

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------



DDMoRe Standalone Execution Environment (SEE) Version 1.2.0 Installation Guide

Completion of the following signature blocks signifies the approver has read, understands, and agrees with the content of this document.

Name	Job Title or Role	Signature	Date (dd-mmm-yyyy)
The Author is signing to indicate that there is the appropriate technical accuracy and completeness			
Authored by: Mats Rogalski	Senior Developer	Authored	08-Dec-2015
Reviewed by: Jonathan Chard	DDMoRe Technical Architect	Reviewed	10-Dec-2015
<<The Technical Lead is signing to indicate that the coverage and completeness of the technical detail is appropriate and that the document has been prepared in accordance with applicable quality processes >>			
Approved by: Richard Kaye	Technical Lead	Approved	10-Dec-2015
<<The Project Manager/Director is signing to confirm that this document has been prepared in accordance with an approved document management process, that content is consistent with the deliverable definition found in the governing Plan, that relevant input from authors has been included and that an appropriate review / editing process has been conducted.>>			
Approved by: Jonathan Chard	Mango Product Director	Approved	10-Dec-2015

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

Contents

1	Revision history	3
2	Glossary	4
3	Introduction	5
3.1	Overview	5
3.2	Scope	5
4	Software Installation	6
4.1	Environment requirements	6
4.2	Installation pre-requisites	6
4.2.1	Configuration of localhost	6
4.2.2	Availability of required ports	7
4.2.3	Dependent Software	8
4.2.4	Deployment Mechanism	8
4.2.5	Deployment Environment	8
5	Installing the SEE.....	9
6	Using the installer package	10
6.1	Downloading the SEE Installer	10
6.2	Running the SEE Installer	12
6.3	Downloading and Installing NONMEM	12
7	Downloading the complete 'pre-built' package	13
7.1	Downloading and Installing the 'pre-built' package	13
7.2	Downloading and Installing NONMEM	15
8	Downloading and Installing NONMEM	16
9	Post-Installation Configuration	18
9.1	Licences	18
9.2	Additional software to be installed for Monolix and MixLibrary	18
9.2.1	Windows 7, 8 and 10 32-bit and 64-bit	18
9.2.2	Windows XP 32bit and 64bit	18
10	Verification of Software Installation	19
10.1	Starting up the SEE Package	19
10.2	Verifying the SEE Package	21
10.3	Shutting down the SEE Package	22
11	What next?	24
11.1	Receiving support for this release	24

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

1 Revision history

Version	Prepared by	Date (dd-mmm-yyyy)	Details
1.0	Mats Rogalski	08-Dec-2015	Written for 1.2.0 SEE release. QAT-3858 covers review/approval history.

This copy printed: 11-Dec-2015

This document is based upon the template: 0105_05, ver 2.0 (16-Jul-2013)

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

2 Glossary

The following terms and abbreviations are used within this document:

Term	Description
IDE	Integrated Development Environment
CTS	Converter Toolbox Service
FIS	Framework Integration Service
MDL	Model Description Language
R	A programming language, available at https://www.r-project.org/
SEE	Standalone Execution Environment
TES	Task Execution Service

A complete glossary of terms is available from the [DDMoRe Consortium](http://www.ddmore.eu/) website at:
<http://www.ddmore.eu/instructions/mdl-user-guide>.

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

3 Introduction

This document details the recommended installation process for the DDMoRe Standalone Execution Environment (SEE) which is delivered as the Demonstrator 1.2.0 package.

3.1 Overview

The SEE provides a complete, standalone environment for performing modelling tasks using the DDMoRe MDL IDE, including translation to, and execution of, models with key tools.

The SEE includes the following elements:

- A bespoke IDE that supports development of models with MDL, that also incorporates an R console with the DDMoRe packages installed
- Translators from MDL to the following target languages:
 - o NM-TRAN
 - o MLXTRAN
- An instance of Monolix for running models, with a license that is valid until the 31st January 2016

NONMEM binaries that are preconfigured to use within the SEE are available directly from ICON and must be installed separately.

3.2 Scope

This document details the installation process for the DDMoRe Standalone Execution Environment (SEE) Demonstrator 1.2.0 package only. These installation instructions cannot be guaranteed to be valid for earlier or later versions of the SEE package.

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

4 Software Installation

The table below details the list of the software components and versions that will be installed by the installation process.

Software	Version
WP2 Framework Demonstrator software	1.2.0

For further details about the Demonstrator dependencies being installed and tools included in its plugins please refer to the README and *.info files located in the home folder of the installed SEE instance.

4.1 Environment requirements

The table below details the minimum environmental requirements for the software, in particular operating systems, available memory and disk space for installation / operation.

Operating System	Windows 7, SP1 or above
Number & speed of CPUs	Dual-core Intel i5 or above (or equivalent)
Available memory	2GB minimum - 4GB ideally
Available disk space	4GB minimum

4.2 Installation pre-requisites

4.2.1 Configuration of localhost

Note that this section describes changes that may be required to your system's 'hosts' file. Editing this file requires Administrator privileges. If you do not have these privileges or are unsure how to proceed, please contact your IT department.

During alpha testing, we have encountered instances when running Windows virtual machines (VMs) on non-Windows platforms, whereby the MDL-IDE could not communicate with the service that executes tasks because the operating system was referring to the host computer rather than the virtual machine itself. If you are not running in a virtual machine then this section probably does not apply to you.

This can be corrected by altering the setting of "localhost" to point to the IP address 127.0.0.1.

To check this setting, edit the file `C:\Windows\System32\drivers\etc\hosts`. If there is no setting for localhost, or it is commented out as shown below (i.e. the line starts with a '#'), everything should work as expected.

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

```
# Copyright (c) 1993-2009 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97       rhino.acme.com           # source server
#       38.25.63.10      x.acme.com             # x client host
#
# localhost name resolution is handled within DNS itself.
#   127.0.0.1          localhost
#   ::1                localhost
```

If the localhost setting is not commented out and is not set to 127.0.0.1, then it will need to be changed or the DDMoRe Demonstrator software will not work. You may wish to contact your local system administrator if you are unsure about the status of your configuration. Following any changes, you may need to restart your machine to ensure that it is using the new setting of the IP address.

4.2.2 Availability of required ports

The server processes delivered with the SEE (FIS, CTS and TES) require a set of internal ports to be available for use so that they can communicate with each other. If these ports are being used by other processes (programs), then the servers will not be able to function correctly.

The Windows command 'netstat' can be used to check whether the required ports are available as detailed below.

1. Open a 'Command Prompt' window. To do this, from the Windows 'Start Menu', enter the text 'cmd.exe' in the 'Search programs and files' text box and click on the offered program
2. In the 'Command Prompt' window type the command *netstat -a*. Output similar to that shown below should be displayed.

```
C:\>netstat -a

Active Connections

Proto Local Address          Foreign Address        State
TCP   0.0.0.0:80              RKAYE:0                LISTENING
TCP   0.0.0.0:135             RKAYE:0                LISTENING
TCP   0.0.0.0:443             RKAYE:0                LISTENING
TCP   0.0.0.0:445             RKAYE:0                LISTENING
TCP   0.0.0.0:623             RKAYE:0                LISTENING
TCP   0.0.0.0:1110            RKAYE:0                LISTENING
TCP   0.0.0.0:5357            RKAYE:0                LISTENING
TCP   0.0.0.0:16992           RKAYE:0                LISTENING
TCP   0.0.0.0:24224           RKAYE:0                LISTENING
TCP   0.0.0.0:42073           RKAYE:0                LISTENING
TCP   0.0.0.0:49152           RKAYE:0                LISTENING
TCP   0.0.0.0:49153           RKAYE:0                LISTENING
TCP   0.0.0.0:49154           RKAYE:0                LISTENING
TCP   0.0.0.0:49158           RKAYE:0                LISTENING
TCP   0.0.0.0:49184           RKAYE:0                LISTENING
TCP   0.0.0.0:49191           RKAYE:0                LISTENING
TCP   127.0.0.1:1110          RKAYE:49467            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49469            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49471            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49473            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49475            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49477            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49479            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49481            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49483            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49485            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49487            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49489            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49491            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49493            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49496            TIME_WAIT
TCP   127.0.0.1:1110          RKAYE:49498            TIME_WAIT
```

3. In the Local Address column, all the internal ports that are currently in use are listed. For the SEE to function correctly, a number of specific ports need to be available. If NONE of the following ports appear in the Local Address column, it is safe to continue with the SEE installation. If ANY of the following ports appear in the Local Address column please post a comment on the relevant DDMoRe Forum (<http://www.ddmore.eu/forum/beta-release-installation>) requesting further advice and we will respond as soon as possible:
- a) TCP 0.0.0.0:9000
 - b) TCP 0.0.0.0:9010
 - c) TCP 0.0.0.0:9020
 - d) TCP 127.0.0.1:9011
 - e) TCP 127.0.0.1:9021

4.2.3 Dependent Software

No dependent software is required prior to installing this item.

4.2.4 Deployment Mechanism

The SEE is shipped as a zip that can be extracted to a location specified by the user and run without configuration steps.

The SEE includes the Java Runtime Environment (JRE) for either 32-bit or 64-bit Windows depending on the version of the installation package selected. These JREs are used to run Java-based utilities included in the system.

4.2.5 Deployment Environment

The supported deployment environment is Windows 7, but has been successfully run on Windows XP, and Windows 8 and 10.

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

5 Installing the SEE

Two distinct mechanisms have been developed for installing the SEE:

1. Using the installer package
2. Downloading the complete 'pre-built' package

Option 1 offers greater flexibility as it can be used to customise an SEE instance and add further functionality at a later date. As the installer downloads the various components of the SEE separately, and offers the facility to restart an interrupted installation, it is useful for users with a slower or less reliable internet connection. However, this installer will not execute successfully when internet access is configured to route through a proxy, which may be the case in many commercial environments.

Option 2 offers a simplified installation process at the expense of a large download which may take a significant amount of time. This option does execute successfully when internet access is configured to route through a proxy and works best when combined with a fast and reliable internet connection.

Instructions for installing the SEE using both of the above options are detailed in the following two sections.


If you are unsure whether you have any environmental constraint that means you specifically need to choose one rather than the other of the above options, please contact your IT department.

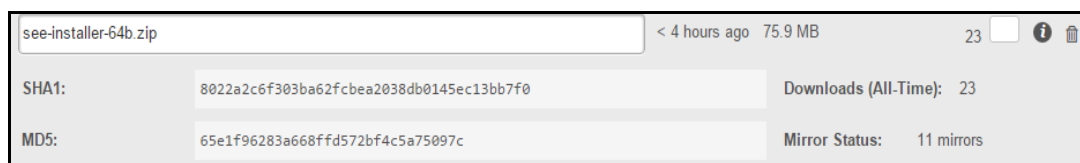
Note that *either* Section 6 or Section 7 should be followed, not both. Also note that the NONMEM binaries and licence need to be downloaded and installed as a separate step, described in section 8.

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

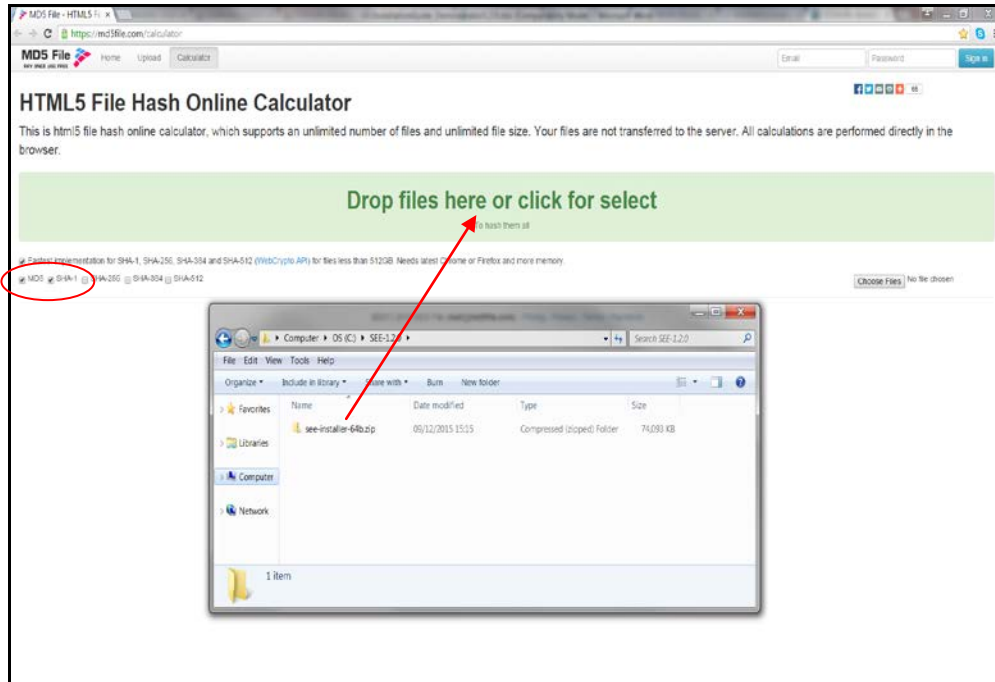
6 Using the installer package

6.1 Downloading the SEE Installer

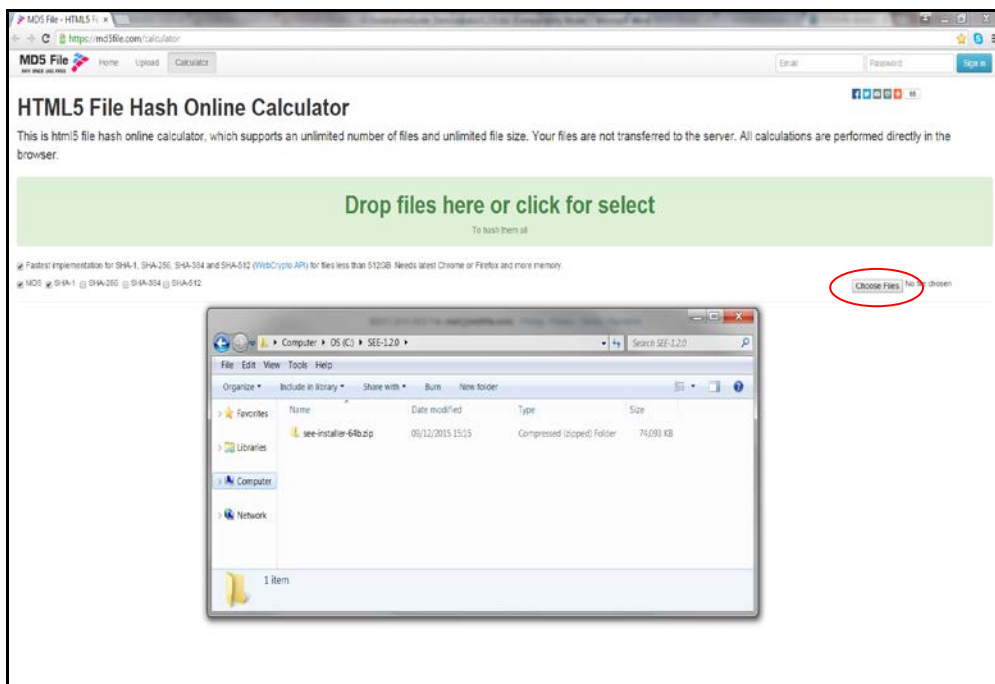
1. Navigate to the URL:
 - a) <https://sourceforge.net/projects/ddmore/files/install/SEE/Demonstrator-1.2.0/see-installer>
2. Locate the required SEE package. *If you are unsure whether you should download the 64-bit or 32-bit installer please contact your IT department, or use the instructions at <http://windows.microsoft.com/en-gb/windows/32-bit-and-64-bit-windows#1TC=windows-7> to find out:*
 - a) see-installer-64b.zip for 64-bit systems or
 - b) see-installer-32b.zip for 32-bit systems (NB. The 32-bit installer will be released shortly after the 64-bit installer, so if you do not see it, check back in a couple of days)
3. Download the required SEE installer package by clicking on the required SEE installer package name
4. Check the integrity of the download - NB. this step is not required, but if you encounter problems during installation, then perform these steps to make sure that the package was downloaded correctly:
 - a) Next to the required SEE package, at the right-hand side of the screen is an Information button: 
 - b) Click on the Information button to reveal SHA1 and MD5 checksums for the SEE installer package:



- c) Make a note of these checksums. Note that the checksums may actually be longer than they are displayed on the screen. Clicking in the checksum box should display (and highlight) the complete checksum string
- d) To verify the integrity of the downloaded SEE installer package, follow the steps below:
 - (i) Navigate to the URL: <https://md5file.com/calculator>
 - (ii) Either drag the SEE installer zip file directly on to the green bar as shown below:



(iii) Or select the SEE installer zip file manually using the 'Choose Files' button as shown below:



- (iv) Note that if Internet Explorer is being used, the screen may look slightly different and the 'Choose Files' button may be labelled 'Browse'
- (v) Compare the generated MD5 and SHA1 checksums with those noted from the SourceForge download page in step 5
- (vi) If the checksums do not match, please try downloading the SEE installer package again. If the same problem occurs, please post a comment on the relevant DDMoRe Forum (<http://www.ddmore.eu/forum/beta-release->

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

[installation](#)) requesting further advice and we will respond as soon as possible

- Unzip the SEE installer package to a local folder (eg C:\see-installer). **Note that this folder must not include spaces, and it must be a short path (< 50 characters) to avoid Windows path length issues arising from the deeply-nested structure of the SEE installation.** From here on in this guide, this folder is referred to as <SEE_INSTALLER_HOME> and any references to this location should be replaced with the actual folder path selected (eg C:\see-installer).

6.2 Running the SEE Installer

The SEE installer allows the user to select which third-party tool-specific modules should be included in their SEE instance. For more details and examples please refer to the README file in the <SEE_INSTALLER_HOME> folder. The guide below details the most generic scenario whereby the user requests a full SEE installation consisting of all available SEE modules.

- Open a 'Command Prompt' window. To do this, from the Windows 'Start Menu', enter the text 'cmd.exe' in the 'Search programs and files' text box and click on the offered program
- In the 'Command Prompt' window navigate to the <SEE_INSTALLER_HOME> folder (e.g. 'cd <SEE_INSTALLER_HOME>')
- Invoke the SEE installer, requesting it to build an SEE including all modules under a location of your preference, e.g. 'see.bat build full -in c:\see-full'
- Wait until the see.bat script completes - this may take a while. You should be presented with the message similar to the one in the screenshot below:

```

Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\mrogalski>cd ..

C:\Users>cd ..

C:\>cd see-installer

C:\see-installer>see.bat build full -in c:\see-full
Refreshing Cache
Performing Installation
This will take a while (even 2h if full installation was requested)
See C:\see-installer\installer.log for more detailed progress
-----
INSTALLATION SUCCESS
-----

C:\see-installer>

```

Note: From here on in this guide, this folder containing the installed SEE is referred to as <SEE_HOME> and any references to this location should be replaced with the actual folder path selected (eg C:\see-full).

The downloaded components are stored in the <SEE_INSTALLER_HOME> folder - this may be deleted to free up space if you wish, although if you will run it again later to update your installation, these components will need to be downloaded again.

6.3 Downloading and Installing NONMEM


At this point the SEE is ready to be used, except that NONMEM is not installed. See Section 8 for instructions on how to add NONMEM to your SEE installation.

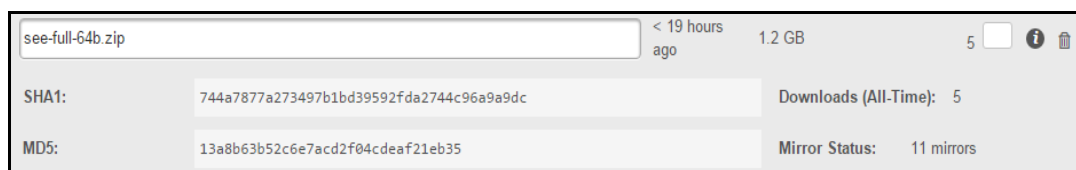
Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

7 Downloading the complete 'pre-built' package

Skip this section if you have already installed the SEE by following the instructions in section 6.

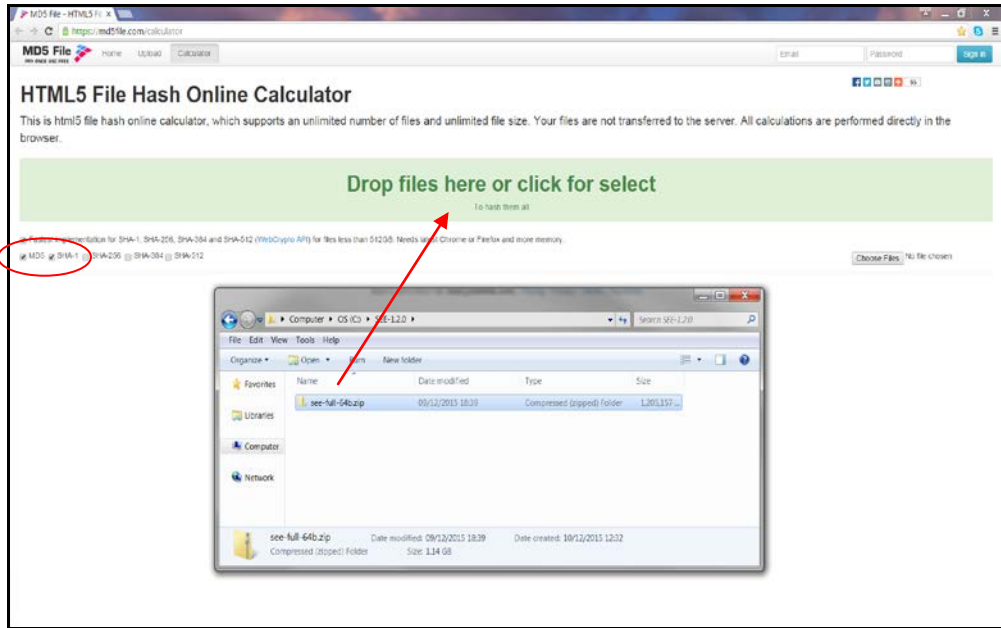
7.1 Downloading and Installing the 'pre-built' package

1. Navigate to the URL:
 - a) <https://sourceforge.net/projects/ddmore/files/install/SEE/Demonstrator-1.2.0>
2. Locate the required SEE package. *If you are unsure whether you should download the 64-bit or 32-bit installer please contact your IT department, or use the instructions at <http://windows.microsoft.com/en-gb/windows/32-bit-and-64-bit-windows#1TC=windows-7> to find out:*
 - a) see-full-64b.zip for 64-bit systems or
 - b) see-full-32b.zip for 32-bit systems (NB. The 32-bit installer will be released shortly after the 64-bit installer, so if you do not see it, check back in a couple of days)
3. Download the required SEE package by clicking on the required SEE package name
4. Check the integrity of the download - NB. this step is not required, but if you encounter problems during installation, then perform these steps to make sure that the package was downloaded correctly:
 - a) Next to the required SEE package, at the right-hand side of the screen is an Information button: 
 - b) Click on the Information button to reveal SHA1 and MD5 checksums for the SEE installer package:

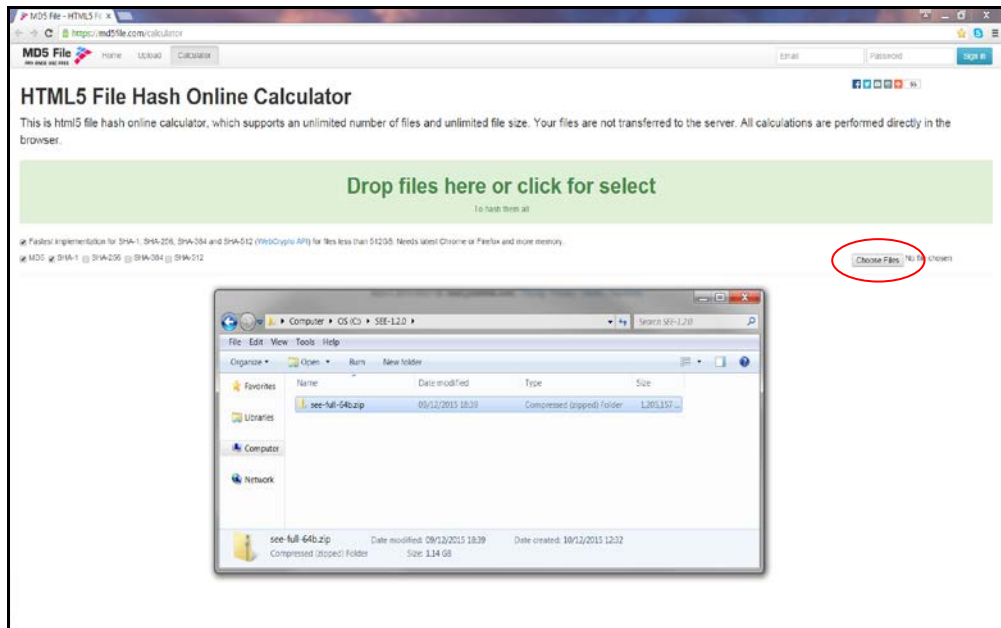


- c) Make a note of these checksums as they will be used later to verify the integrity of the SEE package download. Note that the checksums may actually be longer than they are displayed on the screen. Clicking in the checksum box should display (and highlight) the complete checksum string
 - d) To verify the integrity of the downloaded SEE package follow the steps below:
 - (i) Navigate to the URL: <https://md5file.com/calculator>
 - (ii) Ensure the MD5 and SHA-1 checkboxes are selected and either drag the SEE zip file directly on to the green bar as shown below:

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------



(iii) Or select the SEE zip file manually using the 'Choose Files' button as shown below:



(iv) Note that if Internet Explorer is being used, the screen may look slightly different and the 'Choose Files' button may be labelled 'Browse'

(v) Compare the generated MD5 and SHA1 checksums with those noted from the SourceForge download page in step 5

(vi) If the checksums do not match, please try downloading the SEE package again. If the same problem occurs, please post a comment on the relevant DDMoRe Forum (<http://www.ddmore.eu/forum/beta-release-installation>) requesting further advice and we will respond as soon as possible

5. Unzip the SEE package to a local folder (eg C:\see-full). **Note that this folder must not include spaces, and it must be a short path (< 50 characters) to avoid Windows path length issues arising from the deeply-nested structure of the SEE installation.** From

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

here on in this guide, this folder is referred to as <SEE_HOME> and any references to this location should be replaced with the actual folder path selected (e.g. C:\see-full).

7.2 Downloading and Installing NONMEM

At the point the SEE is ready to be used, except that NONMEM is not installed. See Section 8 for instructions on how to add NONMEM to your SEE installation.

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

8 Downloading and Installing NONMEM

The NONMEM binaries are hosted on ICON's website in a password protected zip file. Additionally, an optional temporary (45 day) NONMEM licence is available to DDMoRe users if they do not already have one.

To gain access to these, send an email to IDSSoftware@iconplc.com containing the text shown below. Select the relevant text if you just need the binaries, or if you need the binaries and the temporary licence. The requested information will then be sent by return email.

Access to NONMEM binaries only - use this if you already have a NONMEM license

To: IDSSoftware@iconplc.com

Title: Request for password to use NONMEM with the DDMoRe Interoperability Framework

Dear Customer Service Lead

I am interested in testing the DDMoRe Interoperability Framework with NONMEM. I presently have a NONMEM license, and I would like to obtain the link and password for the relevant bundled NONMEM software for use in the framework. I understand I can copy my NONMEM license from my existing NONMEM installation (either local or enterprise) into the SEE 'nm_7.3.0_g\license' directory, as detailed in the DDMoRe SEE Installation Guide. So long as I do not use the DDMoRe/NONMEM environment for production use, and only for testing for a period of 45 days, I understand that it does not count against the usage limit of my existing NONMEM license, unless my existing license already permits me to run NONMEM in the environment into which I will be deploying the DDMoRe framework.

Get access to NONMEM binaries, and a temporary NONMEM licence

To: IDSSoftware@iconplc.com

Title: Request for password and temporary license to use NONMEM with the DDMoRe Interoperability Framework

Dear Customer Service Lead

I am interested in testing the DDMoRe Interoperability Framework with NONMEM. I do not presently have a NONMEM license, and I would like to obtain both a 45 day NONMEM trial license to use with the DDMoRe Interoperability Framework, and the link and password for the relevant bundled NONMEM installation software. I will place the license in the SEE 'nm_7.3.0_g\license' directory as detailed in the DDMoRe SEE Installation Guide. I shall not use the product for production use, but only for testing. After the 45 days, I have the option to purchase a yearly renewable license, which will allow me to use the DDMoRe/NONMEM environment for production purposes.

Once you have received the relevant email from ICON, follow the steps below to install NONMEM into the SEE:

1. Click on the provided link to download the NONMEM binaries zip file which will be called *nm_7.3.0_gp.zip*. This may take 5-10 minutes
2. Unzip this file, entering the provided password when prompted, and place the resulting file (which will itself also be a zip file, this time called *nm_7.3.0_g.zip*), into the <SEE_HOME> folder

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

3. Navigate to the <SEE_HOME> folder and double-click on the *InstallNonmem.bat* script. This may take 5-10 minutes. Once it completes, you should be presented with a screen similar to that shown below:

A screenshot of a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The window contains the following text:

```
Installing NONMEM...  
Extracting C:\SEE-1.2.0-PUBLIC_RELEASE\see-installer\SEE\nm_7.3.0_g.zip...  
NONMEM installed successfully.  
Press any key to continue . . .
```

Your NONMEM installation is now complete.

Note that you need to copy your NONMEM license into the NONMEM installation folder for NONMEM to run successfully, as described in section 9.1

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

9 Post-Installation Configuration

9.1 Licences

Necessary licence files for the software to be executed need to be installed. Install your licences as follows:

- a) For NONMEM, copy your licence file into the following location. This can be a license that you have already, or could have been sent to you in response to the email you sent in section 8:
 1. <SEE_HOME>\nm_7.3.0_g\license
- b) For Monolix, the licence is pre-installed and no further action is required
- c) For Mixlibrary, the licence is pre-installed and no further action is required

Note that both the NONMEM and Monolix licences supplied for use with the DDMoRe Interoperability Framework are temporary (approx. 45 days). When these licences have expired, you can apply for a full commercial licence by sending an email request to the following addresses:

1. For NONMEM, email IDSSoftware@iconplc.com
2. For Monolix, email license@lixoft.com

9.2 Additional software to be installed for Monolix and MixLibrary

If Monolix or MixLibrary (Simulx) executions are to be performed, then the relevant Visual C++ Redistributables need to be manually installed if necessary. The installation files are provided in the Monolix folder of the SEE, and the redistributables to install will depend on the O/S and the architecture as detailed below.

To install these, double-click on the executable(s) detailed in the following sections. Note that an installation dialog will not necessarily pop up; the software should still have been installed, and can be verified by checking the Control Panel "Programs and Features" / "Add or Remove Programs" (depending on your version of Windows). Check for the presence of "Microsoft Visual C++ 20xx Redistributable" where "xx" is 05, 08 and/or 10 as appropriate.

9.2.1 Windows 7, 8 and 10 32-bit and 64-bit

If you are running Windows 7 or higher, install both of the following:

The Visual C++ 2005 Redistributables:

<SEE_HOME>\Monolix432s\tools\mcr\v79\bin\win32\vcredist_x86.exe

The Visual C++ 2010 Redistributables:

<SEE_HOME>\Monolix432s\tools\mcr\vc\vs2010\vcredist_x86.exe

9.2.2 Windows XP 32bit and 64bit

If you are running Windows XP, install all of the following:

The Visual C++ 2005 Redistributables:

<SEE_HOME>\Monolix432s\tools\mcr\v79\bin\win32\vcredist_x86.exe

The Visual C++ 2008 Redistributables:

<SEE_HOME>\Monolix432s\tools\mcr\vc\vs2008\vcredist_x86.exe

The Visual C++ 2010 Redistributables:

<SEE_HOME>\Monolix432s\tools\mcr\vc\vs2010\vcredist_x86.exe

Mango Solutions - Company Confidential	
Filename: SEEInstallationGuide_Demonstrator1.2.0.doc	Page 18 of 24

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

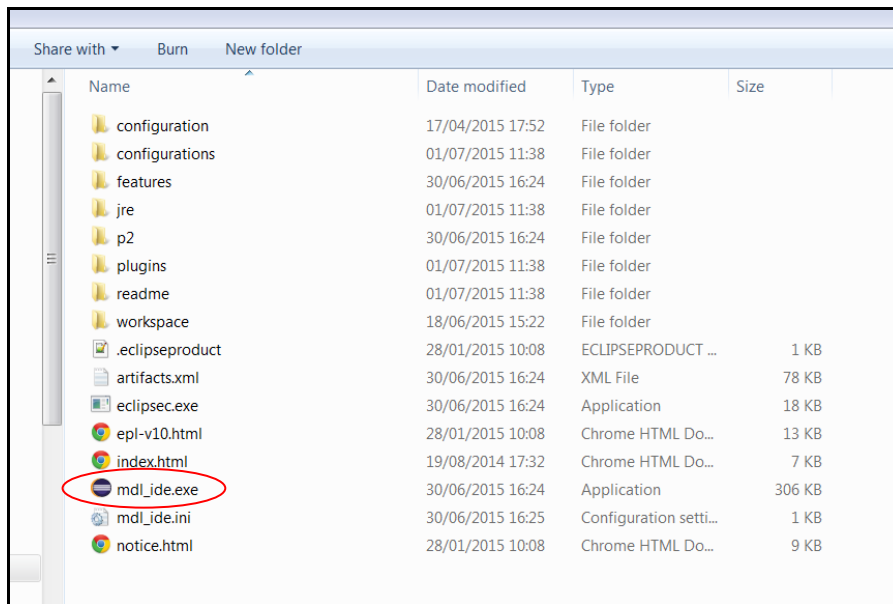
10 Verification of Software Installation

These post-installation tasks ensure the installed software is performing to specification.

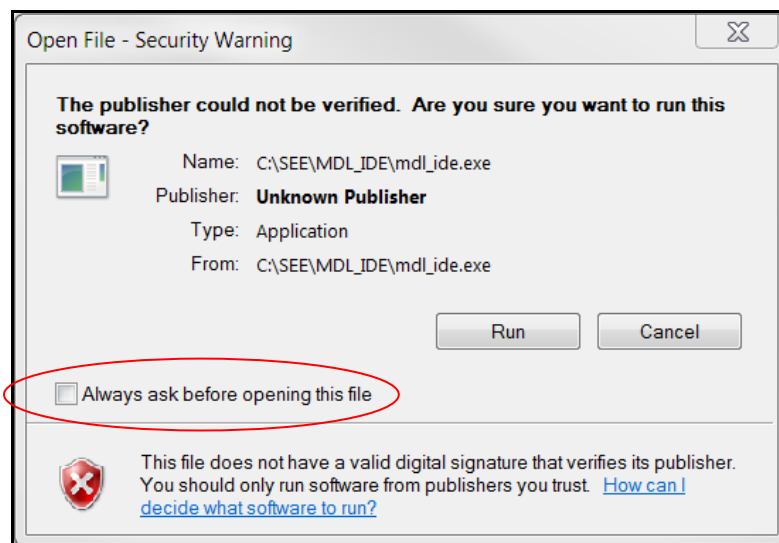
10.1 Starting up the SEE Package

To start up the SEE package follow the steps below:

1. Navigate to the folder <SEE_HOME>\MDL_IDE
2. Double-click on the file mdl_ide.exe as shown below:



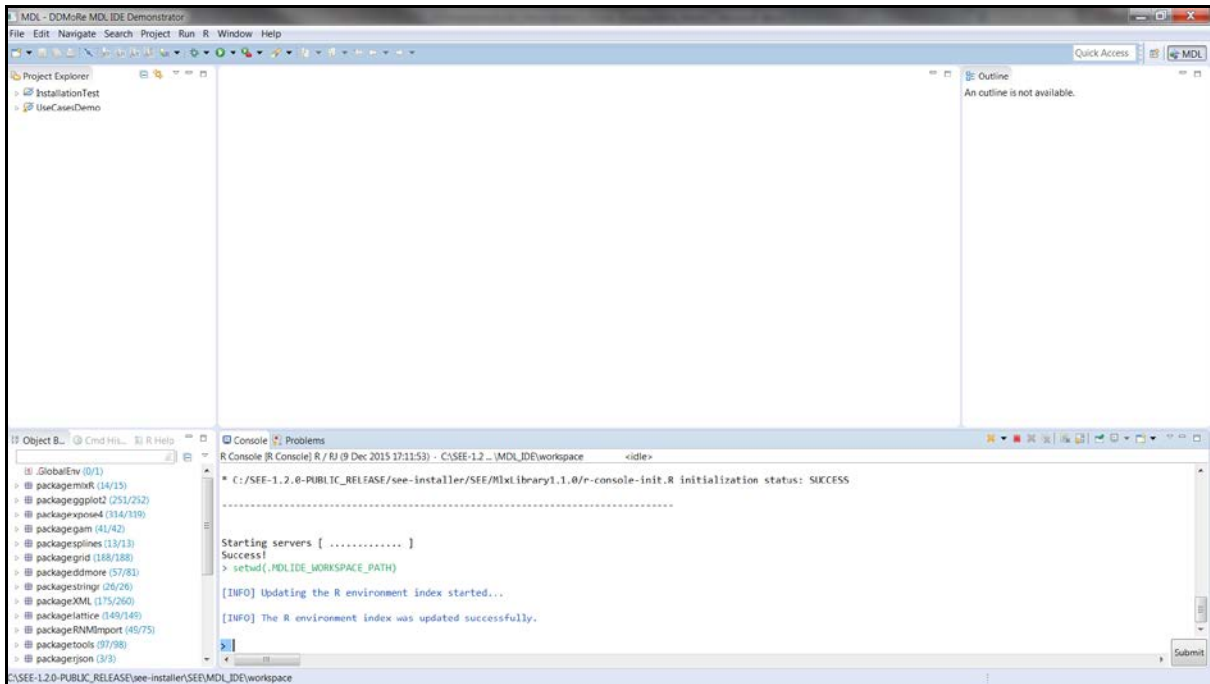
- a) A 'Security Warning' dialog may be presented as shown below as verified publisher details have not been embedded in the MDL IDE in this release. Ensure that the 'Always ask before opening this file' checkbox is *not* ticked and select 'Run'.



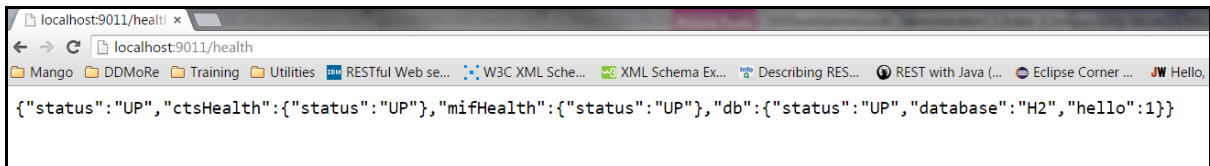
- b) The R Console will be automatically created. The server processes (FIS, CTS and TES) will also be automatically started. Wait until the message 'Success!' is

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

displayed in the R console and the text <idle> is displayed in the R console title bar. The screen should then look similar to that shown below:

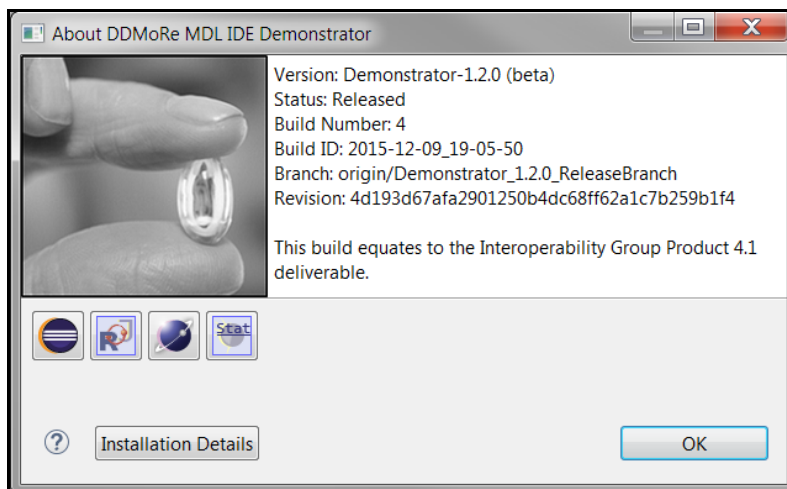


To check that the server processes have started up correctly, type the URL <http://localhost:9011/health> into a web browser. This should return a page as shown below:



To check that the correct version of the MDL IDE has been installed, follow the steps below:

- a) select 'Help->About DDMoRe MDL IDE Demonstrator' from the MDL IDE main menu
- b) the 'About DDMoRe MDL IDE Demonstrator' screen should be displayed as shown below:



Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

- c) Verify that the Build Number and Build ID match those as shown above

Please refer to <https://sourceforge.net/projects/ddmore/files/install/SEE/Demonstrator-1.2.0/resources> for additional documentation and resources.

10.2 Verifying the SEE Package

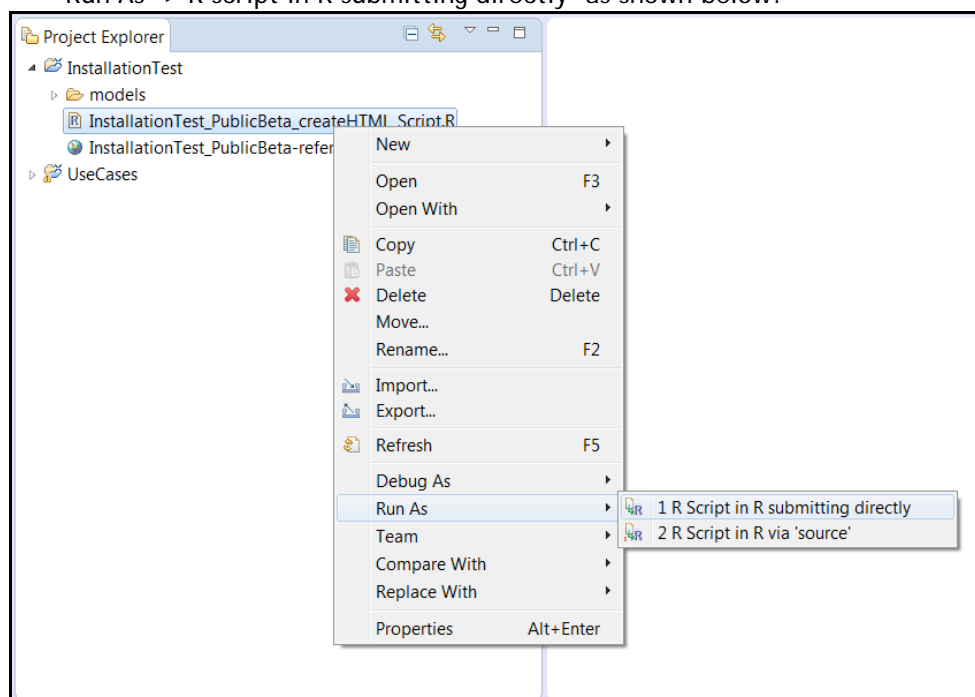
A pre-configured project, *InstallationTest*, has been included in the MDL IDE. This project can be used to run tasks against Monolix, NONMEM and Simulx, and generates an HTML report of the results. These results can then be evaluated against a reference set that are also included in the project.

Assuming that:

1. Section 6 or 7 has been followed (to install the framework)
2. NONMEM has added to the installation (section 8)
3. The NONMEM licenses have been copied into the correct location (Section 9.1)

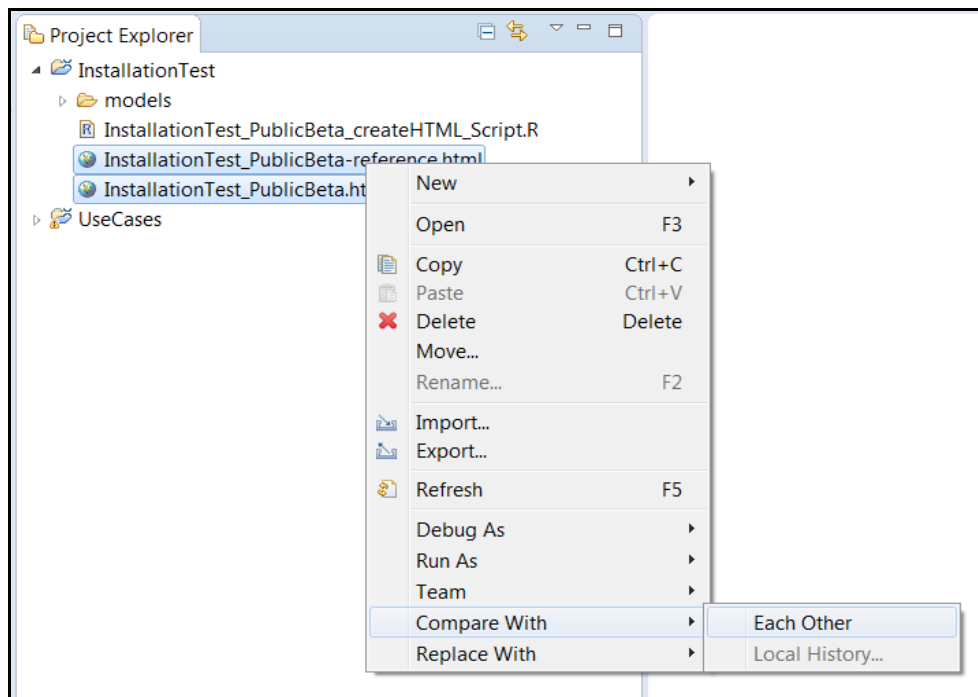
Then the SEE package can be validated by following the steps below:

1. Open the *InstallationTest* project by double-clicking on the project name in the Project Explorer window
2. Right-click on the script *InstallationTest_PublicBeta_createHTML_Script.R* and then select 'Run As' -> 'R script in R submitting directly' as shown below:



- a) This will start the script running in the R Console. It should take around 5-10 minutes to complete. Once it has finished (the word '<idle>' appears in the title bar of the R Console) a file *InstallationTest_PublicBeta.html* should be created in the same folder as the script
3. To check that your installation has been successful, compare the *InstallationTest_PublicBeta.html* file with the *InstallationTest_PublicBeta_Reference.html* file. This can be done by clicking on the *InstallationTest_PublicBeta.html* file (it should become highlighted) and then holding down the CTRL key and clicking on the *InstallationTest_PublicBeta_Reference.html* file (it should also become highlighted). With the mouse pointer over one of the highlighted file names, right-click and then select 'Compare With' -> 'Each Other' as shown below:

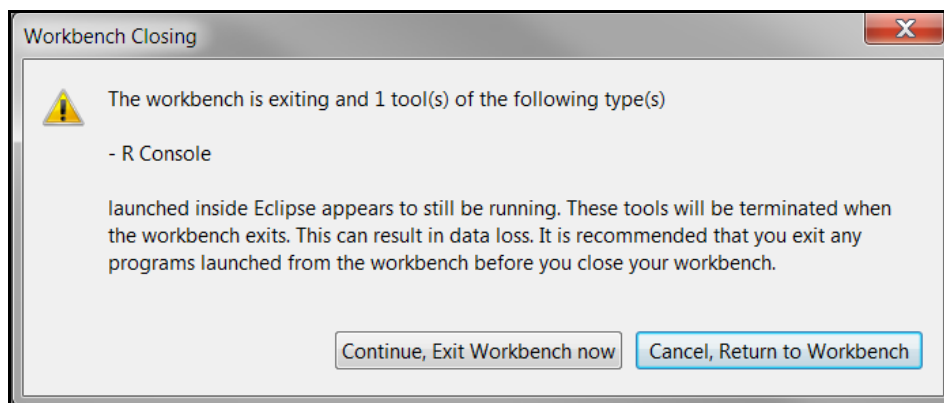
Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------




- a) The selected files should be shown side-by-side with any differences highlighted. It is safe to ignore any date/time, job ID or filepath location differences, but any discrepancies in the population parameters (within a reasonable tolerance) should be investigated.

10.3 Shutting down the SEE Package

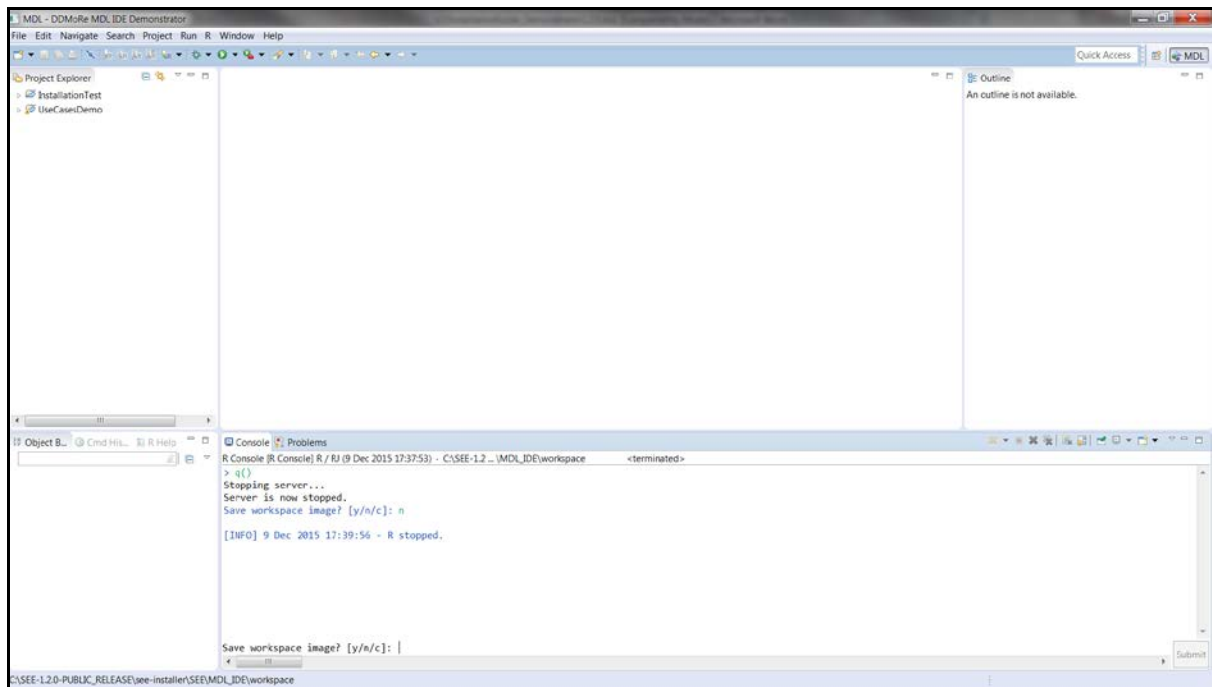
1. When shutting down the MDL IDE a 'Workbench Closing' screen may be displayed as shown below:



2. This means that the R Console and the server processes (FIS, CTS and TES) are still running. To avoid the possibility of these processes using up valuable resources on the machine, they should be safely shut down. This can be done as follows:
3. Select the 'Cancel, Return to Workbench' option on the 'Workbench Closing' screen
4. Select the 'Terminate' button on the R Console title bar: 
5. The message 'Server is now stopped' will be displayed in the R Console and you will be asked if you wish to save the workspace image:

Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

- a) if you select yes (y) or no (n), the message 'R stopped' will be displayed in the R console and the text <terminated> will be displayed in the R console title bar. The screen should look as shown below and it is now safe to close the MDL IDE:



- b) if you select cancel (c) and you wish to continue working with the SEE, you will need to restart the server processes by calling the function: *DDMORE.startServer(DDMORE.getServer())* from the R Console

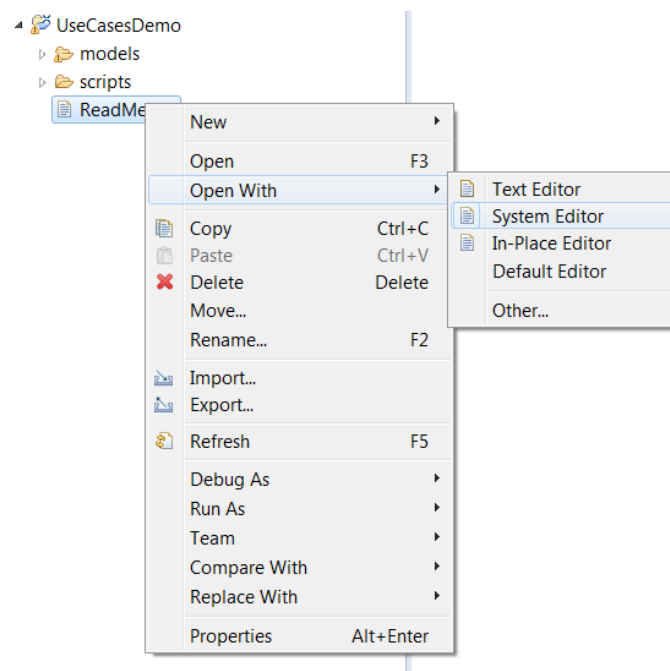
Title: Installation Guide SEE Version 1.2.0	Project/Product: DDMoRe 2107	Date: 08-Dec-2015	Version: 1.0	Status: Approved
---------------------------------------------------	---------------------------------	----------------------	-----------------	---------------------

11 What next?

An additional pre-configured project, *UseCasesDemo*, has been included in the MDL IDE. This project includes examples of a number of model forms encoded using the latest MDL grammar. Along with the collection of MDL models, a set of R scripts have been prepared to illustrate how these models can be used in a M&S workflow using the *ddmore* R package.

All the R scripts have been commented to guide the user through the code and provide information regarding the new functions written by the DDMoRe Consortium. Additional information on each of the functions can be obtained by using the usual R help mechanisms.

For further information and instructions on running the scripts, please see the ReadMe.pdf file in the top-level folder of the *UseCasesDemo* project. Note that the easiest way to open this file is to right-click on it and select 'Open With->System Editor' as show below:



11.1 Receiving support for this release

To receive support with the installation and/or use of this software release, please post questions or comments to the relevant DDMoRe Forum:

1. Installation issues/questions/comments: <http://www.ddmore.eu/forum/beta-release-installation>
2. Usage issues/questions/comments: <http://www.ddmore.eu/forum/beta-release-usage>