



Converged Data Protection and Recovery for Microsoft Hyper-V

Looking for a modern and efficient data protection and recovery solution for your Microsoft Hyper-V Infrastructure?

Organizations are increasingly adopting Microsoft's Hyper-V virtualization platform, and are faced with the challenge of identifying a modern solution that protects and recovers their critical business information and applications. These new solutions are required to have shorter Recovery Points and faster Recovery Times to accommodate growing business demands.

Legacy data protection and recovery solutions were designed more than a decade ago and were engineered for traditional workloads. These solutions are unable to keep-up with today's modern business needs. Data protection and recovery typically consists of a complex mix of expensive point solutions for target storage, backup software, media servers, proxies, replication, and disaster recovery.

Modern workflows are complex and require a simple, efficient, and cost-effective way to keep the data and information protected. Cohesity DataProtect is specifically designed to solve this problem with an entirely new approach for data protection and recovery for Microsoft Hyper-V infrastructure.

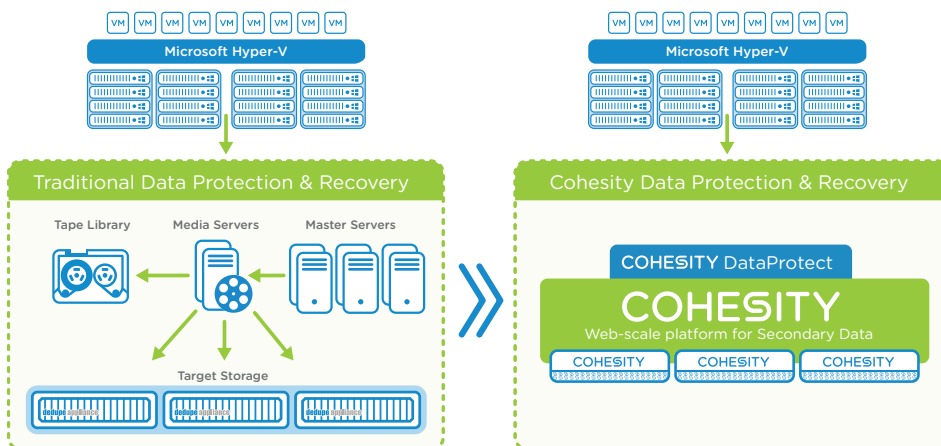
Simple and Efficient Data Protection and Recovery for Microsoft Hyper-V Infrastructure

Cohesity provides the only hyperconverged platform that eliminates the complexity and operational inefficiencies of a traditional data protection and recovery solution. Cohesity DataProtect will consolidate your end-to-end data protection and recovery infrastructure - including target storage, backup, replication, disaster recovery, and cloud tiering. It eliminates data protection and recovery silos by converging all your backup infrastructure on a single unified scale-out platform.

Cohesity provides simple management with a single easy to use and manage UI, and policy-based automation. Accelerate your recovery points and recovery times while cutting data protection costs by 50%. Cohesity natively integrates with all the leading public clouds for long term archival, tiering and replication.

Key Benefits

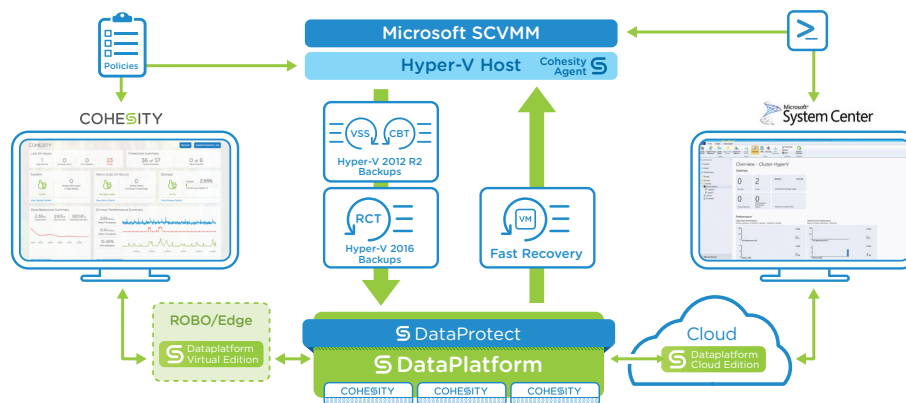
- Simple management with a single easy to use and manage interface
- Accelerate data protection with sub-5 minute RPOs and near-instant RTOs
- Automated data protection and recovery
- Tight integration with Microsoft Hyper-V 2012 R2 and Hyper-V 2016
- Build a multicloud data fabric with native cloud integration for archival, tiering and replication



Legacy Data Protection	Cohesity + Hyper-V
✗ Multiple product silos	✓ One validated solution: Cohesity software and Hyper-V
✗ Complex Management	✓ Simple Management
✗ Fragmented deduplication	✓ Global Deduplication
✗ Slow RPOs and RTOs	✓ <5 minute RPOs, near-instant RTOs
✗ Disruptive upgrades / expansion	✓ Non-disruptive upgrades / expansion
✗ Limited cloud integration	✓ Native cloud integration

Cohesity and Microsoft Hyper-V Seamless Integration

Cohesity DataProtect is tightly integrated with Microsoft Hyper-V 2012 R2 and Hyper-V 2016 at multiple levels to provide a simple, most efficient, reliable and fastest data protection and recovery possible.



- Automated data protection and recovery: System Center Virtual Machine Manager (SCVMM) integration enables Cohesity to automatically register all the Hyper-V VM disk objects (VHD or VHDX). This allows users to assign simple SLA policies to VMs or groups of VMs in the Cohesity UI and automate data protection and recovery.
- Agentless Change-Block Tracking for Hyper-V 2012 R2:
 - > With WMI, VSS and Cohesity Change Tracking with Hyper-V 2012, WMI APIs are used to discover the VM properties. Cohesity Change Tracking Driver tracks the changed areas within the virtual disk files (VHD and VHDX). Cohesity agent interacts with VSS to trigger the VM snapshots and with the changed area information only the changed areas will be backed up. The data itself is transferred from Cohesity's secure layer from the primary storage onto Cohesity platform and the virtual disk files will be kept fully hydrated.
- Instant Recovery for Hyper-V 2016:
 - > Cohesity enables instant recovery at scale, for 100s or 1000s of VMs, and to any backup point in time for Hyper-V 2016. For Hyper-V 2016 Cohesity creates an instant clone of the protected VMs, and presents the cloned data on an SMB share to the Hyper-V hosts. The SMB share serves as the primary storage volume for the initial phase of the recovery. Once the VMs are up and running, Cohesity initiates a live migration of the VMs to the original storage volume.
 - > WMI and RCT (Resilient Change Tracking) with Hyper-V 2016: Cohesity uses the WMI APIs to trigger and manage the snapshot creation and deletion, and integrates with Microsoft's RCT to backup just changed blocks. The data itself is transferred from Cohesity's secure layer from the primary storage onto Cohesity platform and the virtual disk files will be kept fully hydrated.
- Hyper-V integration services and VSS: Cohesity uses the Hyper-V integration services to trigger app-consistent snapshots of the VMs.

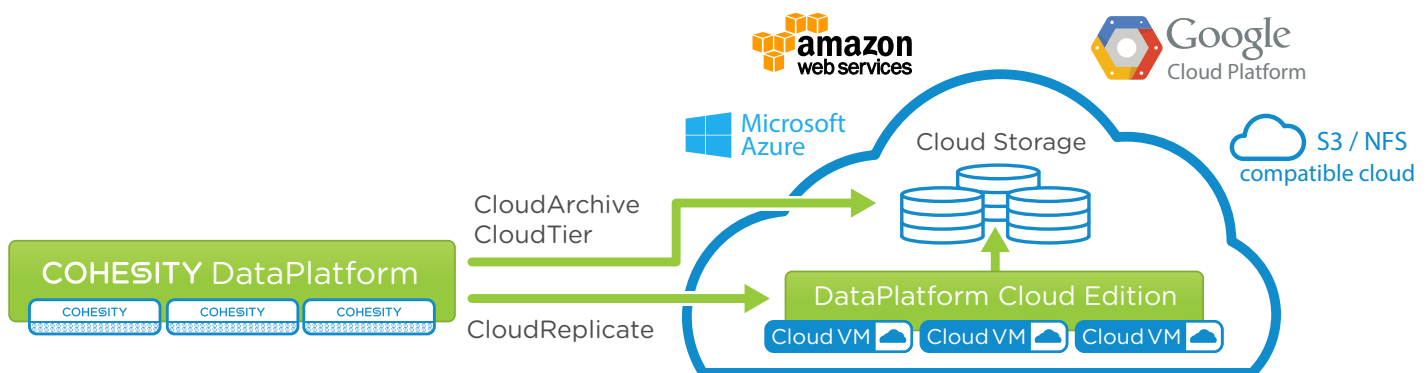
Beyond Data Protection: Making Your Data Productive

Traditional data protection solutions only provide an expensive insurance policy. The data is unproductive until the disaster strikes. Cohesity takes a completely different approach. Data is valuable, and Cohesity puts your secondary data to productive use. Once the data is protected on Cohesity, it can be used to support multiple use cases.

- Build a multicloud data fabric to support disaster recovery, test/dev, and application migrations across multicloud environments.
- Provide developers with instantaneous access to zero-cost copies of your data to accelerate test and dev processes. Perform custom analytics jobs of your protected data directly on the Cohesity cluster, without having to copy data to a separate analytics cluster.
- Easily analyze your data, whether to ensure compliance or to extract valuable insight from your backups. Cohesity exposes distributed NFS, SMB and S3 interfaces to provide file and object storage. Eliminate the need to manage multiple silos, and converge your files and object storage on the same platform used for your data protection.

Native Integration with Public Cloud Providers

Cohesity provides native integration with all the leading public cloud providers including Google Cloud Storage, Microsoft Azure, Amazon S3 and Glacier. Cohesity can leverage the cloud for the following use cases:



CloudArchive: Replace tape rotations and vaulting with long-term archival to the cloud. Enable Google-like wild-card search on your local Cohesity cluster to quickly identify data archived in the cloud. Recover to the original cluster or to a new cluster.

CloudTier: Leverage compelling cloud economics with native cloud integration for data tiering. Colder data is automatically tiered to the cloud to increase the capacity of the Cohesity cluster.

CloudReplicate: Replicate your data to a Cohesity cluster running in the cloud to create a multicloud data fabric that supports disaster recovery, test/dev and analytics.

Cohesity provides organizations using Microsoft Hyper-V the ability to bridge the traditional “islands of secondary storage” by leveraging the truly global file system and storage efficiency technologies built into the Cohesity DataPlatform. These capabilities help customers in transforming their data centers from silos of dark data to highly efficient, next-generation web-scale Enterprise IT.