



HPC User Site Census: System Suppliers

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EXECUTIVE SUMMARY

The HPC User Site Census: Systems report, part of Intersect360 Research's Site Census series, provides a detailed examination of the server systems installed at a sample of High Performance Computing user sites. We surveyed a broad range of users about their current computer system installations, storage systems, networks, middleware, and the applications software supporting these computer installations.

The goal in this analysis of HPC system suppliers is to examine the installations by supplier and to examine supplier penetration by sector and by region within the HPC user community.

Key findings of this Site Census survey include the following:

- Dell EMC, Hewlett Packard Enterprise (HPE), and Lenovo were the top-named vendors out of 40 in Intersect360 Research's total site database. The top five named vendors (also including SGI and Cray) captured 52% of the systems market.
- HPE continues to gain momentum in the HPC market. With its acquisition of SGI (completed in Q4 2016), the combined share could account for more than 20% of all reported installations in next year's study.
- Dell EMC had a significantly higher share (17.5%) at academic sites while HPE had the highest share (25.9%) of installations at commercial sites. For the government sector, SGI had the highest share for named suppliers with 12.2%.
- In North America, Dell EMC had the highest share of systems installed, while Lenovo had the most in EMEA and HPE had the highest share for named suppliers in Asia-Pacific.
- Dell EMC had the most server nodes installed, followed by HPE and Lenovo. Dell EMC and HPE had very similar distributions of systems by node count with 85% or more of their systems having 512 nodes or less. Outliers (i.e., systems with 2,000 or more nodes) were excluded.

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COMPANIES MENTIONED IN THIS REPORT

Companies mentioned in this report, in alphabetical order, include:

- Advanced Clustering Technologies
- Advanced HPC
- Amazon Web Services
- Atipa
- Atos
- Cirrascale
- Citrix
- ClusterVision
- Colfax
- Cray
- Creative Consultants
- Dell EMC
- E4 Computer Engineering
- Eurotech
- Exxact
- Fujitsu
- Generic
- GenOuest
- Google
- HPE
- IBM
- ICC
- In-house
- Inspur
- Intel
- Lenovo
- Megware
- Micron
- Microway Technology
- NEC
- Nvidia
- Oracle
- Penguin Computing
- Proline
- RSC
- Scherm do Brasil
- Seneca
- SGI
- Silicon Mechanics
- SuperMicro
- Transtec
- Xenon systems

TECHNOLOGIES COVERED IN THIS REPORT

- HPC system elements
 - Systems, clusters
 - HPC clusters
 - Supercomputers
 - SMPs
 - Vector-based systems
 - MPP systems
 - Server technologies
 - Rack-mounted servers
 - Blades
 - Memory configurations
- Processor elements
 - System processors
 - x86 processors
 - RISC processors
 - ARM processors
 - Vector processors
 - Other processors
 - Accelerators and co-processors
 - GPU computing
 - FPGAs
 - Other accelerators or co-processors
 - Hybrid (accelerated) system processors (e.g., Intel MIC, AMD Fusion)
- Cloud computing, grid computing, utility computing
 - Public cloud technologies
 - Private cloud technologies