**ENERGY SOLUTION SPOTLIGHT: HIGH-PERFORMANCE COMPUTING** 

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Smart investment in high-performance computing (HPC) becomes more critical than ever as energy companies seek to capitalize on the IoT by processing massive amounts of data to generate actionable insights. By delivering ultrafast speed and powerful processing in the data center and the cloud, HPC drives more efficient operations and boosts bottom-line performance.



# SHARPEN YOUR COMPETITIVE EDGE

To maximize ROI in today's challenging and competitive environment, energy companies need the right supercomputing solutions and expert guidance. CDW has the experience, knowledge and comprehensive technologies to orchestrate the robust HPC solution required to make the most of your fast-growing data assets.



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**SERVERS** need to keep pace with booming data growth, requiring:

- Performance measured in teraflops, petaflops – or more
- Density optimized for Big Data workloads
- Flexibility, scalability and efficiency

**STORAGE** challenges are increasingly intensive, demanding:

- Scalable, networked systems
- Multitier caching
- Intelligent storage controllers
- Cost-effective backup and disaster recovery

#### NETWORKING AND SWITCHING are key

HPC building blocks, delivering:

- Ultrafast network service
- Multigigabit Ethernet
- Resilient connection to the network core



# POWER AND COOLING consumption can be

- high with HPC. Managing power costs requires:
- Energy efficiency
- A reliable power source

**SERVICES** ensure you optimize performance with the right support, including:

- Data center assessment, planning and design
- Storage solution reviews recommendations for performance improvement
- Power and cooling assessment, planning and design





### **CONSIDERATIONS WHEN INVESTING IN HPC**

To fully capitalize on HPC benefits ranging from proactively managing assets and raising exploration success rates to supporting smart grid optimization, you need to invest in technology that has the speed and power you need now – and the ability to grow with you in the future. Ask yourself:

- Do you have the computing power and speed you need to quickly generate high-resolution 3D and 4D seismic imaging and reservoir simulations?
- Are your servers robust enough to handle the predictive analytics required for managing intermittent loads or detecting and remediating outages?
- Can you track geo-diverse assets such as drilling rigs, mud pumps and transformers to ensure timely maintenance?
- Are you able to keep your power and cooling costs in check?
- Do you have sufficient bandwidth and resilient network connections to seamlessly handle all HPC applications?

#### HPC-DRIVEN PERFORMANCE IMPROVEMENT. ORCHESTRATED BY CDW.

At CDW, we use our IT expertise, deep understanding of your needs and partnerships with top energy–focused technology leaders to design and implement HPC solutions that bolster your bottom line.



# ENERGY-SPECIFIC

KNOWLEDGE based on more than two decades of experience providing trusted guidance to thousands of energy companies

# COMPREHENSIVE

**SUPPORT** from a single provider every step of the way, from assessment to deployment and beyond

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#### CUSTOMIZED SOLUTIONS

tailored to your specific needs, both those that exist today and those you anticipate tomorrow



#### TECHNOLOGY PARTNERSHIPS that

ensure you take advantage of the full range of leadingedge supercomputing infrastructure options

## **PARTNERS WHO GET IT**



# **Hewlett Packard** Enterprise





Call **800.800.4239** to set up a consultation with an HPC expert or visit **CDW.com/energy** to learn more.

