

# RSA NetWitness Logs and Packets

## Server, DAC, and SAN Hardware Specifications

This document provides the Hardware specifications for RSA NetWitness Suite servers and Direct Attached Capacity (DAC).

### Servers

The following table provides a summary of the RSA NetWitness Suite Servers.

Component	Description
Security Analytics Server	Security Analytics Server is the Web UI, management server and primary user interface.
Decoder	Decoder captures and stores raw data. Decoders are specific to Logs and Packets. Creates metadata of raw data capture and enriches with security context.
Concentrator	Concentrator stores and indexes metadata for fast queries and retrieval of raw data capture.
Hybrid (Decoder / Concentrator)	Decoder / Concentrator combination in a single appliance for branch monitoring. Hybrids are specific to both Logs and Packets.
Event Stream Analysis (ESA)	ESA is a real-time correlation and analysis engine across logs, packets, endpoints, and NetFlow.
Broker	Broker aggregates data from configured Concentrators. Brokers facilitate queries across multiple Concentrators and Decoders to improve performance.
Archiver	Archiver provides long-term retention and compression of log data for compliance reporting.
Malware Analysis (MA)	MA is the automated malware analysis processor. MA analyzes and scores sessions and the embedded files within these sessions, by scoring four categories: Network, Static Analysis, Community and Sandbox.

# Server Specifications

## Security Analytics Server, Decoder, Concentrator

Specification	Security Analytics Server	Decoder	Concentrator
Model	Dell PowerEdge R630xl	Dell PowerEdge R630xl	Dell PowerEdge R630xl
Processor Type	Intel Xeon E5 -2667v3	Intel Xeon E5 - 2667v3	Intel Xeon E5 -2667v3
Processor Speed	3.2 GHz	3.2 GHz	3.2 GHz
Cache	20 MB	20 MB	20 MB
# of Cores	8	8	8
# of Processors	2	2	2
# of Threads	16	16	16
Total Memory	128 GB	128 GB	128 GB
Internal Disk Controller	Dell PERC H730P	Dell PERC H730P	Dell PERC H730P
External Disk Controller	Dell PERC H830	Dell PERC H830	Dell PERC H830
SAN Connectivity (HBA) (optional)	Emulex 2X8Gb Fiber	Emulex 2X8Gb Fiber	Emulex 2X8Gb Fiber
Remote Management Card	iDRAC8 Enterprise	iDRAC8 Enterprise	iDRAC8 Enterprise
Drives	Total – 4 Drives 2 X 1TB, 2.5" HDD 2 X 2TB, 2.5" HDD	Total – 4 Drives 2 X 1TB, 2.5" HDD 2 X 2TB, 2.5" HDD	Total – 4 Drives 2 X 1TB, 2.5" HDD 2 X 2TB, 2.5" HDD
Drives Speed	7.2k RPM	7.2k RPM	7.2k RPM
Chassis	1U	1U	1U
Weight	18.4 kg (40.5 lbs)	18.4 kg (40.5 lbs)	18.4 kg (40.5 lbs)
NIC Card	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available
Dimensions	H: 4.28 cm (1.68 in.) x W: 48.23 cm (18.98 in.) x D: 75.51 cm (29.72 in.)	H: 4.28 cm (1.68 in.) x W: 48.23 cm (18.98 in.) x D: 75.51 cm (29.72 in.)	H: 4.28 cm (1.68 in.) x W: 48.23 cm (18.98 in.) x D: 75.51 cm (29.72 in.)
Power	1100W Redundant	1100W Redundant	1100W Redundant
Power Cords	Wall	Wall	Wall
BTU/hr	4100 BTU/hr (max)	4100 BTU/hr (max)	4100 BTU/hr (max)
Amps (Spec)	1100W/220VAC = 5A	1100W/220VAC = 5A	1100W/220VAC = 5A
Actual Amp Draw (Post Startup)	2.1 Amps	2.1 Amps	2.1 Amps
Events Per Second (EPS)	N/A	Logs – 30K EPS	Aggregate EPS of all Log Decoders Connected <30K EPS
Throughput	N/A	Packets – 2 Gbps to 10 Gbps	Aggregate throughput of all decoders connected < 10 Gbps

\*NIC Card options (e.g. 2x10Gb Copper) are available for swap with onboard daughter card or add-on

# Server Specifications

## Hybrid, ESA, and Broker

Specification	Hybrid (Decoder / Concentrator)	Event Stream Analysis (ESA)	Broker
Model	Dell PowerEdge R730xd	Dell PowerEdge R630xl	Dell PowerEdge R630xl
Processor Type	Intel Xeon E5 - 2680v3	Intel Xeon E5 -2680v3	Intel Xeon E5 -2667v3
Processor Speed	2.5 GHz	2.5 GHz	3.2 GHz
Cache	30 MB	30 MB	20 MB
# of Cores	12	12	8
# of Processors	2	2	2
# of Threads	24	24	16
Total Memory	128 GB	256 GB	128 GB
Internal Disk Controller	Dell PERC H730P	Dell PERC H730P	Dell PERC H730P
External Disk Controller	Dell PERC H830	Dell PERC H830	Dell PERC H830
SAN Connectivity (HBA) – Optional	N/A	N/A	N/A
Remote Management Card	iDRAC8 Enterprise	iDRAC8 Enterprise	iDRAC8 Enterprise
Drives	<u>Total – 14 Drives</u> 4 X 1TB, 3.5" HDD 8 X 6TB, 3.5" HDD 2 X 800GB, 2.5" SSD	<u>Total – 6 Drives</u> 2 X 1TB, 2.5" HDD 4 X 2TB, 2.5" HDD	<u>Total – 4 Drives</u> 2 X 1TB, 2.5" HDD 2 X 2TB, 2.5" HDD
Drives Speed	7.2k RPM	7.2k RPM	7.2k RPM
Chassis	2U	1U	1U
Weight	36.5 kg (80.47 lbs)	18.4 kg (40.5 lbs)	18.4 kg (40.5 lbs)
NIC Card	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available
Dimensions	H: 8.73 cm (3.44 in.) x W: 44.40 cm (17.49 in.) x D: 68.40 cm (26.92 in.)	H: 4.28 cm (1.68 in.) x W: 48.23 cm (18.98 in.) x D: 75.51 cm (29.72 in.)	H: 4.28 cm (1.68 in.) x W: 48.23 cm (18.98 in.) x D: 75.51 cm (29.72 in.)
Power	1100W Redundant	1100W Redundant	1100W Redundant
Power Cords	Wall	Wall	Wall
BTU/hr	4100 BTU/hr (max)	4100 BTU/hr (max)	4100 BTU/hr (max)
Amps (Spec)	1100W / 220VAC = 5A	1100W / 220VAC = 5A	1100W/220VAC=5A
Actual Amp Draw (Post Startup)	2.7 Amps	2.1 Amps	2.1 Amps
Events Per Second (EPS)	Logs – 20K EPS	100K EPS	
Throughput	Packets – 1Gbps	N/A	

\* NIC Card options (e.g. 2x10Gb Copper) are available for swap with onboard daughter card or add-on

# Server Specifications

## Archiver and Malware Analysis

Specification	Archiver	Malware Analysis
Model	Dell PowerEdge R630xl	Dell PowerEdge R630xl
Processor Type	Intel Xeon E5 -2667v3	Intel Xeon E5 - 2667v3
Processor Speed	3.2 GHz	3.2 GHz
Cache	20 MB	20 MB
# of Cores	8	8
# of Processors	2	2
# of Threads	16	16
Total Memory	128 GB	128 GB
Internal Disk Controller	Dell PERC H730P	Dell PERC H730P
External Disk Controller	Dell PERC H830	Dell PERC H830
SAN Connectivity (HBA) (optional)	Emulex 2X8Gb Fiber	Emulex 2X8Gb Fiber
Remote Management Card	iDRAC8 Enterprise	iDRAC8 Enterprise
Drives	<u>Total – 4 Drives</u> 2 X 1TB, 2.5" HDD 2 X 2TB, 2.5" HDD	<u>Total – 4 Drives</u> 2 X 1TB, 2.5" HDD 2 X 2TB, 2.5" HDD
Drives Speed	7.2k RPM	7.2k RPM
Chassis	1U	1U
Weight	18.4 kg (40.5 lbs)	18.4 kg (40.5 lbs)
NIC Card	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available	<u>On Board</u> 2 X 10 Gb & 2 X 1Gb Copper * Other Options Available
Dimensions	H: 4.28 cm (1.68 in.) x W: 48.23 cm (18.98 in.) x D: 75.51 cm (29.72 in.)	H: 4.28 cm (1.68 in.) x W: 48.23 cm (18.98 in.) x D: 75.51 cm (29.72 in.)
Power	1100W Redundant	1100W Redundant
Power Cords	Wall	Wall
BTU/hr	4100 BTU/hr (max)	4100 BTU/hr (max)
Amps (Spec)	1100W/220VAC = 5A	1100W/220VAC = 5A
Actual Amp Draw (Post Startup)	2.1 Amps	2.1 Amps
Events Per Second (EPS)	N/A	N/A
Throughput	N/A	N/A

\* NIC Card options (e.g. 2x10Gb Copper) are available for swap with onboard daughter card or add-on

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# Storage Options

## Overview

There are several options to add additional capacity either through Direct Attached Capacity (DAC) or Storage Area Network (SAN). The following is a summary of the different options for each server type:

- **Hybrid**
  - Supports capability for adding one High Density DAC
- **Decoder**
  - Supports up to 8 High Density DACs, one UltraDAC and connectivity to SAN.  
*NOTE: Connectivity to SAN requires Emulex card.*
- **Concentrator**
  - Supports up to 8 High Performance DACs as well as connectivity to SAN.  
*NOTE: Connectivity to SAN requires Emulex card.*
- **Archiver**
  - Supports up to 8 High Density DACs, one UltraDAC and connectivity to SAN for hot/warm storage. Cold storage supports NFS connectivity to Isilon.  
*NOTE: Connectivity to SAN requires Emulex card.*

The tables on the next set of pages provide DAC specifications for each server type.

# DAC Specifications

## Decoder Capacity

Specification	High Density (32 TB)	High Density (46 TB)	Ultra High Density (142 TB)*	Ultra High Density (180 TB)*
Form Factor	3U	3U	4U	4U
Total # of Drives	14 + 1 Hotspare	14 + 1 Hotspare	58 + 2 Hotspare	58 + 2 Hotspare
Storage Capacity	32 TB	46 TB	142 TB	180 TB
HDD Size	3 TB	4 TB	3 TB	4 TB
# of HDDs	15	15	60	60
SSD Size	N/A	N/A	N/A	N/A
# of SSDs	N/A	N/A	N/A	N/A
Power Supply	235 W Redundant	235 W Redundant	1130 W Redundant	1130 W Redundant
Amps (Max at 100 Vac)	2.8	2.9	12	12
BTU/hr	800	800	3860	3860
Max Weight	68lbs	70lbs	213lbs	215lbs
Dimensions	Height: 5.25 inches Width: 17.5 inches Length: 14 inches	Height: 5.25 inches Width: 17.5 inches Length: 14 inches	Height: 7 inches Width: 17.5 inches Length: 34.5 inches	Height: 7 inches Width: 17.5 inches Length: 34.5 inches

\*3<sup>rd</sup> party racks are not supported; racks need to be purchased from RSA

## Concentrator Capacity

Specification	High Performance (12 TB)	High Performance (33 TB)
Form Factor	3U	3U
Total # of Drives	14 + 1 Hotspare	14 + 1 Hotspare
Storage Capacity(raw)	12 TB	33 TB
HDD Size	2 TB	4 TB
# of HDDs	8	9
SSD Size	200 GB	200 GB
# of SSDs	7	6
Power Supply	235 W Redundant	235 W Redundant
Amps (Max at 100 Vac)	2.8	2.9
BTU/hr	800	800
Max Weight	67lbs	68lbs
Dimensions	Height: 5.25 inches Width: 17.5 inches Length: 14 inches	Height: 5.25 inches Width: 17.5 inches Length: 14 inches

# DAC Specifications

## Hybrid Capacity

Specification	High Density (32 TB)	High Density (46 TB)
Form Factor	3U	3U
Total # of Drives	14 + 1 Hotspare	14 + 1 Hotspare
Storage Capacity	32 TB	46TB
HDD Size	3 TB	4 TB
# of HDDs	15	15
SSD Size	N/A	N/A
# of SSDs	N/A	N/A
Power Supply	235 W Redundant	235 W Redundant
Amps (Max at 100 Vac)	2.8	2.9
BTU/hr	800	800
Max Weight	67lbs	70lbs
Dimensions	Height: 5.25 inches Width: 17.5 inches Length: 14 inches	Height: 5.25 inches Width: 17.5 inches Length: 14 inches

## Archiver Capacity

Specification	High Density (32 TB)	High Density (46 TB)	Ultra High Density (142 TB)*	Ultra High Density (180 TB)*
Form Factor	3U	3U	4U	4U
Total # of Drives	14 + 1 Hotspare	14 + 1 Hotspare	58 + 2 Hotspare	58 + 2 Hotspare
Storage Capacity	32 TB	46 TB	142 TB	180 TB
HDD Size	3 TB	4 TB	3 TB	4 TB
# of HDDs	15	15	60	60
SSD Size	N/A	N/A	N/A	N/A
# of SSDs	N/A	N/A	N/A	N/A
Power Supply	235 W Redundant	235 W Redundant	1130 W Redundant	1130 W Redundant
Amps (Max at 100 Vac)	2.8	2.9	12	12
BTU/hr	800	800	3860	3860
Max Weight	68lbs	70lbs	213lbs	215lbs
Dimensions	Height: 5.25 inches Width: 17.5 inches Length: 14 inches	Height: 5.25 inches Width: 17.5 inches Length: 14 inches	Height: 7 inches Width: 17.5 inches Length: 34.5 inches	Height: 7 inches Width: 17.5 inches Length: 34.5 inches

\*3<sup>rd</sup> party racks are not supported; racks need to be purchased from RSA

# SAN Specifications

## Decoder, Concentrator, and Archiver Capacity

Specification	SAN Capacity (5600)	SAN Capacity (5800)	SAN Capacity (7600)
Total # of Drives	4 (min) / 500 (max)	4 (min) / 750 (max)	4 (min) / 1000 (max)
Storage Capacity	2000TB (max)	3000TB (max)	4000TB (max)
Max LUNs	1100 (pool) / 4096 (traditional)	2100 (pool) / 4096 (traditional)	3000 (pool) / 8192 (traditional)
LUN Pools	40	40	60
Max LUN Size	256TB (pool) / ∞ (traditional)	256TB (pool) / ∞ (traditional)	256TB (pool) / ∞ (traditional)
HDD Size	<a href="#">VNX Specs Page 6</a>	<a href="#">VNX Specs Page 6</a>	<a href="#">VNX Specs Page 6</a>
# of HDD	See Spec Sheet	See Spec Sheet	See Spec Sheet
SSD Size	<a href="#">VNX Specs Page 5</a>	<a href="#">VNX Specs Page 5</a>	<a href="#">VNX Specs Page 5</a>
# of SSDs	See Spec Sheet	See Spec Sheet	See Spec Sheet
Rack Mounted Units (per VNX)	Min: 6U Max: 103U	Min: 6U Max: 153U	Min: 6U Max: 203U
Power Supply	Depends on configuration	Depends on configuration	Depends on configuration
Amps (Max at 100 Vac)	Depends on configuration	Depends on configuration	Depends on configuration
BTU / hr	Depends on configuration	Depends on configuration	Depends on configuration
Weight	Depends on configuration	Depends on configuration	Depends on configuration
Dimensions	Height: 40 inches Width: 19 inches Depth: 36 inches	Height: 80 inches Width: 19 inches Depth: 36 inches	Height: 80 inches Width: 19 inches Depth: 36 inches