Using the BACnet Network Discovery Tool

Control Solutions has created a Network Discovery Tool to perform simple diagnostics on BACnet devices and networks. It works with MS/TP using the MTX002 USB to MS/TP adapter, or with BACnet IP via the Ethernet connection on your PC.

For MS/TP with the MTX002, if you know the network's baud rate and Max Master setting, select those, and simply click Connect. If you are uncertain or don't even know the baud rate, select the COM port the MTX002 is on, click Enable MS/TP via USB, and then click Auto Connect.

BACnet Network Discovery Tool v1.03	
Connected: 📝 Target: 👿 [Waiting for Target Local Port Who-Is Read/Write	
I Enable MS/TP via USB	☐ Work Offline
USB serial port COM3 Local IP 0.0.0.0	
MS/TP baud 38400 V IP Port (hex) BACO	
Max master 127	
Local MAC 0 Our Device 208002	
Connect Disconnect Disconnect	
No errors detected. MS/TP port searching. USB is responding [1.02]	
· ·	
د	

Auto Connect will take a little while to complete. First it analyzes the baud rate. Once locked onto baud rate, it then listens to the network for a while to learn what the Max Master setting is (which should be identical in all devices on the network). It will also check to see which MAC addresses are in use, and set its own MAC to something not in use starting from the top of the range.

ocal Port Who-Is Re	Connected: 🗹 Target:	Waiting for Target		
	I Enable MS/TP via USB	T Enable IP	🗖 Work Offline	
USB serial port	COM3 V	cal IP 0.0.0.0		
MS/TP baud	38400 • IP Port	(hex) BAC0		
Max master	127 127 Our D	202002		
Local MAC	1 127 Our D	evice zuouuz		
	Connect Auto Conne	ct Disconnect		
	No errors detected. MS/TP port searching. USB is responding [1.02] Auto connected [1.02]			
		τ.		

Once connected, go to the Who-Is page. Usually, by the time you get there, the results of the first automatic Who-Is are already displayed.

.ocal Port Send Wh	Who-ls Read/Write no-ls Clear Who-ls Cache	Connected: 🗹 Target: 👿 🕅	/aiting for Target	
Device	Net Address	Object Model	Object Name	
27	MSTP 027	1.11.1	Device Instance 27	
3010	MSTP 022	537.5	Device Instance 3010	
3021	MSTP 021	512.5	Device Instance 3021	
	1 1			
Get Dev	ice Info Get Object List			

Click the Refresh button to cause the discovery tool to query every responding device to read object model and device oblect name from each of them.

Double click on the device you with to query further. It will now appear as the Target.

Iress Object Model 27 Babel Buster Pro-V2 22 Babel Buster BB2-30	Object Name Babel Buster BBPRO-V230
27 Babel Buster Pro-V2 22 Babel Buster BB2-30	230 Babel Buster BBPRO-V230
22 Babel Buster BB2-30	enter 1. Enterte finale finale de la finale
	010 Test BB2-3010
Get Object List	
	Get Object List

You can read and write properties in any of the standard objects typically used in any Control Solutions device and in most other devices. Select object type, instance, and property to read data by clicking the Read Property button.

In addition to selecting the same parameters you would for reading, select data type, priority if writing to a commandable object, and data value to write that property by clicking the Write Property button.

	ery Tool v1.03
Local Port Who-ls Re	Connected: 🗹 Target: 🗹 27: Babel Buster Pro-V230 ad/Write
Object Type Object Instance Property	Analog Input
Array Index Data Type Priority Write Data	(leave blank for no index) Read Property Null Vrite Property None Relinquish
Write Data	297.000000 Send Raw APDU

Article ID: 38 Created On: Tue, Dec 6, 2016 at 9:54 PM Last Updated On: Tue, Dec 6, 2016 at 9:54 PM