Mind **the Gap**

Are You About To Fall Into A Funding **Shortage?**

High-performance computing (HPC) is growing rapidly — and so is the amount of data that needs to be accessed and stored. Are you investing properly to make sure your HPC storage system can handle it, now and in the coming years?

How much is HPC growing?

8% annual growth rate for HPC systems through 2019[1]

9.4% projected growth rate for HPC storage[2]

HPC adoption is growing beyond "traditional" use cases.

Financial services

Machine-to-machine learning

Real-time marketing

National defense

Biosciences

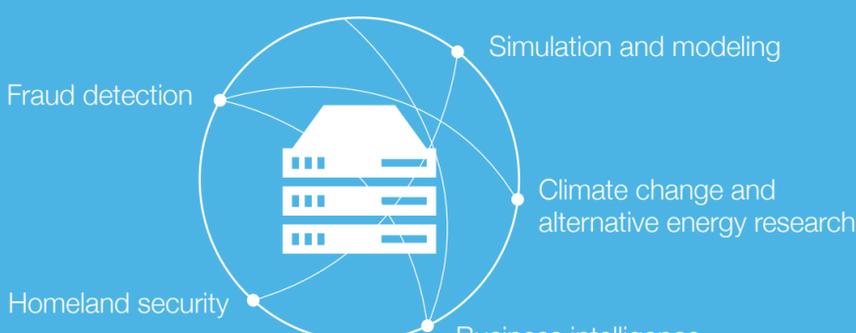### What's driving the growth in HPC?

High-performance data analysis (HPDA)

Big data and extreme-scale computing (BDEC)

Data-intensive modeling and simulation

HPC technologies are used in many critical applications.

Fraud detection

Simulation and modeling

Homeland security

Climate change and alternative energy research

Business intelligence

Yet storage budgets at many organizations aren't keeping up.

12.5% share of HPC spent on storage in current budgets[3]

21.7% share of HPC that will need to be spent on storage by 2019[4]

Already, growth in data is overwhelming storage systems, creating logjams and bottlenecks.

What happens when HPC storage isn't adequate?

Lack of fast access to data

Slowdowns threaten projects

Critical research is stymied

Loss of market share to competitors

Does your HPC storage system have what it takes?

- [x] Ability to scale capacity in a balanced, efficient manner
- [x] Distributed architecture to assure availability and prevent slowdowns
- [x] Very fast streaming I/O for accelerated data ingest and access
- [x] Less complexity, making it easier to use

Cray® ClusterStor™ Storage Systems offer all these features and more.

✓ High capacity
- Designed for linear scale with balanced storage processing, capacity and I/O throughput
- Grow more than 100 PB in a single global namespace

✓ High performance
- Highly optimized from the disk to the software stack for maximum throughput
- Purpose-built disk drives designed for HPC and big data workloads

✓ High efficiency
- Same performance with fewer drives, less floor space, reduced power costs
- GridRAID technology yields 400% faster disk-failure recovery time

✓ High ease-of-use
- Single-pane-of-glass management
- Factory pretesting and configuration allows for installation in hours, not days or weeks

Cray ClusterStor solutions offer better storage for less cost, letting you bridge the funding gap…and secure your HPC storage future.

[1] IDC, "IDC HPC Update at ISC16," 2016
[2] Ibid.
[3] Intersect360, "HPC Budget Allocation Map: HPC Budget Distributi on," January 2016
[4] IDC, "The Broader HPC Market: Server, Storage, Software, Middleware, and Services," May 2015

IG-C4D115, May 2016

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