Manuals+ — User Manuals Simplified.

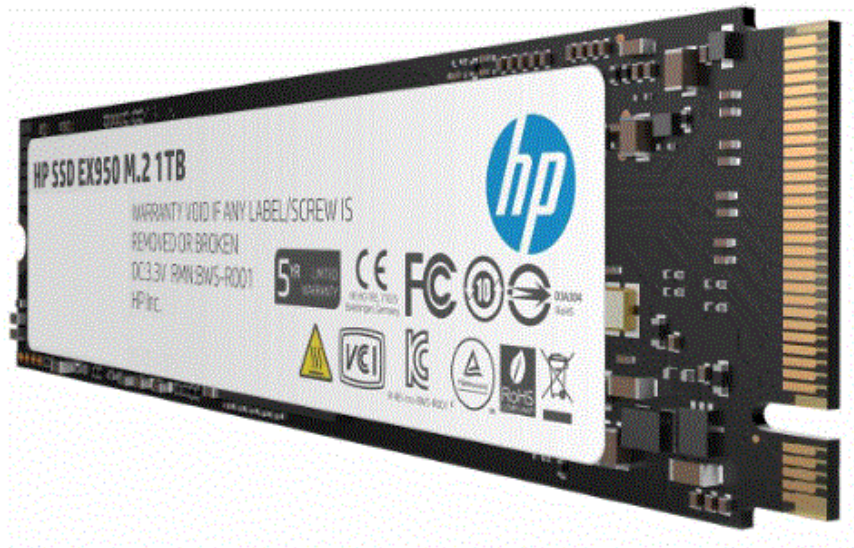# hp Front Accessible NVMe Storage User Guide

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hp Front Accessible NVMe Storage

Product Information

Specifications

- Product Name: FANS (Front-Accessible NVMe Storage)
- Utility Application for NVMe Enclosure Units

Summary
Front-Accessible NVMe Storage (FANS) is a utility application for NVMe Enclosure units. FANS provide a unified interface for drive status monitoring, drive ejection, RAID information for inserted NVMe drives, and notifications of drive events that are configurable.

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Product Usage Instructions

Getting Started
NOTE: RAID is defined as a redundant array of independent disks or a redundant array of inexpensive disks.

Supported Operating Systems
The following table describes the operating systems supported by FANS.

Item	Description
Operating systems	Supported operating systems

Software Overview
The FANS software has two components:

1. Background service: Watches system events about NVMe Enclosure drives and sends them to the client for display to the user.
2. Graphical client: Provides the display and control interface.

Starting FANS
Starting FANS Overview
After FANS is installed, both the service and the graphical client automatically start every time the computer starts. To use FANS, both the service and the client must be running. NOTE: The client does not start if the service is not running. However, you can run the service without the client.

Graphical Client
Follow the steps in this section to start the FANS client manually:

1. Search for the application name in the OS search bar. On Windows, the application is called HP Front-Accessible NVMe Monitoring. On Linux, it is called HP Front NVMe Monitor.
2. After opening the application from the search bar, the FANS client icon appears in the system tray.

FAQ

- Q: What is FANS?
  A: FANS stands for Front-Accessible NVMe Storage. It is a utility application for NVMe Enclosure units that provides a unified interface for drive status monitoring, drive ejection, RAID information, and configurable drive event notifications.
- Q: Which operating systems are supported by FANS?
  A: FANS is compatible with the operating systems listed in the supported operating systems table.
- Q: How do I start the FANS client manually?
- A: To start the FANS client manually, search for the application name in the OS search bar. On Windows, it is called HP Front-Accessible NVMe Monitoring. On Linux, it is called HP Front NVMe Monitor. After opening the application, the FANS client icon will appear in the system tray.

SUMMARY
Front-Accessible NVMe Storage (FANS) is a utility application for NVMe Enclosure units. FANS provide a unified interface for drive status monitoring, drive ejection, RAID information for inserted NVMe drives, and notifications of drive events that are configurable.

Legal information

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Getting started

Front-Accessible NVMe Storage (FANS) is a utility application for NVMe Enclosure units. FANS provide a unified interface for drive status monitoring, drive ejection, RAID information for any inserted NVMe® drives, and configurable notifications of drive events.

NOTE: RAID is defined as a redundant array of independent disks or a redundant array of inexpensive disks.

Supported operating systems

The following table describes the operating systems supported by FANS.

Table 1-1 FANS Compatibility

Item	Description
Operating systems	Windows® 10 / Windows 11 Linux® Ubuntu 20.04 (Focal Fossa) / 22.04 (Jammy Jellyfish)

Software overview

The FANS software has two components.

1. Background service: Watches for system events of NVMe Enclosure drives and sends them to the client for displaying to the user.
2. Graphical client: Provides the display and control interface.

Starting FANS

You can open FANS by restarting the computer after installation or by searching for HP Front Accessible NVMe Monitoring through the Windows search function after installation. After opening, you can find FANS in your system tray.

Starting FANS overview

After FANS is installed, both the service and the graphical client automatically start every time the computer starts. To use FANS, both the service and the client must be running.

NOTE: The client does not start if the service is not running. However, you can run the service without the client.

Graphical client
Follow the steps in this section to start the FANS client manually.

1. Search for the application name in the OS search bar. On Windows, the application is called HP Front-Accessible NVMe Monitoring. On Linux, it is called HP Front NVMe Monitor.
2. After opening the application from the search bar, the FANS client icon appears in the system tray. Select this icon to open the user interface.

Background service
To start the service manually, follow the steps for your operating system.

Windows
Follow these steps to start the service manually in Windows.

1. Search Services in the Windows search bar and open the services app that appears.
2. Right-click the service named Front NVMe Monitoring Service to see the context menu:
    - Start: Select this option to start the service.
    - Restart: Select this option to restart the service if it is already running.

Linux
Follow this step to start the client manually in Linux.

- Run the following command from a terminal: sudo system ctl start hp-fans.

Quitting FANS

This chapter describes how to quit FANS manually.

Background service
To quit the FANS service manually, follow the steps for your operating system.

Windows
Follow these steps to quit the FANS service manually in Windows.

1. From the services app, find the service. For more information, see Background service on page 2.
2. Right-click the service and select Stop. You can also left-click the service to select it and select Stop Services in the services app.

Linux
Follow these steps to quit the FANS service manually in Linux.

- Run the following command from a terminal: sudo system ctl stop hp-fans.

Graphical client
Follow this step to quit the client manually.

- To manually quit the client, right-click the FANS icon in the system tray, and then select Quit. This action stops

the FANS client process and removes the FANS icon from the system tray.

FANS user interface

This chapter describes the elements in the FANS user interface that monitor and control the utility. The following diagram and table illustrate these elements.
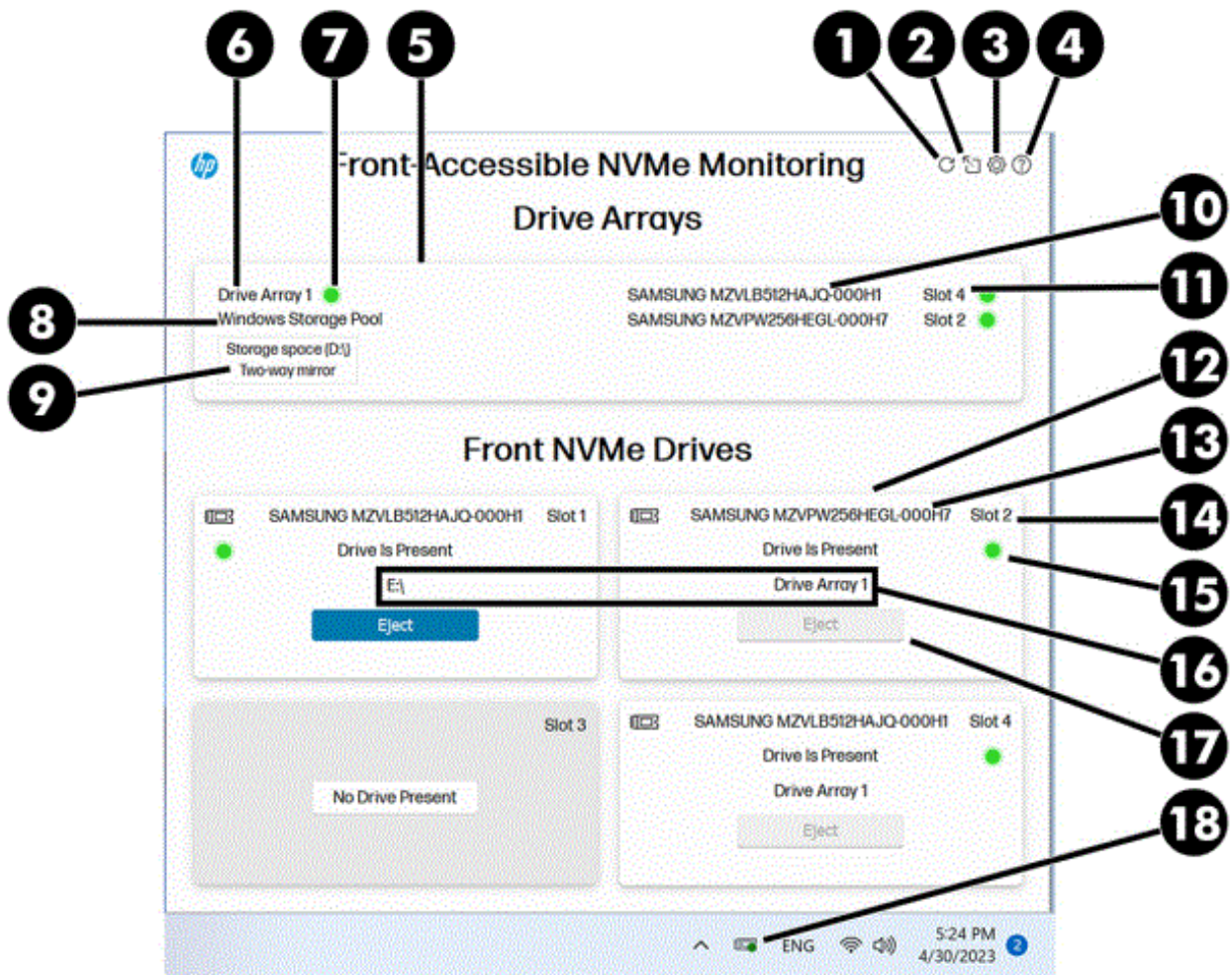

Table 4-1 FANS user interface

Number	Element	Description
1	Refresh button	This button starts a rescan of the NVMe Enclosure and any RAIDs that include drives inside the QX enclosure. FANS usually detects changes dynamically, but in case it ever stalls, use this button.
2	Pop-out & anchor-back button	If FANS is in the system tray, this button opens FANS in its own window. This feature allows you to interact with other applications without having the FANS user interface automatically hide. Use this button to drag the FANS window around (resizing is not available). If FANS is already in its own window, use this button to anchor the app back to the system tray.
3	Notification settings	Use the settings tab to customize the notifications that you receive from the FANS application.

Number	Element	Description
4	About & help page	The about page includes the version number of the FANS application and a link to this user guide.
5	Drive array tile	Displays information for a drive array, which is an array of physical drives where one or more RAID volumes can exist. *RAID volume* refers to the storage partition created on the array, or some subset of it. NOTE: The more general term *RAID* refers to the combined concept of drive arrays and RAID volumes. Some RAID providers might not distinguish between drive arrays and RAID volumes. They might only consider *RAID* as a concept.
6	Drive array identifier	This label assigns each drive array a number that identifies it. NOTE: In Windows Storage Spaces, a *drive array* is a storage pool.
7	Drive array status indicator	No physical LED indicates the drive array status. The drive array status has only two colors. Green indicates an array with healthy RAID volumes, and red indicates that at least one of the RAID volumes has encountered a RAID fault. This status includes warnings and errors that result in an unhealthy status. You can hover over the status indicator to see a tool tip that shows the status as text. NOTE: RAID faults are resolved through the RAID provider. FANS monitors the status of RAID volumes but you cannot use it to resolve issues.
8	Drive array/RAID provider	This element shows the software that provides the RAID capability. Some examples of such software include VROC, Windows Storage Spaces, Linux MD, and Linux LVM.
9	RAID volume	The first line in the RAID volume box lists the RAID volume label. The second line lists the RAID volume type, which signifies what kind of data redundancy the RAID volume has. For example, *RAID 1* is a mirror- redundancy. NOTE: In Windows Storage Spaces, the RAID volume is a storage space.
10	Model numbers of RAID drives	This element displays the model number of each drive in the RAID.

11	Slot numbers of RAID drives	This element displays the slot number of each front NVMe drive in the RAID. For drives that are not front NVMe drives, the message Internal is shown instead of the slot number.
12	Front NVMe drive tile	This element displays information about the drive, such as the eject button for the drive. The position of this tile correlates to the position of the drive in the NVMe Enclosure. For example, a drive in the top right of the NVMe Enclosure displays in the top-right tile of this application.
13	Drive model number	This element displays the model number of the drive in the slot.

Number	Element	Description
14	Drive tile slot number	This element displays the slot number of each front NVMe drive. In the NVMe Enclosure the top-left slot is numbered 1, the top-right is slot 2, the bottom-left is slot 3, and the bottom-right is slot 4. In the other NVMe Enclosure, the left slot is slot 1, and the right slot is slot 2.
15	Drive status indicator	The colored circle represents the status of the physical LED on the NVMe Enclosure. The status circle in the user interface is the same color as the physical LED. The message to the left of the status circle also shows the status. Status colors key: ● Green: Healthy. The status message shows Drive is Present. ● White: Ejected. The status message shows Safe to Remove Drive. ● Red: Warning or error. Includes SMART critical warnings. The status message shows Drive Warning if there is a warning, or Drive Unhealthy for more serious errors.
16	Left tile: Volume letter (Windows) / Mountpoint (Linux) Right tile: Drive array label	On Windows, if the drive is formatted with volumes, this element displays those volumes' drive letters. On Linux, if the drive has mounted partitions, those mountpoints are displayed. On either OS, if the drive is a member of a drive array, this element displays that drive array number. If the drive is not formatted with a volume or a member of a drive array, this label is blank.
17	Eject button	Selecting this button ejects the drive, and makes it safe to remove. Always select this button before removing a drive to prevent loss of data. You are not able to eject your OS drive, or any drive in a RAID. The former would instantly crash your machine, and the latter would degrade RAID redundancy or data availability.
18	System tray icon	This element is the icon for FANS. When the application is not open, clicking this icon opens the user interface of the app. The icon has a status circle that reflects the status of the front NVMe drives and RAIDs that the app monitors. If every drive and drive array is healthy, the status circle on the icon is green. If at least one of the drives or drive arrays has a warning or is unhealthy, the status circle is red.

Documents / Resources

hp Front Accessible NVMe Storage [pdf] User Guide
Front Accessible NVMe Storage, Accessible NVMe Storage, NVMe Storage, Storage

References

- **User Manual**