

# Bill of Materials for SAP HANA Hyper-Converged Infrastructure Certification

Date: September 2018

## HCI Solution used for SAP HANA Certification

- **Model / Version:** Dell EMC XC Series Appliance or Dell EMC XC Core System XC740xd and XC940.
- Datasheet of Dell EMC XC hardware configurations available:  
<https://www.emc.com/collateral/specification-sheet/xc-series-data-sheet.pdf>
- Any configurations from the datasheet that is equal or higher than the below mentioned hardware configuration can be used.
- The Dell EMC XC740xd and Dell EMC XC940 were used for certification. Customers can choose either of them based on their requirements.

## Range of HCI Nodes

- Minimum 3 nodes
- Maximum 64 nodes

## Physical Hardware

### Dell EMC XC740xd-24, 2U/1 Node

- Dual socket \* Intel(R) Xeon(R) Gold 6126 and above, or Intel(R) Xeon(R) Platinum.
- 12 - 24 x 16GB and 32GB RDIMMs or 64GB or 128GB LRDIMMs, installed in pairs, i.e. up to 3,072 GB RAM (1,536 GB per proc).
- 24 x 2.5" drives with all flash SSDs only or SSDs + NVMe configuration available, max 80TB per node.
- SAS/SATA SSDs: 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3,8TB. NVMe SSDs: 800GB, 1.6TB, 3.2TB
- Power: Titanium 750W, Platinum 495W, 750W, 1100W, 1600W, and 2000W 48VDC 1100W, 380HVDC 1100W, 240HVDC 750W
- Mellanox 2P ConnectX-4 LX 25GbE rNDC Firmware 14.20.18.20 or above.
- Mellanox 2P ConnectX-4 LX 25GbE adapter. firmware 14.20.18.20 or above.

### Dell EMC XC940-24, 3U/1 Node

- Quad socket \* Intel(R) Xeon(R) Gold 6126 and above, or Intel(R) Xeon(R) Platinum
- 24 - 48 DIMMS slots, up to 6,144 GB RAM (1,536 GB per proc).
- 24 x 2.5" drives with all flash SSDs only or SSDs + NVMe configuration available, max 80TB per node.
- SAS/SATA SSDs: 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3,8TB. NVMe SSDs: 800GB, 1.6TB, 3.2TB
- Power: Platinum 1100W, 1600W, 2000W, 2400W, 336 - 380VDC 1100W, Gold 48VDC 1100W
- Intel(R) Ethernet 10G 4P X550 rNDC firmware 18.5.13 or above.
- Intel(R) 10GbE 4P X710 adapter firmware 18.3.6 or above.

## Networking

### 1 x Dell EMC TOR Switches: Dell EMC Networking S4048-ON Switch

Switch specification document: <https://i.dell.com/sites/doccontent/shared-content/data-sheets/en/Documents/Dell-EMC-Networking-S4048-ON-Spec-Sheet.pdf>

For the test scenario we did not have backup, replication, or distributed HANA systems capabilities; therefore, one VM network was configured. But for production HANA systems, you can configure multiple VM NICs to manage different network traffic types.

## Software Versions

- Nutanix AHV 20170830.156 or above.
- Nutanix AOS 5.8.1 or above.

## Operating System

- For a supported Operating System for SAP HANA, see <http://service.sap.com/sap/support/notes/2235581>
- Apply operating system level patches and settings for HANA VMs as referred by the SAP note [2205917](https://www.sap.com/support/notes/2205917)(SLES).