Quick Start Guide

Logging into the Web Service

The web server captures data from the DXM using either a cellular connection or an Ethernet connection. Users collect and view the data or update and manage the DXM using a web browser.

Within a few minutes of your purchase, you will receive an email with your authorization code and details regarding the data subscription service. If the authorization code is not received within 10 minutes, please check your spam folder or contact Banner Engineering at 1-888-373-6767 to obtain the code.

Use both the website and the DXM Configuration Software to set up and configure your data collection. Use the latest version of your browser (Google Chrome is recommended) and enter the URL: https://bannercds.com. The login page appears.

Banner CDS home screen
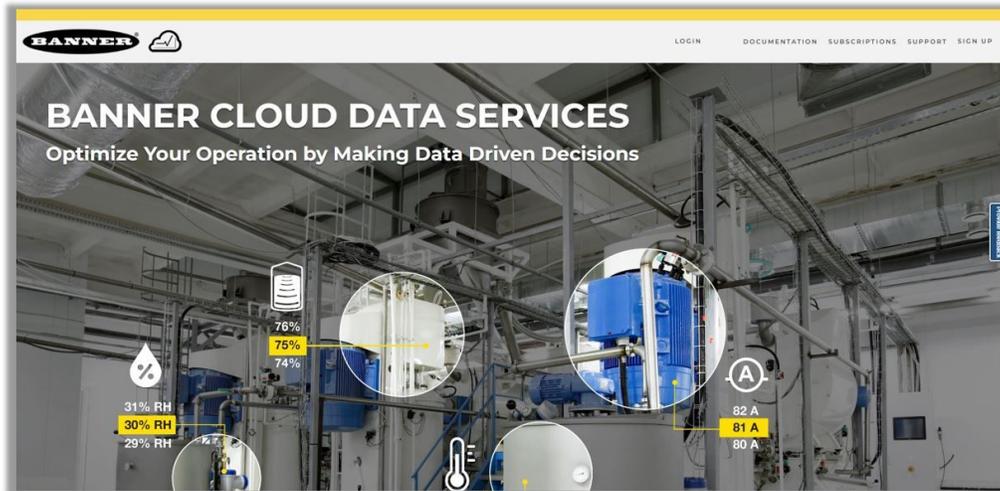
Create an Account

Follow these steps to create an account.

1. Click on **Sign Up**.

2. A prompt will appear requesting the **Authorization Code** that was delivered in an email, an **Email** address, **Company** name, **User Name**, and **Password**.

3. Click **Sign Up** and agree to the Terms & Conditions when prompted.

Create a New Gateway

After you log into the Banner Cloud Data Services website, the **Overview** screen displays. Follow these steps to create a new monitoring site.

1. Click on **New Gateway** (top right corner of the **Overview** screen).
   Create a new Gateway for each DXM Controller that sends data to the web server.
   A **New Gateway** prompt appears.

2. Verify **Traditional** is selected for the **Gateway Type**.

3. Enter a **Gateway Name**.

4. Select the **Company** from the drop-down list.

5. Copy the **Gateway ID** number located within the prompt window.
   The **Gateway ID** number created by the web server is a required parameter in the configuration of the DXM. The **Gateway ID** is the address the webserver uses to store the data pushed from the DXM.

6. Paste this **Gateway ID** into the appropriate field within the XML file generated by DXM Configuration Tool.

7. Upload an XML file by clicking **Select File** under **Update XML** and use a file browser to locate a saved XML.

8. Click **Save**.

Modifying the XML Configuration File

Use the DXM Configuration Software to configure the operation of the DXM.

Launch the software. You can use one of these three screens to modify registers:

- **Local Registers**—Edits individual registers
- **Modify Multiple Registers**—Edits multiple registers at the same time
- **Local Registers in Use**—Edits individual registers

Refer to the DXM Configuration Software Instruction Manual (p/n 209933) for more details.

Edit Registers Using the Local Registers in Use Screen

Use this screen to modify the parameters of any local registers being used.

Edit Register tab

1. Go to the **Local Registers › Local Registers in Use › Edit Register** section of the bottom of the screen.
   A list of the local registers being used displays.

2. Under the **Selected Register** box, select the register to define or modify. You may select the register by using the up/down arrows, directly entering a register number into the field, or clicking within the corresponding row in the **Local Registers in Use** table.
   Only Local Registers that have already been changed from their default configuration are displayed in the **Local Registers In Use** table.

3. Using the drop-down lists, assign a name, register group, change the units, or make other configuration changes to this register.

4. To push register values to the web server, set **Cloud Settings** to read.
   If **Cloud Settings** are set to Read, the web server only views data from the device and cannot write data to the device. If the permissions are set to Write, the web server only writes to the device and cannot read the data. If the permissions are set to Read/Write, the web server can read the data from the device and write to the device from the web.

The changes are automatically applied within the software, not the XML file. To change another register, use the up or down arrows to select another register number. To save these changes to the XML file, go to **File › Save**.

Modify Multiple Registers

Modify a range of registers from the **Local Registers › Local Registers in Use › Modify Multiple Registers** screen.

Select which parameter fields to modify. Most parameters have three selections.
- Unchanged—no changes
- Default—change to default settings
- Set—modify the parameter. Other selections will appear based on the parameter.

Modify Multiple Registers screen

1. Enter the **Starting register** and **Ending register**.

2. Select the value to change using the drop-down list next to each value.

3. Enter the new value in the field provided.

4. To push register values to the web server, set **Cloud Settings** to **Read**.
    If the **Cloud Settings** are set to **Read**, the web server only views data from the device and cannot write data to the device. If the permissions are set to Write, the web server only writes to the device and cannot read the data. If the permissions are set to Read/Write, the web server can read the data from the device and write to the device from the web.

5. Click **Modify Registers** to save and apply the changes.

Configure the Cloud Data Services Settings

1. To configure the connection to the web server, go to the **Settings › Cloud Services** screen.

Cloud Sevices setting screen

2. Copy and paste the **Gateway ID**.
   The **Gateway ID** is the long string of numbers and letters from the Banner Cloud Data Services website.

3. Verify the **Server Name/IP** is set to `push.bannercds.com` and the **Page** is set to `/push.aspx` for sending to the website (verify Show Advanced Settings is selected).

4. Set the **Cloud Push Interval** to a value appropriate for your application.
   The **Cloud Push Interval** determines how often the device pushes the data to the web. The faster the push interval, the more data is sent to the site. Cellular plans can only push at an interval of 5 minutes or longer, while Ethernet connections can push at an interval of 1 minute or longer. The **Sample Count** specifies how many times the data is gathered within the **Cloud Push Interval**(Advanced Settings).
   For example, if the **Cloud Push Interval** is 15 minutes and the **Sample Count** is set to 3, then during each data push (every 15 minutes), 3 samples are sent to the web. This is one sample every 5 minutes.

5. Save the configuration file by going to **File › Save**.
   File names must be no more than 30 characters long, and should not contain any spaces or special characters.

6. With a USB cable connected to the device, go to the **Device › Connection Settings** menu.

7. Select the appropriate **Comm Port** and click **Connect**.

Communication ports settings

If multiple comm ports are visible, try each one until the software is able to connect to the device.

8. Go to **Device › Send Configuration to the Device** to upload the new XML file.

Upload the XML Configuration File to the Website

To upload an XML configuration file to the website, follow these instructions.

1. At the webserver, select the **Gateway** from the **Overview** or **Device Management** screen.

2. On the row displaying your **Gateway**, click the **Details** under **View**.

3. Select **Edit Gateway**.

4. Click **Select File** under **Update XML**.

5. Select the file that was just updated to the DXM and click **Save**.
   After the XML file is loaded into the webserver, the webserver uses the register names and configurations defined in the configuration file.

6. Click on the **Details** link for each **Gateway** to go to the configured registers to see the values uploaded by the DXM.
   The same XML configuration files is now loaded on both the DXM and the Website. After some time, the data should be seen on the website.