INSTALLATION NOTES

PHASTTM & SAFETITM

Taking hazard and risk analysis one step further

These installation notes apply to:
Safeti Offshore 7.6 and
Safeti Offshore Viewer 7.6

Version: 7.6 Date: May 2019



Reference to part of this report which may lead to misinterpretation is not permissible.					
Date: May 2019					
Prepared by: DNV GL – Digital Solutions					
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These application installation notes apply to version 7.6 of Safeti Offshore and Safeti Offshore Viewer.

1 WHAT'S IN THIS SHIPMENT

This shipment includes the following:

- The product is released as a single-file setup_x64.exe for version 7.6 of the application, related documentation and Licence Manager installation.
- Depending on your status as a new or existing user, and your agreement concerning hardware and software licensing, there may be a USB security key (sometimes called a dongle) included in this shipment which will need inserting to the USB port of your PC after the full installation is made.

If anything is missing from your package please contact your local sales and support office or DNV GL – Digital Solutions Support (Software.Support@dnvgl.com).

1.1 Single-File Installer

The single-file setup_x64.exe is issued for ease of distribution for example to reduce the size of the download.

2 SYSTEM REQUIREMENTS

The recommended specification for version 7.6 is as follows:

Operating system	Windows 7 SP1, Windows 8, Windows 8.1 and Windows 10 (64-bit version).	
	Windows 8, 8.1 and Windows 10 with latest Windows Updates and Windows	
	Security patches.	
Internet Browser	IE 7.0x or later. This does not have to be set as your default browser, but you	
	must have at least this version installed to run the program.	
Display	1024x768 resolution or higher, 1920x1080 (recommended)	
Screen colour	65536 (16-bit) and higher	
depth		
СРИ	64-bit CPU from Intel or AMD (for example Intel Core2 Duo)	
Media	DVD-ROM drive or internet connection	
Pointing device	MS Mouse or compatible	
Video card	Any CUDA 8 compatible video card recommended with "compute capability	
	3.0" or higher. See https://en.wikipedia.org/wiki/CUDA for more information.	
Microsoft Excel	Safeti Offshore: requires Excel	
Microsoft Access	Safeti Offshore: requires Access	

No Citrix, Microsoft, Oracle VirtualBox, VMware virtualisation tools, e.g. XP mode on Windows7, are supported.

2.1 Recommended Processor Speed and Memory

Recommended and (Minimum) CPU	Recommended and (Minimum Spare) Memory
Intel i5 2.5 GHz (Intel Core2 Duo 2.2 GHz)	8GB (2GB)

Minimum values are based on acceptable behaviour. Depending on your needs you may consider selecting a more powerful machine. Though not recommended, earlier processors may perform acceptably for certain tasks provided they have a processor speed enabling comparable performance to the newer chips specified above. (E.g. Pentium D 3.2 GHz)

2.2 Hard Disk Requirements

The application consumes up to 3.5 GB of free disk space on a standard Windows 7 SP1 machine. Depending on your system, the amount of disk space required may be smaller or larger.

While running the application, many more gigabytes of free disk space may be needed to successfully run calculations and produce reports.

3 DETAILS OF THE INSTALLATION PROCESS

In order to install the program, you must have administration rights for the machine. Contact your System Administrator to check whether you have administration rights, or to obtain these rights.

However, the application does not require the users to have any administration rights. It is recommended that users are part of the standard Windows Normal User Group while running the application.

To avoid installation failures and before starting the installation, there are several issues to be aware of. These are listed in the next section and refer to sections detailed later in this document. The remaining part details the installation stages.

3.1 Things to Be Aware Of

There are several issues which users and administrators should be aware of before installing version 7.6 of the application:

- Windows Updates
- Windows 8 and 8.1, Windows 10 and later versions issues
- Reboot required on Windows 10 after the installation
- Licence Manager needs to be Upgraded
- Installation of older versions
- Installation location
- Installation timeout
- File Permissions and User Rights
- Installation whilst the User is not connected to the Organisation Network
- Virtualisation
- USB Security Key inserted before the application is installed
- Licence Manager Needs to Be Upgraded

See the section <u>Known Issues</u> for more information on the above subjects. Before running the installation, it is recommended you read the Known Issues section.

3.2 The Main Installation Stages

This section describes the stages in the installation after clicking on the main installation link from the installation page, the file setup_x64.exe.

The dialogs below may look slightly different on your system depending on the operating system and localization (e.g. English, Chinese, Spanish, etc.).

Setup_x64.exe purpose

The program setup_x64.exe checks your system, starts to install any pre-requisites (required third-party components) not already on the machine and finally runs the version 7.6 of the main installation. A failure to run setup_x64.exe and proceed directly to the main installation will result in an installation failure.

Your system may already have some of the third-party components installed; in this case, this

installation step will not be performed. Some systems may require a reboot during the pre-requisite installation phase. In this case reboot when prompted (the installation process will continue as soon the PC has rebooted and the **same** user has logged in.

The following steps are for a system running an English 64-bit Windows 10 Enterprise with no additional software and took 15 minutes to run through on a machine with Intel i7 3.5GHz and 8GB RAM.

Main installation on Windows 8 and later

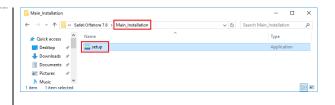
In order to install version 7.6 on Windows 8 and later a step described in the section <u>Windows 8 and 8.1, Windows 10 and later versions issues</u> is required before the main installation is started.

Start the installation

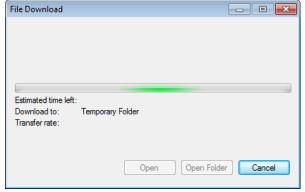
Start the installation process by double-clicking on the setup_x64.exe file

Depending on your setting the file may be displayed as Setup (without the file extension .exe).

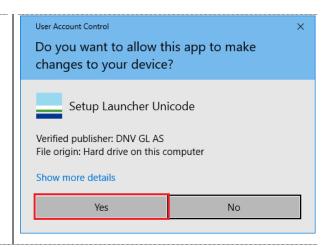
Security Warning from double-clicking on the file Setup (Setup_x64.exe) from File Explorer







This step may take several minutes and may not occur on some operating systems.



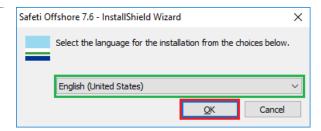
If prompted, accept to run this software by clicking on Run.

These messages may not be displayed on your system depending on your operating system settings.

Selection of the Installation Language

Currently only English, Chinese and Spanish are provided.

Note: This selection does not configure the language displays from the application. This is done through the application itself.



Setup_x64.exe will start the installation of each third-party component in order. The system may prompt you to reboot and some security warning messages may appear on Windows 7 and later versions on the operating system security level setting. On some operating systems the whole process takes up to 30 minutes.

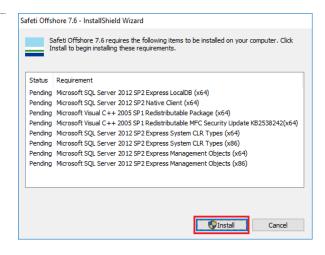
Pre-Requisites to Install

Depending on the system, more or fewer items may be listed in the dialog.

Click on Install to proceed.

Note 1: If all the items were already installed, this step will be skipped and please proceed to *Start of the Installation*

Note 2: The listed pre-requisites may vary depending on your system.



User Account Control Prompt

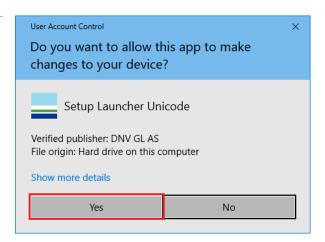
In Windows 7 and later versions, any installation step must be approved. Failure to click Yes within 90 seconds will lead to an installation failure as described in the section Known Issues.

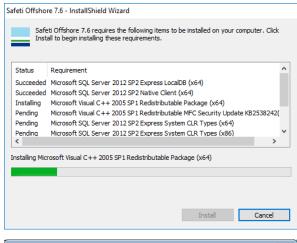
Click on Yes to continue with the pre-requisite installation.

Note: if you were prompted to reboot, when the installation restarts after rebooting, you will also get this message. In this case please click on Yes.

Pre-Requisites Installations

There is no need for any interaction. Clicking on Cancel would abort and reverse the current prerequisite installation and the overall installation will be aborted.





Reboot Prompt

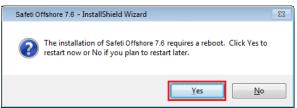
Some installation steps force a reboot.

Note 1: When the machine is running again, please log in as the same user in order for setup to restart for the remaining steps which may be some more pre-requisites (see above for the relevant steps) or for the main installation (described below).

Note 2: several reboots may be necessary on some operating systems before the full install is done.

Click on Yes to reboot.

After all pre-requisites are installed, the main installation will automatically start.



Start of the Main Installation

First the Windows Installer copies the installation file locally.



Welcome Dialog

The first dialog tells you that the main installation is preparing for the installation process. It calculates space requirements, whether the operating system is supported and if the pre-requisites exist; this step may take several seconds. The section Known Issues mentions some of the messages raised at this stage.

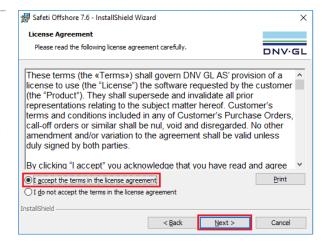
When the preparation is complete, the Next > button will become enabled, and you must click on this to proceed to the next stage of the installation.



License Agreement Dialog

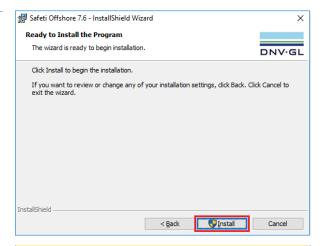
The next dialog contains the licence agreement. You must read it and register your acceptance of the agreement by selecting the option I accept the terms in the license agreement. You can select and copy the text and paste it into a word-processing program or Notepad in order to save it into a file, alternatively print it out by clicking on Print if you want a hard copy.

Once you have clicked on the "I accept..." option, the Next > button will become enabled, and you can proceed to the next stage.



Ready to Install the Program

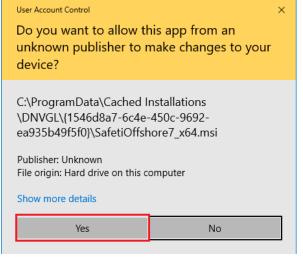
Click on Install to start the installation.



User Account Control Prompt

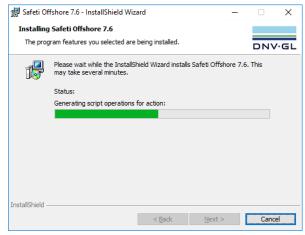
On Windows 7 and later versions, any installation step must be approved. Failure to click Yes within 90 seconds will lead to installation failure as described in the section Known Issues.

Click on Yes to continue with the installation.



Installation Progress Dialog

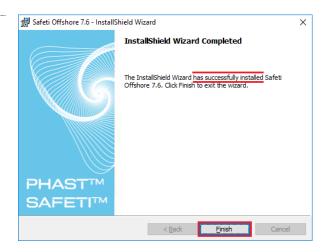
During the installation, a dialog with a progress bar is displayed. If you must abort the installation, please click on Cancel.



Completed Dialog

The last screen in the installation tells you that the process is complete. Check that the text explicitly says "successfully installed". The Completed dialog looks very similar in case of installation failure (see for example the section Installation timeout).

Click on Finish to close the dialog.



3.3 Do I Need to Obtain A Licence to Run 7.6?

Unless you, or someone in your organisation, have already requested a licence valid for the computer, you will need a new licence.

The application has been improved and will assist you in setting up a licence. The next section details the various licensing steps that are required to activate the application.

4 SETTING UP A LICENCE

Any licences from versions of the application prior to 7.0 are not compatible with version 7.6. You (or the System Administrator) must obtain a licence file for version 7.6, as described in the next section.

You will not need to request a licence file if:

- 1. You already have a valid licence of version 7.6 for Safeti Offshore. Or:
- 2. The Licensing has already been set up by the System Administrator
 - Some types of licence¹ are specific to a machine and all licensing is handled locally on that
 machine. If you have arranged with DNV GL Digital Solutions to use this type of licence, you
 would normally set up the licensing yourself on your machine.
 - Other types of licence are specific to a Security Key (sometimes called a dongle) that can be
 moved between machines or are handled by a network server and not by the individual
 machines that are running the application. For these types of licence, the System
 Administrator may handle the process of obtaining the licence file from DNV GL Digital
 Solutions, and then making the file available to users of the application.

The process of requesting a licence file is described in the next sections.

If you are going to use a file supplied by your System Administrator, you can omit the stage of requesting a licence file and proceed immediately to the final stage: <u>running the application to import the licence file</u>.

¹ Licence types are *Floating (sometimes called Concurrent)*, *Standalone* and *Security Key. Floating* and *Standalone* licences are called *Network* licences in this document and they require specific setting as described in the section Setting a Windows Service. A *Network* licence file contains the line "VENDOR dnvslm".

4.1 Request A Licence File

The following process is a simplified version of a normal licence request process for Windows 7. The process for other operating systems may vary. You do not need any specific user rights to perform it.

Start the application

To start version 7.6:

- on Windows 10, click on Windows Start button, click on All apps, proceed to DNV GL - Software, expend the list and click on the application shortcut.
- On Windows 8.1 and earlier, click on the Windows Start button highlighted, click on All Programs, proceed to DNV GL -Software, expand the version 7.6 folders of the application and click on the application shortcut.

NOTE 1: On Windows 8.1 and early versions, the application shortcut for Safeti Offshore it is under Safeti Offshore 7.6

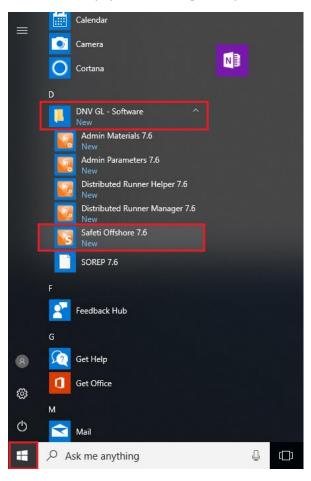
NOTE 2: To request Safeti Offshore Licence you must start Safeti Offshore.

NOTE 3: the following steps are for Phast licences, requesting Safeti Offshore Licences have similar steps.

Request a Licence

If you already have a licence file, please move further down to the next section <u>Importing a licence file</u>.

Otherwise click on the "Request a licence" button.





Specify Required Licences

A new dialog will open with the option of selecting the Licences required.

Please tick the licence(s) required from the list.

Please note that the options available depends on the product installed and the started application.

Send Request and Save Request to Disk

Once you have selected the required licences there are two options available depending on how you intend to send the licence details. You can either email the request or save the request to disk and send it later.

Save Request to Disk

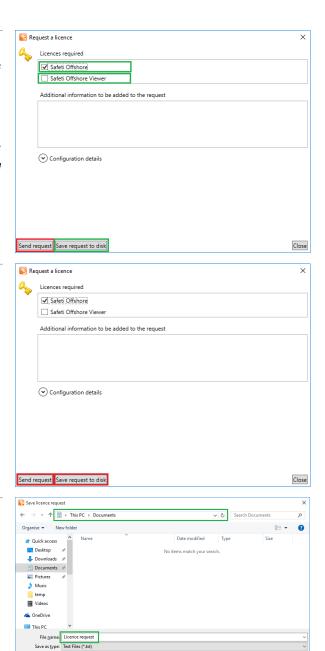
If you are unable to email, then you can choose to Save request to disk and this will save the Configuration Details to a local folder or drive. This can then be transferred or processed later.

NOTE: Before, clicking on Save, please record the file name and location for future reference.

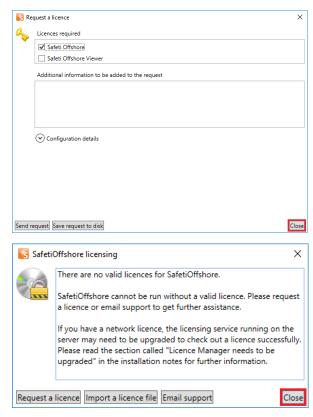
Emailing the Licence Request

Depending on your selected option, do not forget to email the request to DNV GL - Digital Solutions Support

(Software.Support@dnvgl.com).



Close the Dialogs and Wait for the Licence to Arrive



4.2 Importing A Licence File

If Necessary, Start the application

To start version 7.6:

- on Windows 10, click on Windows Start button, click on All apps, proceed to DNV GL - Software, expend the list and click on the application shortcut.
- On Windows 8.1 and earlier, click on the Windows Start button highlighted, click on All Programs, proceed to DNV GL -Software, expand the version 7.6 folders of the application and click on the application shortcut.

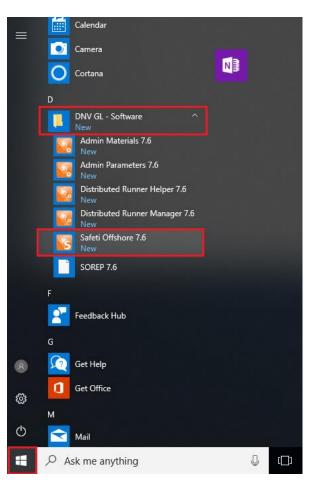
NOTE 1: On Windows 8.1 and early versions, the application shortcut for Phast (and Phast Lite) is under Phast 7.6 folder, for Safeti (and Safeti Lite) is under Safeti 7.6 and for Safeti Offshore it is under Safeti Offshore 7.6.

NOTE 2: To import a Safeti Offsohore licence you must start Safeti Offshore.

NOTE 3: the following steps are for Phast licences, importing a Safeti Licence has similar steps it.

Importing a Licence

To import a licence please click on Import a licence file



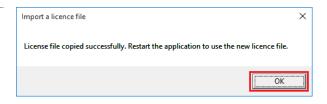


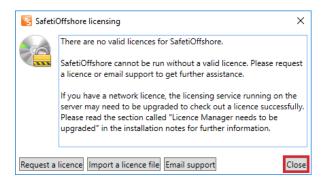
Browse to a Licence File

Then browse to the licence file and click Open to import.



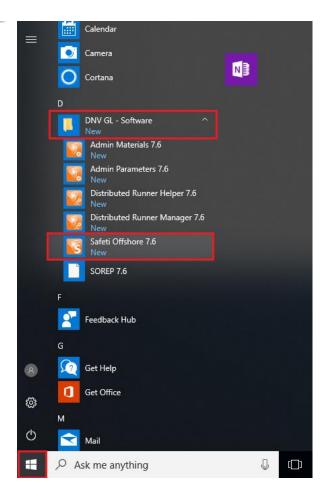
Close the Dialogs





Restart the application (Optional)

If the licence is valid for this computer, the application should start without prompting for a licence. If not, please contact DNV GL - Digital Solutions Support for advice (Software.Support@dnvgl.com).

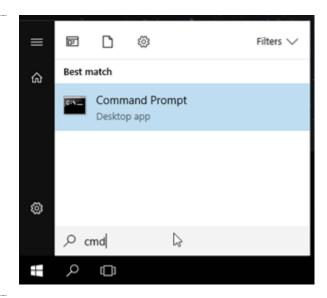


4.3 USB Licence Dongles

To improve licensing our technology has been upgraded. All users with USB licence dongles will need to update their driver before using the new version of our applications. To do this you may ask your IT department to do the following actions or if you would prefer to do them yourself you will need local administration rights.

Open a command prompt

In the Start menu type cmd and click on Command Prompt

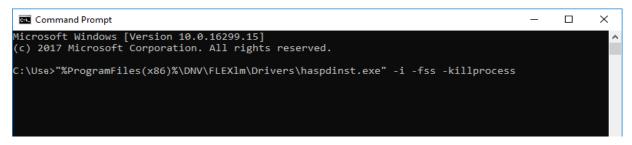


Install driver

Type the command appropriate to your operating system.

For users of 64-bit operating systems:

"%ProgramFiles(x86)%\DNV\FLEXIm\Drivers\haspdinst.exe" -i -fss -killprocess



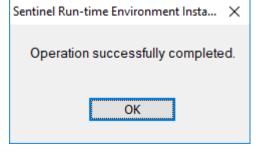
During driver installation

A small window will appear during the driver installation

Sentinel Run-time Environment Install... Please wait .

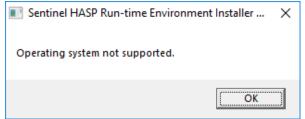
After successful installation

On successful completion of the driver installation a message dialog will pop up for you to OK



Possible error

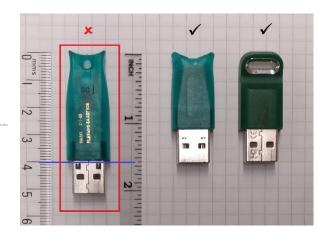
An error will occur if you haven't installed 7.6 before running this upgrade. In this instance please contact DNV GL - Digital Solutions Support for advice (Software.Support@dnvgl.com)



Known issue - you may need to request a new dongle

The dongle type with 4cm (1.5") long green handle (labelled FLEXID 9-6) is no longer supported and will not work with the latest version. Contact support if you have this type of dongle (Software.Support@dnvgl.com).

The more recent dongles with a 2.5cm (1") long handle are valid and do not need replacement.



4.4 Setting A Windows Service for Concurrent Licences

In order to run Flexera's LMTools, you must have administration rights for the machine. Contact your System Administrator to check whether you have administration rights, or to obtain these rights.

This step is only necessary for *Network*¹ licences and generally made on a server and not on a user's PC.

You should not perform the following steps if your licence is a Security Key or Standalone licence.

IMPORTANT NOTE: The Licence Manager is installed from a separate installer. Please look at the install.html file from the DVD for details. A specific installation notes document is also included. The section assumes the Licence Manager is installed.

Known issue

The licensing manager running on the server must be upgraded in order for the 7.6 release to check out a license successfully. Please read the section <u>LICENCE MANAGER NEEDS TO BE UPGRADED</u> for more details.

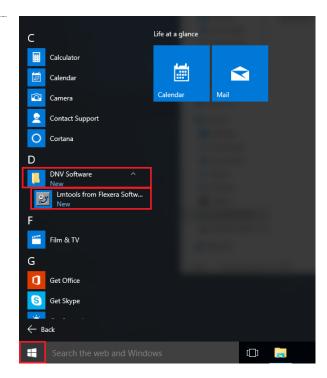
Start the Advanced Tool: LMTools

Depending on your operating system, LMTools is available from

64-bit OS:

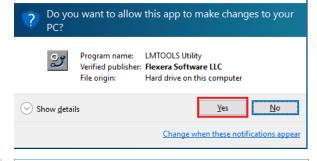
C:\Program Files (x86)\DNV\FLEXIm\Utils

If you have run Licence Manager Installer, a shortcut is created in the Start Programs as shown on the right.



If prompted, accept the User Account Control

If you have not been granted the proper admin rights, you may be prompted to an administrator's name and password instead.



User Account Control

LMTools from Flexera Software (formerly Macrovision)

Select Configuration Using Services

If there are any services in the list, please contact DNV GL - Digital Solutions Support for advice. (Software.Support@dnvgl.com).

Click on the tab Config Services in order to enter the service details

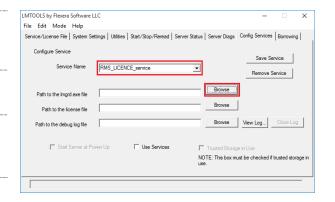
LMTOOLS by Flexers Software LLC File Edit Mode Help Service/Libers Fe System Settings | Utilities | Start/Stop/Reread | Server Status | Server Diags | Config Services | Somowing | Services allow Restricts Services to run in the background. Server Lat C Configuration using License File C Configuration using Services LMTOOLS ignores license file path environment variables

Define the Licensing Service Name

Either:

- Select from the dropdown list RMS_LICENCE_service or
- Type RMS_LICENCE_service if the name does not exist (please note the British spelling).

Click on the first button Browse in order to



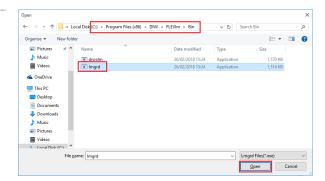
specify the location of the Imgrd.exe file

Select Application Imgrd File Location

The application Imgrd file (sometimes displayed as Imgrd.exe) is in

64-bit OS

C:\Program Files (x86)\DNV\FLEXIm\Bin



Click on Open to select the Imgrd file and return to LMTools.

Specify the Licence File Location

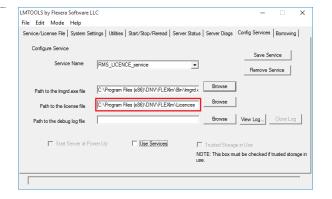
- Select and copy from the field "path to the Imgrd file" entered from the previous step
- Paste it into the field "Path to the licence file"
- Replace Bin\Imgrd.exe with Licences (please note the British spelling)

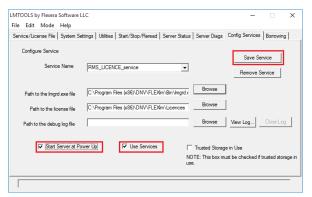
Note: Clicking on *Browse* is not recommended as browse can only select a file not a path.

Select the Service Activation

- Tick-mark Use Services
- Tick-mark Start Server at Power Up

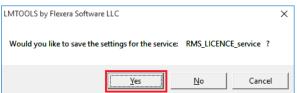
Click on Save Service to create the service





Accept to Save the Settings

Click on Yes to save the settings



Start the Service

- Click on the tab Start/Stop/Reread
- Select the service RMS_LICENCE_service
 Click on Start Server to start the service

Check the Service Status

Check whether the service started successfully. If not please double-check the service settings made in this section.

- Otherwise your system is configured for managing the licence.
- In case of failure, please contact DNV GL
 Digital Solutions Support for advice.
 (Software.Support@dnvgl.com).

Click on the top right button to exit from LMTools.

Optional Additional Check

Most of the time, LMTools reports a successful start. However, the related processes may fail due to various reasons (such as an invalid licence file or conflicting service setting). It may take a minute for all the processes to be active.

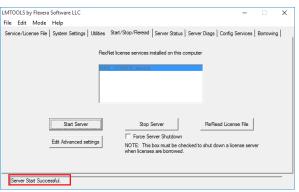
It is worth checking that all processes are running using Windows Task Manager.

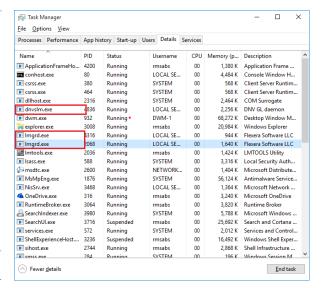
Three processes should be running as shown on the right in the tab Processes:

- Two Imgrd.exes and
- One dnvslm.exe

If dnvslm.exe does not appear after a minute, please contact DNV GL - Digital Solutions Support (Software.Support@dnvgl.com).

Click on the top right button to exit from Task Manager.





5 SHARED ADMINISTRATION FILES

This section explains the specific configurations that may be necessary based on your standard, project needs or practices.

Prior versions provided a standalone installation for the Administration Files. This option was not flexible enough for some customers' needs. Version 7.6 supports various alternatives.

There are typically three types of files:

- 1. Supporting files: These files should not be changed.
- 2. Parameter files: Changing them may allow user to select non-standard parameter values such as the specific local atmospheric pressure.
- 3. Material files: Some material data may need to be changed to reflect your organisation's specific or agreed values (e.g. for the constituents of a mixture).

Changing from the standard configuration requires a common location (typically a network folder) and a specific setting to inform version 7.6 where the files are located.

The default Administration Files location is C:\ProgramData\DNVGL\Safeti_Phast_7_6_0\Admin on Windows 7 and later versions (on older systems this is

C:\Documents and Settings\All users\AppData\DNVGL\Safeti_Phast_7_6_0\Admin).

5.1 Various Administration Files Configurations

The main installation includes the Administration Files. However, based on your standards, project needs and practices the default location for these files may not be appropriate.

The following sections details two main types of administration files settings.

5.2 Use of The Standard Administration File

This setting is already implemented, there is nothing to change, the application can be used immediately after it has been installed and licenced. If any of these Administration Files should be transferred to another machine, the copy must be made manually. There is no control over any edit if the user knows the Administrator password.

5.3 Shared Administration Files

This setting requires specific actions (described later in this section) and a simple change of the application's configuration on each PC that needs to share these common files.

This setting can enforce corporate standards as every user of the application will share the same parameter and material data.

This type of setting also allows the Administration Files to be specific to a project.

Depending on the file permissions, e.g. set by IT engineers or knowledgeable people, only a specific person or group of people may be allowed to change these files even if the user knows the Administrator password.

However, depending on the method used to share the files, a disconnected PC may prevent the application from working. Several methods are listed below:

- 1. Shared folder: Administration files are copied to the shared folder which may have restricted write permission. The machine running version 7.6 must be connected to these administration files during the application and administrator tools execution. This is not a good option if some users must run the application offline i.e. not connected to the organisation network.
- 2. Synchronised folder: The administration files are located on the network and as soon as the user's machine is connected to the network any updated administration file is synchronised. This can be a two-way synchronisation or most probably one way (typically from the shared location to the local machine). The Administration Files location on the local machine can be the default location (in this case no specific application's configuration is necessary). This option allows the user machine to be disconnected from the corporate network.
 - Describing how to configure a file synchronisation tool is outside the scope of this document, please refer to your software or ask your IT Helpdesk for assistance.
- 3. Deployed Administration Files: IT use deployment technology to push updates to local user's machines. This can be an option if shared folder and synchronisation are not valid options. As getting IT involvement may be hard to push the update, this method is probably acceptable if the corporate-controlled files are rarely changed. The deployed Administration Files location on the local machine can be the default location (in this case no specific application's configuration step is necessary).

The following table offers a summary of the various options:

Option	Appropriate for	Specific setting
Standard configuration	The Administration Files used are local to the machine and any changes do not have to be spread to other machines running version 7.6	Changes must be manually copied to other machines
Project-based files	The Administration Files should be specific to a project and several projects may be running in parallel	User, knowledgeable user or IT may be able to configure the application to use the relevant Administration file set.
Corporate- controlled files	Only one set of Administration Files must be used throughout the organisation.	IT configures the application to use the approved shared folder through deployment technology.

The remaining sections described the specific setting for each of the above options and how to set a shared folder.

5.4 Standard Configuration

The application has already been configured to use this option. No changes must be made and the application can be run immediately.

Project-based files and Corporate-controlled files Configurations

The configuration is done in two main steps:

- 1. Copy the Standard Administration Files to the shared folder
- 2. Configure the application to use the shared Administration Files

5.5 Copying the Standard Administration Files to The Shared Folder

Both project-based and corporate-controlled administration files must have a defined network folder. Defining, creating a shared folder and drive mapping are outside the scope of this document (please ask your IT Helpdesk for assistance).

This document assumes the shared folder is mapped as P:\. Please adjust the remaining steps to match your specific environment.

The standard location of the default Administration Files is:

%ProgramData%\DNVGL\Safeti_Phast_7_6_0\Admin

In the case of a special operating system configuration another location may have been used, please ask your IT Helpdesk for help.

Note: C:\ProgramData is a hidden folder.

The new folder's location may vary, dependent on your own IT policies and preferences, but a sensible name may help to maintain and identify it. It is suggested that the sub-path Safeti_Phast_7_6_0\Admin is kept. For project-based versions the use of a specific project share or sub-path is recommended like ProjectNNN\Safeti_Phast_7_6_0\Admin. In the following example the shared drive letter is P: (for Projects) which is a specific share for ProjectNNN.

The DOS commands are for a standard English Windows 7 installation:

MKDIR P:\Safeti_Phast_7_6_0\Admin

COPY %ProgramData%\DNVGL\Safeti_Phast_7_6_0\Admin P:\Safeti_Phast_7_6_0\Admin

```
ACWindows\System32\cmd.exe

Microsoft Windows [Version 10.0.16209.15]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Temp MKDIR P:\Safeti_Phast_7_6_0\Admin

C:\Temp MKDIR P:\Safeti_Phast_7_6_0\Admin

C:\Temp MKDIR P:\Safeti_Phast_7_6_0\Admin

C:\Temp MKDIR P:\Safeti_Phast_7_6_0\Admin

C:\ProgramData\DINVG(\Safeti_Phast_7_6_0\Admin)

C:\ProgramData\DINVG(\Safeti_Phast_
```

The number of files copied depends on the product being installed.

Additional folder/file settings may be required to control who can edit these files. Please use file properties

or ask your IT Helpdesk for assistance.

5.6 Set The Application to Use The Shared Administration Files

This step is to inform version 7.6 to use the shared Administration Files location instead of the standard path.

This step is not necessary if the files are synchronised and deployed to the default location.

When the application starts, it reads the file PhastPreferences.xml in the standard Administrator Files location for the actual location. The file PhastPreferences.xml is in:

- Windows 7 and later versions: C:\ProgramData\DNVGL\Safeti_Phast_7_6_0\Admin
- Older OS:
 C:\Documents and Settings\All users\AppData\DNVGL\Safeti_Phast_7_6_0\Admin

In the case of a special operating system configuration another location may have been used, please ask your IT Helpdesk for help.

Note: C:\ProgramData is hidden folder.

To specify a non-standard location that is to state the shared folder for version 7.6 of the application, the file PhastPreferences.xml is edited and the non-standard location of the shared Administration Files inserted in between the highlighted property <admin-folder></admin-folder> (the property may have been replaced by <admin-folder />, in this case you must replace it with its expended string <admin-folder></admin-folder> before editing the property as described below):

In our example, the property in the file

C:\ProgramData\DNVGL\Safeti_Phast_7_6_0\Admin\PhastPreferences.xml content will become (as shown in the picture below):

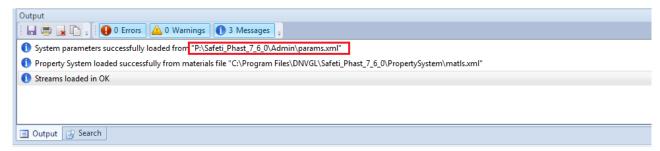
<admin-folder>P:\Safeti Phast 7 6 0</admin-folder>

For enforced corporate-controlled Administration Files, the file PhastParameters.xml can be deployed from the corporate IT system (SMS, Active directory, etc.).

For project-based Administration Files, a person or a group of people or even any project team member can edit the file to specify the location of the project-based Administration Files.

As soon as the application or any Admin Tools (Admin Parameters and Admin Materials) is restarted, the

new location will be used, and this can be checked from the output pane as shown below:



5.7 How to Restore The Original Standard Administration Files

Restoring the administration files to their original version including the location of the Administration Files is done by copying the files in the References\Admin folder from the application folder to the standard administration files location.

By default, the application folder is for:

C:\Program Files\DNVGL\Safeti_Phast_7_6_0

The Standard Administration Files location is:

- Windows 7 and later versions: C:\ProgramData\DNVGL\Safeti_Phast_7_6_0\Admin
- Older OS:
 C:\Documents and Settings\All users\AppData\DNVGL\Safeti_Phast_7_6_0\Admin

It is highly recommended that the files in the Standard Administration Files location are backed up before overwriting them.

First, if the common Administration Files were deployed or synchronised (for details, see the section Shared Administration Files in this document), the method for sharing must be undone; for example the synchronisation method must be stopped.

For a standard 64-bit Windows 7, the two commands are (where the COPY command is over one single line, is shown on the screen dump image below):

ATTRIB -R "C:\ProgramData\DNVGL\Safeti Phast 7 6 0\Admin*.*"

COPY /Y "C:\Program Files\DNVGL\Safeti_Phast_7_6_0\References\Admin" "%ProgramData%\DNVGL\Safeti_Phast_7_6_0\Admin"

ATTRIB -R "C:\ProgramData\DNVGL\Safeti Phast 7 6 0\Admin*.*"

```
C:\Temp\ATTRIB -R "C:\ProgramData\DNVGL\Safeti_Phast_7_6_0\Admin\*.*"

C:\Temp\ATTRIB -R "C:\ProgramData\DNVGL\Safeti_Phast_7_6_0\Admin\*.*"

C:\Temp\ATTRIB -R "C:\Program Files\DNVGL\Safeti_Phast_7_6_0\References\Admin\Admin\Preferences\.xml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\Admin\Preferences\.xml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\Admin\Preferences\.xml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\Admin\Preferences\.xml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\nams\Lxml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\params\Lxml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\params\Lxml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\PhastAdmin\Parameters_\Lxml

C:\Program Files\UNVGL\Safeti_Phast_7_6_0\References\Admin\Phast\Long\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under\under
```

The number of files copied depends on the product being installed.

As soon as the application or any Admin Tools (Admin Parameters and Admin Materials) is restarted, the default location will be used, and this can be checked from the output pane as shown below:

6 SILENT INSTALLATION

For deployment in a corporate environment, it is possible to install the application in silent mode. In any case, the command must be "run as administrator".

To install the application in silent mode, run setup_x64.exe with the following parameters.

Setup x64.exe /s /w /l1033 /v" /passive"

The additional parameter for /I (the letter ell, not the digit one) can be 1033 (English), 1034 (Spanish) and 2052 (Chinese).

The exact details on the process, technology and the command to use are outside the scope of this document. From a standard DOS script, the typical command could be:

start /wait setup_x64.exe /s /w /l1033 /v" /passive"

7 REMOVING THE APPLICATION

Should it be necessary to uninstall version 7.6, the uninstallation must be performed in the correct order, to avoid possible problems when re-installing version 7.6 of the application or installing other versions of the application on the same computer.

The aim of this section is to list the steps required to perform a clean uninstallation of version 7.6. These steps are for a standard Windows 7 installation. Other operating systems may vary.

7.1 Steps to Follow For Uninstalling Version 7.6

If necessarily it is suggested that users seek the help of their IT administrator in performing the following procedures.

- 1. In the Windows Start menu launch the Control Panel and choose Uninstall a program.
- 2. Remove "Safeti Offshore 7.6"

8 KNOWN ISSUES

8.1 Installation of Older Versions

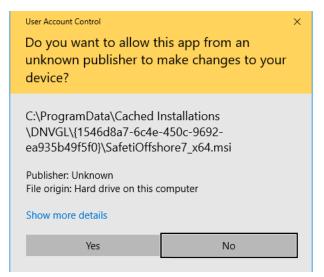
The installation of old versions must be done sequentially from the oldest to the newest. Failing to follow this principle may prevent further installations and/or uninstallations and render currently working versions unusable.

8.2 Installation Location

By default, the application is installed in "C:\Program Files\DNVGL\Safeti_Phast_7_6_0". Using the Installer, it is possible to specify a different path albeit it is not recommended as the application expects that its parent folder is "Safeti_Phast_7_6_0", for example the installation path D:\Folder\Safeti_Phast_7_6_0 is acceptable whereas D:\Folder or D:\Folder\Safeti_Phast_7_6_0 would cause the application to fail.

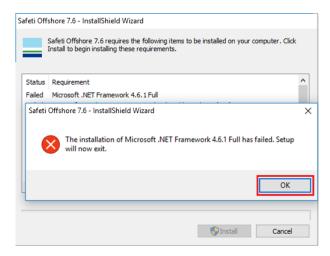
8.3 Installation Timeout

On Microsoft Windows 7 and later, each main installation step triggers a security message like:



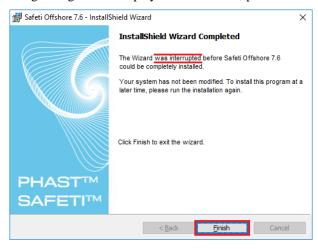
If this message is not acknowledged by clicking on Yes within 90 seconds, the installation will abort.

• During the pre-requisite installation, the following message will appear:



Click on OK to continue.

• During the main Installation, if the security warning is not acknowledged by clicking on Yes, the installation will abort and the following dialog will be displayed. To continue, please click on Finish.



In both cases, you will have to restart the main installation by clicking on setup_x64.exe again (or the main installation link from the installation page). Then the remaining pre-requisites (required third-party components) will be installed and the main installation will be called automatically.

8.4 File Permissions and User Rights

Version 7.6 requires three types of permissions and rights:

- System "administrator" rights for installing the software. This is a temporary requirement to allow the user to install the product. The user account can be assigned to an IT person or a normal user who is given administrator rights for the duration of the installation. When running the application, the user does not need any administrator rights.
- 'Full Access' to 'Authenticated Users' to the Study Folder Files Location, by default C:\Users\Public\Documents on windows 7 and later versions (C:\Documents and Setting\All Users\Documents on older operating systems). During the installation, the setup program sets the Study Folder Files Location correctly. However, if your organization has some special setting and enforces them, the setting may be overwritten, and the application will fail while processing a study file. Please contact DNV GL Digital Solutions Support (Software.Support@dnvgl.com) if you experience such a problem.

• By default, the application's Admin Files are installed in the "All Users" profile (C:\ProgramData\DNVGL\Safeti_Phast_7_6_0\Admin\ on Windows7 and more recent versions and C:\Documents and Settings\All Users\Application Data\DNVGL\Safeti_Phast_7_6_0\Admin\ on older operating systems), so any user of the PC can read and write (with an appropriate application's Administrator password) those files.

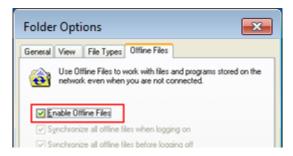
8.5 Installation Whilst The User Is Not Connected to The Organisation Network

Installation may fail if the user is working offline. In this case the installation will produce the following error or similar message:



There are various workarounds to overcome this issue:

- Connect to your network. If you are at your office, connecting to the missing network resource by joining your domain/network (plugging in an Ethernet cable or switching on your wireless connection) or if you are not in the office, using a Virtual Private Network connection over the internet will overcome the issue.
- In some cases, making offline files available can overcome the issue as it simulates the presence of the network resource when you are not connected to the network. To switch on Offline Files capability, start Windows File Explorer and choose the menu item Tools > Folder Options > Offline Files. Check the box Enable Offline Files.



You can then proceed with the installation. It is advisable to switch the unused offline files capability off again once version 7.6 is installed if it is not your usual practice.

8.6 Virtualisation

There are several issues with running version 7.6 of the application on a virtualization operating system (Citrix, VMware, Oracle VirtualBox, Virtual PC, XP Mode under Windows 7, etc.). Version 7.6 is not supported under any virtualised operating system.

8.7 USB Security Key Inserted Before Version 7.6 Is Installed

If the USB Security Key, sometimes called dongle, is inserted into the USB port before version 7.6 is | INSTALLATION NOTES | version 7.6 | Page 28

installed, this will cause the key not to be recognized. After the installation is completed the USB Security Key can be inserted into the USB port and it will be automatically recognized by the system. Failure to follow this process would require the driver currently used by the operating system to be uninstalled. Please contact DNV GL - Digital Solutions Support (Software.Support@dnvgl.com) for advice.

8.8 Windows Updates

Some of the Microsoft redistributable files we use require a special Windows update on Windows 7, 8 or 8.1. If your operating system has its Windows Update activated, this pre-requisite should have automatically been installed and you will not need to take any action. However, if your operating system is not up-to-date, the Windows update described in the following web page must be installed.

https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows

The required Windows update is specific to an operating system and only the relevant update must be downloaded and installed. Additional pre-requisites may be required first, they are detailed in the web page. Please ask knowledgeable a system engineer and/or your corporate IT for advice.

8.9 Reboot Required on Windows 10 After The Installation

If your version of Windows 10 is not up-to-date with the Windows Updates and Security Patches, after the installation of the software, a reboot is required. Without rebooting the licence cannot be found and a prompt for licence will always be made and will fail. Users will also be prompted to accept the EULA each time the software is started. If this prompt reoccurs, a reboot will be required to resolve this issue.

8.10 Windows 8 and 8.1, Windows 10 and Later Versions Issues

You may experience two different issues while installing the software.

- Microsoft .NET 3.5 must be installed manually, it is not installed by default on Windows 8, 8.1, 10 and later versions. .NET 4.0 and later versions do not include .NET 3.5 functionalities.
- On Windows 8 and probably on more recent versions, the installation may fail it the operating system is not up-to-date with Windows updates and security patches.

The next two sections detail the steps to perform, prior to starting the installation, in order to avoid these two issues.

8.10.1 Microsoft .NET 3.5

You must be a local administrator account to perform the actions detailed in this section.

It is also assumed that you have good Windows knowledge. If not, please seek advice from your organisation's IT Helpdesk.

.NET Framework 3.5 not Installed

By default, .NET Framework 3.5 is not installed on Windows 8 and later versions. However, the main

installation requires .NET Framework 3.5 to be installed before setup_x64.exe is run. You will either need to download the Framework or use the Windows 8 installation DVD.

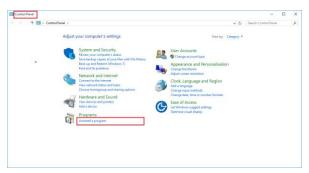
Further details can be found from https://docs.microsoft.com/en-us/dotnet/framework/install/dotnet-35-windows-10.

How to Check whether .NET Framework is Installed

Start Control Panel

Click on Settings, Control Panel from the right pane (depending on your environment, Control Panel may be accessed elsewhere).

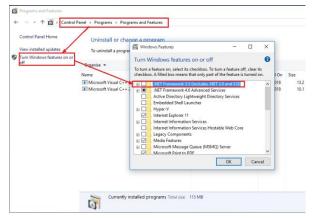
Click on Uninstall a program



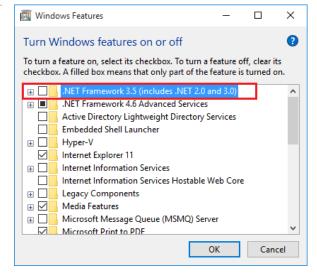
Check Whether .NET Framework 3.5 is Installed

From the Programs and Features dialog, click on "Turn Windows features on or off"

- Browse the Windows Features list
- Check whether ".NET Framework 3.5" is installed (ticked), right



In this example, ".NET Framework 3.5" is not installed (it is un-ticked) and will need to be installed before version 7.6's setup_x64.exe is run. See next sections for installing .NET 3.5.



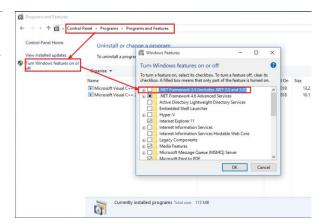
Installing .NET Framework 3.5 while the Computer is Connected to the Internet

As the download size is around 60MB, a stable, high speed connection is recommended.

Go to the Windows Features list

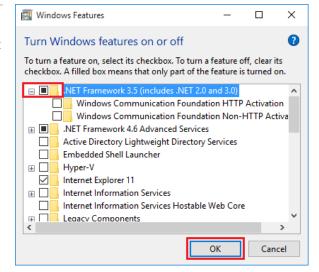
In the Control Panel dialog, click on "Uninstall a program"

In the Programs and Features dialog, click on "Turn Windows features on or off"



Expand and tick mark ".NET Framework 3.5"

As shown on the right the sub-features do not have to be selected.



Click on OK to download and install .NET Framework 3.5 by following the various dialogs (details are outside the scope of this document).

When the installation is completed, please close all Windows related to Control Panel. This concludes the installation of .NET Framework 3.5 by downloading it from the internet.

Version 7.6's setup_x64.exe can be run now.

Installing .NET Framework 3.5 when the Computer is not Connected to the Internet

In this case you must have the Windows 8 installation DVD inserted into the DVD drive. You must also have elevated privileges (like an administrator account).

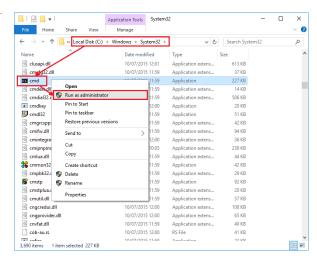
"Run as Administrator" cmd.exe (Windows Command Processor)

Using File Explorer, browse to C:\windows\System32

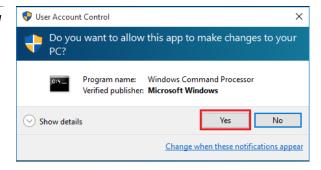
Search for cmd.exe (depending on your settings, .exe may not appear as shown on the right)

Right-click on the file cmd.exe

Select Run as administrator (you may be prompted for an administrator account and password)



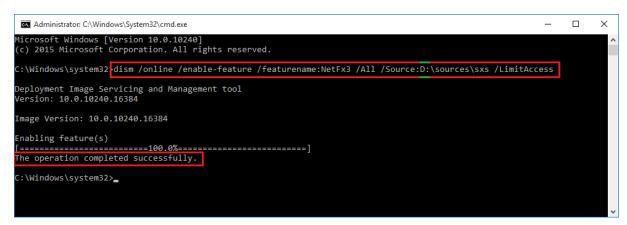
Click on Yes if this Standard Security Dialog Appears



Install .NET Framework 3.5 from the Windows 8 Installation DVD.

From the Windows Command Processor window, type the following line and press enter to actually run it:

dism /online /enable-feature /featurename:NetFx3 /All /Source:D:\sources\sxs /LimitAccess where D: is the drive letter for the Windows 8 Installation DVD.



On Completion

If the operation completed successfully, you can start the main installation again as described in the installation section.

On Failure

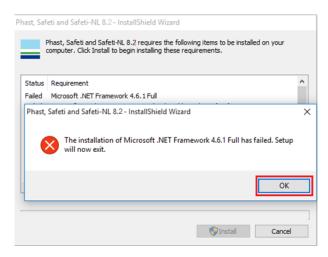
In case of failure, please contact your IT department for help or DNV GL - Digital Solutions Support (Software.Support@dnvgl.com).

8.10.2 Out-of-date operating system

Few pre-requisites may expect specific Windows updates and security patches. For example, the software requires the update KB2919355 on the initial Windows 8.1 release. In this environment, If the update not installed, an error will be reported, you must terminate the installation, update your operating system and then rerun the installer. Listing all cases is outside the scope of this document.

In order to avoid any installation failure, it is strongly suggested you make sure your operating system is up-to-date with Windows updates and security patches.

A typical error if the operating system is not up-to-date with updates



Please click on OK, exit from the installation when prompted and proceed with the next section.

How to install latest Updates

The Windows Updates are made from the Control Panel. Please ask your IT help desk for assistance. When done, make sure the system has fully been completed the updates by rebooting the PC and proceed with the installation as described in the installation section.

8.11 Licence Manager Needs to Be Upgraded

If you have a network licence (also referred as concurrent or floating), typically a corporate licence for several users managed and counted from a server, the licensing manager running on the server must be upgraded for the 7.6 release to check out a license successfully. This is due to the upgrade of FlexNet 11.14 (formerly FLEXIm from Flexera Software) in the 7.6 release. Until the server is upgraded, the licence control will fail at the start of 7.6 with the dialog prompting for importing a licence.

KNOWN ISSUE: This version of FlexlNet 11.14 does not support Windows Server 2008 R2. The new Licence Manager must be installed on a more recent Windows operating system.



The 7.6 release includes a specific installer for the DNV GL Licence Manager which is backward compatible with previous releases of our products. Before upgrading to this Licence Manager release, the version currently installed on the server must be uninstalled (it is suggested to stop the RMS Licence Service first).

In this case, please read the Licence Manager installation notes provided with the installer and accessible from the Installation page from the DVD or from the customer portal.

If the server has been upgraded to this new Licence Manager and users still experience licence issue, please contact <u>DNV GL Software Support</u>.

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Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organizations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping our customers make the world safer, smarter and greener.

DIGITAL SOLUTIONS

DNV GL is the world-leading provider of software for a safer, smarter and greener future in the energy, process and maritime industries. Our solutions support a variety of business critical activities including design and engineering, risk assessment, asset integrity and optimization, QHSE, and ship management. Our worldwide presence facilitates a strong customer focus and efficient sharing of industry best practice and standards.