

## Datasheet

### Asigra Cloud Backup™ Provides Comprehensive Virtual Machine Data Protection Including Replication



Virtual Machines (VMs) have become a staple of the modern enterprise data center, but as the usage of VMs have become widespread, so too has the need to protect those VMs from data loss and corruption. But not all VMs have the same protection needs. Consider these three scenarios:

- A VM containing a mission-critical production database will probably need to be both backed up on a regular basis to a remote disaster recovery (DR) site in the cloud as well as replicated to a standby VM for availability
- A VM containing a mission-critical web server but no database, likely only needs to be replicated to a standby VM

- A VM containing an old snapshot of the production database and used for testing purposes may only need to be backed up once if at all

As an IT technology professional, how do you protect your organization's VMs in a way that lets you match the level and type of protection to the use case? Some try to use their existing data protection solutions, but these were never designed to protect VMs and the results are usually woefully inadequate. Others try cobbling together an overall solution for their organization from a mix of point solutions that support VMs. Although it may provide adequate VM protection for all your organization's use cases, it's usually also very complicated and costly to maintain.

Here's a smarter approach: avoid the

complexity and cost of point solutions. Asigra Cloud Backup™ provides a full spectrum of VM protection options that let you:

- Backup and restore as well as replicate VMs on-site or to the cloud
- Set the level of protection on a VM by VM basis according to your business and application need
- Manage it all from the same single tool and interface used to protect data elsewhere in your organization, including physical servers, workstations, laptops and other mobile devices, enterprise applications and databases, and SaaS based applications like Salesforce.com, Google Apps and Microsoft® Office 365

The result? Comprehensive and easy-to-administer reliable data protection across your entire organization for both VM and non-VM data sources.

## Avoid data loss with comprehensive VM backups

VMs are like any other data source—data loss can happen at any time. The impact to your organization can be potentially severe if you ever need to recover the VM data and can't. Asigra Cloud Backup helps you mitigate this risk by giving you the power to take unlimited point in time backups of VMs across your organization (Figure 1). Based on rules you define on a per-VM basis, Asigra will automatically take as few or as many backups as you wish, enabling you to set and meet recovery point objectives (RPOs) that match all your business requirements.

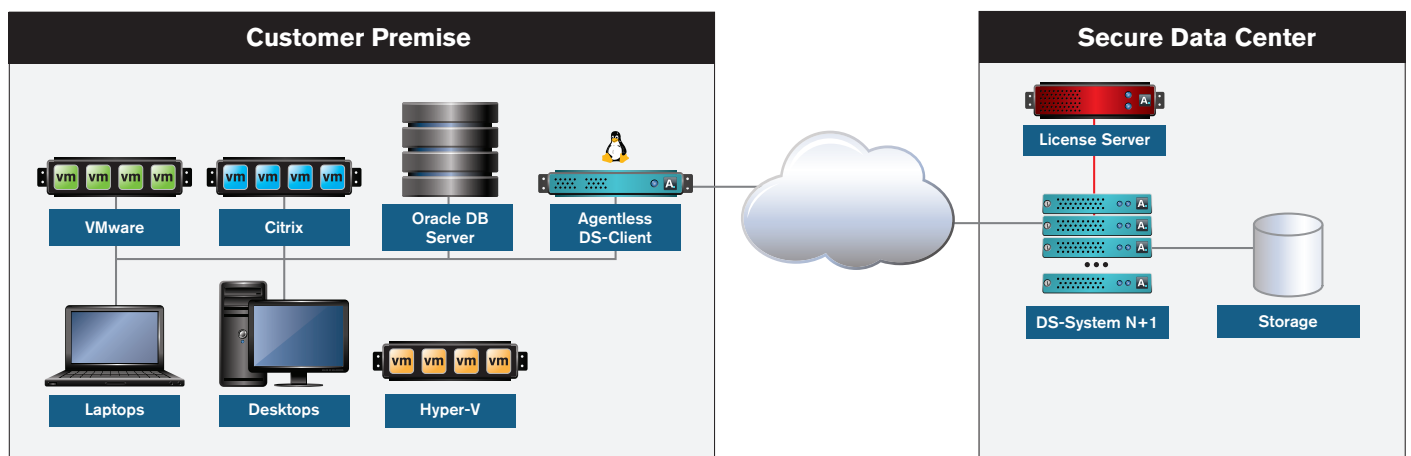


Figure 1

Here are a few key features

**Single intuitive user interface** — Perform all backup and recovery tasks from a single, intuitive user interface. To recover VM data,

1. Choose the backup version you wish to recover,
2. Decide if you want to recover the entire VM or individual files on that VM
3. Choose a destination location to recover to

Your VM or selected VM files will be recovered in the exact state they were at when the VM backup was originally taken.

**Agentless Architecture** — Asigra Cloud Backup does not require backup agents or clients to be installed, managed, and maintained on VM guests or VM hosts. In other words, Asigra Cloud Backup does not hog server and network resources when backing up VMs.

Instead, Asigra Cloud Backup leverages the native APIs of virtualization platforms like VMware, Microsoft, and Citrix where available. This approach ensures efficient VM snapshots and incremental VM backups and recoveries according to vendor recommended best practices.

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 host operating system's published APIs. This ensures any impact to the VM's resources is kept to a minimum and that backup operations don't disrupt the operating system or applications running in the VMs.

**Reduced backup windows for VMs** — After an initial full backup, fast backup and restore performance is achieved either by leveraging change block tracking (via the virtualization platform’s APIs) and/or Asigra’s incremental forever technology. This ensures only changed or new data is captured.

**Compression, global deduplication, and encryption** — Further reduce storage and bandwidth requirements while securing data for transmission to and from the cloud. Local caching and storage options are also available to provide LAN-speed backup and restoration.

## Minimize downtime with VM replication

For VMs that run mission critical applications with urgent RTOs, such as an ecommerce site, organizations generally want to maintain a very recent replica of the production VM, either on or off-site. The replica VM is kept warm — it’s active but not doing any work besides replicating with the primary VM — so that if the primary VM fails, the replica VM can take over the workload with minimum delay. In this VM data protection use case, the time it takes to get the VM replica up and running is crucial. Furthermore, backups of the VM may not be necessary, but if they are, it’s expected that a failover to the warm replica will not be delayed by the backup operation.

Asigra Cloud Backup supports this use case (Figure 2) with VM replication for VMware vSphere.

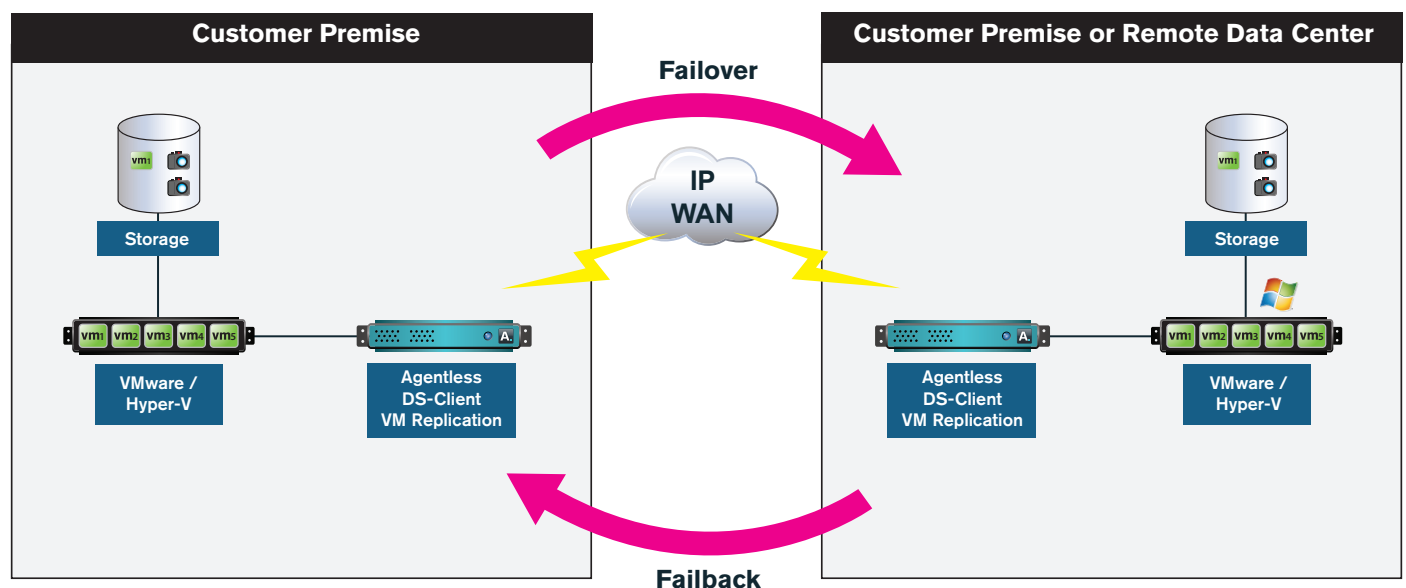


Figure 2

Here’s how VM Replication works with Asigra:

- Using the native snapshot API provided by the virtualization platform, Asigra Cloud Backup replicates a source VM to one or more local or remote VMs.
- After the first snapshot, all snapshots are incremental, ensuring maximum replication speed with minimal impact to either the VM or the network.
- The flow of data during the replication process is directly between the source and the target VMs, helping to further minimize communication and processing delays.
- When bringing a replica on line, simply choose which of the last 30 VM snapshots you wish to run (VMware imposes this limit) and your replica VM will be ready to take over the production workload in as little as 5 minutes or less.

With Asigra Cloud Backup, VM replication can be combined with VM backup to give you the benefits of both types of data protection. By default and by design, the replication and backup operations are independent of each other. As a result, the VM replicas are never exact matches of the backup VMs and vice versa, which in many use cases is ideal, such as when you want to take hourly replicas for the last 24 hours and nightly backups for the last 6 months.

## Synchronize your VM data loss and availability protection with Asigra VDR

But what about use cases that require replicating more than 30 possible VM snapshots? Or where the VM replicas and backups must match exactly?

The Asigra Cloud Backup Virtual Disaster Recovery (VDR) combines VM backup and VM replication into a single feature (Figure 3). With this capability, set your policies to take VM backups as frequently as you wish and retain those backups for however long your business requires. If at any point you need to recover any of those VM backups, you have two options:

1. Recover the VM to the location of your choice like you would with an ordinary VM recovery
2. Recover the VM to a special on or off-site warm standby virtual server dedicated to virtual disaster recovery

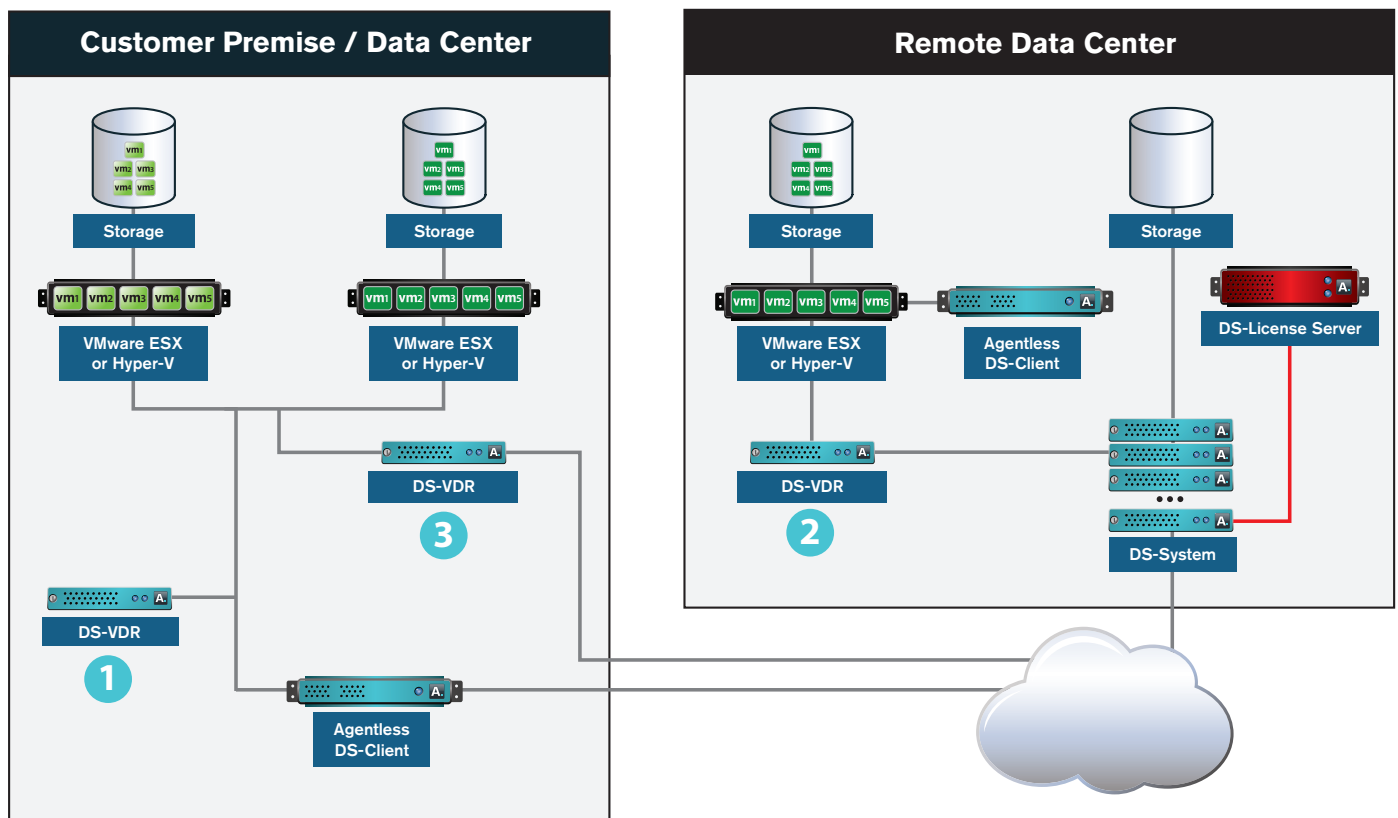
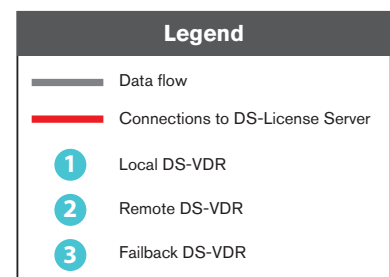


Figure 3



Recovering to the virtual disaster recovery server can enable you to have the VM up and running much faster than you would otherwise. Consequently, Asigra VDR gives you both disaster recovery and higher availability, with reasonably good RTOs.

Asigra Cloud Backup gives you the flexibility to choose the right level of protection for all the VMs in your organization without adding complexity to your IT processes with VM data protection point solutions.

## Business Benefits

- Achieve your recovery time objectives to meet your business needs
- Mitigate risk with 100% recovery assurance
- Eliminate the need for point solutions with backup and VM replication provided in one solution
- Lower your overall costs with one comprehensive data protection software solution for virtual, physical, mobile and cloud environments
- Deploy in the computing style of your choice: as a service via an Asigra certified cloud service provider; as a private cloud in your own data center; or a hybrid cloud. If your preferences evolve over time, you can change your deployment style easily

## Pricing

The [Asigra Recovery License Model](#)® is a patent-pending performance-based pricing model that reflects the true business value of backup and recovery, while delivering significant cost savings in the range of 40 – 60%. With the Recovery License Model, organizations gain the control they need to keep their backup costs low and predictable even as data volumes rise. The model provides analytical insights into the data an organization recovers and ensures that as it recovers less, it pays less.

## 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

For more information about Asigra Cloud Backup, visit [www.asigra.com/product](http://www.asigra.com/product), or to speak to a Recoverability Specialist, call us at 1-877-736-9901 or 416-736-8111 ext. 1453 or email [info@asigra.com](mailto:info@asigra.com).

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## About Asigra

Trusted since 1986, Asigra provides organizations around the world the ability to recover their data now from anywhere through a global network of partners who deliver cloud backup and recovery services as public, private and/or hybrid deployments. As the industry's first enterprise-class agentless cloud-based recovery software to provide data backup and recovery of servers, virtual machines, endpoint devices, databases and applications, SaaS and IaaS based applications, Asigra lowers the total cost of ownership, reduces recovery time objectives, eliminates silos of backup data by providing a single consolidated repository, and provides 100% recovery assurance. Asigra's revolutionary patent-pending Recovery License Model provides organizations with a cost effective data recovery business model unlike any other offered in the storage market. Asigra has been recognized as a Gartner Cool Vendor and has been included in the Gartner Magic Quadrant for Enterprise Backup and Recovery Software since 2010. In 2015, Asigra Cloud Backup was also named the **Top Enterprise Backup Solution** and achieved silver in Storage Magazine's **Products of the Year**.

More information on Asigra can be found at [www.asigra.com](http://www.asigra.com)

