

JLUG 2015

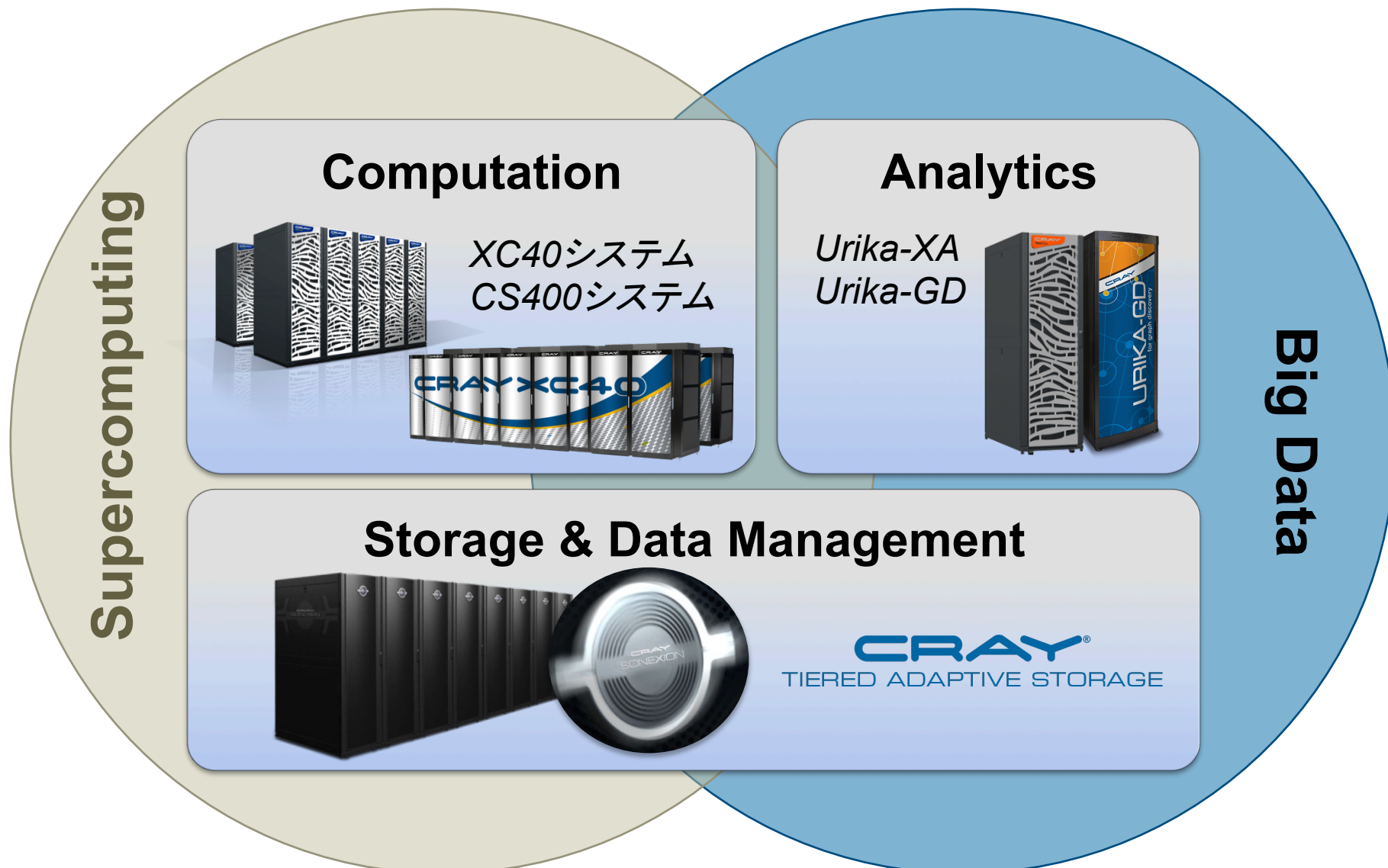
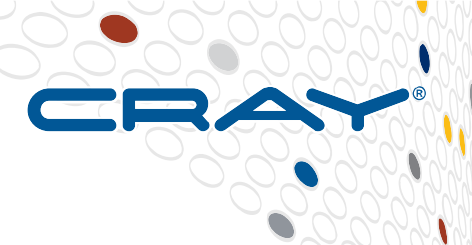
Cray製品のご紹介

クレイ・ジャパン・インク
Oct 22nd, 2015

Safe Harbor Statement

This presentation may contain forward-looking statements that are based on our current expectations. Forward looking statements may include statements about our financial guidance and expected operating results, our opportunities and future potential, our product development and new product introduction plans, our ability to expand and penetrate our addressable markets and other statements that are not historical facts. These statements are only predictions and actual results may materially vary from those projected. Please refer to Cray's documents filed with the SEC from time to time concerning factors that could affect the Company and these forward-looking statements.

クレイ・アダプティブ・スーパーコンピューティング



Cray Computing Solutions



Cray CS400 Cluster Supercomputers

Capacity Computing Focus

- Price/Performance/Watt
- Flexible system configurations
- Industry Standards Technologies
- Manageability and Reliability
- Modular Scalability

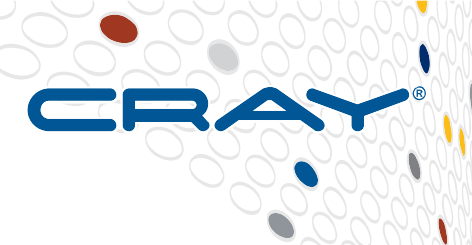
Cray XC40 Supercomputers

Capability Computing Focus

- Application Scalability
- HPC Optimized HW, SW & IP
- Price/Performance
- Roadmap Upgradability
- Reliability/Availability/Serviceability

Scaling Across the Performance Spectrum

Cray XC40システム



Adaptive Supercomputing

Flexible Processor Options & Upgrades

Hybrid Systems

Adaptive Network Routing

Advanced Adaptive Programming Tools

Scalable Performance

Enhanced Aries Interconnect

Global Network Bandwidth

HPC Development Tools

Cray Linux

Comprehensive HPC Integration

HW & Networking
SW Environment & Partner Ecosystem

Storage

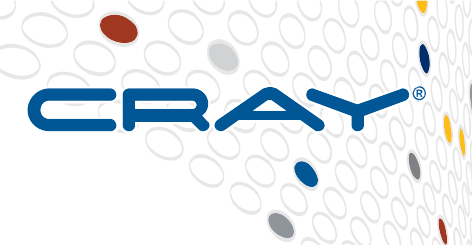
Reliability & Resiliency

Cray XC40-ACシステム

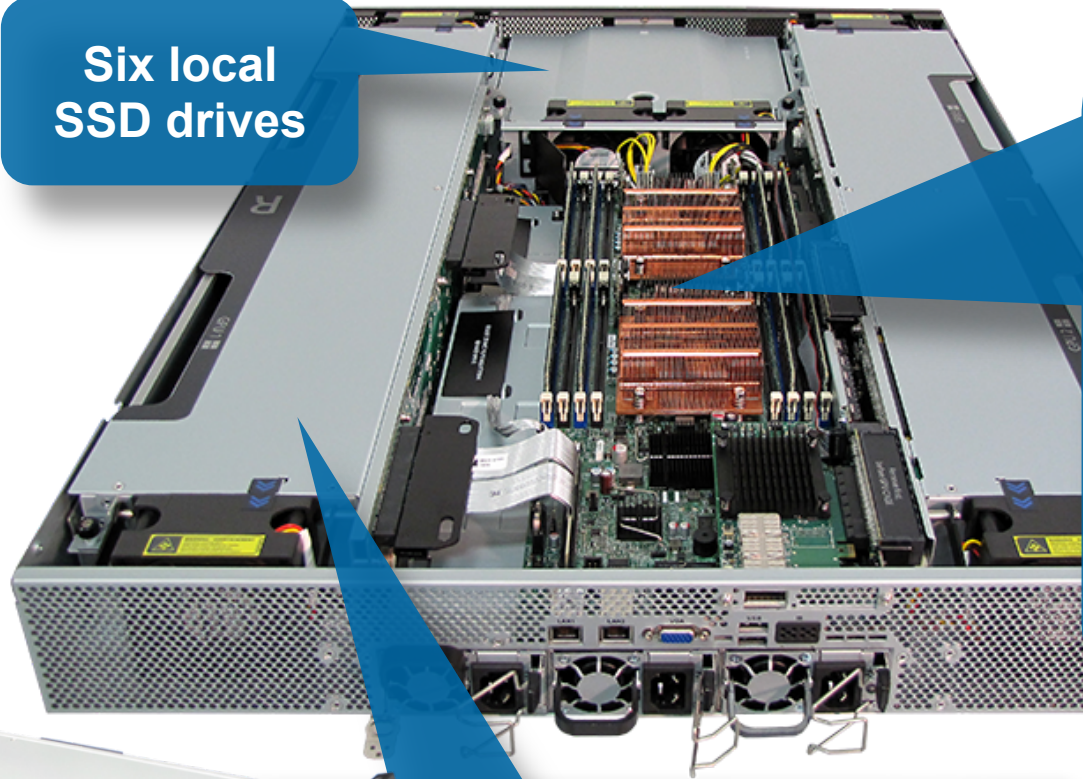
- ❖ XC40と同じ計算ブレードを使用
- ❖ 1キャビネットに64ノードを収納
- ❖ 空冷冷却(XC40は水冷冷却)
- ❖ 電源は3相200V(XC40は3相400V)
- ❖ 最大8キャビネット構成(最大500ノード)



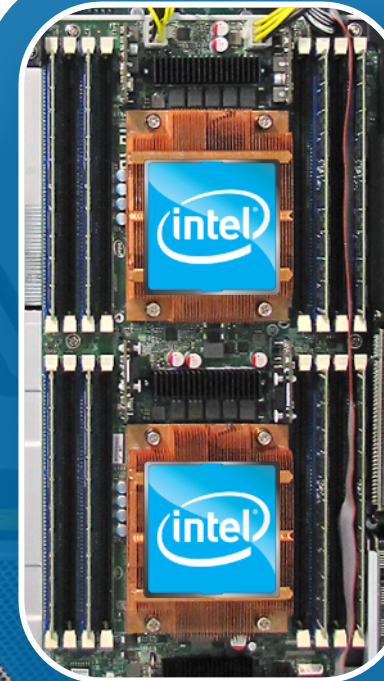
CS-Storm: Innovative Design



Six local
SSD drives



2x4 NVIDIA K40 or K80



Host Intel
processors
IVB / HSW

512 / 1024
GB max
16 DIMMS

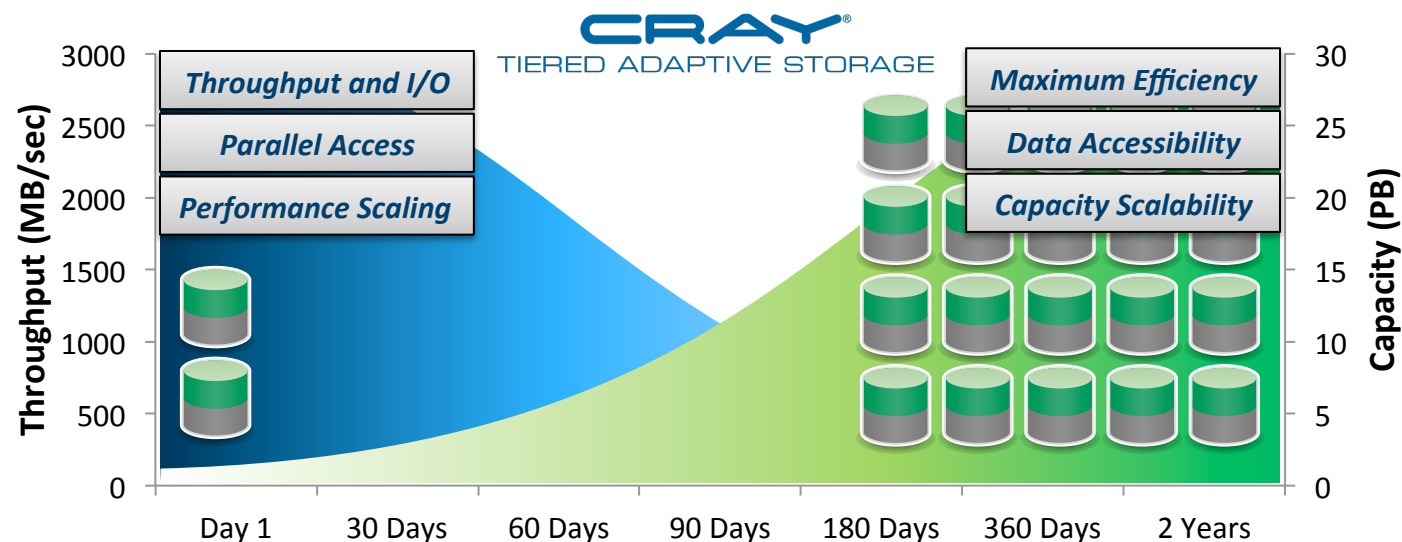
2U form factor

- 22 nodes / 48U rack
- 176 GPUs / 48U rack

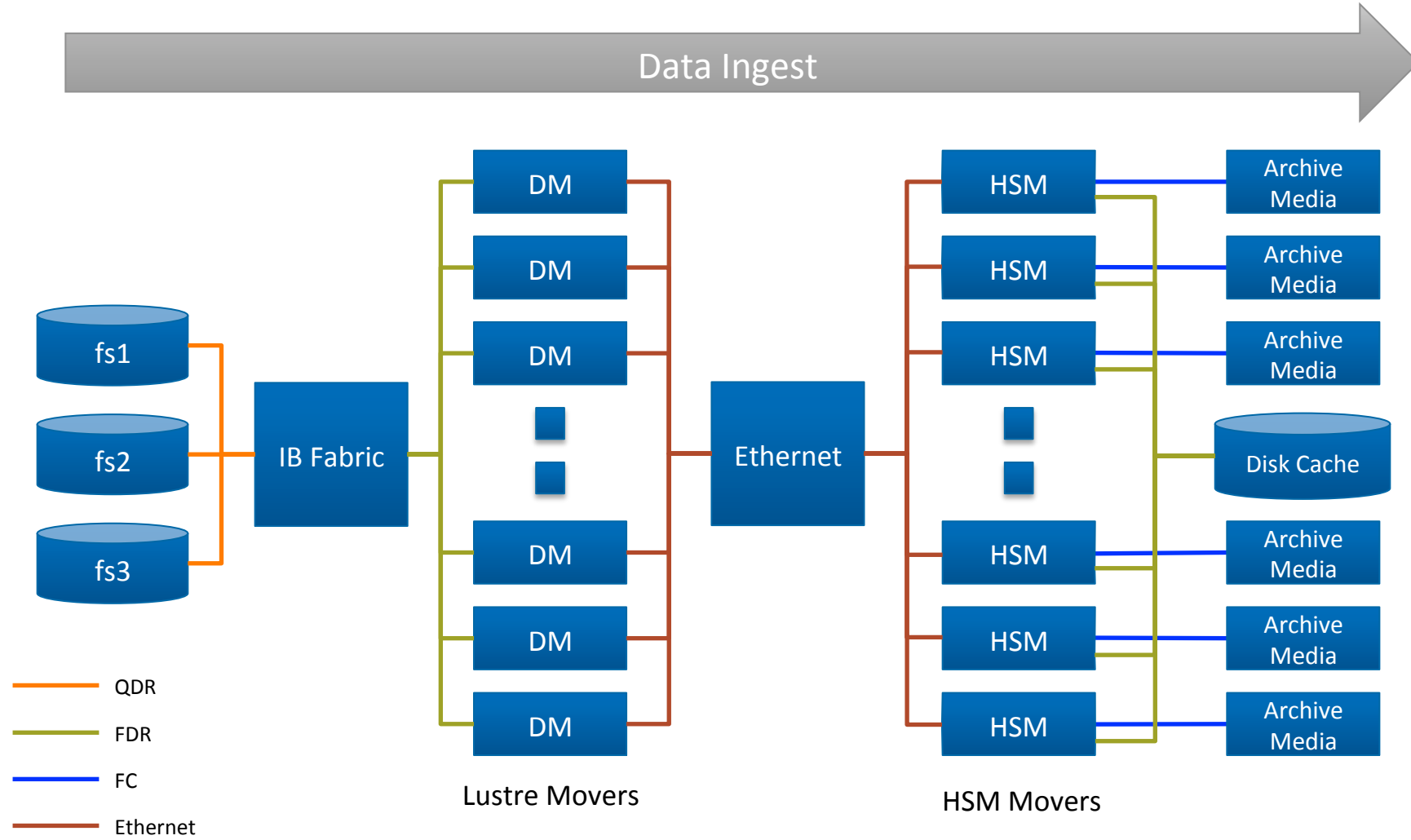
Cray Tiered Adaptive Storage



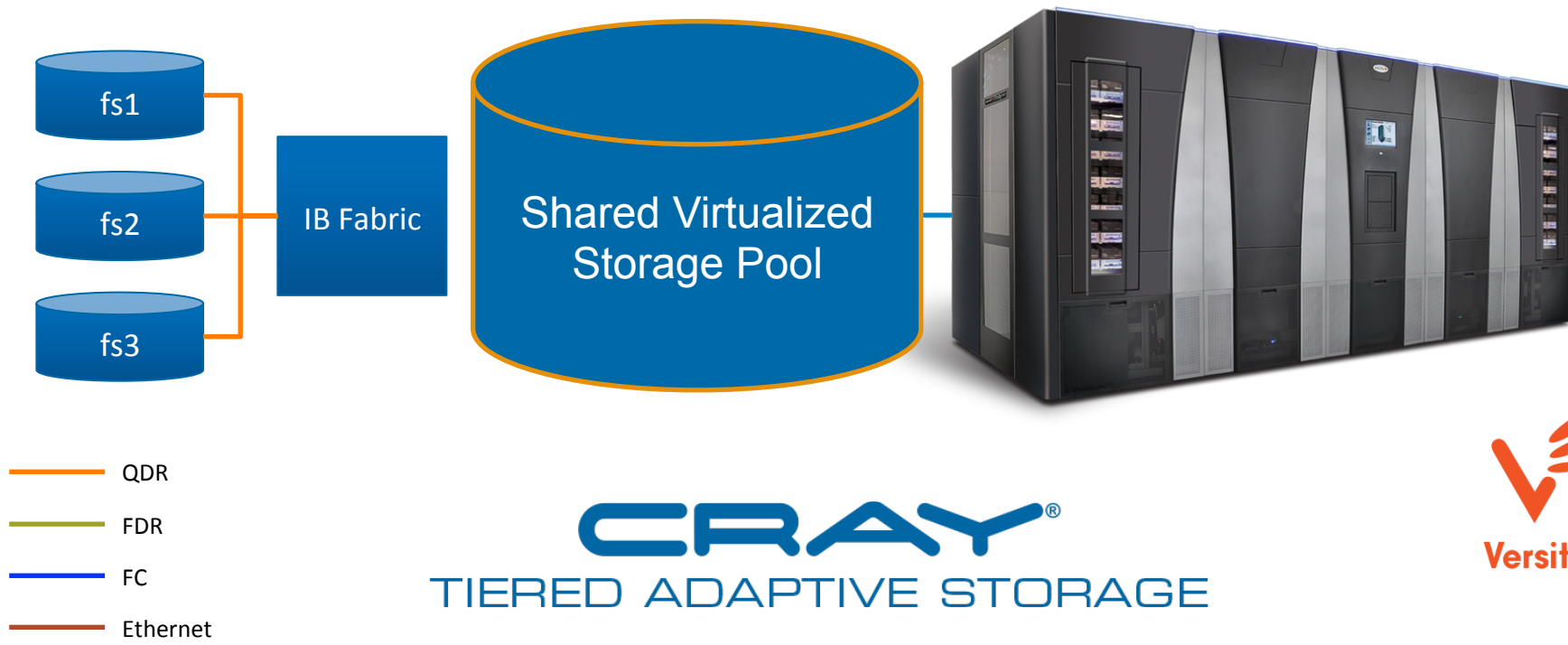
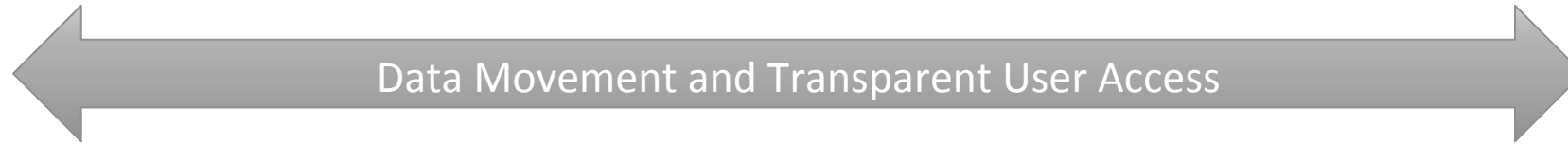
- どのようなデータが本当に高速なストレージシステムを必要としているか？
 - ❖ ユーザの約80%は、データの20%に対してのみで十分
 - ❖ 実際には複数のペタバイト・ファイルシステムは不要かもしれません
- 解決手段はデータのTime-Valueを管理すること
 - ❖ まれにアクセスされたデータは、適切なTier(ディスク/テープ)に自動的に移動
 - ❖ データ・ライフサイクルを通してデータ保護を維持
 - ❖ 特別なI/Fを使用せずにユーザによるすべてのTierへの透過的なアクセス



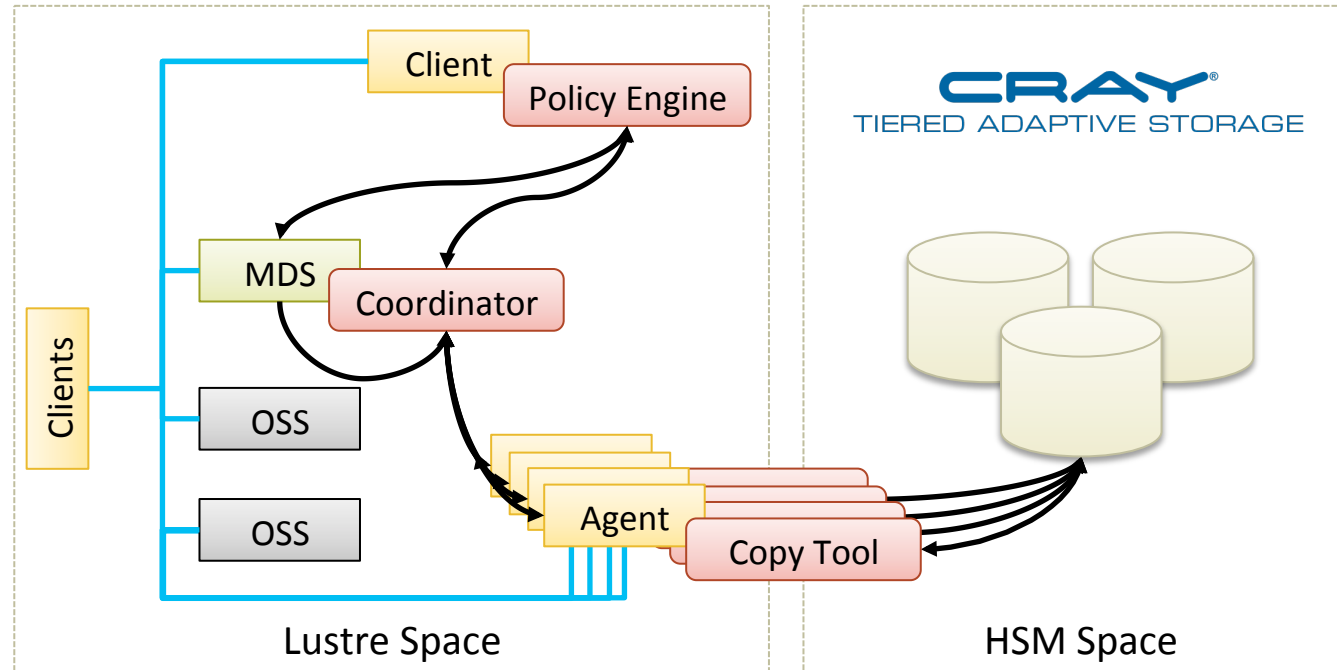
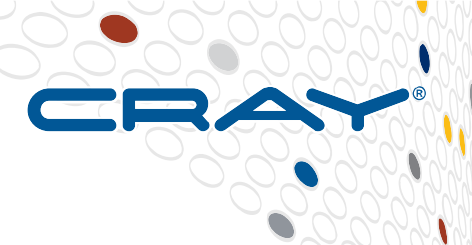
Traditional HSM Implementation



Cray Tiered Adaptive Storage



Cray TAS Connector for Lustre File System



Policy engine

Robinhood policy engine to manage Lustre namespace activity

Coordinator

Communicates with policy engine and agents to manage data movement

Agent and Copy Tool

Lustre clients with copy tool software to migrate data between Lustre and TAS

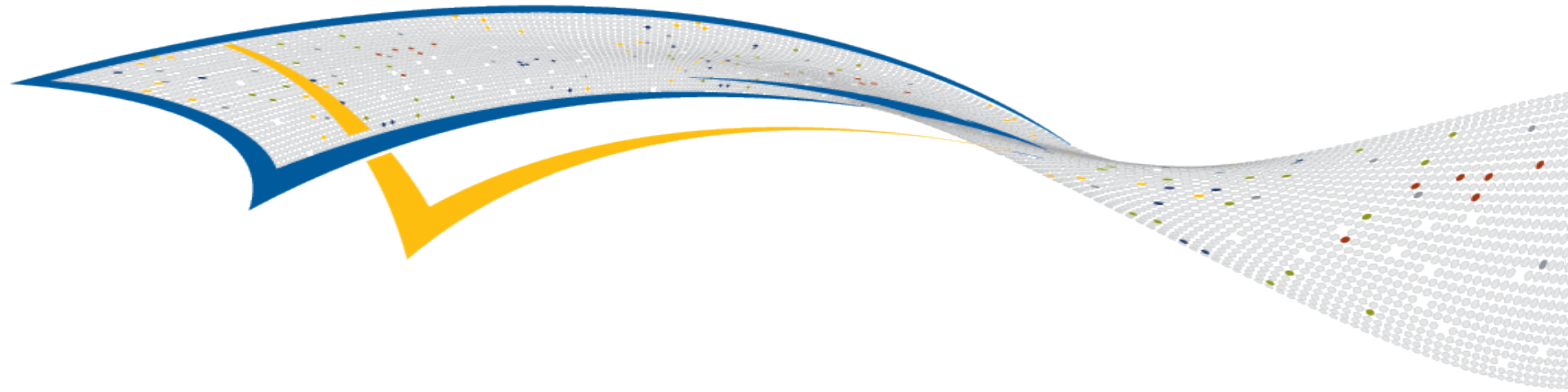
おわりに

- HPCベンダとして包括的なソリューション、製品をご提供
- Lustreの豊富な実績
- LustreとHSMを効果的に組み合わせた新ソリューションTAS
- お問い合わせ先:

クレイ・ジャパン・インク

プリセールスチーム

磯野智之 isono@cray.com



CRAY[®]
THE SUPERCOMPUTER COMPANY