



Published on *CD-adapco* (<http://www.cd-adapco.com>)

[Home](#) > STAR-CCM+ v8.04 - Developed With You in Mind!

STAR-CCM+ v8.04 - Developed With You in Mind!



Jean-Claude Ercolanelli

July 4, 2013, 4:18 am

Share This Post

Last week we announced the release of STAR-CCM+ v8.04, the second of our three v8 series for 2013. I can see from the download logs of [the Steve Portal](#)^[1] that many of you downloaded the new version within the first few minutes. I hope you are enjoying all the new features and enhancements. While I could talk at length about these [new bells and whistles](#)^[2], I'd prefer to explain the rationale behind STAR-CCM+ v8.04, and explore the philosophy of our development strategy.

One of the consequences in maintaining our aggressive release cycle is that it's easy to become distracted by the list of individual features that arrive thick and fast every four months. One may miss the bigger picture of what we are trying to achieve. You see, very few new features in each release are 'one-off enhancements.' Most of them could be better viewed as building blocks towards a larger development objective (although we do hope that many of these new features are instantly useful).

For example, we first introduced our new overset mesh capability in our early 2012 release. Although revolutionary in the commercial CFD space, one was restricted to moving a single object within the bounds of the computational domain. In our late 2012 release, we added the ability to move overset regions outside of the computational domain. Now, with the release of STAR-CCM+ v8.04, designers are able to include [multiple overlapping overset regions in the simulation](#)^[3]. The nice thing is, we're not stopping there! Our development team is currently working hard to introduce close proximity and contact between overset objects.

Another case in point, our [new adjoint solver](#)^[4] is the first building block in a much bigger project that will eventually link the adjoint solution with the mesh-morpher. This will open up a whole world of design optimization possibilities! Use it now, and expect much bigger things in the future.

Every single feature that we develop is focused to improving STAR-CCM+ in one of three key ways:

Experience:

We want to increase your productivity while reducing the barriers to simulation. We believe that the purpose of simulation tools such as STAR-CCM+ is to empower engineers, not constrain them. It allows you to spend more time analyzing engineering data and much less time involved in repetitive simulation tasks.

Performance:

The days of running a single simulation from a STAR-CCM+ set up are gone! Having invested in the construction of a simulation model, we want you to exploit your simulation model in every way possible in ways such as:

- Running multiple design variants that explore the sensitivity of your system to the full range of real world operating conditions and modeling assumptions.
- Shortening the overall wall clock time.
- Return results back into your hands for analysis as quickly as possible.
- Maximizing the use of your hardware resources.

This is only possible with a fast, efficient and fully parallelized process, from model import through to numerical calculation and post-processing.

Coverage:

Challenging industrial engineering problems demand solutions. CD-adapco has built its reputation by empowering our customers to solve the toughest problems the industry has to offer. A key part of our development strategy is to push back the boundaries of what is possible in engineering simulation; opening up solutions and application areas that lie outside the grasp of simulation engineers.

Let me finish with a reminder that most new features and capabilities in our code are influenced by you and your contributions to the [IdeaStorm forum](#)^[1]. If there is anything you would like to add to STAR-CCM+, [please let us know about it](#)^[1]there!

Products:

[STAR-CCM+®](#)^[5]

CD-adapco is the world's largest independent CFD focused provider of engineering simulation software, support and services. We have over 30 years of experience in delivering industrial strength engineering simulation.

Source URL: <http://www.cd-adapco.com/blog/jean-claude-ercolanelli/star-ccm-v804-developed-you-mind>

Links:

[1] <http://steve.cd-adapco.com>

[2] <http://www.cd-adapco.com/pr/star-ccm-v804-release-continues-improve-simulation-engineer%E2%80%99s-productivity-and-effectiveness>

[3] <http://www.cd-adapco.com/blog/deborah-eppel/epicyclic-gear-simulation-overlapping-overset-mesh?language=en#overlay-context=>

[4] <http://www.cd-adapco.com/blog/sabine-goodwin/unlocking-mystery-adjoint-solver>

[5] <http://www.cd-adapco.com/products/star-ccm%C2%AE>