

Install and Configure Oracle APEX with ORDS and Apache Tomcat

PART 1: Installation of Oracle Apex 22.1

1. **In our case the downloaded apex software (apex_22.1_en.zip) is present in the below location.**

```
cd /u01/apex_22.1/apex/
sqlplus /nolog
conn sys as sysdba
alter session set container=pdb1;
@apexins.sql SYSAUX SYSAUX TEMP /i/
@apxchpwd.sql --user name:ADMIN password: Apex*123
ALTER USER APEX_PUBLIC_USER ACCOUNT UNLOCK;
ALTER USER APEX_PUBLIC_USER IDENTIFIED BY Apex#123;
@apex_rest_config.sql
APEX_LISTENER Password: Apex*123,
APEX_REST_PUBLIC_USER Password: Apex*123
```

PART 2: Installation of Tomcat & Java JDK

1. **In our case the downloaded Tomcat, Java jdk software is present in the below location.**

```
cd /home/u01
```

2. **Extract the software setup as below from the above location.**

```
[root@localhost u01]# tar xvf apache-tomcat-9.0.65.tar.gz
[root@localhost u01]# tar xvf jdk-18_linux-x64_bin.tar.gz
[root@localhost u01]# ls -lrth
```

3. **Make sure to set the following environment variable to start the tomcat application.**

```
[root@localhost u01]# vi tomcat.env
export JAVA_HOME=/home/u01/jdk-18.0.2
export CATALINA_HOME=/home/u01/apache-tomcat-9.0.65
export CATALINA_BASE=$CATALINA_HOME
[root@localhost u01]# . tomcat.env
```

4. **Check Startup and shutdown of the tomcat service from the following location**

```
[root@localhost u01]# cd $CATALINA_HOME
```

```
[root@localhost apache-tomcat-9.0.65]# cd bin/  
[root@localhost bin]# sh startup.sh  
systemctl stop firewalld  
systemctl disable firewalld
```

5. Check in Browser by url <http://192.168.5.114:8080>

PART 3: Install Oracle Rest Data service (ORDS)

1. Create a separate directory for ORDS installation and then Unzip ORDS software as below in the following location.

```
[root@localhost u01]# mkdir -p /home/u01/ords  
[root@localhost ords]# unzip ords-22.2.0.172.1758.zip  
[root@localhost ords]# ls -lrth
```

2. Make a directory to hold the configuration and edit the database configuration template(params file) as below

```
[root@localhost ords]# mkdir -p /home/u01 /ords/conf  
[root@localhost ords]# ls -lrth  
[root@localhost ords]# vi /home/u01/ords/params/ords_params.properties
```

```
db.hostname=192.168.5.109  
db.port=1521  
db.servicename=pdb1  
#db.sid=  
# Next 2 lines for CDB installations only.  
#cdb.common.schema=false  
#db.serviceNameSuffix=.your_db_domain  
db.username=APEX_PUBLIC_USER  
db.password=Apex#123  
migrate.apex.rest=false  
plsql.gateway.add=true  
rest.services.apex.add=true  
rest.services.ords.add=true  
schema.tablespace.default=SYSAUX  
schema.tablespace.temp=TEMP  
standalone.mode=false  
# Next 3 lines for standalone mode only.  
#standalone.use.https=true  
#standalone.http.port=8080  
# ORDS19 Onward
```

```
#standalone.static.path=/home/oracle/apex/images
# Pre-ORDS19
#standalone.static.images=/home/oracle/apex/images
user.apex.listener.password=Apex*123
user.apex.restpublic.password=Apex*123
user.public.password=Apex*123
user.tablespace.default=SYSAUX
user.tablespace.temp=TEMP
sys.user=SYS
sys.password=sys
# Enable REST Enabled SQL.
restEnabledSql.active=true
# Enable SQL Developer Web. Available from 19.4 onward. Requires REST Enabled SQL.
feature.sdw=true
# Enable database APIs. Available from 19.1 onward.
database.api.enabled=true
```

```
[root@localhost ~]# $JAVA_HOME/bin/java -jar ords.war configdir /u01/ords/conf
[root@localhost ~]# $JAVA_HOME/bin/java -jar ords.war
```

```
[root@localhost ~]# mkdir $CATALINA_BASE/webapps/i/
[root@localhost ~]# cp -R /tmp/apex/images/* $CATALINA_BASE/webapps/i/
[root@localhost ~]# cd home/u01/ords
[root@localhost ords]# cp ords.war $CATALINA_BASE/webapps/
```

<http://<server-name>:<port>/ords/>

<http://192.168.5.114:8080/ords/>

<http://ol7.localdomain:8080/ords/>

Credential

url : <http://192.168.5.114:8080/ords/>

WORKSPACE :INTERNAL

USER :ADMIN

PASSWORD: Apex*123

WORKSPACE :HIT_DEV

USER :HIT_DEV

PASSWORD: root

WORKSPACE :OMS_DEV

USER :OMS_DEV

PASSWORD: root