

Not every organization needs the hassle and expense of having their own DR data center.

Double-Take Cloud for Windows lets you backup and recover to and from the cloud with four layers of security so your information stays safe. The best part is you only use and pay for what you need.

- Fully eliminates the cost and maintenance of a second data center for DR
- No more backup downtime windows, tapes, or tape vaulting
- 100% hardware agnostic
- Any combination of virtual and/or physical servers

Simplified Protection

- Replicates and recovers between any configuration of physical and virtual systems
- Recovers whole systems, entire databases or single documents
- Provides continuous byte-level server backup and snapshots
- Monitors and recovers system state and data from one simple management console
- Configures quickly and easily
- Eliminates backup windows, system slowdowns, tapes, and tape vaulting
- Features WAN-friendly operation
- Decreases cost of ownership since you can “rent” servers
- Achieves vastly improved and reliable RTO and RPO objectives
- Enables affordable and flexible disaster recovery testing
- Is 100% hardware agnostic
- Delivers the industry-leading system state replication engine for the Windows
- Provides four layers of security
- Controls network use with Flexible Bandwidth Limiting and Intelligent Compression
- Allows you to pay only for resources when you use them
- Available for an affordable monthly fee with no long-term commitment
- Provides continuous server backup and on-demand restoration
- Supports VSS snapshots
- Validates setup to ensure recovery goes as planned
- Works with Hyper-V and VMware guests

Four Layers of Security

Double-Take Cloud ensures data security with industry-leading tools and best-practices, providing four layers of protection:

Secure Transmission - OpenVPN SSL

With the OpenVPN SSL VPN in place, data is protected by openSSL 256-bit encryption and private certificates in transit across the internet. Security certificates are unique to you and are generated uniquely through the Double-Take Backup repository instance.

Private Double-Take Cloud Amazon Web Services (AWS) EC2 Instance

Within the AWS Elastic Compute Cloud (EC2), each customer has one or more private Double-Take Cloud backup repository instances. Backup data is transmitted directly to your own backup repository server instance which can only be accessed by you and only you have access to recover your data. Your repository instance, including its data and resources, is never shared with any other customer.

Private AWS Security Groups

AWS provides security groups to provide isolation for access and data transmission to individual customer EC2 instances. Double-Take Cloud provides each customer with a private, dedicated AWS security group so that all instances and data are secured and isolated from other customers and AWS users. The AWS security groups govern the flow of data traffic into the cloud and ensure that only authorized traffic is delivered to your personal instance. If you provision additional backup repository server instances or when you recover servers within the cloud, they are all protected in your private AWS security group.

Private Elastic Block Storage (EBS) Volumes

As with your private EC2 backup repository instance and AWS security group, your backup data is secured on private EBS storage volumes accessible only by you through your repository instance. Your data volumes are specific to your repository and cannot be accessed by other customer instances through the logical volumes or the raw storage. Your data is completely isolated to your repository where only you have access. You have full control of your storage and provisioning for your specific needs. Amazon EBS storage is redundantly stored in multiple physical locations for ultimate protection against disaster.

Use Scenarios

Scenario 1: Backup Operations

Instead of attempting to provision an entire alternate datacenter ahead of time, or hoping to provision one quickly at the time of an emergency, Double-Take Cloud can be used to provide the best of both worlds. Double-Take Cloud installs on your critical production servers and replicates data and system state information into a cloud-based repository. Since only the repository is running on a day-to-day basis, the amount of infrastructure needed is minimal and more easily justifiable. Replication is performed at the byte-level and occurs as quickly as allowed by either your maximum bandwidth or the limits you set within the Double-Take Cloud software. This provides WAN-efficient replication of all critical information from multiple production servers, providing near-real-time replication if sufficient bandwidth is available. Even if throttling must be used due to bandwidth constraints, Double-Take Cloud still allows you to recover up to the last byte of information that was successfully transmitted to the repository.

When recovery of one or more critical servers is required, the repository can be used to push all system-state information, Windows and application binaries and all data to a cloud-based recovery server. This server is provisioned only when needed and so does not need to be maintained, patched or otherwise monitored. It is brought online via your utilities at the time of restoration and then converted into a replica of your production server at the time of recovery by the Double-Take Cloud recovery wizard. As the production server is not required for this recovery to occur, you can restore your normal operational environment – in the cloud – even in the case of a total loss of production infrastructure.

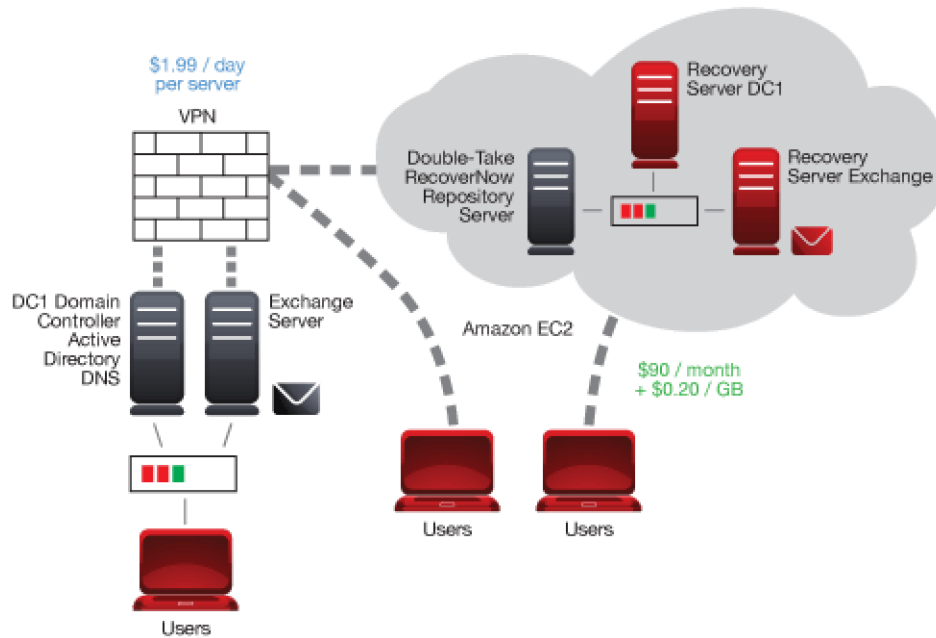
Scenario 2: Cloud Migration

The cloud is a viable platform for testing, development, QA and other back-office operations. Many organizations even use the cloud as a primary business infrastructure, creating agile systems that can move within regions and even scale on demand. The issue has always been how to safely migrate current back- or front-office servers from the machines they reside on in production to the virtual systems they will occupy with a CSP. While some downtime could be absorbed by the back-office teams, it must still be minimized, and extensive downtime for front-office applications is generally considered unacceptable. There is also the question of application and system compatibility, as the production servers are typically located on physical or virtual hardware that may not match with that of the CSP.

Double-Take Cloud provides a simplified method for migration to a cloud infrastructure with minimal downtime. Current servers are installed with the Double-Take RecoverNow software, and begin to replicate system state, applications and data into a CSP-based repository. Once the initial mirror has been completed, new information will continue to be replicated right up until the moment you are ready to stop the developers from working locally and have them begin work remotely. During the initial mirror and ongoing replication, the production servers are available and accessible. Prior to the actual cutover, new servers are provisioned within the CSP and brought online with temporary server identities.

At the point of cutover, the production systems in the local environment are shut down, and Double-Take Cloud creates copies of those servers based on the replication information set on the repository. What would normally take days of coordination and downtime can be accomplished in a matter of a few hours from start to finish, with the hardware differences properly mitigated by the Double-Take Cloud solution set. Once each migration is final, users can immediately begin using the new systems remotely, with the same data, server identities and information that they had while the same systems were local.

How it Works



Double-Take Cloud is a combination of technologies from Vision Solutions and Cloud Service Providers (CSP) such as Amazon Web Services. This combination allows you to replicate data and system state information from one or more Windows servers in your production environment into a virtual server – called a repository - running at the CSP. From this repository, you can restore entire servers to virtual machines – also housed at the CSP – to resume normal operations quickly and effectively. Double-Take Cloud is more than an IaaS target DR hardware site, it is a full RaaS solution that includes both the target infrastructure, and the technologies to replicate and recover your data effectively in the Cloud with proven Double-Take software technologies.

System Requirements

Source (Protected) Server

- Physical / Virtual Server - Physical or Virtual
- Architecture - x86 (32 bit) or x64 (64 bit)
- Operating System - Windows Server 2003 SP1/SP2 or R2; Windows Server 2008
- System Memory:
 - 32 bit systems - 128MB minimum; 512MB recommended
 - 64 bit systems - 512 MB minimum; 1 GB recommended
- Disk space for programs - 130 MB
- .Net 3.5 SP1
- Hardware agnostic