

Joint Solutions Brief

Scale Computing and Mellanox Technologies have joined forces to deliver industry leading performance, density and automation at a price point for small to midsize IT shops.



HC3 Features:

- Integrated hypervisor based on proven, open source technology with no additional licenses
- Integrated web-based management with the patented HyperCore Software
- Live VM migration
- Cluster to Cluster Replication
- Automatic redundant data placement
- VM console access from within a browser
- Self-healing including automatic failover of VMs
- Rolling upgrades and patching with no downtime
- Turn key plug and play expansion

Unified Solution

Scale's HC3 combined with the Mellanox SX1012 brings to market a hyperconverged appliance with future proof networking that provides high availability, scalability and ease-of-use for small to midsize businesses. The SX1012 is a wonderful complement to HC3, with fantastic port density for both the side LAN connection as well as a reliable backplane that provides low latency and high performance with an easy to administer management tool (NEO) at a price that is in line with the Small to Midsize businesses (SMB) targeted by Scale Computing.

SX1012 Features:

- Guaranteed Growth Protection
 - 12 x 10GbE (QSFP-SFP+ cable)
 - 48 x 10GbE (break out cables)
 - 12 x 40GbE (future proof)
- Side-by-side deployment in a standard rack
- Feature proof (mLAG, L2/L3)
- Low latency, high performance
- High Density
- Unique management tools (NEO)
- Best Price

High Availability with HC3

Scale Computing built HC3 with high availability as a core tenant in the design. Every VM created on HC3 is automatically made highly available. HC3 stripes and mirrors data across all of the drives in the cluster—in what is effectively a network RAID 10—such that there is no single point of failure. To accomplish this, HC3 nodes need to be connected through a high-throughput, low-latency private backplane fabric for efficient intra-cluster communication, so that data replication from one node to another can happen quickly and reliably.

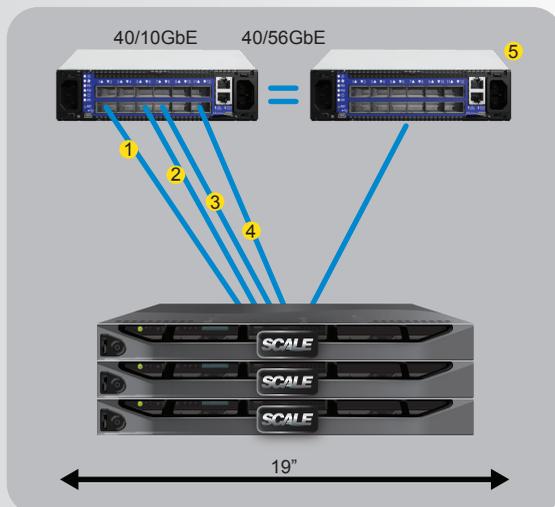
In addition, to guarantee reliable access to HC3 VMs and for associated data from VM's running on the cluster, HC3 nodes need to be connected to a distinct public network with redundancy built-in as part of the design. This normally requires each HC3 node to be connected to two redundant switches with uplinks to external networks.

Mellanox SX1012 and HC3

An ideal switch for 10GbE products in the HC3 family (HC1000z, HC2000z, HC4000z), the SX1012 provides Scale's customers a unique Top of Rack (ToR) backplane switch that allows for side-by-side deployment for a high density of ports in a 1U form factor.

Each QSFP port that operates at 40GbE in the SX1012 can be used with a passive breakout cable to create four discrete SFP+ interfaces to be used as 10GbE ports, for a total of 48-ports on the smallest form factor 10GbE ToR in the industry. As the use of 40GbE becomes available in HC3 (and the industry as a whole), the SX1012 provides 12 x 40GbE ports, future proofing your environment.

Mellanox-Scale Computing Rack Design



- 1 **10GbE link:** QSFP to SFP + cable
- 2 **40GbE link:** QSFP to QSFP cable
- 3 **Adding more 10GbE links:** QSFP to 4x SFP + splitter cable
- 4 **1GbE link:** QSA cable adapter + 1GbE transceiver module
- 5 **HA:** 2x SX1012s side by side in a single 1RU slot

Supports various configurations for different use cases



Learn More

By partnering with companies like Mellanox, Scale Computing continues to deliver on its promise of bringing easy-to-use and affordable products to small and midmarket IT departments. Additionally, Scale Computing VARs can expect to offer a high-value, comprehensive solution to their customers with a true single source solution for their virtualization needs.



Scale Computing integrates storage, servers, and virtualization software into an all-in-one appliance based system that is scalable, self-healing, and as easy to manage as a single server. Using industry standard components, the HC3 appliances install in under an hour, and can be expanded and upgraded with no downtime. High availability insulates the user from any disk or server failure and a unified management capability driven by the patented HyperCore™ Software, efficiently integrates all functionality. The result is a data center solution that reduces operational complexity, allows a faster response to business issues, and dramatically reduces costs.

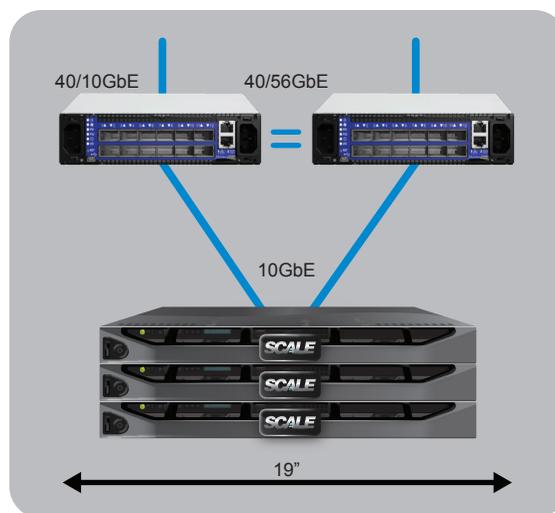
www.scalecomputing.com



Mellanox Technologies is a leading supplier of end-to-end InfiniBand and Ethernet interconnect solutions and services for servers and storage. Mellanox interconnect solutions increase data center efficiency by providing the highest throughput and lowest latency, delivering data faster to applications and unlocking system performance capability. Mellanox offers a choice of fast interconnect products: adapters, switches, software, cables and silicon that accelerate application runtime and maximize business results for a wide range of markets including high-performance computing, enterprise data centers, Web 2.0, cloud, storage and financial services.

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