

# Dell EMC HPC Update

## Hyperion HPC User Forum

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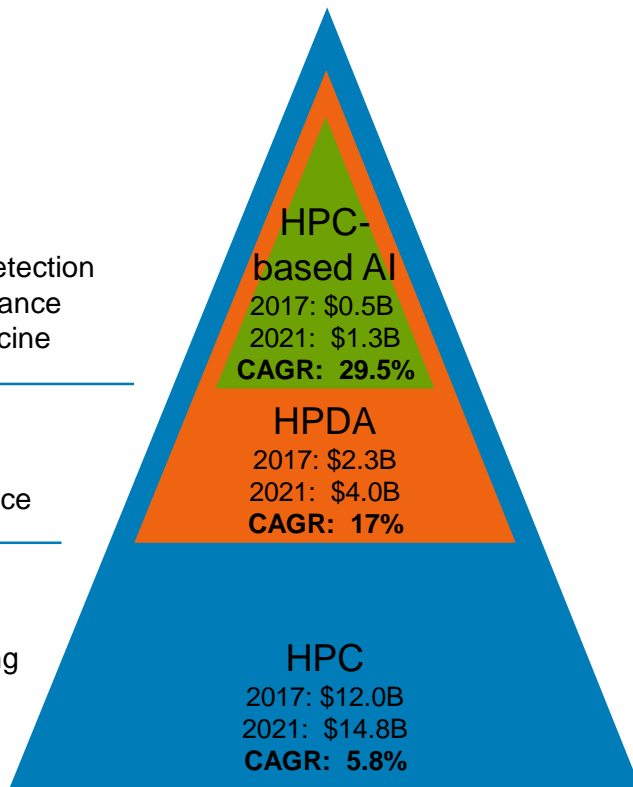
**DELLEMC**

# High Performance Computing provides the infrastructure for High Performance Data Analytics and Artificial Intelligence

- Fraud / anomaly detection
- Predictive maintenance
- Personalized medicine

- Genomics
- Financial Analytics
- Business Intelligence

- Computer-aided engineering
- Weather forecasting
- Seismic Analysis



Total HPC Revenue – Worldwide

Source: Hyperion Research

## Forbes

"Companies will succeed and fail based on their ability to translate data...into insights and actions and products and services."

- Michael Dell



<https://www.forbes.com/100-greatest-business-minds/person/michael-dell>

# Dell EMC HPC is Transforming the Future



## **Advancing HPC**

Expertise, technology and partnerships advancing the state-of-the-art for HPC solutions, from your trusted advisor

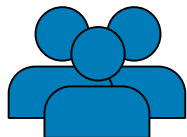
## **Democratizing HPC**

HPC Systems that are easy to configure, deploy and manage, accelerating your science, engineering and analytics

## **Optimizing HPC**

Robust portfolio of products and services optimized for HPC from a company who will be there for you over the long haul

# Dell EMC Strategy for HPC



Domain Experience  
& Expertise



Strategic  
Partnerships



Technology  
Innovations



HPC Innovation  
Lab



Dedicated HPC  
Sales & Soln. Architects

## DELL EMC HPC Solutions



Data  
Analytics



Artificial  
Intelligence



Hybrid Cloud



Dell  
Workstations



Dell EMC  
Servers



Dell EMC  
Storage



Dell EMC  
Networking



Management



Services



Cloud

# Dell EMC Strategy for Optimizing HPC

**PowerEdge R640, R740 and R740xd**  
**NEW!** With Intel Arria FPGAs



**PowerEdge C4140**

Intel Xeon SP and up to 4x NVIDIA V100 (Volta) support • NVLink

**PowerEdge R6415, R7415 and R7425**  
AMD Epyc processors, 1p and 2p



**PowerEdge C6420**

Intel Xeon SP • Drive-less configs • Direct Component Liquid Cooling Technology

**HDR ready** - Dell EMC is ready today!  
HDR200 on C6420, HDR100 elsewhere



# Dell EMC HPC Solutions

## Now with 14<sup>th</sup> Generation PowerEdge



Ready Bundle for HPC

Ready Bundle for HPC

Life Sciences

Research

Manufacturing

Ready Bundle for HPC  
NFS Storage

Ready Bundle for HPC  
Lustre Storage

Ready Bundle for HPC  
Lustre Storage

# More than just hardware

## HPC SERVICES



DEPLOYMENT



Managed  
Services



SUPPORT



Outsourced  
Management



FINANCIAL

# Access the world-class HPC & AI Innovation Lab

Dedicated to research and development of HPC solutions so you can make discoveries faster



Leverage HPC & AI  
engineering expertise



Test new technologies



Tune applications for  
performance and efficiency

## Zenith

Intel SSF, 1.43PF\*, #292 Nov'17  
C6320, C6320p, C6420

## Rattler

Mellanox & NVIDIA  
C6320, C4130



## Dell EMC, Alces Flight to Create Hybrid HPC Solution for the University of Liverpool

December 8, 2017

BICESTER, UK, Dec 8, 2017 — Dell EMC and Alces Flight, the solution provider, are teaming up to provide students and researchers with a hybrid HPC solution in research by combining the power of Dell EMC's Alces Flight, the solution provider, with the power of the University of Liverpool's Alces Flight.

## NOAA Looks to Dell for Massive Supercomputing Upgrade

January 9, 2018 by [staff](#) [Leave a Comment](#)

Today NOAA announced to plans for a major upgrade to its supercomputing

## First Modular Supercomputer Starts Operation at the Research Center Jülich

November 13, 2017

Nov. 13, 2017 — The second module of the supercomputer is being added to the existing system as an entire supercomputer: the booster is being added to the existing system.

## Dell EMC Supercomputer to Power OzGrav Studies of Black Holes

[Leave a Comment](#)

## Harvesting Insights – AeroFarms with Dell Technologies

# DELLTech

# DELL EMC



## AUTONOMOUS MINING

Cat® trucks get the job done with the help of an HPC cluster from Dell EMC.



# Join the Dell EMC HPC Community at DellHPC.org



**Next meeting**  
**June 24, 2018 ♦ Frankfurt, Germany**



[www.dellemc.com/hpc](http://www.dellemc.com/hpc)