Hitachi Data Instance Director (HDID)
Infrastructure Requirements

## Minimum Specification

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Source Node and Replication Node (4)</th>
<th>Master Node (4)</th>
<th>ISM Node (4)</th>
<th>Repository Node (4)(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>As per operating system (OS)</td>
<td>8GB or greater(6)(8)</td>
<td>8GB or greater(6)(8)</td>
<td>16GB or greater(6)(7)(8)</td>
</tr>
<tr>
<td>Disk space</td>
<td>500MB for HDID + 16GB for cache + 16GB for filter logs(3)</td>
<td>500MB for HDID + 4GB logs</td>
<td>500MB for HDID + 4GB logs</td>
<td>500MB for HDID + 16GB cache per source + repository space(2)</td>
</tr>
<tr>
<td>RAID</td>
<td>Not required</td>
<td>Not required</td>
<td>Not required</td>
<td>Performance-based RAID, 16GB cache per source node, repository disk space(2)</td>
</tr>
<tr>
<td>Network interface</td>
<td>Minimum 100Mb/s</td>
<td>Minimum 100Mb/s</td>
<td>Minimum 100Mb/s</td>
<td>Minimum 1,000Mb/s</td>
</tr>
<tr>
<td>Processor</td>
<td>2 core, 1 GHz</td>
<td>4 core, 2+ GHz</td>
<td>4-core, 2+ GHz</td>
<td>4+ core, 2+ GHz</td>
</tr>
<tr>
<td>Display</td>
<td>Via master</td>
<td>1280 x 1024</td>
<td>Via master</td>
<td>Via master</td>
</tr>
<tr>
<td>Third-party software</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Minimum of 1 gigabytes (GB) or 2GB for SUSE Linux.
(2) Repository configuration should plan for 16GB of hard disk space for cache per Live Source Node connection. Repository may reside on internal or SAN attached storage. It cannot reside on a network share.
(3) For host-based backups, we recommend that Linux source nodes have a Logical Volume Manager (LVM) on each volume group that is to be backed up. A minimum of 10GB of free space is required in the “unused” portion of the LVM, which is in addition to the required space for the allocated storage area. For example, if 100GB of usable storage is required, then the total disk size will be 110GB (100GB of usable storage and 10GB of unused storage).
(4) If multiple node capabilities are configured on one node, then the higher specification is required.
(5) If a repository node is being used as an ISM node for hardware orchestration then it must have a Fibre Channel connection to a command device on the storage. iSCSI command devices are not supported.
(6) Configure the page file such that the minimum and maximum page file size are equal and at least 32GB ([https://docs.mongodb.com/manual/administration/production-notes/#production-windows-pagefile](https://docs.mongodb.com/manual/administration/production-notes/#production-windows-pagefile)).
(7) If the node is hosted on a VM the memory should be allocated to and reserved for that node rather than being a pooled resource.
(8) This is in addition to the memory required by any other applications running on the machine.
## Operating System Version Support

<table>
<thead>
<tr>
<th>Hitachi Data Instance Director Component</th>
<th>Configurations</th>
<th>OS Version&lt;sup&gt;(2)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Node and Replication Node</td>
<td>As per support matrices</td>
<td>As per support matrices</td>
</tr>
</tbody>
</table>
| Master Node                              | Standalone      | Microsoft Windows Server 2008 (64-bit)  
                                      |                | Windows Server 2008 R2 (64-bit)  
                                      |                | Windows Server 2012 (64-bit)  
                                      |                | Windows Server 2012 R2 (64-bit)  
                                      |                | Windows Server 2016 (64-bit)<sup>(3)</sup>  
                                      | Linux RHEL 7                                          |
|                                         | Standalone      | Windows Server 2008 (64-bit)  
                                      |                | Windows Server 2008 R2 (64-bit)  
                                      |                | Windows Server 2012 (64-bit)  
                                      |                | Windows Server 2012 R2 (64-bit)  
                                      |                | Windows Server 2016 (64-bit)<sup>(3)</sup>  
                                      | Linux RHEL 7                                          |
| Repository Node<sup>(3)</sup>            | Standalone      | Windows Server 2008 (64-bit)  
                                      |                | Windows Server 2008 R2 (64-bit)  
                                      |                | Windows Server 2012 (64-bit)  
                                      |                | Windows Server 2012 R2 (64-bit)  
                                      |                | Windows Server 2016 (64-bit)<sup>(3)</sup>  
                                      | Linux RHEL 7                                          |
|                                         | Microsoft Failover Cluster (MSFC) | Windows Server 2008 (64-bit)  
                                      |                | Windows Server 2008 R2 (64-bit)  
                                      |                | Windows Server 2012 (64-bit)  
                                      |                | Windows Server 2012 R2 (64-bit)  
                                      |                | Windows Server 2016 (64-bit)<sup>(3)</sup>  
                                      | Linux RHEL 7                                          |
| ISM Node                                 | Standalone      | Windows Server 2008 (64-bit)  
                                      |                | Windows Server 2008 R2 (64-bit)  
                                      |                | Windows Server 2012 (64-bit)  
                                      |                | Windows Server 2012 R2 (64-bit)  
                                      |                | Windows Server 2016 (64-bit)<sup>(3)</sup>  
                                      | Linux RHEL 7                                          |
| VMware Proxy Node<sup>(4)</sup>          | Standalone      | Windows Server 2008 (64-bit)  
                                      |                | Windows Server 2008 R2 (64-bit)  
                                      |                | Windows Server 2012 (64-bit)  
                                      |                | Windows Server 2012 R2 (64-bit)  
                                      |                | Windows Server 2016 (64-bit)<sup>(3)</sup>  

<sup>(1)</sup> Windows 2016 is supported only with features compatible with Windows 2012.

<sup>(2)</sup> Support is provided only where standard vendor support is available.

<sup>(3)</sup> The ability to host a repository on a Windows-deduplicated volume is not supported.

<sup>(4)</sup> To support mounting of storage-based snapshots to a VMware virtual machine, the VMware Proxy Node must also be the master.