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## Newest Simcenter STAR-CCM+ Release Brings Major Upgrades to Simulation

Simcenter STAR-CCM+ launched [version 2406](#) this past month and introduced a range of advanced features designed to enhance the efficiency and accuracy of workflows across various engineering applications.



Join Rodolfo Piccioli, Principal Engineer, and David Mann, Product Manager, as they walk you through the most exciting new capabilities of the new release of Simcenter STAR-CCM+

The new launch includes several notable enhancements including:

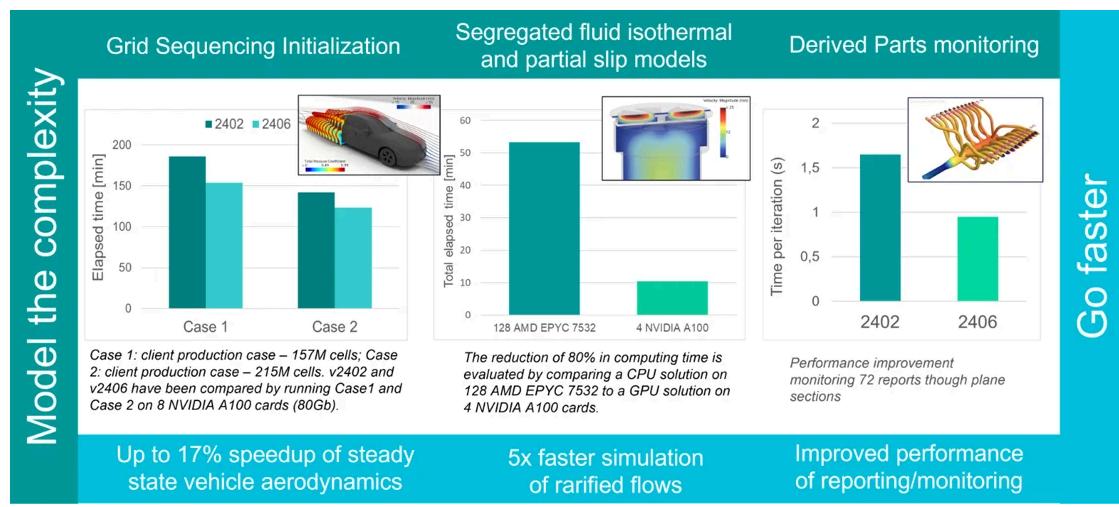
**Adjoint Optimization:** Gradient-based optimization allows sensitivity computations only in specific areas of interest through per-surface subgrouping for adjoint sensitivities

**Battery Cell Aging Analysis:** Enhanced modeling for better understanding battery degradation

**Simulation Workflow Optimization:** Sped up design simulations by reusing results from the nearest previous design, streamlining workflows and boosting productivity

**VR Integration:** New zero-install VR access for easier visualization and sharing

**GPU Acceleration:** Faster simulations for tasks like Vehicle Thermal Management



## Simcenter X Brings End-to-End CFD Workflows to the Cloud

Released prior to, however, was [Simcenter X](#) - the next generation of Simcenter solutions. Simcenter X transitioned the Simcenter portfolio to a cloud-based, SaaS model. This new offering allows users to access powerful simulation tools, like STAR-CCM+, directly through the cloud.



Meet Lucie Sanchez, product management lead for Simcenter X and Vinan Misty, global portfolio director for Simcenter fluids and thermal to find out what Simcenter X offers and how it works.

## Major Highlights:

- **Cloud-Based Access:** Simcenter X provides a virtual engineering desktop that enables modeling, post-processing and HPC directly from a web browser
- **Scalability:** The platform allows for easy scaling of resources, making it more flexible to manage intense workloads and adjust capabilities based on each project
- **Cost Efficiency:** With a pay-as-you-go pricing model, companies can reduce upfront investment in hardware and licensing, making high-level technology accessible to businesses of all sizes
- **Collaboration:** Simcenter X facilitates secure file sharing and collaboration, enhancing productivity for teams across different locations

## Overall Improvements:

Simcenter X enhances simulation workflows by reducing setup time, eliminating the need for additional IT expertise and providing access to automatically updated tools. The platform also significantly reduces the overall turnaround time for simulations by over 50% compared to traditional on-premise methods.

Learn more about Simcenter X [here](#) or [reach out](#) to our team to discuss how [STAR-CCM+](#) and Simcenter X could be useful for you.

## Upcoming Events

Americas Partner Conference // October 21 - 25 // Anaheim, CA

PRI // December 12 - 14 // Indianapolis, IN

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