



SEP

Backup & Disaster Recovery

SEP Software

A SINGLE BACKUP & DISASTER RECOVERY SOLUTION FOR ENVIRONMENTS OF ANY SIZE

About SEP

SEP is an enterprise backup and disaster recovery solution for today's hybrid computer environments. Supporting the widest range of operating systems and databases, SEP offers a single solution to manage heterogeneous environments of any size.

SEP is the perfect solution for IT professionals tasked with managing enterprise-wide backup and recovery processes. Its ease of use allows for complete control of all data in the most complex of IT environments. SEP is incredibly simple to install and can be integrated into any system in a matter of hours.

With SEP's Bare Metal Recovery module for Microsoft and Linux, disk drive and system failures need no longer be a devastating occurrence. Bare Metal Recovery restores damaged systems to their previous state in the easiest manner and shortest time possible. The entire system, settings, and user data are quickly restored to a new server.

SEP ensures that data and system recoverability for both physical and virtual environments can be easily and cost-effectively achieved.

For more information, visit www.sepusa.com.



Key Features

- **Back Up Virtual Environments**
Agentless solution includes image-level backups, single-file restore options, CBT and instant restore. Unparalleled coverage of virtual platforms: VMware, Microsoft Hyper-V, Red Hat Virtualization (RHV), Citrix XenServer, KVM/QEMU, OpenNebula and z/VM.
- **Cloud**
Fully integrated and secure way to back up, replicate and restore to/from any cloud.
- **Incredibly Fast Backup Speed**
Patented Multi-Streaming Technology allows the backup of multiple servers/workstations/VMs simultaneously, significantly reducing backup times.
- **Deduplication**
Source-side deduplication is a scalable, high performance solution optimizing backup performance, reducing the amount of data transferred.
- **Disaster Recovery**
Bare metal restore capabilities for Windows & Linux to similar or dissimilar hardware.
- **Platform-Independent**
Comprehensive operating system support includes Windows, Linux, SUSE, macOS, Micro Focus, Red Hat, Oracle, Solaris, Ubuntu, Debian, and AIX.
- **Centralized Administration**
The SEP GUI can quickly and easily manage the entire enterprise with the management console from a central location or remote workstation.
- **Quick Installation**
Simple installation and configuration – entire data centers, including remote locations, can be up and running in record time.

CERTIFICATIONS

SEP is certified for every major operating system, database and Groupware application. From Microsoft to Linux; from Oracle to MS SQL; from Exchange to GroupWise, SEP can quickly and efficiently back up and granularly restore mission-critical data for businesses of any size.

SEP meets or exceeds all European security standards, including GDPR, as well as US data security requirements. The solution also complies with all EU privacy requirements and follows the more stringent German legal requirements for data backup and recovery.

Download SEP Today!

Download the fully-functional backup solution, including full support, for a free 30-day trial at:

<http://sepusa.com/download-trial>

Operating Systems



Virtualization



Databases



Applications



Multi-Platform Data Availability

SEP is highly scalable and designed to back up heterogeneous client and server architectures, regardless of size. This eliminates the need for multiple backup solutions and allows for an entire IT infrastructure to be managed under one umbrella.

SEP's patented Multi-Streaming Technology leverages full network capabilities to provide multiple simultaneous backup streams. This functionality provides the fastest transfer rates and the most efficient backups possible. In optimized systems, backups exceed 2.5 TB per hour per server/media agent.

Ideal for Company Expansion and Data Growth

SEP is easy to implement and flexible to any growing or changing environment.

The main SEP console can be installed on either a Microsoft or Linux server. Then, either à la carte, capacity-based or subscription licensing can be selected to adapt to any enterprise environment, reducing costs and allowing for complete customization. With flexible licensing, add online databases, Groupware modules, disaster recovery, and virtual backup capabilities as company needs expand and budgets allow or choose the flexibility of an all-inclusive capacity base license model.

Ask about our newest solutions including Cloud, VM Essentials and MSP Backup-as-a-Service!

Virtualized Environments

PROTECT VIRTUAL MACHINES
WITH SEP

SEP Virtual Machine Backup & Recovery

When designing a virtual environment, a comprehensive backup and recovery strategy must be considered before implementation. Utilize best practices that centralize management and process controls to ensure easy monitoring and the security of the environment.

SEP offers exceptional backup, recovery, replication and encryption for virtual platforms, including VMware, Hyper-V, Red Hat Virtualization, Citrix, KVM/QEMU, z/VM and OpenNebula. SEP virtual solutions are fully integrated, easily installed enterprise-wide and allow for the maximum flexibility when designing backup strategies.

Key Features

- Agentless technology
- Single-file restore for Windows VSS, Linux/UNIX
- VM snapshots, image level backups for all supported operating systems
- Automatically or manually restore to other hosts, HA clusters, or pools
- Easily create automated warm standbys onsite or offsite for DR or QA
- Convert between virtual and physical servers [P2V and V2P]

SEP VM Essentials VMware and Hyper-V

Harness the same powerful enterprise class backup and disaster recovery engine for a reduced cost. SEP VM Essentials delivers socket-based software that affords you the ability to realize significant backup software licensing savings. A socket-based approach allows you to optimize the number of VMs without having to worry about the size of your datastore.

SEP VM Essentials offers unlimited backup to disk, tape or cloud with unlimited deduplication, replication and restore features. SEP VM Essentials is designed to meet the needs of small businesses with up to 6 CPU sockets.

- Restart VMs directly from backup, completely eliminating any restore or down time
- Unlimited VMs, Deduplication, Replication, Encryption
- Backup and granular recovery of snapshots
- Back up any database - SQL, Exchange, Oracle, SAP, SharePoint, and more

“Since installing SEP, the time we spend working on backup related issues has shrunk by a factor of 90%. In addition, the acquisition cost of SEP was less than the maintenance fee of our old backup software.”

*John Carpenter
Georgetown University*

SUPPORTED VIRTUAL PLATFORMS

VMware

- Restart VMs directly from backup, completely eliminating any restore or down time
- Full or incremental backups with Change Block Tracking (CBT)
- Full support of ESX backups through a VCB proxy, VADP or direct access to the hypervisor

Citrix XenServer

- Online hot and warm backup and restore options using the XenServer API
- Restores all VMs with activated O/S product code as well as all third-party licenses (Activation Loss Prevention)
- Backs up host-specific info and metadata
- Full integration and support for XenDesktop and XenApp

Microsoft Hyper-V

- File consistency with VSS
- Exchange/SQL/SharePoint aware

Red Hat Virtualization

- Agentless, native API, uninterrupted snapshot backups
- VMs are backed up via direct communication between SEP & the RHV hypervisor

KVM/QEMU

- Online backup of VMs on single host systems through direct integration with the libvirt API

Deduplication & Replication

EFFICIENT BACKUPS WITH SEP

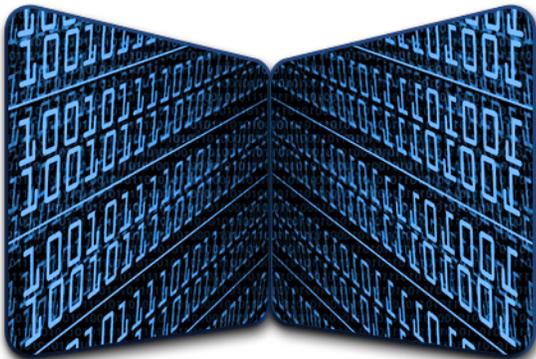
SEP Si3 Deduplication

Utilize disk space more efficiently and reduce storage costs with the dynamic SEP deduplication solution.

SEP Si3 Deduplication is a scalable, high-performance, source-side solution that greatly reduces storage requirements. Si3 delivers extremely fast restores and eliminates performance degradation during read operations. By using variable block sizes, users can compress more data into smaller footprints and maximize limited disk space.

Deduplication processes can be set by the main SEP management console to start during a backup or can be scheduled to occur at a set time on a regular basis. This flexibility allows the end user to accommodate different use cases for both deduplicated and raw data.

SEP software-based deduplication runs on any hardware, eliminating the need for expensive, hardware-based deduplication appliances.



SEP Si3 Replication

SEP Si3 Replication is an easy and secure way to consistently replicate data between a main data center, a disaster recovery site, remote locations, and the cloud, providing redundancy for disaster recovery as well as reducing overall disk and tape storage requirements.

Users can maximize their existing infrastructure by creating off-site warm standbys and/or replicating data from any node to any other node. Since SEP is completely hardware independent, users can replicate to dissimilar hardware.

Combined with SEP Si3 Deduplication and Encryption, this feature will ensure faster backup windows, improved performance and additional data security.

SEP Si3 Encryption

- SEP can compress data stream into blocks and each block can be encrypted using a randomly generated key
- Integrated encryption of data on tape, DataStore or Si3 DedupStore
- Requires activated authentication
- Uses the key algorithm: IDEA
- Ensures compliance with general data protection legislation
- Completes the encrypted data chain after transmission

“ I can definitively say that SEP backs up our environment at least twice as fast, uses only one server instead of two, and our backups complete well within our backup window, so it is much faster than our old solution. ”

*Clint Scott
Mount Aloysius College*

Deduplication + Replication

- Optimizes existing infrastructure by creating off-site warm standbys and/or replicating data from any node to any location via LAN, WAN or Cloud
- Provides a space-efficient repository for SEP DataStores
- Reduces disk storage needs and data center power consumption
- Longer retention periods on backup media
- Supports any type of disk storage or Cloud



Key Features	Availability
Deduplication	Source-Side
Direct Block-Level Access (Restore)	✓
Multi-Stream Backup Integration	✓
Replication	Block-level
Replication Bandwidth (WAN)	Reduced by up to 97%
Unique Data Transferred only once from Remote Sites to Data Center	✓
Maximum Dedupe DataStore size	4 PB
Disk Storage Savings	Up to 300:1
SEP Management Interface Integration	✓
Storage Target	Server, Remote Device, Cloud
Variable Block-Size	Down to 2K Block Size
Installation Framework	Physical, Virtual
Supported Architectures	64 bit

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SEP Hybrid Cloud

ENTERPRISE-WIDE

“ The performance of SEP went above and beyond what we expected of the product. The time it takes to complete a full backup has decreased by 235%! ”

*Dustin Hurshman
City of Thousand Oaks*

SEP Cloud Backup and Recovery

SEP Hybrid Cloud Backup and Disaster Recovery is a fully integrated and secure way to back up, replicate and restore to/from any cloud. Data spread across remote locations and clouds presents a specific set of challenges and organizations need a hybrid cloud approach that offers the utilization of physical and virtual environments in addition to cloud integration.

The SEP Hybrid Cloud solution provides an organization the flexibility of using both privately and publicly hosted clouds to create a seamlessly integrated platform. SEP's easy and automated cloud backup is a comprehensive solution for the entire environment - Virtual, Physical and Cloud.



Key Features

Business Continuity

Seamlessly integrated solution for public and hybrid cloud is a simple extension of the enterprise backup and disaster recovery for both virtual and physical environments.

Data Security

Encrypted data can be sent to dedicated data centers while companies are assured that redundant copies of the data are secured off-site or in the Cloud.

Storage Flexibility

Offers complete flexibility when planning, building or expanding any Cloud backup infrastructure.

Scalable

Once installed, solution can be expanded as needed without expensive upgrade fees.

Infrastructure Control

Offers maximum flexibility allowing vendors and customers the ability to select the most efficient backup solution possible.

Certified Compatibility

Vendor certified compatibility with any storage device including cloud, disk and tape

SEP Easy Archive

SIMPLE AND EFFICIENT

SEP Easy Archive stores data in an unchangeable format and uses Write Once, Read Many (WORM) Technology to prevent unauthorized and unintentional loss or deletion of data. SEP Easy Archive writes to NTFS formatted disk drives and RAID arrays and is able to easily cluster multiple systems and disk drives. This solution can be directly installed on Windows physical servers or a virtual machine.

Document management software solutions can also easily utilize SEP Easy Archive to find and utilize protected data on secured disk drives.

SEP Easy Archive is a valuable addition to backup architectures, providing enterprise-level backups with a fully-featured archiving solution to meet or exceed all legal and government requirements.

Quick Facts

- Enterprise-class backups with fully-featured archiving solution
- Stores data in unchangeable format
- Prevents unintentional loss or deletion of data
- Install on Windows or any virtual machine
- Meets or exceeds all legal and government requirements

Key Features	Availability
Write Once, Read Many (WORM) Technology	✓
Audit Compliant - Conforms to SOX / HIPPA / GdPdU / GoBs	✓
SnapLock Interface	✓
Storage Replication to Cloud	✓
Archiving Set Manually	Directory or File-Level
Manage Access to the Data via Operating System	✓
Archive Every NTFS File System	✓
RAID & Cluster Support	✓
Hypervisor Support	VMware Hyper-V Citrix
Archiving of File Systems	✓
Edit Archival Periods	✓
Scalability	✓
Simple Installation and Administration	✓
Data Erased After Archive Date	✓
Application-Independent	✓
Supported Architectures	32 & 64 Bit

Bare Metal Recovery

PROTECT YOUR DATA FROM DISASTER

Disaster Recovery

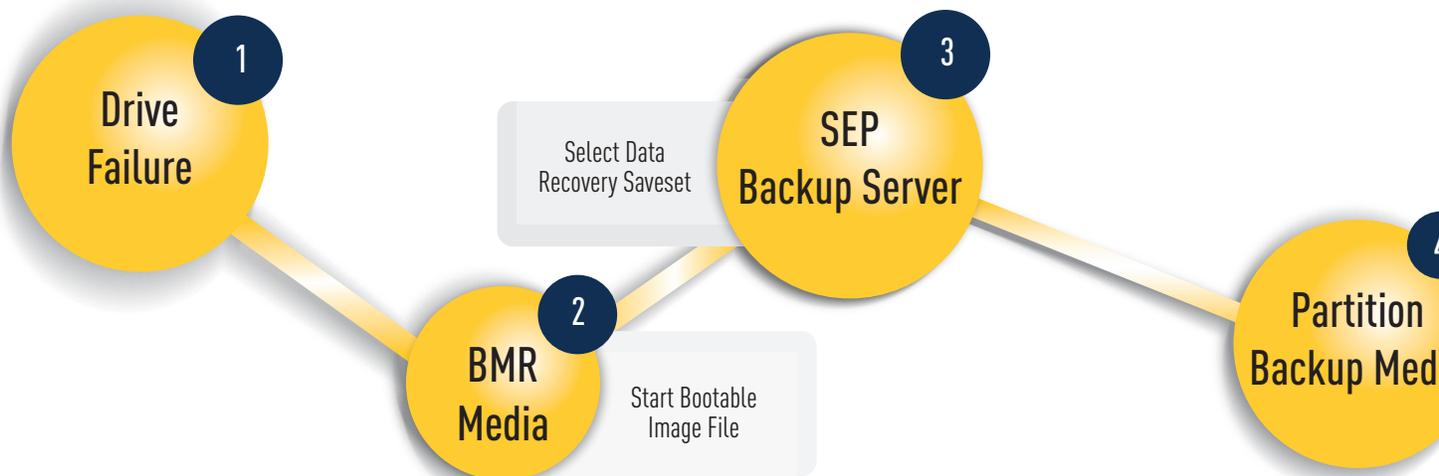
By utilizing SEP's Bare Metal Recovery, users can restore entire servers, operating systems, and databases quickly and easily using a universal boot medium. This recovery method can be achieved within minutes, regardless of the type of hardware in use.

SEP's Bare Metal Recovery module is fully integrated into the SEP interface to ensure a fast and complete system recovery. The data flow for the entire enterprise can be controlled from a single management console.

Dependability

The SEP Bare Metal Recovery module guarantees a fast and secure recovery of all company data. SEP ensures that in the event of a disaster, all data and information can be recovered to completely recreate the original environment.

System administrators managing company infrastructures know that server storage devices frequently fail. According to Google System Labs, approximately 140,000 hard drives abruptly fail every week, destroying petabytes of data. With SEP Bare Metal Recovery, disk and system failures are no longer a devastating occurrence.



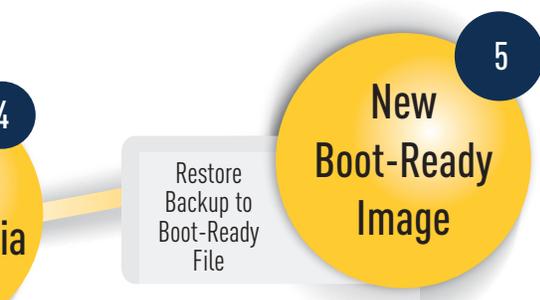
“The result was just astonishing! SEP was able to do a full backup within 3 to 4 hours when our previous solution took 4 days to perform the same tasks on exactly the same hardware.”

*Frank Uittenbosch
Netherlands Institute for Space Research*

How it Works

SEP's Bare Metal Recovery module provides snapshot backups and can be restored to any media. The data repository can be selected using a disk-to-disk or disk-to-disk-to-tape strategy.

After a system disaster or drive failure, the media is inserted into the new server. The computer is then connected to the network to establish a connection with the SEP backup server. Next, the desired saveset is selected and the automated recovery begins.



Resurrect Your System, *Fast!*

- Available for Windows and Linux servers and Windows workstations
- Fully integrated into the SEP GUI for a single point of administration
- Quickly and comprehensively restore clients without prior partitioning or installing operating systems
- Servers/workstations are bootable in minutes
- Disaster recovery processes using SEP Bare Metal Recovery solutions are nearly automatic

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<https://www.sepusa.com/download-trial>



Backup & Disaster Recovery

SEP Software is a premier technology leader providing high-performance hybrid backup and disaster recovery solutions for professional IT environments of all sizes. SEP delivers a single solution to easily manage backups for physical, virtual and cloud heterogeneous environments.

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