

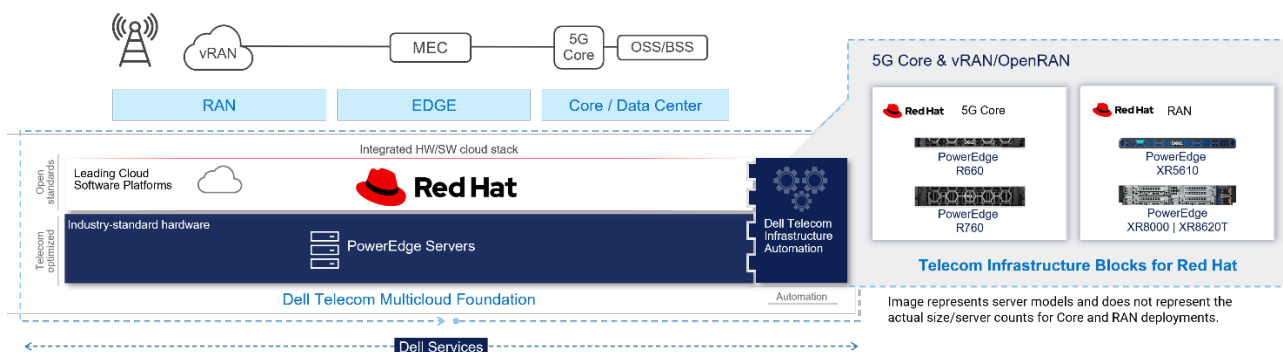
Dell Telecom Infrastructure Blocks for Red Hat



Featuring Red Hat® OpenShift® Container platform for cloud-native 5G core and RAN networks.

The core and RAN are critical to 5G networks. Dell Technologies, in concert with Red Hat, has developed an integrated, validated, and automated solution that enables CSPs to transition seamlessly from a vertical core architecture to a horizontal, unified cloud environment in their core and extend that architecture to RAN deployments for Red Hat® OpenShift® deployments. Dubbed Dell Telecom Infrastructure Blocks for Red Hat, these engineered systems deliver a complete hardware and software stack optimized for 5G core workloads and edge RAN networks, direct from Dell’s factory.

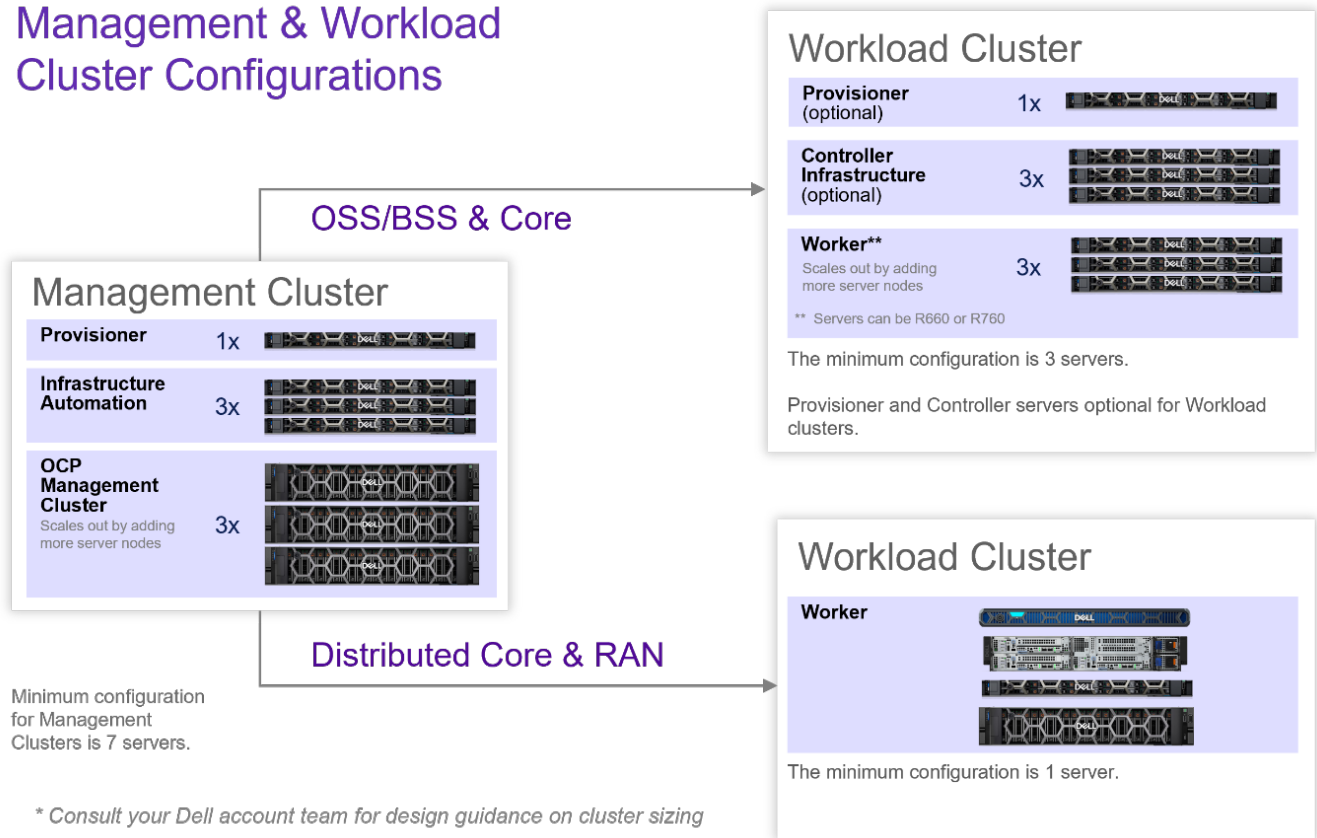
Telecom Infrastructure Blocks for Red Hat are pre-integrated, pre-validated, purpose-built packages of hardware and software designed to support the deployment and lifecycle management of Red Hat OpenShift management and workload clusters on bare metal running 5G core workloads in national and regional data centers. They also extend that management to RAN edge environments, enabling zero touch deployment and orchestration of bare-metal hardware. Dell Telecom Infrastructure Blocks for Red Hat represent the simplest, fastest, and safest way for communications service providers (CSPs) to build and expand their cloud native network from core to RAN.



What is in Telecom Infrastructure Blocks for Red Hat?

In a the 5G telco cloud, Red Hat OpenShift core, distributed core and RAN management and workload clusters are built using Telecom Infrastructure Blocks for Red Hat. The cloud environment configurations are shown in the following diagram.

Management & Workload Cluster Configurations



Infrastructure Blocks for Red Hat Components

5G Core

There are five (5) types of nodes that are used to build the Management and Workload 5G core cloud clusters of Infrastructure Blocks for Red Hat. They are the Provisioner, Automation, Red Hat OpenShift Container Platform (OCP) Management Cluster, Controller and Worker Nodes. Each node has all the hardware resources and software

licenses needed to build and scale out the management and workload cloud. Each Infrastructure Block also offers various choices for flexible configuration.

5G Core Components and Configuration Quick Links		
Components	Configuration Options Quick Links	Description
Provisioner Infrastructure Nodes	<ul style="list-style-type: none"> PowerEdge R660 	Provisioner Infrastructure Nodes come with Red Hat Enterprise Linux factory installed and includes right to manage licenses for Dell Technologies Infrastructure Automation Suite and right to use licenses for included Red Hat software. The Provision Nodes are responsible for cluster management related tasks. They run the required auxiliary services to bring up the cluster.
Automation Infrastructure Nodes	<ul style="list-style-type: none"> PowerEdge R660 	Automation Infrastructure Nodes come with Red Hat Enterprise Linux factory installed and include right to use licenses for Dell Technologies Infrastructure Automation Suite and right to use licenses for the included Red Hat software.
OCP Management Cluster Nodes	<ul style="list-style-type: none"> PowerEdge R760 	OCP Management Cluster node is a three (3) node hyperconverged OCP cluster that will act as controller/worker/storage node. This node also contains ACM that manages multiple OCP clusters, with right to manage licenses.
Controller Infrastructure Nodes	<ul style="list-style-type: none"> PowerEdge R660 	The Controller Infrastructure Nodes include right to manage licenses for Dell Technologies Infrastructure Automation Suite and right to use licenses for Red Hat software. The Cluster Controller which is constructed from three Controller Infrastructure Blocks manages the workloads and schedules them across compute node within the cluster. Kubernetes core components like etcd, API, scheduler etc are running inside Cluster Controller.
Worker Nodes	<ul style="list-style-type: none"> PowerEdge R660 PowerEdge R760 	The Worker Nodes include right to manage licenses for Dell Technologies Infrastructure Automation Suite and Red Hat software.

Distributed 5G Core and RAN

There are five (5) types of Telecom Infrastructure Blocks for Red Hat that are used for the Distributed Core and RAN deployments. They are the Provisioner, Automation, OCP Management Cluster, Controller and Worker Infrastructure Blocks. Each Infrastructure Block has all the hardware resources and software licenses needed to build out and manage edge and RAN cloud environments. Each Infrastructure Block also offers various choices for flexible configuration.

Distributed Core and RAN Components and Configuration Quick Links		
Components	Configuration Options Quick Links	Description
Provisioner Infrastructure Nodes	<ul style="list-style-type: none"> PowerEdge R660 	Provisioner Infrastructure Nodes come with Red Hat Enterprise Linux factory installed and includes right to manage licenses for Dell Technologies Infrastructure Automation Suite and right to use licenses for included Red Hat software. The Provision Nodes are responsible for cluster

Distributed Core and RAN Components and Configuration Quick Links

Components	Configuration Options Quick Links	Description
		management related tasks. They run the required auxiliary services to bring up the cluster.
Automation Infrastructure Nodes	<ul style="list-style-type: none"> PowerEdge R660 	Automation Infrastructure Nodes come with Red Hat Enterprise Linux factory installed and include right to use licenses for Dell Technologies Infrastructure Automation Suite and right to use licenses for the included Red Hat software.
OCP Management Cluster Nodes	<ul style="list-style-type: none"> PowerEdge R760 	OCP Management Cluster node is a three (3) node hyperconverged OCP cluster that will act as controller/worker/storage node. This node also contains ACM that manages multiple OCP clusters, with right to manage licenses.
Controller Infrastructure Nodes	<ul style="list-style-type: none"> PowerEdge R660 	The Controller Infrastructure Nodes include right to manage licenses for Dell Technologies Infrastructure Automation Suite and right to use licenses for Red Hat software. The Cluster Controller which is constructed from three Controller Infrastructure Blocks manages the workloads and schedules them across compute node within the cluster. Kubernetes core components like etcd, API, scheduler etc are running inside Cluster Controller.
Worker Node (vCU/vDU)	<ul style="list-style-type: none"> PowerEdge XR8000 / XR8620t PowerEdge XR5610 PowerEdge R660 (Compute) PowerEdge R760 (Compute) 	The Worker Nodes include right to manage licenses for Dell Technologies Infrastructure Automation Suite and Red Hat software.

Note:

Telecom Infrastructure Blocks offer a broad range of configuration options for increased flexibility. The following configurations represent the minimum default configuration and additional options are available to support specific workload needs. Please work with your account team to select the best options based on workload and business needs.

5G Core Configurations

Provisioner Infrastructure Node Configurations		
Using Dell PowerEdge R660		
Components	Quantity	Description
Server	1	<ul style="list-style-type: none"> PowerEdge R660
CPUs	2	<ul style="list-style-type: none"> Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none"> 32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none"> 3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none"> Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none"> iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none"> Dual, Fully Redundant(1+1), Hot-Plug Power Supply, 1100W MM(100-240Vac) Titanium
Factory Installed Software	1	<ul style="list-style-type: none"> Red Hat Enterprise Linux
Dell Software licenses (3 years)	1	<ul style="list-style-type: none"> Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none"> Red Hat Enterprise Linux (RHEL)

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Automation Infrastructure Node Configurations		
Using Dell PowerEdge R660		
Components	Quantity	Description
Server	1	<ul style="list-style-type: none"> PowerEdge R660
CPUs	2	<ul style="list-style-type: none"> Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none"> 32GB RDIMM, 4800MT/s Dual Rank

Automation Infrastructure Node Configurations

Using Dell PowerEdge R660

Components	Quantity	Description
Storage	1	<ul style="list-style-type: none">3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Fully Redundant(1+1), Hot-Plug Power Supply, 1100W MM(100-240Vac) Titanium
Factory Installed Software	1	<ul style="list-style-type: none">Red Hat Enterprise Linux
Dell Software licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat Enterprise Linux (RHEL)

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

OCP Management Cluster Node Configurations

Using Dell PowerEdge R760

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">PowerEdge R760
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6428N 1.8G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (185W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">800GB SSD SAS Mixed Use up to 24Gbps 512e 2.5in Hot-Plug, AG Drive
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Fault Tolerant Redundant(1+1), Hot-Plug PSU, 1800W MM HLAC (ONLY FOR 200-240Vac) Titanium, C16 Connector

OCP Management Cluster Node Configurations

Using Dell PowerEdge R760

Components	Quantity	Description
Dell Software licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat OpenShift Container PlatformRed Hat Advanced Cluster Management for KubernetesRed Hat Software License for Datacenter ODF Essentials or Ceph

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Controller Infrastructure Node Configurations

Using Dell PowerEdge R660

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">PowerEdge R660
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Fully Redundant(1+1), Hot-Plug Power Supply,1100W MM(100-240Vac) Titanium
Dell Software licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat Enterprise Linux (RHEL) 9.2

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Worker Node Configurations		
Using Dell PowerEdge R660		
Components	Quantity	Description
Server	1	<ul style="list-style-type: none"> PowerEdge R660
CPUs	2	<ul style="list-style-type: none"> Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none"> 32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none"> 3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none"> Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none"> iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none"> Dual, Fully Redundant(1+1), Hot-Plug Power Supply,1100W MM(100-240Vac) Titanium
Dell Software licenses (3 years)	1	<ul style="list-style-type: none"> Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none"> Red Hat OpenShift Container Platform Red Hat Advanced Cluster Management for Kubernetes Red Hat Software License for Datacenter ODF Essentials or Ceph

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Worker Node Configurations		
Using Dell PowerEdge R760		
Components	Quantity	Description
Server	1	<ul style="list-style-type: none"> Poweredge R760
CPUs	2	<ul style="list-style-type: none"> Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none"> 32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none"> 3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none"> Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height

Worker Node Configurations

Using Dell PowerEdge R760

Components	Quantity	Description
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Hot-Plug, FR Power Supply, 1100W MM (100-240Vac) Titanium, Redundant (1+1)
Dell Software licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat OpenShift Container PlatformRed Hat Advanced Cluster Management for KubernetesRed Hat Software License for Datacenter ODF Essentials or Ceph

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Distributed Core and RAN Configurations

Provisioner Infrastructure Node Configuration (Distributed Core and RAN)

Using Dell PowerEdge R660

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">PowerEdge R660
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Fully Redundant(1+1), Hot-Plug Power Supply, 1100W MM(100-240Vac) Titanium
Factory Installed Software	1	<ul style="list-style-type: none">Red Hat Enterprise Linux
Dell Software licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)

Provisioner Infrastructure Node Configuration (Distributed Core and RAN)

Using Dell PowerEdge R660

Components	Quantity	Description
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat Enterprise Linux (RHEL)

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Automation Infrastructure Node Configurations (Distributed Core and RAN)

Using Dell PowerEdge R660

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">PowerEdge R660
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Fully Redundant(1+1), Hot-Plug Power Supply, 1100W MM(100-240Vac) Titanium
Factory Installed Software	1	<ul style="list-style-type: none">Red Hat Enterprise Linux
Dell Software licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat Enterprise Linux (RHEL)

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

OCP Management Cluster Node Configurations (Distributed Core and RAN)

Using Dell PowerEdge R760

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">PowerEdge R760
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6428N 1.8G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (185W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">800GB SSD SAS Mixed Use up to 24Gbps 512e 2.5in Hot-Plug, AG Drive
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Hot-Plug, FR Power Supply, 1100W MM (100-240Vac) Titanium, Redundant (1+1)
Dell Software Licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat OpenShift Container PlatformRed Hat Advanced Cluster Management for KubernetesRed Hat Software License for Datacenter ODF Essentials or Ceph

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Controller Infrastructure Node Configurations (Distributed Core and RAN)

Using Dell PowerEdge R660

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">PowerEdge R660
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height

Controller Infrastructure Node Configurations (Distributed Core and RAN)

Using Dell PowerEdge R660

Components	Quantity	Description
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power	2	<ul style="list-style-type: none">Dual, Fully Redundant(1+1), Hot-Plug Power Supply,1100W MM(100-240Vac) Titanium
Dell Software Licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat Enterprise Linux (RHEL)

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Worker Node Configurations (vCU/vDU) (Distributed Core and RAN)

Using Dell PowerEdge XR8000r chassis with XR8620t compute sled

Components	Quantity	Description
Chassis Configuration	1	<ul style="list-style-type: none">PowerEdge XR8000r Chassis
Power Supply	1	<ul style="list-style-type: none">Dual, Fully Redundant (1+1), Hot-Plug PSU,1800W MM HLAC (ONLY FOR 200-240Vac) Titanium, C16 Connector, RAF
Server Sleds	1	<ul style="list-style-type: none">PowerEdge XR8620t
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">NVMe M.2, PCIe Storage Option with 2x 1.92TB (No RAID)
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9, Datacenter 16G
With 4th Generation Intel® Xeon® Scalable processor (EE + WP)		
CPU	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6433N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4400
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4TGG1 Quad Port 10/25GbE SFP28 Precision Timing Adapter with GNSS, PCIe Full Height
Dell Software Licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)

Worker Node Configurations (vCU/vDU) (Distributed Core and RAN)

Using Dell PowerEdge XR8000r chassis with XR8620t compute sled

Components	Quantity	Description
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none"> Red Hat OpenShift Container Platform Red Hat Advanced Cluster Management for Kubernetes

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Worker Node Configurations (vCU/vDU) (Distributed Core and RAN)

Using Dell PowerEdge XR5610 servers

Components	Quantity	Description
Server	1	<ul style="list-style-type: none"> PowerEdge XR5610
RAID Configuration	??	<ul style="list-style-type: none"> C20, No RAID with Embedded SATA for SATA HDDs or SATA SSDs (Mixed Drive Types Allowed)
Memory	8	<ul style="list-style-type: none"> 32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none"> 960GB SSD SATA Mix Use 6Gbps 512 2.5in Hot-plug AG Drive
Embedded System Management	1	<ul style="list-style-type: none"> iDRAC9, Datacenter 16G
Chassis Configuration	1	<ul style="list-style-type: none"> Front Port Access Chassis with up to 4 SATA Drives (Onboard SATA), RAF
With 4th Generation Intel® Xeon® Scalable processor (EE + WPC)		
CPU	2	<ul style="list-style-type: none"> Intel® Xeon® Gold 6433N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4400
NICs	2	<ul style="list-style-type: none"> Intel E810-XXVDA4TGG1 Quad Port 10/25GbE SFP28 Precision Timing Adapter with GNSS, PCIe Full Height
Power	2	<ul style="list-style-type: none"> Dual, Fully Redundant(1+1), Hot-Plug Power Supply, 1100W MM(100-240Vac) Titanium
Dell Software Licenses (3 years)	1	<ul style="list-style-type: none"> Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none"> Red Hat OpenShift Container Platform Red Hat Advanced Cluster Management for Kubernetes

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Worker Node Compute Configurations (Distributed Core and RAN)

Using Dell PowerEdge R660 – Compute

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">PowerEdge R660
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank
Storage	1	<ul style="list-style-type: none">3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power Supply	1	<ul style="list-style-type: none">Dual, Fully Redundant(1+1), Hot-Plug Power Supply,1100W MM(100-240Vac) Titanium
Dell Software licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat OpenShift Container PlatformRed Hat Advanced Cluster Management for Kubernetes

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Worker Node Compute Configurations (Distributed Core and RAN)

Using Dell PowerEdge R760 – Compute

Components	Quantity	Description
Server	1	<ul style="list-style-type: none">Poweredge R760
CPUs	2	<ul style="list-style-type: none">Intel® Xeon® Gold 6438N 2G, 32C/64T, 16GT/s, 60M Cache, Turbo, HT (205W) DDR5-4800
Memory	8	<ul style="list-style-type: none">32GB RDIMM, 4800MT/s Dual Rank

Worker Node Compute Configurations (Distributed Core and RAN)

Using Dell PowerEdge R760 – Compute

Components	Quantity	Description
Storage	1	<ul style="list-style-type: none">3.2TB Enterprise NVMe Mixed Use AG Drive U.2 Gen4 with carrier
NICs	2	<ul style="list-style-type: none">Intel E810-XXVDA4 Quad Port 10/25GbE SFP28 Adapter, PCIe Full Height
Embedded System Management	1	<ul style="list-style-type: none">iDRAC9 Datacenter 16G
Power Supply	2	<ul style="list-style-type: none">Dual, Hot-Plug, FR Power Supply, 1100W MM (100-240Vac) Titanium, Redundant (1+1)
Dell Software Licenses (3 years)	1	<ul style="list-style-type: none">Dell Telecom Infrastructure Automation Foundation (includes Bare Metal Orchestrator)
Red Hat Software Subscription (3 years)	1	<ul style="list-style-type: none">Red Hat OpenShift Container PlatformRed Hat Advanced Cluster Management for Kubernetes

[RETURN TO CONFIGURATION OVERVIEW TABLE](#)

Dell Services

Dell Technologies offers a range of services and support options to support Day 0 through Day 2 operations.

While Dell Telecom Infrastructure Blocks provide an engineered system that is ready for deployment out of the box, some operators may require custom configurations to meet specific outcomes. Dell ProDeploy for Telecom Networks enables you to quickly operationalize critical network infrastructure with agility and scale. During Day 0 operations, Dell Services can work with you to develop optimized designs through custom intake that outlines requirements, collaborate in workshops to define outcomes, and fine-tune designs for peak performance, scalability, and cost-effectiveness. Dell Services can also support Day 1 operations by providing tailored integration services from onsite racking and stacking of hardware and network integration, to remote installation and support, to network design and validation. This allows operators to deploy at any scale anywhere in their network. Dell Services can also deliver custom configurations direct from Dell factories to streamline operator processes to meet unique requirements.

Every Telecom Infrastructure Block is backed by one call support for the entire hardware and software stack. This eliminates the need for you to determine if it is a hardware or software issue, you just call Dell. And, with Dell's carrier grade support, operators receive guaranteed response times of under 15 minutes and guaranteed service restoration times under four hours.*

We are open to innovation

Dell Technologies is committed to open telecom solutions, from OpenStack and Kubernetes to Open RAN. Dell Telecom Infrastructure Blocks for Red Hat allow CSPs to quickly deploy, easily manage, and seamlessly scale OpenShift clusters to support 5G Core, Edge and RAN workloads while driving cost and complexity out of the network. Dell Technologies supports each of our Infrastructure Blocks across the entire stack to eliminate finger-pointing between vendors. There is one trusted source for procurement, deployment, and lifecycle management—backed by a global supply chain and a world-class team of telecom service professionals. When it comes to building telecom clouds, nothing else stacks up to Dell Telecom Infrastructure Blocks for Red Hat.

* Availability and terms of Dell Technologies services vary by region and by product. For more information



Learn more about [Dell Telecom Multicloud Foundation](#) solutions



[Contact](#) a Dell Technologies Expert



[View more](#) technical documentation resources



Join the conversation with Dell Edge & Telecom [@Dell_Edge](#)

© 2024 Dell Inc. or its subsidiaries. All Rights Reserved. Dell and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners. 03272024