

Diamanti D20 RH for Red Hat OpenShift ENTERPRISE CONTAINER PLATFORM

FULLY INTEGRATED
Red Hat® OpenShift®

NETWORK
4x10 GbE per node

STORAGE
4 / 8 / 32 TB NVMe

COMPUTE
2x E5-2630V4 2.2 GHz Intel® Xeon®

The Diamanti® D20 RH for Red Hat® OpenShift® enables enterprises building and deploying containerized applications on the Red Hat OpenShift Container Platform to maximize the performance, scalability, and operational efficiency of Red Hat's best-in-class developer tools and industry-leading Docker/Kubernetes Platform-as-a-Service (PaaS).

Through Diamanti's deep integration with Red Hat OpenShift, enterprises now have a turnkey container Platform-as-a-Service (PaaS) that deploys in hours. Developers can take full advantage of OpenShift's features while IT operations enjoys the performance, efficiency, and simplicity of Diamanti's hyperconverged container platform.



DIAMANTI D20 RH BENEFITS:

SIMPLICITY

- Rapid OpenShift infrastructure deployment
- No vendor lock-in
- Integrates with cloud-native ecosystem
- Easy to manage and scale

PERFORMANCE

- 1,000,000 IOPS per 1U
- Consistent sub-100µs latency
- Industry-leading application-level transactions per second

EFFICIENCY

- 70% lower TCO
- 100% host utilization
- 95% usable storage capacity
- No hypervisor needed
- Guaranteed QoS with no overprovisioning

ENTERPRISE-CLASS

- Full-stack support
- Production-grade SLAs
- Secure multi-tenant isolation
- Advanced DR/DP
- On-prem availability zones and hybrid cloud support



The Diamanti D20 RH for Red Hat OpenShift: INFRASTRUCTURE ARCHITECTED FOR CONTAINERS

Diamanti's virtualized approach to network and storage traffic management addresses the unique requirements of stateful containerized applications. At the same time, Diamanti delivers unmatched resource utilization—up to 95%—across the entire cluster. No other container platform achieves comparable performance in such a small data center footprint. Low-latency block storage is built using Intel® NVMe, which requires roughly one-third the transactional CPU overhead of SCSI, delivering 100-microsecond read/write latency. Diamanti extends NVMe across the cluster using standard 10 Gb Ethernet, offering data mobility without compromise.

PLUG-AND-PLAY NETWORKING

Containers have their own unique system of port mappings, overlays, and bandwidth requirements that create a host of interoperability challenges. Diamanti eliminates these configuration roadblocks by using networking that integrates directly with existing network infrastructure. Each container is automatically allocated an IP address and can reside on any subnet.

FAST NVME PERSISTENT STORAGE

Legacy scale-up storage arrays don't fit modern scale-out containers. Trying to achieve performance at scale for databases and key value stores has ops teams scrambling to deliver persistent storage.

Diamanti meets the storage needs of your stateful applications with low-latency NVMe block storage, delivering 100-microsecond read/write latency. Diamanti extends NVMe across the cluster using standard 10Gb Ethernet, offering data mobility without compromise.

SEAMLESS SCALABILITY

Easily scale your container infrastructure with multi-cloud capabilities and Diamanti appliances that deliver 1,000,000+ IOPS per 1U node and sub-millisecond latency.

24X7 ENTERPRISE-CLASS SUPPORT

By providing single-point-of-contact support for your container stack, Diamanti lets you focus on developing applications instead of building and maintaining infrastructure.

CONTAINER-GRANULAR QUALITY OF SERVICE (QOS)

Guarantee real-time service levels for application containers across compute, network, and storage resources.

MULTI-ZONE CLUSTERING

Enhance fault tolerance and application high availability by setting up your container environment and deploying workloads across multiple availability zones.

[“Diamanti increased our application performance without code changes and allowed us to consolidate infrastructure while automating application deployment by our development team.”](#)

NBCUniversal

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SPECIFICATIONS



HARDWARE SPECIFICATIONS (minimum 6-node configuration is recommended)

NETWORK	4x10 GbE via a single 40 GbE QSFP+ connection (per node)
STORAGE	<p>DATA STORAGE</p> <p>4 TB configuration (4x1000 GB Intel® NVMe SSD per node)</p> <p>8 TB configuration (4x2000 GB Intel® NVMe SSD per node)</p> <p>32 TB configuration (4x 8000 GB Intel® NVMe SSD per node)</p> <p>HOST OS AND DOCKER REGISTRY STORAGE</p> <p>960 GB (2x480 GB SATA SSD per node)</p>
COMPUTE	<p>CPU: 2x Silver 4114 2.2 GHz Intel® Xeon® Scalable Processors (per node)</p> <p>RAM: 192 GB / 384 GB / 768 GB (per node)</p>

PHYSICAL SPECIFICATIONS

RACK SPACE	1U
DIMENSIONS PER NODE	17.25" W x 28" D x 1.72" H / 52 lbs 43.8 cm x 71.1 cm x 4.4 cm / 23.6 kg
POWER	Dual redundant 110/220V power supplies
ENVIRONMENTAL	Operating temperature: 50°F to 95°F (10°C to 35°C)