



## WAN SERIES SOLUTION BRIEF

# Data Storage Replication

WAN Series WAN Optimization Controllers: Accelerating storage backup, replication and recovery over the WAN, efficiently and cost-effectively

### The WAN Impact on Data Protection and Business Continuity

When deploying business continuity plan (BCP) capabilities over a wide area network (WAN), data backup and replication processes among data centers, branches, and replication sites can be significantly slowed down by other business traffic traversing the WAN. Frequently, this results in backups and replications being delayed or even postponed to after hours, increasing the data loss risk window.

Low bandwidth, high latency, network contention, and packet loss on the WAN can thus interfere with an enterprise's ability to quickly and efficiently achieve recovery-time objective (RTO) and recovery point objective (RPO) goals.

### WAN Series for Data Throughput

Array Networks® WAN Series WAN optimization controllers, deployed in WAN Series physical appliances, as virtual appliances or Windows software, enable more efficient data replication and backup over the WAN. WAN Series helps enterprises recover their most valuable asset – their company data – in record time while reducing BC costs, and reducing backup window times and network bandwidth consumption. Through WAN Series, distributed enterprises can deploy industry-leading data protection solutions and deliver cost-effective, real-time performance to critical remote backup sites.

WAN Series mitigates long backup windows due to chatty protocols through data differencing and reduction algorithms that reduce traffic and round trips over the WAN. In addition, only newly changed data is sent across the WAN, further reducing bandwidth requirements and replication times.

WAN Series utilizes disk-based compression that allows storage of gigabits (scalable to a terabit or more) of data patterns on disk, allowing cache-based delivery of data to reduce server load and further improve WAN performance. WAN Series' disk-based de-duplication is also far more granular than typical block- and file-level de-duplication often utilized by backup and replication products, resulting in further reduction of replication times.

WAN Series implements more efficient byte-level data differencing and reduction over the WAN. In addition, data is written to disk in a manner that will not fragment: Single Instance Store caches only a single copy of data across multiple peers; and cross-protocol caching stores only a single copy of data even if it is transmitted using different protocols.

Through WAN Series, enterprises can deploy storage solutions for business continuity and disaster recovery, and achieve cost-efficient, real-time replication, backup and recovery performance without adding expensive bandwidth.

## High-Performance and Bandwidth Conservation

In performance tests of specific continuity applications, WAN Series reduced full data replication times by up to 97%\*. Incremental replication times were reduced by up to 94%\*. WAN Series also decreases network bandwidth requirements by up to 95%\*, reducing the need for costly purchases of incremental bandwidth.

## Deploying WAN Series for Business Continuity

WAN Series high-performance physical appliances, or software for cloud and virtualized environments, are symmetrically deployed at the data center, remote and branch offices, and mirrored sites. All WAN Series solutions can be configured to support high-availability (HA) environments commonly found in BC infrastructures.

## Support for Backup, Recovery and Replication Solutions

WAN Series reduces the backup and replication times of many of the industry's leading backup, recovery and replication solutions. Supported solutions include, but are not limited to, CA XOSoft, Commvault, Dell Compellent, Dell EqualLogic, Double-Take, EMC Celerra Replicator, EMC SRDF/A, FalconStor, Hitachi HDS, HP and HP LeftHand (HP P4000), IBM Tivoli Fast Back, IBM Tivoli Storage Manager, NetApp SnapMirror and Symantec NetBackup.

## WAN Series Configuration Management System

The optional WAN Series configuration management system (CMS) enables global configuration and deployment of physical and virtual WAN Series appliances. CMS uses templates, so that settings that are common between appliances can be easily managed from one configuration. Changes only need to be made once and will propagate throughout the system, creating simplicity and eliminating errors.

CMS provides IT administrators with an easy-to-use solution for centralized provisioning, drag-and-drop configuring, appliance management and a centralized view of entire WAN Series deployments. CMS was designed with the needs of the CIO and IT administrator in mind, optimizing operational efficiency for branch acceleration management and thereby lowering TCO for the enterprise.

## WAN Series Benefits

- > Dramatically improve RTO and RPO
- > Decrease remote backup and replication times
- > Increase backup frequency to reduce data-loss risk
- > Decrease WAN bandwidth requirements
- > Optimize industry-leading data recovery solutions
- > Reduce IT capital, network bandwidth and operations costs
- > Reduce long storage backup windows
- > Improve storage replication rates over the WAN
- > Reduce time-consuming incremental backups
- > Guard against large data-loss risk windows
- > Reduce competition from other WAN traffic for replication

\*Acceleration results may vary based upon traffic type, network contention and network configuration.

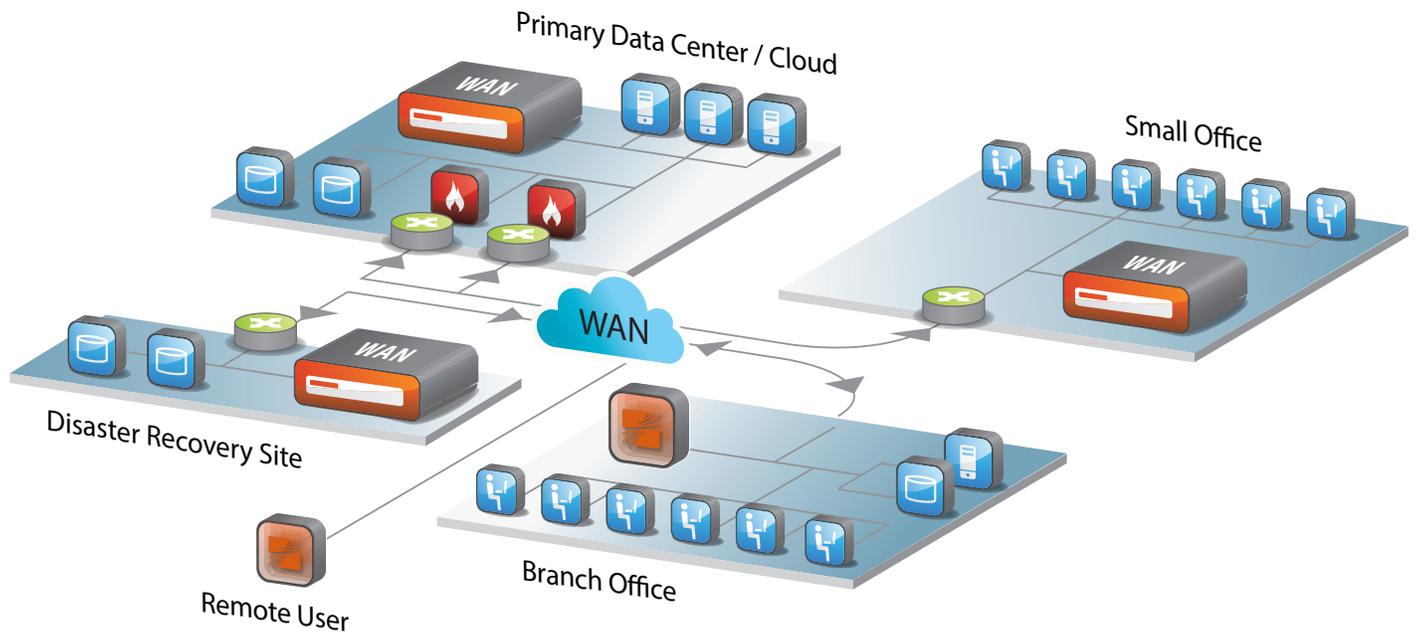


Figure 1: WAN Series Business Continuity Environment supporting Storage Backup and Replication Acceleration

For more information about how Array Networks can help you accelerate storage backup, replication and recovery over the WAN, efficiently and cost-effectively, visit us at [arraynetworks.com](http://arraynetworks.com) or send us an email at [sales-info@arraynetworks.com](mailto:sales-info@arraynetworks.com).