### Component Configuration

All hardware components have been thoroughly tested for compatibility and functionality by IDIES@JHU.

**Integration**
- **Component**: SRS-42SRV-10SN-SM-01
- **Description/Comments**: HW/SW integration, testing service up to 10 nodes (includes BIOS settings, firmware updates, making 'pod' turnkey-ready)

**Rack**
- **Component**: SRK-42SE-75 [AR3350]
- **Description/Comments**: APC AR3350 NetShelter SX 42U (750mm x 1200mm) Enclosure

**Rack Accessory**
- **Component**: SRK-00AS-53 [AR7706]
- **Description/Comments**: APC AR7706 NetShelter SX 750mm Mounting Rail Brush Strip (for cable pass-through to front-facing Netgear 1Gb switch)

- **Component**: SRK-01PN-01
- **Description/Comments**: (2x) 1U Mesh Blanking Panel (mounted in front of the rear-facing Mellanox 100Gb switch and behind the Netgear 1Gb switch)

- **Component**: [AR7540]
- **Description/Comments**: APC Toolless Cable Management Rings (Qty 10)

- **Component**: [AR8101BLK]
- **Description/Comments**: APC Airflow Management. 1U, 2U, 4U, 8U blanking panels (black) Rack Positions 22–36 (fills 15U gap between shelf and the top-of-rack gear)

- **Component**: [AR8122BLK]
- **Description/Comments**: APC Fixed Shelf 250lbs/114kg Black (1U) Rack Position 21 (ensures top 4U data node can slide freely in rack for service)

- **Component**: [AR8108BLK]
- **Description/Comments**: APC 1U Airflow Management Blanking Panel Kit (Qty 2) (shelf does not include a blank)

**PDU**
- **Component**: [MNU3EGW1]
- **Description/Comments**: (2x) Vertiv (Geist) Managed, Switched Outlet PDU (IEC 60309 60A 3P4W)

**Cable, CAT6**
- **Component**: [Green, 7ft]
- **Description/Comments**: (2x) [LAN=>Netgear] Ethernet,CAT6,RJ45,Snagless,STP,7ft (green) (for remote PDU management via command module)

**Switch, KVM**
- **Component**: [DLX-216]
- **Description/Comments**: Raritan Dominion LX 2- IP User, 16-Port KVM Switch Rack Position 42

**Cable, Power**
- **Component**: [Black, 4ft]
- **Description/Comments**: [PS1=>PDU1] Power C14 to C13, 14/3 SJT (black) (non-redundant)

- **Component**: [Green, 7ft]
- **Description/Comments**: [LAN=>Netgear] Ethernet,CAT6,RJ45,Snagless,STP,7ft (green) (remote access via KVM-over-IP)

**Switch, 100Gb**
- **Component**: [MSN2100-CB2F]
- **Description/Comments**: Mellanox SN2100 16-port 100GbE Ethernet Switch Rack Position 41

**Rack Kit**
- **Component**: [MTEF-KIT-D]
- **Description/Comments**: Mellanox Rack Installation Kit for SN2100/SN2010 series 1U half width switches

**Cable, Power**
- **Component**: [PFC1414E72]
- **Description/Comments**: [PS1=>PDU1] Power C14 to C13, 14/3 SJT (black)

- **Component**: [PFC1414E72A]
- **Description/Comments**: [PS2=>PDU2] Power C14 to C13, 14/3 SJT (gray)

**Optics**
- **Component**: [MMA1B00-C100D]
- **Description/Comments**: Mellanox Optical Transceiver 100GbE QSFP28 MPO 850nm SR4 up to 100m DDMI (also supports 40Gb) (LAG uplink to SITE switch)

**Cable, CAT6**
- **Component**: [Green, 7ft]
- **Description/Comments**: [LAN=>Netgear] Ethernet,CAT6,RJ45,Snagless,STP,7F (green) (remote management)

**Cable, Serial**
- **Component**: [CAB-CONSOLE-RJ45]
- **Description/Comments**: [RS232=>monX:COM1] DB9 to RJ45 Console, 6ft (light blue) (out-of-band console connection #1)

- **Component**: [CAB-CONSOLE-USB]
- **Description/Comments**: [miniB=>monY:USB] USB Type A to mini-B Console, 6ft (light blue) (out-of-band console connection #2)
<table>
<thead>
<tr>
<th>Component</th>
<th>PN</th>
<th>Description/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch, 1Gb</td>
<td>M4300-28G</td>
<td>Netgear M4300- 28G 1U RM L3 Managed Switch 24xGbE 2x10GbE 2x10GbE SFP+ 1x250W Rack Position 40</td>
</tr>
<tr>
<td>PSU</td>
<td>APS150W-100NES</td>
<td>Netgear ProSafe 150W Power Module for M4300-28G Rack Position 40</td>
</tr>
<tr>
<td>Cable, Power</td>
<td>PFC1414E72</td>
<td>[PS1=&gt;PDU1] Power C14 to C13,6ft,15a/250v 14/3 SJT (black)</td>
</tr>
<tr>
<td>Cable, Power</td>
<td>PFC1414E72A</td>
<td>[PS2=&gt;PDU2] Power C14 to C13,6ft,15a/250v 14/3 SJT (gray)</td>
</tr>
<tr>
<td>Cable, 10Gb</td>
<td>MC2309130-002</td>
<td>(2x) Mellanox Passive Copper Hybrid Ethernet 10GbE QSFP to SFP+ 2m (LAG uplink to Mellanox SN2100)</td>
</tr>
<tr>
<td>Cable, Serial</td>
<td>CAB-CONSOLE-RJ45</td>
<td>[RS232=&gt;monX:COM1] DB9 to RJ45 Console, 6ft (light blue) (out-of-band console connection #1)</td>
</tr>
<tr>
<td>Cable, Serial</td>
<td>CAB-CONSOLE-USB</td>
<td>[miniB=&gt;monY:USB] USB Type A to mini-B Console, 6ft (light blue) (out-of-band console connection #2)</td>
</tr>
<tr>
<td>OSN Monitor Node</td>
<td>SYS-1019P-OSN-01-MS046</td>
<td>(3x) 1U rackmount server (see detailed worksheet) Rack Positions 37,38,39 Monitor Node ‘Short Cable’ Bundle (One per Monitor Node)</td>
</tr>
<tr>
<td>Cable, Power</td>
<td>PFC1414E48</td>
<td>(3x) [PS1=&gt;PDU1] Power C14 to C13,4ft,15a/250v 14/3 SJT (black)</td>
</tr>
<tr>
<td>Cable, Power</td>
<td>PFC1414E48A</td>
<td>(3x) [PS2=&gt;PDU2] Power C14 to C13,4ft,15a/250v 14/3 SJT (gray)</td>
</tr>
<tr>
<td>Cable, 50Gb</td>
<td>MCP7H00-G01</td>
<td>(3x) Mellanox Hybrid Ethernet 100Gb/s to 2x50Gb/s QSFP28 to 2xQSFP28 1m 30AWG (high-speed network interconnect)</td>
</tr>
<tr>
<td>Interface Module</td>
<td>D2CIM-DVUSB</td>
<td>(3x) Raritan CIM 1x HDDB15 male, 2x USB Type A male, 1x RJ-45 female</td>
</tr>
<tr>
<td>Cable, CAT6</td>
<td>Yellow, 7ft</td>
<td>(3x) [CIM=&gt;KVM] Ethernet,CAT6,RJ45,Snagless,STP,7ft (yellow) (remote console management via KVM-over-IP)</td>
</tr>
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<td>Cable, CAT6</td>
<td>Green, 7ft</td>
<td>(3x) [BMC=&gt;Netgear] Ethernet,CAT6,RJ45,Snagless,STP,7ft (green) (remote management via IPMI)</td>
</tr>
<tr>
<td>Cable, CAT6</td>
<td>Red, 7ft</td>
<td>(3x) [em1=&gt;Netgear] Ethernet,CAT6,RJ45,Snagless,STP,7ft (red) (edge node access to 1Gb management network)</td>
</tr>
<tr>
<td>OSN Data Node</td>
<td>SYS-5049P-OSN-01-MS046</td>
<td>(5x) 4U rackmount server (see detailed worksheet) Rack Positions 1-4,5-8,9-12,13-16,17-20 Data Node ‘Long Cable’ Bundle (One per Data Node)</td>
</tr>
<tr>
<td>Cable, Power</td>
<td>PFC1414E72</td>
<td>(5x) [PS1=&gt;PDU1] Power C14 to C13,6ft,15a/250v 14/3 SJT (black)</td>
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<td>Cable, Power</td>
<td>PFC1414E72A</td>
<td>(5x) [PS2=&gt;PDU2] Power C14 to C13,6ft,15a/250v 14/3 SJT (gray)</td>
</tr>
<tr>
<td>Cable, 50Gb</td>
<td>MCP7H00-G03</td>
<td>(5x) Mellanox Hybrid Ethernet 100Gb/s to 2x50Gb/s QSFP28 to 2xQSFP28 3m 30AWG (high-speed network interconnect)</td>
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<td>Yellow, 10ft</td>
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