Femap, NX, and Simcenter 3D

WHITEPAPER

Overview of Product Updates and Licensing Options for Femap, NX, and Simcenter 3D

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ATA ENGINEERING, INC.

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Overview of Product Updates and Licensing Options

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VENDOR ugslmd
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    67AD 7BC9 66E1 16E4 DFEF 53E8 F2DF 009D 9F7C"
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    SIGN="41ED 1ABE 8511 77CE C891 7E7A 0480 FE0B 8D54 ATE9 \
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    C891 7E7A 0480 FE0B 8D54 ATE9 29A8 DDE1 68CF B4AA 1DD5 \
    0ED4 853C 4F41 602B D7A9 A6A7 67AD 7BC9 66E1 16E4 DFEF \
    53E8 F2DF 009D 9F7C"
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Software:
Femap
NX
Simcenter 3D

Overview

This whitepaper gives a broad introduction to how users can update their Siemens PLM software and licenses. It begins with an overview of requesting and maintaining WebKeys and continues with discussions on how to view documentation, download the latest product releases, and register for mailing lists through Siemens GTAC. It also describes different license types, explains how to download and implement new license files, and shares methods for borrowing licenses to work offline.

As always, ATA is standing by to answer any of your questions, help solve your licensing problems, and identify ideal license configurations to meet your team's requirements.

This whitepaper is part of a series of free Siemens PLM Software training resources provided by ATA. For more whitepapers, tutorials, videos, and macros, visit ATA's PLM Software website: http://www.ata-plmsoftware.com/resources.

Overview of Product Updates and Licensing Options

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Overview of Product Updates and Licensing Options

1. WebKey Account Management

WebKey accounts provide personal, single-point authentication for Siemens PLM Software, giving users access to the product information and support tools located at www.siemens.com/gtac. These resources include the following:

- Software downloads and patches
- License file retrieval and emergency license requests
- Product-specific documentation, notes, and guides
- Solution Center database of problem solutions
- Web support for incident reporting and tracking*
- WebKey account management

*As a value-added reseller for Siemens PLM Software, ATA Engineering is proud to be the first line of support for our customers' questions and problems. ATA hosts a technical support hotline with unmatched expertise Monday through Friday from 5:00 AM to 5:00 PM Pacific. Contact the hotline by phone at 877-ATA-4CAE (877-282-4223) or through our web interface. ATA can help expedite Siemens GTAC support when necessary.

WebKey account management is available at the following link, which can also be found on the top-level GTAC page:

https://www2.industrysoftware.automation.siemens.com/webkey/

Here, users can request WebKey accounts, change passwords, recover forgotten usernames and passwords, add Sold-to IDs, and update account information.

1.1. Request a WebKey

Active customers can request a WebKey account at the following link, which can also be reached by selecting "Create Account" on the top-level WebKey account management page. Users can select between standard and Femap-specific request forms:

https://www2.industrysoftware.automation.siemens.com/webkey/chooseProductLine.jsp

You will need your Sold-to ID, which can be found directly under the Sold-to information on the shipping order or in the upper left-hand corner of the license file. Note that Femap users should omit the five leading zeros. Additional information depends on the associated product set:

- Femap users with a dongle will need to supply a portion of the serial number, which is printed on the dongle itself or is available in Femap from the Help → About menu. For the example serial number "900-FX-NT-1234567F," users should enter "FX-NT-1234."

Overview of Product Updates and Licensing Options

- Femap users with floating licenses should supply the LMHost ID.

- Other users (NX, Simcenter 3D, Simcenter Nastran, and Solid Edge) should supply a WebKey Access Code (WAC), which can be found on the upper-right corner of the license file.

After completing the form, you will receive an email with a link to activate the WebKey. The link is valid for thirty days, and the account will be available for use as soon as it is activated.

1.2.   Change WebKey Password

To update your WebKey password, use the following link, which can also be reached by selecting "Change Password" at the top-level WebKey account management page:

https://www2.industrysoftware.automation.siemens.com/webkey/password.jsp

1.3.   Recover WebKey Username and Password

To have your username sent to the associated email address, select "Forgot your Username" on the top-level WebKey account management page, or follow the link below:

https://www2.industrysoftware.automation.siemens.com/webkey/forgotUsername.jsp

You can also reset forgotten passwords, at which point you will receive an email with a new automatically generated password. This option can be reached by selecting "Forgot your Password" on the top-level WebKey account management page, or by following the link below:

https://www2.industrysoftware.automation.siemens.com/webkey/forgotPassword.jsp

1.4.   Add Sold-To/Install

You can add a new Sold-to or Install to your account with the following link, which can also be reached by selecting "Add a SoldTo/Install" on the top-level WebKey account management page.

https://www2.industrysoftware.automation.siemens.com/webkey/addSoldTo.jsp

1.5.   Update Account Information

You can update your WebKey account information, including name and phone number, using the link below or by selecting "Update Account" on the top-level WebKey account management page.

https://www2.industrysoftware.automation.siemens.com/webkey/update.jsp

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2. Product Updates and Documentation

Users with a valid WebKey can quickly access new product downloads from the GTAC website. In addition, GTAC hosts a documentation repository and maintains email lists that highlight product releases and solution center articles.

2.1. Downloading New Products

New product releases and maintenance patches can be accessed at the link below, or by navigating to the main GTAC page and selecting "Download or Upload Files."

https://download.industrysoftware.automation.siemens.com/

After logging in with a valid WebKey, select from the available products on the left side of the screen. The available subfolders vary based on the product chosen but generally have a logical structure and allow for the download of full product releases, maintenance patches, and addition add-ons as applicable. README. txt files are commonly used to identify files and outline basic download and installation instructions.

The most recent Femap releases and prior versions are available at Femap → Full Products, VXX.X.X. The most recent NX release is available at NX → NX XXXX Series → NX XXXX with prior supported and unsupported releases available at NX Support → NX Supported and NX Support → NX End of Standard Maintenance, respectively.

Note that some NX releases are split between three smaller files with extensions .zip, .z01, and .z02. To install these versions, download all of the smaller files and then use WinZip or 7-Zip to extract only the .zip file, which will automatically unzip and merge all three files.

Some maintenance updates are available as smaller files that upgrade the existing software installation. Alternatively, a full, clean installation of the newer version can be completed.

2.1.1. Continuous Release for NX and Simcenter 3D

NX and Simcenter 3D moved to a Continuous Release update methodology beginning with the January 2019 release of NX (Version 1847) and Simcenter 3D 2019.1. With this release cadence, functional enhancement releases will be delivered every six months, with monthly updates providing fixes. There are no schema- or compatibility-related changes in monthly updates.

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Installation files are provided in two formats:

- MSI format is a complete installation that is available as a downloadable .zip file or on the DVD media. This version is designed to update existing NX installations or allow the standard base installation of NX.

- MSP format is an upgrade-only patch installer that will upgrade your previous NX version to the current version and is only available as an .msp file download. This option is recommended for customers who are looking to update a recent version of NX.
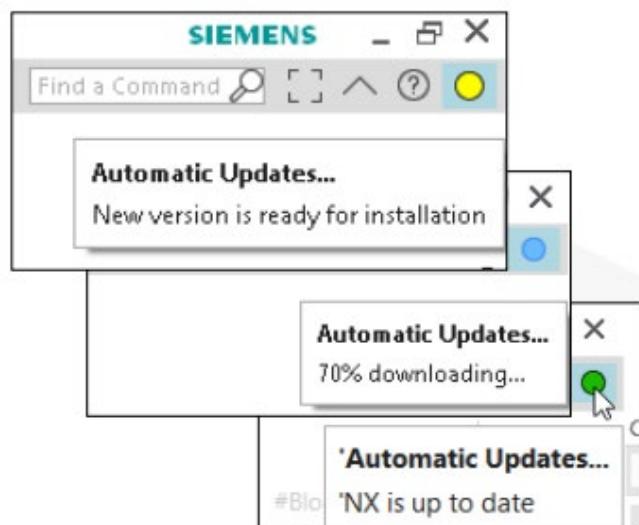
To return to a previous version of NX, it is recommended that you uninstall the newer version using Add/Remove Programs before using the original media to install the previous version.

Instructions for parallel installation of continuous release versions can be found in the installation guide located inside the install package at docs\nx_install_wnt.pdf.

2.1.2.   Automatic Updates for NX and Simcenter 3D

January 2019's release of NX and Simcenter 3D 2019.1 also introduces optional automatic updates for these products. This feature is turned off by default and can be controlled under customer defaults at Gateway → General → Software Update, where users can choose between Notify or Notify and Download. The latter option will automatically download and install the latest version of software each month as it becomes available. As shown in Figure 2-1, new icon in the upper right-hand corner shows the status of automatic update, with green indicating that the product is up to date, red indicating that the product is out of date, yellow indicating that a new version is available to download, and blue indicating that the new version is actively downloading. The icon will be grey if automatic update is turned off.

Figure 2-1: ▶
A new icon indicates the current status of automatic update.

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2.2.   Accessing Product Documentation

Product documentation can be accessed at the link below, or by navigating to the main GTAC page and selecting "Documentation."

https://support.industrysoftware.automation.siemens.com/general/documentation.shtml

Customers can select their desired product from the list and then choose among current and previous software versions. Available resources include user manuals, reference guides, release notes, and more. The documentation is public for some products, including NX and Simcenter 3D, but other software like Femap requires a WebKey login.

2.3.   Alerts for Product Updates and Support Articles

There are four email distribution lists available to help users stay up to date on product releases, fixes, Solution Center FAQs, and technical newsletter articles. Basic descriptions, subscribe and unsubscribe instructions, and options for filtering are described in the following sections. Content from these sources can also be accessed by searching in the Solution Center database:

https://solutions.industrysoftware.automation.siemens.com/index.php

2.3.1.   Software Field Bulletin (SFB) Mailing List

Messages to this list notify users about new product releases, fixes, and end of standard maintenance schedules. You can subscribe to the SFBmail list by sending a blank message to:

sfbmail-subscribe.plm@siemens.com

You will receive a welcome email with your initial password and a link to the subscription page. This page provides the option to filter by product, to turn digest mode on or off, and to change your login password:

http://mailman.industrysoftware.automation.siemens.com/mailman/options/sfbmail

You can remove yourself from the SFBmail list from the options page or by sending a blank message to:

sfbmail-unsubscribe.plm@siemens.com

You will receive a confirmation email and must send a reply to that message or click the confirmation link to approve the unsubscribe request.

2.3.2.   GTAC Newsletter Mailing List

Messages from this list include links to all new technical newsletter articles submitted in the past month by the GTAC global support staff. You can subscribe to the newsletter list by sending a blank message to:

newsletter-subscribe.plm@siemens.com

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You will receive a welcome email with your initial password and a link to the subscription page. This page provides the option to filter by product, to turn digest mode on or off, and to change your login password:

https://mailman.industrysoftware.automation.siemens.com/mailman/options/newsletter

You can remove yourself from the newsletter list from the options page or by sending a blank message to:

newsletter-unsubscribe.plm@siemens.com

You will receive a confirmation email and must send a reply to that message or click the confirmation link to approve the unsubscribe request.

2.3.3. Solution Center Symptom Solution Articles

You can subscribe to the Solution Center list by sending a blank message to:

solutioncenter-subscribe.plm@siemens.com

You will receive a welcome email with your initial password and a link to the subscription page. This page provides the option to filter by product, to turn digest mode on or off, and to change your login password:

http://mailman.industrysoftware.automation.siemens.com/mailman/options/solutioncenter

You can remove yourself from the Solution Center list from the options page or by sending a blank message to:

solutioncenter-unsubscribe.plm@siemens.com

You will receive a confirmation email and must send a reply to that message or click the confirmation link to approve the unsubscribe request.

2.3.4. Weekly Summary List

This list offers a weekly summary of new articles and SFBs. You can subscribe to the summary list by sending a blank message to:

summary-subscribe.plm@siemens.com

You will receive a welcome email with your initial password and a link to the subscription page. This page allows you to enable or disable mail delivery and to change your password:

http://mailman.industrysoftware.automation.siemens.com/mailman/options/summary

You can remove yourself from the summary list from the options page or by sending a blank message to:

summary-unsubscribe.plm@siemens.com

You will receive a confirmation email and must send a reply to that message or click the confirmation link to approve the unsubscribe request.

3. Licensing Options

Licenses are generally configured for network or node-locked use and can be issued on a perpetual or subscription basis. ATA is happy to help you consider which license and configuration options are best suited to your current and long-term situation.

3.1. Floating vs. Node-Locked

Software licenses can be categorized as either floating or node-locked depending on where they can be used:

- Floating licenses are typically more expensive, but they allow anyone on the network to use the licensed product, up to the number of users specified in the license file.

- Node-locked licenses limit software usage to an individual node. NX and Simcenter 3D typically tie a node-locked license to an individual computer's MAC address. Femap typically ties node-locked licenses to a USB dongle, which can be transferred between computers. Note that Femap, NX, and Simcenter 3D cannot be accessed through a remote desktop application when a node-locked license is used.

License files can contain a mix of node-locked and floating licenses, with the node-locked features available on the specified machines and the floating features available to anyone with network access.

3.1.1. Changing License Type in Femap

Femap users can change their licensing method using batch files located in the top Femap directory (e.g., C:\Siemens\FEMAPv1201):

- go_demo.bat converts your licensing method to the Femap Node-Limited Demonstration version.

- go_dongle.bat converts your licensing method to use a security key.

- go_network.bat converts your licensing method to the floating/network configuration.

- go_subscription.bat converts your licensing method to the online/web subscription configuration. Note that unlike the other files, go_subscription.bat is located inside the subscription subfolder, e.g., C:\Siemens\FEMAPv1201\subscription.

Simply double-click the batch file to run. Note that Femap and NX Nastran should be closed before these tools are run.

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3.1.2. Changing License Types in NX and Simcenter 3D

Unlike Femap, batch files are not required to change licensing methods in NX or Simcenter 3D. Instead, floating or node-locked licensing is determined by whether a license server or license file is specified on the NX_Server registry key or the SPLM_LICENSE_SERVER environment variable, with the registry key taking precedence. See section 4.3.2 for more details.

3.2. Perpetual, Rental, and Subscription Licenses

Software has traditionally been available through either perpetual licenses, short-term rentals, or subscriptions:

- Perpetual licenses have the highest upfront cost but are by far the lowest-priced option over the long run. In addition to the initial license cost, users typically choose to maximize their investment by paying an annual fee to cover maintenance, enhancements, and support (ME&S, or maintenance). This allows users to receive regular software updates that provide new features and bug fixes and to enjoy continued access to ATA's technical support services. Users who end their maintenance still have access to their software, albeit without the ability to upgrade to newer product releases.

- Rental licenses come with a three-month minimum duration and are only cost-effective for finite, short-term periods. This is the most expensive option over the long run, although credit toward a perpetual license is available for users who decide to purchase after the rental term.

- Subscriptions have the lowest entry cost for a twelve-month minimum term, but the costs break even with perpetual plus maintenance licenses within the first few years. Subscription licenses provide no residual value.

3.3. Online Subscription Licenses

Siemens PLM Software products are becoming increasingly available as monthly or annual subscriptions through their online store. Available configuration options can be limited and vary by product. However, subscription-based licensing offers a low entry cost, the ability to quickly scale licenses up or down depending on current demand, and the flexibility to pay as you go.

3.3.1. Femap Online Subscriptions

Monthly and annual subscriptions are available for Femap in five popular configurations:

- Femap stand-alone
- Femap with Simcenter Nastran
- Femap with Simcenter Nastran and Dynamic Response

Overview of Product Updates and Licensing Options

- Femap with Simcenter Nastran and Advanced Bundle
- Femap with Simcenter Nastran and Advanced Bundle with Desktop Extension

The Advanced Bundle offers the Dynamic Response capabilities in addition to the functionality previously available in the Aeroelasticity, DMAP, Superelement, and Distributed Memory Parallel (DMP) add-on modules. Desktop Extension removes checksum control, allowing the user to manually edit input files and run the analysis independently of Femap.

Visit ATA's page on the Siemens PLM web store for pricing and additional information.

Femap's subscription version is identical to the equivalent perpetual version, and files can be easily shared between users with different license configurations. Femap monthly online subscriptions are node-locked by MAC address.

3.3.2.   NX Cloud Connected Products

NX Cloud Connected Products are available as monthly or annual subscriptions and come in five configurations:

- NX Cloud Connected – Core Designer
- NX Cloud Connected – Advanced Designer
- NX Cloud Connected – Mold Designer
- NX Cloud Connected – Scan to Part
- NX Cloud Connected – Drafting & Layout

These configurations utilize a local install of software with the license managed in the cloud. Core Designer includes solid part modeling and assembly modeling, plus sheet-metal design, freeform modeling, and convergent modeling. Advanced Designer and Mold Designer add more advanced design tools and streamline the entire mold development process, while Scan to Part brings powerful reverse engineering tools, and Drafting & Layout offer tools for creating engineering drawings and design layouts.

Visit the Siemens PLM web store for additional information and contact ATA with any questions.

3.3.3.   Simcenter on the Cloud

Siemens offers the following simulation solutions through the Rescale platform:

- Simcenter 3D
- Simcenter Nastran
- Simcenter STAR-CCM+
- Simcenter Aimsim

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These solutions are available through a web browser interface, and bring-your-own-license and pay-as-you-go licensing configurations are available. Visit the Siemens PLM web store for additional information and contact ATA with any questions.

3.4. Value-Based Licensing for NX and Simcenter 3D

Value-based (token) licensing for NX CAD and Simcenter 3D allows users to run any combination of token-enabled applications, provided enough tokens are available. This gives users access to various applications without buying the corresponding add-on modules, making it cost-effective for customers who need to access a variety of capabilities and offering flexibility to try new capabilities and accommodate changes in capability usage over time. Value-based licensing can be easily combined with traditional module-based license configurations, with module-based licenses being checked out before tokens are used when available. Value-based licensing operates using the same Flex license server as module-based licenses. Tokens are not consumed; when a user exits NX or Simcenter 3D, the tokens are released back to the pool for others to use. Note that separate token pools are used for NX CAD and Simcenter 3D applications, e.g., NX tokens could not be used to run Simcenter Nastran.

Many NX add-on modules can be licensed through the token pool, including Mechatronics Concept Designer (MCD), Advanced Sheet Metal, Molded Part Validation, NX Realize Shape, Weld Assistant, Human modeling, Routing, translators, and more. A Mach 1 floating license or higher is required as the base seat, and after that, each additional application checks out a defined number of tokens. NX CAD tokens are only available on a subscription basis and are supported for NX 1872 (Summer 2019) and later.

Most Simcenter 3D and Simcenter Nastran products are available through token licensing, including various solver environments, Simcenter Thermal/Flow, modeling add-ons, solutions like Simcenter Durability and Response Dynamics, Simcenter Motion, and Simcenter Flexible Pipe. A base seat of Simcenter 3D is required, and after that, each additional application checks out a defined number of tokens. Simcenter 3D tokens can be obtained on a perpetual, rental, or subscription basis and are supported for Simcenter 3D v11 and higher.

3.5. License File Format

A license file is a text file containing information like server names, host identifiers, and licensed features with "\" used as a continuation character. SERVER lines identify the node name and host ID of the license server and the port number of the license manager daemon. There may be multiple SERVER lines for redundant server configurations or no SERVER lines for stand-alone node-locked license files. The VENDOR line specifies the name of the vendor daemon supported by the license file.

     Femap, NX, and Simcenter 3D are trademarks of Siemens PLM Software, Inc.

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PACKAGE lines are used to license a product suite to enforce bundles in some products and as a more efficient way to distribute a license file with a large number of features sharing the same INCREMENT / FEATURE line arguments. The PACKAGE line doesn't license anything by itself but instead requires a matching INCREMENT / FEATURE line to license the entire package.

```
SYNTAX:

INCREMENT name vendor daemon version exp. date # of licenses \
HOSTID=hostid SUPERSEDE DUP_GROUP=UHD user_info="<Optional Text>" \
ISSUED=dd-mmm-yyyy BORROW=nnnn ck=nnn SIGN="nnnn … nnnn"
```

Figure 3-1: ▶

Excerpt from the Siemens PLM Licensing User Guide describing the parts of an INCREMENT line.

name	The name given to the license module by Siemens PLM Software.
vendor daemon	The name of the Siemens PLM Software vendor daemon, ugslmd, that serves this feature.
version	The highest version of this feature that is supported by this license.
exp. date	The expiration date. (If this field is set to "permanent", then the license never expires.)
# of licenses	The number of floating licenses for this feature.
HOSTID=hostid	A host identifier supported by Siemens PLM Software. Used only if the feature is to be bound to a particular host.
SUPERSEDE	All licenses issued before the date specified in ISSUED= are superseded by this line and become ineffective.
DUP_GROUP=UHD	Allows a single user, host, and display combination to use only one license seat.
user_info="<Optional Text>"	Describes the licensed product in more detail.
ISSUED=dd-mmm-yyyy	The date the product version was released.
BORROW=nnnn	The maximum number of hours a feature can be borrowed.
ck=nnn	A checksum value, useful with the "lmutil lmcksum" command, which verifies that the license has been entered correctly.
SIGN="nnnn … nnnn"	A hexadecimal number that "authenticates" the readable license file text, ensuring that the license text has not been modified.

In general, license files should not be edited, with the exception of hostnames on the SERVER line(s), port numbers on the SERVER line(s), and user_info on INCREMENT / FEATURE line(s). If the hostname is not supplied when a license file is requested, a placeholder will be used and should be replaced with the real hostname. The proper hostname and port number value are used on the client side for setting the server setting to port@hostname. The user_info field in an INCREMENT / FEATURE line displays a descriptive name for the bundle and should not exceed twenty characters, use special characters such as quotes, or contain a continuation character.

3.6. Licensing User Guide

For additional details on license formats, configurations, and administration, visit the Siemens PLM Licensing User Guide, located on the GTAC Downloads page under Siemens PLM Licensing → Product Updates → Documentation.

Overview of Product Updates and Licensing Options

4. License Updates

This section describes how to download and update new license files, which will be needed for upgrading software to new major releases.

4.1. Downloading New License Files

New license files can be retrieved from the following link, which can also be accessed from the main GTAC page by selecting "License Management."

https://www2.industrysoftware.automation.siemens.com/LicenseManagement/Application

After logging in via WebKey, select the applicable Sold-To/Install from the dropdown selection. Next, select Passwords and License Files, choose the product, version, and LM Host or Dongle ID of interest, as applicable, and click Continue to generate and download the license file.

In addition to downloading new license files, the License Management menu provides options to obtain emergency license files, view a configuration report to see license quantities and expirations, and see Composite Host ID information.

4.2. Updating Node Locked Licenses

To update the license for a node-locked Femap installation, open Femap and navigate to Help → About. Click Security, and enter the two access codes from the license file, without any trailing spaces.

To update the license for a node-locked NX or Simcenter 3D installation, save the new license file in place of the original license file.

4.3. Updating Floating Licenses

After downloading the new license file (see section 4.1), check that the proper hostname and port number are specified on the SERVER line, and if they are not, update those fields.

In most cases, license updates can be completed by simply stopping the old license service, replacing the previous license file with the new license file, and starting a new license service. Some updates will require a newer version of the FLEXlm license manager tool to be installed.

4.3.1. Install and Configure the License Manager

The FLEXlm license manager can be installed from both NX and Femap installation packages, or it can be downloaded independently from the GTAC downloads site. From an NX package, double-click Launch.exe and then choose install license manager. For Femap, double-click setup.exe and, on the Select Features page of the install wizard, choose just the Flexlm License Manager.
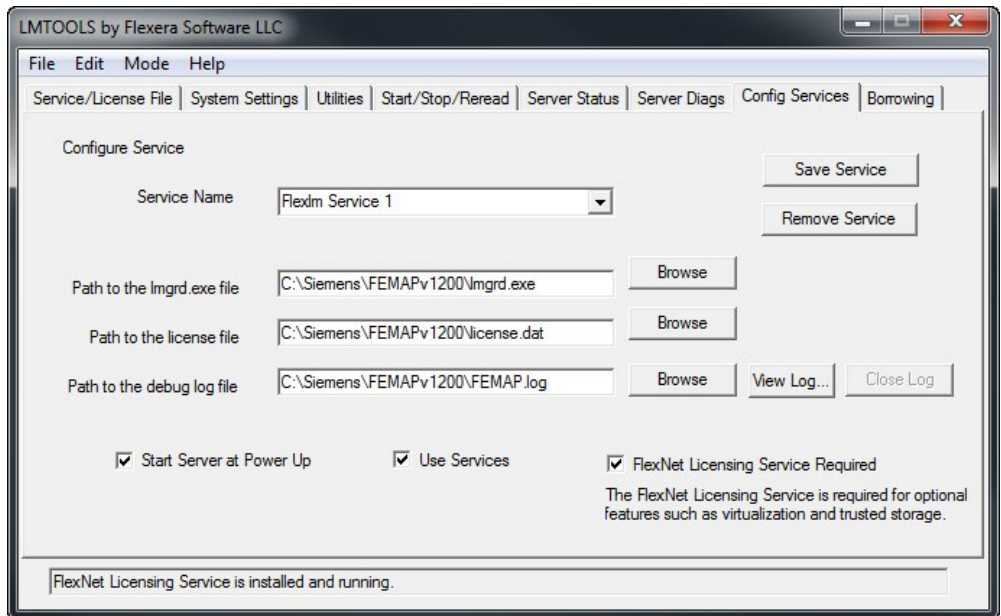
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The license manager is configured using the LMTOOLS program, which should be available under the NX or Femap start directory (Start → All Programs → Femap vXX.XX or Siemens NX), or it can be accessed by running LMTOOLS.exe from the installed directory (C:\Siemens\FemapvXXXX or C:\Siemens\NX).

Start on the Config Services tab: enter a Service Name, specify a path to the lmgrd.exe file that can be found in the installation directory, specify the path to the license file, and check on the Start Server at Power Up and Use Services buttons. Save the service before continuing.

The license server must be manually started the first time from the Start/Stop/Reread tab. Select the service that was previously configured and press the Start Server button. The FLEXlm should now be operating normally and is ready to distribute licenses on the network. The Server Status tab can be used to verify that everything is functioning properly.

Figure 4-1: ▶
Configuration settings for license manager.

4.3.2.   Direct Femap and NX to the License Server

To point Femap to the license server, open Femap, navigate to Help → About, and click security. In the License File field, enter an at sign followed by the name of the license server, i.e., "@LicenseServer." Alternatively, a copy of the license file can be placed in the Femap directory, and Femap will extract the name of the license server, but this is not the suggested approach because each local copy of the license file would need to be replaced when licenses are updated.

NX and Simcenter 3D determine where to look for the license server or license file based on the entry in the NX_Server registry key (HKEY_CURRENT_USER \ Software \ Siemens_PLM_Software \ Common_Licensing) or the SPLM_ LICENSE_SERVER (as of NX 10.0) or UGS_LICENSE_SERVER environment

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variable. The registry setting will always override any environment variable setting, even if it is "blank" or empty. Prior to NX 9.0, the License Options utility outside of NX was used to set the environment variable. As of NX 10.0, the Licensing Tool (Start → All Programs → Siemens NX → Licensing Tools → Licensing Tool) is used to set the registry key, which will take precedence over any environment variable. Note that the only way to make the variables effective again is to delete the NX_SERVER registry key.

License server information for NX Nastran is specified by the AUTH line in the nastran.rcf file, which is located in the conf folder of the NX Nastran installation.

5. Additional License Options

This section covers additional license options such as controlling bundle settings for NX and Simcenter 3D and accessing licenses remotely.

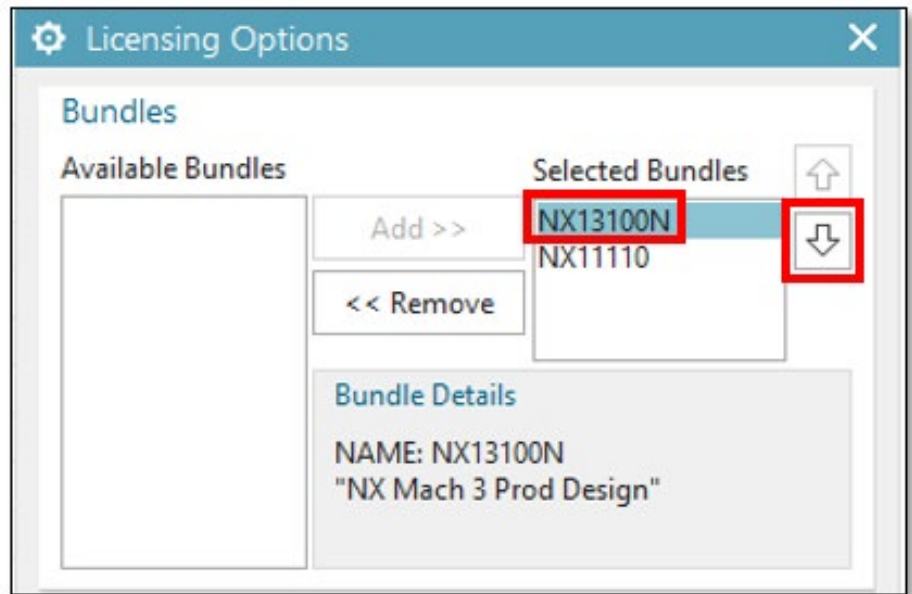### 5.1. NX/Simcenter 3D Bundle Settings

The bundles to be used at launch can be set on the Bundle Settings tab of the Siemens PLM Software Licensing Tool, which is available in the NX folder at Start → All Programs → Siemens NX → Licensing Tools → Licensing Tool. Bundles can also be updated for an individual session of NX by going to File → Utilities → Select Bundles. In either case, use the Add and Remove buttons to move bundles back and forth between Available Bundles and Applied/Selected Bundles. The order of bundle names in Applied Bundles is the order in which the application will attempt to check out any feature.

Siemens PLM Licensing uses Automatic Bundle Consolidation to maximize the number of licensed modules available for use by attempting to reduce crossover licensing. As an example, in a situation where a user has "Mach 1" and "Mach 3" NX license bundles selected, the "Mach 1" seat will typically be checked out when NX is started and basic modeling functions are used. When commands from the "Mach 3" bundle are used, the "Mach 3" bundle will be checked out and the "Mach 1" bundle will be checked back in. The "Mach 3" bundle will remain checked out even after those commands are completed to ensure that the user has access to those features again, should they be required. Users could choose to relinquish the "Mach 3" bundle and revert back to "Mach 1" without exiting NX using this procedure:

1. Switch to the Gateway application, available under the File menu, to check in all "Mach 3" bundle features except for "gateway" and the bundle itself.

2. Go to File → Utilities → Select Bundles. The Licensing Options dialog shows the "Mach 3" bundle at the top of the list, because it is the bundle currently in use. Select the "Mach 3" (NX13100N) bundle and use the down arrow to move it below the "Mach 1" (NX11110) bundle, as shown in Figure 5-1.

3. Switch back to the Modeling application. When a modeling command is selected, the "Mach 1" bundle will be checked out and the "Mach 3" bundle is checked in, making it available to other users on the network.

Figure 5-1: ▶
Licensing Options dialog box.

In some cases, individual features are available as add-on "sticky" modules, which cost less than an individual floating license feature but must be manually released from an NX session. Sticky modules aren't reserved when a bundle is initially accessed. Once a sticky module is checked out, it will remain attached to the user's session until the user manually releases it at File → Utilities → Select Bundles by highlighting the feature and clicking "Free Selected Licenses," or until the NX session is closed.

5.2. Accessing Licenses Remotely

Users working remotely or on travel who use network licensing may be able to access their license server using a VPN, which would allow for normal use of the software with no additional changes required. When that isn't an option, License Borrowing allows a single seat to be checked out for offline use. The borrow feature, indicated by the BORROW keyword on an INCREMENT line in the license file, is now enabled by default and no longer requires a special configuration like in the past. Note that licenses are borrowed for specific user accounts on specific machines; other users on the same computer will not have access to a borrowed license.

5.2.1. Borrowing a License in NX or Simcenter 3D

Open the Siemens PLM Software Licensing Tool, which is located in the NX folder under Start → All Programs → Siemens NX → Licensing Tools → Licensing Tool, and go to the Borrowing Settings Tab. Click Borrow, which will open a new window that allows specific license features to be checked out and the return date to be specified. The Change button allows the return date to be updated, and Return can be used to check the borrowed license back in early, provided you are
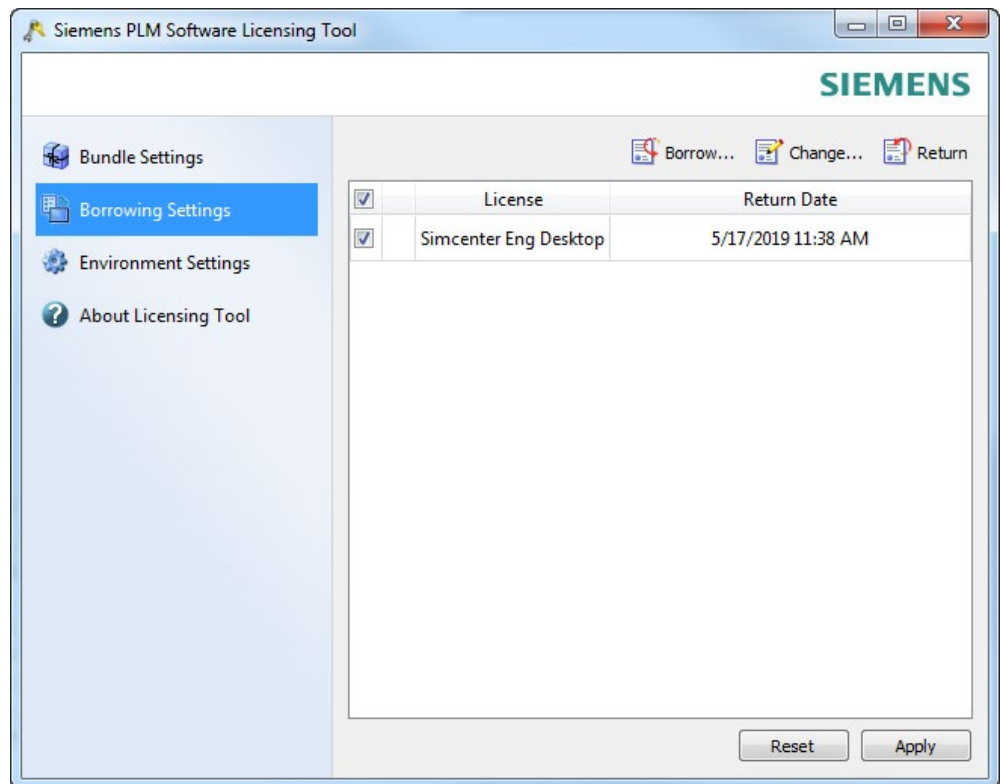
Overview of Product Updates and Licensing Options

connected to the license server. Changes on the Borrowing Settings tab of the Licensing Tool, shown in Figure 5-2, do not go into effect until Apply has been clicked.

The license pool on the server will be reduced by the number of borrowed licenses for the entire duration they are checked out. Licenses can be borrowed for up to 120 days (2880 hours). At the return time, the license will be automatically returned to the license server, even if the device is still offline.

Figure 5-2: ▶
Borrowing settings tab of the Siemens PLM Software Licensing Tool.

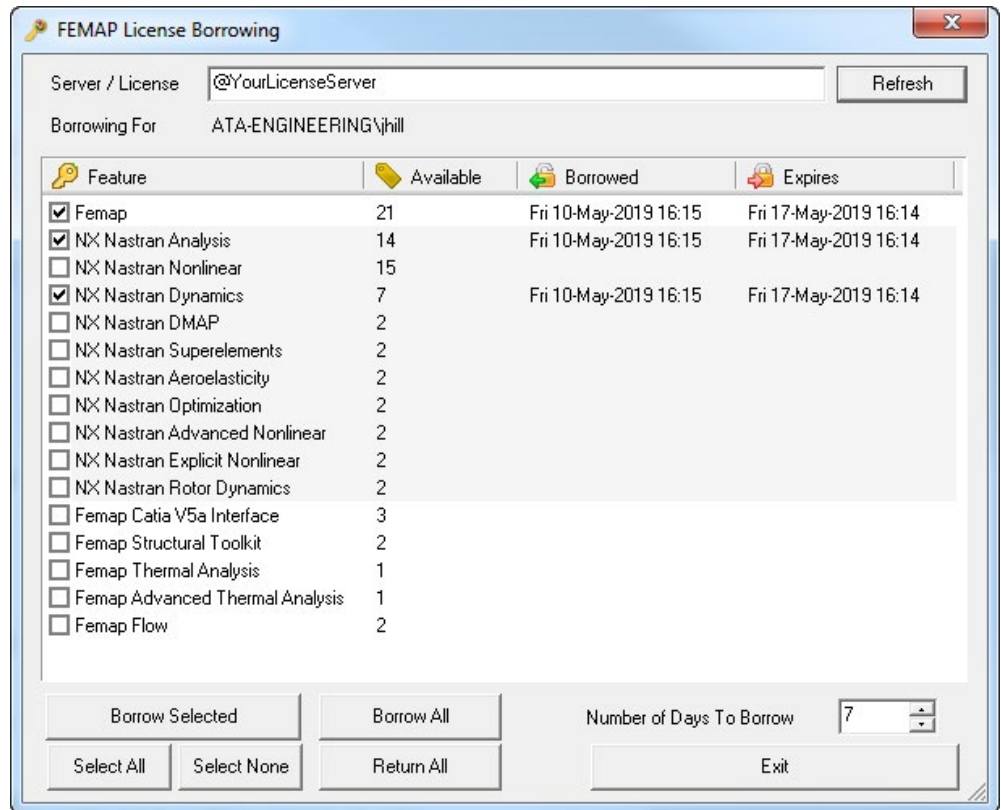### 5.2.2.   Borrowing a License in Femap

Begin by running the Borrow.exe utility located in the main Femap directory, and make sure the correct server is specified in the Server / License field. Select the various features you want to borrow, select the required number of days, and click Borrow Selected, as shown in Figure 5-3. The chart will update to show features that have been checked out, how many are available on the server, and when the borrowed licenses expire. Licenses can be returned to the server using the same utility.

When you launch Femap with a borrowed license, a pop-up message will notify you how many days are left on the license. Borrowed licenses will also be reflected on the license page inside Femap at Help → About → Security → Show Licenses.

Overview of Product Updates and Licensing Options

The license pool on the server will be reduced by the number of borrowed licenses for the entire duration they are checked out. Licenses can be borrowed for up to 120 days (2880 hours). At the return time, the license will be automatically returned to the license server, even if the device is still offline.

Figure 5-3: ▶
Femap License Borrowing utility.

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