Dell EMC Oracle Validated Configurations (OVCs) with Oracle Database 12c

Dell EMC and Oracle Reference Architectures
Pre-tested and validated Oracle Validated Configurations (OVCs) comprising of Dell EMC PowerEdge Servers, Dell EMC Storage, Dell EMC Networking, Oracle Linux, Oracle VM, and Oracle Database 12c

Dell EMC and Oracle - Joint Infrastructure Solutions
June 2017
## Revisions

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2017</td>
<td>Added OVC R730 + OL 7.3 (UEK R3) + Dell EMC Compellent SC9000</td>
</tr>
<tr>
<td></td>
<td>Added OVC FC630 + OL 7.3 (UEK R3) + Dell EMC Compellent SC9000</td>
</tr>
<tr>
<td>May 2017</td>
<td>Added OVC R930 + OL 7.3 (UEK R3) + Dell EMC XtremIO X1</td>
</tr>
<tr>
<td></td>
<td>Added OVC FC830 + OL 7.3 (UEK R3) + Dell EMC XtremIO X1</td>
</tr>
<tr>
<td>April 2016</td>
<td>Added OVC R930 + OVM 3.3.3 (UEK R3) + Dell Compellent SCv2020</td>
</tr>
<tr>
<td>December 2015</td>
<td>Added OVC R930 + OL 6.6 + DAAD 2.0</td>
</tr>
<tr>
<td></td>
<td>Added OVC R730 + OL 6.6 + DAAD 2.0</td>
</tr>
<tr>
<td>January 2015</td>
<td>Added OVC M630(VRTX) + OL6.6</td>
</tr>
<tr>
<td></td>
<td>Added OVC FC630+OVM3.3.1+Dell Compellent SC4020</td>
</tr>
<tr>
<td>September 2014</td>
<td>Added OVC R730xd +OL6.5 (R730,R630 and T630)</td>
</tr>
<tr>
<td></td>
<td>Added OVC R920 + OL6.5 + Dell Acceleration Appliance</td>
</tr>
<tr>
<td></td>
<td>Added OVC R720 + OL6.5 + Dell Acceleration Appliance</td>
</tr>
<tr>
<td></td>
<td>Added OVC R730xd +OVM 3.3.1 +Compellent SC4020 (R730,R630 and T630)</td>
</tr>
<tr>
<td>June 2014</td>
<td>Added two new OVCs: R920 + R720 + Oracle VM 3.2.8</td>
</tr>
<tr>
<td>March 2014</td>
<td>Initial release</td>
</tr>
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Executive Summary

This document lists all the Oracle Validated Configurations (OVCs) that are currently available for Oracle Database 12c from Dell EMC. Dell EMC OVCs are certified using the Oracle Validated Configurations Program. OVCs provide easier, faster, and lower-cost deployment of Oracle Linux (OL) and Oracle VM (OVM) based Oracle Database solutions for customers. The program offers pre-tested, validated matrix - including software, hardware, storage, and network components - along with documented best practices that are certified by Oracle and published on Oracle’s website.

For each of the OVCs, this document also provides:

- Hardware details of all the components directly tested with OVC
- Expanded list of compatible hardware
- Software details of all the components directly tested with OVC
- Solution ID - for Dell Sales to quickly generate a quote or Bill of Materials
- A published link to Oracle’s website that lists all the hardware and software details, including the configuration settings
1 Oracle Linux (OL) with Unbreakable Enterprise Kernel (UEK)

1.1 Dell EMC PowerEdge Rack Servers

1.1.1 R730 (R730xd/R630/T630) + OL 7.3 + SC9000 (Release Date – 06/01/2017)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Dell EMC Servers</th>
<th>Poweredge: R730</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon CPU E5-2650 v4 @ 2.20GHz 12 Core</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>256GB (8 x 32GB 2400Mhz DDR4 DIMMs)</td>
<td></td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730P Mini</td>
<td></td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>QLogic/Broadcom: 57800S 2x10GbE SFP+ + 2x1GbE rNDC</td>
<td></td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2662 16Gb FC Adapter</td>
<td></td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell EMC Compellent SC9000</td>
<td></td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell EMC Networking: S4048-ON</td>
<td></td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
<td></td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware:

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Dell EMC Servers</th>
<th>PowerEdge: R730, R630, T630</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processors</td>
<td>All processors supported by PowerEdge servers listed above</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
<td></td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730, H730P Adapter</td>
<td></td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>QLogic/Broadcom:57810, 57810S, 57840S</td>
<td></td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE256x, QLE266x</td>
<td></td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell EMC Compellent: SC4020, SC7020</td>
<td></td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell EMC Networking: S4048T-ON</td>
<td></td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 6505, 6520</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Hardware Details - OVC: R730 + OL7.3 (UEK R3)
The matrices below list the software versions of the different components that this OVC was tested with:

### Software Details

<table>
<thead>
<tr>
<th>Component</th>
<th>Version/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.2.0 for Linux x86_64</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 7.3 with UEK R3 U7 [kernel 3.8.13-118.17.4.el7uek.x86_64]</td>
</tr>
<tr>
<td></td>
<td>NOTE: Default UEK R4 kernel in OL 7.3 is not supported with this config.</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>iDRAC/LC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>R730</td>
<td>2.4.3</td>
<td>2.41.40.40(07)</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H730 Mini</td>
<td>25.5.2.0001</td>
<td>06.803.02.00-rc1 (megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLogic 57800S 2x10Gb SFP+ + 2x1Gb rNDC</td>
<td>1.713.01(bnx2x)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLE2662</td>
<td>08.00.15</td>
<td>8.07.00.26.39.0-k(qla2xxx)</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Compellent SC9000</td>
<td>SCOS 7.1.4.4</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Networking S4048-ON</td>
<td>9.11(0.0)</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 6510</td>
<td>7.4.1e</td>
</tr>
</tbody>
</table>

### Additional Information and Configuration Settings


**Table 2. Software Details - OVC: R730 + OL7.3 (UEK R3)**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.1.2 R930 + OL 7.3 (UEK R3) + XtremIO X1 (Release Date – 05/09/17)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>PowerEdge: R930</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon CPU E7-8893 v4 @ 3.20GHz 4C</td>
</tr>
<tr>
<td>Memory</td>
<td>512GB (32 x 16GB 1600Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC H730P Adapter</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Intel X710 QP 10 Gigabit Ethernet rNDC</td>
</tr>
<tr>
<td>HBAs</td>
<td>Emulex LPe16002B-M6-D 16Gb FC Adapter</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell EMC XtremIO X1; 2 x X-Bricks</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell EMC Networking: S4048-ON</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Other Compatible Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>PowerEdge: None</td>
</tr>
<tr>
<td>Processors</td>
<td>All processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>None</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>All X710 family of Adapters</td>
</tr>
<tr>
<td>HBAs</td>
<td>Emulex: LPe1200x, LPe1600x</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>None</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell EMC Networking: S4048T-ON</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 6505, 6520</td>
</tr>
</tbody>
</table>

Table 3. Hardware Details - OVC: R930 + OL7.3 (UEK R3)
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Multipath Software</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R930</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H730P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Intel X710 QP 10 Gigabit Ethernet rNDC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Emulex LPe16002B-M6-D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell EMC XtremIO X1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell EMC Networking: S4048-ON</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 6510</td>
</tr>
</tbody>
</table>

**Additional Information and Configuration Settings**

https://linux.oracle.com/pls/apex/f?p=102:2::NO::P2_VC_ID,P2_VERSION:692,1.0

**Table 4. Software Details - OVC: R930 + OL7.3 (UEK R3)**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.1.3 R930 + OL 6.6 + DAAD 2.0 (Release Date – 12/21/2015)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R930</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon CPU E7-8891 v3 @ 2.80GHz 10C</td>
</tr>
<tr>
<td>Memory</td>
<td>256GB (8 x 32GB 1600Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730P Adapter</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>MLNX 40GbE 2P ConnectX-3 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2662 16Gb FC Adapter</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Acceleration Appliance for Databases (DAAD 2.0)</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S6000</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>None</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>None</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>MLNX 10GbE 2P ConnectX-3 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2562 8Gb FC Adapter</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>None</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S4810, S5000</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

Table 5. Hardware Details - OVC: R930 + OL6.6
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.2</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 6.6 with kernel 3.8.13-44.1.1.elfuek.x86_64 (UEK R3U4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>BIOS</td>
</tr>
<tr>
<td>R930</td>
<td>V1.0.9</td>
</tr>
<tr>
<td></td>
<td>ESM - BMC Firmware</td>
</tr>
<tr>
<td></td>
<td>V2.13.13.12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Firmware</td>
</tr>
<tr>
<td>PERC H730P</td>
<td>V4.240.01-3190</td>
</tr>
<tr>
<td></td>
<td>Driver</td>
</tr>
<tr>
<td></td>
<td>v06.700.06.00-rc1 (megaraid_sas)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Driver</td>
</tr>
<tr>
<td>Mellanox 40G Adapter cards</td>
<td>v2.1.8 (mlx4_en)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>BIOS</td>
</tr>
<tr>
<td>QLE2662</td>
<td>V3.29</td>
</tr>
<tr>
<td></td>
<td>Driver</td>
</tr>
<tr>
<td></td>
<td>v8.07.00.08.39.0-k1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Software</td>
</tr>
<tr>
<td>Dell Acceleration Appliance for Databases 2.0</td>
<td>ION Accelerator 2.5.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Firmware</td>
</tr>
<tr>
<td>Dell Networking S6000</td>
<td>V9.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Firmware</td>
</tr>
<tr>
<td>Brocade 6510</td>
<td>V7.3.0c</td>
</tr>
</tbody>
</table>

Additional Information and Configuration Settings


Table 6. Software Details - OVC: R930 + OL6.6

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.1.4  R730 (R730xd/R630/T630) + OL 6.6 + DAAD 2.0 (Release Date – 12/21/2015)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R730</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon CPU E5-2687W v3 @ 3.10GHz 10 Core</td>
</tr>
<tr>
<td>Memory</td>
<td>256GB (8 x 32GB 2133MHz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730 Mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>MLNX 40GbE 2P ConnectX-3 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2662 16Gb FC Adapter</td>
</tr>
</tbody>
</table>

| Storage Array |
| Network Switches |
| Network Switches | Dell Networking: S6000 |
| SAN Switches | Brocade: 6510 |

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R730xd, R630, T630</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>H730P</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>MLNX 10GbE 2P ConnectX-3 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2562 8Gb FC Adapter</td>
</tr>
</tbody>
</table>

| Storage Array |
| Network Switches |
| Network Switches | Dell Networking: S4810, S5000 |
| SAN Switches | Brocade: 300, 5300, 6505, 6520 |

**Table 7. Hardware Details - OVC: R730 + OL6.6**
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>ESM - BMC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>R730</td>
<td>V1.3.6</td>
<td>V2.15.10.10</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H730 Mini</td>
<td>V25.3.0.0016</td>
<td>v06.803.02.00-rc1 (megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mellanox 40G Adapter cards</td>
<td>v2.1.8 (mlx4_en)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLE2662</td>
<td>V3.29</td>
<td>v8.07.00.08.39.0-k1</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Acceleration Appliance for Databases 2.0</td>
<td>ION Accelerator 2.5.2</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking S6000</td>
<td>V9.8</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 6510</td>
<td>V7.3.0c</td>
</tr>
</tbody>
</table>

### Additional Information and Configuration Settings


**Table 8. Software Details - OVC: R730 + OL6.6**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.1.5  R730xd (R730/R630/T630) + OL 6.5 (Release Date - 09/09/2014)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R730xd</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2683 v3 2.00GHz 14C</td>
</tr>
<tr>
<td>Memory</td>
<td>32GB (2 x 16GB 2133Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H330mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM57810S DP SFP+ 10GbE Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>Emulex:LPe16002</td>
</tr>
<tr>
<td>Storage Array</td>
<td>Dell Compellent: SC8000 Controllers; SC220 Expansion Enclosures</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: 8024F, S4810</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R730, R630 and T630</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>None</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 5720 QP 1GbE rNDC, 57800S QP rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>Emulex LPe16000</td>
</tr>
<tr>
<td>Storage Array</td>
<td>Dell Compellent: SC4020 Controllers</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

Table 9. Hardware Details - OVC: R730xd + OL6.5
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R920</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H730p</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>LPe16002</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC8000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking 8024F</td>
</tr>
<tr>
<td>Dell Networking S4810</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 6510</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Information and Configuration Settings</th>
</tr>
</thead>
</table>

**Table 10.** Software Details - OVC: R730xd + OL6.5

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R920</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon E7-8891 v2 3.2GHz 10C</td>
</tr>
<tr>
<td>Memory</td>
<td>128GB (16 x 8GB 1333MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Intel Ethernet 10G 2P X520 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2662</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Acceleration Appliances for Databases v1.0</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S4810</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>None</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>None</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Intel Ethernet 10G 2P X540 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic QLE256x, QLE2660</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>None</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

Table 11. Hardware Details - OVC: R920 + OL6.5
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R920</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H730p</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Intel Ethernet 10G 2P X520 Adapter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QLE2662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Acceleration Appliance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking S4810</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 6510</td>
</tr>
</tbody>
</table>

Additional Information and Configuration Settings


**Table 12.** Software Details - OVC: R920 + OL6.5

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.1.7 R720 + OL6.5 + DAAD 1.0 (Release Date - 09/09/2014)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R720</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2680 v2 @ 2.80GHz</td>
</tr>
<tr>
<td>Memory</td>
<td>128GB (16 x 8GB 1600MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710p mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Intel Ethernet 10G 2P X520 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2662</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Acceleration Appliances for Databases v1.0</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S4810</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>none</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>None</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 5720 QP 1GbE rNDC, 57800S QP rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter, Intel Ethernet 10G 2P X540 Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic QLE256x, QLE2660</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>none</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

**Table 13. Hardware Details - OVC: R720 + OL6.5**
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.1</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 6.5 with kernel 3.8.13-35.1.2.elfuek.x86_64 (UEK R3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>BIOS</td>
</tr>
<tr>
<td>R720</td>
<td>V2.2.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Firmware</td>
</tr>
<tr>
<td>PERC H710p mini</td>
<td>V21.3.0-0009</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Driver</td>
</tr>
<tr>
<td>Intel Ethernet 10G 2P X520 Adapter</td>
<td>V3.15.1 (ixgbe)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>BIOS</td>
</tr>
<tr>
<td>QLE2662</td>
<td>v3.24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Software</td>
</tr>
<tr>
<td>Dell Acceleration Appliance</td>
<td>Fusion IO 2.4.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Firmware</td>
</tr>
<tr>
<td>Dell Networking S4810</td>
<td>V8.3.12.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Firmware</td>
</tr>
<tr>
<td>Brocade 6510</td>
<td>V7.0.1</td>
</tr>
</tbody>
</table>

**Additional Information and Configuration Settings**


**Table 14. Software Details - OVC: R720 + OL6.5**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.1.8 R920 + OL6.5 (Release Date - 03/18/2014) [Solution ID: 4086103v4]

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Component</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R920</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon E7-4870 v2 2.3GHz 15C</td>
</tr>
<tr>
<td>Memory</td>
<td>64GB (16 x 4GB 1333MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM57840S QP 10GbE SFP+ rNDC</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QLE2662</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent: SC8000 Controllers; SC220 Expansion Enclosures</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: 8024F, S4810</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Hardware Component</th>
<th>Other Compatible Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>none</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>None</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 5720 QP 1GbE rNDC, 57800S QP rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic QLE256x, QLE2660</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>none</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

Table 15. Hardware Details - OVC: R920 + OL6.5
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R920</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H730p</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QLE2662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC8000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking 8024F</td>
</tr>
<tr>
<td>Dell Networking S4810</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 6510</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Information and Configuration Settings</th>
</tr>
</thead>
</table>

**Table 16. Software Details - OVC: R920 + OL6.5**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R720</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2665 2.4GHz 8C</td>
</tr>
<tr>
<td>Memory</td>
<td>128GB (8 x 16GB 1333MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM5720 QP 1GbE rNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2562</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Array</th>
<th>Dell Compellent Controllers: SC8000; SC220 Expansion Enclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S55</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R620, R720xd, T620</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H310, H710</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 5720 QP 1GbE rNDC, 57800S QP rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic QLE2560, QLE266x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
<th>Dell Compellent Controllers: SC40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S60, S4810, S4820T</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 6505, 6520</td>
</tr>
</tbody>
</table>

**Table 17.** Hardware Details - OVC: R720 + OL6.4
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R720</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H710p</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 1GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QLE2562</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC8000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking S55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 6510</td>
</tr>
</tbody>
</table>

Additional Information and Configuration Settings


**Table 18.** Software Details - OVC: R720 + OL6.4 -

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database Server</td>
</tr>
</tbody>
</table>
| Dell EMC Servers | R820  
| Processors | 4 x Intel Xeon E5-4650 2.7GHz 8C  
| Memory | 128GB (16 x 8GB 1333MHz DDR3 DIMMs)  
| RAID Controllers | PERC: H310  
| Ethernet Interfaces | Broadcom: BCM5720 QP 1GbE rNDC  
| Host Bus Adapters | QLogic: QLE2562  
| Storage Enclosures | Dell Compellent Controllers: SC8000; SC220 Expansion Enclosures  
| Network Switches | Dell Networking: S55  
| SAN Switches | Brocade: 6510  

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database Servers</td>
</tr>
</tbody>
</table>
| Dell EMC Servers | none  
| Processors | All Processors supported by PowerEdge Servers listed above  
| Memory | All valid PowerEdge memory configurations  
| RAID Controllers | PERC: H710, H710p  
| Ethernet Interfaces | Broadcom: 5720 QP 1GbE rNDC, 57800S QP rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter  
| Host Bus Adapters | QLogic QLE2560, QLE266x  
| Storage Enclosures | Dell Compellent Controllers: SC40  
| Network Switches | Dell Networking: S60, S4810, S4820T  
| SAN Switches | Brocade: 300, 6505, 6520  

Table 19. Hardware Details - OVC: R820 + OL6.4
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R820</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H310</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 1GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QLE2562</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC8000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking S55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 6510</td>
</tr>
</tbody>
</table>

Additional Information and Configuration Settings


**Table 20.** Software Details - OVC: R820 + OL6.4

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.2 Dell EMC PowerEdge Blade Servers

1.2.1 M820 + OL6.5 (Release Date - 03/18/2014) [Solution ID: 4086719v3]

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M820 in M1000e chassis</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon E5-4617 2.9GHz 6C</td>
</tr>
<tr>
<td>Memory</td>
<td>64GB (4 x 16GB 1600MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H310 mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM57810S DP 10GbE bNDC, BCM57810S DP 10GbE KR</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QME2662</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC8000; SC220 Expansion Enclosures</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: 1GbE Pass-Through, MXL 10/40GbE, S55</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 5300, Dell Networking: 8/4Gbps FC Pass-Through</td>
</tr>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.1</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 6.5 with kernel 3.8.13-16.2.1.el6uek.x86_64 (UEK R3)</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M820 (FX2s), M820 (VRTX)</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710, H710p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57840S-k QP 10GbE KR bNDC, 5719 QP 1GbE</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic QME2572</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td></td>
</tr>
<tr>
<td>Network Switches</td>
<td></td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

**Table 21.** Hardware Details - OVC: M820 + OL6.5
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>M820</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H310</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QME2662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC8000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking S55</td>
</tr>
<tr>
<td>Dell Networking MXL 10/40GbE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 5300</td>
</tr>
<tr>
<td>Dell Networking 8/4Gbps FC Pass-Through</td>
</tr>
</tbody>
</table>

Additional Information and Configuration Settings


Table 22. Software Details - OVC: M820 + OL6.5

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
## M620 + OL6.5 (Release Date - 03/18/2014) [Solution ID: 4086703v3]

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M620 in M1000e chassis</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2680 v2 2.8GHz 10C</td>
</tr>
<tr>
<td>Memory</td>
<td>64GB (4 x 16GB 1866 MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710P mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM57810S DP 10GbE bNDC, BCM57810S DP 10GbE KR</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic: QME2662</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC8000; SC220 Expansion Enclosures</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: 1GbE Pass-Through, MXL 10/40GbE, S55</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 5300, Dell Networking: 8/4Gbps FC Pass-Through</td>
</tr>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.1</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 6.5 with kernel 3.8.13-16.2.1.el6uek.x86_64 (UEK R3)</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M620 (FX2s), M620 (VRTX)</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710, H710p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57840S-k QP 10GbE KR bNDC, 5719 QP 1GbE</td>
</tr>
<tr>
<td>HBAs</td>
<td>QLogic QME2572</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td></td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

**Table 23.** Hardware Details - OVC: M620 + OL6.5
The matrices below list the software versions of the different components that this OVC was tested with:

### Software Details

<table>
<thead>
<tr>
<th>Component</th>
<th>Version/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.1</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 6.5 with kernel 3.8.13-16.2.1.el6uek.x86_64 (UEK R3)</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>ESM - BMC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>M620</td>
<td>V2.1.6</td>
<td>v1.51.52 A00 (iDRAC7)</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H710P mini</td>
<td>V21.2.1-0000</td>
<td>v06.00.18.00 (megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
<td>v1.76.54 (bnx2x)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QME2662</td>
<td>v3.00</td>
<td>v8.05.00.03.39.0-k</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Compellent SC8000</td>
<td>Storage Center 6.3</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking S55</td>
<td>v8.3.5.3</td>
</tr>
<tr>
<td>Dell Networking MXL 10/40GbE</td>
<td>v8.3.16.2</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 5300</td>
<td>v6.4.1b</td>
</tr>
<tr>
<td>Dell Networking 8/4Gbps FC Pass-Through</td>
<td>V7.0.0b</td>
</tr>
</tbody>
</table>

### Additional Information and Configuration Settings


**Table 24. Software Details - OVC: M620 + OL6.5**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.3 Dell EMC PowerEdge VRTX

1.3.1 M630 + OL6.6 (Release Date - 01/07/2015)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M630 in VRTX chassis</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2690 2.6GHz 12C</td>
</tr>
<tr>
<td>Memory</td>
<td>32GB (2 x 16GB 2133Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H330 mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM57810 DP 10GbE bNDC</td>
</tr>
<tr>
<td>HBAs</td>
<td>Dell Shared PERC 8</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>VRTX Internal Shared Storage</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: 8024F</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>VRTX Internal Fabric switch</td>
</tr>
<tr>
<td>Software</td>
<td></td>
</tr>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.1</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 6.6 with kernel 3.8.13-44.1.1.el6uek.x86_64 (UEK R3)</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware:

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M630 (M1000e), M630 (FX2s)</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730, H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57810S DP 10GbE KR Mezz, 5719 QP 1GbE Mezz</td>
</tr>
<tr>
<td>HBAs</td>
<td>none</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>none</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S4810,S4820,T,S55,S60,8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>none</td>
</tr>
</tbody>
</table>

| Table 25. Hardware Details - OVC: M630 + OL6.6 |
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
</tr>
<tr>
<td>Operating System</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: M630</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: PERC H330mini</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: Broadcom NetXtreme II 10GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: Dell Shared PERC8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: VRTX Internal Shared storage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: Dell Networking 8024F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: VRTX Internal Fabric Switch</td>
</tr>
</tbody>
</table>


**Table 26.** Software Details - OVC: M630 + OL6.6

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
1.4 Dell EMC PowerEdge FX2s

1.4.1 FC630 + OL 7.3 (UEK R3) + SC9000 (Release Date – 06/01/2017)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>OVC: FC630 + OL 7.3 (UEK R3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>Poweredge: FC630 with FX2 chassis</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon CPU E5-2650 v4 @ 2.20GHz 12Core</td>
</tr>
<tr>
<td>Memory</td>
<td>256GB (8 x 32GB 2400Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730P Mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BRCM 57840S-k 10GbE 4P bNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>Qlogic: QLE2662 16Gb FC Adapter</td>
</tr>
</tbody>
</table>

Storage Arrays

| Storage Enclosures | Dell EMC Compellent SC9000 |

Network Switches

| Network Switches | Dell EMC Networking: S4048-ON, FX2s 10GbE Pass-through IOM |

SAN Switches

| SAN Switches | Brocade: 6510 |

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>OVC: FC630 + OL 7.3 (UEK R3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M630 (M1000e), M630 (VRTX)</td>
</tr>
<tr>
<td>Processors</td>
<td>All processors supported by PowerEdge servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730, H730P Adapter</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>QLogic/Broadcom: 57800S, 57810, 57810S</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE256x, QLE266x</td>
</tr>
</tbody>
</table>

Storage Arrays

| Storage Enclosures | Dell EMC Compellent: SC4020, SC7020 |

Network Switches

| Network Switches | Dell EMC Networking: S4048T-ON, FN 410S, FN 410T IOM |

SAN Switches

| SAN Switches | Brocade: 300, 6505, 6520 |

**Table 27.** Hardware Details - OVC: FC630 + OL 7.3 (UEK R3)
The matrices below list the software versions of the different components that this OVC was tested with:

### Software Details

<table>
<thead>
<tr>
<th>Component</th>
<th>Version/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.2.0 for Linux x86_64</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 7.3 with UEK R3 U7 [kernel 3.8.13-118.17.4.el7uek.x86_64]</td>
</tr>
<tr>
<td>NOTE:</td>
<td>Default UEK R4 kernel in OL 7.3 is not supported with this config.</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>iDRAC/LC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC830</td>
<td>2.4.2</td>
<td>2.41.40(07)</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H730P Mini</td>
<td>25.2.0.0001</td>
<td>06.803.02.00-rc1 (megaraid_sas)</td>
<td></td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRCM 57840S-k 10GbE 4P bNDC</td>
<td>1.713.01 (bnx2x)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLE2662</td>
<td>08.00.15</td>
<td>8.07.00.26.39.0-k (qla2xxx)</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Compellent SC9000</td>
<td>SCOS v7.1.4.4</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Networking S4048-ON</td>
<td>9.11(0.0)</td>
</tr>
<tr>
<td>FX2s 10GbE Pass-through IOM</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 6510</td>
<td>7.41e</td>
</tr>
</tbody>
</table>

### Additional Information and Configuration Settings


**Table 28.** Software Details - OVC: FC630 + OL 7.3 (UEK R3)

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
### 1.4.2 FC830 + OL 7.3 (UEK R3) + XtremIO X1 (Release Date – 05/09/2017)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>OVC: FC830 + OL 7.3 (UEK R3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>PowerEdge: FC830 in FX2s chassis</td>
</tr>
<tr>
<td>Processors</td>
<td>4 × Intel Xeon CPU E5-4610 v4 @ 1.80GHz 10C</td>
</tr>
<tr>
<td>Memory</td>
<td>512 GB (16 x 32GB 1866 Mhz DDR4 RDIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC H730mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Intel: X710 QP 10GbE KR bNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>Emulex LPe16002B-M6-D 16Gb FC HBA</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell EMC XtremIO X1; 2 × X-Bricks</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell EMC Networking: S4048-ON, FX2 FN410s SFP+ IOM</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>PowerEdge: M830 (M1000e), M830 (VRTX)</td>
</tr>
<tr>
<td>Processors</td>
<td>All processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Intel: X710 DP 10GbE KR bNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>Emulex: LPe1200x, LPe1600x</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>none</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell EMC Networking: S4048T-ON, FX2s Pass-Through IOMs</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300,5300,6505,6520</td>
</tr>
</tbody>
</table>

**Table 29.** Hardware Details - OVC: FC830 + OL 7.3 (UEK R3)
The matrices below list the software versions of the different components that this OVC was tested with:

### Software Details

<table>
<thead>
<tr>
<th>Component</th>
<th>Version/Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Database</td>
<td>Oracle Database 12c Release 1 Patch Set 12.1.0.2.0 for Linux x86_64</td>
</tr>
<tr>
<td>Operating System</td>
<td>Oracle Linux 7.3 with UEK R3U7 [kernel 3.8.13-118.17.4.el7uek.x86_64]</td>
</tr>
<tr>
<td>Multipath Software</td>
<td>EMC PowerPath for Linux 6.1.0</td>
</tr>
</tbody>
</table>

**NOTE:** Default UEK R4 kernel in OL 7.3 is not supported with this config.

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>iDRAC/LC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC830</td>
<td>2.3.5</td>
<td>2.41.40.40</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H730mini</td>
<td>25.2.0.0018</td>
<td>06.803.02.00-rc1 (megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel X710 QP 10</td>
<td>1.3.21-k (i40e)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emulex LPe16002B-M6-D</td>
<td>11.0.270.14</td>
<td>11.0.0.1</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC XtremIO X1</td>
<td>XIOS v4.0.15-15; XMS v4.2.1</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Networking: S4048-ON</td>
<td>9.11(0.0)</td>
</tr>
<tr>
<td>Dell EMC Networking: FX2 FN410s IOM</td>
<td>9.11(0.0)</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 6510</td>
<td>7.4.1b</td>
</tr>
</tbody>
</table>

### Additional Information and Configuration Settings


**Table 30. Software Details - OVC: FC830 + OL 7.3 (UEK R3)**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
2 Oracle VM (OVM) 3

2.1 Dell EMC PowerEdge Rack Servers

2.1.1 R930 + OVM3.3.3 (Release Date – 04/19/2016)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R930</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon E7-4809 v3 2.0GHz 8C</td>
</tr>
<tr>
<td>Memory</td>
<td>64GB (4 x 16GB 1333Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>QLogic: 57800S 10 GbE rNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2662</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database Servers</td>
</tr>
<tr>
<td>Dell EMC Servers</td>
</tr>
<tr>
<td>Processors</td>
</tr>
<tr>
<td>Memory</td>
</tr>
<tr>
<td>RAID Controllers</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
</tr>
<tr>
<td>Storage Arrays</td>
</tr>
<tr>
<td>Network Switches</td>
</tr>
<tr>
<td>SAN Switches</td>
</tr>
</tbody>
</table>

Table 31. Hardware Details - OVC: R930 + OVM 3.3.3
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Oracle VM Server 3.3.3 [Oracle VM Manager 3.3.3]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guest VMs + Database</td>
<td>Oracle Linux 6.7 (UEK) x86_64, Paravirtualized with Oracle Database 12cR1</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>ESM - BMC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>R930</td>
<td>v1.0.9</td>
<td>v2.13.13, A00 (iDRAC8)</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H730p</td>
<td>v25.3.0.0016</td>
<td>v06.803.02.00-rc1 (megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLogic 57800S 10 GbE rNDC</td>
<td>v1.712.10 (bnx2x)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLE2662</td>
<td>v3.29</td>
<td>v8.07.00.16.39.0-k or higher</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Compellent SCv2020</td>
<td>Storage Center 6.6.4.6</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking S4810</td>
<td>v8.3.12.2</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 6510</td>
<td>v7.3.0c</td>
</tr>
</tbody>
</table>

**Additional Information and Configuration Settings**


**Table 32.** Software Details - OVC: R930 + OVM 3.3.3

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
2.1.2 R730xd (R730, R630 and T630) + OVM3.3.1 (Release Date - 09/10/2014)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R730xd</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2680 v3 2.5GHz 12C</td>
</tr>
<tr>
<td>Memory</td>
<td>32GB (2 x 16GB 2133Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H330mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 5720 QP 1Gbe rNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Compellent Controllers: SC4020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking: 8024F, S4810</td>
</tr>
<tr>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R730, R630 and T630</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H330mini, H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57800S QP (2x10GbE+2x1GbE) rNDC, 57840S QP 10GbE SFP+ rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic QLE256x, QLE2660</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Compellent Controllers: SC8000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking: S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>Brocade: 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

Table 33. Hardware Details - OVC: R730xd + OVM 3.3.1
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Guest VMs + Database</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>ESM - BMC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>R730xd</td>
<td>V0.3.30</td>
<td>V2.00.00, A00 (iDRAC8)</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H330mini</td>
<td>V4.240.01-3190</td>
<td>v06.700.06.00-rc1 (megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcom NetXtreme II 1GbE Family of Adapters</td>
<td>v2.2.4g (bnx2)</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
<td>v1.78.80 (bnx2x)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLE2662</td>
<td>V3.24</td>
<td>v8.06.00.14.39.0-k1</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Compellent SC4020,SC8000</td>
<td>Storage Center 6.5</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking 8024F</td>
<td>v8.3.3.8</td>
</tr>
<tr>
<td>Dell Networking S4810</td>
<td>v8.3.12.2</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 6510</td>
<td>V7.0.1</td>
</tr>
</tbody>
</table>

### Additional Information and Configuration Settings


**Table 34.** Software Details - OVC: R730xd + OVM 3.3.1

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
2.1.3    R920 + OVM3.2.8 (Release Date - 06/09/2014) [Solution ID: 4577352v1]

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R920</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon E7-4890 v2 2.80 GHz 15C</td>
</tr>
<tr>
<td>Memory</td>
<td>32GB (8 x 4GB 1600MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM5720 QP (4x1GbE) rNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2562</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Array</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Enclosures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Switches</td>
</tr>
<tr>
<td>SAN Switches</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>none</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>none</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57800S QP rNDC, 57840S QP 10GbE SFP+ rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic QLE2560, QLE266x</td>
</tr>
<tr>
<td>Storage Arrays</td>
<td></td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC40</td>
</tr>
<tr>
<td>Network Switches</td>
<td></td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S60, S4810, S4820T, 8024, 8024F</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 6505, 6510, 6520</td>
</tr>
</tbody>
</table>

**Table 35.** Hardware Details - OVC: R920 + OVM 3.2.8
The matrices below list the software versions of the different components that this OVC was tested with:

### Software Details

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Oracle VM Server 3.2.8 [Oracle VM Manager 3.2.8]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guest VMs + Database</td>
<td>Oracle Linux 6.4 (UEK) x86_64, Paravirtualized with Oracle Database 12cR1</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>ESM - BMC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>R920</td>
<td>v1.0.7</td>
<td>v1.56.55, A00 (iDRAC7)</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H730p</td>
<td>v25.2.0.0017</td>
<td>v06.600.18.00(megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcom NetXtreme I 1GbE Family of Adapters</td>
<td>v3.131d (tg3)</td>
<td>v7.2.0</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLE2562</td>
<td>v3.00</td>
<td>v8.05.00.03.39.0-k (qla2xxx)</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Compellent SC8000, SC40</td>
<td>Storage Center 6.4.3</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking S55 1GbE Switch</td>
<td>v8.3.5.3</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 5300 8Gbps Switch</td>
<td>v6.4.1b</td>
</tr>
</tbody>
</table>

### Additional Information and Configuration Settings


**Table 36. Software Details - OVC: R920 + OVM 3.2.8**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
2.1.4  R720 (R620/R720xd/T620) + OVM3.2.8 (Release Date – 06/09/2014) [Solution ID: 4578972v5]

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R720</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2680 v2 2.80 GHz 10C</td>
</tr>
<tr>
<td>Memory</td>
<td>64GB (4 x 16G 1866MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710p mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM5720 QP (4x1GbE) rNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2562</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Array</th>
<th>Storage Enclosures</th>
<th>Dell Compellent Controllers: SC8000; SC220 Expansion Enclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Switches</td>
<td>Network Switches</td>
<td>Dell Networking: S55</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>SAN Switches</td>
<td>Brocade: 5300</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware:

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R620, R720xd, T620</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>H310, H710</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57800S QP rNDC, 57840S QP 10GbE SFP+ rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic QLE2560, QLE266x</td>
</tr>
<tr>
<td>Storage Arrays</td>
<td></td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC40</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Network Switches</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S60, S4810, S4820T, 8024, 8024F</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 6505, 6510, 6520</td>
</tr>
</tbody>
</table>

**Table 37.  Hardware Details - OVC: R720 + OVM 3.2.8**
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Guest VMs + Database</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>R720</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H710p mini</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme I 1GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QLE2562</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC8000, SC40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking S55 1GbE Switch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 5300 8Gbps Switch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Information and Configuration Settings</th>
</tr>
</thead>
</table>

**Table 38. Software Details - OVC: R720 + OVM 3.2.8**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>R820</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon E5-4650 2.7GHz 6C</td>
</tr>
<tr>
<td>Memory</td>
<td>64GB (8 x 8GB 1333MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57800S QP (2x10GbE+2x1GbE) rNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2662</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC8000; SC220 Expansion Enclosures</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: 8024F, S4810</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>none</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H310, H710p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 5720 QP 1GbE rNDC, 57840S QP 10GbE SFP+ rNDC, 57810S DP SFP+ 10GbE Adapter, 57810S DP Base-T 10GbE Adapter, 5719 QP 1GbE Adapter, 5720 DP 1GbE Adapter</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic QLE256x, QLE2660</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC40</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S55, S60, S4820T, 8024</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300, 5300, 6505, 6520</td>
</tr>
</tbody>
</table>

Table 39. Hardware Details - OVC: R820 + OVM 3.2.7
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Guest VMs + Database</td>
</tr>
</tbody>
</table>

### Database Servers

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>ESM - BMC Firmware</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>R820</td>
<td>v1.7.2</td>
<td>v1.37.35, A00 (iDRAC7)</td>
<td></td>
</tr>
</tbody>
</table>

### RAID Controllers

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERC H710p</td>
<td>v21.1.0-0007</td>
<td>v00.00.05.40-rc1 (megaraid_sas)</td>
</tr>
</tbody>
</table>

### Ethernet Interfaces

<table>
<thead>
<tr>
<th>Model</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcom NetXtreme II 1GbE Family of Adapters</td>
<td>v2.2.3 (bnx2)</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
<td>v1.72.50-0 (bnx2x)</td>
</tr>
</tbody>
</table>

### Host Bus Adapters

<table>
<thead>
<tr>
<th>Model</th>
<th>BIOS</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLE2662</td>
<td>v3.17</td>
<td>v8.04.00.08.39.0-k</td>
</tr>
</tbody>
</table>

### Storage Arrays

<table>
<thead>
<tr>
<th>Model</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Compellent SC8000, SC40</td>
<td>Storage Center 6.4</td>
</tr>
</tbody>
</table>

### Network Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking 8024F</td>
<td>v8.3.3.8</td>
</tr>
<tr>
<td>Dell Networking S4810</td>
<td>v8.3.12.1</td>
</tr>
</tbody>
</table>

### SAN Switches

<table>
<thead>
<tr>
<th>Model</th>
<th>Firmware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade 6510</td>
<td>v6.2.0c</td>
</tr>
</tbody>
</table>

**Additional Information and Configuration Settings**


**Table 40.** Software Details - OVC: R820 + OVM 3.2.7

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
2.2 Dell EMC PowerEdge Blade Servers

2.2.1 M820 + OVM3.2.4 (Release Date - 09/17/2013) [Solution ID: 4086722v2]

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Database Server</strong></td>
<td></td>
</tr>
<tr>
<td>Dell EMC Servers</td>
<td>M820 in M1000e chassis</td>
</tr>
<tr>
<td>Processors</td>
<td>4 x Intel Xeon E5-4617 2.9GHz 6C</td>
</tr>
<tr>
<td>Memory</td>
<td>128GB (16 x 8GB 1600MHz DDR3 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H310</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57810S DP 10GbE bNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QME2662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Array</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC8000; SC220 Expansion Enclosures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking: MXL 10/40GbE</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brocade: M6505</td>
<td></td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Database Servers</strong></td>
<td></td>
</tr>
<tr>
<td>Dell EMC Servers</td>
<td>M820 (FX2s), M8201 (VRTX)</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H710, H710p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57810S DP 10GbE KR Mezz, 5719 QP 1GbE Mezz</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic QME2572</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Networking: M8024-k, M8428-k, M6348, M6220</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>

**Table 41.** Hardware Details - OVC: M820 + OVM 3.2.4

1 Only supported with external SAN storage; Internal VRTX SAS storage is not supported.
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Guest VMs + Database</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>M820</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H310</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QME2662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC8000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking MXL 10/40GbE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade M6505</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Information and Configuration Settings</th>
</tr>
</thead>
</table>

**Table 42. Software Details - OVC: M820 + OVM 3.2.4**

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
2.3 Dell EMC PowerEdge FX2s

2.3.1 FC630 + OVM3.3.1 (Release Date - 12/17/2014)

The matrix below lists the hardware components this OVC was tested with:

<table>
<thead>
<tr>
<th>Hardware Details</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>FC630 in FX2s chassis</td>
</tr>
<tr>
<td>Processors</td>
<td>2 x Intel Xeon E5-2680 v3 2.5GHz 12C</td>
</tr>
<tr>
<td>Memory</td>
<td>64GB (4 x 16GB 2133Mhz DDR4 DIMMs)</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H330mini</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: BCM57810 DP 10GbE bNDC</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2662</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent SC4020</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: 8024F, FX2s 10GbE Pass-Through</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 6510</td>
</tr>
</tbody>
</table>

The matrix below expands the compatible hardware list. These components were not directly tested but are acceptable components to replace any of the above corresponding hardware.

<table>
<thead>
<tr>
<th>Other Compatible Hardware</th>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell EMC Servers</td>
<td>M630 (M1000e), M630³ (VRTX)</td>
</tr>
<tr>
<td>Processors</td>
<td>All Processors supported by PowerEdge Servers listed above</td>
</tr>
<tr>
<td>Memory</td>
<td>All valid PowerEdge memory configurations</td>
</tr>
<tr>
<td>RAID Controllers</td>
<td>PERC: H730, H730p</td>
</tr>
<tr>
<td>Ethernet Interfaces</td>
<td>Broadcom: 57810S DP 10GbE KR Mezz, 5719 QP 1GbE Mezz</td>
</tr>
<tr>
<td>Host Bus Adapters</td>
<td>QLogic: QLE2562</td>
</tr>
<tr>
<td>Storage Enclosures</td>
<td>Dell Compellent Controllers: SC8000</td>
</tr>
<tr>
<td>Network Switches</td>
<td>Dell Networking: S4810T,S4820T,S55,S60,8024, FX2s GbE Pass-Through</td>
</tr>
<tr>
<td>SAN Switches</td>
<td>Brocade: 300,5300,6505,6520</td>
</tr>
</tbody>
</table>

Table 43. Hardware Details - OVC: FC630 + OVM 3.3.1

³ Only supported with external SAN storage; Internal VRTX SAS storage is not supported.
The matrices below list the software versions of the different components that this OVC was tested with:

<table>
<thead>
<tr>
<th>Software Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Guest VMs + Database</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>FC630</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAID Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>PERC H330mini</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethernet Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Broadcom NetXtreme II 10GbE Family of Adapters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Host Bus Adapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>QLE2662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Compellent SC4020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Network Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Dell Networking 8024F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAN Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Brocade 6510</td>
</tr>
</tbody>
</table>

Additional Information and Configuration Settings

**Table 44.** Software Details - OVC: FC630 + OVM 3.3.1

**NOTE:** It is recommended to use the latest software versions supported by the hardware components listed in the ‘Other Compatible Hardware’ matrix for this OVC.
References

- Oracle Validated Configurations Program:  
- Dell EMC Oracle Validated Configurations (search by Dell):  
- Dell EMC Servers Hardware Certification List (HCL) for Oracle Linux and Oracle VM (search by Dell):  
- Dell EMC Storage Hardware Certification List (HCL) for Oracle VM (search by Dell):  
- Dell Tech Center Oracle Community – Best Practices, White Papers, How-To guides, and more:  
  www.delltechcenter.com/oracle
- Dell EMC Compellent’s connectivity guide, best practices for Oracle Databases:  
  - Knowledge Center http://kc.compellent.com
- Dell EMC and Oracle Technology Alliance Partners:  
- Everything Oracle at Dell EMC:  
  https://community.emc.com/community/connect/everything_oracle