

# Axcient Appliances Minimum Specs and Requirements

Axcient

## Appliance Choice and Flexibility for Axcient Partners

Axcient is unique in providing our partners with the greatest choice and flexibility of any BDR vendor in the channel. Because x360Recover is hardware agnostic, it enables Axcient's BYOD approach, or "Bring Your Own Device," meaning Partners can build or repurpose their own hardware for use as a local BDR appliance or purchase a turn-key hardware and software bundle from Axcient. Partners can purchase hardware from Axcient outright or enroll in the Axcient hardware leasing program.

**x360**  
**Recover**



Axcient focuses on solving MSP-specific pain points with a comprehensive all-in-one solution that goes beyond just BDR. Central to these principles are choice and flexibility. Our backup, business continuity, and disaster recovery solution (BCDR), x360Recover, is both hardware and cloud agnostic. This unique foundation lets MSPs and their SMB clients enjoy Bring Your Own Device (BYOD) and Bring Your Own Cloud (BYOC) for BCDR.

For MSP partners who want to BYOD, or Bring Your Own Device, MSPs and their clients have device options:

1. Build or repurpose existing hardware and use it as a local BDR appliance or Local Cache device.
2. Purchase a turn-key hardware and software bundle directly from Axcient.
3. Lease the hardware from Axcient.

### BYOD Bring Your Own Device

Because x360Recover is hardware agnostic, you can choose to use your own hardware, so long as it meets the minimum hardware requirements. The BYOD option requires that you download and install the software onto your hardware. This means you'll need to pay special attention to hardware requirements. When partners choose Axcient, they can repurpose nearly any device, including a Siris appliance. (And an Altos makes a great **Local Cache** device.)

#### BYOD Hardware Requirements

The x360Recover appliance and vault use the same ISO image for installation. The procedures are the same for installing any of x360Recover's main components. You will assign the device to a particular role during the "Setup & Configuration" stage, which is performed after installing the base operating system.

- x360Recover automatically updates all of the software and agents so you do not have to worry about managing the underlying operating system. Additionally, the

Axcient support team is available to assist you whenever necessary. Review the [Using the Linux Shell](#) article for instructions on accessing our simplified Linux command line environment.

- Prior to your first deployment of x360Recover, please review x360Recover [Best Practices](#). This should answer many of the questions you may have during your installation process, and provide you with an understanding of best practices to use when deploying the product.

## Ubuntu Linux

x360Recover does not require you to purchase proprietary hardware. You can choose your own hardware if it meets the minimum hardware requirements; however, the hardware you choose must be compatible with Ubuntu Linux 18.04 LTS (Bionic Beaver). Current versions of x360Recover ship an updated kernel, so please consult the following links to determine whether or not the hardware you want to use will support Linux:

- <https://ubuntu.com/certified?category=Server>
- <https://ubuntu.com/certified?category=Desktop>
- For individual components, like NICs or HBA controllers, visit [www.ubuntu.com/certification/catalog](http://www.ubuntu.com/certification/catalog)

- You do not need to know Linux in order to run and operate x360Recover software, as all management and operations are performed from within the Web Management interface. However, a basic understanding of Linux, and common Linux shell commands can be useful when troubleshooting and maintaining the product. See our Linux primer [here](#).

## Bare Metal Install

We recommend that you install the x360Recover appliance software **on bare metal** for the best performance and to take advantage of automated backup verification booting.

### Minimum hardware configuration

- **OS:** 8GB RAM, 4 Cores minimum recommended for 1-5 protected systems
- **Compatibility:** Must be compatible with Ubuntu 18.04 LTS (Bionic Beaver) and must be 64-bit OS

#### If you are backing up more than five (5) servers:

- For every additional five protected systems (production servers being backed up), x360Recover requires four (4) more GB's of RAM and two (2) more cores.

Example: To backup 6-10 servers, x360Recover requires a minimum of 12 GB RAM and 6 cores.

#### Add the additional memory needed to support running the protected systems as virtual machines.

Example: Two protected systems that normally run with 4GB of RAM would need the standard 8GB of RAM plus 8GB of RAM for virtualization so a total of 16GB.

- We recommend using ECC RAM for data protection and performance.

#### Machine must have at least three physical hard drives:

- One drive must be dedicated to the operating system. A minimum of 100 GBs is needed for the OS drive, but use of a 256 GB M.2 is recommended. NVMe is supported with x360Recover v8.2.3 and above.

- The remaining two or more drives must be used for storage in a RAID1, RAID5 or RAID6 set.
- x360Recover uses a software RAID. If your BDR has a hardware RAID controller it must be set to a RAID0 or JBOD configuration. Some RAID controllers may not be supported.

#### SMR-based hard drives are not suitable as x360Recover storage devices.

Shingled magnetic recording (SMR) is a hard drive storage technology that improves data density and storage capacity on disk, at the expense of write performance. SMR drives achieve high storage density by overlapping tracks of data slightly on top of neighboring tracks. The underlying storage mechanism writes entire tracks in a high density fashion that is not conducive to the random write patterns associated with the native copy-on-write functionality of ZFS. Severe performance limitations have been observed with x360Recover when employing SMR based hard drives, and these storage devices are not recommended for use with the product.

**Please note:** Nightly Boot VM Checks are enabled by default and require an additional 2 GB of RAM and 2 available CPU cores to perform.

**If you intend to use virtualization for instant recovery:**

1. Processor must support hardware assisted virtualization:
  - Intel VT
  - AMD-V
  - Intel processors significantly outperform AMD
  - **Note:** VMware ESXi 5.5+ supports only Intel processors for Nested Virtualization
2. You must include additional RAM and CPU cores for running virtual machines
3. The minimum total memory required to enable BootVM checks is 10GB

The software/hardware RAID controllers available onboard some motherboards are not supported by Linux and can be used only in IDE/SATA mode.

Unless you are using SAN storage, we recommend using the software RAID provided by the appliance rather than a hardware RAID controller. ZFS Software RAID is more robust than hardware RAID. Alerting for faulted disks, and failed disk replacement are not supported within the x360Recover GUI when using hardware RAID.

**Hybrid Software/Hardware RAID controllers are not supported**

- We highly recommend installing on bare metal
- Microsoft Volume Shadowcopy Service (VSS) requires sufficient free space on the disk to maintain changed data during backup operations. We recommend maintaining at least 10% free space on each drive volume to ensure sufficient free space is available to backup the system.

Access the [preinstall prerequisites and learn more about installing the OS, installing x360Recover, configuring the device, and setting up the storage pool on the Axcient Knowledgebase](#).

## Use an Axcient Device

We offer a variety of choices if you have decided to use an Axcient backup appliance. You can choose to purchase or lease BDR hardware appliances from us (and, of course, x360Recover installs in <10-minutes on Ubuntu certified hardware). The new BDR appliance ordering system in the x360 Portal has a modern UI. It is wizardized, and the new ordering system for buying or leasing a BDR device in the x360 Portal is easy to use even when purchasing several appliances at a time.

### Your appliance options

We offer a range of high performance BDR hardware devices, shipped directly to you or your customer. The following options are available:

#### The x360Recover Eco

The Eco is a compact server and comes in three models:

- Eco-1500 has 1.5 TB usable storage and 16 GB of RAM
- Eco-3000 has 3 TB of usable storage and 16 GB of RAM
- Eco-6000 has 6 TB usable storage and 16 GB of RAM

Any non-SSD Eco models use Enterprise HDD's for storage hard drives. Eco appliances cannot be upgraded and do not have field replaceable parts.

Powerful IPMI functionality. IPMI makes it possible to control and monitor servers centrally and could save MSPs a lot of time and operational overhead.

#### The x360Recover Pico

The x360Recover Pico is Axcient's most compact and affordable BDR solution, built on the ASUS Dual M.2 NUC platform.

The Pico features a dedicated OS disk and a 1.5TB storage disk, optimized for protecting 1-3 systems. This appliance is designed for small businesses requiring virtualization capabilities for a single system and includes a standard 3-year warranty for peace of mind.

- CPU: Hyperthreaded 6 core processor
- OS SSD: Kingston M.2 256GB SSD
- RAM: 16 GB
- Storage Drive: Kingston 2TB NVMe M.2 2280

### The x360Recover Mini

Our Mini BDR appliance, provides Axcient's most popular storage capacities and price points. The Mini is a mini tower which includes a Xeon E-2126G, 32GB RAM, and a 3-year warranty. (The Mini-6000 is available with 64GB RAM.) Extended 4 or 5 year warranties can be added anytime during the initial three year warranty.

Features include:

- Hot-swap drive bays for easy storage drive replacement
- IPMI for remote access

- Field upgrade to 1.5, 3 or 6 TB of usable storage for hybrid variants (depending on the original model purchased)
- Spare parts kits available for hybrid units
- Any non-SSD Mini models use Enterprise HDD's for storage hard drives.

**Learn More about the [Mini2 options on the Axcient Knowledgebase](#)**

### Rack Gen

The second generation Axcient x360Recover Rack Gen BDR appliance is a standard 2U 19" server rack chassis with (8) 3.5" hot swap drive bays. The default configuration is four bays populated with 2, 4, 8, or 12 TB disks. The remaining four slots can be populated with like-sized disks to double the initial storage capacity.

Any non-SSD Rack models use Enterprise HDD's for storage hard drives. The Rack Gen is a turnkey BDR appliance that ships pre-configured with x360Recover backup software and can be requested with end-customer configurations during ordering for direct-drop shipping.

**Learn More about the [Rack Gen2 options on the Axcient Knowledgebase](#)**

**[Access the Rack Gen2 Specs and Datasheet](#)**

### IPMI with Axcient Devices

All Axcient branded BDR hardware models include an [Intelligent Platform Management Interface](#) (IPMI) for the best possible remote management and monitoring functionality. IPMI saves MSPs time and operational costs with powerful management and monitoring capabilities that are independent of the host system's CPU, firmware, BIOS, or operating system. With IPMI, MSPs can perform off-site management on deployed BDR devices independently from core system hardware. For example, you can power off, power on, and reset an unresponsive device at the OS layer. Also included are remote Keyboard-Video-Monitor (KVM) capabilities that let MSPs operate devices remotely with the same level of access they would have physically seated at the keyboard.

**Lock in 22% Savings with Upfront Purchase**

Axcient's bundled appliances offer exceptional value for our partners. We know upfront hardware costs can affect your finances, so we've priced them to deliver a significant 22% savings over leasing with a buyout by purchasing upfront.

**Flexible Options:**

- Upfront Purchase: Maximize savings with a one-time purchase.
- 3-Year Lease: Lease for 3 years with the option to return or buyout to fully own the appliance.

**Learn More About x360Recovery Flexibility**

Learn More About BYOD and BYOC with Axcient in our [BYOD/C datasheet](#). You'll find links to our Knowledge Base, details on requirements, and hardware configurations. What could you do with a single solution that does more?

Download the **Bring Your Own Device or Cloud Datasheet**

Ready to learn more or try Axcient yourself?  
Start a no-cost, no-obligation trial today.

<https://info.axcient.com/l/x360recover-byod>

**ABOUT AXCIENT:**

Axcient is an award-winning leader in business continuity and disaster recovery for Managed Service Providers (MSPs). Axcient x360 provides one platform for MSPs to Protect Everything™, and includes BCDR, Microsoft 365 and Google Workspace backup, and secure sync and share. Trusted by more than 3,000 MSP partners worldwide, Axcient protects business data and continuity in the event of security breaches, human error, and natural disasters.

**CONTACT:**

Axcient, 707 17th Street, Suite 3900, Denver, CO, 80202  
Tel: 720-204-4500 | [axcient.com](https://axcient.com)

FOLLOW US:

