

ExpressNVM® Adapter Getting Started Guide

Thank you for purchasing the ATTO ExpressNVM Adapter. This guide gives you the basics for installing and configuring your adapter. For more information, please visit our website at www.atto.com

Overview

This guide covers hardware and software installation, setup procedures, and troubleshooting tips for ATTO ExpressNVM adapters. Ensure you have the equipment and software you need for the installation:

- ExpressNVM adapter
- A computer with x16 PCle expansion slot (PCle Gen4 recommended for best performance)
- Storage, cables, and connectors to support backplane or direct connect configuration
- ATTO ConfigTool™ configuration and management tool

System Requirements

ExpressNVM adapters use the standard NVMe operating system inbox drivers for basic operations. Your ExpressNVM adapter should be automatically detected and operational upon completion of system boot without the need to install any additional hardware drivers. The following operating systems are supported:

- Microsoft Windows®
- Microsoft Windows Server®
- Linux
- **VMware®**
- FreeBSD



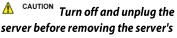
Note **Please visit**

https://www.atto.com/support/interoperability/for details on specific supported operating systems.

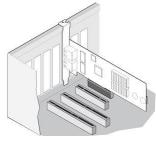
Hardware Installation

Insert a your ExpressNVM PCIe Adapter in the Server

Turn off the server and unplug the power cord; remove the server cover.



server before removing the server's cover. Failure to do so could endanger you and may damage the adapter or server.



- Remove the cover bracket from a PCIe slot. PCIe slots and adapters vary in the number of connectors present, depending on the data lanes being supported.
- Insert the adapter in an available, compatible PCle slot. Push the adapter into the slot until the adapter is firmly seated. The

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05/2023 PRMA-0500-000 S48F/S4FF adapter can be installed in a \times 16 mechanical PCle slot.

A CAUTION Some PCIe adapters may have a short connector. Excessive force could break the connector. Use caution when pressing the board in the slot.

- 4. Repeat steps 2 through 3 for each adapter you want to install.
- 5. Replace the server cover and plug in the power cord.
- 6. Turn the power on.

Installing Management Drivers

ATTO management drivers provide additional functionality beyond the basic operation of the inbox hardware drivers. While optional, ATTO highly recommends installation of the management driver for an optimal customer experience, including advanced configuration, analytics and data collection.

Windows

- Power on your system and log in as the administrator or a user with proper administrative privileges.
- 2. Go to https://www.atto.com/downloads/
- 3. Register or log in if previously registered.
- 4. Click on **ExpressNVM**® in the left dialog.
- 5. Navigate to your HBA model/family in the right dialog and click on it.
- 6. Scroll down and select the desired driver depending on the operating system.
- 7. A download window appears. Choose **Save File**.
- 8. Double-click the downloaded file to extract and launch the driver setup program.
- Follow the on-screen instructions to complete the driver installation.

Linux

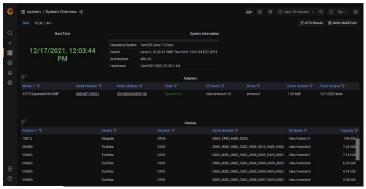
Note These steps assume a basic knowledge of Linux terminal commands. You must also have the correct kernel source files for the appropriate kernel already installed.

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- 4. Click on **ExpressNVM**® in the left dialog.
- 5. Navigate to your HBA model/family in the right dialog and click on it.
- 6. Scroll down to and click the desired driver depending on the operating system.
- 7. A download window appears. Choose **Save File**.
- 8. Copy the .tgz file to a temporary folder.
- 9. Open a terminal window and change to the location of the copied tgz.

- 10. Extract the file using the command tar-xfz<filename.tgz>
- 11. Change to the directory that was created in Step 11 and run the installer script. You may need to run the command with elevated admin privileges (sudo./install.sh).

Installing ATTOView Analytics and System Visualization

ATTOview is an easy-to-deploy software stack, that offers full visibility into the NVMe storage ecosystem, by monitoring key performance metrics and generating graphical models to help understand trends in the storage environment with ExpressNVM installed. The data collectors (data exporters) are installed automatically with the ATTO ExpressNVM management drivers.



Note TCP ports 3000, 9090 and 29075 are required to use this feature, please make sure these ports are open and available.

ATTOview runs in a web browser, with the latest versions of the following browsers being supported:

- Chrome / Chromium
- Firefox
- Safari
- Microsoft Edge



Note

Internet Explorer is NOT supported

Note
ATTOview can be installed in a system that includes
ExpressNVM adapters, or one that is stand-alone. To ensure optimal
performance, we recommend a stand-alone system separate from
your ExpressNVM adapters. However, for centralized management
of mutliple systems, it is highly recommended to pick 1 system on the
network with ATTOview installed and have it monitor all the other
systems(including itself).

Configuring Targets for ATTOView

After installation ATTOview needs to be pointed at targets to collect data from. These are systems that have ExpressNVM adapters installed in them with the optional management driver and driver exporter. To configure ATTOview follow the instructions located in the README.txt . Refer to the Installation and Operations Manual for more information.