



# **BRAdmin Professional 4 for Microsoft Azure**

User's Guide

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## Important Note

Some functions may not be available depending on the model.

This user's guide is a description of BRAdmin Professional 4 connected to the Microsoft Azure Storage service. For the same operation as the regular BRAdmin Professional 4, see the *BRAdmin Professional 4 User's guide*.

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# 1 Introduction

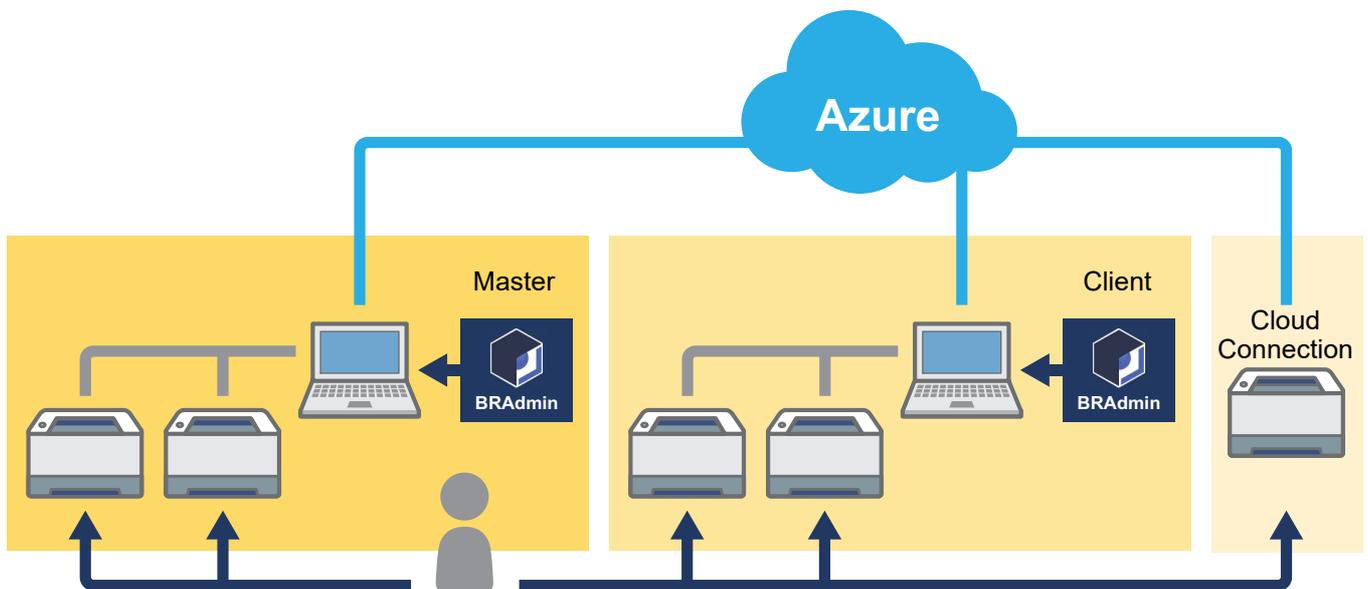
## 1.1 Overview

BRAdmin Professional 4 is an application for managing Brother devices and monitoring their status. BRAdmin Professional 4 can connect to Microsoft Azure Storage services to allow IT professionals to remotely manage devices in multiple locations.

- Microsoft Azure Storage (Cloud) stores device information for each location.
- BRAdmin Professional 4 Administrators must have access to Microsoft Azure Storage (Cloud).



- Device management is not a real-time process.
- Web Based Management is not available via Microsoft Azure.



### Master

When BRAdmin Professional 4 is configured as the “Master”: The Master manages Clients, Cloud Connections, and local devices, collects information from multiple devices managed by each Client or Cloud Connection via Microsoft Azure Storages, and runs instant tasks.

### Client

When BRAdmin Professional 4 is configured as the “Client”: BRAdmin Professional 4 compatible-devices connect to Microsoft Azure via the Client. The Client regularly uploads device data to Microsoft Azure. This requires the Client-installed computer to always be ON. When a Client computer is OFF, any devices connected to that Client show as **Connection error** on the Master device list.

### Cloud Connection

Cloud Connection-compatible devices connect directly to Microsoft Azure, and uploads data to the Microsoft Azure regularly.



Each device can only be managed with one connection type - Client OR Cloud Connection.

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## 1.2 System Requirements

BRAdmin Professional 4 and Cloud Connection devices must be able to access Microsoft Azure over the Internet.

Operating Systems	Windows 7 SP1 Windows 8.1 / Windows 10 (32-bit and 64-bit) / Windows 11 (64-bit) Windows Server 2012 or later (64-bit)
Additional Software	.NET Framework 4.7.2 or later

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## 2 Microsoft Azure

Please note that Microsoft Azure terms may change at any time.

### 2.1 Configure Microsoft Azure Account

To connect BRAdmin Professional 4 to Microsoft Azure, you need a Microsoft Azure subscription and a Microsoft Azure Storage account.

Using BRAdmin Professional 4 with Microsoft Azure will incur charges to your Microsoft Azure subscription.

### 2.2 Microsoft Azure Settings

Open a web browser and go to the Microsoft Azure portal page.

Please prepare the following items:

- Resource Group
- Storage Account
- Blob Storage Container
- Table



- Preexisting Tables and Blob Storage Containers cannot be reused when connecting to Microsoft Azure. You must create new Tables and Blob Storage Containers for each Microsoft Azure Profile.
  - Create an access policy for the Table with Read, Add, Update, and Delete permissions selected.
  - Create an access policy for the Blob container with Read, Add, Create, Write, Delete and List selected.
- 

### 2.3 Shared Access Signature (SAS) Settings in Microsoft Azure Storage Explorer

Do not share your SAS with anyone.



- BRAdmin Professional 4 works with data within Table Storage and Blob Storage. Do not directly edit the data contained within Table Storage and Blob Storage containers used by BRAdmin Professional 4.
  - For a Cloud Connection device to appear in the correct Azure profile, make sure the Table and Blob SAS keys match those in the profile.
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For more instructions, visit [Brother Support for IT Administrators](#). This page is available only in English.

# 3 Setup Using BRAdmin Professional 4

For each Azure profile, set up the Master first, then Client/Cloud Connection using the same Table and Blob storage containers. For more information, see [3.1 Configure the Master](#).  
To use the Client, see [3.1 Configure the Master](#) and [3.2 Configure the Client](#).  
To use Cloud Connection, see [3.1 Configure the Master](#) and [3.3 Cloud Connection Settings](#).  
To use both, see [3.1 Configure the Master](#), [3.2 Configure the Client](#) and [3.3 Cloud Connection Settings](#).

## 3.1 Configure the Master

1. Download the latest version of BRAdmin Professional 4 onto your computer.
2. From the Master, click the **Devices** tab and then select the **New Azure profile** from the left navigation bar.
3. Type the SAS key into the **Blob URI:** and **Table URI:** fields, and then click **OK**.
4. Configure the Azure polling periods, and then click **Upload**. BRAdmin Professional 4 is set up as the Master.



Depending on your network environment, configure the proxy server settings as needed in **Application settings > Network > Proxy**.

## 3.2 Configure the Client

If you have already installed BRAdmin Professional 4, then you have jumped ahead of the instructions we give below:

1. Export the Client INI file from the Master, and then configure the Client setting lock.  
Click **Export client INI file...** button to create a Client setting lock password - (between 1-255 ASCII characters).  
This password is required to unlock the Client setting lock.  
Handling of INI files you have exported caution.

Master

The screenshot shows the Brother BRAdmin Professional 4 interface with the 'Devices' tab selected. A context menu is open over a device, with the 'Export client INI file...' option highlighted in red. A red arrow points from this option to a dialog box titled 'Brother BRAdmin Professional 4'. The dialog box has a text input field for 'Create client setting lock password:' and 'OK' and 'Cancel' buttons.

Device status	Model name	Toner/Ink volume	Node name
Sleep	Brother MFC		BRN3C2AF4A
Paper Low Tray 1	Brother MFC		BRN30055CB
Sleep	Brother MFC		BRN3C2AF45
Connection error	Brother MFC		BRN3C2AF4A
Cannot Connect	Brother MFC		BRN3C2AF41
Sleep	Brother MFC		BRN30055CF
Sleep	Brother MFC		BRN30055CF
Connection error	Brother MFC		BRNB422004
Toner Low (Y)	Brother MFC		BRN3C2AF41
Azure connection settings...	Brother MFC		BRN3C2AF4A
Azure profile settings...	(M) Brother MFC		BRN3C2AF41
Delete	Brother MFC		BRN0080774
Toner Low (Y)	Brother MFC		BRN3C2AF49
Sleep	Brother MFC		BRNB422001
Connection error	Brother MFC		BRNB422004
Sleep	Brother MFC		BRNB422005

2. Save the BRAdmin Professional 4 installer (the same installer as the Master) and the exported INI file in the same folder on the Client computer.
3. Run the installer and follow the on-screen instructions to complete the installation.
4. BRAdmin Professional 4 Client will automatically search for and discover devices according to the configuration in the settings.ini file.

When it finishes, click the discovery button  in the Master to discover the Client devices.



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Depending on your network environment, configure the proxy server settings as needed in **Application settings > Network > Proxy**.

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To convert an existing installation of BRAdmin Professional 4 to a Client:

1. Make sure you have updated your installation to the latest version of BRAdmin Professional 4, and then import the Client settings ini file exported from the Master using the **Import backup file** function of **Back up application settings**: in **Application settings**. This will overwrite any existing configuration, so reconfigure as necessary.
2. Click the discovery button  in the Client to discover devices.
3. Click the discovery button  in the Master to discover the Client devices.

### 3.3 Cloud Connection Settings

The Cloud Connection connects devices directly to Microsoft Azure.

1. Apply and download the Microsoft Azure-supported firmware from the Brother support website at [support.brother.com](http://support.brother.com).  
For applicable models, contact your Brother technical support team.
2. Configure Microsoft Azure connection settings in Web Based Management.
  1. Start your web browser.
  2. Type "http://machine's IP address" in your browser's address bar (where "machine's IP address" is the IP address of the machine or the print server name). For example: http://192.168.1.2.
  3. If the machine prompts you for a password, type it in, and then click .



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- The default login password to manage machine settings is on the back of the machine and marked "Pwd".
  - We recommend changing the default login password in order to protect your machine from unauthorized access.
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4. Click the **Administrator** tab.
5. Click **Network Profile** in the left navigation bar, and then click **FTP** for **Profile 1**.
6. Select the **Azure** radio button, and then click **Submit**.
7. Typing the SAS key in the **Blob URI**: and **Table URI**: fields, type a **Profile Name**, and then click **Submit**.
8. Configure the date and time, or configure SNTP settings.  
We recommend using SNTP.
9. Get the correct CA certificates to access Microsoft Azure storage.  
For information regarding CA certificates, visit [Brother Support for IT Administrators](#).  
To configure the CA certificates:
  1. Click the **Security** in **Network** tab.
  2. Click **CA Certificate** in the left navigation bar, and then click **Import CA Certificate**.
  3. Select the files, and then click **Submit**.



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Depending on your network environment, configure the proxy server settings as needed.

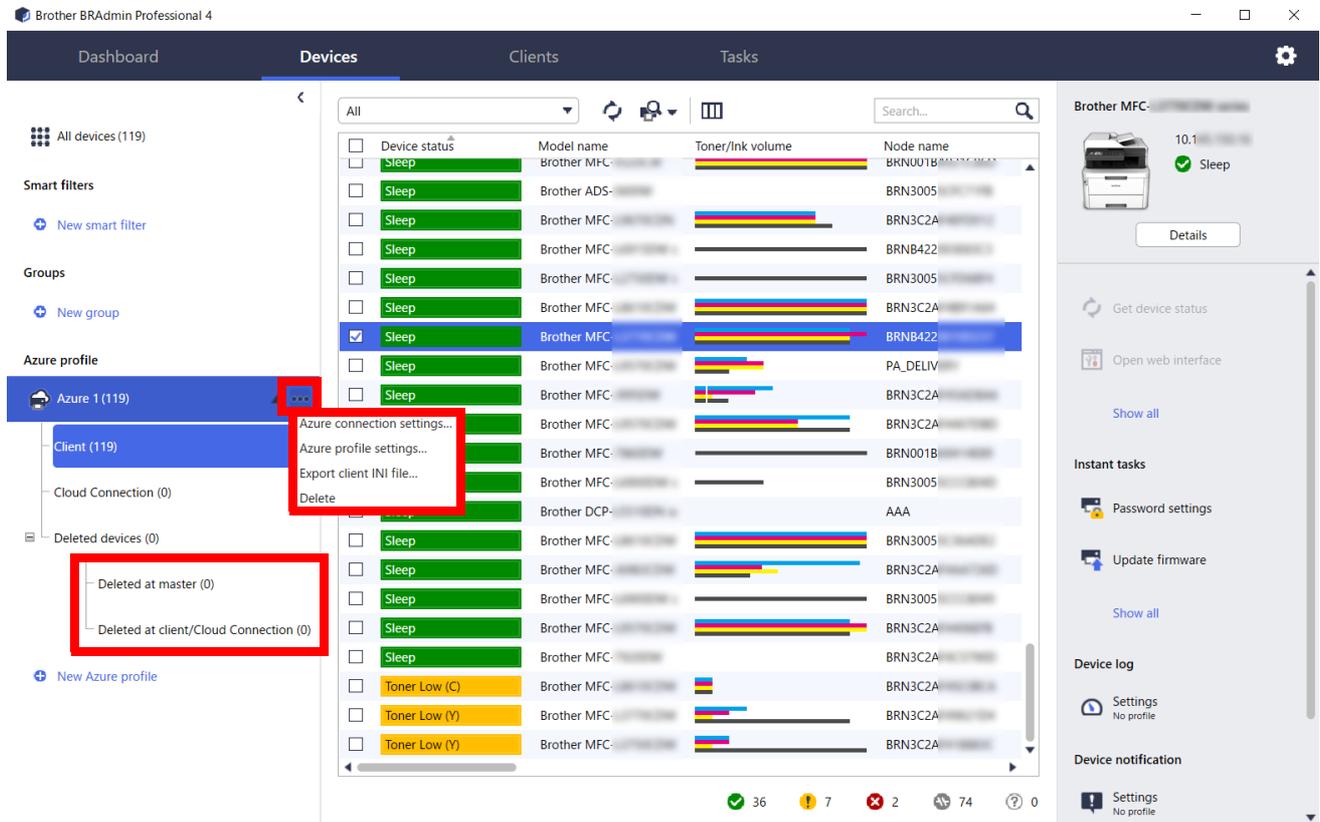
1. Click the **Network** tab, and then click the **Protocol** in the left navigation bar.
  2. Make sure the **Proxy** checkbox is selected, and then click **Submit**.
  3. In the **Proxy** field, click **Advanced Settings**.
  4. Enter the proxy server information, and then click **Submit**.
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10. Click the **Administrator** tab, and then click **BRAdmin Cloud Connection** in the left navigation bar.
  11. Select **On** the **BRAdmin Cloud Connection** radio button, select **Profile 1** (the profile you just configured), and then click **Submit**.
  12. Confirm the status by checking the **Connection Status**.
  13. Click the discovery button  in the Master to discover the device.

# 4 Actions

After setting up Master, Client, and Cloud Connection, Azure Devices appear in the devices list when you run a device discovery on the Master.

## 4.1 Master: Devices Tab



Click **...** to complete these actions:

- To change the Azure connection:  
Select **Azure connection settings...**  
Change the **Blob URI:** and **Table URI:** fields, as needed, or enable or disable the Azure connection.
- To change the configuration of the Azure profile:  
Select **Azure profile settings...** to display Azure profile.
- To export the client INI file:  
Select **Export client INI file...**
- To delete the Azure profile:  
Select **Delete**.  
When you delete a profile, any Clients associated with that profile are removed from the **Clients** tab, and the Client data is removed from the database.  
When the device list refreshes, any devices associated with the deleted profile will display **Connection Error** in the **Devices** tab.

### Deleted devices

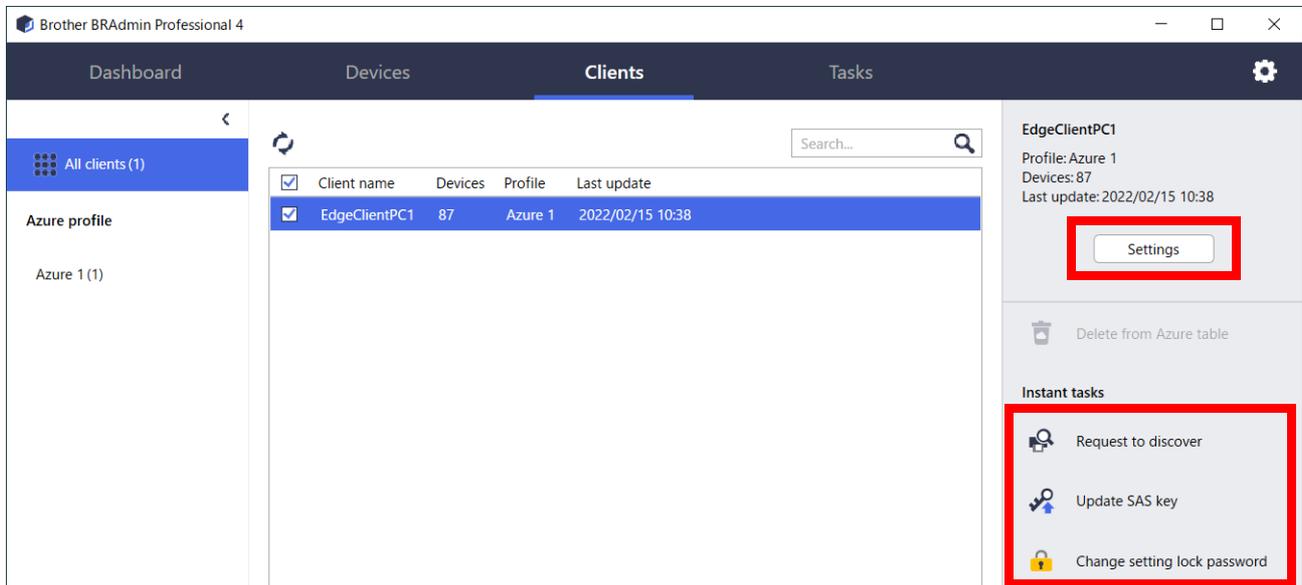
When you delete Azure devices, BRAdmin moves them to the **Deleted devices** list, located in the associated Azure profile. Deleted devices cannot be discovered, but their names remain in the **Deleted devices** list.

- **Deleted at master**  
The devices that you have deleted at the Master are listed here.  
To restore a deleted device, right-click on the device name or select **Redisplay to Azure devices list** in the right pane.
- **Deleted at client/Cloud Connection**  
The devices that you have deleted at the Client are listed here. This includes any devices with Microsoft Azure disabled on the Client and Cloud Connections.

To rediscover after deleting a device listed from the **Deleted at master** or **Deleted at client/Cloud Connection** lists:

- To rediscover a Client device, start device discovery on the appropriate BRAdmin Professional Client.
- To rediscover a Cloud Connection device, disconnect and reconnect the device to the Microsoft Azure using Web Based Management.

## 4.2 Master: Clients Tab



To perform Client actions or execute tasks, select one or more Clients, and then select the action or task you want from the right pane.

- To change Client settings, click the **Settings** button in the right pane.
- To execute **Instant tasks**, select one of the following:
  - **Request to discover**  
Run a search for devices at the Client.
  - **Update SAS key**
  - **Change setting lock password**



If all clients use the same setting password, you can select multiple clients and change the password for all of them at the same time.

## 4.3 Client

Access to settings in the Client is locked by default. This is to avoid changing application or device settings without the administrator's permission.

To change either the Client settings or the settings of the device connected to the Client, you need to unlock the setting lock.

To unlock the **Client setting lock**:

1. Click  to open the **Application settings**.
2. Select **General**.
3. Click **Unlock**, and type the client setting lock password.  
The client setting lock password is the password you created when exporting the client **INI** file.

To check the **Azure connection**:

1. Click  to open the **Application settings**.
2. Select **Azure connection**.

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# 5 Troubleshooting and Support

If the problem persists, contact your Brother technical support team.

## 5.1 Connection Difficulties

If you are having difficulty discovering the device or cannot clear a connection error, check the following:

- Master, Client, Cloud Connection all have the same SAS key or each Table/Blob has the same SAS key.
- Ensure the SAS key, permission settings, and expiration date are accurate.

### Master

If you cannot rediscover or refresh devices on the Master, check the following:

- The Master's computer is connected to the network.
- The target device is displayed on the Client.

### Client

If you cannot rediscover or refresh devices on the client, first rediscover and make sure the Client detects the device. If you still cannot find devices, check the following:

Regardless of your type of your network connection, make sure that:

- Your computer is connected to the network and is powered ON.
- The target device is connected to the network and is powered ON.
- The discovery has not been interrupted by any security software or firewalls.
- The target device meets the discovery conditions and criteria.
- The target device is within the reach of the Broadcast packet. If it is not, you may need to try the unicast search or use the BRAgent software.

For USB-connected devices, make sure that:

- The target device is using the correct driver.
- The target device is connected to the USB direct interface.
- The target device is not busy.

### Cloud Connection

Make sure that:

- BRAdmin Cloud Connection by Web Based Management is enabled.
- The correct profile is selected.
- CA certificates are installed and they have not expired.
- Proxy settings are correct.
- The latest firmware has been downloaded.
- Any devices using Cloud Connection are connected to the network and are able to access the internet.
- The Cloud Connection is connected to Microsoft Azure. You can see the status on Web Based Management.

## 5.2 Disconnecting from Microsoft Azure and Removing Data

Disable Microsoft Azure connection for all Master, Client, and Cloud Connections.

Delete all the data that remains in the Table and Blob, or delete the resource group you created for BRAdmin Professional 4.

## 5.3 Troubleshooting

Error	Solution
Timeout error - The task did not finish within the timeout limit due to too many devices or too many devices with connection errors.	Wait and discover new devices again on the Master, reduce the number of target devices, or increase the timeout setting in <b>Application settings &gt; Network</b> .
Profile is inactive	To activate a profile, open <b>Azure profile</b> , click <b>Azure connection settings...</b> , and enable Azure.
No profile available	Create the profile again.
Timeout error - No response from client/ Cloud Connection.	Make sure the network connection is good. Make sure Client, Cloud Connection, or both are not offline or busy.
Timeout error - The task was delivered to client/Cloud Connection, but no task result was returned.	Make sure Client, Cloud Connection, or both are working properly. For more information, see <a href="#">5.1 Connection Difficulties</a> .
Blob access error	Make sure the Blob key is correct.
Encryption error	Delete all Table data.
Decryption error	It is possible that new Table data has been added or changed. Delete the data. If you are unsure, follow these steps: <ol style="list-style-type: none"><li>1. Initialize Table data.</li><li>2. Upload profile settings from the Master.</li><li>3. Re-register Client and Cloud Connection.</li></ol>

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