



SIMULIA ESTABLISHED PRODUCTS 2024 INSTALLATION GUIDE

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What's New

This page describes recent changes in SIMULIA Established Products installation.

R2024x GA

Localhost as Documentation Server

The documentation installation supports reconfiguration mode.

Benefits: Some service parameters can be reconfigured without reinstallation.

For more information, see [Installing Documentation](#).

SIMULIA Installation Guide

This guide describes how to install Abaqus[®], fe-safe[®], Isight, the SIMULIA Execution Engine, Tosca Fluid, and Tosca Structure.

A complete installation includes the individual software products with a license server and possibly documentation.

Installation Roadmap

The SIMULIA[®] established products Assembly Media contains media for Abaqus, fe-safe, Isight, the SIMULIA Execution Engine, Tosca, documentation, and your choice of license server.

The General Availability (GA) release provides an Assembly Media (AM) that contains Windows and Linux media for the various products. There is a Suite Installer on the AM that is capable of launching most of the media. The Suite Installer is provided only for GA releases; individual media upgrades are provided for maintenance releases.

A complete installation includes the individual software products with a license server, and possibly documentation.

Before starting the installers, confirm that your computer is compatible with this release. Compare your system's configuration to the system requirements described in the Program Directory. The Program Directory is additional documentation, similar to release notes, available at <http://media.3ds.com/support/progdir>. Choose SIMULIA as the product line and *Established Products 2024* as the **Level**, then choose **Prerequisites - Abaqus** in the left-hand pane. A support contract and private login account are required for access (see https://iam.3ds.com/self_service/login/service/websupport/).

The license server should be installed before products because the product installers use the licensing information to configure network access to the license server.

During GA installations, some configuration information may be requested. The products will use this information as configuration for the life of the installation. Default values are supplied whenever possible, and it is highly recommended that you use the defaults unless you have a good reason to change them. When you later upgrade the products in a maintenance release, you will not be able to change any of the configuration supplied during GA installation, and you will not be able to choose any additional products during the upgrade.

To start the installers on Windows, you must belong to the Administrators group or have the privileges assigned to the Administrators group.

The Assembly Media contains the following:

- *FLEXnet license server*

You can use either FLEXnet licensing or Dassault Systèmes licensing, depending on which type of license file you have. With FLEXnet licensing, you use the vendor daemon named ABAQUSLM for all of the established products.

- *Dassault Systèmes license server*
- *SIMULIA Established Products*

This media contains Abaqus/Standard solver and Abaqus/Explicit solver, Abaqus/CAE, Abaqus Samples, Tosca Structure, Tosca Fluid, and fe-safe. This software includes the SIMULIA Co-Simulation Engine and the foundation of all Abaqus APIs.

- *SIMULIA Established Products CAA API*

This media contains the software required for building user subroutines and postprocessing applications. The Component Application Architecture (CAA) API provides source libraries and header files to develop Abaqus user subroutines in Fortran or C⁺⁺, SIMULIA Co-Simulation Engine connectors, and applications to process the ODB, SIM, or results file.

- *Isight and the SIMULIA Execution Engine*
- *HTML documentation for all products*

You can use the web-hosted documentation at <http://help.3ds.com/>, or you can install the documentation locally on a server at your site. If you choose to install the documentation locally, use the following media:

- Exalead CloudView search engine
- NETVIBES SearchDoc - documentation search customization, including a built-in Apache TomEE web server
- SIMULIA Established Products Documentation
- *CAD associative interfaces for Abaqus*

GA Assembly Media

You will download a single Assembly Media (AM) for the General Availability release. The AM contains all the licensing, documentation, and product media you need to install the GA release. There is also a Suite Installer that is capable of launching many of the media on the AM.

Assembly Media Content and Organization

The Assembly Media (AM) includes Windows and Linux Established Products media for the General Availability release.

The AM includes the following media:

- Exalead CloudView
- NETVIBES SearchDoc
- SIMULIA Established Products Documentation
- FLEXnet license server
- DS license server
- SIMULIA Established Products
- SIMULIA Established Products CAA API
- Abaqus CAD associative interfaces
- Isight and the SIMULIA Execution Engine

The AM includes a plain text file that describes its contents. If you want to launch an individual product installer (see [Launching a DS Media in GUI or TUI Mode](#)), you can use this file to find the correct subdirectory. The file is located in volume 1 of the AM media:

```
<download_dir>/media_name/1/table_of_contents.txt
```

This file shows how the various product installers are organized in numbered volumes (1, 2, 3, etc.) and subdirectories.

The number of volumes and the location of each product package within a volume is determined by the package size and the total size of the media. The ordering of product packages is random, and the contents of each volume may change from release to release.

An *example* of the `table_of_contents.txt` is shown below.



Note: The contents of your file may be different.

Sample Table of Contents

```
Volume 1:
/EXALEAD_CloudView/Windows64/1      EXALEAD CloudView
/EXALEAD_Search_Doc/Windows64/1     EXALEAD Search for Doc
/SIMULIA_FLEXnet_LicenseServer/Windows64/1  FLEXnet License Server

Volume 2:
/SIMULIA_EstPrd/Linux64/1          SIMULIA Est Products
/SIMULIA_EstPrd_CAA_API/Linux64/1  SIMULIA Est Prd CAA API
/SIMULIA_Isight/Windows64/1        Isight

Volume 3:
/SIMULIA_EstPrd/Windows64/1        SIMULIA Est Products
/SIMULIA_EstPrd_CAA_API/Windows64/1  SIMULIA Est Prd CAA API
/EXALEAD_Search_Doc/Linux64/1     EXALEAD Search for Doc
/SIMULIA_FLEXnet_LicenseServer/Linux64/1  FLEXnet License Server
/DS_License_Server/Allos/1         DSLS - DSLS

Volume 4:
/SIMULIA_Documentation/Allos/1     Established Product Doc
/SIMULIA_Isight/Linux64/1         Isight
/SIMULIA_Abaqus_AI/SIMULIA_AI.Allos.1-1.tar  CAD assoc interfaces
```

Extracting the Assembly Media

After you download the Assembly Media tape archive (.tar) files, you must extract them into a common directory before starting the installation.

1. Download the media archive files to a single folder/directory in any location.

It is strongly recommended that you keep the length of this path reasonably short to avoid problems. The extracted media may create fairly long subdirectory paths under this root directory, and the combined depth may cause a product installer to fail. The combined path should be no more than 60 characters deep.

This download location is different from the folder/directory where the products will be installed (and may optionally be deleted once installation is complete). The media archive files may vary in number; the file names are similar to the following:

```
xxx.AM_SIM_Abaqus_Extend.ALLOS.1-4.tar
xxx.AM_SIM_Abaqus_Extend.ALLOS.2-4.tar
xxx.AM_SIM_Abaqus_Extend.ALLOS.3-4.tar
xxx.AM_SIM_Abaqus_Extend.ALLOS.4-4.tar
```

2. Extract each of the .tar or .zip files into the same directory, merging (combining) their contents.

It is easiest to extract the files into a subdirectory/folder of the current (download) directory. A single subdirectory/folder will be created. In the instructions throughout this guide, `<download_dir>` represents the full path to this extraction directory; for example, `C:\download\` on Windows or `/tmp/download/` on Linux.

On Windows, it is recommended that you use the free 7-Zip utility (V4.57 or higher) which handles .tar format. You can download 7-Zip from <http://www.7-zip.org>. On Linux you can use GNU Tar version 1.15.1 or higher, which is included in most modern Linux distributions.

You can follow the detailed instructions below, if needed:

Windows platforms

1. In Windows Explorer, select all of the .tar or .zip files.
2. Right-click on the selected files and choose **7-Zip > Extract here**.

This will extract all of the compressed files into the current folder. A single media subfolder will be created.

Linux platforms

1. In a shell/terminal, change directory (cd) to the download directory and execute the command `tar -xf filename.tar` on each of the files.

```
tar -xf filename.1-4.tar
tar -xf filename.2-4.tar
tar -xf filename.3-4.tar
tar -xf filename.4-4.tar
```

A single media subdirectory will be created.

3. Verify the integrity of the extracted media by using the DSYInsMediaCheck utility:

On Windows, execute the following file:

```
<download_dir>\media_name\1\0data\intel_a\DSYInsMediaCheck.exe
```

On Linux, execute the following file:

```
<download_dir>/media_name/1/0data/linux_a64/DSYInsMediaCheck
```

After you finish extracting the files, the extraction directory will look like this:

```
<download_dir>/media_name/1/  
                /2/  
                /3/  
                ...
```

where *media_name* is the name of the software package, for example AM_SIM_Abaqus_Extend.ALLOS.

References:

- [Assembly Media Content and Organization](#)

Assembly Media Suite Installer

A Suite Installer is delivered with the Assembly Media (AM). It can launch various media on the AM.

When you start the Suite Installer, you can choose which media from the AM to install. Once you have made this selection, the AM installer will launch the chosen individual media one at a time, waiting for each to return before launching the next.

The Suite Installer can run the following media:

- Exalead CloudView
- NETVIBES SearchDoc
- SIMULIA Established Products Documentation
- FLEXnet license server
- SIMULIA Established Products
- SIMULIA Established Products CAA API
- Isight and the SIMULIA Execution Engine



Important:

The Dassault Systèmes license server (DSLS) installer cannot be launched from the Suite Installer. If you are using DSLS licensing, you must start the DSLS installer separately before using the Suite Installer. This will ensure that you have the DS license server machine name and port number ready to enter in the product installers. If you already have a current DS license server running, you can continue using it. See [Installing the DS License Server](#) for details.

References:

- [Launching the Suite Installer in GUI Mode](#)
- [Launching the Suite Installer in TUI Mode](#)
- [Launching the Suite Installer in Silent \(Replay\) Mode](#)

Launching Media from the Assembly Media

You can launch most media on the Assembly Media using a Graphical User Interface (GUI) or a Textual User Interface (TUI). Using the TUI, you can launch a media with a silent replay option. To launch multiple media in a sequence, you can use the Suite Installer.

Launching a DS Media in GUI or TUI Mode

The media on the Assembly Media can be launched individually with a Graphical User Interface (GUI) or a Textual User Interface (TUI).

These media include:

- EXALEAD_CloudView
- EXALEAD_Search_Doc
- SIMULIA_Documentation
- SIMULIA_FLEXnet_LicenseServer
- SIMULIA_EstablishedProducts
- SIMULIA_EstablishedProducts_CAA_API
- SIMULIA_Isight

Locate the Media's Launcher on the Assembly Media

Determine where the media is located in the extracted Assembly Media by viewing the `table_of_contents.txt` file in volume 1 of the AM in a text editor:

```
<download_dir>\media_name\1\table_of_contents.txt
```

For example, in the `table_of_contents.txt` file below, you see that the Linux64 SIMULIA Established Products subdirectory is located in volume 2:

```
Volume 1:
    ...
    ...

Volume 2:
    ...
    /SIMULIA_EstablishedProducts/Linux64/1
    ...
```

Launch the Media

When you have located the directory on the AM where the launchers for your media are, use one of the four launchers in that directory to launch the media.

- `setup.exe` - Windows GUI
- `StartTUI.exe` - Windows TUI
- `StartGUI.sh` - Linux GUI
- `StartTUI.sh` - Linux TUI

For example, run one of the following:

```
<download_dir>\media_name\2\SIMULIA_EstablishedProducts\Windows64\1\setup.exe
```

```
<download_dir>\media_name\2\SIMULIA_EstablishedProducts\Windows64\1\StartTUI.exe
```



```
<download_dir>/media_name/2/SIMULIA_EstablishedProducts/Linux64/1/StartGUI.sh
```

```
<download_dir>/media_name/2/SIMULIA_EstablishedProducts/Linux64/1/StartTUI.sh
```

Launching a DS Media in Silent (Replay) Mode

The silent installer lets you automate a repeatable, customized installation that runs with no user interaction.

Before using the silent installer, you must run the installation once, as a trial run, then retrieve the response file that is generated from the installation. The response file is generated automatically by either a Graphical User Interface (GUI) or a Textual User Interface (TUI) installation and contains the installation choices you gave during that installation.

1. Do a trial run of the media using GUI or TUI mode. Complete the installation.

For more information about running the installer, see [Launching a DS Media in GUI or TUI Mode](#).

2. Retrieve the response file from the trial installation.

For all media (except the SIMULIA Established Products CAA API media), the response file name and path is:

```
<install_dir>/InstallData/UserIntentions_CODE.xml
```

For the SIMULIA Established Products CAA API installation, the response file name and path is:

```
<install_dir>/InstallData/UserIntentions_CAA.xml or
UserIntentions_CAA_Additional.xml
```

After retrieving the response file, you can put it anywhere.

A response file is specific to:

- a particular operating system; response files are different between Windows and Linux
- a particular media
- a particular release level or fix pack (hot fix) level

3. Edit the response file.

You can edit the following variables:

- path values
- text values
- port number values

The response file must be:

- XML well-formed
- UTF8 encoded

4. Start the silent installation.

You start the silent installation in the same manner as in console mode using the StartTUI installer, except that you must specify the `--silent` option followed by the full path name of the response file.

For example, use the following command on Windows:

```
<download_dir>\media_name\1\SIMULIA_EstablishedProducts\Windows64\1\StartTUI.exe
--silent <path>\UserIntentions_****.xml
```

and on Linux:

```
<download_dir>/media_name/1/SIMULIA_EstablishedProducts/Linux64/1/StartTUI.sh
--silent <path>/UserIntentions_****.xml
```

Optionally, you can specify the `--xmlreport` option to generate an XML file that generates an installation error report in XML format:

```
./StartTUI.sh --silent /opt/ds/UserIntentions_****.xml --xmlreport
<reportfilepath>
```

For example:

```
./StartTUI.sh --silent /opt/ds/UserIntentions_****.xml --xmlreport
/opt/ds/tmp/Report.xml
```

An XML file is created and can be parsed. The file contains a list of `<Message>` elements contained inside a `<Logs>` element. The `<Message>` elements contain the following attributes:

id	A unique identifier for each error. If the id ends with ".0", it means that the message is not an error.
message	Error message, localized in the user language
techMessage	Technical message
msgCatalog	Name of the .CATNLS file (if any)
msgKey	Name of the key inside the file (if any)
type	Error type (info / warn / error / fatal)

References:

- [Launching the Suite Installer in Silent \(Replay\) Mode](#)

Launching the Suite Installer in GUI Mode

The Suite Installer has an interactive Graphical User Interface (GUI).

1. To start the Suite Installer on Windows, use the right-click option **Run as administrator** to run the following `setup.exe` file:

```
<download_dir>\media_name\1\setup.exe
```

To start the Suite Installer on Linux, run the following shell script:

```
<download_dir>/media_name/1/StartGUI.sh
```

2. Select the product components you want to install, then follow the prompts as directed. Separate child installers will start for each product, one after the other.

After the individual product installers have finished, log files are generated for each one in the following subdirectories:

```
<product_install_dir>/InstallData/log/CODE/<os>/<media_name>/
```

Launching the Suite Installer in TUI Mode

The Suite Installer has an interactive Textual User Interface (TUI).

Your computer requires a graphics card even when you use the TUI installer.

Both the GUI and TUI installers are interactive; they prompt you to answer questions and make configuration choices. The sequence of prompts is identical in both cases.

1. Open a Command Prompt window on Windows or a shell on Linux.

On Windows, open the Command Prompt with Administrator privileges. You can do this by using the right-click option **Run as administrator** on the `cmd.exe` executable file icon:

```
C:\Windows\system32\cmd.exe
```

2. Change directory (`cd`) to the volume 1 subdirectory in the extracted archive.
3. To start the TUI Suite Installer on Windows, run the following file:

```
<download_dir>\media_name\1\StartTUI.exe
```

To start the TUI Suite Installer on Linux, run the following shell script:

```
<download_dir>/media_name/1/StartTUI.sh
```

4. Follow the prompts as directed, and press **Enter** after each response.

When a question shows a default answer or value, simply press **Enter** to accept the default. To change the default, type your value and press **Enter**.

If at any time you want to go back to the previous question, clear the default entry, or quit the installation, special commands are available. Entries beginning with the "!" character are considered special commands:

- type `!b` to return to the previous page
- type `!c` to clear the default value
- type `!q` and press **Enter** to quit

If you want to have an entry beginning with a "!" that is not a command, you must precede it by an additional "!". For example, if the question is to enter a password and the password is `!toto`, you must write `!!toto`. Similarly, if you want to enter `!!toto`, you must write `!!!toto` (and so on).

Radio buttons are identified by ():

```
1 ( ) : unselected radio button
2 (X) : selected radio button
```

For radio buttons, only one choice is possible. To change the selected radio button, enter the number of the desired choice and press **Enter**; this will automatically unselect the previous choice.

Check boxes are identified by []:

```
1 [ ] : unselected check box
2 [X] : selected check box
```

Some, all, or none of a set of check boxes can be selected. To check or uncheck a check box, enter its corresponding number and press **Enter**.

If the `Select All` and `Select None` choices are shown, do one of the following:

- use numbers 1 to *n* as usual
- enter 0 and press **Enter** to unselect all check boxes

- enter -1 and press **Enter** to select all check boxes

Launching the Suite Installer in Silent (Replay) Mode

The Suite Installer can be run in a repeatable, customized fashion that requires no user interaction.

Before using the Suite Installer in silent mode, you must run it once in Graphical User Interface (GUI) or Textual User Interface (TUI) mode, as a trial run, then retrieve the response file that is generated from the run. The response file contains the installation choices you gave for all installations during the Suite Installer trial run.

1. Do a trial run of the Suite Installer, choosing all the media you want. Complete all installations.

For more information about running the Suite Installer, see

- [Launching the Suite Installer in GUI Mode](#)
- [Launching the Suite Installer in TUI Mode](#)

2. Retrieve the response file from the trial run of the Suite Installer.

The file is named `UserIntentions_AM_SIM_Abaqus_Extend.media-<timestamp>-0500.xml` and is located in the following folder/directory:

On Windows The folder specified by the `TEMP` environment variable. You can find the setting of your `TEMP` variable by choosing **Environment Variables** in the System Properties control panel.

On Linux The directory specified by the `TMPDIR` environment variable (`$TMPDIR`).

After retrieving the response file, you can put it anywhere.

A response file is specific to:

- A particular operating system; response files are different between Windows and Linux
- A particular release level or fix pack (hot fix) level

3. Edit the response file.

You can edit the following variables:

- path values
- text values
- port number values

The response file must be:

- XML well-formed
- UTF8 encoded

4. Start the silent suite installation.

You start the silent installer in the same manner as in console mode using the `StartTUI` installer, except that you must specify the `--silent` option followed by the full path name of the response file. Follow Steps 1-3 in [Launching the Suite Installer in TUI Mode](#).

For example, use the following command on Windows:

```
<download_dir>\media_name\1\StartTUI.exe --silent
<path>\UserIntentions_AM_SIM_Abaqus_Extend.media-<timestamp>-0500.xml
```

and on Linux:

```
<download_dir>/media_name/1/StartTUI.sh --silent
<path>\UserIntentions_AM_SIM_Abaqus_Extend.media-<timestamp>-0500.xml
```

Optionally, you can specify the `--xmlreport` option to generate an XML file that generates an installation error report in XML format:

```
./StartTUI.sh --silent
/opt/ds/UserIntentions_AM_SIM_Abaqus_Extend.media-<timestamp>-0500.xml
--xmlreport <reportfilepath>
```

For example:

```
./StartTUI.sh --silent
/opt/ds/UserIntentions_AM_SIM_Abaqus_Extend.media-<timestamp>-0500.xml
--xmlreport /opt/ds/tmp/Report.xml
```

An XML file is created and can be parsed. The file contains a list of `<Message>` elements contained inside a `<Logs>` element. The `<Message>` elements contain the following attributes:

id	A unique identifier for each error. If the id ends with ".0", it means that the message is not an error.
message	Error message, localized in the user language
techMessage	Technical message
msgCatalog	Name of the <code>.CATNLS</code> file (if any)
msgKey	Name of the key inside the file (if any)
type	Error type (info / warn / error / fatal)

Launching the Abaqus CAD Associative Interfaces

Three CAD associative interface (AI) plug-ins are delivered on the Assembly Media: SOLIDWORKS, Pro/ENGINEER, and CATIA V5. These plug-ins let you use your CAD geometry in Abaqus/CAE simulations.

The AI plug-ins are delivered in a .tar file embedded in the Assembly Media archive .tar files.

1. After you have extracted the Assembly Media .tar files, find the table_of_contents.txt file as described in *Assembly Media Content and Organization*.

The table_of_contents.txt file shows you where the AI archive file is located, for example under Volume 1:

```
<download_dir>/media_name/1/SIMULIA_Abaqus_AI/SIMULIA_Abaqus_AI.ALLOS.1-1.tar
```

2. **Optional:** Copy the SIMULIA_Abaqus_AI.ALLOS.1-1.tar file to a different location, if desired.
3. Extract the .tar file.
4. Under this extraction directory you will find three subdirectories:

```
<extract_dir>/SIMULIA_Abaqus_AI.ALLOS/1/CATIA_V5-6R201x_Associative_Interface/  
<extract_dir>/SIMULIA_Abaqus_AI.ALLOS/1/ProENGINEER_Associative_Interface/  
<extract_dir>/SIMULIA_Abaqus_AI.ALLOS/1/SolidWorks_2.0_Associative_Interface/
```

These subdirectories contain the files for each AI plug-in (in a .zip or .exe file) and the associated PDF documentation. Refer to the documentation for each AI for specific installation and user instructions.

For the SOLIDWORKS AI, for example, open the following guide:

```
<extract_dir>/SIMULIA_Abaqus_AI.ALLOS/1/SolidWorks_2.0_Associative_Interface/  
SolidWorksToAbaqus_AI.pdf
```

In this guide, see "Installing the SOLIDWORKS Associative Interface add-in."

Licensing Installation and Configuration

You should install licensing before products, so that you can enter the licensing configuration when requested while installing the products. You can use either FLEXnet licensing or Dassault Systèmes licensing, depending on which type of license file you have. Either license server type will work with all of the SIMULIA portfolio products: Abaqus, fe-safe, Isight, the SIMULIA Execution Engine, and Tosca.

Installing the FLEXnet Server

The FLEXnet server can be launched in GUI or TUI mode. The Suite Installer can also launch the FLEXnet server media.

For more information about how to launch the FLEXnet server installer, see [Launching Media from the Assembly Media](#).

Installer Options

Installer Option	Definition
Installation directory	On Windows, the default location is under <code>C:\SIMULIA\License\2024\</code> .
Path to your license file	This is the FLEXnet license file that was mailed to you. The installer will save the license file in the <code><flex_install_dir>/<os>/code/bin/</code> directory using the default name <code>simulia1m.lic</code> .
Choose whether to automatically start the license server program after the files are installed	<p>This option chooses between two scenarios:</p> <ul style="list-style-type: none"> Automatic configuration is recommended for most users, particularly those whose primary responsibility is not computer system or network administration. You can allow the installer to install, configure, and start the FLEXnet license server for you automatically. An existing license server using an older version of FLEXnet is upgraded automatically if it was previously installed and configured using the SIMULIAAbaqus installer. For redundant license servers the installer will install and configure the SIMULIAFLEXnet license server automatically, but you will have to manually start each server. Use this method for ease of maintenance so that future upgrades can be configured automatically. Manual configuration is required for combining FLEXnet license files with other vendors. You will need to configure and start the FLEXnet license server manually. Use this method to allow the system administrator more control.

Licensing Notes

On Windows platforms the SIMULIAFLEXnet license server is usually started by the installer and will start up automatically upon restart.

On Linux platforms the license server is started by the installer, but you should include the command to restart the license server in the system startup file for the computer to have the SIMULIA license server restart automatically after a system restart. The command to restart the license server is written to the `licenseStartup.sh` file in the `<flex_install_dir>/<os>/code/bin/` directory.

Installing the DS License Server

The Dassault Systèmes license server (DSLS) installer does not run from the Suite Installer—you must start it separately. You must install the license server before products because the product installers use the licensing information to configure network access to the license server. If you already have a current DS License Server running, you can continue using it and skip this step.

If you are using an older version of the DS License Server software on Windows (**3DEXPERIENCE** platform R2015x or earlier), it is recommended that you upgrade to DSLS R2024x with this release.

A new DS license file allows you to run all fix pack (hot fix) deliveries of the current version.

To install the Dassault Systèmes license server, you must be an Administrator on Windows or root on Linux.

Automatic configuration is recommended in most cases, particularly if you are not experienced in network administration. You can allow the installer to install, configure, and start the Dassault Systèmes license server automatically.



Warning: Virtual machines, such as VMware, are not supported. It is not possible to install or run the Dassault Systèmes license server on a virtual machine.

The DSLS software package includes *#unique_22* (DSLS.pdf), which contains instructions for configuring the license server and administering licenses. Refer to this guide for all Dassault Systèmes licensing operations. You can find the DSLS.pdf file in the following location:

```
<download_dir>/media_name/volume#/DS_License_Server/AlLOS/1/DSLS.pdf
```

Install DSLS on Windows

1. Determine where the DSLS installer is located in the extracted media by viewing the following file in a text editor:

```
<download_dir>\media_name\1\table_of_contents.txt
```

For example, below you see that the DSLS subdirectory is under volume 2:

```
Volume 1:
  ...
  ...

Volume 2:
  ...
  /DS_License_Server/AlLOS/1           DSLS - DSLS
  ...
```

2. To start the DSLS installer, double-click or execute the following file:

```
<download_dir>\media_name\volume#\DS_License_Server\AlLOS\1\SetupDSLSmsi.exe
```

3. Follow the instructions in the panels that appear to complete the installation.

After the installation finishes, you must use the Dassault Systèmes License Administration Tool to enroll the product licenses on the Dassault Systèmes license server (see *#unique_24*). You must enroll the licenses before continuing with the product installations.

After installation, you can use the `dslsstat` utility to check the license server status. For more information, see the following topic in the user assistance:

Using the dslsstat utility for a Dassault Systèmes license server

Install DSLS on Linux

1. Ensure that the `DISPLAY` environment variable is set for your computer.
2. Determine where the DSLS installer is located in the extracted media by viewing the following file in a text editor:

```
<download_dir>/media_name/1/table_of_contents.txt
```

For example, below you see that the DSLS subdirectory is under volume 2:

```
Volume 1:
  ...
  ...

Volume 2:
  ...
  /DS_License_Server/ALLOS/1           DSLS - DSLS
  ...
```

3. To start the DSLS installer, execute the following file:

```
<download_dir>/media_name/volume#/DS_License_Server/ALLOS/1/RedHat_Suse/startInstLicServ
```

4. Follow the instructions in the panels that appear to complete the installation.

After the installation finishes, you must use the Dassault Systèmes License Administration Tool to enroll the product licenses on the DS License Server (see *#unique_24*). You must enroll the licenses before continuing with the product installations.

After installation, you can use the `dslsstat` utility to check the license server status. For more information, see the following topic in the user assistance:

Using the `dslsstat` utility for a Dassault Systèmes license server

Manually Configuring Licensing for Abaqus

When you installed either the FLEXnet or Dassault Systèmes license server, you may have chosen to skip the installer's automatic setup of client application licensing. If so, follow the instructions below to manually configure an Abaqus installation for either license server.

Before you begin: You must finish installing the files for the FLEXnet licensing or DS License Server before performing this configuration.

References:

- [Installing the DS License Server](#)
- [Installing the FLEXnet Server](#)

Configure Abaqus for a FLEXnet License Server

1. Edit the following environment customization file in the Abaqus installation:

```
install_dir/os/SMA/site/custom_v6.env
```

2. In the `custom_v6.env` file, add the following parameters:

```
license_server_type=FLEXNET
abaquslm_license_file="port@license_server_hostname"
```

For more information, see the following topic:

License management parameters

Configure Abaqus for a DS License Server

1. On Windows, create the following directory:

```
C:\ProgramData\DassaultSystemes\Licenses
```

On Linux, create the following directory:

```
/var/DassaultSystemes/Licenses
```

2. Go to the directory and create an ANSI text file (multi-bytes such as UNICODE are not supported) named:

```
DSLicSrv.txt
```

3. Edit the file to declare the DS License Server to which the Abaqus client can connect.

The syntax of the declaration is as follows:

```
servername:port
```

The server name can be declared as:

- a simple hostname, for example: `lw5ses1dsy:4085`
- a full qualified domain name, for example: `lw5ses1dsy.dsy.com:4085`
- an IPV4 address, for example: `10.232.70.1:4085`
- an IPV6 address, for example: `[2a00:4b00:220:172::103]:4085`

The port number is the license server listening port, not the administration port.



Note: If the DS License Server is on the same computer as Abaqus, you must use the special keyword `localhost` instead of the computer name, for example:

```
localhost:4085
```



Note: The syntax for failover servers is different. The three failover servers must all be referenced on the same line as follows:

```
server1:4085,server2:4085,server3:4085
```

By default, load balancing of the three failover members is performed automatically by the licensing client (Abaqus). At startup, Abaqus selects randomly the failover member to contact from the three members declared. If the first selected member is down, the second member is randomly selected, and so forth. This ensures that the three members are statistically contacted by the same number of clients and results in automatic load balancing on the three members.

However, it is also possible to specify the order of priority in which failover members are contacted by Abaqus, replacing randomization by an explicit order defined by the administrator. This can be useful in the following cases, for example if:

- one member is more (or less) powerful than the others
- one member is located much closer to (or further from) the licensing clients than the others
- one member cannot be reached due to proxy constraints
- one member is temporarily down.



Note: You cannot mix automatic and manual configurations; in other words, the three failover members are either randomly accessed or are accessed through the specified order. So you cannot, for example, declare the first member then set random access to the remaining two members.

To explicitly specify an order of priority order between the failover members, use the following separator:

```
>
```

instead of:

```
,
```

which is reserved for automatic load balancing.

The following declaration is valid, for example:

```
licmbr1:4085>licmbr2:4085>licmbr3:4085
```

4. If several logical (i.e. standalone or failover) Dassault Systèmes License Servers need to be accessed, add a new line for each logical license server.

In this context, when Abaqus requests a license and this license is not already granted by one of the declared logical servers, then the order in which the logical license servers is declared is observed. If a license is available on the first declared logical server, this one is taken; if not, if a license is available on the second declared logical server, then this one is taken, and so forth.

5. **Optional:** Check that the `DSLicSrv.txt` file is correctly configured.

The license client-side `DSCheckLS` command parses the `DSLicSrv.txt` file to check license server availability, and reports errors if, for example, the file is incorrectly configured.

6. Edit the following environment customization file in the Abaqus installation:

```
install_dir/os/SMA/site/custom_v6.env
```

7. In the `custom_v6.env` file, add the following parameters:

```
license_server_type=DSL
```

```
dsls_license_config="C:\\ProgramData\\DassaultSystemes\\Licenses\\DSLicSrv.txt"
```

For more information, see the following topic:

License management parameters

Documentation and NETVIBES SearchDoc Installation

You can use the web-hosted documentation, or you can install the documentation locally on a server at your site. Make this decision before you start the Suite Installer to choose the right options for configuring the applications' connection to context-sensitive help.

The web-hosted documentation is accessible from <http://help.3ds.com/>.

Using NETVIBES SearchDoc

SIMULIA Established Products offer Exalead CloudView as a documentation search solution.

The installation requires installation of these media in this order:

1. Exalead CloudView
2. NETVIBES SearchDoc
3. Extended Products Documentation (SIMULIA)

For more information about launching the media, see [Launching Media from the Assembly Media](#).

The `Search_Doc` media includes a built-in Apache TomEE web server. The installers configure this for you automatically.



Note: You must obtain a license for Exalead CloudView before installing this documentation package. For more information see [Obtaining an Exalead CloudView License](#)



Important: Install all of these media on the same server computer. This server must be the one with the host ID that you provide in your Exalead CloudView license key request.

Exalead CloudView Platform/OS Requirements

There are platform and OS requirements specific to Exalead CloudView.

Supported Platforms

Install on a 64-bit server (x86_64) running a distribution with dependencies listed in the Program Directory. The Program Directory is additional documentation, similar to release notes, available at <http://media.3ds.com/support/progdir>. A support contract and private login account are required for access.

After opening the Program Directory in a web browser, do the following:

1. Select **3DEXPERIENCE** as the **product line**.
2. Select 2024x as the **Level**.
3. In the left-hand pane, click **Deployment - Strategic Platform Requirements**.
4. In the right-hand pane, click **Server Hardware and Software Requirements**.
5. Locate the requirements under section **Platforms for all DS Servers except 3DIndexing Server, 3DNotification Server**.

For more information about the Dassault Systèmes support policy, see <http://www.3ds.com/fileadmin/Support/Documents/Platform-support-policies.pdf>.

Linux Requirements

For additional configuration information for Linux, see the CloudView setup documentation at *#unique_39*.

Refer to the following sections:

- **Requirements**
- **Java versions**

Windows Requirements

For additional configuration information for the Windows server, see the CloudView setup documentation at *#unique_40*.

Refer to the following sections:

- **Java versions**
- **Update for Universal C Runtime**
- **Redistributable Packages**
- **Permissions**
- **System Settings**

Obtaining an Exalead CloudView License

The NETVIBES SearchDoc installation requires an Exalead CloudView license.

Before starting the installations, you must obtain a license for Exalead CloudView. For customers who have any of the designated SIMULIA Established Products license trigrams, you can request a special license key for Exalead CloudView.

You must identify the host computer on which you will install and run the SIMULIA documentation with Exalead CloudView and give the host ID to Dassault Systèmes in your license key request.

Follow these steps to obtain the license:

1. Choose the Windows server or Linux server machine on which you will install the documentation and Exalead CloudView search engine.
2. Go to <https://www.3ds.com/terms/software-keys>.
3. Follow the instructions under **License Key Tools > Exalead Host ID Generator** to download and run the `nghostid.bat` or `nghostid.sh` tool.

This tool gives you the host ID of your server. It is formatted for Exalead CloudView, which is similar to an Ethernet/MAC address.



Note: This host ID is different from the SIMULIA DSLS target ID.

4. Contact your local sales or support office to request the special Exalead CloudView license key. Give your sales representative your host ID.

Request the license type **SERVER**, not **NODELOCK**. The free license you receive is valid for one year, which is the default term for all Dassault Systèmes licenses.

Installing Exalead CloudView

You can choose the installation directory for Exalead CloudView.

Start the Exalead CloudView installer first. This is a default Exalead CloudView installation, which will be customized and configured by the subsequent installers.

Installer Option	Definition
Installation directory	Choose the installation directory for Exalead CloudView. The default on Windows is: <code>C:\DassaultSystemes\R2024x\CloudView\</code>



Important: Do not use a path/folder that includes spaces on either Windows or Linux.

References:

- [Launching Media from the Assembly Media](#)

Installing NETVIBES SearchDoc

You can configure several options when you install NETVIBES SearchDoc.

This installer prompts you for configuration choices and connects the HTML documentation to the Exalead CloudView search engine.

The name of this media is `Search_Doc`.



Important: When you ordered the Exalead CloudView license, you gave a host identification (host ID) of the computer on which you plan to install the software. Install this media on the same server as Exalead CloudView but in a separate, empty directory. A copy of the license file must be available on your server.

Installer Option	Definition
Installation directory	Choose the installation directory for the search customizations. The default on Windows is <code>C:\DassaultSystemes\R2024x\SearchDoc\</code> .
JRE directory	A JRE is required for indexing. Enter the Java Runtime Environment path.
CloudView base port	Reserve a range of 100 consecutive TCP ports for use by Exalead CloudView. Enter the starting port number of this range here. For example, with the default base port of 19000, Exalead CloudView uses ports 19000-19100.
CloudView license path	Enter or browse to the location of your Exalead CloudView license file (<code>cvlicense.dat</code> or a <code>.lic</code> file).
CloudView admin password	Enter your password.
CloudView data directory	Specify a directory in which to store the index and configuration data for your Exalead CloudView instance. The default on Windows is: <code>C:\DassaultSystemes\R2024x\SearchDoc\win_b64\datadir\</code>

After this installer finishes, check that the Exalead CloudView application is running properly. Open the Exalead CloudView administration console in a web browser at this URL:

```
http://<servername>:<CV_base_port+1>/index.html
```

For example, if you used the default base port of 19000, the URL is:

```
http://<servername>:19001/index.html
```

Verify that a connector named **DocSearch** is shown in the list:




References:

- [*Launching Media from the Assembly Media*](#)

Installing Documentation

You can configure several options when you install the Extended Products Documentation.

This media installs the documentation content (in HTML, CSS, Javascript, etc.) and configures an external TomEE web server and Exalead CloudView search and Java Search.

Installer Option	Definition
Installation directory	The default on Windows is <code>C:\Program Files\Dassault Systemes\SIMULIA2024doc\</code>
Documentation components to install	Choose the SIMULIA products you need.
Search using CloudView	Use the Exalead CloudView search engine.
Search_Doc installation (Optional)	This information is only requested if you select the option Search using CloudView . Browse or enter the path to the NETVIBES SearchDoc installation. The default on Windows is <code>C:\DassaultSystemes\R2024x\SearchDoc\</code> . For more information about the NETVIBES SearchDoc installation, see Installing NETVIBES SearchDoc .
Documentation Collection Identifier (Optional)	This information is requested only if you select the option Search using CloudView and install more than one documentation collection. If you have already installed your initial documentation and indexed it with NETVIBES SearchDoc, and this is a new installation of a different software release, you are prompted to enter a DocCollectionID . The DocCollectionID is used to differentiate the indexing of the collections in NETVIBES SearchDoc.
External TomEE server (Optional)	It is possible to serve documentation from a previously existing TomEE installation. The Documentation installer will create a connection to the documentation in the TomEE webapps directory at <code><TomEE>\webapps\EstProdDocs2024\English\index.htm</code> If a connection already exists to a collection for this release, the Documentation installer will request a 'TomEE Collection Identifier' tag so that it can adjust the structure created in webapps like <code><TomEE>\webapps\EstProdDocs2024_<IDENT>\English\index.htm</code> Using TomEE has the advantage that the resultant URLs to collections will have the collection name and level in it. For instance, the URL to the GA collection will be <code>http://<TomEEalias>/EstProdDocs2024/English</code>  Warning: avoid using a release name for the <code><TomEE Collection Identifier></code> , because the URL for the documentation will contain that ID for the life of the documentation installation, and if the documentation is upgraded to a different release later, then the URL will no longer reflect the current release of the installed documentation.
NodeJS server HTTP port number	Documentation is served by a NodeJS server listening for HTTP requests on this dedicated port.

Installer Option	Definition
	The default on Windows is 4040.
Allow feedback	Option to enable the documentation server to send feedback about topics to Dassault Systèmes.
Server Name	<p>There are three options for configuring the documentation server.</p> <p>The first option is to use the machine name with its fully qualified domain name. For instance, if your machine name (with domain) is <code>petrichor.myCo.com</code>, and you choose 4040 as your NodeJS server HTTP port number and install the English documentation collection, then the URL will be</p> <pre data-bbox="609 562 1425 594">http://petrichor.myCo.com:4040/English</pre> <p>An advantage to using the machine name is that it allows the collection to be accessed by other machines. You do not need to update the URL text field at the bottom of the panel when using this option.</p> <p>The second option is to use 'localhost'. For instance, if you choose 'localhost', and you choose 4040 as your NodeJS server HTTP port number and install the English documentation collection, then the URL will be</p> <pre data-bbox="609 829 1425 861">http://localhost:4040/English</pre> <p>The advantage to using 'localhost' is that it allows starting and using the server even after a domain name change. You do not need to update the URL text field at the bottom of the panel when using this option.</p> <p>The third option is to use a previously setup server as a ReverseProxy. In this case, you must update the URL text field at the bottom of the panel to define the URL.</p> <p>An advantage to using ReverseProxy is that it allows a web client to forward https requests to the Node.js server.</p>
JRE path	Browse or enter the path to the JRE.
	The installer panel will indicate the required JRE level.
Java Search server port	<p>Search is performed through a Java server on this dedicated port.</p> <p>The default on Windows is 4041.</p>

The documentation installer automatically indexes the documentation files (both HTML and PDF).



Warning: The indexing might take several minutes to finish—please be patient and do not end the installer process.

On Windows the installer creates a NodeJS service and starts it automatically. On Linux, after documentation installation completes, a manual action is required to start the documentation server; see details below.

A typical installation using the machine's fully qualified domain name and default port will result in the documentation URL:

```
http://<HOSTNAME>:4040/English
```

If the documentation is configured to use TomEE, the documentation can also be accessed at:

```
http://<HOSTNAME>:<TOMEE_PORT>/<ALIAS>/<LANGUAGE>
```

The ALIAS is 'EstProdDocs2024' with the 'Documentation Collection Identifier' (see above) appended to it, if the installer asked for one.

When using Java Search, you can locate the actual URL for your documentation installation and instructions to launch the NodeJS server manually on Linux in the following file:

```
<documentation_install_dir>\StartDocumentationUsingJavaSearch.txt
```

When using Exalead CloudView search you can locate the actual URL for your documentation installation, and instructions to launch the NodeJS server manually on Linux, in the following file:

```
<documentation_install_dir>\StartDocumentationUsingCloudViewSearch.txt
```

The Established Product documentation installer supports the reconfiguration mode, which will update certain service installation and deployment parameters, such as the NodeJS port. To run the tool:

```
<documentation_install_dir>\InstallData\installer\setup.exe --reconfig
```

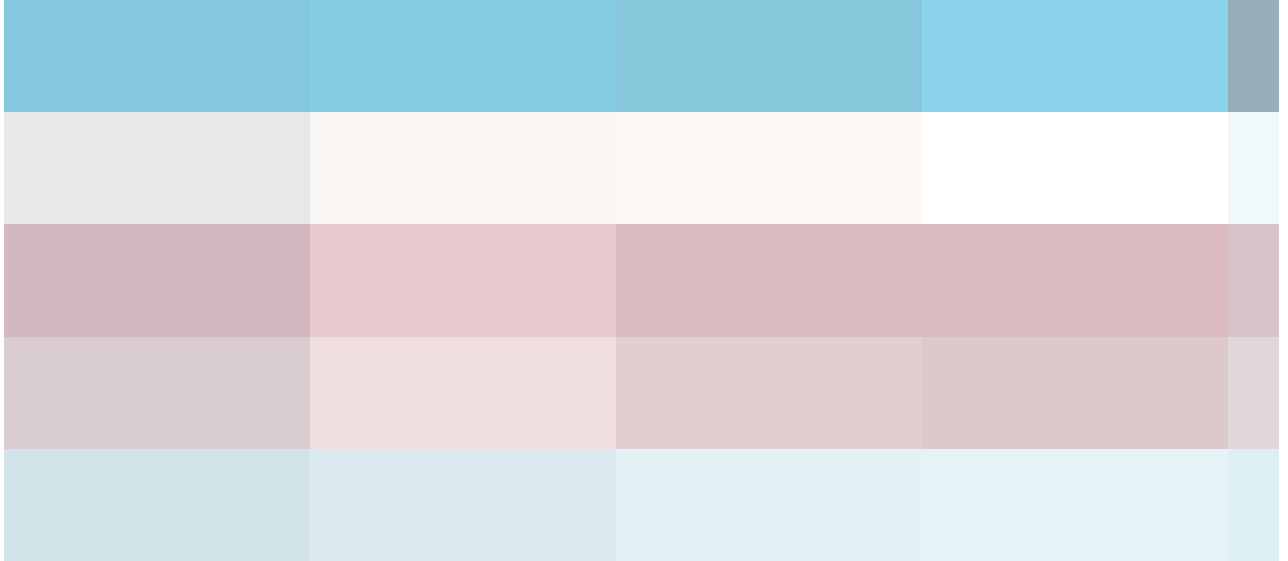
References:

- [Launching Media from the Assembly Media](#)
- [IdentTag for Multiple Installations on the Same Windows Machine](#)

Restarting NETVIBES SearchDoc After a Machine Restart

On Windows, the NETVIBES SearchDoc web server is automatically installed as a Windows Service.

You can see the names of the service in the **Task Manager**:



You can manage this application in the **Services** manager, which is part of the Microsoft Management Console.

This application will automatically restart when you restart the server computer. If necessary, you can stop the running application from the **Services** manager.

On Linux, use the commands below to start or stop the application:

```
NETVIBES SearchDoc <Search_Doc_installdir>/linux_a64/datadir/bin/cvinit.sh  
server [start|stop]
```

Manually Re-indexing for the Search Engine

You may need to re-index the documentation files at some point.

The HTML and PDF documentation files are indexed automatically for the Exalead CloudView search engine by the GA version installer. Normally this indexing leaves the documentation ready to use and searchable, with no further action needed.

When you install a hot fix upgrade of the SIMULIA documentation, the HTML and PDF files are then re-indexed in the search engine.

However, you may need to manually re-index the documentation files at a later time for one of the following reasons:

- You have more than 50,000 accumulated HTML files because you have installed multiple (separate) versions of the documentation. These separate collections can be multiple fix pack (FP.xxxx) releases.
- You are upgrading Exalead CloudView or NETVIBES SearchDoc media when there is no Documentation media upgrade.
- The Exalead CloudView search engine is not running when the documentation installer tries to perform the indexing.

To re-index the documentation files, execute the following .bat (Windows) or .sh (Linux) script from the documentation installation directory:

- **Windows:**

```
<doc_install_dir>\<lang>\indexDocumentation.bat
```

- **Linux:**

```
<doc_install_dir>/<lang>/indexDocumentation.sh
```

For example, if you installed the default English language documentation in the Windows default location, the command is:

```
C:\Program Files\Dassault  
Systemes\SIMULIA2024doc\English\indexDocumentation.bat
```

Running this script clears the current search index (for this collection) and recreates the index from scratch.

Installing MathJax Fonts for Firefox

Some documentation contains mathematical notation written in the MathML markup language. To render this notation in HTML output, the open-source MathJax Javascript package is used. The fonts that MathJax normally uses are webfonts, included with the documentation and downloadable by MathJax as it performs the rendering.

There is one exceptional case in which the webfonts cannot be downloaded automatically: when Firefox is used to read documents in a local file system (as opposed to reading them from an HTTP server). In this case, Firefox's strict same-origin policy regarding the use of webfonts prevents the download.

Workaround

To read math with Firefox, you need to install the MathJax TeX Open Type fonts on the local computer. Installing the appropriate fonts is straightforward. The fonts are the Open Type MathJax TeX fonts found in:

```
<doc_install_dir>/Doc/English/MathJax/fonts/HTML-CSS/TeX/otf/
```

where `<doc_install_dir>` is the root directory in which the documentation has been installed.

With appropriate user privileges (e.g., by running as Administrator), the files should be copied to one of the computer's font directories and installed as required by the operating system.

For example, on Windows the font directory is `C:\Windows\Fonts\` and to install any or all of the fonts, just right-click a selection and choose Install.

Established Products Installation and Configuration

You should install licensing before products that require licensing because the product installers will request the licensing configuration.


Installing Established Products

The SIMULIA Established Products media can be launched in Graphical User Interface (GUI) or Textual User Interface (TUI) mode. It can also be launched using the Suite Installer.

For more information about how to launch the Established Products media, see [Launching Media from the Assembly Media](#).

You must install the SIMULIA Established Products before installing the SIMULIA Established Products CAA API; do not install the CAA API media first.

Installer Options

Installer Option	Definition
Installation directory	<p>On Windows, the default location is under <code>C:\SIMULIA\EstProducts\2024\</code>.</p> <p> Note: If you click Next and let the installer create a new directory, then use the Back button from the following panel, you will get a message stating that this directory is not empty (because the installer has copied the Java JRE into it). To work around this issue, delete the entire new folder/directory manually before continuing.</p>


Components to install

It is strongly recommended that you install all components unless you are sure you will never need one.

```
Abaqus/Standard Solver *
Abaqus/Explicit Solver *
Cosimulation Services *
Abaqus ODB API Services *
Abaqus/CAE
Abaqus Samples
Tosca Structure
Tosca Fluid
fe-safe **
fe-safe interface to Abaqus 2019 ODBs
fe-safe interface to Abaqus 2018 ODBs
fe-safe interface to Abaqus 2017 ODBs
fe-safe interface to Abaqus 2016 ODBs
fe-safe materials and surface finish
specifications
Material database server for fe-safe
fe-safe tutorial and sample data
fe-safe tutorial models for Abaqus
fe-safe tutorial models for I-DEAS
fe-safe tutorial models for Ansys
fe-safe tutorial models for NASTRAN
3DSFlow Solver ***
```

Selecting any fe-safe item (other than the Material database server for fe-safe) will also install the fe-safe component as a dependency.

* The SIMULIA Established Products installer configures Abaqus only when component Abaqus/CAE is installed. To install and run any of the Abaqus solver components without installing Abaqus/CAE, you must manually perform licensing and other configuration. For more information about how to install and run a

Installer Option	Definition
	<p>standalone Abaqus solver, see the Knowledge Base item QA00000061999 in the Dassault Systèmes Knowledge Base at https://kb-prd.dsxcient.3ds.com/mashup-ui/page/document?q=docid:QA00000061999.</p> <p>** The fe-safe interface to Abaqus2024 ODBs is included as part of the fe-safe component.</p> <p>*** Installation of the 3DSFlow Solver is required only for 3DEXPERIENCE workflows.</p>
License server configuration	<p>You must use either FLEXnet licensing or Dassault Systèmes licensing. Include the port number being used on the license server machine, for example:</p> <ul style="list-style-type: none"> • FLEXnet: 27000@jupiter • DSLS: jupiter:4085 <p>If a set of redundant servers will be used, enter the host names of the redundant servers in the boxes provided in the dialog box.</p> <p>The installer will record the licensing configuration inside the installation. See Established Products Configuration (EPC) file for details.</p>
Established Products Commands directory path	<p>Enter your desired location for the Established Products Commands directory. The default is C:\SIMULIA\Commands\. See Established Products Command-Line Interfaces (Commands Directory) for details.</p>
Abaqus/CAE external plug-ins directory	<p>Enter your desired location for the Abaqus/CAE central plug-ins directory. The default is C:\SIMULIA\CAE\plugins\2024\. See the following topic in the Abaqus user assistance for details:</p> <p><i>Where are plug-in files stored?</i></p> <p> Note: The same plug-ins directory can be used for multiple installations of a release.</p>
Abaqus/CAE and Tosca Fluid working directory (CAE is Windows only)	<p>User files generated by Abaqus/CAE and Tosca will be created in this folder. The default location is C:\temp. Ensure that this folder has write permission for all users.</p>
Interfaces for Tosca Structure	<p>FEMFAT®, MSC Nastran®, and/or ANSYS®.</p>
Interfaces for Tosca Fluid	<p>STAR-CCM+® or FLUENT®. For multiple solver selections, STAR-CCM+® is set as the default solver.</p>

IdentTag for Multiple Installations on the Same Windows Machine

The **IdentTag** option provides a unique identifier for multiple installations of the same software on a single Windows machine.

The installer will request the **IdentTag** after you have installed the software once, then rerun the GA installer for a second time on the same machine and choose a different installation directory than the first install.

The **IdentTag** can include lowercase and uppercase letters, numbers, dashes (-), or underscores (_), but it must not exceed 20 characters.

It is only required for Windows installs, and is displayed in the following places:

- desktop shortcuts
- registry entries
- **Start** menu program entries
- the **Programs and Features** control panel

Wide Area Network Configuration



Note: If the installer detects a wide area network (WAN) license file, you will be prompted for information about the geographic location of your computer. This information is used to automatically set the `computer_location` environment file parameter and enable license usage logging for report generation.

Using UNC Paths with HPC Clusters



Note: If you intend to use Abaqus on a Windows HPC cluster, it is recommended that you change the installation directory to install into a shared file system on the head node of the cluster. Enter a UNC path as the installation directory. For complete information about configuring Abaqus on Windows HPC, see the Knowledge Base item **QA00000008800** at <https://kb-prd.dsclient.3ds.com/mashup-ui/page/document?q=docid:QA00000008800>.

Installing Established Products CAA API

The SIMULIA Established Products CAA API media can be launched in Graphical User Interface (GUI) or Textual User Interface (TUI) mode. It can also be launched using the Suite Installer.

For more information about how to launch the Established Products CAA API media, see [Launching Media from the Assembly Media](#).

You must install the SIMULIA Established Products before installing the SIMULIA Established Products CAA API; do not install the CAA media first.

Media Contents

This media contains the software required for building user subroutines and postprocessing applications. The Component Application Architecture (CAA) API provides source libraries and header files to develop Abaqus user subroutines in Fortran or C⁺⁺, SIMULIA Co-Simulation Engine connectors, and applications to process the ODB, SIM, or results file.

Installer Options

Installer Option	Definition
Installation directory	The directory/folder in which you installed the SIMULIA Established Products. The media installs CAA APIs for all the software products you have already installed during SIMULIA Established Products installation.

Manually Configuring Documentation

If you install different versions of the documentation, you may need to change the Context-Sensitive Help connection for SIMULIA Established Products.

The SIMULIA Established Products 2024 GA installation defaults to <http://help.3ds.com/>.

After the installation completes you can manually configure Established Products to connect to a URL of locally installed documentation for context-sensitive help.

Before you begin: You have completed the documentation installation described in [Documentation and NETVIBES SearchDoc Installation](#), and you have completed the Established Products installation described in [Installing Established Products](#).

1. Find the URL of your newly installed fix pack documentation by looking in the following file:

```
<doc_install_dir>/StartDocumentationUsingJavaSearch.txt
```

2. Set the documentation configuration for all Established Products in the 'EstablishedProducts' section of the installation configuration .ini file:

```
<EstPrd_install_dir>/<OS>/SMA/site/EstablishedProductsConfig.ini
```

where <OS> is either *win_b64* or *linux_a64*, depending on which platform your SIMULIA Established Products media is installed.

Here is an example of a configuration entry for the URL of documentation on a server:

```
[EstablishedProducts]
```

```
documentation=http://<servername>:4040/English
```

3. To change the help connections for Abaqus only, you can set environment file parameter `doc_root` in either the `abaqus_v6.env` file or `custom_v6.env` file. This will override the configuration .ini file setting.

For more information, see the following topic:

System customization parameters

Manually Configuring the Connection from Abaqus/CAE to Tosca

The environment variable `TOSCA_INSTALL_PATH` can be set in the startup environment of Abaqus/CAE to indicate the path to the Tosca installation.

By default, without this variable manually configured, Abaqus/CAE will use the Tosca installed in the same Established Products installation.

The environment variable `TOSCA_INSTALL_PATH` can be manually set in the `custom_v6.env` file of the Established Products installation. It is set to the full path of the Tosca Structure launch command (Windows batch file or Linux shell script):

```
<tosca_install_dir>/<os>/code/command/ToscaStructure.[bat|sh]
```

To manually set this environment variable for a default installation on Windows, you can add to this file:

```
<EstProducts_install_dir>/<os>/SMA/site/custom_v6.env
```

the following lines:

```
import os
os.environ['TOSCA_INSTALL_PATH'] =
"C:\\SIMULIA\\EstProducts\\2024\\win_b64\\code\\command\\ToscaStructure.bat"
```

Manually Configuring Tosca

Some Tosca settings can be updated manually after installation completes.

Changing License Server Settings for Tosca

If necessary, you can change the license server settings after the installation has finished by modifying the `EstablishedProductsConfig.ini` file in the following location:

```
<install_dir>/<os>/SMA/site/EstablishedProductsConfig.ini
```

By default, Tosca uses DSLS and server information from the default `DSLicSrv.txt` file in:

```
C:\ProgramData\DassaultSystemes\Licenses\DSLicSrv.txt
```

```
/var/DassaultSystemes/Licenses/DSLicSrv.txt
```

Changing Interface Information for Tosca Structure

After the installation has finished, you can change interface information if necessary by modifying the `EstablishedProductsConfig.ini` file in the following location:

```
<install_dir>/<os>/SMA/site/EstablishedProductsConfig.ini
```

Define the following interface paths:

```
INS_TSO_ABAQUS_PATH=/path/to/abaqus.executable
INS_TSO_MSCNASTRAN_PATH=/path/to/mscnastran.executable
INS_TSO_FESAFE_PATH=/path/to/fesafe.executable
INS_TSO_CST_PATH=/path/to/cst.executable
INS_TSO_FEMFAT_PATH=/path/to/femfat.executable
INS_TSO_TOSCA_ANSA_PATH=/path/to/ansa-installdir
```

Define the default solver:

```
INS_TSO_DEFAULT_SOLVER=abaqus|mscnastran
```

Define the path to the Java distribution to be used by the graphical user interface:

```
INS_TSO_JAVA_PATH=/path/to/JAVA
```

Changing Interface Information for Tosca Fluid

If necessary, you can change Tosca Fluid interface information after the installation has finished by modifying the `EstablishedProductsConfig.ini` file in the following location:

```
<install_dir>/<os>/SMA/site/EstablishedProductsConfig.ini
```

Define the following interface paths:

```
INS_TFO_STARCCMP_PATH=/path/to/STAR-CCMP-install-dir
INS_TFO_STARCCMP_POD=<your_pod_key>
INS_TFO_FLUENT_PATH=/path/to/ANSYS-Fluent-install-dir
```

Define the default solver:

```
INS_TFO_DEFAULT_SOLVER=starccmp|fluent
```

Define the path to the Java distribution to be used by the graphical user interface:

```
INS_TFO_JAVA_PATH=/path/to/JAVA
```

More solver options can be found in:

```
<install_dir>/<os>/SMATfoResources/config/solver.cfg
```

Isight and SIMULIA Execution Engine Installation

This section describes the basic options for installing Isight Desktop, the SIMULIA Execution Engine (SEE) server, and the SIMULIA Execution Engine Station.


For complete information about configuring Isight and the SIMULIA Execution Engine, see the following guides:

- [#unique_52](#)
- [#unique_53](#)
- [#unique_54](#)

Root (superuser) privileges are not required to install Isight on Linux, and it is recommended that you install Isight as a non-root user. However, root permissions are usually needed beforehand to grant the installing user write access to the installation directory; for example, in `/opt/SIMULIA/Isight`.

As a non-root user, you can install Isight in any directory to which you have write access. If an administrator creates a directory called `/opt/SIMULIA/Isight` and makes it writable, a non-root user can also install in `/opt`.

Isight Desktop

Installer Option	Definition
Installation directory	<p>Choose a base directory/folder for the installation. The recommended installation directory on Windows is <code>C:\SIMULIA\Isight\2024\</code>.</p> <p> Important: Do not install Isight into any folder/directory path containing a space, including <code>C:\Program Files\</code>. The application will not work correctly in this case.</p>
Documentation configuration options	<p>Choose option 'Enter a URL for served documentation' to connect Isight to the SIMULIA HTML documentation.</p>
Enter a URL for served documentation	<p>If you choose to connect Isight to the SIMULIA HTML documentation you must specify the documentation installation NodeJS URL for context-sensitive help to work. The hostname must be a fully qualified host name (for example <code>host.domain1.xxx.com</code>). Use this format to specify the URL:</p> <pre>http://<HOSTNAME>:<NodeJS_server_HTTP_port_number></pre> <p>You can locate the actual NodeJS server port number for the documentation installation in the following file:</p> <pre><documentation_install_dir>\StartDocumentationUsingJavaSearch.txt</pre>
Server Host Name	<p>The host name of the computer running the SIMULIA Execution Engine server application, if you are using the SIMULIA Execution Engine. If the SIMULIA Execution Engine will be accessed from computers in multiple network domains (for example, <code>domain1.xxx.com</code> and <code>domain2.xxx.com</code>), you must specify the fully qualified host name (for example, <code>host.domain1.xxx.com</code>).</p>

Installer Option	Definition
Server Port Number	Port number on which the SIMULIA Execution Engine application is running on the server.
License server	If you have already installed Abaqus/CAE and specified your license server information in the same Suite Installer session, Isight will automatically use the same license server. In this case you need not enter anything here.

Note: Installation will fail on Windows if the media unload directory names and/or the installation path exceeds certain limits, because of the overall limit of 260 characters imposed by Windows. During installation or unzip operations, subdirectories and files will be created in the specified directories. The longest full pathname length must be limited to well within the 260 characters limit. Therefore, both unload and installation paths should be kept reasonably short to guarantee that this limit is not reached.

You can use Isight Desktop in Standalone Mode or have the installer create a connection profile (.cpr file) to connect Isight Desktop to a SIMULIA Execution Engine server.

If the Isight Desktop application will use a SIMULIA Execution Engine, it must have a connection profile specific to the application server getting used. The .cpr file must be located in the following directory:

```
<isight_install_dir>/config/
```


An initial configuration profile named `standalone.cpr` is provided for standalone Isight operation. Additional connection profiles can be created later by using the **Edit Logon Profile** tool. See [#unique_55](#) for more details.

A graphics card is not required to use the Text User Interface (TUI) installer for Isight.



Note: To change the help connections for Isight, see [#unique_56](#).


SIMULIA Execution Engine Server

Installer Option	Definition
Please enter a string to identify the new installation	You can use this option to keep track of different installations and hot fix (fix pack) versions.
Installation directory	Choose a base directory/folder for the installation.  Important: Do not install into any folder/directory path containing a space, including <code>C:\Program Files\</code> . The application will not work correctly in this case.
Launch TomEE configuration utility	Choose this option if you want to run the SEE server on the included TomEE application server. Skip this option if you plan to use your own WebSphere application server.
License server	If you have already installed Abaqus/CAE and specified your license server information in the same Suite Installer session, SEE will automatically use the same license server. In this case you need not enter anything here.



Note: If you install the SIMULIA Execution Engine in TUI mode, do not enable launching of TomEE Configuration Utility; this will start the GUI-based utility and the installation will not be completely text-based.

SIMULIA Execution Engine Station

Installer Option	Definition
Please enter a string to identify the new installation	You can use this option to keep track of different installations and hot fix (fix pack) versions.
Installation directory	Choose a base directory/folder for the installation.  Important: Do not install into any folder/directory path containing a space, including <code>C:\Program Files\</code> . The application will not work correctly in this case.
Enter the following details to configure access to the SEE Server	Indicate whether your SEE server is running on a TomEE or WebSphere application server. Specify the Server Host Name and Server Port for the SEE server application. This information is used to create the <code>.cpr</code> connection profile file that will connect this station to the SEE server.

Upgrading Installations in a Maintenance Release

To upgrade any of the SIMULIA software products, you install a hot fix. A fix pack is a release that contains a collection of hot fixes for individual media.

Upgrade Overview

You can upgrade a installation from the general availability (GA) release or an earlier HF than the one you are currently applying.

Each fix pack contains, at minimum, a hot fix for SIMULIA Established Products.

The hot fix for the SIMULIA Established Products is a *delta* installation, containing only the changed files required to upgrade the software. The delta installation provides a *rollback* option, which you can use if you want to ignore the hot fix and restore the previous version for any reason. If you decide to keep the new hot fix, you must use the *commit* option in the Dassault Systèmes Software Management tool. Committing a hot fix applies the hot fix to your installation so that it becomes the official working level. It deletes the outdated files of the previous level to save disk space. Once you use the commit option to permanently accept the changes, the rollback option is no longer available. These options allow you to test the new functionality without the hard disk space or time required for another full installation.

If you prefer to leave your GA installation intact and install the hot fix separately, you must first install a separate copy of the GA software. You can then apply the hot fix upgrade to the new installation.

The hot fixes for Isight and the SIMULIA Execution Engine are not delta installations; they install a complete new set of files.

When you install a hot fix upgrade of the SIMULIA documentation, the HTML and PDF files are automatically reindexed for the search engine.

The standard hot fix upgrade for each media must be installed separately.

Hot Fix Installation Order for SIMULIA Established Products

Always install the hot fix upgrade media in the following order:

1. SIMULIA Established Products
2. SIMULIA Established Products CAA API

Hot Fix Installation Order for Exalead CloudView

Always install the hot fix upgrade media in the following order:

1. Exalead CloudView
2. NETVIBES SearchDoc
3. Extended Products Documentation (SIMULIA)

Installing a Hot Fix

Follow these steps to install any hot fix.

1. Get the hot fix media for your operating system.

The naming convention for the hot fix media is:

```
VERSION.HFLEVEL.PRODUCT.PLATFORM.EXT
```

where *EXT* is `.zip` on Windows and `.tar` on Linux.

For example, for Windows:

```
V6Rxxxx.FP.CFA.yyww.Part_3DEXP_SIMULATIONSERVICES.Windows64.zip
xxxx.FP.CFA.yyww.Part_SIMULIA_Abaqus_CAE.Windows64.zip
```

As shown, the Abaqus services/solvers naming (the first item) differs slightly from the other products. For all products, *xxxx* designates the release number, and *yyww* designates the year and week.

2. If you obtained the hot fix media in a Windows `.zip` file or Linux `.tar` file, extract (unpack) the archive to a temporary directory.
3. Start the hot fix installer. The installer can be run as a graphical user interface (GUI), as a command-line text user interface (TUI), or silently.

To start the installer with a graphical user interface, execute the following file on Windows with the right-click **Run as administrator** option:

```
<extract_dir>\1\setup.exe
```

To start the installer on Linux with a graphical user interface, execute the following file:

```
<extract_dir>/1/StartGUI.sh
```

4. Install the hot fix in exactly the same manner as the GA software, using either the GUI, TUI, or silent mode.
5. Specify the installation directory to upgrade, and click **Next**.
6. Click **Install**.

The hot fix delta installers are cumulative. This means that the hot fix media does not contain all files—it only contains the files that are different from the previous hot fix or from the GA of the same version.

For example, having installed GA and HF1, the HF2 installation will not remove the HF1 files and then install the HF2 files. Only the HF2 files that are different from the HF1 files or from the GA files will be installed.

Existing files modified by the HF are simply replaced. New files are added. If existing files are installed by the HF in another location, these files will not be removed during HF installation.

Since the HF media are cumulative, there is no need to install all HF versions until the needed HF version. For example, it is possible to install the GA, then HF3, then HF5 without installing the intermediary HF1, HF2 and HF4.

The HF media must always be installed in the same directory as the GA version. Hot fixes must belong to the same major version, for example Abaqus 2024.

Committing or Rolling Back a Hot Fix

After you install a hot fix, you must commit or roll back the changes using the Software Management utility.

1. Start the Software Management utility by choosing **Start > Dassault Systemes Simulation Services > Tools > Software Management** or by running the following executable with administrator privileges:

```
C:\Program Files\Dassault
Systemes\SimulationServices\V6R2024x\InstallData\installer\setup.exe
--mgt "C:\Program Files\Dassault
Systemes\SimulationServices\V6R2024x\"
```

This starts the GUI version of the utility on Windows; the Linux location is similar. The command-line TUI version is also available (`StartTUI.exe` and `StartTUI.sh`).

The Software Management utility provides four commands:

- **List installed products**
- **Check integrity**
- **Commit**
- **Rollback**

After installing a hot fix, you may want to spend some time using the hot fix for validation purposes, before making it officially available to your end users.

Committing a hot fix means applying the hot fix to your installation so that it becomes the official working level. This deletes the outdated files of the previous level, saving disk space.

After spending some time using the hot fix for validation purposes, you may find that the hot fix is not suitable. If this is the case, you can roll back the hot fix—rolling back uninstalls the files and restores the software level to the previous level.

2. To commit the hot fix, select **Commit** and click **Next**.

You should see this message:

```
Commit successful
```

The **List installed products** command will now show you the latest hot fix level.

3. If you decide not to keep the hot fix upgrade, do the following:
 - a. Manually stop any processes running in the installation directory.
 - b. Select **Rollback** and click **Next**.

Running the Software Management Tool

You can run the Software Management utility interactively from the command-line using a Textual User Interface (TUI).

1. Open a command prompt window with the right-click option **Run as administrator**.
2. Execute the Dassault Systemes Software Management program as follows, replacing `<install_dir>` with the path to where your products are installed:

```
WINDOWS: <install_dir>\InstallData\installer\StartTUI.exe --mgt
<install_dir>
UNIX: <install_dir>/InstallData/installer/StartTUI.sh --mgt
<install_dir>
```

3. Enter the number of your choice at the command prompt:

```
Dassault Systemes Software Management
Input !q and hit Enter to quit. Just press Enter to continue.
1 (X) List installed Components
2 ( ) Check integrity
3 ( ) Commit the current Hotfix level
4 ( ) Rollback to the previous level
Enter selection (default: Next):
```

To use the tool in batch mode execute it with one of these options:

```
<install_dir>\InstallData\installer\StartTUI.exe" -SoftMgt -List
<install_dir>\InstallData\installer\StartTUI.exe" -SoftMgt -Check
<install_dir>\InstallData\installer\StartTUI.exe" -SoftMgt -Commit
<install_dir>\InstallData\installer\StartTUI.exe" -SoftMgt -Rollback
```

Uninstalling the Software

You can uninstall and remove any of the software components.

Uninstallation Overview

You can uninstall and remove any of the software components.



Note: The uninstallers may be unable to remove some files; for example, files that are open in another application. In addition, the uninstallers remove only directories and files that were written by the installers. You may want to delete any remaining directories and files manually.

Uninstalling Isight or the SIMULIA Execution Engine

For specific instructions for uninstalling Isight or the SIMULIA Execution Engine, see the following guides:

- [#unique_52](#)
- [#unique_53](#)
- [#unique_54](#)

Uninstalling the Dassault Systèmes License Server

For specific instructions for removing the Dassault Systèmes license server, see [#unique_65](#) (DSL.S . pdf).

Uninstalling the FLEXnet License Server

For more information see [Uninstalling the FLEXnet License Server](#).

Uninstalling Other Established Product Software

On Windows, you can use the **Programs and Features** control panel or a silent uninstaller batch file to uninstall any of the following applications:

- SIMULIA Established Products
- SIMULIA Established Products CAA API
- FLEXnet license server
- NETVIBES SearchDoc
- SIMULIA Established Products Documentation

When uninstalling SIMULIA Established Products, you may also want to uninstall:

```
Dassault Systemes Software Prerequisites x86-64
Dassault Systemes Software VC10 Prerequisites x86-64
Dassault Systemes Software VC11 Prerequisites x86-64
```

You can also run a silent uninstaller from a batch/script file. To use the silent uninstallers, execute the following batch files from the command line or from another batch/script file:

```
WINDOWS: <INSTALL_DIR>\Uninstall.bat
LINUX: <INSTALL_DIR>/Uninstall.sh
```


Uninstalling the FLEXnet License Server

You can use the Windows **Programs and Features** control panel or the silent uninstaller batch files to remove FLEXnet licensing.

The silent uninstallers allow you to automate these tasks from another batch/script file. The silent uninstallers are available on Windows and Linux.

The uninstallers may be unable to remove some files; for example, files that are open in another application. In addition, the uninstallers remove only directories and files that were written by the installers. You may want to delete any remaining directories and files manually.

You should create a backup of any files you wish to keep, such as your SIMULIA license file (typically named `abaquslm.lic` or `simuliaalm.lic`) and the FLEXnet licensing server debug log file (typically named `simuliaalm.log`).

Uninstall FLEXnet on Windows

The FLEXnet license server can be removed in either of the following ways:

- Use the **Programs and Features** control panel to **Uninstall a program**.
- To use the FLEXnet silent uninstaller, execute the following batch file from the command line or from another batch/script file:

```
<flex_install_dir>\Uninstall.bat
```

Uninstall FLEXnet on Linux

1. Log into the license server host machine as root or as the owner of the license server.
2. Before you can remove the license server and license files, you must terminate the license server using the FLEXnet utility `lmdown`.
3. Do one of the following:

- Run the silent uninstaller with the following shell script:

```
<flex_install_dir>\Uninstall.sh
```

- Manually delete the FLEXnet files using the following commands:

```
cd <flex_install_dir>
rm -rf License
```

4. Remove the license server restart command from the host machine's system startup file.

Reference Information

After the installations are completed, refer to the topics below for further information.

Getting a List of Dassault Systemes Software Installed

You can use the `DSYListInstalls.exe` utility to generate a list of all Dassault Systemes software products installed on a Windows computer.

This utility is available in the extracted Assembly Media and in each product installation:

**In the
extracted
media**

```
<download_dir>\media_name\1\InstallData\installer\inst\win_b64\
code\bin\DSYListInstalls.exe
```

**In a
product
installation**

```
<install_dir>\InstallData\installer\inst\win_b64\code\bin\DSYListInstalls.exe
```

Run the utility from a Command Prompt window.

The information is returned in an XML file, which contains the following data:

- Build level (the build level of the SIMULIA Established Products 2024 release is "B426")
- HotFix level
- Identifier label
- Installation path
- Installation type

Example output of the utility is shown below.

```
<?xml version="1.0" encoding="UTF-8"?>
<installs>
  <install buildLevel="B426" hfxLevel="426" ident="!"
path="C:\SIMULIA\EstProducts\2024" type="SIMULIA_EstablishedProducts"/>
  <install buildLevel="B426" hfxLevel="426" ident="secondInstall"
path="C:\SIMULIA\EstProducts\2024secondInstall"
type="SIMULIA_EstablishedProducts"/>
  <install buildLevel="B426" hfxLevel="426" ident="!"
path="C:\SIMULIA\License\2024" type="SIMULIA_FlexNet_License_Server"/>
  <install buildLevel="B426" hfxLevel="426" ident="!" path="C:\Program
Files\Dassault Systemes\SIMULIA2024doc" type="Documentation_SIMULIA"/>
  <install buildLevel="B426" hfxLevel="426" ident="!"
path="C:\SIMULIA\I sight\2024" type="SimuliaI sight"/>
</installs>
```

You can fine-tune and filter the data returned by using various command-line options—for help on these options, use the following command:

```
DSYListInstalls.exe -h
```

Established Products Command-Line Interfaces (Commands Directory)

The SIMULIA Established Products installer creates command-line interfaces (shortcuts) to run Abaqus, Tosca Structure, and fe-safe from the command line. The Windows batch files or Linux links are created in a directory named `Commands`.

On both Windows and Linux, the installer prompts you to choose the location for this directory.

The default `Commands` directory for Windows is:

```
C:\SIMULIA\Commands\
```

and for Linux it is:

```
/var/DassaultSystemes/SIMULIA/Commands/
```

On Windows the installer prepends the `Commands` directory path to the `PATH` environment variable, if it is not already present in the current `PATH` variable. On Linux platforms the `Commands` directory should be prepended to each user's path manually.

Selecting any of the Abaqus/Standard, Abaqus/Explicit, or Abaqus/CAE installation components activates the `Commands` directory and creates Abaqus shortcuts. Similarly, selecting the Tosca Structure installation component creates Tosca shortcuts and selecting the fe-safe installation component creates fe-safe shortcuts.

Each shortcut in the `Commands` directory conforms to a specific syntax: prefix + release level + (optionally) 'hf' + HFnum.

The prefix for each shortcut is as follows:

product	shortcut prefix
Abaqus	abq
Tosca graphical user interface	tosca_gui
Tosca command line interface	tosca
fe-safe graphical user interface	fe-safe
fe-safe command line interface	fe-safe_cl

For example, the 2024 GA shortcut for Abaqus is `abq2024`, and for Tosca command line is `tosca2024`.

For hot fix (maintenance) releases, the release-specific shortcut appends the hot fix number. For example, for 2024 hot fix 3, the fe-safe GUI shortcut is `fe-safe2024hf3`.

In addition, each product launcher has a 'latest' shortcut that always points to the most recent GA or HF release for that product. For instance, if `abq2021`, `abq2021hf9`, `abq2022`, and `abq2022hf4` are available in the `Commands` directory, the 'latest' shortcut 'abq' is created, and launches the `abq2022hf4` release because it is the latest available release located in the `Commands` directory for Abaqus. The installer re-evaluates the 'latest' shortcut for a given product every time one of that product's shortcuts in the `Commands` directory is updated. So, in this example, if the installation to which `abq2022hf4` points is upgraded to release `2022hf5`, the `abq2022hf4` shortcut is renamed to `abq2022hf5`, and the 'latest' Abaqus shortcut now points to `abq2022hf5`.

The 'latest' shortcut for each product is as follows:

product	'latest' shortcut
Abaqus	abq
Tosca graphical user interface	tosca_gui
Tosca command line interface	tosca
fe-safe graphical user interface	fe-safe

product	'latest' shortcut
fe-safe command line interface	<code>fe-safe_cl</code>

For a list of all Abaqus command-line options, use the `help` command-line option with either the `abaqus` or `abq2024` command.

Established Products Configuration (EPC) file

After licensing is validated during installation, the installer creates the Established Products Configuration (EPC) file and writes the licensing configuration to the file. The file is located in the installation directory at `SMA\site\EstablishedProductsConfig.ini`.

You can manually update the file with a new configuration any time after installation. Tosca, fe-safe, and Abaqus can all use the licensing configuration in the file.

The EPC file is an `.ini` file that contains key/value pairs of configuration data. The values conform to the following standards:

- Single backslashes for Windows path-separators
- No quotes surrounding paths
- Paths with spaces are allowed

The EPC file can include the following licensing key/value pairs:

```
LICENSE_SERVER_TYPE=dsls|flex
DSLS_LICENSE_CONFIG=[complete_path_to_] \DSLicSrv.txt
FLEX_LICENSE_CONFIG=@flexServer1
ACADEMIC_TYPE=teaching|research|none
COMPUTER_LOCATION=CityStateCountry
FLEX_TYPE=auto|concurrent|token
```

The EPC file can include the following sections:

```
[EstablishedProducts]
[Tosca]
[fe-safe]
[Abaqus]
```

Tosca, fe-safe, and Abaqus can all use the configuration from the generic `[EstablishedProducts]` section. Each product can also use the configuration from its own section. Entries in the individual product section take precedence over entries in the generic section.

Example 1: The EPC file contains only the generic configuration section. All products use `flexServer1` because there is no product-specific configuration.

```
[EstablishedProducts]
LICENSE_SERVER_TYPE=flex
FLEX_LICENSE_CONFIG=@flexServer1
```

Example 2: In a later release, a new license server for Tosca is added. You can update the EPC file from Example 1 as shown below. `fe-safe`, and `Abaqus` continue to use `flexServer1` because there is no product-specific configuration for them, but `Tosca` now uses `flexServer2`.

```
[EstablishedProducts]
LICENSE_SERVER_TYPE=flex
FLEX_LICENSE_CONFIG=@flexServer1

[Tosca]
FLEX_LICENSE_CONFIG=@flexServer2
```

You can override the values in the EPC file. For more information about other licensing / configuration options, see:

for Abaqus:

License management parameters

for Tosca:

#unique_71

for fe-safe:

the Program Directory. (See <http://media.3ds.com/support/progdir>).

Visual C++ and MPI Libraries for Abaqus

Visual C++ libraries and Message Passing Interface (MPI) libraries are required to run Abaqus.

When you install Abaqus on Windows, the Microsoft Visual C++ 2012 and 2010 runtime libraries are installed automatically. The following libraries are installed:

- 64-bit 2012 libraries
- 64-bit 2010 libraries

MPI components must be installed to 1) use MPI-based parallel job execution in Abaqus/Standard or 2) to use domain-level parallelization in Abaqus/Explicit. If your Abaqus users will be running these types of simulations, you must have the required MPI components preinstalled or allow the Abaqus installer to install them for you:

- On Windows/x86-64, the Abaqus services installer automatically installs the Microsoft MPI libraries, if necessary. If you have a 64-bit Windows HPC Server, however, this is not needed because the MPI components are included with the operating system.
- On Linux 64-bit (lnx86-64) operating systems, the Abaqus installer installs the IBM Platform Computing MPI libraries.

For more information on MPI and thread-based parallel processing modes, see the following section of the Abaqus user assistance:

Parallel Execution

Any other third-party software that will be used in conjunction with the Abaqus products (compilers, operating system patches, etc.) should be installed before installing the Abaqus products. See the Program Directory for more details.

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