

SIEMENS
Ingenuity for life

Simcenter STAR-CCM+ Cloud Ready

Unrestricted © Siemens AG 2019

Realize Innovation.

Simcenter STAR-CCM+

An integrated multiphysics solution for CFD engineers

SIEMENS

Ingenuity for life

Single integrated environment

Automated workflows

Comprehensive multiphysics

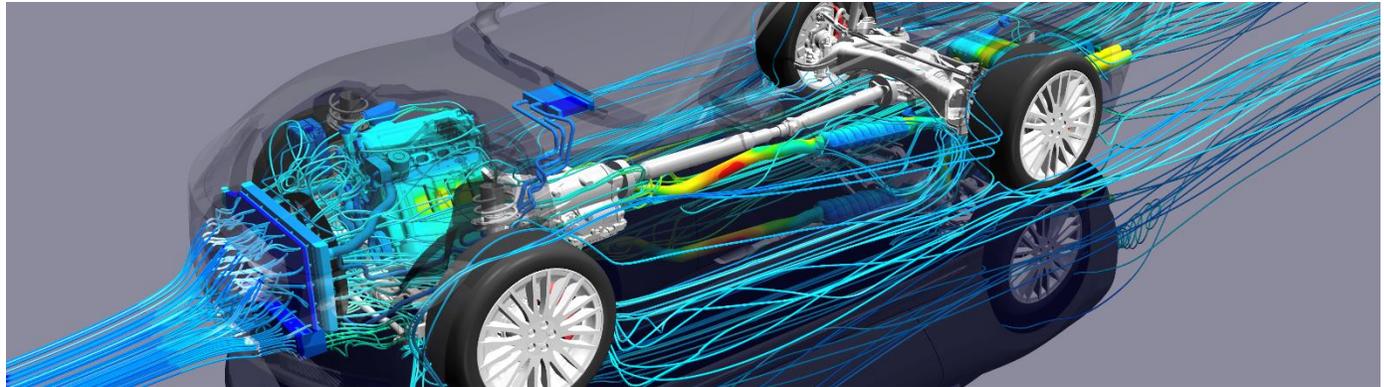
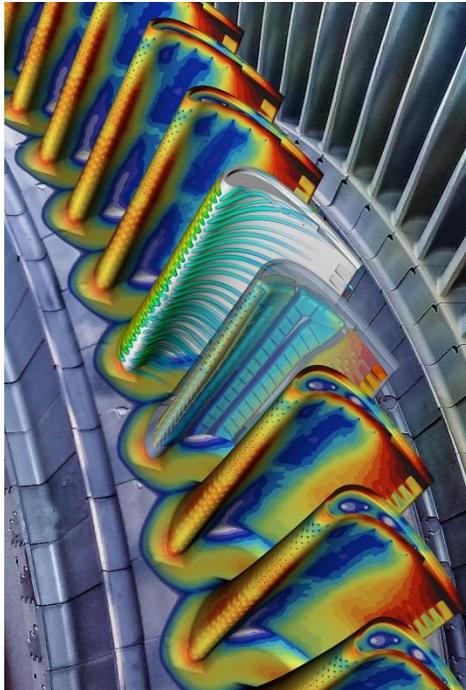
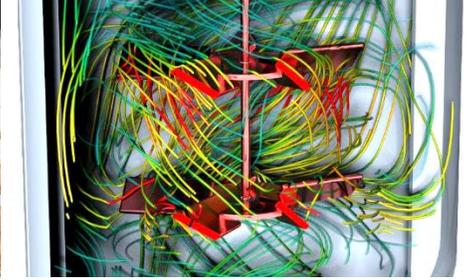
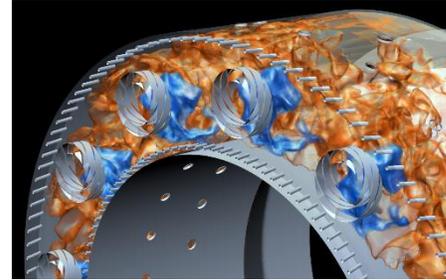
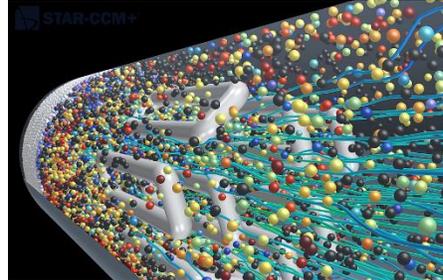
Built-in design exploration

Massively parallel CAD-to-solution

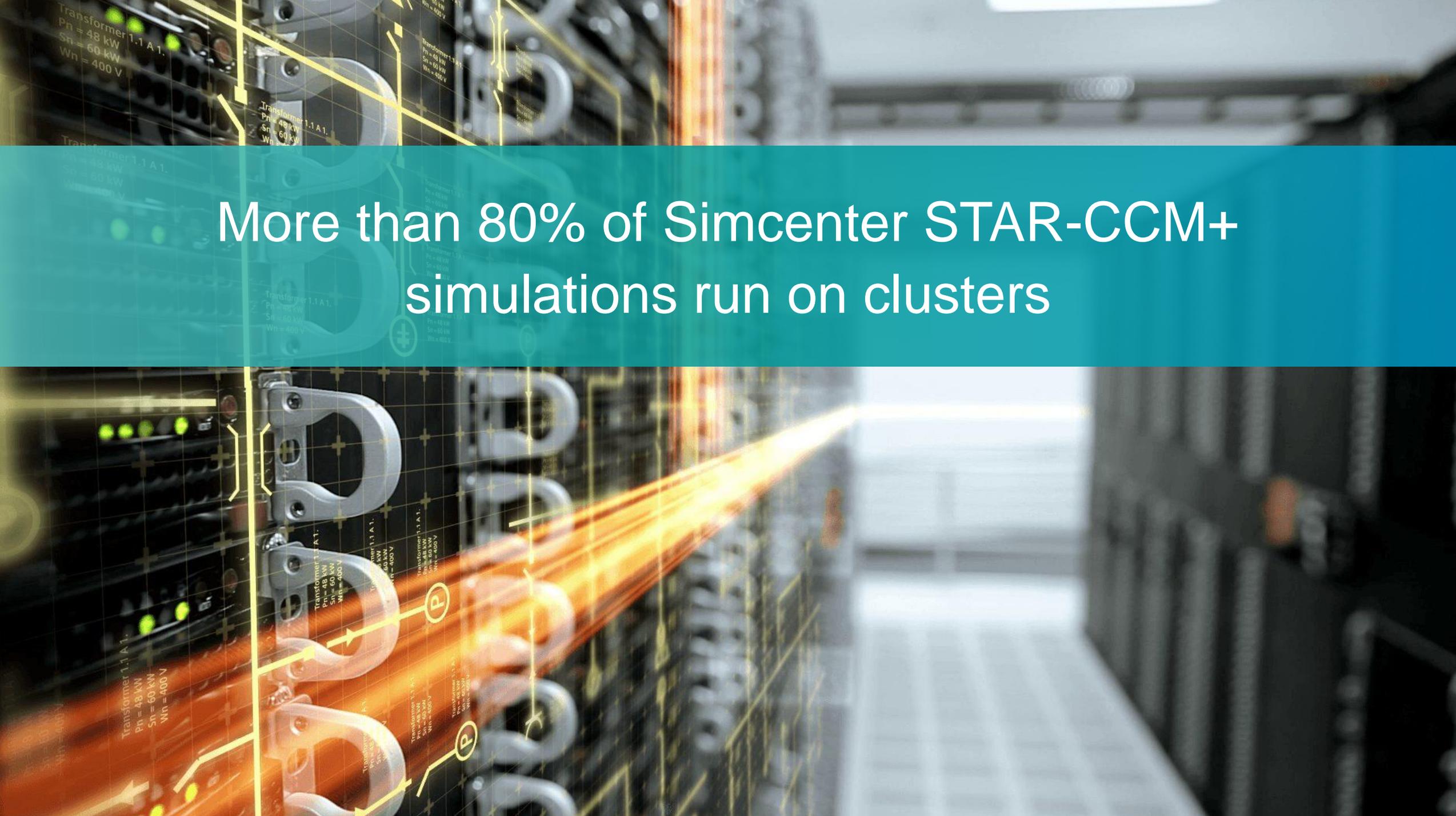
Flexible licensing

PLM integration

Customer-focused



Simcenter STAR-CCM+ is the CFD-focused multiphysics engineering solution that uniquely integrates comprehensive physics with intelligent design exploration in a single CAD-to-solution environment, built for the most simple to the most advanced CFD simulation needs.

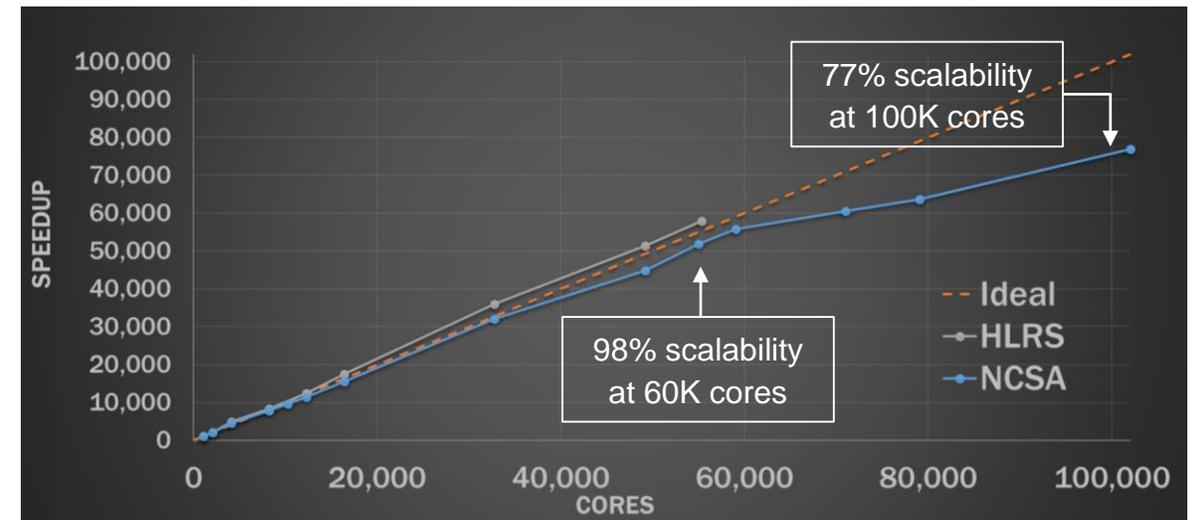


More than 80% of Simcenter STAR-CCM+ simulations run on clusters

Simcenter STAR-CCM+ Parallel Efficiency

- STAR-CCM+ can scale to 10,000s cores
- STAR-CCM+ users mesh up to billions of cells
- Simulations usually run on 10s to 1,000s cores

Use all your available compute resources to get results faster



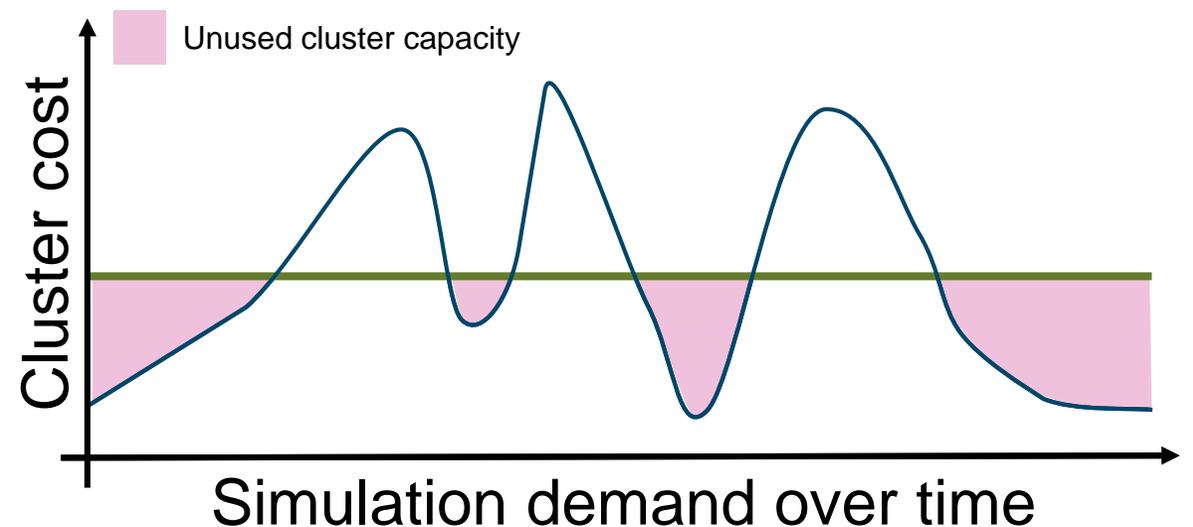
Simcenter STAR-CCM+ Cloud Ready

Unlimited Compute

Cloud enables burst capacity or replaces on prem. clusters

Add capacity and skip the cluster queue:

- Faster simulation turnaround time
- Higher fidelity models with more advanced physics
- More simulations to evaluate trade-offs in design



Simcenter STAR-CCM+ Cloud Ready

IT Efficiency

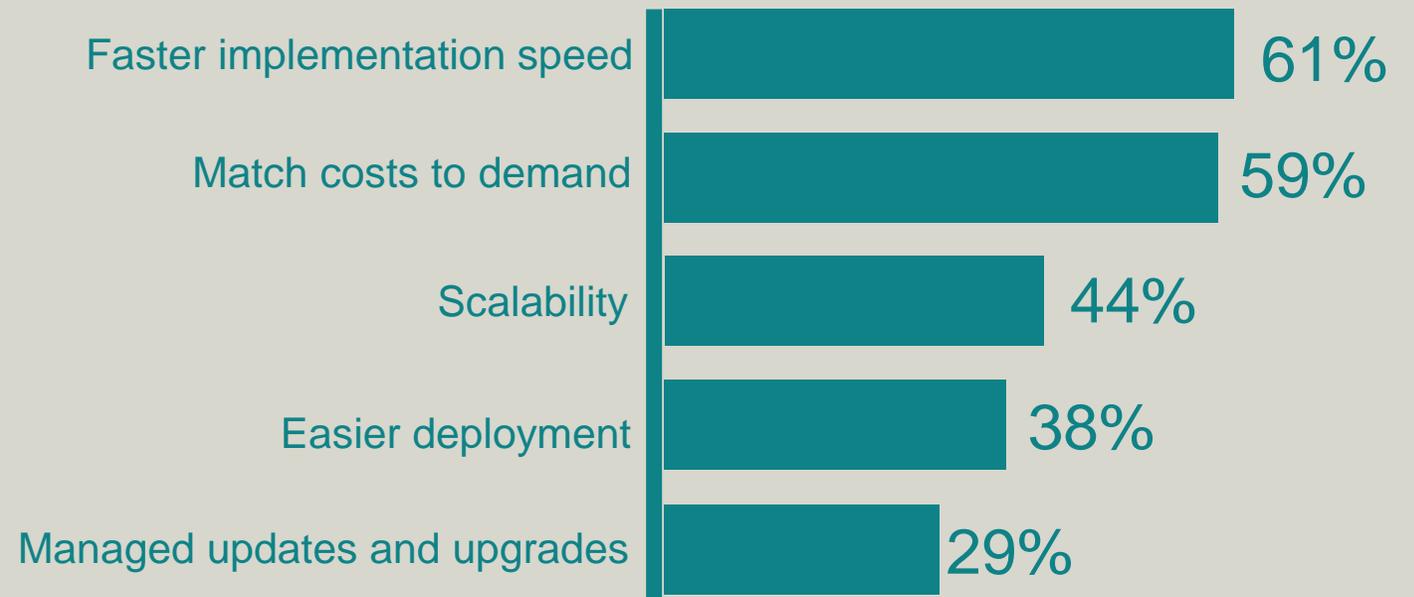
- Automatic software and hardware updates
- Access to latest generation of processors
- CFD-optimized hardware: verified for latency and scale
- ITAR compliance options and secure connection

Move IT from roadblock
to business driver



Accelerate time to value with cloud solutions

Top performing companies report benefits moving to the cloud:

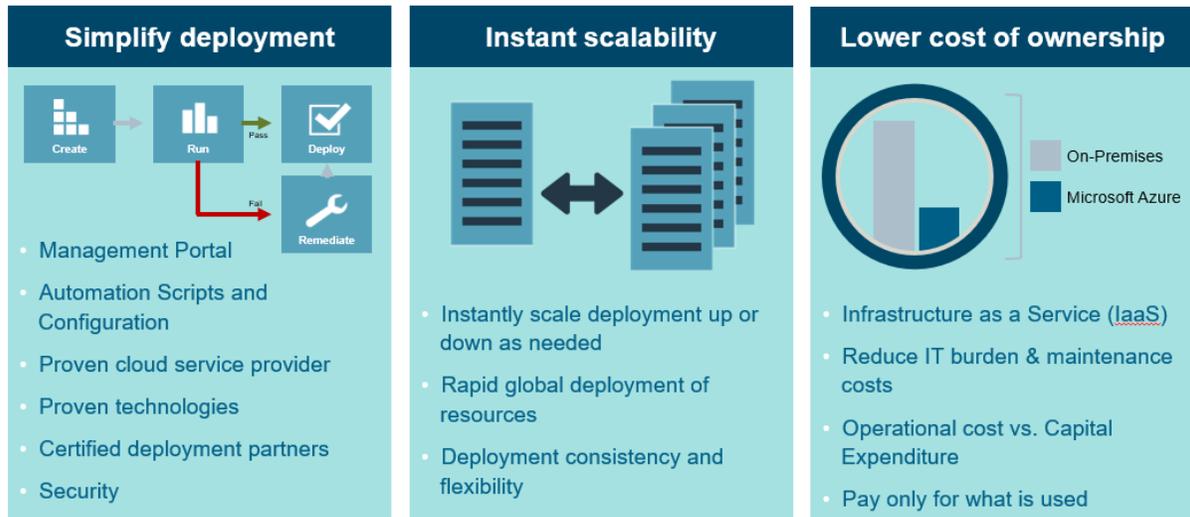


Siemens Xcelerator Cloud Ready Solutions

Siemens applications like Teamcenter, or Simcenter STAR-CCM running on Microsoft Azure

Flexible deployment options, the choice of self-administration or managed services by Siemens

Faster, easier deployment
Match cost to demand



Simcenter STAR-CCM+ Cloud Ready

Simcenter STAR-CCM+ running in the cloud today,
powered by Microsoft Azure HPC

Successfully running simulations
at scale for Siemens customers

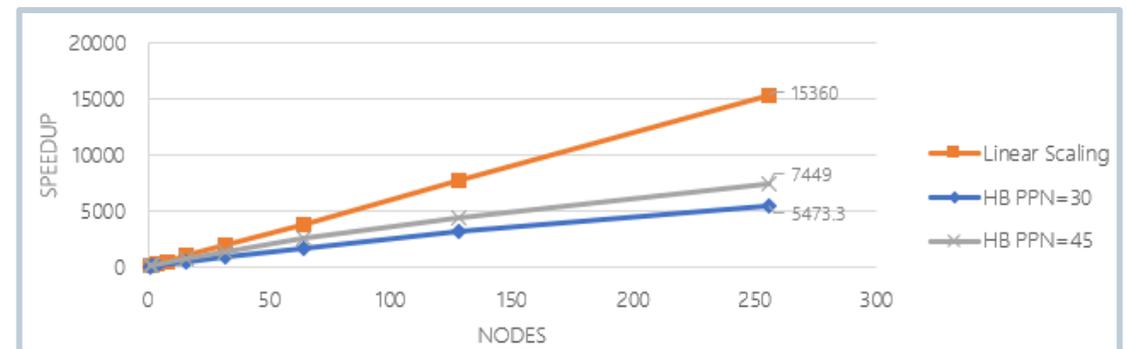


Cloud Doesn't Scale?

Azure HB-series, perfect for CFD

HB-series virtual machines (VMs) are optimized for HPC applications requiring high memory bandwidth. HB-series VMs are the most performant, scalable, and price-performant ever launched on Azure or elsewhere on the public cloud.

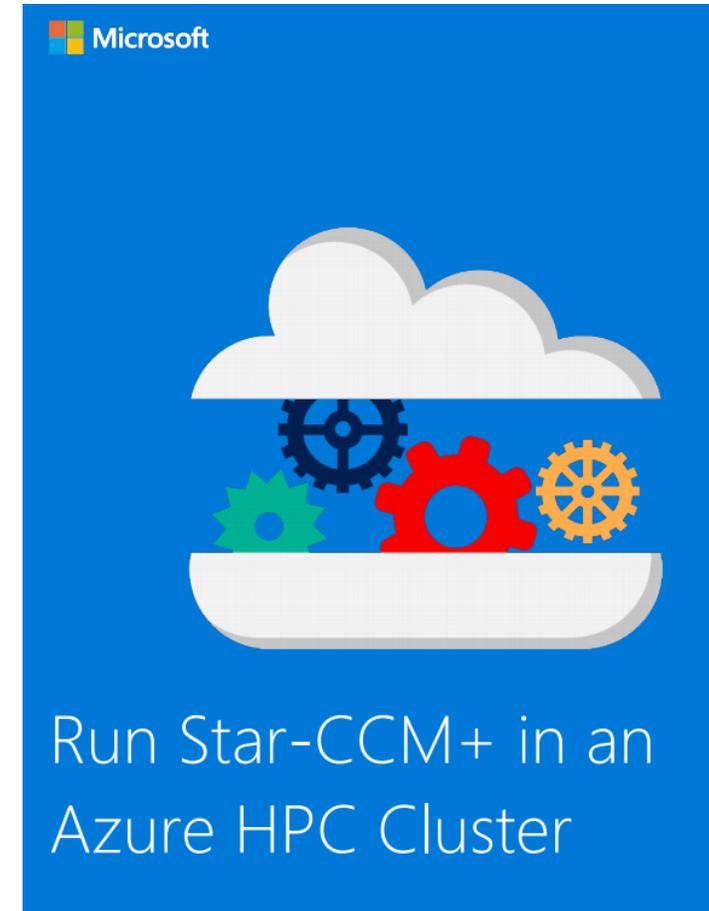
For memory-bandwidth bound workloads like Simcenter STAR-CCM+, the HB-series delivers something many in HPC thought may never happen. Azure-based VMs are now as capable as bare-metal, on-premises status quo that dominates the HPC market, and at a highly competitive price point.



Cloud Is Complicated?

A learning curve, Microsoft and Siemens can help

- Cyclecloud for Simcenter STAR-CCM+ makes it easy to quickly get up and running on Azure
- Azure Big Compute Global Black Belts can help customers with complex HPC workloads
- Microsoft provide Simcenter STAR-CCM+ set up guides to ease deployment
- Siemens support engineers have expertise in cloud implementations

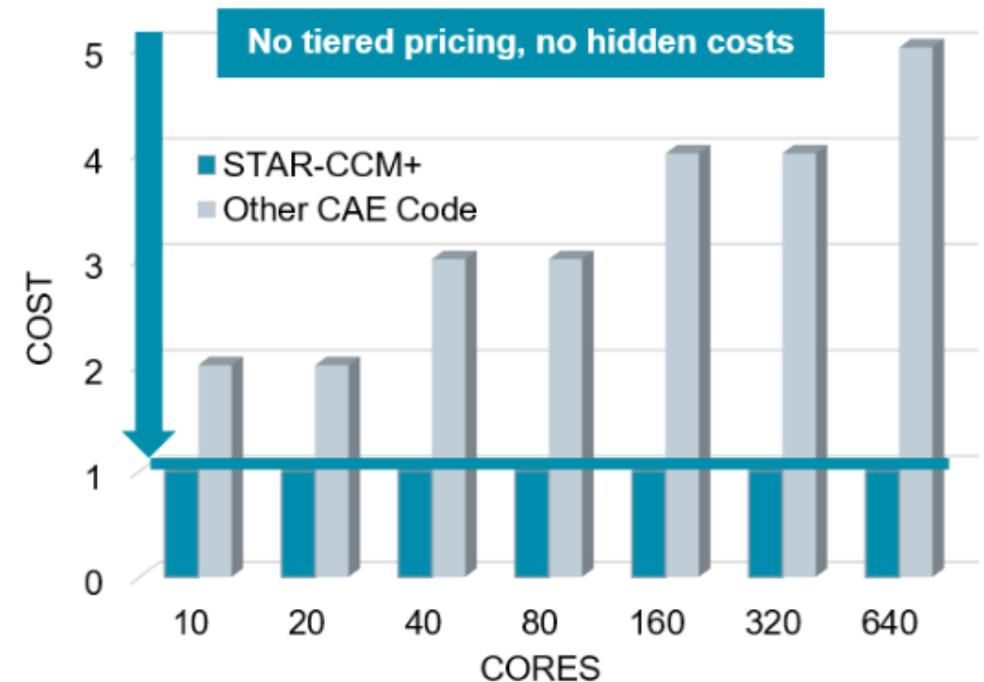


Simcenter STAR-CCM+ Flexible Licensing

Software costs don't limit hardware utilization:

- Unlimited cores for the same price
- By the year, by the month or by the hour

Allocate software budget
when & where it matters most



Simcenter STAR-CCM+ Power On Demand

License hosted by Siemens, use anywhere
Purchased by the hour
Use a “bundle of hours” within 12 months

Unlimited cores, by the hour

The screenshot displays the Siemens Account Center interface. At the top, there is a navigation bar with the Siemens logo, 'Products', and 'Support Cases' menus. The breadcrumb trail indicates the user is in 'Account Center > Licenses > POD Licenses'. Below this, there are tabs for 'Profile', 'Licenses', 'Orders', 'Sites and Users', 'Products', 'Contacts', and 'Notifications'. The 'Licenses' tab is active, showing a table of licenses. A blue arrow points from the 'View POD License' button in the table to the 'Real Time Statement' section below.

Product	Start Date	End Date	Units Purchased
Power On Demand Test	Jan 1, 2018	Jan 1, 2020	20

Account Activity | Account Usage | Manage Keys

Real Time Statement

STAR-CCM+ Power-On-Demand (#1601.1)

6% 25% 100%

Used : 115:11 hr:min | Deposited : 393:53 hr:min | Balance : 1490:56 hr:min | Total Credit : 2000:00 hr:min

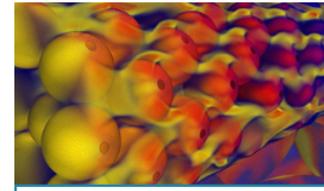
[Credit Details](#)

Power On Demand (POD) Purchase Online

Buy Power On Demand on the Siemens Digital Store
Easy top up for customers
Get started quickly, free trials available from Siemens

Fast and easy account top up

Siemens PLM > PLM Store > Simcenter on the Cloud > Simcenter STAR-CCM+ Power On Demand



[Product Brochure](#)

Terms & Conditions
[SISW End User License Agreement](#)
[Simcenter CD-adapco Supplemental Terms](#)

Simcenter STAR-CCM+ Power On Demand

Provided by SIEMENS

On-demand, per-hour licensing for CFD-focused multiphysics simulations

Engineer innovation with Simcenter STAR-CCM+ without hardware and licensing constraints using on-demand, pay-as-you-go Power On Demand (POD) licensing on unlimited number of cores. Usable from any public/private cluster, network or cloud, POD enables cloud computing, burst capacity and flexible usage of your CFD-focused multiphysics simulation software. Meet variable simulation needs, maximum return on hardware and software investment and enhance your design exploration capabilities with HPC/cloud computing.

Engineer innovation with Simcenter STAR-CCM+ without hardware and licensing constraints using on-demand, pay-as-you-go Power On Demand (POD) licensing on unlimited number of cores. Usable from any public/private cluster, network or cloud, POD enables cloud computing, burst capacity and flexible usage of your CFD-focused multiphysics simulation software. Meet variable simulation needs, maximum return on hardware and software investment and enhance your design exploration capabilities with HPC/cloud computing.

Select the quantity of hours below to continue with your purchase. Purchased hours are valid for one year.

Quantity

Total: USD \$22

Minimum: 1 hour

Add to Cart >

Further Reading

<https://azure.microsoft.com/en-us/blog/hb-series-azure-virtual-machines-achieve-cloud-supercomputing-milestone/>

<https://github.com/Azure/azurehpc/blob/master/apps/starccm/readme.md>

<https://docs.microsoft.com/en-us/azure/cyclecloud/>

<https://docs.microsoft.com/en-us/azure/cyclecloud/quickstart-install-cyclecloud>

<https://www.plm.automation.siemens.com/global/en/products/simcenter/STAR-CCM.html>

<https://mdx2.plm.automation.siemens.com/sites/default/files/flier/pdf/Siemens-PLM-STAR-CCM-power-licensing-fs-58546-A3.pdf>