

R Systems and Dell Technologies: Enabling On-Demand HPC Resources

VALUE PROPOSITION

With the high performance computing expertise, services and solutions from R Systems and Dell Technologies, your organization can:

- **Access technical expertise and optimized cloud computing resources on demand**
- **Choose from multiple dedicated configurations to fit your usage requirements**
- **Leverage high-end computing resources for simulation and AI/ML/DL**
- **Capitalize on the available implementation of multi-cloud and workflow orchestration tools**
- **Increase your confidence with proven solutions backed by superior technical support**

PARTNER OVERVIEW

R Systems NA, Inc. provides high performance computing cluster resources and technical expertise to commercial and institutional research clients through the R Systems brand and the Dell HPC Cloud Services Partnership.

R Systems owns and operates bare-metal clusters and offers a variety of solutions to meet each client's specific HPC needs. These offerings include lease time on clusters for bursting as well as for short-term and long-term projects available at highly competitive prices.

In addition to offering industry-standard solutions, R Systems provides engineering expertise to assist clients in selecting the optimal components for their HPC clusters.

SOLUTION OVERVIEW

With the flexible service offerings from R Systems, your organization can access on-demand HPC capability — when you need it, as you need it. This on-demand approach helps your organization minimize time, maximize effectiveness and add value to your HPC results.

R Systems product offerings include dedicated and utility clusters. Both of these offerings include full white-glove service, with R Systems functioning as an extension of your in-house IT team.

DEDICATED CLUSTERS

A dedicated offering from R Systems provides a purpose-built cluster tailored to your specifications, leveraging existing equipment when available to reduce costs. These clusters are completely bare-metal, separated entirely from other tenants, and allow full root access on request. They provide the best value for long-term, high-security or niche technical requirements.

UTILITY CLUSTERS

Bare-metal utility clusters offer the best value for short-term or sporadic HPC needs. They offer fast, reliable and efficient access to HPC resources. R Systems maintains existing resources in a preconfigured HPC environment: shared login hosts, scheduler queues and NFS/Lustre storage. This environment is all about simplicity, allowing users to upload custom applications or use pre-installed ISV and open source applications to run jobs and gain access via standard protocols, such as SSH and VNC.

HPC CONSULTING

Engineers from R Systems can help your organization design, implement and optimize your in-house HPC resources. In addition, the R Systems team of HPC experts can remotely manage and monitor your clusters, freeing your onsite team to interact with users and address enterprise systems support.

CUSTOMER REFERENCE

To perform significantly finer-grained design simulations than it could run affordably in-house, Trek Bicycle contacted the R Systems team. Working in tandem with the R Systems utility clusters, Trek Bicycle was able to reduce expensive wind-tunnel time. The company also improved bicycle racing wheel designs, necessitating an additional 40 manufacturing positions to fulfill orders upon release of the first wheel design powered by R Systems.

Formula One and IndyCar also take advantage of R Systems HPC Managed Services for additional HPC capacity as well as technical expertise to assist with the most challenging computational fluid dynamics problems. This allows for a decrease in time to solution and an increase in the potential of a podium finish.

Electronic design automation clients, in turn, can leverage the resources of R Systems to perform additional design simulations before the critical tape-out deadline. The additional HPC capacity/simulation increases the success of the chip before any silicon is cut.

CONTACT US

To learn more about how R Systems and Dell Technologies can help you gain greater performance and value from your IT systems, contact R Systems or your Dell Technologies representative, or visit rsystemsinc.com.