

HPC TECHNOLOGY SPECIAL

# CIOReview

The Navigator for Enterprise Solutions

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Rescale  
Deploying Cloud HPC  
in the Enterprise

# Rescale

## Deploying Cloud HPC in the Enterprise

Implementing hybrid and pure-play cloud based HPC in order to maintain a competitive edge has become essential for organizations. In an interview with CIOReview, Joris Poort, CEO of Rescale Inc. gives his views on the industry dynamics driving the CIOs and IT professionals to shift from deploying on-premise HPC clusters to an agile IT environment with scalable, secure, and elastic cloud HPC resources.

### The forces driving simulation/HPC in the cloud

Simulation driven design has become an indispensable tool for product development. Across all industries, simulation is driving a paradigm shift from traditional physical test and design to virtual prototyping, design space explorations and optimizations that evaluate what-if scenarios and trade off studies. As a result, organizations are running engineering simulations that are far more comprehensive and accurate, driving innovation and competitive advantage. The dramatically increasing and highly variable user demand for simulation presents a daunting challenge for traditional IT systems that cannot provision peak demand, resulting in delays and bottlenecks. Providing state-of-the-art HPC resources that carry the

computing horsepower and scalability while remaining elastic and flexible are key to deliver on these new IT demands.

### Key evaluation factors to choose a cloud provider

Global reach, best-in-class hardware, application availability, on-demand licensing, security, support, cost, administrative functions for IT, tools to integrate with the existing computing infrastructure and easy of use are all important aspects when choosing a robust enterprise HPC cloud provider. Rescale's HPC cloud platform is natively built for the cloud and designed with these considerations in mind to efficiently deploy to Fortune 500 IT organizations. Its disruptive technology is transforming fixed-cost capital infrastructure into agile project-based operating expense. Rescale has the largest hardware footprint in the industry with an infrastructure network of over 30 of the most advanced data

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centers worldwide, as well as the most extensive simulation software selection (120+ software packages, 9 out of 10 top CAE vendors) including Siemens PLM, CD-adapco, Dassault Systemes, MSC Software, ANSYS, and many others.

### Rescale—Ensuring safe operations in the cloud environment

Rescale has built the leading security solution for cloud HPC. The company invests heavily in the security and resiliency of every component within the

Rescale ecosystem. As a result, Rescale complies with the strictest industry standards such as ITAR compliance for US export controlled activities and SOC 2, as well as end-to-end data encryption, cluster isolation, kernel encryption, data center security and independent external security audits.

### Providing a powerful simulation platform to the engineers and scientists

Through a unique set of deployment tools, Rescale supports public, private cloud as well as hybrid on-premise/cloud deployment. Simulation customers can easily port their applications to or programmatically burst their compute jobs onto the Rescale cloud simulation platform to tap into the immense global infrastructure network, including collaboration, visualization and scheduler integration tools that are built into the platform. Rescale supports native integrations and deployments with all commercial schedulers.

Rescale's enterprise platform includes administrative IT tools that provide controls for administrators to implement security policies, manage user account settings, and configure permissions, budgets, and privileges.

### The future to HPC cloud service providers

There are challenges that must be addressed when adding cloud HPC into an enterprise IT organization - especially on total cost of ownership benefits and security model that must be directly addressed and understood. Providing a sound business model and helping application providers make the transition from annual licenses to on-demand software offerings is another critical effort. Rescale facilitates, promotes and works closely with the application providers to introduce on-demand licensing.



Joris Poort

# Cloud HPC Platform

Leading Fortune 500 IT organizations  
use Rescale to deploy Cloud HPC.



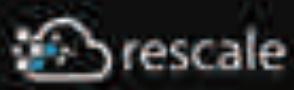
Instant



Secure



Scalable



# CIO Review

## 20 MOST PROMISING HPC SOLUTION PROVIDERS - 2015

