

Dell EMC NFV Ready Bundle for VMware

Bill of Materials Guide v2.0

Dell Engineering
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Revisions

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Notes, cautions, and warnings



A **Note** indicates important information that helps you make better use of your system.



A **Caution** indicates potential damage to hardware or loss of data if instructions are not followed.



A **Warning** indicates a potential for property damage, personal injury, or death.

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Overview

This document provides the bill of materials information necessary to purchase the hardware needed for the deployment of the Dell EMC and VMware vCloud Network Functions Virtualization (NFV). This bill of materials can be used with the VMware vSAN and the Dell EMC ScaleIO for virtual storage.

The hardware consists of the following components:

- One Dell EMC Networking S4048T-ON switch
- Two Dell EMC Networking S6010-ON switches
- 12 Dell EMC PowerEdge R630 servers

Note: Dell EMC Networking R730 servers can be used as an alternative.

Solution ID: 8322630

Consult with your Dell EMC sales representative to ensure proper preparation and submission of your hardware and software order.

1 Bill of materials

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

Dell EMC Networking S6010-ON (two units)		
SKU	Description	Quantity
210-AGMN	S6010-ON,IO/PSU,OS9	2
528-BBSX	OS9 Factory Installed	2
634-BHCU	SW,L3,S6010-ON	2
450-AASX	250V,12A,2MTR,C13/C14	4
343-BBEP	Doc Kit, S6010-ON	2
332-1286	US Order	2
407-BBBY	Dell QSFP+ SR Optic, 40GbE	24
470-AAGD	Dell, QSFP+ Breakout Cable, 1m	12
470-AAGE	Dell, QSFP+ Breakout Cable, 3m	16
900-9997	ONSITE INSTL DECLINED	2

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

Dell EMC Networking S4048T-ON (one unit)		
SKU	Description	Quantity
210-AHMR	S4048T-ON,IO-PSU,OS9	1
528-BBSW	OS9 Factory Installed	1
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
332-1286	US Order	1
973-2426	INFO Declined Remote Consulting Service	1
900-9997	ONSITE INSTL DECLINED	1

2 Bill of materials for Dell EMC PowerEdge R630 Servers

The default kit consists of Dell EMC PowerEdge R630 servers for each of the three clusters. Components can be changed according to need, however, the primary objective is high availability with the ability to grow based on virtual network functions requirements.

Each cluster must have identical node configurations and be VSAN Ready certified by VMware. Dell EMC Ready Nodes for ScaleIO are required for ScaleIO to be used as virtual storage.

Note: For two PoD architecture, the minimum quantities required for Resource and Edge clusters, is four servers.

Table 3 Bill of materials – Dell EMC PowerEdge R630 resource cluster

Dell EMC PowerEdge R630 – Resource and edge cluster (eight units)			
SKU	Description	Quantity	Quantity per server
210-ACXS	PowerEdge R630 Server	8	1
329-BCZI	PowerEdge R630 Motherboard MLK	8	1
370-ACPH	2400MT/s RDIMMs	8	1
370-AAIP	Performance Optimized	8	1
405-AAEG	PH730 Intg RD CTL,1GB Cache	8	1
385-BBHO	iDRAC8, Enterprise	8	1
634-BBWU	OpenManage Essentials,Server ConfigMgmt	8	1
770-BBBL	Slide RdyRI, with CMA	8	1
384-BBBL	Performance BIOS Settings	8	1
450-ADWS	Dual,Redundant,Hot-plug PS,750W	8	1
450-AALV	NEMA5-15P-C13,125V,15A,10ft,3m	16	2
619-ABVR	No Operating System	8	1
421-5736	No Media Required	8	1
332-1286	US Order	8	1
900-9997	ONSITE INSTL DECLINED	8	1
973-2426	INFO Declined Remote Consulting Service	8	1
461-AADM	PowerEdge Server FIPS TPM 2.0	8	1
321-BBKM	Chas,10HD,3PCI	8	1
340-AKPR	PowerEdge R630 Ship-10/24 Drive Chassis	8	1

Dell EMC PowerEdge R630 – Resource and edge cluster (eight units)			
SKU	Description	Quantity	Quantity per server
429-AAIQ	No Internal Optical Drive	8	1
338-BJDX	E5-2698 v4 2.2GHz,50M C,135W	8	1
338-BJED	E5-2698 v4 2.2GHz,50M C,135W	8	1
370-ABWE	DIMM Blanks for System with 2 Processors	8	1
412-AAEF	160W Heatsink for PowerEdge R630	8	1
412-AAEF	160W Heatsink for PowerEdge R630	8	1
370-ACNS	32GB RDIMM,2400MT/s,DR,x4	128	16
780-BBJD	Uncnfg RD,H330/H730/H730P	8	1
400-AJON	HDD,1.2TB 10K SAS,12G,2.5,HP	64	2
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	8	1
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	8	1
540-BBBB	X520 DP,10G,DA + I350 DP,1G,DC	8	1
330-BBCL	Internal Dual SD Module	8	1
385-BBCF	Redundant SD Cards Enabled	8	1
385-BBLI	16GB SD Card For IDSMD	8	1
385-BBLI	16GB SD Card For IDSMD	8	1
325-BCJQ	Dell EMC QSYNC Bezel forPE R630,10/24HD	8	1
343-BBDK	Edocs and OpenManage DVD, R630	8	1
800-BBDM	UEFI BIOS Boot Mode with GPT Partition	8	1
400-ALXS	HDD,800G SSD SAS,MU,MLC,12,2.5,HP,PX04SM	8	1
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	16	2
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	16	2
540-BBHY	X520 DP 10Gb DA/SFP+,SA LP	16	2
210-ACXS	PowerEdge R630 Server	8	1

Table 4 Bill of materials – Dell EMC PowerEdge R630 management cluster

Dell EMC PowerEdge R630 – management cluster (four units)			
SKU	Description	Quantity	Quantity per server
210-ACXS	PowerEdge R630 Server	4	1
329-BCZI	PowerEdge R630 Motherboard MLK	4	1
370-ACPH	2400MT/s RDIMMs	4	1
370-AAIP	Performance Optimized	4	1
405-AAEG	PH730 Intg RD CTL,1GB Cache	4	1
385-BBHO	iDRAC8, Enterprise	4	1
634-BBWU	OpenManage Essentials,Server ConfigMgmt	4	1
770-BBBL	Slide RdyRI, with CMA	4	1
384-BBBL	Performance BIOS Settings	4	1
450-ADWS	Dual,Redundant,Hot-plug PS,750W	4	1
450-AALV	NEMA5-15P-C13,125V,15A,10ft,3m	8	2
619-ABVR	No Operating System	4	1
421-5736	No Media Required	4	1
332-1286	US Order	4	1
900-9997	ONSITE INSTL DECLINED	4	1
973-2426	INFO Declined Remote Consulting Service	4	1
461-AADM	PowerEdge Server FIPS TPM 2.0	4	1
780-BBJD	Uncnfg RD,H330/H730/H730P	4	1
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	4	1
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	4	1
540-BBBB	X520 DP,10G,DA + I350 DP,1G,DC	4	1
330-BBCL	Internal Dual SD Module	4	1
385-BBCF	Redundant SD Cards Enabled	4	1
385-BBLI	16GB SD Card For IDSDM	4	1
385-BBLI	16GB SD Card For IDSDM	4	1
343-BBDK	Edocs and OpenManage DVD, R630	4	1
800-BBDM	UEFI BIOS Boot Mode with GPT Partition	4	1

Dell EMC PowerEdge R630 – management cluster (four units)			
SKU	Description	Quantity	Quantity per server
321-BBKL	Chas,8HD,3PCI	4	1
340-AKPS	PowerEdge R630 Shipping- 8 Drive Chassis	4	1
350-BBBW	No Bezel	4	1
338-BJDL	E5-2640 v4 2.4GHz,25M C,90W	4	1
338-BJDN	E5-2640 v4 2.4GHz,25M C,90W	4	1
370-ABWE	DIMM Blanks for System with 2 Processors	4	1
412-AAEE	120W Heatsink for PowerEdge R630	4	1
412-AAEE	120W Heatsink for PowerEdge R630	4	1
370-ACNX	16GB RDIMM,2400MT/s,DR,x8	32	8
400-ALXS	HDD,800G SSD SAS,MU,MLC,12,2.5,HP,PX04SM	4	1
400-AJON	HDD,1.2TB 10K SAS,12G,2.5,HP	28	7
429-AAQL	DVD+/-RW,SATA,Int	4	1
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	8	2
407-BBVK	SFP+,SR,Opt Tran, Intel,10Gb-1Gb	8	2
540-BBHY	X520 DP 10Gb DA/SFP+,SA LP	8	2

References

For additional information regarding Dell EMC and VMware Cloud Infrastructure Platform for NFV, see <http://en.community.dell.com/techcenter/networking/w/wiki/12300.vmware-documentation-for-nfv>

Supplemental information can also be accessed at www.dell.com/nfv or by e-mailing nfv@dell.com.

If you require additional services or implementation assistance, contact your Dell sales representative.