

AMD | SeaMicro SM15000

- Dramatic Reductions in TCO: Uses 1/2 the power and takes 1/2 the space of today's best-in-class volume server
- Optimized for East-West
 Traffic: SeaMicro Freedom™
 Fabric eliminates the complexity and cost of discreet networking devices by interconnecting
 64 servers with high performance
 1.28 Tbps fabric for East-West inter-node Hadoop traffic
- Elastic Shared Storage
 Capacity: SeaMicro Fabric
 Storage provides the ability to
 scale storage independent of
 compute making it ideal for
 evolving compute to storage
 ratios typical of Hadoop
 deployments
- High Bandwidth Networking:
 SeaMicro SM15000 delivers
 up to 160 Gbps of network
 bandwidth per system without
 needing additional hardware,
 thus providing very high
 bandwidth, low latency inter-rack
 communications across
 thousands of servers

Apache™ Hadoop™ is a powerful tool for data storage, processing, and analytics, but can be daunting when it comes to deployment with its multitude of infrastructure choices. To simplify and accelerate Hadoop deployment while meeting your business objectives, AMD and Hortonworks have partnered to deliver a complete end-to-end infrastructure plus application solution that provides the most energy efficient Hadoop cluster. The solution provides a converged compute, storage and networking platform that provides a high level of performance for the Hortonworks Data Platform.

The AMD and Hortonworks Apache Hadoop Solution Includes:

- 1. AMD's SeaMicro SM15000 family of high density, energy and space efficient server systems consisting of 64 AMD Opteron™ or Intel® Xeon® Ivy Bridge servers in a 10 RU system
- 2. AMD's SeaMicro Fabric Storage family consisting of capacity and performance optimized offerings that scale up to five petabytes of storage capacity per SM15000
- 3. Hortonworks Data Platform (HDP), a 100 percent open source Apache Hadoop-based software stack designed to store, process and analyze data in any format at any scale

SeaMicro SM15000 Offers Dramatic Reduction In Infrastructure TCO

The AMD SeaMicro SM15000 provides "plug and play" x86 servers that require zero change to run existing software. Hadoop workloads can take advantage of up to 1024 AMD Opteron or 512 Intel Xeon x86 cores and over one petabyte of storage capacity in a rack. This far exceeds the compute and storage capacity available from traditional 2RU servers in the same power and space footprint.

SeaMicro Fabric Storage Offers Flexible, Industry Leading Storage ScalabilityFor Hadoop workloads, the storage to compute ratios vary from application to application and often cannot be determined in advance. This challenge makes it imperative that a Hadoop cluster is designed for flexibility and scaling storage, and compute independently in order to optimize the overall TCO. The AMD SeaMicro SM platform delivers the industry's best overall value for the combination of compute, storage, and networking.





Hortonworks Data Platform

- Integrated and Tested Package: HDP includes stable versions of all the critical Apache Hadoop components in an integrated and tested package
- Easy Installation: HDP includes an installation and provisioning tool with a modern, intuitive user interface
- Management and Monitoring Services: HDP includes intuitive dashboards for monitoring clusters and creating alerts
- Data Integration Services:
 HDP includes Talend Open Studio for Big Data, the leading open source integration tool for easily connecting Hadoop to hundreds of data systems without having to write code
- Metadata Services: HDP includes Apache HCatalog, which simplifies data sharing between Hadoop applications and between Hadoop and other data systems
- High Availability: HDP has been extended to seamlessly integrate with proven high availability solutions

Hortonworks Data Platform (HDP)

Hortonworks Data Platform (HDP) is a 100 percent open source data management platform based on Apache Hadoop. HDP allows loading, storing, processing and management of data in virtually any format and at any scale. As the foundation for the next generation enterprise data architecture, HDP includes all of the necessary components to begin uncovering business insights from the quickly growing streams of data flowing into and throughout your business. HDP is ideal for organizations that want to combine the power and cost-effectiveness of Hadoop with the advanced services required for enterprise deployments.

AMD and Hortonworks End-to-End Hadoop Solution For Successful Hadoop Deployment

AMD and Hortonworks have collaborated to provide an end-to-end deployment ready, fully supported, enterprise class Hadoop solution consisting of AMD's SeaMicro infrastructure and Hortonworks Data Platform software. The AMD and Hortonworks combination provides a Hadoop solution that combines the industry's best-in-class server platform with the industry's most seamlessly integrated Apache Hadoop distribution and delivers real business value, fast ROI, and lowest ongoing TCO available today.

For additional details on the AMD and Hortonworks Hadoop Solution, contact us at sales@seamicro.com or 1-408-701-5000.

