

How to install APEX 3.xxx in Oracle database 10g R2 *on Windows*

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Steps:

1. Oracle Database 10g R2 Installation
2. Oracle HTTP Server Installation
3. APEX download and Installation
4. APEX database images Installation.
5. Database Access Descriptor (DAD) Configuration
6. APEX Accessing

Process for Step: 1

I assume Oracle Database 10g R2 already installed and configured in your computer. If Not installed and configured yet then finish it.

One thing you remember after installing Oracle database 10g if you do not configure “**Net configuration**” using “Net configuration Assistant” or “Net manager” or either way, then do it so that you can access your database in the command prompt applying command like `SQL>conn scott/tiger@orcl`
(As like as you can access your database from other machine)

Note: This configuration will be required later.

Few others required setting need to check below for APEX:

- a) Shared Pool Size Requirements
- b) Verify JOB_QUEUE_PROCESS

For Requirement (a):

Oracle Application Express requires the *shared_pool_size* of the target database to be at Least 100 MB. To determine the current value of the *shared_pool_size* parameter type below:

```
SQL> SHOW PARAMETER SHARED_POOL_SIZE;
```

Note : you must log in as sys with sysdba privilege

For Requirement (b):

If **JOB_QUEUE_PROCESS** is not enabled and working properly, you can not successfully execute script.

To view the number of **JOB_QUEUE_PROCESS** type as :

```
SQL > SELECT VALUE FROM v$parameter WHERE  
NAME='job_queue_process';
```

Note : you must log in as sys with sysdba privilege

For example, to set the number of **JOB_QUEUE_PROCESSES** to 20, use:

```
SQL> ALTER SYSTEM SET JOB_QUEUE_PROCESSES = 20;
```

Process for Step: 2

To install Oracle HTTP server you will require *Oracle10g Release 2 Companion CD*.

That is available at <http://otn.oracle.com>

Before installing *Oracle10g Release 2 Companion CD*. Very important thing to

Remember that ,

The Oracle HTTP Server cannot be installed into an existing Oracle Home. If another Oracle product is installed on the same server, you will need to create a new Oracle home name and location for the Oracle HTTP Server

Installation Steps:

1. Start the Oracle Universal Installer from the Oracle10g Release 2 Companion CD
2. Select a product to install screen select
Oracle Database 10g Companion Products 10.2.0.1.0
3. Specify Home Details Select Different Oracle Home path and name (other then ORACLE_HOME for database) and **NEXT >**
4. For Available Product Components select '*Apache Standalone 10.1.2.0.0*' product only
5. In the final stage Press "**Install**" button and Installer will show you the progress for installation

After successfully installation of Oracle HTTP server, to test the HTTP server open a browser window and type below URL:

http://<computer name>:7777 (here port no. may differ than 7777..follow end of installation success message)

If your computer name is abc and port no. is 7777 then the above url is <http://abc:7777>

For your information **Starting / Stopping / Restarting Oracle HTTP Server:**

Start All:

```
$ORACLE_HOME/opmn/bin/opmnctl startall
```

Stop All :

```
$ORACLE_HOME/opmn/bin/opmnctl stopall
```

Start HTTP Process:

```
$ORACLE_HOME/opmn/bin/opmnctl startproc ias-component=HTTP_Server
```

Stop HTTP Process :

```
$ORACLE_HOME/opmn/bin/opmnctl stopproc ias-component=HTTP_Server
```

Restart HTTP Process:

```
$ORACLE_HOME/opmn/bin/opmnctl restartproc ias-component=HTTP_Server
```

Process for Step: 3

Before you can install APEX, you need to make sure your PATH Environment Variable Is set correctly. [Right click on “My Computer” > Advanced Tab >click “ Environmental Variable button” > In the System variables section, select **Path** and click **Edit**.](#)

Make sure that the first directory in the path is set to your Oracle Database 10g Database home, not the Apache HTTP Server home. Then click **OK**.

Example :

Correct :

```
d:\oracle\product\10.2.0\db_1\bin;E:\OraComp\bin;E:\OraComp\jlib;D:\OraCompanionHome_1\bin;D:\OraCompanionHome_1\jlib;%SystemRoot%\system32;%SystemRoot%;%SystemRoot%\System32\Wbem
```

Wrong:

```
D:\OraCompanionHome_1\bin;d:\oracle\product\10.2.0\db_1\bin;E:\OraComp\bin;E:\OraComp\jlib;D:\OraCompanionHome_1\bin;D:\OraCompanionHome_1\jlib;%SystemRoot%\system32;%SystemRoot%;%SystemRoot%\System32\Wbem
```

Above environmental variable setting is wrong because first variable path directory showing apache http server home and the database server home directory showing later.

if you keep your Environmental variable setting wrong then you can not use command prompt to access your database using like **“SQL > conn scott/tiger@oracl”** because it will show Protocol adapter error.

Now we have to install oracle APEX 3.2.xx. We can download latest version of APEX from <http://apex.oracle.com/i/index.html>

After download unzip file and keep it in your local disk drive as example :
D:\apex..... Follow figure-1.

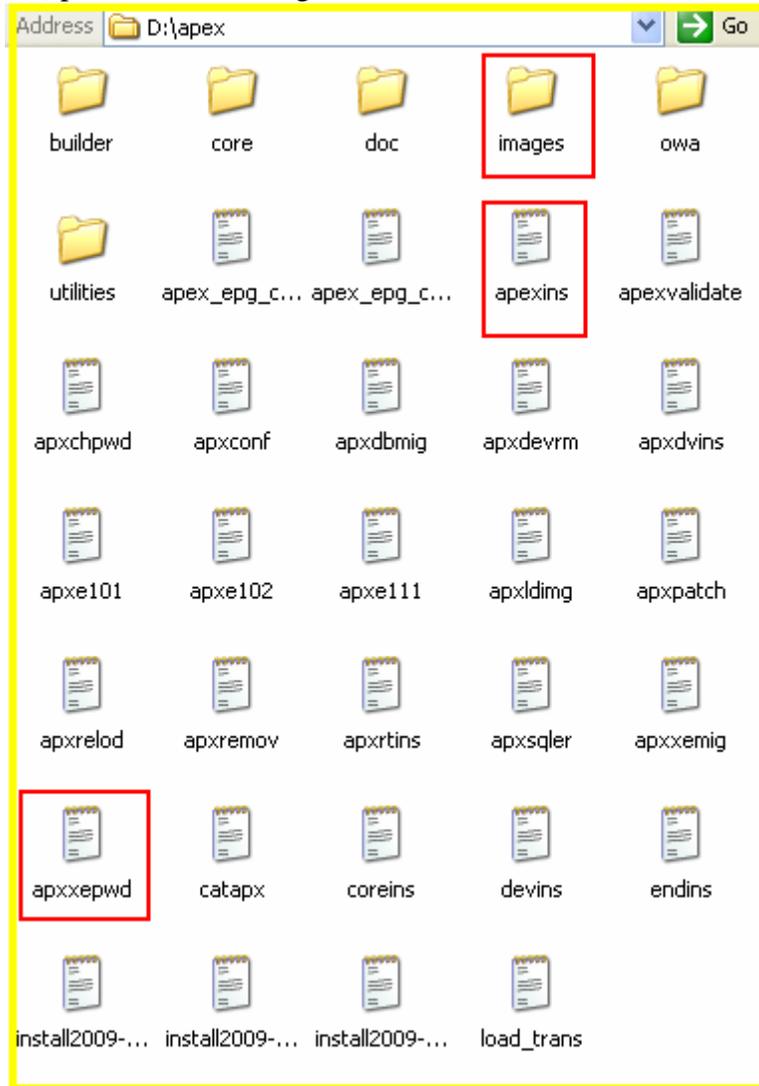


Fig : 1

Now Create Tablespace named APEX for Oracle Application Express Database Objects:

```
SQL> CREATE TABLESPACE APEX datafile 'D:\oraclehome10g\oradata\ORCL\APEX.dbf'  
2 SIZE 500M  
3 EXTENT MANAGEMENT LOCAL  
4 SEGMENT SPACE MANAGEMENT AUTO;
```

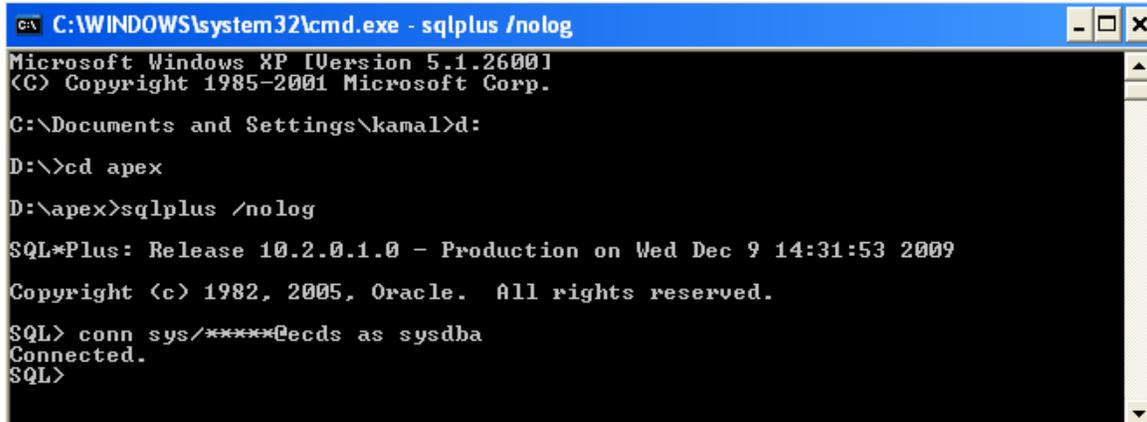
Now go to your apex directory that you stored after unzipped follow fig : 2



Fig: 2

Now log on as sys with sysdba privilege follow fig: 3

```
SQL> conn sys/****@<sid> as sysdba
```

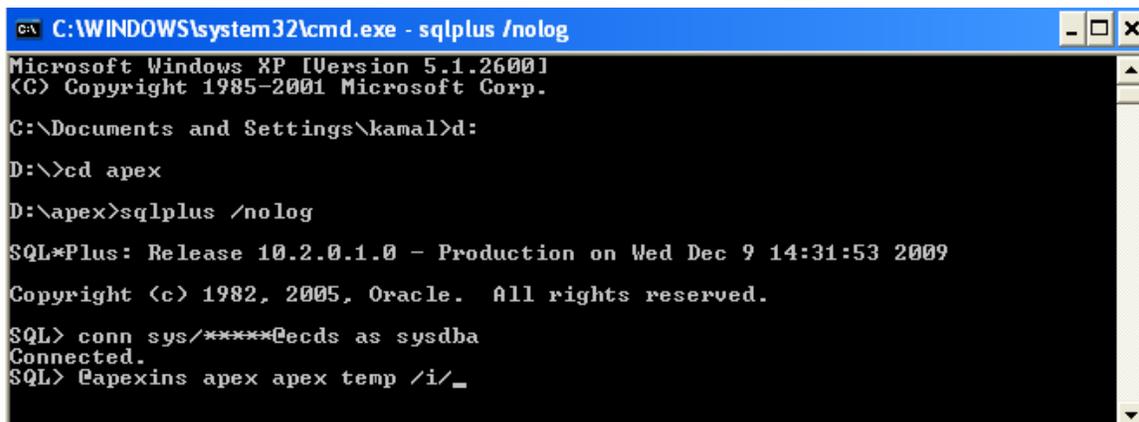


```
C:\WINDOWS\system32\cmd.exe - sqlplus /nolog
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\kamal>d:
D:\>cd apex
D:\apex>sqlplus /nolog
SQL*Plus: Release 10.2.0.1.0 - Production on Wed Dec 9 14:31:53 2009
Copyright (c) 1982, 2005, Oracle. All rights reserved.
SQL> conn sys/****@ecds as sysdba
Connected.
SQL>
```

Fig: 3

Type the below command and follow fig: 4

```
SQL > @apexins APEX APEX TEMP /i/
```



```
C:\WINDOWS\system32\cmd.exe - sqlplus /nolog
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\kamal>d:
D:\>cd apex
D:\apex>sqlplus /nolog
SQL*Plus: Release 10.2.0.1.0 - Production on Wed Dec 9 14:31:53 2009
Copyright (c) 1982, 2005, Oracle. All rights reserved.
SQL> conn sys/****@ecds as sysdba
Connected.
SQL> @apexins apex apex temp /i/_
```

Fig : 4

Description of the parameter used in the above script execution command:

@apexins is a sql script that is located at directory:

“**d:\apex**” (this directory just as an example you may have different. It depends on which directory you unzipped) that need to execute to install apex installation files.

APEX is the Name of the default tablespace for the APEX schema owner

FLows_020200.

APEX Name of the default tablespace for the APEX files schema owner **FLows_FILES**. Note that Oracle Application Express creates a table named **FLows_FILES.WWV_FLOW_FILE_OBJECTS\$** in this tablespace used to store any uploaded files. Although this could have been a separate tablespace, it is just as easy having the all objects in a single tablespace.

TEMP Name of the temporary tablespace to be used for all schemas created by the Oracle Application Express install process

/i/ Virtual directory that is used for images rendered by Oracle Application Express. To support future Oracle APEX upgrades, define the virtual image directory as **/i/**.

..... and the installation will continue

After successfully installed APEX you will be quit from **d:\apex** directory and from database as well automatically.

So now again get into the directory to **d:\apex** and connect to sys with sysdba privilege as you did before.

Now you have to set the apex admin password and to do so you have to type below:

SQL > @apxchpw

And type your own password for apex admin user.

After successfully installed apex there are 3 additional database user created

[APEX_030200](#), [APEX_PUBLIC_USER](#) and [FLows_FILES](#)

And by default all there accounts are LOCKED. Now you have to unlock this there user account. You can do it through enterprise manager console in graphical mode or in the command prompt you can type command

ALTER USER APEX_PUBLIC_USER account unlock
ALTER USER APEX_PUBLIC_USER identified by <YOUR PASSWORD>

Similarly you do for other two users and keep the same password for all there users.

Process for Step: 4

Now you have to copy images from d:\apex directory and paste it into apache server. Just copy the **images** folder from d:\apex and paste it into:

E:\OraComp\Apache\Apache

That means final **images** folder will look like as in the apache web server:

E:\OraComp\Apache\Apache\images

Process for Step: 5

Configure Database Access Descriptor:

Now that the Oracle Application Express images are in place, the next step is to configure the Oracle Database Access Descriptor (DAD) file. The configuration file is named **dads.conf** and should be located in the **E:\OraComp\Apache\modplsql\conf** directory. The DAD is used by the Oracle HTTP Server and mod_plsql extension module to connect to the Oracle database.

To find out the **dads.conf** file go to the

E:\OraComp\Apache\modplsql\conf directory and open **dads.conf** with “wordpad” editor

Copy the below text and paste into the **dads.conf** file:

```
=====  
Alias /i/ "E:\OraComp\Apache\Apache\images/"  
AddType text/xml xbl  
AddType text/x-component htc  
  
<Location /pls/apex>  
SetHandler pls_handler  
Order deny,allow  
Allow from all  
AllowOverride None  
PlsqlDatabaseUsername APEX_PUBLIC_USER  
PlsqlDatabasePassword ecds  
PlsqlDatabaseConnectString ecds-2:1521:ECDS  
PlsqlAuthenticationMode Basic  
PlsqlDefaultPage apex  
PlsqlDocumentTablename wwv_flow_file_objects$  
PlsqlDocumentPath docs  
PlsqlDocumentProcedure wwv_flow_file_mgr.process_download  
PlsqlNLSLanguage AMERICAN_AMERICA.AL32UTF8  
</Location>  
=====
```

You have to change few parameters from the above text

```
Alias /i/ "E:\OraComp\Apache\Apache\images/" -- here put your own  
apache server directory for images and important thing,last slash  
should be"/" not "\" as shown above.
```

Change the following parameter :

```
PlsqlDatabasePassword < your password>  
PlsqlDatabaseConnectString <your computer name>:1521:<SID>
```

After paste and changing the above text with your own information you must save it using wordpad editor save button.

Now you have to restart the HTTP server to make the change effect that you have changed in the **dads.conf** file.

Go to command prompt and set your directory as

```
E:\>CD E:\OraComp\opmn\bin
```

```
E:\OraComp\opmn\bin> opmnctl restartproc ias-component=HTTP_Server
```

After executing the above command now your **dads.conf** file is in effect.

Process for Step: 6

Now open your browser url type : **http://ecds-2:7777/pls/apex**

Type workspace : internal

User name : admin

Password : <admin password>

-----**End of documentation**

