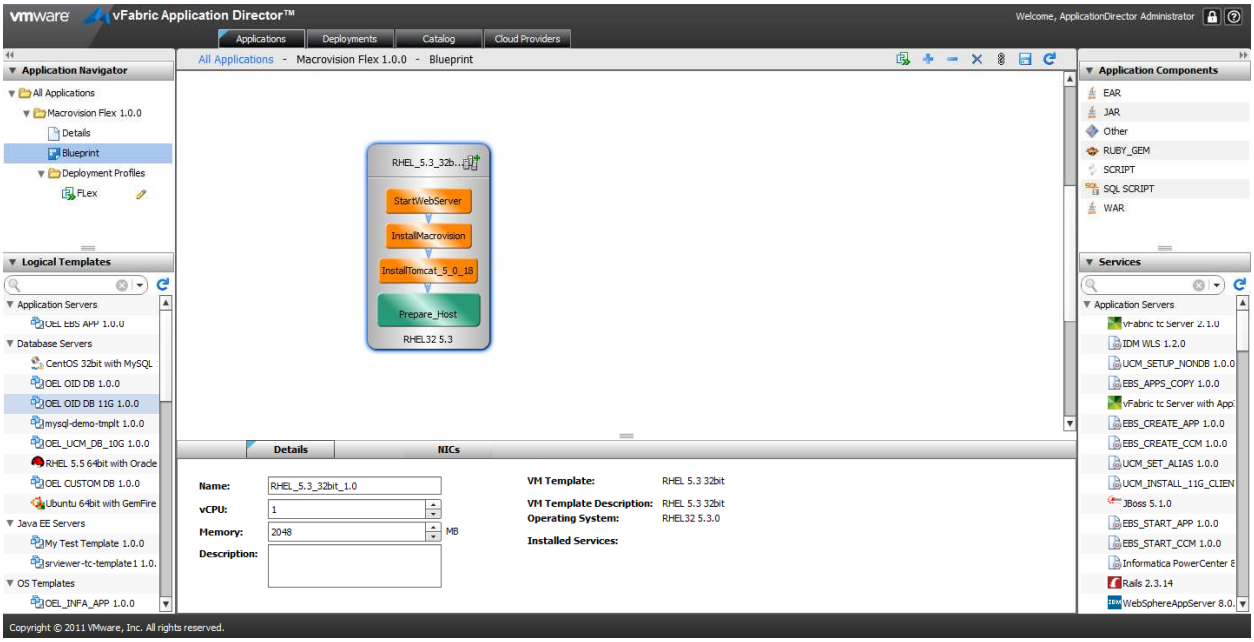
MacroVision FLEXlm - Blueprint Information

1. OVERVIEW

The purpose of this document is to describe the MacroVision FLEXlm blueprint in detail. The goal of the blueprint is to allow for provisioning and configuration of a MacroVision FLEXlm instance in an automated and repeatable fashion.

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

(1) MacroVision FLEXlm 6.1
(2) Tomcat 5.0.18



2. HIGH LEVEL BLUEPRINT DESIGN

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

(1) Prepare Host
(2) Install Tomcat 5.0.18
(3) Install MacroVision FLEXlm 1.6
(4) Start Webserver

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/Macrovision:
Flexlm Installation files

$DROPBOX_HOME/Macrovision_FlexWS:
Gtlweb, cust-fulfill.war, cust-integration.war

$DROPBOX_HOME/jakarta-tomcat:
jakarta-tomcat-5.0.18.tar.gz

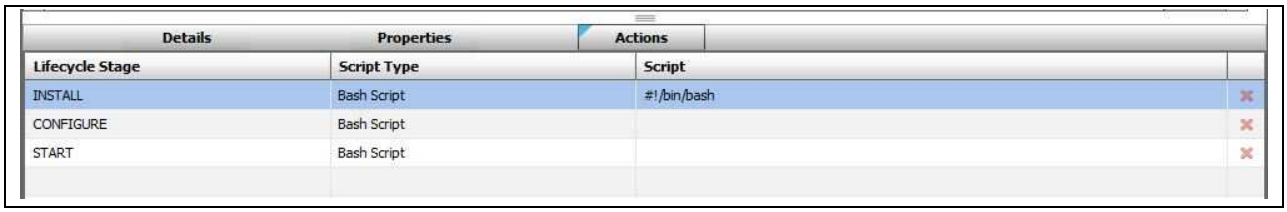
2.2 Prepare OS Properties

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

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 expanded to t...	String
ENV_NAME		String
IP_ADDRESS	The IP_ADDRESS parameter must be set at the Blueprint level to the ip address of the node (self:ip)	String
DOMAIN_NAME	Domain name	String
HOST_NAME		String
env_util		Content
NODE_ARRAY	IF it's a multi-node cluster, then please set this value to the array of cluster nodes, i.e. all(node_array_index). Otherwise, leave it empty.	Array
NODE_ARRAY_INDEX	Please set this variable to the node array index if it's a multi-node cluster (self:node_array_index). If it's not a multi-node cluster, then leave it a...	String
MOUNT_OPTIONS1	Options if any for the /etc/fstab entry, for e.g., noauto	String
MOUNT_DIR1	Local directory to which to mount, for e.g., /oracle/shared	String
MOUNT_PATH1	Path of remote filesystem to mount, for e.g. wdc-ns120-m1:/oracle/shared	String

Actions:



Install Script:

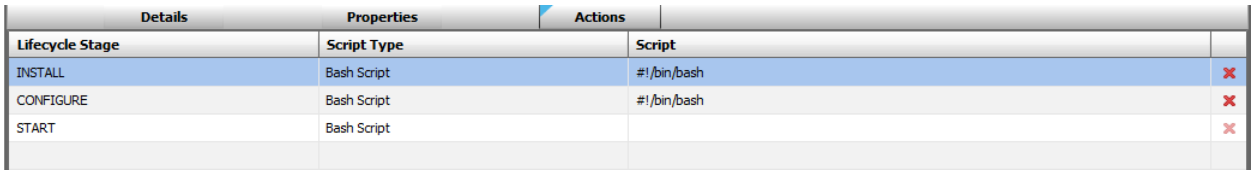
```
#!/bin/bash

# Set path variables

export PATH=$PATH:/opt/java/jdk1.6.0_19/bin:/usr/java/default/bin:/usr/java/jdk1.6.0_29/bin



# Get cluster number. If we are in a cluster, then get the cluster index value.

# Otherwise, use 1 for non-cluster environments

if [ ${#NODE_ARRAY[@]} -gt 1 ]; then

        CNUMBER=`expr $NODE_ARRAY_INDEX + 1`

else

        CNUMBER=1

fi;

# Set hostname variable

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

echo "Setting hostname to $HOST_NAME.$DOMAIN_NAME"

# 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"

# Perform mount commands, if specified.

if [ -n "$MOUNT_PATH1" -a -n "$MOUNT_DIR1" ]; then

   echo "Mounting $MOUNT_PATH1 to $MOUNT_DIR1 with options $MOUNT_OPTIONS1"
```

```
    test -d "$MOUNT_DIR1"     || mkdir -p $MOUNT_DIR1
    test -z "$MOUNT_OPTIONS1" && MOUNT_OPTIONS1="defaults"
    mount -o $MOUNT_OPTIONS1 $MOUNT_PATH1 $MOUNT_DIR1
    if [ $? -eq 0 ]; then
       echo "$MOUNT_PATH1  $MOUNT_DIR1 nfs $MOUNT_OPTIONS1 1 2" >> /etc/fstab
    else
       exit $?
    fi;
fi;
```

2.3 Install Tomcat

The Install Tomcat task installs Tomcat 5.0.18 on the machine. It's governed by the following properties:

Actions:



Install Script:

```
#!/bin/bash

# copy tomcat tar file to /usr/local

cp $DROPBOX_HOME/jakarta-tomcat/jakarta-tomcat-5.0.18.tar.gz /usr/local/

cd /usr/local

# extract tomcat files

tar -zxvf jakarta-tomcat-5.0.18.tar.gz

# create link 'tomcat' on /usr/local/jakarta-tomcat-5.0.18

ln -s /usr/local/jakarta-tomcat-5.0.18 tomcat
```

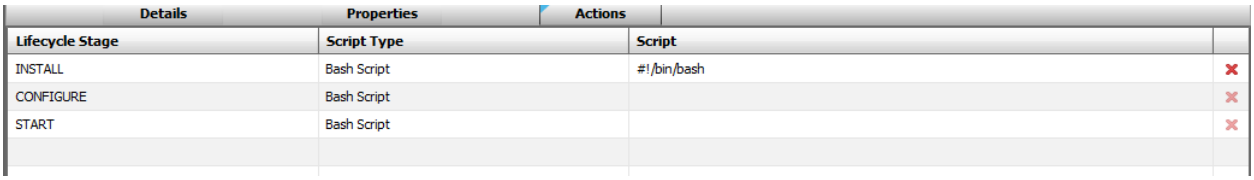
Configure Script:

```
#!/bin/bash

# copy Custom server.xml to tomcat/conf

/bin/cp -rf $DROPBOX_HOME/jakarta-tomcat/custom_conf/*
/usr/local/tomcat/conf/

#Modify the bash profile root user

echo "export JAVA_HOME=/usr/java/jdk1.6.0_32" >> ~/.bash_profile

echo "export CATALINA_HOME=/usr/local/tomcat" >> ~/.bash_profile
```

2.4 Install Macrovision FLEXlm 6.1

The Install Macrovision task installs Macrovision FLEXLm 6.1 on the machine. It's governed by the following properties:

Actions:

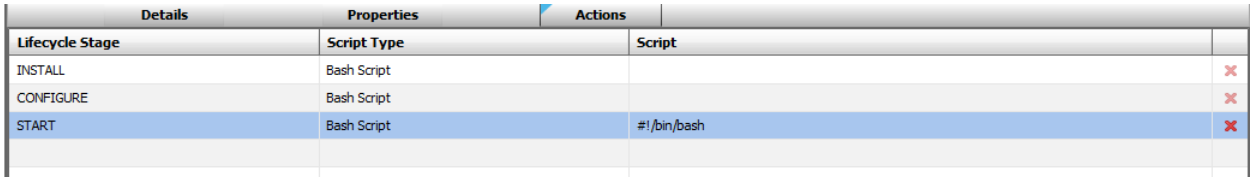


Install Script:

```
#!/bin/bash

# create user & group for fnpom

/usr/sbin/groupadd fnpom

/usr/sbin/useradd fnpom -d /opt/fnpom -g fnpom

cp -r $DROPBOX_HOME/Macrovision/ /opt/fnpom/

# change owner & group of installed Macrovision files

cd /opt

chown -R fnpom:fnpom fnpom/

# install Custom web applications created for Macrovision Flex

cp -r $DROPBOX_HOME/Macrovision_FlexWS/* /usr/local/tomcat/webapps/
```

2.5 Start WebServer

The Start Webserver task starts tomcat webserver on the machine. It's governed by the following Action:



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

Start Script:

```
#!/bin/bash

#Start the Tomcat Services

cd /usr/local/tomcat/bin

./startup.sh &
```