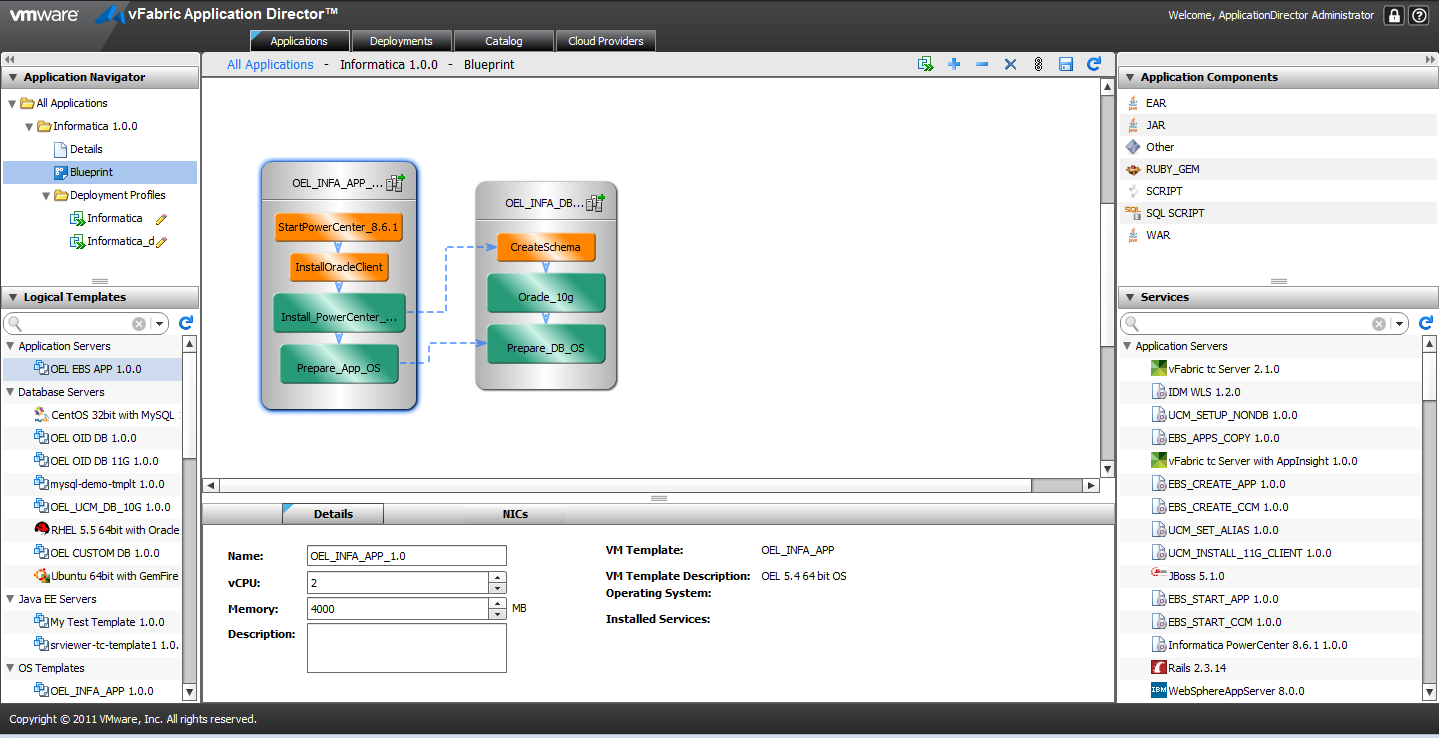
Informatica PowerCenter - Blueprint Information

# Overview

The purpose of this document is to describe the Informatica PowerCenter 8.6.1 blueprint in detail. The goal of the blueprint is to allow for provisioning and configuration of an Informatica PowerCenter 8.6.1 instance in an automated and repeatable fashion.

The following components and versions are installed as part of the Informatica PowerCenter 8.6.1 instance:

1. Informatica PowerCenter 8.6.1
2. Oracle Database 10g
3. Oracle 11g DB Client



# High level BLUEPRINT Design

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

1. Prepare OS (common to DB & App tier)
2. Install Oracle RDBMS 10.2.0 (server on DB tier & 11g client on App tier)
3. Install Informatica PowerCenter 8.6.1 (App tier)
4. Install default Schema (DB tier)

## 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/INFORMATICA:

1. Extracted files from Pc861\_linux\_em64t.tar
2. Extracted files from Pc861\_Hostfix13\_linux\_em64t.tar
3. Informatica license File
4. Informatica\_Install.sh (Silent installation file)

$DROPBOX\_HOME/OIDDBBINARIES:

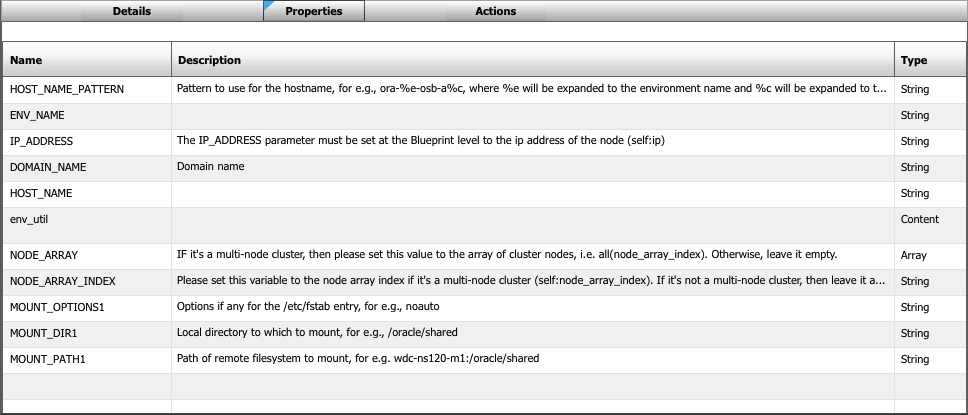
Oracle 10g DB binary files

$DROPBOX\_HOME/10g\_orclInstaller:

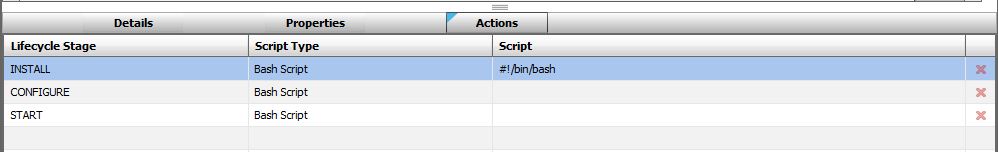
Response files for installing Oracle 10g DB in silent mode.

## 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:



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 $?

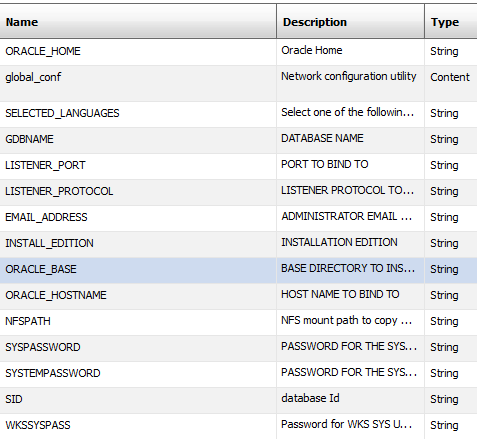
fi;

fi;

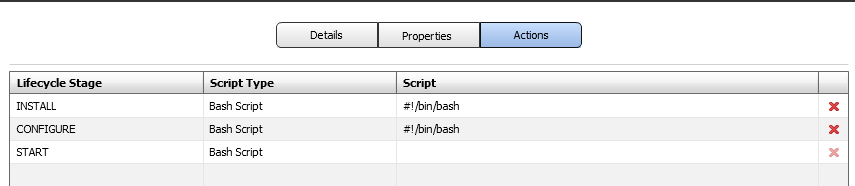
## Install Oracle RDBMS 10.2.0 (Database Node)

The “Install Oracle RDBMS 10.2.0” task installs a server instance of Oracle RDBMS 10.2.0. It’s defined as a blueprint service.

Properties:



Actions:



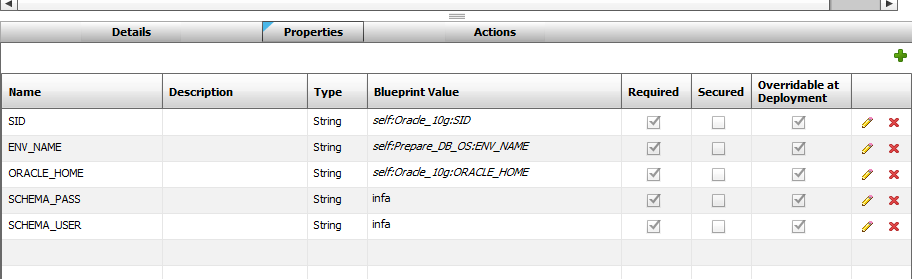
Install Script:

Please refer to file **Oracle\_10g\_INSTALL.txt** to copy the script as the INSTALL Bash Script.

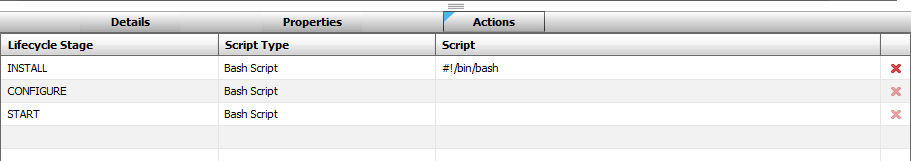
Please refer to file **Oracle\_10g\_CONFIGURE.txt** to copy the script as the CONFIGURE Bash Script.

## Create Default Schema

The CreateSchema task creates default db schema on the machine. It’s governed by the following properties:



Actions:

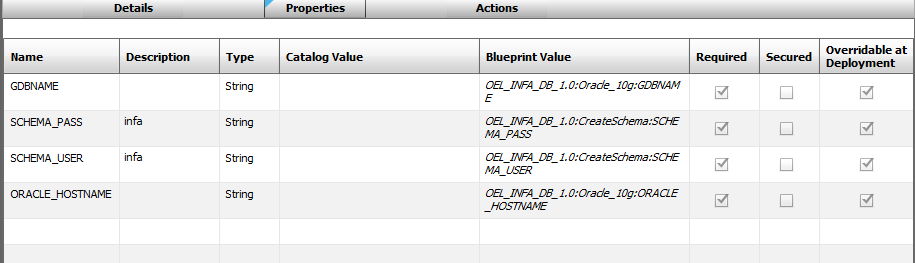


Install Script:

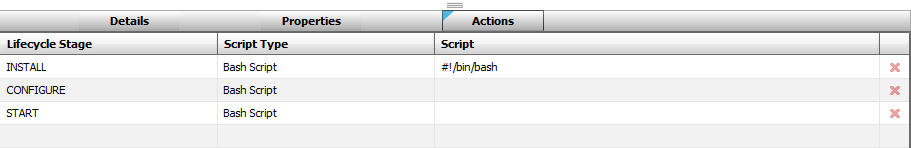
|  |
| --- |
| #!/bin/bash  echo "creating dummy schema for user PC861\_DOM\_$ENV\_NAME"  SCHEMA\_USER=PC861\_DOM\_$ENV\_NAME  SCHEMA\_PASS=PC861\_DOM\_$ENV\_NAME  SQLPLUS\_SCRIPT="/home/oracle/sqlplus\_create\_schema.sh"  echo "#!/bin/bash" >> $SQLPLUS\_SCRIPT  echo $ORACLE\_HOME"/bin/sqlplus -s '/ as sysdba' <<EOF" >> $SQLPLUS\_SCRIPT  echo "CREATE TABLESPACE TEST1 DATAFILE '/oracle/oradata/$SID/test01.dbf' SIZE 2G;" >> $SQLPLUS\_SCRIPT  echo "CREATE USER $SCHEMA\_USER IDENTIFIED BY $SCHEMA\_PASS" >> $SQLPLUS\_SCRIPT  echo "DEFAULT TABLESPACE TEST1" >> $SQLPLUS\_SCRIPT  echo "TEMPORARY TABLESPACE TEMP" >> $SQLPLUS\_SCRIPT  echo "QUOTA UNLIMITED ON TEST1;" >> $SQLPLUS\_SCRIPT  echo "GRANT CONNECT,RESOURCE TO $SCHEMA\_USER;" >> $SQLPLUS\_SCRIPT  echo "exit;" >> $SQLPLUS\_SCRIPT  echo "EOF" >> $SQLPLUS\_SCRIPT  chmod +x $SQLPLUS\_SCRIPT  su - oracle -c $SQLPLUS\_SCRIPT  echo "created dummy schema $SCHEMA\_USER" |

## Install PowerCenter 8.6.1

The Install PowerCenter task installs Informatica PowerCenter 8.6.1 on the machine. It is installed as INFA user. It’s governed by the following properties:



Actions:

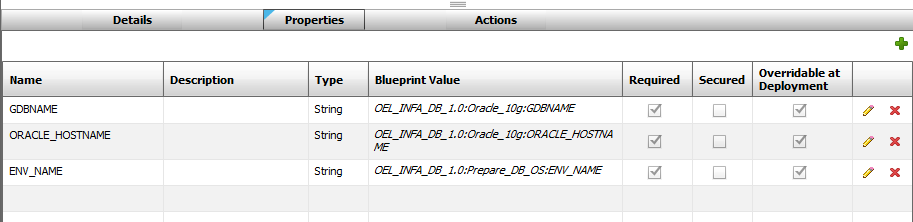


Install Script:

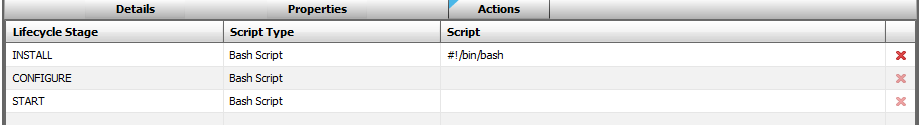
|  |
| --- |
| #!/bin/bash  # create a home dir for infa user  mkdir -p /apps/infa/home  # create "infa" user  /usr/sbin/useradd -d /apps/infa/home -p infa infa  # create dir for copying installers  mkdir -p /apps/infa/installers/  # copy binaries  cp -R /tmp/mount/INFORMATICA/\* /apps/infa/installers/  # change owner of /apps/infa/home to infa  chown infa:infa /apps/infa/home |
| # modify bash profile.  echo "export IATEMPDIR=/apps/infa/home" >> /apps/infa/home/.bash\_profile  echo "export GDBNAME=$GDBNAME" >> /apps/infa/home/.bash\_profile  echo "export SCHEMA\_PASS=$SCHEMA\_PASS" >> /apps/infa/home/.bash\_profile  echo "export SCHEMA\_USER=$SCHEMA\_USER" >> /apps/infa/home/.bash\_profile  echo "export ORACLE\_HOSTNAME=$ORACLE\_HOSTNAME" >> /apps/infa/home/.bash\_profile  # install using expect  echo "+++++++++++++ INSTALLING INFORMATICA +++++++++++++++"  PC861\_INSTALL\_SCRIPT="/apps/infa/installers/Informatica\_Install.sh"  chmod +x $PC861\_INSTALL\_SCRIPT  $PC861\_INSTALL\_SCRIPT $ORACLE\_HOSTNAME $SCHEMA\_USER $SCHEMA\_PASS $GDBNAME  echo "+++++++++++++ INFORMATICA INSTALLED +++++++++++++++"  echo "+++++++++++++ INSTALLING HOT FIX 13 +++++++++++++++"  # grant execution permissions Hot fix 13 binaries  chmod -R 777 /apps/infa/installers/software/  # stop Informatica server  su - infa -c "/apps/infa/home/Informatica/PowerCenter8.6.1/server/tomcat/bin/infaservice.sh shutdown"  sleep 60  # install hostfix 13  su - infa -c "/apps/infa/installers/software/pc861\_HotFix13\_linux\_em64t/silentinstall.sh"  sleep 60  echo "+++++++++++++ HOT FIX 13 INSTALLED +++++++++++++++" | | |

## Install Oracle 11g Client (client on App tier)

This task installs Oracle database 11g client on Application server.



Actions:



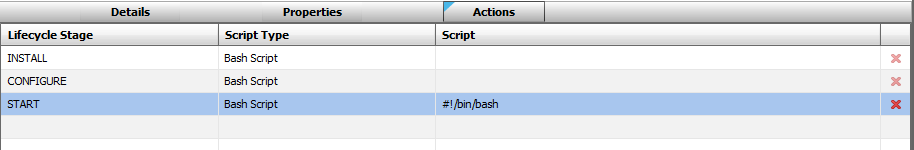
Install Script:

|  |
| --- |
| #!/bin/bash  ORACLE\_HOME=/oracle/products/11gClient  mkdir -p $ORACLE\_HOME  cp -R /tmp/mount/ORACLECLIENTS/response /oracle/products/  chown -R oracle:oinstall /oracle  su - oracle -c "/tmp/mount/ORACLECLIENTS/Oracle11gclient/11.1.0.6/client/runInstaller -silent -noconfig \ -responseFile /oracle/products/response/clientadmin.rsp"  sleep 180  #Root script to run  /home/oracle/oraInventory/orainstRoot.sh  /oracle/products/11gClient/root.sh  # create tnsnames.ora file & append DB params.  TNSNAMES\_FILE=$ORACLE\_HOME/network/admin/tnsnames.ora  touch $TNSNAMES\_FILE  echo "INFDB =" >> $TNSNAMES\_FILE  echo " (DESCRIPTION =" >> $TNSNAMES\_FILE  echo " (ADDRESS = (PROTOCOL = TCP)(HOST = $ORACLE\_HOSTNAME)(PORT = 1521))" >> $TNSNAMES\_FILE  echo " (CONNECT\_DATA =" >> $TNSNAMES\_FILE  echo " (SERVER = DEDICATED)" >> $TNSNAMES\_FILE  echo " (SERVICE\_NAME = $GDBNAME)" >> $TNSNAMES\_FILE  echo " )" >> $TNSNAMES\_FILE  echo " )" >> $TNSNAMES\_FILE  # copy additional libs for DB connectivity  mkdir -p $ORACLE\_HOME/extralib  cp -R /tmp/mount/OIDDBBINARIES/lib/\* $ORACLE\_HOME/extralib/  # chown of newly created files to oracle  chown -R oracle:oinstall /oracle  # update infa user's .bash\_profile  INFA\_PROFILE=/apps/infa/home/.bash\_profile  ODBCHOME=/apps/infa/home/Informatica/PowerCenter8.6.1/ODBC5.2  INFAHOME=/apps/infa/home/Informatica/PowerCenter8.6.1/server/infa\_shared  echo "export ORACLE\_HOME=/oracle/products/11gClient" >> $INFA\_PROFILE  echo "export LD\_LIBRARY\_PATH=$ORACLE\_HOME/lib:$ORACLE\_HOME/extralib:  /apps/infa/home/Informatica/PowerCenter8.6.1/ODBC5.2/lib:/apps/infa/home/Informatica/PowerCenter8.6.1/server/bin" >> $INFA\_PROFILE  echo "export ODBCHOME=/apps/infa/home/Informatica/PowerCenter8.6.1/ODBC5.2" >> $INFA\_PROFILE  echo "export ODBCINI=$ODBCHOME/odbc.ini" >> $INFA\_PROFILE  echo "export INFAHOME=/apps/infa/home/Informatica/PowerCenter8.6.1/server/infa\_shared" >> $INFA\_PROFILE  echo "export PMRootDir=$INFAHOME" >> $INFA\_PROFILE  echo "export INFA\_HOME=/apps/infa/home/Informatica/PowerCenter8.6.1" >> $INFA\_PROFILE  echo "export INFA\_DOMAINS\_FILE=/apps/infa/home/Informatica/PowerCenter8.6.1/domains.infa" >> $INFA\_PROFILE  echo "export PATH=$PATH:$INFA\_HOME/server/bin:$INFA\_HOME/java/bin" >> $INFA\_PROFILE  echo "export INFATARGET=$INFAHOME/TgtFiles" >> $INFA\_PROFILE  echo "export NLS\_LANG=AMERICAN\_AMERICA.UTF8" >> $INFA\_PROFILE  echo "export PMSERVERNAME=PC861\_INT\_$ENV\_NAME" >> $INFA\_PROFILE  echo "export DOMAINNAME=PC861\_DOM\_$ENV\_NAME" >> $INFA\_PROFILE  echo "export INFA\_USER=batch\_user" >> $INFA\_PROFILE  echo "export INFA\_PASSWORD=batch\_user" >> $INFA\_PROFILE  echo "+++++++++++++ ORACLE DB CLIENT INSTALLED +++++++++++++++" |

## Start Informatica PowerCenter 8.6.1 server

This task starts the Informatica PowerCenter 8.6.1 server.

Actions:



Start Script:

#!/bin/bash

# start Informatica server

su - infa -c "/apps/infa/home/Informatica/PowerCenter8.6.1/server/tomcat/bin/infaservice.sh startup"

sleep 60