SIEMENS
Ingenuity for life

STAR-CCM+ power licensing

Offering innovative licensing options

Benefits

- Provides affordable and customizable licensing options
- Meets variable simulation needs and throughput requirements
- Maximizes return on hardware and software investment
- Enhances design exploration capabilities

Features

- Power session: Provides unlimited usage of unlimited number of cores per session
- Power-on-demand: Provides pay-as-you-go usage on unlimited number of cores
- Power token: Provides needs-based usage for design exploration

Summary

High-performance computing (HPC) accelerates the pace of product development by maximizing throughput of multidisciplinary engineering simulations, thus delivering a constant stream of data that influences product design from start to finish.

In the age of multicore computing, the cost of software, not hardware, in the traditional computer-aided engineering (CAE) licensing model is becoming the limiting factor in the use of large compute clusters. When analysis software is licensed on a per core basis, you can end up with compute resources that are underutilized, restricting your engineering ambitions.

Delivering affordable power licensing

Siemens PLM Software offers innovative licensing options for STAR-CCM+ software that are affordable and customizable to meet your simulation needs and throughput requirements. No matter the size or location of your compute resources, our power licensing is designed to ensure that you can maximize the value of your hardware and fully leverage your investment in our simulation technologies.

We make HPC-powered simulations affordable by breaking the link between software cost and core count with three unique power licensing options:

- Power session: Unlimited usage and cores for a single fixed price
- Power-on-demand: On-demand licensing means you only pay for what you use; it is most beneficial for cloud computing, burst capacity and infrequent usage
- Power token: Needs-based usage for design exploration

For users that run smaller simulations on fewer cores, we also offer traditional pay-by-the-core licensing. If you run on eight cores or more, the power session license is the way to go.

Maximizing throughput in large simulations

- Use power session to deploy all your available hardware resources for a single fixed price or power-on-demand to pay by the hour for usage of unlimited cores
- Achieve enhanced scalability for large simulations and get results in hours instead of days. As an example, running on 10,000 cores costs the same as running on 100 or 10 cores

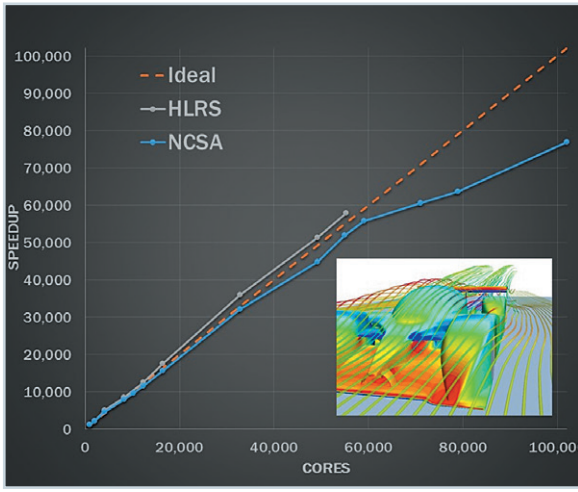
Focusing on design space exploration

- Use power tokens to deploy all your available resources to maximize throughput when exploring design derivatives
- Use tokens to run any number of concurrent configurations of a design exploration campaign, each on as many cores as needed
- A token pays for either adding an additional core or a new configuration. For example, if you buy 100 tokens, you can run one job on 100 cores, 10 jobs on 10 cores, or 100 jobs on one core

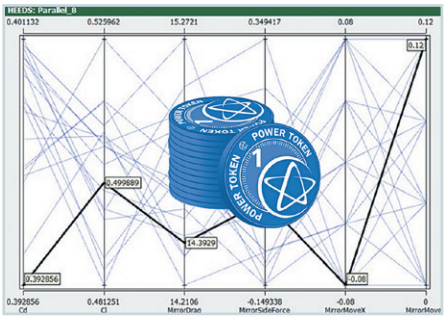
Leverage burst capacity at times of peak demand

- Use power-on-demand to deploy resources when needed from any private/public cluster, network or on-the-cloud infrastructures
- Get unlimited simulation burst capacity for peak project loads and only pay for what you use

Your account manager can put together a customized configuration with a unique combination of power license ingredients that meets your specific simulation and throughput requirements.



This graph shows the scalability of STAR-CCM+ on National Center for Supercomputing Applications (NCSA) and High Performance Computing Center Stuttgart (HLRS) supercomputers.



Power tokens maximize throughput when exploring design derivatives.

Types of usage

Automation and exploration	Power tokens • Unlimited usage • #tokens = #jobs* #cores	
Regular, interactive	Serial session + HPCs • Specified # of cores • Unlimited usage • One job	Power session • Unlimited cores • Unlimited usage • One job
Sporadic, burst and cloud	Power-on-demand • Unlimited cores • Metered usage • Power session by the hour	

Size of model(s)

Power licensing at Siemens PLM Software

Siemens PLM Software
www.siemens.com/plm

Americas +1 314 264 8499
Europe +44 (0) 1276 413200
Asia-Pacific +852 2230 3308

© 2016 Siemens Product Lifecycle Management Software Inc. Siemens and the Siemens logo are registered trademarks of Siemens AG. Other logos, trademarks, registered trademarks or service marks belong to their respective holders.
58546-A3