

# Dell EMC + VMware Cloud Infrastructure Platform for NFV

VMware vCloud NFV 1.5 – VMware vSAN Bill of Materials

Service Provider Solutions Group  
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# Revisions

Date	Description
October 2016	Initial release
April 2017	Updated for release 1.5

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## Overview

This guide provides Bill of Material information necessary to purchase the proper hardware to deploy the Dell EMC VMware vCloud NFV.

The hardware consists of:

- Three Dell EMC Networking: 1xS4048-ON and 2xS6010-ON
- Twelve Dell EMC PowerEdge R630 servers

Please consult with your Dell EMC sales representative to ensure proper preparation and submission of your hardware and software orders.

## Bill of Material for Dell EMC Networking

	<b>Dell Networking S6010-ON</b>	<b>2</b>
<b>SKU NUMBER</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>
634-BHCU	SW,L3,S6010-ON	2
450-AASX	250V,12A,2MTR,C13/C14	4
343-BBEP	Doc Kit, S6010-ON	2
808-8123	HW WRTY,NW S6010-ON	2
808-8209	PS NBD OS,NW S6010-ON,1YR	2
808-8232	PS NBD OS,NW S6010-ON,2YR EXT	2
808-8233	PS TECH SPT,NW S6010-ON,3YR	2
975-3461	HW WRTY,INFO,EXT	2
989-3439	INFO,PS TECH SPT CONTACT,ENTERPRISE	2
997-6306	Info 3rd Party O/S Warranted by Vendor	2
805-2402	PD Dell N/W Switch S6XXX,EDT	2
805-2404	PD Dell N/W Switch S6XXX,RIS	2
332-1286	US Order	2
210-AGMR	S6010-ON,IO/PSU,OS9	2
470-ABOF	MOD,CBL,MTP-4xLC,OM4,Breaklout,1M	4
470-ABOG	MOD,CBL,MTP-4xLC,OM4,Breaklout,3M	8
470-ABOK	MOD,CBL,MTP-MTP,OM4,Crossover,1M	2
407-BBBY	Dell QSFP+ SR Optic, 40GbE	12

Table 1 Bill of Materials – Dell EMC Networking S6010-ON

	<b>Dell Networking S4048T-ON</b>	<b>1</b>
<b>SKU NUMBER</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>
634-BCXM	SW,Layer 3 DNOS 9, S4048-ON	1
450-AASX	250V,12A,2MTR,C13/C14	2
343-BBEM	Doc Kit, S4048T-ON	1
808-6848	HW WRTY+SVC,NW S4048t-ON	1
808-6934	PS NBD OS,NW S4048t-ON,1YR	1
808-6957	PS NBD OS,NW S4048t-ON,2YR EXT	1
808-6958	PS TECH SPT,NW S4048t-ON,3YR	1
975-3461	HW WRTY,INFO,EXT	1
989-3439	INFO,PS TECH SPT CONTACT,ENTERPRISE	1
997-6306	Info 3rd Party O/S Warranted by Vendor	1
804-2145	PD N/W Switch S4XXX EDT	1
804-2146	PD Dell N/W Switch S4XXX RIS	1
973-2426	INFO Declined Remote Consulting Service	1
332-1286	US Order	1
210-AHMOV	S4048T-ON,PSU-IO,OS9	1

Table 2 Bill of Materials – Dell EMC Networking S4048T-ON

## 2 Bill of Material for Dell EMC PowerEdge R630 Servers

	ITEM DESCRIPTION	QUANTITY
	<b>PowerEdge R630 - Edge Cluster</b>	<b>4</b>
OPTION	OPTION DESCRIPTION	QUANTITY
R630X	PowerEdge R630 Server	1
NTPM	No Trusted Platform Module	1
83P	Chassis with up to 8, 2.5" Hard Drives, 3 PCIe Slots	1
D8SH	PowerEdge R630 Shipping- 8 Drive Chassis	1
HS1202	2 CPU up to 120W	1
2400MT	2400MT/s RDIMMs	1
PEOPT	Performance Optimized	1
H7301G	PERC H730 RAID Controller, 1GB NV Cache	1
OI8EN	iDRAC8, Enterprise with OpenManage Essentials, Server ConfigMgmt	1
DVDRW	DVD+/-RW, SATA, Internal	1
8BZ	Bezel 8 Drive Chassis	1
RRCMA	ReadyRails™ Sliding Rails With Cable Management Arm	1
HPBIOS	Performance BIOS Setting	1
750R	Dual, Hot-plug, Redundant Power Supply (1+1), 750W	1
125V10	NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North America	2
DOC	Electronic System Documentation and OpenManage DVD Kit	1
NOOS	No Operating System	1
NOMED	No Media Required	1
USNONE	US No Canada Ship Charge	1
NOINSTL	No Installation	1
NORCS	Declined Remote Consulting Service	1
URH	Unconfigured RAID for H330/H730/H730P (1-24 HDDs or SSDs)	1
X520LS	Intel X520 DP 10Gb DA/SFP+ Server Adapter, Low Profile, with SR Optics	1
216GSD	Internal Dual SD Module with 2x 16GB SD Cards	1
VMWXI	VMware ESXi 6.0 U2 Embedded Image on Flash Media with Customer Providing Their Own vSAN Licenses	1
VSE3US	vSphere Enterprise Plus 1CPU Lic, 3Y Subscription w/Dwngrd Rights	2
X520SR	Intel X520 DP 10Gb SR/SFP+, + I350 DP 1Gb Ethernet, Network Daughter Card, with SR Optics	1
PSP3Y4H	ProSupport Plus: 3 Year Mission Critical 4Hr On-site Service	1
H1TSHR	1TB 7.2K RPM Near-Line SAS 12Gbps 2.5in Hot-plug Hard Drive	7
ES2654	Intel® Xeon® E5-2650 v4 2.2GHz, 30M Cache, 9.60GT/s QPI, Turbo, HT, 12C/24T (105W) Max Mem 2400MHz	1
ES105W	Intel® Xeon® E5-2650 v4 2.2GHz, 30M Cache, 9.60GT/s QPI, Turbo, HT, 12C/24T (105W) Max Mem 2400MHz	1
16GBMM	16GB RDIMM, 2400MT/s, Dual Rank, x8 Data Width	16
80GCM3	800GB Solid State Drive SAS Mix Use MLC 12Gbps 2.5in Hot-plug Drive, PX04SM	1

Table 3 Bill of Materials – Edge Cluster Dell EMC PowerEdge R630

	ITEM DESCRIPTION	QUANTITY
	<b>PowerEdge R630 - Resource Cluster</b>	<b>4</b>
OPTION	OPTION DESCRIPTION	QUANTITY
R630X	PowerEdge R630 Server	1
2400MT	2400MT/s RDIMMs	1
PEOPT	Performance Optimized	1
H7301G	PERC H730 RAID Controller, 1GB NV Cache	1
OI8EN	iDRAC8, Enterprise with OpenManage Essentials, Server ConfigMgmt	1
RRCMA	ReadyRails™ Sliding Rails With Cable Management Arm	1
HPBIOS	Performance BIOS Setting	1
750R	Dual, Hot-plug, Redundant Power Supply (1+1), 750W	1
125V10	NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North America	2
DOC	Electronic System Documentation and OpenManage DVD Kit	1
NOOS	No Operating System	1
NOMED	No Media Required	1
USNONE	US No Canada Ship Charge	1
NOINSTL	No Installation	1
NORCS	Declined Remote Consulting Service	1
URH	Unconfigured RAID for H330/H730/H730P (1-24 HDDs or SSDs)	1
X520LS	Intel X520 DP 10Gb DA/SFP+ Server Adapter, Low Profile, with SR Optics	1
216GSD	Internal Dual SD Module with 2x 16GB SD Cards	1
VMWXI	VMware ESXi 6.0 U2 Embedded Image on Flash Media with Customer Providing Their Own vSAN Licenses	1
VSE3US	vSphere Enterprise Plus 1CPU Lic, 3Y Subscription w/Dwngprd Rights	2
X520SR	Intel X520 DP 10Gb SR/SFP+, + I350 DP 1Gb Ethernet, Network Daughter Card, with SR Optics	1
PSP3Y4H	ProSupport Plus: 3 Year Mission Critical 4Hr On-site Service	1
TPM20	Trusted Platform Module 2.0 FIPs, Common Criteria	1
ES2698	Intel® Xeon® E5-2698 v4 2.2GHz, 50M Cache, 9.60GT/s QPI, Turbo, HT, 20C/40T (135W) Max Mem 2400MHz	1
HS1602	2 CPU up to 160W	1
ES2698	Intel® Xeon® E5-2698 v4 2.2GHz, 50M Cache, 9.60GT/s QPI, Turbo, HT, 20C/40T (135W) Max Mem 2400MHz	1
32GBMM	32GB RDIMM, 2400MT/s, Dual Rank, x4 Data Width	16
80GCM3M	800GB Solid State Drive SAS Mix Use MLC 12Gbps 2.5in Hot-plug Drive, PX04SM	1
103P	Chassis with up to 10, 2.5" Hard Drives, 3 PCIe Slots	1
D10SH	PowerEdge R630 Shipping - 10/24 Drive Chassis	1
NODVD1	No Internal Optical Drive for 10 or 24 HDD Chassis	1
1024QS	Quick Sync Bezel 10/24 Drive Chassis	1
12TB1K	1.2TB 10K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive	8

Table 4 Bill of Materials – Resource Cluster Dell EMC PowerEdge R630

	ITEM DESCRIPTION	QUANTITY
	<b>PowerEdge R630 - Management Cluster</b>	<b>4</b>
OPTION	OPTION DESCRIPTION	QUANTITY
R630X	PowerEdge R630 Server	1
83P	Chassis with up to 8, 2.5" Hard Drives, 3 PCIe Slots	1
D8SH	PowerEdge R630 Shipping- 8 Drive Chassis	1
HS1202	2 CPU up to 120W	1
2400MT	2400MT/s RDIMMs	1
PEOPT	Performance Optimized	1
H7301G	PERC H730 RAID Controller, 1GB NV Cache	1
OI8EN	iDRAC8, Enterprise with OpenManage Essentials, Server ConfigMgmt	1
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DOC	Electronic System Documentation and OpenManage DVD Kit	1
NOOS	No Operating System	1
NOMED	No Media Required	1
USNONE	US No Canada Ship Charge	1
NOINSTL	No Installation	1
NORCS	Declined Remote Consulting Service	1
26404	Intel® Xeon® E5-2640 v4 2.4GHz, 25M Cache, 8.0GT/s QPI, Turbo, HT, 10C/20T (90W) Max Mem 2133MHz	1
E5264V	Intel® Xeon® E5-2640 v4 2.4GHz, 25M Cache, 8.0GT/s QPI, Turbo, HT, 10C/20T (90W) Max Mem 2133MHz	1
16GBMM	16GB RDIMM, 2400MT/s, Dual Rank, x8 Data Width	8
URH	Unconfigured RAID for H330/H730/H730P (1-24 HDDs or SSDs)	1
216GSD	Internal Dual SD Module with 2x 16GB SD Cards	1
VMWXI	VMware ESXi 6.0 U2 Embedded Image on Flash Media with Customer Providing Their Own vSAN Licenses	1
VSE3US	vSphere Enterprise Plus 1CPU Lic, 3Y Subscription w/Dwngrd Rights	2
X520SR	Intel X520 DP 10Gb SR/SFP+, + I350 DP 1Gb Ethernet, Network Daughter Card, with SR Optics	1
PSP3Y4H	ProSupport Plus: 3 Year Mission Critical 4Hr On-site Service	1
H1TSHR	1TB 7.2K RPM Near-Line SAS 12Gbps 2.5in Hot-plug Hard Drive	7
TPM20	Trusted Platform Module 2.0 FIPs, Common Criteria	1
80GCM3M	800GB Solid State Drive SAS Mix Use MLC 12Gbps 2.5in Hot-plug Drive, PX04SM	1
X520LS	Intel X520 DP 10Gb DA/SFP+ Server Adapter, Low Profile, with SR Optics	1

Table 5 Bill of Materials – Management Cluster Dell EMC PowerEdge R630



## References

Additional information can be obtained at <http://www.dell.com/nfv> or by e-mailing [nfv@dell.com](mailto:nfv@dell.com).

If you need additional services or implementation help, please contact your Dell sales representative.

## To Learn More

For more information on the Dell EMC + VMware Cloud Infrastructure Platform NFV solution visit <http://www.dell.com/nfv>.