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Welcome

Intersect360 Research User Site System Census Survey

Thank you for taking a few minutes to complete our survey. Your responses will help technology and services suppliers better understand the server, storage, network, and software technology currently in use at High Performance Computing sites. Intersect360 Research will aggregate the data and will not identify individual sites with their responses.

For the purposes of this study we define HPC as:

High Performance Computing (HPC) is the use of servers, clusters, and supercomputers - plus associated software, tools, components, storage, and services - for scientific, engineering, or analytical tasks that are particularly intensive in computation, memory usage, or data management. HPC is used by scientists and engineers both in research and development, and to a growing extent business applications in such areas as business intelligence, complex event processing, virtual environments (e.g. online games), and hyperscale computational facilities. HPC applications are found across industry, government, and academia. Within industry, HPC can frequently be distinguished from general business computing in that companies generally will use HPC applications to gain advantage in their core endeavors - e.g., finding oil, designing automobile parts, or protecting clients' investments - as opposed to non-core endeavors such as payroll management or resource planning.

In this study we will ask you to list the systems and software you currently have installed and provide some top level configuration/usage information for those systems and packages. Finally, we ask for some demographic information to complete the survey.

Please contact Chris Willard at Chris@Intersect360.com if you have any questions or comments. Thank you again for your help.

Click the NEXT button below to begin.

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Country

*** What country does your organization reside? (not headquarters, your facility)**

- ○ Australia
- ○ Austria
- ○ Belgium
- ○ Brazil
- ○ Canada
- ○ China
- ○ Czech Republic
- ○ Denmark
- ○ Finland
- ○ France
- ○ Germany
- ○ India
- ○ Ireland
- ○ Israel
- ○ Italy
- ○ Japan
- ○ Korea, South
- ○ Netherlands
- ○ New Zealand
- ○ Norway
- ○ Poland
- ○ Russia
- ○ Saudi Arabia
- ○ Singapore
- ○ South Africa
- ○ Spain
- ○ Sweden
- ○ Switzerland
- ○ Taiwan
- ○ Thailand
- ○ Ukraine
- ○ United Kingdom
- ○ United States
- ○ Other country:

[ ]

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Qualifier
#1

*** Does your organization run any type of HPC applications? (Note: If you run HPC type applications on any size machine including entry level or midrange systems you ARE qualified for this study.)**

- ◯ Yes
- ◯ No

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Qualifier
#2

*** What is the primary use or application category running on your HPC systems?.**
e.g., digital content creation, quantum chromodynamics research, designing airplanes

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Qualifer
#3

*** Do you have knowledge of the HPC hardware and software installed at your site?**

- ◯ Yes
- ◯ No

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Qualifer
#4

*** Do you work for a computer hardware or software vendor that sells to HPC users?**

- ◯ Yes
- ◯ No

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Introduction

Please provide a response to each question.

*** What is the name of your organization? (All survey responses are kept anonymous. We will not identify your organization as a respondent to this survey.)**

*** What is your job title?**

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Server #1

Please provide as much of the following information as possible for each of your installed server systems (you will be able to include up to 5 systems - one per page):

SYSTEM 1: Vendor and model:
Vendor = "in-house" for systems configured by internal staff, integrators, or contractors.
Vendor = "generic" for systems using commercial off-the-shelf technology with multiple or unknown vendors.
For cloud usage, Vendor = cloud service provider and Model = "Cloud". Provide additional info (nodes, memory, storage) if appropriate.

Vendor:

Model:

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

How acquired (direct sales rep, reseller, web):

- ○ direct sales rep
- ○ reseller
- ○ web
- ○ don't know
- ○ Other (please specify)

Architecture (SMP, MPP, cluster, blade, etc.):

- ◯ SMP
- ◯ MPP
- ◯ Cluster
- ◯ Blade based
- ◯ Vector
- ◯ Uniprocessor
- ◯ Cloud
- ◯ Other (please specify)

What is the primary Operating system:

- ◯ SUSE/OpenSUSE
- ◯ Red Hat
- ◯ CENT OS
- ◯ Other commercial Linux
- ◯ Non-commercial Linux
- ◯ Windows HPC Server (HPC Server 2008, Compute Cluster Server 2003 or older)
- ◯ Windows Server (Windows Server 2003, Windows Server 2000)
- ◯ Windows Client (XP, Vista, Windows 7, or older)
- ◯ Mac OS X
- ◯ AIX
- ◯ Solaris
- ◯ Irix
- ◯ Other (please specify)

Number of nodes:
(For SMP or Uni-processor systems set the number of nodes to 1.)

On average, how many additional nodes (servers) do you<u>add</u> to your cluster/blade/mpp each year?

On average, how many nodes (servers) do you replace in your cluster/blade/mpp each year?

What is the average cost of a node on this system?*Please specify currency.*

For the following processor questions, please provide information on the main processor. Questions on accelerators/co-processors will be asked later in the survey.

Processor type (AMD x86-64, Intel x86-64, Power, Sparc, etc.):

Number of processors per node:
(NOTE: For next 4 questions, for clustered systems with multiple node types configured, use the predominant node for your responses.)

Number of cores per processor: (physical cores, not threads)

Amount of memory per node in GB:

Average node-level storage:

Average storage capacity per node:

Unit of measure (GB, TB, PB, other):

Does this system use SSDs for node-level storage?

- ◯ Yes
- ◯ No
- ◯ Don't know

What percent is SSDs?

Storage capacity of direct attached storage for this system: (Do not include networked-attached storage)

Total Storage Capcity of DAS:

Unit of Measure (GB, TB, PB, other):

For cluster, blade and MPP configurations, please list:

Interconnect Supplier (Primary):

Interconnect Supplier (Secondary):

For cluster, blade, and MPP configurations, please list primary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

For cluster, blade, and MPP configurations, please list secondary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Not Applicable
- ◯ Other (please specify)

Accelerator/Co-processor/FPGA Technology - please answer the following if this system uses these technologies:

Supplier name:

Accelerator name/type:

Number of Nodes with Accelerators:

Number of Accelerators per node: (use predominant if number varies)

Large memory nodes - please answer the following if this system has any specialized large memory nodes:

Number of Large Memory Nodes:

Average memory capacity (please specify units - GB,TB)

*** Do you have another installed server system to report on?**

- ◯ Yes
- ◯ No

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Server #2

Please provide as much of the following information as possible for your 2nd system:

SYSTEM 2: Vendor and model:
Vendor = "in-house" for systems configured by internal staff, integrators, or contractors.
Vendor = "generic" for systems using commercial off-the-shelf technology with multiple or unknown vendors.
For cloud usage, Vendor = cloud service provider and Model = "Cloud". Provide additional info (nodes, memory, storage) if appropriate.

Vendor:

Model:

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

How acquired (direct sales rep, reseller, web):

- ○ direct sales rep
- ○ reseller
- ○ web
- ○ don't know
- ○ Other (please specify)

Architecture (SMP, MPP, cluster, blade, etc.):

- ◯ SMP
- ◯ MPP
- ◯ Cluster
- ◯ Blade based
- ◯ Vector
- ◯ Uniprocessor
- ◯ Cloud
- ◯ Other (please specify)

What is the primary Operating system:

- ◯ SUSE/OpenSUSE
- ◯ Red Hat
- ◯ CENT OS
- ◯ Other commercial Linux
- ◯ Non-commercial Linux
- ◯ Windows HPC Server (HPC Server 2008, Compute Cluster Server 2003 or older)
- ◯ Windows Server (Windows Server 2003, Windows Server 2000)
- ◯ Windows Client (XP, Vista, Windows 7, or older)
- ◯ Mac OS X
- ◯ AIX
- ◯ Solaris
- ◯ Irix
- ◯ Other (please specify)

Number of nodes:
(For SMP or Uni-processor systems set the number of nodes to 1.)

On average, how many additional nodes (servers) do you<u>add</u> to your cluster/blade/mpp each year?

On average, how many nodes (servers) do you replace in your cluster/blade/mpp each year?

What is the average cost of a node on this system?*Please specify currency.*

For the following processor questions, please provide information on the main processor. Questions on accelerators/co-processors will be asked later in the survey.

Processor type (AMD x86-64, Intel x86-64, Power, Sparc, etc.):

Number of processors per node:
(NOTE: For next 4 questions, for clustered systems with multiple node types configured, use the predominant node for your responses.)

Number of cores per processor: (physical cores, not threads)

Amount of memory per node in GB:

Average node-level storage:

Average storage capacity per node:

Unit of measure (GB, TB, PB, other):

Does this system use SSDs for node-level storage?

- ◯ Yes
- ◯ No
- ◯ Don't know

What percent is SSDs?

Storage capacity of direct attached storage for this system: (Do not include networked-attached storage)

Total Storage Capcity of DAS:

Unit of Measure (GB, TB, PB, other):

For cluster, blade and MPP configurations, please list:

Interconnect Supplier (Primary):

Interconnect Supplier (Secondary):

For cluster, blade, and MPP configurations, please list primary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

For cluster, blade, and MPP configurations, please list secondary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Not Applicable
- ◯ Other (please specify)

Accelerator/Co-processor/FPGA Technology - please answer the following if this system uses these technologies:

Supplier name:

Accelerator name/type:

Number in Nodes with Accelerators:

Number of Accelerators per node: (use predominant, if number varies)

Large memory nodes - please answer the following if this system has any specialized large memory nodes:

Number of Large Memory Nodes:

Average memory capacity (please specify units - GB,TB)

*** Do you have another installed server system to report on?**

- ◯ Yes
- ◯ No

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Server
#3

Please provide as much of the following information as possible for your 3rd system:

SYSTEM 3: Vendor and model:
Vendor = "in-house" for systems configured by internal staff, integrators, or contractors.
Vendor = "generic" for systems using commercial off-the-shelf technology with multiple or unknown vendors.
For cloud usage, Vendor = cloud service provider and Model = "Cloud". Provide additional info (nodes, memory, storage) if appropriate.

Vendor:

Model:

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

How acquired (direct sales rep, reseller, web):

- ○ direct sales rep
- ○ reseller
- ○ web
- ○ don't know
- ○ Other (please specify)

Architecture (SMP, MPP, cluster, blade, etc.):

- ◯ SMP
- ◯ MPP
- ◯ Cluster
- ◯ Blade based
- ◯ Vector
- ◯ Uniprocessor
- ◯ Cloud
- ◯ Other (please specify)

What is the primary Operating system:

- ◯ SUSE/OpenSUSE
- ◯ Red Hat
- ◯ CENT OS
- ◯ Other commercial Linux
- ◯ Non-commercial Linux
- ◯ Windows HPC Server (HPC Server 2008, Compute Cluster Server 2003 or older)
- ◯ Windows Server (Windows Server 2003, Windows Server 2000)
- ◯ Windows Client (XP, Vista, Windows 7, or older)
- ◯ Mac OS X
- ◯ AIX
- ◯ Solaris
- ◯ Irix
- ◯ Other (please specify)

Number of nodes:
(For SMP or Uni-processor systems set the number of nodes to 1.)

On average, how many additional nodes (servers) do you<u>add</u> to your cluster/blade/mpp each year?

On average, how many nodes (servers) do you replace in your cluster/blade/mpp each year?

What is the average cost of a node on this system?*Please specify currency.*

For the following processor questions, please provide information on the main processor. Questions on accelerators/co-processors will be asked later in the survey.

Processor type (AMD x86-64, Intel x86-64, Power, Sparc, etc.):

Number of processors per node:
(NOTE: For next 4 questions, for clustered systems with multiple node types configured, use the predominant node for your responses.)

Number of cores per processor: (physical cores, not threads)

Amount of memory per node in GB:

Average node-level storage:

Average storage capacity per node:

Unit of measure (GB, TB, PB, other):

Does this system use SSDs for node-level storage?

- ◯ Yes
- ◯ No
- ◯ Don't know

What percent is SSDs?

Storage capacity of direct attached storage for this system: (Do not include networked-attached storage)

Total Storage Capcity of DAS:

Unit of Measure (GB, TB, PB, other):

For cluster, blade and MPP configurations, please list:

Interconnect Supplier (Primary):

Interconnect Supplier (Secondary):

For cluster, blade, and MPP configurations, please list primary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

For cluster, blade, and MPP configurations, please list secondary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Not Applicable
- ◯ Other (please specify)

Accelerator/Co-processor/FPGA Technology - please answer the following if this system uses these technologies:

Supplier name:

Accelerator name/type:

Number in Nodes with Accelerators:

Number of Accelerators per node: (use predominant, if number varies)

Large memory nodes - please answer the following if this system has any specialized large memory nodes:

Number of Large Memory Nodes:

Average memory capacity (please specify units - GB,TB)

*** Do you have another installed server system to report on?**

- ◯ Yes
- ◯ No

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Server
#4

Please provide as much of the following information as possible for your 4th system:

SYSTEM 4: Vendor and model:
Vendor = "in-house" for systems configured by internal staff, integrators, or contractors.
Vendor = "generic" for systems using commercial off-the-shelf technology with multiple or unknown vendors.
For cloud usage, Vendor = cloud service provider and Model = "Cloud". Provide additional info (nodes, memory, storage) if appropriate.

Vendor:

Model:

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

How acquired (direct sales rep, reseller, web):

- ○ direct sales rep
- ○ reseller
- ○ web
- ○ don't know
- ○ Other (please specify)

Architecture (SMP, MPP, cluster, blade, etc.):

- ◯ SMP
- ◯ MPP
- ◯ Cluster
- ◯ Blade based
- ◯ Vector
- ◯ Uniprocessor
- ◯ Cloud
- ◯ Other (please specify)

What is the primary Operating system:

- ◯ SUSE/OpenSUSE
- ◯ Red Hat
- ◯ CENT OS
- ◯ Other commercial Linux
- ◯ Non-commercial Linux
- ◯ Windows HPC Server (HPC Server 2008, Compute Cluster Server 2003 or older)
- ◯ Windows Server (Windows Server 2003, Windows Server 2000)
- ◯ Windows Client (XP, Vista, Windows 7, or older)
- ◯ Mac OS X
- ◯ AIX
- ◯ Solaris
- ◯ Irix
- ◯ Other (please specify)

Number of nodes:
(For SMP or Uni-processor systems set the number of nodes to 1.)

On average, how many additional nodes (servers) do you<u>add</u> to your cluster/blade/mpp each year?

On average, how many nodes (servers) do you replace in your cluster/blade/mpp each year?

What is the average cost of a node on this system?*Please specify currency.*

For the following processor questions, please provide information on the main processor. Questions on accelerators/co-processors will be asked later in the survey.

Processor type (AMD x86-64, Intel x86-64, Power, Sparc, etc.):

Number of processors per node:
(NOTE: For next 4 questions, for clustered systems with multiple node types configured, use the predominant node for your responses.)

Number of cores per processor: (physical cores, not threads)

Amount of memory per node in GB:

Average node-level storage:

Average storage capacity per node:

Unit of measure (GB, TB, PB, other):

Does this system use SSDs for node-level storage?

- ◯ Yes
- ◯ No
- ◯ Don't know

What percent is SSDs?

Storage capacity of direct attached storage for this system: (Do not include networked-attached storage)

Total Storage Capcity of DAS:

Unit of Measure (GB, TB, PB, other):

For cluster, blade and MPP configurations, please list:

Interconnect Supplier (Primary):

Interconnect Supplier (Secondary):

For cluster, blade, and MPP configurations, please list primary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

For cluster, blade, and MPP configurations, please list secondary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Not Applicable
- ◯ Other (please specify)

Accelerator/Co-processor/FPGA Technology - please answer the following if this system uses these technologies:

Supplier name:

Accelerator name/type:

Number of Nodes with Accelerators:

Number of Accelerators per node: (use predominant, if number varies)

Large memory nodes - please answer the following if this system has any specialized large memory nodes:

Number of Large Memory Nodes:

Average memory capacity (please specify units - GB,TB)

*** Do you have another installed server system to report on?**

- ◯ Yes
- ◯ No

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Server
#5

Please provide as much of the following information as possible for your 5th system:

SYSTEM 5: Vendor and model:
Vendor = "in-house" for systems configured by internal staff, integrators, or contractors.
Vendor = "generic" for systems using commercial off-the-shelf technology with multiple or unknown vendors.
For cloud usage, Vendor = cloud service provider and Model = "Cloud". Provide additional info (nodes, memory, storage) if appropriate.

Vendor:

Model:

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

How acquired (direct sales rep, reseller, web):

- ○ direct sales rep
- ○ reseller
- ○ web
- ○ don't know
- ○ Other (please specify)

Architecture (SMP, MPP, cluster, blade, etc.):

- ◯ SMP
- ◯ MPP
- ◯ Cluster
- ◯ Blade based
- ◯ Vector
- ◯ Uniprocessor
- ◯ Cloud
- ◯ Other (please specify)

What is the primary Operating system:

- ◯ SUSE/OpenSUSE
- ◯ Red Hat
- ◯ CENT OS
- ◯ Other commercial Linux
- ◯ Non-commercial Linux
- ◯ Windows HPC Server (HPC Server 2008, Compute Cluster Server 2003 or older)
- ◯ Windows Server (Windows Server 2003, Windows Server 2000)
- ◯ Windows Client (XP, Vista, Windows 7, or older)
- ◯ Mac OS X
- ◯ AIX
- ◯ Solaris
- ◯ Irix
- ◯ Other (please specify)

Number of nodes:
(For SMP or Uni-processor systems set the number of nodes to 1.)

On average, how many additional nodes (servers) do you<u>add</u> to your cluster/blade/mpp each year?

On average, how many nodes (servers) do you replace in your cluster/blade/mpp each year?

What is the average cost of a node on this system?*Please specify currency.*

For the following processor questions, please provide information on the main processor. Questions on accelerators/co-processors will be asked later in the survey.

Processor type (AMD x86-64, Intel x86-64, Power, Sparc, etc.):

Number of processors per node:
(NOTE: For next 4 questions, for clustered systems with multiple node types configured, use the predominant node for your responses.)

Number of cores per processor: (physical cores, not threads)

Amount of memory per node in GB:

Average node-level storage:

Average storage capacity per node:

Unit of measure (GB, TB, PB, other):

Does this system use SSDs for node-level storage?

- ◯ Yes
- ◯ No
- ◯ Don't know

What percent is SSDs?

Storage capacity of direct attached storage for this system: (Do not include networked-attached storage)

Total Storage Capcity of DAS:

Unit of Measure (GB, TB, PB, other):

For cluster, blade and MPP configurations, please list:

Interconnect Supplier (Primary):

Interconnect Supplier (Secondary):

For cluster, blade, and MPP configurations, please list primary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

For cluster, blade, and MPP configurations, please list secondary Interconnect type:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Not Applicable
- ◯ Other (please specify)

Accelerator/Co-processor/FPGA Technology - please answer the following if this system uses these technologies:

Supplier name:

Accelerator name/type:

Number in Nodes with Accelerators:

Number of Accelerators per node: (use predominant if number varies)

Large memory nodes - please answer the following if this system has any specialized large memory nodes:

Number of Large Memory Nodes:	
Average memory capacity (please specify units - GB,TB)	

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Networked Storage System #1

For your Network-Attached Storage Systems:

Please provide as much of the following information as possible for each of your installed storage systems (you will be able to include up to 3 storage systems - one per page).

Note: DAS storage systems should be reported with the system in the previous section.

STORAGE SYSTEM #1: Vendor and model
For cloud usage, Vendor = cloud service provider and Model = "cloud"

Vendor:

Model:

What is the predominant storage media on this systems?

- ( ) Disk
- ( ) Tape
- ( ) SSD
- ( ) Other (please specify)

How is this storage system deployed?

- ( ) NAS
- ( ) SAN

Is the primary purpose of this system archival?

- ( ) Yes
- ( ) No

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

What is total storage capacity currently installed on this system?

Total Capacity Installed

Unit of Measure (GB, TB, PB, other)

Is your data for this storage system primarily file-based, block-based, or object-based?

- ◯ File
- ◯ Block
- ◯ Object
- ◯ Don't know

Primary network supplier to/from the storage systems:

Primary network type to/from the storage systems:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

Storage management software:

Supplier

Package Name

What percentage of data is stored in

% Structured (i.e. database) form (ex: SQL, Oracle, other database)

% Semi-structured file system form (ex: NetCDF, HDFS, HDF5, Hbase)

% Unstructured file system form (ex: flat files)

*** Do you have another installed storage system to report on?**

- ◯ Yes
- ◯ No

Intersect360 RESEARCH

Networked Storage System #2

Please provide as much of the following information as possible for each of your 2nd networked storage systems

Note: DAS storage systems should be reported with the system in the previous section.

STORAGE SYSTEM #2: Vendor and model
For cloud usage, Vendor = cloud service provider and Model = "cloud"

Vendor:

Model:

What is the predominant storage media on this systems?

- ◯ Disk
- ◯ Tape
- ◯ SSD
- ◯ Other (please specify)

How is this storage system deployed?

- ◯ NAS
- ◯ SAN

Is the primary purpose of this system archival?

- ◯ Yes
- ◯ No

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

What is total storage capacity currently installed on this system?

Total Capacity Installed

Unit of Measure (GB, TB, PB, other)

Is your data for this storage system primarily file-based, block-based, or object-based?

- ◯ File
- ◯ Block
- ◯ Object
- ◯ Don't know

Primary network supplier to/from the storage systems:

Primary network type to/from the storage systems:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

Storage management software:

Supplier

Package Name

What percentage of data is stored in

% Structured (i.e. database) form (ex: SQL, Oracle, other database)

% Semi-structured file system form (ex: NetCDF, HDFS, HDF5, Hbase)

% Unstructured file system form (ex: flat files)

*** Do you have another installed storage system to report on?**

- ◯ Yes
- ◯ No

Intersect360 RESEARCH

Networked Storage System #3

For your Network-Attached Storage Systems:

Please provide as much of the following information as possible for each of your 3rd networked storage system.

Note: DAS storage systems should be reported with the system in the previous section.

STORAGE SYSTEM #3: Vendor and model
For cloud usage, Vendor = cloud service provider and Model = "cloud"

Vendor:

Model:

What is the predominant storage media on this systems?

- ( ) Disk
- ( ) Tape
- ( ) SSD
- ( ) Other (please specify)

How is this storage system deployed?

- ( ) NAS
- ( ) SAN

Is the primary purpose of this system archival?

- ( ) Yes
- ( ) No

What year was this system acquired and when was it last upgraded?

Year Acquired:

Last Year Upgraded:

What is total storage capacity currently installed on this system?

Total Capacity Installed

Unit of Measure (GB, TB, PB, other)

Is your data for this storage system primarily file-based, block-based, or object-based?

- ◯ File
- ◯ Block
- ◯ Object
- ◯ Don't know

Primary network supplier to/from the storage systems:

Primary network type to/from the storage systems:

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

Storage management software:

Supplier

Package Name

What percentage of data is stored in

% Structured (i.e. database) form (ex: SQL, Oracle, other database)

% Semi-structured file system form (ex: NetCDF, HDFS, HDF5, Hbase)

% Unstructured file system form (ex: flat files)

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Local Area and Computer Networks

For your local area and/or computer room network installed, please list as much of the following information as possible (you will be able to enter up to 3 networks - one per page):

LOCAL NETWORK #1: Type

- ○ 1 Gbps Ethernet
- ○ 10 Gbps Ethernet
- ○ 40 Gbps Ethernet
- ○ 100 Gbps Ethernet
- ○ Older Ethernet (100 Mbps or less)
- ○ Ethernet, unknown speed
- ○ 10 Gbps Infiniband
- ○ 20 Gbps Infiniband
- ○ 40 Gbps Infiniband
- ○ 56 Gbps Infiniband (FDR)
- ○ 100 Gbps Infiniband (EDR)
- ○ 200 Gbps Infiniband (HDR)
- ○ Infiniband, unknown speed
- ○ 100 Gbps Omni-Path
- ○ Fibre Channel
- ○ Don't know
- ○ Other (please specify)

Primary router supplier for Network #1

Primary NIC supplier

*** Do you have another installed network to report on?**

- ◯ Yes
- ◯ No

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Local Area and Computer Networks #2

Please list as much of the following information as possible for your 2nd local area and/or computer room network.

LOCAL NETWORK #2: Type

- ( ) 1 Gbps Ethernet
- ( ) 10 Gbps Ethernet
- ( ) 40 Gbps Ethernet
- ( ) 100 Gbps Ethernet
- ( ) Older Ethernet (100 Mbps or less)
- ( ) Ethernet, unknown speed
- ( ) 10 Gbps Infiniband
- ( ) 20 Gbps Infiniband
- ( ) 40 Gbps Infiniband
- ( ) 56 Gbps Infiniband (FDR)
- ( ) 100 Gbps Infiniband (EDR)
- ( ) 200 Gbps Infiniband (HDR)
- ( ) Infiniband, unknown speed
- ( ) 100 Gbps Omni-Path
- ( ) Fibre Channel
- ( ) Don't know
- ( ) Other (please specify)

Primary router supplier for Network #2

Primary NIC supplier

*** Do you have another installed network to report on?**

- ◯ Yes
- ◯ No

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Local Area and Computer Networks #3

Please list as much of the following information as possible for your 3rd local area and/or computer room network you currently have installed

LOCAL NETWORK #3: Type

- ◯ 1 Gbps Ethernet
- ◯ 10 Gbps Ethernet
- ◯ 40 Gbps Ethernet
- ◯ 100 Gbps Ethernet
- ◯ Older Ethernet (100 Mbps or less)
- ◯ Ethernet, unknown speed
- ◯ 10 Gbps Infiniband
- ◯ 20 Gbps Infiniband
- ◯ 40 Gbps Infiniband
- ◯ 56 Gbps Infiniband (FDR)
- ◯ 100 Gbps Infiniband (EDR)
- ◯ 200 Gbps Infiniband (HDR)
- ◯ Infiniband, unknown speed
- ◯ 100 Gbps Omni-Path
- ◯ Fibre Channel
- ◯ Don't know
- ◯ Other (please specify)

Primary router supplier for Network #3

Primary NIC supplier

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Middleware and Utilities

Please list the primary middleware and utilities packages in use at your facility. Packages in this category are system-level software not included as part of the operating system, ranging from load balancing and batch queue management utilities, to compilers, debuggers, and parallel programming environments.

In-house packages: Enter "In-house" for supplier
Open Source packages: Enter either name of the supplier organization or "Open Source".

Middleware and Utilities Package # 1

Supplier	
Package Name	
Type/Primary Use	

Middleware and Utilities Package # 2

Supplier	
Package Name	
Type/Primary Use	

Middleware and Utilities Package # 3

Supplier	
Package Name	
Type/Primary Use	

Middleware and Utilities Package # 4

Supplier	
Package Name	
Type/Primary Use	

Middleware and Utilities Package # 5

Supplier	
Package Name	
Type/Primary Use	

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Application Software Packages

Please list the primary application software packages in use at your facility.

In-house packages: Enter "In-house" for supplier.
Open Source packages: Enter either name of the supplier organization or "Open Source".

*** Application Software Package # 1**

Supplier	
Package Name	
Type/Primary Use	
Leverages accelerator (Y=Yes, N=No)	

Application Software Package # 2

Supplier	
Package Name	
Type/Primary Use	
Leverages accelerator (Y=Yes, N=No)	

Application Software Package # 3

Supplier	
Package Name	
Type/Primary Use	
Leverages accelerator (Y=Yes, N=No)	

Application Software Package # 4

Supplier	
Package Name	
Type/Primary Use	
Leverages accelerator (Y=Yes, N=No)	

Application Software Package # 5

Supplier	
Package Name	
Type/Primary Use	
Leverages accelerator (Y=Yes, N=No)	

Intersect360 RESEARCH

Demographic Information

Select the best description for your organization from the list below:

Note: for contractors, please provide organization details for the site referenced in your answers to this survey.

*** Which of the following sectors best describes your organization?**

- ◯ Commercial/Industrial
- ◯ Academic/Not-For-Profit Research
- ◯ Government
- ◯ Other

Please specify other

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Commercial/Industrial Subcategories

COMMERCIAL/INDUSTRIAL SITE:

Which of the following best describes your organization? (please select one)

- ○ Bio-sciences (pharmaceutical, genomics, medical device mftg. etc.)
- ○ Chemical manufacturing and engineering (e.g., polymers, plastics)
- ○ Consumer products manufacturing
- ○ Large product manufacturing (aerospace, automotive, IT sytems and software mftg,etc.)
- ○ Electronics (semiconductors, electronic components, etc.)
- ○ Energy (oil/gas exploration, alternative energy)
- ○ Professional Services (engineering consulting, cloud service provider, etc.)
- ○ Utilities (power generation, distribution, telecommunications, pipeline management)
- ○ Financial services or insurance
- ○ Media/Entertainment
- ○ Online Gaming
- ○ Retail
- ○ Transportation
- ○ Hyperscale computing
- ○ Other commercial segment (please specify):

[ ]

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Bio-sciences Subcategories

Please check a subcategory that best applies for Biotechnology, Biochemistry, Pharmaceutical industry.

- ○ General Pharmaceutical
- ○ Genomics
- ○ Proteomics
- ○ Medical device manufacturing
- ○ Other (please specify)

[ ]

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Large Product Manufacturing Subcategories

Please check a subcategory that best applies for Large Product Manufacturing industry.

- ○ Automotive
- ○ Aerospace
- ○ IT Systems and Software
- ○ Government Contractor
- ○ Other (please specify)

[ ]

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Electronics Subcategories

Please choose the Electronics subcategory that best applies to your organization.

- ○ Semiconductor design or manufacturing
- ○ Circuit boards
- ○ Electronic components
- ○ Other (please specify)

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Energy Subcategories

Please check a subcategory that best applies for Oil/Gas Exploration industry?

- ○ Oil/gas Exploration
- ○ Alternative Energy - Solar
- ○ Alternative Energy - Wind
- ○ Other (please specify)

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Professional Services Subcategories

Please choose the Professional Services subcategory that best applies to your organization?

- ○ Engineering Consulting
- ○ Cloud Service Provider
- ○ System Integration
- ○ System Management
- ○ Software Development
- ○ Other (please specify)

[ ]

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Utilities
Subcategory

Please check a subcategory that best applies for Utilities industry.

- ◯ Power generation distribution
- ◯ Telecommunications
- ◯ Pipeline management
- ◯ Other (please specify)

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Financial Services or Insurance Subcategories

Please check a subcategory that best applies for Financial Services or Insurance industry.

- ◯ Retail bank
- ◯ Capital markets
- ◯ Insurance
- ◯ Other

Please specify other

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Media/Entertainment Subcategories

Please check a subcategory that best applies for Media/Entertainment industry.

- ○ Develop and distribute entertainment products
- ○ Digital Content Creation
- ○ Other (please specify)

[ ]

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Government

Which of the following best describes your GOVERNMENT organization?

- ○ National research lab
- ○ National military, defense, or homeland security organization
- ○ National agency
- ○ State or local government
- ○ Government contractor
- ○ Other government site (please specify)

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Academic

Which of the following best describes your ACADEMIC organization?

- ○ Public college/university
- ○ Private college/university
- ○ Multi-university consortium
- ○ Not-for-profit research institution
- ○ Other academic/research site (please specify)

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Other Sector

*** Please describe your industry.**

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Demographic Information cont.

What is your organization's annual budget for HPC, including servers, software, storage, and services?

- ○ Less than $50,000
- ○ $50,000 to $99,999
- ○ $100,000 to $499,999
- ○ $500,000 to $999,999
- ○ $1,000,000 to $1,999,999
- ○ $2,000,000 to $4,999,999
- ○ $5,000,000 to $9,999,999
- ○ $10,000,000 or higher
- ○ Not provided

For the purpose of this survey, please classify the budget level provided.

- ○ ***Centralized HPC facility***: HPC resources for a broad spectrum of users within your overall organization (e.g. corporate-wide facility, national facility, university-wide facility, etc.)
- ○ ***Divisional facility***: Provides access to HPC resources to a major sub-division of the organization (e.g. product engineering, national bio-sciences resource, engineering school)
- ○ ***Workgroup or lab server***: Servers that are maintained by an operational unit as tools to help them address their primary research, development, or analysis activities.
- ○ ***Individual servers or workstations***: Resources assigned to specific individuals, small groups, or labs to help them address their primary research, development, or analysis activities.

Other (please specify)

[ ]

How many employees does your organization have?

- ◯ 1-49
- ◯ 50-99
- ◯ 100-249
- ◯ 250-999
- ◯ 1,000-4,999
- ◯ >5,000

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Thank you for your time

Thank you for your time. Unfortunately, you do not meet our criteria to take the survey at this time.

Please exit the browser and have a great day.

Intersect360 RESEARCH

Thank you for your time

Thank you for your time. Unfortunately, you do not meet our criteria to take the survey at this time.

Please exit the browser and have a great day.

Intersect360 RESEARCH

Thank You for Completing Our Survey

Thank you for taking time out to participate in our survey. We truly value the information you provided.

As an additional thank you for completing our survey, we offer you a choice of a $25 Amazon gift card or PayPal cash transfer. In order to send you the gift card, we need you to:

- Provide your contact information - All personal information will be kept confidential.
- Chose your preferred gift card type.

If you have any questions or comments about the survey, please contact Chris Willard at Chris@Intersect360.com.

Thank you again.

Work email address is required to receive a gift card or PayPal cash transfer. We will be glad to send the card to another email address if preferred.

Name:	
Company/Organization:	
Work Email:	
Email for gift card or PayPal (if different):	
Phone Number	

Please indicate if you would like to receive your thank you gift.

We reserve the right to limit the number of gift cards sent out to respondents from a single organization, economic sector, industry group, or region.

- ○ Amazon gift card (25 USD, valid only on Amazon.com)
- ○ PayPal cash transfer (25 USD) Please provide PayPal email above.
- ○ No thank you.

PLEASE ADD OUR DOMAIN (@INTERSECT360.COM) TO YOUR SAFE SENDER LIST: We will email your electronic gift card to you. In the past, we have had a few emails end up in spam folders.