



Catalogic DPX® vPlus for Open VMs

Address your virtualization platform gaps with granular backup, disaster recovery and compliance

Catalogic DPX® vPlus Highlights

- Data protection for a wide range of Open VM platforms that are not supported by Catalogic DPX and other enterprise backup providers
- Supported platforms include: Citrix Hypervisor, Huawei, KVM, Nutanix AHV, OpenStack, Oracle VM, RHEV/RHV, oVirt, PowerKVM, Proxmox, Scale Computing HC3, Xen, and more.
- Support for backup and snapshot management of Amazon EC2
- Easy file recovery directly from within the DPX vPlus web UI
- Ability to backup, restore, mount file systems, RBD volumes, and Nutanix files.
- Supports multiple backup destinations: DPX vStor, any mounted file system (local, NFS, SMB, iSCSI), and cloud object storage
- Data exported in native, hypervisor-specific format and encrypted
- Open API for 3rd party software integration (REST API) as well as command line
- Multi-node architecture for better scalability or geographically dispersed environments
- Pre/post snapshot remote command execution to enable operations such as DB quiesce
- UI – English, Chinese, French, German, Japanese, and Spanish languages supported

DPX vPlus for Open VMs Introduction

The proliferation of open virtualization platforms and hyperconverged infrastructure (HCI) has left data protection gaps in enterprises given they are not supported by enterprise backup providers. DPX vPlus is an add-on product that addresses these gaps by providing granular VM-level data protection for a wide range of open virtualization platforms, including Citrix Hypervisor, Huawei, KVM, Nutanix AHV, OpenStack, Oracle VM, RHEV/RHV, oVirt, PowerKVM, Proxmox, Scale Computing HC3, Xen and Amazon EC2, all in a single product with a single license.

DPX vPlus can function as a standalone solution or it can be integrated with DPX vStor for ransomware protection, governance, and compliance.

Platform Specific Features

vPlus provides a wide range of capabilities and makes use of advanced virtualization platform features such as changed block tracking. Platform-specific features are listed below:

Amazon EC2

- Full backup with disk-exclusion support for EC2-based VMs (backup to on-premises copy)
- File-level restore with mountable backups
- EC2 snapshot management

Citrix Hypervisor (XenServer)

- Hypervisor snapshot management with snapshot consistency and quiesced snapshots
- Efficient, incremental backups using changed block tracking
- Option to back up only selected VM disks
- VM auto-grouping based on regular expressions and tags
- Easy file-level restore using mountable backups

KVM

- Hypervisor snapshot management
- Incremental backups using snapshot chain export
- Option to back up only selected VM disks
- Easy file-level restore using mountable backups
- Full backup of QCOW2 or LVM-based VMs

Oracle VM

- Full backups
- Backups exported using external storage repository
- File-level restore with mountable backups
- VM auto-grouping based on regular expressions and tags

Nutanix Acropolis Hypervisor (AHV)

- Hypervisor snapshot management with application consistency
- Efficient, incremental backups using changed block tracking
- Option to back up only selected VM disks
- Easy file-level restore using mountable backups
- Installs directly in the Nutanix cluster for faster and reliable backups
- Protects Ceph RBD volumes, files systems and Nutanix Files (AFS)

Proxmox

- Hypervisor snapshot management
- Easy file-level restore using mountable backups
- Disk-exclusion option for backups
- Automatic backup import to Proxmox hypervisor
- Full image backup with native hypervisor
- Incremental backup for Proxmox VE and Changed Block Tracking (CBT) backup strategy for oVirt and Red Hat Virtualization Proxmox containers support
- Proxmox containers support

Red Hat Virtualization and oVirt

- Hypervisor snapshot management
- Incremental backups using snapshot chain export
- VM auto-grouping based on regular expressions and tags
- Snapshot consistency technology and quiesced snapshots
- Easy file-level restore using mountable backups
- Restore VMs as either thin-provisioned format or as pre-allocated (RAW)
- RHV API v4 support with proxy VM backup strategy (doesn't require export stored domain)

DPX vPlus Architecture

The DPX vPlus architecture consists of three components: the vPlus Server, one or more vPlus Nodes, and finally a backup target. The vPlus Server provides management and stores all metadata and it is the IP address that you use to access the web GUI. A vPlus Node is responsible for data transfer and integration with Microsoft 365, hypervisor platforms, Amazon EC2 and backup destinations.

The vPlus Node can be any CentOS or Red Hat Enterprise Linux installation. For smaller environments, all components can install on the same server or VM. In the case of vPlus for Microsoft 365, once registered, vPlus can automatically synchronize with your Microsoft 365 account and automatically identify new users and add them to existing backup policies.

DPX vPlus can store backup data in many different backup repositories, including DPX vStor, a local file system or NFS, Microsoft Azure Blob Storage, or in a variety of S3 object storage providers such as Amazon S3, Backblaze B2, and Red Hat OpenStack storage.

Backup Storage Options

DPX vPlus can export backups to DPX vStor, effectively adding native open VM backup and Amazon EC2 backup functionality to DPX. vPlus can optionally keep a local backup copy for faster operational recovery purposes.

DPX vPlus also supports standalone deployments and vPlus can back up to any file system connected to the Proxy VM. In addition, data can be exported to Amazon S3, Microsoft Azure, Google Cloud Storage (Nearline, Coldline), Neverfail HybriStor, Data Domain Boost, or OpenStack Swift.

Efficient Backups

vPlus provides incremental backups for Citrix Hypervisor and Nutanix using changed-region tracking (CRT) based on the hypervisor APIs. Incremental backups for RHV, oVirt and KVM are done using snapshot chain export. In addition to incremental backup, users can exclude specific VM disks from backup, such as disks that store large temp files. The disk exclusion feature is available for Citrix Hypervisor, KVM, Nutanix AHV and Proxmox.

Hypervisor Snapshot Management

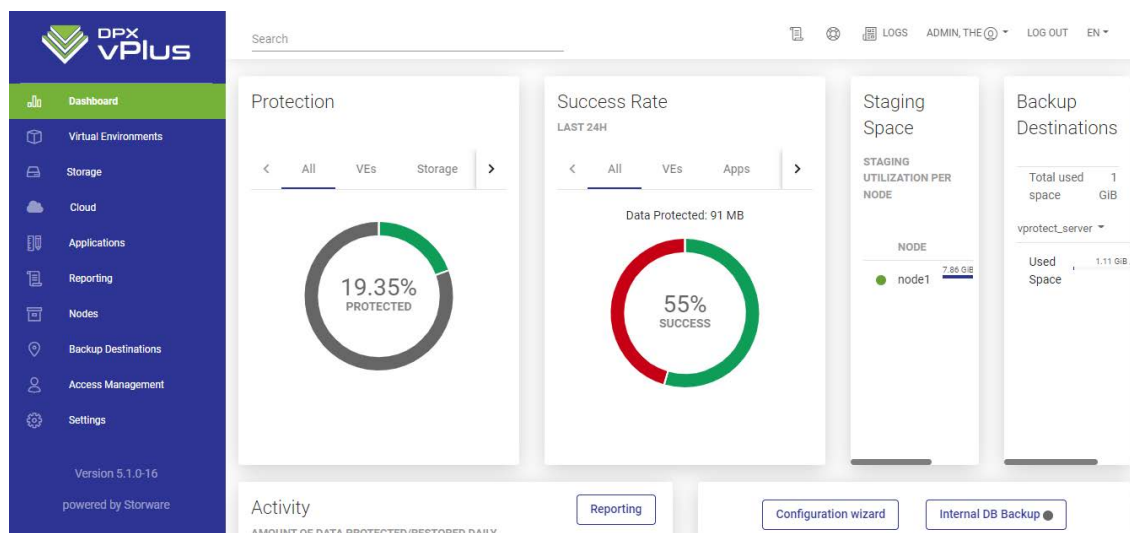
Hypervisor snapshot management is available for Citrix Hypervisor, KVM, Nutanix AHV, RedHat Virtualization, Proxmox, and Amazon EC2. vPlus manages hypervisor snapshot schedules and retention times, allowing you to combine a short-term protection option that provides fast restore/revert using snapshots, plus a longer-term backup to a separate backup target, all managed in one place.

Data Consistency

vPlus uses the hypervisor functions to create application-consistent snapshots for Citrix, Nutanix, Red Hat and oVirt VMs. This allows for quiescing databases prior to the snapshot, which results in a consistent backup. vPlus also allows you to setup periodic backups with your own scripts or application-native backup commands. These can be executed either on the vPlus Node or remotely over SSH. The application can reside anywhere: in a VM or on a physical box. The only requirement is it to allow vPlus to execute set of commands over SSH or on the node to access data remotely.

Easy Dashboard View

vPlus provides an easy-to-use, intuitive interface that makes management and monitoring simple. Configuration steps are clearly defined and a visual scheduler aids in understanding policies. And the dashboard immediately identifies any VMs that are not protected.



Mountable Backups and File Restore

The mountable backup feature provides a quick and easy way to access backup data without having to do a full VM restore. This is especially useful for restoring one or a few individual files. The user can mount the backup image, which requires no data movement, and simply copy back the needed files. Incremental backups can also be mounted because the vPlus Node merges the incremental backups into the full backup image.

Backup images can be scheduled to mount at a pre-set time, and mount points specified.

Conclusion

The proliferation of open virtualization platforms and hyperconverged infrastructure has left data protection gaps in enterprises given they are not supported by enterprise backup providers. DPX vPlus for Open VMs is a powerful data protection solution that more than fills those gaps. Contact us today to learn how DPX vPlus is a smart choice for providing rapid, reliable, and low cost backup and recovery for open virtualization platforms.

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