Product Installation and Upgrade Guide v4.4.0.0

The Global Leader in Infrastructure Asset Management Solutions

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Exor Development

1.2 Document Summary

This document covers steps involved in installing/upgrading the components for:

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- Maintenance Manager
- Enquiry Manager
- TMA Manager
- TMA API
- Streetworks Manager
- Asset Valuation Manager
- Accidents Manager
- Public Rights Of Way Manager
- Street Lighting Manager
- Schemes Manager
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- Traffic Interface Manager
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1.3 Document History

Document History			
Revision	**Date**	**By**	**Description**
3.0	21-Jul-2011	Bentley Development	First Edition
3.1	02-Aug-2011	Bentey Development	Second Edition
3.2	28-Feb-2012	Bentley Development	Amendment to DB version
3.3	21-Mar-2012	Bentley Development	Removed reference to exor download

1.4 Reference documents

None

1.5 Distribution

Bentley Customers, Partners and Staff

1.6 Quality Assurance

Document Details	
File	Prepared By
Product Installation and Upgrade Guide v4.4.0.0.docx	Bentley Development
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Version	Approved for issue by
3.3	Colin Stewart
Date of Issue	Support Manager
21-Mar-2012	Graham Anns

2 Introduction

2.1 Purpose

This guide covers steps involved in installing/upgrading the components for:

- Network Manager
- Street Gazetteer Manager
- Maintenance Manager
- Enquiry Manager
- TMA Manager
- TMA API
- Streetworks Manager
- Asset Valuation manager
- Accidents Manager
- Public Rights Of Way Manager
- Street Lighting Manager
- Schemes Manager
- Structures Manager
- Traffic Interface Manager
- Highways Agency Interface
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- Work Orders Work Tray
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Each product upgrade is split into two distinct stages,

- Stage 1 – Implementation of the Software files
- Stage 2 – Installation/Upgrade of the Server

2.2 Products Covered by this Guide

Table 1 lists the relevant products that are covered by this guide.

Product	Install	Upgrade From 4.3.1.0	Upgrade From 4.3.0.1	Upgrade From 4.3.0.0
Network Manager	✓	✖	✓	✓
Street Gazetteer Manager	✓	✖	✖	✓
Maintenance Manager	✓	✖	✖	✓
Enquiry Manager	✓	✖	✖	✓

Product	Install	Upgrade From 4.3.1.0	Upgrade From 4.3.0.1	Upgrade From 4.3.0.0
TMA Manager	✓	✘	✘	✓
TMA API	✓	✘	✘	✓
Streetworks Manager	✓	✘	✘	✓
Asset Valuation Manager	✓	✘	✘	✓
Accidents Manager	✓	✘	✘	✓
Public Rights Of Way Manager	✓	✘	✘	✓
Street Lighting Manager	✓	✘	✘	✓
Schemes Manager	✓	✘	✘	✓
Structures Manager	✓	✘	✘	✓
Traffic Interface Manager	✓	✘	✘	✓
Highways Agency Interface	✓	✘	✘	✓
MapCapture Interface	✓	✘	✘	✓
UKPMS	✓	✓	✘	✘
Information Manager Foundation Layer	✓	✘	✘	✓
Information Manager 4	✓	✘	✘	✓
Work Order Work Tray	✓	✘	✘	✓
Enquiry Manager Work Tray	✓	✘	✘	✓

Table 1: List of products covered by this guide

2.3 Order in which to Install/Upgrade Products

Table 2 lists the order in which to install/upgrade the products in this release.

Product to Install/Upgrade	Order to Install/Upgrade
Network Manager	1
Street Gazetteer Manager	2
Maintenance Manager	3
Enquiry Manager	4
TMA Manager	5
TMA API	6
Streetworks Manager	7
Asset Valuation Manager	8
Accidents Manager	9
Public Rights Of Way Manager	10
Street Lighting Manager	11
Schemes Manager	12
Structures Manager	13
Traffic Interface Manager	14
Highways Agency Interface	15
MapCapture Interface	16
UKPMS	17
Information Manager Foundation layer	18
Information Manager 4	19
Work Orders Work Tray	20
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Table 2: Order in which to install/upgrade products

2.4 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 installing/upgrading the Server (your Highways schema) assume you have access to the database from the 'Client'.

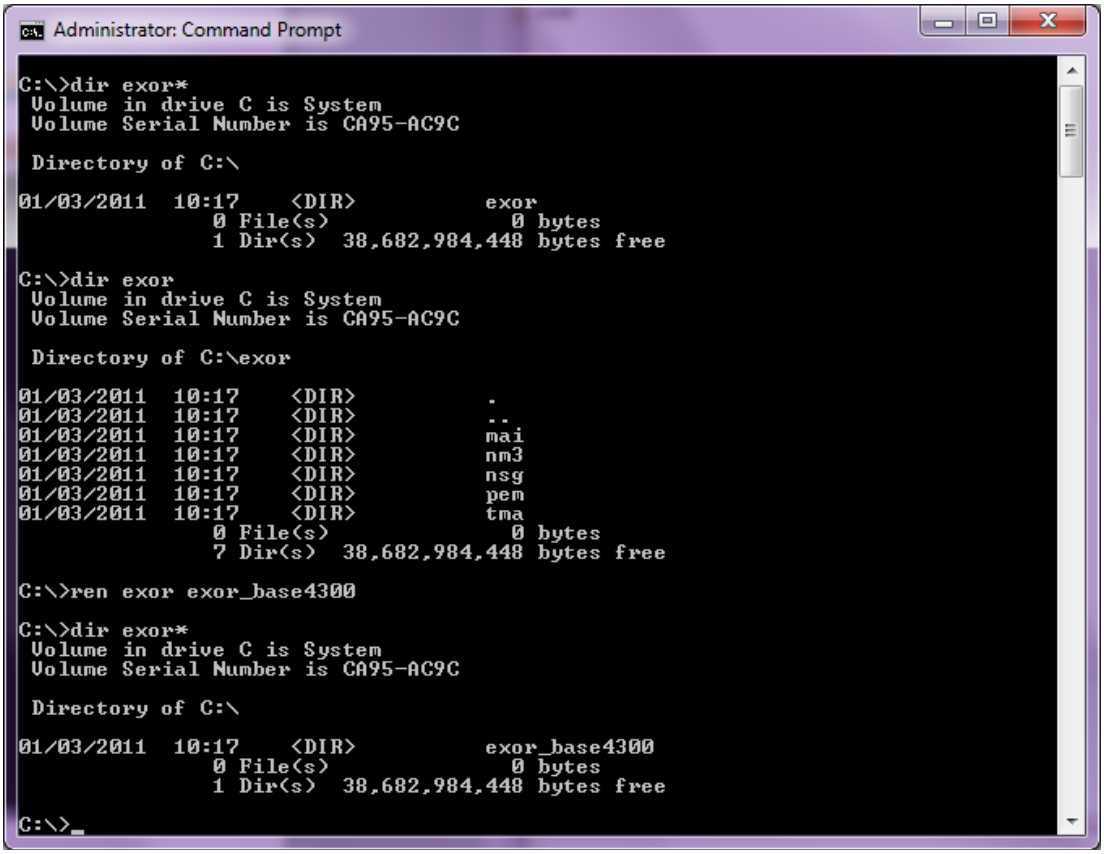
Your configuration and server access may differ from this; the InstallShield can still be used for installation. For example, you may have to install the Client software on the Application Server and the Server software on the Database Server for reasons of database access availability from the Application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

If in any doubt please raise a ticket at http://selectservices.bentley.com.

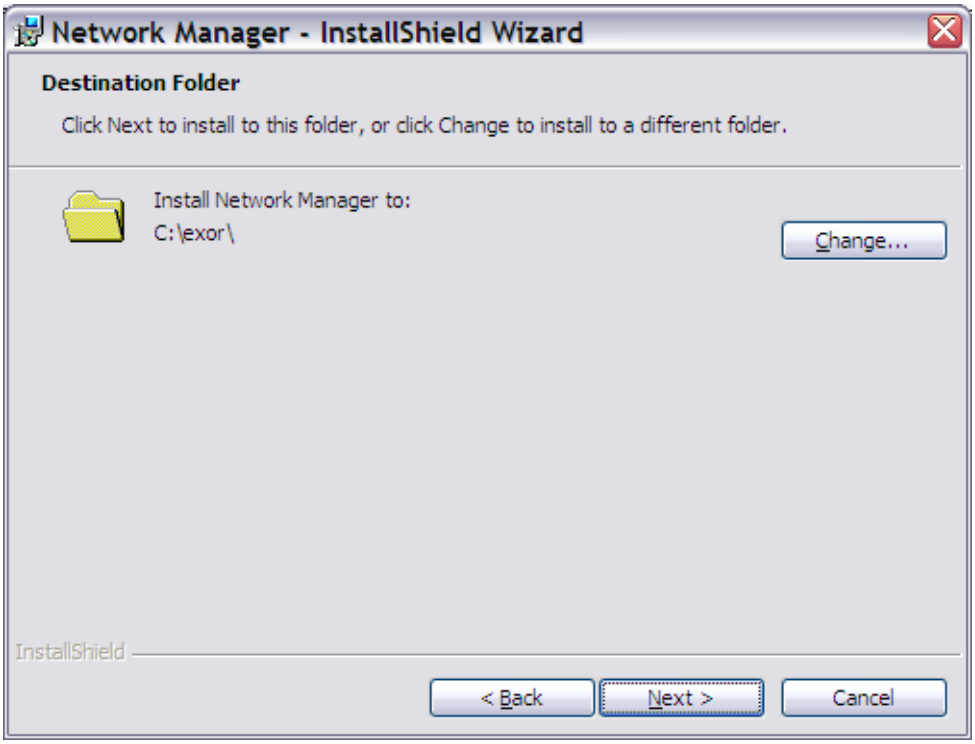
Before attempting to install/upgrade, you should ensure that;

- **the database version is 11gr2 (11.2.0.2) in accordance with the certification matrix. Please that the database can be upgraded with the assistance of services or Oracle documentation.**
- **also, when using ESRI please ensure, before installing or upgrading the Exor 4.4.0.0 product set, that the version installed is compatible in accordance with the certification matrix.**
- **the appropriate software components are installed and are compatible with the exor certification matrix. The certification matrix document "Bentley Exor_certification_September_2011(V1.3).pdf" can be downloaded from the Bentley Download site.**
- **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 rename the current <*exor_base*> directory and sub-directory structure and contents to a new area (e.g. <*exor_base4300*>). 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 the area that the <exor_base> normally resides (which should now be empty).

  For Example:
  ….rename the current <*exor_base*> directory and sub-directory structure and contents to a new area (e.g. <*exor_base4300*>)



… The installation can then continue into a clean area (e.g. c:\exor)



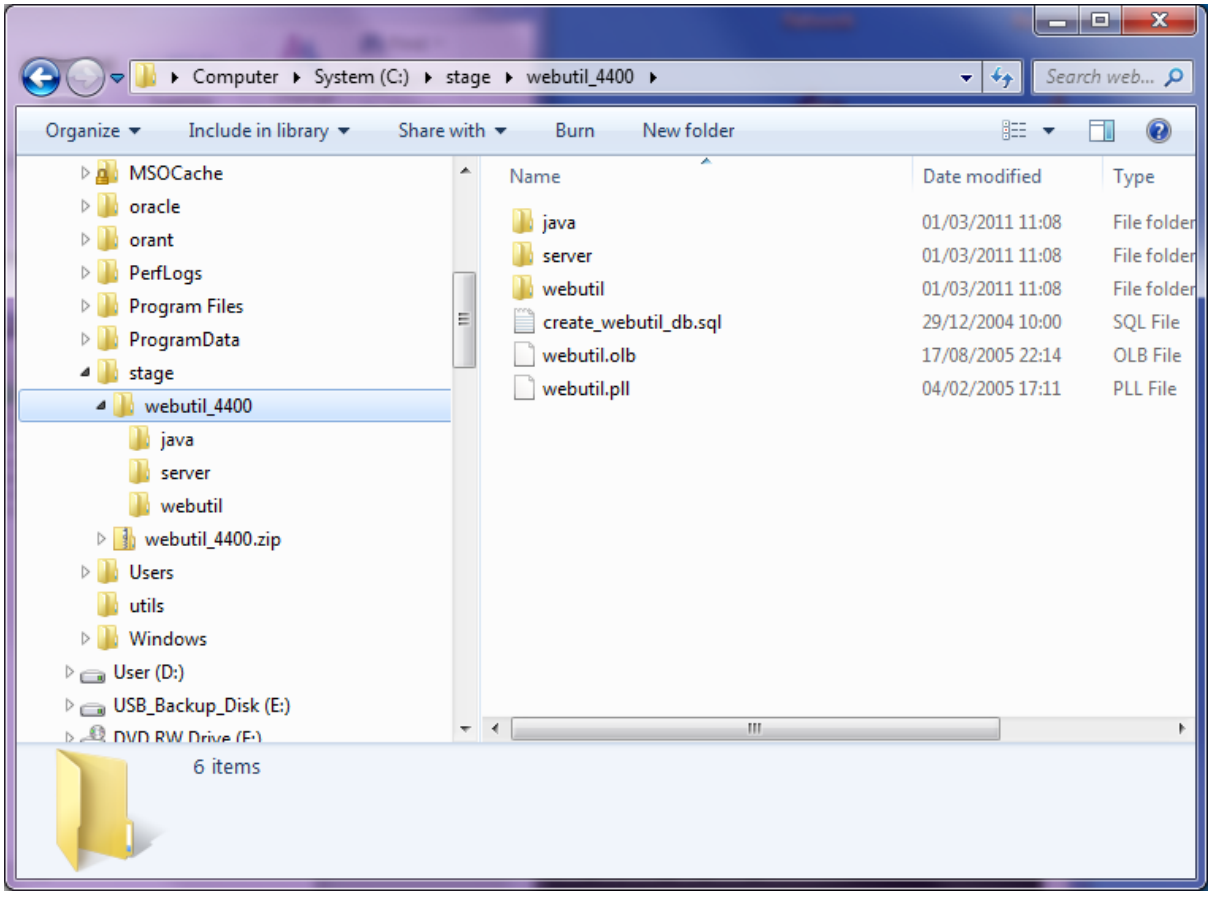
2.4.1 Oracle Application Server Configuration (Install only)

Please note that this section is not applicable when performing an upgrade. It should only be completed when a new install of Core 4.4.0.0 is taking place.

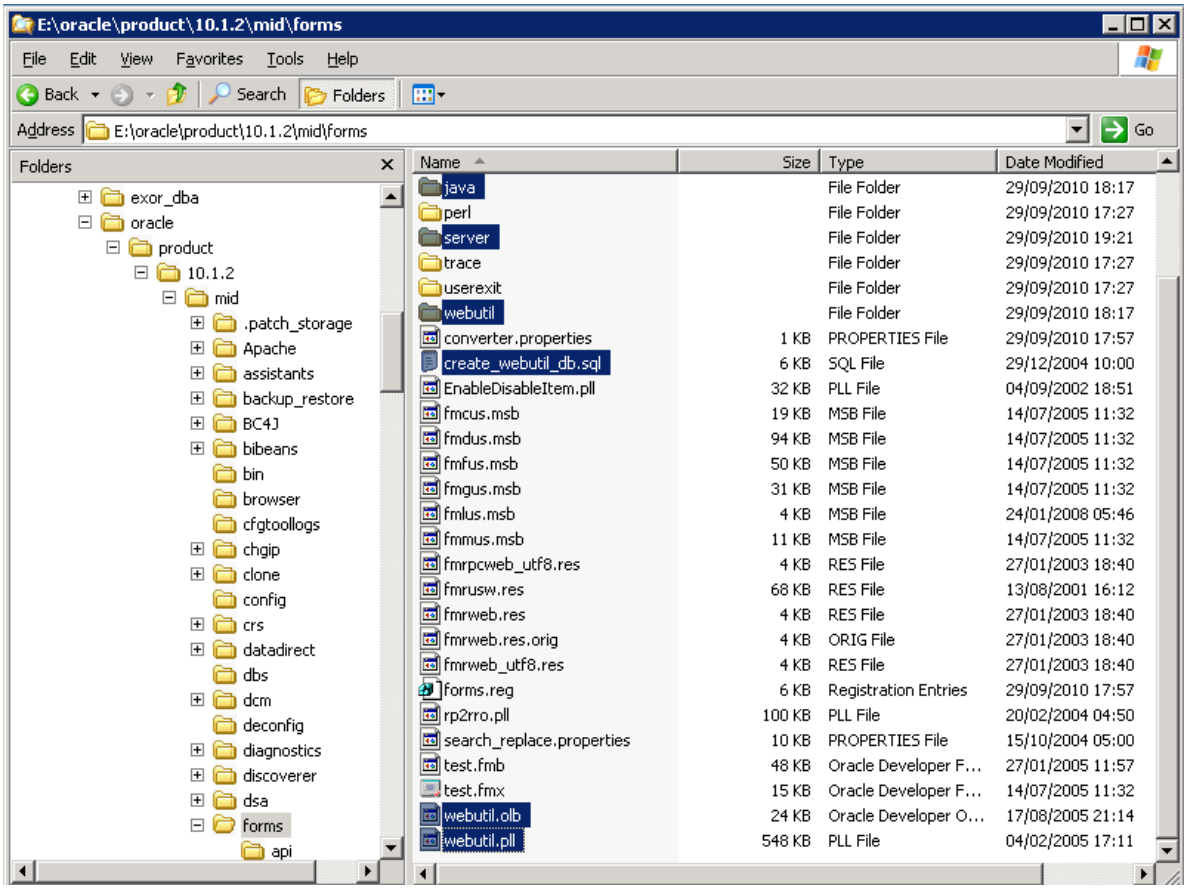
Exor Release 4.4.0.0 makes use of WebUtil functionality within the Oracle Application Server Technology stack for Maintenance Manager (Inspection Loader), Document Manager (uploading documents and Document Bundle Loader) and the Process Framework. This requires additional configuration within the Oracle Applications 10.1.2.3 Middle Tier (Forms) deployment.

Deploy WebUtil

Locate the file webutil_4400.zip contained within the exnm04040000en.exe (available from the Bentley Download site) and unzip into a staging area to give a folder structure as below:-



These folders can then be copied into the ORACLE_HOME/forms directory to give a final folder structure of:-



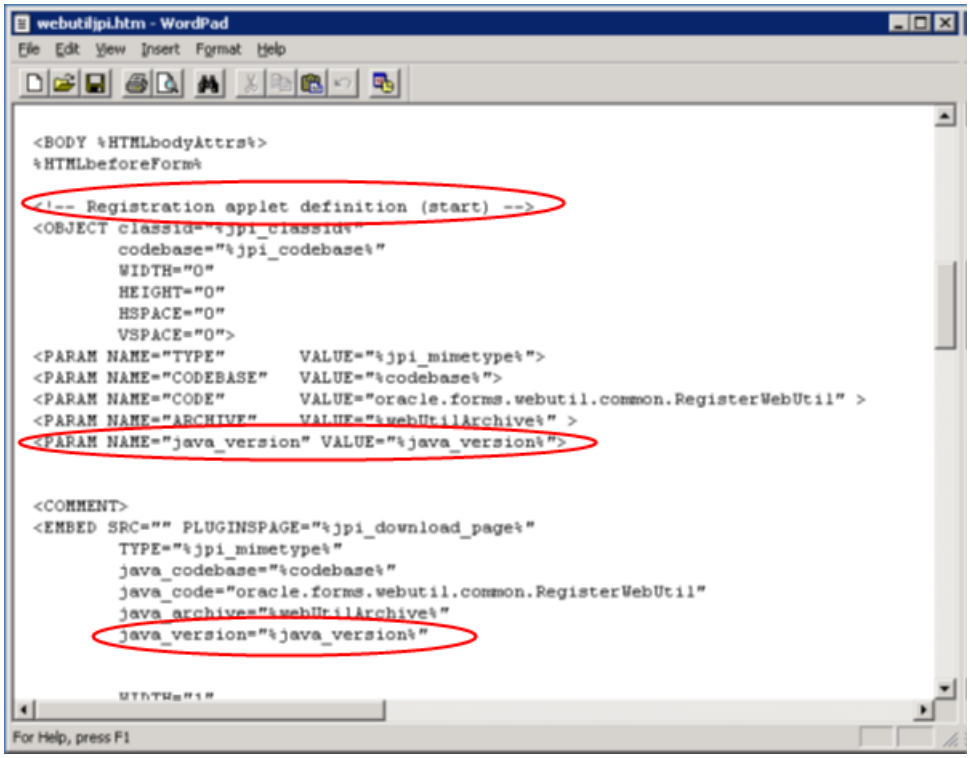
Edit webutiljpi.htm

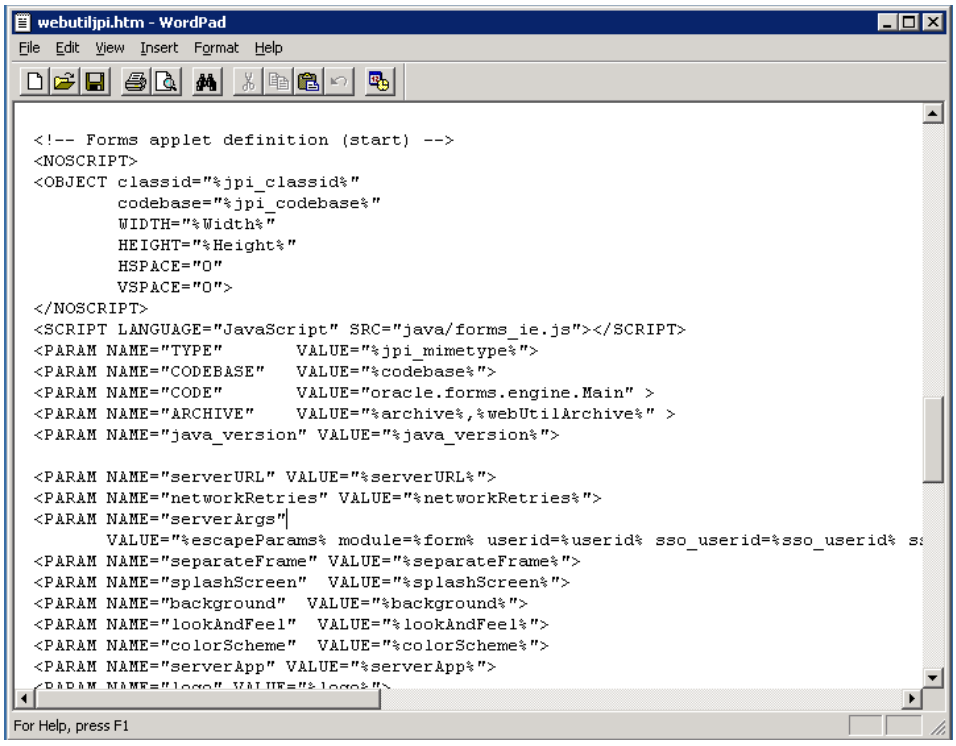
It is not possible to edit the webutiljpi.htm file via enterprise manager; navigate to <ORACLE_MIDDLE_TIER_HOME>\forms\server and open the webutiljpi.htm file using a suitable text editor.

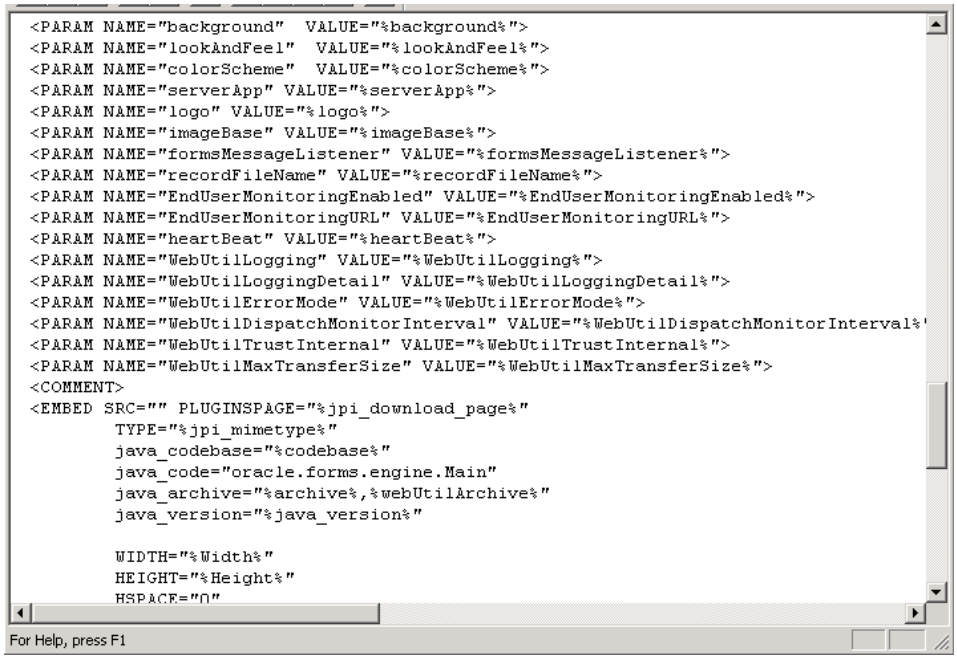
The new PARAMETER_NAME and EMBEDDED SRC to allow a specific java version to be used should be added to the file in two sections, first the 'Registration applet definition (start)' section, then the 'Forms applet definition (start)' section – NOTE: in this section you will have to scroll down to the EMBED SRC section to add java_version. The screen shots below indicate this.

NOTE in order to edit this file the Forms Service must be down, stop the OC4J_BI_FORMS service using Application Server Control.

Add the new PARAMETER_NAME and EMBEDDED SRC as per below and save the file.







This additional new parameter allows the Application to force the use of a specific version of JRE specified in the formsweb.cfg file. Once the changes are completed the Forms services may be started.

Configure the Forms Service to use WebUtil

Oracle Application Server 10.1.2.3 only supports the editing of certain configuration files using Enterprise Manager Application Server Control.

Add the additional parameters to the default section of formsweb.cfg

webUtilArchive frmwebutil.jar,jacob.jar
webUtilLogging on

Edit the User Defined section of formsweb.cfg to represent the new values required for 4.4.0.0

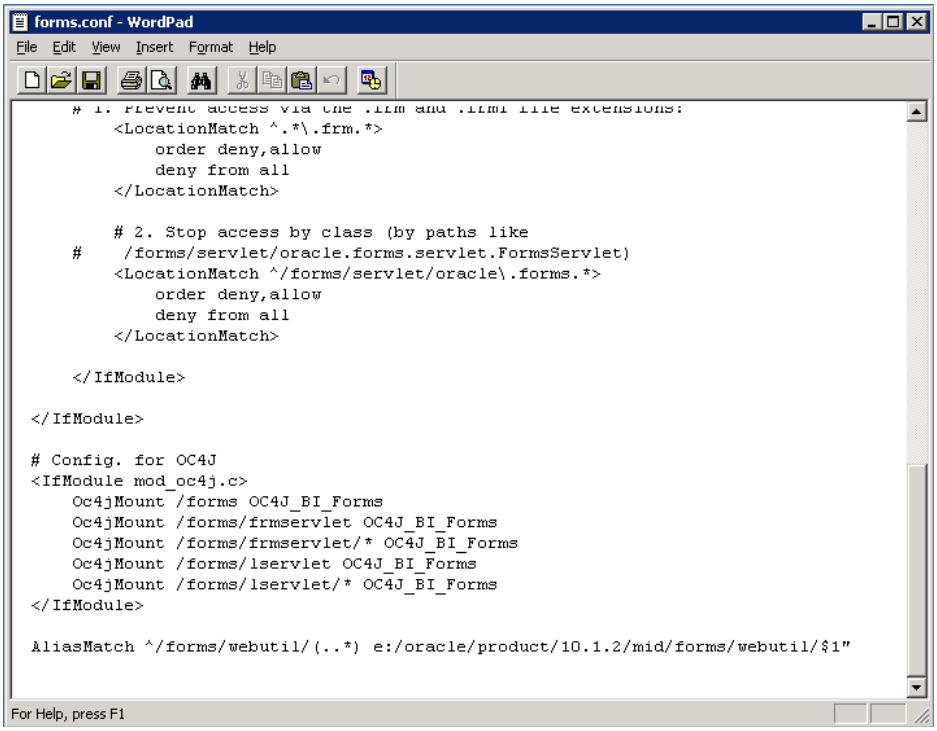
baseHTMLjinitiator	webutiljpi.htm
pjcArchive	frmall.jar,exor_jpg.jar,UploadClient.jar,UploadClient.jar.sig,exorMapviewer4400_10_1_3.jar,mvclient_10_1_3.jar,share.jar
archive	frmall.jar,exor_jpg.jar,UploadClient.jar,UploadClient.jar.sig,exorMapviewer4400_10_1_3.jar,mvclient_10_1_3.jar,share.jar
workingDirectory	E:\exor_dba\bin

Ensure that frmwebutil.jar exists in the CLASSPATH variable and if it does not, add it now.

WebUtil requires a single virtual directory to be defined in order to download files at runtime as they are needed which maps onto the ORACLE_HOME/forms/webutil directory

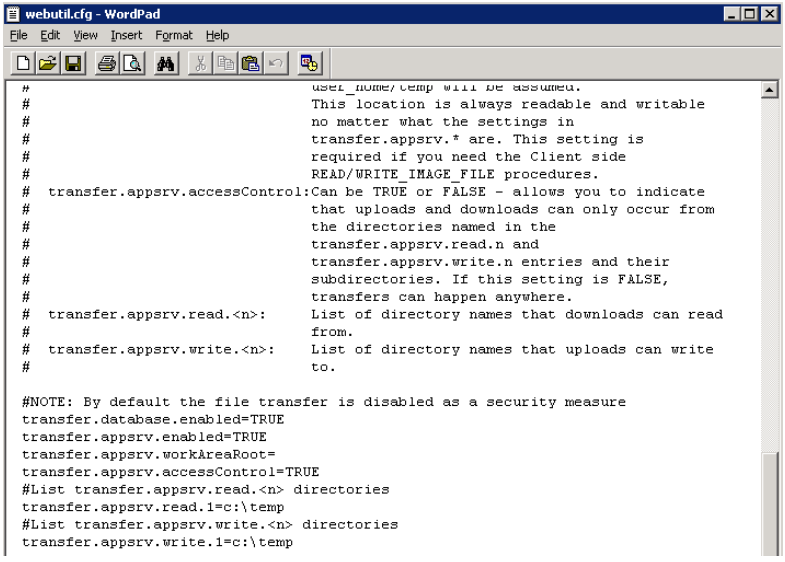
Edit the file <ORACLE_HOME>/forms/server/forms.conf and add the alias as:-

AliasMatch ^/forms/webutil/(..*) <ORACLE_HOME>/forms/webutil/$1"



Configure the WebUtil

There are numerous options that can be configured in webutil.cfg relating to Logging, OS specifics, Upload/Download, and work areas. Initially we only configure the File Transfer which requires the following change to webutil.cfg



In the example above we have set the database and appsrv to be 'TRUE' with the default settings for transfer.appsrv.read and transfer.appsrv.write being at the default of c:\temp. We may need to add additional folders here to allow the upload on Maintenance Manager files etc to the specific Exor Directories.

3 Network Manager

3.1 Installation of the Network Manager Software files

To install the software components for Network Manager execute the **setup_network_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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 Highways Owner Account

This section provides details of steps involved in creating as owner for all exor database objects.

> **Important:**
>
> Only perform the steps outlined in this section if you do not already have a 'Highways Owner' account. If you are upgrading Network Manager then please skip to section 3.3.5.

3.2.1 Before you start:

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 3.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

3.2.2 Creation of a Highways Owner

The following paragraphs should be used to create a new schema for the implementation of Network Manager and any other subsequent exor application.

Tablespace Requirements

The following tablespaces (or equivalents) should be made available on your server:

HIGHWAYS Default Table Space. Can be a different name if required.

TEMP Default temporary Tablespace for users. Can be a different name.

Data Dictionary Privileges

Login to SQL*PLUS as the **SYS** user on the client PC and run the following command :

start <***exor_base***>\nm3\install\hig_sys_grants

The higowner script

Login to SQL*PLUS as the **SYSTEM** user on the client PC and run the following command:

start ***<exor_base>***\nm3\install\higowner

This script will prompt you for the following information:

Prompt	Meaning
Highways Owner Name	This should be the name to be given to your highways owner
Owner's Password	Password for highways owner
Default Tablespace	Default Tablespace for highways owner
Temporary Tablespace	Temporary Tablespace for highways owner
System Start Date	This is the earliest date at which data is valid in your database
Admin Type Code	Code for the default admin unit type
Admin Type Description	Description for the default admin unit type
Admin Unit Code	Code for the default Admin Unit
Admin Unit Description	Description for the default Admin Unit

You will now have a new Oracle user set up with all relevant privileges to run the highways application. Also the system start date for your database will have been set and Top level Admin Unit created for your default Admin Unit Type.

3.3 Network Manager Server Install/Upgrade

This section provides details of steps involved in installing/upgrading the server components for Network Manager to 4.4.0.0.

Important:
This product will require upgrading ***before*** any other 4.4.0.0 product upgrades.

3.3.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 3.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

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

3.3.3 Install of Network manager

Core User and Objects

The following should be used to create a new schema for the implementation of Context Setting. This step is only required for a new install of Network Manager (i.e. not required if upgrading from a previous version of Network Manager).

Login to SQL*PLUS as the **SYSTEM** user on the client PC and run the following command:

start <**exor_base**>\nm3\install\exor_core_user_creation.sql

Login to SQL*PLUS as the **EXOR_CORE** user (Password EXOR_CORE) on the client PC and run the following command:

start <**exor_base**>\nm3\install\exor_core_objects.sql

Then continue with the Install of Network Manager.

Install of Network Manager

To create the base data and objects for Network Manager modules;

Change directory to **<*exor_base*>\nm3\install**

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

```
start nm_inst.sql
```

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 Network Manager objects and data will have been installed.

Checking Log File(s)

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

```
nm3_install_1_<date&time>.LOG
nm3_install_2_<date&time>.LOG
```

Note:
it is perfectly normal for the NM3SDE package to not compile if an SDE schema does not exist or if the highways owner has no privilege to read SDE objects.

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

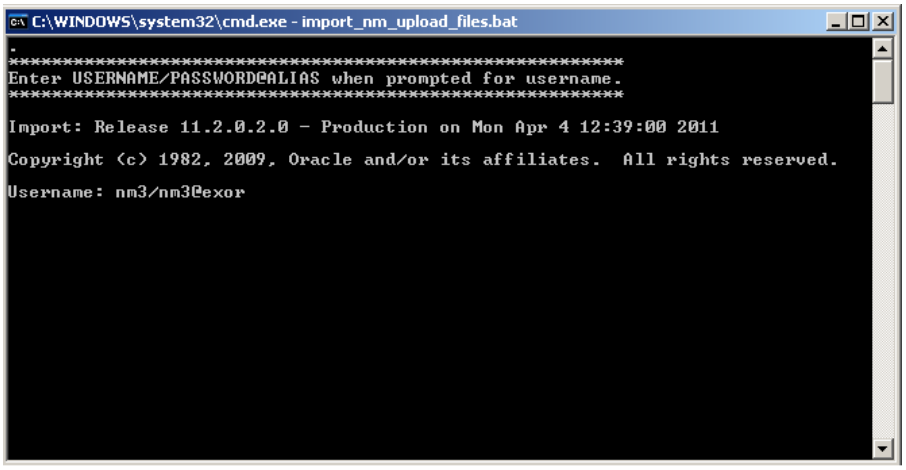
3.3.4 Post Install Tasks

Creation Of Additional Database Objects

Once an **install** has been completed the following batch files must be run;

- import_nm_upload_files.bat
- ldjava_11g.bat (for customers with an Oracle 11gR2 RDBMS)

These may be found in the ***<exor_base>***\nm3\install\ directory and should be run from the command prompt.



You will be prompted for the Username of the Highways Owner. Enter the Username/Password@alias then press Enter, e.g. nm3/nm3@exor

Synonyms

Highways product option HIGPUBSYN is used to dictate whether or not Public database synonyms are used.

On first time installation of Network Manager synonyms are NOT created. So to create synonyms following installation, use the Highways application to set product option HIGPUBSYN and then within SQL*Plus run the following command;

```
EXECUTE nm3ddl.refresh_all_synonyms;
```

Note:
if you opt to not use Public Synonyms, then Private synonyms are created for all subordinate users when the above command is executed.

Configuring NM3WEB

This section provides details of steps involved in configuring the Gateway Database Access Descriptor to allow access to the Web modules used within Highways by Exor.

These include modules such as the
CSV Loaders - HIGWEB2030
Engineering Dynamic Segmentation - NMWEB0020.

In this section <apache_html> refers to the base directory for files accessed through the Apache web server. By default this is ORACLE_HOME\apache\apache\htdocs.

A Database Access Descriptor (DAD) must be created to handle the connection to the database by the web server.

From the Oracle Apache Admin page (by default this is http://<host>/index.html) select *mod_plsql*. Select *Gateway Database Access Descriptor Settings*.

Select *Add Default (blank configuration)*.

Database Access Descriptor Name should be NM3WEB

Schema Name should be blank.

Fill in user, password and database as required. You can leave the password and/or username blank to force the user to enter them (recommended).

Authentication Mode should be Basic.

Session Cookie should be blank.

Create a Stateful Session? Should be No.

Note that if Running on Oracle Standard Edition this should be set to Yes.

Enable Connection Pooling? Should be Yes.

Default (Home) Page should be nm3web.main_menu.

Document Table should be nm_upload_files.

Document Access path should be the value set for Product Option WEBDOCPATH. The standard metadata value is docs

Document Access Procedure should be nm3web.process_download

Click *OK* button at top of page.

Note:
In order to access the Web Modules the User must be granted the appropriate Roles for the Module. Refer to the General System Admin Guide for more information on User Roles

Forms 10g Specific Configuration

There are certain product options which must be set according to the Oracle forms version that is being used to run the exor application.

NOT_6I_REP

This should be set to Y

REPURL

The value of this product option should be set to the URL that identifies the 10g Application Server Reports Server.

e.g.
http://<app_server>:7778/reports/rwservlet?server=<rep_server>

Date Format Masks

There are a couple of registry entries that can be used to re-define the default Forms date mask.

These registry entries should be added to the same area of the registry as the FORMS_PATH e.g

HKEY_LOCAL_MACHINE\SOFTWARE\Oracle

Note:
If running Oracle forms via an application server then only the registry on the application server needs to be updated.

Registry Setting
FORMS_USER_DATE_FORMAT

Example Value data
DD-MON-RRRR|DDMONRRRR|DD/MM/RRRR

Used to set the allowed input format mask(s).
Multiple masks should be separated with a pipe character.
The example above allows the user to enter the 1st of Jan 2005 as :-

01-JAN-2005
01-JAN-05
01JAN2005
01JAN05
01/01/2005
01/01/05

Used (rather unsurprisingly) by Forms to format the displayed Date.
i.e. If the user enters the date as 01JAN05 the displayed value is changed to 01-JAN-2005 when the user leaves the field or the form is validated. This mask is also applied when querying in a Form.

Only one value should be set for this entry.

3.3.5 Upgrade of Network Manager

Pre Upgrade Tasks

Before upgrading Network Manage to 4.4.0.0 it is necessary to run the following file as the **SYS** user:

- Change directory to **<*exor_base*>**\nm3\install
- Login to SQL*PLUS as the **sys** user (as sysdba) on the client PC
- Run the following command

```
start nm4400_sys_upg.sql
```

Upgrade of Network Manager

This section describes the steps necessary to upgrade Network Manager to 4.4.0.0

To upgrade the base data and objects for the Network Manager modules;

- Change directory to **<*exor_base*>**\nm3\install
- Login to SQL*PLUS as the highways owner on the client PC
- Run the following command

```
start nm4300_nm4400.sql
```

- 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 Network Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
nm4300_nm4400_1_<date&time>.LOG
nm4300_nm4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with http://selectservices.bentley.com to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

3.3.6 Mandatory Configuration (Post Install and Upgrade)

exor_version.txt

Before accessing Network Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

Ensure that the entry for Network Manager is set accordingly;

NET=4.4.0.0
HIG=4.4.0.0
AST=4.4.0.0
DOC=4.4.0.0
WMP=4.4.0.0

Forms Username Flag

The following flag should be set in the forms/server/**default.env** file. When the flag has been appended to the end of the file restart the forms service.

```
FORMS_USERNAME_CASESENSITIVE = 1
```

If it is not set any forms opened will return invalid username/password errors to 11g database case sensitivity functionality (not currently compatible with 10g forms):

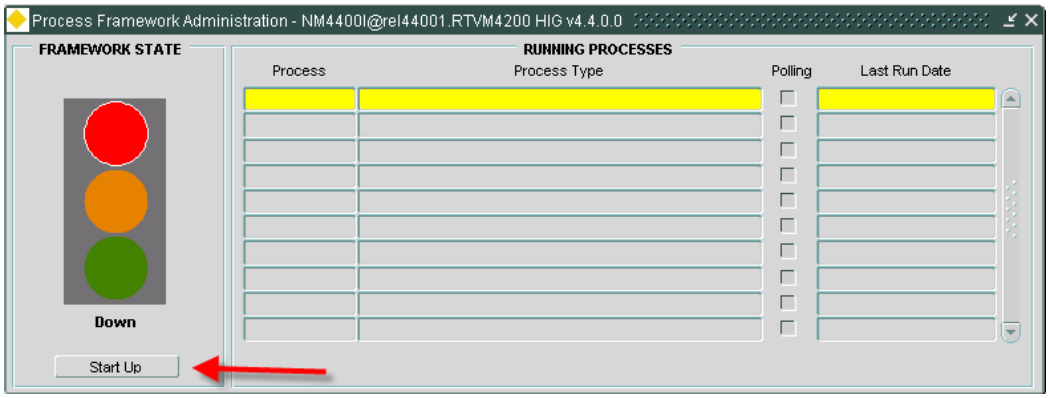
3.3.7 EXOR_JPG.JAR (Post Install and Upgrade)

Copy the new EXOR_JPG.JAR from the <exor_base>/icons/java folder to the <forms_home>/java folder on the application server.

Users may need to clear their JRE caches to see the changes.

3.3.8 Process Framework (Post Install and Upgrade)

The Process Framework can be started (or stopped) via the Process Framework Administration form (hig2550). After successfully completing installs or upgrades to 4.4.0.0 for all products required navigate to this form and use the Start Up button to start up the Process Framework.



3.3.9 Jobs (Post Install and Upgrade)

After completing a successful install/upgrade of all products required to 4.4.0.0 please execute the following script to start/restart Core jobs:

- Change directory to ***<exor_base>***\nm3\install
- Login to SQL*PLUS as the highways owner on the client PC
- Run the following command

```
start nm3jobs.sql
```

3.3.10 Spatial Configuration (Post Install and Upgrade)

Specific information regarding the registration of spatial layers can be found in the ***"Locator and Web Mapping"*** document.

3.3.11 Doc Bundle Loader (Post Install and Upgrade)

Oracle External Scheduler Jobs

- For databases that exist on a Windows Operating System – The OracleJobScheduler<instance> service MUST be running on the database server.
- For databases that exist on a Solaris/Linux Operating System – Relevant permissions to execute <db_home>/bin/extjob must be set in accordance with Oracle Documentation.
- External Jobs are not supported on any other platform.

3.3.12 Additional Configuration (Post Install and Upgrade)

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.

3.3.13 Mapserver Component Install (Post Install and Upgrade)

At version 4.4.0.0 of the Exor Application set, locator mapping software using Oracle Application Server Mapviewer version 10.1.3.3 should be implemented.

Locate the <**exor_base**>\msv\exorMapviewer4400 where you will find exorMapviewer4400_10_1_3.jar. Copy this file to <oracle_home>\mid\forms\java.

The formsweb.cfg file, located at <**oracle_home**>\mid\forms\server, will need editing to reference occurrences of exorMapviewer4400_10_1_3.jar once the upgrade of the test and/or live system has taken place. There are usually two lines per entry (test and live)

e.g. for Oracle Mapviewer version 10.1.3:

pjcArchive=frmall.jar,exor_jpg.jar,UploadClient.jar,UploadClient.jar.sig,exorMapviewer4400_10_1_3.jar,mvclient_10_1_3.jar
archive_jini=exor_jpg.jar,exorMapviewer4400_10_1_3.jar,frmall.jar,mvclient_10_1_3.jar,UploadClient.jar,UploadClient.jar.sig

Save the file and exit.

On each client machine the Jar Cache will need to be cleared. This can be done by the following methods.

Sun JRE users

Start-> Settings-> Control Panel-> Java. Navigate to the "General" tab and click "Settings" button. In the Disk Space section click "Delete Files" button

You should now load the exor application in the usual way. On the first load, it will take longer than usual whilst the JAR files are cached again.

MV_SECURITY Option

Please ensure that the MV_SECURITY option in the Mapviewer config file is set to FALSE. This has to be set to FALSE so that the Java code can create a data source on the fly when the preferred data source is not set.

4 Street Gazetteer Manager

4.1 Implementation of the Street Gazetteer Manager Software files

To install the software components for Street Gazetteer Manager execute the **setup_street_gazetteer_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

4.2 Street Gazetteer Manager Server Upgrade

This chapter provides details of steps involved in upgrading the server components for Street Gazetteer Manager.

Important:
This product will require upgrading ***after*** Network Manager and ***before*** Maintenance Manager, Enquiry Manager and TMA Manager.

4.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in Section 2.4 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 4.1** you will have implemented software into the location referred to as <exor_base>, for example, C:\EXOR.

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

4.2.3 Install of Street Gazetteer manager

To create the base data and objects for Street Gazetteer Manager modules;

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

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

```
start nsg_inst.sql
```

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 Street Gazetteer Manager objects and data will have been installed.

Checking Log File(s)

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

```
nsg_install_1_<date&time>.LOG
nsg_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

4.2.4 Upgrade of Street Gazetteer Manager

This section describes the steps necessary to upgrade Street Gazetteer Manager to 4.4.0.0

To upgrade the base data and objects for the Street Gazetteer Manager modules;

- Change directory to ***<exor_base>***\nsg\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start nsg4300_nsg4400.sql
  ```

- 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 Street Gazetteer Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
nsg4300_nsg4400_1_<date&time>.LOG
nsg4300_nsg4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

4.2.5 Mandatory Configuration (Post Install and Upgrade)

exor_version.txt

Before accessing Street Gazetteer Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

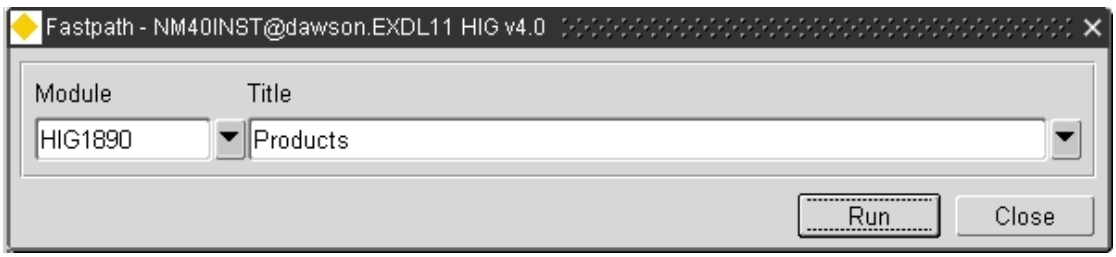
Ensure that the entry for Street Gazetteer Manager is set accordingly;

NSG=4.4.0.0

4.2.6 Product Licencing (Post Install only)

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



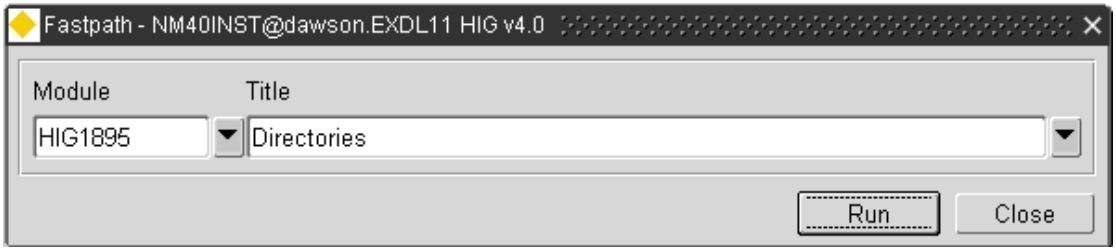
For further details please refer to the "**Network Manager General System Admin Guide**"

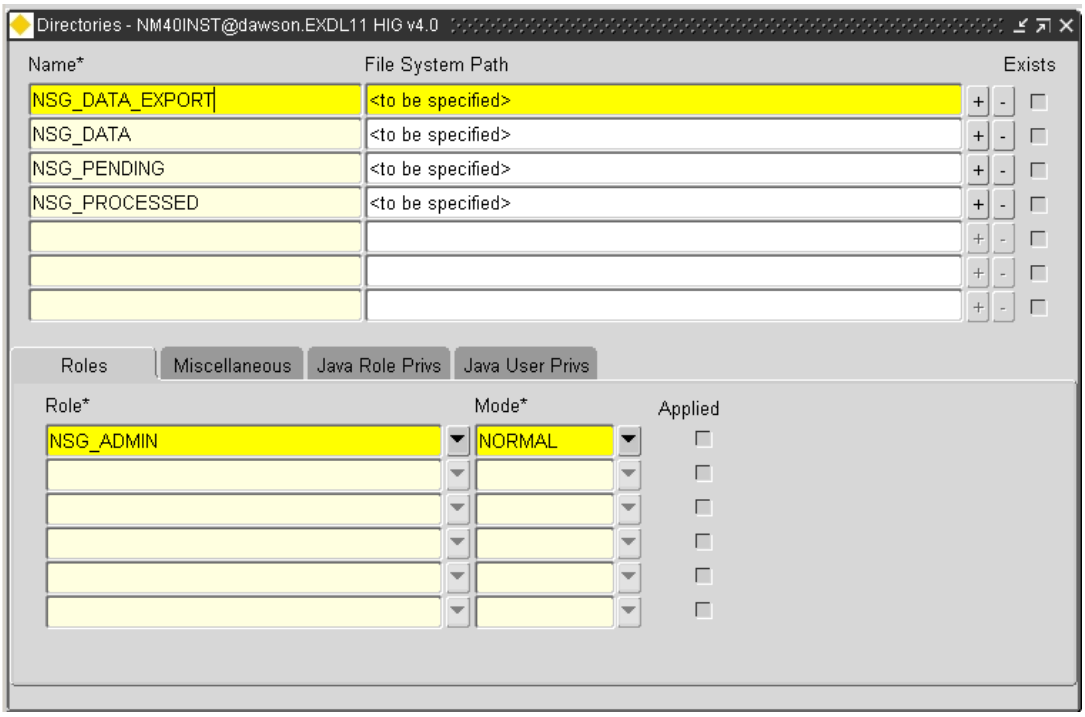
4.2.7 Setting Directory Paths (Post Install only)

This step is only necessary following a first time Installation of Street Gazetteer Manager. The Setting of Directory Paths will have been implemented previously for an Upgrade.

Street Gazetteer Manager uses the Oracle directories mechanism to denote the locations of files that are read/written.

The following Oracle directories are utilised by Street Gazetteer Manager, and they must have their "File System Paths" set using module HIG1895.





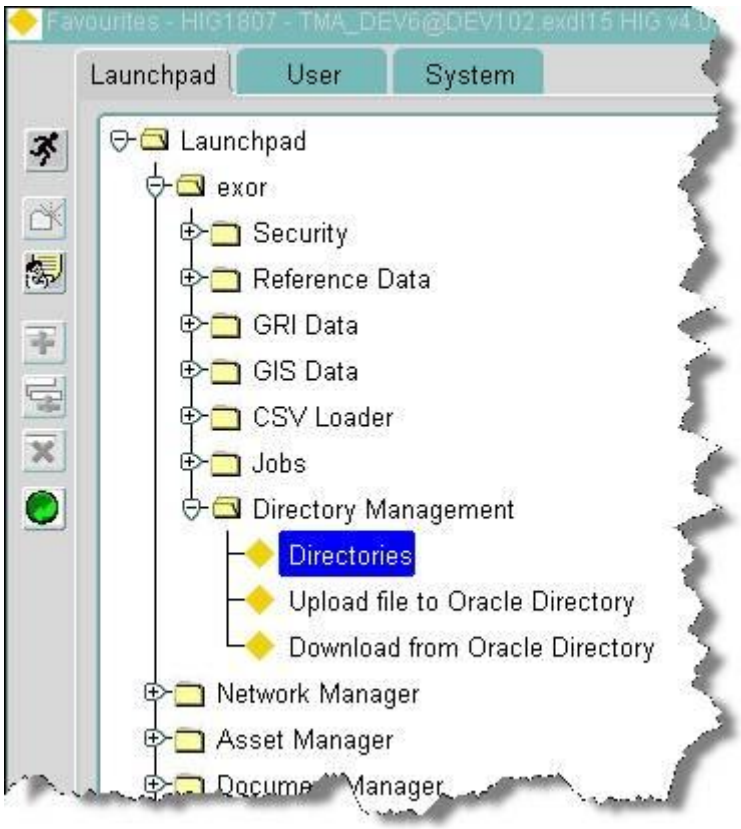
For more information regarding managing directories, please consult the ***"Network Manager General System Admin Guide"***

4.2.8 XSD Files (Post Install only)

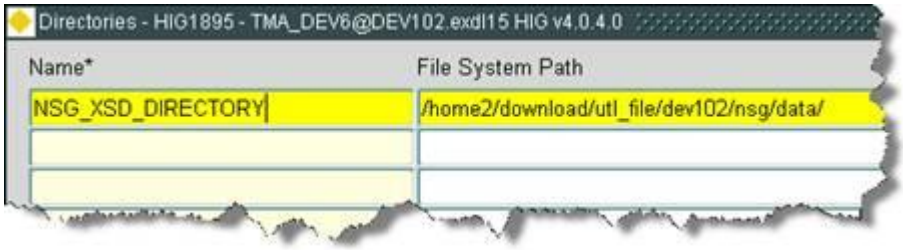
This step is only necessary following a first time Installation of Street Gazetteer Manager. The XSD files will have been registered previously for an Upgrade.

Copy the .xsd files from <***exor_base***>\nsg\admin\xsd into a directory on the **database server.**

Log into the Highways By Exor application and open the 'Directories' module



Ensure that the directory with the name 'NSG_XSD_DIRECTORY' has a path set that points to the location that you have just copied .xsd files into e.g.

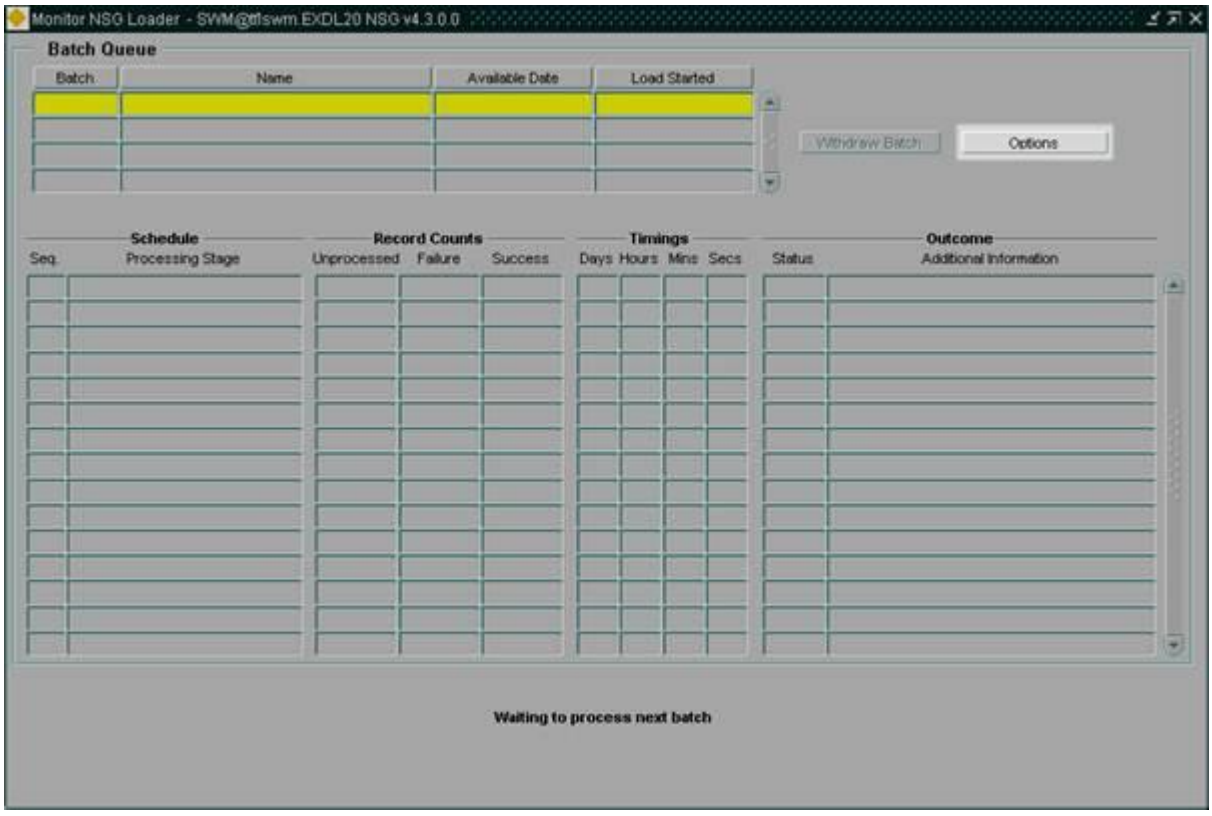


The XSD files must then be registered with Oracle XMLDB by running the script <exor_base>\nsg\admin\xsd\register_eton_schemas.sql

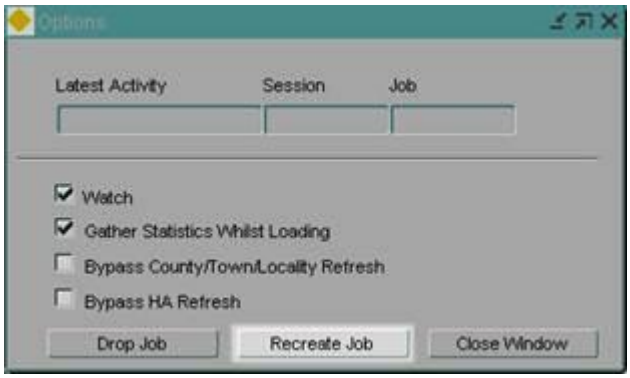
4.2.9 Creation of Loader Database Job (Post Install only)

Following first time installation, should it be necessary to load Gazetteer files a database job needs to be created. To do this open the Highways application and run the 'Monitor NSG Loader' module (NSG0040).

Press the 'Options' button.



Press the ‘Recreate Job’ button.



5 Maintenance Manager

5.1 Implementation of the Maintenance Manager Software files

To install the software components for Maintenance Manager execute the **setup_maintenance_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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 Maintenance Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager and Street Gazetteer Manager.

5.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** of this document are met.

Also, please be aware of the following;

Where an upgrade is to be performed please ensure that any data loading being done through the Maintenance Manager loader modules has been completed, any data held in the Maintenance Manager load tables may be removed during this upgrade.

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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

5.2.3 Install of Maintenance Manager

To create the base data and objects for Maintenance Manager modules;

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

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

```
start mai_inst.sql
```

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 Maintenance Manager objects and data will have been installed.

Checking Log File(s)

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

```
mai_install_1_<date&time>.LOG
mai_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

5.2.4 Upgrade of Maintenance Manager

This section describes the steps necessary to upgrade Maintenance Manager to 4.4.0.0

To upgrade the base data and objects for the Maintenance Manager modules;

- Change directory to **<*exor_base*>**\mai\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

```
start mai4300_mai4400.sql
```

- 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 Maintenance Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
mai4300_mai4400_1_<date&time>.LOG
mai4300_mai4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade 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 Mandatory Configuration (Post Install and Upgrade)

exor_version.txt

Before accessing Maintenance Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

Ensure that the entry for Maintenance Manager is set accordingly;

MAI=4.4.0.0

5.2.6 Conflated Networks (Post Install only)

Customers using a Conflated Network must run an additional script to implement an appropriate view for Cyclic Maintenance.

NB. This step is not required if the Maintenance Sections used by Maintenance Manager are Datum Elements.

To implement the view;

- Change directory to **<*exor_base*>**\mai\admin\views
- Login to SQL*PLUS as the highways owner on the client PC
- Run the following command

```
start inv_items_all_section.sql
```

- You will be prompted to enter the Group Type of the Maintenance Sections used by Maintenance Manager.
- When you have supplied this value press enter and the script will create the appropriate view.

5.2.7 Additional Configuration (Post Install and Upgrade)

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

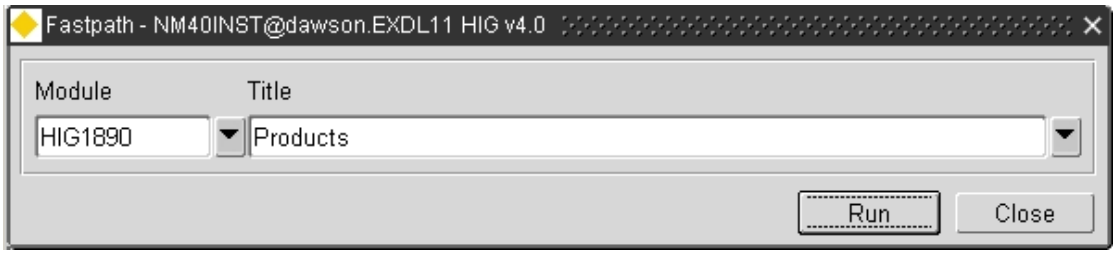
For example, to obtain details of product options, and for details of new product features/amendments.

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

5.2.8 Product Licencing (Post Install only)

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

5.2.9 Spatial Configuration (Post Install and Upgrade)

Specific information regarding the registration of spatial layers can be found in the ***"Locator and Web Mapping"*** document.

6 Enquiry Manager

6.1 Implementation of the Enquiry Manager Software files

To install the software components for Enquiry Manager execute the **setup_enquiry_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

6.2 Enquiry Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager, Street Gazetteer Manager and Maintenance Manager.

6.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 6.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

6.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

6.2.3 Install of Enquiry Manager

To create the base data and objects for Enquiry Manager modules;

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

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

```
start pem_inst.sql
```

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 Enquiry Manager objects and data will have been installed.

Checking Log File(s)

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

```
pem_install_1_<date&time>.LOG
pem_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

6.2.4 Upgrade of Enquiry Manager

This section describes the steps necessary to upgrade Enquiry Manager to 4.4.0.0

To upgrade the base data and objects for the Enquiry Manager modules;

- Change directory to **<*exor_base*>**\pem\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start pem4300_pem4400.sql
  ```
- 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 Enquiry Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
pem4300_pem4400_1_<date&time>.LOG
pem4300_pem4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

6.2.5 Mandatory Configuration (Post Install and Upgrade)

exor_version.txt

Before accessing Enquiry Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

Ensure that the entry for Enquiry Manager is set accordingly;

PEM=4.4.0.0

6.2.6 Additional Configuration (Post Install and Upgrade)

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

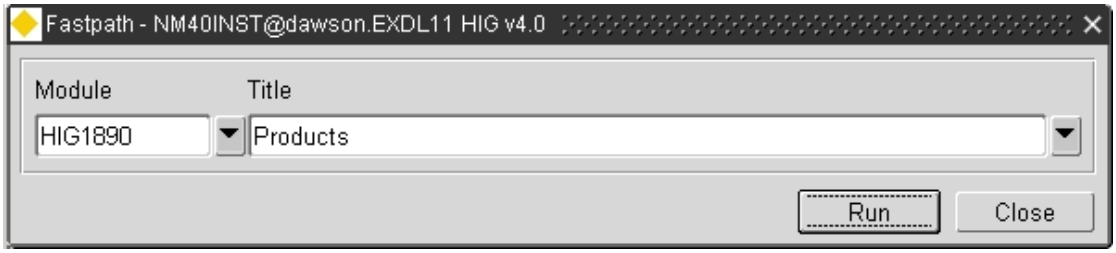
For example, to obtain details of product options, and for details of new product features/amendments.

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

6.2.7 Product Licencing (Post Install only)

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

6.2.8 Spatial Configuration (Post Install and Upgrade)

Specific information regarding the registration of spatial layers can be found in the ***"Locator and Web Mapping"*** document.

7 TMA Manager

7.1 Implementation of the TMA Manager Software files

To install the software components for TMA Manager execute the **setup_tma_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

7.2 TMA Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager and Street Gazetteer Manager.

7.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** of this document are met.

Also, please be aware of the following;

Extremely Important (When Upgrading):

Before upgrading TMA Manager shutdown the TMA Web Server and Restart it, after successfully upgrading TMA Manager.

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 7.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

7.2.2 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.

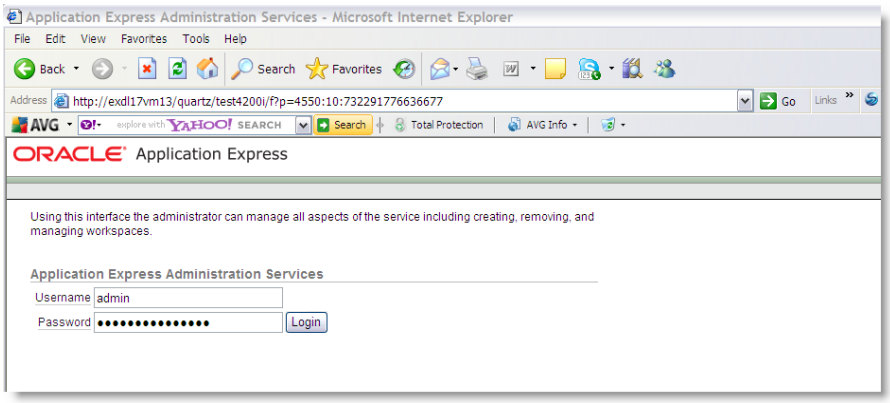
The upgrade procedures will also attempt to install database roles in the highways owner account that are necessary for the system to operate correctly. You may find that errors are produced when running the upgrade scripts to the effect that the role names being created are already used by existing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

Also during install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

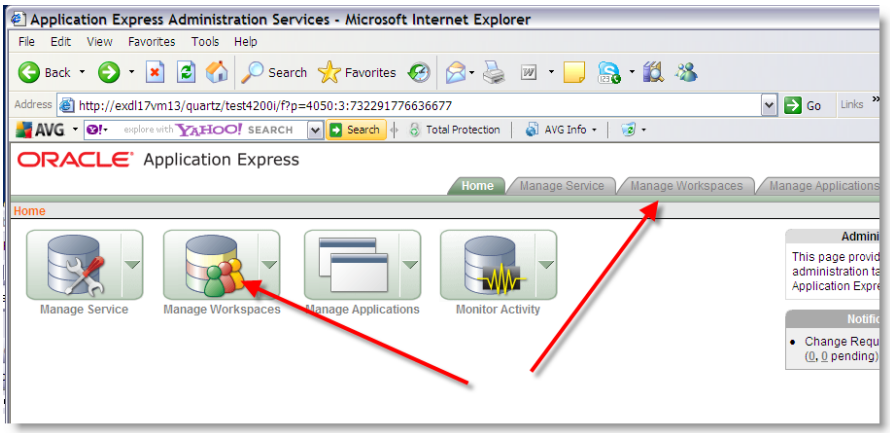
7.2.3 Install of TMA Manager

Import the tma_apex_rpts Workspace (this step is not required for upgrade)

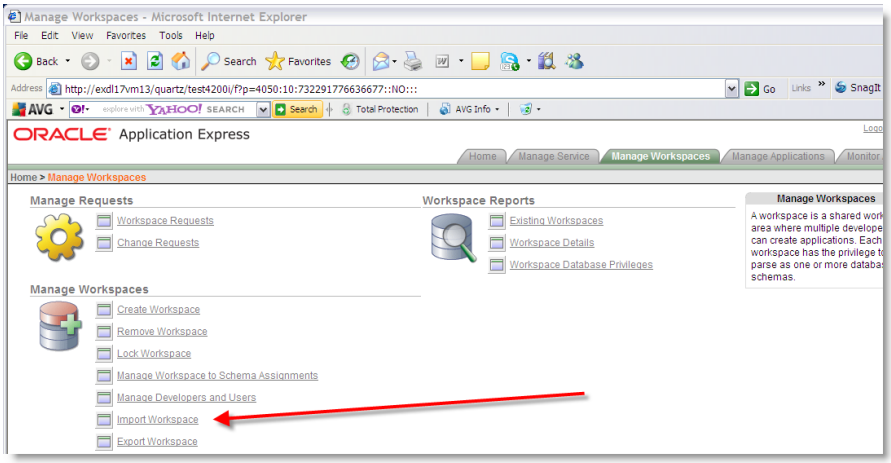
Log onto the ApEx administration account:



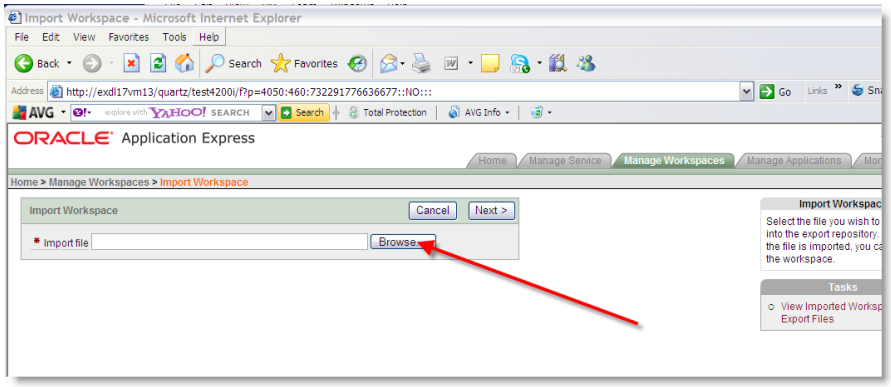
Choose 'Manage Workspaces' using the button or tab:



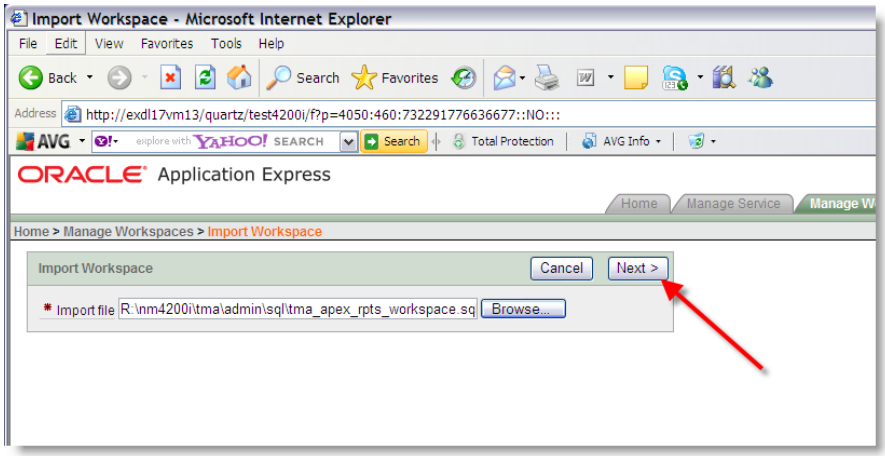
Choose the 'Import Workspace' hyperlink:



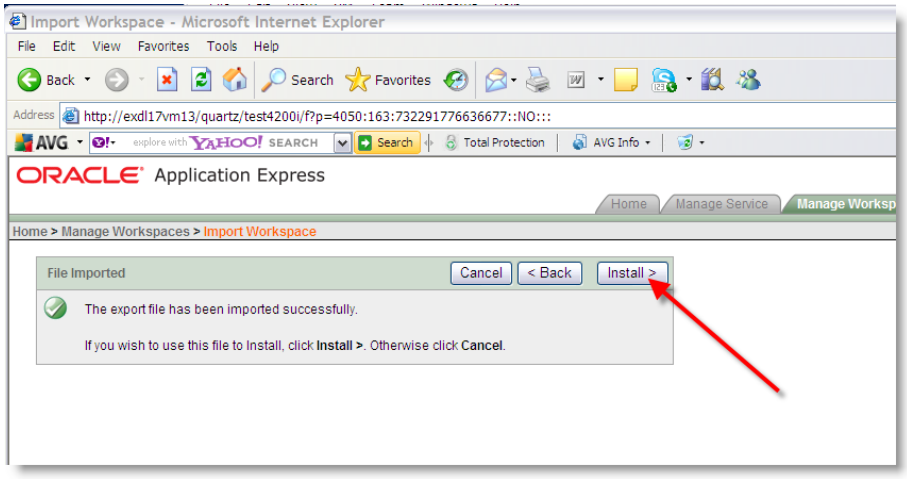
Browse for the workspace to be imported which will exist in the **<exor_base>**/tma/admin/sql/ directory as extracted from the install shield in section **7.1**. The workspace is called **tma_apex_rpts_workspace.sql**:



Once selected click the 'Next' button:

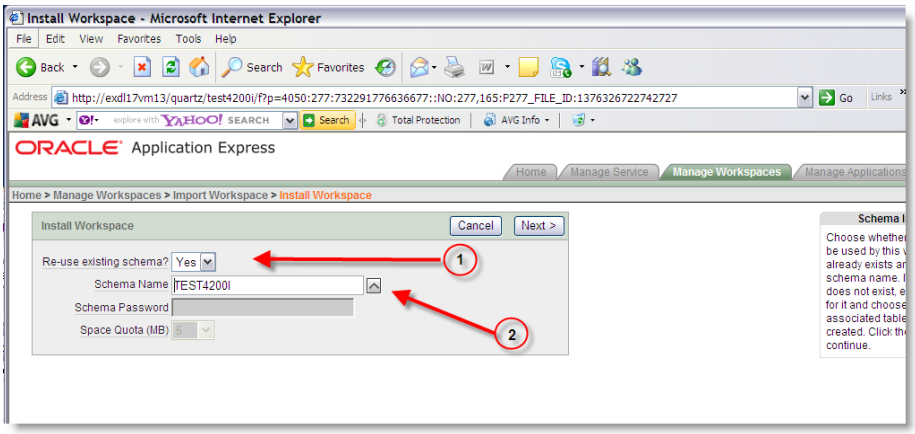


When imported successfully, as highlighted in the screenshot below, click the 'Install' button:

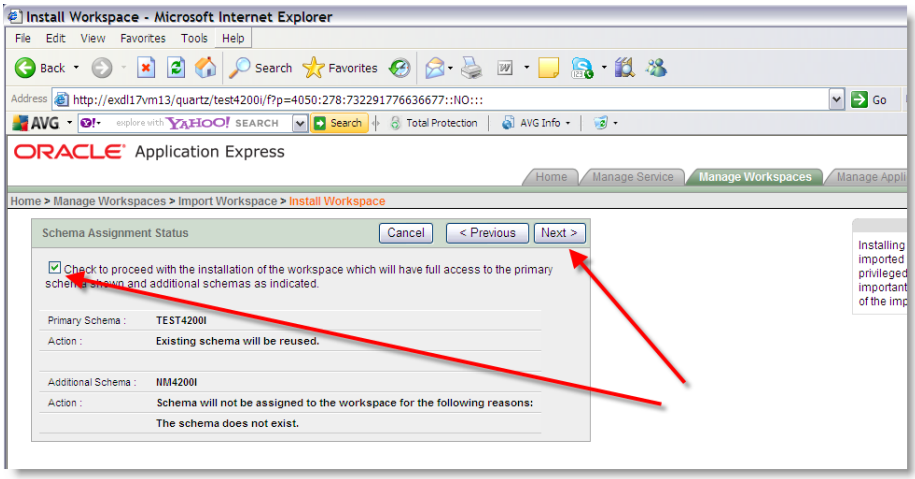


Choose to ‘Re-use existing schema?’, as highlighted by option 1 in the screenshot and then enter or select the highways schema name from the LoV as highlighted by option 2 in the screenshot.

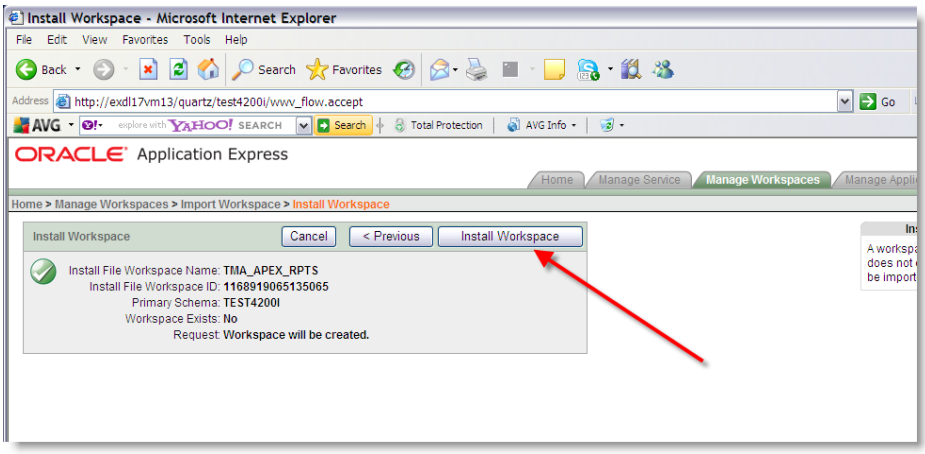
Click the ‘Next’ button when the above is completed:



Check the ‘Check to proceed …’ check box and click the ‘Next’ button to proceed:

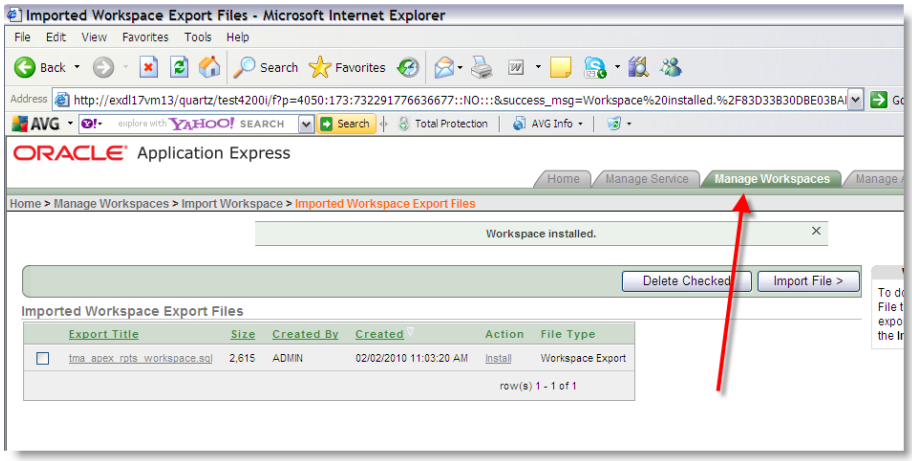


Click the ‘Install Workspace’ button:

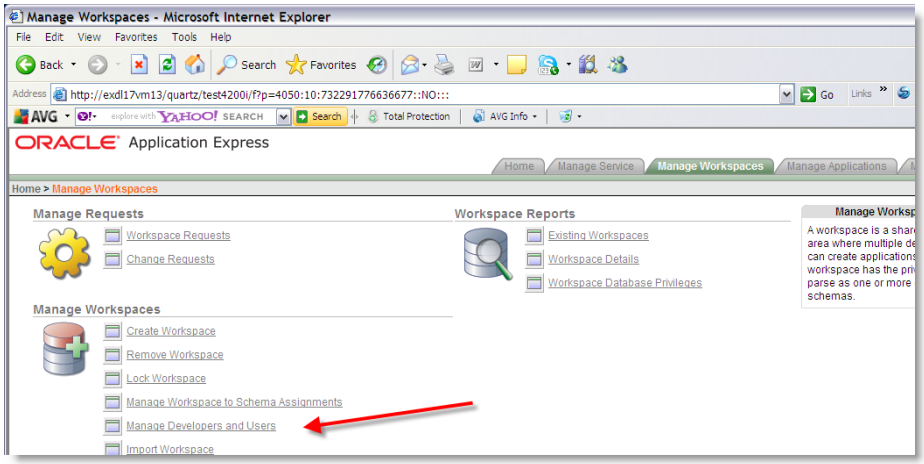


The tma_apex_rpts workspace is now installed.

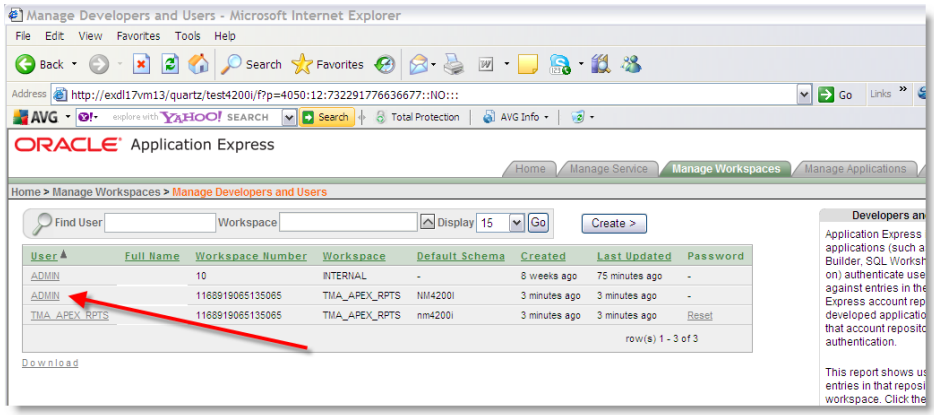
Select the ‘Manage Workspaces’ tab to amend some of the user settings:



Select the ‘Manage Developers and Users’ hyperlink:



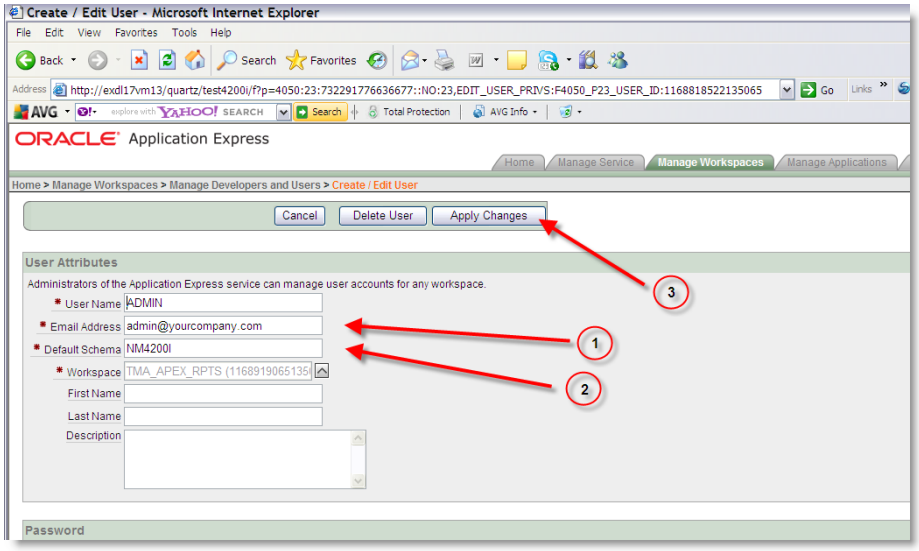
Select the ‘Admin’ (user account) hyperlink:



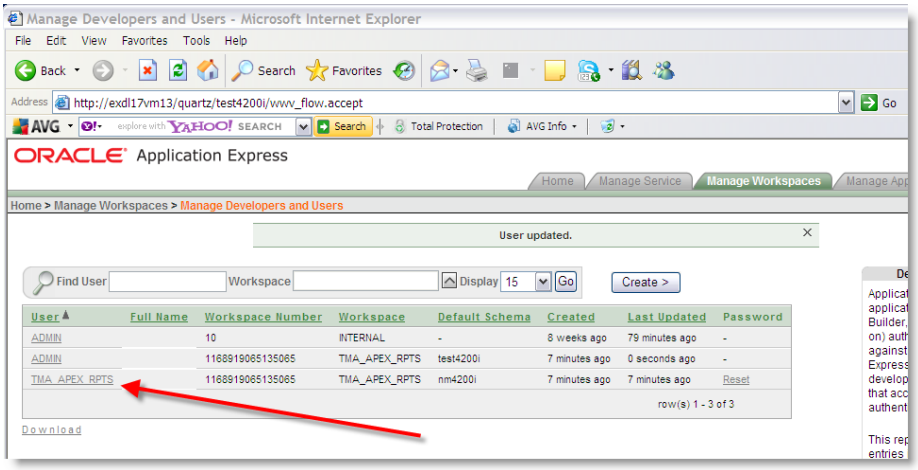
Set the ‘Email Address’ to the email address of the ApEx administrator, as highlighted in option 1 of the screenshot.

Enter the ‘Default Schema’ as the highways schema, as highlighted in option 2 of the screenshot.

When the above is completed press the ‘Apply Changes’ button:



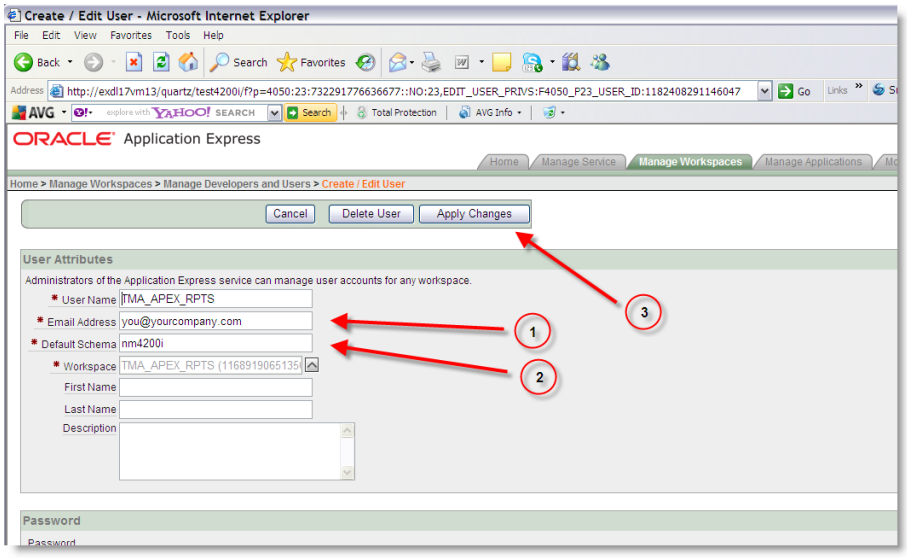
Select the ‘TMA_APEX_RPTS’ (user account) hyperlink:



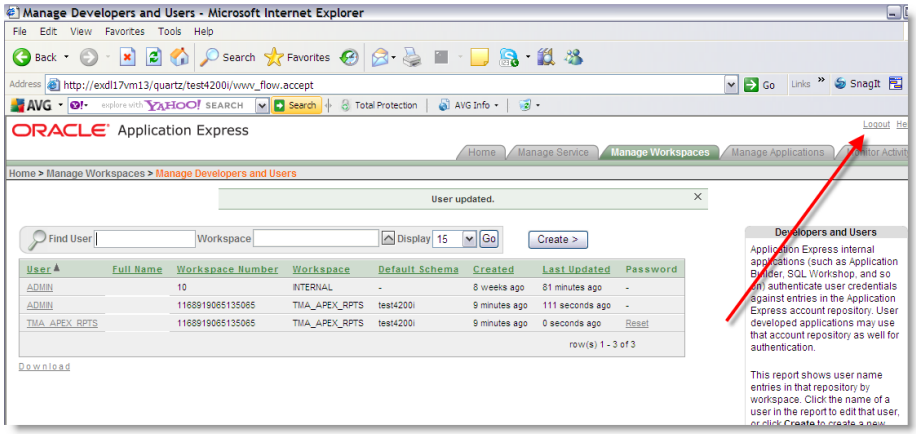
Set the ‘Email Address’ to the email address of the ApEx administrator, as highlighted in option 1 of the screenshot.

Enter the ‘Default Schema’ as the highways schema, as highlighted in option 2 of the screenshot.

When the above is completed press the ‘Apply Changes’ button:



Logout of the ApEx administrator’s account and proceed with the Install of TMA Manager:



Installation of TMA Manager

To create the base data and objects for TMA Manager modules;

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

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

```
start tma_inst.sql
```

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 TMA Manager objects and data will have been installed.

Checking Log File(s)

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

```
tma_install_1_<date&time>.LOG
tma_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

7.2.4 Upgrade of TMA Manager

This section describes the steps necessary to upgrade TMA Manager to 4.4.0.0

To upgrade the base data and objects for the TMA Manager modules;

- Change directory to ***<exor_base>***\tma\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

```
start tma4300_tma4400.sql
```

- 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 TMA Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
tma4300_tma4400_1_<date&time>.LOG
tma4300_tma4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

7.2.5 TMA Manager 4.4.0.0 Fix 1 (Post Install and Upgrade)

Important:
After installing or upgrading TMA Manager to 4.4.0.0 the patch '***TMA Manager 4.4.0.0 Fix 1***' should be applied before using the application.

7.2.6 Mandatory Configuration (Post Install and Upgrade)

exor_version.txt

Before accessing TMA Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

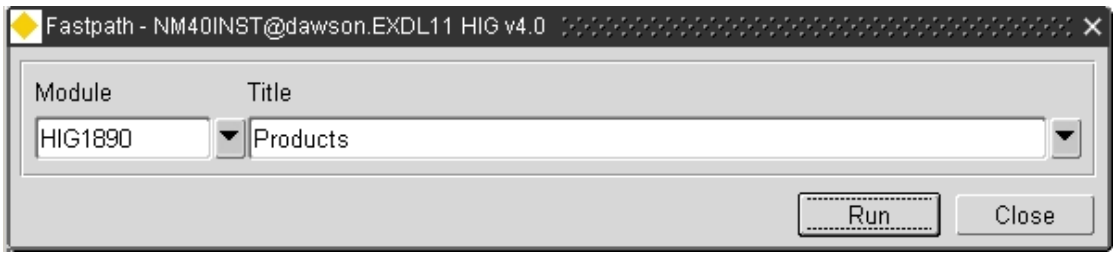
Ensure that the entry for TMA Manager is set accordingly;

TMA=4.4.0.0

7.2.7 Product Licencing (Post Install only)

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

7.2.8 Web Service Install/Upgrade (Post Install and Upgrade)

After a successful install/upgrade of TMA Manager to version 4.4.0.0 the TMA Web Service will require installation/upgrade.

Specific information regarding the installation or upgrade of the TMA Web Service can be found in the ***"4400_Installation_and_Upgrade_Guide_for_the_TMA_Web_Service.pdf"*** contained in the **TMAWebService_4400.zip** located in the <***exor_base***>\EToNWebService\doc\ directory.

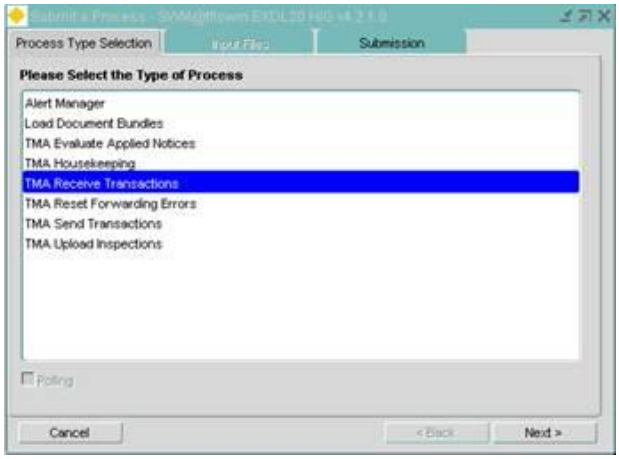
7.2.9 TMA Process Types (Install only)

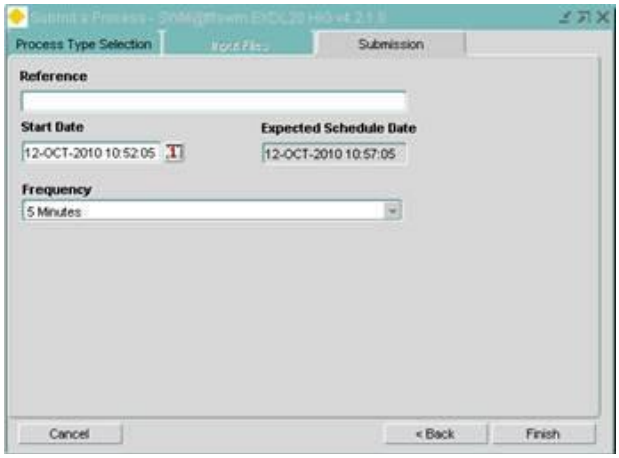
For customers that have upgraded, no new TMA process types have been introduced at this release so the following instructions are for new installations of TMA Manager only.

Following the Install of TMA v4.4.0.0

An Administrator must submit a Process of each relevant type to the desired frequency.

For example:



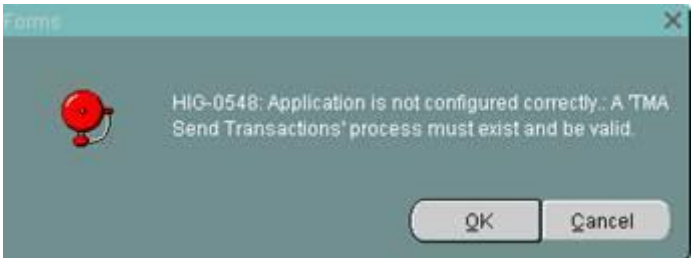


When the TMA1000-Works form (and other key forms are opened) a check has always been carried out to see if TMA is correctly configured.

The check will look for the existence of a process of each given type.

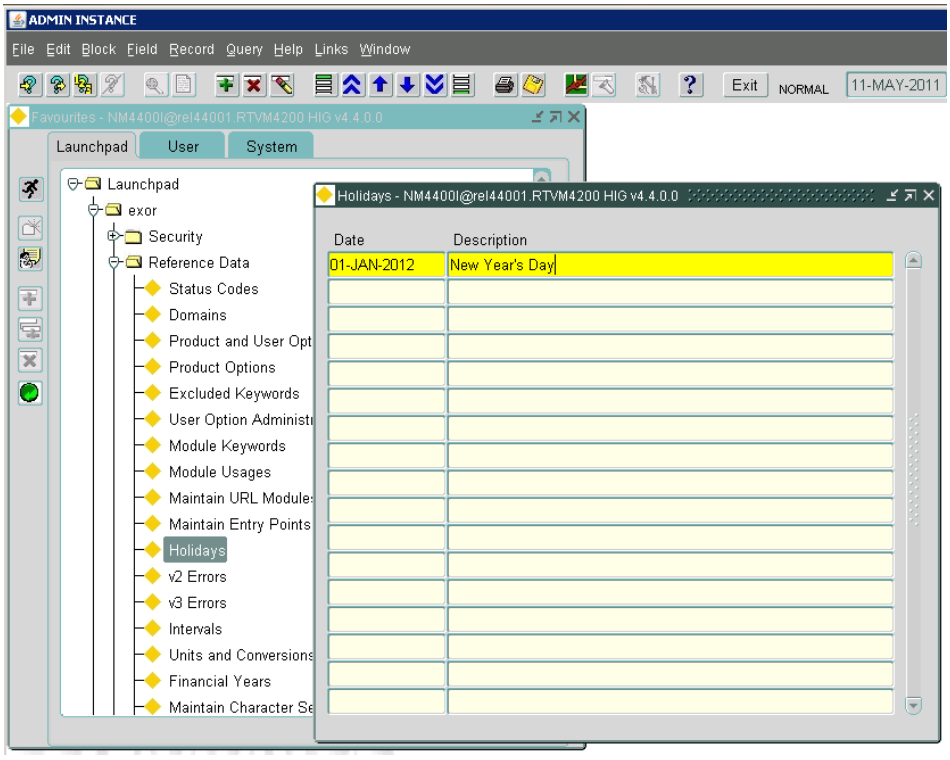
Process Type	Checking Rule
TMA Receive Transactions	Mandatory - always checked for
TMA Send Transactions	Mandatory - always checked for
TMA Housekeeping	Mandatory - always checked for
TMA Reset Forwarding Errors	Only checked for if product option 'FWD_NOTICE' = 'Y'
TMA Upload Inspections	Only checked for if product option 'INSPAUTIMP ' = 'Y'
TMA Evaluate Applied Notices	Mandatory - always checked for

If the process is expected to exist and it's either missing or is neither 'Running' nor 'Scheduled', an error will be flagged.



7.2.10 System Holidays (Post Install and Upgrade)

After install/upgrade to 4.4.0.0 has been completed please ensure that the holidays of the system have been set before using TMA Manager.



8 TMA API

8.1 Implementation of the TMA API Software files

To install the software components for TMA Manager execute the **setup_tma_api_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

8.2 TMA API Server Install/Upgrade

This chapter provides details of steps involved in upgrading the server components for TMA Manager.

Important:
This product will require upgrading ***after*** Network Manager, Street Gazetteer Manager and TMA Manager.

8.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** of this document are met.

Also, please be aware of the following;

Extremely Important (When Upgrading):

Before upgrading TMA API shutdown the TMA External Notice API Web Server and Restart it, after successfully upgrading TMA API.

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 8.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

8.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

8.3 TMA External Notice API Implementation

8.3.1 Deployment of API Software Files

This section provides details of steps involved in deploying the files that the api is composed of to the relevant location on the file system.

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

To deploy the software components for the api, execute the **setup_tma_api_4400.exe** and follow the on-screen prompts.

When the wizard completes, the necessary software files will have been deployed**.** These are held in the API directory. **Copy the API folder and contents to the tma\admin folder.**

8.3.2 API Server Component Install/Upgrade

This section provides details of steps involved in installing the server components for the api.

Note, that there is no upgrade option; the software can be reinstalled as required.

Important:
The api will require installing after the TMA application.

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>`.

To create the base data and objects for api;

Change directory to `<exor_base>\tma\admin\api`

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

```
start tma_api_inst.sql
```

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, the api will have been installed.

Checking Log File(s)

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

`tma_api_install_<date&time>.LOG`

Note:
Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

9 Streetworks Manager

9.1 Implementation of the Streetworks Manager Software files

To install the software components for Streetworks Manager execute the **setup_streetworks_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

9.2 Streetworks Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager and Street Gazetteer Manager.

9.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 9.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

9.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

9.2.3 Install of Streetworks Manager

To create the base data and objects for Streetworks Manager modules;

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

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

```
start swr_inst.sql
```

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 Streetworks Manager objects and data will have been installed.

Checking Log File(s)

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

```
swr_install_1_<date&time>.LOG
swr_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

9.2.4 Upgrade of Streetworks Manager

This section describes the steps necessary to upgrade Streetworks Manager to 4.4.0.0

To upgrade the base data and objects for the Streetworks Manager modules;

- Change directory to **<*exor_base*>**\swr\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start swr4300_swr4400.sql
  ```

- 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 Streetworks Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
swr4300_swr4400_1_<date&time>.LOG
swr4300_swr4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

9.2.5 Mandatory Configuration

exor_version.txt

Before accessing Streetworks Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

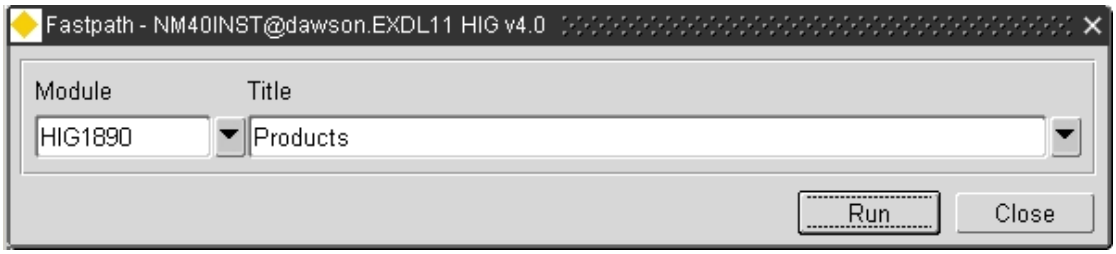
Ensure that the entry for Streetworks Manager is set accordingly;

SWR=4.4.0.0

9.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

9.2.7 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.

9.2.8 Spatial Configuration

Specific information regarding the registration of spatial layers can be found in the ***"Locator and Web Mapping"*** document.

10 Asset Valuation Manager

10.1 Implementation of the Asset Valuation Manager Software files

To install the software components for Asset Valuation Manager execute the **setup_asset_valuation_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

10.2 Asset Valuation Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager.

10.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 10.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

10.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

10.2.3 Install of Asset Valuation Manager

To create the base data and objects for Asset Valuation Manager modules;

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

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

```
start vm_inst.sql
```

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 Asset Valuation Manager objects and data will have been installed.

Checking Log File(s)

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

```
vm_install_1_<date&time>.LOG
vm_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

10.2.4 Upgrade of Asset Valuation Manager

This section describes the steps necessary to upgrade Asset Valuation Manager to 4.4.0.0

To upgrade the base data and objects for the Asset Valuation Manager modules;

- Change directory to **<*exor_base*>**\avm\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start avm4300_avm4400.sql
  ```

- 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 Asset Valuation Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
avm4300_avm4400_1_<date&time>.LOG
avm4300_avm4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

10.2.5 Mandatory Configuration

exor_version.txt

Before accessing Asset Valuation Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

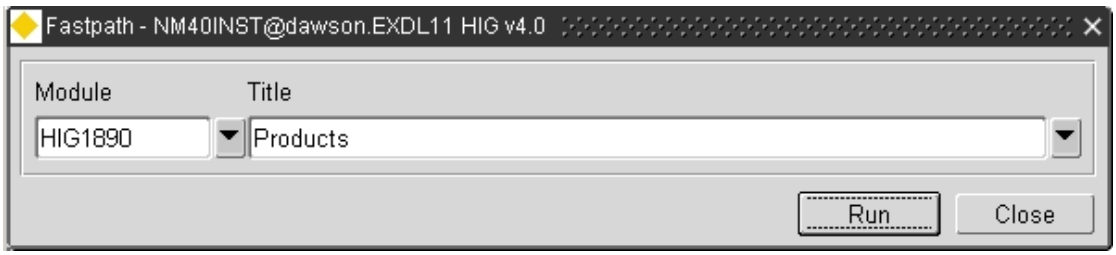
Ensure that the entry for Asset Valuation Manager is set accordingly;

AVM=4.4.0.0

10.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

10.2.7 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.

11 Accidents Manager

11.1 Implementation of the Accidents Manager Software files

To install the software components for Accidents Manager execute the **setup_accidents_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

11.2 Accidents Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager.

11.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 11.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

11.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

11.2.3 Install of Accidents Manager

To create the base data and objects for Accidents Manager modules;

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

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

```
start acc_inst.sql
```

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 Accidents Manager objects and data will have been installed.

Checking Log File(s)

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

```
acc_install_1_<date&time>.LOG
acc_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

11.2.4 Upgrade of Accidents Manager

This section describes the steps necessary to upgrade Accidents Manager to 4.4.0.0

To upgrade the base data and objects for the Accidents Manager modules;

- Change directory to **<*exor_base*>**\acc\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start acc4300_acc4400.sql
  ```

- 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 Accidents Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
acc4300_acc4400_1_<date&time>.LOG
acc4300_acc4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

11.2.5 Mandatory Configuration

exor_version.txt

Before accessing Accidents Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

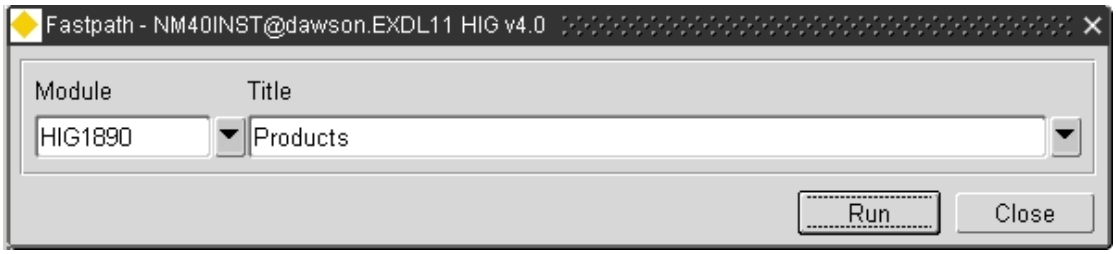
Ensure that the entry for Accidents Manager is set accordingly;

ACC=4.4.0.0

11.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

11.2.7 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.

12 Public Rights Of Way Manager

12.1 Implementation of the Public Rights Of Way Manager Software files

To install the software components for Public Rights Of Way Manager execute the **setup_public_rights_of_way_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

12.2 Public Rights Of Way Manager Server Install/Upgrade

This chapter provides details of steps involved in installing/upgrading the server components for Public Rights Of Way Manager.

Important:
This product will require installing/upgrading ***after*** Network Manager.

This product also has dependencies on Public Enquiry Manager and Maintenance Manager so they must be installed/upgraded before you begin this install/upgrade.

12.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 12.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

12.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

12.2.3 Install of Public Rights Of Way Manager

To create the base data and objects for Public Rights Of Way Manager modules;

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

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

```
start prow_inst.sql
```

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 Public Rights Of Way Manager objects and data will have been installed.

Checking Log File(s)

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

```
prow_install_1_<date&time>.LOG
prow_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with http://selectservices.bentley.com to allow Bentley (formerly exor) support staff to verify the install has been successful.

12.2.4 Upgrade of Public Rights Of Way Manager

This section describes the steps necessary to upgrade Public Rights Of Way Manager to 4.4.0.0

To upgrade the base data and objects for the Public Rights Of Way Manager modules;

- Change directory to **<*exor_base*>**\prow\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start prow4300_prow4400.sql
  ```

- 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 Public Rights Of Way Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
prow4300_prow4400_1_<date&time>.LOG
prow4300_prow4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

12.2.5 Mandatory Configuration

exor_version.txt

Before accessing Public Rights Of Way Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

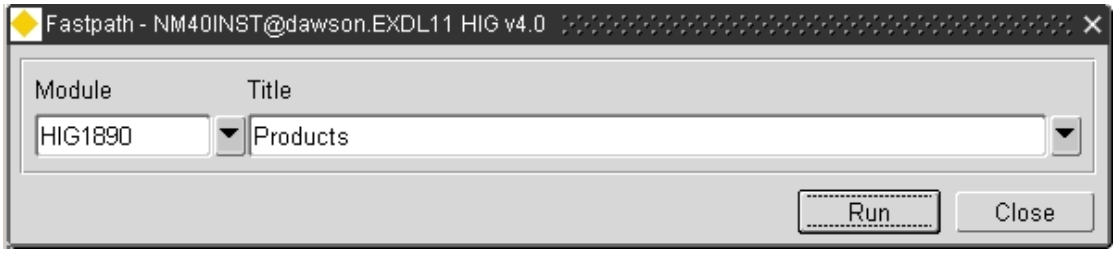
Ensure that the entry for Public Rights Of Way Manager is set accordingly;

PROW=4.4.0.0

12.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

12.2.7 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.

13 Street Lighting Manager

13.1 Implementation of the Street Lighting Manager Software files

To install the software components for Street Lighting Manager execute the **setup_street_lighting_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

13.2 Street Lighting Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager.

13.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 13.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

13.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

13.2.3 Install of Street Lighting Manager

To create the base data and objects for Street Lighting Manager modules;

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

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

```
start slm_inst.sql
```

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 Street Lighting Manager objects and data will have been installed.

Checking Log File(s)

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

```
slm_install_1_<date&time>.LOG
slm_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

13.2.4 Upgrade of Street Lighting Manager

This section describes the steps necessary to upgrade Street Lighting Manager to 4.4.0.0

To upgrade the base data and objects for the Street Lighting Manager modules;

- Change directory to **<*exor_base*>**\slm\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start slm4300_slm4400.sql
  ```

- 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 Street Lighting Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
slm4300_slm4400_1_<date&time>.LOG
slm4300_slm4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

13.2.5 Mandatory Configuration

exor_version.txt

Before accessing Street Lighting Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

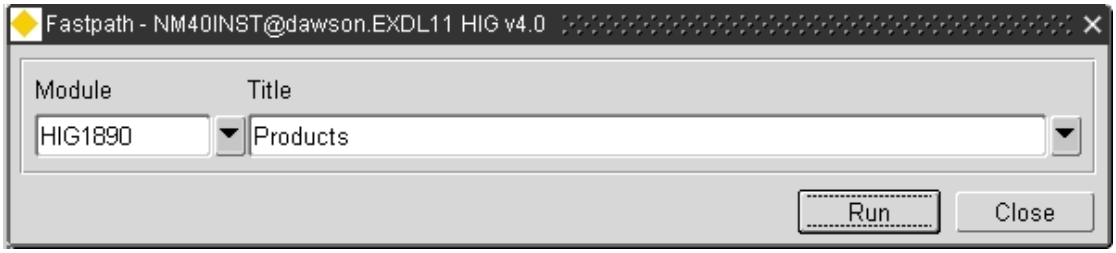
Ensure that the entry for Street Lighting Manager is set accordingly;

CLM=4.4.0.0

13.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

13.2.7 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.

14 Schemes Manager

14.1 Implementation of the Schemes Manager Software files

To install the software components for Schemes Manager execute the **setup_schemes_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

14.2 Schemes Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager.

14.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 14.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

14.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

14.2.3 Install of Schemes Manager

To create the base data and objects for Schemes Manager modules;

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

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

```
start stp_inst.sql
```

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 Schemes Manager objects and data will have been installed.

Checking Log File(s)

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

```
stp_install_1_<date&time>.LOG
stp_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

14.2.4 Upgrade of Schemes Manager

This section describes the steps necessary to upgrade Schemes Manager to 4.4.0.0

To upgrade the base data and objects for the Schemes Manager modules;

- Change directory to **<*exor_base*>**\stp\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start stp4300_stp4400.sql
  ```

- 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 Schemes Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
stp4300_stp4400_1_<date&time>.LOG
stp4300_stp4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

14.2.5 Mandatory Configuration

exor_version.txt

Before accessing Schemes Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

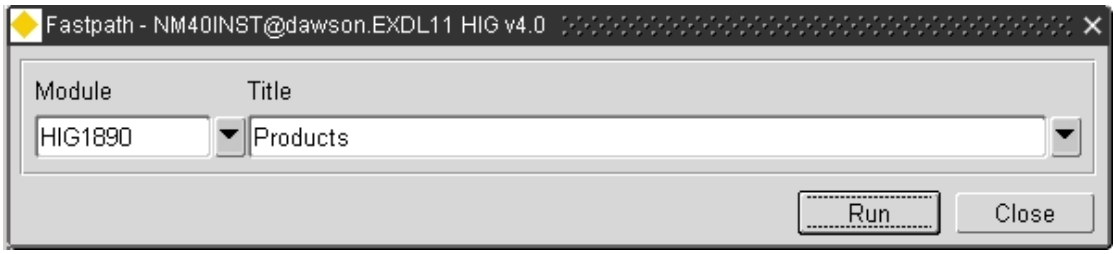
Ensure that the entry for Schemes Manager is set accordingly;

STP=4.4.0.0

14.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

14.2.7 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.

15 Structures Manager

15.1 Implementation of the Structures Manager Software files

To install the software components for Structures Manager execute the **setup_structures_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

15.2 Structures Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager.

15.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 15.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

15.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

15.2.3 Install of Structures Manager

To create the base data and objects for Structures Manager modules;

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

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

```
start str_inst.sql
```

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 Structures Manager objects and data will have been installed.

Checking Log File(s)

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

```
str_install_1_<date&time>.LOG
str_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

15.2.4 Upgrade of Structures Manager

This section describes the steps necessary to upgrade Structures Manager to 4.4.0.0

To upgrade the base data and objects for the Structures Manager modules;

- Change directory to **<*exor_base*>**\str\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start str4300_str4400.sql
  ```
- 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 Structures Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
str4300_str4400_1_<date&time>.LOG
str4300_str4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

15.2.5 Mandatory Configuration

exor_version.txt

Before accessing Structures Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

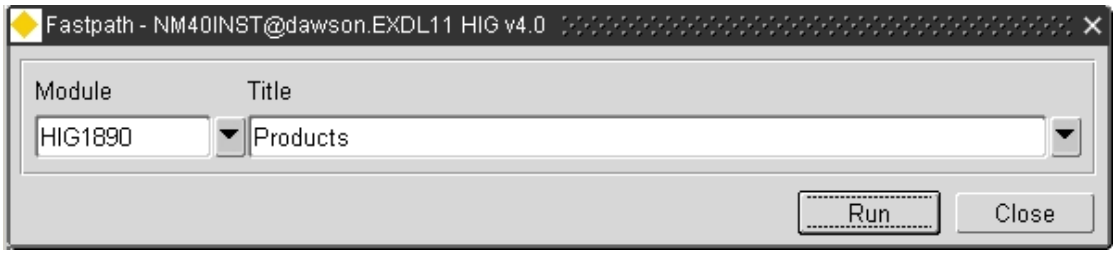
Ensure that the entry for Structures Manager is set accordingly;

STR=4.4.0.0

15.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

15.2.7 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.

16 Traffic Interface Manager

16.1 Implementation of the Traffic Interface Manager Software files

To install the software components for Traffic Interface Manager execute the **setup_traffic_interface_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

16.2 Traffic Interface Manager Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager.

16.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 16.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

16.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

16.2.3 Install of Traffic Interface Manager

To create the base data and objects for Traffic Interface Manager modules;

Change directory to **<*exor_base*>\tm3\install**

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

```
start tm_inst.sql
```

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 Traffic Interface Manager objects and data will have been installed.

Checking Log File(s)

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

```
tm_install_1_<date&time>.LOG
tm_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

16.2.4 Upgrade of Traffic Interface Manager

This section describes the steps necessary to upgrade Traffic Interface Manager to 4.4.0.0

To upgrade the base data and objects for the Traffic Interface Manager modules;

- Change directory to **<*exor_base*>**\tm3\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start tm4300_tm4400.sql
  ```

- 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 Traffic Interface Manager objects and data will have been upgraded.

Checking Log File(s)

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

```
tm4300_tm4400_1_<date&time>.LOG
tm4300_tm4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

16.2.5 Mandatory Configuration

exor_version.txt

Before accessing Traffic Interface Manager you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

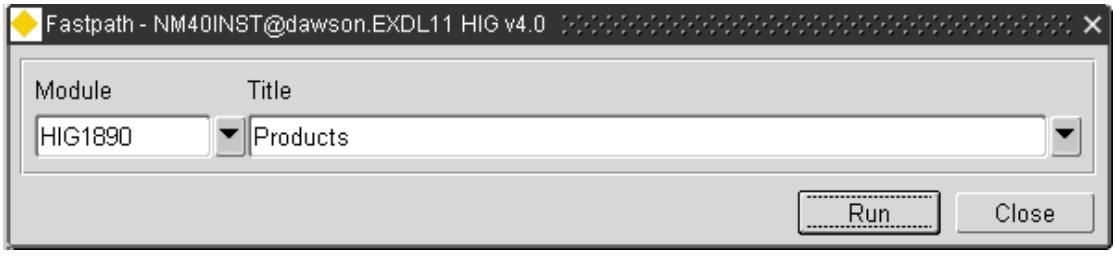
Ensure that the entry for Traffic Interface Manager is set accordingly;

TM=4.4.0.0

16.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

16.2.7 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.

17 Highways Agency Interface

17.1 Implementation of the Highways Agency Interface Software files

To install the software components for Highways Agency Interface execute the **setup_highways_agency_interface_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

17.2 Highways Agency Interface Server Install/Upgrade

This chapter provides details of steps involved in installing/Upgrading the server components for Highways Agency Interface.

Important:
This product will require installing/upgrading ***after*** Network Manager and Maintenance Manager.

17.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 17.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

17.2.2 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 install 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation.

17.2.3 Install of Highways Agency Interface

To create the base data and objects for the Highways Agency Interface modules;

- Change directory to **<*exor_base*>**\hai\install

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

```
start hai_inst.sql
```

- 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 Highways Agency Interface objects and data will have been installed.

Checking Log File(s)

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

```
hai_install_1_<date&time>.LOG
hai_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly 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 installed.

17.2.4 Upgrade of Highways Agency Interface

This section describes the steps necessary to upgrade the Highways Agency Interface to 4.4.0.0

To upgrade the base data and objects for Highways Agency Interface modules;

- Change directory to ***<exor_base>***\hai\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start hai4300_hai4400.sql
  ```

- 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 Highways Agency Interface objects and data will have been upgraded.

Checking Log File(s)

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

```
hai4300_hai4400_1_<date&time>.LOG
hai4300_hai4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

17.2.5 Mandatory Configuration

exor_version.txt

Before accessing Highways Agency Interface you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

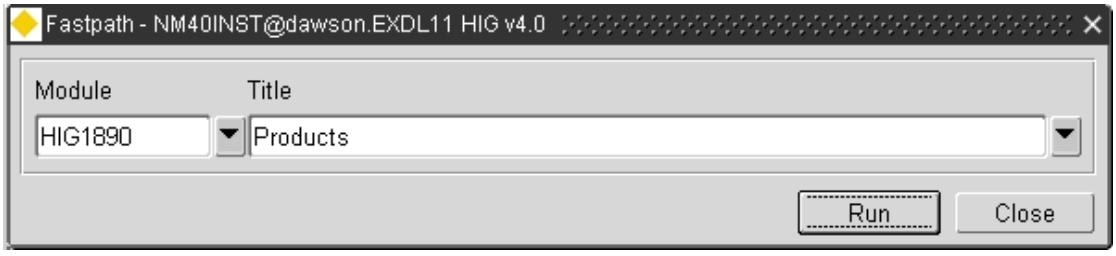
Ensure that the entry for Highways Agency Interface is set accordingly;

HAI=4.4.0.0

17.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

17.2.7 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.

18 MapCapture Interface

18.1 Implementation of the MapCapture Interface Software files

To install the software components for MapCapture Interface execute the **setup_mapcapture_interface_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

18.2 MapCapture Interface Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager and Maintenance Manager.

18.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 18.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

18.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation and completion of post installation tasks.

18.2.3 Install of MapCapture Interface

To create the base data and objects for the MapCapture Interface modules;

- Change directory to **<*exor_base*>**\mcp\install

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

```
start mcp_inst.sql
```

- 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 MapCapture Interface objects and data will have been installed.

Checking Log File(s)

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

```
mcp_install_1_<date&time>.LOG
mcp_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly 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 installed.

18.2.4 Upgrade of MapCapture Interface

This section describes the steps necessary to upgrade MapCapture Interface to 4.4.0.0

To upgrade the base data and objects for the MapCapture Interface modules;

- Change directory to ***<exor_base>***\mcp\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

```
start mcp4300_mcp4400.sql
```

- 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 MapCapture Interface objects and data will have been upgraded.

Checking Log File(s)

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

```
mcp4300_mcp4400_1_<date&time>.LOG
mcp4300_mcp4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

Due to interdependencies between some Exor products, please ignore all compilation errors until all of your products have been installed. Also, objects may be invalid for certain products due to post configuration tasks not being completed. In this case reassess invalid objects when post installation task have been completed.

18.2.5 MapCapture Interface 4.4.0.0 Fix 1 (Post Install and Upgrade)

Important:
After installing or upgrading MapCapture Interface to 4.4.0.0 the patch '***MapCapture Interface 4.4.0.0 Fix 1***' should be applied before using the application.

18.2.6 Mandatory Configuration

exor_version.txt

Before accessing MapCapture Interface you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

Ensure that the entry for MapCapture Interface is set accordingly;

MCP=4.4.0.0

18.2.7 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.

19 UKPMS

19.1 Implementation of the UKPMS Software files

To install the software components for UKPMS execute the **setup_ukpms_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

19.2 UKPMS Server Install/Upgrade

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

Important:
This product will require installing/upgrading ***after*** Network Manager.

19.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 19.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

19.2.2 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 install/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 install/upgrade. However it will be of concern if compilation errors still occur following the re-compilation and completion of post installation tasks.

19.2.3 Install of UKPMS

To create the base data and objects for UKPMS modules;

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

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

```
start ukp_inst.sql
```

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 UKPMS objects and data will have been installed.

Checking Log File(s)

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

```
ukp_install_1_<date&time>.LOG
ukp_install_2_<date&time>.LOG
```

Note: following the install it is usual for packages NET1119 and/or UKPMS_ROAD_CONDITION to be invalid. Once the **UR Asset Type** has been assigned and **UKPMS inventory views** are regenerated (as part of the post install tasks), the packages should be valid. The post install tasks are detailed in the accompanying Release Notes for UKP 4400.

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

Also, objects may be invalid for certain products due to post configuration tasks not being completed. In this case reassess invalid objects when post installation task have been completed.

19.2.4 Upgrade of UKPMS

This section describes the steps necessary to upgrade UKPMS to 4.4.0.0

To upgrade the base data and objects for the UKPMS modules;

- Change directory to **<*exor_base*>**\ukp\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start ukp4310_ukp4400.sql
  ```

- 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 UKPMS objects and data will have been upgraded.

Checking Log File(s)

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

```
ukp4310_ukp4400_1_<date&time>.LOG
ukp4310_ukp4400_2_<date&time>.LOG
```

Note: following the upgrade it is usual for packages `NET1119` and/or `UKPMS_ROAD_CONDITION` to be invalid. Once the **UR Asset Type** has been assigned and **UKPMS inventory views** are regenerated (as part of the post upgrade tasks), the packages should be valid. The post upgrade tasks are detailed in the accompanying Release Notes for UKP 4400.

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

Due to interdependencies between some Exor products, please ignore all compilation errors until all of your products have been installed. Also, objects may be invalid for certain products due to post configuration tasks not being completed. In this case reassess invalid objects when post installation task have been completed.

19.2.5 Mandatory Configuration

exor_version.txt

Before accessing UKPMS you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

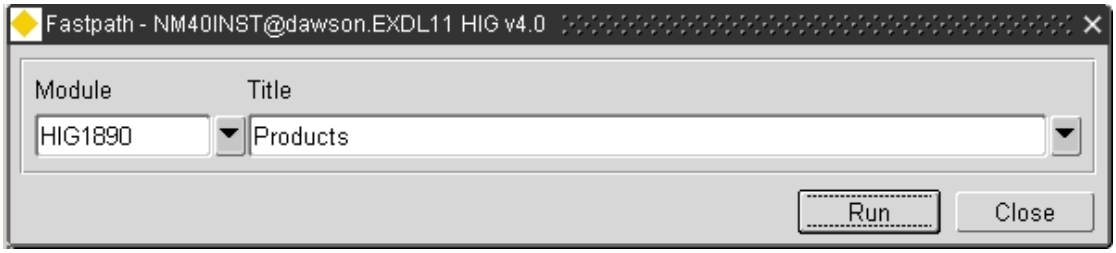
Ensure that the entry for UKPMS is set accordingly;

UKP=4.4.0.0

19.2.6 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the "**Network Manager General System Admin Guide**"

19.2.7 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.

20 Information Manager Foundation Layer

20.1 Implementation of the Information Manager Foundation Layer Software files

To install the software components for Information Manager Foundation Layer execute the **setup_information_manager_foundation_layer_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

20.2 Information Manager Foundation Layer Server Install/Upgrade

This chapter provides details of steps involved in installing/upgrading the server components for Information Manager Foundation Layer.

Important:
This product will require installing/upgrading ***after*** 4.4.0.0 versions of products integrated with Information Manager Foundation Layer i.e. Network Manager and/or Maintenance Manager, Enquiry Manager, TMA Manager, Schemes Manager.

20.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 20.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

20.2.2 Install or Upgrade of Information Manager Foundation Layer

The IMF installation or upgrade is executed using the same command '*imf_inst.sql*'. This script will determine the starting point, new install or upgrade, and produce the relevant log files accordingly.

To create the base data and objects for Information Manager Foundation Layer modules;

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

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

```
start imf_inst.sql
```

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 Information Manager Foundation Layer objects and data will have been installed/upgraded.

Checking Log File(s)

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

A new installation of Information Manager Foundation Layer will produce the following LOG file:

```
imf_install_<date&time>.LOG
```

An upgrade of Information Manager Foundation Layer from 4.3.0.0 will produce the following LOG file:

```
imf4300_imf4400_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install/upgrade has been successful.

20.2.3 Documentation

Documentation is automatically produced as part of the installation/upgrade process

Two documents are produced per licenced product with foundation views.

All filenames are prefixed with the product code and they can be located in the working directory i.e. **<*exor_base*>\imf\install**

For example, with the TMA product the following files will be produced;

```
TMA_foundation_view_list.txt
TMA_foundation_view_column_list.txt
```

20.2.4 Mandatory Configuration

exor_version.txt

Before accessing Information Manager Foundation Layer you must check the file exor_version.txt.

This file is referenced in Windows Registry setting 'EXOR_VERSION' and by default can be located in the <***exor_base***>\bin directory.

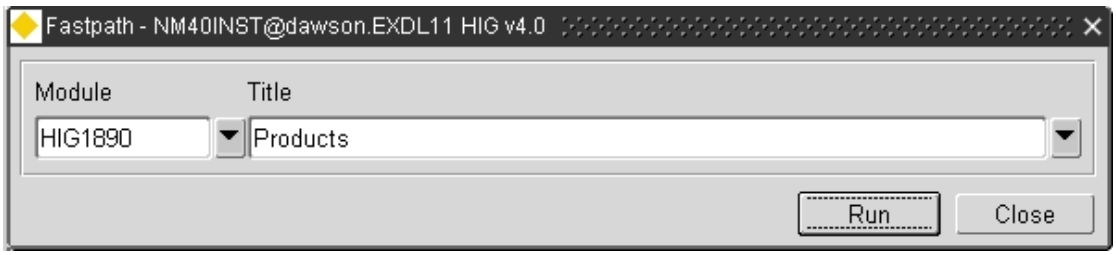
Ensure that the entry for Information Manager Foundation Layer is set accordingly;

IMF=4.4.0.0

20.2.5 Product Licencing

Following **first time installation** you must licence the product for use.

To do this start highways by exor and invoke module HIG1890 from the Fastpath menu.



For further details please refer to the “**Network Manager General System Admin Guide**”

21 Information Manager 4

21.1 Implementation of the Information Manager 4 Software files

To install the software components for Information Manager 4 execute the **setup_information_manager_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

Further instructions are available in the "**Information Manager 4 Install and Configuration Guide.pdf**".

21.2 Information Manager 4.4.0.0 Fix 1

Important:
After installing or upgrading Information Manager to 4.4.0.0 the patch '***Information Manager 4.4.0.0 Fix 1***' should be applied before using the application.

22 Work Orders Work Tray

22.1 Implementation of the Work Orders Work Tray Software files

To install the software components for Enquiry Manager Work Tray execute the **setup_work_orders_work_tray_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

22.2 Work Orders Work Tray Server Install

This chapter provides details of steps involved in installing the server components for Work Orders Work Tray.

Important:
This product will require installing ***after*** Network Manager, Maintenance Manager, Enquiry Manager and Information Manager.

22.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 22.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

22.2.2 Typical problems that you may encounter

It is possible that, when you are running some of the install 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.

Also during install 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 install. However it will be of concern if compilation errors still occur following the re-compilation.

22.2.3 Install of Work Orders Work Tray

To create the base data and objects for Work Orders Work Tray modules;

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

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

```
start wowt_inst.sql
```

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 Work Orders Work Tray objects and data will have been installed.

Checking Log File(s)

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

```
wowt_install_1_<date&time>.LOG
wowt_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

22.2.4 Upgrade of Work Orders Work Tray

This section describes the steps necessary to upgrade Work Orders Work Tray to 4.4.0.0

To upgrade the base data and objects for the Work Orders Work Tray modules;

- Change directory to ***<exor_base>***\wowt\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start wowt4300_wowt4400.sql
  ```

- 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 Works Orders Work Tray objects and data will have been upgraded.

Checking Log File(s)

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

```
wowt4300_wowt4400_1_<date&time>.LOG
wowt4300_wowt4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

22.2.5 Additional Configuration

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

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.

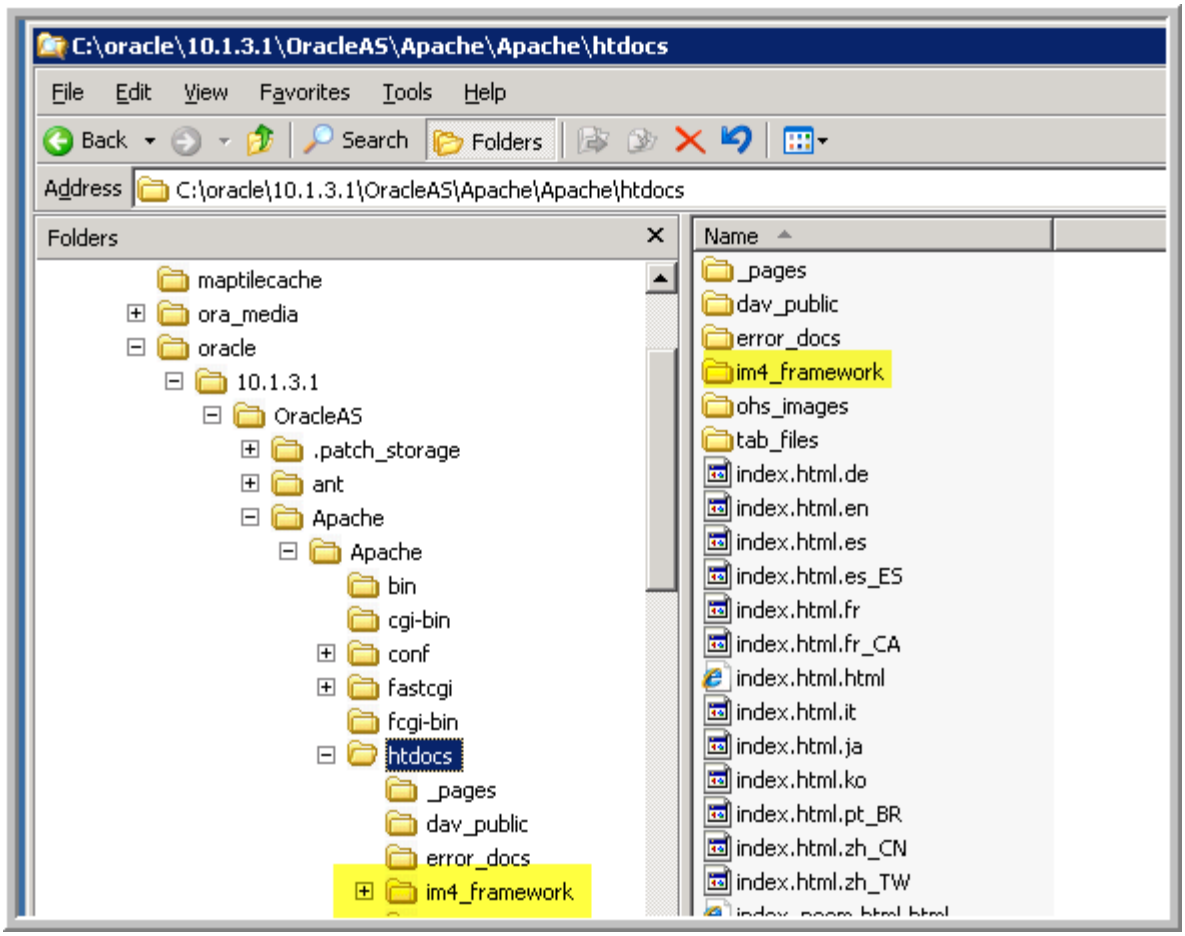
22.2.6 Spatial Configuration

Specific information regarding the registration of spatial layers can be found in the ***"Locator and Web Mapping"*** document.

22.3 HTTP Server Setup

You will need to copy the \wowt\admin\im4_framework directory to the application server under the apache\apache\htdocs directory appending to what already exists.

When appending to an existing folder it is recommended that the existing folder be copied and renamed as a backup (i.e, im4_framework_4300). The im4_framework directory can then be appended to the existing folder.



23 Enquiry Manager Work Tray

23.1 Implementation of the Enquiry Manager Work Tray Software files

To install the software components for Enquiry Manager Work Tray execute the **setup_enquiry_manager_work_tray_4400.exe** and follow the on-screen prompts.

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 please raise a ticket at **http://selectservices.bentley.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***>.

23.2 Enquiry Manager Work Tray Server Install

This chapter provides details of steps involved in installing the server components for Enquiry Manager Work Tray.

Important:
This product will require installing ***after*** Network Manager, Maintenance Manager, Enquiry Manager and Information Manager.

23.2.1 Before you Start

Before proceeding please ensure that the pre-requisites mentioned in **Section 2.4** 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 23.1** you will have implemented software into the location referred to as <***exor_base***>, for example, C:\EXOR.

23.2.2 Typical problems that you may encounter

It is possible that, when you are running some of the install 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.

Also during install 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 install. However it will be of concern if compilation errors still occur following the re-compilation.

23.2.3 Install of Enquiry Manager Work Tray

To create the base data and objects for Enquiry Manager Work Tray modules;

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

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

```
start enqwt_inst.sql
```

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 Enquiry Manager Work Tray objects and data will have been installed.

Checking Log File(s)

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

```
enqwt_install_1_<date&time>.LOG
enqwt_install_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the install has been successful.

23.2.4 Upgrade of Enquiry Manager Work Tray

This section describes the steps necessary to upgrade Enquiry Manager Work Tray to 4.4.0.0

To upgrade the base data and objects for the Enquiry Manager Work Tray modules;

- Change directory to ***<exor_base>***\enqwt\install
- Login to SQL*PLUS as the highways owner on the client PC
- The same script is used to upgrade from the previous version shown in **Section 2.2**.
  Run the following command

  ```
  start enqwt4300_enqwt4400.sql
  ```

- 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 Enquiry Manager Work Tray objects and data will have been upgraded.

Checking Log File(s)

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

```
enqwt4300_enqwt4400_1_<date&time>.LOG
enqwt4300_enqwt4400_2_<date&time>.LOG
```

Please raise and attach the logs to a ticket with **http://selectservices.bentley.com** to allow Bentley (formerly exor) support staff to verify the upgrade has been successful.

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

23.2.5 Additional Configuration

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

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.

23.2.6 Spatial Configuration

Specific information regarding the registration of spatial layers can be found in the ***"Locator and Web Mapping"*** document.