ThinkSystem Ready Node HS350X V3 Quick Start Guide
Planning / Implementation

This document is a quick reference for how to support and manage the ThinkSystem Ready Node HS350X V3 platform. We provide references to the documentation as well as a brief summary of how to leverage it, all in one location, so that customers, partners and field technicians can educate themselves and better support the product.

Figure 1. Lenovo ThinkSystem Ready Node HS350X V3

Reference documentation

The reference documentation for the HS350X V3 is contained within the following links. Below, we have also provided a summary of the contents and usage of each document. These documents are all housed at the main documentation pages for the HS350X V3:
https://pubs.labs.lenovo.com/hs350x-v3
https://lenovopress.lenovo.com/storage/thinksystem/hs350x-v3

- Product Guide

  This guide provides essential pre-sales information to understand the HS350X V3 server, its key features and specifications, components and options, and configuration guidelines.

  https://lenovopress.lenovo.com/lp1827-thinksystem-ready-node-hs350x-v3

- User Guide

  This guide contains the hardware component reference and detailed technical specifications. It can be leveraged to better understand how to maintain and/or replace hardware components within the server, as well as assist in daily operations.

  https://pubs.labs.lenovo.com/hs350x-v3/hs350x_v3_user_guide.pdf

- Messages and Codes Reference

  This document contains the specification and detail for the information, warning, and error messages output by the BMC. These are typically viewed via the event log of the application on the server and can be cross-referenced in this document so that appropriate actions can be taken.

  https://pubs.labs.lenovo.com/hs350x-v3/hs350x_v3_messages_reference.pdf

- UEFI User Guide

  This guide contains information on how to configure the UEFI functions of the server. It provides a method by which to configure server management, socket configuration, platform configuration, security and advanced settings. For example, the server management screen allows the administrator to view and configure parameters for managing the server, i.e. IP network configuration for the BMC interface.

  https://pubs.labs.lenovo.com/hs350x-v3/thinksystem_hs350xv3_uefi_user_guide.pdf

- BMC User Guide

  This guide contains information on how to operate the various functions within the BMC web UI. It has a reference for the sensors, FRU information, settings and maintenance. For example, there is a section on firmware upgrades and how to perform them in the maintenance section.

  https://pubs.labs.lenovo.com/hs350x-v3/thinksystem_hs350xv3_bmc_user_guide.pdf

Management

For management, customers can leverage the Platform Management Utility (PMU) tool. We have included a comparison of PMU vs OneCLI as well as a spec below.

PMU can be downloaded at the following web page:
https://datacentersupport.lenovo.com/us/en/products/servers/thinksystem/hs350xv3/7de3/downloads/driver-list/component?name=Software and Utilities

HS350X V3 will also support the use of Redfish v13.5 if desired. Exhaustive information regarding Redfish can be obtained at the following URL: https://www.dmtf.org/standards/redfish

Note: HS350X V3 is not compatible with XClarity management solutions.

Firmware updates

When updating drive and adapter firmware, the method varies depending on the type of hardware requiring updates. This section summarizes how to update the generic IO parts.

Network adapters

Firmware updates vary depending on the adapter vendor:

- Broadcom adapters

  The tool/utility is contained in the FW package for the HS350X V3; readme file details the update method.

- Mellanox adapters

Mellanox/NVIDIA adapter updates are located on the vendor web site. See the Mellanox/NVIDIA web site for both tool and FW package.

- Intel adapters:

  The tool/utility is contained in the FW package for the HS350X V3; readme file details the update method.

HBA/RAID adapters

The "storcli2" tool is used when updating HBA and RAID firmware.

The tool/utility is contained in the FW package for the HS350X V3. The readme file explains the update method.

SSDs

No extra tool/utility is needed for the FW update; the update command explained in the readme file instructs users how to perform the update. See update example below:

Steps to update SSD firmware:

1. Run `./nvme list` (check the node number of the SSD that requires a firmware update; for example, `nvme1.`)
2. Run `./nvme fw-download -f xxxxx.bin /dev/nvme1` (`xxxxx` is the firmware file name)
3. Run `./nvme fw-commit /dev/nvme1 -a 1 -s 0`
4. Run `./nvme reset /dev/nvme1` (check if the firmware version has been successfully updated)
5. Wait 10 seconds
6. Power cycle the system.

HDDs

Tool/utility download link are provided; the update method is explained in the readme file. See update example below:

Steps to update HDD firmware:

1. Based on the HDD model, open the corresponding FW folder which you downloaded & extracted from the Lenovo Webpost website.
2. Download the FW upgrade utility to the folder from link:
   https://www.seagate.com/content/dam/seagate/migrated-assets/old-support-files/seachest/SeaChestLite.zip
3. Unzip the utility zip file and launch corresponding tools based on your system configuration (see below).
4. Follow the instructions included with the tools. See update example below:

Usage (run with sudo)

```
SeaChest_Lite [-d ] {arguments} {options}
```

Examples:

```
sudo SeaChest_Lite --scan
sudo SeaChest_Lite -d /dev/sg1 -i
sudo SeaChest_Lite -d /dev/sg1 --downloadFW FWfile.bin
```

More information

For more information not covered in this Quick Start Guide, please see links to the User Guide, Messages and Codes Reference, UEFI User Guide, and BMC User Guide. Links are listed in the Reference documentation section.

Related product families

Product families related to this document are the following:

- ThinkSystem HS350X V3 Storage Server

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