Transformation Manager
Version 5.8

Installation Guide

Copyright Notice

Table of Contents

Installation

Preface

This guide provides instructions for installing Transformation Manager. The guide assumes that Transformation Manager will be installed on a Microsoft® Windows platform.

Transformation Manager can be installed on a UNIX® or Apple® Mac platform also. Please contact ETL Solutions if you require any information on installing on either of these platforms.

Prerequisites

This guide assumes a good working knowledge of the Windows operating system and of the Java Development Kit (JDK) from ORACLE®.
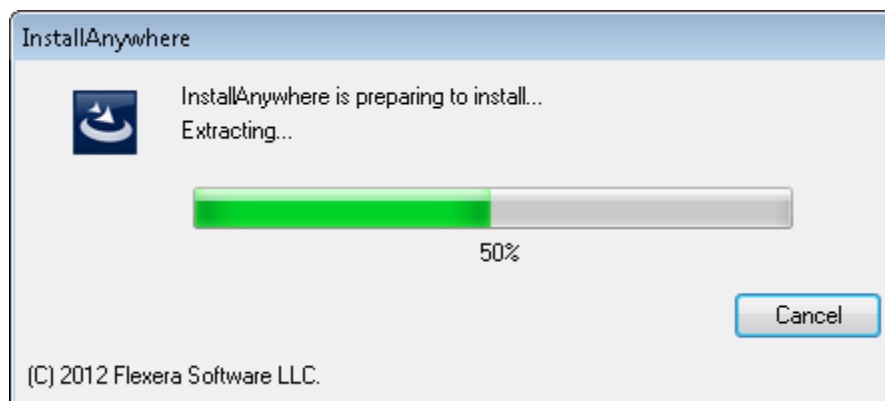
Installation Procedure

Installing Transformation Manager is a four step process.

1) Obtain an account for the resource centre at the ETL Solutions web site

2) Locate and obtain the installer

3) Run the installer

4) License the installation

The first step is to contact ETL Solutions to obtain a log in account for the resource centre at the ETL Solutions web site - http://www.etlsolutions.com/resource-centre/. Then a user can download or run the installer from the resource centre. The installer will step through the installation process allowing a user to select the options required.

There are two installation options: a complete installation will add TM Designer, TM Migrator, TM Upgrader and RunTransform, and a command line only option which installs just RunTransform. Typically, the installation is placed in the Program Files directory or its equivalent for the specific operating system used and in addition creates a Transformation Manager users home directory which is the default location for transformation programmes created by the user. A dialog appears as the installation application prepares to install Transformation Manager Suite, as shown below.

After you have downloaded and run or just run the installer, the Transformation Manager installation will begin automatically starting at the Introduction step of the process.

Step 1 Introduction

TM Installer displays a sequence of steps to complete the installation. On the left of the Window, the current step is highlighted, and the first step displays an 'Introduction' page.
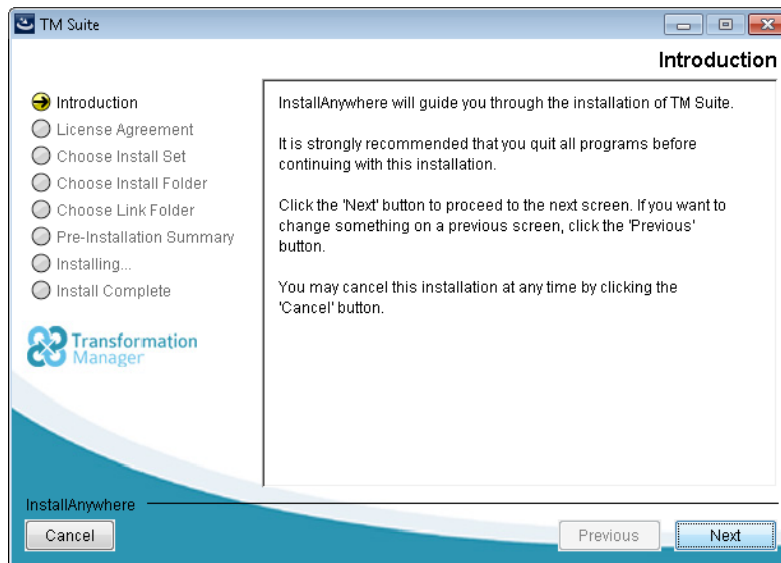
To exit the installation at this stage, choose the [Cancel] button or, to proceed to the next step, choose the [Next] button. As the installation proceeds, select the [Previous] button to return to the previous step or the [Cancel] button to exit.

Step 2 Licence Agreement

This step requires the user to agree to the licence terms for installing Transformation Manager. The user has the option to not accept these terms. However, this will end the installation as agreement is a requirement to complete the install. The user must reach the end of the agreement before the option to accept the licence terms is activated.
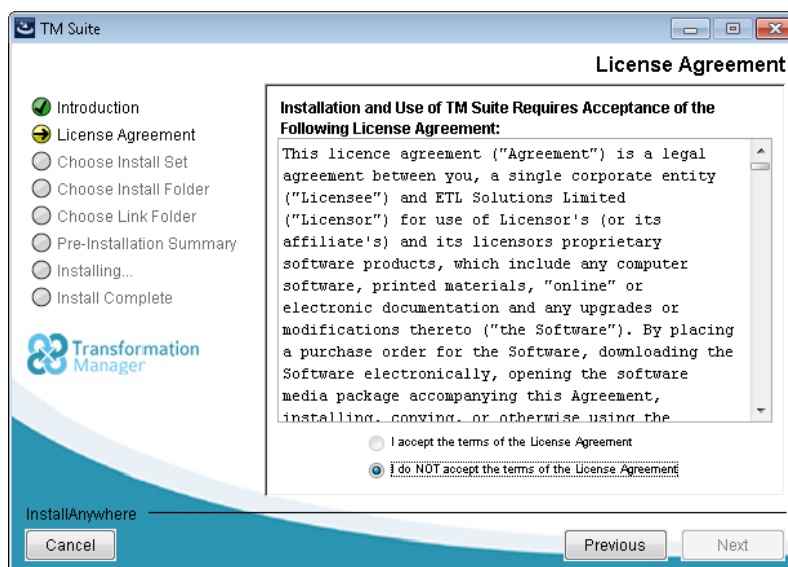
After reaching the bottom of the licence agreement, select the option **I accept the terms of the Licence Agreement** and click on the [Next] button.
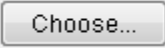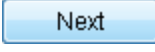
Step 3 Choose Install Set

The installation will continue to the installation set where it is possible to select a **Complete** or **Command-Line Only** installation. The default setting is a complete installation.
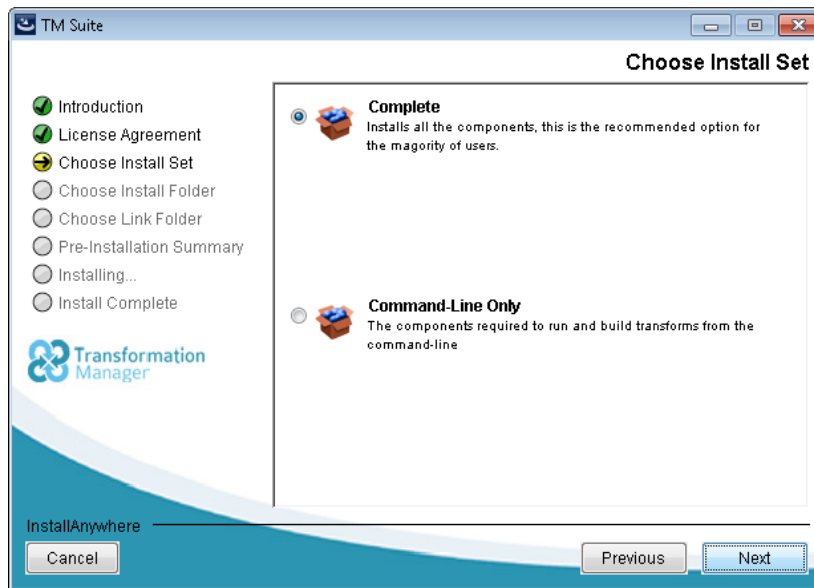
Proceed to the next step by clicking the **Next** button.

Step 4 Choose Install Folder

Choose the location where you wish to install Transformation Manager. The default location is typically `C:\Program Files\TM Suite` on a Windows 32-bit operating system or `C:\Program Files (x86)\TM Suite` on a Windows 64-bit operating system. Alternatively you can type in a new one, or use the **Choose...** button to select an existing directory. You may use the **Restore Default Folder** button to re-set the default directory. The install program will create the directory if necessary. When finished, click the **Next** button to proceed with the installation process.
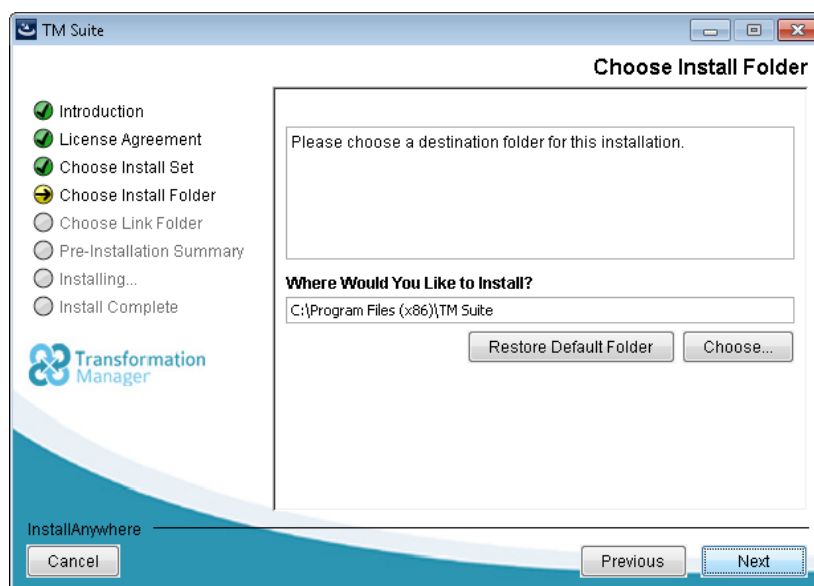
Step 5 Choose Shortcut Folder

You may choose where to create icons and whether these should apply to all users. When finished, click the [Next] button to proceed with the installation process.
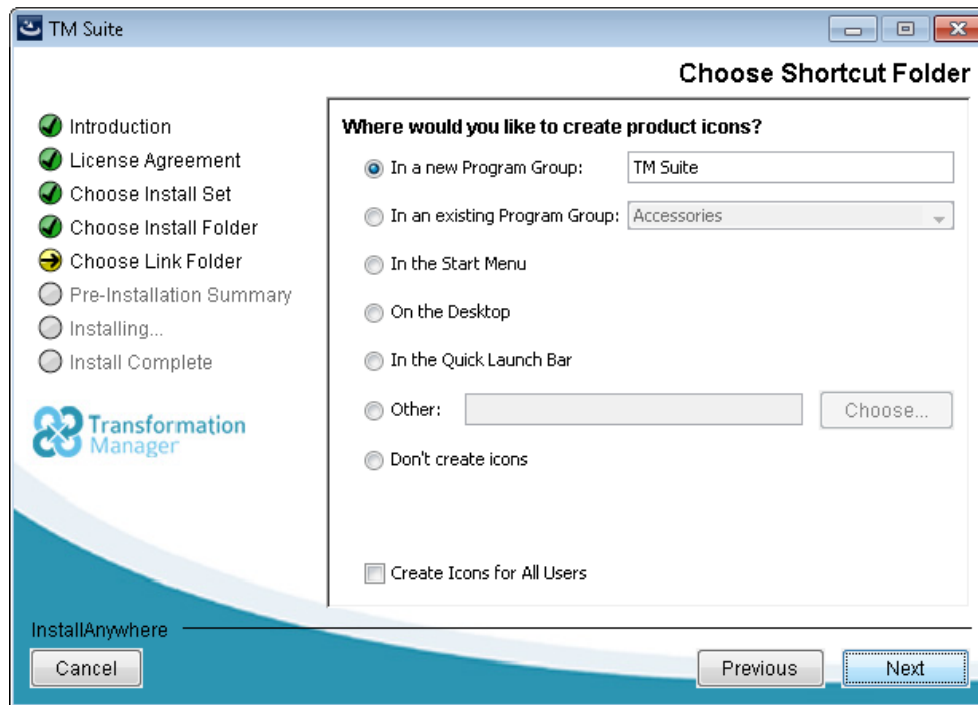
Step 6 Pre-Installation Summary

Prior to installing, a summary of the selections made will be displayed. Review these before clicking the [Next] button to proceed with the installation process. To make alterations, click the [Previous] button to return to the earlier steps.
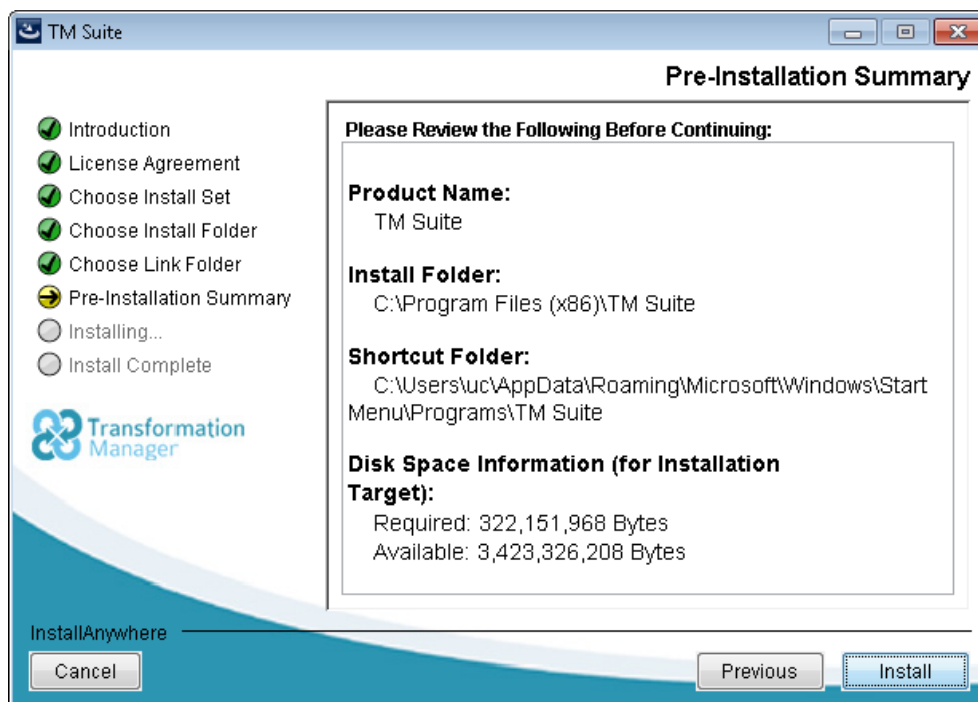
Step 7 Installing Transformation Manager
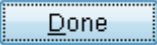
A simple progress indication is given as each file is copied. The indication may pause for a few seconds as large files are copied.
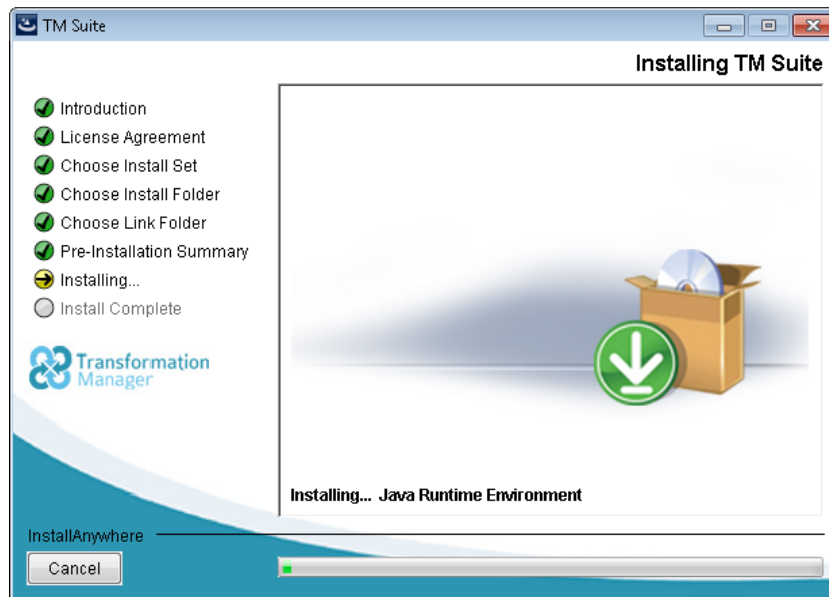
Step 8 Install Complete

On completion, an install complete message is displayed.
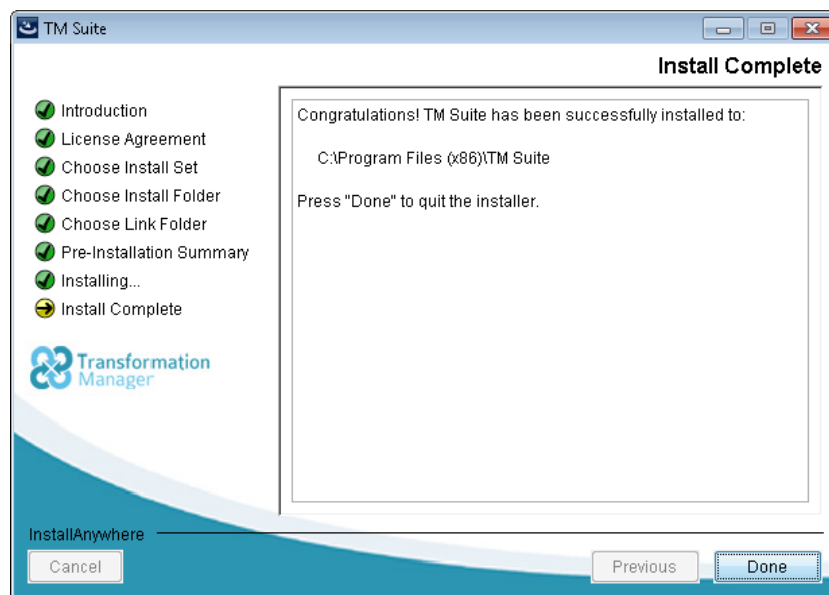
Read any notes that are displayed in the install dialog, and choose the [Done] button to complete the installation.

Step 9 Install your Licence

Before you can use Transformation Manager you must install a valid licence for the software. You should have obtained this from ETL Solutions.

See Also: Installing a Licence File

Installation on a Windows 8 System

Installing Transformation Manager on a Windows 8 operating system requires Transformation Manager to run in Windows 7 compatibility mode.

1) Open the Properties window for the TM Designer application. This can be done by using a secondary right-mouse click to open the context menu from the desk top icon or the All Programs and TM Designer application item.

2) Click the **Properties** item in the context menu. The Properties window will open.

3) In the **Compatibility mode** section of the window place a tick in the **Run this program in compatibility mode for:** tick box.

4) Select **Windows 7** from the options in the drop down list box as shown below.
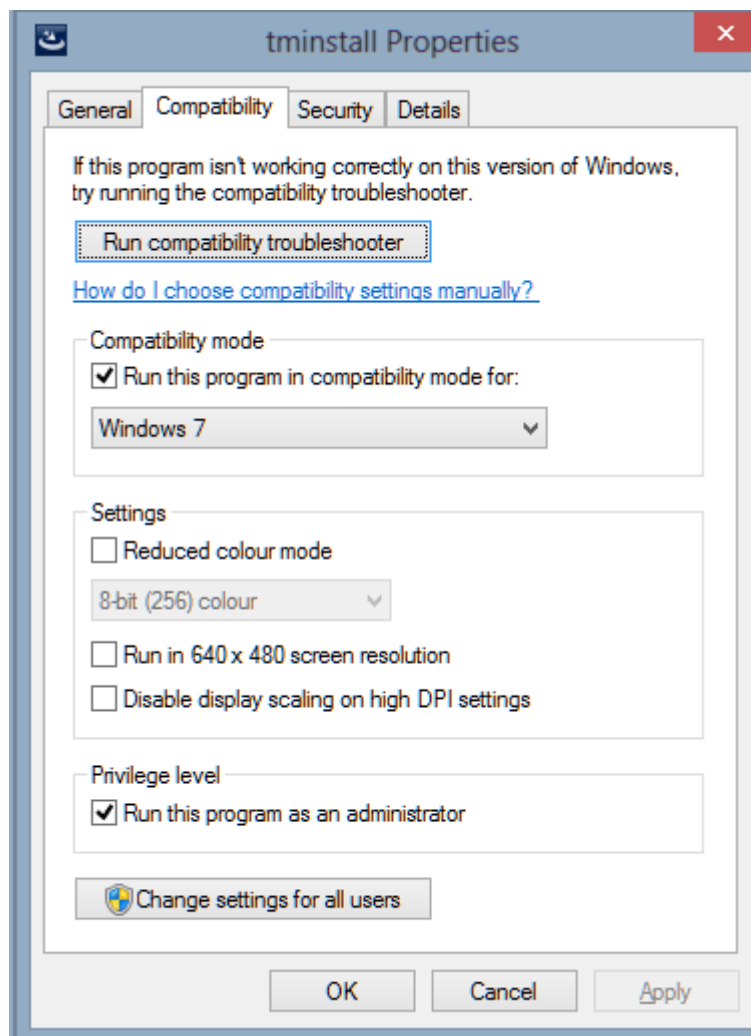
Click the OK button to close the window. Now you will be able to run Transformation Manager on your Windows 8 operating system.

Upgrading From a Previous Transformation Manager Version

This guidance refers to upgrading from version 4.16 and above.

If you wish to upgrade from an earlier version of Transformation Manager please contact ETL Solutions at support@etlsolutions.com for specific upgrade assistance.

Recommended Upgrade Procedure

The list below describes the steps we believe provide the most satisfactory upgrade procedure.

1) Make *backups* of any repositories by copying the directories to a safe location

2) Make a backup of your entire installation directory by copying the directory to a safe location

3) Backup any udf classes and java files, if defined externally

4) Uninstall Transformation Manager

5) Install the new version

Post-Installation Tasks

A valid licence file must be installed before Transformation Manager can be used.

Each Transformation Manager application is configured by reading property values contained in an associated lax file. Although these files may be amended by the user with care, a TM Properties Editor is provided to simplify this task without the need to edit the property files directly.

You must also ensure that you have access to the necessary JDBC drivers to connect to the databases to or from which you wish to transform (if any). Access to these will again be determined by editing the lax file with the TM Properties Editor.

The following instructions assume you have installed Transformation Manager to the default directory, `C:\Program Files\TM Suite`. The actual installation directory chosen in installation Step 2 must be substituted in the relevant places.

Home Location [TMHOME]

TM Designer needs to save preferences, configuration files, generated code and other files. TM Designer uses an area known as TMHOME to do so.

By default and in a typical installation, Transformation Manager writes data to the %USERPROFILE%\TM directory, for example, C:\Users\<[Windows user account name]>\TM. However, this can vary. For instance, if the operating system is Windows XP then the directory would be found in C:\Documents and Settings\<[Windows user account name]>\TM or in a network environment it may be on a network drive such as H:\Users\<[Windows user account name]>\TM. This location will initially contain three directories, config, etc and tutorials. As tutorials are completed and user projects are added to a repository so further directories will be added which will contain generated transform code, project configurations, etc. This is the recommended usage.

It is possible to change this location by creating and setting an environment variable. An environment variable is a key/value pair. The convention for setting environment variables differs between operating systems. To set an environment variable on a machine consult the relevant system

documentation. The key should be 'TMHOME' and the value should be the full path to the directory, for example C:\TM.

It can also be set by editing the lax file. Edit the TMDesignerLauncher.lax and create a customer property named TMHOME, of type File. Then set the value for this property which is the full path to the file e.g. C:\TM. When TM Migrator is launched from within TM Designer the TMHOME location set in the TMDesignerLauncher.lax will be used by TM Migrator. If TM Migrator is launched independently, then the TMHOME should also be set in the TMMigratorLauncher.lax file.

Either change should be made before starting Transformation Manager.

Please note that if a System Property and an Environment Variable have both been set, the Environmental Variable takes priority.

JNDI

The Java Naming and Directory Interface™ (JNDI) is an application programming interface (API) that provides naming and directory functionality to applications written using the Java™ programming language. It is designed to be independent of any specific directory service implementation. So a variety of directories can be accessed in a common way.

When TM Designer is launched for the first time after installation, default JNDI files will be created in TMHOME (if they do not already exist).

The following files will be created in Transformation Managers home directory:

```
[TMHOME]\config\jndi.properties

[TMHOME]\config\jndi\jdbc\.bindings
```

The `jndi.properties` file contains the location of the jndi directory. The .bindings file contains connection details for the jndi settings.

The reference in the jndi.properties file to the jndi directory can be either absolute or relative. An example of an absolute path is shown below.

```
context.java.naming.provider.url=file\:C\:\\Documents and
Settings\\bob\\TM\\config\\jndi
```

A relative path is shown below and has the format displayed.

```
context.java.naming.provider.url=.\\config\\jndi
```

Specifying a relative path makes it easier to copy the `jndi.properties` file and jndi directory from one user to another, or when changing the TMHOME location.

If you change the TMHOME location, you will need to copy over the jndi files to the new TMHOME location, and manually edit the `jndi.properties` file so that the path contains the new value for the TMHOME location.

Licensing

Installing a Licence File

All ETL products use FlexLM licensing from Flexera Software.

The Transformation Manager Suite is divided into a range of products, each of which can be licensed as shown in the table below.

	Node-Locked (Named)	Floating (Concurrent)	Floating (CPU restricted)
TM Designer	Yes	Yes	
TM Migrator	Yes	Yes	
TM SAP Adapter			Yes
TM Runtime		Yes	Yes

The Development Kit Licence includes licences for TM Designer and TM Migrator. A separate licence is required for TM Runtime. In version 3.8 only, TM Runtime can be run without a TM Designer licence but a warning is displayed.

Three licence types are supported by ETL Solutions.

- Floating (also known as a Concurrent or Counted) Licence.

- Node-Locked (also known as Named) Licence which is locked to a specific machine or username.

- Demonstration (Time-expired) Licence.

ETL Solutions offers 6 licensing options:

1) FlexLM Unserved Licences

   a) Time-expired Demo Licences

   b) Time-expired IP Address Range Licences (for named users)

   c) Permanent IP Address Licences (for named users and CPU run-time)

2) FlexLM Served Licences

   a) Permanent Concurrent Licences

   b) Permanent Named User Licences

   c) Permanent IP Address Licences (for CPU run-time licences)

Floating (or Concurrent or Counted) Licence

This is the recommended approach for end users. This controls a licence for single or multiple users. Where there are multiple users, the same licence file is used by all users. Users may either point at the same file, or can have their own copies of the file locally, as the server location is specified in the licence file.

The issued floating license(s) is tied to the hostID and may optionally be tied to one of the following.

- Named user(s)

- IP addresses

System administrators should download and install the licence server, if necessary, then configure the licence server, which must be running `lmgrd` and be pointing at the supplied licence file. To obtain a licence server if you do not already have one, follow the instructions below.
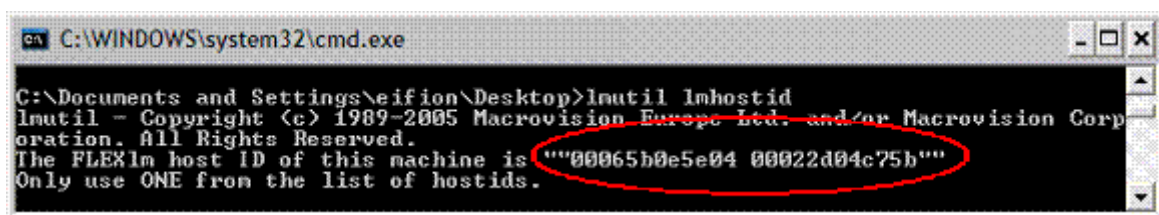
1) Go to http://www.globes.com/support/fnp_utilities_download.htm.

2) On that page select your operating system, and click on its `lmgrd`.

3) Run `lmgrd` and start the server.

The hostID address of the server must be supplied to ETL Solutions before a floating licence can be generated.

To find out the hostID of your server follow the instructions below.

1) Go to http://www.globes.com/support/fnp_utilities_download.htm

2) On that page select your operating system, and click on its `lmutil`.

3) Run `lmutil lmhostid`

The last step described will produce an output as shown below displaying the lmhostid required.

Send the FlexLM host ID of your machine (circled in red) to us at ETL Solutions.

The generated licence file should be copied into the etc subdirectory of the Transformation Manager installation program. By default, this will be **C:\Program Files\TM\etc**.

Node-Locked Licence

If you are not using a FlexLM licence server it may be possible to use a node-locked licence. This allows for single host licences which are locked to a specific node (IP Address) to be issued, since counted licences are not supported if a FlexLM licence server is not used. In some cases where the user is unable to restrict the IP address, a time-expired IP Address range licence may be provided. The customer must supply the IP address before the licence file can be generated.

The generated file should then be copied into the etc subdirectory of the Transformation Manager installation program. If you are using a Windows operating system, the default subdirectory will be C:\Program Files\TM\etc. If you are running on Linux, the default will be /home/[username]/TM/etc.

A single licence file can give permissions for multiple components for example TM Designer and TM Runtime.

Demo (Time-expired) Licence

A demo licence can be issued which permits all components of Transformation Manager to be used on any platform for a limited period – usually one month.

Licensing Procedure

Running TM Designer

Put the file in the default location.

Running TM Migrator from within TM Designer

When the transform is executed from within TM Migrator, the licensing information used by TM Migrator is passed through to the run-time check.

Licensing Information When Deploying Code from Command Line

When `calling java com.prismt.transform.runtime.exec.RunMaps` you need to pass in the licence location as a VM parameter (i.e. as a -D argument), using etl.license.file as the key i.e. `java –Detl.license.file=etc/etltm.lic`.

Java Deployment

There is a method on the `net.etltm.TMTransformerFactory`

`public static void setTMLicenseLocation(String theLocation)`

When executing a transform, this call must be made on the TMTransformerFactory before the factory is used to create a TMTransformer. The location can be the path to the licence file or a URI to the location of the license file on a remote machine.

### Deploying in a non-file based environment

The call, `setTMLicenseLocation` must be called (as above), but passing in a special string (which will be supplied by ETL Solutions in these cases), which then stops the run-time system from checking for a licence.
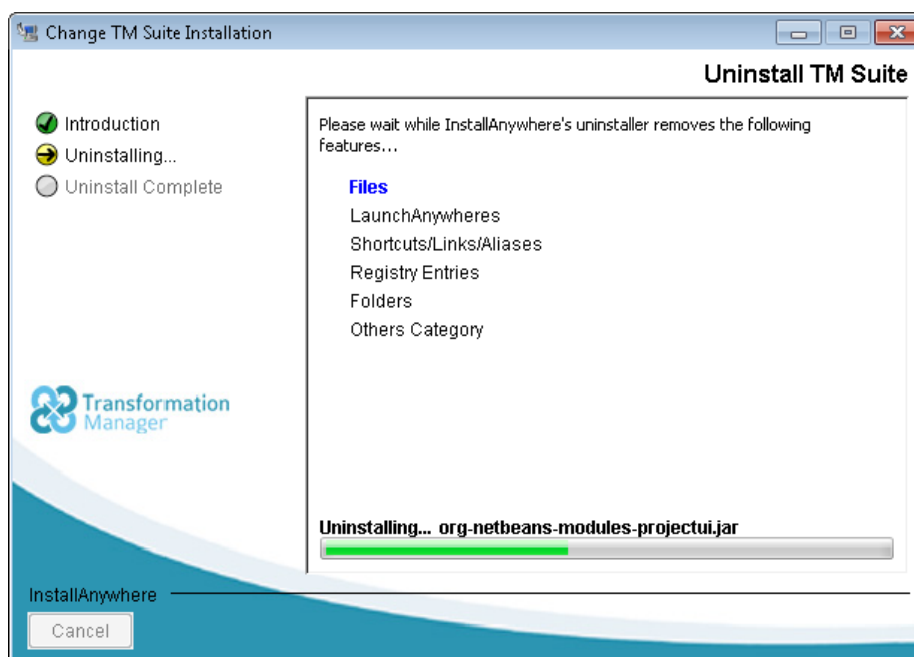
Uninstall Process

ETL Solutions recommend that you uninstall previous versions of Transformation Manager before installing a new version of the application suite.

To remove Transformation Manager from your system, assuming the operating system is Windows 7, select Start > Control Panel and then Programs and Features.

When the window opens, it displays a list of installed programs. Find the option called **TM Suite** in the list and click on it to select the program. Then click once on the Uninstall/Change button. The uninstall window will appear as shown below.
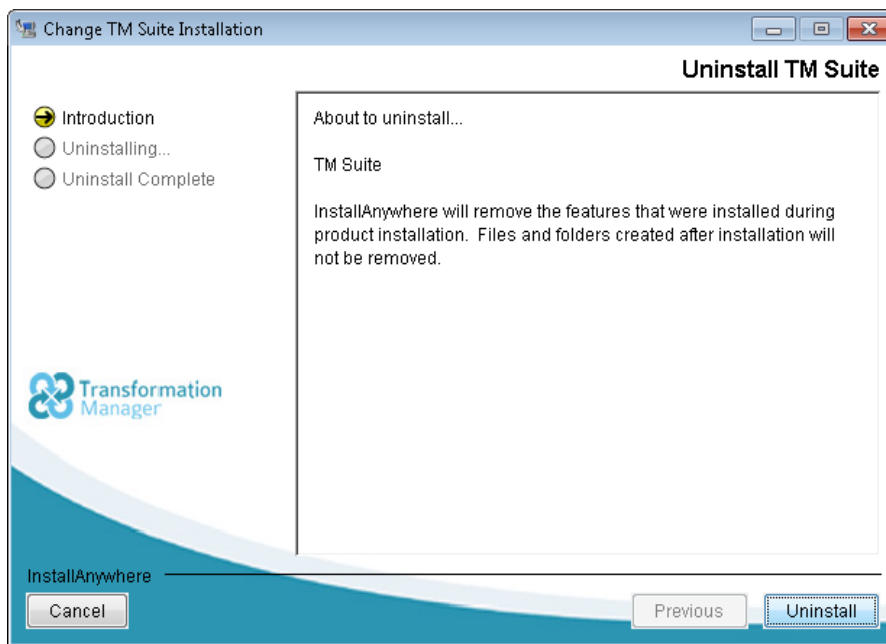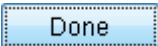

Click once on the Uninstall button and Transformation Manager will remove application files, shortcuts etc. displaying a progress bar as the uninstall process proceeds.

When complete, any items that could not be removed are displayed.
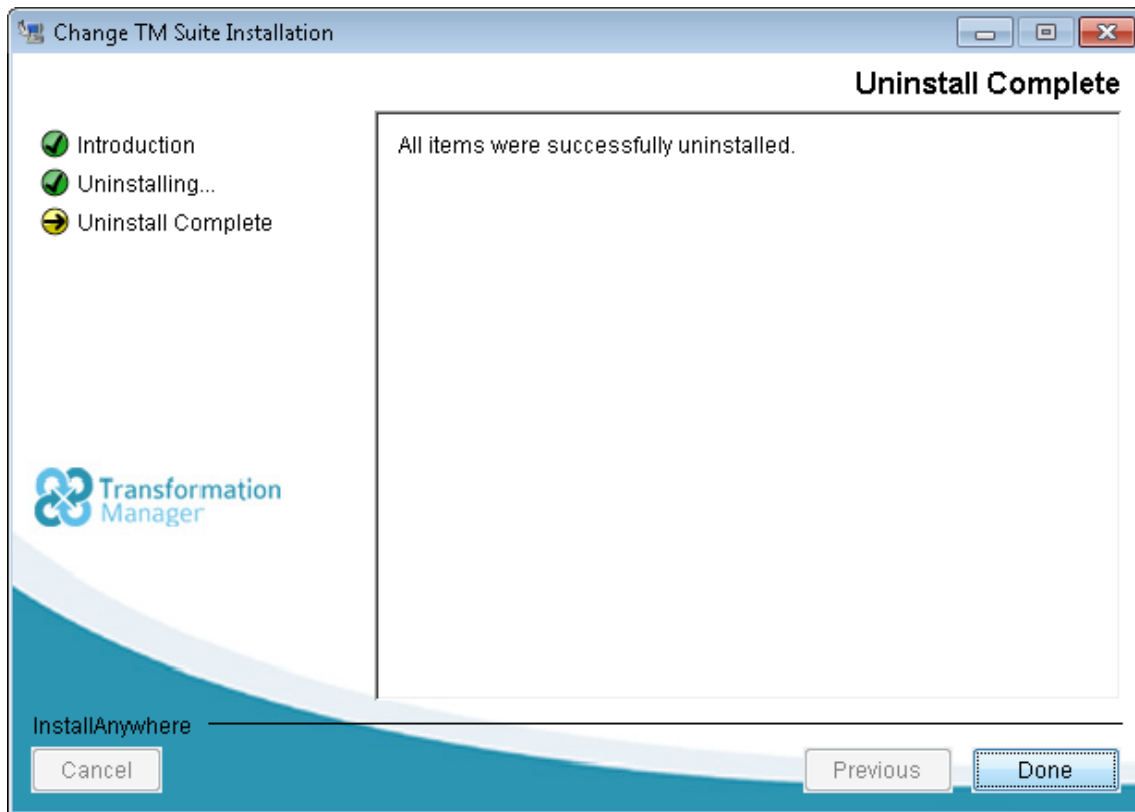
Click once on the [Done] button to complete the application uninstall process.

To remove Transformation Manager entirely however, you will need to remove the Transformation Manager directory containing user data. On Windows 7 and Windows Vista this is at **C:\Users\<User>\TM** and on Windows XP is at **C:\Documents and Settings\<User>\TM**. Removing this directory will delete all project and setting information for Transformation Manager.

Repositories outside the installation directory, for example an Oracle repository, must also be deleted manually if the projects and models they contain are no longer required.

To keep projects, backup the files in **C:\Program Files\TM\repositories** before removing the installation directory.