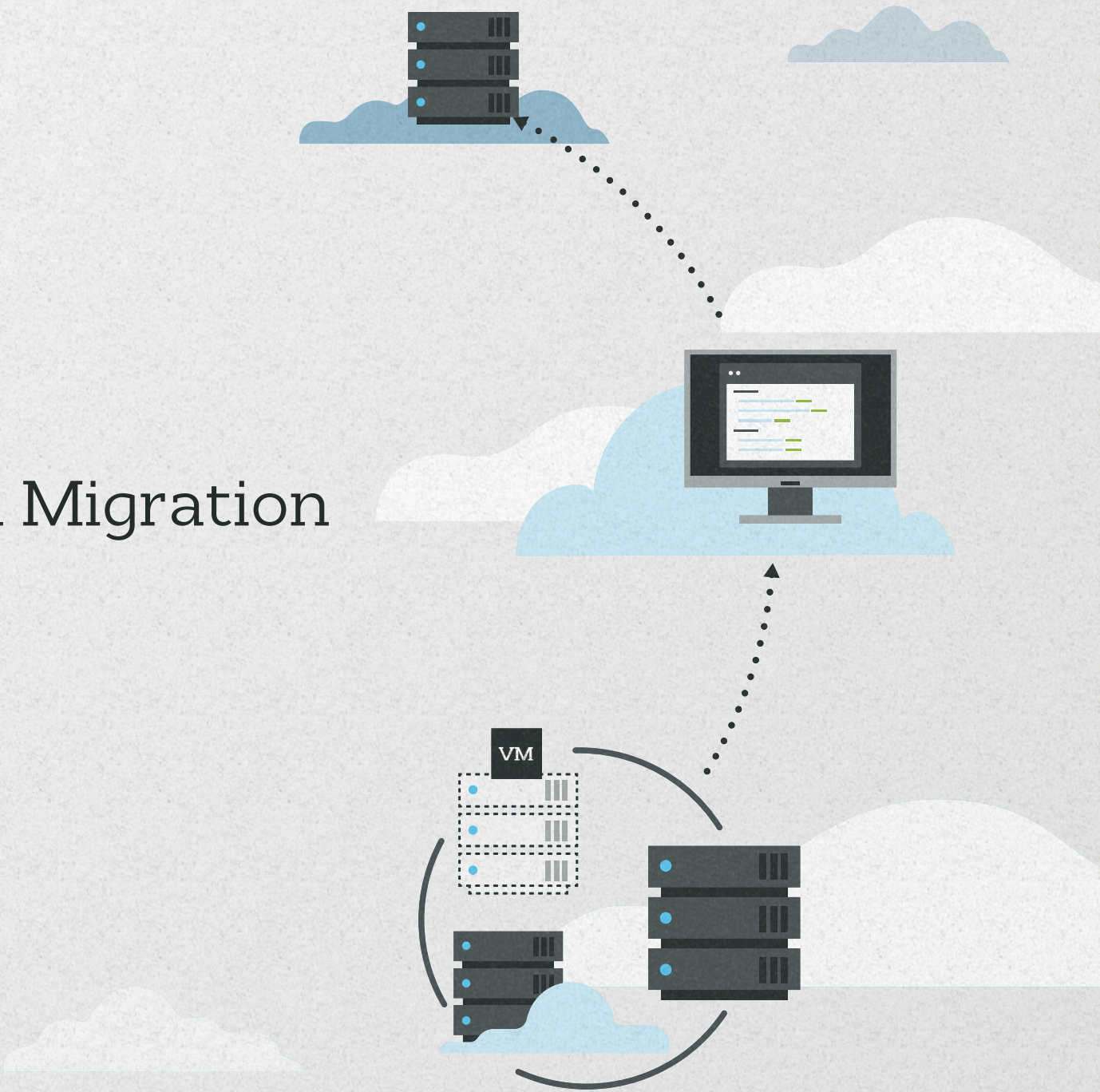


# Carbonite Cloud Migration

Technical guide

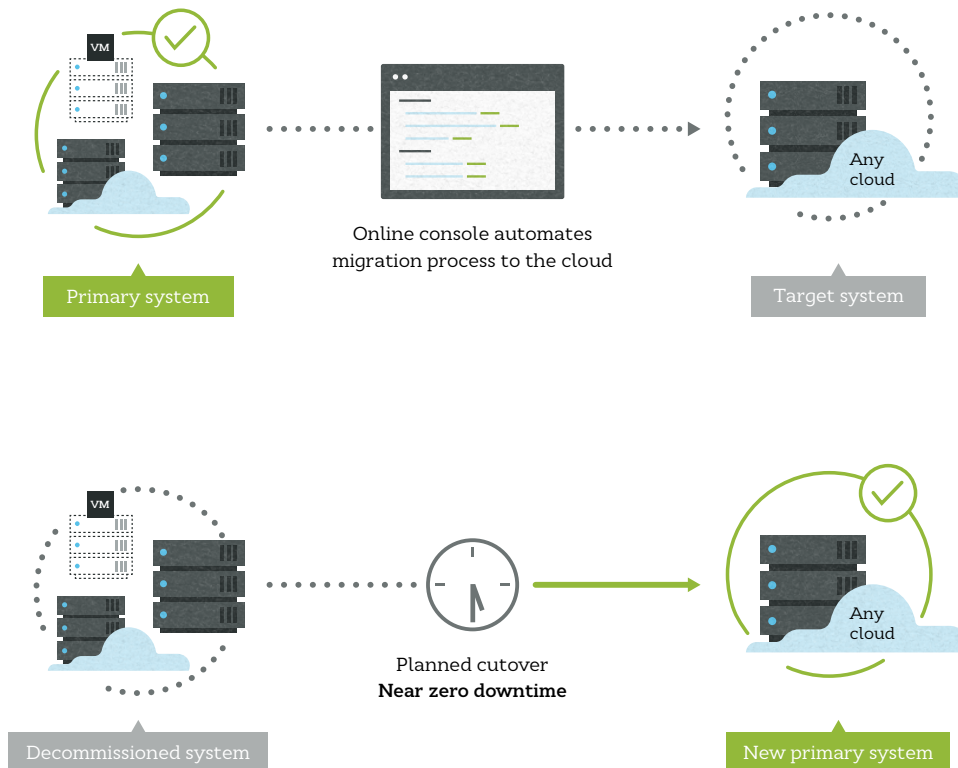




# Carbonite Cloud Migration

Carbonite Cloud Migration *Powered by DoubleTake* is an online service that enables migrations from any physical, virtual or cloud-based environment into VMware vSphere, vCloud Director, OpenStack, Amazon Web Services EC2 or Microsoft Azure infrastructure as a service (IaaS) cloud environments. The web-based console provides automated, centralized migration to the cloud.

This document provides a detailed technical briefing on the functionality and use of Carbonite Cloud Migration and assumes that the reader will have at least a basic understanding of infrastructure as a service (IaaS).



# Glossary

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## **Environment**

The hardware, software, network resources and services that comprise a business' IT infrastructure. This includes information to connect to that infrastructure, for example the access key, subscription information or username/password.

## **Infrastructure as a service (IaaS)**

A service that allows businesses to leverage computing resources over the internet by off-loading workloads onto virtualized servers in the cloud.

## **Server**

A computing workload including an operating system, applications, data and storage.

## **Proxy server**

A server with Carbonite software installed on it that is used to communicate to an environment with servers that do not have public IP addresses. The proxy server is used for server discovery and migration job creations.

## **Migration**

The process of transitioning a server to new hardware or a secondary environment.

## **Cutover**

The final step of migration in which the original server is discontinued and begins operating in the new environment.



# Requirements

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Carbonite Cloud Migration automates and simplifies workload migrations to the cloud. The Carbonite Cloud Migration console manages migration of physical, virtual or cloud servers to any cloud target. That means greater flexibility and freedom from cloud vendor lock-in.

Note: there must be at least one TCP/ IP network interface configured with a routable IP address that can send and receive data to and from the secondary infrastructure.

## Source supported operating systems:

- Microsoft Windows Server 2008
- Microsoft Windows Server 2012
- Red Hat Enterprise Linux
- Oracle Enterprise Linux
- CentOS
- SUSE Enterprise Linux
- Ubuntu

## Target infrastructure\*:

- Amazon Web Services
- Microsoft Azure Classic
- Microsoft Azure Resource Manager
- OpenStack
- VMware vSphere
- VMware vCloud Director

\* Users will need to have created an account with the target cloud vendor prior to migration so that account information is available for Carbonite Cloud Migration initial configuration.



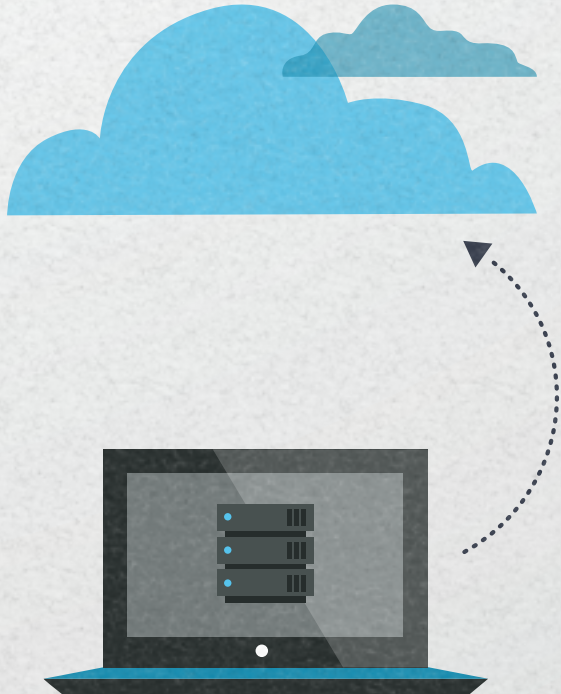
# How the solution works

Carbonite Cloud Migration provides a streamlined migration process for moving workloads to the cloud:

1. Initially, the details regarding the source and target environments are added to the online Carbonite Cloud Migration portal. The solution then automates the discovery of servers that may be migrated.
2. Once a server is selected for migration, the tool will identify an appropriate instance size in the target cloud, and the instance can be customized before migration. An automated process then installs the necessary software, provisions the target environment and initiates real-time byte-level replication to create a replica of the source server at the target.
3. Carbonite replication maximizes bandwidth efficiency, sending the smallest possible chunks of data, incorporating multiple levels of compression and enabling bandwidth throttling.
4. The target server can be validated and cutovers can be tested anytime without disrupting business operations. The cutover itself takes minutes or seconds. Then your workload will be running in the target cloud, with limited disruption or data loss.

Behind the scenes: Carbonite Cloud Migration automates several steps to prepare for cutover:

- Creates a target service that will hold the server that is migrated
- Creates a target instance, a VM within the cloud service
- Provisions the target instance, including remapping the D: drive in the target instance if the source machine has a D: drive in use
- Creates install points by setting up firewall rules to allow for remotely installing Carbonite Move *Powered by DoubleTake* on the source and target servers
- Copies, installs and activates Carbonite to the source server
- Activates Carbonite on the target server
- Creates the migration job within Carbonite Move
- Synchronizes source and target by sending data from the source server to the target server



# Migrate, protect and recover—anywhere

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Carbonite delivers workload migrations, high availability, disaster recovery and data sharing across multiple operating systems, on any hardware and on any physical, virtual or cloud-based environment.

Near-zero downtime migration of data, applications and systems significantly reduces cost, risk and resource requirements.

We utilize real-time replication to prevent data loss and enable fast recovery to secondary servers in the event of a planned or unplanned failure at the primary site. Our software also enables different database platforms to seamlessly share and consolidate data in real time for proactive, business-critical decision-making.

Contact us to learn more

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