

enVista services

Business Continuity and Disaster Recovery Solution



Why use enVista's Backup and Recovery Solution?

- Ensure data security – Data is deduplicated globally, compressed and encrypted on the client side before transfer
- Eliminate the risk of off-site tape backup with a secure backup and replication via existing LAN/WAN links
- Obtain fast, single-step recovery without staging full backup and daily incrementals

Companies are redefining their backup and recovery as a result of exponential data growth, regulatory compliance, increased service-level agreements, and shrinking backup windows. The IT team faces additional challenges brought on by accelerated virtualization, converged infrastructure and the need to improve data protection across the enterprise, including remote offices.



In order to help IT teams address challenges brought on by accelerated virtualization, converged infrastructure and the need to improve data protection across the enterprise, including remote offices, enVista has partnered with EMC, a global leader in delivering information technology as a service (ITaaS). enVista resells EMC's data backup and recovery solution as a robust alternative to traditional backup methods.

Unlike traditional backup solutions, Avamar eliminates redundant sub-file data segments at the client before backup data is transferred across the network and stored to the EMC Avamar Data Store or EMC Data Domain Systems. Avamar also provides efficient, daily asynchronous replication to meet disaster recovery objectives. Backup data can be encrypted in-flight and at rest, enabling secure, cost-effective, retention on disk.

Drawbacks of Conventional Backup and Recovery

One of the key drivers impacting backup performance is the amount of data that must be protected within the available backup window. Traditional solutions are inefficient because they repeatedly backup everything—duplicate files and sub-file data segments that exist across servers, desktops, laptops, and offices. When combined with traditional daily incremental and weekly full backups, the quantity of duplicate data is staggering. The sheer amount of data that must cross already congested networks, backup servers, and infrastructure often makes meeting backup windows a challenge.

The impact is especially severe when dealing with virtual environments, remote offices, and NAS systems. In virtual environments, each virtual machine (VM) represents an individual backup job, often with overlapping backup windows, and includes redundant operating system, application, and file data. Consequently, backups for VMs often overrun backup windows and tax shared resources, leaving data unprotected and creating issues for backup administrators.

In remote offices, limited network bandwidth makes centralized, automated WAN- based backup nearly impossible. As a result, remote non-IT staff must handle backup tasks. Failure-prone, tape-based hardware and ad-hoc manual processes do not provide reliable remote office data protection.

Traditional solutions also increase costs because extra storage is needed to retain duplicate backup data. This is often exacerbated by extended data retention requirements for regulatory compliance. In addition, traditional backup often involves the shipment of tapes offsite, which can result in exposure of confidential information, theft, or data loss.

Never Back Up The Same Data Twice

Utilizing the Avamar product, enVista provides fast, efficient backup and recovery by reducing the size of backup data at the client—before it is transferred across the network and stored. Our solution also deduplicates backup data globally across servers, desktops, laptops, and offices worldwide to reduce the total required backup storage by up to 95 percent. As a result, enVista's backup solution provides the following benefits:

- Efficient long-term retention of backup data on disk
- Dramatically lowers capital and operating expenses including floor space, power and cooling
- Ability to quickly recover backups in one step and eliminate the hassle of restoring full and subsequent incremental backups to reach the desired recovery point
- Integrated RSA Data Protection Manager for generating encryption keys

Highly Efficient Data Deduplication

The method for determining segment size is a key factor in eliminating redundant data at a sub-file level. Some solutions

on the market use fixed-length segments when performing deduplication. With this approach, even small changes to a dataset (for example, inserting data into the beginning of a file) can change all subsequent fixed-length segments in a dataset. Despite the fact that very little data has actually changed, the entire file will appear as new data that must be backed-up again.

enVista's backup solution solves this problem by examining the data to determine logical boundary points using variable-length data segments. Leveraging the power of Avamar, enVista delivers the most-efficient global, client-side data deduplication on the market—dramatically reducing the amount of data sent and stored, while eliminating backup bottlenecks and reducing backup times.

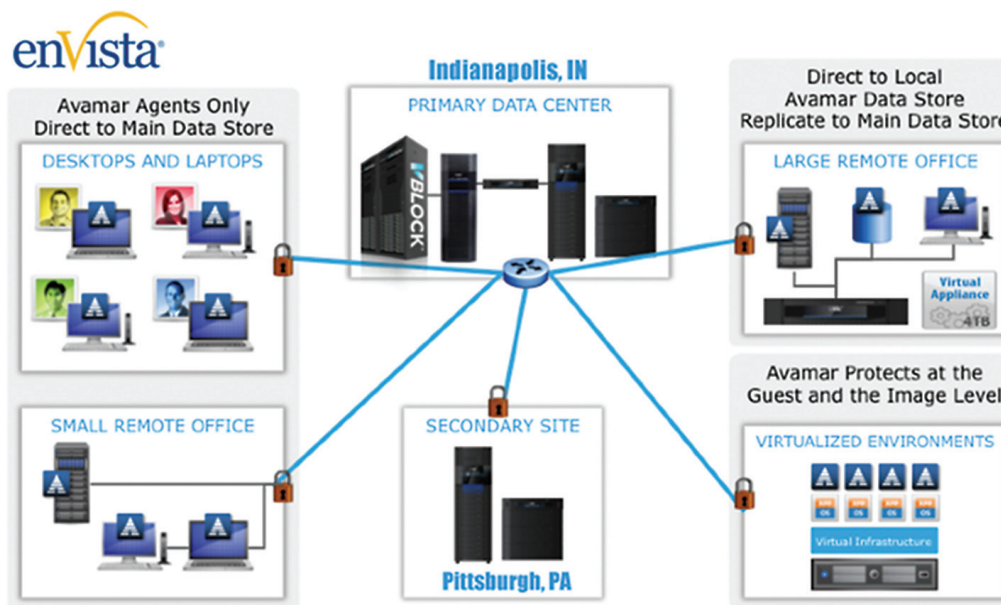
Scalability, High Availability and Reliability

Unlike many server deployments, the Avamar Data Store uses a grid architecture that facilitates linear performance increases by simply adding storage nodes. Each incremental node increases CPU, memory, I/O, and disk capacity for the entire grid. When a storage node is added, data is automatically load-balanced without compromising system performance.

When traditional backup solutions fail, a company is exposed to potential data loss. With Avamar, enVista eliminates single points of failure by employing patented redundant array of independent nodes technology to provide high availability across nodes in the Data Store. In addition, system and data integrity is verified daily to ensure recoverability.



**EMC Avamar
Data Store
Main Grid**



Flexible Deployment Options

enVista provides flexibility in solution deployments depending upon the specific use case and recovery requirements. enVista's turnkey backup and recovery solution, Avamar Data Store, integrates Avamar software with EMC-certified hardware for streamlined deployment and service. A replicated Avamar Data Store single-node is ideal for smaller businesses or remote offices with strict SLAs.

The EMC Avamar Virtual Edition—the industry's first deduplication virtual appliance for backup and recovery—consists of EMC Avamar software deployed as a virtual appliance. It enables the deployment of a complete Avamar server on an existing VMware ESX server or Microsoft Hyper-V server, leveraging the attached disk storage (up to 4TB) and infrastructure. Since all aspects of the backup and recovery process are encapsulated and virtualized, control and management are also streamlined, reducing demands on IT staff. Avamar Virtual Edition has the added benefit of cost-

effective Avamar virtual-to-virtual, or Avamar virtual-to-physical server replication to meet disaster recovery objectives.

For remote offices, lightweight, efficient Avamar software agents can be deployed on servers with no additional remote hardware required. This enables data to be backed up directly via existing WAN links to a central Avamar Data Store at the data center, eliminating the need for local tape backups and offsite tape shipment risks.

Having a business continuity and disaster recover strategy in place is an essential component of any company's IT strategy. It is no longer considered a viable option to backup data onsite without the existence of a secure and readily accessible off-site backup. For mid-market environments, the EMC Avamar Business Edition provides a competitively priced, conveniently sized, turnkey deduplicated backup solution. This fully featured single-node solution eliminates the need to replicate data to another Avamar single-node.

Avamar provides efficient, daily asynchronous replication to meet disaster recovery objectives.

Contact us today to learn more.