

ATA news

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ISSUE SIXTEEN



SUMMER 2019



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

DETAILS INSIDE

ATA Launches Revamped YouTube Page

ATA Engineering is excited to have launched our newly revamped YouTube page earlier this summer. The new page makes it easier than ever to stay up to date with our latest videos and on-demand webinars.

The site already contains our full catalog of videos for Femap, STAR-CCM+, HEEDS, NX, Simcenter 3D, Simcenter Nastran, and more, and it will continue to be updated as new material becomes available. We invite you to subscribe today to receive notifications as new videos are uploaded.



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Of course, you can also continue to access our free, high-value resources at www.ata-plmsoftware.com, which includes all of our videos as well as other resources like free APIs, whitepapers, and tutorials.

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www.ata-plmsoftware.com
844-756-7638 (844-PLM-SOFT)
plm_sales@ata-e.com

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

[Our newest whitepaper](#) gives an in-depth look at everything needed to keep Femap, NX, and Simcenter 3D and associated licenses up to date. This includes WebKey basics, links to the GTAC page where new software is available, and instructions on how to download and install new license files.

In addition, licensing basics are discussed, such as the difference between floating and node-locked licenses; the pros and cons of perpetual, rental, and subscription licenses; online subscription licensing options; and value-based licensing for NX and Simcenter 3D.

[This document](#) is intended to empower users to update their software and licenses without delay. In addition, ATA is always standing by to answer any questions, help solve licensing problems, and identify ideal license configurations.

Calendar of Events

UPCOMING TRAINING CLASSES

ATA provides comprehensive training in the use of Femap, Simcenter 3D (formerly NX CAE), and NX Nastran. Upcoming training classes are shown below. Please visit [our website](#) to sign up for these classes or request a custom class. TBA classes are also scheduled on request.

NX NASTRAN WITH FEMAP

- OCT 08** [Introduction to Dynamic Analysis](#)
- OCT 14** [Advanced Dynamic Analysis](#)
- TBA** [Introduction to DMAP](#)

NX NASTRAN WITH SIMCENTER 3D

- OCT 08** [Introduction to Dynamic Analysis](#)
- OCT 14** [Advanced Dynamic Analysis](#)
- TBA** [Response Dynamics](#)

FEMAP

- TBA** [Introduction to Femap](#)
- TBA** [Advanced Femap](#)

ON-DEMAND WEBINARS

[What's New in Simcenter 3D and Simcenter Nastran 2019.2](#)

Discover how the latest enhancements in Simcenter 3D and Simcenter Nastran 2019.2 can boost your productivity. This webinar will focus on improvements to meshing, post processing, and Simcenter Nastran solutions while also highlighting the new features of other disciplines available in Simcenter 3D.



ATA also provides a host of [free training resources](#) including tutorials, videos, and whitepapers.

Tips and Tricks

STAR-CCM+: STATISTICS REPORT

Oftentimes a simulation may be slow to converge or may represent an inherently unsteady problem, such that reported values on important quantities—for instance, drag coefficient—might oscillate between two extremes. In 13.04, STAR-CCM+ introduced Statistics Reports, which can report the mean, maximum, minimum, or sum of monitor over a specified number of iterations. The statistical representation of a monitor history may be more representative than the instantaneous report of the correct value of the reported quantity, and this difference may be especially important in automated workflows, such as a HEEDS-directed optimization, where a reported response on an oscillating quantity may mislead the optimization algorithm.

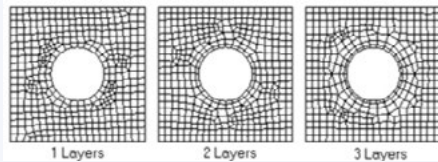
NX & SIMCENTER 3D: CONTROLLING COLOR DEFAULTS

The Element tab of the Model Display Preferences dialog (Home Tab: Utilities Group → More Gallery → Model Display Preferences) allows element color to be determined by physical or material property, mesh collector, and more. Customer Defaults (File → Utilities → Customer Defaults) gives users greater control over which colors are used.

Default colors can be set on the Model Display tab (Simulation → Pre/Post → Model Display). After selecting the desired display criteria, such as Element Material or Physical Color Basis, users can customize the number of color levels and choose specific colors to be used.

FEMAP: QUAD LAYERS

The Quad/Tri Layers option in the Meshing Toolbox or Mesh, Geometry, Surface command allows users to specify the number of element layers for Femap to place around every boundary curve on a surface, including internal curves.



New Resources

[Femap API: Find Groups Containing Nodes or Elements](#)

These APIs search for nodes or elements in a set of user-selected groups. This function can be especially helpful for locating entities in a large model with many include files.

[On-Demand Webinar: Intro to the Femap API](#)

This webinar covers everything you need to get started building APIs that automate repetitive tasks, customize existing functionality, or introduce entirely new tools. A variety of example programs are provided to teach core principles.

[On-Demand Webinar: What's New in Femap 2019.1](#)

Femap 2019.1 introduces a new naming convention and release cadence as well as a number of improvements from geometry and meshing through solver support and postprocessing. This webinar demonstrates many of these new features.

[On-Demand Webinar: Automating STAR-CCM+ with Java](#)

This webinar looks at the various ways to automate workflows within STAR-CCM+, including using the Design Manager and basic JavaScript automation. It also showcases a workflow using Java to drive adaptive meshing that tracks a shock in a transonic simulation.

[On-Demand Webinar: Introducing Screenplay for STAR-CCM+](#)

Screenplay, new in STAR-CCM+ 2019.2, allows users to quickly animate and interpolate simulation views and visualizations. Watch this webinar to learn how Screenplay can make communicating results more effective.

Recent News

Register for NX Beta Testing

NX and Simcenter 3D beta tests are coming soon! This testing will allow users to get an early look at new features, develop upgrade plans, and improve the quality of these tools through realistic testing. Testing is available at the Siemens office in Milford, Ohio, or off site for users who can't travel. [Register today!](#)

Siemens Releases Simcenter 3D and Simcenter Nastran 2019.2

Simcenter 3D 2019.2 introduces new selection methods, quality improvements for meshing, and new view controls during postprocessing. It also includes the first release of Simcenter 3D Electromagnetics. [View the Simcenter blog](#) for more details, and [view our on-demand webinar](#).

Siemens Releases Simcenter STAR-CCM+ 2019.2

In addition to the new Screenplay feature enabling advanced video creation for CFD scenes, this release also incorporates script-free automation, faster transient simulations, a new adjoint solver, and more. Learn more on the [Simcenter blog](#).

2019 Regional Users' Groups (RUGs) Are Coming Soon

These one-day events bring together local Siemens Digital Industries Software users to share knowledge, tips and tricks, and training. There are four events this year, with more expected in the future. [Visit the event page](#) to view locations and schedule details.



Why choose **ATA**?

ATA Engineering, Inc., (ATA) is a nationwide provider of innovative, high-value, test- and analysis-driven mechanical engineering design solutions.

With more than four decades of experience working with our customers to solve the most challenging design, test, and analysis problems, we have gained a reputation for excellence in the engineering community.

Our work on a wide range of products across a broad spread of industries has been recognized with numerous technical and service awards for excellence. This expertise and support is a key part of the added value we offer to all customers who purchase Siemens products from us, whether you are an independent contractor or a large engineering team. To provide best-in-class support to our VAR software customers, we have established a formal hotline system that provides on-demand support to resolve technical issues encountered by our customers in their implementation of the tools.

The hotline is staffed by experienced engineers, all of whom use these applications on a regular basis. ATA is also the Siemens PLM Software-preferred training provider and official developer of courseware for all NX Nastran training.

ATA Technical Support

Need technical assistance? Call our hotline staffed by engineers at **877-282-4223**, or [visit us online](#). Even if you're not a current ATA customer, try us out for free.

Free Software Trials

Visit our website to access free trials/demos of Femap and Simcenter Nastran, NX CAD and CAM, Simcenter 3D, Simcenter STAR-CCM+, Teamcenter, and Solid Edge



ATA Engineering, Inc., has been recognized as a Smart Expert Partner with validated expertise in Femap and STAR-CCM+.

Featured Instructor

Vicki Harris



Vicki Harris is a senior project engineer in ATA's Herndon, Virginia, office. She has over ten years of project experience in structural analysis and dynamics using NX, Femap, and NX Nastran. Past projects have involved spacecraft, roller coasters, and ships. She also develops software to expand the capabilities of existing analysis software. Vicki shares her knowledge by providing support to ATA's CAE hotline.

Vicki is also ATA's lead engineer for machine learning, helping to drive ATA's efforts to improve existing processes and develop new analysis tools using advanced computational methods. As a part of ATA's Small Business Innovation Research program, she has developed a method for representing complex regions of finite element models with faster-solving machine learning metamodels.

Vicki has a B.S. in Mechanical Engineering from the Massachusetts Institute of Technology and an M.S. in Mechanical Engineering from the University of California, San Diego.

-  www.ata-e.com
-  [ata-engineering](https://www.linkedin.com/company/ata-engineering)
-  [@ataengineering](https://twitter.com/ataengineering)
-  sales@ata-e.com
-  858.480.2000

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