

HCLTech | Supercharging
Progress™

High-Performance Computing (HPC) solutions powered by HPE

Powering innovation at scale



In today's data-driven world, traditional IT systems can't keep up with the scale and speed of modern workloads. From drug discovery and climate modeling to genomics and automotive design, the demand for rapid and at scale computation and real-time insights is soaring.

High-Performance Computing (HPC) is considered as the engine behind scientific breakthroughs, industrial innovation and enterprise intelligence. Whether it's advanced manufacturing, life sciences, financial modeling, or AI training, HPC helps organizations accelerate research, shorten time to insight and drive faster innovation.



Trends shaping the Future of HPC

Several macro and technology trends are transforming the HPC landscape:



AI-HPC convergence

AI workloads—like large language models (LLMs) and deep learning—now require HPC-grade infrastructure, merging two compute-intensive domains.



Hybrid and cloud-enabled HPC

Organizations are adopting hybrid models that blend on-prem control with cloud scalability, elasticity and pay-per-use economics.



Containerization and automation

Tools like Kubernetes and Slurm are streamlining job scheduling, improving reproducibility and reducing operational overhead.



Data deluge

Explosive data growth—from genomics to IoT—demands scalable, high-throughput architectures.



Sustainable computing

Energy-efficient HPC is becoming essential as organizations balance performance with carbon reduction goals.

How HCLTech helps you harness HPC

HCLTech brings deep expertise in designing, deploying and managing high-performance computing environments that are agile, scalable and tuned for your workloads. Our end-to-end HPC services span:

Consulting and assessment

We begin with a deep dive into your current and future HPC needs—profiling workloads, identifying bottlenecks and optimizing TCO to build a tailored roadmap.

Design and build

Our workload-specific architectures, using the right mix of CPUs, GPUs, interconnects, storage and schedulers. Whether it's AI-accelerated clusters, hybrid cloud burst models, or storage-optimized nodes, we tailor the solution precisely

Managed services

We manage your HPC stack 24x7—covering orchestration, monitoring, patching and compliance—powered by automation and AI-ops.

HPC-as-a-Service (HPCaaS)

We offer flexible consumption models—on-prem, cloud, or hybrid—with SLA-based delivery and utility-style pricing. HCLTech offers the power of HPC without infrastructure complexity.

HCLTech + HPE: A strategic alliance for HPC transformation

HCLTech and Hewlett Packard Enterprise (HPE) have joined forces to deliver next-generation HPC environments that are secure, scalable, and performance-driven. Together, we combine world-class technology with deep domain expertise to accelerate innovation across industries and geographies. Explore the joint benefits:



Proven HPC infrastructure: Leverage HPE Cray supercomputers, Apollo systems and GreenLake for HPC to achieve unmatched performance and flexibility.



HCLTech U4X (HPCaaS): Our U4X model, built on HPE GreenLake, delivers HPC-as-a-Service with cloud agility, on-prem control and consumption-based pricing—secured and governed end-to-end.



End-to-end solution engineering: We co-design, deploy and manage turnkey HPC environments tailored to use cases like AI training, genomics and product simulation.



Global reach, local expertise: HCLTech's domain-aligned teams and global delivery centers ensure consistent support, compliance and scalability worldwide.

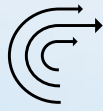
The joint value proposition

Our partnership delivers differentiated business value across every stage of the HPC lifecycle:



Pay-per-use model

With U4X organizations can consume HPC like a service with consumption-based pricing, backed by expert operations.



Accelerated time-to-insight

Accelerated deployments from HCLTech, powered by HPE's high-performance hardware.

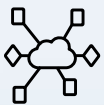


Trusted scalability

Effortlessly scale AI research or hybrid workloads with our integrated stack.

What sets HCLTech's HPC offering apart

HCLTech delivers differentiated HPC solutions built for performance, flexibility and sustainability:



Workload-centric architecture

Infrastructure tailored to your specific computational needs—no one-size-fits-all.



Hybrid-ready design

Seamless workload mobility across on-prem and cloud, powered by containerized workflows and orchestration.



Performance engineering

Deep telemetry analysis and tuning of schedulers, I/O paths and interconnects to maximize throughput.



AI-driven operations

ML-based anomaly detection, self-healing automation and intelligent job tracking reduce downtime and manual effort.



Sustainable by design

Energy-efficient clusters with optimized cooling, low PUE and carbon-aware scheduling.



Security and compliance first

Built-in multi-factor authentication (MFA), role-based access, and encryption—aligned with industry standards.

Customer success snapshot



Global bioinformatics leader

HCLTech deployed an HPE-powered hybrid HPC cluster for a leading life sciences firm, enabling real-time DNA sequence analysis. Leveraging Slurm for scheduling and Lustre-based parallel file systems, the solution cut processing times by 40% while ensuring HIPAA and GxP compliance.



Engineering R&D giant

For a leading automotive company, HCLTech implemented an on-prem HPE Apollo-based CFD simulation platform with GPU acceleration. The result: 60% faster simulation cycles and seamless CI/CD integration for rapid model iteration.

Business benefits delivered



Faster time to discovery: Accelerate R&D, product design and data analysis with high-performance, compute-optimized infrastructure.



Cost efficiency: Reduce total cost of ownership through hybrid deployments, consumption-based pricing and intelligent job scheduling.



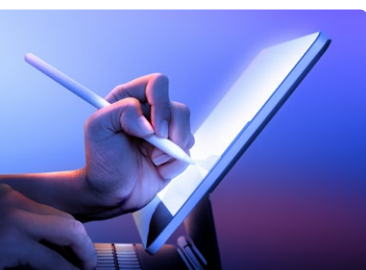
Optimized resource utilization: Maximize compute and storage efficiency with advanced workload profiling and scheduling.



Higher uptime and reliability: Ensure uptime and reduce system downtime risk with resilient architectures.



Future-ready infrastructure: Modular, scalable designs prepare you for evolving AI, data and compute demands.



Let's accelerate the future

HPC is not just about speed—it's about solving the world's most complex challenges. With HCLTech and HPE as your partners, you're not just investing in infrastructure, but in innovation, agility and long-term advantage.

Whether you're launching your HPC journey or scaling to exascale, HCLTech helps you move forward—faster, smarter and more securely.

For more information, you may write to us at HCBU-PMG@hcltech.com

HCLTech | Supercharging Progress™

HCLTech is a global technology company, home to more than 223,000 people across 60 countries, delivering industry-leading capabilities centered around digital, engineering, cloud and AI, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending March 2025 totaled \$13.8 billion. To learn how we can supercharge progress for you, visit hcltech.com.

hcltech.com

