arcserve®

> Arcserve® Unified Data Protection virtualization solution Brief

Server and desktop virtualization have become very pervasive in most organizations, and not just in the enterprise. Everybody agrees that server virtualization offers many advantages, saves money, offers more flexibility, etc. Although server virtualization helps reduce IT infrastructure costs, it also adds complexity to protecting the wide range of applications installed on the virtual machines and the ever-increasing volumes of data created on shared storage devices…But it can also help in disaster recovery scenarios and can offer some level of high availability.

This apparent contradiction is an opportunity that can be seized to enhance service levels, in particular to better control those metrics focused on system and data recoverability. To do so, users need to truly understand the operational ramifications of virtualization deployments. One critical step is to adopt the right approach and technologies when it comes to data protection.

The solution is not to add more complexity by adding yet another point solution or vendor, but rather to take a holistic and unified view of data protection across the infrastructure, virtual and physical.

Introducing Arcserve® Unified Data Protection

Arcserve UDP delivers comprehensive Assured Recovery™ for virtual and physical environments with a next generation unified architecture and unmatched ease of use. This feature-rich solution enables organizations to scale their IT environments easily, while delivering against their recovery point and recovery time objectives (RPO and RTO), on-premise, off-premise or in the cloud. Traditional, overly complex backup policies are replaced by modern task-based data protection plans and deep integration with hypervisors to fully automate complex, mundane repetitive tasks.

Arcserve UDP is the first solution to combine industry-proven backup, replication, high availability and true global deduplication technologies within one solution and unlike competitive products, does not require expensive professional services.

Assured recovery™

Arcserve® UDP differentiators at a glance

Unified Solution with Broad Features	Image backup, high availability, tape, cloud; virtual, physical, global deduplication One UI, all core data protection technologies unified under one solution
Ease of Use	Out of the box Enterprise Class Protedtion that leverages wizards (improves end to end customer experience) Protection Plans Purchasing, deploying, licensing, configuring
Assured Recovery Recovery Point and Time Assurance	Recovery Time and Recovery Point Assurance Assured Recovery with full system high availability Automated Virtual Standby Reporting and logs
Service Provider Friendly	MSP Capabilities Document API and Log Schema MSP Partner Program

Fast, simple, agentless backup for VMware and Hyper-V host environments

Arcserve UDP offers a wide array of functionalities to enhance data protection easily and efficiently:

- Single-pass backup of all VMs without the need to install software agents on each VM
- Auto-discovery of VMs on target hypervisor
- Integrated with VMware vStorage API's
- Only backs up changed blocks
- Application consistent (Exchange, SQL etc.) and transaction-log purge
- Easy recovery of individual files and folders from within each VM
- Centralized node, group and plan management from Arcserve UDP Console
- VM auto-disccovery
- Microsoft Hyper-V Clustered Resources Volume support
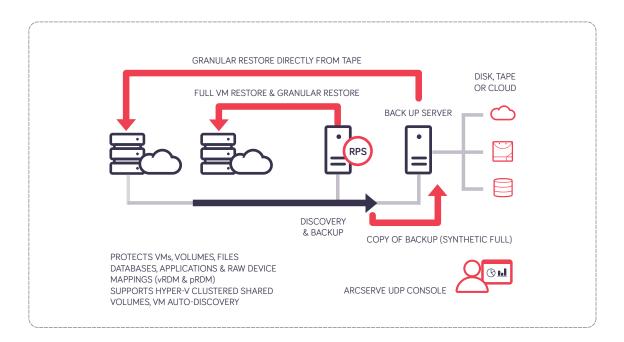- VMware Backup Transport Mode Switching

Focus on host-based backup for VMware and Hyper-V

The Host-Based/Agentless Backup Proxy technology enables single-pass backup of all Windows and Non-Windows VMs, without the need to install software agents on each VM.

For Microsoft Hyper-V environments, Arcserve UDP introduces a new changed block tracking mechanism that tracks changes to the virtual disk file of a Virtual Machine. With changed block tracking, only the changed or used blocks of the virtual disk are actually read, which improves performance significantly, as well as reducing overall storage requirements. In addition, Arcserve UDP leverages VSS snapshot technology to help ensure file system and application consistent backups. The resulting backup session format is identical to Arcserve UDP client backups and host-based backup of VMware VMs.

Agentless Backup for VMware & Hyper-V

High Availability Features

Arcserve UDP not only leverages local and virtual remote standby capabilities that can provide a shorter RPO and RTO than traditional backup technologies, but also provides a sophisticated high availability solution for both virtual and physical systems.

Migration capabilities

Migrations often offer operational challenges and complexity in execution. With Arcserve UDP and its high availability and hypervisor support capabilities, many permutations are available whether you are conducting migrations in house or as a service provider. Among the supported topologies and migration use case are:

- Physical System to Physical System (P2P)
- Physical to Virtual (P2V)
- Virtual to Physical (V2)
- Virtual to Virtual (V2V) including cross-hypervisor migrations. This capability allows users to easily migrate a system from one supported hypervisor to another.
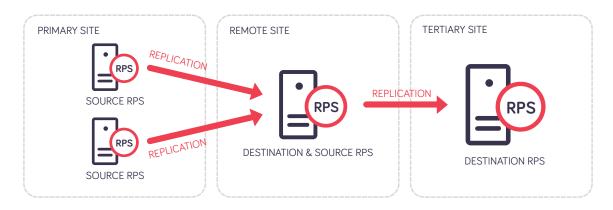
Full System High Availability

- Integrated with Arcserve UDP Console
- Protects Windows and Linux Full Systems (OS, Apps, Data)
- Continuous full system replication enables near-instant recovery of an entire system including business applications, files & data
- Automated DR testing and/or push button fail-over, fail-back
- WAN optimized replication & offline sync, for remote sites
- Extensive migration capabilities (see above)
- Supports DAS, SAN, NAS & cloud storage

Additional Features

- Protection of non-Windows VMs
- Backup of powered off VMs / Single Pass backup with UAC enabled
- vDS VLAN
- Protection of VM with Snapshot

Full System High Availability/Failover

Focus Feature: Assured Recovery

Arcserve UDP uniquely provides capabilities to test and measure your RPO and RTOs through a set of automated and non-disruptive features. Instead of objectives, you can now actively manage your infrastructure with actual numbers: assured recovery metrics.
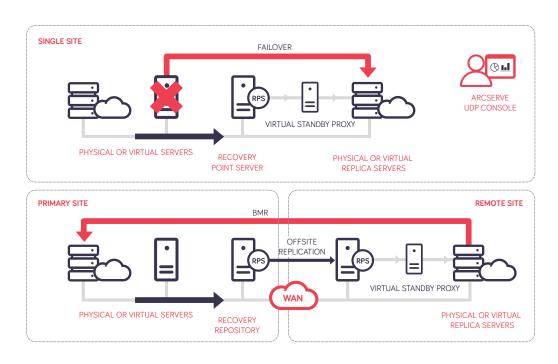
- Enables automated disaster recovery testing of business-critical systems, applications and data, on a separate, replica server
- Non-disruptive process avoids business downtime and impact to production systems
- Recovery testing can be fully automated, or performed on a scheduled basis, as needed
- Assured Recovery reporting provides evidence of system recoverability for compliance auditor

Local and remote virtual standby

With Arcserve UDP you can enhance your RPO and RTO locally or over distance:

- Periodic, image-based system, application & data protection for Windows Servers & VMs
- Replication to remote location (remote office, DR site, MSP & Cloud)
- Recovery point conversion into VHD or VMDK formats at the remote site to a virtual server
- Register with Hypervisor
- Server Heartbeat Monitoring
- Manual failover to remote resources

Local & Remote Virtual Standby with RPS

SINGLE SITE

FAILOVER

RPS

VIRTUAL STANDBY PROXY

ARCSERVE
UDP CONSOLE

PHYSICAL OR VIRTUAL SERVERS

RECOVERY
POINT SERVER

PHYSICAL OR VIRTUAL
REPLICA SERVERS

PRIMARY SITE

REMOTE SITE

BMR

RPS

OFFSITE
REPLICATION

RPS

VIRTUAL STANDBY PROXY

PHYSICAL OR VIRTUAL SERVERS

RECOVERY
REPOSITORY

WAN

PHYSICAL OR VIRTUAL
REPLICA SERVERS

Assured recovery™

arcserve

UNIFIED DATA PROTECTION

NEW ARCSERVE UDP. YOU NEEDN'T THINK ABOUT THE WAY IT LEVERAGES NEXT GENERATION ARCHITECTURE TO UNIFY DATA PROTECTION ACROSS PHYSICAL & VIRTUAL ENVIRONMENTS. YOU NEEDN'T CONSIDER HOW ITS ENTERPRISE-CLASS CAPABILITIES NOW ENABLE YOU TO ESTABLISH, TEST AND IMPROVE YOUR RECOVERY POINT AND RECOVERY TIME OBJECTIVES. AND YOU CERTAINLY NEEDN'T PONDER OVER ITS REVOLUTIONARY EASE OF USE. YOU JUST NEED TO KNOW THAT IT SIMPLY ALL WORKS IN CONJUNCTION TO DELIVER THE PEACE OF MIND OF ASSURED RECOVERY™.

For more information on Arcserve UDP, **please visit Arcserve.com**