

# Connecting to the Banner Connected Data Solutions Demo Site



## Overview

Equipment Necessary: DXM100 or DXM150 using either a 900 MHz or 2.4 GHz Gateway ISM radio

This document provides step-by-step instructions on how to connect the DXM Controller to the Banner Connected Data Solutions by Sensonix Demo website <https://demo.sensonix.net/>. To request access to the Demo site, please contact your local Banner Distributor or Representative.

## Download, Install, and Connect to the Software

1. Download the DXM Configuration Tool v3 from the Banner Engineering website and install it on a computer.
2. Apply power to the DXM Controller.
3. Connect the DXM Controller to the computer with a USB cable.
4. Launch the DXM Configuration Tool.
5. On the DXM Configuration Tool, go to the **Device > Connection Settings** menu.
6. Select **Serial**, then select the COM port the USB cable is plugged into.
7. Click **Connect**. If you are unsure which COM port to use, and multiple appear, attempt to connect to each one of them until you are successful.

## Connect to the Demo Site

1. After the DXM Controller has been connected to the DXM Configuration Tool, access the XML file.
  - Open the XML file the DXM is currently using;
  - Create a new XML; or
  - Get the current XML file by going to the **Device > Get XML Configuration from DXM** menu and naming the file.
2. Go to the **Settings > Cloud Services** screen.

The screenshot displays the 'Settings > Cloud Services' screen of the DXM Configuration Tool. The interface is divided into several sections:

- Network Interface:** 'Push interface' is set to 'Ethernet' (highlighted with a red box). 'Ethernet retries per push interval' is set to 5.
- Cell Configuration:** 'Cell module' is 'CE910 2G CDM'. 'Enable Server Mode' is unchecked. Fields for APN, APN Username, and APN Password are present.
- Cloud Push:** 'Cloud push interval' is '10 minutes' (highlighted with a red box). 'Sample count' is 2 (highlighted with a red box). 'Push port' is 80. There is a checkbox for 'Print push debug messages to serial console'.
- Web Server:** 'Server name/IP' is 'demopush.sensonix.net' (highlighted with a red box). 'Page' is '/push.aspx'. 'Host header' is empty. 'Site ID is' is 'GUID' (highlighted with a red box), with a 'Clear' button and a GUID value '00000000-0000-0000-0000-000000000000' (highlighted with a red box). There is a 'Custom HTTP Headers' section and an 'Initial Push Options' section with a checkbox for 'Include XML GUID on first push'.
- Web Server Authentication:** 'Require Authentication' is unchecked. Fields for 'Username' and 'Password' are present.
- HTTPS:** 'Use HTTPS' is unchecked. 'Certificate CN' is '\*.sensonix.net'.

3. Change the **Server name/IP** to: `demopush.sensonix.net`.
4. Select the appropriate **Push interface**: Cellular or Ethernet.  
To configure for Ethernet, go to the **Settings > Network** screen. To configure for cellular, refer to the [Activating a Cellular Modem](#) tech note.

- Set the **Cloud push interval** to determine how often the DXM Controller pushes the registers selected to report to the website.

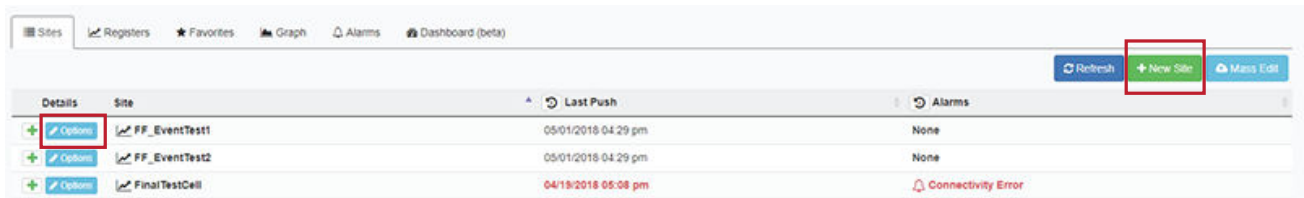
The **Sample count** determines how many samples are taken between each push interval. For example, a push interval of 10 minutes with a sample count of 2 pushes two samples that were taken every 5 minutes.

Use **Action Rules** to trigger cloud pushes by selecting **Push When Active** within the Threshold options. Threshold options are available by expanding a **Threshold Rule** (click on the arrow next to the rule). This pushes all registers set to push every time the action rule is triggered.

- Select which registers to push to the cloud.
  - On the **Local Registers** screen, expand each register you'd like to push to the cloud and set **Cloud Reporting** to on and **Cloud Permissions** to Read, Write, or Read/Write.
  - On the **Modify Multiple Registers** screen, set **Cloud Reporting** to on and **Cloud Permissions** to Read, Write, or Read/Write for a block of registers.

## Configure the Demo Site

- Go to the Banner Connected Data Solutions by Sensonix demo website (<https://demo.sensonix.net>) and log into the demonstration account that was created for you.
- Click **+New Site** and name your site.



- Highlight and copy the Site ID, then click **Save**.
- On the DXM Configuration Tool, go to the **Settings > Cloud Services** screen.
- In the **Web Server** section, verify GUID is selected as the **Site ID** type. Paste the copied site ID into the **Site ID** field.
- Save the XML configuration file (**File > Save** menu).
- Upload the XML configuration file to the DXM Controller (**Devices > Send XML Configuration to the DXM** menu).
- On the Banner Connected Data Solutions by Sensonix site, load the new XML configuration file.
  - Click **Options** on the row of the newly created site.
  - Click the checkbox next to **XML Config** and select the XML file that was just saved and uploaded to the DXM Controller.
- Click **Save** to complete the connection to the website.