

Intel's Data Management Platform @MOC

Dave Cohen, Intel

Abstract

In this talk I will provide an overview of Intel's Data Management Platform (DMP). This is a rack-centric physical cluster that disaggregates physical storage from compute so that the two resources scale independently. The cluster employs an Ethernet-based, 3-stage Clos fabric that employs a routing function to compute hosts. It also employs a cluster-wide volume manager that presents logical volumes from the disaggregated storage using NVMe-over-Fabric. These network and storage components are integrated with Red Hat's OpenShift, which provides cluster-wide Scheduling and Orchestration.

Speaker Bio



Dave is a Senior Principal Engineer and Storage Solutions CTO for the Nonvolatile Memory and Storage Solutions Group (NVMS), a unit within Intel's Data Center Group. He focuses on designing solutions that exploit Intel's 3D-Xpoint Memory technology to its fullest while taking advantage of centrally-managed software in order to operate large-scale, distributed systems. Prior to Intel, David was a Director in the Office of the CTO at EMC where he lead efforts related to integrating storage systems with network virtualization. David also has a long-history of working on building distributed systems in industry, most recently working for the investment banks: Goldman Sachs and Merrill Lynch. An experienced practitioner, Dave's active connections to commercial and academic research and development labs insure Intel's Storage Solutions are both well-grounded and cutting-edge. An acknowledged industry expert in system architecture and development, Dave is a sought after speaker and published author.