



## Hitachi Data Instance Director (HDID) Support Matrix: Storage Based, Operating System and Application

The following matrices apply to both physical servers and to virtual machines with physical raw device mapping (for VMware) or pass-through disks (for Microsoft® Hyper-V®). In the case of virtual machines, an agent must be installed on the virtual machine.

The exception is that Hitachi storage (hardware path) has no host dependencies and therefore applies to any host type supported by the storage device.

### Operating System (OS) and Application HDID Capability Support

The following table shows the HDID versions that support each capability.

Category	Microsoft® Windows® <sup>(2)</sup> Block (Fibre Channel or FC)	Linux Block (FC)	Linux File (NFS)	IBM® AIX® Block (FC)	IBM® AIX® File (NFS)	Oracle Solaris Block (FC)	Oracle Solaris File (NFS)	OS or App Unaware Block (FC)	OS or App Unaware File (NFS/CIFS)
Files (Path) <sup>(1)</sup>	v5.0+	v5.0+	v5.0+	v5.1+	v5.1+	5.3+	5.3+	N/A	N/A
Oracle <sup>(1)</sup>	v5.5+	v5.0+	v5.0+	v5.3+	v5.3+	5.3+	5.3+		
SAP HANA <sup>(1)</sup>	x	v5.3+ <sup>(4)</sup>	N/A	N/A	N/A	N/A	N/A		
Exchange <sup>(1)</sup>	v5.0+	N/A	N/A	N/A	N/A	N/A	N/A		
Microsoft SQL <sup>®(1)</sup>	v5.0+	N/A	N/A	N/A	N/A	N/A	N/A		
Hitachi Storage (Hardware Path) <sup>(3)</sup>	N/A							v5.0+	v5.0+

(1) Agent required on physical host or virtual machine (VM) guest.

(2) No remote OS or app-consistent snapshot for Microsoft OS or Microsoft applications with Hitachi Universal Replicator.

(3) Hardware path hardware-based protection provides crash consistency by default when consistency groups are used. A framework allows hardware path to provide application consistency through the use of user prescripts and postscripts.

(4) SLES 11 (11.4+) and RHEL6 (6.6+) only.

## Operating System Version Support

Operating System	OS Version <sup>(5)</sup>	File Systems	Configurations	Hitachi Data Instance Director Version
<b>Microsoft Windows®</b>	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>(6)</sup>	NTFS	Standalone	v5.0+
			Microsoft Failover Cluster (MSFC)	v5.1+
			Multipath: Native MPIO	v5.0+
			Multipath: Hitachi Dynamic Link Manager (HDLM)	v5.5
<b>Linux</b>	RHEL 6 x64 (6.7 and newer) RHEL 7 x64 (7.0 and newer) OEL 6 x64 (6.3 and newer) OEL 7 x64 (7.0 and newer) SUSE 11 x64 (11.3 and newer) SUSE 12 x64 (12.0 and newer)	EXT3 EXT4 LVM NFS (HNAS)	Standalone	v5.0+
			Multipath: Device mapper	v5.0+
			Multipath: HDLM	v5.5+
<b>AIX</b>	AIX v7.1 (TL3 and newer)	JFS2 NFS (HNAS)	Standalone	v5.1+
			LPAR	v5.1+
			LPAR with VIOS (NPIV only)	v5.1+
			Multipath: Native MPIO	v5.0+
			Multipath: HDLM	v5.5+
<b>Oracle Solaris</b>	Solaris 11 (11.2 and newer)	ZFS NFS (HNAS)	Standalone (Intel x64)	v5.3+
			Standalone (SPARC)	v5.5+
			Multipath: Native MPxIO	v5.3+
			Multipath: HDLM	v5.5+

(5) Note: Support only where standard vendor support is available

(6) Windows 2016 is only supported in HDID v5.5+ and only with features compatible with Windows 2012

# Application Version Support

Application	Application Version <sup>(5)</sup>	Configurations	Hitachi Data Instance Director Version
Microsoft® Exchange Server	Exchange 2010	Standalone	v5.0+
	Exchange 2013	Database Availability Group (DAG) <sup>(8)(9)</sup>	v5.0+
	Exchange 2016 <sup>(7)</sup>		
Microsoft SQL Server®	SQL 2008	Standalone	v5.0+
	SQL 2012	Active-Passive Failover Cluster	v5.1+
	SQL 2014	AlwaysOn Availability Groups (AAG) <sup>(9)</sup>	v5.5+
	SQL 2016 <sup>(10)</sup>		
Oracle	Oracle 11g	Single instance with filesystem (local or NAS)	v5.0+
		Single instance with ASM (Linux: ASMLib or udev, Others: Native)	v5.0+
		RAC with filesystem (NAS)	v5.0+
		RAC with ASM (Linux: ASMLib or udev, Others: Native)	v5.0+
	Oracle 12c	Single instance with filesystem (NAS)	v5.0.1+
		Single instance with ASM (Linux: ASMLib or udev, Others: Native)	v5.0.1+
		RAC with filesystem (local or NAS)	v5.0.1+
		RAC with ASM (Linux: ASMLib or udev, Others: Native)	v5.0.1+
		Multitenant Container Databases (CDB)	v5.3+
		Flex ASM, ASM Linux Filter driver, Flex Cluster	v5.5+
SAP HANA	SPS10+	Scale Up	v5.3+

(5) Note: Support only where standard vendor support is available.

(7) Exchange 2016 is only supported in HDID v5.3+ and only with configurations compatible with Exchange 2013.

(8) Exchange DAG revert is not supported in this release. To recover Exchange DAG, mount a snapshot and then perform any recovery manually.

(9) Batch only

(10) SQL 2016 is only supported in HDID v5.3+ and only with configurations compatible with SQL 2014. There is a known bug with the Microsoft SQL 2016 distribution. A dll is missing from the 64bit Assemblies folder. The following workaround has been approved by Microsoft:

COPY: "Microsoft.SqlServer.ConnectionInfo.dll"

FROM: "Program Files (x86)\Microsoft SQL Server\130\SDK\Assemblies"

TO: "Program Files\Microsoft SQL Server\130\SDK\Assemblies"