SOA Suite Setup for BPEL Process Flow Oracle FLEXCUBE Universal Banking Release 14.1.0.0.0 [May] [2018]



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1. Preface

1.1 Background

This document provides an overview of configuring SOA suite for Oracle FLEXCUBE Universal Banking BPEL process deployment.

Refer Oracle documentation for HA (<u>FCUBS Switch Interface Gateway High Availability</u> <u>Configuration.pdf</u>) and other configuration patterns.

1.2 Audience

The audience for this document will be the development groups of BPEL/BPM process flows FLEXCUBE Universal Banking.

1.3 Organization

This manual is organized as follows:

• The document helps in download and installation of Oracle SOA 12c.

1.4 Acronyms and Abbreviations

Acronym/Abbreviation	Description
BPEL	Business Process Execution Language
НА	High Availability



2. Installing the JDK, WebLogic, RCU, SOA and domain Creation

2.1 Introduction

The download of software can be done from the below oracle edelivery portal <u>https://edelivery.oracle.com</u>

Refer to the Oracle certification matrix for qualified databases.

2.2 List of downloaded files

Search: Oracle JDK Latest JDK 1.8 Update 144 for Linux x86-64Search: Oracle Fusion Middleware 12c Infrastructure 12.2.1.2.0

V779122-01.zip - Oracle Fusion Middleware 12c Infrastructure 12.2.1.2.0

Search: Oracle Business Process Management 12.2.1.2.0

V789369-01.zip - Oracle Fusion Middleware 12c (12.2.1.2.0) SOA Suite and Business Process Management

List of platform which can be selected based on the installation platform



	FAQ priyadharshini.balacha	ndran@oracle.com Engli	ish Sign Out
Oracle Software Delivery Cloud			
Selected Software			
To continue, select the Platform/Language for each individual Release. If the item is a Documentation Release, there will be tite.	e no need to select a Platform. To remove an item from the Selected Sof	tware Cart, please uncheck	the box next to the
	Terms and Restrictions	Platforms / Languages	Size
☑ Oracle Business Process Management 12.2.1.2.0 \$8	Oracle Standard Terms and Restrictions	Linux x86- 🔻	5.4 GB
Oracle Fusion Middleware 12c Infrastructure 12.2.1.2.0 \$\$	Oracle Standard Terms and Restrictions	Linux x86- 🔻	1.5 GB

NOTE (Doc ID 1904280.1): As part of the new Release of SOA 12c, you need to get WebLogic 12c through the Oracle Fusion Middleware Infrastructure installation, which contains all required components for SOA. The standard WebLogic 12.2.1.0.0 Installer i.e. fmw_12.2.1.0.0_wls.jar, does not have the required JRF templates.

2.3 Install JDK

Login to WebLogic server host upload and install JDK package. Refer to the release certificate for the version of java JDK.

2.4 Installing WebLogic Server software

Installation of the software can be done from local machine or from the app server

- 1. Installation from the app server location:
- a) Login to the app server host and connect through putty
- b) Copy the zipped file into the app server in the location /scratch/app/<[app_name]>

eg: /scratch/app/bpm12212

c) Unzip the file with the command "unzip V779122-01.zip"

d) Once it is unzipped, fmw_12.2.1.2.0_soa.jar and fmw_12212_readme.htm will be

extracted into the same path

e) execute the jar file to launch the installer for 12c SOA installation with the below command

"java -jar fmw_12.2.1.2.0_infrastructure.jar"

```
[oracle@wls12c-node1 ~]$ cd /scratch/app/fmwTemp1221/
[oracle@wls12c-node1 fmwTemp1221]$ unzip V779122-01.zip
Archive: V779122-01.zip
inflating: fmw_12.2.1.2.0_infrastructure.jar
[oracle@wls12c-node1 fmwTemp1221]$ java -jar fmw_12.2.1.2.0_infrastructure.jar
```

- 2. Installation from the local path:
- a) open the command prompt in "Run as Adminstrator" mode and move to the location where

the zip file is available using the command "cd" followed by the path

- eg: C:\Users\pribalac\Downloads
- b) Unzip the file with the command "unzip V779122-01.zip"
- c) Once it is unzipped, fmw_12.2.1.2.0_soa.jar and fmw_12212_readme.htm will be extracted into

the same path

d) execute the jar file to launch the installer for 12c SOA installation with the below command

"java -jar fmw_12.2.1.2.0_soa.jar"

```
[C:\Users\pribalac\ ~]$ cd C:\Users\pribalac\Downloads\V779122-01
[C:\Users\pribalac\Downloads\V779122-01]$ unzip V779122-01.zip
Archive: V779122-01.zip
inflating: fmw 12.2.1.2.0 infrastructure.jar
[C:\Users\pribalac\Downloads\V779122-01]$ "C:\Program Files\Java\jdk1.8.0_144\bin\java" -jar
fmw_12.2.1.2.0_infrastructure.jar
```

Step 1:



Step 2:

Select the option based on the requirement:

If you do not want the auto updates, select the first option.

If you are applying patches, select the second option.

uto Updates		
Welcome Auto Updates Installation Location Installation Type Prerequisite Checks Installation Summary Installation Progress Installation Complete	Skip Auto Updates Select patches from directory Location: Search My Oracle Support for Updates Username: Password: Proxy Settings Search	Brown
Help		

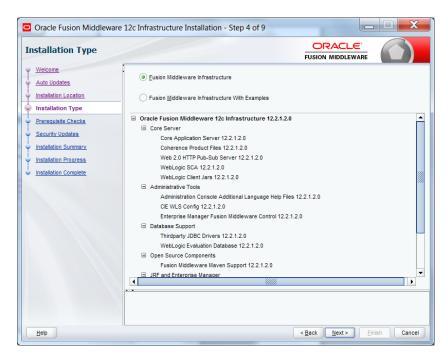
Step 3:

Define the oracle home path

Oracle Fusion Middleware	12c Infrastructure Installation - Step 3 of 8
Installation Location	
<u>Welcome</u>	Oracle Home:
Auto Updates	C:\Oracle\Middleware\Oracle_Home
Installation Location	Feature Sets Installed At Selected Oracle Home: View
Installation Type	
Prerequisite Checks	
Installation Summary	
Installation Progress	
Installation Complete	
	Oracle Home may only contain alphanumeric, underscore (_), hyphen (-) or dot(.) characters and it must begin with an alphanumeric character.
Help	< <u>Back</u> <u>Next</u> > <u>Einish</u> Cancel

Step 4:

Select fusion middleware infrastructure





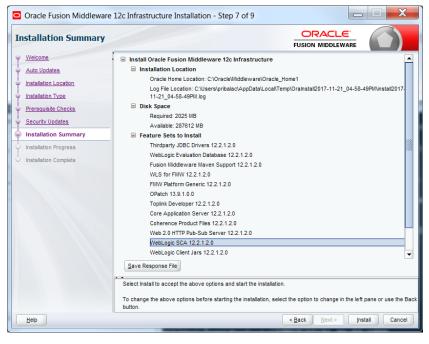
Oracle Fusion Middleware 120	Infrastructure Installation - Step 5 of 9					
Prerequisite Checks						
<u>Welcome</u>						
<u>Auto Updates</u>	100%					
Installation Location	Checking operating system certification					
Installation Type	Checking Java version used to launch the installer					
Prerequisite Checks						
<u>Security Updates</u>						
Installation Summary						
Installation Progress						
Installation Complete						
-						
-						
-						
	Stop Rerun Skip View Successful Tasks View Log					
	Checking operating system certification Checking Java version used to launch the installer					
Help	< Back Next > Finish Cancel					
Пеф	< Dack Wext> Ensite Cancel					



Optional based on installation requirement



Step 7:



Step 8:

Oracle Fusion Middleware	12c Infra	astructure Insta	allation - Step	8 of 9		
Installation Progress						
Y Welcome	: 			0%		
Auto Updates				0%		
Unstallation Location	9	Prepare				
Installation Type		Сору				
Prerequisite Checks		Generating Librar	ries			
Security Updates		Performing String	Substitutions			
Installation Summary		Linking				
Installation Progress		Setup				
Installation Complete		Saving the invent	tory			
		Post install script	5			
	View	Messages		✓ <u>V</u> iew Succ	essful Tasks	View Log
	-	544			Hardware and Engineered to W	
Help					< Back Next >	Einish Cancel

Step 9:



2.5 Installing Oracle Fusion Middleware 12c software.

Installation of the software can be done from local machine or from the app server

- 1. Installation from the app server location:
- a) Login to the app server host and connect through putty
- b) Copy the zipped file into the app server in the location /scratch/app/<[app_name]>

eg: /scratch/app/bpm12212

c) Unzip the file with the command "unzip V789369-01.zip"

d) Once it is unzipped, fmw_12.2.1.2.0_soa.jar and fmw_12212_readme.htm will be

extracted into the same path

e) execute the jar file to launch the installer for 12c SOA installation with the below command

"java -jar fmw_12.2.1.2.0_soa.jar"

```
[bpm12212@whf00anl:~]$ cd /scratch/app/bpm12212/
[bpm12212@whf00anl:/scratch/app/bpm12212]$ unzip V789369-01.zip
Archive: V789369-01.zip
inflating: fmw 12.2.1.2.0 soa.jar
[bpm12212@whf00anl:/scratch/app/bpm12212]$ java -jar fmw 12.2.1.2.0 soa.jar
```

2. 1) Installation from the local path:

a) open the command prompt in "Run as Adminstrator" mode and move to the location where

the zip file is available using the command "cd" followed by the path

eg: C:\Users\pribalac\Downloads

b) Unzip the file with the command "unzip V789369-01.zip"

c) Once it is unzipped, fmw_12.2.1.2.0_soa.jar and fmw_12212_readme.htm will be extracted into

the same path

d) execute the jar file to launch the installer for 12c SOA installation with the below command

"java -jar fmw_12.2.1.2.0_soa.jar"

Step 1:



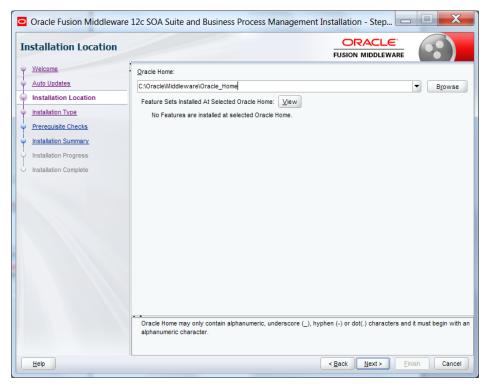
Step 2:

Option need to be selected based on the requirement :

- If you don't want the auto updates, select the first option.
- If you are applying patches , select the second option .

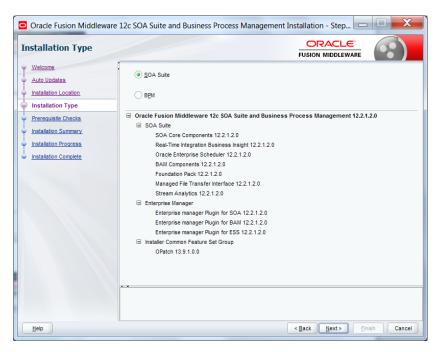
Please select the below option based on the requirement:

Step 3:



Step 4:

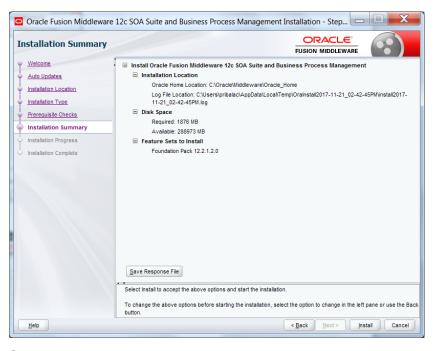
Select BPM if the environment requires BPM process flow deployment



Step 5:

rerequisite Checks			
Welcome		100%	
Auto Updates Installation Location			
Installation Type		Checking operating system certification	
		Checking Java version used to launch the installer	
Prerequisite Checks			
Installation Summary			
Installation Progress			
Installation Complete			
	Stop	Rerun Skip View Successful Tasks	View Log
		cking operating system certification cking Java version used to launch the installer	

Step 6:



Step 7:

Oracle Fusion Middlewa	re 12c SOA Suite and Business Process Management Installation - Step 👝 💷 🗮 🗶
Installation Progress	
9 Welcome	
Auto Updates	100%
Installation Location	Y Prepare
Installation Type	Copy
Prerequisite Checks	Generating Libraries
Installation Summary	Performing String Substitutions
Installation Progress	✓ Linking
Installation Complete	✓ Setup
	Saving the inventory
	Post install scripts
	View Messages View Successful Tasks View Log
	Hardware and Software Engineered to Work Together
Help	< <u>Back</u> Next> Enish Cancel

Step 8:



2.6 Creating product schemas in Oracle database

The Repository Creation Utility (RCU) is the tool used to create schemas in a database. This tool is available once we've installed the Oracle Fusion Middleware Infrastructure software (Point 2).

Refer to <u>Oracle Fusion Middleware Creating Schemas with the Repository Creation Utility</u> for more information about the Repository Creation Utility.

- [oracle@wls12c-node1 fmwTemp1221]\$ cd /scratch/app/fmwTemp1221/Oracle/Middleware/Oracle_Home/bin/
- [oracle@wls12c-node1 bin]\$./rcu

Step 1:



Step 2:

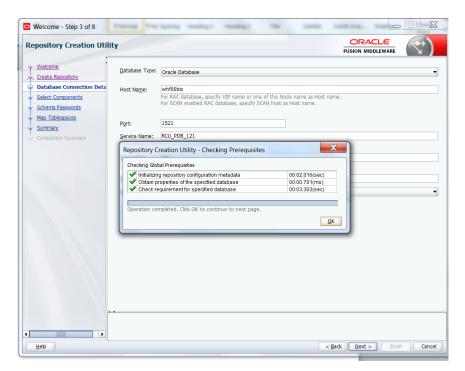
Select the option as System Load and Product Load and click on Next



Step 3:

Define the host name port username and password for creating the RCU schemas in the database. The sys user required to create the rcu schemas.

Repository Creation Utility Disconsection Vicionne Database Type: Oracle Database Database Connection Detr Host Name: For Racle Database, specify UP name or one of the Node name as Host name. Scherns Passwords Main Tablesacces Port: 1521 Summary Correlation Summary Service Name: RCU_POB_121 User with DBA or SYSDBA privileges. Example:sys Database Database Bole: SySDBA One or more components may require SYSDBA role for the operation to succeed.	Welcome - Step 3 of 8	Toplas in	
Create Rapostory Database Connection Deta Select Components Hot Name: Scheme Passwords Port RAC database, specify VIP name or one of the Node name as Host name. For SCAll database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. For SCAI mable dAC database, specify SCAI host as Host name. Bole: SYSDBA One or more components may require SYSDBA role for the operation to succeed.	Repository Creation Utili	ty	
Select Components Softma Passwords Map Tablespaces Summary Completion Summary Genvice Name: RCU_PDB_121 User with DBA or SYSDBA privleges. Example:sys Bassword: SYSDBA One or more components may require SYSDBA role for the operation to succeed.	Create Repository		
Summary Pgrt: 1521 Completion Summary Service Name: RCU_PDB_121 User with DBA or SYSDBA privleges. Example:sys Bassword: Sys Bassword: SYSDBA One or more components may require SYSDBA role for the operation to succeed.	 Schema Passwords 	Host Na <u>m</u> e:	For RAC database, specify VIP name or one of the Node name as Host name.
Competent summary Jermanne: Sys User with DBA or SYSDBA privileges. Example:sys Bassword: SYSDBA Bole: SYSDBA One or more components may require SYSDBA role for the operation to succeed.		-	
User with DBA or SYSDBA privleges. Example:sys Bassword: SYSDBA Bole: SYSDBA One or more components may require SYSDBA role for the operation to succeed.	Completion Summary	Service Name:	RCU_PDB_121
Bole: SYSDBA One or more components may require SYSDBA role for the operation to succeed.		Username:	
One or more components may require SYSDBA role for the operation to succeed.		Password:	
		Roie:	
	Help		< Back Next > Finish Cancel



Step 4:

Define the prefix to be used for the schemas

Welcome - Step 4 of 8	Fights maked maked make	
Repository Creation Uti	lity	
Y Welcome	Specify a unique prefix for all schemas created in this se	ssion, so you can easily locate, reference, and manage the schemas later.
Database Connection Details	Select existing prefix: BPM12212	
Select Components	Create new prefix: DEV	
 Schema Passwords 		Cannot start with a number. No special characters.
<u>Map Tablespaces</u>	Component	Schema Owner
 <u>Summary</u> 	Oracle AS Repository Components	outerna owner
 Completion Summary 	Bas Common Schemas	
	Common Infrastructure Services	DEV_STB
	Oracle Enterprise Scheduler	ESS
	Oracle Platform Security Services	OPSS
	User Messaging Service	UMS
	Audit Services	IAU
	Audit Services	IAU APPEND
	Audit Services Append	
		IAU_VIEWER
	Metadata Services	MDS
	Weblogic Services	WLS
	SOA Suite	
	Following are mandatory selected components:Commo	n Infrastructure Services
	Mandatory selected components cannot be deselected	d.
Help		< <u>Back</u> <u>Next</u> > <u>Enish</u> Cancel

	Select Compo	nents - Step 3 of 7	- 🗆 🗡
elect Components			
Summary Completion Summ Completion Summ Comple	manage the schemas later. Select existing prefix: Create newprefix:	hemas created in this session, so you can easily i DEV tility - Checking Prerequisites 00:00.101(ms) 00:00.102(ms) 00:00.102(ms) 00:00.102(ms) 00:00.101(ms) 00:00.101(ms) 00:00.101(ms) 00:00.101(ms) 00:00.101(ms)	VD ER
Help		< <u>B</u> ack <u>N</u> ext >	Einish Cancel

Step 5:

Define the password for the schemas.

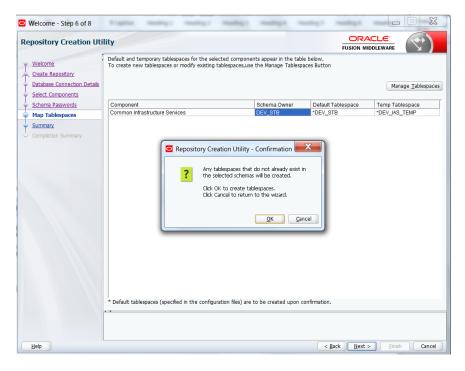
Welcome - Step 5 of 8	Fights read	gi maligi i	and the second s	10000		
Repository Creation Util	lity					
Welcome	Define passwords for m	ain and auxiliary schema use	ers.			
Create Repository	() Use same passwords	s for all schemas				
Database Connection Details	Password:	•••••				
 Select Components 		Alpha numeric only.Cannot No special characters except	start with a number.			
Schema Passwords						
<u>Map Tablespaces</u>	Confirm Password:	•••••				
Completion Summary	🔘 Use <u>m</u> ain schema pa	asswords for auxiliary schem	as			
o completion ourmany	Specify different pas	sswords for all schemas				
	• •					
Help				<	Back Next > Fin	ish Cancel

Note: It is important to remember the password or passwords that you enter during the process.

Step 6:

Welcome - Step 6 of 8	Fights made i made	r maligh maligh m	Appleant Lynna	
Repository Creation Uti			FUSION M	
Welcome Create Repository Database Connection Details Select Components		e selected components appear in the tabk ting tablespaces,use the Manage Tablespa		Manage <u>T</u> ablespaces
Schema Passwords	Component	Schema Owner	Default Tablespace	Temp Tablespace
Map Tablespaces	Common Infrastructure Services	DEV_STB	*DEV_STB	*DEV_IAS_TEMP
Completion Summary	* Default tablespaces (specified in the co	nfiguration files) are to be created upon co	onfirmation.	
Help			< <u>B</u> ack <u>N</u> ext	> Einish Cancel

Step 7:



epository Creation Util	ity	
Wekome Create Repostory Database Connection Details Select Components Schema Passwords Map Tablespaces	Specify a unique prefix for all schemas created in this session, so you can easily locate, reference, a Select existing prefix: @ Greate new prefix: DEV Alpha numeric only. Cannot start with a number. No special chart	-
Summary Completion Summary	Component Component Checking Scommon Schemas Repository Creation Utility - Checking Prerequisites Checking Component Prerequisites Checking Common infrastructure Services Operation completed. Click OK to continue to next page. OK	Schema Owner
Help	< Back	Next > Finish Cancel

Step 7:

Welcome - Step 7 of 8	Fights makes i makes	making a	salling a survey of a	
Repository Creation Uti	lity			
φ <u>Welcome</u>	Database details:			
Create Repository Database Connection Details Select Components Schema Passwords	Host Name Port Service Name Connected As Operation	15 RC sy	hf00bk 521 5U_PDB_121 s rstem and Data Load concurrent	-h-
Map Tablespaces Summary	Prefix for (prefixable) Schema Owners		EV	
Completion Summary	Component Common Infrastructure Services	Schema Ov DEV_STB	vner Tablespace Defaut Additional	Type Tablespace Hame DEV_JSTB DEV_JAS_TEMP [None]
	Save <u>R</u> esponse File			
Help			< <u>B</u> ac	k <u>N</u> ext > <u>Create</u> Cancel

Note: Verifying Schema Version Numbers in the database where RCU is executed

SQL> select comp_name, version from schema_version_registry;

5Q	L	Output Statistics						
SE	LE	CT comp name, version FRC	M	Schema V	/er:	sion H	Regis	tr
				_		_		
-	-		-					
Ē	-	• 🔒 + - 🗸 🔻 🖄		🎽 🏫 🤝	\bigtriangleup	-65		Ë
		COMP_NAME		VERSION				
▶	1	Audit Service		12.2.1.0.0				
	2	Audit Service Append		12.2.1.0.0				
	3	Audit Service Viewer		12.2.1.0.0				
	4	Metadata Services		12.2.1.0.0				
	5	Oracle Platform Security Services		12.2.1.0.0				
	6	SOA Infrastructure Services		12.2.1.0.0				
_	7	User Messaging Service		12.2.1.0.0				
_	1	WebLogic Services		122100				

2.7 WebLogic Server Domain Configuration

Step 1:



Step 2:

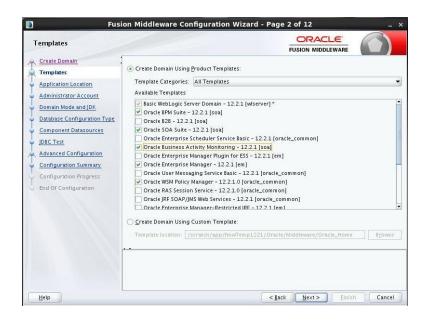
Domain creation template

For BPEL only domain

Based on the requirement select the Oracle Business Activity Monitoring (BAM) check box.

Templates	
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Type Component Datasources JDBC Test Advanced Configuration Configuration Summary Configuration Progress End Of Configuration	Create Domain Using Product Templates: Template Categories: All Templates Available Templates Ø Basic WebLogic Server Domain - 12.2.1 [wlserver]* Oracle BPM Suite - 12.2.1 [soa] Oracle B2B - 12.2.1 [soa] Ø Oracle B2B - 12.2.1 [soa] Oracle Enterprise Scheduler Service Basic - 12.2.1 [oracle_common] Ø Oracle Enterprise Manager Plugin for ESS - 12.2.1 [oracle_common] Ø Oracle Enterprise Manager - 12.2.1 [oracle_common] Ø Oracle Enterprise Manager - 12.2.1 [oracle_common] Ø Oracle ENS Service Basic - 12.2.1 [oracle_common] Ø Oracle Enterprise Manager - 12.2.1.0 [oracle_common] Ø Oracle RAS Session Service - 12.2.1.0 [oracle_common] Oracle Enterprise Manager-Restricted IRE - 12.2.1 [eral Create Domain Using Custom Template: Template location: /scratch/app/fmwTemp1221/Oracle/Middleware/Oracle_Home

For BPM enabled domain (_If BPM process flows deployment is required then we have to select the Oracle BPM Suite -12.2.1)



Step 3:

🛐 Fus	ion Middleware (Configuration Wizard -	Page 3 of 13	_ ×
Application Location				
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Type Component Datasources JDBC Test Keystore Advanced Configuration Configuration Progress End Of Configuration	Domain name: Domain location: Application location:		Oracle_Home/user_projects/domains er_projects/applications/wls_domain)	Brgwse
Help			< <u>B</u> ack <u>N</u> ext > <u>E</u> inish	Cancel

Step 4:

Defining the domain user name and password

	Fusion Middleware	Configuration Wizard - Page 4 of 13 ×
Administrator Accour	nt	
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Component Datasources JDEC Test Keystore Advanced Configuration Configuration Progress End Of Configuration	Name Password Confirm Password	the password. Password must contain at least 8 alphanumeric characters with at least al character.
Help		< <u>Back</u> <u>Next</u> > <u>Einish</u> Cancel

Step 5:

Domain mode needs to be production for all installations.

	Fusio	n Middleware Configuration Wi	zard - Page 5 of 13	
Domain Mode a	und JDK			
Create Domain Templates Application Locat Administrator Ac Domain Mode ar Database Configu DBC Test Keystore Advanced Config Configuration Pro End Of Configura	tion count dd JDK uration Type sources uration mmary ogress	O <u>P</u> roduction	e and password, and poll for applications to d d password, and do not poll for applications to p/jdk1.8.0_65	
Help			< <u>Back Next ></u> Einish	Cancel



Define the RCU schema details and the TNS connection details

	Fusion Middleware Configuration Wizard - Pa	ige 6 of 12	- 🗆 🗡
Database Configuration Ty	pe		
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Type Component Datasources IDBC Test Advanced Configuration Configuration Progress End Of Configuration	DBMS/Service: Host Name:	Ically configure the datasources r Ile's Driver (Thin) for Service conn Pord: Port	required for
Help		< <u>Back N</u> ext > <u>F</u> inish	Cancel

Step 7:

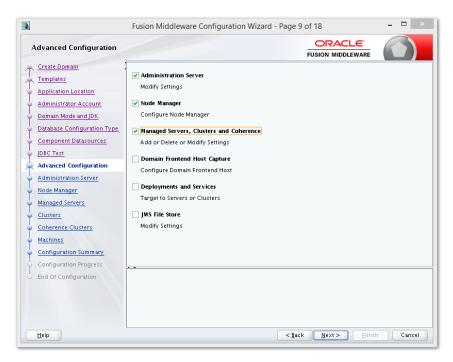
	Ereate Domain	1					MIDDLEWARE	
-		Ver	ndor:		Driver:			
· -	<u>Femplates</u>	DBI	MS/Service:	1	Host Name:		Port:	
	Application Location	Sch	iema Owner:		Schema Password:			
- 1	Administrator Account							
5	Domain Mode and JDK	Ori	acle RAC configuration f	or component s	chemas:			
g	Database Configuration Type		🔿 Convert to G	ridLink 🔿 C	onvert to RAC mult	i data sour	rce 🔷 🔿 Don't	convert
(Component Datasources							
1	DBC Test	Edi	ts to the data above will	affect all checke	d rows in the table	below.		
	Advanced Configuration		Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Passwor
			BAM Schema	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
	Configuration Summary		BAM Job Sched Schema	ORFC12C	ofss220337	1522	DEV_WLS	•••••
(Configuration Progress		SOA EDN (XA)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
B	End Of Configuration		SOA EDN (Local)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
			LocalSvcTbl Schema	ORFC12C	ofss220337	1522	DEV_STB	•••••
			User Messaging Servic	ORFC12C	ofss220337	1522	DEV_UMS	•••••
			SOA (XA)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
			SOA (Local)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
			BAM MDS Schema	ORFC12C	ofss220337	1522	DEV_MDS	•••••
			OWSM MDS Schema	ORFC12C	ofss220337	1500	DEV MDS	

Step 8:

		Fu	sion N	liddleware Config	guration Wizard -	Page 8 of 12	- • ×
JD	BC Component Schema T	est					
<u>م</u>	Create Domain		Status	Component Schema		JDBC Connection URL	
4 -	Templates		1	User Messaging Ser	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
Γ,	Application Location		1	SOA (XA)	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
1 7	Administrator Account		1	SOA (Local)	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
1 1			1	BAM MDS Schema	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
1	Domain Mode and JDK		1	OWSM MDS Schema	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
<u>י</u>	Database Configuration Type		1	SOA MDS	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
5	Component Datasources		1	OPSS Audit Schema	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
	IDBC Test		1	OPSS Audit Viewer S	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
1	Advanced Configuration		1	OPSS Schema	jdbc:oracle:thin:@//	ofss220337:1522/ORFC12C	
	Configuration Summary Configuration Progress End Of Configuration	Col	- nnectio	lected Connections n Result Log t Schema=BAM Schem	<u>C</u> ancel Testing		
	End of configuration	URL: User Pass	=jdbc:c `=DEV_ word=	cle.jdbc.xa.client.Ora oracle:thin:@//zeus.zi SOAINFRA select 1 from schema_	on.local:1522/PD801	.ZION.LOCAL re owner=(select user from dual)	and mr_type='SOAI
				213: Test Successful			
			EUUK - 64	1213: IDBC connection	o test was successful 2000		•
	Help					< Back Next > Fin	ish Cancel

Step 9:

Select the admin server, node manager and managed servers.



Step 10:

Specify the server name as AdminServer and listener address as hostname. Based on the installation requirement SSL need to be enabled.

۹.	Fusion Middle	eware Configuration Wizard - Page 10 of 18	- 🗆 🛛
Administration Server			
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Type Component Datasources JDBC Test Advanced Configuration Administration Server Node Manager Managed Servers Clusters Coherence Clusters Machines Configuration Progress End Of Configuration	Server Name Listen Address Listen Port Enable SSL SSL Listen Port Server Groups The name must n	VLSO_ADMIN WLSO_ADMIN Ws12c 7001 Unspecified Unspecified ot be null or empty and may not contain any : , = *? %_cloned.	
Help		< Back Next > Finish	Cancel

Step 11:

Specify the server name as soa_server1 and bam_server1 for the managed servers.

Based on the installation requirement SSL need to be enabled for managed servers

	Fusion Midd	leware Configuration Wi	zard - Pa	age 12 of	18	>	×
Managed Servers						_	
Create Domain Templates	🛖 Add	🗈 C <u>l</u> one 🛛 🗙 <u>D</u> elete)			🧐 Dis <u>c</u> ard Changes	
Application Location Administrator Account	Server Name	Listen Address	Listen Port	Enable SSL	SSL Listen Port	Server Groups	
	WLS1_SOA	wis12c-node1.zion.local 💌	7003		Disabled	SOA-MGD-SVRS	-
 Domain Mode and JDK Database Configuration Type 	WLS2_BAM	wis12c-node1.zion.local 💌	7004		Disabled	BAM12-MGD-SVRS	-
Component Datasources DBC Test Advanced Configuration Administration Server Node Manager Managed Servers Clusters Configuration Summary Configuration Summary Configuration Progress End Of Configuration							
Help				< <u>B</u> ack	<u>N</u> ext >	Einish Cancel	כ

Step 12:

	Fusion Middleware Configuration Wiza	ard - Page 15 of 19	- 🗆 🗙
Coherence Clusters			
Create Domain Templates		6	is <u>c</u> ard Changes
Application Location	Cluster Name	Unicast Listen P	ort
Administrator Account	defaultCoherenceCluster	0	
<u>Domain Mode and JDK</u>			
Database Configuration Type			
Component Datasources			
UDBC Test			
Advanced Configuration			
Administration Server			
 <u>Node Manager</u> 			
Managed Servers			
Clusters			
Assign Servers to Clusters			
Coherence Clusters			
 <u>Machines</u> 			
Configuration Summary	· •		
Configuration Progress			
ပ် End Of Configuration			
Help		< <u>B</u> ack <u>N</u> ext > Einis	h Cancel

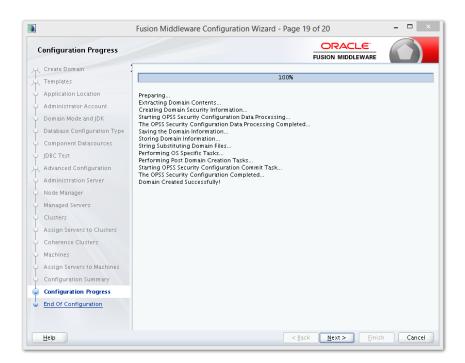
Step 13:

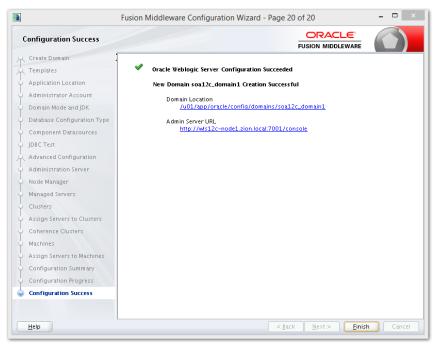
	Fusion Middleware	Configur	ation Wi	zard - Pag	ge 16 of 2	- 20	×
Machines							
Create Domain Templates Application Location Administrator Account	Machine Unix Machir	lete Enable	Post	Enable	Post	🔊 Dis <u>c</u> ard Cl Node Manager Listen	Node
Domain Mode and JDK Database Configuration Type		Post Bind GID	Bind GID	Post Bind UID	Bind UID	Address	Manager Listen Port
Component Datasources IDBC Test Advanced Configuration Administration Server Managed Servers Clusters Conservers to Clusters Coherence Clusters Coherence Clusters Machines	MACHINE_wds12c-node		nobody		nobody	ws12c-nodel.zion.local 🔻	5556
Assign Servers to Machines Configuration Summary Configuration Progress End Of Configuration						Next > Finish	

Step 14:

	Fusion Middleware Configuration Wizard -		
Assign Servers to Machine	s		
Create Domain	Servers	Machines	
Templates		🗁 Unix Machine	
Application Location		MACHINE_wis12c	-nodel
Administrator Account		🥥 WLS1_SOA	
Domain Mode and JDK		📦 WLS2_BAM	
Database Configuration Type			
		≫	
Component Datasources		Ø	
JDBC Test			
Advanced Configuration			
Administration Server			
Node Manager	[[]	8	
Managed Servers			
Clusters			
Assign Servers to Clusters			
Coherence Clusters			
Machines			
Assign Servers to Machines			
Configuration Summary	Select one or more servers in the left pane and one n button (>) to assign the server or servers to the mac		use the right arrow
Configuration Progress	barron (2) to assign the server of servers to the fildu	inite.	
End Of Configuration			
Help		< Back Next >	Finish Cance

Step 15:





2.8 <u>Remote Setup Configuration:</u>

Remote setup means SOA is installed in different machine and EAR is running in different machine.

Configuring Flexcube Application to point to remote BPEL instances.

1. Following Jars has to be copied to <Weblogic_home>\<domain>\lib

Jar to be copied	Path where the jar is available in SOA Middleware %Middleware Home%/soa/soa/modules/oracle.soa.workflow_ 11.1.1			
bpm-services.jar				
fabric-runtime.jar	%Middleware			
tracking-fabric.jar	Home%/soa/soa/modules/oracle.soa.fabric_11.			
tracking-api.jar				
jrf-api.jar	%Middleware Home%/oracle_common/modules/oracle.jrf			
orabpel-common.jar	%Middleware — Home%/soa/soa/modules/oracle.soa.bpel_11.1. 1			
orabpel-thirdparty.jar				
orabpel.jar				
soa-infra-mgmt.jar	%Middleware Home%/soa/soa/modules/oracle.soa.mgmt_11. 1.1			
xml.jar	%Middleware			
xmlparserv2.jar	 Home%/oracle_common/modules/oracle.xdk 			
mdsrt.jar	%Middleware Home%/oracle_common/modules/oracle.mds			
com.oracle.webservices.fmw.wsclient-rt- impl.jar	%Middleware Home%/oracle_common/modules			

2. Additionally if BPMN enabled

Jar to be copied	Path where the jar is available in SOA Middleware
------------------	---

oracle.bpm.bpm-services.client.jar	%Middleware Home%/soa/soa/modules/oracle.bpm.client_11.1.1		
oracle.bpm.bpm-services.interface.jar			
oracle.bpm.project.draw.jar	%Middleware Home%/soa/soa/modules/oracle.bpm.project_11.1.1		
oracle.bpm.project.model.jar			
oracle.bpm.core.jar	%Middleware Home%/soa/soa/modules/oracle.bpm.runtime_11.1.1		
oracle.bpm.ui.jar	%Middleware Home%/soa/soa/modules/oracle.bpm.workspace_11.1 .1		
oracle.bpm.casemgmt.interface.jar	%Middleware Home%/soa/soa/modules/oracle.bpm.runtime_11.1.1		

- The jars copied have to be from same soa-suite version where BPEL processflows deployed. Ie, We cannot have jars from soa12.1.3.0.0 and BPEL deployed in soa12.2.1.0.0 It should be consistent.
- 4. The properties file fcubs.properties should read as below WORKFLOW_CLIENT_TYPE =REMOTE java.naming.provider.url =t3://10.184.74.143:8001/?partitionName=DOMAIN (Remote soa server provider url) java.naming.security.principal =weblogic (Remote bpel server userid) java.naming.security.credentials=RF2MRTP/MG8TB1T5QG6lnQ== (Remote soa server password) dedicated.connection =true domain.name =default (Remote soa server partition) domain.pwd =RF2MRTP/MG8TB1T5QG6lnQ== (Remote soa server password)
- 5. Configure domain password same as for both fcj ear domain and remote BPEL domain and DowngradeUntrusted Principals has to be checked

rust between two weblogic dom $ imes$	Configuring Security for a WebLogic Do × Enable	global trust between domains 🛛 👋 📄 Security	- base_kernel1132 - WLS Console × 🌓 /Farm_base_kernel1132/base_kernel11 🗵
http://10.184.74.143:7389/cons	ole/console.portal?_nfpb=true&_paget.abel=DomainSecurityg	eneralTabPage&SecurityDomainDomainConfigGeneralF	Portlethandl 🏫 = C 🚷 - cject: principals=[weblogic, Administrators] 🔎 🏫
ne EnforceStrictURLPattern flag			
le Enforcescholokickaltent hag	- 🗢 Advanced		
itatus 🛛 🖂	👸 Security Interoperability Mode:	default	Specifies the security mode of the communication channel used for XA calls between servers that participate in a global transaction. All server instances in a domain must have the same security mode setting. More Info
Failed (0) Critical (0) Overloaded (0) Warning (0)	Credential:		The credential for this WebLogic Server domain. When a domain is created, a unique credential is generated for the domain. If you want to establish trust between two or more domains, decide on a credential latva. Will be shared by the domains, then specify it here and in the other domains. More Info
OK (2)	Confirm Credential:	••••••	
	NodeManager Username:	weblogic	The user name that the Administration Server uses to communicate with Node Manager when starting, stopping, or restarting Managed Servers. More Info
	NodeManager Password:	••••••	The password that the Administration Server uses to communicate with Node Manager when starting, stopping, or restarting Managed Servers. More Info
	Confirm NodeManager Password:	•••••	
	dुटि Web App Files Case Insensitive:	false	Specifies the case sensitive URL-pattern matching behavior for security- constraints, servlets, filters, virtual-hosts, etc. in the webapp container and external security policies. The valid values are os, true, or false. More Info
	🗹 🐠 Enforce Strict URL Pattern		Specifies whether the system should enforce strict URL pattern., " / " to represent the entire contents of a Web Application. More ${\rm Info}\ldots$
	🗹 🎼 Downgrade Untrusted Principals		Specifies whether to downgrade to anonymous principals that cannot be verified. More Info
	🗌 🚝 Principal Equals Case Insensitive		Specifies whether the WebLogic Server principal name is compared using a case insensitive match when the equals method for the principal object is performed. More Info
	🗌 👸 Principal Equals Compare DN and GUID		Specifies whether the GUID and DN data in a WebLogic Server principal object are used when the equals method of that object is invoked. More Info
	Compatibility Connection Filters Enabled		Specifies whether this WebLogic Server domain enables compatibility with previous connection filters. More Info
	Allow Security Management Operations if Nor	n-dynamic Changes have been Made	Specifies whether security management operations are allowed if non-dynamic changes have been made and the Admin Server requires restart. More Info
	Clear Text Credential Access Enabled		Returns true if allow access to credential in clear text. This can be overridden by the system property -Oweblogic.management.clear/extCredentialAccessEnabled More Info



SOA Suite Setup for BPEL Process Flow [May] [2018] Version 14.1.0.0.0

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