

SEP VM Backup & Disaster 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, Microsoft Hyper-V, Red Hat Virtualization, Citrix Hypervisor, KVM/QEMU, zVM, Nutanix, and OpenNebula. SEP virtual solutions are fully integrated, easily installed and allow for the maximum flexibility when designing backup strategies.

SEP for Citrix

SEP offers advanced backup and disaster recovery features for Citrix Hypervisor (XenServer) and Citrix Virtual Apps & Desktops (XenApp & XenDesktop). SEP displays the Citrix infrastructure in the management interface, showing available VMs and simplifying the planning and execution of automated backup processes. No additional effort is required to back up and protect any XenServer environment.

SEP also includes Activation Loss Prevention by keeping the same MAC Address and UID so you don't have to re-enter Windows Key Codes or re-activate third party software.

Changed Block Tracking

SEP supports CBT through the Citrix API, which optimizes performance and frees up disk space with the option to perform efficient incremental and differential backups.

SEP for Citrix Hypervisor

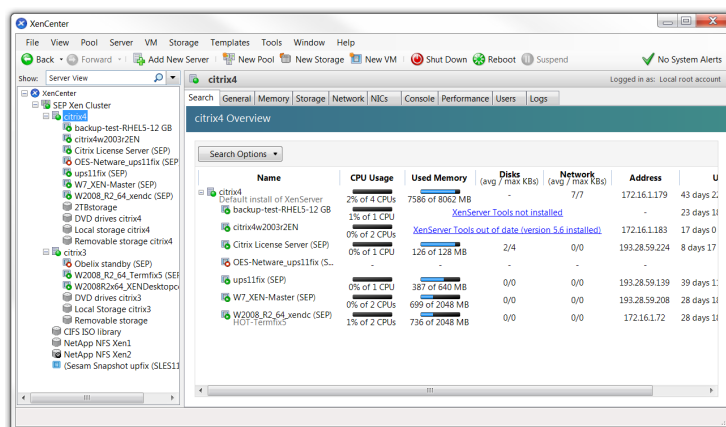


Key Features

Certified for Citrix Hypervisor (XenServer), Virtual Apps & Desktops (XenDesktop & XenApp)	✓
Agentless technology	✓
Changed Block Tracking	✓
Prevents license activation loss	✓
Full integration into management interface and the entire backup environment	✓
Windows VSS & Linux server snapshots	✓
Encryption	✓
Open File Backup	✓
Keep a disaster recovery site in sync for a hot or cold availability solution	✓
Disaster recovery is used to synchronize your virtual machine to a pool or offsite location	✓
Restore to other Citrix Hypervisor hosts or pool	✓
Back up metadata & host-specific information	✓
Convert between Virtual and Physical Servers (V2P and P2V)	✓
Backup methods	Hot, Cold
Backup types	Full, Inc, Diff
Granularity	Image Level
Supported platforms	5.x & Greater

Agentless Technology

The software communicates directly with the Citrix API to back up snapshot images of VMs without the need for clients/agents. You simply enter your XenCenter username and password and a list of all Citrix hosts and VMs auto-populates. VMs can be dragged and dropped VMs into any backup group schedule.

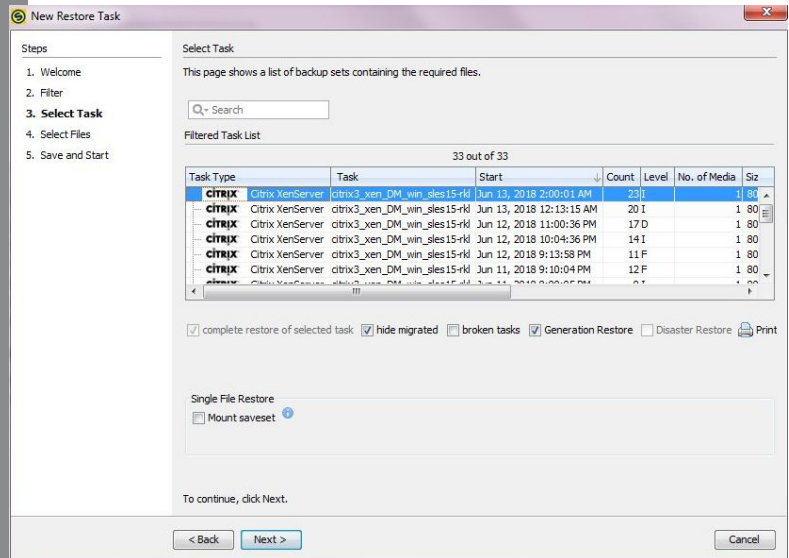


Backup Virtual Desktops Key Components

- Desktop delivery controller
- User-specific profiles
- Provisioning server
- Master image
- Metadata
- Templates
- SQL database
- Works with all virtualization platforms:
 - Citrix Hypervisor
 - VMware ESX
 - Microsoft Hyper-V

Additional Features

- Can back up & restore servers from a bare metal state

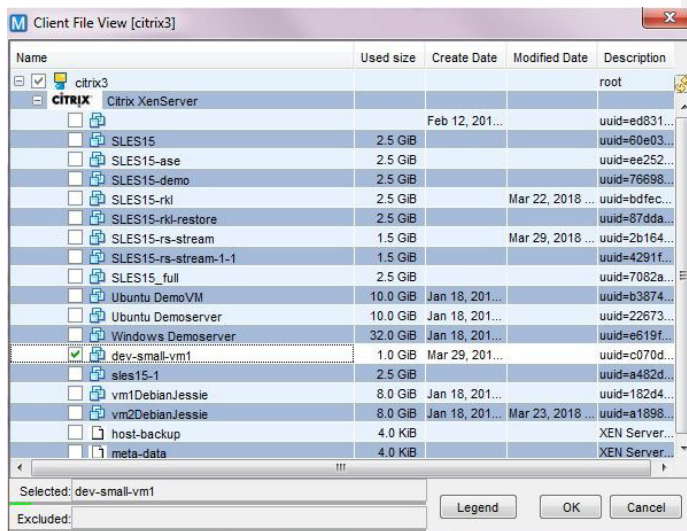


Backup Virtual Apps Key Components

- XenApp Server
- User-specific profiles
- License server
- Citrix secure gateway
- Active directory
- Granular file and file share rights
- Server farm information
- System-specific information (included in system state)
- Works with all virtualization platforms:
 - Citrix Hypervisor
 - VMware ESX
 - Microsoft Hyper-V

Additional Features

- Can back up & restore servers from a bare metal state



When backing your Citrix Virtual Apps & Desktops environment, it is critical to back up all components that make the system function. SEP provides a complete solution that will not only back up your Citrix virtual environment, but the rest of the enterprise as well.