

REO SERIES 4000™ & 9000™ with Protection OS™

VERSATILE, DISK-BASED BACKUP AND RECOVERY APPLIANCES



REO 4000



REO 9000

- ENABLES FAST, RELIABLE BACKUP AND RECOVERY
- USER-DEFINED FUNCTIONALITY:
 - VIRTUAL TAPE LIBRARY
 - VIRTUAL TAPE DRIVES
 - DISK VOLUMES (LUNs)
- UP TO 44 TB RAW CAPACITY (REO 9000)
- REO PROTECTION OS SOFTWARE
- DYNAMIC VIRTUAL TAPE
- COMPATIBLE WITH ALL POPULAR BACKUP SOFTWARE
- ETHERNET (iSCSI) AND FIBRE CHANNEL CONNECTIVITY



Disk Product
of the Year 2005

REO 4000

For over 25 years, Overland Storage® has delivered industry leading data protection solutions that optimize backup, recovery, and archive operations. Our award winning designs and patented technologies combined with superior reliability and performance enable IT managers worldwide to successfully protect their valuable data.

Exponential data growth, shrinking backup windows, unreliable backups and the need for fast data recovery combined with new government regulations make data protection a challenge for any IT professional. The Overland REO 4000™ and 9000™ Disk-Based Backup and Recovery Appliances solve these challenges by providing fast, reliable data backup and recovery while reducing operating costs. Easily configured as a virtual tape library, dynamic virtual tape drives, and/or disk volumes (LUNs), the REO can be easily deployed and modified to adapt to changing data protection requirements.

Unlike tape solutions and other disk-based backup systems, only the REO SERIES™ includes REO Protection OS™ software, which embeds data protection intelligence and enables future software enhancements via software PACs. It also provides a core set of volume and device virtualization, management, and connectivity features found only in REO SERIES appliances. When configured as virtual tape, backup data is written sequentially and in large blocks, which results in greater backup performance. In addition, REO SERIES virtual tape appliances are not susceptible to disk fragmentation, viruses, manual volume management, hackers, ongoing tuning, or file system overhead - all are common problems found with general purpose disk-based backup systems.

And only REO SERIES includes patent-pending Dynamic Virtual Tape™ (DVT) technology, which ensures that no storage capacity is wasted while eliminating the manual effort and guesswork of sizing, configuring, provisioning, and deleting virtual tape cartridges. With DVT, users can create virtual tape cartridges that automatically expand or shrink to match the exact capacity requirements of the backup operation.

REO 4000 and 9000 appliances are compatible with all popular open systems and Windows-based backup software, physical tape drives and libraries and easily connect to existing Ethernet (iSCSI) and Fibre Channel networks for seamless integration without changes to existing backup processes. An intuitive and robust browser-based graphical user interface makes REO easy to configure and manage. Users can proactively monitor REO appliances and receive e-mail alerts for instant notification of status changes.

REO 4000/9000 Key Benefits:

Flexible Functionality—easily configured as a virtual tape library, dynamic virtual tape drives, and/or disk volumes (LUNs).

Performance—when configured as virtual tape, data is written sequentially and in large blocks for fast, reliable backup. Utilizes direct access disk technology for nearly instantaneous data recovery.

Easy Integration—compatible with all popular open systems and Windows-based backup software, physical tape drives or libraries and easily connects to Ethernet (iSCSI) and Fibre Channel networks.

REO Protection OS—software embedded in all REO SERIES appliances. Provides data protection intelligence including virtualization, management, and connectivity. Also enables enhanced features via add-on software PACs (e.g. REO Multi-SitePAC).

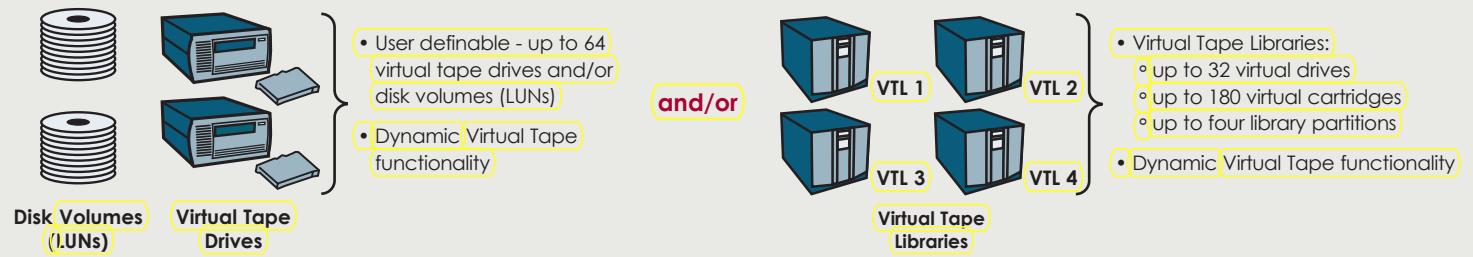
Dynamic Virtual Tape—virtual tape cartridges are automatically sized to match backup job so no capacity is wasted. Eliminates manual effort and guesswork of sizing, configuring, and provisioning virtual cartridges.

Easy to Setup and Manage—robust web-based interface provides simple step-by-step setup and proactive monitoring. Integrating disk into your backup strategy has never been easier!

REO Multi-SitePAC™ Software Option:

Automates the manual process of protecting remote data without requiring changes to existing backup systems or software. Multi-SitePAC seamlessly transfers backup data in virtual tape format from a remote REO to a central REO, where it can be consolidated, managed and archived.

REO SERIES - Configuration Example :



SPECIFICATIONS	REO 4000	REO 9000
FUNCTIONALITY	Up to 64 disk volumes (LUNs) and/or virtual tape drives and/or VTL with up to 32 virtual drives, 180 virtual cartridges, 4 partitions.	
CAPACITY* (SATA DISKS)	REO 9000 base system can be purchased with 12 or 24 disks (upgradeable to 24 disks). All base and expansion arrays ship with RAID 5 (factory default).	
Base system:	(8) 250 GB	(8) 400 GB
Raw	2 TB	3.2 TB
RAID 5	1.5 TB	2.4 TB
Expansion arrays:	Not supported	Not supported
Per Expansion Array (up to 4 total):		
Raw	N/A	N/A
RAID 5	N/A	N/A
Maximum Capacity (base system with four expansion arrays):		
Total Raw	N/A	N/A
Total RAID 5	N/A	N/A
SOFTWARE FEATURES	REO Protection OS software with Dynamic Virtual Tape, disk virtualization, browser-based management, SNMP, email alerts	
HARDWARE FEATURES	19-inch rack-mount enclosure, hot-plug disk drives, redundant hot-plug power supplies, redundant cooling, dual RAID controllers, dual GbE data ports, 10/100 management port	
EXTERNAL INTERFACES	Two, Gb Ethernet (iSCSI) ports (RJ45); Two, 2 Gb Fibre Channel Ports (optional) One Ethernet management port (RJ45)	
Data Management Expansion	Two UltraSCSI 320 ports (HD68) for SCSI tape device only	Two UltraSCSI 320 ports (VHDCI) for SCSI tape device or REO 9000 Expansion Arrays
ARRAY CONTROLLER	Dual RAID controllers	
RAID SUPPORT	RAID 0, RAID 5 (shipped with RAID 5 format)	
BASE SYSTEM POWER		
Voltage	90 to 120 VAC, 200 to 240 VAC+/-10%	90 to 120 VAC, 200 to 240 VAC+/-10%
Frequency	47 to 63 Hz	47 to 63 Hz
Current	5A @ 115 VAC, 2.5A @ 230 VAC	6A @ 115 VAC, 3A @ 230 VAC; 20A max at start-up
Power Cord Connector (US)	IEC 60320 C13 connectors	IEC 60320 C13 connectors, four per unit
Power Consumption	Steady state 203 W; Peak 277 W	Steady state 500 W; Peak 525 W (fully populated)
ENCLOSURE		
Dimensions	3.5 x 17 x 27 inches (8.9 x 43.2 x 68.6 cm)	8.75 x 19.0 x 27.0 inches (22.2 x 48.3 x 68.6 cm)
Weight (unpacked)	2U rackmount 56 lbs. (25.4 kg)	5U rackmount 130 lbs. (59 kg)
ENVIRONMENTAL REQUIREMENTS	OPERATING	NON-OPERATING
Humidity	20–80% non-condensing	10–95% non-condensing
Temperature	10–40° C	-40 to 60° C
Altitude	-984 to 10,000 ft (-300 to 3,048 m)	-984 to 30,370 ft (-300 to 12,000 m)
Shock	10 G (11 ms half sine pulse)	20 G (11 ms half sine pulse)
Vibration	.25 G swept sine (5–250–5 Hz) no errors	1.0 G swept sine (5–250–5 Hz)
AGENCY APPROVALS	UL/TUV, NRTL, CE, CUL (Canada), VCCI Class B/CISPR PUB 22 (Japan), TUV GS (Germany), BSMI (Taiwan)	
INTEROPERABILITY	Contact Overland Storage or visit www.overlandstorage.com for the most current iSCSI, Fibre Channel, and backup software compatibility matrices	
STANDARD WARRANTY	Standard warranty includes 3-year hardware XchangeNow® and 90-day software support via telephone, e-mail, and Web. Extended service options available.	

* One TB equals one trillion bytes. ** Expansion Array specifications available on separate datasheet.

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