Planapps Installation and Upgrade Guide v4.1.0.0

The Global Leader in Infrastructure
Asset Management Solutions

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1.1 Author

Exor Development

1.2 Document Summary

This document provides instructions on the Installation or upgrade of Planapps to version v4.1.0.0.

1.3 Document History

Document History			
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1.4 Reference documents

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1.5 Distribution

Exor Customers, Partners and Staff

1.6 Quality Assurance

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2 Introduction

This document will guide you through the installation/upgrade and configuration of Planapps.

2.1 Pre-requisites

Your highways system must, at least, be at version 4.1.0.0 as a base line and have Enquiry Manager installed.

The version of application express must be at 3.2.1 This can be downloaded from Oracle at http://www.oracle.com/technology/products/database/application_express/download.html
Installation or upgrade is covered in this document.

An excellent knowledge of databases, SQL. PL/SQL, sqlplus and a command prompt are expected from the installer.

3 Planapps Software Files

3.1 Implementation of the Planapps Software files

To install the software components for Planapps execute the **setup_planapps_4100.exe** and follow the on-screen prompts.

Extremely Important (When Upgrading):

This is a patch release to be installed on top of release 4.0.5.2

It is crucial that when selecting the 'Destination Folder', you select that directory under which the ***existing*** 4.0.5.2 software resides.

When the wizard completes, the necessary client and server software files will have been installed.

Notes:
A password is required to be entered during this process. If you are not sure of the password contact support@exorcorp.com.

Important:
All exor applications that you install must go into the same destination – what is often referred to as <***exor_base***>.

To support different roll-out models, you can decide to just install Client or Server or both sets of components into the <***exor_base***>.

3.2 Pre-Requisites to Installation/Upgrade

It is assumed that the audience of this document understand the configuration of the servers being installed/upgraded and are sufficiently proficient with SQL*Plus. It is also assumed that the terminology used in this document is understood by the reader.

NB. The instructions for installation of the software describes the installation of all the software into a single area (usually referred to as the 'Client'). The instructions for upgrading the Server (your Highways schema) assume you have access to the database from the 'Client'.

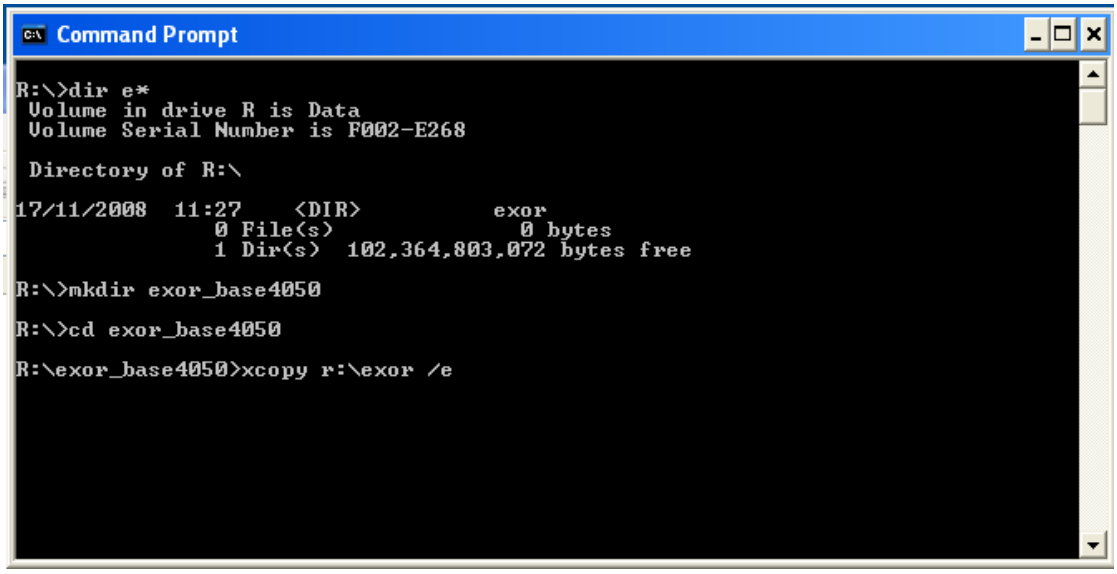
Your configuration and server access may differ from this; the InstallShield can still be used for installation. For example, you may have to install the Client software on the Application Server and the Server software on the Database Server for reasons of database access availablilty from the Application Server.

If in any doubt please contact support@exorcorp.com.

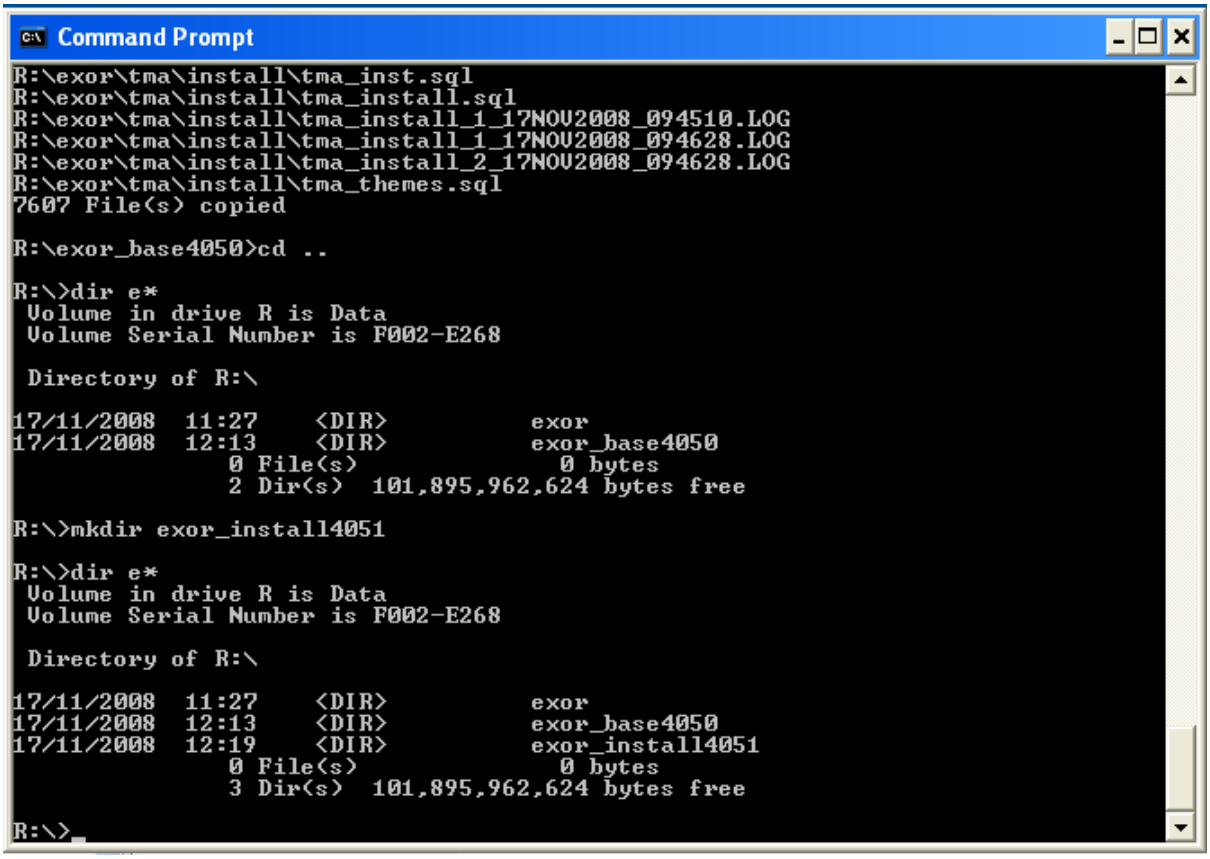
Before attempting to upgrade, you should ensure that;

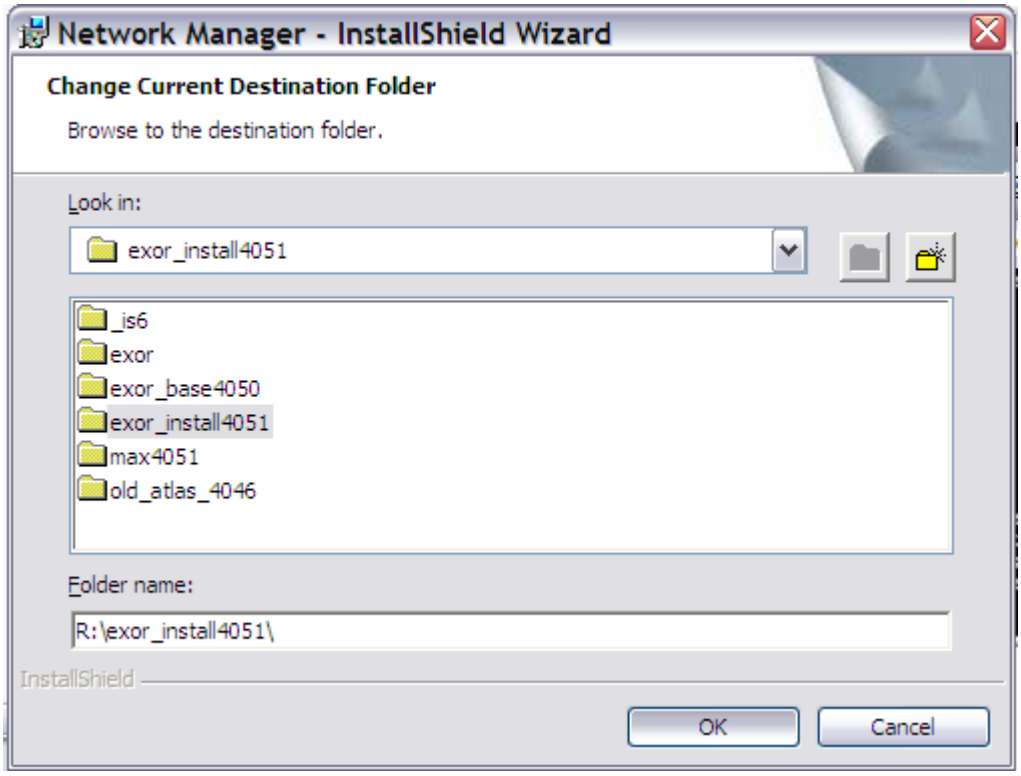
- **the appropriate software components are installed and are compatible with the exor certification matrix. The certification matrix can be downloaded from the Client area of the exor website.**
- **all users are disconnected from the system**
- **the highways listener processes are not running**
- **a database export of the owner of Highways owner has been taken.**
- **You MUST copy the current <*exor_base*> directory and sub-directory structure and contents to a new area (e.g. <*exor_base4050*>). This ensures that a copy is available for backup or reference purposes should any issues arise during the installation.**
  The installation can then continue into a new area (e.g. <exor_install4051>) which should then be copied onto the <*exor_base*>.

  For Example:
  ….copy the current <*exor_base*> directory and sub-directory structure and contents to a new area (e.g. <*exor_base4050*>)

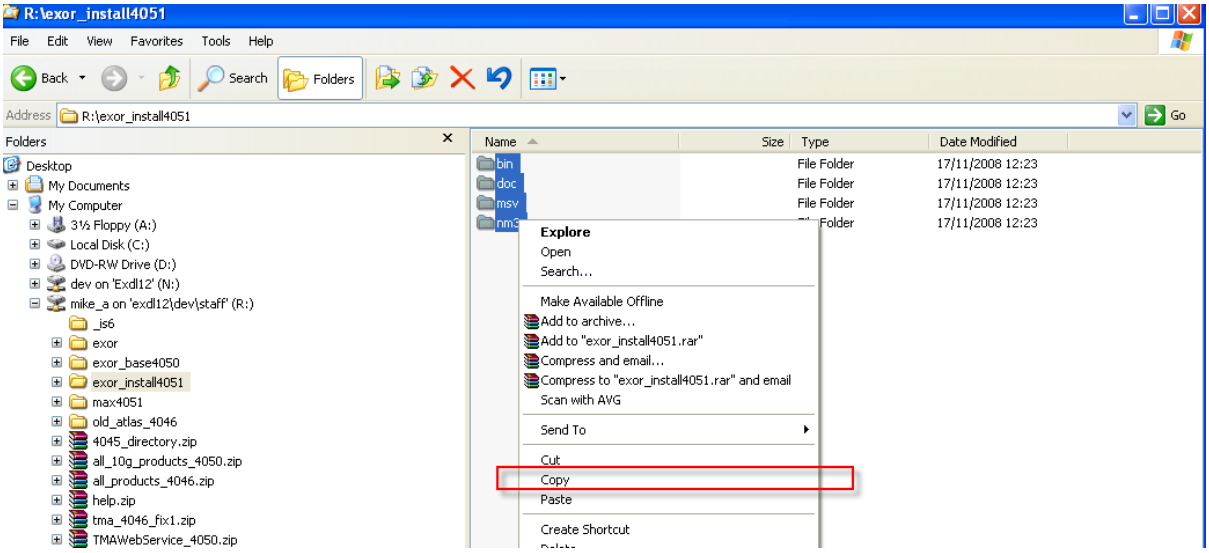


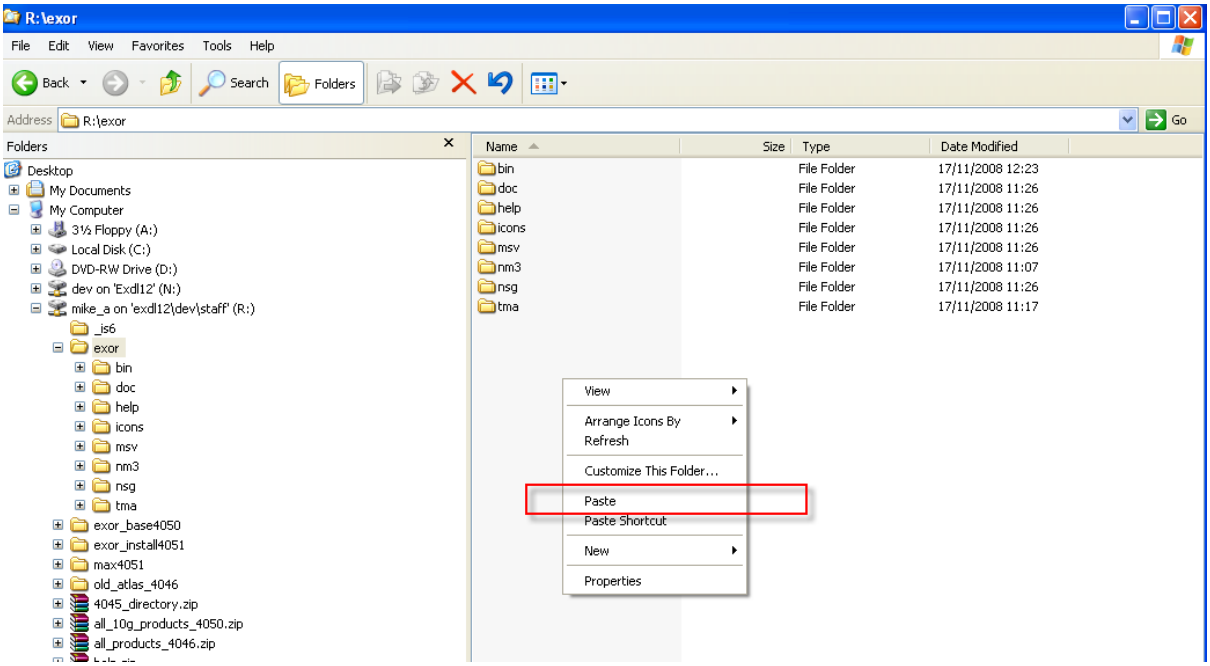
… The installation can then continue into a new area (e.g. <exor_install4051>)





… which should then be copied onto the <*exor_base*>





4 Install APEX 3.2.1

You will need to create a tablespace to install APEX into.

Check if a tablespace exists.
select a.tablespace_name, (b.bytes/1024)/1024 Mb, b.file_name
from dba_tablespaces a
, dba_data_files b
where a.tablespace_name = b.tablespace_name;

If there is a tablespace called APEX check that it is large enough. At least 500Mb.

As the sys user execute the following to increase the datafile size.
where 'filename' is the value returned from the query above eg
'D:\ORACLE\DATABASES\HAMPS\APEX.DBF'

alter database datafile 'filename' resize 2500M;

If you need to create an APEX tablespace.
Make a note of the path to the other datafiles listed above and use the following to create a tablespace.

CREATE TABLESPACE apex
DATAFILE
'path\apex01.dbf' SIZE 1024 m
AUTOEXTEND ON NEXT 1024 M MAXSIZE UNLIMITED;

Check that the apex tablespace exists using the query above.

Download the apex install package from
http://www.oracle.com/technology/products/database/application_express/download.html

Unzip the package to a working directory c:\apex

What follows is extracts from the APEX install guide located in the working directory\apex\doc\install\e13366.pdf.
From the section Downloading from OTN and configuring Oracle HTTP Server.

This can be followed for an new install of apex or an upgrade from a previous version.

Start a command prompt, (Start->Run and enter cmd)

Change directory to the location that you unzipped the apex package to.

Change directory until you can see the file apexins.sql

Start sqlplus and log in as the sys user.

Then
Run `apexins.sql` passing the following
four arguments in the order shown:
`@apexins tablespace_apex tablespace_files tablespace_temp images`
Where:
– *`tablespace_apex`* is the name of the tablespace for the Oracle Application Express application user.
– *`tablespace_files`* is the name of the tablespace for the Oracle Application Express files user.
– *`tablespace_temp`* is the name of the temporary tablespace.
– *`images`* is the virtual directory for Oracle Application Express images. To support future Oracle Application Express upgrades, define the virtual

image directory as /i/.
Example:
```
@apexins apex apex TEMP /i/
```

When Oracle Application Express installs it creates three new database accounts:
- APEX_030200 - The account that owns the Oracle Application Express schema and metadata.
- FLOWS_FILES - The account that owns the Oracle Application Express uploaded files.
- APEX_PUBLIC_USER - The minimally privileged account used for Oracle Application Express configuration with Oracle HTTP Server and mod_plsql.

If you are upgrading from a previous release, FLOWS_FILES, already exists and APEX_PUBLIC_USER is created if it does not already exist.

A log file is created, eg install2009-03-13_13-22-55.log review this for any errors.

4.1 Change the Password for the ADMIN Account

In a new installation of Oracle Application Express, or if you are converting a runtime environment to a development environment, you must change the password of the internal ADMIN account. In an upgrade scenario, the password will be preserved and carried over from the prior release.
To change the password for the ADMIN account:
1. Change your working directory to the apex directory where you unzipped the installation software.
2. Start SQL*Plus and connect to the database where Oracle Application Express is installed as SYS specifying the SYSDBA role. For example:
- On Windows:

```
SYSTEM_DRIVE:\ sqlplus /nolog
SQL> CONNECT SYS as SYSDBA
Enter password: SYS_password
```

- On UNIX and Linux:

```
$ sqlplus /nolog
SQL> CONNECT SYS as SYSDBA
Enter password: SYS_password
```

3. Run apxchpwd.sql. For example:
```
@apxchpwd
```
When prompted enter a password for the ADMIN account.

Configure the Oracle HTTP server.

4.2 Unlocking the APEX_PUBLIC_USER Account

The APEX_PUBLIC_USER account is locked at the end of a new installation of Oracle Application Express. You must unlock this account before configuring the database access descriptor (DAD) in a new installation.
To unlock the APEX_PUBLIC_USER account:
1. Start SQL*Plus and connect to the database where Oracle Application Express is installed as SYS specifying the SYSDBA role. For example:
- On Windows:

```
SYSTEM_DRIVE:\ sqlplus /nolog
SQL> CONNECT SYS as SYSDBA
Enter password: SYS_password
```

- On UNIX and Linux:

```
$ sqlplus /nolog
SQL> CONNECT SYS as SYSDBA
```

```
Enter password: SYS_password
```
2. Run the following statement:
```
ALTER USER APEX_PUBLIC_USER ACCOUNT UNLOCK
```

Changing the Password for the APEX_PUBLIC_USER Account

The APEX_PUBLIC_USER account is created with a random password in a new installation of Oracle Application Express. You will must change the password for this account before configuring the database access descriptor (DAD) in a new installation.
To change the password for the APEX_PUBLIC_USER account:
1. Start SQL*Plus and connect to the database where Oracle Application Express is installed as SYS specifying the SYSDBA role. For example:
- On Windows:

```
SYSTEM_DRIVE:\ sqlplus /nolog
SQL> CONNECT SYS as SYSDBA
Enter password: SYS_password
```
- On UNIX and Linux:

```
$ sqlplus /nolog
SQL> CONNECT SYS as SYSDBA
Enter password: SYS_password
```
2. Run the following statement:
```
ALTER USER APEX_PUBLIC_USER IDENTIFIED BY new_password
```
Where new_password is the new password you are setting for APEX_PUBLIC_USER. You will use this password when creating the DAD in the sections that follow.

4.3 Copy the Images Directory

The images directory need to be copied from the APEX working Directory(apexHome) to the http server

```
xcopy /E /I APEX_HOME\apex\images ORACLE_HTTPSERVER_HOME\Apache\apex\images
```

4.4 Editing the dads.conf

If you can access the dad via enterprise manager then edit the dad in the usual way.
If not follow these instructions.

Use a text editor and open the `dads.conf`

ORACLE_HTTPSERVER_HOME`\Apache\modplsql\conf\dads.conf`

In the `dads.conf` file, replace `ORACLE_HTTPSERVER_HOME`, `host`, `port`, `service_name`, with values appropriate
for your environment.

Note that the `apex_public_user_password` is the
password you changed above
Note that the path listed is only an example. The path in the dads.conf file should
reference the file system path described in "Copy the Images Directory" .

These values might already exist

```
Alias /i/ "ORACLE_HTTPSERVER_HOME/Apache/apex/images/"
AddType text/xml xbl
AddType text/x-component htc


PlsqlDatabaseUsername should be the highways owner username

PlsqlDatabasePassword should be the password of the highways owner
<Location /pls/apex> this should be /<database_sid>/planapps



<Location /<database_sid>/planapps>
Order deny,allow
PlsqlDocumentPath docs
AllowOverride None
PlsqlDocumentProcedure wwv_flow_file_mgr.process_download
PlsqlDatabaseConnectString HOST:PORT:SERVICE_NAME ServiceNameFormat
PlsqlNLSLanguage AMERICAN_AMERICA.AL32UTF8
PlsqlAuthenticationMode Basic
SetHandler pls_handler
PlsqlDocumentTablename wwv_flow_file_objects$
PlsqlDatabaseUsername HIGHWAYS_OWNER
PlsqlDefaultPage apex
PlsqlDatabasePassword HIGHWAYS_OWNER_PASSWORD
PlsqlRequestValidationFunction wwv_flow_epg_include_modules.authorize
Allow from all
</Location>
```

Stopping and Restarting Oracle HTTP Server To stop and restart Oracle HTTP Server:

```
ORACLE_HTTPSERVER_HOME\opmn\bin\opmnctl stopproc ias-component=HTTP_Server
ORACLE_HTTPSERVER_HOME\opmn\bin\opmnctl startproc ias-component=HTTP_Server
```

4.5 Obfuscating PlsqlDatabasePassword Parameter

The password in the dads.conf is in clear text the following can be used to obfusticate it.

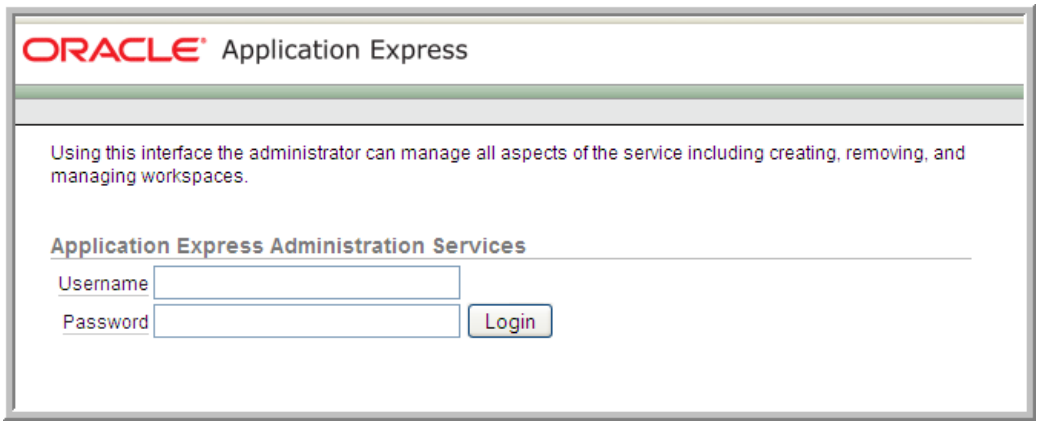
The `PlsqlDatabasePassword` parameter specifies the password for logging in to the database. You can use the `dadTool.pl` utility to obfuscate passwords in the `dads.conf` file. To obfuscate passwords, run `dadTool.pl` by following the instructions in the `dadTool.README` file.

4.6 Importing Planapps workspace

You should now be able to access the APEX development environment form a web browser.

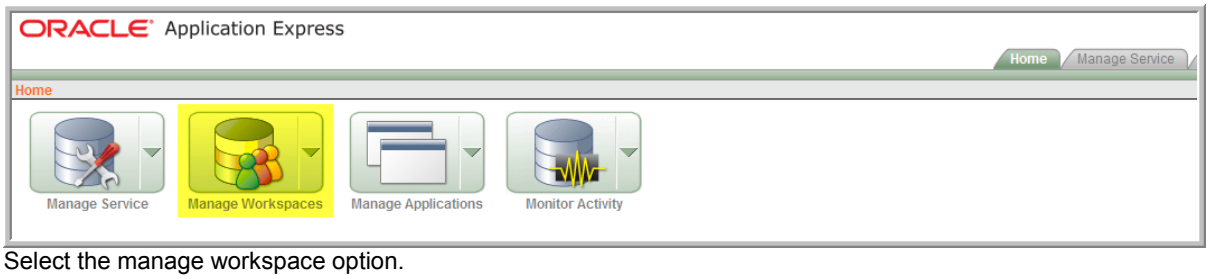
The internal admin pages can be located at

`http://hostname:port/planapps/apex_admin`

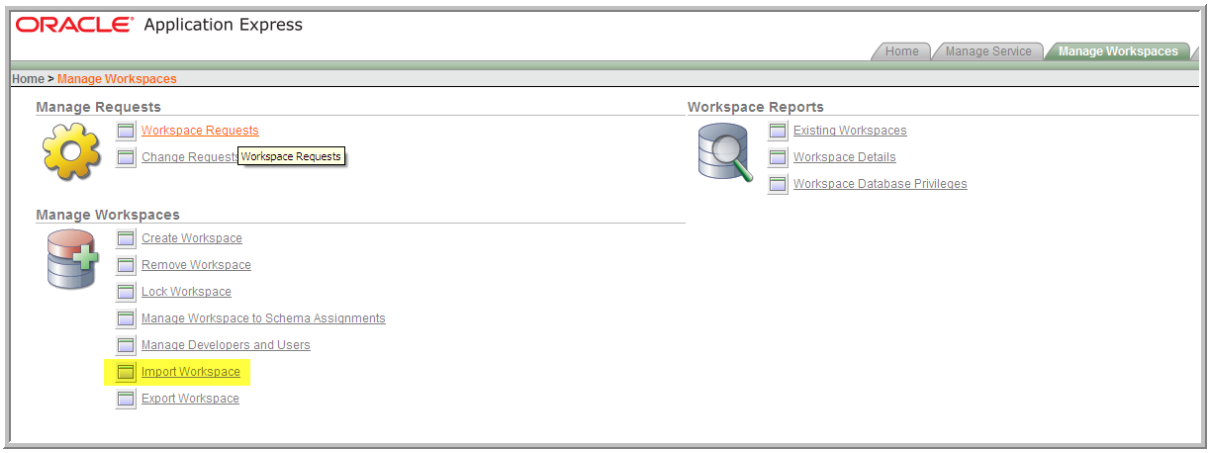


Username will be ADMIN
Password will be what you entered when you installed apex and changed the admin password.

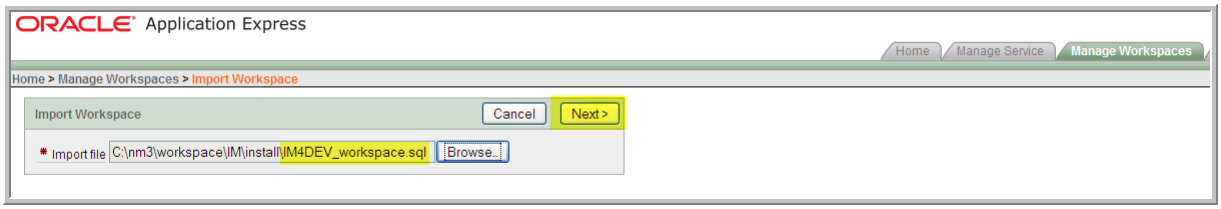
In order for future updates to work and allow single pages to be imported and exported you will need to import the workspace.
The workspace name is planapps



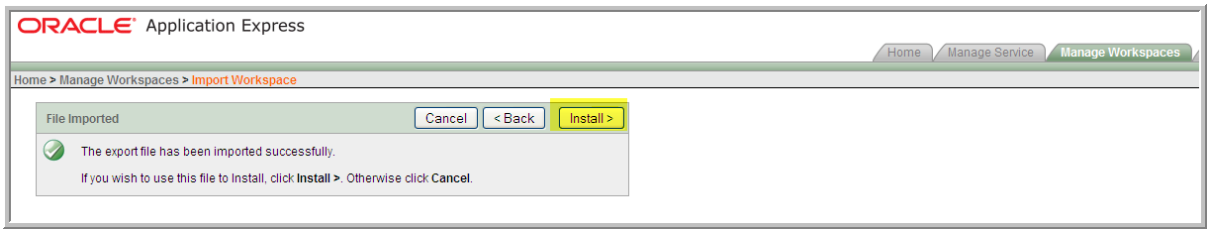
Select the manage workspace option.



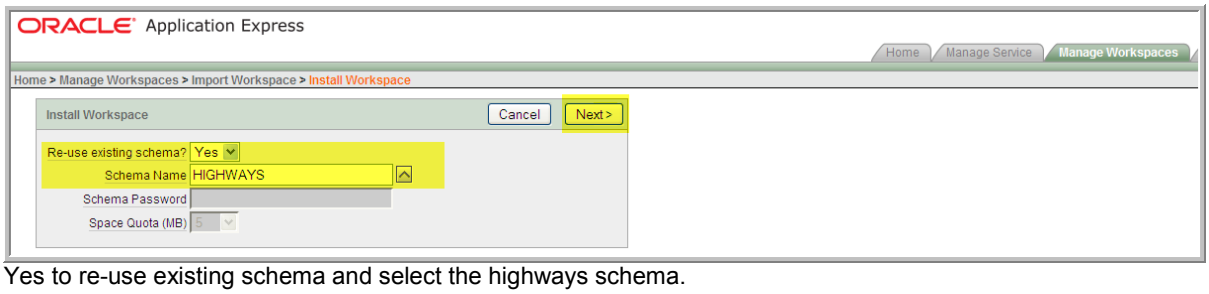
Select import workspace.



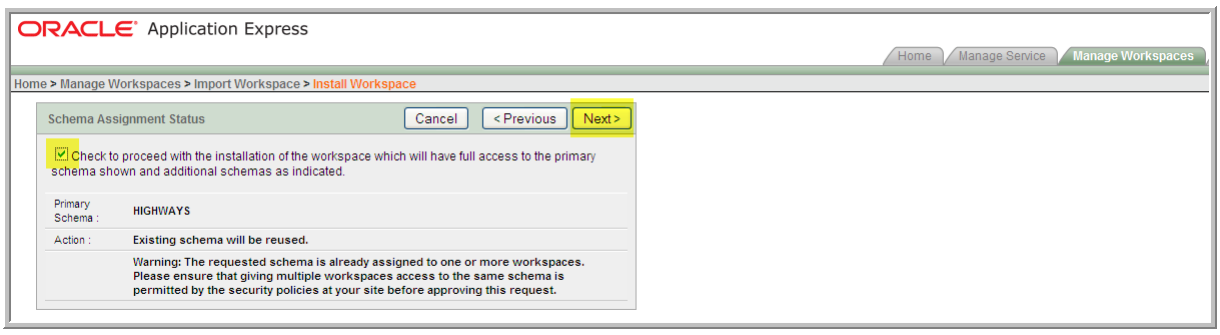
Browse to the location of the file planapps_workspace.sql and select it.
Press Next.



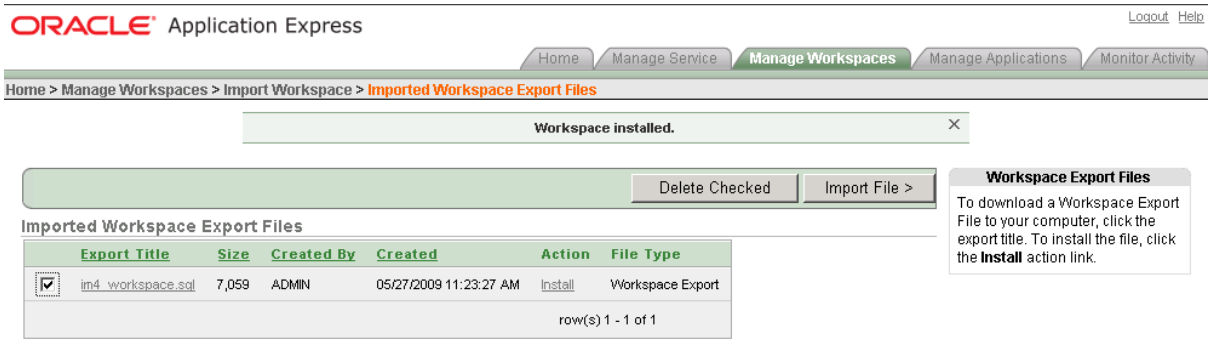
The file will be imported, press install.



Yes to re-use existing schema and select the highways schema.
Press Next



Check the ‘Proceed’ box, Confirm the details are correct and press next
The workspace will now be created.



You will be presented with this screen but there is no need to take any action

You can create yourself as a user of the workspace.
This will allow you to log on and changes to be tracked

5 Planapps Server Install/Upgrade

5.1 Implementation of the Planapps Software files

To install the software components for Maintenance Manager execute the **setup_planapps_4100.exe** and follow the on-screen prompts.

Extremely Important (When Upgrading):

This is a patch release to be installed on top of release 4.0.5.2

It is crucial that when selecting the 'Destination Folder', you select that directory under which the ***existing*** 4.0.5.2 software resides.

When the wizard completes, the necessary client and server software files will have been installed.

Notes:
A password is required to be entered during this process. If you are not sure of the password contact support@exorcorp.com.

Important:
All exor applications that you install must go into the same destination – what is often referred to as <***exor_base***>.

To support different roll-out models, you can decide to just install Client or Server or both sets of components into the <***exor_base***>.

5.2 Planapps Server Install/Upgrade

This chapter provides details of steps involved in installing/upgrading the server components for Planapps.

Important:
This product will require installing/upgrading ***after*** Enquiry Manager v4.1.0.0.

5.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 3.2** of this document are met.

Also, please be aware of the following;

Where instructed to change to a directory before running a script, it is assumed that you are running SQL*PLUS from a DOS Command prompt.

If you are running SQL*PLUS in windows you should set the 'start in' directory of the SQL*PLUS shortcut to simulate the change of directory.

If you do not run SQL*PLUS from the directory stated in each step of the guide, the installation will fail.

Also, whilst following the instructions in this section you will be required to know the location of <***exor_base***>. You may recall that whilst undertaking the tasks in **Section 5.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

5.2.2 Typical problems that you may encounter

It is possible that, when you are running some of the upgrade scripts, errors may be reported saying that objects already exist in the database or that columns already exist on tables. These errors can generally be ignored. If you are in any doubt, please contact the Exor support desk for guidance.

The upgrade procedures will also attempt to install database roles in the highways owner account that are necessary for the system to operate correctly. You may find that errors are produced when running the upgrade scripts to the effect that the role names being created are already used by existing roles or users. These errors can be ignored as they simply mean that the roles being created already exist.

Also during upgrade Warning messages may appear saying that compilation errors have occurred. These warnings can be ignored, since invalid objects will be recompiled prompt later on in the upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

5.2.3 Install/Upgrade of Planapps

To create the base data and objects for Planapps modules;

Change directory to **<*exor_base*>\pla\install**

Login to SQL*PLUS as the highways owner on the client PC and run the following command:

```
start pla_inst
```

You will be prompted to enter the path of the location of your highways software. This should be name of the directory, including disk identifier and a trailing slash character, referred to as <***exor_base***>.

For example, if you installed your highways software in a directory called EXOR on your C drive, you would enter the following when prompted.

C:\EXOR

When you have supplied this value, you will be prompted to confirm that it is correct and asked whether you wish to continue.

If the value specified is not correct or does not end with a slash character, you will be given an error message and the installation script will abort. You will then need to login to SQL*PLUS again and rerun the script.

When the script has completed, all the Planapps objects and data will have been installed/Upgraded.

5.2.4 Checking Log File(s)

The following log files are produced in the working directory. At the end of the installation/upgrade, the files can be viewed to check for any errors that could have occurred during installation.

The installation script determines whether the route taken should be to install/upgrade or apply fix.

Should an Install be performed (Planapps installed for the first time) the log files produced will be in the following format:

```
pla_install_1_<date&time>.LOG
pla_install_2_<date&time>.LOG
```

Should an upgrade be performed (Planapps has already been installed in a prior release) the log files produced will be in the following format:

```
pla4052_pla4100_1_<date&time>.LOG
pla4052_pla4100_2_<date&time>.LOG
```

Should a fix be performed (Planapps requires a patch to be applied on top of a release) the log files produced will be in the following format:

```
pla4100_fix<fix_version>_1_<date&time>.LOG
pla4100_fix<fix_version>_2_<date&time>.LOG
```

Log files should be emailed to support@exorcorp.com to allow exor support staff to verify the install has been successful.

Due to interdependencies between some Exor products, please ignore all compilation errors until all of your products have been upgraded.

5.2.5 Additional Configuration

Consult the documentation that accompanies this release for details of any additional configuration that may be required following an install/upgrade.

For example, to obtain details of product options, and for details of new product features/amendments.

Important:
It is highly recommended that you do this before attempting to use the application.