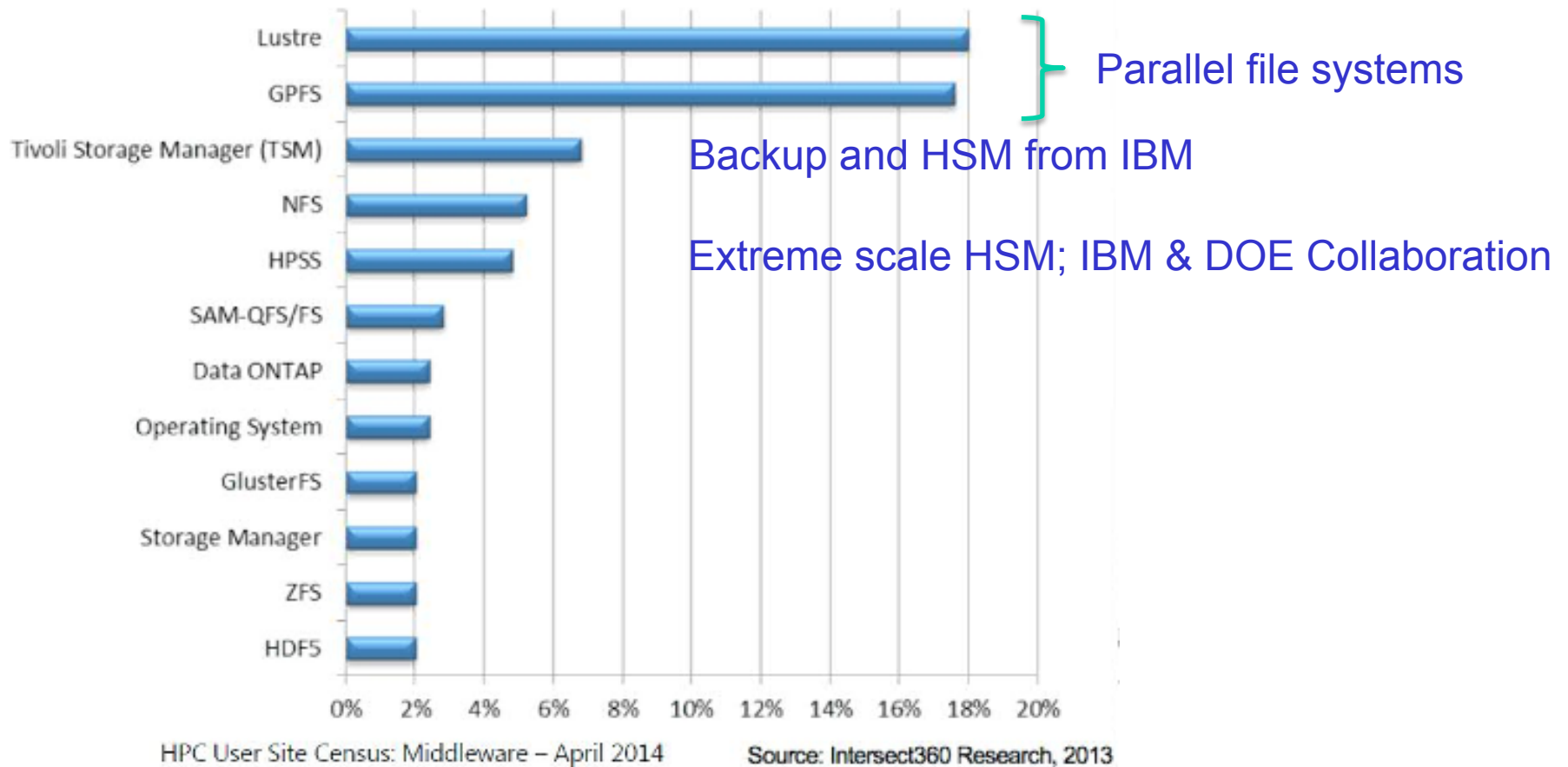# An HPSS Update
for
MSST 2015

Jim Gerry
June 2nd, 2015

Intel reports to Lustre User Group

Figure 12: Top Storage Management Software Provided by Surveyed HPC Sites
N=246 mentions

Parallel file systems

Backup and HSM from IBM

Extreme scale HSM; IBM & DOE Collaboration

HPC User Site Census: Middleware – April 2014   Source: Intersect360 Research, 2013

HPSS Advantages...

- Best of breed for tape:
  - Extreme scale performance for small and large files to tape.
  - Reduced cost of tape redundancy using HPSS RAIT.
  - Recommended Access Order (RAO) support for extreme-performance tape recalls.

- Low overhead end-to-end data integrity and validation.

- DB2 protected metadata with field proven FAST disaster recovery.

- One flat fee for extreme scale capacities.

- 20+ year track-record of actually managing extreme scale file repositories.

HPSS Happenings

- HPSS object storage:
    - OpenStack Swift & Keystone + HPSS integration.
    - Automatic HPSS Class of Service (COS) selection.
    - MD5 checksum support for HPSS end-to-end data integrity support.
- NEW DB2 online metadata migration now in use for HPSS software upgrades needing metadata changes.
- NEW trashcan feature in production.
- Production deployment of NEW features:
    - HPSS End-to-end data integrity; and
    - Recommended Access Order (RAO) support for extreme-performance tape recalls.
- HPSS 7.5 in production-readiness testing.

Thank you…

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