ATA ENGINEERING

SOFTWARE newsletter

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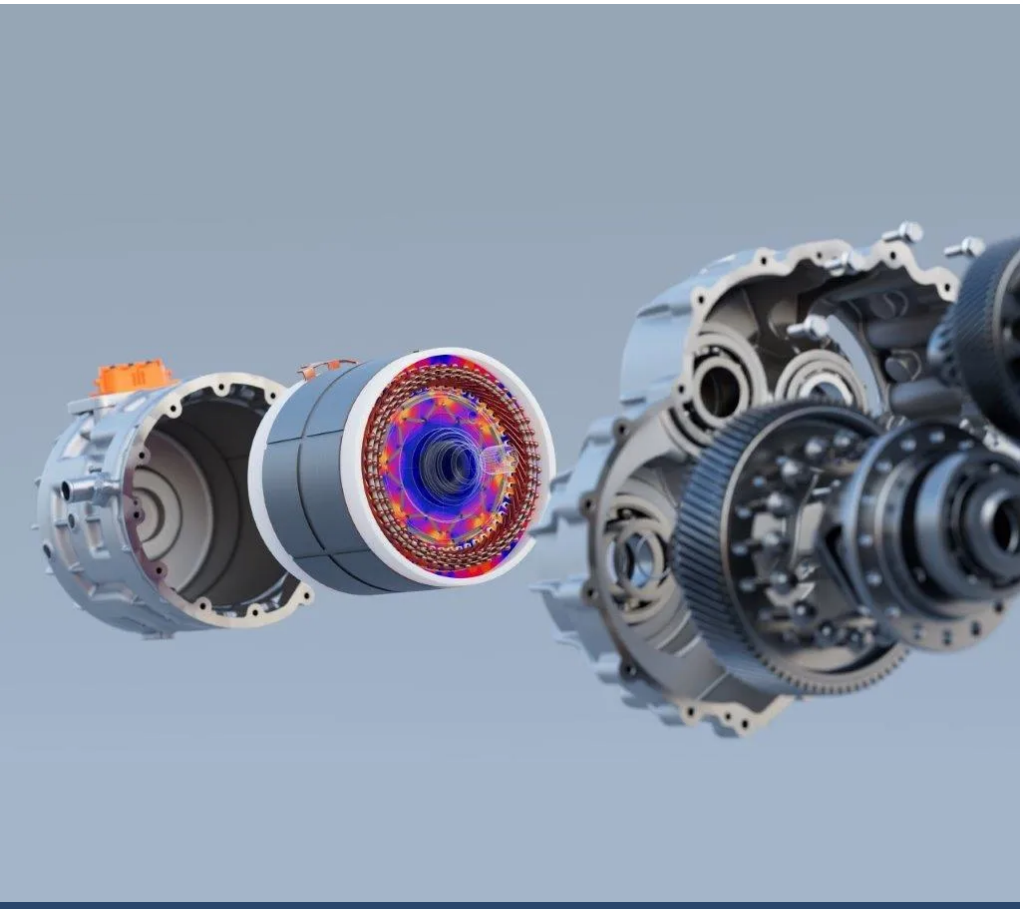

Siemens' Acquisition of Altair

DETAILS INSIDE

ATA Recognized at the Siemens Americas Partner Conference

To kick off the new fiscal year, ATA Engineering joined Siemens Digital Industries Software partners in Miami for the annual Americas Partners Conference. This event brings together Siemens value-added resellers (VARs) to collaborate and share insights on how an evolving software portfolio continues to support customers across design, simulation, and test.

ATA Engineering was recognized with two awards reflecting our continued growth and impact within the Siemens partner ecosystem:

- Outstanding Sales Achievement – Simcenter
- Xcelerator Competitive Win – Simcenter

These recognitions reflect the strength of our partnership with Siemens and our ongoing commitment to helping customers implement powerful, efficient engineering tools that drive meaningful results.

Click here to unlock the full value of Siemens Digital Industries Software with ATA Engineering.

Inside:

ATA ENGINEERING, INC.

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Siemens' Acquisition of Altair

In January 2025, Siemens announced its landmark US$10 billion acquisition of Altair Engineering, bringing together Siemens' world-class digital twin ecosystem with Altair's strengths in multiphysics simulation, high-performance computing (HPC), data analytics, and artificial intelligence (AI). The move represents one of the largest expansions of the Siemens Xcelerator platform and significantly broadens the engineering toolsets available to customers.

Altair's solvers, optimization tools, and cloud-based computation capabilities will be integrated into Siemens' "ONE Tech Company" strategy, enabling deeper AI-driven insights and more cohesive simulation workflows. Siemens is already working behind the scenes to align platforms and prepare the expanded offering for release.

For ATA Engineering, the acquisition means exciting new opportunities: as a Siemens VAR, ATA can now offer Altair products alongside our current Siemens portfolio. Customers can expect greater interoperability across design, simulation, and test—and more powerful ways to accelerate innovation.

Product availability and rollout details are still forthcoming. Customers are encouraged to stay connected with the ATA Software team by visiting us online and following us on LinkedIn for updates, timelines, and training information as integration progresses.

Calendar of Events

UPCOMING TRAINING CLASSES

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

FEMAP

MAR 02 — Introduction to Femap

SIMCENTER NASTRAN WITH FEMAP

FEB 23 — Multi-Step Nonlinear with Solutions 401 and 402 with Femap for Pre/Post

MAR 02 — Introduction to Dynamic Analysis with Femap for Pre/Post

MAR 09 — Introduction to Finite Element Analysis with Femap for Pre/Post

MAR 23 — Advanced Dynamic Analysis with Femap for Pre/Post

SIMCENTER NASTRAN WITH SIMCENTER 3D

FEB 23 — Multi-Step Nonlinear with Solutions 401 and 402 with Simcenter 3D for Pre/Post

MAR 02 — Introduction to Dynamic Analysis with Simcenter 3D for Pre/Post

MAR 09 — Introduction to Finite Element Analysis with Simcenter 3D for Pre/Post

MAR 23 — Advanced Dynamic Analysis with Simcenter 3D for Pre/Post

APR 06 — Response Dynamics

UPCOMING EVENTS

Connect with ATA Engineering at these upcoming industry events.

FEB 17 — Webinar: Simultaneous Engineering in NX: Live Share + AI Copilot

FEB 25 — Webinar: Femap HexMesh Bodies Tool Deep Dive

MAR 3-5 — Rotating Machinery Dynamics, Modal Analysis, and Vibration Control Seminars

Join ATA Engineering and Siemens in Costa Mesa for three in-person engineering seminars exploring durability and vibration control. Register here.

MAR 25 — Designcenter User Event

The Siemens Designcenter User Event on March 25 in Troy, Michigan, is an immersive NX user forum focused on practical tips, best practices, and expanding real-world use of Designcenter tools. ATA customers are encouraged to attend and connect with fellow users and Siemens experts. Register here.

ATA also provides a host of free training resources including tutorials, videos, and whitepapers.

Tips and Tricks

VIBRATA: USE XY OUTPUT FOR ACCURACY

For the best accuracy when extracting load data from Vibrata, prioritize XY output over contour output: XY results are calculated at every time or frequency point in the analysis, providing better fidelity and more consistent agreement with PSD-based RMS values. Contour results, on the other hand, may skip points or average data, which can introduce inaccuracies, especially for elements like CBUSH, beam, and bar.

FEMAP: SPEED UP LOAD MAPPING BETWEEN MODELS

When transferring nodal forces and moments from a coarse to a refined model, avoid using 3D data surfaces for interpolation, as this method is slow and can misrepresent distributed loads. Instead, convert your loads to output vectors using Model → Output → From Load, and then use Femap's Map from Model Output tool to efficiently transfer loads between models.

If your models include 1D elements, note that this tool supports 2D and 3D elements only; for 1D components, directly apply forces from the original model or use a two-step hybrid approach. For large numbers of load cases, automate the process with a Femap program file and loop commands like #IF, #DEF, and #GOTO, or run TempMap in batch mode with MATLAB scripts to generate and convert input/output files.

Finally, when mapping, consider mapping pressures or tractions instead of nodal forces, as this method preserves consistent loading magnitudes across meshes and avoids artificially inflating forces on the refined model.

NX: VERSION COMPATIBILITY

Need to know which NX versions can open which files? Use Command Finder → "About NX" to view the built-in NX Version History. This tool shows your release number and corresponding part file compatibility. For example, parts saved in NX 2023 (a minor release) can still be opened in NX 2007 or any later major version. In general, NX versions within the same major release family maintain backward and forward compatibility, so there is no need to uninstall intermediate versions to collaborate. Always check "About NX" before upgrading to confirm compatibility for shared files.

New Resources

On-Demand Webinar: Design Smarter with NX: Copilot and Hidden Power Tools

Most NX users are not fully leveraging the tools already included in their licenses. This on-demand webinar highlights often-overlooked NX 2506 modules and offers a first look at how Siemens is integrating AI, including AI Copilot, into future NX design workflows.

On-Demand Webinar: Tips and Tricks to Improve Efficiency in Simcenter 3D

Take a look at practical tips and real-world techniques for streamlining model setup, improving mesh editing, and working more effectively within the unified Simcenter 3D environment to reduce analysis time and improve consistency.

On-Demand Webinar: What's New in STAR-CCM+ 2506: Unlocking New Levels of Simulation Power

STAR-CCM+ 2506 introduces new features that enhance simulation accuracy and performance. Watch this webinar to see how these features can improve your workflows.

Recent News

Introducing IMAT v9.0

We are excited to announce IMAT v9.0 and IMAT4XL v9.0, now supporting MATLAB R2023b–R2025b. This major update introduces ATA Viewer, a modern replacement for VTKPLOT that works independently of MATLAB and supports multiple FEM overlays, custom display options, and a Femap-inspired interface. Other highlights include expanded nonlinear result reading in *readnas*, 64-bit OP2 file support in *writenas*, updated GUIs for MATLAB's new desktop themes, and improved consistency across unit menus and plotting tools. IMAT v9.0 is available to any IMAT user who is current with maintenance, enhancements, and support (ME&S). There is no cost for upgrading to v9.0.

Customers can download the latest version here. Please note that this version requires Sentinel RMS 10.0.0 or higher. To learn more about these new features, please send an email to imat@ata-e.com.

ATA at AIAA SciTech

ATA Engineering recently participated in the 2026 AIAA SciTech Forum in Orlando, presenting multiple technical papers and chairing sessions on topics spanning aerodynamics, hypersonics, materials, and flight dynamics. These contributions at the event highlighted ATA's continued leadership in advanced analysis and simulation across the aerospace industry.

ATA also supported STEM outreach at SciTech with a live aeroelastic wind tunnel demonstration in partnership with AIAA. Request technical papers from SciTech and other conferences here.

Why choose ATA?

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

With nearly five 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 are 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 preferred training provider and official developer of courseware for all Simcenter Nastran training.

ATA Technical Support

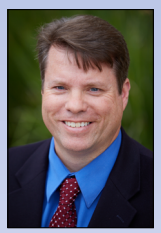
Need technical assistance? Call our hotline staffed by engineers at **877-282-4223**, or visit us online. Even if you're not a current ATA customer, try us out for free.

Free Software Trials

Contact us for more information about free trials/demos of Femap and Simcenter Nastran, NX CAD and CAM, Simcenter 3D, Simcenter STAR-CCM+, Teamcenter, and Solid Edge.

Featured Instructor

Kurt Knutson



Mr. Kurt Knutson is a Senior Technical Advisor at ATA Engineering, Inc. He manages and executes design and analysis projects for flight hardware, often focusing on evaluation of complex instruments and payloads. As Technical Director of flight programs, Mr. Knutson helps guide staffing and technical approaches on ATA's work for customers.

Mr. Knutson has worked extensively on analysis and design of aerospace flight hardware, including composite structures, optical instruments, and spacecraft payloads. He has managed multiple large projects and multidisciplinary teams performing structural and dynamic analysis to address complex requirements. His experience spans structural dynamics, thermal-structural-optical performance (STOP) analysis, and qualification testing of flight systems. Mr. Knutson also focuses on process optimization and methods development, having created software tools and automation utilities that streamline engineering workflows for ATA projects and customers.

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Software Partner Sell
PLATINUM EXPERT
SIEMENS

ATA Engineering, Inc., is recognized as an Expert Partner with validated expertise in Femap, Simcenter 3D, and STAR-CCM+.