

The Top of All Things in HPC, 2017 Site Census Snapshot Analysis

April 2018



Intersect360
R E S E A R C H

**Christopher Willard, Ph.D., Addison Snell,
Laura Segervall**



Introduction

- The purpose of this presentation is to identify the top suppliers, packages, or categories within specific HPC market segments, according to survey data.
- Shares reported are based on Site Census survey results. This is not the same as revenue shares, which Intersect360 Research models separately; however, in most cases, it is an important indicator.
- “Top” is defined as companies accounting for 50% market share or the top five.
- Full details will be issued in written HPC User Site Census reports.

Summary

- HPE became the largest HPC vendor reported in our Site Census surveys, accounting for roughly 21% of all mentions. Much of this increase in mentions is due to the acquisition of SGI systems.
- NVIDIA continues to dominate the accelerator market in system installations. However, NVIDIA's lead in total processors installed shrank to less than 50% due to installation of several large Intel Phi-based systems.
- Mellanox gained share of mentions in every networking locale, with storage showing the largest gain.
- Middleware profile remained consistent with the prior year with programming environment, job management, and compilers being the top three subcategories.
- Top ten generally-available application packages continue to primarily be in traditional segments: chemistry, fluid dynamics, and structural analysis.

TECHNOLOGIES COVERED IN THIS REPORT

- HPC system elements
 - Systems, clusters
- Processor elements
 - Accelerators and co-processors
- Storage elements
 - Storage systems
- Interconnect elements
 - System interconnects
 - Storage interconnects
 - Lan interconnects
- Software elements
 - Applications
 - Developer Tools
 - Middleware
- Cloud computing, grid computing, utility computing



COMPANIES MENTIONED IN THIS REPORT

Amazon Web Services
ANSYS
Cray
Dassault Systems
DDN
Dell EMC
Gaussian, Inc.
GNU.org
Gromacs.org
HPE

IBM
Intel
Lenovo
LSTC
Lustre.org
Mathworks
Mellanox
NCAR
NetApp
NVIDIA

OpenFoam Foundation
Panasas
SchedMD
Siemens
Supermicro
U of Illinois, UC
U of Vienna