SOA Suite Setup for BPEL Process Flow Oracle FLEXCUBE Universal Banking Release 12.5.0.0.0 [September] [2017]



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# ORACLE

# 1. Preface

# 1.1 Background

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

Refer to the Oracle documentation for HA 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 oracle edelivery portal

https://edelivery.oracle.com

Refer to the Oracle certification matrix for qualified databases.

## 2.2 List of downloaded files

Latest Oracle JDK 8 Update for Linux x86-64

Search: Oracle Fusion Middleware 12c Infrastructure 12.2.1(WebLogic Installation)

V78156-01.zip- Oracle Fusion Middleware 12c (12.2.1) Infrastructure

Search: Oracle Business Process Management 12.2.1.0.0(BPM/BPEL)

V78169-01.zip– Oracle Fusion Middleware 12c (12.2.1.0.0) SOA Suite and Business Process Management

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

HP-UX Itanium		
IBM AIX on POWER Systems (64-bit)		
IBM z/OS on System z		
IBM: Linux on System z		
Linux x86-64		
Microsoft Windows (32-bit)		
Microsoft Windows x64 (64-bit)		
Oracle Solaris on SPARC (32-bit)		
Oracle Solaris on SPARC (64-bit)		
Oracle Solaris on x86-64 (64-bit)		
	Select	Cancel

earch by All   Start typing	Select Platform V
Download Queue	Continue
Selected Item	Platform
Release: Oracle SOA Suite 12.2.1.0.0 🗱	Linux x86-64
Release: Oracle Business Process Management 12.2.1.0.0 🛛 🎇	Linux x86-64
Remove All	Continue

**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

```
[oracle@wls12c-node1 ~]$ cd /scratch/app/fmwTemp1221/
[oracle@wls12c-node1 fmwTemp1221]$ unzip V78156-01.zip
Archive: V78156-01.zip
inflating: fmw_12.2.1_infrastructure.jar
[oracle@wls12c-node1 fmwTemp1221]$ java -jar fmw_12.2.1 _infrastructure.jar
```

Step 1:

🖸 Oracle Fusi	ion Middleware 12c Infrastructure Installation - Step 1 of 8 ×
Welcome	
🥥 Welcome	
Auto Updates	Welcome to the Oracle Fusion Middleware 12c (12.2.1.0.0) Infrastructure Installer.
Installation Location	Use this installer to create a new Oracle home that contains the Oracle Fusion Middleware
Installation Type	Infrastructure software. You can then install additional Fusion Middleware products that require the Infrastructure into the Oracle home, or you can use the Infrastructure to configure a WebLogic Server domain for the deployment of Java and Oracle ADF applications.
Prerequisite Checks	
Installation Summary	For more information, see <u>Install, Patch, and Upgrade</u> in the Oracle Fusion Middleware documentation library.
ပုံ Installation Progress	
Installation Complete	Context-sensitive online help is available from the <u>H</u> elp button.
	Copyright © 1996, 2015, Oracle and/or its affiliates. All rights reserved.
Help	< <u>Back</u> <u>Pext</u> > <u>Finish</u> Cancel

Option need to be selected based on the requirement :

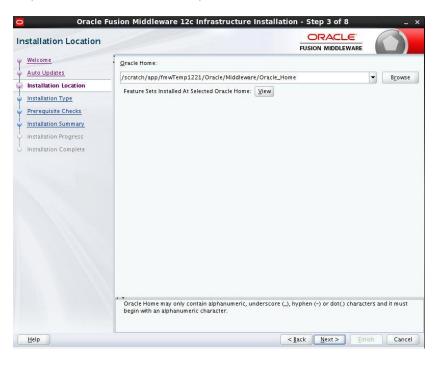
If you don't want the auto updates, select the first option.

If you are applying patches , select the second option.

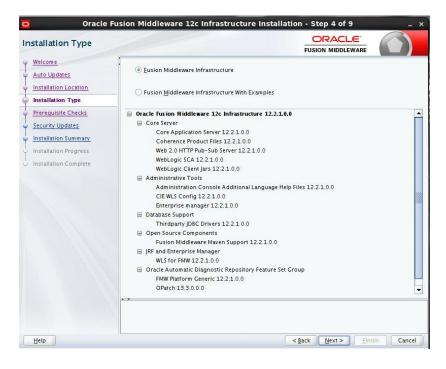
Please select	the option	based on th	e req	uirement :	

Welcome	1	
Auto Updates	Skip <u>A</u> uto Updates	
Installation Location	Select patches from <u>d</u> irectory	
nstallation Type	Location:	Bro
Prerequisite Checks	Search My Oracle Support for Updates	
Installation Summary Installation Progress Installation Complete	Username: Password:	
	Search	

#### Step 3: Define the oracle home path



Step 4: select fusion middleware infrastructure



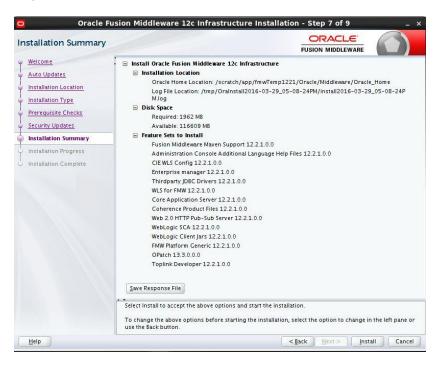
Step 5:

rerequisite Checks			
Welcome Auto Updates		100%	
Installation Location Installation Type Prerequisite Checks	<b>v</b>	Checking operating system certification Checking Java version used to launch the installer	
Security Updates Installation Summary Installation Progress Installation Complete			
		Berun       Sgp       View Successful Tasks         ecking operating system certification       ecking Java version used to launch the installer	ViewLog

Step 6: optional based on installation requirement

ecurity Updates			
Welcome Auto Updates Installation Location Installation Type Prerequisite Checks Security Updates	Provide your email address to be i and initiate configuration manage Email:		
Installation Summary Installation Progress Installation Complete	My <u>O</u> racle Support Password:		og og en mante.

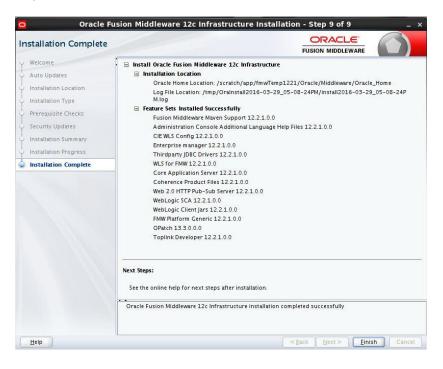
#### Step 7:



#### Step 8:

Oracle Fusio	n Middleware 12c Infrastructure Installation - Step 8 of 9 $\_$ $\_$ $\times$
Installation Progress	
V Welcome	
4 Auto Updates	0%
Installation Location	Prepare
O Installation Type	Сору
Prerequisite Checks	Generating Libraries
Ý Security Updates	Performing String Substitutions
Unstallation Summary	Linking
Installation Progress	Setup
O Installation Complete	Saving the inventory
	Post Install scripts  View Messages  View Mussages  View Mussage  View Mussages  View Mussages
	Engineered to Work Together
Help	< <u>Back</u> <u>Next&gt;</u> Einish Cancel

#### Step 9:



# 2.5 Installing Oracle Fusion Middleware 12c software.

```
[oracle@wls12c-node1 ~]$ cd /scratch/app/fmwTemp1221/
[oracle@wls12c-node1 fmwTemp1221]$ unzip V78169-01.zip
Archive: V78169-01.zip
inflating: fmw 12.2.1.0.0 soa.jar
[oracle@wls12c-node1 fmwTemp1221]$ java -jar fmw_12.2.1 _soa.jar
```

#### Step 1:



#### Step 2:

Option need to be selected based on the requirement :

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

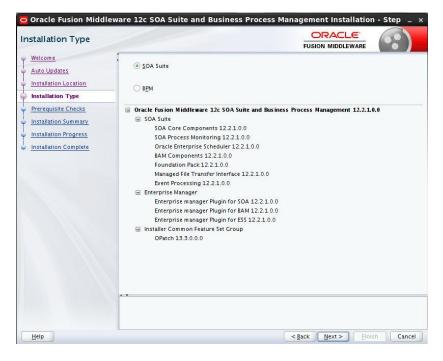
Please select the below option based on the requirement:

uto Updates			and the second sec
Welcome	Skip <u>A</u> uto Updates		
Auto Updates	Select patches from dir	rectory	
Installation Type	Location		Brows
Prerequisite Checks	Search My Oracle Supp	ort for Updates	
Installation Summary	Username:	errer opunce	
Installation Progress			
Installation Complete	Password:		
	Prox)	/ Settings	Test Connectio

Step	3:
------	----



Step 4: Please select BPM if the environment requires BPM process flow deployment





Welcome	1	
Auto Updates		100%
Installation Location		
Installation Type	<b></b>	Checking operating system certification
Prerequisite Checks	-	Checking Java version used to launch the installer
Installation Summary		
Installation Progress		
Installation Complete		
	-	
	Stop	Rerun Skip View Successful Tasks View
		necking operating system certification necking Java version used to launch the installer

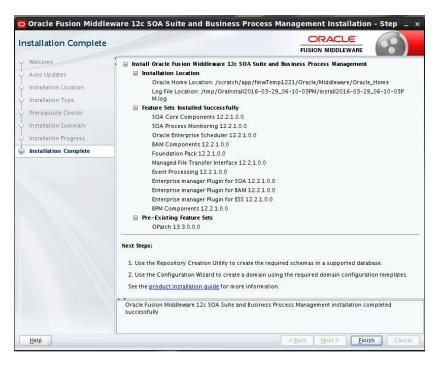
#### Step 6:



#### Step 7:

Installation Progress			()
Y Welcome			
Auto Updates		1%	
Installation Location	V 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		
	ViewMessages	) <u>V</u> iew Successful Tasks	ViewLog
Help	Mar Mar	Hardware and So Engineered to Work	Together

#### 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: 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.

4	Databas	e Connection Details - Step 2 of 7 – 🗖 🛛 🕹
Repository Creation Uti	lity	
Welcome	<u>D</u> atabase Type:	Oracle Database
Database Connection Details	Host Na <u>m</u> e:	ofss220337
<ul> <li><u>Select Components</u></li> <li>Schema Passwords</li> </ul>	Port:	For RAC database, specify VIP name or one of the Node name as Host name. For SCAN enabled RAC database, specify SCAN host as Host name.
<ul> <li>Map Tablespaces</li> </ul>		
Summary	<u>S</u> ervice Name:	ORDB12C
Completion Summary		
	<u>U</u> sername:	sys User with DBA or SYSDBA privileges. Example:sys
	Password:	•••••
	Role:	SYSDBA 🗸
		One or more components may require SYSDBA role for the operation to succeed.
	Messages:	
Help	1	< Back Next > Finish Cancel

<u>(</u>	Database	e Connection Details - Step 2	2 of 7	- 🗆 🛛
Repository Creation Utilit	У			
Welcome <u>Create Repository</u>	<u>D</u> atabase Type:	Oracle Database		•
Database Connection Details     Select Components	Host Na <u>m</u> e:	ofss220337 For RAC database, specify VIP nam For SCAN enabled RAC database, s		t name.
Schema Passwords Map Tablespaces	P <u>o</u> rt:	1522	specify scale nost as nost name.	
<ul> <li>✓ Initiali</li> <li>✓ Obtair</li> <li>✓ Check</li> </ul>	lobal Prerequisites zing repository con properties of the requirement for sy	Creation Utility - Checking Pro figuration metadata specified database pecified database to continue to next page.	00:01.215(sec) 00:00.102(ms) 00:01.625(sec)	↓ to succeed.
Ň	essages:			
Help			< <u>B</u> ack <u>N</u> ext > <u>F</u> ini	sh Cancel

Step 3: Define the prefix to be used for the schemas

Welcome manage the sc		FUSION MIDDLEWARE ed in this session, so you can easily locate, reference	e, and
Welcome         manage the sc           Create Repository         O Select e		ed in this session, so you can easily locate, referenc	e, and
Select Components     Schema Passwords     Map Tablespaces     Summary     Completion Summary     Completion Summary	Alpha nur		Characters

	Select Compo	onents - Step 3 of 7	×
elect Components			
Completion Summ	manage the schemas later.           Select existing prefix:           Create newprefix:		y locate, reference, and

Step 4: Define the password for the schemas.

1	Schem	a Passwords - Step 4 of 8		- 🗆 🛛
Repository Creation Util	lity			7
Welcome     Create Repository     Database Connection Details     Select Components     Schema Passwords     Custom Variables     Map Tablespaces     Summary	Les same password     Password: <u>C</u> onfirm Password:     Use <u>m</u> ain schem a pa	ain and auxiliary schema users. s for all schemas Alpha numeric only.Cannot start w No special characters except: \$, # excession schemas usswords for auxiliary schemas iswords for all schemas		
Completion Summary	Messages:			
Help			< <u>B</u> ack <u>N</u> ext > Eini	sh Cancel

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

# Step 5: Please select the database profile based on requirement (SMALL/MED/LARGE)

	Custom	Variables - Step 5 of 8		>
epository Creation Uti	lity			7
Welcome	Enter value for the following	ng custom variables.		
Create Repository	Component	Custom Variable	V	alue
Database Connection Details	SOA Infrastructure	Database Profile (SMALL/MED/LARGE)	SMALL	
Select Components		Healthcare Integration(YES/NO)	NO	
Schema Passwords				
	-			
Oustom Variables	-			
Map Tablespaces				
Summary				
Completion Summary				
	<u>M</u> essages:			
Help	IL	< <u>B</u> ack	<u>N</u> ext > <u>E</u> ini	sh Cancel

#### Step 6:

Repository Creation Ut	ility			
Welcome Create Repository Database Connection Details	To create new tablespaces		ed components appear in th lespaces,use the 'Manage T	
Select Components	Component	Schema Owner	Default Tablespace	Temp Tablespace
	Metadata Services	DEV_MDS	*DEV_MDS	*DEV_IAS_TEMP
<ul> <li>Schema Passwords</li> </ul>	Audit Services	DEV_IAU	*DEV_IAS_IAU	*DEV_IAS_TEMP
Custom Variables	Audit Services Append	DEV_IAU_APPEND	*DEV_IAS_IAU	*DEV_IAS_TEMP
Map Tablespaces	Audit Services Viewer	DEV_IAU_VIEWER	*DEV_IAS_IAU	*DEV_IAS_TEMP
with Lanceshares	Oracle Platform Secu	DEV_OPSS	*DEV_IAS_OPSS	*DEV_IAS_TEMP
🧅 <u>Summary</u>	User Messaging Service	DEV_UMS	*DEV_IAS_UMS	*DEV_IAS_TEMP
Completion Summary	WebLogic Services	DEV_WLS	*DEV_WLS	*DEV_IAS_TEMP
Completion summary	Oracle Enterprise Sch		*DEV_ESS	*DEV_IAS_TEMP
	SOA Infrastructure	DEV_SOAINFRA	*DEV_SOAINFRA	*DEV_IAS_TEMP
	Common Infrastructu	DEV_STB	*DEV_STB	*DEV_IAS_TEMP
	* Default tablespaces (spec	ified in the configurat	ion files) are to be created u	pon confirmation.
	<u>M</u> essages:			

Repository Creation Util	ity			
Velcome Create Repository Database Connection Details Select Components Cschema Passwords Custom Variables			ed components appear in th lespaces, use the 'Manage T Default Tablespace *DEV_MDS *DEV_IAS_IAU *DEV_IAS_IAU	
Wap Tablespaces	Audit Sopicos Viewer Orai S Viewer Vec SoA Com Cli	Repository Creation	The second secon	
	* Default tablespaces (spe Messages:	cified in the configurat	ion files) are to be created u	pon confirmation.

	Map Tal	olespaces - Step 6	of 8	
epository Creatio	on Utility			
Welcome Create Repository Database Connection	To create new tablespaces		ed components appear in th lespaces,use the 'Manage T:	
Select Components	Component	Schema Owner	Default Tablespace	Temp Tablespace
	Metadata Services	DEV MDS	*DEV MDS	*DEV_IAS_TEMP
) Schema Passwords	Audit Services	DEV_IAU	*DEV_IAS_IAU	*DEV_IAS_TEMP
Custom Variables	Audit Services Append	DEV IAU APPEND	*DEV JAS JAU	*DEV IAS TEMP
Completion Summ	Repository Creat	sitory database		S_TEMP           S_TEMP
	* Default tablespaces (spe <u>M</u> essages:	cified in the configurati	ion files) are to be created u	pon confirmation.
Help			< <u>B</u> ack <u>N</u> ext	> Einish Cance



reate Repository Atabase Connection Details elect Components thema Passwords ustom Variables ap Tablespaces immary Component Log Directory: //uD/app/oracle/logdir.2014-07-17_22-48/rcu.log Component Log Directory: //uD/app/oracle/logdir.2014-07-17_22-48/rcu.log Prefix for (prefixable) Schema Owners:DEV Component Status Time Logflie(Click to view) Metadata Services Success 00:11.435(sec) mds.log Audit Services Append Success 00:09.193(sec) iau_append.log Audit Services Viewer Success 00:13.453(sec) uiau_viewer.log Oracle Platform Security Services Success 00:13.453(sec) ucsus.log User Messaging Service Success 00:13.453(sec) ucsus.log		Completion S	Summary - Step 8 of	f 8	- 🗆 🛛
reate Repository Host Name: seus zion local Port: 1522 Service Name: PD801_ZION.LOCAL Connected As: sys Operation: System and Data Load concurrently RCU Logfie: JU1/app/oracle/logdir.2014-07-17_22-48/rcu.log Component Log Directory: //01/app/oracle/logdir.2014-07-17_22-48/ View Log: rcu.log Prefix for (prefixable) Schema Owners:DEV Prefix for (prefixable) Schema Owners:DEV Metadata Services Success 00:11.435(sec) mds.log Audi Services Append Success 00:11.435(sec) iau.log Audi Services Papend Success 00:19.139(sec) iau.append.log Oracle Platform Security Services Success 00:13.453(sec) usums.log User Messaging Service Success 00:13.453(sec) usums.log	epository Creation Uti	lity			
weelogic services     Success     00:10:39(sec)     Weslog       Oracle Enterprise Scheduler     Success     00:13:767(sec)     essilog       SOA Infrastructure     Success     00:59:186(sec)     soainfra.log       Common Infrastructure Services     Success     00:09.259(sec)     stb.log	Velcome Create Repository Database Connection Details Select Components Schema Passwords Custom Variables Map Tablespaces Summary Completion Summary	Host Name: Port: Service Name: Connected As: Operation: Scruice Jog Directory: Component Log Directory: Execution Time: View Log: Prefix for (prefixable) Schema Component Metadata Services Audit Services Append Audit Services Viewer Oracle Platform Security Servic User Messaging Service WebLogic Services Oracle Enterprise Scheduler SOA Infrastructure	1522 PD801.2ION.LOCAL. sys and Data Load cc (u01/app/oracle/logdir. u01/app/oracle/logdir. rcu.log .owners:DEV Status Success Success Success Success Success Success Success Success Success Success Success Success Success Success Success Success Success	Discurrently 2014-07-17_22-48/rc 2014-07-17_22-48 00:11.435(sec) 00:09.193(sec) 00:09.146(sec) 00:13.435(sec) 00:13.435(sec) 00:13.435(sec) 00:13.767(sec) 00:59.166(sec)	Logfile(Click to view) mds.log iau.japend.log iau.japend.log ucsums.log wds.log ess.log ess.log soainfra.log

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	<b>-</b>	• 🔒 + - 🗸 🔻 🖄		🎽 🏫 🤝	$\bigtriangleup$	-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 <u>WebLogic Server Domain Configuration</u>

Step 1:

🗊 Fi	usion Middlewar	e Configuration W	/izard - Page 1	of 8	_ ×
Configuration Type			F		
Create Domain Templates Administrator Account Domain Mode and JDK Advanced Configuration Configuration Summary Configuration Progress End Of Configuration	What do you want Create a new gi Update an exist Domain Location: Create a new domain	omain ling domain TOracle/Middleware/Ora			nain Browse
Help			< <u>B</u> ack	<u>N</u> ext > Eini	h Cancel

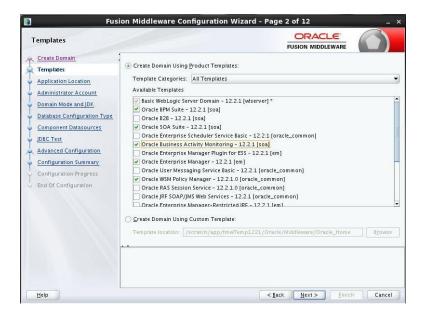
#### Step 2: Domain creation template

a. For BPEL only domain

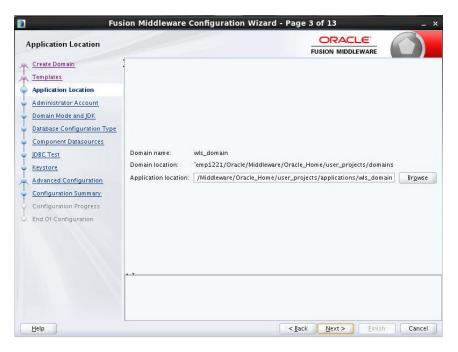
b. 🕮 Based on the requirement select the Oracle Business Activity Monitoring (BAM) check box.

Fus Templates	ion Middleware Configuration Wizard - Page 2 of 12
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Type Component Datasources JDBC Test Advanced Configuration Configuration Progress End Of Configuration	Create Domain Using Product Templates:   Template Categories: All Templates   Available Templates   Ø Basic WebLogic Server Domain - 12.2.1 [wserver]*   Oracle BPM Suite - 12.2.1 [soa] Ø Oracle B2B - 12.2.1 [soa] Ø Oracle B2B - 12.2.1 [soa] Ø 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 - 12.2.1.0 [oracle_common] Ø Oracle User Messaging Service Basic - 12.2.1 [oracle_common] Ø Oracle RAS Session Service - 12.2.1.0 [oracle_common] Ø Oracle PSG APJ/JMS Web Services - 12.2.1 [oracle_common] Ø Oracle FAS Session Service - 12.2.1 [oracle_common] Ø Oracle PSG APJ/JMS Web Services - 12.2.1 [oracle_common] Ø Oracle PSG APJ/JMS Web Services - 12.2.1 [oracle_common] Ø Oracle PSG APJ/JMS Web Services - 12.2.1 [oracle_common] Ø Oracle Pasic Scheduler Service J2.2.1 [oracle_common] Ø Oracle Pasic Scheduler Service J2.2.1 [oracle_common] Ø Oracle Pasic Scheduler Service J2.2.1 [oracle_common] Ø Oracle Pasic Scheduler Services - 12.2.1 [oracle_common] Ø Oracle Pasic Pasic Pasice
Help	< <u>Back</u> <u>Next&gt;</u> <u>Finish</u> Cancel

c. 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:



Step 4: Defining the domain user name and password

D F	usion Middleware	Configuration	n Wizard ·	Page 4	of 13		_ ×
Administrator Account				FL			
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Typ DBC Test Keystore Advanced Configuration Configuration Summary Configuration Progress End Of Configuration	Nam e Password Confirm Password	the password. Pass	word must co				ers with at least
Help				< <u>B</u> ack	Next >	Einish	Cancel

Step 5: Domain mode needs to be production for all installations.

Fus	ion Middleware Configuration Wizard - Page 5 of 13 ×
Domain Mode and JDK	
Configuration Progress End Of Configuration	Domain Mode <ul> <li>Development</li> <li>Utilize boot.properties for username and password, and poll for applications to deploy.</li> <li>Production</li> <li>Require the entry of a username and password, and do not poll for applications to deploy.</li> </ul> <li>JDK         <ul> <li>Oracle HotSpot 1.8.0_65 /scratch/app/jdk1.8.0_65</li> <li>Other JDK Location:</li> <li>Browse</li> </ul> </li>
Help	< <u>Back</u> <u>Next&gt;</u> <u>Einish</u> Cancel

Step 6: Define the RCU schema details and the TNS connection details

	Fusion Middleware Configuration Wizard - Page 6 of 12 – 🗖 🗙
Database Configuration Ty	
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Type Component Datasources JDBC Test Advanced Configuration Configuration Progress End Of Configuration	Specify AutoConfiguration Options Using:            • RCU Data <ul> <li>Manual Configuration</li> </ul> Enter the database connection details using the Repository Creation Utility service table (STB) schema credentials. The Wizard uses this connection to automatically configure the datasources required for components in this domain.           Vendor:         Oracle         Driver: *Oracle's Driver (Thin) for Service connections; Versi*           DBMS/Service:         Host Name:         Port: 1522           Schema Owner:         DEV_STB         Schema Password:           Get RCU Configuration         Cancel           Connection Result Log         Connecting to the database serverOK           Betrieving schema data form database serverOK         Binding local schema components with retrieved dataOK           Successfully Done.         Click**Next* button to continue.
Help	< <u>Back</u> <u>Next&gt;</u> <u>Einish</u> Cancel

#### Step 7:

JDBC Cor	nponent Schema							
Create D	omain .	Ven	dor:		Driver:			
🗼 <u>Template</u>	25	DBM	IS/Service:		Host Name:		Port:	
🍦 <u>Applicati</u>	on Location							
🖕 <u>Administ</u>	rator Account	Sch	ema Owner:		Schema Password:			
Domain t	Mode and JDK	Ora	cle RAC configuration	for component s	chemas:			
Database	Configuration Type		O Convert to C	ridLink OC	onvert to RAC multi	data sour	ce 🔿 Don't	convert
Compon	ent Datasources		Ŭ				0	
JDBC Tes		Edit	s to the data above will	affect all checke	d rows in the table	oelow.		
-	-		Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Password
<u> </u>	d Configuration	ΠŪΓ	BAM Schema	ORFC12C	ofss220337	1522	DEV_SOAINFR	
Configur	ation Summary		BAM Job Sched Schem	ORFC12C	ofss220337	1522	DEV_WLS	•••••
ပုံ Configur	ation Progress		SOA EDN (XA)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
5 End Of C	onfiguration		SOA EDN (Local)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
			LocalSvcTbl Schema	ORFC12C	ofss220337	1522	DEV_STB	•••••
			User Messaging Servio	ORFC12C	ofss220337	1522	DEV_UMS	•••••
			SOA (XA)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
			SOA (Local)	ORFC12C	ofss220337	1522	DEV_SOAINFR	•••••
			BAM MDS Schema	ORFC12C ORFC12C	ofss220337		DEV_MDS	•••••
			OWSM MDS Schema				DEV MDS	

#### Step 8:

	Fu	sion N	liddleware Config	guration Wizard - Page 8 of 12 🛛 🗕 🗖 📉
JDBC Component Schema T	est			
Treate Domain		Status	Component Schema	JDBC Connection URL
Templates		1	User Messaging Ser	jdbc:oracle:thin:@//ofss220337:1522/ORFC12C
Application Location		1	SOA (XA)	jdbc:oracle:thin:@//ofss220337:1522/ORFC12C
Administrator Account		1	SOA (Local)	jdbc:oracle:thin:@//ofss220337:1522/ORFC12C
		1	BAM MDS Schema	jdbc:oracle:thin:@//ofss220337:1522/ORFC12C
Domain Mode and JDK		1	OWSM MDS Schema	jdbc:oracle:thin:@//ofss220337:1522/ORFC12C
Database Configuration Type		1	SOA MDS	jdbc:oracle:thin:@//ofss220337:1522/ORFC12C
Gomponent 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.		1	OPSS Schema	jdbc:oracle:thin:@//ofss220337:1522/ORFC12C
Advanced Configuration     Configuration Summary     Configuration Progress		-	lected Connections	<u>⊆</u> ancel Testing
C End Of Configuration	Driv URL User Pass SQL CFG	er=ora =jdbc:o =DEV_ word=' Test=s	SOAINFRA	leXADataSource en.local:1522/PD801.ZION.LOCAL version_registry where owner=(select user from dual) and mr_type='SOAII
Help				< <u>Back</u> Next > Einish Cancel

Advanced Configuration		
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 Summary     Configuration Progress     End Of Configuration	Administration Server Modify Settings  Node Manager Configure Node Manager Managed Servers, Clusters and Coherence Add or Delete or Modify Settings Domain Frontend Host Capture Configure Dom ain Frontend Host Deployments and Services Target to Servers or Clusters JJNS File Store Modify Settings	

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.

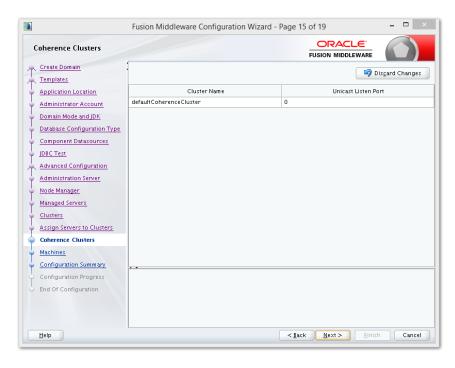
	Fusion Middle	leware Configuration Wizard	- Page 10 of 18	- • ×
Administration Server				
Create Domain Templates Application Location Administrator Account Domain Mode and JDK Database Configuration Type Component Dataources JDBC Test Advanced Configuration Advanced Configuration Advanced Configuration Server Node Manager Managed Servers Clusters Coherence Clusters Machines Configuration Summary. Configuration Progress End Of Configuration	Server Name Listen Address Listen Port Enable SSL SSL Listen Port Server Groups	WLSO_ADMIN Ws12c 7001 Unspecified Unspecified	ntain any : , = *? %_cloned.	
Help			< <u>Back Next &gt; Einist</u>	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 - P	age 12 of	18		>
Managed Servers							
Create Domain	Add	🗈 Clone 🛛 🗙 Delete				🔊 Dis <u>c</u> ard Changes	s
Application Location	Server Name	Listen Address	Listen Port	Enable SSL	SSL Listen Port	Server Groups	;
Domain Mode and JDK	WLS1_SOA WLS2_BAM	wis12c-node1.zion.local 👻	7003		Disabled Disabled	SOA-MGD-SVRS	
Database Configuration Type	WL32_DAM	wis12c-node1.zion.local 🔻	7004		Disabled	BAM12-MGD-SVRS	
<u>Component Datasources</u> JDBC Test							
Advanced Configuration							
Administration Server							
Node Manager							
Managed Servers Clusters							
Coherence Clusters							
Machines							
Configuration Summary							
Configuration Progress							_
End Of Configuration							
Help				< <u>B</u> ack	Next >	Finish Cancel	





Step 13:

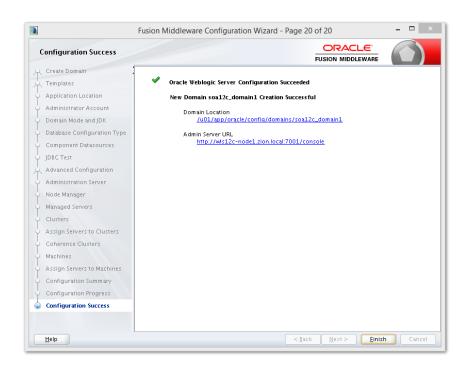
	Fusion Middleware	Configur	ation Wiz	zard - Pag	ge 16 of 2	20	-	
Machines								
Create Domain Templates Application Location	Machine Unix Machin	<u> </u>				🗳 Dis	: <u>c</u> ard C	hanges
Administrator Account     Domain Mode and JDK     Database Configuration Type	Name	Enable Post Bind GID	Post Bind GID	Enable Post Bind UID	Post Bind UID	Node Manager Lis Address	ten	Node Manager Listen Port
Component Datasources JDBC Test Advanced Configuration Administration Server Node Manager Managed Servers Clusters Assign Servers to Clusters Coherence Clusters Coherence Clusters Machines	MACHINE_ws12c-node		nobody		nobody	ws12c-node1.zion.id	ocal 🔻	5556
Assign Servers to Machines Configuration Summary Configuration Progress End Of Configuration	· •							

Step 14:

	Fusion Middleware Configuration Wizar	rd - Pag	ge 17 of 20	- 🗆 🗙
Assign Servers to Machine	s			
🙊 Create Domain	Servers	-	Machines	
Templates			Unix Machine MACHINE_wis12c-node1	(
Application Location			WLSO_ADMIN	1
Administrator Account			WLS1_SOA	
Domain Mode and JDK			📦 WLSZ_BAM	
Database Configuration Type				
Component Datasources		>		
UDBC Test				
Advanced Configuration				
Administration Server				
Vode Manager				
Managed Servers		3		
Ulusters				
Assign Servers to Clusters				
Coherence Clusters				
Machines				
Assign Servers to Machines				
Configuration Summary	Select one or more servers in the left pane and or button (>) to assign the server or servers to the			right arrow
Configuration Progress	button (>) to assign the server or servers to the f	n aurinne.		
End Of Configuration				
Help		-	< Back Next > Finish	Cancel

Step 15:

Configuration Progress			
Create Domain			
Templates	100%		
Application Location	Preparing		
Administrator Account	Extracting Domain Contents Creating Domain Security Information		
Domain Mode and JDK	Starting OPSS Security Configuration Data Processing		
Database Configuration Ty			
Component Datasources	Storing Domain Information String Substituting Domain Files		
JDBC Test	Performing OS Specific Tasks Performing Post Domain Creation Tasks		
Advanced Configuration	Starting OPSS Security Configuration Commit Task		
Administration Server	The OPSS Security Configuration Completed Domain Created Successfully!		
Node Manager			
Managed Servers			
Clusters			
Assign Servers to Clusters			
Coherence Clusters			
Machines			
   Assign Servers to Machine			
↓ ♀ Configuration Summary			
Configuration Progress			
End Of Configuration			
Help	< <u>B</u> a	ck <u>N</u> ext > <u>F</u> inis	h Cancel



# 2.8 Remote Setup Configuration:

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
bpm-services.jar	Home%/soa/soa/modules/oracle.soa.workflow_11.1.1
fabric-runtime.jar	
tracking-fabric.jar	%Middleware Home%/soa/soa/modules/oracle.soa.fabric_11.1.1
tracking-api.jar	

jrf-api.jar	%Middleware Home%/oracle_common/modules/oracle.jrf
orabpel-common.jar	-
orabpel-thirdparty.jar	%Middleware Home%/soa/soa/modules/oracle.soa.bpel_11.1.1
orabpel.jar	
soa-infra-mgmt.jar	%Middleware Home%/soa/soa/modules/oracle.soa.mgmt_11.1.1
xml.jar	%Middleware Home%/oracle_common/modules/oracle.xdk
xmlparserv2.jar	
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

ng trust between two weblogic dom ×	Configuring Security for a WebLogic Do × Contraction	global trust between domains 🛛 👋 🗋 Security -	- base_kernel1132 - WLS Console × 📄 /Farm_base_kernel1132/base_kernel11 ×
http://10.184.74.143:7389/cor	sole/console.portal? nfpb=true& pageLabel=DomainSecurityc	generalTabPage&SecurityDomainDomainConfigGeneralF	Portlethandl 🛧 - C 🔣 - pject: principals=[weblogic, Administrators] 🔎 🏠
ping			
et the EnforceStrictURLPattern flag	— ♥ Advanced —		
m Status E	E 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 that 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:	••••••	
	鑦 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 Info
	🗹 🌐 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 No	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 -Dweblogic,management, clear TextCredentialAccessEnabled More Info



SOA Suite Setup for BPEL Process Flow [September] [2017] Version 12.5.0.0.0

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