

Dell PS Series to Dell EMC SC Series Terminology Dictionary

Abstract

This document maps the terminology differences between Dell™ PS Series and Dell EMC™ SC Series storage arrays.

October 2017

Revisions

Date	Description
October 2015	Initial release
October 2017	Miscellaneous updates

Acknowledgements

Author: David Glynn

The information in this publication is provided "as is." Dell Inc. makes no representations or warranties of any kind with respect to the information in this publication, and specifically disclaims implied warranties of merchantability or fitness for a particular purpose.

Use, copying, and distribution of any software described in this publication requires an applicable software license.

© 2015–2017 Dell Inc. or its subsidiaries. All Rights Reserved. Dell, EMC, Dell EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.

Dell believes the information in this document is accurate as of its publication date. The information is subject to change without notice.

Table of contents

Re	evisions	2
	knowledgements	
	recutive summary	
	PS Series to SC Series terminology map	
	SC Series to PS Series terminology map	
3	PS Series to SC Series quick reference	16
4	SC Series to PS Series quick reference	19
5	SC Series terminology updates	22
Α	Technical support and resources	23

Executive summary

The Dell™ PS Series and the Dell EMC™ SC Series storage portfolios have many similar features, however in many cases, the terminology used is somewhat different. This document helps technical customers with both platforms map the terminology differences so that they can better understand the terminology of the platform with which they have less familiarity.

1 PS Series to SC Series terminology map

The following PS-to-SC terminology map includes many of the most commonly used Dell™ PS Series terms.

PS Series term	Definition	SC Series term
access control list (ACL)	(Volume security) A list of permissions attached to a volume. Also see access policy, access policy group, and basic access point.	mapping (volume to server)
access control record	(Volume security) As of PS Series firmware version 7.0, referred to as a basic access point.	mapping (volume to server)
access policy	(Volume security) A set of extended access points that provide a method for describing endpoints for a volume. After an access policy is associated with a volume, all the endpoints described by the extended access points have access to that volume.	mapping (volume to server)
access policy group	(Volume security) A set of access policies that can be associated to a volume. All endpoints described within those access policies have access to that volume.	mapping (volume to server)
active control module	(Hardware) In a dual control module array, the control module that is actively serving I/O on a network. If the active control module ceases to function, it fails over to the secondary control module.	leader controller
array	(Hardware) A PS Series storage array is a self-contained storage unit that includes multiple disk drives configured in a highly available RAID set with dual control modules and redundant power supplies and cooling modules.	array (an entire SC Series system, including controllers and associated JBODs)
Auto-Snapshot Manager/Microsoft Edition (ASM/ME)	A snap-in console application for the Microsoft® Management Console that enables you to administer Smart Copies.	Application Protection Manager
Auto-Snapshot Manager/Microsoft Edition Command Line Interface (ASMCLI)	A set of Smart Copy operation commands that you can execute from the Microsoft Windows® command prompt.	Application Protection Manager
Auto-Snapshot Manager/VMware Edition (ASM/VE)	A plug-in console application for the VMware® vSphere® Console that enables you to administer Smart Copies.	Replay Manager for VMware (included with DSITV)
base volume	(Group Manager) A volume that has snapshots. Snapshots depend on the base volume; if the base volume is destroyed, the snapshots are removed.	active snapshot
basic access point	(Volume security) Basic access points provide volume security by directly connecting a specific endpoint to a specific volume. Prior to PS Series firmware version 7.0, referred to as an access control record.	mapping (volume to server)
cloning	The process of creating a new copy of an object such as a volume. The new object is the same type and has the same contents as the original. Contrast with thin clone.	local copy

PS Series term	Definition	SC Series term
control module	(Hardware) The processor and interface component in a PS Series array. A control module contains the PS Series firmware in flash memory and provides temporary power continuity for data stored in cached memory. It has multiple network interfaces and an optional serial port. An array can contain two hot-swappable, dual redundant controllers. The active control module serves I/O, while the secondary control module mirrors data in its cache.	controller
cross-platform replication	Feature that enables replication between PS Series and SC Series storage.	cross-platform replication
delegated space	(Group Manager) Space on a group that is set aside to store received replicas for a partner.	N/A (SC Series does not require space reserves)
Dell Storage Update Manager (DSUM)	An application that helps you analyze current PS Series storage configurations to determine which components (if any) can or need to be updated, and performs updates.	Dell Storage Manager (DSM) client (updates are guided for SCv Series, manual for others)
failback	Bringing the original primary site volume online for use after a failover.	no specific term (similar functionality exists in SC Series)
failover	Bringing the replica at the secondary site online for use while the primary site is unavailable.	activate disaster recovery
group	An iSCSI storage entity comprised of one or more PS Series storage arrays that scales out through peering and is accessed through a single IP address and managed as a storage area network (SAN).	SC Series array
group administrator	An account on a PS Series group that has permission to manage all features and objects in a PS Series group, including configuring replication partners. The default group administrator account is grpadmin. Compare to pool administrator.	administrator
group IP address	The network address that iSCSI initiators use to discover iSCSI targets and administrators use to access the group. See also management IP address.	control port (virtual port mode)
Group Manager	A SAN and NAS management tool integrated with PS Series firmware. Providing a comprehensive single point of management, Group Manager enables administrators to remotely manage all aspects of PS Series iSCSI-based SAN or NAS.	DSM client
group member	An individual PS Series array or Fluid FS NAS controller configured into a PS Series group. A PS Series array NAS cluster appears in the group hierarchy as a member.	N/A (group member is specific to PS Series architecture)
group name	A unique identifier assigned to a group.	SC Series array name
Host Integration Tools for Linux (HIT for Linux)	A suite of tools that integrate Linux® systems with PS Series storage arrays. It includes the Remote Setup Wizard Command Line Interface (RSWCLI), the EqualLogic Host Performance and Configuration Tuning Suite (eqltune), and EqualLogic Log Gathering Facility (eqllog).	N/A (SC Series does not have a Linux toolkit)

PS Series term	Definition	SC Series term
Host Integration Tools for VMware (HIT/VMware)	A suite of tools that integrate VMware vSphere systems with PS Series storage arrays. It includes Virtual Storage Manager (VSM), Storage Replication Adapter (SRA) for VMware Site Replication Manager, and the Dell EqualLogic Multipathing Extension Module (MEM).	Dell Storage Integration Tools for VMware (DSITV)
Host Integration Tools for Windows (HIT/Microsoft)	A suite of applications that enable you to configure and manage an array. It includes ASM/ME, DSM (Multipath I/O Device Specific Module), and RSW (Remote Setup Wizard).	N/A (while not bundled as a suite, SC Series has similar components such as Replay Manager for Microsoft, SCOM Management Pack, SCVMM SMI-S provider, and Azure Site Recovery)
local replication reserve	(Group Manager) Storage space on a primary group that is used to record changes to a volume when replication is configured, and (optionally) to store a failback snapshot for a volume.	N/A (SC Series does not require space reserves)
low free space	A condition in which the PS Series group has insufficient free space to perform load balancing operations.	emergency mode
management IP address	In a group with a management network configured and enabled, an address used exclusively to log in to the Group Manager GUI or CLI.	DSM client IP address
management network	An optional management network that separates iSCSI traffic (volume I/O) from management traffic (GUI and CLI sessions, and other group management communications and intergroup operations).	management network (required)
Manual Transfer Utility (MTU)	A standalone utility for PS Series that performs volume replication using transportable media instead of the network. The utility has both graphical and command-line user interfaces.	portable volume
member	An individual PS Series array or Fluid FS NAS controller configured into a PS Series group. A PS Series array NAS cluster appears in the group hierarchy as a member.	N/A (member is specific to PS Series architecture)
oversubscribed space	The amount of space presented as volumes that exceeds the physical capacity of the group or pool.	oversubscribed space
peering	Combing multiple arrays as part of a PS Series group to permit seamless migration of workloads from one to another and load balancing within pools.	federation
pool	Storage space provided by one to eight members (and up to four pools in a group). You assign volumes to a specific pool, and load balancing operates only within pools.	disk folder
pool administrator	(Group Manager) An account on a PS Series group that has permission to manage objects only in a specific pool or set of pools for a group. Compare to group administrator.	no comparable role
primary controller	The active controller performing I/O and management functions in a PS Series array.	leader controller
primary group	(Group Manager) In a replication partnership, the group containing the original volume. See secondary group.	source SC Series array

PS Series term	Definition	SC Series term
primary volume	(Group Manager) A volume configured for replication to a replication partner.	source volume
PS Series array	A single PS Series iSCSI storage unit, usually configured as a PS Series group. You can join multiple PS Series arrays into a larger PS Series group and manage them as a single iSCSI SAN.	SC Series array
PS Series group	An iSCSI storage entity comprised of one or more PS Series storage arrays that scales out via peering and is accessed through a single IP address and managed as a storage area network (SAN).	SC Series array
RAID preference	(Group Manager) Volumes may be assigned a RAID preference. If the specified RAID type exists in the pool that the volume is assigned to and has space available, the volume will be moved to that RAID type.	storage profile
recoverable volume	(Group Manager) Deleted volumes are placed in the recovery bin, where they remain until they are purged or recovered. Recovering a volume moves the volume from the recovery bin back to the group. Volumes with no data are automatically deleted. Volumes in the recovery bin can be purged by the system if free space is needed for any other purpose.	no specific term (similar functionality exists in SC Series)
recovery bin	(Group Manager) Area of pool free space used to preserve recoverable volumes. Volumes in the recovery bin can be restored or purged. See recoverable volume.	recycle bin
recovery volume	Temporary volume created by promoting an inbound replica set as part of a failover operation. You can also create recovery template volumes and recovery thin clones.	view volume
Remote Setup Wizard (RSW), Remote Setup Wizard Command Line Interface (RSWCLI)	(Host Integration Tools) Interfaces that enable you to configure a PS Series array after you install the Host Integration Tools.	DSM client discover and configure (supported on SCv Series, SC5020, and SC7020)
replica	A point-in-time representation of a PS Series volume. The original volume and its replica are located on different PS Series groups (replication partners) potentially separated by some geographical distance to facilitate disaster tolerance. Compare to Synchronous Replication.	replication
replica collection	(Group Manager) The set of replicas resulting from each replication of a volume collection.	no comparable feature
replica collection set	(Group Manager) The set of replica collections for a volume collection.	no comparable feature
replica reserve	(Group Manager) The portion of delegated space on a replication partner that is set aside for the replica sets for a specific volume.	N/A (SC Series does not require space reserves)
replica set	(Group Manager) The set of complete replicas for a volume, template volume, or thin clone volume.	no specific term (similar functionality exists in SC Series)
replication	The process of copying the replicas from the primary PS Series group to the secondary PS Series group so that data can be recovered at the secondary group if necessary.	replication

PS Series term	Definition	SC Series term
replication partner	(Group Manager) A group that is configured to send or receive replicas from another partner.	destination SC Series array
SAN HeadQuarters (SAN HQ)	Application that monitors and displays utilization, performance, and log data about one or more PS Series groups.	Dell Storage Manager (DSM)
secondary controller	The controller that is mirroring cache and standing by to take over I/O and management functions in the event of a failure of the PS Series array primary controller.	peer controller
secondary group	(Group Manager) In a replication configuration, the group that receives replicas of a source volume. See primary group.	destination SC Series array
shrink (volume)	(Group Manager) Decreasing the reported size of a volume.	no specific term (similar functionality exists in SC Series)
single sign-on (SSO)	(Group Manager) A feature that enables a user who has already logged in to a PC using Windows Active Directory® (AD) credentials to log in to the Group Manager GUI without having to specify the credentials a second time.	N/A (not supported by SC Series)
Smart Copy	(Auto-Snapshot Manager/Microsoft Edition) A point-in-time, application-consistent copy of objects in a PS Series group. A Smart Copy can be of type snapshot, clone, or replica, depending on the edition of Auto-Snapshot Manager that you are using.	snapshot, replication
smart tags	Provide a mechanism for PS Series group administrators to organize, search, and filter the volumes in their groups.	no comparable feature
snapshot	A point-in-time representation of a PS Series iSCSI volume. Seen on the network as an iSCSI target, a snapshot is maintained as deltas from the original volume.	snapshot
snapshot collection	A set of snapshots resulting from a snapshot operation on a volume collection. See volume collection.	no comparable feature
snapshot reserve	Space allocated on a per-volume basis to hold snapshots.	N/A (SC Series does not require space reserves)
space borrowing	(Group Manager) Includes snapshot space borrowing and replication borrowing. As of PS Series firmware v8.0, the following borrowing capabilities are available:	N/A (SC Series does not require space reserves)
	 Extends the existing snapshot and local replica borrowing capability to enable borrowing from unused delegated space Provides borrowing to remote replicas so that they can borrow space beyond their replica reserve (similar to snapshot borrowing) 	
storage pool	Storage space provided by one to eight members (and up to four pools in a group). You assign volumes to a specific pool, and load balancing operates only within pools.	disk folder

PS Series term	Definition	SC Series term
SupportAssist	An optional component of SAN HeadQuarters that enables you to collect, and optionally upload, PS Series group configuration diagnostic data to Dell Support for analysis and diagnosis. It is bundled with every SAN HeadQuarters server and configured from the SAN HeadQuarters client.	SupportAssist
synchronous replication (SyncRep)	(Group Manager) The simultaneous writing of data to two pools for a volume in the same PS Series group, resulting in two hardware-independent copies of the volume data. Each write must go to both pools before the write is acknowledged as complete. If one copy of the volume data is not available, you can still obtain the data from the other pool. Compare to replica.	synchronous replication
template volume	Read-only volume from which you create thin clones.	N/A
thin clone	A volume that shares space with a template volume. Thin clones provide an efficient use of storage space for configurations with multiple volumes that have a large amount of common data.	N/A
thin provisioning	(Group Manager) The process of optimizing use of storage space in a group through over allocation. An object (such as a volume) is attributed less physical space than is reported by the group to any computer that is connected to the volume.	Dynamic Capacity
Virtual Storage Manager (VSM) for VMware vSphere	An application packaged as a plug-in to VMware vSphere that provides storage efficiency, performance, and data protection for PS Series arrays, along with additional functions and tasks that can be applied to VMware objects.	Dell Storage Integration Tools for VMware (DSITV)
volume	Storage allocated by a PS Series group as an addressable iSCSI target.	dynamic write volume, snapshot-enabled volume
volume administrator	An account on a PS Series group that has permission to manage a quota of storage in one or more pools. A volume administrator can perform any volume operations, including replication, within their quota limit.	volume manager
volume collection	(Group Manager) A number of volumes grouped together for purposes of performing operations on the volumes simultaneously. See snapshot collection and replica collection.	consistency group
volume folder	(Group Manager) A folder that you can use to organize volumes in the Group Manager GUI. Volume folders are only an organizational tool; they do not affect the volumes they contain.	volume folder (they may be nested in the SC Series array)
volume reserve	(Group Manager) The amount of space allocated to a volume from free pool space. Without thin provisioning, volume reserve is the same as the reported size.	N/A (SC Series does not require space reserves)

2 SC Series to PS Series terminology map

The following SC-to-PS terminology map includes many of the most commonly used SC Series terms.

SC Series term	Definition	PS Series term
activate disaster recovery	Bringing the destination volume in a replication online to provide access to the data while the source volume is unavailable.	failover
active Replay (EM)	Current active pages of a volume. Known as an active snapshot in DSM.	base volume
active space	Amount of space that is used by a volume if the volume has no snapshots attached to it. This number does not include RAID overhead.	in-use capacity
actual space	Amount of active space plus snapshot space.	N/A (each reserve is reported separately in PS Series arrays)
Application Protection Manager	A set of tools that enable the administration of application-consistent snapshots for Microsoft applications.	Auto-Snapshot Manager/Microsoft Edition
Application Protection Manager Suite	A set of tools (application managers) that enable the protection of various applications such as Microsoft and VMware.	Host Integration Tools
assigned disks	Physical disks that have been assigned to a disk folder. Same as managed disks.	N/A (all PS Series disks are assigned)
asynchronous replication	Point-in-time replication of changes to a volume based on a snapshot schedule. Compare to synchronous replication.	replication
asynchronous replication/active snapshot mode	All writes to a volume are copied from the source volume to the destination volume using a queue to hold pending writes so that the application I/O may continue before the second write is completed (contrast with synchronous replication).	N/A (PS Series does not support continuous asynchronous replication)
available space	Total amount of storage available on all disks.	group capacity, pool capacity
back end (BE)	Connection between SC Series controller(s) and disk enclosures. Also see front end.	N/A (PS Series uses arrays as building blocks, not JBODs)
base price	Chargeback feature that allows a base storage cost to be assigned to a department.	NA (PS Series does not support chargeback)
clustered controllers	Multiple active/active SC Series controllers that are interconnected to form a single SC Series array.	No specific term (similar functionality exists in PS Series)
conservation mode	Mode reached when remaining free space reaches 10%. When the SC Series array enters conservation mode, System Manager generates a Conservation Mode Alert to inform you that no new volumes can be created and that it will begin to aggressively expire snapshots.	low free space
consistency group	A group of volumes that are managed as a unit for snapshots.	volume collection
control port	In virtual port mode, a control port is created for each iSCSI fault domain. iSCSI servers connect to the SC Series array using the control port. The control port redirects a connection to the appropriate physical ports.	group IP address

SC Series term	Definition	PS Series term
cross-platform replication	Feature that enables replication between PS Series and SC Series storage.	cross-platform replication
Data Collector	Dell Storage Manager (DSM) component that collects information from all registered SC Series, PS Series, and FluidFS clusters.	SAN HeadQuarters (SAN HQ)
Data Progression	Data Progression moves data between tiers as well as among multiple RAID levels within the same tier based on policies.	load balancers
Dell Storage Integration Tools for VMware (DSITV)	DSITV is a virtual appliance that hosts the vSphere Web Client Plugin, and Replay Manager for VMware applications. This was previously included the VASA Provider which is now a part of DSM.	Virtual Storage Manager (VSM) for VMware vSphere
Dell Storage Manager (DSM) client	DSM component that manages and displays SC Series, PS Series, FluidFS clusters, and servers that are registered to the DSM Data Collector.	SAN HeadQuarters, Group Manager, DSUM
Dell Storage Manager (DSM) Data Collector	DSM component that polls SC Series arrays for performance data, capacity utilization, and other information.	SAN HeadQuarters
Dell Storage Software Suite for AIX	The Dell Storage Software Suite for AIX is a software driver package that enables SC Series solutions to be utilized in a wide range of IBM® AIX® environments.	N/A (no comparable function in PS Series)
destination SC Series array	SC Series array to which volumes are being replicated.	secondary group, replication partner
disk folder	A logical collection of physical disks.	storage pool
dual redundancy	A storage type option for protecting against the loss of any two drives, using RAID 10 dual-mirror and/or RAID 6.	no specific term (similar functionality exists in PS Series)
Dynamic Capacity	Reduces storage use by consuming physical disk space only when data is written to a volume.	thin provisioning
dynamic controllers	A minimum of two SC Series clustered controllers that provide automatic failover using an internal heartbeat.	no specific term (similar functionality exists in PS Series)
dynamic write volume	A volume that has never had a snapshot taken.	volume
emergency mode	Mode reached when the SC Series array can no longer operate because there is no more free space. Volumes are taken offline, but the SC Series array continues to provide management functions to allow the situation to be corrected.	low free space
enclosure	Component that provides connectivity, power, and cooling to multiple disks (for example, a JBOD).	N/A (PS Series does not use JBODs)
FastTrack	An optional SC Series feature that dynamically places the most active data on the outer (faster) disk tracks.	N/A (PS Series does not have this feature)
fault domain	A fault domain identifies physical front-end ports grouped into a failover set.	no specific term (similar functionality exists in PS Series)
federation	Multiple SC Series arrays that are able to transfer workloads to each through Live Migrate to achieve load balancing.	peering
free space	Space not assigned to volumes or snapshots.	free capacity
front end (FE)	Connection between the controllers and servers. Also see back end.	no specific term (similar functionality exists in PS Series)
I/O pending	Number of I/O operations that are currently waiting to be processed.	queue depth

SC Series term	Definition	PS Series term
I/O usage	Rate at which data is being transferred.	I/O rate
leader controller	The primary controller of the dual controller cluster. Also see peer controller.	primary controller
legacy mode	Front-end port mode in which fault domains associate primary and reserved front-end ports to each other in a static active/passive configuration. Also see virtual mode.	N/A (PS Series ports are active/active)
Live Migrate	A feature that allows a volumes to be non-disruptively moved from one SC Series array to another.	N/A
Live Volume	A feature that allows two separate SC Series arrays to present the same volume as a read/write volume to one or multiple hosts.	N/A
Live Volume auto failover	A feature that supports the automatic failover of a volume from one SC Series array to another, transparently to the attached servers.	N/A
local copy	SC Series feature allowing volumes to be copied to another volume, mirrored to another volume, or migrated between different disk types and RAID levels.	clone
managed disks	Disks that are assigned to a disk folder in order to associate those devices with a storage pool.	N/A (all PS Series disks are managed)
management IP address	Virtual IP address used to connect to the controller currently serving as the leader controller.	management IP address (only applies to PS Series if the optional management port has been activated)
mapping (volume to server)	Mapping defines which servers can access specific volumes.	access control list (ACL), access control record, access control policy, basic access point
oversubscribed space	Provisioned space minus available space.	oversubscribed space
pagepool	A pagepool is a collection of pages made up of the disks in the assigned disk folder.	pool
peer controller	In a dual-controller SC Series array, the peer controller shares the I/O load with the leader controller but does not perform external management functions. If the leader controller fails, the peer controller assumes the I/O and management duties of both controllers. Also see leader controller.	secondary controller
preallocation	Preallocating storage physically assigns storage to the volume before it is used by the server. Not allowed for volumes already having snapshots.	thick provisioning
price multiplier	In chargeback, a modifier applied to the storage costs of a department to add a premium or discount to the price.	N/A (PS Series does not support chargeback)
provisioned space	Space reported to servers as volumes.	N/A (not directly reported by PS Series tools)
QoS (quality of service)	Controls how bandwidth between SC Series arrays is used for replication and Live Volumes.	N/A (PS Series does not support QoS)

SC Series term	Definition	PS Series term
RAID 10-DM	RAID 10 dual mirror. Data is written simultaneously to three separate disks.	N/A (PS Series does not support this RAID type)
RAID 5-5 and 5-9	RAID 5-5 uses 5 drives to form a RAID 5 stripe; RAID 5-9 uses 9 drives to form a RAID 5 stripe.	RAID 5
RAID 6-6 and 6-10	RAID 6-6 uses 6 drives to form a RAID 6 stripe; RAID 6-10 uses 10 drives to form a RAID 6 stripe.	RAID 6
RAID tiering	The SC Series function that directs new writes to RAID 10 and then migrates the data to RAID 5 or RAID 6.	load balancers
Remote Instant Replay (EM)	Remote Instant Replay in Enterprise Manager (EM) is a Replay (snapshot in DSM) replicated to another SC Series array and may be either synchronous or asynchronous.	replica
Replay (EM)	A Replay in Enterprise Manager (EM), known as a snapshot in Dell Storage Manager (DSM), is a point-in-time copy of a volume that contains an image of the data as it appeared when the copy was initiated.	snapshot
Replay enabled volume (EM)	A volume with one or more Replays (snapshots).	volume
Replay Manager for VMware	A utility that that enable the administration of virtual machine consistent snapshots of VMware virtual machines.	Auto-Snapshot Manager/VMware Edition
snapshot	Point-in-time copy of an SC Series volume, providing the ability to roll back a volume to a previous point in time. Only data that has changed from the previous point in time copy is stored.	snapshot
snapshot schedule	A collection of rules that determine when snapshots are created and how long they will be retained.	snapshot schedule, replication schedule
snapshot space	Amount of space used by snapshots of a volume.	snapshot reserve (in use)
replication	The process of copying the snapshots from one SC Series array to another so that data can be recovered from the remote SAN if necessary.	replication
replication deduplication	Replication feature that reduces the amount of data transferred by copying only the changed portions of the snapshot history on the source volume, rather than all data captured in each snapshot. Not the same as deduplication of data stored on disk.	no specific term (similar functionality exists in PS Series)
restore points	Snapshots that may be used to restore a volume to the point in time at which the snapshot was created.	snapshot, replica
server agent	An application that installs into Windows Server to aid in volume management and space recovery in Windows Server 2003 and 2008.	N/A (PS Series has a similar agent included in the Host Tools for Microsoft to provide UNMAP support to Windows Server 2008)
single redundancy	A storage type option for protecting against the loss of any one drive, using RAID 10 and/or RAID 5.	no specific term (similar functionality exists in PS Series)
source SC Series array	The SC Series array that is sending data to another by replication.	primary group

SC Series term	Definition	PS Series term
source volume	A volume that is being replicated.	primary volume
SC Series array	A complete storage solution that provides unified physical storage and storage management. SC Series architecture integrates multiple disk technologies with multiple interfaces and controllers. Arrays scale up using JBODs and scale out by federation.	PS Series group
SC Series name	Unique identifier assigned to an SC Series array.	group name
storage profile	A collection of rules that identify RAID level and drive types (tiers) on which data is stored.	RAID preference
storage type	A set of attributes, including redundancy options and page size, that control how space from a storage pool is allocated and protected.	no specific term (similar functionality exists in PS Series)
storage usage	Amount of space consumed by volumes on the disk (including snapshot space and RAID overhead).	capacity (in use)
synchronous replication	Each write must be completed to both the source volume and the destination (remote) volume before the application receives an I/O complete message. Compare to asynchronous replication.	synchronous replication
thin provisioning	Volume sizes can be defined and reported to the application that are greater than the actual physical storage. Storage space is only used when data is written.	thin provisioning
thin import	Feature that enables the importing of LUNs from a PS Series to an SC Series array. Requires both arrays to be managed by DSM.	thin import
threshold alert definition	Defines the event or condition that triggers an alert.	alert criteria
threshold alert object	Defines what logical objects are monitored, such as an SC Series array, volume folder, or volume.	alert name
total storage	Actual space plus the amount of space taken up by RAID overhead.	total capacity
transport type	The protocol used to communicate data between the SC Series array and attached servers.	N/A (PS Series is iSCSI only)
unassigned disk	Drive that have not been assigned to a managed disk folder.	N/A
view volume	A volume that has been created from a snapshot for the purpose of restoring, recovering, cloning, or presenting data from a point in time.	recovery volume
virtual port mode	All front-end ports accept I/O and can be part of one fault domain. Also see legacy port mode.	N/A (PS Series operates in this manner by default)
volume folders	A logical view used to organize volumes in the DSM client. In the SC Series array, volume folders may be nested.	volume folders

3 PS Series to SC Series quick reference

PS Series term	SC Series term
access control list (ACL)	mapping (volume to server)
access control record	mapping (volume to server)
access policy	mapping (volume to server)
access policy group	mapping (volume to server)
active control module	leader controller
array	array (an entire SC Series array, including controllers and associated JBODs)
Auto-Snapshot Manager/Microsoft Edition (ASM/ME)	Application Protection Manager
Auto-Snapshot Manager/Microsoft Edition Command Line Interface (ASMCLI)	Application Protection Manager
Auto-Snapshot Manager/VMware Edition (ASM/VE)	Replay Manager for VMware
base volume	active snapshot
basic access point	mapping (volume to server)
cloning	local copy
control module	controller
delegated space	N/A (SC Series does not require space reserves)
Dell Storage Update Manager (DSUM)	DSM client (updates are guided for SCv Series, manual for others)
failback	no specific term (similar functionality exists in SC Series)
failover	activate disaster recovery
group	SC Series array
group administrator	administrator
group IP address	control port (virtual port mode)
Group Manager	Dell Storage Manager (DSM) client
group member	N/A (specific to PS Series architecture)
group name	SC Series name
Host Integration Tools for Linux (HIT for Linux)	N/A (SC Series does not have a Linux toolkit)
Host Integration Tools for VMware (HIT/VMware)	Dell Storage Integration Tools for VMware (DSITV)
Host Integration Tools for Windows (HIT/Microsoft)	N/A (while not bundled as a suite, SC Series has similar components such as Replay Manager for Microsoft, SCOM Management Pack, SCVMM SMI-S provider, and Azure Site Recovery)
local replication reserve	N/A (SC Series does not require space reserves)
low free space	emergency mode
management IP address	DSM client IP address
management network	management network (required)
manual transfer utility (MTU)	portable volume
member	N/A (specific to PS Series architecture)
oversubscribed space	oversubscribed space
peering	federation

PS Series term	SC Series term
pool	disk folder
pool administrator	no comparable role
primary controller	leader controller
primary group	source SC Series array
primary volume	source volume
PS Series array	SC Series array
PS Series group	SC Series array
RAID preference	storage profile
recoverable volume	no specific term (similar functionality exists in SC Series)
recovery bin	recycle bin
recovery volume	view volume
Remote Setup Wizard (RSW), Remote Setup Wizard Command Line Interface (RSWCLI)	DSM client (SCv Series, SC5020, and SC7020 only)
replica	snapshot
replica collection	N/A
replica collection set	N/A
replica reserve	N/A (SC Series does not require space reserves)
replica set	no specific term (similar functionality exists in SC Series)
replication	replication
replication partner	destination SC Series array
SAN HeadQuarters (SAN HQ)	DSM client and Data Collector
secondary controller	peer controller
secondary group	destination SC Series array
shrink (volume)	no specific term (similar functionality exists in SC Series)
single sign-on (SSO)	N/A (not supported by SC Series)
smart copy	snapshot/replication
smart tags	N/A
snapshot	snapshot
snapshot collection	N/A
snapshot reserve	N/A (SC Series does not require space reserves)
space borrowing	N/A (SC Series does not require space reserves)
storage pool	disk folder
SupportAssist	SupportAssist (formerly PhoneHome)
synchronous replication (SyncRep)	synchronous replication
template volume	N/A
thin clone	N/A
thin provisioning	Dynamic Capacity
Virtual Storage Manager (VSM) for VMware vSphere	Dell Storage Integration Tools for VMware (CITV)
volume	dynamic write volume, snapshot-enabled volume

PS Series term	SC Series term
volume administrator	volume manager
volume collection	consistency group
volume folder	volume folders (may be nested in SC Series)
volume reserve	N/A (SC Series does not require space reserves)

4 SC Series to PS Series quick reference

SC Series term	PS Series term
activate disaster recovery	failover
active Replay (EM)	base volume
active space	in-use capacity
actual space	N/A (each reserve is reported separately in PS Series)
Application Protection Manager Suite	Host Integration Tools
assigned disks	N/A (all PS Series disks are assigned)
asynchronous replication	replication
asynchronous replication, active snapshot mode	N/A (PS Series does not support continuous asynchronous replication)
available space	group capacity, pool capacity
back end (BE)	N/A (PS Series uses arrays as building blocks not JBODs)
base price	N/A (PS Series does not support chargeback)
clustered controllers	no specific term (similar functionality exists in PS Series)
conservation mode	low free space
consistency group	volume collection
control port	group IP address
Data Collector	SAN HeadQuarters (SAN HQ)
Data Instant Replay (EM)	snapshot
Data Progression	load balancers
Dell Storage Integration Tools for VMware (CITV)	Virtual Storage Manager (VSM) for VMware vSphere
Dell Storage Manager (DSM) client	SAN HeadQuarters, Group Manager, DSUM
Dell Storage Manager (DSM) Data Collector	SAN HeadQuarters
Dell Storage Software Suite for AIX	N/A
destination SC Series array	secondary group, replication partner
disk folder	storage pool
dual redundancy	no specific term (similar functionality exists in PS Series)
Dynamic Capacity	thin provisioning
dynamic controllers	no specific term (similar functionality exists in PS Series)
dynamic write volume	volume
emergency mode	low free space
enclosure	N/A (PS Series does not use JBODs)
FastTrack	N/A
fault domain	no specific term (similar functionality exists in PS Series)
federation	peering
free space	free capacity

SC Series term	PS Series term
front end (FE)	No PS Series term, but similar functionality exists
I/O pending	queue depth
I/O usage	I/O rate
leader controller	primary controller
legacy mode	N/A (PS Series ports are active/active)
Live Volume	N/A
local copy	clone
managed disks	N/A (all PS Series disks are managed)
management IP address	management IP address (applies if the optional management port has been activated)
mapping (volume to server)	access control list (ACL), access control record, access control policy, basic access point
oversubscribed space	oversubscribed space
pagepool	pool
peer controller	secondary controller
preallocation	thick provisioned
price multiplier	N/A (PS Series does not support chargeback)
provisioned space	Not directly reported by PS tools
QoS (Quality of Service)	N/A
RAID 10-DM	N/A
RAID 5-5 and 5-9	RAID 5
RAID 6-6 and 6-10	RAID 6
RAID tiering	load balancers
Remote Instant Replay (EM)	replica
Replay (EM)	snapshot
Replay Enabled Volume (EM)	volume
Replay Manager for Microsoft	Auto-Snapshot Manager/Microsoft Edition
Replay Manager for VMware	Auto-Snapshot Manager/VMware Edition
Replay profile (EM)	snapshot schedule, replication schedule
Replay space (EM)	snapshot reserve (in use)
replication	replication
replication deduplication	no specific term (similar functionality exists in PS Series)
restore points	snapshot, replica
SC Series array	PS Series group
SC Series array name	group name
server agent	N/A (PS Series has a similar agent included in the Host Tools for Microsoft to provide UNMAP support to Windows Server 2008)
single redundancy	no specific term (similar functionality exists in PS Series)

SC Series term	PS Series term
snapshot	snapshot
source SC Series array	primary group
source volume	primary volume
storage profile	RAID preference
storage type	no specific term (similar functionality exists in PS Series)
storage usage	capacity (in use)
synchronous replication	synchronous replication
thin provisioning	thin provisioning
threshold alert definition	alert criteria
threshold alert object	alert name
total storage	total capacity
transport type	N/A (PS Series is iSCSI only)
unassigned disk	N/A
view volume	recovery volume
virtual port mode	N/A (PS Series operates in this manner by default)
volume folders	volume folders

5 SC Series terminology updates

New terminology	Old terminology
Application Protection Manager	Replay Manager
active snapshot	active Replay
active snapshot mode	active Replay mode
local copy	copy-mirror-migrate
data reduction	deduplication, compression
Dell Storage Integration Tools for VMware (DSITV)	Compellent Integration Tools for VMware (CITV)
Dell Storage Manager (DSM)	Enterprise Manager (EM)
Dell Storage Manager client	Enterprise Manager client
replication	Remote Instant Replay
replication	Remote Instant Replay
snapshot	Replay, Data Instant Replay
snapshot schedule	Replay profile
SupportAssist	PhoneHome

A Technical support and resources

Dell.com/support is focused on meeting customer needs with proven services and support.

<u>Dell TechCenter</u> is an online technical community where IT professionals have access to numerous resources for Dell EMC software, hardware, and services.

<u>Storage Solutions Technical Documents</u> on Dell TechCenter provide expertise that helps to ensure customer success on Dell EMC storage platforms.

Dell EMC has published technical papers on Dell TechCenter that outline best practices for sharing an existing PS Series iSCSI SAN with SC arrays.

- Best Practices for Sharing an iSCSI SAN Infrastructure with Dell PS Series and Dell SC Series
 Storage using Dedicated Hosts
- Best Practices for Sharing an iSCSI SAN Infrastructure with Dell PS Series and Dell SC Series
 Storage using a Windows Host
- Best Practices for Sharing an iSCSI SAN Infrastructure with Dell PS Series and Dell SC Series
 Storage using an ESXi Host
- Best Practices for Sharing an iSCSI SAN Infrastructure with Dell PS Series and Dell SC Series
 Storage using a Linux Host

.