riverbed

SPEC SHEET

NPM Product Family Specifications

NPM product components include:

- Riverbed AppResponse
- Riverbed NetProfiler
- Riverbed Flow Gateway
- Riverbed NetIM
- Riverbed Portal
- Riverbed Packet Analyzer Plus

Riverbed® AppResponse

Model Specifications

AppResponse xx90 Appliances

Model				Storage Units (for Model 8190)	
	2190	4190	8190	Medium Storage Unit	Large Storage Unit
Product SKU	SCAN-02190-BASE-C	SCAN-04190-BASE-C	SCAN-08190-BASE-C	SCAN-SU-8	SCAN-SU-20
Packet Capture Performance[1]	2.4 Gbps	9.6 Gbps	1 SU =16 Gbps 2 SU = 32 Gbps 3 SU = 50 Gpbs	N / A	N / A
Packet Analysis Performance[2] **(All IP/TCP apps)**	1M conn/min	1.5M conn/min	6M conn/min	N / A	N / A
Storage[3]	16 TB raw 13 TB usable	64 TB raw 51 TB usable (RAID0)	None	96 TB raw 68 TB usable (RAID0)	240 TB raw 169 TB usable (RAID0)
Supported Storage Units[3]	N / A	N / A	12		
Maximum Storage Capacity[3]	16 TB raw 13 TB usable	64 TB raw 51 TB usable (RAID0)		96 TB raw 68 TB usable (RAID0)	240 TB raw 169 TB usable (RAID0)
Storage Disk Redundancy	SW RAID level 0	HW RAID level 0 (default)[5,6]	N / A	HW RAID level 0 (default)[5,6]	HW RAID level 0 (default)[5,6]
Data Encryption at Rest	No	No	No	No	Yes
System & Data Capacity	4 TB usable (2 x 4 TB)	8 TB usable (4 x 4 TB)	54 TB usable (2x4 TB HDDs + 8x8 TB HDDs + 2x3.2 TB NVMes)	N / A	N / A
System & Data Redundancy	Yes (SW RAID 1)	Yes (SW RAID 10)	Yes (SW RAID 1, 10, and 6)	N / A	N / A
Operating System	Customized Linux-based OS	Customized Linux-based OS	Customized Linux-based OS	N / A	N / A
RAM (GB)	32	64	256	N / A	N / A
Available Network Interface Card Slots	1	2	1	N / A	N / A
Monitoring Ports	One of the following NIC cards: - 4 x 1 GigE - 2 x 10 GigE	Up to two of the following NIC cards - 4 x 1 GigE - 2 x 10 GigE - 4 x 10 GigE	One of the following NIC cards - 4 x 10 GigE - 8 x 10 GigE (requires 2 x 1:4 octopus cables) - 2 x 40 GigE - 2 x 100 GigE	N / A	N / A
Management Ports	Primary = 1/10 GigE built-in (RJ45) Aux = 1/10 GigE built-in (RJ45)	Primary = 1/10 GigE built-in (RJ45) Aux = 1/10 GigE built-in (RJ45) Primary40 = Optional 40 GigE second primary management port (QSFP)	Primary = 1/10 GigE built-in (RJ45) Aux = 1/10 GigE built-in (RJ45) Primary40 = Optional 40 GigE second primary management port (QSFP)	N / A	N / A

Riverbed® AppResponse

Power and Physical Specifications

AppResponse

Model				Storage Units (for Model 8190)	
	2190	4190	8190	Medium Storage Unit	Large Storage Unit
Product SKU	SCAN-02190-BASE-C	SCAN-04190-BASE-C	SCAN-08190-BASE-C	SCAN-SU-8	SCAN-SU-20
Dual Power Supplies (redundant)	Yes	Yes	Yes	Yes	Yes
Typical Power [Watts]	319 W	491 W	624 W	180 W	180 W
BTU	1087	1676	2127	614	614
Line Power Requirements	100V to 127V and 200V to 240V, 50Hz to 60Hz	100V to 127V and 200V to 240V, 50Hz to 60Hz	100V to 127V and 200V to 240V, 50Hz to 60Hz	100V to 240V 50Hz to 60Hz	100V to 240V 50Hz to 60Hz
Operating Temperature	10 to 40˚C (50 to 104˚F)	10 to 40˚C (50 to 104˚F)	10 to 40˚C (50 to 104˚F)	10 to 35˚C (50 to 95˚F)	10 to 35˚C (50 to 95˚F)
Rack Size	2 U	2 U	2 U	2 U	2 U
System Dimensions (LxWxH)	700 mm (L) X 438.5 mm (W) X 87 mm (H) 27.56" (L) X 17.26" (W) X 3.42" (H)	700 mm (L) X 438.5 mm (W) X 87 mm (H) 27.56" (L) X 17.26" (W) X 3.42" (H)	700 mm (L) X 438.5 mm (W) X 87 mm (H) 27.56" (L) X 17.26" (W) X 3.42" (H)	647 mm (L) X 437 mm (W) X 89 mm (H) 25.5" (L) X 17.2" (W) X 3.5" (H)	647 mm (L) X 437 mm (W) X 89 mm (H) 25.5" (L) X 17.2" (W) X 3.5" (H)
Packaging Dimensions (LxWxH)	914 mm (L) X 610 mm (W) X 305 mm (H) 36" (L) X 24" (W) X 12" (H)	914 mm (L) X 610 mm (W) X 305 mm (H) 36" (L) X 24" (W) X 12" (H)	914 mm (L) X 610 mm (W) X 305 mm (H) 36" (L) X 24" (W) X 12" (H)	876 mm (L) X 678 mm (W) X 290 mm (H) 34.5" (L) X 26.7" (W) X 11.4" (H)	876 mm (L) X 678 mm (W) X 290 mm (H) 34.5" (L) X 26.7" (W) X 11.4" (H)
Maximum Weight (without packaging)	65 lb	75 lb	75 lb	76 lb	76 lb
Rail Information	Mounting Rail Kit Included. Orderable Spare Part Number: RMK-5-2U	Mounting Rail Kit Included. Orderable Spare Part Number: RMK-5-2U	Mounting Rail Kit Included. Orderable Spare Part Number: RMK-5-2U	Mounting Rail Kit Included. Orderable Spare Part Number: RMK-4-JBOD	Mounting Rail Kit Included. Orderable Spare Part Number: RMK-4-JBOD
RoHS Compliant	Yes	Yes	Yes	Yes	Yes

1. AppResponse's Capture Performance is the sustained (bps) rate at which packets can be captured to disk without loss over long time periods while the appliance is also doing IP/TCP/UDP/Layer 4, etc. analysis. The three Capture Performance specs for the 8190 represent the achievable Capture Performances with one, two, and three or more attached storage units, respectively. Capture Performance in bps is not necessarily the same as the total bps/pps that is entering an AppResponse appliance if you configure pre-capture packet slicing and/or packet sampling. In addition to bps, Capture Performance can also be expressed in units of pps by dividing bps by (measured or presumed) average packet size. Capture Performance expressed as pps can be artificially inflated by: (a) presuming unrealistically low average packet sizes such as 64 bytes; and/or (b) configuring an appliance to only do capture and not do packet analysis at the same time. In contrast, Riverbed's performance benchmarking: (i) used an average packet size of 600-750 bytes which is a more reliable representation of real-world IT environments; (ii) did not use pre-capture slicing or sampling; and (iii) used appliances where both packet capture and packet analysis were occurring at the same time.
2. AppResponse's Analysis Performance is the number of concurrent TCP/UDP/Layer 4 connections/streams/flows that were analyzed without loss over long periods of time while the appliance was also performing packet capture. In this context, Packet Analysis represents tasks such as collating packets into bi-directional TCP/UDP connections/flows, mapping these to logical groups (e.g., Host Groups), auto-classification into well-known protocols and applications (e.g., Facebook, Google), and tracking individual TCP connection activity to extract TCP performance information (e.g., server response time, % retransmissions, metrics that comprise the Response Time Composition Chart). In addition to connections/min, Analysis Performance can also be expressed in units of bps by multiplying connections/min with measured (or presumed) values for the average number of packets per connection and average packet size (in bits). To mimic typical real-world IT environments, Riverbed's testing was based on (playing back anonymized) real-world traffic with 90 packets/connection on average and an average packet size of 600-750 bytes.
3. TB always means 10^12 bytes for everything related to storage.

Note: Riverbed AppResponse Flex licenses can be moved across AppResponse xx80, xx90 and virtual/VM/cloud models. The FLEX-SM license can be freely exchanged between VSCAN-5000, VSCAN-AWS, VSCAN-AZR, SCAN-2180 and SCAN-2190. FLEX-MD licenses can be freely exchanged between SCAN-4180 and SCAN-4190 models. FLEX-LG licenses can be freely exchanged between SCAN-8180 and SCAN-8190 models.

Riverbed® AppResponse

Model Specifications

AppResponse Virtual						AppResponse Cloud	
Model	VSCAN-00100	VSCAN-00500	VSCAN-02000	VSCAN-FLOW	VSCAN-05000	VSCAN-AWS-SUB-010	VSCAN-AZR-SUB-010
Secondary Storage	Up to 100 GB	Up to 2 TB	Up to 8 TB	Up to 100 GB	Up to 8 TB	ST1, 7 TiB (minimum)	E60, 8 TiB (minimum)
Hypervisor	VMWare ESXi 7.0 and 8.0 Nutanix AOS 6.5.5 with AHV hypervisor Microsoft Hyper-V running on Windows Server 2019 and 2022				VMWare ESXi 7.0 and 8.0	AWS EC2	Azure Virtual Machines
vCPU	4				16	16 (c5n.4xlarge)	16 (F16s_v2)
Memory	12 GB				32 GB	42 GiB (c5n.4xlarge)	32 GiB (F16s_v2)
System Disk Space	100 GB				2 TB	2 TB	
Capture Ports	VMware: up to 8 virtual NICs or 1 physical NIC using VMDirectPath I/O pass-through[2] Hyper-V: up to 4 Nutanix: 1[1]				VMware: up to 8 virtual NICs or 1 physical NIC using VMDirectPath I/O passthrough[2]	1 (shared mgmt/capture port)	
Management Ports	VMware: 2 Nutanix: 1 (shared mgmt/capture port)				2	1 (shared mgmt/capture port)	

1. On Nutanix platform, traffic is received through a VxLAN or GRE tunnel on the primary interface. There are no dedicated capture ports.
2. The following NICs are supported with VMDirectPath I/O:
   a. Intel 82599 10 Gigabit Dual Port Network Connection
   b. Intel Ethernet Controller X710 for 10GbE SFP+
   c. Broadcom BCM57412 NetXtreme-E 10Gb RDMA Ethernet Controller
   d. Intel Ethernet Controller E810-XXVDA2

Riverbed® NetProfiler and Flow Gateway

Product Specifications

NetProfiler and Flow Gateway xx90 Appliances

Model	NetProfiler	Flow Gateway
	NP-4290-BASE	FG-2290-BASE
De-duplicated Flow Capacity (flows per minute)	100,000 to 1,500,000	100,000 to 8,000,000
Raw Flow Capacity (flows per minute)	7.5 M	40 M
Raw Disk Capacity	79 TB	8 TB
Usable Disk Capacity	32 TB	4 TB
Optional 10GB Fibre NIC Support	Yes	Yes
RAID	RAID 1 / 10	RAID 1
Hard Disk Drives	8	2
Solid State Drives	6	2
RAM	512 GB	128 GB
Primary Management Port (10/100/1000/10000 RJ45)	Yes	Yes
Flow as Data Source[1]	Yes	Yes
Dual Power Supplies (redundant)	Yes	Yes
Power [Watts] (typical)	547	314
BTU	1864	1070
Operating Temperature	10C to 40C	10C to 40C
Relative Humidity (shipping)	90%, non-condensing at 40C	90%, non-condensing at 40C
Rack Size	2 U	2 U
System Dimension (LxWxH)	27.56" (L) X 17.26" (W) X 3.42" (H) 700 mm (L) X 438.5 mm (W) X 87 mm (H)	27.56" (L) X 17.26" (W) X 3.42" (H) 700 mm (L) X 438.5 mm (W) X 87 mm (H)
Packaging Dimensions (LxWxH)	36" (L) X 24" (W) X 12" (H) 914 mm (L) X 610 mm (W) X 305 mm (H)	36" (L) X 24" (W) X 12" (H) 914 mm (L) X 610 mm (W) X 305 mm (H)
Weight (without packaging)	65 lbs	65 lbs
Rail Information	RMK-4-2U	RMK-4-2U
RoHS Compliant	Yes	Yes

1. Accepts NetFlow (V1, V5, V7, and V9), Enhanced NetFlow, IPFIX, cFlow, Cisco NBAR and NBAR2, Cisco MediaNet, Cisco ASA NSEL, Citrix AppFlow, sFlow V2 and V5, J-Flow, Packeteer FDR, Palo Alto Networks, Riverbed SteelFlow, and flows from Azure NSG Flow Logs and AWS VPS Flows.

Note: Riverbed NetProfiler Flex licenses can be freely exchanged between NetProfiler 4280, 4290 and virtual/VM/cloud models. Riverbed Flow Gateway Flex licenses can be freely exchanged between Flow Gateway 2280, 2290 and virtual/VM/cloud models.

Riverbed® NetProfiler Virtual

System Requirements

NetProfiler Virtual Base / Expansion
Supports up to 40 million de-duplicated flows per minute[5]

Model	SCNP-VE-BASE / SCNP-VE-EXP				
De-duplicated Flow Capacity (flows per minute)	Up to 10,000	20,000 to 100,000	110,000 to 500,000	510,000 to 1,000,000	1,010,000 to 1.500,000
Raw Flow Capacity (flows per minute)	Up to 50,000	100,000 to 500,000	550,000 to 2,500,000	2,550,000 to 5,000,000	5,050,000 to 7,500,000
Hypervisor	VMWare ESXi 7.0, 8.0, Nutanix 6.5.2 LTS, and Microsoft Hyper-V 2022				
vCPU[6]	4 vCPUs minimum	4 vCPUs minimum / 12 vCPUs recommended	8 vCPUs minimum / 16 vCPUs recommended	12 vCPUs minimum/ 24 vCPUs recommended	16 vCPUs minimum / 32 vCPUs recommended
	2.6 GHz recommended				
RAM	8 GB minimum / 32 GB recommended	16 GB minimum / 64 GB recommended	32 GB minimum / 96 GB recommended	64 GB minimum / 128 GB recommended	96 GB minimum / 256 GB recommended
System Disk Space	450 GB				
Flow Storage Space	500 GB minimum / 1 TB recommended	1 TB minimum / 2 TB recommended	2 TB minimum / 4 TB recommended	4 TB minimum / 10 TB recommended	5 TB minimum / 20 TB recommended
	50 TB maximum[8]				
Flow Cache Space (optional)[7]	Not recommended (500 GB minimum)	Not recommended (500 GB minimum)	500 GB (optional)	500 GB minimum / 1 TB recommended	500 GB minimum / 2 TB recommended
Flow Storage IOPS (primary data storage)	150 minimum / 500+ recommended	500 minimum / 2,000+ recommended	1,500 minimum / 4,000+ recommended		2,000 minimum / 5,000+ recommended
Flow Cache IOPS (optional)[9]	300 minimum / 1,000+ recommended	1,000 minimum / 4,000+ recommended	3,000 minimum / 8,000+ recommended		4,000 minimum / 9,000+ recommended

5. Up to 32 SCNP-VE-EXP expansion modules may be added to each SCNP-BASE-VE system. Each additional SCNP-EXP-VE enables up to 1.5M de-duplicated FPM.A maximum of 40M de-duplicated flows/min is supported. SCNP-DP-VE is required after more than 10 million FPM.
6. We require this range of CPUs to be provisioned to the virtual machine, and ensure this is the number of CPU cores or threads available on the hypervisor.
7. Only provision flow cache storage if it is on separate, significantly faster datastore. Additionally, it should be only a fraction (i.e 10%) of the primary storage. Further, it should always be a smaller size than the primary flow storage, they should not be the exact same size.
8. NetProfiler support a 50 TB maximum disk volume size.
9. The optional Flow Cache disk can be used to store the most recently collected data on a faster storage tier to make reporting on the more recent data faster. We recommend provisioning SSD storage which is 10% the size of the primary flow storage.

Note: The availability, export or re-export of these products or specific features are subject to the export laws and regulations of the U.S. and the laws and regulations of any applicable foreign agency or authority.

Riverbed® NetProfiler Virtual

System Requirement

NetProfiler Virtual Dispatcher

Model	SCNP-VE-DP
De-duplicated Flow Capacity (flows per minute)	0 to 40,000,000
Raw Flow Capacity (flows per minute)	0 to 150,000,000
Flow Capacity beyond which DP is required	10,000,000
Hypervisor	VMWare ESXi 7.0, 8.0, Nutanix 6.5.2 LTS, and Microsoft Hyper-V 2022
vCPU	16 vCPUs minimum / 32 vCPUs recommended 2.1 GHz minimum / 2.6 GHz recommended
RAM	32 GB minimum /96 GB recommended
System Disk Space	120 GB

Riverbed® NetProfiler Cloud

Model Specifications

NetProfiler Cloud Base/Expansion

Model	SCNP-VE / SCNP-VE-EXP			
De-duplicated Flow Capacity (flows per minute)	Up to 100,00	110,000 to 375,000	385,000 to 750,000	760,000 to 1,500,000
Raw Flow Capacity (flows per minute)	Up to 500,000	550,000 to 1,875,000	1,925,000 to 3,750,000	3,800,000 to 7,500,000
AWS Instance Type	r4.xlarge	r4.2xlarge	r4.4xlarge	r4.8xlarge
Azure Instance Type	E4s_v3	E8s_v3	E16s_v3	E32s_v3
System Disk Space	450 GB			
System Disk Type	AWS (GP2 SSD recommended), Azure (Premium SSD recommended)			
Flow Storage Space	500 GB minimum / 2 TB recommended	2 TB minimum / 4 TB recommended	4 TB minimum / 10 TB recommended	5 TB minimum / 20 TB recommended
	50 TB maximum[2]			
Flow Storage Type	AWS (GP2 SSD recommended), Azure (Premium SSD recommended)			
Flow Cache Space (optional)[1]	Not recommended (500 GB minimum)	500 GB (optional)	500 GB minimum / 1 TB recommended	500 GB minimum / 2 TB recommended
Flow Storage Cache Type	AWS (GP2 SSD minimum/ io1 SSD recommended), Azure (Premium SSD recommended)			
Management Ports	1			

1. Only provision flow cache storage if its on a separate, significantly faster datastore. Additionally, it should only be a fraction (i.e. 10%) of the primary Flow Storage. Further, it should always be a smaller size than the primary flow storage, they should not be the exact same size.
2. While NetProfiler supports 50 TB maximum, disk volume size is limited to 16T on AWS and 32T on Azure.

Riverbed® NetProfiler Cloud

Model Specifications

NetProfiler Cloud Dispatcher

Model	SCNP-VE-DP	
De-duplicated Flow Capacity (flows per minute)	0 to 10,000,000	10,010,000 to 30,000,000
Raw Flow Capacity (flows per minute)	0 to 50,000,000	50.050,000 to 150,000,000
AWS Instance Type	r4.8xlarge	
Azure Instance Type	E32s_v3	E48s_v3
System Disk Type	120GB	
System Disk Space	AWS (GP2 SSD recommended), Azure (Premium SSD recommended)	

Riverbed® Flow Gateway Virtual

System Requirements

Flow Gateway Virtual

Model	SCFG-VE						
De-duplicated Flow Capacity (flows per minute)	Up to 10,000	20,000 to 100,000	110,000 to 1,000,000		1,010,000 to 2,000,000	2,010,000 to 4,000,000	4,010,000 to 8,000,000
Raw Flow Capacity (flows per minute)	Up to 50,000	100,000 to 500,000	550,000 to 5,000,000		5,050,000 to 10,000,000	10,050,000 to 20,000,000	20,050,000 to 30,000,000
Hypervisor	VMWare ESXi 7.0, 8.0, Nutanix 6.5.2 LTS, and Microsoft Hyper-V 2022						
vCPU	2 vCPUs recommended	2 vCPUs minimum / 4 vCPUs recommended	4 vCPUs minimum / 6 vCPUs recommended		6 vCPUs minimum / 8 CPUs recommended	8 vCPUs minimum / 12 vCPUs recommended	12 vCPUs minimum / 18 vCPUs recommended
	2.6 GHz recommended						
RAM	2 GB minimum / 4 GB recommended	4 GB minimum / 8 GB recommended	8 GB minimum / 16 GB recommended	16 GB minimum / 24 GB recommended	24 GB minimum / 32 GB recommended	32 GB minimum / 48 GB recommended	48GB minimum / 64 GB recommended
System Disk Space	120 GB						
Flow Storage	500 GB minimum / 2 TB maximum						
Management Ports	2						

Riverbed® Flow Gateway Virtual

System Requirements

Flow Gateway Virtual with Advanced Security Module

Model	SCFG-VE						
De-duplicated Flow Capacity (flows per minute)	Up to 10,000	20,000 to 100,000	110,000 to 1,000,000		1,010,000 to 2,000,000	2,010,000 to 4,000,000	4,010,000 to 8,000,000
Raw Flow Capacity (flows per minute)	Up to 50,000	100,000 to 500,000	550,000 to 5,000,000		5,050,000 to 10,000,000	10,050,000 to 20,000,000	Up to 20,000,000
Hypervisor	VMWare ESXi 7.0, 8.0, Nutanix 6.5.2 LTS, and Microsoft Hyper-V 2022						
vCPU	4 vCPUs recommended	4 vCPUs minimum / 6 vCPUs recommended	6 vCPUs minimum / 8 vCPUs recommended		8 vCPUs minimum / 12 vCPUs recommended	12 vCPUs minimum / 16 vCPUs recommended	16 vCPUs minimum / 24 vCPUs recommended
	2.6 GHz recommended						
RAM	2 GB minimum / 4 GB recommended	4 GB minimum / 8 GB recommended	8 GB minimum / 16 GB recommended	16 GB minimum / 24 GB recommended	24 GB minimum / 32 GB recommended	32 GB minimum / 48 GB recommended	48GB minimum / 64 GB recommended
System Disk Space	120 GB						
Flow Storage	500 GB minimum / 2 TB maximum						
Management Ports	2						

Riverbed® Flow Gateway Cloud

Model Specifications

Model	SCFG-VE			
De-duplicated Flow Capacity (flows per minute)	Up to 100,000	110,000 to 1,000,000	1,010,000 to 3,000,000	3,010,000 to 8,000,000
Raw Flow Capacity (flows per minute)	Up to 500,000	550,000 to 5,000,000	5,050,000 to 15,000,000	15,050,000 to 30,000,000
AWS Instance Type	r4.large or m4.large	r4.xlarge or m4.xlarge	r4.2xlarge or m4.2xlarge	r4.4xlarge or m4.4xlarge
Azure Instance Type	E2s_v3 or D2s_v3	E4s_v3 or D4s_v3	E8s_v3 or D8s_v3	E16s_v3 or D16s_v3
System Disk Space	120 GB			
System Disk Type	AWS (GP2 SSD recommended), Azure (Premium SSD)			
Flow Storage	500 GB minimum / 2 TB maximum			
Flow Storage Type	AWS (GP2 SSD recommended), Azure (Premium SSD recommended)			
Management Ports	Up to 2			

Riverbed® Flow Gateway Cloud

Model Specifications

Flow Gateway Cloud with Advanced Security Module

Model	SCFG-VE			
De-duplicated Flow Capacity (flows per minute)	Up to 100,000	110,000 to 1,000,000	1,010,000 to 3,000,000	3,010,000 to 8,000,000
Raw Flow Capacity (flows per minute)	Up to 500,000	550,000 to 5,000,000	5,050,000 to 10,000,000	Up to 10,000,000
AWS Instance Type	r4.xlarge	r4.2xlarge	r4.4xlarge	r4.8xlarge
Azure Instance Type	E4s_v3	E8s_v3	E16s_v3	E32s_v3
System Disk Space	120 GB			
System Disk Type	AWS (GP2 SSD recommended), Azure (Premium SSD recommended)			
Flow Storage	500 GB minimum / 2 TB maximum			
Flow Storage Type	AWS (GP2 SSD recommended), Azure (Premium SSD recommended)			
Management Ports	Up to 2			

Riverbed® NetIM

Model Specifications

NetIM Manager (Virtual and Cloud Images)

Devices[1]	up to 1K	2.5K	5K	10K	15K	20K	25K	30K
Interface Count[2]	40k	100K	200K	400K	600K	800K	1M	1.2M
Polled Interface Count	20k	50K	100K	200K	300K	400K	500K	600K
vCPUs	4			6	8		10	
Memory	20 GB	24 GB	28 GB	32 GB	36 GB	48 GB	52 GB	60 GB
OS Storage	75 GB							
App Storage	500 GB	1 TB	2 TB				3 TB	
Hypervisor[5,6]	VMware ESXi 7.x, ESXi 8.x[7], Azure Hypervisor, AWS Hypervisor, Microsoft Hyper-V 2019, Microsoft Hyper-V 2022, Nutanix AOS 6.5.x LTS (AHV versions 20220304.342)							
Managers	1							

Riverbed® NetIM

Model Specifications

NetIM Data Manager (Virtual and Cloud Images)

Devices	up to 1K	2.5K	5K	10K	15K	20K	25K	30K
Interface Count	40k	100K	200K	400K	600K	800K	1M	1.2M
Polled Interface Count	20k	50K	100K	200K	300K	400K	500K	600K
vCPUs	N / A			4				
Memory	N / A			16 GB				
OS Storage	N / A			75 GB				
App Storage	N / A			2 TB			3 TB	
Hypervisor[5,6]	VMware ESXi 7.x, ESXi 8.x[7], Azure Hypervisor, AWS Hypervisor, Microsoft Hyper-V 2019, Microsoft Hyper-V 2022, Nutanix AOS 6.5.x LTS (AHV versions 20220304.342)							
Data Managers[3]	0			1		2		3

Riverbed® NetIM

Model Specifications

NetIM Worker (Virtual and Cloud Images)

Devices	up to 1K	2.5K	5K	10K	15K	20K	25K	30K
Interface Count	40k	100K	200K	400K	600K	800K	1M	1.2M
Polled Interface Count	20k	50K	100K	200K	300K	400K	500K	600K
vCPUs	4							
Memory	16 GB							
OS Storage	75 GB							
App Storage	100 GB							
Hypervisor[5,6]	VMware ESXi 7.x, ESXi 8.x[7], Azure Hypervisor, AWS Hypervisor, Microsoft Hyper-V 2019, Microsoft Hyper-V 2022, Nutanix AOS 6.5.x LTS (AHV versions 20220304.342)							
Workers[4]	1		2	4	6	8	10	12

Riverbed® NetIM

Model Specifications

NetIM Core (Virtual and Cloud Images)

Devices	up to 1K	2.5K	5K	10K	15K	20K	25K	30K
Interface Count	40K	100K	200K	400K	600K	800K	1M	1.2M
Polled Interface Count	20K	50K	100K	200K	300K	400K	500K	600K
vCPUs	4		6			8		
Memory	16 GB		32 GB	48 GB	64 GB	80 GB	96 GB	112 GB
OS Storage	75 GB							
App Storage	100 GB		200 GB	250 GB	300 GB	350 GB	400 GB	450 GB
Hypervisor[5,6]	VMware ESXi 7.x, ESXi 8.x[7], Azure Hypervisor, AWS Hypervisor, Microsoft Hyper-V 2019, Microsoft Hyper-V 2022, Nutanix AOS 6.5.x LTS (AHV versions 20220304.342)							
Core	1							

1. Manager and Data Manager Application Storage requirements are primarily dependent on metric retention and roll-up settings. For proof-of-concepts, the default App Storage of 100 GB may be enough if metric retention settings are reduced from the system defaults.
2. Assuming 5-minute polling and minimal latency between workers and polled elements. If CoS metrics are polled, each CoS definition applied to a polled interface counts as an additional logical interface, thereby increasing the overall polled interface count).
3. Write and query performance may improve with additional Data Manager nodes.
4. Use the netimsh "scale" command on the Manager to scale the poller and alerting services to equal the number of deployed Workers. See the NetIM Installation Guide or Upgrade Guide for instructions.
5. VMotion should be disabled for all NetIM VMs.
6. ESXi servers must be geographically collocated in the same data center for minimum latency.
7. The NetIM Virtual Appliance OVA is certified for deployment on VMware ESXi. In many cases, NetIM may be successfully deployed on other major hypervisors (i.e. KVM, AHV); however, these other hypervisors may not have been QAed or certified. Further, Riverbed maintains the right to deny support and provide support only on a best-effort basis for deployments on uncertified hypervisors.

Riverbed® Portal

Model Specifications

Portal

	VMware	AWS	Azure
Product SKU	SCPRTL-FNDTN		
Hypervisor	ESXi 7.0 or 8.0 and Nutanix AOS 6.10.1.6 with AHV hypervisor, Microsoft Hyper-V running on Windows Server 2019 and 2022	AWS EC2	Azure Virtual Machines
vCPUs[1]	4	4 (c5.xlarge)	4 (Standard B4ms)
Memory	16 GB	8 GiB (c5.xlarge)	16 GiB (Standard B4ms)
OS Storage	100 GB	–	–
Instance type	–	C5.xlarge	B4MS
System Disk Space	–	100 GB	100 GB
System Disk Type	–	GP2 SSD recommended	Premium SSD recommended
Supported Browsers[2]	Firefox ESR 128.11.0esr, Chrome 136.0.7103.93, Edge Browser 137.0.3296.68		

1. The host CPUs must support the POPCNT CPU instructions (the Nehalem generation of Xeon CPUs (or later).
2. Internet Explorer is not supported. Other versions or browsers may or may not be compatible.

Riverbed® Packet Analyzer Plus

System Requirements

Packet Analyzer Plus requires, at a minimum, the following

Packet Analyzer Plus

Operating Systems	Microsoft Windows 10*, 11, Windows Server 2016, 2019 and 2022 Microsoft update **https://support.microsoft.com/en-in/kb/2999226** Microsoft .NET Framework 4.6 (or later)
Suggested Hardware Platform	A Dual-core 2.0 GHz CPU or better
Memory	2 GB or more of system memory
Disk Space	300 MB of disk space for a base installation; additional space is required to store generated reports or trace files
Graphics Support	Graphics card with minimum resolution of 1024 x 768

***Also note:** Local System Live Interfaces are not supported in Windows 10 currently.

Table 4 System requirement for running Packet Analyzer Plus.

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About Riverbed

Riverbed, the leader in AIOps for observability, helps organizations optimize their user's experiences by leveraging AI automation for the prevention, identification, and resolution of IT issues. With over 20 years of experience in data collection and AI and machine learning, Riverbed's open and AI-powered observability platform and solutions optimize digital experiences and greatly improves IT efficiency. Riverbed also offers industry-leading Acceleration solutions that provide fast, agile, secure acceleration of any app, over any network, to users anywhere. Together with our thousands of market-leading customers globally – including 95% of the FORTUNE 100 – we are empowering next-generation digital experiences. Learn more at riverbed.com.