The Power Behind the Storage

FastFrame™ 4th Generation SmartNICs 10/25/40/50/100Gb
Getting Started Guide

Thank you for purchasing the ATTO FastFrame 4 SmartNIC. 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 FastFrame 4 SmartNICs. Ensure you have the equipment and software you need for the installation:

- FastFrame SmartNIC 10/25/40/50/100GbE
- A computer with an available PCIe 3.0 expansion slot
- Cables
- ATTO 360™ Tuning, Monitoring, and Analytics application
- ATTO Ethernet Suite™ for Linux/Windows installations

System Requirements

Before installing the ATTO FastFrame SmartNIC,please check your system for the following minimum configuration requirements:

Supported Operating Systems

- macOS®
- Microsoft Windows®
- Microsoft Windows Server®
- Linux®

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

Installing Drivers

Configure your system to recognize and use your FastFrame SmartNIC by installing drivers for your operating system.

macOS

Note *When installing into a Mac Pro (2019) chassis we recommend using expansion slots 2-4 for thermal efficiency, if you must install in slots 5-7 we strongly advise using our "fan speed utility" which can be found in the DMG folder of the FastFrame driver or ATTO 360 utility. This utility will increase fan speeds in the chassis to prevent overheating.*

1. Power on your system and log in as the administrator or user with proper administrative privileges
2. Go to https://www.atto.com/downloads
3. Register or login if previously registered

4. Click on **Ethernet Adapters** and then **4ᵗʰ Generation 10/25/40/50/100GbE Network Interface cards** in the dialog box
5. Scroll down and select the latest **macOS** driver version listed
1. A download window appears. Choose **Save File**.
2. Open the download file to extract and launch the driver setup program
3. Follow the onscreen instructions to complete the driver installation

Windows

1. 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 **Ethernet Adapters** and then **4ᵗʰ Generation 10/25/40/50/100GbE Network Interface cards** in the dialog box
5. Navigate to **ATTO Ethernet Suite for Windows** in the right dialog and click on it.

Note *ATTO Ethernet Suite includes an ATTO hardware driver for Windows along with the option to install ATTO 360™ and ATTOview™ along with Driver installation*

6. Scroll down to and click the **Windows** download.
7. A download window appears. **Choose Save File.**
8. Double-click the downloaded file to extract and launch ATTO Ethernet Suite™
9. Follow the on-screen instructions to complete the software installation.

Note *Optional ATTOview™ - if you decide to opt in and install this a time series database will be stored on your local machine*

Linux

1. 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 **Ethernet Adapters** and then **4ᵗʰ Generation 10/25/40/50/100GbE Network Interface cards** in the dialog box
5. Navigate to **ATTO Ethernet Suite™** in the right dialog and click on it.
6. Scroll down to and click the **Linux** version of ATTO Ethernet Suite™

Note *ATTO Ethernet Suite™ is an installer package that includes ATTO hardware driver as well as ATTO 360™ software and optional ATTOview™ Time-Series Database*

7. A download window appears. Choose **Save File**.
8. After the download has completed, open the ATTO Ethernet Suite™ volume on the desktop.
9. Open the Linux folder.
10. Copy the .tgz file to a temporary folder.
11. Open a terminal window and change the location of the copied tgz.

ATTO 360™ Optimization, Configuration, and Management Utility

ATTO 360™ is an all-purpose application for Ethernet storage optimization featuring performance tuning, analytics, and monitoring tools designed specifically for your new ATTO FastFrame SmartNIC, visit ATTO.com at https://www.atto.com/landing/atto360 to download your free copy and get the most out of your ATTO product.

Hardware Installation

Note *If you are replacing an existing adapter with a* *new adapter, you must re-install the driver.*
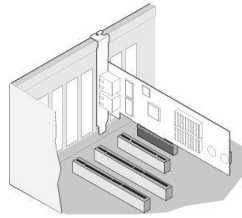
Insert a PCIe Adapter in the Server

1. Turn off the server and unplug the power cord, then remove the server's cover.

⚠ **CAUTION** *Turn off and unplug the server before removing the server's cover. Failure to do so could endanger you and may damage the adapter or server.*

2. 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.
3. Insert the adapter in an available, compatible PCIe slot. Push the adapter into the slot until the adapter is firmly seated. The adapter can be installed in a x8 or x16 mechanical PCIe slot.

⚠ **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.

Insert optical trans receiver modules
If utilizing QSFP 28, QSFP+, SFP28 or SFP+ modules, please ensure the modules are inserted into specified ports. If using direct-attached copper cables with integrated modules, wait until Step 5 is complete.

Connect a 10/25/40/50/100GbE Ethernet Network Cable

In NIC to NIC configurations it is suggested that the link speed is forced to the desired speed

Configure Network Settings
We recommend using ATTO 360™ to help with configuring settings, make performance optimizations, and diagnose bottlenecks.
Consult your System Administrator or system documentation for more info on configuring network settings.

Configure your Adapter
ATTO 360™ has several configuration profiles designed to optimize your new ATTO SmartNIC. Download it at our website at https://www.atto.com/landing/atto360 and get access to these 1-click setups that make dozens of setting adjustments instantly.