

Explore HPE supercomputing

Unlock the next frontier of innovation and discovery





The key to achieving your goals

Accelerating drug discovery. Building safer vehicles. Faster, more accurate prediction of natural disasters. Creating a more sustainable world.

The goals are different. But the journey is the same.

Whether you're a global enterprise, a research institution, or a government agency, you share a common need to harness insights, innovate faster, sidestep roadblocks, and most importantly, deliver on your promises.

You're also navigating these demands through the same waters regardless of industry or organization type. It's a backdrop characterized by massive data growth, converging workload types, and the toughest of competition. Underpinning it all is the growing need to implement an artificial intelligence (AI) strategy, which requires an infrastructure environment that can seamlessly scale as needed.

Supercomputing answers these demands, delivering the foundation to unlock the next frontier of innovation and discovery. And Hewlett Packard Enterprise closes the gap, scaling advanced supercomputing technologies, tools, and support services to tackle your AI-at-scale challenges.

Supercomputing delivers accelerated outcomes, AI at scale

Exponential data growth has shaped today's business and science landscape. This has brought about challenges around harnessing insights from massive data sets compounded by outside requirements such as budget limitations, sustainability demands, timeline goals, and more.

But these are all challenges that have been asked and answered by the exascale era.

High-performance computing has evolved to bring exascale technologies to more organizations, responding to the obstacles standing between many organizations and success: achieving faster time-to-results, mastering AI at scale, and unlocking business value while corralling costs. Doing so requires processing vast amounts of data faster than ever before to support new workloads on an unprecedented scale—all to create a competitive advantage.

The resulting technology enables you to handle all the pieces critical to discovery and decision-making. Need to manage those data sets? Done. Run converged modeling/simulation and AI workloads? Absolutely. How about developing and deploying AI / machine learning (ML) solutions at any scale? High-performance computing with exascale technologies was built for it.

The nature of the challenges is the same across the business and research spectrum. What it means is more organizations today need supercomputing to empower their initiatives and evolve for the increasing computational needs of tomorrow.

It also means the last challenge has been to make supercomputing capabilities widely accessible.

HPE is removing restrictions around performance and accessibility to deliver supercomputing technologies at the right scale for you. Whether you know it or not, you're part of the exascale era. Now, you can compute like it, too.





Step confidently into the exascale era

Your first step into the exascale era and beyond starts here. By leveraging supercomputing technology from HPE, you can help maximize AI at scale and modeling and simulation capabilities to gain a competitive advantage via deeper insights and the ability to make faster, more accurate decisions.

Advance your journey as a leader in high-performance computing to help maximize AI at scale. HPE draws on a 50-year legacy of supercomputing leadership to bring you unbounded access to an end-to-end supercomputing portfolio for both the enterprise and public sector.

Supercomputing innovation made accessible to you

Supercomputing forms the foundation for the workloads that make the difference between staying in the lead or staying in the race at all.

Now, HPE extends the same supercomputing technology that fuels the world's fastest systems to a full range of industries and data center sizes, scales, and resource needs. Rooted in exascale innovation, the expanded portfolio provides significant performance and AI-at-scale capabilities to tackle data-intensive workloads, accelerate AI and ML initiatives, and drive market-leading innovation.

When enterprises adopt hybrid supercomputing solutions from HPE, they realize monumental gains. For example, car makers can better model and develop autonomous driving cars. Life sciences researchers can piece together chemical interactions leading to breakthrough drug therapies. Financial organizations can use advanced analytics to predict stock trends and improve fraud detection. And every industry can unlock a critical tool for advancing their business: increased AI at scale.

Harnessing the value of AI has emerged as a business requirement today. But doing it at scale is still a work in progress for many organizations. HPE supercomputing enables the massive parallelism AI at scale needs. Flexible HPE supercomputing and AI solutions provide:

- Scalability and performance to optimize workloads and accelerate business outcomes
- Faster model development and training for deeper insights
- Improved simulation accuracy with no infrastructure changes or code rewrites



Opportunities

- Unlock the next frontier of innovation and discovery
- Get faster time to results
- Help maximize AI at scale
- Achieve monumental performance in AI, research, and innovation

Benefits of working with HPE

- Capitalize on a 50-year supercomputing legacy
- Gain a trusted partner and support network of more than 1000 supercomputing specialists
- Be at the forefront of the exascale era and beyond

Capture your market with leading performance and AI-at-scale capabilities

Put supercomputing and AI solutions sized to you in your own data center or access them as a service via the HPE GreenLake edge-to-cloud platform. Learn more about your choices.

HPE Machine Learning Development System

HPE Machine Learning Development System helps you bring your most impactful AI applications to life. You get everything needed to scale AI models easily from idea to impact—a model training and development software platform, HPC, infrastructure software, networking components, accelerators, startup services, and solution support—all preconfigured, fully installed, and performant out of the box. The HPE Machine Learning Development System accelerates the pace at which your enterprise can improve model quality, scale into production, and achieve desired business objectives.

HPE Cray

HPE Cray supercomputers form the basis of our exascale systems. With them, HPE rethought and reengineered supercomputing to create an entirely new solution to address today's diversifying needs. The expanded portfolio delivers these world-leading, energy-efficient supercomputers in a smaller form factor and at a lower price point.

HPE GreenLake

Achieve unmatched supercomputing agility and economics with flexible deployment options including on-premises, colocation, or hybrid model. With HPE GreenLake, you can also get on-demand access when you need to run larger problem sets to avoid rework.

The HPE difference

Supercomputing is now accessible at the enterprise level, allowing you to help maximize AI at scale and unlock business value from insights and build AI/ML models like never before.

Learn more at

HPE.com/supercomputing





Enterprise

© Copyright 2023 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

a50007853ENW