

# Dell | EMC RecoverPoint/SE

## Disaster Recovery made simple - the way it should be

Deciding on the best technology to secure your data — whether locally or offsite — can be a daunting challenge. Your goal is to recover your data quickly with as little data loss as possible, and to do so in a simple, cost-effective manner. How do you meet this challenge?

RecoverPoint/SE is a single product solution with any point-in-time recovery with synchronous continuous data protection (CDP) to provide local data protection and synchronous and asynchronous continuous remote replication (CRR) to provide remote data protection. RecoverPoint/SE CDP and CRR can be used separately or together to provide concurrent local and remote (CLR) data protection of the same data volume over any distance.

RecoverPoint/SE technology maintains the dependent write-order data consistency of protected data replicated locally or remotely, and dynamically switches between synchronous and asynchronous replication modes based on customer policy for the best in performance and distance between production and disaster recovery sites. Its advanced bandwidth reduction and data compression capabilities are designed to dramatically reduce WAN bandwidth requirements and associated costs.

### End-to-end data protection

RecoverPoint/SE can protect companies from data loss due to common problems such as server failures, data corruption, software errors, viruses, and end-user errors, while also protecting against natural disasters that can bring businesses to a standstill. With RecoverPoint/SE, organizations can realize dramatic cost savings by eliminating complex, non-performing data protection schemes and application-specific point products in favor of deploying a single, easy-to-manage solution.

### Bandwidth reduction and data compression

RecoverPoint/SE uses proven, patented technology to dramatically help reduce replication bandwidth requirements. The solution employs data compression and intelligent bandwidth-reduction technologies that can deliver up to a 10:1 reduction in WAN bandwidth. These intelligent technologies can be combined, allowing customers to experience the best possible level of protection for the available bandwidth, while dramatically reducing WAN costs, particularly over long distances.

### Application data protection to any point in time

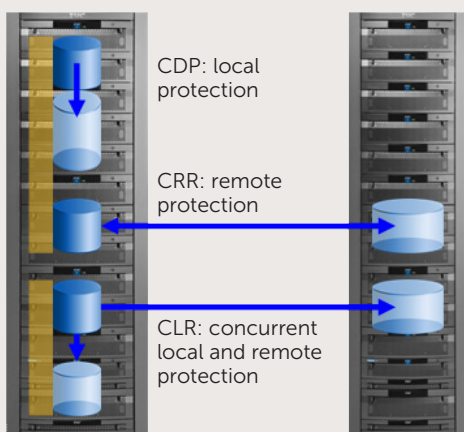
RecoverPoint/SE allows application data to be recovered to any point in time by selecting intelligent time-specific or application-specific bookmarks. Application data at the selected point in time is instantly accessed and can be immediately read and written by the host. Snapshot consolidation is also used for longer retention periods within a set amount of allocated storage, which enables customers to maintain more data online for recovery without incurring additional storage costs.

RecoverPoint/SE also allows read/write access to replicated data without disturbing the replication process. In recovery, this enables testing the data at several points in time in order to determine the best point from which to recover. This capability can be used to offload backups, to allow live application development and testing, to support on-demand recovery, to migrate data, and for many other valuable data processing purposes.

RecoverPoint/SE protects common applications from Microsoft®, Oracle, SAP, and VMware®. It also supports application-consistent recovery points (using Microsoft® required APIs such as Virtual Data Interface for SQL Server® or Volume Shadow Copy Service for Exchange®)—allowing vendor-supported recovery for these environments.

### End-to-end protection for virtual server environments

RecoverPoint/SE provides a flexible, comprehensive application data protection solution with point-in-time recovery for CLARiiON arrays in virtualized VMware Infrastructure and Microsoft® Hyper-V™ server environments. For VMware, RecoverPoint/SE integrates with VMware vCenter™ enabling the user to view the protection status for virtual machines. It also integrates with VMware vCenter Site Recovery Manager to orchestrate and streamline data protection and failover and failback processes, enabling VMware virtual machines to be brought back online rapidly with no data loss.



### RecoverPoint/SE

- Dynamic switching between synchronous and asynchronous replication
- Supports popular operating systems
- CLARiiON or Host-based splitters
- Replicated capacity up to 150 TB
- Upgradable to RecoverPoint Full

### The big picture

- Data protection, replication, and disaster recovery for CLARiiON® (CX3, CX4) arrays and Celerra FC Block LUNs
- Minimizing capital costs through virtual environment support for server and storage consolidation
- Protecting VMware® Infrastructure with RecoverPoint integrated with VMware vCenter
- Reducing infrastructure cost with policy-driven data reduction and compression technologies
- Recovering data locally or remotely to any point in time for local data protection and disaster recovery
- Reducing operation and disaster recovery time for Microsoft®, SAP®, Oracle®, VMware, and other applications

RecoverPoint/SE	
Features	RecoverPoint/SE
Management software (included)	Java-based GUI automatically downloaded and run from any host that has connectivity to a RecoverPoint appliance. Now integrated with Unisphere, and includes a command line interface (CLI)
Write splitter software (included)	CLARiiON array-based splitter (CX3, CX4) – heterogeneous OS Windows host-based splitter (Windows-only)
Software License (required)	RecoverPoint/SE is licensed based on the terabyte capacity to be locally and/or remotely replicated. CDP and/or CRR in 4TB, 8TB, 16TB, 24TB or 32TB capacities and in 1TB increments up to 150TB
Optional software	RecoverPoint/CE (Cluster Enabler) - integrates RecoverPoint/SE remote replication with Microsoft failover clustering
	VMware storage replication adapter is a VMware vCenter Site Recovery Manager (SRM) component that installs on a VMware vCenter Server at each site. This enables VMware vCenter SRM to interoperate with RecoverPoint/SE.
<b>RecoverPoint/SE Hardware - RPA</b>	
RecoverPoint Appliance (RPA)	The minimum number of appliances supported for RecoverPoint CDP is two (2) and for RecoverPoint CRR and CLR is four (4). RecoverPoint CDP supports eight (8) appliances at one site and RecoverPoint CRR and RecoverPoint CLR support a total of sixteen (16) appliances, distributed as eight (8) per site.
System (RPA)	Custom version of the Dell PE R610 1U server – leveraging Dell OEM Ready platform
Form factor	1U rack height
Processor	Intel® Xeon® Quad-core processor E5504, 2-socket, 4MB cache
Chipset	Intel™ 5520
Memory	8GB DDR3 (1066MHz or 1333MHz)
Operating system	RecoverPoint image runs on a custom built 64-bit Linux kernel
Storage	2.5" SAS 15K 146GB drives - hotplug
RAID controllers	PERC 6/I with 256MB battery-backed cache
Power supplies	Two hot-plug high-efficient 502W PSU
NICs	Two dual port embedded Broadcom® 5709c Gigabit Ethernet NIC
Rack support	ReadyRails™ sliding rails with optional cable management arm for 4-post racks (optional adapter brackets required for threaded hole racks) ReadyRails™ static rails for 2-post and 4-post racks
Chassis dimensions	Height: 4.26cm (1.68") Width: 48.24cm (18.99") (includes rack latches) Depth: 77.2cm (30.39") (includes PSU handles and bezel) Weight (maximum config): 17.69Kgs (39lbs)
Environmental specifications	<u>Temperature</u> Operating: 10° to 35°C (50° to 95°F), max temperature gradation of 10°C per hour Note: For altitudes above 2950 feet, the max operating temp is de-rated 1°F/550 ft Storage: -40° to 65°C (-40° to 149°F) with a max temp gradation of 20°C per hour <u>Relative Humidity</u> Operating: 20% to 80% (non-condensing), max humidity gradation of 10% per hour Storage: 5% to 95% (non-condensing) with a max humidity gradation of 10% per hour <u>Maximum Vibe</u> Operating: 0.26 Grms at 5 – 350Hz for 5 minutes in operational orientations Storage: 1.54 Grms at 10 – 250Hz for 10 minutes in all orientations <u>Maximum Shock</u> Operating: Half sine shock in all operational orientations of 31G 5% with a pulse duration of 2.6 ms 10% Storage: Half sine shock on all six sides of 71G 5% with a pulse duration of 2 ms 10% Square wave shock on all six sides of 27G with velocity change @ 235 in/sec or greater <u>Altitude</u> Operating: -16 to 3048 m (-50 to 10,000 ft) Note: For altitudes above 2950 feet, the maximum operating temperature is de-rated 1°F/550 ft Storage: -16 to 10,600 m (-50 to 35,000 ft)
Power supply specifications	Voltage: 90-264 VAC, autoranging, 47-63Hz Heat Dissipation: 1712.9 BTU/hr max (Energy Smart) Maximum Inrush Current: Under typical line conditions and over the entire system ambient operating range, the inrush current may reach 55A per power supply for 10ms or less

## Solutions designed for your unique needs

Dell offers a suite of end-to-end consulting services to help you understand data protection and disaster recovery technology, quantify the benefits and design a business continuity/disaster recovery solution to effectively meet your needs. These services are designed to help you find the "right path" to data protection, to save time and money and reclaim your IT resources.

Simplify your storage at [Dell.com/EMC](http://Dell.com/EMC)

