

Session Supplement

x360Recover: Recovery Best Practices You Need to Know

Some recovery options with x360Recover are more technically challenging than others.

Recovery Best Practices to help guide you through the following options with x360Recover:

- **Bare Metal Restore (BMR) from a Vault with Local Cache**
- **Recovery Center Hyper-V Virtualization from an Appliance**
- **Recovery Center Hyper-V Virtualization from Local Cache**
- **Failover to Virtual Office and Runbooks**



Bare Metal Restore (BMR)

Bare Metal Restore from a Vault with Local Cache

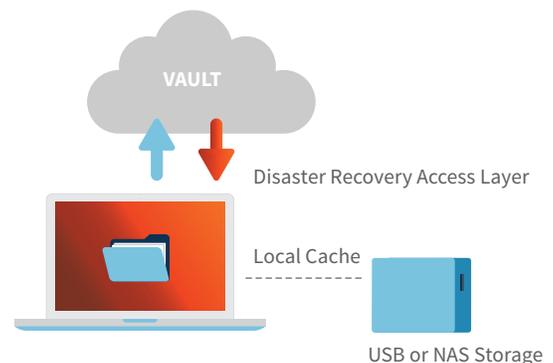
You can perform a BMR from an x360Recover Direct-to-Cloud (D2C) Local Cache. BMR is most often used with hardware devices, but the process can also be applied to virtual machines.

If your protected system is a D2C endpoint, and you have deployed a Local Cache for the protected system, the BMR wizard can recover directly from that Local Cache.

How does it work?

- Authentication and recovery point selection is performed against the cloud vault.
- The small amount of metadata needed to construct the protected system virtual disk image is also delivered from the cloud vault.
- The bulk of the data will be retrieved from the local cache repository during the recovery.
- Any data missing from the local cache will be fetched seamlessly from the vault.

Visit the [Knowledgebase \(KB\)](#) to access step-by-step instructions for a [Bare Metal Restore from Local Cache](#).



Recovery Center Hyper-V Virtualization from an Appliance or Local Cache

Hyper-V Virtualization from an Appliance

Axcient has supported virtualizing an x360Recover appliance or vault on VMware for a long time. Partners have asked if virtualization can also be supported under Hyper-V.

The original sticking point was that Hyper-V did not support nested virtualization within a guest VM. This made it impossible to (a) perform nightly boot check verification or (b) instantly recover protected systems by virtualizing them on the appliance.

Now that more modern versions of Hyper-V support nested virtualization, it is possible to support x360Recover running as a guest VM on Hyper-V.

Minimum requirements to run as a guest on Hyper-V

The Hyper-V host must support nested virtualization. This is to allow for boot VM checks and instant virtualization for recovery.

Nested virtualization requires either:

- Windows Server 2016 or newer operating system
- Intel processor with VT-x and EPT technology

or

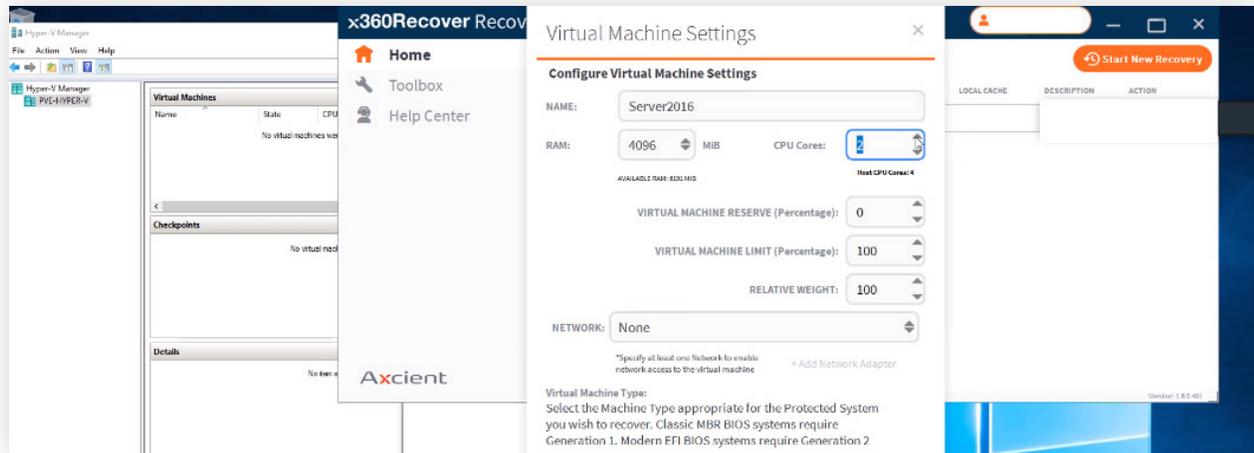
- Windows Server 2022
- AMD EPYC/Ryzen processor or later

Guest VM requirements

- The guest VM should be configured with a minimum of 12GB RAM (or more)
- The guest VM should have at least 2 CPU cores assigned
- The guest VM should be configured as Generation-2 (EFI-BIOS)
- We recommend that Secure Boot be disabled for the Guest VM



Virtualization with an Appliance



Visit the [KB](#) to access step-by-step instructions for [Hyper-V Virtualization from an Appliance](#).

Hyper-V Virtualization from Local Cache

Beginning with x360Recover 10.18.0 and newer, you can access protected systems on local appliances with the Recovery Center.

Using [Recovery Center](#) to work with protected systems on local appliances allows:

- Instant virtualization on Hyper-V for appliance and Local Cache protected systems
- Additional options for file and folder recovery
- Virtual disk exports from appliance-protected systems

[Recovery Center](#) has been optimized primarily for use with a local cache repository to accelerate data access. You can start a new recovery in the Recovery Center and choose Hyper-V (Virtualize) as the operation you want to perform to quickly boot the selected recovery point as a virtual machine for testing or live recovery.

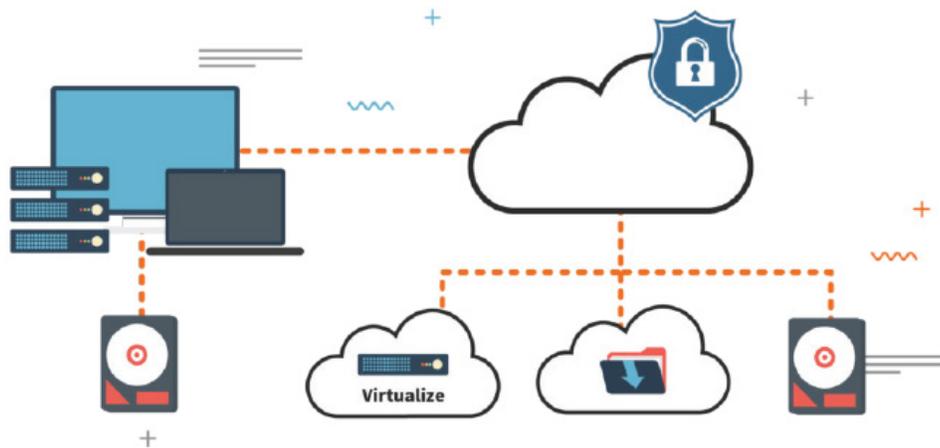
Local Cache is an optional, fully independent x360Recover D2C feature for MSPs who want to eliminate or deprioritize on-prem storage and directly back up servers and workstations to the cloud instead.

Local Cache maintains a local datastore of backup block data used to accelerate the recovery of cloud backups. As a recovery acceleration layer, Local Cache works in tandem with hardware-free D2C. By pairing D2C with an inexpensive local USB or NAS device, MSPs see substantially decreased recovery and failback times; this in turn significantly reduces downtime after a data loss issue or even a disaster.

Visit the [Recovery Center KB](#) to access step-by-step instructions for Hyper-V Virtualization from Local Cache.



Virtualization from Local Cache



Failover to Virtual Office and Runbooks

The cloud failover capability of x360Recover allows you to start virtual machines in the Axcient Cloud of one or more protected devices to temporarily replace all impacted production infrastructure. You can then create a Virtual Office running within the Axcient data center with the ability to match existing server configurations. With Runbooks, you can automate and templatize the boot process to get the environment up and running within a one-hour SLA.

Virtual Office lets you self-manage using a secure, web-based application, which includes role-based authentication with required MFA.

What can you do with Virtual Office?

- Configure network settings for that Virtual Office
- Provide secure access to that Virtual Office by configuring VPN
- Configure Site to Site Open VPN, so multiple remote networks connect to that Virtual Office
- Allow VMs to access the internet by enabling outbound connections (disabled by default)
- Establish Port Forwarding rules
- Start the Virtual Office VMs of each server from separate restore points
- Instantly recover production servers and workstations in the Axcient Cloud
- Perform regular full-office recovery tests to ensure backups are always recoverable

Via the Recovery Wizard, you can choose to “Make it Virtual!” to run a VM on a local appliance, virtualize an entire office in the cloud, or export a virtual disk.

Visit the [Axcient KB](#) to get step-by-step instructions for accessing the Remote Management Console and [starting a Virtual Office](#).

Learn more: [watch a Virtual Office and Runbooks overview video](#)

More Recovery Options

Axcient x360Recover, whether deployed via an appliance or directly to the cloud, offers a [variety of recovery options](#).

x360Recover Flowchart: Recovery Options



WHAT ARE YOU RECOVERING?

FILES AND FOLDERS

AN ENTIRE PROTECTED SYSTEM

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WHERE CAN YOU ACCESS THE BACKUP IMAGE?

Appliance (BDR)

Private/Axcient Cloud Vault with Local Cache

Private/Axcient Cloud Vault without Local Cache (or appliance unavailable)

HOW DO YOU WANT TO RECOVER?

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