FCUBS121User						
dir(3)	0561 #100051210561						

ORACLE WebLogic Server Ad	ministration Console 12c			Ŷ
Change Center	😰 Home Log Out Preferences 🐼 Record Help	9	Wekome, weblogic	Convected to: FCUBSDomain
View changes and restarts	none -PC085MS7anglab >Summery of Server Templates +PC085MS7anglab	In -Ourmany of Christens -Summary of Sarvar	1 - Summary of 309C Data Sources	
Pending changes exist. They must be activated to take effect.	Create a New JOBC Data Source			
Activate Changes	(Back) (Seed) (Cancel)			
Unde All Changes	Select Targets			
Domain Structure	You can select one or more targets to deploy your new 3DBC data source later time.	e. If you don't select a target, the data co	surce will be created but not deployed. You will need to de	ploy the data source at a
PCUBSDemain + IB toveronment	Servers			
B-Outlers Server Templates	Administerver			
Higratable Targets Coherence Clusters	Clesters			
- Machanes Victual Hents 	R PCUTSChaster			
Startup and Shutdown Classes				
B-Services	Back Freeh Carcel			

6) Upon Activate Changes would create the XA Datasource

		and the second s		
Change Center	A Home Log Out Freferences Im nor	and Help	<u>A</u>	Welcome, weblogic Connected to: FOUBSDomail
View changes and restarts	Hane >PO/85HSTanyide >Summary of Se	ver Templates >FC/80HS7emplate >5	remary of Chobers -Suremary of Servers, -Suremary of	X00C Data Science (FC/8005 Informately of 300C Data Seamle
Click the Lock & Edit button to modify, add or	Summary of 108C Data Sources			
delete items in this domain. Lock & Edl	Configuration Hostoring			
Remove Configuration	A 300C data source is an object bound borrow a distablese connection from a do This page summarizes the 200C data so is Costomize this table Data Sources (Filtered - Hore Colum Clock the <i>Lock & Foll</i> button in the Cha	sta source. urce objects that have been created new Exist)	in this domain.	n. Applications can look up a data source on the JNEE tree and then
Persistent Stores Foreign JNCC Providers	frene - Detele			Shawing 1 to 2 of 2 Previous Next
-Work Contents 2016, Registries	Barne 🚔	Type	JNDI Name	Targets
- XPB, Entity Caches	E POUBSBranchOS	Generic	atho/KodevDSBranch	PCUBSCluster
- JCOH -	C POUBSDS	Generic	jdbc/fcjdm05	FCUBSCluster
How do L.	frame + Chilele			Showing 1 to 2 of 2 Previous Next

7) Similarly create all the other Datasource required for the FCUBS Application and Gateway Deployments

DRACLE' WebLogic Server Ar					<u> </u>
Thange Center	1 Home Log O	at Preferences 🔤 Record Help	Q		Welcome, weblogic Connected to: FCUBSDomail
Wew changes and restarts		Template >Summary of Clusters >Summa tranch05 >Semmary of 3DBC Data Se		Data Sources >FOUBSDS >Summary of 3DBC Data	Sources >FCUESDomain >Summary of 3DBC Data
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 a	recessary.		
Release Configuration	Summary of 3D8	C Data Sources			
	Configuration	Honitoring			
Transme Transme	borrow a datab This page sum P Customize th Data Sources Click the Lock New V Data	ase connection from a data source, navizes the JDBC data source objects in table (Filtered - Hone Columns Exist) & Editbutton in the Change Center I atm	that have been created in this a activate all the buttons on th	domain. 45 page.	Applications can look up a data source on the JHER tree and then Showing 1 to 6 of 6 Previous Next
iew do L_	🔲 Name 🔿		Туре	JMDI Name	Targets
ow do L	E FCUBSBra	#d+05	Generic	jdbc/ftjidevDSBranch	FCUBSCluster
Create 3DBC generic data sources	FCUBSDS		Generic	jdbc/fcjdev05	FCUBSCluster
Create 3DBC GridLink data sources	PCUBSDS	ASYNC	Generic	jdbc/fcjdevDS_ASYNC	PCUBSCluster
Create 3DBC multi data sources	CUBSDS	YA .	Generic	idbolfcidev05_XA	FCUBSCkuter
Delete JDBC data sources					
Delete JDBC malti data sources	E POUBSSI		Generic	jdbc/ft(jSchedulerDS	FCUBSCluster
	PLD/TEST	WORLD	Generic	FLEXTEST.WORLD	FCUBSCluster
		at a			Showing 1 to 6 of 6 Previous Next
ystem Status 🛛	New - Dek	310			Shewing a to o or o Previous Next

6.4 JDBC Parameters Tuning

	VALUE	Navigate To
PARAMETER		
Connection Reserve time out	30	Connection Pool->Advance
Test Frequency	60	Connection Pool->Advance
Inactive connection time out	30	Connection Pool->Advance
Initial Capacity	1	Connection Pool
Max capacity	Based on Site Requirement	Connection Pool
Capacity Increment	5	Connection Pool
Shrink Frequency	900	Connection Pool->Advance
Test Connection on Reserve	Checked	Connection Pool->Advance

7. JMS Resource Creation

JMS Resource Creation involves various steps

- Persistence Store Creation
- JMS Server Creation
- JMS Module Creation
- Resource Creation: Connection Factory and Queue's

Refer to the Configuring JMS on Weblogic Server for further details on JMS setup.

8. Oracle WebLogic Load Balancing

For Weblogic Load balancing, use

- 1) Oracle HTTP Server: Refer to Configuration for Oracle HTTP Server for setup.
- 2) Apache: Refer to Configuration for Apache for setup.

9. Frequently Asked Questions

9.1 Machine status is Unreachable.

If the machine status is unreachable, means that machine is not reachable and from console you cannot start/stop the managed servers.

In the console, navigate through Domain structure \rightarrow Machines \rightarrow machine1 \rightarrow Monitoring \rightarrow Node Manager Status will be **Unreachable**

To change the status, you need to start the nodemanager on that server. Refer to start nodemanager section on steps to start the nodemanager.

9.2 How to restart node manager?

- 1) Locate node manager pid using ps -ef|grep weblogic.nodemanager.javaHome
- 2) Change directory to \$DOMAIN_HOME/bin
- 3) Kill the unix process using kill -9 <pid>
- 4) Verify that the node manager is killed by *tail f nohup.out*
- 5) Start node manager using nohup ./startNodeManager.sh &
- 6) Verify nodemanager is started using *tail f nohup.out*

9.3 Scaling Up Dynamic Cluster

When the capacity is insufficient and you need to scale-up, you can add dynamic servers on demand. It requires only a few clicks.

1) Navigate to FCUBSDomain \rightarrow Environment \rightarrow Clusters

Change Center	1 10 10	me Los Out P	references 22 mars	and Made	Q.			Welcone, weblogic Cor	method to: FCUBSDumain		
View changes and restarts	2.122			ver Templetes >FCUEDHSTemplet	and the second sec	barte .					
Click the Lock 5 6dt button to modify, add or delete items in this domain.											
Lock & Edit											
Release Configuration	1.112			over servers that work together							
Domain Structure	1										
B Environment Servers B Cleaters Server Templates Hightable Targets	Click	CONTRACTOR OF THE OWNER OWNER OWNER OF THE OWNER		ost) ope Center to activate all the b	uttons on this page.			Showing 1 to	L of 1 Previous Next		
Coherence Clusters Hachines		Name 🗠	Christer Address	Christer Messaging Hode	Migration Basis	Default Load Algorithm	Replication Type	Cluster Broadcast Channel	Servers		
- Virtual Hists - Weik Managers - Startup and Shotdown Classes - Deployments	PCUBSCluster Unicast Database Round Robin (Hone)							POUBSHISI, POUBSHISI, POUBSHISI, POUBSHISI			
Security Realms	New Other Debte Shawing to i of Previous (He										
How do L.	1										

2) Click FCUBSCluster \rightarrow Configuration \rightarrow Servers tab

hange Center	Home Log C		; 🔤 Recor	d Help		Q					Welco	ome, weblogi	ic Connected to: FCUBSDomain
/iew changes and restarts	-	of JDBC Data So			Summary of I		-	mary of Machines	s >Summary o	of Servers >Summary of S			ary of Machines >Summary of
to pending changes exist. Click the Release Configuration button to allow others to edit	Settings for FC	Settings for FCUBSCluster											
Lock & Edit	Configuration	Monitoring Control		Deployments	Services	ces Notes							
Release Configuration	General JTA	Messaging	Servers	Replication	Migration	Singleto	n Services	Scheduling	Overload	Health Monitoring	HTTP	Coherence	
omain Structure	Save												
Environment Servers Clusters		ed to configure ontain both exp		-			he following	g settings are u	sed to deter	mine the number and	characte	ristics for thes	e dynamic servers.
Server Templates Migratable Targets Coherence Clusters Machines	Server Templa	ite:	FC	FCUBSMSTemplate				se	Specifies the server template that is to be used to configure the dynamic servers in this cluster. Only templates that specify this cluster are valid choices. More Info				
Machines													
Machines Virtual Hosts Work Managers Startup and Shutdown Classes	Maximum Nur	nber of Dynan	nic Servers	: 4]				pecifies the maximum fo	number	of dynamic ser	vers in this cluster. More

3) Change the Maximum Number of Dynamic Servers to: 8 and Click Save

ORACLE WebLogic Server Administration Console 12c													
Change Center	🔒 Home Log O	Welcome, weblogic Connected to: FCUBSDomain											
View changes and restarts	Home >Summary of DBC Data Sources >Summary of Machines >Summary of Machines >MAC-1 >Summary of Machines >Summary of Server >Summary of Server Templates >Summary of Machines >Summary of Machines >Summary of Server Templates >Summary of Machines >Summary of Machines >Summary of Server Templates >Summary of Machines >Summary of Machines >Summary of Machines >Summary of Server Templates >Summary of Machines >Summary of Machines >Summary of Machines >Summary of Machines >Summary of Server Templates >Summary of Machines >Summary of Ma												
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.	Settings for FCUBSCluster												
Lock & Edit	Configuration	Monitoring	Control	Deployments	oyments Services Notes								
Release Configuration	General JTA	Messaging	Servers	Replication	Migration	Singleton Services	Scheduling	Overload	Health Monitoring	HTTP	Coherence		
Domain Structure Save													
FCUBSDomain		-		that are assign ured and dynami		ster. servers. The following	g settings are u	used to deter	mine the number and	characte	ristics for thes	e dynamic servers.	
	Server Template:				JBSMSTer	mplate	se	Specifies the server template that is to be used to configure the dynamic servers in this cluster. Only templates that specify this cluster are valid choices. More Info					
Virtual Hosts Work Managers Startup and Shutdown Classes	Maximum Number of Dynamic Servers:						Specifies the maximum number of dynamic servers in this cluster. More Info				1ore		
EDeployments ⊡-Services ⊡-Messaning ▼	👘 Server Nar	ne Prefix:		FCU	JBSMS				pecifies the prefix to b uster. More Info	oe used v	/hen naming n	ew dynamic servers in	this

Activate changes in the Change Center of the Weblogic Console. After activation 4 new Dynamic Servers are added to the Dynamic Cluster

Name 🔅	Туре	Machine	Listen Port
FCUBSMS1	Dynamic	MAC-1	7101
FCUBSM52	Dynamic	MAC-2	7102
FCUBSM53	Dynamic	MAC-1	7103
FCUBSM54	Dynamic	MAC-2	7104
FCUBSMS5	Dynamic	MAC-1	7105
FCUBSMS6	Dynamic	MAC-2	7106
FCUBSMS7	Dynamic	MAC-1	7107
FCUBSMS8	Dynamic	MAC-2	7108

5) Start the 4 new Dynamic Servers and you have doubled you capacity.

9.4 Session Timeout

Session timeouts occur intermittently during load condition. Verify the following

- 1. Clock Synchronization: Time across the nodes/machines is same.
- 2. Session Stickiness in load balancer: Persistence Type in load balancer should be set to SOURCE IP and should not be cookie.



FCUBS Weblogic 12c Middleware Practices [Apr] [2020] Version 14.4.0.0.0

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