

IntelliFlash

IntelliFlash Configuration Guide

IntelliFlash 3.11.4.0



Notice

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Contents

Chapter 1: Preparing for IntelliFlash System Configuration.....	1
Introduction to the Configuration Wizard.....	2
Settings.....	2
Network Settings.....	2
Preferences.....	3
Preparing for Configuration.....	3
Default Settings.....	3
Chapter 2: Running the IntelliFlash Configuration Wizard.....	5
Preparing to Run the Configuration Wizard.....	6
Running the Configuration Wizard.....	6
Configuring IntelliCare.....	9
Configuring CallHome Settings.....	9
Enabling SMTP Account Settings.....	9
After Running the Configuration Wizard.....	11

Preface

About this Document

Intended Audience

This guide describes how to complete the initial configuration of IntelliFlash N-Series and H-Series systems using the IntelliFlash Configuration Wizard.

This guide is intended for engineers who deploy IntelliFlash systems at customer sites.

IntelliFlash Documentation

The following table lists the technical documentation library available for the IntelliFlash systems.

Table 1: IntelliFlash Documentation

Name	Description
IntelliFlash N-Series N6100/N6200 NVMe Storage Systems Hardware Guide	Contains detailed descriptions, hardware specifications, and rack installation instructions for the N-Series N6100/N6200 NVMe Storage Systems.
IntelliFlash H-Series H6100/H6200 Hybrid Storage Systems Hardware Guide	Contains detailed descriptions, hardware specifications, and rack installation instructions for the H-Series H6100/H6200 Hybrid Storage Systems.
IntelliFlash User Guide	Contains detailed instructions on how to configure, use, and administer IntelliFlash H-Series Hybrid Storage Systems and N-Series NVMe Storage Systems.
IntelliFlash API Reference	Contains detailed descriptions of the IntelliFlash REST APIs.
IntelliFlash Configuration Wizard Guide	Contains instructions on configuring IntelliFlash arrays using the Configuration Wizard.
IntelliFlash CSI File Driver User Guide	Contains instructions on installing and using the CSI File driver.
IntelliFlash Release Notes	Contains information about new features, enhancements, fixed issues, and known issues in IntelliFlash releases.
IntelliFlash PowerShell Toolkit Guide	Contains information about IntelliFlash PowerShell Toolkit.

Support

IntelliFlash support services give you access to online, telephone, and onsite support. IntelliFlash support provides multiple levels of support through a Technical Support team and Field Engineers. For details on support offerings, contact your account team.

Revision

Date	Description
August 05, 2022	No changes to the configuration wizard for IntelliFlash 3.11.4.0. Re-organized the chapters for clarity.
September 27, 2021	Updated content for IntelliFlash 3.11.2.0.

Chapter 1

Preparing for IntelliFlash System Configuration

Topics:

- *Introduction to the Configuration Wizard*
- *Preparing for Configuration*
- *Default Settings*

Introduction to the Configuration Wizard

The IntelliFlash Configuration Wizard helps you to quickly configure a new IntelliFlash system. The Configuration Wizard appears when you first log into the IntelliFlash Web UI of a new system.

The Configuration Wizard is also activated when you re-install the IntelliFlash OS on the system. In this case, you first need to configure high availability (HA) before you can use the Configuration Wizard.

You can use the Configuration Wizard to configure the following system and network settings:

Settings

The **Settings** page of the Configuration Wizard enables you to configure the following settings:

- **Date and Time Settings:** Add an NTP server and to select a time zone. The Current time field displays the time based on the selected NTP server and time zone.
- **Management Network Settings:** Configure the array management network. Set the array hostname, domain, array management IP address, subnet, gateway, and the DNS server. You can also configure the host names and the management IP addresses for both canisters.
- **KVM Settings:** To configure a different subnet and gateway for the BMC, use this section. You can also set the IP addresses for VLAN and the BMC IP addresses for each canister.
- **Access Settings:** Modify the default passwords for the system accounts.

The system accounts are:

- Console administrator (**zebiadmin**): This account allows you to access the IntelliFlash console.
- IntelliFlash Web UI administrator (**admin**): This account allows you to access the IntelliFlash Web UI.
- KVM administrator (**sfabmc**): This account allows you to access the BMC web interface.

Related Topics

[Running the Configuration Wizard](#)

Network Settings

The **Network** page of the Configuration Wizard enables you to view and configure the following:

- In the **Hardware** section, you can view the physical ports in the system and their status.
- In the **Interfaces** section, you can view the physical, virtual, and logical interfaces. You can create or modify the Link Aggregates.
- In the **Interface Groups** section, you can view the default interface groups. You can create and configure interface groups, which includes creating a VLAN and creating or configuring floating and fixed IP addresses. By default, the MTU value is set to 9000 in the Interface Group.

For Active-Passive configurations, add HA floating IP addresses to the Active resource group that contains the pool. For Active-Active configurations, add HA floating IP addresses to each Active resource group that contains the pool.



Tip: For iSCSI and SMB 3.0 protocols, add one HA floating IP address per physical link interface within the Interface Group for each resource group. For example, in an Active-Passive configuration, if the Interface Group has four physical link interfaces, it is recommended to add four HA floating IP addresses to provide better aggregated throughput with MPIO round-robin configurations. Similarly, if the same array has an Active-Active configuration (two resource groups), it is recommended to add eight HA floating IP addresses.

Preferences

The **Preferences** page of the Configuration Wizard enables you to configure the following settings:

- **Customer Details:** Add customer details such as company name, email address, and phone number(optional).
- **Asset Location:** Include location details of the IntelliFlash system.
- **Support:** Configure IntelliCare and CallHome notifications.

Related Topics

[Running the Configuration Wizard](#)

Preparing for Configuration

The prerequisites for configuring an IntelliFlash system are as follows:

- **Laptop:** You need a laptop to connect to the wired ethernet to change the IP addresses of the IntelliFlash system back to the default IP addresses that the system was configured when shipped.
- **Spare Ethernet cable:** The spare Ethernet cable allows connecting the laptop to the head unit in the rack.
- **Supported Web browsers:** To access the IntelliFlash Web UI, use any of the following web browsers:
 - Google Chrome (version 57.0 or later)
 - Mozilla Firefox (version 53.0 or later)
 - Microsoft Edge (version 40.15063.0 or later)
 - Safari (version 10.0 or later)

Default Settings

Default IP Addresses

The IntelliFlash systems are shipped with default IP addresses for the onboard management ports and BMC ports on each canister. The onboard management interfaces are 10Gbps, but are also capable of negotiating at 1Gbps. The onboard BMC ports are 1Gbps, but are also capable of negotiating at 100Mbps speeds.

**Caution:**

If any of the default IP addresses listed in the following table conflict with existing IP addresses, do not connect any of the management IP network connections until the configuration steps in the *IntelliFlash Configuration Guide* have been performed.

Table 2: Default IP Addresses

Default IP Address	Canister/Interfaces	Description
10.10.10.11/24	Canister A/Web mgmt UI	This is the default IntelliFlash management IP address for canister A.
10.10.10.13/24	Canister B/Web mgmt UI	This is the default IntelliFlash management IP address for canister B.
10.10.10.10/24	Canister A/BMC Web interface	This IP address provides access to the BMC port on canister A.
10.10.10.12/24	Canister B/BMC Web interface	This IP address provides access to the BMC port on canister B.

Default Credentials for Management Network

Use the following default credentials to log into the IntelliFlash Web UI:

- User name: admin
- Password: tintri

Default Credentials for BMC Network

Use the following default credentials to log into the BMC interface:

- User name: sfabmc
- Password: A1hDdn200Nv

Chapter 2

Running the IntelliFlash Configuration Wizard

Topics:

- *Preparing to Run the Configuration Wizard*
- *Running the Configuration Wizard*
- *Configuring IntelliCare*
- *Configuring CallHome Settings*
- *After Running the Configuration Wizard*

Preparing to Run the Configuration Wizard

Before running the Configuration Wizard, complete the following prerequisites:

1. Remove the cable from one of the management ports in the head unit.

As shown in the following illustration, remove the cable from port 7 in Canister A.

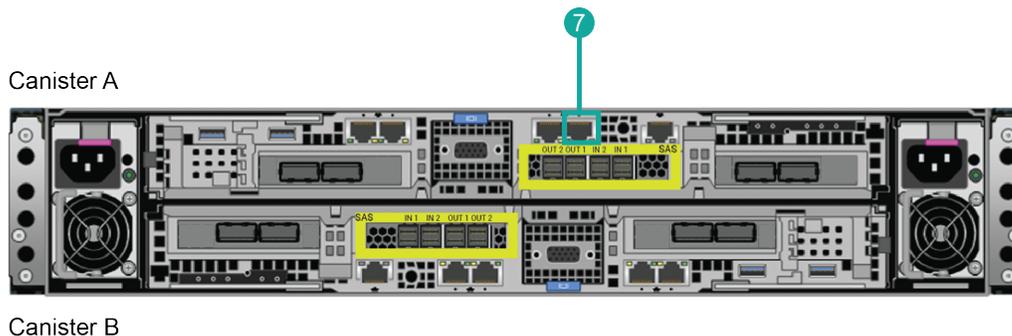


Figure 1: Rear panel of the H-Series Head Unit

2. Connect the laptop to that management port and configure the laptop to be on the 10.10.10.0/24 network.

For more information, see [Default Settings](#).

Running the Configuration Wizard

1. Use the browser to access the management interface on Canister A. Go to <http://10.10.10.11> (see the [Default IP Addresses](#) table).
2. Click **Configure HA** option if it appears.
The HA configuration might take several minutes. Both the canisters reboot several times during the HA configuration. Wait for the process to finish.
3. Log in to the IntelliFlash Web UI of Canister A using the [default credentials](#).
The Configuration Wizard appears.
4. (Optional) In the Configuration Wizard, click **Rescan** to view the latest hardware information.
5. Click **Start** to start the configuration.
The **Settings** page of the Configuration Wizard appears.
6. Under **Date and Time Settings** section of the **Settings** page, do the following:
 - a) Type the IP address or name of an NTP server that you want to use and then click **Add**. Repeat the step to add additional NTP servers. You can click the Delete icon (X) next to any NTP server that you want to remove.

 **Note:** If no NTP server is added, the system takes "pool.ntp.org" by default.

- b) Select the region and the city from the **Timezone** list.
7. Under **Management Network Settings**, you can configure the management network. The IntelliFlash Web UI and the IntelliFlash console are accessible over the management network.
- a) In the **Array** section, type the **Hostname**, **Domain**, **Management IP**, **Subnet**, and **Gateway** of the system

 **Note:** When you enter the management IP address, the IP addresses of the Canister A, Canister B, and the BMC are automatically populated with the first three notations of the management IP address. By default, the Gateway IP address is the first three notations of the management IP address followed by 1.

- b) To add a DNS server, enter the IP address or name of the DNS server and click **Add**. You can add multiple DNS servers.

 **Note:** To delete a DNS server, click the Delete icon (X) next to the DNS server that you want to delete.

- c) Under **Controller A** section, add **Hostname** and **Management IP** addresses of canister A.
 - d) Under **Controller B** section, add **Hostname** and **Management IP** addresses of canister B.
8. Under **KVM Settings**, enter the following:
- a) In the **Array** section, you can enter different subnet and gateway for the BMC, set the VLAN (choose the default VLAN or configure a different VLAN).
 - b) Under **Controller A** section, enter the BMC IP address for canister A.
 - c) Under **Controller B** section, enter the BMC IP address for canister B.
9. Under **Access Settings**, modify the default passwords for the IntelliFlash Web UI administrator, IntelliFlash console administrator, and the KVM administrator accounts.
- a) Select the change password option for the account for which you want to change the password.

 **Important:** For security, make sure you change all default passwords for the system accounts during the initial configuration.

- b) Select the **Show Password** option if you want the page to display the passwords as you type.
- c) Type and confirm the passwords for each account for which you have selected the change password option.

The **Network** page of the Configuration Wizard appears.

The Network page displays the default on-board management interface group name and the interface group names for the interface cards installed. The Network page displays the

Unified UI of the Interfaces section. The changes you make in the Interface section are applied on both the canisters.

10. In the **Network** page, you can do the following:

- a) Change the default MTU settings and create new link aggregates.
By default, the MTU value is set to 9000. However, when you change the interface group, the MTU value automatically changes.
- b) Edit existing interface groups or create new interface groups.



Note: You must add at least one floating or fixed IP address while creating a new interface group.

You cannot change the default on-board management interface group name.

11. In the **Preferences** page of the Configuration Wizard, do the following:

- a) In the **Customer Details** section, enter customer details such as company name, email address, and phone number (optional).
- b) In the **Asset Location** section, enter the address, street, city, state, and country where the IntelliFlash system of the customer is located.
- c) Click the toggle button if you want to ship the replacement unit to the assets location.

12. In the **Support** section, enable and test IntelliCare and CallHome.

- a) In the IntelliCare section, click the toggle button to **Turn on IntelliCare**. For more information see [Configuring IntelliCare](#).

13. In the **CallHome** section, enable and test SMTP.

- a) Click the toggle button to **Turn on CallHome**.
- b) Click **Settings** button to add the SMTP settings.
For more information see, [Configuring CallHome Settings](#).

14. After completing the required configuration, click **Complete and Restart** to apply the changes and reboot the canisters.

If you have not completed any of the required configuration, click **Modify** for the relevant settings in the Home page.

After the canisters reboot, refresh the Web browser and accept the new self-signed certificate to access the login page of the IntelliFlash Web UI .

Related Topics

[Configuring IntelliCare](#)

[Configuring CallHome Settings](#)

Configuring IntelliCare

IntelliCare enables you to quickly and easily monitor the health, performance, and space usage of all your IntelliFlash systems from a single web portal without logging into the individual IntelliFlash Web UI.

After you configure the IntelliCare, the system information is automatically collected and uploaded to the IntelliCare server.

Perform the following steps to set up IntelliCare:

1. In the **Preferences Settings** page, click the **Turn on IntelliCare** toggle button to enable IntelliCare.
2. Click the **Settings** icon next to **Test Service**.
The IntelliCare Settings page appears.
3. Click the **HTTP Proxy** toggle button to enable HTTP proxy.
4. In the **Host** field, type the name or IP address of the IntelliCare server.
5. In the **Port** field, type the port number of the IntelliCare server.
6. Click **Save**.
7. After saving the settings, click **Test Service** to verify whether IntelliFlash is connected to IntelliCare.

Configuring CallHome Settings

Configuring the **CallHome** option allows the IntelliFlash OS to send email notifications that contain critical system alerts to the IntelliFlash Technical Support team. These email notifications enable the Technical Support team to provide proactive support for critical issues.

To configure **CallHome**, configure SMTP first.

For additional information, see [Enabling SMTP Account Settings](#).

After configuring SMTP, use **Test Settings** option to test the **CallHome** settings.

Enabling SMTP Account Settings

Enable and configure the SMTP mail server to receive notifications.

Perform the following steps to set up the SMTP account:

1. In the **Preferences Settings** page, click the **Settings** icon.

2. Click the **SMTP** toggle button to enable SMTP.
3. In the **Host** field, type the name or IP address of the SMTP mail server.
4. In the **Security** field, select the secure connection type:
 - **None**: Choose this option if you want a normal connection to the mail server. The default port number is 25.
 - **SSL/TLS**: Choose this option if you want to make a secure connection to the mail server through SSL/TLS from the beginning. The default port number is 465.
 - **STARTTLS**: Choose this option if you want to open a normal connection to the mail server, and upgrade later to a secure connection using SSL/TLS. The default port number is 587.
5. In the **Port** field, the port number is automatically populated depending on the secure connection type you choose. Enter a different port number, if required.
6. If the server requires authentication, click the **Authentication** toggle button to enable it.
 - In the **Username** field, type the user name of the account to be used for sending the emails.
 - In the **Password** field, type the password for the user account.
7. In the **Senders Email** field, type the email address that will be identified as the sender of the notifications.
8. In the **Send Notifications to** field, enter the email address to which notifications have to be sent, and click **Add**.

 **Note:** If required, repeat this step to add more email addresses. Notifications are sent to the email addresses you provide here.
9. Click **Save**.
10. After saving the SMTP details, click the **SMTP Test Settings** button to test the SMTP settings.

After Running the Configuration Wizard

After running the configuration wizard, complete the following steps:

1. Remove the laptop cable from the management port (port 7 in [figure 1](#)) on Canister A and connect the permanent management cable back to that port.
2. Verify that you can connect and log in to the management interfaces on Canister A and Canister B using the addresses and credentials that have been configured.
3. Verify that you can connect and log in to the BMC Web Interfaces on Canister A and Canister B using the addresses and credentials that have been configured.

