

# **Quick Start Guide**

## Logging into the Sensonix Web Services

The web server captures data from the device and allows users to collect and view the data or update and manage the device using a web browser. The data is sent to the web site using either a cellular connection or an Ethernet connection.

A company login will be created with a login and password. Use both the web site and the DXM Configuration Tool to set up and configure your data collection. Use Internet Explorer or Google Chrome as your Internet browser and enter the URL: https://data.sensonix.net/login.aspx. The login page appears.

Sign in to your sensonb.net account.	
Please sign in	
Username	
Password	
Sign in	
Don't have a user? Register Now!	
Forgot your password?	

## Create a New Site

After you log into the site, go to **Settings** > Sites.

1. Click on +New Site.

Create a new site for each DXM that will be sending data to the web server.

- 2. Enter a site name.
- 3. Copy the Site ID number shown on the dashboard.

The Site ID number created by the web server is used by the DXM Configuration Tool when you create the configuration XML file for the device. The Site ID is the address the webserver uses to store the data pushed from the device.

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## Modifying the XML Configuration File

Use the DXM Configuration Tool to configure the operation of the device. For more help on all the capabilities of the configuration platform, refer to the DXM Configuration Tool manual.

Launch the DXM Configuration Tool 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 Tool Instruction Manual for more details.

#### Modify Local Registers Individually

This example configuration sets the device to push registers values to the web server.

Local Registers	Local Register Configuration       Modify Multiple Registers       Local Registers In Use       Protocol Conversion Overview         Image: Im	<b>_</b>
Register Mapping	Display Information Constant Value and Counter Logging and Protocol Conversion Units: (RH ) None  None NONE NONE NONE NONE NONE NONE NONE NON	
Action Rules	Sign Type: Unsigned  Scaling: divide  Cloud Settings Cloud Retrings Cloud Retring	
Scheduler	Scale value:       100.00 \$ Scale offset:       0.0000 \$         LCD Permissions:       Read       Cloud Permissions:       Read         Cloud Permissions:       Read       0 \$       seconds, set the register to:       0 \$	or
Register View	2 None Units: None	
	⊙ 3 None Units: None	
Settings	✓     4     None   Units: None	
		· ·

1. Go to the Local Registers > Local Register **Configuration** screen.

The local registers are a pool of integer and floating point registers that can be used by the controller to save data that was created, store data from external devices, or store basic constants. The local registers are where the user defines the data sent to the web server.

This screen shows how each local register is defined.

- 2. Click on the down arrow next to the first line for Local Register 1.
- The parameters for Local Register 1 display.
- 3. To push the register values to the web server, set Cloud Reporting to ON.
- 4. Set the Cloud Permissions to read.

If the Cloud Permissions 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. Set the LCD Permissions to Read. This allows this Local Register data to be displayed on the DXM LCD under the Registers menu.

Modify Registers Using the Local Registers in Use Screen

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

Local Registers	Loca	I Register Configuration	Modify Multiple Register	s Local Regist	ers In U	Jse Protocol	Conversio	n Overvie	~		
		Register Name	Register Group	Units	Signed	Constant or Timer	Cloud Reporting	Web	LCD	Protocol Conversion	Log Files
Register Mapping	1	Humidity 1		RH		None	On 👻	Read -	Read) -	None -	None -
Action Rules	2	Humidity 2		RH 🔍 🕶		None 🔍 👻	On 👻	Read) -	(Read) 👻	None) 🕶	None -
Scheduler											
Register View											
Settings											

1. Go to the Local Registers > Local Registers in Use screen. A list of the local registers being used displays.

- 2. Using the drop-down lists, change the desired parameters.
- 3. To push register values to the web server, set Cloud **Reporting** to on and Web to read.

If Web is 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.

#### Modify Multiple Registers

Modify a range of registers from the Local Registers > Modify Multiple Registers screen.

Local Registers	Local Register Confi	guration Modify Multip	le Registers	xal Registers In Use	LCD Display	Protocol Conversion Overview
	Modify Registers					
Register Mapping	Starting register	1 <a>Ending regist</a>	er 1 🗘	]		
	Modify Properties					
Action Rules	Name	None -				
	Register group	None -				
Scheduler	Constant or timer	None 🔍 💌				
	Units	None -				
Register View	Sign type	None				
	Scaling	None 🔍 💌				
Settings	LCD permissions	None 🔍 💌				
	Cloud reporting	Change 💌 On	•			
	Cloud permissions	Change - Read	•			
	SD card logging	None 🔍 💌				
	Protocol IO	None 🔍 👻				
	Host timeout	None 🗸 👻				
	Reset Form		Change Registers			

- 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 Reporting to on and Cloud Permissions to read.

If the Cloud Permissions 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 Change Registers.

## Configure the Cloud Settings

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

Local Registers	General Cloud Services Logging Scripting N	etwork Mail and Messaging Administration Notes IO Board Reprogram
	Network Interface	Web Server
Register Mapping	Push interface Ethernet	Server name/IP push.sensonix.net
	Ethernet retries per push interval 5 Cell Configuration	Page /push.aspx
Action Rules	Cell module CE910 2G CDN CEnable Server Mode	Host header
	APN	Site ID is GUID
Scheduler	APN Username	Clear bb63298d-db3d-4019-b6d5-124ff0b1a27d
	APN Password	
Register View	Cloud Push	Custom HTTP Headers
	Cloud push interval None	Initial Push Options
Settings	Sample count	Include XML GUID on first push
	Push port 80 \$	нтгрз
	Web Server Authentication	Use HTTPS
	Require Authentication	Certificate CN *.sensonix.net
	Username	
	Password	
	Send Authentication	

2. Copy and paste the Site ID.

The Site ID is that long string of numbers and letters from the Sensonix Web Services site.

- 3. Verify the Server Name/IP is set to push.sensonix.net and the Page is set to /push.aspx for sending to the Sensonix Web Services site.
- 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 10 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.

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.
- No spaces or special characters are permitted in file names.
- 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.

Connection Settings	×					
Serial	●TCP/IP					
Comm Port:	•					
Cancel	Connect					
Not Connected						

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 Settings > Sites.
- 2. Click Send XML to Web.

SENSONIX.	n Dashboard 👻	🔳 History 👻	🖌 Settinas 👻	📕 Audit 👻	🖨 Sites 👻	🔺 🖀 MRue	e (mr2_dei	mo) <b>ს</b>	Log Out
	Send XML Configur	ation to MyDe	moSite		×				
Sites Alarms Tables Ba									
	Site ID:	a083b512-3cee-	-4a37-b784-9498e	41d4305		Dashboa	rd «H	listory	» Audit
	Site Type:	Normal -				Bearch:			
	Send XML File:	None				÷	XML	XML 🗍	XML Push
+/- Edit Site Site		Choose File	FF_EventTest.xml			ıfig	File	Updated	Info
Edit MyDemoSite a08 949						m Web		Never	None
Subscriptions				Clos	se Save	F	AQ	_	
Cuberphone		_	_	_					

- Click Choose File. 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.
- 4. Click on the Site Name link to go to the configured registers to see the values uploaded by the device. The same XML configuration files is now loaded on both the DXM Controller and the Website. After some time, the data should be seen on the website.

## Web Services Features

For more information on each of these features, see the Sensonix Web Services Instruction Manual.

View Graph of Individual Registers—View a graph of register values over time.

Compare Graphs of Multiple Registers—Compare two or more register values on the same time graph.

Set Alarms—Set alarms when a register reaches or is compared to a certain numerical value. Alarms can also be used for connectivity problems, MAC alerts, geofence alerts, or register limits. If an alarm is activated, emails can be sent automatically to preset addresses.

Create Spreadsheet Tables—Create data tables to view numbers in a spreadsheet-style format.

Create FTP Backups or Download Data for Backup—Back up registers, upload logs, alarms, updates, and audits to an FTP address that can be accessed with a username and password created by the user.

Use Log Viewer for Viewing Past Data—Display graphs of data logged to the SD card, backed up previously to an FTP site, or downloaded.

**Updating** Script or XML via Web—Download an XML file from the DXM or upload a new XML to the DXM without having the device connected to a computer via USB.

Write to Registers via Website—Set Cloud Permissions to Write or Read/Write in the DXM Configuration to write to the DXM from the website. Instead of using the LCD on the DXM or waiting for an input value, users can write certain register values directly to the DXM from the cloud site.

Create New Companies and Users—This feature is only available with certain subscriptions. Limits may be placed on the number of companies or users a subscription can have.

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