

# <sub>DMS</sub> <u>User Manual</u>

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### Introduction

DMS Cloud is designed for use in settings where multiple deices are spread out across various spaces. It enables remote and centralized management of multiple digital projectors and displays by IT administrators/technicians. DMS Cloud's management capabilities include the ability to remotely monitor, control, and configure devices individually or as groups.

### System requirements

To use DMS Cloud, a computer must meet the following minimum hardware and software requirements.

CPU	1.8 GHz
Free memory	8 GB
Display resolution	1024 x 768 or higher
Browser	<ul> <li>Chrome version 75.0.3770 or higher</li> <li>Firefox version 70.0</li> <li>Edge version 14+</li> <li>Safari version 101+</li> </ul>
Other	Internet access

For a device to support management via DMS Cloud, the device must feature the following item:

An RJ-45 Ethernet port with LAN control functionality

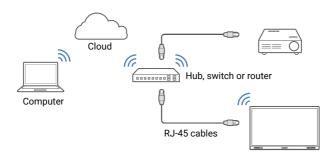
#### Note

DMS Cloud also supports non-BenQ projectors that utilize the PJLink protocol.

## **Initial setup**

Before you use DMS Cloud to manage your device(s), the following setup procedures must be completed:

- Connect the devices to a network with Internet access
- Ensure the computer using DMS Cloud is connected to a network with Internet access
- Configure device settings



#### Note

- For details on the location of ports and connectors, please refer to the documentations for the computer and devices.
- [For Projectors only]: Ensure that the IP address for each projector is properly set and that the IP address is shown on the OSD menu of the projector. You may need to contact your network administrator for assistance in setting the projectors' IP addresses.

# Configure settings (for projectors only)

For DMS Cloud to access a projector while it is in standby mode, the settings on the projector must be pre-configured by your IT administrator to ensure that the **Enable Network Standby Mode** setting in the projector's setting menu is set to **On**.

#### Note

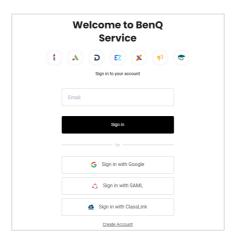
- For BenQ projectors, this setting can be found in either the System > Standby Settings > Network or Advanced > Standby Settings > Network menu.
- For non-BenQ projectors, refer to the documentation for the device.
- For certain projectors, "Monitor Out" should be enabled in the standby settings menu to ensure
  that the projector is accessible while in standby mode. Refer to your projector's user manual for
  details.

## Sign in to DMS Cloud

To enter DMS Cloud, open the following link in your browser: http://dms.benq.com. Enter your E-mail and passwords to sign in.

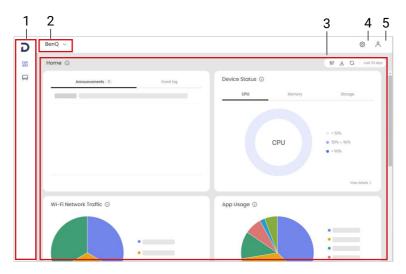
#### Note

If you are not the administrators in your organization and your account is not activated yet, please contact your administrators.



## **DMS Cloud home page**

Once you sign in, the home page for DMS Cloud will be shown. The following items are featured on the DMS Cloud home page.



No.	Item	Description
		Hover over the panel to view menu options.
1	Navigation panel	• 🔐 Dashboard
		• 🖵 Devices
2	Switch company	See Switch companies on page 4 for details.
3	Dashboard	See Dashboard overview on page 5 for details.
4	Settings	Adjust language and view other system settings.
5	^ Account	Edit account settings such as username, password or time zone.

### Switch companies

If you are the external agent of other organizations, you can switch over to a different company's set of devices managed by the same DMS Cloud account.

#### Note

This feature is only accessible to accounts that have enabled the multi-company function.

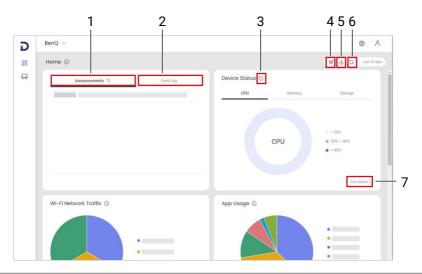
1. Select the current company name to view a list of companies managed by your DMS account.



2. Select the company you want to switch to.



#### Dashboard overview



No.	Item	Description	
1	Announcements	Shows the latest update information.	
2	Event log	Shows the status of scheduled events, including <b>processing</b> , <b>fail</b> , <b>success</b> .	
3	(i) Information	Points to the icon to show additional information of a certain function.	
4	∜ Customize	Specifies a range for data analysis. See Customize data range on page 5 for details.	
5	$ ule{blue}$ Download	Exports the data report.	
6	G Refresh	Updates the status of devices.	
7	View detail	View the complete data analytics.	

### Customize data range

- 1. Select of Customize in the upper-right corner of the dashboard.
- 2. Adjust the date range for data analysis.
- 3. Select Apply.

### Add devices

To manage devices via DMS Cloud, the devices must first be added into the DMS Cloud device database. You can use any one of the following methods to add devices into DMS Cloud:

- Add devices via the BenQ DMS Tool App
- Add devices in DMS Cloud

### Add devices via the BenQ DMS Tool App

Use BenQ's DMS Tool mobile app to add a device to your DMS Cloud account. To add a device via the DMS Tool App:

- On your mobile device, install **BenQ DMS Tool** app in the iOS App Store or Google Play Store.
- 2. Sign in to the **BenQ DMS Tool** app with your DMS Cloud account.
- 3. Select + and scan the serial number barcode or QR code to add devices.
  - Barcode: Find your product's barcode on the side of the package box or on the side of the product.
  - QR code: To find the QR code for your BenQ product, see Access device info in DMS Client on page 7.



#### Add devices in DMS Cloud

 Make sure you have your device information ready. See Access device info in DMS Client on page 7 or Download device info from DMS Local on page 7 for details.

- 2. Go to Devices > Devices.
- 3. Select + Add > Devices.
- 4. Choose to add devices through **Bulk enrollment** or **Individual enrollment**.
- 5. Follow the on-screen descriptions to enroll your device.

#### Access device info in DMS Client

Only available for products that support DMS Client app.

**Note:** Ensure that your devices are connected to a network with Internet access, as described in Initial setup on page 2.

Open the DMS Client app on the device you want to add. The **Unique ID** and **Temporary Pairing Code** will be shown on the screen. You can also scan the QR code with **BenQ DMS Tool** App.



#### Download device info from DMS Local

To transfer device data from DMS Local to DMS Cloud, use any one of the following methods:

- A. Export the device listings in CSV form. See the "Exporting Device Listings" section in the DMS Local user manual for details.
- B. Transfer the device listings through QR code or pairing code. See the "Transferring Device Listings to DMS Cloud via Agent Mode" section in the DMS Local user manual for details.

# Add groups/tags

- 1. Go to Devices > Devices.
- 2. Select + Add > Group/Tag.
- 3. Enter a name.
- 4. Select Add.

### Manage groups

Select  $\stackrel{...}{...}$  Groups to view all device groups. Select  $\ll$  Collapse to hide the group panel.

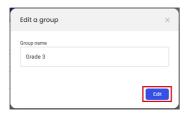


#### Edit a group name

- 1. Select 🔓 Groups.
- 2. Point to the group you want to edit. The icon  $\cdots$  appears.
- 3. Select · · · and choose to Edit group name.



4. Specify a new name and select Edit.



#### Delete a group

- 1. Select 🚠 Groups.
- 2. Point to the group you want to edit. The icon · · · appears.
- 3. Select · · · and choose to **Delete a group**.



4. Select Delete.



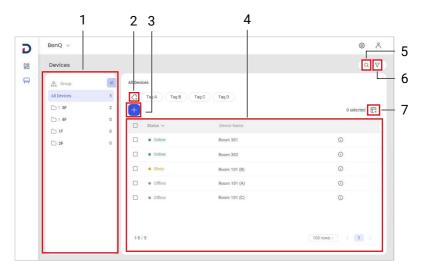
#### Move groups

- 1. Select 🔓 Groups.
- 2. In the group panel, select and hold a group you want to move.
- 3. Slide the group to where you want and drop it.

# Manage your devices

DMS Cloud features the device panel to monitor the status of your device. To view detail information of your device, see Quick settings in action bar on page 11 and Adjust detail information of a device on page 13.

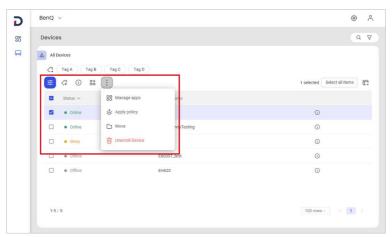
### Device page overview



No.	Item	Description
1	器 Groups	Shows all device groups managed by DMS Cloud. See Manage groups on page 8 for details.
2	<b>◯</b> Tags	View and edit tags.
3	+ Add	Add a new device/group/tag.
4	Device list	Shows devices enrolled in DMS Cloud.
5	<b>▽</b> Filter	Filter to show specific devices.
6	○ Search	Find specific devices.
7	☐ Select columns	Adjust the information shown in the device list.

## Quick settings in action bar

Once one or more devices are selected in the device list, the action bar appears. The action bar provides tools for IT administrators to apply general settings quickly.

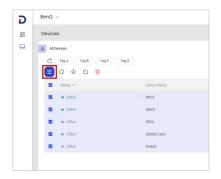


No.	Item	Description
1	<b>☼</b> Control	Shows the control panel for quick settings. See Control panel on page 11.
2	← Tags	Manage tags of the selected devices.
3	i Detail info*	View and edit detail information of a device.
4	□ hostall apps*	Install apps to a selected device.
5	□ Manage apps*	Manage installed apps on a selected device.
6	♣ Apply policy	Apply a certain policy to the selected devices.
7	☐ Move	Move devices to another group. See Move devices between groups on page 13.
8	Unenroll device	Remove the selected device from DMS Cloud.

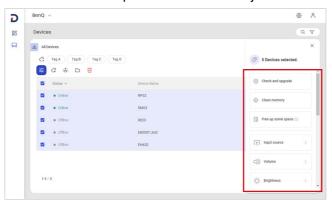
#### Control panel

- 1. Go to Devices > Devices.
- 2. Select the devices you want to edit. The action bar appears.
- 3. Select **Control** to open the control panel.

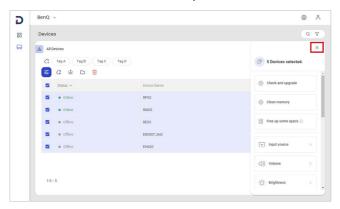
\* The option only appears when a single device is selected.



4. Select the control options to make the adjustments.



5. Select  $\times$  to close the control panel.



#### Delete a device

- 1. Go to Devices > Devices.
- 2. Select the device you want to delete.

3. In the action bar, select in Unenroll device.

#### Move devices between groups

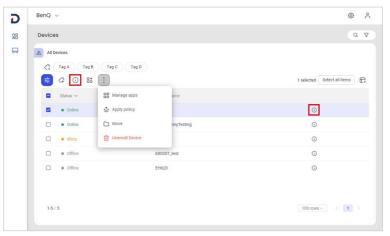
- 1. Go to Devices > Devices.
- 2. Select the devices you want to move.
- 3. In the action bar, select \( \bigcap \) Move.
- 4. Choose a new group for the devices.
- 5. Select Apply.

#### Apply policy to a device

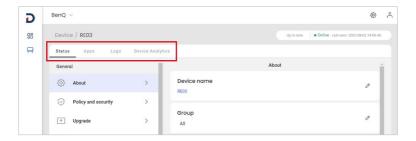
- 1. Go to Devices > Devices.
- 2. Select the devices you want to edit.
- 3. In the action bar, select  $\diamondsuit$  **Apply policy**.
- 4. Choose the policy to apply.
- 5. Select Deploy.

### Adjust detail information of a device

- 1. Go to Devices > Devices.
- 2. Select (i) **Detail info** from a device you want to edit.



- 3. A page with full information of the device appears.
- 4. Select a tab to view and edit detail information of the device.



#### Note

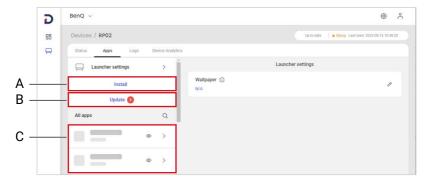
You can also use **Control** for quick device settings. See Control panel on page 11.

#### Rename a device & Add device description

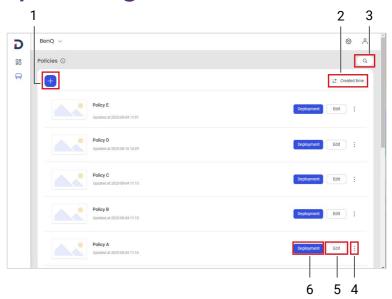
- 1. Go to Devices > Devices.
- 2. Select (i) **Detail info** from the device you want to rename.
- 3. Under the Status tab, find Device name.
- 4. Select / Edit to rename or edit description.
- 5. Select Update.

#### Manage apps on a device

- 1. Go to Devices > Devices.
- 2. Find the device you want to edit.
- 3. Select (i) **Detail info.** The device detail page appears.
- 4. Select the Apps tab.
- 5. You may install, update or delete an app here.
  - A. Install new apps to the device.
  - B. Update available apps to the latest version.
  - C. View and manage all apps installed on the device.



# Policy management



No.	Item	Description	
1	+ Add	Add a new policy.	
2	- Descending /	Specify the cost order and type	
۷	<u>-</u> ↑ Ascending	Specify the sort order and type.	
3	○ Search	Search for a policy name.	
4	More	Duplicate or delete a policy.	
5	Edit	Adjust policy settings.	
6	Deployment	Apply a policy to selected devices.	

### Add a new policy

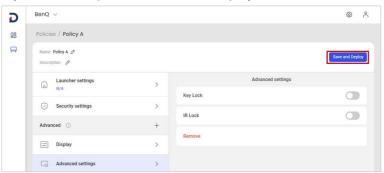
- 1. Go to Devices > Policies.
- 2. Select + **Add**.



3. Specify a name for the policy and select Add.



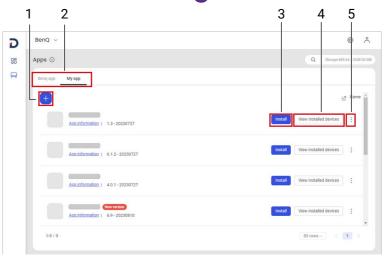
4. Adjust the settings. Select Save and deploy to continue.



- 5. A window pops up. Check the boxes for all the devices you want to apply the policy to.
- 6. Choose **Select** to proceed.
- 7. Select Confirm to apply.



# **Application management**



No.	ltem	Description	
1	+ Add	Add a new application to DMS Cloud.	
2	BenQ app / My app	Select the tab to switch the app list.	
3	Install	Install an app onto selected devices. See Install apps onto a device from the app list on page 18 for details.	
4	View installed devices	View and update app version on installed devices. See Update an app on multiple devices on page 19 for details.	
5	More	Edit or remove an app.	

### Add an app to DMS Cloud database

This feature is only available for apps in the category of My app.

- 1. Go to Devices > Apps > My app.
- 2. Select + Add.
- 3. Select the app file located in your local storage.
- 4. Enter a description for the app in the pop-up window.

**Note:** Entering an app description is not a required step. To add/edit an app description at a later time, see Edit app descriptions on page 18.

5. Select Upload.

### Delete apps from DMS Cloud database

This feature is only available for apps in the category of My app.

- 1. Go to Devices > Apps > My app.
- 2. Select More > Remove.
- 3. Check **Uninstall from all devices as well** if you want to delete the respective app installed in all devices from the DMS Cloud database.
- 4. Select Confirm.

## Edit app descriptions

This feature is only available for apps in the category of My app.

- 1. Go to Devices > Apps > My app.
- 2. Select More > Edit.
- 3. In the edit window, enter the description and click Save.

### Install app onto devices from the app list

#### Note

To view the apps installed on one certain device, see Manage apps on a device on page 14.

- 1. Go to Pevices > Apps.
- 2. Find the app you want to add onto a device. Select **Install**.



- 3. A window pops up. Check the boxes for all the devices you want to install the app to.
- 4. Choose **Select** to proceed.
- 5. Select **Confirm** to start installing.

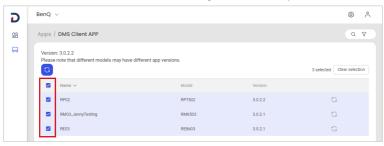


### Update an app on multiple devices

- 1. Go to Devices > Apps.
- 2. Find the app you want to add onto a device. Select View installed devices.



3. Check the boxes for all the devices you want to update.



4. Select 🔾 Update.



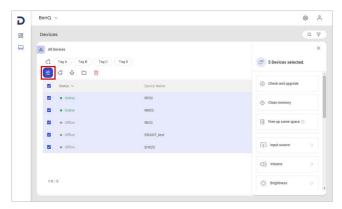
## Firmware management

Use either way to update your device firmware:

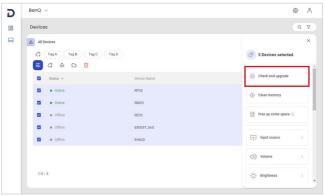
- · Update the firmware of certain devices
- · Update all firmware of the same model

### Update the firmware of certain devices

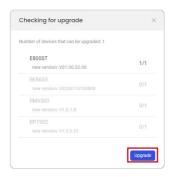
- 1. Go to Devices > Devices.
- 2. Select the devices you want to update.
- 3. Select **Control** to open the control panel.



4. Select Check and upgrade.



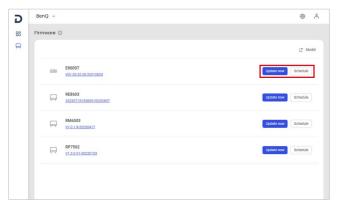
- 5. Read the DMS update notice. Select Confirm & Go.
- 6. The system will show you the number of devices you can upgrade. Select **Upgrade** to continue.



7. You can check the update status at 🔐 Dashboard > Event log.

### Update all firmware of the same model

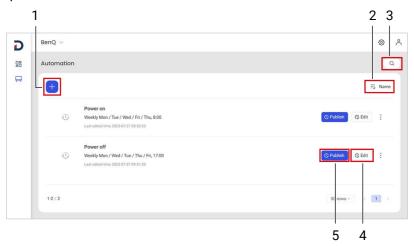
- 1. Go to Devices > Firmware.
- 2. For the model name you want to update, select Update now or Schedule.



- 3. A window pops up. You'll see the total amount of devices included in the update.
  - For Update now, select Update to continue.
  - For **Schedule**, set a date and time to update. Select **Schedule** to continue.
- 4. You can check the update status at 🖺 Dashboard > Event log.

### **Automation**

Go to **Devices > Automation**. Set your customized automation rule and apply it to multiple devices.



No.	Item	Description	
1	+ Add	Add a new automation rule.	
2	$\overline{\mathbb{T}}$ Descending /	On a sife that a sent and an and time	
	<u>-</u> ↑ Ascending	Specify the sort order and type.	
3	○ Search	Search the name of your automation rule.	
4	Edit	Edit the automation rule.	
5	Publish	Apply the automation rule to selected devices.	

#### Create an automation rule

To create an automation rule, you need to set a trigger to kick off the rule and an action to perform tasks on your devices.

For example, you can schedule to automatically power-on/off your devices:

- 1. Go to  $\square$  **Devices > Automation**. Select + **Add** to create a rule.
- 2. Specify a name and select Next.
- 3. Set a trigger for the automation.
  - A. Choose By time.
  - B. Select + **Add** to specify a time to power on/off.

- C. Select Next.
- 4. Add actions.
  - A. Select + **Add**.
  - B. Choose to Power on, Power off, or Switch input source.
  - C. Select **Done** to finish settings.
- 5. Find the schedule you created. Select **Publish**.
- 6. Select which devices you want to add the schedule to. Select Publish.

# Troubleshooting

If you encounter problems while using DMS Cloud, refer to the following troubleshooting tips to try to solve the problems by yourself. If the problem persists, please contact BenQ Customer Support for help.

Problem	Solution
Cannot connect to the device(s) (The device is showing offline in the device list)	<ul> <li>Check the following:</li> <li>Check the cable connection. Is the device correctly connected to the network?</li> <li>Is the device turned on?</li> <li>Is the device network setting correct?</li> <li>Check if the device's firmware version is up-to-date.</li> <li>Check if the DMS Client app is up-to-date.</li> <li>Check if a whitelist has been added for DMS Cloud. See Network whitelist on page 25.</li> </ul>
The device is showing that it is online, but in DMS Cloud it is listed as offline.	<ul> <li>Check if the device's firmware version is up-to-date.</li> <li>Check if the DMS Client app is up-to-date.</li> <li>Clear all cookies on your browser.</li> <li>Use Incognito mode on your browser and then launch DMS Cloud.</li> <li>Check if a whitelist has been added for DMS Cloud. See Network whitelist on page 25.</li> </ul>
Cannot power on the device via DMS Cloud	<ul> <li>Ensure that WOL (Wake-on-LAN) Settings is enabled on the device.</li> <li>Ensure that the device is connected to the network via the LAN (RJ-45). Wake-on-LAN does not work over a Wi-Fi connection.</li> </ul>
Cannot add a device into DMS Cloud	Check if the device supports LAN control.

### **Network whitelist**

If your network is in a private environment, please add a whitelist for DMS Cloud using the following URLs.

URL/DNS	Description	Port
https://dms.benq.com/	API URL (DMS Cloud & Local)	_
https://vod.benq.com/	Get Device JSON files (DMS Cloud & Local)	
http://staging2.benq.com	Get Device JSON files (v1.0.0.1) (DMS Cloud Only)	-
https://dms-relay.benq.com	MQTT Connection (DMS Cloud Only)	http://00.
https://cmota.s3.amazonaws.com/ https://cmota.s3.ap- northeast-1.amazonaws.com	MDA command data used by DMS > (DMS Cloud & Local)	http(80)/https (443)
https://dsdownload.benq.com	Verify Key or Release Key (DMS Local Only)	
apexd90h2t5wg-ats.iot. eucentral-1.amazonaws.com	AWS IoT service for MQTT Connection > (DMS Cloud)	
apexd90h2t5wg-ats.iot. eucentral-1.amazonaws.com	AWS IoT service for MQTT Connection > (DMS Local)	(443/8883 port)
https://benq-dms-eu.s3.eu- central-1.amazonaws.com	DMS firewall	port 80/443
N/A	DMS Local search device protocol	Ping (ICMP)