# Systems, Application & Data Protection, Recovery & Availability



Whether you're protecting the data center or remote office resources, we all know that basic backup alone is not enough to meet today's demanding service-level agreements (SLAs) and disaster recovery (DR) strategies. Don't compromise! You need faster backup and faster, more granular recovery for your systems, applications and data; you need a way to reduce backup storage requirements along with costs. Organizations seek faster, better ways to copy data off-site and to the cloud for disaster recovery. For critical servers and applications, you need a high-availability solution that monitors servers and applications and automatically fails over to another server at the first sign of trouble. In addition, your solution needs to protect both physical and virtual servers, reducing complexity, cost, management and maintenance. The bottom line is that you need a solution that delivers protection, recovery and availability for your systems, applications and data—delivering the agility that your business demands.

#### **CHALLENGES**

With exponential data growth, new applications such as Microsoft® SharePoint®, new virtualized servers and data residing on desktops, laptops and remote offices, it's tougher than ever to meet demanding SLAs for recovery time and availability that meet the needs of your users. How do you recover data that has been lost or damaged between periodic backups? How do you get your data off-site for disaster recovery? How quickly can you restore a server and application in case of a server or system crash—or unplanned disaster such as fire or flood? How can you centrally manage it all? Most likely, your legacy backup system was just not designed to address all these challenges.

#### **PRODUCT INFO**

With the CA ARCserve Family of Products, you can speed the backup and recovery process, perform timely, secure disk and tape backups and reduce backup storage costs at the same time. Infinite, incremental (I<sup>2</sup>) snapshot backups significantly speed the process and provide more granular recovery points, too. Forget about physical, off-site tape transport for DR—just replicate right over the wide area network (WAN) to any remote location. In addition, real-time server monitoring with automatic failover provides system, application and data high availability without complex clustering. You also get ways to more quickly rebuild and replace damaged servers and migrate from physical to virtual servers.

#### **BENEFITS**

The CA ARCserve Family of Products provides a single strategy for backup, recovery and availability of your systems, applications and data across Windows®, Linux® and UNIX® systems on physical and virtual servers. Built-in automation, remote management and centralized reporting improve IT productivity, which enables you to focus on other critical activities. You reduce backup storage costs and gain critical management insights to help reduce unexpected outages. Overall, data protection, business continuity and disaster recovery are simplified and risks associated with data loss and system downtime are minimized.

## The Solution: The CA ARCserve Family of Products

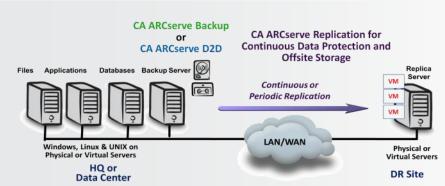
The CA ARCserve Family of Products gives you control over your evolving business by delivering total protection, recovery and availability for servers, applications and data in your data center and remote offices. It is the only solution that offers a full range of products from bare-metal restore to fully automatic failover for high availability. You get a complete strategy to manage backup, recovery and availability across diverse platforms, applications and storage devices.

### **Data Protection**

CA ARCserve® D2D provides fast and easy backup to disk and is the only Windows-based backup solution that offers infinite, incremental backups and bare-metal restore—including to dissimilar hardware. This new backup methodology changes how backups are performed to significantly reduce backup and restore times and eliminate the inherent risks of tape devices and media. It also enables faster and more granular recovery points—up to every 15 minutes—which speeds data recovery, either from local data on disk or remote data stored in the cloud. CA ARCserve® Central Protection Manager and CA ARCserve® Central Reporting deliver centralized deployment, management and reporting for the CA ARCserve D2D environment and can include information about CA ARCserve® Backup. You can use CA ARCserve D2D with CA ARCserve® Central Host-Based VM Backup for single-pass, host-based VMware virtual server backups using VMware vSphere™ Changed Block Tracking (CBT) technology, and the new CA ARCserve® Central Virtual Standby application that makes your backups available to run like VMware or Microsoft Hyper-V™ virtual servers, providing you with near-instantaneous, efficient and secure recovery for both your physical and virtual servers.



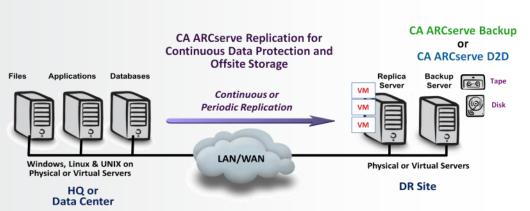
For more complex environments such as those with mixed Windows, Linux and UNIX operating systems; VMware, Microsoft Hyper-V and Citrix® XenServer environments; or a more diverse set of applications, CA ARCserve Backup delivers what you need. It offers simple, centralized management across your entire infrastructure and provides backup to disk, tape and the cloud (for off-site storage and archiving). It also includes built-in data deduplication at no additional cost—which can reduce storage requirements by up to 95 percent, providing immediate savings! New synthetic full backups reduce backup windows and simplify recovery operations. CA ARCserve Backup also provides a built-in dashboard with Storage Resource Manager (SRM) reporting and infrastructure visualization capabilities that monitor your backups and IT infrastructure resources to help avoid unplanned disruptions and outages. Combine CA ARCserve Backup with CA ARCserve D2D for fast, disk-based backups with more granular recovery points and bare-metal restore to dissimilar hardware for your critical Windows-based servers.



Whichever backup solution you use, once backups are completed, **CA ARCserve® Replication** makes transferring that data off-site for disaster recovery quick and easy. After the initial synchronization between your backup repository and the Replica server at your remote or disaster recovery site, only block-level changes in the infinite, incremental backups are transferred over the WAN, keeping network requirements to a minimum. Scheduled replication, offline synchronization, multi-stream replication and backup-tuning features help you to avoid increasing WAN bandwidth and associated costs.

In addition, to make off-site data storage easier, CA ARCserve Backup is integrated with CA ARCserve Replication to make scheduling combined backup and replication jobs faster and easier.

CA ARCserve Replication is used to copy data between servers or locations, including the Amazon cloud, for DR purposes. It provides Data Rewind for continuous data protection (CDP) to complement periodic backups and snapshots. CDP captures every change made to data and databases and enables you to quickly and easily rewind back to a known, good point in time after data loss and damage. You can also use CA ARCserve Replication to consolidate remote office data at a



central location where secure, non-disruptive backup can be performed using CA ARCserve Backup or CA ARCserve D2D— eliminating the need for backup in each remote office. Alternatively, you can use CA ARCserve D2D for backup in each remote office and then replicate off-site for disaster recovery. Best of all, CA ARCserve D2D, CA ARCserve Backup and CA ARCserve Replication all support both your physical and virtual server environments.

# Application and systems protection

CA ARCserve D2D provides bare-metal restore to dissimilar hardware for Windows-based systems to help you more quickly and easily rebuild damaged servers, from any location, by using the web-based management console. It helps you to eliminate the time-consuming process of installing the operating system, application and data—which impacts both employee and IT productivity. Now, combined with CA ARCserve Central Virtual Standby, CA ARCserve D2D provides near-instantaneous recovery of entire Windows-based systems and data by making backups available to run like regular virtual servers. This process converts CA ARCserve D2D recovery points to the VMware Virtual Machine Disk (VMDK) or Microsoft Virtual Hard Disk (VHD) formats on a regularly scheduled basis. It automatically pre-registers and stores each recovery point (including incrementals) with the hypervisor for immediate use if disaster strikes. VMs can be powered on manually or automatically in the event of emergency via server heartbeat monitoring.

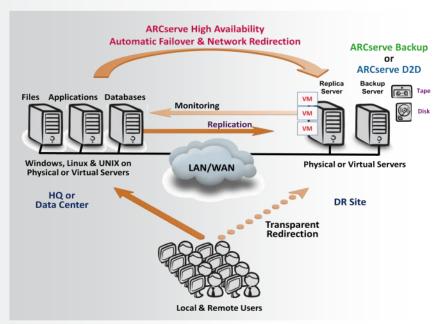
## CA ARCserve Family of Products overview

CA ARCserve Backup goes beyond backup, giving businesses highly reliable data protection with centralized management that makes sense, no matter how complex your data or IT infrastructure is. It does all this at a fraction of the cost of the competition. Reduce your backup

#### **PRODUCT BRIEF:** CA ARCserve® Family of Products r16



If a higher level of system, application and data protection and availability is required, CA ARCserve® High Availability provides real-time server and application monitoring with automatic and push-button failover, along with push-button failback after server repair or replacement, for continuous availability. It delivers Data Rewind for continuous data protection (CDP), which captures every change made to data and databases and enables rewind to any known, good point in time for best data recovery. You also get automated, nondisruptive recovery testing to help ensure that your failover systems are ready when you need them—a critical requirement for any highavailability solution. Whether it's a simple server or application crash, or an unplanned manmade or natural disaster, CA ARCserve High Availability offers the fastest recovery.



storage by up to 95 percent and regain precious time with the only product that combines data deduplication; integrated backup copy to cloud storage; granular restore of applications such as Active Directory®, Microsoft Exchange and SharePoint; infrastructure visualization; and archiving—all for both physical and virtual servers in a single package¹. New synthetic full backups reduce backup windows and improve recovery operations across your environment.

CA ARCserve D2D is a disk-based recovery product that is designed to provide the perfect combination of fast, simple, reliable protection and recovery for all of your business information, on both physical and virtual servers, from a local disk or off-premise cloud storage. An innovative Web 2.0 interface proactively feeds you updates that enable you to confidently meet and manage your recovery SLAs. It is the only product that has bare-metal restore to dissimilar hardware and block-level, infinite, incremental snapshots based on the patent-pending I2 technology™ from CA Technologies in one package. Like data deduplication, I2 technology™ will drastically reduce your backup window, network traffic and disk storage and load on your production applications. Encryption capabilities keep your data private regardless of where it resides, and backup throttling enables you to customize backup performance to balance system usage during peak times. Companies that already have an installed backup system can use CA ARCserve D2D to improve their recovery time.

CA ARCserve Replication, formerly known as CA XOsoft™ Replication, provides continuous data protection and an easy way to migrate or copy data between servers and locations, as well as between remote offices and a central site for consolidated backup and archiving. It includes local area network (LAN) and WAN continuous and periodic replication, for data protection on-site, off-site and in the Amazon cloud. Combined with its Data Rewind feature, it delivers continuous data protection (CDP) to complement any periodic backup solution, helping to speed recovery and minimize data loss. CA ARCserve Replication offers scheduled replication, offline synchronization, multi-stream replication and bandwidth throttling and tuning for LAN and WAN optimization. In addition, you now get built-in, 128-bit Secure Sockets Layer (SSL) encryption for replication across the network for added security without requiring a virtual private network (VPN).

CA ARCserve High Availability, formerly known as CA XOsoft™ High Availability, provides continuous system, application and data availability for Windows, Linux and UNIX environments. It helps to minimize system downtime on physical and virtual servers including VMware, Microsoft Hyper-V and Citrix XenServer. CA ARCserve High Availability includes all CA ARCserve Replication features and adds real-time server and application monitoring, automatic and push-button failover and push-button failback. Unlike other high-availability solutions, CA ARCserve High Availability does not require any cluster architecture or additional "witness server," responds to issues at the server and application levels, includes Data Rewind for continuous data protection (CDP) and provides CA ARCserve® Assured Recovery® for automated, non-disruptive recovery testing.

CA ARCserve® Central Applications deliver greater integration across the CA ARCserve Family of Products and easily add new functionality into your existing CA ARCserve environment for improved recovery time, reduced IT management workload and enhanced backup of your virtualized servers. These new applications provide centralized management for CA ARCserve D2D, centralized reporting across CA

As of August 2010

#### **PRODUCT BRIEF:** CA ARCserve® Family of Products r16



ARCserve Backup and CA ARCserve D2D, virtual standby recovery for CA ARCserve D2D backups and host-based VMware backups for CA ARCserve D2D:

- CA ARCserve Central Protection Manager reduces the workload on IT personnel in environments with multiple servers and workstations being protected by CA ARCserve D2D by providing simplified, policy-based, centralized management, SRM reporting and centralized recovery to reduce operational costs, improve the consistency of protection and free up IT time for strategic projects.
- CA ARCserve Central Reporting minimizes risk by quickly understanding what is occurring across your backup environment, regardless of the size of your environment. Reports inform you and your management that the data is protected by CA ARCserve D2D or CA ARCserve Backup and ready for recovery if an unplanned outage occurs.
- CA ARCserve Central Host-Based VM Backup works with CA ARCserve D2D to simplify protecting your virtualized servers while helping to ensure the availability of business-critical data and applications by delivering fast recovery from any type of failure. Simple to deploy and manage, CA ARCserve Central Host-Based VM Backup protects all VMs in a VMware host environment and helps you to reduce operational costs and complexity.
- CA ARCserve Central Virtual Standby delivers quick recovery for your servers, applications and data by making CA ARCserve D2D backups available as pre-configured virtual servers. Physical or virtual critical systems can be brought back online quickly, utilizing the power and flexibility of virtualization, increasing the availability of IT services and maintaining productivity. Migration from physical servers to on-premise or off-premise virtualized servers can be performed with minimal impact to your business operations.

The CA ARCserve Family of Products is a value leader in the market, delivering enterprise-class system, application and data protection, recovery and availability for a wide range of operating environments and applications. Certified across an extensive range of industry platforms and applications, it provides compatibility and support for heterogeneous environments.

## **Benefits**

You can leverage the CA ARCserve Family of Products to help ensure the protection, recovery and availability of your systems, applications and data on which your business or organization depends. Benefits include:

- Faster backup and restore while reducing storage requirements and costs.
- Virtualization of servers, with the confidence that your data is protected on both physical and virtual servers with quick recovery capabilities.
- Continuous data protection to help keep data and information accurate, supporting regulatory compliance initiatives.
- High availability to help mitigate the risk of system and application downtime.
- Support for Windows, Linux and UNIX on physical and virtual servers to help reduce complexity and simplify training.
- · Centralized and automated management and reporting to help maximize IT staff productivity.
- The ability to take advantage of cloud technologies to help reduce costs while increasing protection.

## **Next Steps**

Learn more about the CA ARCserve Family of Products by visiting <u>arcserve.com/products</u>. Please contact your local reseller or visit <u>arcserve.com/partners</u> to locate an authorized partner in your area. your local reseller or visit <u>arcserve.com</u> for more information.

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