

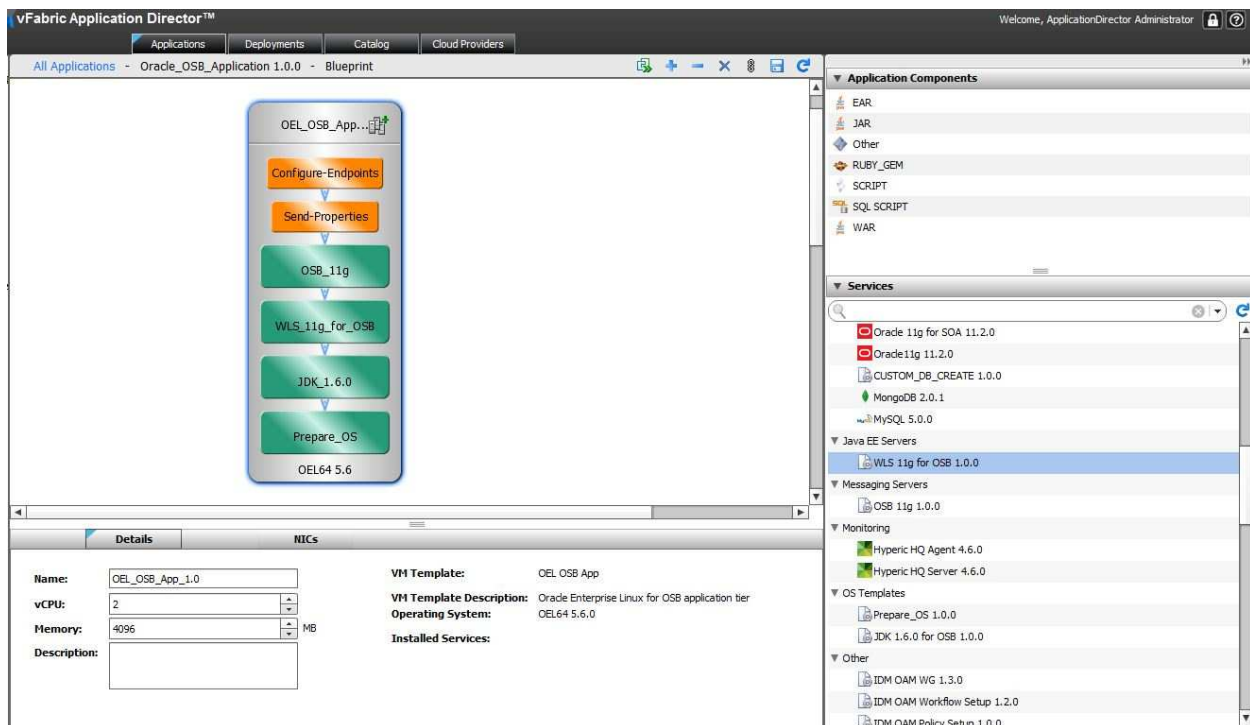
# Oracle Service Bus - Blueprint Information

## 1. OVERVIEW

The purpose of this document is to describe the Oracle Service Bus (OSB) blueprint in detail. The goal of the blueprint is to allow for provisioning and configuration of an Oracle Service Bus instance in an automated and repeatable fashion.

The following components and versions are installed as part of the OSB instance:

- (1) Oracle WebLogic Server 10.3.3
- (2) Oracle Service Bus 11.1.1.3
- (3) JDK 1.6.0



## 2. HIGH LEVEL BLUEPRINT DESIGN

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Conceptually, the blueprint design consists of four tasks as described below. These tasks are listed in chronological order:

- (1) Prepare OS
- (2) Install JDK 1.6
- (3) Install WLS 11g
- (4) Install OSB 11g
- (5) Custom Scripts

### 2.1 Files

You will need access to create the following file repository that contains the necessary installers and configuration files needed. We will refer to this repository as the Dropbox Home in this document.

\$DROPBOX\_HOME/OSB:

build.xml	Ant-based build file for installation
runner.sh	Main driver file

\$DROPBOX\_HOME/OSB/config:

osb-create-domain.py	WLST script to create OSB domain
silent.xml	Weblogic silent installation file
oraInst.loc	Oracle install location file
osb-custom-install.rsp	OSB silent installation response file

\$DROPBOX\_HOME/OSB/installer:

jdk-6u20-linux-x64.bin	JDK 1.6 installer
ofm_osb_generic_11.1.1.3.0_disk1_1of1.zip	OSB 11g installer
wls1033_generic.jar	WLS 11g installer

### 2.2 Prepare OS Properties

The Prepare OS task sets the hostname for the machine that's provisioned. The following properties govern the execution of the blueprint:

Property	Description	Notes
HOST_NAME_PATTERN	Set this to be a hostname pattern based on the environment (for e.g., dev1).	%e in the pattern will be substituted by the environment name
IP_ADDRESS	Set this property to the IP address of the machine	Self:NIC0_ip
DOMAIN_NAME	Set this property to be the domain name	

HOST_NAME	The eventual hostname will be set in this property. Therefore, you can use this property within other modules in this blueprint	
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### Properties:

Details Properties Actions		
Name	Description	Type
HOST_NAME_PATTERN	Pattern to use for the hostname, for e.g., ora-%e-osb-a%c, where %e will be expanded to the environment name and %c will be expa...	String
ENV_NAME		String
IP_ADDRESS	The IP_ADDRESS parameter must be set at the Blueprint level to the ip address of the node.	String
DOMAIN_NAME	Domain name	String
HOST_NAME		String
env_util		Content

### Actions:

Details Properties Actions		
Lifecycle Stage	Script Type	Script
INSTALL	Bash Script	#!/bin/bash
CONFIGURE	Bash Script	
START	Bash Script	

### Install Script:

```
#!/bin/bash

# Set hostname variable

HOST_NAME=`echo $HOST_NAME_PATTERN | sed "s/%e/$ENV_NAME/g"`

# Change VM hostname

hostname $HOST_NAME

# Replace hostname in /etc/hosts

sed -i.bak "s/$IP_ADDRESS.*/$IP_ADDRESS $HOST_NAME.$DOMAIN_NAME $HOST_NAME/g" /etc/hosts

sed -i.bak "s/HOSTNAME=.* /HOSTNAME=$HOST_NAME.$DOMAIN_NAME/g" /etc/sysconfig/network

# set HOST_NAME INCLUDING DOMAIN

HOST_NAME="$HOST_NAME"."$DOMAIN_NAME"

echo "Setting hostname to $HOST_NAME"
```

## 2.3 Install JDK Properties

The Install JDK task installs JDK 1.6.0 on the machine. It's governed by the following properties:

Property	Description	Notes
DROPBOX_HOME	Location of the dropbox file repository	NFS mount where installation binaries & deployment scripts are located.

Details	Properties	Actions
<b>Name:</b> <input type="text" value="JDK_1.6.0"/>		
<b>Catalog Service:</b> JDK 1.6.0 for OSB		
<b>Version:</b> 1.0.0		
<b>Description:</b> OSB install needs a special JDK version (1.6.0)		
<b>Pre-installed in a Template:</b> <input type="checkbox"/>		

Properties:

Details		Properties	Actions		
Name	Description	Type	Catalog Value	Blueprint Value	
DROPBOX_HOME	Location of the dropbox	String	/mnt/vfsbdropbox		

Actions:

Details		Properties	Actions	
Lifecycle Stage	Script Type		Script	
INSTALL	Bash Script		\$DROPBOX_HOME/OSB/runner.sh install-jdk	✖
CONFIGURE	Bash Script			✖
START	Bash Script			✖

Install Script:

```
$DROPBOX_HOME/OSB/runner.sh install-jdk
```

## 2.4 Install WLS Properties

The Install WLS task installs WLS 11g on the machine. It uses the JDK that's installed in the previous step. It's governed by the following properties:

Property	Description	Notes
DROPBOX_HOME	Location of the dropbox file repository	NFS mount where installation binaries & deployment scripts are located.
BEAHOME	Directory in which to install WLS	Also known as Middleware Home.

Details	Properties	Actions
<b>Name:</b> <input type="text" value="WLS_11g_for_OSB"/>		
<b>Catalog Service:</b> WLS 11g for OSB		
<b>Version:</b> 1.0.0		
<b>Description:</b> Oracle WebLogic Server 10g		
<b>Pre-installed in a Template:</b> <input type="checkbox"/>		

### Properties:

Report

Details		Properties	Actions	
Name	Description	Type	Catalog Value	Blueprint Value
BEAHOME	Location of BEAHOME	String	/oracle/products/osbmw	
DROPBOX_HOME	Location of the dropbox	String	/mnt/vfsbdropbox	

### Actions:

Details		Properties	Actions	
Lifecycle Stage	Script Type		Script	
INSTALL	Bash Script		\$DROPBOX_HOME/OSB/runner.sh install-wls	✖
CONFIGURE	Bash Script			✖
START	Bash Script			✖

### Install Script:

```
$DROPBOX_HOME/OSB/runner.sh install-wls
```

## 2.5 Install OSB Properties

This task installs OSB 11g on the WLS that's configured and set up in the previous step. It creates and configures a domain (called `osb_domain`) on the AdminServer.

Property	Description	Notes
DROPBOX_HOME	Location of the drop box file repository	NFS mount where installation binaries & deployment scripts are located.
BEAHOME	Directory in which WLS is installed	Also known as Middleware Home.
OSB_ORACLE_HOME	Oracle Home under which to install OSB	
WEBLOGIC_PASSWORD	Set password for administrator of the <code>osb_domain</code>	Administrator name is <code>weblogic</code>

Details	Properties	Actions
<b>Name:</b> <input type="text" value="OSB_11g"/>		
<b>Catalog Service:</b> OSB 11g		
<b>Version:</b> 1.0.0		
<b>Description:</b> Oracle Service Bus 11.1.1.1.3		
<b>Pre-installed in a Template:</b> <input type="checkbox"/>		

Properties:

Details		Properties	Actions	
Name	Description	Type	Catalog Value	Blueprint Value
OSB_ORACLE_HOME	Oracle Home under which OSB will be installed	String	/oracle/products/osbmw/Oracle_OSB1	
BEAHOME	Also known as middleware home	String	/oracle/products/osbmw	
DROPBOX_HOME	Location of the dropbox	String	/mnt/vfsbdropbox	
WEBLOGIC_PASSWORD	Set password for weblogic user	String	*****	

Actions:

Details	Properties	Actions
Lifecycle Stage	Script Type	Script
INSTALL	Bash Script	\$DROPBOX_HOME/OSB/runner.sh install-osb
CONFIGURE	Bash Script	
START	Bash Script	\$DROPBOX_HOME/OSB/runner.sh start-osb

Install Script:

```
$DROPBOX_HOME/OSB/runner.sh install-osb
```

Start Script:

```
$DROPBOX_HOME/OSB/runner.sh start-osb
```