



**AGENTLESS CLOUD BACKUP AND
RECOVERY SOFTWARE FOR THE ENTERPRISE**



Your company's single most valuable asset may be its data.

Customer data, product data, financial data, employee data—this is the lifeblood of modern organizations. And when something goes wrong, you will not define success by how the data was backed up—all that matters is getting your data back. All of it. All the time. All correct. All at once.

In data backup, recovery is everything. With this as the ultimate goal, your software solution should deliver maximum:

- Security
- Manageability
- Reliability
- Affordability

Asigra Cloud Backup™ Data Protection for Recovery From Anywhere, Anytime

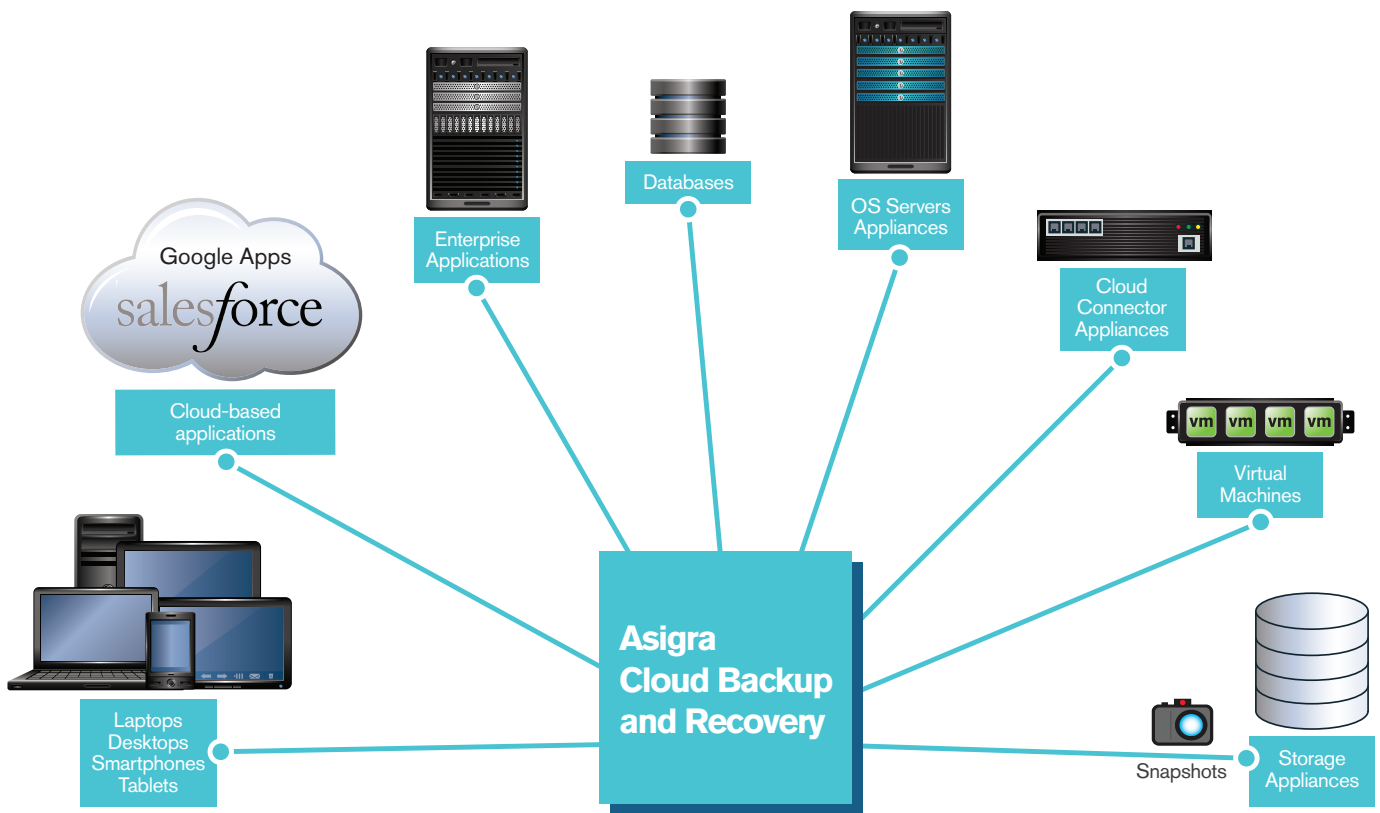
Asigra Cloud Backup is designed for private, hybrid and public cloud architectures, giving you industry-best recovery assurance in the face of your exploding data volume and complexity. Your data can be backed up and recovered efficiently whether it is on a physical or virtual machine in your heterogeneous enterprise environment, on servers, desktops, laptops, smartphones and tablets, or in cloud-based applications such as Google Apps or Salesforce.com.

Maximum Security

With Asigra, your data is protected at all times with the highest levels of security and compliance:

- AES 256-bit in-flight and at-rest data encryption
- Government-approved NIST FIPS 140-2 security certification
- Customer-controlled encryption key and authentication

Asigra's agentless architecture is secure because it does not rely on vulnerable agents that need to be installed on each machine. This eliminates open ports on your firewall for all backup sources, dramatically enhancing security by removing points of attack inherent with agent-based architectures.



Fact:

Enterprises using Asigra technology have achieved 100% recovery of all data, regardless of where it resides.

Maximum Manageability

Asigra delivers continuous control with low-touch manageability. Our centralized operations and capacity management give you a comprehensive, unified view of your systems, users and devices:

- **Single consolidated repository** simplifies backup and recovery of data that's currently backed up in silos scattered across the enterprise
- **Single-pane-of-glass view** allows you to manage from an intuitive web-based dashboard with visibility across the enterprise for even the most complex disaster recovery and business continuity strategies, including multiple branch locations and local/remote backup and recovery management of data centers
- **Support for private, hybrid and public cloud** so you choose the cloud architecture or deployment model that best suits your business needs, and easily migrate as your needs evolve
- **Agentless architecture** simplifies installation and ongoing operations in your environment by eliminating the downtime and disruption of deploying and maintaining agents
- **World-class service from our worldwide partner network** minimizes the time and resources you spend on backup and recovery

Maximum Reliability

Having confidence in your ability to recover data when it matters most comes from trusting in the backup and restoration processes. Asigra has two important processes to ensure reliability in your recoverability:

- **Autonomic Healing** verifies the logical and physical integrity of the data written to the storage systems
- **Restore Validation** ensures data is restoreable by simulating real recoveries (without actually writing the restored data)

“Tape is no longer a viable option given other alternatives now available in the marketplace. Cloud-based data recovery is so much easier than having to find, load and retrieve data from tapes. Thanks to Echopath and Asigra we have shaved off the number of hours spent on backup significantly and substantially improved our ability to recover from a data loss event regardless of where the data was originally located.”

Scott Reid, VP of Operations, PacMoore

Key Features

Security

- Agentless Architecture
- NIST FIPS 140-2 Certification
- Encryption Key Management
- AES 256-bit Encryption
- Regulatory Compliance (SOX, HIPAA, Basel II)
- Compliant Data Destruction

Manageability

- Block-Level Incremental Forever
- Deduplication
- Compression
- Local Storage
- Retention Rules
- LAN Storage & Resource Discovery
- Extensible Storage
- Backup Lifecycle Management (BLM)

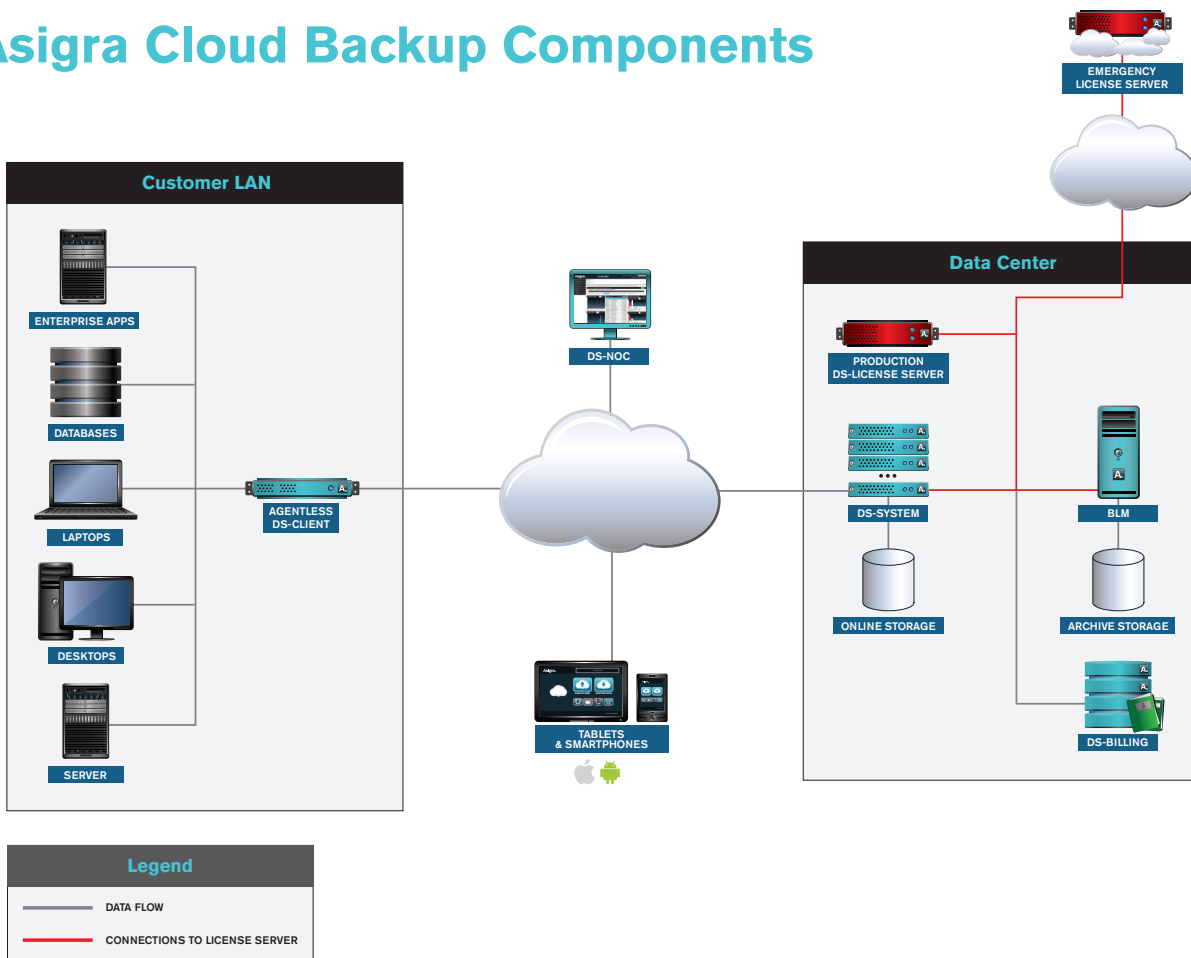
Reliability

- Restore Validation
- Autonomic Healing
- Reporting

Near-Instant Recovery

- Local and Remote Virtual Disaster Recovery (VDR)
- Continuous Data Protection (CDP)
- Snapshot Support

Asigra Cloud Backup Components



Did You Know?

Enterprises using Asigra can restore in a few minutes rather than several hours.

Granular Recovery When You Need it the Most

Email is by far the most common recovery request demanded by users. The Asigra solution allows you to recover Exchange and SharePoint at the item level, even if your backup was performed at the database level.

Recover Quickly and Resume Business as Usual

Depending on your organization's Recovery Time Objective (RTO) requirements, you may want near-instant recovery for some mission-critical applications and data. Asigra provides peace of

mind by safeguarding the availability of your environment with three optional features:

- **Continuous Data Protection (CDP)** can be selected for specific backup sets to ensure you can be up and running quickly with minimal data loss
- **Virtual Disaster Recovery (VDR)** allows you to failover to a local or, in the event of a site loss, a remote environment in minutes instead of hours or days
- **Snapshot capability** gives you the ability to achieve aggressive Recovery Point Objectives (RPOs) and Recovery Time Objectives (RTOs) for even large amounts of data. You can leverage the native NetApp Snapshot API to perform quick and efficient hardware-based backups across homogeneous NetApp™ platforms. The Asigra Snapshot Manager enables organizations to simplify configuration, management and scheduling of backups and restores with a "single pane of glass" view of all snapshots in the environment.

Maximum Affordability

In addition to the patent-pending Asigra Recovery License Model™ —an innovation in pricing that delivers immediate and long-term savings by allowing you to pay based on how little data your organization actually recovers—Asigra delivers technical innovations that reduce time to benefit (T2B) and increased return on investment (ROI).

Asigra Cloud Backup provides you with a single solution for the end-to-end backup and recovery requirements of your enterprise, eliminating the high costs of integrating disparate point solutions to protect different types of enterprise data.

Asigra leverages the latest technologies and best practices for block-level and incremental forever backup, deduplication and compression to reduce your WAN and network usage and more importantly, your storage costs.

A key feature is **LAN Storage Discovery**, which completely analyzes the entire application and data types on the LAN before committing to a backup procedure. It generates reports that identify possible storage inefficiencies, enabling you to optimize and better manage the backup procedure from the perspective of both data and cost.

Operating Systems and Applications Supported

Asigra Cloud Backup supports a wide range of operating systems, physical and virtual machines, servers, databases, applications, and storage environments to ensure you can recover heterogeneous environments in local, primary and disaster recovery data centers using a single consolidated tool.

All leading enterprise applications and operating systems are supported:

VMware	DB2	Linux
XenServer	PostgreSQL	NovellNetworkware
Hyper-V	Sybase	Mac OSX
MS SharePoint	Lotus Notes	System i
MS Exchange	Lotus Domino	Apple iOS
MS Outlook	GroupWise	Android
MS SQL Server	MySQL	Google Apps
SAP	Windows	Salesforce.com
Oracle		



How Recovery License Model Works

With the patent pending Asigra Recovery License Model®, businesses now pay two separate license costs, purchased together:

- **Fixed backup costs** – based on capacity and always constant on a per GB basis
- **Variable recovery costs** – based on the percentage of data you recover, as reflected by the Recovery Performance Score measured by the Asigra Recovery Tracker™. The new model is based on a low limited per GB recovery cost, so the expenditures remain predictable and low even as data volumes rise.

For more information about the Asigra Recovery License Model, visit <http://www.asigra.com/solutions/recovery-license-model>

Asigra's Recovery License Model helps businesses achieve 40% cost savings immediately.

“Working with Asigra technology gives me confidence in my data protection plan. I know that if I ever need to restore, it will take a few minutes rather than several hours. It’s about the recovery, not the backup.”

Ivan De Moya
IT Director of Equity One, Inc.

Asigra Cloud Backup is Comprised of the Following Components:

DS-System

DS-System software is installed at the enterprise data center in the core of the cloud. The DS-System aggregates data from remote DS-Clients. The DS-System can leverage any disk-based storage such as Direct-Attached-Storage (DAS), Storage Area Network (SAN) or Network-Attached Storage (NAS). The DS-System can be deployed as a standalone or High Availability (HA) N+1 configuration. The N+1 configuration is a redundant grid of nodes that provide further scalability, performance and high-availability. This configuration allows the DS-System to withstand failures to up to half minus one the nodes in the cluster without interruption to the backup services. The addition of nodes also helps scale the performance of the grid by providing additional backup and restore processing resources. DS-System also offers optional offsite replication for additional redundancy and Disaster Recovery (DR). DS-Clients can be configured to automatically failover to the replicated DS-System for both backup and restore activities. In prolonged outages, the replicated DS-System can be promoted to be the primary DS-System.

DS-Systems are offered in several variants:

1. **FullFeatured** – accepts connections from all variants of DS-Client
2. **Replication** – accepts connections from replication DS-Systems and from replicated DS-Clients for restore activities
3. **Mobile** – accepts connections from DS-Mobile Clients for Windows and Mac, DS-Consumer, DS-Smartphone, and DS-Tablet Clients
4. **Consumer** – accepts connections from DS-Consumer, DS-Smartphone and DS-Tablet Clients

DS-Client

DS-Client software is installed on your LAN and collects data from all machines, drives, applications and systems on it.

The DS-Client can also be configured to collect data from cloud-based applications and platforms such as PaaS and SaaS infrastructures. The DS-Client software is agentless and does not need to be installed on every machine that needs to be backed up. DS-Client can run on a dedicated machine or on an existing machine on the LAN. It is designed to back up a heterogeneous environment of different OS, databases, applications and data types.

DS-Client is offered in several variants:

1. **FullFeatured** – for enterprise and data center backup
2. **Mobile** – for corporate managed laptops
3. **Consumer** – for consumer laptops and desktops
4. **Notebook** – for consumer Mac laptops and desktops
5. **Smartphone** – for corporate and consumer smartphones
6. **Tablet** – for corporate and consumer tablets

Recovery Tracker

Recovery Tracker is a powerful analytics engine focused on data recoveries and is an integral part of Asigra's revolutionary **Recovery License Model**. It provides customers with in-depth analytics about their data recovery performance to help them benchmark their operations with others in their industry, geographic region and business size.

The Recovery Tracker includes the following components:

- **Annual recovery performance score** – A score between 0 and 10 based on the percentage of data recoveries performed over a 12-month period. This score is then used to calculate the license price based on performance.
- **Recovery analytics** – Provides various measurements related to recoveries, including number of recoveries performed each year, amount of data recovered, type of data lost, and reason for recoveries.

Backup Lifecycle Management (BLM)

Every business stores data of varying importance. Mission-critical data required for day-to-day operations must be immediately accessible and stored on the DS-System. However, less important data or dormant files for significant periods of time occupy premium real estate on the DS-System and should be saved to less expensive storage and eventually deleted to ensure compliance. The DS-System's online disk-based storage maintains critical data. BLM allows you to archive DS-System backup data for long term:

- Saves money while still offering data protection by archiving obsolete generations, deleted data, and old data.
- Enables compliance with backup regulations by allowing periodic copy archiving, and by providing data destruction (with certificate).
- Provides optional offsite replication for additional redundancy and compliance.

DS-NOC

DS-NOC is the Network Operations Center for systems administrators. It is the web-based control interface that provides a single-pane-of-glass view into the entire backup environment. The graphical dashboard is simple to use and allows for monitor and control of the entire set of Asigra software products, including the associated reports and logs.

Extensive APIs are also available to enable seamless integration with your existing monitoring and management systems.

DS-Billing

DS-Billing offers easy management and maintenance of billing information for internal charge-back capabilities. The billing module can also be used for quota allocation to provision capacity across multiple departments.

DS-License Server

DS-License Server is the single management console for license capacity management across your Asigra real estate, including DS-Systems, BLMs, production and replication servers. It provides a centralized tool for managing and provisioning total capacity and expiration dates per component, as well as performs authentication of all components on a regular basis.

Asigra Snapshot Manager

Snapshot Manager is a management interface that comes pre-packaged at no additional cost with Asigra Cloud Backup, providing you with a simple and effective way to initiate, catalog, and manage snapshots. Your backup administrators can now schedule, configure, and manage all snapshots from the familiar Asigra user interface.

About ITC Infotech

ITC Infotech is a specialized global scale - full service provider of Domain, Data and Digital technology solutions, backed by a strong business and technology consulting focus. The company caters to enterprises in Supply Chain based industries (CPG, Retail, Manufacturing, Hi-Tech) and Services (Banking, Financial Services and Insurance, Airline, Hospitality) through a combination of traditional and newer business models, as a long term sustainable partner. ITC Infotech is a fully owned subsidiary of USD 7bn ITC Ltd – one of India's most admired companies.

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