

# Veritas<sup>™</sup> Risk Advisor Support Requirements

AIX, ESX, HP-UX, Linux, Solaris, Windows Server

7.2

# Veritas Risk Advisor Support Requirements

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- Hardware information
- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:

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Include the title and document version (located on the second page), and chapter and section titles of the text on which you are reporting.

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# Support requirements for Veritas Risk Advisor

This document includes the following topics:

- [“Host requirements”](#) on page 10
- [“Scanned entities”](#) on page 12

## Host requirements

This section describes the system requirements for hosts that are installing Veritas Risk Advisor (VRA).

The recommended server configuration is as follows:

**Table 1-1** VRA server requirements

# of scanned hosts	CPUs/cores	RAM	Free disk space	Operating system
Up to 100	2 Intel / AMD (4 recommended)	8 GB	80 GB	Windows Server 2008 R2 <sup>1</sup> Standard or Enterprise Edition 64-bit
100-500	2 Intel/ AMD (4 recommended)	16 GB	100 GB	
500-1,000	4 Intel / AMD	32 GB	120 GB	
Above 1,000	Specific sizing required			

The following server requirements also apply:

- Database: Oracle 11g Standard or Enterprise installed with full database administrator rights.
- Server: Apache Tomcat 8 (the only supported version). Product is automatically installed if not already on your system.
- Web client access:
  - Internet Explorer 11 with Java client 1.8 or later.
  - HTTP/HTTPS access from clients to the VRA server through port 8080/8443 (configurable).

VRA requires administrator rights on the VRA application server.

**1:** If your organization does not plan to use Windows Remote Management (WinRM) to collect data from Windows servers, you can also use Windows Server 2003/2008 64-bit.

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**Note:** If VMware is used, it is recommended that you reserve the required CPU and memory.

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The recommended collector configuration is as follows:

**Table 1-2** Collector requirements

# of scanned hosts	CPUs/cores	RAM	Free disk space	Operating system
Up to 100	2 Intel / AMD	8 GB	40 GB	Windows Server 2008 R2 <sup>1</sup> Standard or Enterprise Edition 64-bit
100-500	2 Intel/ AMD	16 GB	50 GB	
500-1,000	4 Intel / AMD	32 GB	60 GB	
Above 1,000	Specific sizing required			

VRA collectors require administrator rights on the server.

**1:** If your organization does not plan to use Windows Remote Management (WinRM) to collect data from Windows servers, you can also use Windows Server 2003/2008 64-bit.

**Note:** If VMware is used, it is recommended that you reserve the required CPU and memory.

## Scanned entities

This section describes the various servers, storage arrays, and databases that VRA can scan, as well other VRA support requirements.

### Servers

[Table 1-3](#) describes the servers that VRA can scan.

**Table 1-3** Servers that VRA can scan

Server	Operating system version	Processor architecture
AIX	4 and above	Power3 series and later
HP-UX	11 and above	PA8700/8800/8900, IA64, IA64 Dual Core Montecito
Linux Red Hat/SUSE	RedHat Advanced Server, SUSE	Intel EM64T, AMD Opteron
Solaris	8 and above	UltraSPARC II/III/IV/T1/T2/T2+, SPARC64-V/VI /VII series
Solaris x64	8 and above	Intel EM64T, AMD Opteron
Windows	Windows XP/2000/2003/2008/2012	Intel EM64T, AMD Opteron
ESX, ESXi	3.5 and above	
Hyper-V	Hyper-V Server 2012 R2 and above	

## Storage arrays

Table 1-4 describes the storage arrays that VRA can scan.

**Table 1-4** Storage arrays that VRA can scan

Storage array	Supported replications	Comments
EMC Symmetrix (all series) <b>Note:</b> EMC Celleria is not supported.	SRDF, BCV, Clone, Snap, RecoverPoint	Using SymCLI <b>Note:</b> You must install SymCLI on at least one host.
EMC CLARiiON/VNX <b>Note:</b> CLARiiON/VNX devices connected to hosts via iSCSI are not supported.	SnapView, MirrorView, SAN Copy, RecoverPoint	NaviSecCLI 6.24 and above RecoverPoint 3 and above
EMC VPLEX	RecoverPoint	VPLEX 5.2 and above Using the VPLEX Management Server
EMC Isilon	Remote Sync, Snapshot	
EMC DataDomain		
Hitachi HDS/HP XP	TrueCopy, UniversalReplicator, ShadowImage, QuickShadow	Using Hitachi HiCommand/HP Command View 4 and above
NetApp Filer / NetApp Cluster (cDOT only)	SnapMirror, SnapVault	Using Ontap 6 and above
IBM DS (6000, 8000)	FlashCopy, MetroMirror, GlobalCopy, GlobalMirror	Using DSCLI
IBM DS (3000, 4000, 5000)	FlashCopy, MetroMirror, GlobalMirror	Using SMCLI
IBM XIV	Snapshot, RemoteMirror	Using XCLI
IBM V7000/SVC	FlashCopy, MetroMirror, GlobalMirror	

**Table 1-4** Storage arrays that VRA can scan (Continued)

Storage array	Supported replications	Comments
HP 3PAR	Snapshot, RemoteCopy	Using 3PAR InForm CLI
Infinidat InfiniBox	Snapshot, Clone, RemoteCopy	

## Management Consoles

[Table 1-5](#) describes the console applications that VRA can scan.

**Table 1-5** Console applications that VRA can scan

Application	Version	Comments
ECC (by EMC)	5 and above	
HiCommand (by Hitachi)	4 and above	
Command View (by HP)	4 and above	
vCenter (by VMware)	3.5 and above	Including SRM and Zerto
System Center Virtual Machine Manager (by Microsoft)	2012 R2 and above	
HMC (by IBM)	7 and above	
Oracle Enterprise Manager	11 and above	
Oracle GoldenGate Monitor	11g release 1 and above	
NetApp OnCommand Unified Manager Core	5 and above	

## Databases

[Table 1-6](#) describes the databases that VRA can scan.

**Table 1-6** Databases that VRA can scan

Database	Version	Comments
Oracle	8 and above	Including RAC, ASM, DataGuard and GoldenGate Scanned either directly or via OEM
Microsoft SQL Server	2005 and above	
Sybase	12.5 and above	
IBM DB2	8 and above	

## Multipath programs

[Table 1-7](#) describes the multipath programs that VRA supports.

**Table 1-7** Multipath programs that VRA supports

Software	Comments
AIX MPIO	
EMC PowerPath	
Hitachi Dynamic Link Manager (HDLM)	
HP-UX PVLinks	
IBM Subsystem Device Driver (SDD)	
Linux MPIO	
NetApp DSM	
Solaris MPxIO	
Veritas Dynamic Multi-Pathing	
Windows 2008 MPIO	

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**Note:** Unless explicitly noted in [Table 1-7](#), all versions of the multipath software are supported.

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## Logical volume managers

VRA can scan the following logical volume managers (LVMs):

- AIX-native LVM
- HP-UX-native LVM
- Linux LVM2
- Oracle ASM
- Solaris ZFS
- Veritas Volume Manager (VxVM) - Including Veritas Volume Replicator
- Windows Logical Disk Management



## Clusters

VRA supports the following clusters:

- HP Serviceguard (MC/SG)
- HP PolyServe
- IBM PowerHA
- Microsoft Cluster
- Oracle RAC
- Veritas Cluster Server 5.0 and later; prior to release 6.1, this product was known as Veritas Cluster Server
- VMware ESX Cluster
- RedHat Cluster Suite version 6.x

## Application Servers

VRA supports the following application servers:

- Apache Tomcat on Linux
- IBM WebSphere on Linux and AIX
- Oracle WebLogic on Linux and AIX

## SAN Fabric Switches

VRA supports the following SAN fabric switches:

- Cisco MDS 9000 Family
  - Direct scan or using Cisco Data Center Network Manager
- Brocade
  - Direct scan or using Brocade Network Advisor
  - Fabric OS 7.0 and above is supported
  - In Virtual Fabric environments, Fabric OS 7.3 and above is required
  - When using Brocade Network Advisor, version 12.3 and above with REST API is required
- HP Virtual Connect

