



## InMage Scout

### Simplify Disaster Recovery. Eliminate Backups.

- Simple, cost-effective disaster recovery solutions for any application that support long distance requirements using IP-based networks
- Faster and reliable data and application recovery through automate policy-based software solutions
- Granular recovery capabilities to support the most stringent RPO/RTO requirements through the use of a unique hybrid recovery technology
- Preserves existing investments in other data protection products and processes with a single solution that supports heterogeneous servers and storage

Recovery is a critical concern for enterprises of all sizes, and must be addressed both remotely (for disaster recovery) and locally (for operational recovery). Disaster recovery (DR) is recognized as a need, but many enterprises cannot afford to implement it effectively in a way to support recovery requirements. Most enterprises are already backing up locally and using tapes for disaster recovery, but may be experiencing issues with backup windows, data loss on recovery, lengthy recovery times, or recovery reliability. Because of the unnecessary complexity of today's IT environments, most enterprises use multiple products and tools to cover their range of recovery requirements, a situation that leads to high management complexity and cost.

Data recovery alone is not sufficient to meet comprehensive application recovery needs for mission critical systems. Data is only useful when applications that can use that data are available. Application recovery must be addressed to ensure continued business operations as well. Application recovery generally requires additional processes further adding to infrastructure complexity, cost, and recovery risk.

#### A Unified Approach to Backup and Replication

InMage Scout™ leverages the advantages of disk-based data protection to provide application-aware recovery that can meet remote and/or local requirements. InMage Scout continuously captures data changes in real time as they occur and performs local backup or remote replication simultaneously with a single data stream. It offers instantaneous and granular recovery of data locally and enables push-button application level failovers to remote sites to meet local backup and/or remote DR requirements, thus going above and beyond the protection offered by conventional replication backup and failover automation products alone.

InMage Scout collects data changes from production servers as they occur, directly in memory before they are written to disk, and sends them to a software appliance called the InMage Scout Server. Due to this approach, there is absolutely no additional I/O load induced on production servers due to backup and/or replication. The server is responsible for further off-loading compute intensive tasks from production systems, such as compression, encryption, WAN acceleration and consolidated bandwidth management. In addition, it also provides centralized management, monitoring and reporting capabilities. This approach allows for very large data sets and applications to be protected while minimizing the effect on production and network resources. From the InMage Scout Server, a single stream of data can be backed up to a local repository, while simultaneously replicating to a remote target for DR purposes. Many to 1 replication support offers the option of remote office data protection configurations that minimize tape infrastructure and manual involvement in locations that may not have access to sophisticated backup expertise.

Application consistency is enforced at regular intervals through VSS integration on Windows and native application specific mechanisms on Linux and Solaris systems. Application consistency is also enforced at the guest level in virtual environments such as VMware ESX, Xen Server and Hyper-V. These application consistent points are tagged by a bookmark and archived as part of the CDP data. They can be leveraged to perform application consistent recoveries within stringent recovery time objectives.

#### Backup Enhancements and Target Capacity Optimizations

InMage Scout provides several built-in features specific to disk based backup aimed at simplifying the implementation process. Backup policies can be created for a production server as a whole.

The target repositories for backup can also be automatically provisioned. These features significantly minimize the time required to implement a disk backup solution by as much as 85% compared to traditional backup based solutions.

InMage Scout also provides target capacity optimization features for backup without requiring dedupe software like most traditional backup methods. The auto-provisioned backup repositories are thin-provisioned to reduce target storage requirements. They are also compressed to further reduce target capacity usage. Sparse retention is a novel form of capacity optimization that saves recovery bookmarks at less frequent intervals as time progresses. For example, a sparse retention policy may be described as – “Retain all data changes for the last 3 days, retain one recovery point per hour for the next 4 days beyond that, and retain one recovery point per day for older data”. It is important to note that the older recovery points retained are application consistent points. This allows for maintaining long term data on disk while utilizing lesser or equal target storage capacity compared to traditional disk backup with dedupe.

## Instantaneous and Granular Recovery

Recoveries can occur to the latest or any previous point in time by creating a disk-based image or snapshot to the desired point-in-time, thus providing the maximum flexibility to select the best recovery point for any given scenario. Additionally, virtual snapshots created with InMage Scout do not consume any target storage, and can be used to perform granular file and object level recoveries. Mailbox and message level recovery is currently supported for most versions of MS Exchange. Recoveries can occur from either remote or local locations, and can meet very stringent Recovery Point or Recovery Time Objectives (RPO/RTO). InMage Scout enables business to address their recovery needs through a cost effective and scalable solution.

## Affordable DR and Push-Button Failover

InMage Scout supports cost-effective DR configurations that leverage asynchronous, IP-based replication and support heterogeneous servers and storage. The solution scales well

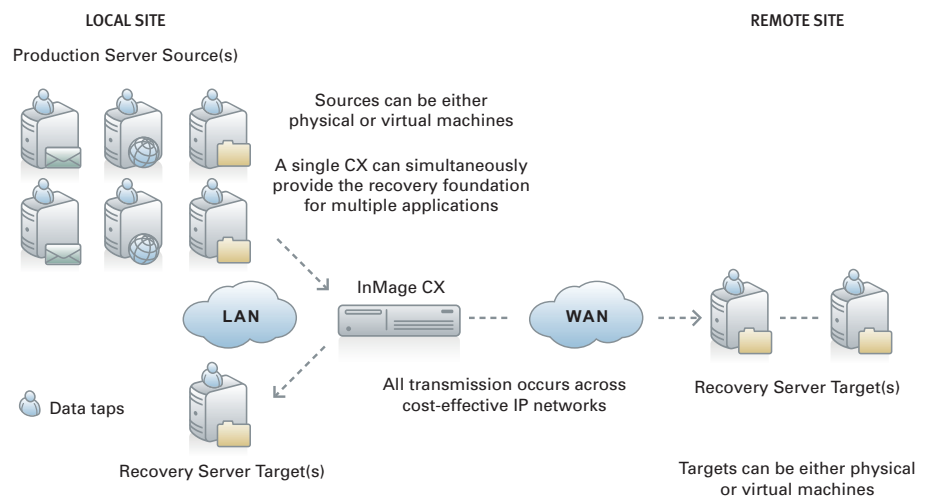


Figure 1. Using data taps, data is granularly collected from servers as it is created and sent to a local CX, which can then store the data locally and/or remotely (using replication). If bi-directional and/or one button application failover is desired at the remote site, an optional second CX would be deployed there. Note that in InMage's unique architecture, data is replicated between servers, not between appliances or storage arrays.

as it grows (both in terms of storage capacities and number of supported servers) because most of the processing associated with moving the data is off-loaded to the InMage Scout Server. When recovery is required, InMage Scout can immediately generate recoverable images, and those images can be mounted on local recovery targets or at targets at the DR site. If desired, customers can run production applications at the DR site and then, when the primary site is again ready to be brought on line, InMage Scout can restart primary site operations using the latest data state.

InMage Scout also supports application failover/failback, uniquely combining a backup and DR solution with an application availability management solution all on a single platform. Based on policies established by the administrator, InMage Scout may automatically recover applications locally, making services available from a different physical server in a manner completely transparent to clients. Alternatively, administrators can perform a “one button” failover to a remote location. InMage Scout's automated application recovery can be used with any application, and supports faster, more reliable recoveries.

## Start-to-Finish Central Administration with Single GUI: Install, Backup, Replicate and Failover

To simplify deployments, InMage Scout

provides a range of application-aware solutions, all of which reside on and are managed centrally from a single, secure, web browser-based management console. InMage Scout solutions include application-specific functionality, particularly with respect to application-consistent points in time creation and usage and the management of application failover/failback, even though they are managed under a common set of policies. Multiple application recovery solutions can all reside on a single InMage Scout Server, although multiple InMage Scout Servers can be deployed to meet scaling requirements.

## Replicate regardless of Storage Types and Vendors

InMage Scout's unique hybrid recovery technology translates directly into customer value propositions. It accommodates heterogeneous servers and storage (and storage architectures like DAS, SAN, NAS, iSCSI, and FC), while providing recovery solutions that are tailored to specific application environments. InMage Scout leverages cost-effective IP-based networks for data capture and replication, employing continuous data protection for granular recovery and asynchronous replication to support long distance DR solutions. Its flexible design preserves existing investments in hardware, software, and processes while providing the benefits of disk-based recovery and maximum freedom in purchasing and deploying new products going forward.