

# High-Performance Computing Infrastructure Stacks and Deployments

AN IDC CONTINUOUS INTELLIGENCE SERVICE

IDC's *High-Performance Computing Infrastructure Stacks and Deployments* flagship service covers modeling and simulation trends, insights, end-user adoption, use cases, and vendor strategies.

## Markets and Subjects Analyzed

- High-performance computing (modeling and simulation)
- High-performance data analytics
- HPC/AI convergence
- Quantum computing for HPC use cases
- Supercomputing (Top 20 of Top500)
- Institutional HPC (rest of Top500)
- Mainstream HPC (not in Top500)
- HPC-related infrastructure technologies, platforms, and systems (compute and storage)
- HPC-related software
- Overlap and convergence of HPC and AI

## Core Research

- Worldwide HPC Historical Server and Storage Vendor Share
- Worldwide HPC Server and Storage Forecast
- HPC End-User Adoption Trends and Analysis
- HPC Vendor Landscape
- HPC Cloud Services
- Infrastructure Convergence for HPC and AI

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: [High-Performance Computing Infrastructure Stacks and Deployments](#).

## Key Questions Answered

1. How are institutions and enterprises investing in high-performance computing? What are their key objectives (use cases)? And what are their unmet needs in the market?
2. How are IT vendors and cloud service providers responding to these unmet needs? What are the key products and services that are being introduced to service these needs?
3. What is the market opportunity for these vendors today in five years?
4. Who are the leading vendors and service providers in the space? What differentiates them?
5. How is institutional HPC influencing enterprise behavior? What are some of the new and emerging use cases?

## Companies Analyzed

This service reviews the strategies, market positioning, and future direction of several providers in the high-performance computing market, including:

AMD, Arm, Atos, Bright Computing, Cisco, Dell, Fujitsu, GIGABYTE, NVIDIA, Penguin Computing, Pure Storage, Quantum, Supermicro, Groupe Bull (Atos), HPE, Huawei, IBM, Inspur, Intel, Lenovo, NetApp, WekaIO, and Xilinx