

Cray Corporate Update

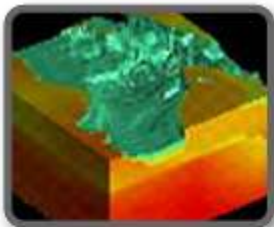
Larry Hoelzeman
VP WW Sales

September 2012

Our Focus: Supercomputing



We build the world's fastest supercomputers to help solve "Grand Challenges" in science and engineering



Earth Sciences
CLIMATE CHANGE
& WEATHER PREDICTION



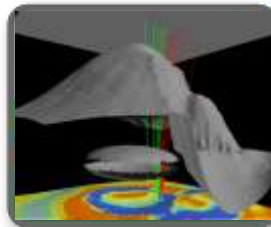
Life Sciences
PERSONALIZED MEDICINE &
IMPROVED BIOFUELS



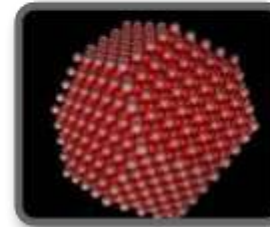
Defense & National Security
WARFIGHTER SUPPORT,
THREAT PREDICTION &
STOCKPILE STEWARDSHIP



Computer-Aided Engineering
AIRCRAFT DESIGN,
CRASH SIMULATION &
FLUID DYNAMICS



Petroleum
SEISMIC IMAGING &
RESERVOIR SIMULATION



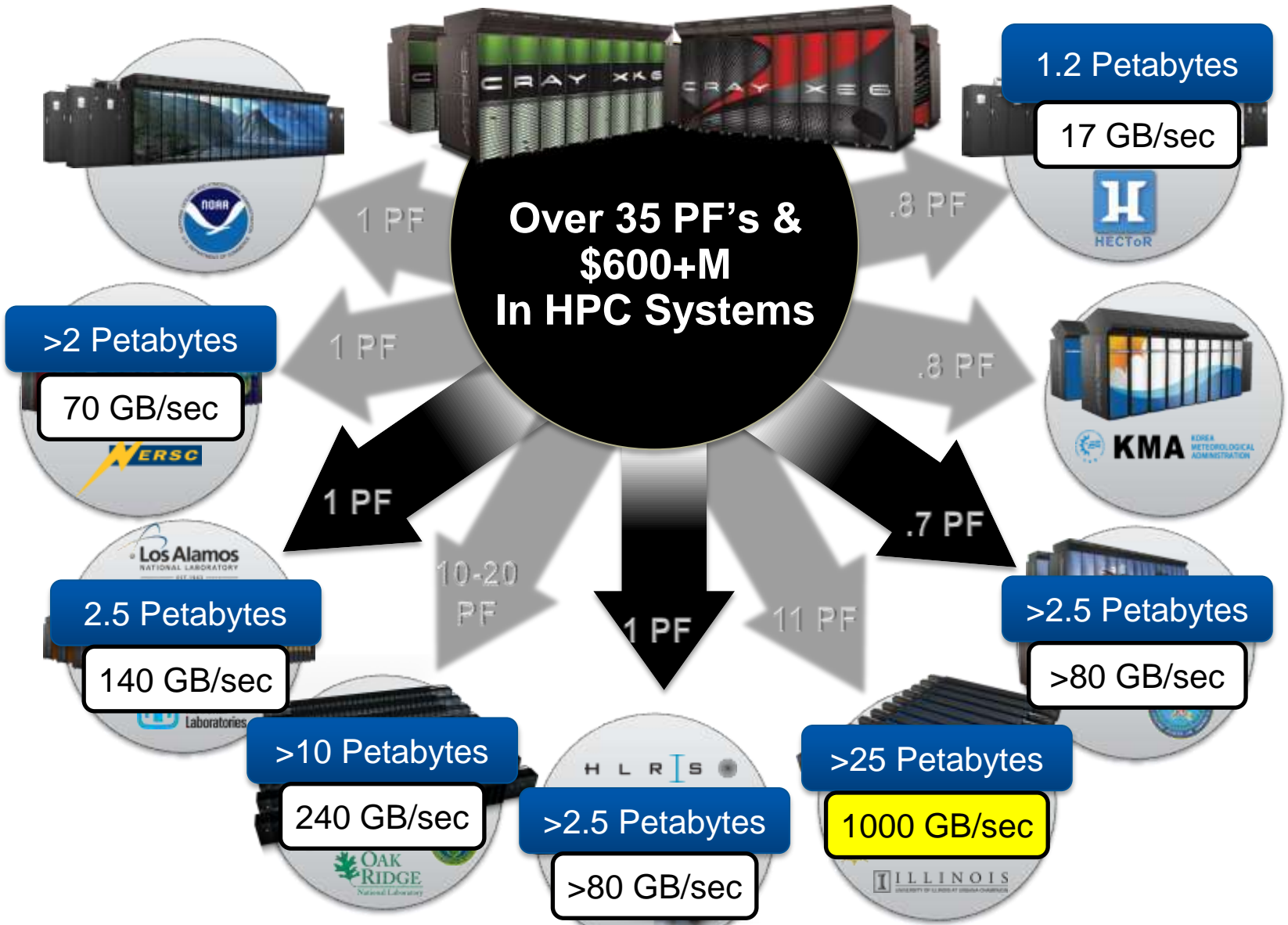
Scientific Research
NEW ENERGY SOURCES &
EFFICIENT COMBUSTION

Our New CTO...



Bill Blake

Leveraging Cray's Expertise at Scale



Blue Waters & Titan



\$188M
11.5PF XE6/XK6
25 PB Sonexion
1 TB/s I/O BW
1.5 PB Memory



\$97M
10-20PF XK6
0.6 PB Memory

Enabling Simulation and Analytics



**Scalable
Computation**



**“Big Data”
Storage**



**“Big Data”
Analytics**

Adaptive Supercomputing

Cray Industry Solutions



Earth Sciences

Auto/Aero

Energy

Life Sciences

...

Big Data

...

Industry-specific solutions that leverage Cray expertise across all technologies and products

Technical Enterprise Systems



Merged CX and XE/XK-m lines

Leverages proven HPC technology

Entry-level systems starting at \$200K

Technical Enterprise Customers



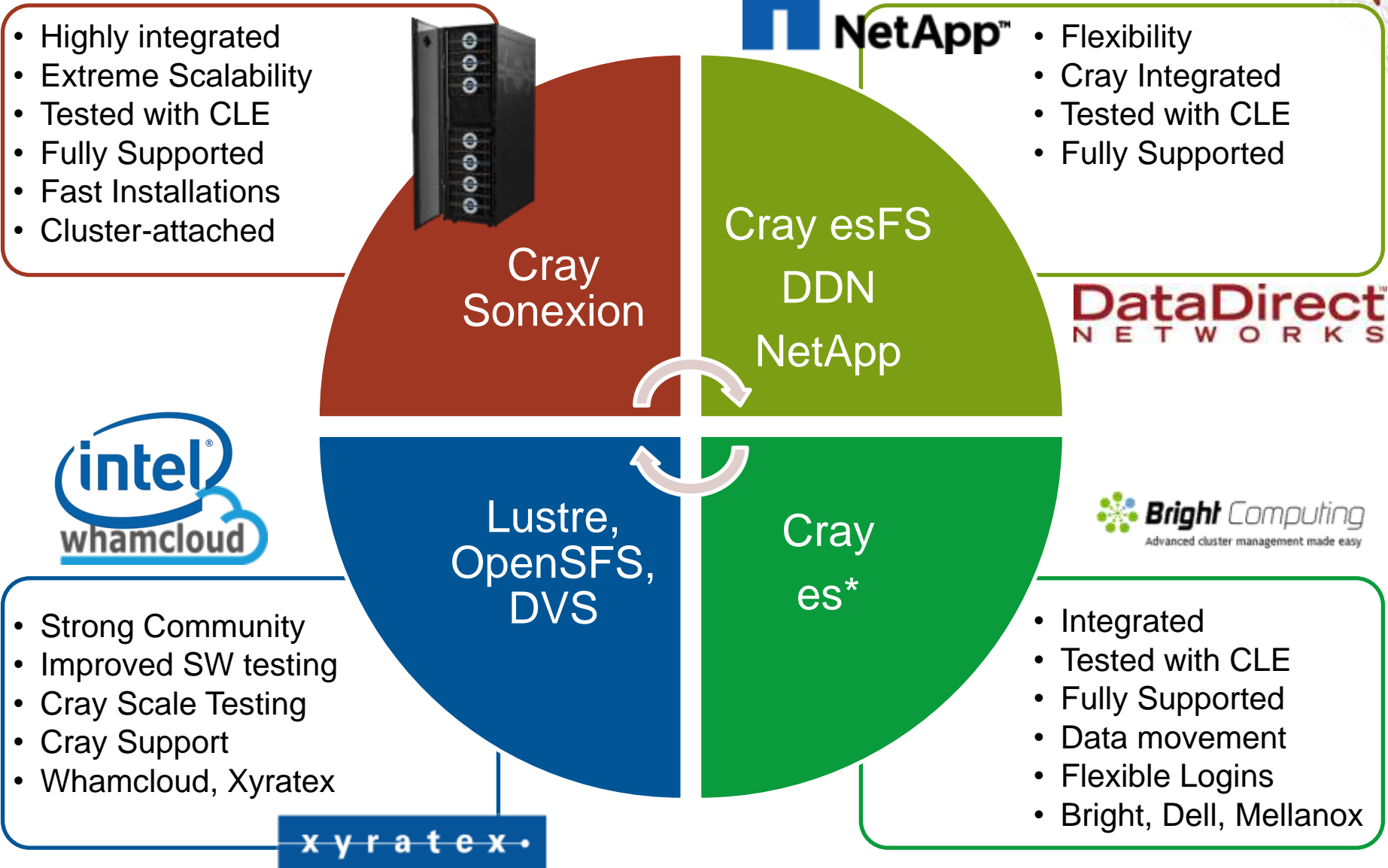
University / Higher Education

Weather & Earth Sciences

Commercial

Classified Systems

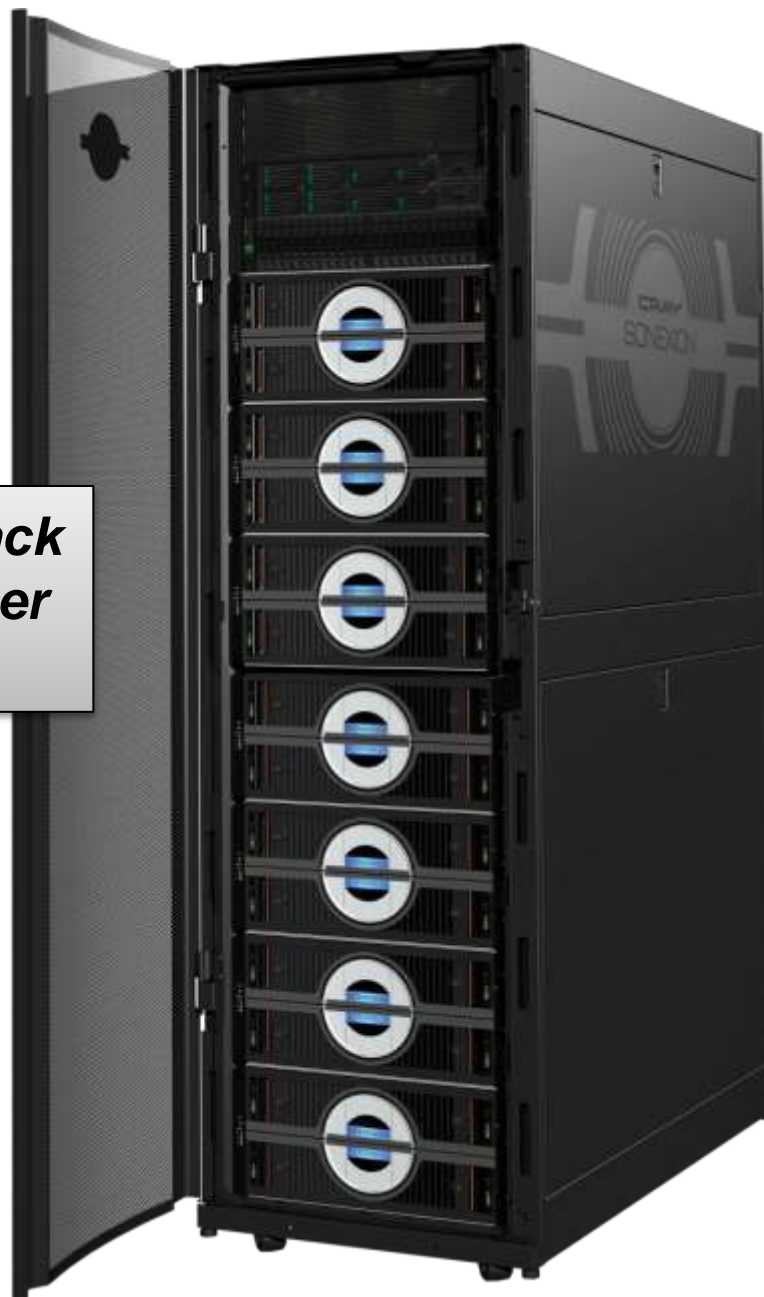
Cray Storage and Data Management



Sonexion Appliance-based Approach



CRAY
SONEXION



> 20GB/sec per rack
> 1.2 Petabytes per rack

Three Simple Modular Components

Rack

- Preconfigured power, cabling & switches

Metadata Management Unit

- Can support up to 6 billion files

Scalable Storage Unit

- 3 GB/sec sustained
- Performance scales with capacity
- Lustre can scale up to 64 petabytes



YarcData™

A DIVISION OF CRAY INC.

Created a new division within Cray

100% focused on Big Data solutions

Rapidly-growing, multi-billion market

Hired new SVP and GM—Arvind Parthasarathi

Big Data Graph Appliance for Relationship Analytics



Discover Unknown and Hidden Relationships in Big Data

- Relationship Warehouse supporting Inferencing/Deduction, Pattern-based queries and Intuitive Visualization

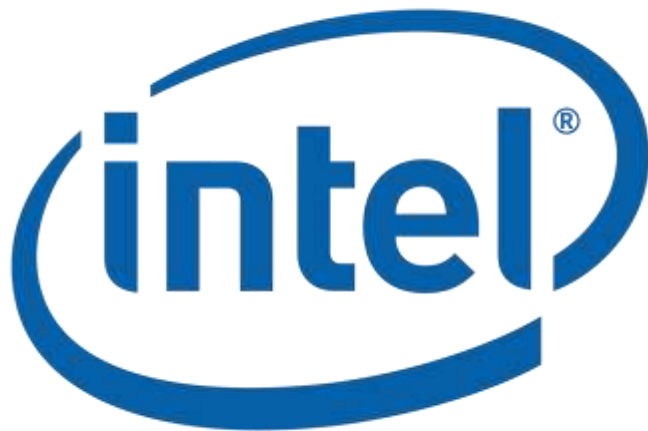
Perform Real-time Analytics on Big Data Graph Problems

- High-performance, Graph Appliance with large shared-memory, massive multi-threading and scalable I/O

Realize Rapid Time to Value on Big Data Solutions

- Ease of Enterprise adoption with industry-standards, open-source software stack enabling reuse of existing skillsets and no lock-in

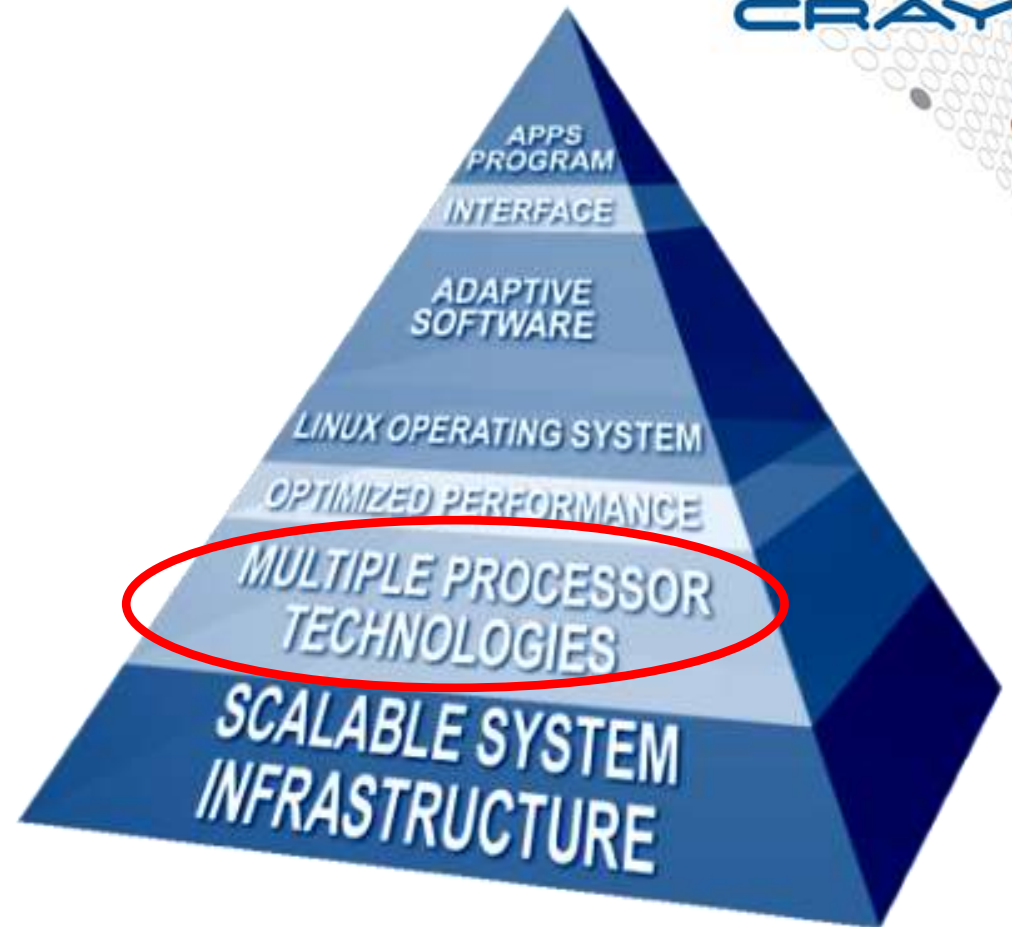
Cray signed a definitive agreement for the sale of our interconnect hardware development program and IP to Intel



AMD



CRAY



Cray is working closely with the 3 mainstream processor vendors

- Overall technical directions are similar (heterogeneous computing)
- Cray is building our systems and software to be compatible with all three
- Consulting with them on needs for HPC applications and systems

Supercomputing Leadership

Technology

Custom designed
for unmatched
scalability,
productivity and
system balance

Product Roadmap

Adaptive
Supercomputing
vision from
sustained
petaflops
through exascale

Focus

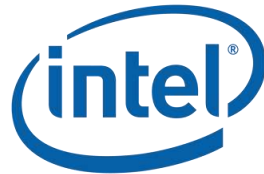
100% dedication
to HPC with
purpose-built
supercomputers

In short...



Same Parts

CRAY
THE SUPERCOMPUTER COMPANY



Same People



Same Plan

We are hiring!

www.cray.com to apply

Thanks!