Third-Party BACnet Utility v9.0

User Guide

 • Catalog No. 11-808-1113-01 • 5/3/2024

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Important changes are listed in **Document revision history** at the end of this document.

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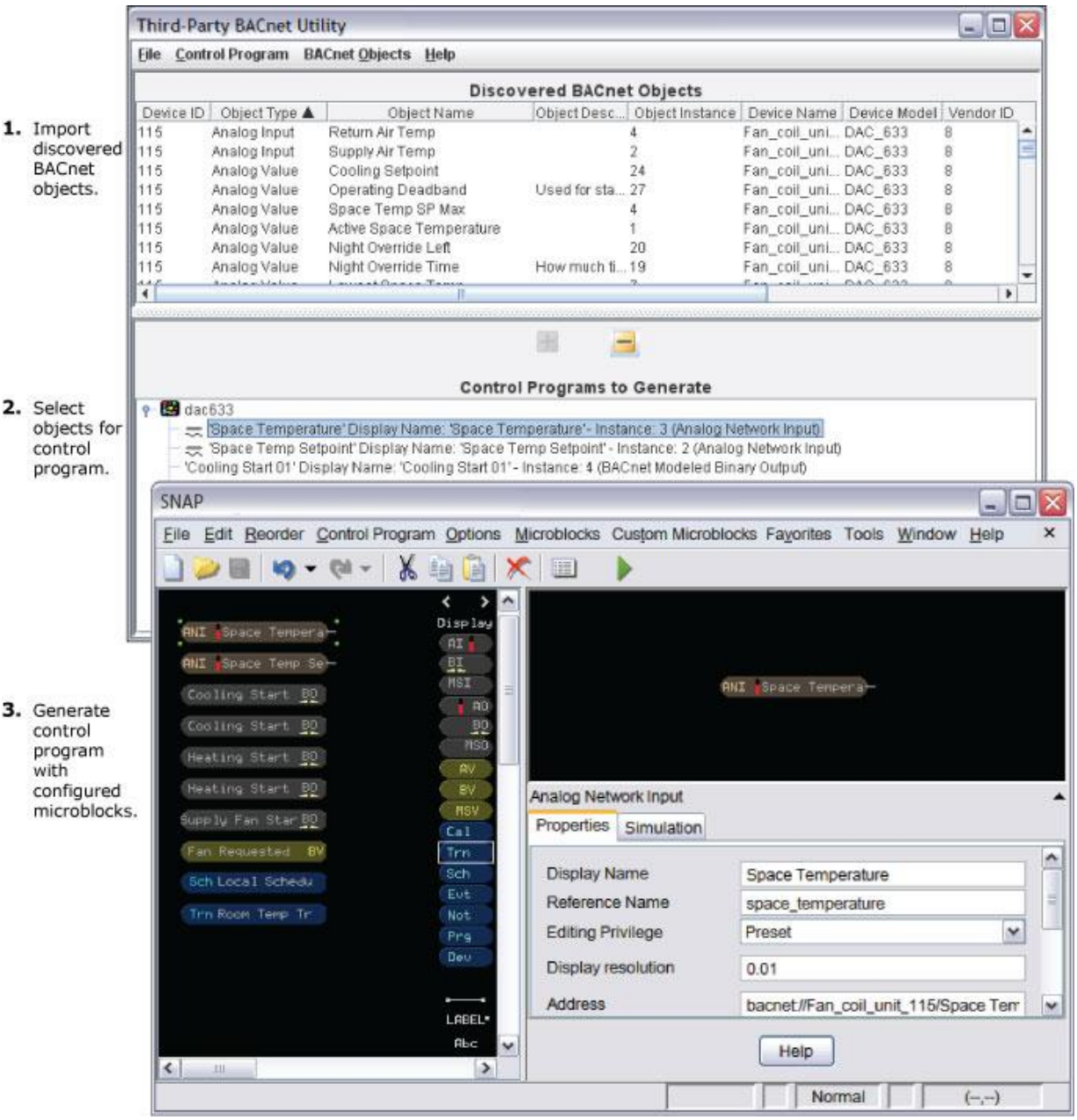
What is Third-Party BACnet Utility?

Using BACnet information exported from the i-Vu® Pro BACnet Discovery feature, the Third-Party BACnet Utility configures and addresses Display or Network I/O microblocks for selected BACnet objects, and then generates a control program containing the microblocks.

1. Import discovered BACnet objects.
2. Select objects for control program.
3. Generate control program with configured microblocks.



To create a control program

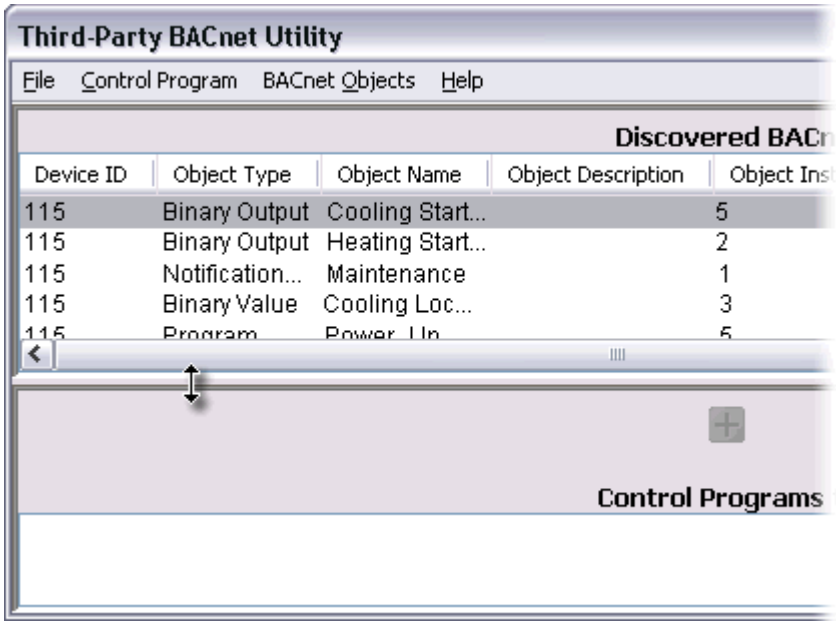
1. Click **Start** > **All Programs** > **i-Vu Tools x.x** > **Third-Party BACnet Utility**.
2. Select **File** > **Save as**.
3. Name and save the .3pbu file in any folder.
4. Select **File** > **Import**.
5. Browse to the .discovery file that you exported using the i-Vu® Pro BACnet Discovery feature. See To export a .discovery file in the i-Vu® Pro interface.
6. Select **Control Program** > **Add Control Program**.
7. In the **Name** field, type the name of the .equipment file that you want to create, then click **OK**.

   NOTE You can repeat steps 6 and 7 to add multiple control programs to the .3pbu file.
8. Click to highlight one or more control programs in the **Control Programs to Generate** list.
9. Click, Shift+click, or Ctrl+click to select the point(s) you want to add to the control program(s).
10. Click  .
11. Select **Control Program** > **Generate Control Programs**.
12. Browse to the control programs **Destination Directory**.
13. Select the checkbox by each control program that you want to generate.

    NOTE You can use the **Check All** and **Uncheck All** buttons to the far right.

TIPS

- Move the divider bar to adjust the size of the panes.



- Keyboard shortcuts are shown beside their corresponding commands in the drop-down menus.
- Change the width of a column by dragging the bar between column headings.
- Rearrange the columns by dragging and dropping a heading cell.
- Click a column heading to sort the rows by the information in that column.
- To prioritize sorting by multiple columns, hold down Ctrl as you click headings. The size of the triangles indicate the sorting priority.

  For example: Click **Device ID** to sort the rows by third-party devices. Then Ctrl+click **Object Type** to sort each device's object types. Then Ctrl+click **Object Instance** to sort each section of object types by instance numbers.
- Make the **Discovered BACnet Objects** list easier to view by selecting **BACnet Objects** > **Filter Properties**. Then select or clear checkboxes to show only the information you need.
- Hide selected objects by right-clicking one of the selected objects then selecting **Hide object**. To reveal the hidden objects, go to **BACnet Objects** > **Filter Properties**, then select the **Show hidden objects** checkbox.
- To find an object in the opposite pane, right-click the object, then select **Find Usages**.
- Move or copy objects from one control program to another by right-clicking the selected object(s), then selecting **Move to** or **Copy to**.

To edit a control program

You can edit a control program created with the Third-Party BACnet Utility in the utility itself or in the Snap application. Or, in the Snap application, you can edit an existing control program to integrate with a third-party BACnet device.

To edit a control program in the Third-Party BACnet Utility

1 In the Third-Party BACnet Utility, select **File** > **Open**.

2 Select the .3pbu file that contains the control program(s) you want to edit.

3 Make changes as needed.

NOTE If you change a microblock's reference name, the utility will add a new microblock when you generate the control program.

4 Select **Control Program** > **Generate Control Programs**.

NOTE The **Generate Control Programs** command will add microblocks that you added, but will not delete microblocks that you deleted in the Third-Party BACnet Utility.

5 Save the control program(s).

To edit a control program in the Snap application

1 Select **File** > **Open**.

2 Select the .equipment file that you want to edit.

3 Select **Edit** > **Third Party BACnet Addresses**.

4 Browse to the .discovery file that contains the BACnet object you want to add or change.

5 In the **Third Party Addresses** window, check **Only show objects that match selected microblock**.

6 Do one of the following:

Change an existing microblock

a. Select an existing microblock.

b. Select an object in the **Discovered BACnet Objects** list.

c. Click **Change Microblock**.

d. Select a different microblock type from the drop-down list.

e. Optional: Choose **Change Type Only** or **Change Type And Set Address**.

f. Click **OK**.

OR

Add a new microblock

a. Add a Network I/O or Display microblock.

b. Select a point in the **Discovered BACnet Objects** list.

c. Click **Set Address** to assign object properties to the microblock.

7 Save the file.

To export a .discovery file in the i-Vu® Pro interface

The i-Vu® Pro **BACnet Discovery** feature locates all accessible BACnet networks, BACnet devices, and BACnet objects (including devices in your i-Vu® Pro system) on a BACnet network.

To use BACnet Discovery:

1 In the i-Vu® Pro interface, go to  > **System Options** and select **Connections**.

2 On the **Configure** tab, disconnect the BACnet/IP connection.

3 While the connection is stopped, enter or verify the server's **IP Address** and **Subnet Mask** for the BACnet/IP connection.

4 Restart the connection.

5 On the navigation tree, select the system level.

6 Click **Devices**.

7 On the **Advanced** tab, click **Start** to discover BACnet sites for the system. An item called **Discovered Networks** appears in the tree.

8 To discover BACnet networks, select **Discovered Networks**, then click **Go**. A list of all BACnet networks appears on the navigation tree. After all networks are found, close the status dialog box.

 **TIP** Run a commstat manual command to determine which device routes to each network. The **BACnet Bind Show Network** section of the Commstat window shows the IP address of the router to each network.

9 To discover BACnet devices on a network, select a network on the navigation tree, then click **Go**. After all devices are found, close the status dialog box. Click the plus sign beside an item to expand the list of devices.

10 To discover BACnet objects on a device, select the device on the navigation tree, then click **Go**. After all objects are found, close the status dialog box. A list of all BACnet objects in this device appears on the navigation tree.

 **TIP** Make sure you are discovering objects in the correct device. It may take some time to discover objects in devices with more than 100 objects.

11 On the navigation tree, select a discovered network with devices or a single device.

12 Click the **Export** button to export the BACnet information.

13 Name and save the .discovery file in any folder.

NOTES

- Some third-party BACnet devices may not be discovered because they do not support the BACnet methods required for auto discovery.
- If the discovery process returns ambiguous information, such as multiple points with similar names, contact the third-party manufacturer's representative for clarification.
- Device configuration or network load can prevent the i-Vu® Pro interface from showing all BACnet devices. If you do not see a BACnet device that you expect to see, check the system's BBMD configurations. If the configurations are correct, try the discovery process again.

Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
		No changes yet	

* For internal use only