

Autodesk® Moldflow® Scandium 2012

Installation Guide

The Autodesk logo is displayed in white text on a black rectangular background. The text is oriented vertically, reading from bottom to top.

Revision 04, 08 July 2011.

Autodesk® Moldflow® Insight

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Published by:

Autodesk, Inc.
111 McInnis Parkway
San Rafael, CA 94903, USA

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Autodesk Moldflow Scandium installation

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To complete the Autodesk Moldflow Scandium 2012 installation, you must install two applications: Autodesk Moldflow Scandium—User Interface and Autodesk Moldflow Scandium—Solvers.

Installation overview

The following items need to be considered prior to installation.

- 1 Check that your computer complies with the supported platforms.
- 2 Ensure that you have permissions to install applications on the computer or network.
- 3 Obtain serial numbers and product keys for all the products you want to install. These are provided at the time you download the software or on the product package.

NOTE: Autodesk Moldflow Scandium uses Autodesk Moldflow Insight 2012 commercial licenses, serial numbers, and product keys. The functionality available in Autodesk Moldflow Scandium depends on the licenses you have purchased for the Autodesk Moldflow Insight 2012 release.

- 4 Review the product documentation to clarify installation procedures. The Autodesk Network License Manager Installation Guide should also be reviewed if that product is being installed on this machine.

NOTE: 30 day trial installation is not available for Autodesk Moldflow Scandium—User Interface or Autodesk Moldflow Scandium—Solvers.

- 5 Obtain the name of the server on which the licenses will be installed.
- 6 Close all running programs.

IMPORTANT: Autodesk products share some licensing components. If any Autodesk product is running when you attempt to install another Autodesk product, the installation may fail.

Once you have completed these tasks, prepare to install the following applications:

Autodesk Moldflow Scandium—User Interface
Autodesk Moldflow Scandium—Solvers
Autodesk Network License Manager if required on this machine.

NOTE: There is no specific order in which these products have to be installed. However, the Autodesk Network License Manager must be installed and you must be able to access it either locally or remotely on your network. Refer to the Autodesk Network License Manager Installation Guide for further information.

Your licenses must be activated on the license server before you run your Autodesk Moldflow product for the first time.

License server location

Ascertain the server to be used for license management.

The first installation of an Autodesk Moldflow product on this machine will define the server location and settings for subsequent installations of Autodesk Moldflow products.

If another Autodesk Moldflow product is installed on this machine, the server defined in that installation will apply for this product.

If you want to change the license server details set in a previous installation, you must uninstall all Autodesk Moldflow products. Contact Technical Support via the Subscription Center (<http://subscription.autodesk.com>) if you need assistance.

Hardware requirements and supported platforms

Supported operating systems, hardware platforms and related information are described.

Autodesk Moldflow Scandium supported platforms

The user interface and analysis solvers are supported on Windows platforms.

Table 1: Supported Windows platforms

Operating System	Service Pack
Windows 7 (32-bit edition) Professional, Enterprise and Ultimate	SP 1
Windows 7 (64-bit edition) Professional, Enterprise and Ultimate	SP 1

Operating System	Service Pack
Windows Vista (32-bit edition) Business, Enterprise and Ultimate	SP 2
Windows Vista (64-bit edition) Business, Enterprise and Ultimate	SP 2
Windows XP Professional (32-bit edition)	SP 3
Windows XP Professional (64-bit edition)	SP 2

Hardware requirements

- Ethernet card¹
- Microsoft Mouse-compliant pointing device

System specifications for Windows platforms

Table 2: Recommended minimum hardware and software specifications for Autodesk Moldflow Scandium on Windows platforms

System component	Recommended
CPU speed	2 GHz or higher
Main memory (RAM)	2 GB or higher
Virtual memory/swap space	2 GB or higher
Disk space	4 GB or higher free disk space (at least 1.5 GB free disk space for installation)
Web browser	Internet Explorer 7
Video viewer	Adobe Flash Player 9 or higher

Third-party software

The help system requires Microsoft Internet Explorer 7.0.

¹ Autodesk Moldflow software uses a network to request and obtain licenses. The network hardware is used to allow license servers to be uniquely identifiable, and these constraints require that all machines which will run Autodesk Moldflow software to have an enabled Ethernet card.

- Flash Player 9.0 or later is required for 32-bit browsers.
- If you are using a 64-bit browser, you may have to install <http://labs.adobe.com/downloads/flashplayer10.html>.

The reports generated by Autodesk Moldflow products are optimized for use with Internet Explorer 7.0 and Office 97 and later versions (PowerPoint and Word applications only).

Disk space requirements

Installation disk space requirements

The table below outlines the recommended disk space allocation for installing the Autodesk Moldflow Scandium applications and optional companion products.

Table 3: Installation disk space requirements

Software installed	Installed size on disk (approximate)
Autodesk Moldflow Scandium—User Interface	430 MB
Autodesk Moldflow Scandium—Solvers	300 MB
Autodesk Moldflow Design Link	1.85 GB

NOTE: During the installation process, you will need approximately twice the amount of disk space as specified in the installed size requirement.

Project directory disk space requirements

The disk space requirement for an Autodesk Moldflow Scandium study depends on the specified analysis sequence and the size of the model. A 3D Cool or 3D Warp analysis of a large, complex model could require up to 10 GB of disk space in the project directory.

Table 4: Disk space requirements for typical Autodesk Moldflow Scandium studies

Analysis sequence	Analysis technology	Disk space required in project directory (approximate)
Fill+Pack (20,000 element model)	Midplane	500 MB
Fill+Pack+Cool	Midplane	700 MB
Fill+Pack+Cool+Warp	Midplane	900 MB
Fill+Pack (20,000 element model)	Dual Domain	500 MB
Fill+Pack (300,000 tetrahedra model)	3D	1 GB

Analysis sequence	Analysis technology	Disk space required in project directory (approximate)
Fill+Pack+Cool	3D	10 GB ²

Graphics requirements

The graphic requirements listed here reflect the minimum required to obtain acceptable simulations.

- 512 MB DRAM or higher, OpenGL-capable graphics card. Ensure you have installed the latest driver for your card. Please refer to the card manufacturer's website for drivers and instructions.
- 24-bit color setting at 1280×1024 or higher screen resolution.

NOTE: Autodesk does not guarantee the use of any particular graphics card with Autodesk Moldflow products.

Autodesk will make every effort to work with card manufacturers to resolve any problems that may arise in the use of our software with a particular card. However, we cannot guarantee that all graphics-related issues can be fixed, as they may lie within the card manufacturer's drivers rather than Autodesk Moldflow software.

Recommended

Autodesk Moldflow software makes extensive use of OpenGL and texture mapping, therefore any device offering OpenGL acceleration and texture memory will give improved performance.

GPU card

Autodesk Moldflow Scandium software takes advantage of GPUs (Graphics Processing Units) to improve analysis time.

Through GPU technology, you can benefit from the following:

Reduced load on the CPU GPU cards have their own built-in memory and have the ability to resolve complex simulations. The additional built-in processing power in GPUs relieves task-intensive strain on the CPU, enabling your application to run faster.

Shortened analysis time The software leverages the processing power offered by CUDA technology in GPU cards. This allows analyses to run at a much greater speed, thus resulting in a faster analysis time. On a very large

² All 3D Cool analyses have high disk space requirements for the temporary directory.

model, this can reduce the analysis time by a few hours.

Efficient use of data-parallel computing GPU technology and our parallel solver complement each other. If you use GPU technology in conjunction with a parallel solver, you can achieve even greater speed improvements.

By default, the software automatically detects and uses a compatible GPU card for 3D Fill+Pack analyses and Cool (FEM) analyses, if one is found.

You also can enable the GPU options for 3D Warp analyses, but this option is off by default.

The GPU options setting can be changed from the relevant analysis tab of the solver parameters dialog.

Compatible graphics card

You will benefit from speed enhancements offered by GPU technology only if you have a compatible graphics card installed.

To determine if you have a compatible GPU card installed, please check the specifications provided by the card's manufacturer.

The minimum required hardware is a CUDA-enabled card capable of double-precision (64-bit floating point precision) computations. Cards which meet these requirements will have a CUDA Compute Capability of 1.3 or higher.

NVIDIA Fermi GPU card For optimal performance when using an NVIDIA Fermi GPU card, it is important that the latest drivers are installed.

NOTE: The automatic Windows Update function may not install the most recent version of the drivers.

Supported operating systems

GPU technology is available on all Windows operating systems supported by Autodesk Moldflow products, for both 32-bit and 64-bit systems.

GPU card limitations

Certain constraints apply when using GPU (Graphics Processing Unit) technology within Autodesk Moldflow software.

Analysis types Use of GPU technology is limited to certain types of analyses. At present, 3D Fill+Pack, 3D Flow, Cool (FEM) and 3D Warp analyses all support GPU technology.

Multiple GPUs Some graphics cards have multiple GPUs. At present, Autodesk Moldflow software does not support multiple GPUs. If your card has multiple GPUs, the analysis will

select the fastest GPU among the available GPUs with adequate memory to perform the analysis.

Maximum model size

The analysis you run is restricted by the size of the available memory on the GPU. For example, if your GPU card memory size is not large enough to run the full model, then the analysis will use the GPU for smaller time steps when the model is partially filled.

The analysis size is determined by the number of elements a model has. The more elements there are, the bigger the model size. Approximately one tetrahedral element equates to 1 KB of memory, so a model with 1 million elements will require 1 GB of device memory on the GPU card to run the model completely on the GPU.

Computer stops responding

When running computation-intensive tasks on a GPU card, the card will be diverted from other tasks such as redrawing the Windows desktop or refreshing other applications. This can be especially noticeable when running multiple jobs simultaneously or when running a very large analysis.

CAUTION: In extreme circumstances, Microsoft Windows may determine that the card has reached a locked up state and trigger a reset of the graphics drivers. If this happens, it is possible that the system will stop responding. Details on this behavior are available from Microsoft [here](#).

Windows Remote Desktop

Windows Remote Desktop does not support direct access to GPU resources. If an analysis which is set to use GPU resources is launched through a Remote Desktop command line (for example, using the **runstudy** command), it will not be able to utilize the GPU card on the remote machine.

Launching a job in Windows Vista or Windows 7

There is a limitation for Windows Vista and Windows 7 users when using GPU technology. If you launch a job locally on a Windows Vista or Windows 7 machine, or if you remotely launch a job through Job Manager where the remote server is a Windows Vista or Windows 7 machine, we recommend that you do not log out. Logging out will cause the analysis to fail.

GPU card drivers

The latest drivers for any installed card will need to be updated.

NOTE: The automatic Windows Update function may not install the most recent version of the drivers.

2 GB memory limit on 32-bit Windows systems

Windows 32-bit operating systems have a 2 GB memory limit per process; however there are some guidelines to help you avoid errors due to this memory limit.

- A large number of open studies in a project may exceed the memory limit.
 - Close any open studies that are not being used at a given time.
 - Consider splitting one project with a large number of studies into two or more projects with a smaller number of studies in each.
- Even a small number of large studies open in a project may exceed the memory limit.
 - It is recommended to open only one study per project.
- Post-processing large result files may exceed the memory limit. In particular, 3D results require greater amounts of memory.
 - Consider using the **Optimize memory for results display** options in the results preferences (**Application menu > Options > Results** tab) to minimize the amount of memory required to display results.
- Running a Fill+Pack analysis on a model with a large number of elements may exceed the memory limit.
 - Try remeshing the model using a coarser mesh to reduce the number of elements.

NOTE: Note that using a coarse mesh may affect analysis accuracy, in particular for 3D models.

- For a 3D model only, turn off the AMG matrix solver. Change the **AMG matrix solver selection** option setting to **Off** in the **Solver Parameters** dialog. This option is set to **Auto** by default.
- Running a Cool analysis on a model with a large number of elements may exceed the memory limit.
 - Review the mesh density in the part and on cooling circuits, and remesh using a coarser mesh if possible.
- Running a 3D Warp analysis may exceed the memory limit.
 - If the model contains more than 800,000 elements, change the **Use AMG matrix solver** option to **No** on the **Warp Settings** page of the **Process Settings Wizard**. This option is on by default. Turning this option off enables the legacy (SSORCG) matrix solver. The AMG matrix solver is faster but requires more memory compared to the legacy solver.
 - Enable mesh aggregation to reduce memory requirement for analyses of thin-wall parts. Make sure the **Use mesh aggregation and**

2nd-order tetrahedral elements option is selected on the Warp Settings page of the Process Settings Wizard. This option is on by default.

NOTE: If the part geometry is thick or solid (true 3D geometry), using mesh aggregation is not recommended. Turning off the mesh aggregation option causes the original mesh to be used for the analysis. This increases analysis time and memory requirement but improves accuracy for true 3D parts.

- The maximum model size on which a 3D Warp analysis can be run on a 32-bit operating system is up to 1.5 million elements (using legacy solver and mesh aggregation options).
- Free resources (memory, swap space) on the machine running the analysis.
- Add more resources (memory, swap space) on the machine running the analysis.

If you have tried the above options but still exceed the 2GB memory limit, consider changing to a computer with a 64-bit Windows operating system.

License types

During installation you will be asked to select your License type.

Network license	Supports a specified number of users who are connected to a network. The Autodesk Network License Manager needs to be installed on one or more servers on the network to manage the distribution of licenses to users.
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Within the product there are also tiers of functionality. These are determined by the license that is purchased.

A detailed list of the functionality enabled by each license type is included in the *Minimum license requirements* appendix.

Network license

A valid Serial Number and Product key must be entered before you can continue the installation.

NOTE: When a Network License is selected, Autodesk Network License Manager must be installed on the designated server before you run the product.

If you are using a Network License, you must choose the server configuration model for the Autodesk Network License Manager.

- Single License Server** One server manages all licenses on the network. You need to enter the host name or IP address of the server.
- Redundant License Server** Three servers are available to authenticate each license. You need to enter the host name or IP address of the three servers.

License functionality

The functionality of Autodesk Moldflow Scandium depends on which licenses are available on the Autodesk Network License Manager server.

The license types are listed below in order of increasing functionality

- **Autodesk® Moldflow® Synergy**—Enables the use of the Autodesk Moldflow Scandium—User Interface application
- **Autodesk® Moldflow® Insight Basic**—Enables the use of the Basic tier of functionality in the Autodesk Moldflow Scandium—Solvers application
- **Autodesk® Moldflow® Insight Performance**—Enables the use of the Performance tier of functionality in the Autodesk Moldflow Scandium—Solvers application
- **Autodesk® Moldflow® Insight Advanced**—Enables the use of the Advanced tier of functionality in the Autodesk Moldflow Scandium—Solvers application

When performing an operation such as an analysis, the Autodesk Network License Manager client will request the minimum level license which allows that operation. If there are no licenses available at the minimum level, the client will attempt to reserve a license of a higher level.

If you attempt to perform an operation that requires a license which has not been installed, you will receive a message advising you to purchase the required license. If there are no licenses available because they have been reserved by other clients, you will receive a message advising you of this.

NOTE: The Autodesk Moldflow Scandium—User Interface license allows pre- and post-processing tasks only.

Getting help

Find information resources or contact Technical Support via the Subscription Center.

Log in and access the Subscription Center at <http://subscription.autodesk.com>.

Installing on Windows systems

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Before installing Autodesk Moldflow Scandium applications, check that your platform and hardware are supported.

Before installing software

To prevent problems during the installation of Autodesk Moldflow Scandium applications, there are initial tasks that should be performed.

Exit all Autodesk programs

Exit all Autodesk programs that are running before beginning the installation of Autodesk Moldflow Scandium applications.
This ensures no “File in use” errors occur during installation.

IMPORTANT: Autodesk products share some licensing components. If any Autodesk product is running when you attempt to install another Autodesk product, the installation may fail.

Uninstall previous versions of Autodesk Moldflow Scandium

If a previous version of Autodesk Moldflow Scandium has been previously installed on the current machine, you must uninstall it before beginning the current installation.

To check if a previous version has previously been installed, open the Control Panel (**Start > Control Panel**), select **Programs and Features (Add/Remove Programs** on Windows XP systems) and look for entries titled **Autodesk Moldflow Scandium 2012** or **Autodesk Moldflow Scandium 2012 - Solvers** and **Autodesk Moldflow Scandium 2012 - Solvers**.

To uninstall a previous version of Autodesk Moldflow Scandium:

- 1 Exit all Autodesk Moldflow products.
- 2 Open the **Autodesk Moldflow Scandium xxxx Command Shell (Start > All Programs > Autodesk > Autodesk Moldflow Scandium xxxx > Autodesk Moldflow Scandium xxxx Command Shell)**, where *xxxx* is 2012. At the command prompt, type `scandcleanreg`.

Alternatively, run the `scandcleanreg.exe` command. This is found in the **bin** folder where the previous version was installed (typically, **C:\Program Files\Autodesk\Moldflow Scandium xxxx\bin**).

A dialog appears which asks you to confirm the deletion of all personal settings.

- 3 Click **Yes** to delete personal settings.
This will remove all registry entries associated with the previous version.
- 4 Uninstall the previous version.
 - a Open the Control Panel (**Start > Control Panel**).
 - b Select **Programs and Features (Add/Remove Programs)** on Windows XP systems).
 - c Select the entry you want to remove and click **Uninstall (Change/Remove)** on Windows XP systems) to launch the uninstall procedure.

Depending on which previous version you have installed, possible entries are:

- **Autodesk Moldflow Scandium xxxx**
- **Autodesk Moldflow Scandium 2012 - Solvers**
- **Autodesk Moldflow Scandium Synergy 2012 - User Interface**

IMPORTANT: Uninstall both **Autodesk Moldflow Scandium 2012 - Solvers** and **Autodesk Moldflow Scandium Synergy 2012 - User Interface** applications if both entries appear in the list of programs.

- 5 Restart the computer to complete the uninstall of the software.

Running previous version of Autodesk Moldflow products on 64-bit machines

If you no longer require the Autodesk Moldflow 2011 software, proceed directly to the next section. To ensure Autodesk Moldflow 2011 products continue to work on a 64-bit machine after installing the Autodesk Moldflow 2012 products, you must update the existing version of Autodesk Network License Manager.

To uninstall the existing version of Autodesk Network License Manager, complete the following steps.

- 1 Before uninstalling Autodesk Network License Manager, ensure you take a copy of the current license file as this information will be required at a later stage.
The location of this file can be found at **Start > All Programs > Autodesk > Network License Manager > LMTOOLS Utility**. Select the **Config Services** tab. If you have an existing license file, the **Path to the license file** indicates its location.
- 2 Open **LMTOOLS Utility** which can be found at **Start > All Programs > Autodesk > Network License Manager > LMTOOLS Utility**.
- 3 Select the **Config Services** tab.

- 4 Select the Autodesk service from the **Service Name** drop-down list.
- 5 Click **Remove Service**.
- 6 Exit **LMTOOLS**.
- 7 Click **Start > Control Panel > Programs and Features**
- 8 Right-click on **Autodesk Network License Manager** and select **Uninstall**. The previous version of Autodesk Network License Manager is removed.
- 9 Restart the computer to complete the uninstall of the software.

CAUTION: The computer must be restarted for this change to take effect, otherwise Autodesk Network License Manager might remain active in the Windows service.

IMPORTANT: Do not uninstall **Autodesk License Manager (Moldflow)** because this component is still required for Autodesk Moldflow 2011 products.

Installing the Autodesk Moldflow Scandium—User Interface application—Windows

NOTE: If you are installing on a Windows 7 system, make sure the User Account Control (UAC) is disabled first (**Control Panel > System Security > Change User Account Control settings**).

The Autodesk Moldflow Scandium—User Interface application uses a Setup Wizard that steps you through the installation process.

- 1 Log in using an account with Administrator privileges.
- 2 Exit any Autodesk programs that are currently running.

IMPORTANT: Autodesk products share some licensing components. If any Autodesk product is running when you attempt to install another Autodesk product, the installation may fail.

- 3 You can install the Autodesk Moldflow Scandium—User Interface application from an executable file that you have downloaded or from an installation disk.
 - If you are installing from a downloaded executable file (**scandium_full_eng_scandium_main_11261_001_wnx.exe**), navigate to that file and double-click on it to launch the Setup Wizard.

While the installer is initializing, the following checks are performed, and warnings are given or the installer exits if any of these conditions is found:

Two instances of the same installer, or both the Autodesk Moldflow Scandium Synergy 2012 - User Interface installer and the Autodesk Moldflow Scandium 2012 - Solvers installer are running at the same time

A warning message notifies you that another Autodesk Moldflow installer is already running. When you click **OK** to dismiss the message dialog, the current installer exits, and the other installer continues

A previous installation of Autodesk Moldflow Scandium Synergy 2012 - User Interface 2012 is detected.

A warning message notifies you that another copy of **Autodesk Moldflow Scandium Synergy 2012 - User Interface 2012** or **Autodesk Moldflow Scandium 2012 - Solvers** is already installed. You must uninstall the previous 2012 installation before installing the new version.

Another version of the user interface is in use when the Autodesk Moldflow Scandium Synergy 2012 - User Interface installer is running

A warning message notifies you that you must close the version that is in use before continuing the installation. If you click **OK**, the installer waits until the version in use is closed, then the installer continues. If you click **Cancel**, the installer exits.

You attempt to install incompatible versions of the Autodesk Moldflow Scandium—User Interface and Autodesk Moldflow Scandium—Solvers applications

If you attempt to install a different version of Autodesk Moldflow Scandium—User Interface compared to the version of Autodesk Moldflow Scandium—Solvers that is already installed (or vice versa), a warning message notifies you that you are trying to install incompatible versions of the applications and prompts you to uninstall all existing versions of the Autodesk Moldflow Scandium—User Interface and Autodesk Moldflow Scandium—Solvers applications before you attempt the installation again. The installer exits.

NOTE: Both the Autodesk Moldflow Scandium—User Interface and Autodesk Moldflow Scandium—Solvers applications must come from the same installation package (build numbers must be identical).

If none of these conditions is found, the installer initializes successfully.
The **Welcome** page appears.

- 4 Click **Next** to begin the installation process.
The **License Agreement** page appears.
- 5 Review the license agreement.
 - a Select the appropriate entry from the **Country or Region** list.
 - b Select the option to accept the agreement.
 - c Click **Next** to continue.

The **Product Information** page appears.

NOTE: **Network License** is the only license type available for the Autodesk Moldflow Scantium—User Interface application. It requires a serial number and product key.

- 6 Enter your **Serial Number** and **Product key**, then click **Next**.

NOTE:

- Autodesk Moldflow Scantium uses Autodesk Moldflow Insight 2012 commercial licenses, serial numbers, and product keys.
 - The **Next** button is disabled until both a valid serial number and a valid product key have been provided.
-

The **Install the Autodesk Network License Manager on this machine?** page appears.

NOTE: This page does not appear if you have already installed another Autodesk Moldflow product.

- 7 If you want the current machine to be the network license manager, select **I want to install the Network License Manager on this machine**. Download and follow the instructions in the *Autodesk Network License Manager Installation Guide* for more detailed information about installing and configuring the Autodesk Network License Manager product.

NOTE: If you wish to use another machine as the network license manager, you can specify the server details in the next step.

- a Specify the location on the current machine where the Autodesk Network License Manager application will be installed.
Accept the default install path, or click **Browse** to select another location.

³ The *Autodesk Network License Manager Installation Guide* and the Autodesk Network License Manager installer executables are available on the Subscription Center (<http://subscription.autodesk.com>)

- b Choose whether to install Autodesk Network License Manager for anyone who uses this computer or for only yourself.

Everyone is selected by default.

CAUTION: If you choose **Just me**, no other users will be able to access the Autodesk Network License Manager on this machine to run Autodesk Moldflow software.

- c Click **Next**.

If you choose to install Autodesk Network License Manager locally, and the installer detects an older version of the network license manager is already installed on the current machine, a warning message notifies you to uninstall the older version. Click **OK** to dismiss the message dialog and continue with the installation.

The **Network License** page appears.

- 8 Select either **Single License Server** (one server) or **Redundant License Server** (three servers).

RESTRICTION: If you want to change the license server details set in a previous installation, you must uninstall all Autodesk Moldflow products. Contact Technical Support via the Subscription Center (<http://subscription.autodesk.com>) if you need assistance.

- If you select the **Single License Server** model, enter the name or IP address of the server, or click **Browse** to select a server machine on your network.

ATTENTION: If any other Autodesk Moldflow product is already installed, the name of the selected server machine appears in the text box, and you will not be able to select a different server machine.

NOTE: The **Next** button is disabled until a server name has been provided.

- If you select the **Redundant License Server** model, enter the names or IP addresses of three servers, or click **Browse** to select each of three server machines on your network.

ATTENTION: If any other Autodesk Moldflow product is already installed, and a redundant license server configuration was established during that installation, the selected server names appear in the **Server 1**, **Server 2** and **Server 3** text boxes, and you will not be able to select different server machines.

NOTE: The **Next** button is disabled until three server names have been provided.

When the license server details are complete, click **Next**.

The **Select Destination Location** page appears.

NOTE: If the Autodesk Moldflow Scandium—Solvers application is already installed, you will not be able to select a different destination location.

- 9 Accept the default installation folder or click the **Browse** button to locate and select a different folder. Click **Next** to continue. The **Project Files Location** page appears. This is the location where your project files will be stored.

NOTE: This page does not appear if the Autodesk Moldflow Scandium—Solvers application is already installed and you specified the user folder location during that installation.

- 10 Select the user folder location option. **In each user's 'My Documents' folder** is selected by default. To accept this option, click **Next**.

You may choose **In a folder shared by all users**. When you click **Next**, the **All Users' Project Files Location** page appears. Accept the default user folder location, or click the **Browse** button to locate and select a different folder, then click **Next**.

The **Select Temporary Files Folder** page appears. This is where temporary files will be written whenever an analysis is run on the current machine.

NOTE: This page does not appear if the Autodesk Moldflow Scandium—Solvers application is already installed and you specified the temporary files folder during that installation.

- 11 Accept the default **Temporary Files Folder**, or click the **Browse** button to locate and select a different folder, then click **Next**.

NOTE: For optimum performance, it is important that you select a local drive, rather than a network drive. The amount of temporary space that will be required depends primarily on the size and complexity of the model being analyzed, the number of analyses being run simultaneously, and the frequency with which analyses are launched. You should select a temporary directory with at least 2 GB of free space.

The **Configure Job Manager** page appears.

- 12 Enter the server name or IP address of the machine that will be the default Job Manager server, then click **Next**.

The local machine is specified by default. You can change the Job Manager configuration after installation in the **Job Manager** dialog.

The **Select Active User Interface Style** page appears.

- 13 Select the user interface style you want to use. **Ribbon UI** is selected by default.

This is the Autodesk standard user interface style. However, the **Classic UI** style is still available for selection.

NOTE: You can change the active user interface style after installation in the application **Options**. The product Help supports the Ribbon user interface workflow and functionality.

Click **Next**.

If you have a 3Dconnexion device installed, the **Checking existing 3Dconnexion installation** page appears.

- 14 Ensure that you have closed all applications that use the 3Dconnexion device, then click **Next**.
The **Ready to Install** page appears.
- 15 Review the installation settings. You can change settings by clicking **Back** until the relevant screen appears. When you are satisfied with the settings, click **Install** to continue.
The **Installing** page appears and the Wizard begins installing the Autodesk Moldflow Scandium—User Interface software. A progress indicator shows how much of the installation has been completed.

NOTE: If you selected **I want to install the Network License Manager on this machine** and the **Autodesk Network License Manager** application is not already installed, it will be installed automatically.

- 16 If you have not yet installed the Autodesk Moldflow Scandium—Solvers application, a warning message appears to remind you. Click **OK** to close the message dialog.
- 17 Click **Finish** to complete the Autodesk Moldflow Scandium—User Interface installation.
 - a If you selected **I want to install the Network License Manager on this machine**, the option to **Register your product and activate licenses online** appears and is selected by default, and a browser window will open at the **Autodesk - RegisterOnce** web page.

NOTE: If you deselect this option, you can register and activate your licenses later. Go to registeronce.autodesk.com to register your product and activate your licenses.

The installation completes, and the installer exits.

IMPORTANT:

- Before you can use the Autodesk Moldflow Scandium—User Interface application, the Autodesk Network License Manager must be installed and you must be able to access it either locally or remotely on your network.

NOTE: You must have activated your licenses on the license server machine.

- Before you can run an Autodesk Moldflow Scandium analysis, the Autodesk Moldflow Scandium—Solvers application must be installed.
-

Resetting the user interface default options

If required, the registry and user default settings can be reset to the factory defaults.

- 1 Exit all Autodesk Moldflow products.
- 2 Open the **Autodesk Moldflow Scandium xxxx Command Shell (Start > All Programs > Autodesk > Autodesk Moldflow Scandium xxxx > Autodesk Moldflow Scandium xxxx Command Shell)**. At the command prompt, type `scandcleanreg`.
Alternatively, run the `scandcleanreg.exe` command. This is found in the **bin** folder where the application is installed (typically, **C:\Program Files\Autodesk\Moldflow Scandium xxxx\bin**).
A dialog appears which asks you to confirm the deletion of all personal settings.
- 3 Click **Yes** to delete personal settings.

Any user-defined registry or user default settings will be replaced with the standard default settings.

Installing the Autodesk Moldflow Scandium—Solvers application—Windows

NOTE: If you are installing on a Windows 7 system, make sure the User Account Control (UAC) is disabled first (**Control Panel > System Security > Change User Account Control settings**).

The Autodesk Moldflow Scandium—Solvers application uses a Setup Wizard that steps you through the installation process.

- 1 Log in using an account with Administrator privileges.
- 2 Exit any Autodesk programs that are currently running.

IMPORTANT: Autodesk products share some licensing components. If any Autodesk product is running when you attempt to install another Autodesk product, the installation may fail.

- 3 You can install the Autodesk Moldflow Scandium—Solvers application from an executable file that you have downloaded or from an installation disk.
 - If you are installing from a downloaded executable file (`scandium-solvers_full_eng_scandium_main_11262_001_wnx.exe`), navigate to that file and double-click on it to launch the Setup Wizard.

While the installer is initializing, the following checks are performed, and warnings are given or the installer exits if any of these conditions is found:

<p>Two instances of the same installer, or both the Autodesk Moldflow Scandium—User Interface installer and the Autodesk Moldflow Scandium—Solvers installer are running at the same time</p>	<p>A warning message notifies you that another Autodesk Moldflow installer is already running. When you click OK to dismiss the message dialog, the current installer exits, and the other installer continues.</p> <hr/> <p>NOTE: Only one Autodesk Moldflow installer can run at a time.</p> <hr/>
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<p>A previous installation of Autodesk Moldflow Scandium—Solvers 2012 is detected.</p>	<p>A warning message notifies you that another copy of Autodesk Moldflow Scandium—Solvers 2012 or Autodesk Moldflow Scandium 2012 is already installed. You must uninstall the previous 2012 installation before installing the new version.</p>
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<p>Another version of the solvers is in use when the Autodesk Moldflow Scandium—Solvers installer is running</p>	<p>A warning message notifies you that you must close the version that is in use before continuing the installation. If you click OK, the installer waits until the version in use is closed, then the installer continues. If you click Cancel, the installer exits.</p> <hr/> <p>NOTE: You cannot install a new version of an Autodesk Moldflow product while a previous version of the product is in use.</p> <hr/>
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<p>You attempt to install incompatible versions of the Autodesk Moldflow Scandium—User Interface and Autodesk Moldflow</p>	<p>If you attempt to install a different version of Autodesk Moldflow Scandium—User Interface compared to the version of Autodesk Moldflow Scandium—Solvers that is already installed (or vice versa), a warning message notifies you that you are trying to install incompatible versions of the applications and prompts you to</p>
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Scandium—Solvers applications

uninstall all existing versions of the Autodesk Moldflow Scandium—User Interface and Autodesk Moldflow Scandium—Solvers applications before you attempt the installation again. The installer exits.

NOTE: Both the Autodesk Moldflow Scandium—User Interface and Autodesk Moldflow Scandium—Solvers applications must come from the same installation package (build numbers must be identical).

If none of these conditions is found, the installer initializes successfully. The **Welcome** page appears.

- 4 Click **Next** to begin the installation process. The **License Agreement** page appears.
- 5 Review the license agreement.
 - a Select the appropriate entry from the **Country or Region** list.
 - b Select the option to accept the agreement.
 - c Click **Next** to continue.

The **Product Information** page appears.

NOTE: **Network License** is the only license type available for the Autodesk Moldflow Scandium—Solvers application. It requires a serial number and product key.

- 6 Enter your **Serial Number** and **Product key**, then click **Next** to continue.

NOTE:

- Autodesk Moldflow Scandium uses Autodesk Moldflow Insight 2012 commercial licenses, serial numbers, and product keys.
- The **Next** button is disabled until both a valid serial number and a valid product key have been provided.

The **Install the Autodesk Network License Manager on this machine?** page appears.

NOTE: This page does not appear if you have already installed another Autodesk Moldflow product.

- 7 If you want the current machine to be the network license manager, select **I want to install the Network License Manager on this machine.**

Download and follow the instructions in the *Autodesk Network License Manager Installation Guide* for more detailed information about installing and configuring the Autodesk Network License Manager product.

NOTE: If you wish to use another machine as the network license manager, you can specify the server details in the next step.

- a Specify the location on the current machine where the Autodesk Network License Manager application will be installed.
Accept the default install path, or click **Browse** to select another location.
- b Choose whether to install Autodesk Network License Manager for anyone who uses this computer or for only yourself.
Everyone is selected by default.

CAUTION: If you choose **Just me**, no other users will be able to access the Autodesk Network License Manager on this machine to run Autodesk Moldflow software.

- c Click **Next**.
If you choose to install Autodesk Network License Manager locally, and the installer detects an older version of the network license manager is already installed on the current machine, a warning message notifies you to uninstall the older version. Click **OK** to dismiss the message dialog and continue with the installation.

The **Network License** page appears.

- 8 Select either **Single License Server** (one server) or **Redundant License Server** (three servers).

RESTRICTION: If you want to change the license server details set in a previous installation, you must uninstall all Autodesk Moldflow products. Contact Technical Support via the Subscription Center (<http://subscription.autodesk.com>) if you need assistance.

- If you select the **Single License Server** model, enter the name or IP address of the server, or click **Browse** to select a server machine on your network.

ATTENTION: If any other Autodesk Moldflow product is already installed, the name of the selected server machine appears in the text box, and you will not be able to select a different server machine.

⁴ The *Autodesk Network License Manager Installation Guide* and the Autodesk Network License Manager installer executables are available on the Subscription Center (<http://subscription.autodesk.com>).

NOTE: The **Next** button is disabled until a server name has been provided.

- If you select the **Redundant License Server** model, enter the names or IP addresses of three servers, or click **Browse** to select each of three server machines on your network.

ATTENTION: If any other Autodesk Moldflow product is already installed, and a redundant license server configuration was established during that installation, the selected server names appear in the **Server 1**, **Server 2** and **Server 3** text boxes, and you will not be able to select different server machines.

NOTE: The **Next** button is disabled until three server names have been provided.

When the license server details are complete, click **Next**.
The **Select Destination Location** page appears.

NOTE: If the Autodesk Moldflow Scandium—User Interface application is already installed, you will not be able to select a different destination location.

- 9 Accept the default installation folder or click the **Browse** button to locate and select a different folder. Click **Next** to continue.
The **Project Files Location** page appears. This is the location where your project files will be stored.

NOTE: This page does not appear if the Autodesk Moldflow Scandium—User Interface application is already installed and you specified the user folder location during that installation.

- 10 Select the user folder location option. **In each user's 'My Documents' folder** is selected by default. To accept this option, click **Next**.
You may choose **In a folder shared by all users**. When you click **Next**, the **All Users' Project Files Location** page appears. Accept the default user folder location, or click the **Browse** button to locate and select a different folder, then click **Next**.

The **Select Temporary Files Folder** page appears. This is where temporary files will be written whenever an analysis is run on the current machine.

NOTE: This page does not appear if the Autodesk Moldflow Scandium—User Interface application is already installed and you specified the temporary files folder during that installation.

- 11 Accept the default **Temporary Files Folder**, or click the **Browse** button to locate and select a different folder, then click **Next**.

NOTE: For optimum performance, it is important that you select a local drive, rather than a network drive. The amount of temporary space that will be required depends primarily on the size and complexity of the model being analyzed, the number of analyses being run simultaneously, and the frequency with which analyses are launched. You should select a temporary directory with at least 2 GB of free space.

The **Ready to Install** page appears.

- 12 Review the installation settings. You can change settings by clicking **Back** until the relevant screen appears. When you are satisfied with the settings, click **Install** to continue.

The **Installing** page appears and the Wizard begins installing the Autodesk Moldflow Scandium—Solvers software. A progress indicator shows how much of the installation has been completed.

NOTE: If you selected **I want to install the Network License Manager on this machine** and the **Autodesk Network License Manager** application is not already installed, it will be installed automatically.

- 13 If you have not yet installed the Autodesk Moldflow Scandium—User Interface application, a warning message appears to remind you. Click **OK** to close the message dialog.
- 14 Click **Finish** to complete the Autodesk Moldflow Scandium—Solvers installation.
 - a If you selected **I want to install the Network License Manager on this machine**, the option to **Register your product and activate licenses online** appears and is selected by default, and a browser window will open at the **Autodesk - RegisterOnce** web page.

NOTE: If you deselect this option, you can register and activate your licenses later. Go to registeronce.autodesk.com to register your product and activate your licenses.

The installation completes, and the installer exits.

IMPORTANT:

- Before you can use the Autodesk Moldflow Scandium—Solvers application, the Autodesk Moldflow Scandium—User Interface application must be installed, and the Autodesk Network License Manager must be installed and you must be able to access it either locally or remotely on your network.

NOTE: You must have activated your licenses on the license server machine.

Command line installation

Autodesk Moldflow Scandium applications may be installed using command line instructions.

Installing from a downloaded executable, using the command line

- 1 Click **Start > Run**.
- 2 Enter **cmd** in the **Open** text box.
- 3 Click **OK** to open the command prompt.

NOTE: Windows Vista Users should click **Start** and enter **cmd** in the **Start Search** dialog at the bottom of the Start menu. Press **CTRL+SHIFT+ENTER** to open the Administrator Command Prompt.

- 4 Navigate to the directory where you downloaded the installer executable file.
- 5 Type the name of the executable file.

Autodesk Moldflow Scandium command line installation options

There are several command line options that can be used to create silent installs and to set Autodesk Moldflow Scandium component install options.

The command line installer requires the following items as mandatory fields. If any of these are not supplied, the installer will fail.

- Valid serial number (SN) and product code (PK)
- End User License Agreement (EULA) country selection
- License type (which must be set to Network)
- Network license server model and server name(s)
- Whether or not to install the Network License Manager
- When installing the user interface, the name or IP address of the default Job Manager server.

To install the user interface:

NOTE: If you have already installed the solvers, certain options cannot be changed and certain pages of the installer may not appear, even if you specify different variables during the user interface installation. This behavior is consistent with the installation process using the installation wizard.

```
scandium_full_eng_scandium_main_11261_001_wnx.exe  
/eulalang="country_code" /sn="serial_number" /pk="product_key"
```

```
/license="network"  
/networks="server_name"|/networkr="server_name1:server_name2:server_name3"  
/installnlm="yes"|"no" /jmsrver="hostname"|"ipaddress" [/silent] [/verysilent]  
[/dir="x:\dirname"] [/userdir="x:\dirname"] [/tmpdir="x:\dirname"]
```

To install the solvers:

NOTE: If you have already installed the user interface, certain options cannot be changed and certain pages of the installer may not appear, even if you specify different variables during the solvers installation. This behavior is consistent with the installation process using the installation wizard.

```
scandium-solvers_full_eng_scandium_main_11261_001_wnx.exe  
/eulalang="country_code" /sn="serial_number" /pk="product_key"  
/license="network"  
/networks="server_name"|/networkr="server_name1:server_name2:server_name3"  
/installnlm="yes"|"no" [/silent] [/verysilent] [/dir="x:\dirname"]  
[/userdir="x:\dirname"] [/tmpdir="x:\dirname"]
```

Options

/eulalang=country_code

Specify the country for the EULA. Options for *country_code* are:

- enu = English—United States
- jpn = Japan
- chs = China
- cht = Taiwan
- fra = France
- deu = Deutschland
- esn = España
- ita = Italia
- kor = Korea, South
- ptg = Portugal
- ptb = Brazil
- rus = Russia
- cze = Ceska Republika
- nld = Netherland
- pol = Polska
- hun = Magyarország
- oth = Other Countries

/sn="serial_number"

Specify the serial number provided with your product.

/pk="product_key"

Specify the product key provided with your product.

/license="network"

Specify the type of license to install. This choice installs a network license setup.

/networks="server_name"

Specify the name of the server machine to use if you are installing a Single Network License.

/networkr="server_name1:server_name2:server_name3"

Specify a quoted, colon-separated list of three server machines to use if you are installing a Redundant Network License.

/installnlm="yes"

Install the Network License Manager on this machine.

/installnlm="no"

Do not install the Network License Manager on this machine.

/jmserver="hostname"|"ipaddress"

Specify the hostname or IP address of the default Job Manager server.

/silent

Only the **Installing** progress page is displayed, but no questions are asked of the user.

/verysilent

The installer is completely silent, nothing is displayed.

/dir="x:\dirname"

A quoted, fully specified pathname to an alternative install directory.

/userdir="x:\dirname"

A quoted, fully specified pathname to the user's default projects folder.

/tmpdir="x:\dirname"

A quoted, fully specified pathname to the temporary directory.

Examples

```
scandium-solvers_full_eng_scandium_main_11261_001_wnx.exe /license="network" /sn="serial_number" /pk="product_key" /eulalang="enu" /networks="localhost" /installnlm="yes" /silent
```

Silently install the Autodesk Moldflow Scandium—Solvers application on this machine. Also install the Autodesk Network License Manager

on this machine. A Single Network License configuration is specified, and the license server name is set to *localhost*. The installation wizard **Installing** progress page is displayed but does not prompt for user input. The United States English version of the EULA will be applied.

```
scandium_full_eng_scandium_main_11261_001_wnx.exe  
/license="network" /sn="serial_number" /pk="product_key"  
/eulalang="fra" /networks="server2" /installnlm="no"  
/jmsserver="server1" /verysilent
```

Silently install the Autodesk Moldflow Scandium—User Interface application on this machine. The user chose not to install the Autodesk Network License Manager on this machine. A Single Network License configuration is specified, and the license server name is set to *server2*. The user set the default Job Manager server to be *server1*. The installation wizard is not displayed. The French version of the EULA will be applied.

```
scandium-solvers_full_eng_scandium_main_11261_001_wnx.exe  
/sn="serial_number" /pk="product_key" /eulalang="ptb"
```

Install the Autodesk Moldflow

```
/license="network" /networkr="server1:server2:server3"  
/installnlm="no"
```

Scandium—Solvers application on this machine. A Redundant Network License configuration is specified, and the license server names are set to *server1*, *server2*, and *server3*. The user chose not to install the Autodesk Network License Manager on this machine. The installation wizard is displayed. The Brazilian Portuguese version of the EULA will be applied.

Minimum license requirements



This table lists the minimum license requirements for different analysis types and general operations.

Analysis type /operation	Autodesk Moldflow Adviser	Autodesk Moldflow Scandium
Open Synergy (GUI)	Design	Synergy
View Results	Design	Synergy
Generate Model	Design	Synergy
Generate Report	Design	Synergy
Fill Analysis	Design	Basic
Gate Location Analysis	Design	Basic
Molding Window Analysis	Design	Basic
Cooling Quality Analysis	Design	Not Applicable
Design Adviser Analysis	Design	Not Applicable
Sink Mark Analysis	Design	Basic
Midplane Analysis Technology	Not Applicable	Basic
Dual Domain Analysis Technology	Design	Basic
3D Analysis Technology	Manufacturing	Basic
Runner Adviser Analysis	Manufacturing	Not Applicable
Runner Balance Analysis	Manufacturing	Basic
Mesh Model	Not Applicable	Basic
Reactive Molding	Not Applicable	Basic
Multiple Barrel	Not Applicable	Basic
RTM/SRIM	Not Applicable	Basic
Design of Experiments Analysis	Not Applicable	Basic
Overmolding	Not Applicable	Basic
Fill+Pack Analysis	Advanced	Basic
Cool Analysis	Advanced	Performance

Analysis type /operation	Autodesk Moldflow Adviser	Autodesk Moldflow Scandium
Warp Analysis	Advanced	Performance
Shrink Analysis	Not Applicable	Performance
Core shift Analysis	Not Applicable	Performance
Stress Analysis	Not Applicable	Performance
Fiber Orientation	Not Applicable	Performance
Process Optimization Analysis	Not Applicable	Performance
Microchip Encapsulation	Not Applicable	Performance
Underfill Encapsulation	Not Applicable	Performance
Autodesk Simulation Interface	Advanced	Basic
Autodesk Moldflow Structural Alliance Interface	Advanced	Basic
Structural CAE Interface	Not Applicable	Performance
Paddle Shift Analysis	Not Applicable	Performance
Dynamic Paddle Shift Analysis	Not Applicable	Performance
Wire Sweep Analysis	Not Applicable	Performance
Birefringence Analysis	Not Applicable	Advanced
Gas-Assisted Injection Molding	Not Applicable	Advanced
MuCell	Not Applicable	Advanced
Injection Compression	Not Applicable	Advanced
Reactive Injection Compression	Not Applicable	Advanced
Co-Injection	Not Applicable	Advanced