Protect Virtual Machines Efficiently with Asigra Cloud Backup™

Virtualization is no doubt a growing presence in every data center. It enables you to reduce hardware costs, allows for more flexible server provisioning and ensures that you as an IT manager can be more responsive to business needs.

As virtualization platforms and functionality become more robust, and more data and applications reside on virtual machines (VM), you must have a method of protecting that data.

Managing multiple vendors such VMware, Microsoft and Citrix is already a complex task. Treating VM data protection separately from your overall data protection plan is a replication of effort and an inefficient use of resources. Don’t leave the backup and recovery of data on virtual machines to the administrator of a particular VM platform; instead, you should integrate virtual machine data protection into an enterprise-wide data backup strategy and practice.

Asigra Cloud Backup enables your organization to backup and restore multiple virtual and physical servers with a single product, eliminating the need to learn, operate and manage multiple point solutions. Asigra delivers a flexible, agentless backup and recovery solution that supports multiple hypervisors, operating systems and physical server environments, enabling effortless backup and recovery of virtual machine environments.
Virtualization Backup and Recovery Challenges

Virtualization is now an essential component of your IT infrastructure. Many enterprises are more than 50 percent virtualized with a goal of achieving even greater levels of virtualization over the next few years because of the many business benefits it provides, including rapid provisioning and better utilization of system resources.

The problem with traditional agent-based approaches to protecting data on virtual machines is that they increase the load on system resources and therefore take away from the central benefit of virtualization, so any solution deployed to backup these virtual machines needs to be agentless. Because the proliferation of different virtual machine platforms has led to the growing use of point solutions for backup and recovery, multiple people are now responsible for safeguarding data on virtual machines. For example, the VMware administrator is responsible for data protection of virtual machines running VMware, while the Citrix administrator is responsible for the backup and recovery of virtual machines running Citrix.

This can result in the same data being backed up more than once, which is an inefficient use of storage and network resources. More importantly, your backup administrator no longer has a single view of all the backup and recovery activities in the organization, which can lead to confusion and a lack of a clear recovery strategy in the face of data loss.

Using different point solutions means spending money for multiple licenses, while also incurring unnecessary costs to train different personnel on these disparate tools. Using multiple data protection solutions also leads to inefficient use of network and storage resources – you end up consuming more storage media than necessary to safeguard multiple copies of the same data.

The Asigra Solution

Asigra Cloud Backup offers an integrated enterprise-class solution for the end-to-end data protection of both physical and virtual machines across operating systems or virtualization platforms.
Comprehensive virtualization platform support

Asigra Cloud Backup leverages the native APIs of virtualization platforms wherever they are available, simplifying the backup, recovery and restore process for virtual machines. APIs currently available include those for VMware, Microsoft and Citrix. VMware has the VMware API for data protection (VADP) with Changed Block Tracking (CBT) features which help perform efficient incremental backups of VMware virtual machines. Microsoft provides a Volume Shadow Service (VSS) API for the backup of Hyper-V. Citrix XenServer’s API supports efficient virtual machine snapshots.

Asigra Cloud Backup works natively with VMware’s vSphere 4.x/5.x VADP with CBT, Microsoft’s Hyper-V VSS API and Citrix XenServer VM snapshot API to provide low impact backup of virtual machines. It follows the standardized rules by quiescing and backing up VM images directly via the appropriate APIs on both a full and incremental basis.

Asigra Cloud Backup also supports virtualization platforms that do not provide APIs, including RedHat KVM, Parallels Virtuozzo and Oracle VM server, by accessing their data externally via the operating system’s published APIs. This ensures the impact on the virtual server’s resources is kept to a minimum and that it does not disrupt operating system and applications.

Simple and intuitive recovery

Asigra facilitates the recovery of virtual machines using a simple and intuitive process. In the case of VMware, Microsoft Hyper-V and Citrix XenServer, Asigra Cloud Backup restores the virtual disks of a virtual machine. Post restoration, the virtual machines can just be turned on, and the entire machine, including all of the data and applications, can then be made available as of the instant that the previous backup was taken. For virtual machine platforms that don’t currently expose an API, Asigra Cloud Backup restores all visible and hidden files that have been backed up without any disruptions.

The Benefits of Asigra Cloud Backup

Agentless backups

Asigra Cloud Backup is agentless which means it does not require backup agents or clients to be installed, managed, and maintained on virtual servers or operating systems running on physical servers. The benefit of this architecture is that Asigra Cloud Backup does not hog server and network resources when backing up virtual or physical machines in a virtualized environment.

Improved performance

After an initial full backup, fast backup and restore performance is achieved either by leveraging changed block tracking (via APIs) and/or Asigra’s incremental forever technology. This ensures only changed or new data is captured, reducing backup windows for virtual machines. Asigra Cloud Backup also provides compression, deduplication, and encryption to further reduce storage and bandwidth requirements while securing data for transmission into the cloud. Local caching and storage options are also available to provide LAN-speed backup and restoration.

Supported Platforms

VMware
- VMware vSphere
- VMware ESX
- vStorage API for Data Protection (VADP)
- Changed Block Tracking (CBT)

Microsoft Hyper-V
- Hyper-V Server
- Cluster Hyper-V Server
- Hyper-V Volume Shadow Services (VSS) writer

Citrix Xen
- XenServer
- XenDesktop
- VM Protection and Recovery snapshots

RedHat KVM
- Enterprise Virtualization for Servers
- Enterprise Virtualization for Desktops

Parallels
- Parallels Virtuozzo Containers
- Parallels Server
- Parallels Workstation
- Parallels Desktop

Oracle VM
- Oracle VM Server
Enterprise scalability
Asigra Cloud Backup can easily scale to perform the backup and recovery of all your virtual machines. When provided with adequate hardware resources, Asigra can backup hundreds of virtual machines. Greater scalability can be achieved by configuring multiple data collectors in a grid configuration and provide additional backup failover and load balancing across your environment.

Quick and simple recovery
Asigra Cloud Backup restores complete virtual machines with all the data and applications as of the instant that the previous backup was taken. In the case of restoring VMware, Microsoft Hyper-V and Citrix XenServer virtual machines, Asigra Cloud Backup can restore virtual machines at the virtual disk level or the entire virtual machine level. In the case of restoring virtual machines from platforms that don’t currently expose an API, Asigra Cloud Backup restores all visible and hidden files that have been backed up. As a result, the complete virtual machine can be restored and brought online without any challenges or disruptions.

Multiple platform support
Besides supporting the agentless backup of all leading virtualization platforms which expose APIs for data protection such as VMware, Microsoft Hyper-V and Citrix XenServer, Asigra Cloud Backup also facilitates the agentless backup of virtualization platforms that do not have equivalent APIs. It does so by leveraging the well published operating system APIs to backup all visible and hidden file data. All VMs and physical servers can therefore be backed up live and online without disruptions. The result is a unique standardized agentless backup methodology for heterogeneous virtual and physical machines across vendors, virtual servers, operating systems, applications, and platforms.

If you’re using different point solutions to backup virtual machines and would prefer a single enterprise-class end-to-end backup and restore solution to protect all of your data, look no further than Asigra Cloud Backup.

For more information about Asigra Cloud Backup, visit www.asigra.com/product or to speak to a cloud backup specialist call us at 416-736-8111.

About Asigra Cloud Backup
Award-winning Asigra Cloud Backup is an agentless hardware-and-software platform agnostic cloud backup, recovery and restore software solution that supports servers, virtual machines, desktops, laptops, tablets, smartphones, cloud-based applications, enterprise applications and databases enabling organizations to resume business operations quickly while reducing costs and achieving peace of mind.