

Dell EMC Converged Systems

Glossary

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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

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Revision history

Date	Document revision	Description of changes
December 2020	1.31	<ul style="list-style-type: none"> ● Removed the Vblock System 100. ● Removed Vblock Specialized Systems. ● Removed Hyperconverged infrastructure, ScaleIO, VxFlex OS, VxFlex OS gateway. ● Changed Vblock and VxBlock 700 series to Vblock and VxBlock Systems 740. ● Changed Vblock and VxBlock 500 series to Vblock and VxBlock Systems 540. ● Changed Vblock and VxBlock 300 series to Vblock and VxBlock Systems 340. ● Changed Vblock and VxBlock 200 series to Vblock and VxBlock Systems 240.
June 2020	1.30	<ul style="list-style-type: none"> ● Updated VxBlock Central Lifecycle Management. ● Deleted Vscale Management Platform. ● Changed Dell EMC Sales Engineer to Dell Technologies Sales Engineer. ● Changed Dell EMC Technical Field Sales Specialist to Dell Technologies Dell EMC Technical Field Sales Specialist.
January 2020	1.29	<ul style="list-style-type: none"> ● Added VxBlock Central Life Cycle Management. ● Changed vArchitect to Dell EMC sales engineer. ● Changed vSpeicalist to Dell EMC technical field sales specialist. ● Deleted Vision terms: <ul style="list-style-type: none"> ○ compliance benchmark ○ compliance checker ○ compliance score history
December 2019	1.28	Added AMP Central.
September 2019	1.27	<ul style="list-style-type: none"> ● Deleted Vision terms. ● Updated the definition for Converged System. ● Updated VxBlock Central terms.
July 2019	1.26	<p>Added the following terms:</p> <ul style="list-style-type: none"> ● Dedicated deployment ● Shared deployment ● VxFlex integrated rack ● VxFlex integrated systems ● VxFlex Manager ● VxFlex node ● VxFlex OS gateway <p>Updated the following terms:</p> <ul style="list-style-type: none"> ● hyperconverged deployment ● VxFlex OS
January 2019	1.25	<p>Added the following terms:</p> <ul style="list-style-type: none"> ● Hyper-converged deployment ● Two-layer deployment
December 2018	1.24	<p>Added the following VxBlock Central terms:</p> <ul style="list-style-type: none"> ● VxBlock Central ● VxBlock Central Orchestration ● VxBlock Central Operations

Date	Document revision	Description of changes
August 2018	1.23	Added the following VxFlex Manager terms: <ul style="list-style-type: none"> • Deployment • Port view • Service • Template Updated the following terms: <ul style="list-style-type: none"> • Bare metal • Resource
March 2018	1.22	Added terms related to VxBlock System 1000.
2017	1.20 - 1.21	Added VxRack and VxRail terms.
2016	1.17 - 1.19	Added the following terms: <ul style="list-style-type: none"> • Vscale Architecture • ScaleIO • Software Defined Storage (SDS) • Hyper-converged engineered system • Hyper-converged infrastructure appliance • VxRack node • Vblock System 200 Removed references to Vblock System0, 1, and 1U.
2015	1.15 - 1.16	Added terms for: <ul style="list-style-type: none"> • Release Certification Matrix • Converged Systems • Converged Technology Extension for Cisco UCS compute • Converged Technology Extension for Isilon storage • Converged Technology Extension for XtremIO storage • VxBlock Systems • Vblock System 540 • Shared Management Platform Revised the definitions for Vblock Systems and Integrated Data Protection.
2014	1.13 - 1.14	Added terms for AMP-2, AMP-2HA, and IPI.
2013	1.9 - 1.12	<ul style="list-style-type: none"> • Added terms for Vision, Vblock System 200, and Vblock System 100. • Updated term for UIM. • Removed references to Vblock System 300 models.
2012	1.6 - 1.8	<ul style="list-style-type: none"> • Added terms for Vblock System 300, Vblock System security, Integrated Data Protection. • Updated references to VNXe3150, VMAX, and Cisco UCS C220 Server. • Removed references to cabinet names and Powerlink.
2011	1.4 - 1.5	Added Vblock Systems.
2010	1.0 - 1.3	Initial releases.

Introduction

This document provides terms, definitions, and acronyms for Converged Systems.

Advanced Management Platform (AMP)	Provides the infrastructure and tools to support management software that is used to operate a Converged System .
Advanced Management Platform - Version 2 (AMP-2)	Second generation of the Advanced Management Platform. AMP-2 is a hardware and workload solution to support management software that is used to operate a Converged System .
AMP	See Advanced Management Platform .
AMP-2	See Advanced Management Platform - Version 2.
AMP-2HA	AMP-2 high availability model that provides automatic failover and load balancing of VMs that are deployed to implement Core and Optional management workloads. The following configuration options are available: <ul style="list-style-type: none"> AMP-2HA Base consists of two Cisco UCS rack servers and a VNXe3200 storage array with FAST Cache. AMP-2HA Performance consists of the base configuration, a third Cisco UCS rack server, and 100 GB enterprise flash drives (EFDs) to implement FAST VP.
AMP-2LP	Limited physical version of the second-generation Advanced Management Platform. AMP-2LP is a single dedicated server with a limited hardware configuration. AMP-2LP runs part of the Core management workload as virtual machines using its own resources, not customer resources. AMP-2LP is designed for 100 percent bare metal configurations.
AMP-2P	Minimum physical version of the second-generation Advanced Management Platform. AMP-2P is a single dedicated server running Core management and Optional management workloads as VMs using its own resources, not customer resources.
AMP-2RP	Redundant physical version of AMP-2. AMP-2RP is a pair of dedicated servers running Core management and Optional workloads in a redundant configuration using its own resources, not customer resources.
AMP-2V	Virtual version of AMP-2 running Core management and Optional workloads as VMs on customer resources.
AMP Central	AMP Central provides a consolidated infrastructure to manage multiple VxBlock Systems in a data center. AMP Central is available in a stand-alone configuration or integrated configuration in a VxBlock System cabinet. The AMP Central stand-alone configuration supports up to eight production VMware vCenter Servers. The AMP Central integrated configuration can manage a smaller environment with up to four production VMware vCenter Servers.
AMP-VX	A scalable system management platform that provides centralized management and functionality that is built on Dell PowerEdge servers and VMware software.

bare metal

Non-VMware virtualized operating system and applications that run on systems.

block (block device, block storage)

Storage design that allows direct data access at a LUN level from a host. In a block access design, the host provides all access and sharing facilities for the LUN. This design differs from file access, where the storage system maintains the file system and all lock management for the hosts that are accessing the data. Typical block protocols are FC, FCoE, and iSCSI.

chassis activation kit (CAK)	Software license that enables additional fabric interconnect ports. For some Vblock Systems and VxBlock Systems, cabinets are shipped with the first two blade chassis licensed. As more blades are added and additional chassis are required, chassis activation kits are automatically added.
compliance report	Summarized results of a compliance scan.
compliance report score	Level of compliance to an established benchmark reported by running a compliance scan of the Converged System.
compliance scan	Scan that compares the firmware and software versions running on the components of the Converged System to the versions defined in the selected profile within the benchmark. Used in VxBlock Central.
Converged System	Hardware and software components that are integrated as one unit of data center infrastructure. Dell EMC manufactures Converged Systems.
Converged Technology Extension for Cisco UCS compute	The technology extension for Cisco UCS servers expands an existing Converged System by adding Cisco UCS C-series servers to the compute domain. These servers provide additional resources and server configurations for Converged Systems to support hardware-optimized configurations for specific workloads and applications.
Converged Technology Extension for Isilon storage	The technology extension optimizes storage capacity, performance, and data capacity to help customers address the unprecedented growth in unstructured data. This Converged Technology Extension is a NAS scale-out solution that optimizes scale-out data storage requirements as part of a Converged System.
Converged Technology Extension for storage	Homogenous or heterogeneous scale-out solutions for the Converged Systems. Each technology extension storage is available with Dell EMC Unity, VNX, XtremIO, or VMAX storage.
Core management workload	Minimum set of required management software and support resources to install, operate, and support a Converged System. Management software includes hypervisor management, element managers, virtual networking components, and VxBlock Central.

- dashboards** An interface that displays VxBlock Central monitored components and their metric data. Each dashboard shows the relationships between monitored components.
- Dell Technologies Sales Engineer** Formerly vArchitect. A technical field sales resource who helps with positioning and closing opportunities involving [Converged Systems](#).
- Dell Technologies Technical Field Sales Specialist** Formerly vSpecialist. A resource who helps with positioning and closing opportunities involving VMware and [Converged Systems](#). Technical Field Sales Specialists and Sale Engineers work closely to support Converged Systems deals.
- Dvols** Physical storage unit exported from the storage array. All other volume types are created from disk volumes.

Ecosystem management workload	Customer-specific management software whose primary purpose is to manage and support one or more Converged Systems .
element manager	A software component that is used to manage Converged System components or is used as a support tool.
events	Events that originate at the individual Converged System component level. VxBlock Central processes the events.

- health status** VxBlock Central status of the [Converged System](#) and its components. Possible statuses are: operable, minor, degraded, major, and critical.
- hyperconverged deployment** A configuration where compute and storage reside in the same server, creating a single-layer architecture.

**Intelligent
Physical
Infrastructure
(IPI) solution**

Hardware, firmware, and software that enables users to remotely monitor, manage, and troubleshoot the power, temperature, and physical security of Converged System cabinets and power components.

IPMI

Intelligent Platform Management Interface.

management aggregation switches	A pair of switches that combines and interlinks the connections for multiple pairs of subordinate management switches.
management infrastructure	Any AMP management solution available with a Converged System .
management server	<p>Component in the Advanced Management Platform (AMP) of the Converged System. For Converged Systems, the Cisco UCS C2XX series servers host management VMs for production-level virtualization, web infrastructure, and other mainstream data center workloads.</p> <p>For the AMP-VX, Dell PowerEdge servers host management VMs for production-level virtualization, web infrastructure, and other mainstream data center workloads.</p>
management switch	A switch that connects the AMP. For Converged Systems using the original Advanced Management Platform (AMP) , the management switch is in the AMP.
metrics	Observed values of component attributes. Metric data is collected for each component that VxBlock Central monitors. The adapter defines the collection criteria for components and those criteria determine the type of information sent. Types of metric data include operational status, temperature, CPU, storage, and memory utilization.
mini-AMP	A variant of the original Advanced Management Platform (AMP) , which consists of a single rack-mounted server and dual Cisco switches.
Multiple VxBlock System 1000	Multiple VxBlock Systems 1000 that reside in a single site. A single AMP manages the VxBlock Systems 1000.

network layer

The layer in [Converged Systems](#) that provides the switching and routing between the compute and storage layers and between the Converged System and the customer network. The network layer contains the Cisco Nexus and MDS switches.

OneFS

The operating system running on the [Converged Technology Extension for Isilon storage](#) system. OneFS combines three layers of traditional storage architecture into one unified software layer: file system, volume manager, and data protection. OneFS creates a single intelligent file system that spans all nodes within a cluster.

operational status

Reporting of how well a component is functioning. VxBlock Central determines the operational status that is based on responses from queried components. The statuses that VxBlock Central reports are operable, critical, major, minor, degraded, and inoperable.

Optional Management Workloads

Dell EMC installs and Support covers these non-Core management workloads.

patch panel

Panel mounted in the [Converged System](#) cabinet that houses cable connections.

**Release
Certification
Matrix (RCM)**

A document that defines the specific hardware components and software versions that Dell EMC tests and certifies for [Converged Systems](#) and other Dell EMC products.

**Remote
Protection suite**

Storage software for [Converged Systems](#) that protects data against localized failures, outages, and disasters.

resource

A physical and virtual datacenter object that VxBlock Central interacts with and monitors.

Secure Development Lifecycle (SDL)	<p>Repeatable and measurable process that enables Dell EMC to meet customer expectations by:</p> <ul style="list-style-type: none"> • Ensuring that Dell EMC product engineering organizations apply security controls during the product development life cycle. • Enables product groups to assume accountability for the security of the products they ship • Assisting customers in understanding and assessing overall security posture of the product
Security and Compliance suite	Storage software for Converged Systems that ensures that data is safe from changes, deletions, and malicious activity.
separated network architecture	Separates LAN and SAN connectivity into two switches within a Converged System . LAN switching uses the Cisco Nexus switch and SAN switching uses the Cisco MDS switch. See also unified network architecture .
Shared Management Platform	A specialized configuration of a standard Converged System that is used as a single point of management for multiple Converged Systems.
Software Defined Storage	Computer data storage software created to manage policy-based provisioning and management of data storage independent of the underlying hardware which is storing the data.
storage layer	Layer in the Converged System that contains the storage components.
storage subsystem	Main component of a Converged System storage solution that stores all production data and the configuration database of the storage system. In a unified storage solution, X-Blades do not contain a hard drive and the backend storage provides disk space for the NAS code. The backend storage for a unified storage system must be a CLARiiON or VNX.
Support service descriptions	<p>Customers can choose from the following service tiers:</p> <ul style="list-style-type: none"> • Core Support - A foundational, integrated level of support that is standard on all Converged Systems. • Plus Support - An enhanced, higher-touch support option with proactive deliverables and capabilities across the Converged Systems installed base. • Premier Support - A customer-centric, strategic support relationship for the installed base of Converged Systems.

TDAT	A storage pool type that indicates a data device.
TDEV	A storage pool type that indicates a thin device.
top of rack switch	A switch that handles data plane LAN traffic in a Converged System. If there are subordinate data plane switches in the configuration, the switch links to the customer network.
ToR switch	See top of rack switch.

- unified fabric** A configuration that consolidates different types of network traffic onto a single, general-purpose, high-performance, highly available network. Unified fabric simplifies the network infrastructure and reduces costs.
- unified network architecture** A configuration that consolidates LAN and SAN switching onto a single network device in the [Converged System](#). Unified network architecture eliminates the need for a Cisco MDS SAN switch. See [separated network architecture](#).

vArchitect	See Dell Technologies Sales Engineer.
Vblock System	Vblock Systems seamlessly integrate best-in-class compute, network, and storage, and virtualization technologies. Vblock Systems provide dynamic pools of resources that can be intelligently provisioned and managed to address changing demands and business opportunities.
Vscale Architecture	An architectural framework that provides a backplane for data center systems using a Vscale Fabric to connect modular components, such as Converged Systems and Vscale Fabric Technology Extensions, to resources.
Vscale Border Technology Connect	Provides external access to the Vscale Architecture as a specialized function within the Vscale Fabric.
Vscale Fabric	Contains the Vscale LAN and SAN Fabrics that connect modular components to resources. Vscale Fabric incorporates a scalable spine/leaf LAN architecture with optional software-defined networking (SDN), and an access or core architecture for the SAN.
Vscale Fabric Technology Extensions	Modular containers that provide connectivity for compute, storage, and data protection resources. Other resources attached to the Vscale Fabric can consume those resources.
Vscale Open Technology Connect	Contains third-party, non-Dell EMC resources that are provided to the Vscale Architecture.
VSM	A VM that manages the virtual Ethernet modules and is installed on the Advanced Management Platform (AMP) and is part of the Cisco Nexus 1000V Switches.
vSpecialist	See Dell Technologies Technical Field Sales Specialist.
VxBlock Central	A management application that allows you to manage and monitor Converged Systems.
VxBlock Central Lifecycle Management	A management application that enables inventory management for all Converged System components. This feature is integrated with CloudIQ, which enables you to monitor and analyze the inventories.
VxBlock Central Operations	An application that works with VMware vRealize Operations (vROPs) Manager to monitor the health and collect metrics on Converged Systems.
VxBlock Central Orchestration Services	An application that provides the health of critical back-end services, manages credentials and firmware, configures the network, and collects log files.
VxBlock Central Orchestration Workflows	Applications in the Dell EMC library of workflows in VMware vRealize Orchestrator, which automates compute, storage, and networking tasks.
VxBlock Central Workflow Automation	An application that automates and performs daily provisioning tasks through integration with VMware vRealize Orchestrator (vRO). Workflow Automation provides the following features: <ul style="list-style-type: none"> • VxBlock Central Orchestration Services • VxBlock Central Orchestration Workflows
VxBlock Systems	VxBlock Systems offer increased flexibility, including the choice of VMware VDS and VMware NSX virtualization. VxBlock Systems are engineered to exacting specifications for the highest levels of availability, performance, and operational efficiency.
VxBlock and Vblock Systems 240	VxBlock and Vblock System 240 provide the capacity, workload, and storage to meet the needs of midsize data centers and distributed enterprise remote offices. The VxBlock and Vblock Systems 200 series have predefined, variable configurations.

VxBlock and Vblock Systems 340	VxBlock and Vblock System 340 enable enterprises and service providers to support many VMs, users, and applications.
	VxBlock and Vblock Systems 540 have defined scalability points that meet the higher performance and availability requirements of enterprise business-critical applications.
Vblock and VxBlock Systems 740	The Vblock and VxBlock Systems 740 are for enterprises and service providers that have demanding IT environments with workloads and SLAs that run thousands of virtual machines and virtual desktops.
VxBlock System 1000	A flexible, scalable, and expandable Converged System. The VxBlock System 1000 can mix and pool different types of storage, Cisco UCS Blade and Rack servers, and Integrated Data Protection options. VxBlock 1000 supports a centralized multisystem management platform for up to eight VxBlock Systems.
VxRail Appliance	A hyperconverged infrastructure appliance that runs on VMware HyperConverged Software (VMware HCS). Each VxRail Appliance supports four vSphere nodes and offers the power of a whole SAN in two RUs.