

# 2012 IS360 Site Census

## 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 ultra-scale 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 Laura Segervall at [Laura@Intersect360.com](mailto:Laura@Intersect360.com) if you have any questions or comments. Thank you again for your help.

Click the NEXT button below to begin.

## 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

## Qualifer #2

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

- Yes
- No

## Qualifer #3

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

Yes

No

## Introduction

Please provide a response to each question.

**\*What is the name of your company/institution/organization?**

**\*What is your job title?**

**\*Which of the following tasks do you perform or have management responsibilities for in your organization? (check all that apply)**

- Overall management
- Systems administration
- Facilities operations/management
- Systems engineering/planning
- Systems specifications/purchasing
- Software specifications/purchasing
- Applications software development/optimization/maintenance
- Systems software/middleware development/turning/enhancing/maintenance
- Workflow software development/maintenance
- User services/training/consulting
- Other

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

# 2012 IS360 Site Census

## 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.**

**Vendor = cloud service provider for cloud usage 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)

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

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

**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.)**

**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:**

**Amount of memory per node in GB:**

**Average local disk capacity per node:**

Average Disk capacity   
per node:

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

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## Does this system use SSDs for local disk?

- 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 Capacity

of DAS:

Unit of Measure (GB,

TB, PB, other):

## Storage capacity allocated to this system on network shared storage system:

Storage Capacity

Allocated

Unit of Measure (GB,

TB, PB, other)

## For cluster, blade and MPP configurations, please list:

Interconnect

Supplier (Primary):

Interconnect

Supplier

(Secondary):



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**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Other (please specify)

## 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Not Applicable
- Other (please specify)

**Accelerator Technology - please answer the following if this system uses accelerator technology:**

Supplier name:

Accelerator name/type:

Number in system:

**Accelerator configuration approach (select one):**

- On-node accelerator - accelerators are configured as part of a node
- Independent - accelerators are configured as independent nodes

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### For Accelerators -- what programming models are you using?

- OpenCL
- CUDA
- DirectX
- My Numerical library handles this for me
- My Compiler does this for me
- I don't know
- Other (please specify)

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

- Yes
- No

# 2012 IS360 Site Census

## 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.**

**Vendor = cloud service provider for cloud usage 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)

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

# 2012 IS360 Site Census

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

**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.)**

**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:**

**Amount of memory per node in GB:**

**Average local disk capacity per node:**

Average Disk capacity   
per node:

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

# 2012 IS360 Site Census

## Does this system use SSDs for local disk?

- 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 Capacity

of DAS:

Unit of Measure (GB,

TB, PB, other):

## Storage capacity allocated to this system on network shared storage system:

Storage Capacity

Allocated

Unit of Measure (GB,

TB, PB, other)

## For cluster, blade and MPP configurations, please list:

Interconnect

Supplier (Primary):

Interconnect

Supplier

(Secondary):

## 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Other (please specify)

## 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Not Applicable
- Other (please specify)

**Accelerator Technology - please answer the following if this system uses accelerator technology:**

Supplier name:

Accelerator  
name/type:

Number in system:

**Accelerator configuration approach (select one):**

- On-node accelerator - accelerators are configured as part of a node
- Independent - accelerators are configured as independent nodes



## 2012 IS360 Site Census

### For Accelerators -- what programming models are you using?

- OpenCL
- CUDA
- DirectX
- My Numerical library handles this for me
- My Compiler does this for me
- I don't know
- Other (please specify)

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

- Yes
- No

# 2012 IS360 Site Census

## 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.**

**Vendor = cloud service provider for cloud usage 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)

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

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

**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.)**

**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:**

**Amount of memory per node in GB:**

**Average local disk capacity per node:**

Average Disk capacity   
per node:

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

# 2012 IS360 Site Census

## Does this system use SSDs for local disk?

- 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 Capacity

of DAS:

Unit of Measure (GB,

TB, PB, other):

## Storage capacity allocated to this system on network shared storage system:

Storage Capacity

Allocated

Unit of Measure (GB,

TB, PB, other)

## For cluster, blade and MPP configurations, please list:

Interconnect

Supplier (Primary):

Interconnect

Supplier

(Secondary):

## 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Other (please specify)

# 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Not Applicable
- Other (please specify)

**Accelerator Technology - please answer the following if this system uses accelerator technology:**

Supplier name:

Accelerator name/type:

Number in system:

**Accelerator configuration approach (select one):**

- On-node accelerator - accelerators are configured as part of a node
- Independent - accelerators are configured as independent nodes

## 2012 IS360 Site Census

### For Accelerators -- what programming models are you using?

- OpenCL
- CUDA
- DirectX
- My Numerical library handles this for me
- My Compiler does this for me
- I don't know
- Other (please specify)

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

- Yes
- No

# 2012 IS360 Site Census

## 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.**

**Vendor = cloud service provider for cloud usage 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)

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



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

**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.)**

**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:**

**Amount of memory per node in GB:**

**Average local disk capacity per node:**

Average Disk capacity   
per node:

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

# 2012 IS360 Site Census

## Does this system use SSDs for local disk?

- 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 Capacity

of DAS:

Unit of Measure (GB,

TB, PB, other):

## Storage capacity allocated to this system on network shared storage system:

Storage Capacity

Allocated

Unit of Measure (GB,

TB, PB, other)

## For cluster, blade and MPP configurations, please list:

Interconnect

Supplier (Primary):

Interconnect

Supplier

(Secondary):

## 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Other (please specify)

## 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Not Applicable
- Other (please specify)

**Accelerator Technology - please answer the following if this system uses accelerator technology:**

Supplier name:

Accelerator  
name/type:

Number in system:

**Accelerator configuration approach (select one):**

- On-node accelerator - accelerators are configured as part of a node
- Independent - accelerators are configured as independent nodes

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### For Accelerators -- what programming models are you using?

- OpenCL
- CUDA
- DirectX
- My Numerical library handles this for me
- My Compiler does this for me
- I don't know
- Other (please specify)

### \*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.**

**Vendor = cloud service provider for cloud usage 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)

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

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

**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.)**

**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:**

**Amount of memory per node in GB:**

**Average local disk capacity per node:**

Average Disk capacity   
per node:

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

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## Does this system use SSDs for local disk?

- 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 Capacity

of DAS:

Unit of Measure (GB,

TB, PB, other):

## Storage capacity allocated to this system on network shared storage system:

Storage Capacity

Allocated

Unit of Measure (GB,

TB, PB, other)

## For cluster, blade and MPP configurations, please list:

Interconnect

Supplier (Primary):

Interconnect

Supplier

(Secondary):



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**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Other (please specify)

## 2012 IS360 Site Census

**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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Not Applicable
- Other (please specify)

**Accelerator Technology - please answer the following if this system uses accelerator technology:**

Supplier name:

Accelerator  
name/type:

Number in system:

**Accelerator configuration approach (select one):**

- On-node accelerator - accelerators are configured as part of a node
- Independent - accelerators are configured as independent nodes

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### For Accelerators -- what programming models are you using?

- OpenCL
- CUDA
- DirectX
- My Numerical library handles this for me
- My Compiler does this for me
- I don't know
- Other (please specify)

## 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

**Vendor = cloud service provider for cloud storage usage and Model = "cloud"**

Vendor:

Model:

### What type of media does this system use?

**Note: if it has mixed drives, consider each drive type as a separate system.**

- 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)

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## 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)
- Infiniband, unknown speed
- 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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**\* Do you have another installed storage system to report on?**

Yes

No

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## 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

**Vendor = cloud service provider for cloud storage usage and Model = "cloud"**

Vendor:

Model:

### What type of media does this system use?

**Note: if it has mixed drives, consider each drive type as a separate system.**

- 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)

# 2012 IS360 Site Census

## 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)
- Infiniband, unknown speed
- 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)



## 2012 IS360 Site Census

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

Yes

No

## 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

**Vendor = cloud service provider for cloud storage usage and Model = "cloud"**

Vendor:

Model:

### What type of media does this system use?

**Note: if it has mixed drives, consider each drive type as a separate system.**

- 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)

# 2012 IS360 Site Census

## 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)
- Infiniband, unknown speed
- 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)

## 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)
- Infiniband, unknown speed
- 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

## 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)
- Infiniband, unknown speed
- 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

## 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)
- Infiniband, unknown speed
- Fibre Channel
- Don't know
- Other (please specify)

### Primary router supplier for Network #3

### Primary NIC supplier

# 2012 IS360 Site Census

## 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	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Middleware and Utilities Package # 2

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Middleware and Utilities Package # 3

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Middleware and Utilities Package # 4

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Middleware and Utilities Package # 5

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

# 2012 IS360 Site Census

## Applications Software Package

Please list the primary applications 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".

### Applications Software Package # 1

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Applications Software Package # 2

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Applications Software Package # 3

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Applications Software Package # 4

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>

### Applications Software Package # 5

Supplier	<input type="text"/>
Package Name	<input type="text"/>
Type/Primary Use	<input type="text"/>



## Visualization

**Which of the following types of graphics and visualization do you employ with your HPC applications?**

**Check all that apply.**

- No visualization usage
- Pre-process design, such as CAD/CAM, on individual PCs or workstations
- Post-process analysis rendered on individual PCs or workstations
- Post-process analysis rendered on scalable graphics servers
- Intra-process visualization for computational steering, what-if analysis, etc., rendered by the HPC/graphics server
- Remote visualization: graphics rendered on a scalable platform and served to remote clients
- Multi-user visualization: multiple users viewing or interacting with the same visualization simultaneously
- Immersive visualization: users viewing simulations through large-scale, immersive environments, such as rooms, walls, cubes, power desks, or virtual reality glasses

# 2012 IS360 Site Census

## 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

## 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 systems 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
- Ultrascale computing
- Other commercial segment (please specify):

## 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)

## 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)

## Electronics Subcategories

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

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

## 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)

## 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)



## Utilities Subcategory

**Please check a subcategory that best applies for Utilities industry.**

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

## 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

## 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)

## 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
- Other government site (please specify)

## 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)

**Other Sector**

**\* Please describe your industry.**

## 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

**How many employees does your organization have?**

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

### **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.



### **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.

## Thank You

Thank you for participating in our survey. We have a few additional questions we ask you to answer. All personal information provided will be kept confidential.

As a gesture of our gratitude to those qualified respondents completing our questionnaire, we offer a \$25 (USD) Amazon\*.com gift card.

**\*Are you willing to be contacted for follow-up questions, strictly related to our research? Your contact information will not be used for other purposes.**

- Yes
- No

**Would you like to receive an electronic \$25 Amazon gift certificate? (Please note: Only qualified respondents who have taken the full survey will receive the gift card.)**

- Yes -- Contact information must be provided on the next page.
- No thank you.

## Contact Information

**Please provide your contact information so we can follow-up with you directly, if necessary.**

**NOTE: Name, company name, and email are required to receive your Amazon gift card.**

**Name:**

**Company:**

**Work Email Address:**

**Phone Number:**

**If you prefer to receive your gift card at an email address other than work, please provide below:**

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. If you do not receive an email after March 9, 2012, check your spam folder. If you still did not receive the gift card, please contact us.