

Description: Guide to manual BACnet Network and Device discovery which is required for proper BACnet functionality since v10.8.

General Requirement: GENESIS64 v10.8 or higher

Introduction

This guide describes how to setup the BACnet Network and Device discovery process. In versions before v10.8 the BACnet Network and Device discovery was carried out automatically and the user did not have any control over the discovery process. It was initiated automatically each time BACnet Runtime started and then periodically each 60 minutes by default. The user also did not have an indication on which stage the discovery process was in as well as all devices which returned an I-Am message on Who-Is request was scanned – this was a clear problem on large BACnet networks.

Since v10.8, the user gets control over which devices are discoverable in the BACnet network, and can choose only the devices which are required for the project which will be scanned for object instances and properties and stored in BACnet runtime cache. Therefore unused devices will not be added to the BACnet Runtime anymore.

Discovery process

Since v10.8 the Workbench Classic’s BACnet configuration and BACnet runtime providers have been concatenated and replaced by one provider in Workbench-SL. To initiate discovery, get a list of devices that needs to be discovered and add them to cache as following:

1. Launch Workbench Silverlight
2. Select the BACnet provider
3. Expand the tree until you can see the ‘Devices’ tree item
4. Right-click on the ‘Devices’ tree item
5. From the context menu, select ‘Network Discovery’ similar to Figure 1.

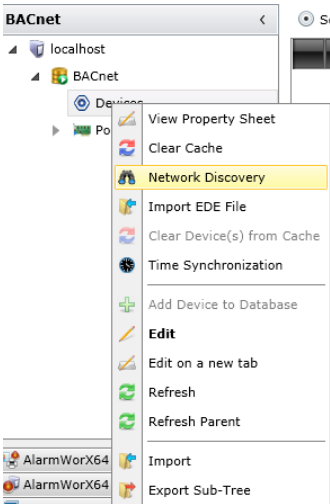


Figure 1 - BACnet device discovery

6. If needed, adjust the ‘Who-is range’ and/or add a new range. You can also adjust the Timeout setting (useful for slower BACnet MS/TP devices which can be easily overloaded).
7. Initiate the Who-is request broadcast by clicking the ‘Scan’ button on the upper right corner of the dialog.
8. When the scanning finishes, you will get a list of discovered devices. You can now add them to the BACnet cache by clicking ‘+’ next to each device
9. You can monitor progress of device scanning at the bottom while you also have the option of stopping the process.
10. When the task finishes, you can close the dialog. Now you should see the address space (object instances) of scanned devices and be able to retrieve data from them. The data should also be brows-able in the Data Browser.

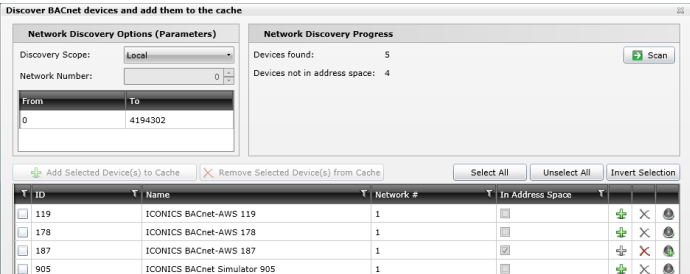


Figure 2 - BACnet Device Discovery