

Getting Started with Allxon

v.3.4

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Revision History

Version	Date	Description of Revision
1.0	Feb. 2, 2021	Initial Release
1.1	Apr. 16, 2021	<p>6. Enable Out-Of-Band Control on Device</p> <ul style="list-style-type: none"> Added for new feature <p>4.1.2 Install Allxon Agent via Command Prompt</p> <ul style="list-style-type: none"> Added Windows Installation Command
2.1	July 14, 2021	<p>4.1.1 Install Allxon Agent via Desktop Installer</p> <ul style="list-style-type: none"> Added a new way of installation <p>4.2.1 Using Graphical User Interface</p> <ul style="list-style-type: none"> Separated from Get Device Pairing Code <p>4.2.2 Using Command-Line Interface</p> <ul style="list-style-type: none"> Added a new way of getting device pairing code
3.0	Aug. 13, 2021	<p>Integrated all information to one document.</p> <p>Revision History</p> <ul style="list-style-type: none"> Added for history review <p>Appendix A: Redeem Promotion Code</p> <ul style="list-style-type: none"> Moved to Appendix A <p>Appendix B: Uninstall Allxon Agent</p> <ul style="list-style-type: none"> Added for new instruction
3.1	Dec 3, 2022	Corrected typos or updated broken links
3.2	May 6, 2022	Updated links
3.3	May 26, 2022	Updated Windows installation command
3.4	Oct 18, 2022	<ul style="list-style-type: none"> Updated Installation & Uninstallation commands for Linux & Windows Added Appendix D: Internet Access Requirement for Allxon Agent

1. About Allxon

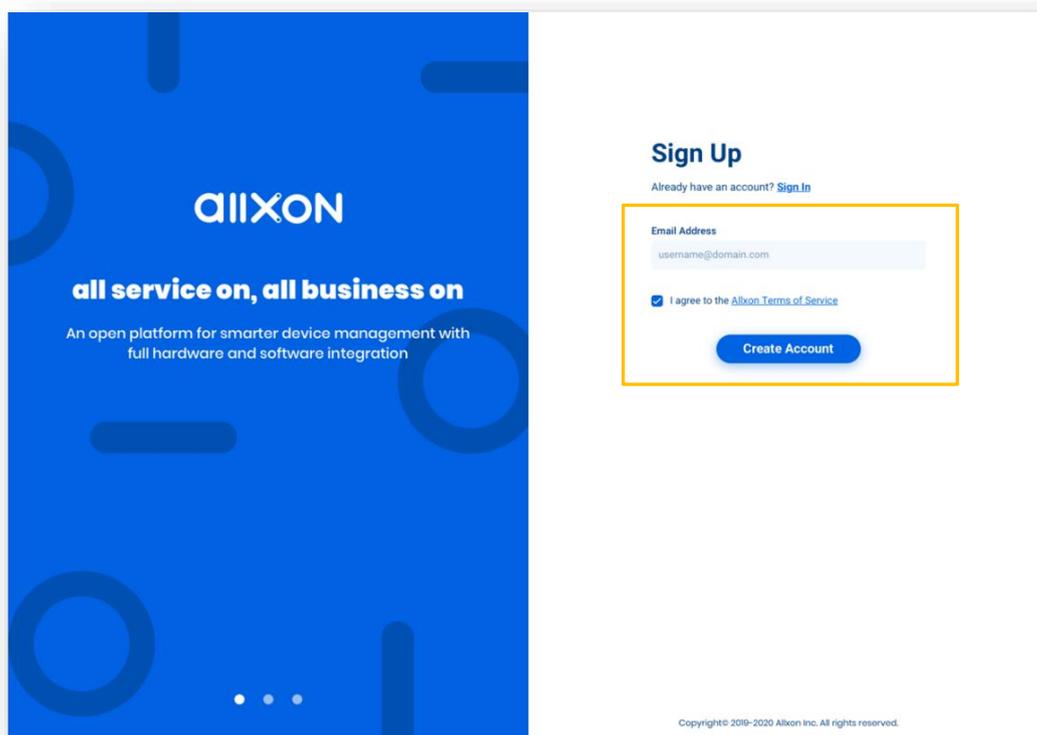
Allxon is a ready-to-use and easy-to-integrate SaaS, providing simple and easy-to-navigate device management services for SI & MSPs. With just one Allxon account, business can not only save time on resolving device issues but also save money on labor costs and operation costs.

2. Sign Up and Activate

2.1 Sign Up

To sign up for an Allxon account, please follow the steps below.

- 1 Navigate to [Allxon Sign Up Page](#)
- 2 Type in your **“Work Email”** and click **“Create Account”**



3 Receive an activation email

You will receive an activation email with **Subject: Activate Your Allxon** from Allxon (no-reply@allxon.net). Please check your inbox for the activation email and complete the account setup.

Note

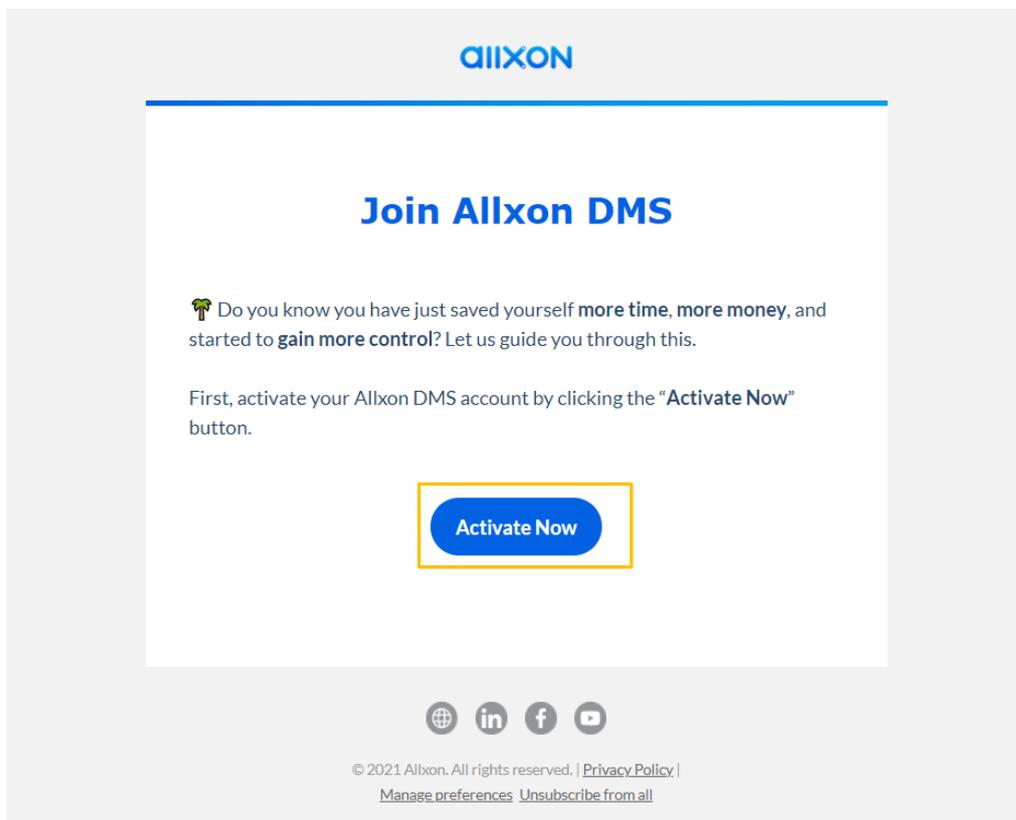
Sometimes activation email may be hard to find.
Here is what you can do :

- **Wait 15 minutes** for email delivery.
- **Check your spam or junk mail folder** for an email from no-reply@allxon.net
- Add email contact or approved senders list with no-reply@allxon.net
- **Try signing up again** with the same email address. If the account already exists, you'll see an error indicating that there is a duplicate email address.

Click **"Forgot Password"** on [Allxon Sign In Page](#) and follow the instructions to activate your account.

2.2 Activate

You will receive an activation email from Allxon, please click the **"Activate"** to proceed the activation process.



3. Sign In

Congratulations! You have completed your user account set up. Now you can sign in to Allxon Portal at <https://dms.allxon.com/> with your newly created account and password. Time to start your smart operation management journey with us !

4. Allxon Agent on Device

To pair your edge device, you will first need **Allxon Agent** installed on your device & get the device pairing code. Follow the steps to install **Allxon Agent**.

✓ Environment

At your edge device



💡 Note

Already have **Allxon Agent** installed on your device?

Simply bring up **Allxon Agent** by pressing **Ctrl + Shift + B** and skip to [4.2 Get Device Pairing Code](#)



4.1 Install Allxon Agent

Allxon has partnered with many global leading Independent Hardware Providers to ease the installation process and to bring best remote monitoring & management and disaster recovery solutions to users.

There are two ways to install Allxon Agent:

- Execute Allxon Agent installer on device desktop (selected devices only)
- Enter installation command at terminal/shell.

4.1.1 Install Allxon Agent via Desktop Installer

With selected devices from Allxon's hardware partners, users can easily launch the Allxon Agent installation from Desktop.

- 1 Navigate to **Desktop** and **Double-click** the Allxon icon. (selected devices only)



Note

Having trouble finding Allxon icon on Desktop?

Please go [4.1.2 Install Allxon Agent via Command Prompt](#) to install Allxon Agent manually.

- 2 To continue the installation process, press '**Enter**' in the terminal.

```
allxon_dms_installer.sh
File Edit Tabs Help
Remote Device Monitoring and Management Solution
-----
Allxon, an NVIDIA® Jetson™ Preferred Partner, provides easy and secure remote monitoring & management solutions to edge devices on various platforms. Allxon Device Management Solutions (Allxon DMS) is free for basic device management services; you can use Allxon DMS to access & manage your edge devices, and to solve operation problems remotely.

Want to know more? Please visit https://allxon.com/

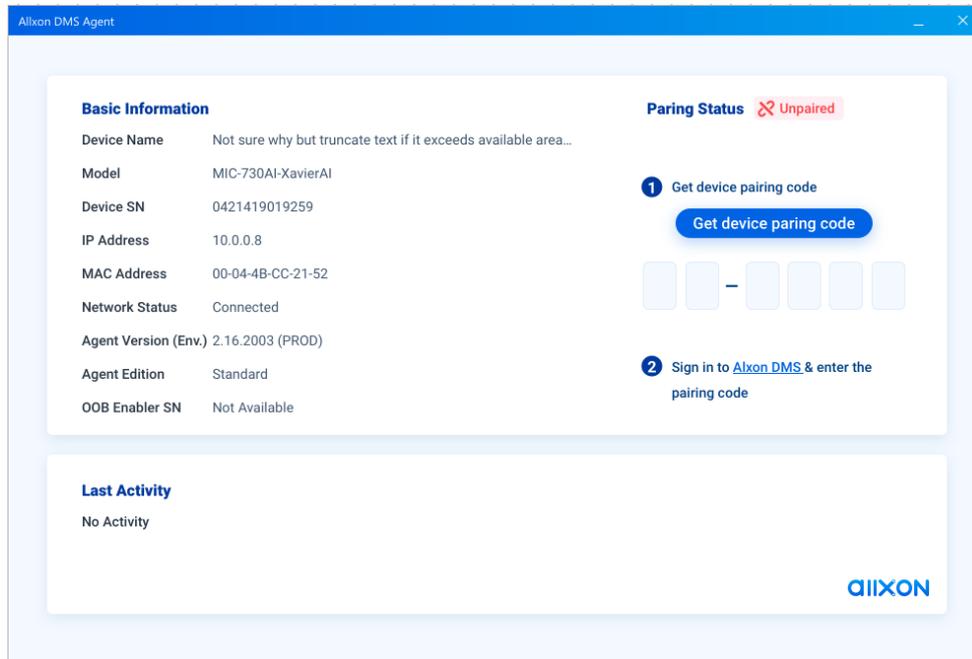
Before you get to monitor, manage & control this device remotely from Allxon DMS, you need to install Allxon DMS agent on your edge device first. This package contains some dependency libraries.

List of dependency libraries:
gcc-multilib or g++-multilib, libssl-dev, libcurl4, gnome-screenshot, lshw, lm-sensors, libblkid1, x11-xserver-utils, net-tools

Press [Enter] to continue Allxon DMS agent installation or Ctrl+C to cancel installation.
```

- 3 Upon successful installation, **Allxon Agent** should start up automatically in 5 seconds.

If the **Allxon Agent** does not start, please press **Ctrl + Shift + B** to start the agent.



- 4 Allxon Agent is now installed on your edge device. Please proceed to [4.2 Get Device Pairing Code](#) to get your device pairing code, add your edge device on Allxon, and start managing it!

4.1.2 Install Allxon Agent via Command Prompt

Don't worry if you are not able to find an Allxon Agent installer on desktop. Allxon provides another easy and fast installation method – Installation via Command Prompt.

1 To install Allxon Agent via command prompt, please follow the instructions below. By entering the command, the installation process of Allxon Agent and the related packages will start automatically.



Note

Please Input the following command without inserting newline.



Linux: Installation Command in Terminal or SSH client

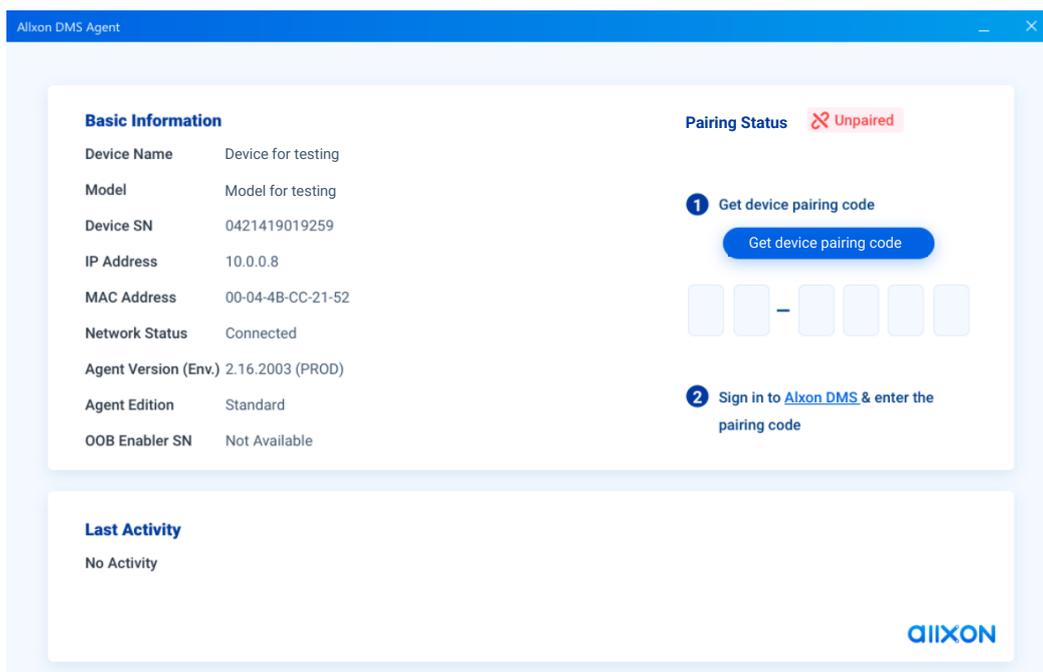
```
sudo bash -c "$(wget -qO - https://get.allxon.net/linux)"
```



Windows: Installation Command in Command Prompt (Run as Administrator)

```
powershell -command "Invoke-WebRequest -OutFile %temp%\agent-installer.bat https://get.allxon.net/windows" && %temp%\agent-installer.bat
```

2 Upon successful installation, **Allxon Agent** should start up automatically. If the **Allxon Agent** does not start, please press **Ctrl + Shift + B** to start the agent.



The screenshot shows the Allxon DMS Agent interface. The title bar reads "Allxon DMS Agent". The interface is divided into two main sections: "Basic Information" and "Pairing Status".

Basic Information:

Device Name	Device for testing
Model	Model for testing
Device SN	0421419019259
IP Address	10.0.0.8
MAC Address	00-04-4B-CC-21-52
Network Status	Connected
Agent Version (Env.)	2.16.2003 (PROD)
Agent Edition	Standard
OOB Enabler SN	Not Available

Pairing Status: Unpaired (indicated by a red 'X' icon).

1 Get device pairing code

Get device pairing code

2 Sign in to [Allxon DMS](#) & enter the pairing code

Last Activity: No Activity

The Allxon logo is visible in the bottom right corner of the interface.

4.2 Get Device Pairing Code

One last thing before pairing the device on Allxon is to get your device pairing code from the device. Depending on your application, you can choose to obtain the pairing code using **Graphical User Interface (GUI)** or **Command-Line Interface (CLI)**.

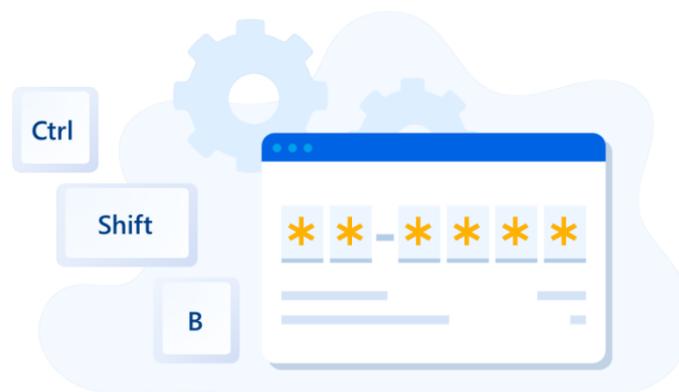
4.2.1 Using Graphical User Interface (GUI)

✓ Environment

Allxon Agent on edge device with **Graphical User Interface**.



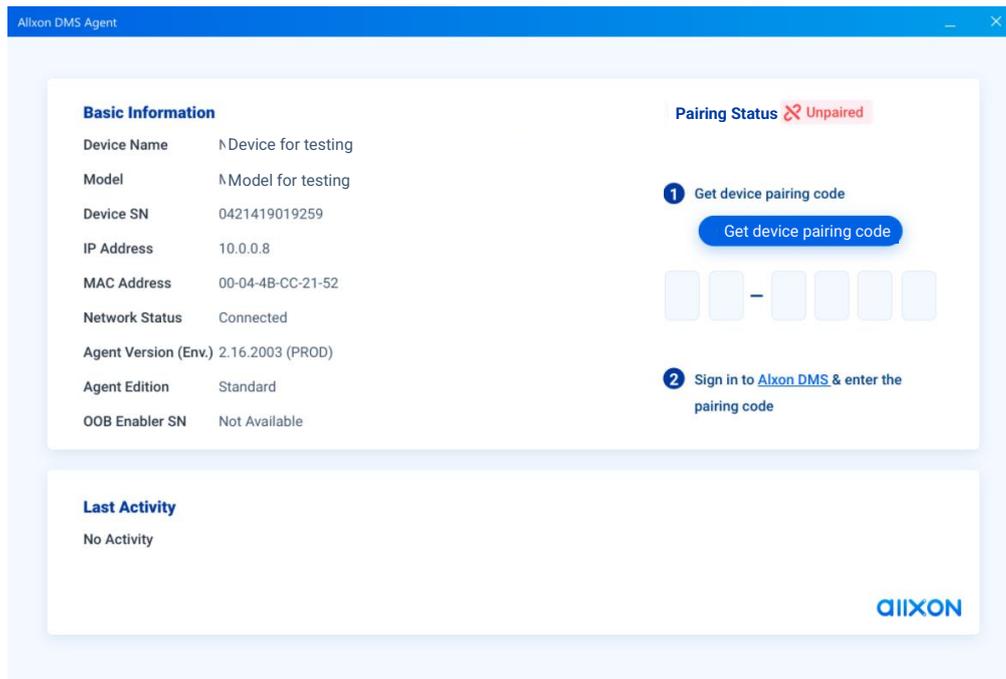
- 1 Bring up Allxon Agent by pressing “**Ctrl + Shift + B**” on your device.



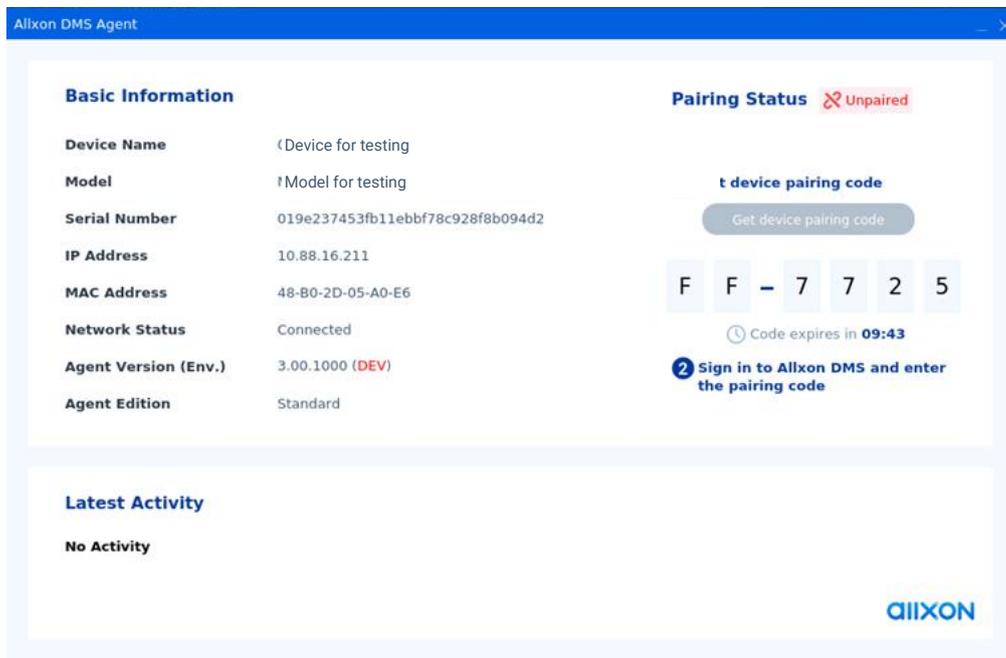
💡 Note

If your device does not have Allxon Agent Installed on it, please refer to [4.1](#) [Install Allxon Agent](#) to complete the installation.

- 2 Click **"Get device pairing code"** button on the right.



- 3 A device pairing code will be shown upon click.



4.2.2 Using Command-Line Interface (CLI)

✓ Environment

Allxon Agent on edge device
with **Command-Line Interface**.



💡 Note

1. If your device does not have Allxon Agent Installed on it, please refer to [4.1 Install Allxon Agent](#)
2. The Command-Line Interface is only supported in the following architectures and operation systems
 - **Linux on ARM for NVIDIA Jetson systems** running on Ubuntu 18.04
 - **Linux x86 (32-bit & 64-bit)** devices running on Ubuntu 18.04 & onward

1 If you are accessing your device with **Command-Line Interface**, you can get the device pairing code by entering the command below via terminal or SSH client.

- ✓ **Linux:** Get Pairing Code Command via terminal or SSH client.

```
dms-get-pairing-code
```

2 A device pairing code will be shown upon execution.

```
james@ubuntuserver:~ — ssh
james@ubuntuserver:~$ dms-get-pairing-code
Allxon DMS Device Pairing Code: "FF-7725"
Please sign in to Allxon DMS (https://dms.allxon.com) & enter the pairing code in 10 minutes (before
July 7, 2021 17:30 system time)
```

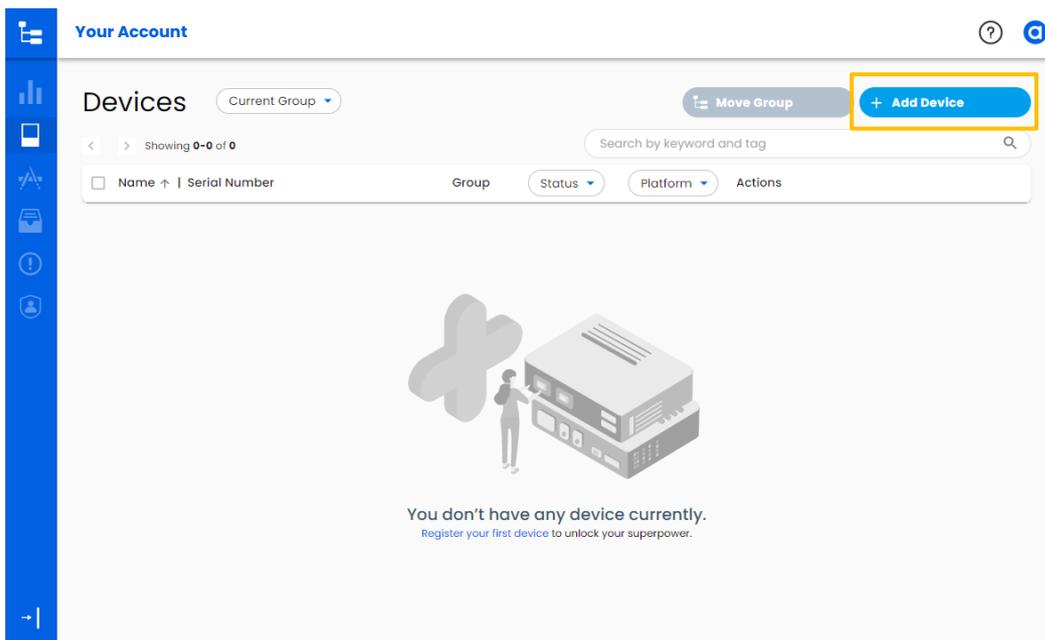
5. Add Your Device on Allxon Portal

Allxon is committed to making remote device management services compatible and available for all edge devices. **Allxon Agent** makes pairing In-Band devices and Out-Of-Band functions to Allxon Portal quick and easy.

Allxon supports multiple platforms and operating systems, such as NVIDIA® Jetson™ empowered edge devices, and further ensures installation of **Allxon Agent** for other edge devices is as simple as the pairing process.

5.1 Get Ready for Device Pairing

To add your device, sign in to [Allxon Portal](#) and hover over to the left navigation panel. Click on **Devices**.



Click on **+Add** button and have your **device pairing code** ready.

 **Note**

Haven't got your device pairing code?
Please head back to [4.2 Get Device Pairing Code](#) to get the code.

5.2 Enter Device Pairing Code

With your device pairing code on your hand, please follow the steps below to enter the code on Allxon Portal.

✓ Environment

On Allxon Portal



- 1 On Allxon Portal, please enter device pairing code obtained in [4.2 Get Device Pairing Code](#) to complete the Add Device process.

Input the Pairing Code

F F - 7 7 2 5

Back Next

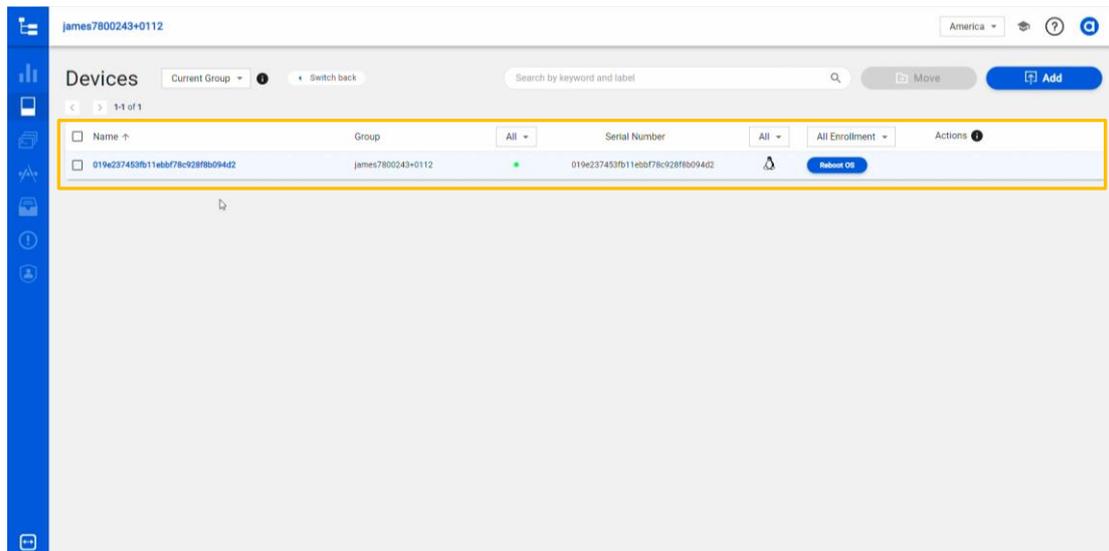
- 2 After entering the device pairing code, you should see a **“Pairing Completed”** message. You can click **“Next”** to redeem promotion offer with promotion code, see [Appendix A: Redeem Promotion Code](#) for detail, or click **“Skip”** to finish the pairing process.

Pairing Completed. You Are Ready to Go!

Have a promotion code? You can go to next step and redeem them.

Skip Next

- 3 Once the pairing process is complete, your edge device will appear on your **Device page** list with some general information and management controls.



To fully experience Allxon with **Out-Of-Band disaster recover solutions**, head over to the next chapter, [5.2 Enter Device Pairing Code](#), to learn how to link your device to Allxon swiftDR OOB Enabler.

6. Enable Out-Of-Band Control on Device

Allxon swiftDR OOB Enabler is a hardware module that can be integrated in edge devices to realize remote out-of-band disaster recovery. This cutting-edge technology allows you to perform enforcement shutdown and schedule power on/off the device even when the hardware and software are not responding.

✓ Environment

On your edge device
with **Allxon swiftDR OOB Enabler**



💡 Note

Do not have Allxon swiftDR OOB Enabler integrated in your device?
Please contact Allxon Service at service@allxon.com for more information on giving you the ability to control your devices via Out-Of-Band.

After completing In-Band device pairing at [5. Add Your Device on Allxon Portal](#), you will now be able to link your Allxon swiftDR OOB Enabler to Allxon Portal by following these simple steps below:

Bring up **Allxon Agent** by pressing **Ctrl + Shift + B** on your edge device. The **Pairing Status: Paired** indicates your In-Band device is paired and connected to your Allxon Portal. You will now need to configure the OOB Enabler by clicking **Configure & Link OOB**.

The screenshot shows the 'Allxon DMS Agent' window. It features a 'Basic Information' section with the following details:

Device Name	Device for testing
Model	Model for testing
Device SN	0421419019259
IP Address	10.0.0.8
MAC Address	00-04-4B-CC-21-52
Network Status	Connected
Agent Version (Env.)	2.16.2003 (PROD)
Agent Edition	Standard
OOB Enabler SN	Not Available

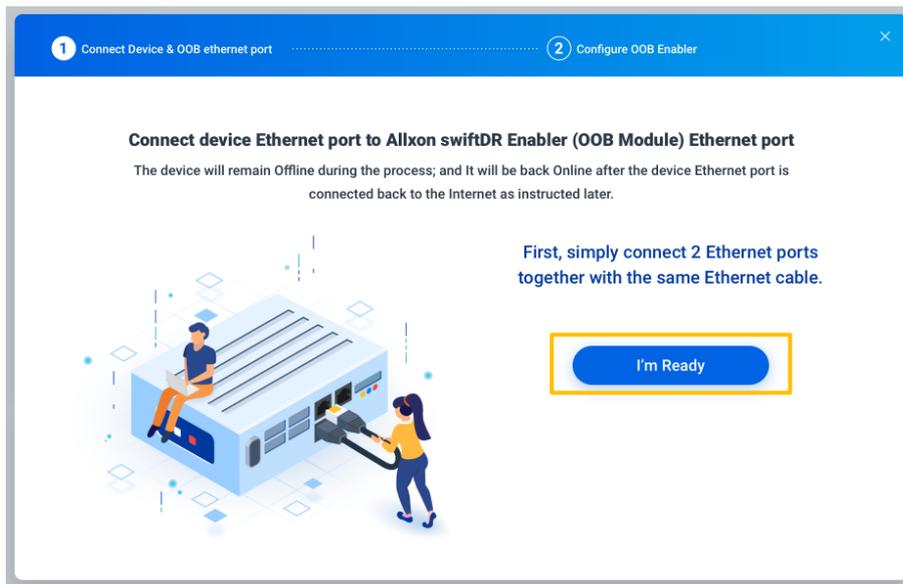
On the right side of the interface, there is a 'Pairing Status' indicator showing 'Paired' with a green checkmark. Below this, there is a 'Configure & Link OOB' button. At the bottom of the window, there is a 'Last Activity' section showing 'No Activity' and the Allxon logo.

6.1 Connect OOB Enabler to Device

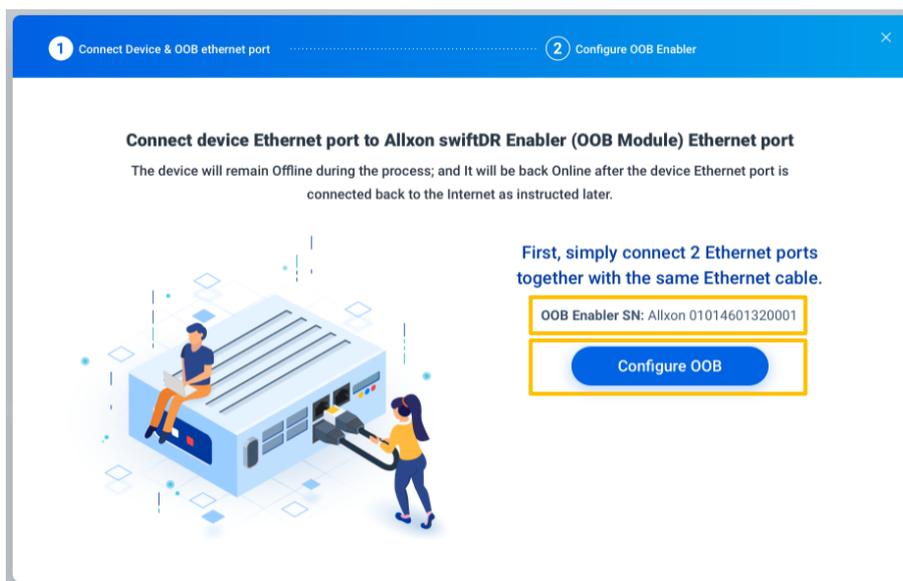
- 1 Connect **OOB Ethernet port** to **device Ethernet port** using an Ethernet cable. Once the ports have been connected, click on **I'm Ready**.

 **Note**

The device will remain offline during the process until the Ethernet cable is reconnected to the internet as instructed later.



- 2 An **OOB Enabler Serial Number** will appear to help you verify your connection with the OOB Enabler. Click **Configure OOB** to continue.



6.2 Verify OOB Enabler Identity

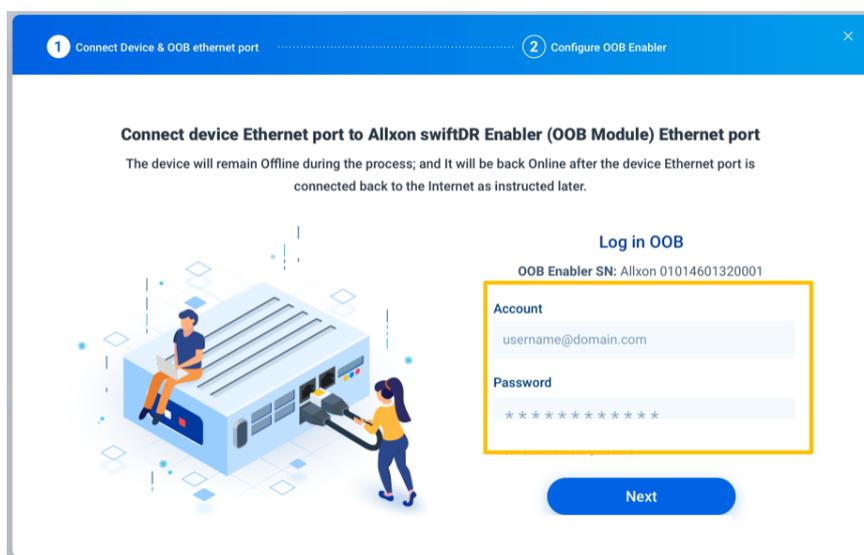
1 To complete OOB Enabler configuration, verify your identity using the following default OOB Enabler credentials, then click **Next**:

Default OOB Enabler Credentials

Account: admin

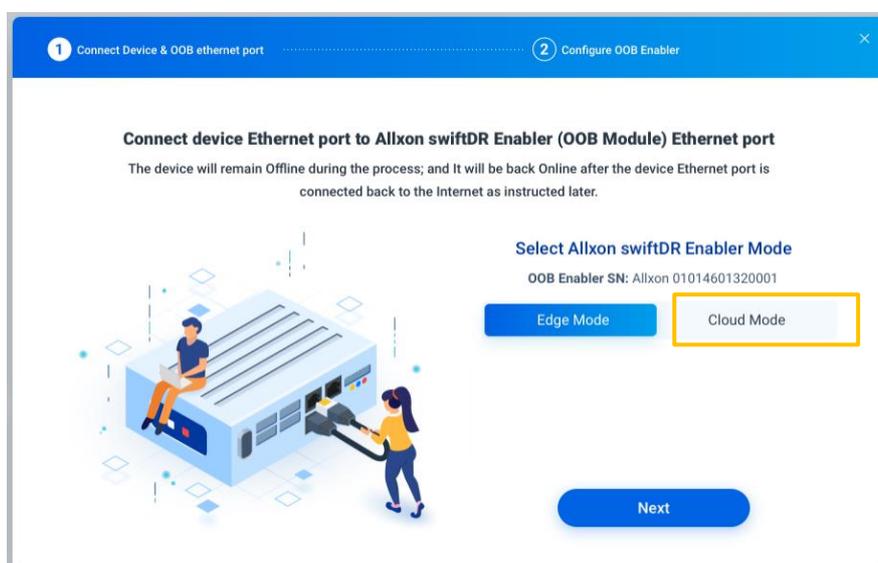
Password: 0000

*Note: If you have already changed your password, then verify with new account and password details to complete OOB Enabler configuration.



The screenshot shows a web interface for configuring the OOB Enabler. At the top, there are two tabs: "1 Connect Device & OOB ethernet port" and "2 Configure OOB Enabler". The main heading is "Connect device Ethernet port to Allxon swiftDR Enabler (OOB Module) Ethernet port". Below this, a note states: "The device will remain Offline during the process; and It will be back Online after the device Ethernet port is connected back to the Internet as instructed later." On the left, there is an illustration of a person sitting on a server rack and another person plugging a cable into it. On the right, there is a "Log in OOB" section with the OOB Enabler SN: Allxon 01014601320001. Below this, there are two input fields: "Account" with the value "username@domain.com" and "Password" with masked characters "*****". A blue "Next" button is located at the bottom right.

2 Select **Cloud mode** to proceed with OOB Enabler configuration, then click **Next**.



The screenshot shows the same web interface as above, but now in the "2 Configure OOB Enabler" tab. The heading is "Connect device Ethernet port to Allxon swiftDR Enabler (OOB Module) Ethernet port" and the note is the same. On the left, the illustration is the same. On the right, there is a "Select Allxon swiftDR Enabler Mode" section with the OOB Enabler SN: Allxon 01014601320001. Below this, there are two buttons: "Edge Mode" and "Cloud Mode". The "Cloud Mode" button is highlighted with a yellow border. A blue "Next" button is located at the bottom right.

- 3 In Network Settings, switch **On DHCP** and enter the details for **Primary DNS, Secondary DNS, Primary NTP Server, and Secondary NTP Server**. Click **Save & Link** to proceed with configuration and device pairing.

Connect Device & OOB ethernet port 2 Configure OOB Enabler

Allxon swiftDR Enabler (OOB Module) Allxon 01014601320001

Edge Mode

Network Settings

DHCP	On	Off	Primary DNS	192.168.0.100
IP	192.168.0.100		Secondary DNS	256.244.235.0
Net Mask	256.244.235.0		Primary NTP Server	192.168.0.100
Default Gateway	256.244.235.0		Secondary NTP Server	256.244.235.0

Back Cancel Save & Link

6.3 Reconnect LAN

- 1 After you have entered the details, your OOB Enabler network setting will be configured, and your OOB Enabler will be paired to your In-Band device. **Disconnect the Ethernet cable** from the device Ethernet port and OOB Ethernet port. Then reconnect the device Ethernet port and the OOB Ethernet port to the internet **separately**. Click **Finish**.

Connect Device & OOB ethernet port Configure OOB Enabler

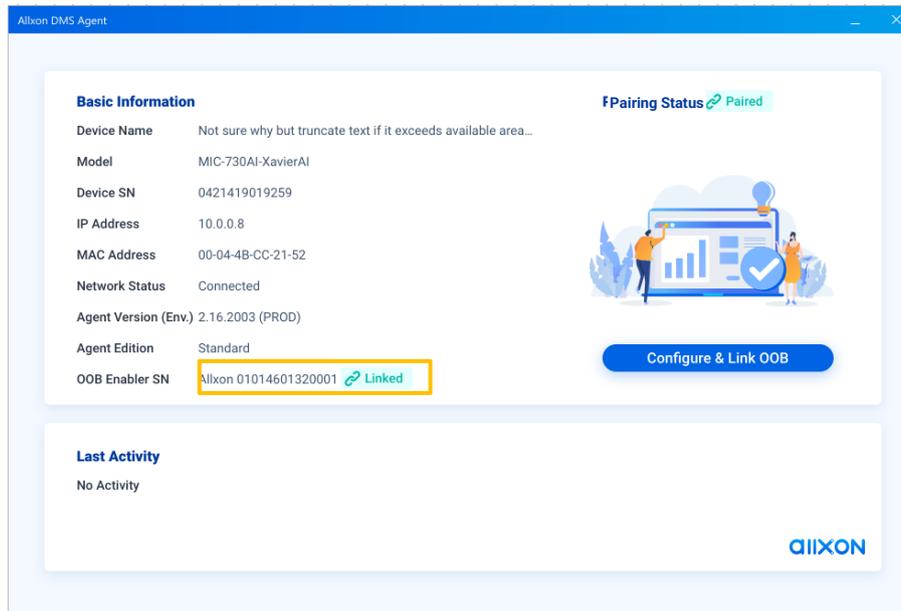
Allxon swiftDR Enabler (OOB Module) Allxon 01014601320001 Linked, waiting to update

Connect Device Ethernet Port & OOB Ethernet Port to the Internet Separately

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc cursus at mauris nec dictum.

Finish

- 2 Upon successful pairing, the **serial number** of your **OOB Enabler** will appear on **Allxon Agent** and will be marked as **Linked**.



The screenshot displays the Allxon DMS Agent interface. The window title is "Allxon DMS Agent". The main content area is divided into two sections: "Basic Information" and "Last Activity".

Basic Information

Device Name	Not sure why but truncate text if it exceeds available area...
Model	MIC-730AI-XavierAI
Device SN	0421419019259
IP Address	10.0.0.8
MAC Address	00-04-4B-CC-21-52
Network Status	Connected
Agent Version (Env.)	2.16.2003 (PROD)
Agent Edition	Standard
OOB Enabler SN	Allxon 01014601320001 Linked

Pairing Status Paired

Last Activity
No Activity

[Configure & Link OOB](#)

AIIXON

Power ON, and Stay In Touch

Congratulations on pairing all your devices! Simply start monitoring and managing and let us know how you like it. Thank you for taking the time to understand Allxon better.

If you have any further questions, please do not hesitate to reach out. We love to hear from you.

Power ON, and stay in touch!

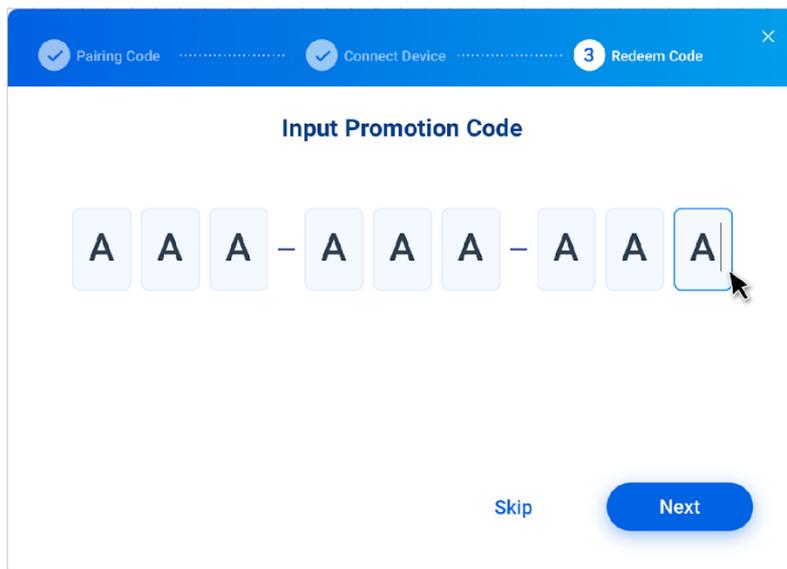
Allxon Team.

Appendix A: Redeem Promotion Code

Redeem Promotion Code

Don't miss a chance to redeem an exclusive offer to fully experience how Allxon can elevate your business operations management.

1 Enter the 9-character promotion code and click **Next** to redeem the offer.



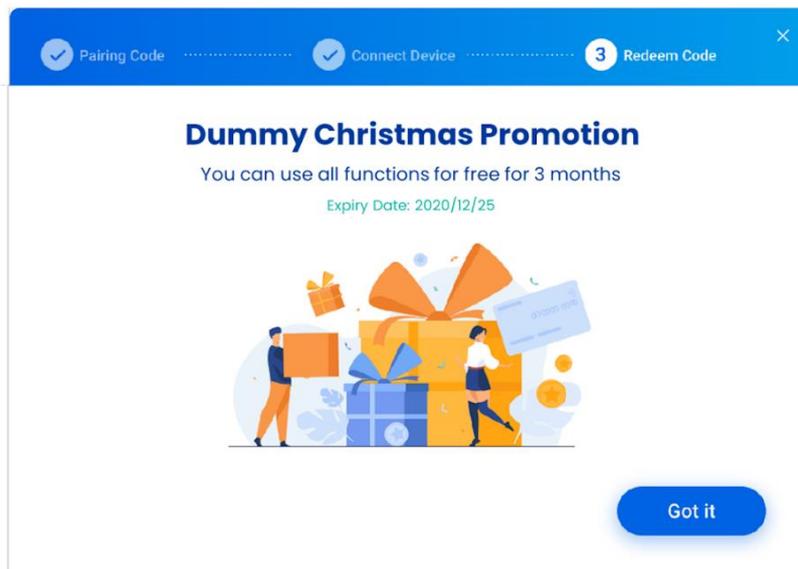
Pairing Code Connect Device **3 Redeem Code**

Input Promotion Code

A A A - A A A - A A A

Skip Next

2 After successfully redeeming an offer, you should see a short description of its terms of use.



Pairing Code Connect Device **3 Redeem Code**

Dummy Christmas Promotion

You can use all functions for free for 3 months

Expiry Date: 2020/12/25

Got it

Appendix B: Uninstall Allxon Agent

Uninstall Allxon Agent

To uninstall Allxon Agent, please type in the following command. By entering the command, the uninstallation of Allxon Agent and the related packages will start automatically.

**Note**

Please Input the following command without inserting newline.

**Linux:** Uninstallation Command in Terminal or SSH client

```
sudo bash -c "$(wget -qO - https://dev.allxon.net/linux) -s --uninstall"
```

**Windows:** Uninstallation Command in Command Prompt

(Run as Administrator)

```
powershell -command "Invoke-WebRequest -OutFile %temp%\agent-installer.bat https://get.allxon.net/windows/uninstall.bat" && %temp%\agent-installer.bat
```

Appendix C: Library dependency list

List of library or package dependencies of Allxon Agent.

Ubuntu (ARM, x86) 18.04, 20.04

	Package	Description
1*	gcc-multilib or g++-multilib	Allxon Agent installation.
2	libssl1	Server-related connections.
3	gnome-screenshot	Screenshot-related function.
4	lshw	Hardware information acquisition (e.g., keyboard, mouse, etc.).
5	libblkid1	Hardware information acquisition (e.g., USB).
6	x11-xserver-utils	Hardware information acquisition (e.g., HDMI connection status).
7	net-tools	Software information acquisition (e.g., network status).
8	fonts-roboto	Roboto Font Package Installation

* "gcc-multilib" and "g++-multilib" are the default packages in Ubuntu 18.04 (ARM), please ensure that either one of the packages is installed.

Appendix D: Internet Access Requirement for Allxon Agent

Some Allxon Agent features rely on internet connectivity for full functionality. If your organization restricts network communication with the internet using a firewall or proxy device, make sure to allow these endpoints.

In-band Service

#	Destination	Protocol	Port	Purpose
1	endpoints.adm.allxon.com	HTTPS	443	Connection between Allxon Agent and Allxon Portal
2	api-us.adm.allxon.com	HTTPS	443	
3	api.adm.allxon.com	HTTPS	443	Access to Allxon device API
4	bdmwebfile-prod-us.s3.us-east-2.amazonaws.com	HTTPS	443	Amazon S3 storage for screenshot, log collections , command execution, and any temp file storage
5	iot-us.adm.allxon.com	MQTTS	443 or 8883	MQTTS
6	cloudflare-dns.com	HTTPS	443	DNS over HTTPS
7	roughtime.cloudflare.com	UDP	2002	Clock Synchronization

Out-of-Band Service

#	Destination	Protocol	Port	Purpose
1	endpoints.adm.allxon.com	HTTPS	443	Connection between Allxon Agent and Allxon Portal
2	api.adm.allxon.com	HTTPS	443	
3	api-us.adm.allxon.com	HTTPS	443	Access to Allxon device API
4	bdmwebfile-prod-us.s3.us-east-2.amazonaws.com	HTTPS	443	Amazon S3 storage for screenshot, log collections , command execution, and any temp file storage
5	iot-us.adm.allxon.com	MQTTS	443 or 8883	MQTTS
6	time.google.com	UDP	123	Clock Synchronization