

# Double-Take<sup>®</sup> virtual system protection

## Advanced Disaster Recovery and Availability Solutions

**Virtual server technologies provide businesses and IT departments with the ability to do more with less, enabling the consolidation of data and applications on to a single server. The result is reduced costs, simplified IT management, and minimized space requirements. The need to protect these virtualized systems is paramount as they are running multiple business-critical applications, requiring a higher level of protection.**

Consider the impact of a failure of a virtualized system. Instead of incurring downtime of just one application, you will incur downtime of multiple applications. Virtual machine technologies require advanced disaster recovery and availability solutions that provide protection against data loss and downtime for the entire environment.

Double-Take<sup>®</sup> from Double-Take Software™ delivers enterprise-class disaster recovery and high availability solutions for these cutting-edge virtual environments. Double-Take<sup>®</sup> is the industry-leading replication and availability solution that offers local and long-distance protection against most any outage, from a failed power supply to a regional disaster. Double-Take<sup>®</sup> for Virtual Systems is the industry's first disaster recovery and availability solution designed for virtualized server environments.

Your tape backup solution can provide for the long-term archival needs of the virtual servers; however tape cannot provide the level of recoverability required for critical business applications. Rebuilding one application from tape can be a difficult and lengthy process. Having to recover four or more applications at the same time from tape to rebuild the one physical server will result in an excessive period of downtime, likely more than the business can afford. Double-Take<sup>®</sup> replication solutions are the perfect compliment to existing tape backup solutions, delivering a much quicker recovery time with minimal to no loss of data. Double-Take<sup>®</sup> can also maintain availability

of the virtual servers by providing failover monitoring and client redirection to a standby server to minimize lost productivity. Double-Take<sup>®</sup> for Virtual Systems provides the same worldclass protection for your virtual servers that you have come to rely on for your physical servers. With the flexibility and robust feature set of Double-Take<sup>®</sup>, you can implement the solutions that ensure these virtualized environments are protected from data loss and downtime.

### ■ Solutions That Fit

The implementation of virtual servers enables businesses to better meet the ever-growing demands on budgets and resources. You need a data protection solution that is able to seamlessly integrate with your particular configurations without fail. The flexibility of Double-Take<sup>®</sup> allows for a virtualized source, target, or both, allowing for the protection of virtual servers as well as using a virtualized server as the replica target for a cost effective DR solution.

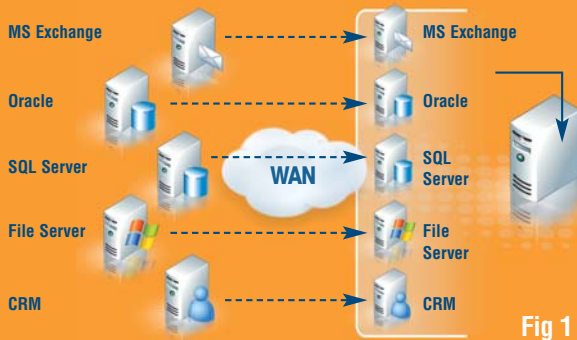
### ■ Disaster Recovery for Virtualized Machines

Protecting the data on a virtual machine is absolutely crucial. Double-Take<sup>®</sup> for Virtual Systems deploys easily within each virtual session to protect each individual application independently. Options include replicating all virtual sessions to a single physical server or to a virtualized server.

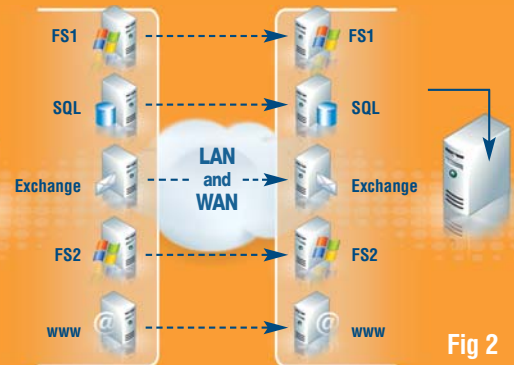
The patented Double-Take<sup>®</sup> architecture allows you to design and implement the solution that's right for your business.

## Virtual system protection

### DISASTER RECOVERY: Physical Server to Virtual Server



### HIGH AVAILABILITY & DISASTER RECOVERY for virtual systems



## FLEXIBLE CONFIGURATION OPTIONS IN A VIRTUAL ENVIRONMENT WITHOUT THE NEED OF A SAN

### 1) Disaster recovery for physical servers in a multi-site organization: (Fig 1)

*Replication and Failover, via the WAN, from physical servers to one virtual host on a Disaster Recovery site.*

### 2) Disaster Recovery and Clustering for virtual systems: (Fig 2)

*Replication and Failover from virtual to virtual systems via WAN and/or LAN.*

### 3) Replication and Failover from virtual to physical servers.

#### Protection virtual systems in a virtual environment

- Replication and failover from physical to virtual servers.
- Replication and failover from virtual to virtual servers.

#### High availability and Disaster Recovery for virtual servers

Support of the market leading technologies as VMware ESX, GSX and Microsoft Virtual Server.

#### Many-to-one failover

Allow multiple production servers to use the same target server.

■ **Double-Take® protects:** Exchange, SQL, Oracle, SAN, VMware, file servers...

#### Continuous, asynchronous, byte-level replication

Double-Take® monitors changes to all protected files and replicates only the actual bytes that change.

#### Unlimited distance replication

Replicate to a disaster recovery site as far away from your production server as you would like, over standard IP networks, for maximum protection against data loss from regional crises and other disasters.

#### Hardware independent and Application independent

The flexibility to choose best-of-breed hardware and software as your enterprise grows. Patented STAR (*Sequential Transfer Asynchronous Replication*) technology enables complete data replication integrity for virtually any application.

#### Integrate with existing backup solutions

Use replicated data to perform remote backups and snapshots at any time without impacting your production server.

#### Flexible Bandwidth Scheduling

Impose higher or lower network usage limits during those times when most appropriate for your business. Limit network use of Double-Take®

during busy work hours and increase or remove these limits during non-peak times for very efficient replication with the least amount of impact on production resources.

#### Enterprise scalability

Enable system administrators to quickly organize, monitor and manage thousands of Double-Take® servers across the enterprise—even across the globe— at a single glance. The management console looks much like Windows Explorer, and provides the ability to group servers in a logical hierarchy. A view of the entire enterprise can be structured according to business needs such as geography, branch, application or other subdivisions.

#### Unlimited disk queuing

Never lose a data change - queue replicated data to disk during heavy network usage times, then transmit to the target server when network usage allows.

#### Exclusive resource planning tool

Simulate your replication solution and estimate the bandwidth you'll need to go live.

#### Queued task processing

Insert commands in the replication queue to automatically trigger remote backups, snapshots, or other tasks at specific times or in response to specific applications events.

#### Uses standard network protocols

Replicate over any existing IP network – LAN, WAN, VPN or NAT – so you can deploy without additional infrastructure costs.

#### Intelligent Data Compression

Improve performance and reduce network usage by compressing only the data that will benefit.

#### Certified Windows compatibility

For all editions of Windows® Server 2003 and Windows 2000.

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