BASview — Login

❖ The default IP address of the BASview is 192.168.92.68.

❖ At login, you can switch from Flash to Mobile Interface.

❖ The default login is
  o Username: admin
  o Password: pass

Contemporary Controls BASview
Version 1.42d - Serial #012A4B4C288A

Corporate Headquarters

Username

Password

Login

(Switch to Mobile Interface)

BASview — Main Screen

After logging into the Flash Interface, you will see this basic screen.
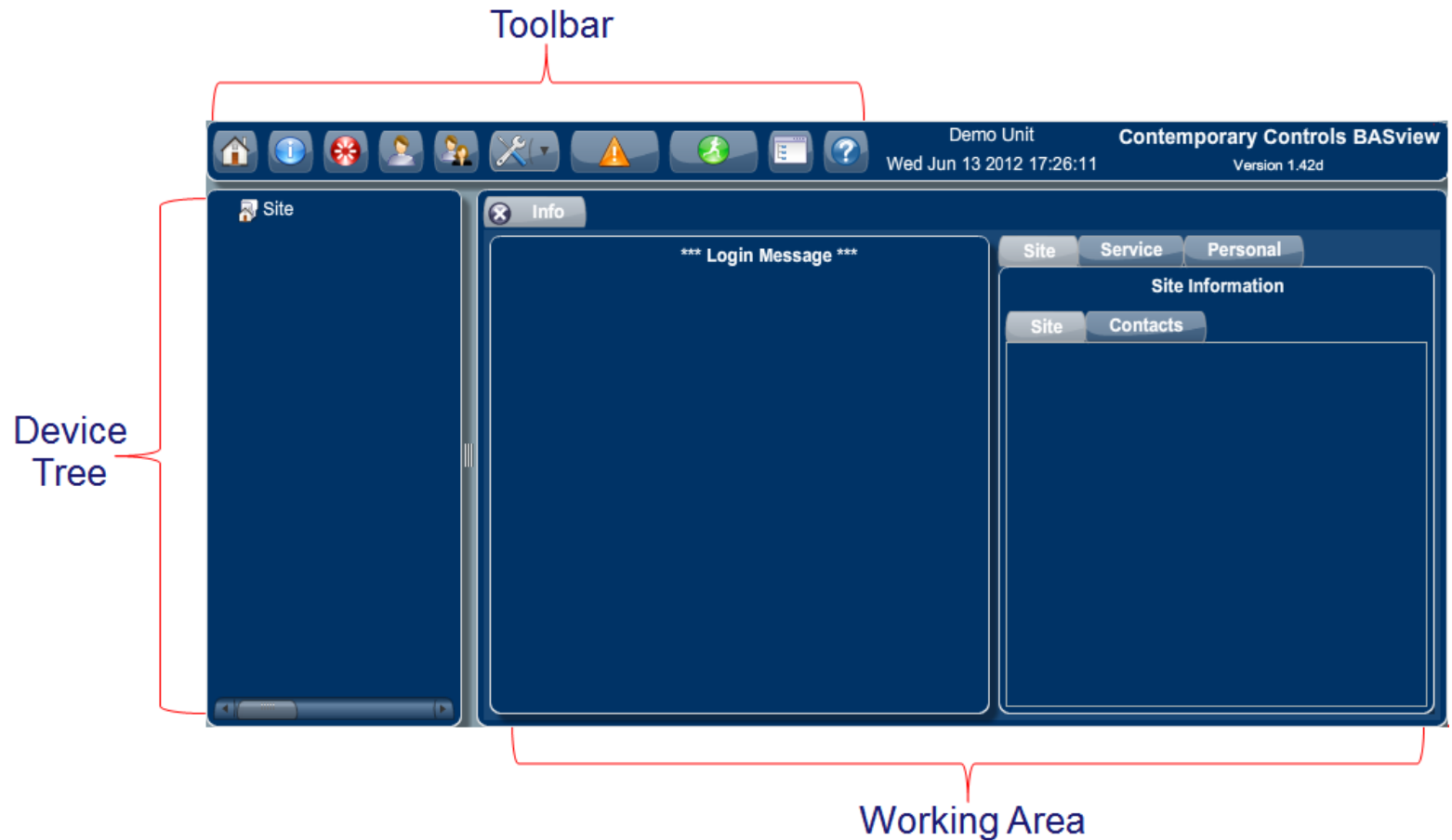
BASview — Toolbar

❖ The 10 Toolbar icons are: Home, Site Info, Logout, Users, User Groups, Admin, Alarms, Runtime, Tree View and Help.

❖ The drop-down menu under the Admin (wrench) icon allows you to …

- see logs and status
- enter site settings
- set the time/location
- specify a login message
- configure the IP address
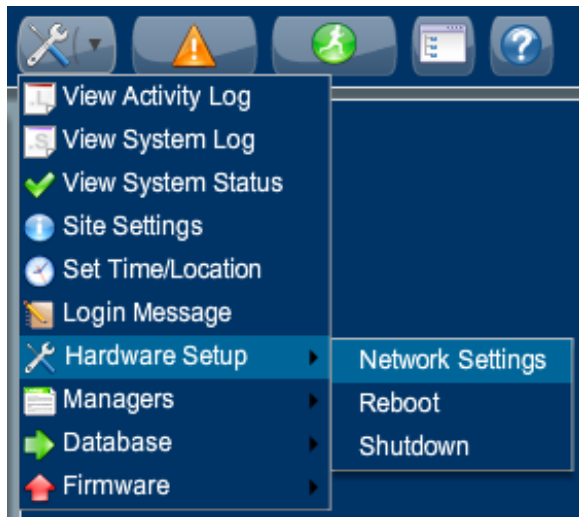- reboot the unit
- update the firmware

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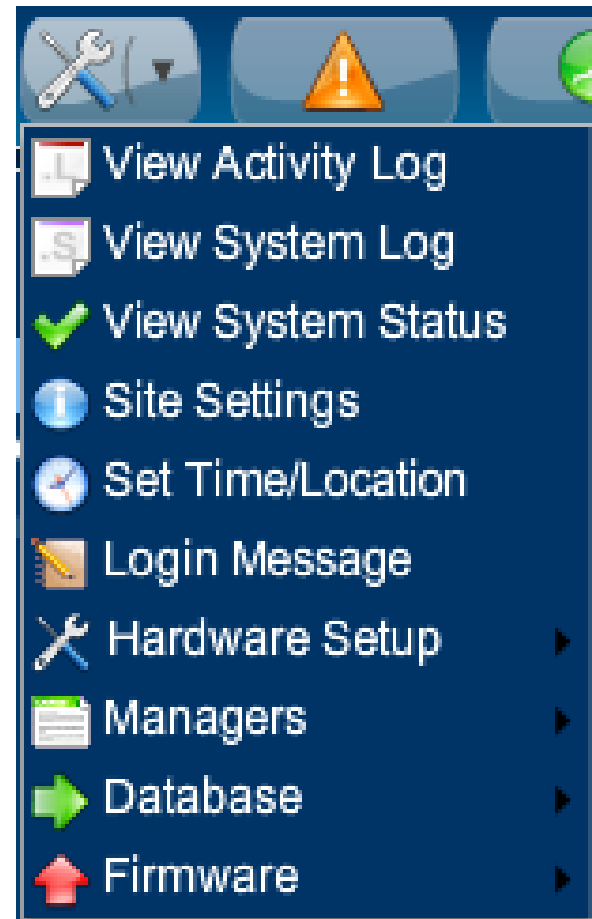
BASview — Help Screens

❖ The BASview has tool-tip messages that pop up to explain what a button does when you hover over it.

❖ It also has context-appropriate online help. Press ⍰ on the toolbar and on all screens to access the help system
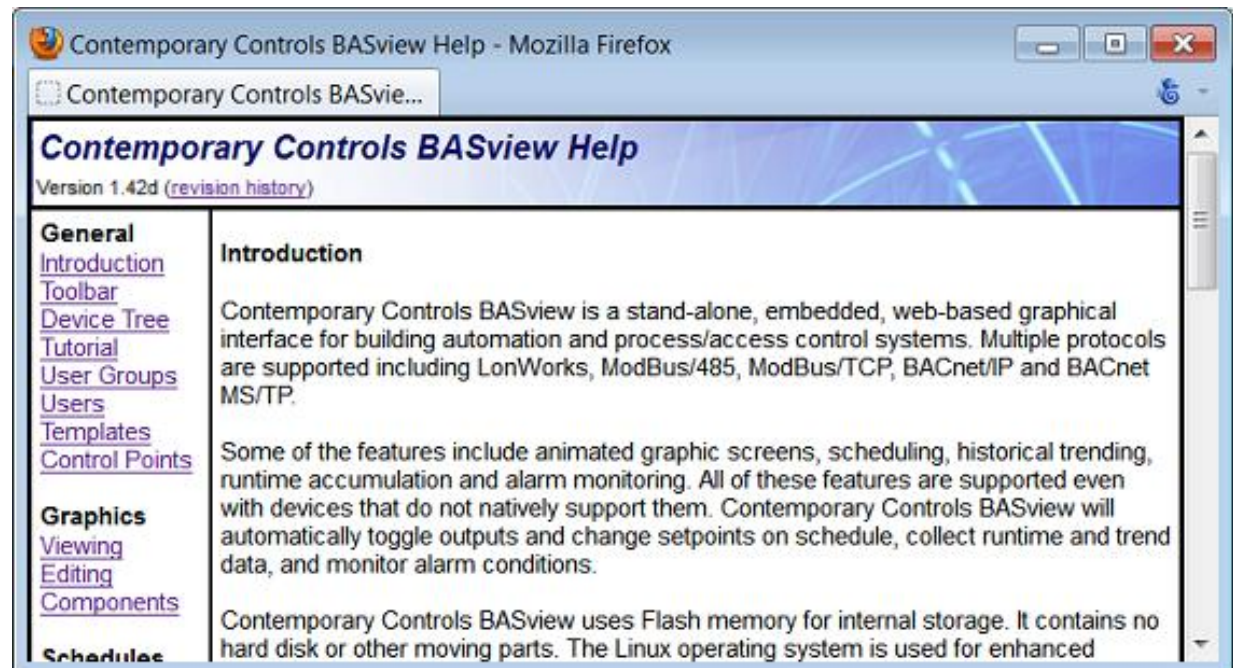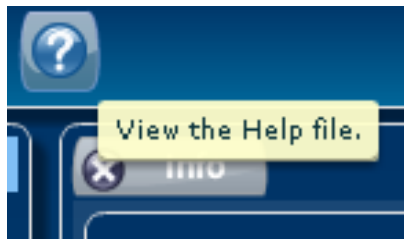
BASview — IP Address Setting

❖ Enter your IP address settings and reboot.

❖ For BACnet systems it is important to set the Broadcast setting to the broadcast address in your subnet.
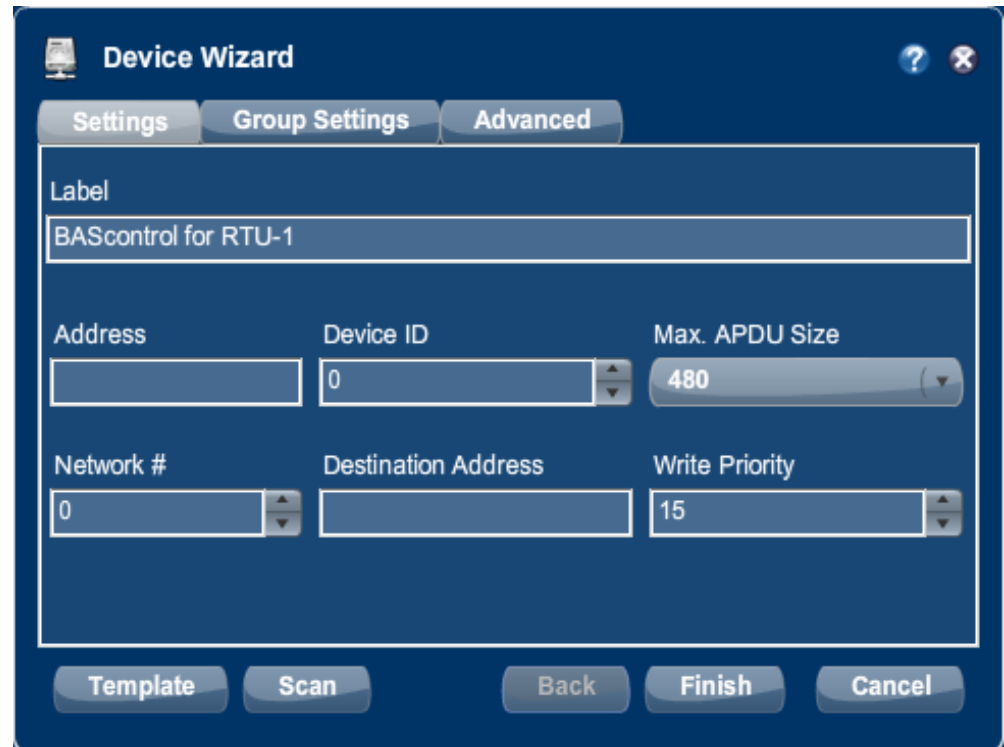
BASview — Drivers

❖ To communicate with devices, you must load a driver.

❖ In the **Device Tree**, right-click the Site icon and select "New Driver".

❖ In the **Select Driver Type** window, choose the appropriate driver and press "Ok".
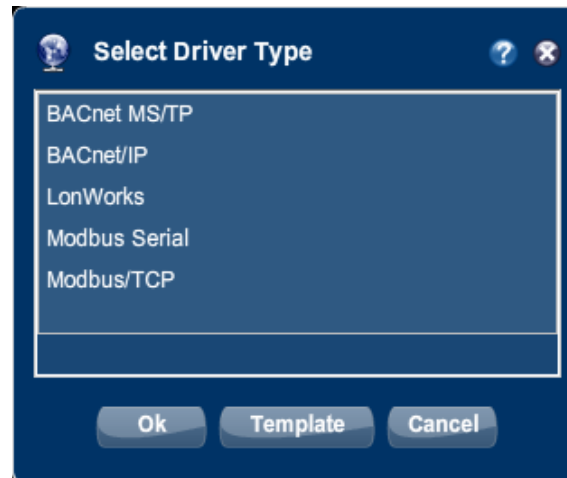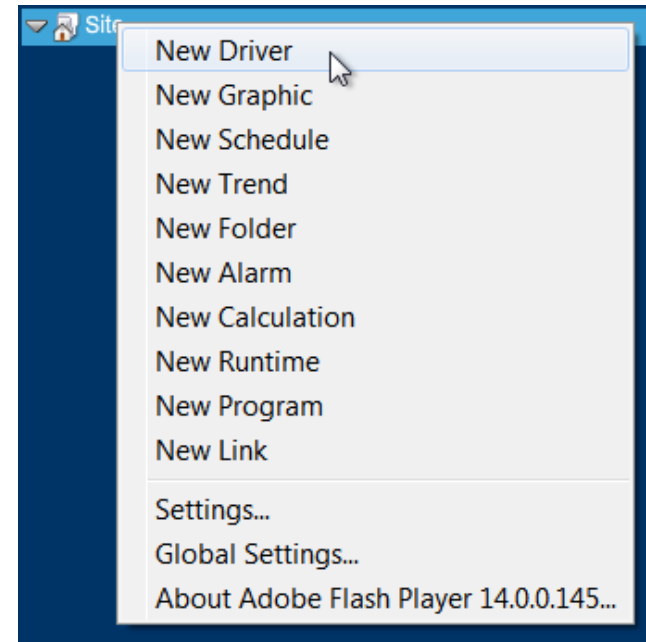
BASview — Driver Configuration

❖ Enter in your driver configuration.

❖ For BACnet, use a system-wide unique Device ID.

❖ 47808 is the standard BACnet port number.

❖ Enter a label for the driver and press "Finish".

BASview — Discover Devices

❖ Right click the driver and select "New Device".

❖ The **Device Wizard** allows you to set device parameters, or — with BACnet — discover a device.

❖ Press the "Scan" button to discover BACnet devices.

❖ Press "Finish" on the next pop up window.
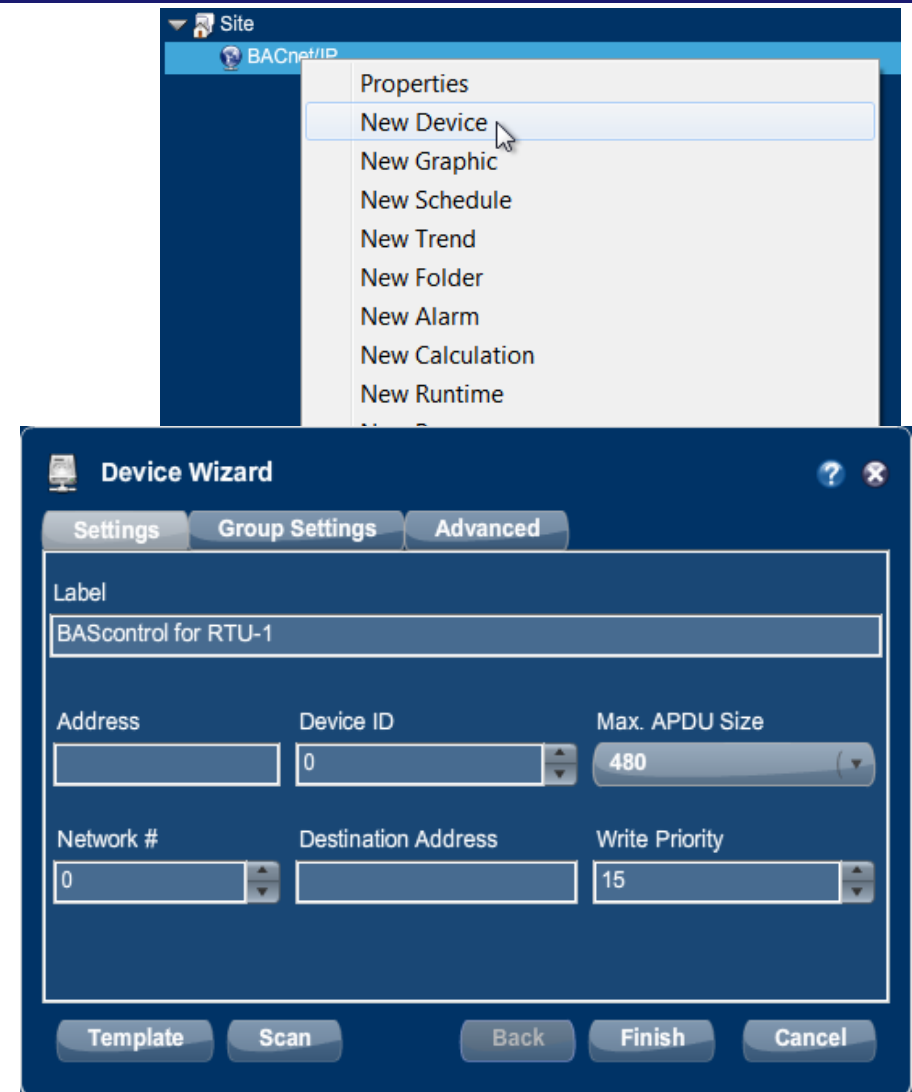
BASview — BACnet Device Scan

❖ If the NetworkID is 0, the discovered device is on the BASview network — otherwise, it is accessed through a router.

❖ Select each device you want, give each a meaningful label and press the "Add" button.

BASview — Add BACnet Points

❖ Refresh the **Device Tree** to see your new BACnet devices.

❖ Right click a device and select "New Point" in the popup menu.

❖ The **Point Wizard** allows you to enter one point or discover points.

❖ Press "Scan" to discover points.

❖ Press "Finish" on next window.
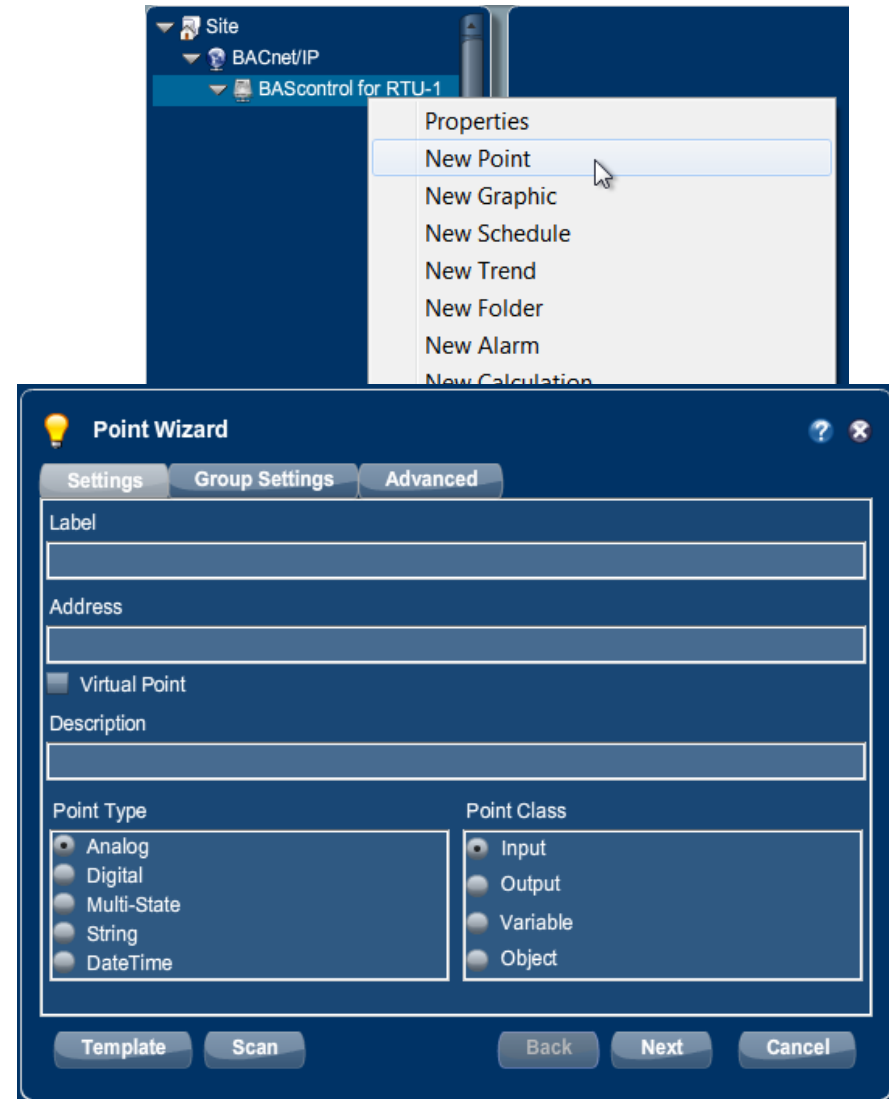
BASview — Add BACnet Points

❖ Select the points of interest and press the "Add" button.

❖ You can select multiple points.

❖ Points **disappear** from the scan list as they are added.

BASview — Points To Be Written

❖ All points are read-only by default.

❖ To modify a point you must mark it writeable.

❖ Right-click a point and select "Properties".
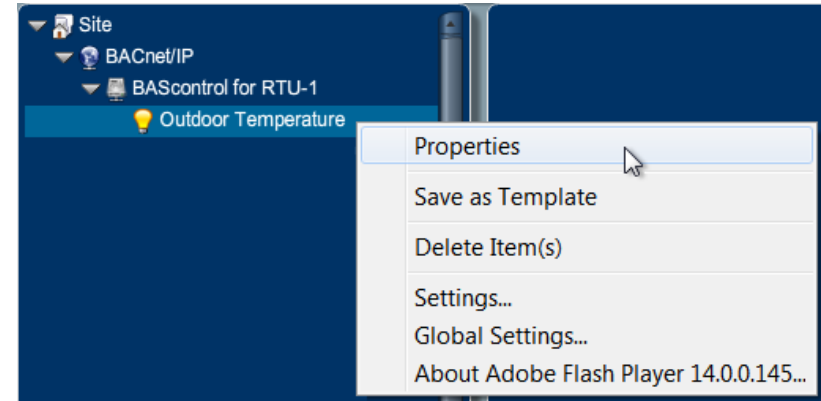
❖ In the **Point Wizard** window that appears, press "Next".

❖ The next window may or may not display a "Modifications" tab. If shown, click it to view this check box:
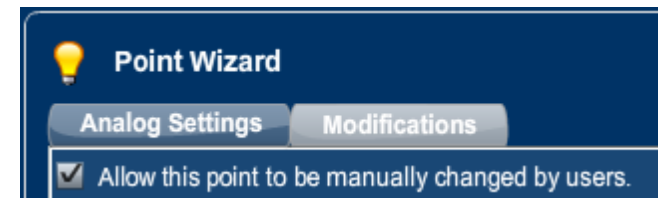
"Allow this point to be manually changed by users"

❖ Check this box and press "Finish".

BASview — Manually Writing/Reading Points

❖ Left-click a point in the **Device Tree**.

❖ Then modify its value — if writeable — from the point window and press the "Apply" button.

❖ This can also be used to view the status of a point.

❖ The lock symbol can be used to view/modify the BACnet priorities for the point.
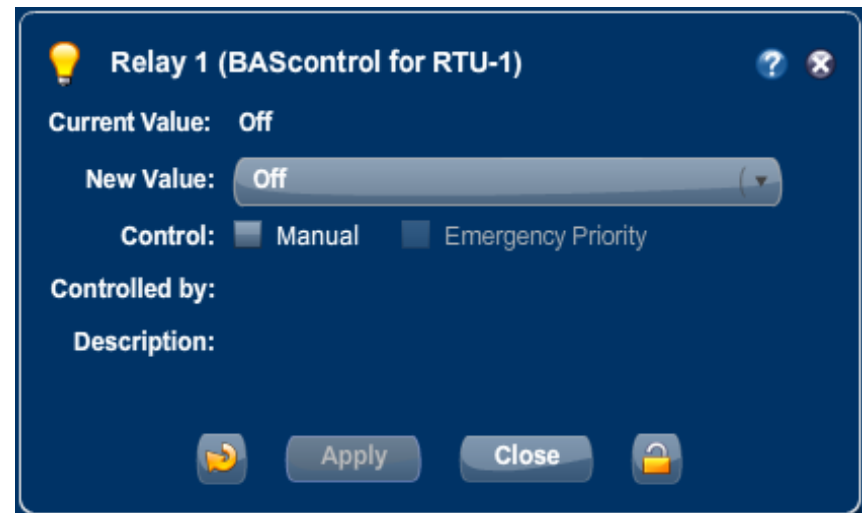
BASview — Alarms

❖ In the **Device Tree** you can place Alarms at different levels.

❖ To place an alarm below a **driver**, right-click the driver and select "New Alarm".

❖ To place an alarm below a **device**, right-click the device and select "New Alarm".

(Continue on the next slide.)
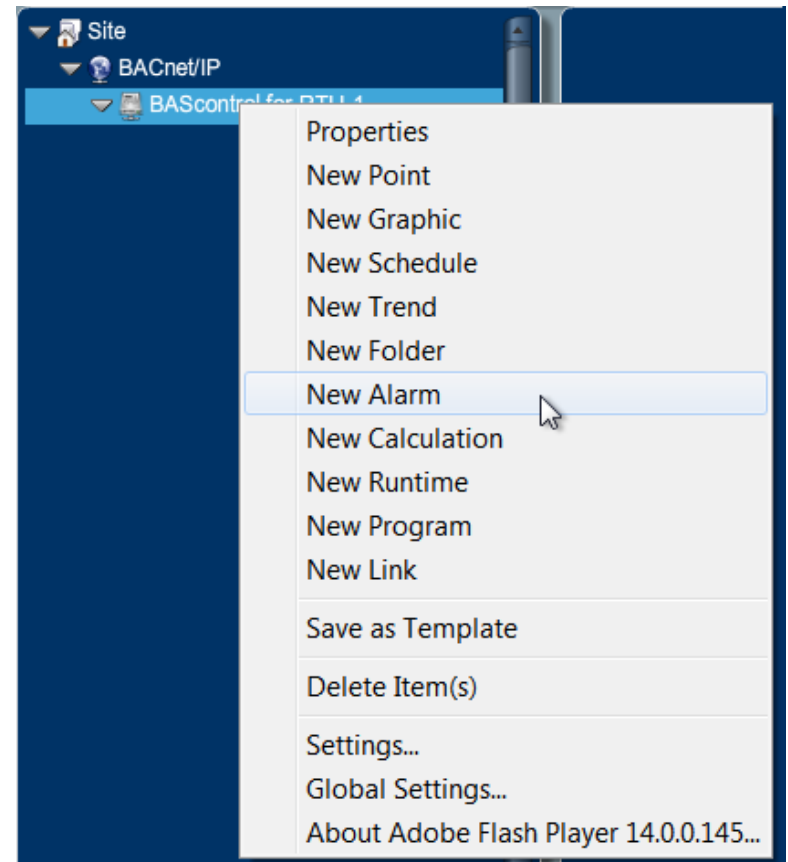
BASview — Alarms

❖ Name the alarm and press "Finish".

❖ Then left-click the newly created alarm.

❖ Now you can set the alarm conditions.

❖ Press the "Conditions" tab.

(Continue on next slide.)
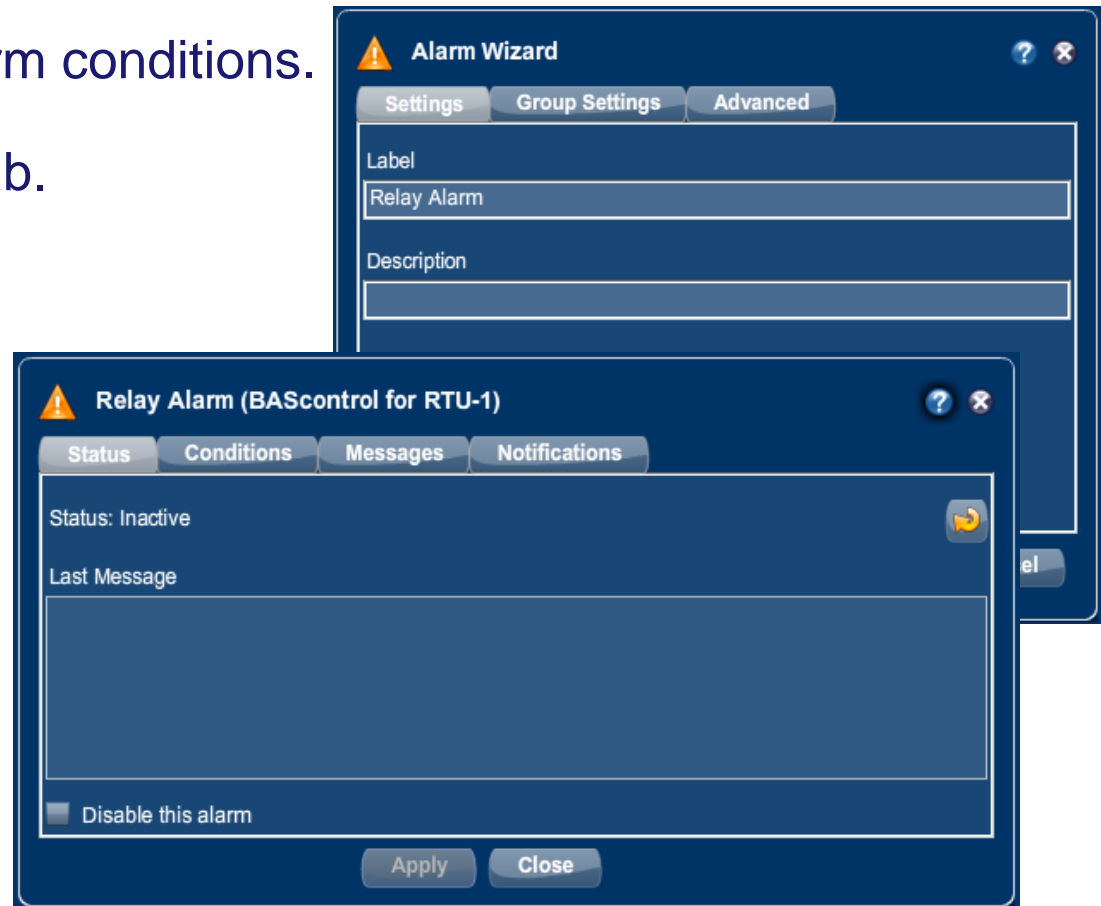
BASview — Alpha Conditions

❖ Drag a point from the **Device Tree** to the point box.

❖ Set the options boxes for when to report an alarm.

❖ Select the "Clear" tab and then set the conditions for alarm clearing.
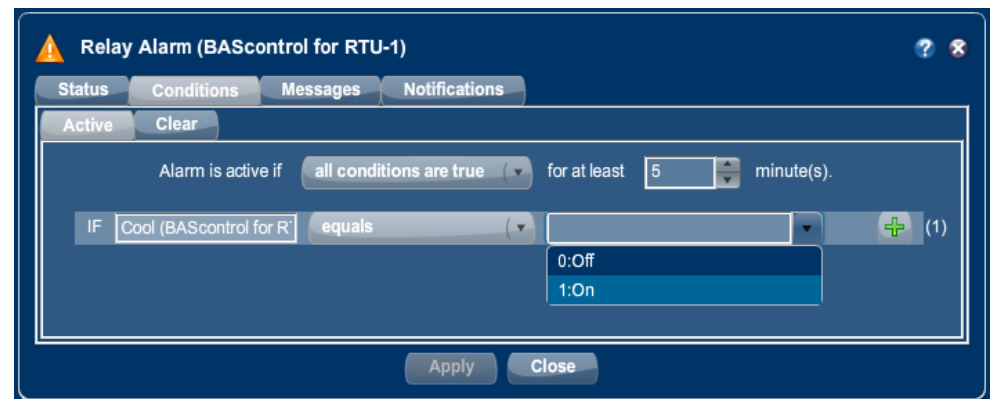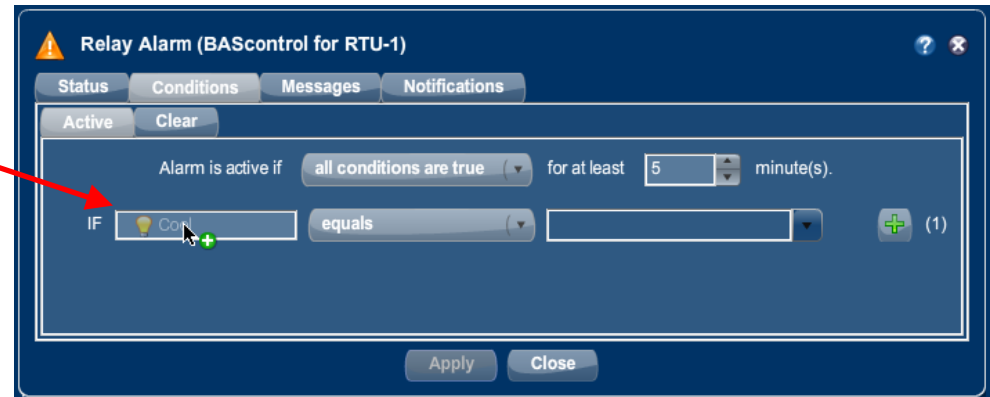
(Continue on the next slide.)

BASview — Alarm Messages

❖ Alarms require a message when set and optionally when cleared.

❖ Press the "Messages" tab and provide the messages.

❖ Then press the "Apply" button.

BASview — Alarm Log

❖ When the Alarm icon is flashing — or presenting a non-zero number — one or more alarms have occurred.

❖ Left-click this icon and you will see the **Alarm Log** window. These alarms clear when the conditions have cleared.
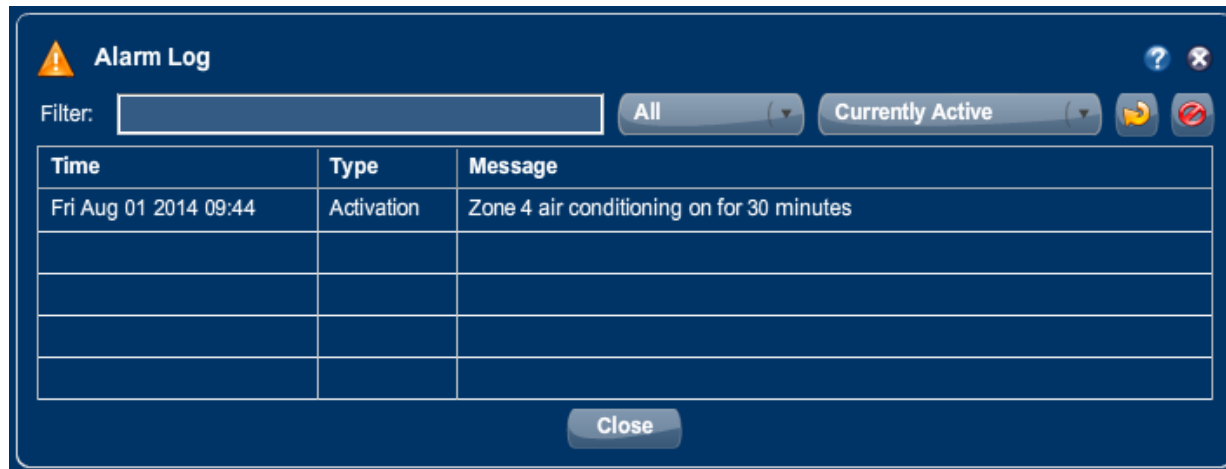
BASview — Schedule

❖ To create a schedule, right-click a driver or device and select "New Schedule".

❖ Name the schedule and select "Finish".

❖ Left-click the newly created schedule to configure it.

(Continue on the next slide.)
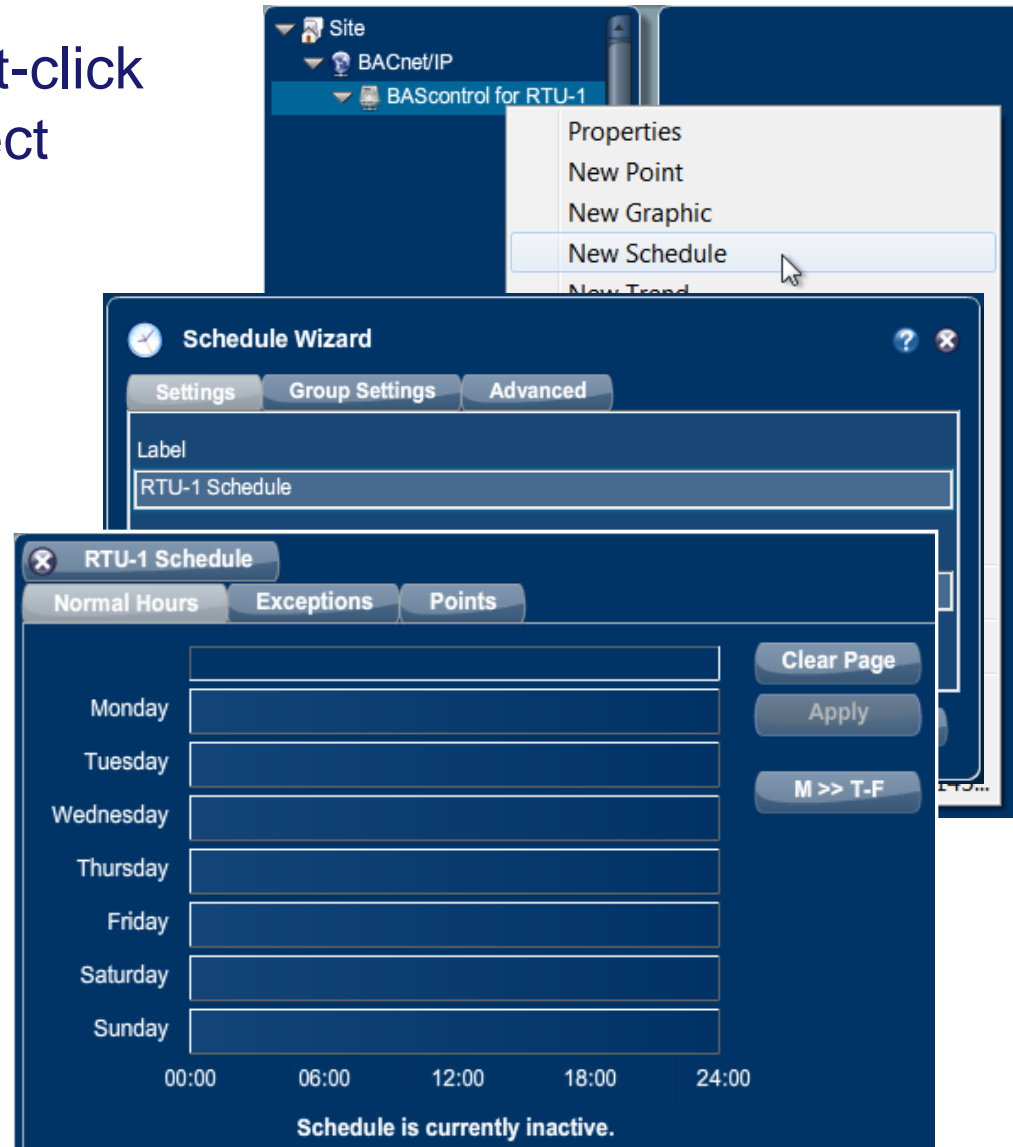
BASview — Schedule Editing

❖ Press the "Points" tab and drag from the **Device Tree** the points you want this schedule to control.

❖ When prompted, select the Active and Inactive values for these points. Then press "Apply".

❖ During the Active period, BASview will send the Active value (that you previously created) to the device point that you provided.

❖ During the Inactive period, BASview will send the Inactive value (that you previously created) to the device.

(Continue on the next slide.)

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BASview — Schedule Setting

❖ To set a daily schedule, click the "Normal Hours" tab and place your cursor into a blank day. A time appears and matches the cursor position. Set this as the Active period start — for example, 6:30 a.m.

❖ Left-click and drag the cursor to the end of the period — for example, 6:00 p.m.

❖ When done, the active period appear between the two triangles.

(Continue on the next slide.)
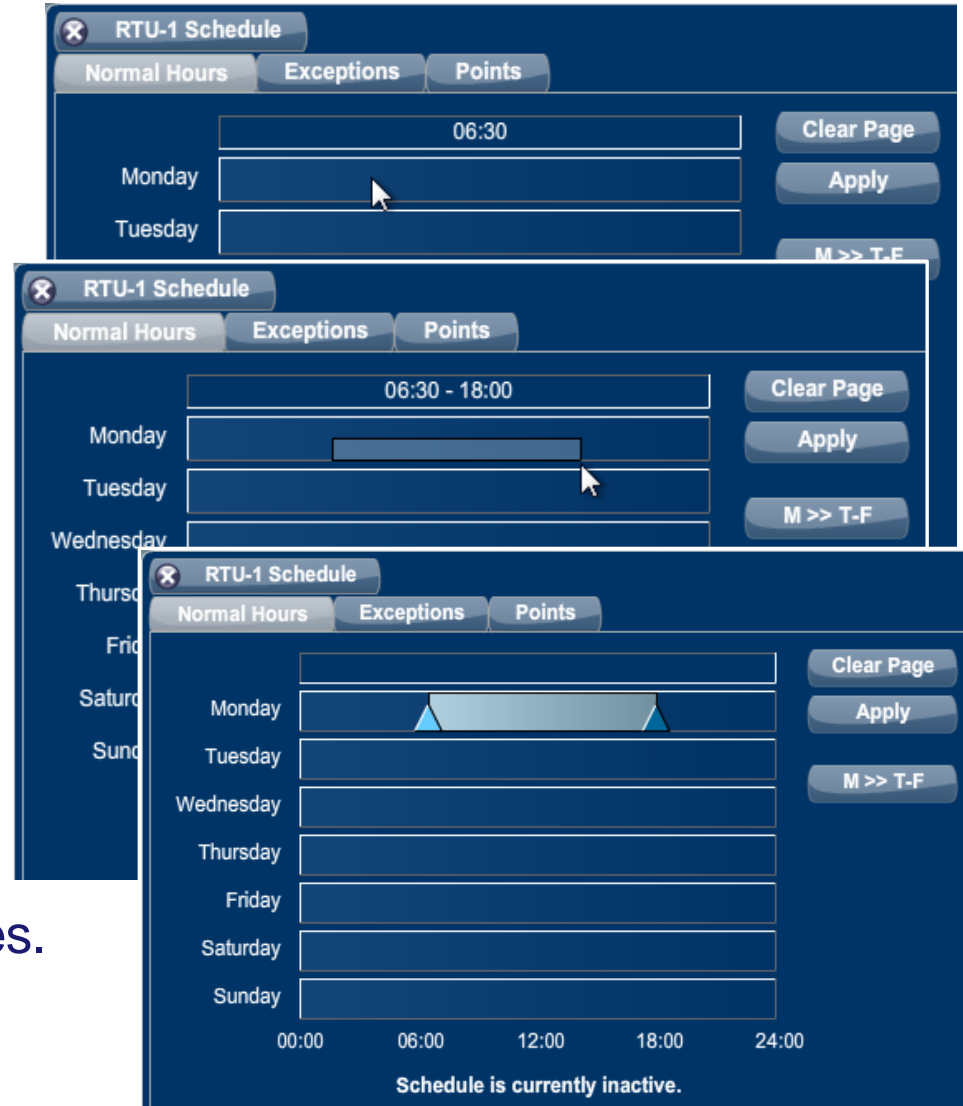
BASview — Schedule Setting

❖ Adjust the schedule by dragging the triangles to different times.

❖ Once you have a Monday schedule — for example — you can copy it to the rest of the week by pressing the M>>T-F button.

❖ You can also set or adjust schedules for each day of the week.

❖ Any area between the triangles is **Active** time (occupied). The area outside the triangles is **Inactive** time (unoccupied).

❖ You can totally **Inactive** days (such as Saturday and Sunday).

❖ Once you are done editing, press the "Apply" button.

❖ You can have many schedules in the BASview.

BASview — Schedule Exceptions

❖ To add Exceptions to your schedule, choose the "Exceptions" tab and click on *any* blank entry to display the **Exception Editor**.

❖ In the **Editor**, set dates that your normal schedule will *not* apply and enter the active times for that date.
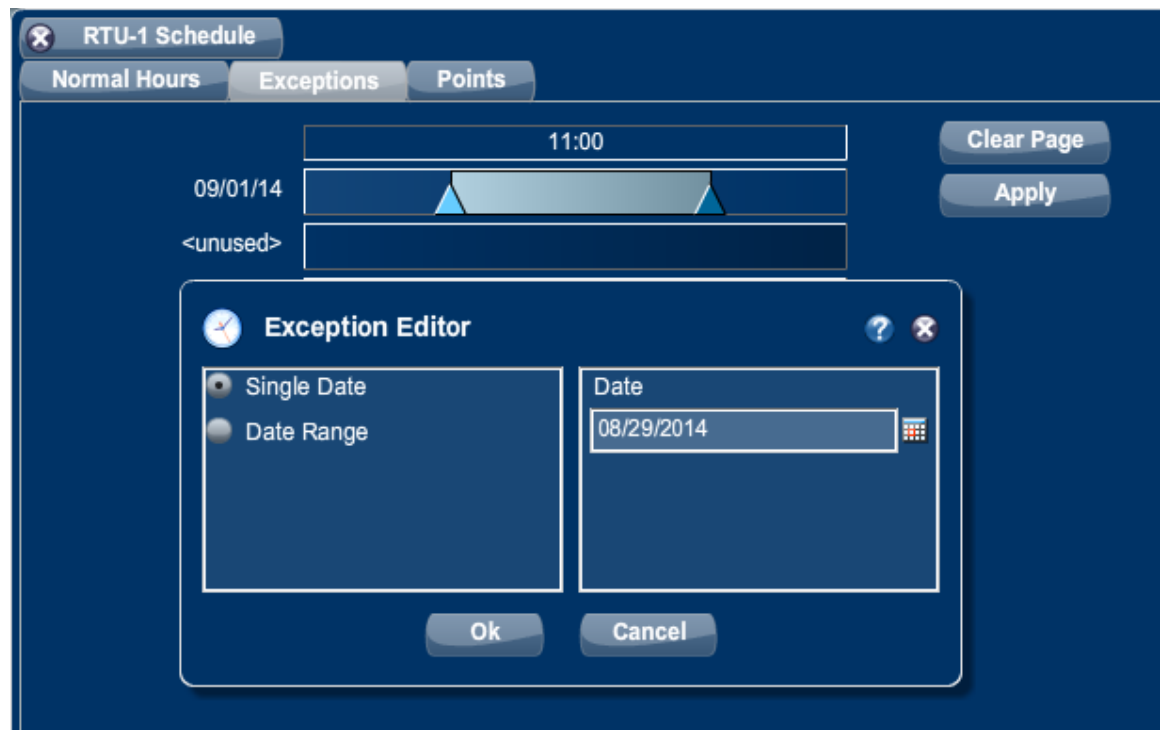
BASview — Trends

❖ You can trend any point in the **Device Tree**.

❖ You can have your trend below a ***driver*** (right-click driver and select "New Trend").

❖ You can have your trend below a ***device*** (right-click driver and select "New Trend").
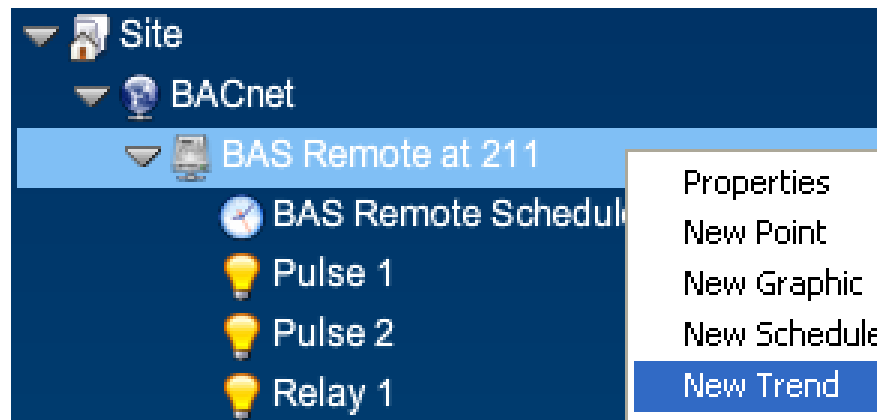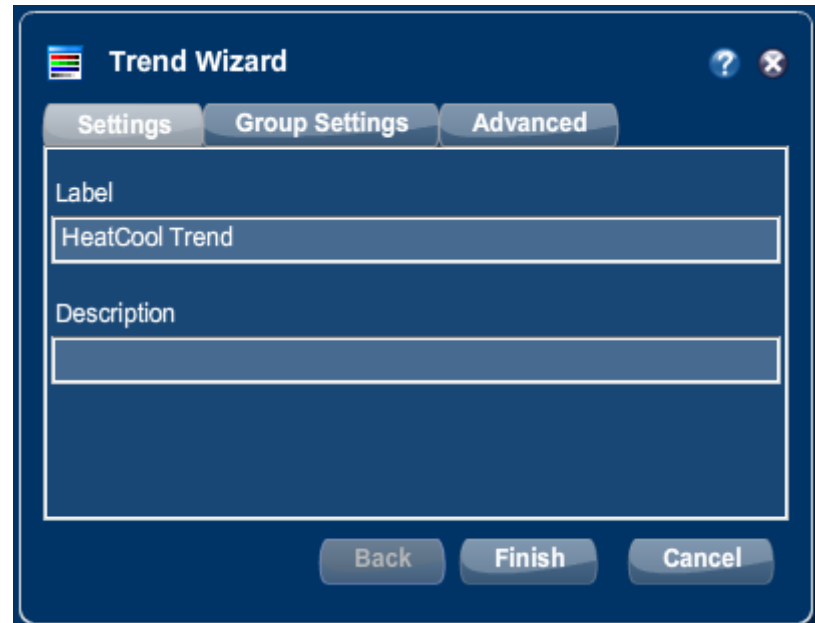
(Continue on the next slide.)

BASview — Trend Wizard

❖ After you create a trend, provide a meaningful label in the **Trend Wizard** and press "Finish".

❖ Left click the newly created Trend in the **Device Tree** and you will see the BASview Trend screen.

(Continue on the next slide.)

BASview — Trend Point Screen

❖ You must add points to the screen. Press the "Points" tab.

❖ Drag a point (you want to trend) from the **Device Tree**.

❖ You can have up to 6 points in one trend.

❖ Select the time between acquisitions and press "Apply".

❖ Time affects how many days you can trend. If you get data every minute, for example, you can only provide 7 days of trends.

(Continue on the next slide.)

BASview — Trend Screen Graphs

❖ After acquiring data, you can see graphs in the **Trend** screen.

❖ You can select the date and time to view.

❖ Hovering will show you the value and the time.
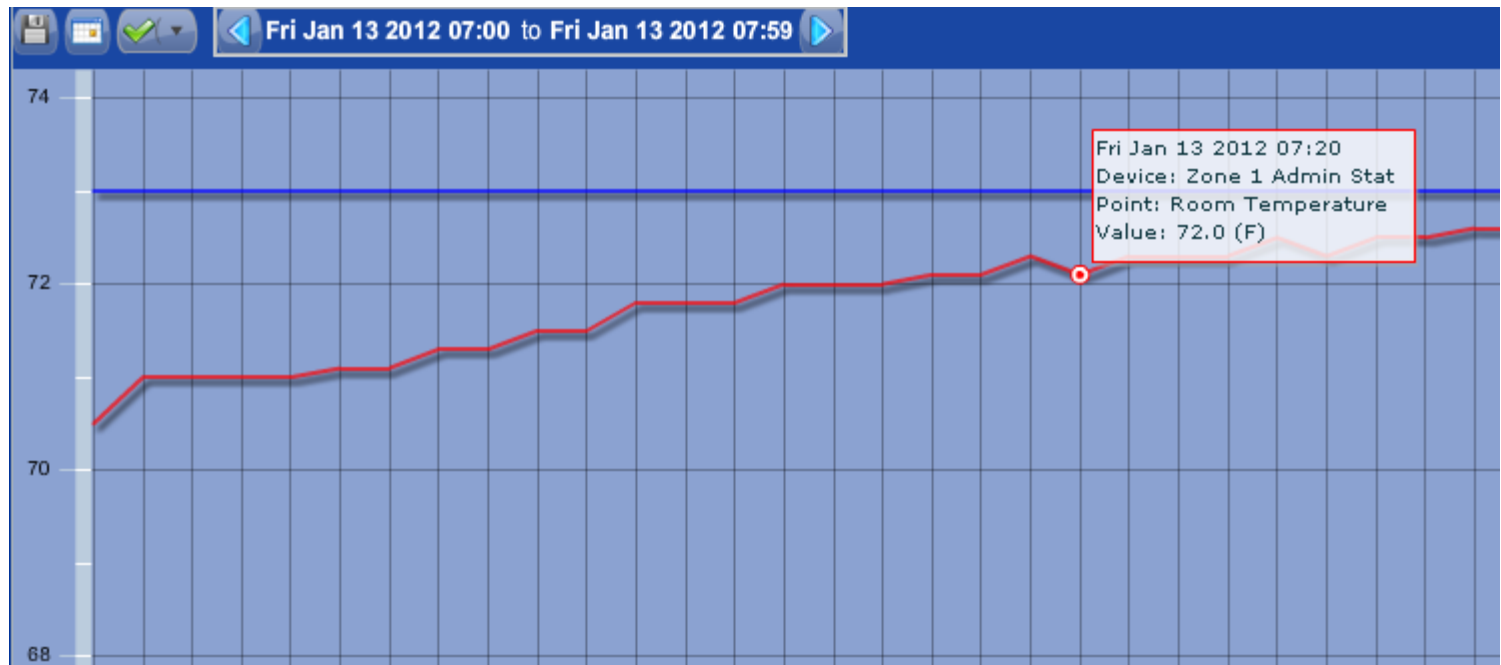
BASview — Users

❖ Under the User Group icon, you can create users groups to allow users varied access to the unit.

❖ For example, you can stop users from seeing the **Device Tree** and provide a pleasing interface for most end users.
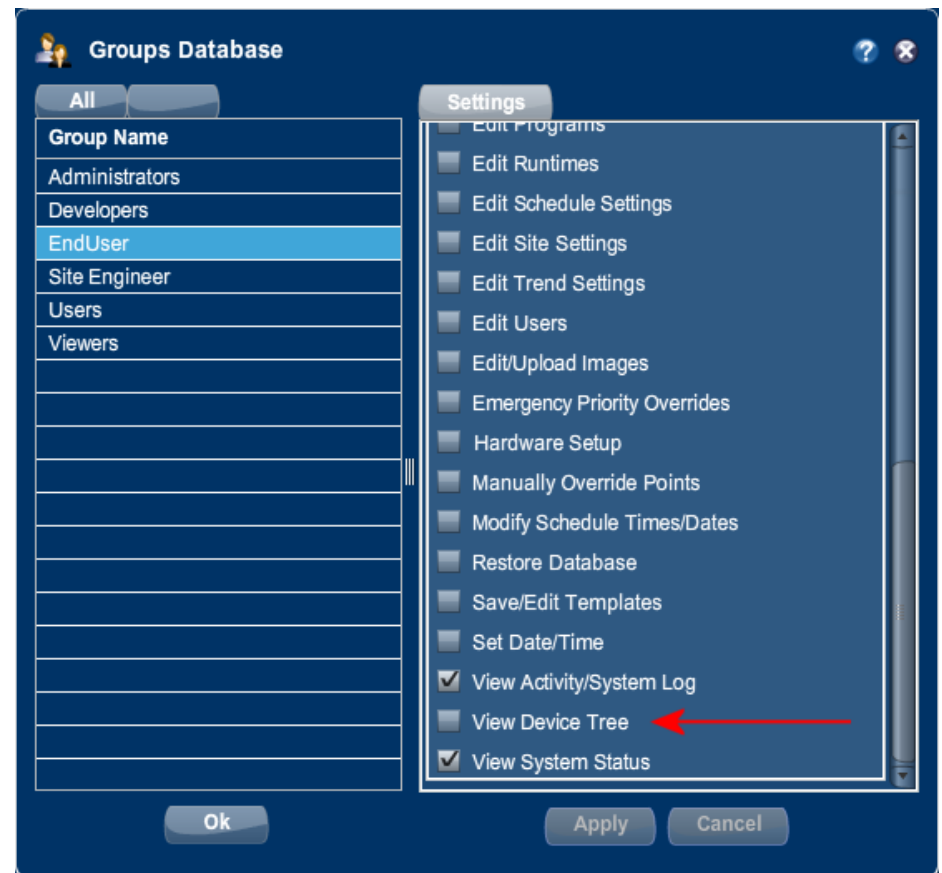
BASview — Graphics

❖ Graphics let you to create custom webpages with values and animations displaying the status of the building.

❖ You can also alter building operation in a graphical view.

❖ Often, end users are allowed access to only one graphic.

❖ BASview provides the integrator the ability to create various **logins** for end users and categories for end users — building engineer, building owner, etc.

❖ Logins can access different graphic screens and can have different rights to the system.

BASview — Creating Graphics

❖ You can put a graphic under a driver or device.

❖ In the next window, enter a name for the graphic, select "Next" and then "Finish".

❖ A graphic is initially blank, when you click its icon in the **Device Tree**.

❖ Click the pencil icon to edit.
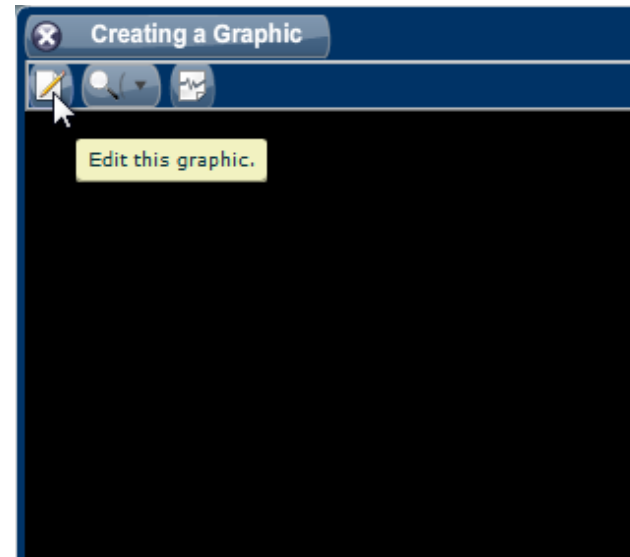
(Graphics continue on the next slide.)

BASview — Graphics Editing

❖ The edit mode has 12 main icons.

❖ Hover over each to see the icon names:
- Exit
- Save
- Edit
- Align
- Size
- Cut
- Copy
- Paste
- Delete
- Scale
- Label
- Add Component
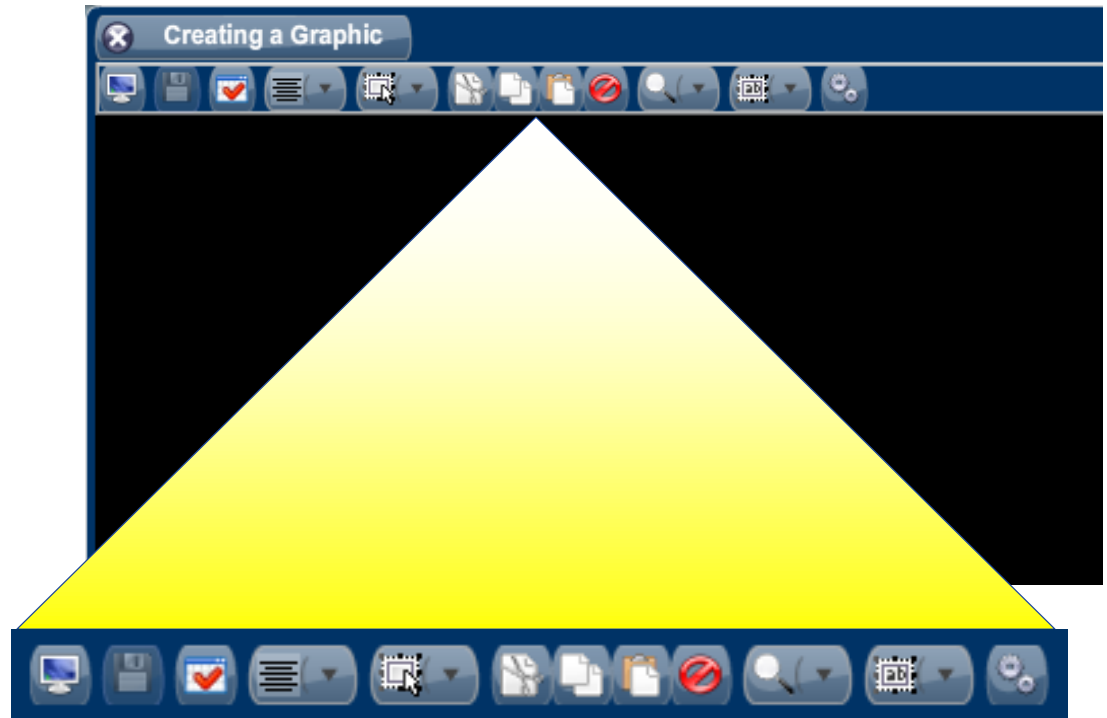
(Graphics continue on the next slide.)

BASview — Graphics Editing — Add Components

❖ Click the Add Component icon to open the **Component Templates** window.

❖ Here you can add graphic components, but most often you will drag some item from the **Device Tree**.

(Graphics continue on the next slide.)
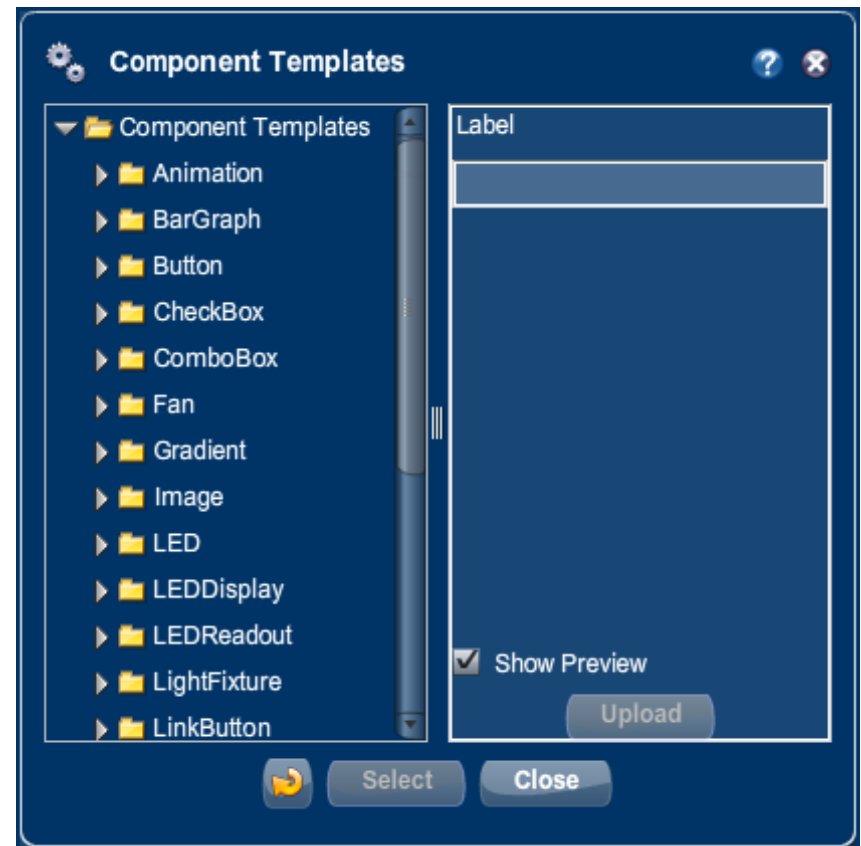
BASview — Graphics — Adding Points

❖ In most cases you will drag a point or element from the **Device Tree** and drop it onto the **Graphic** screen (while in edit mode) to add graphical elements.

❖ Here we drag the "Cool" point onto the **Graphic** screen.

❖ After you complete the drop, the **Component Template** window opens to let you create a graphic component for this point.

(Graphics continue on the next slide.)
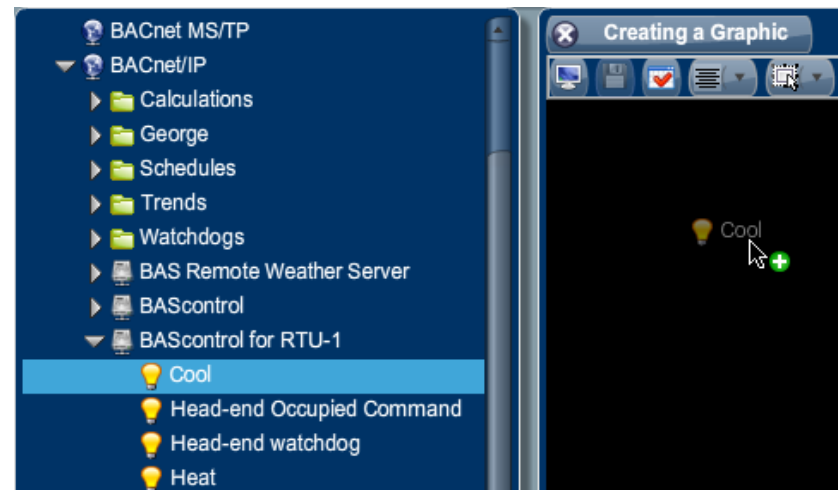
BASview — Graphics — Value Components

❖ Dragging in a read-only point provides an analog value, such as temperature, which can be displayed with various elements that simulate LEDs or LCDs.

❖ Here we select an LCD.

❖ Press "Select" to accept.

❖ The LCD appears on the graphic preview screen.

❖ You can drag the item to any location in your **Graphics** screen.
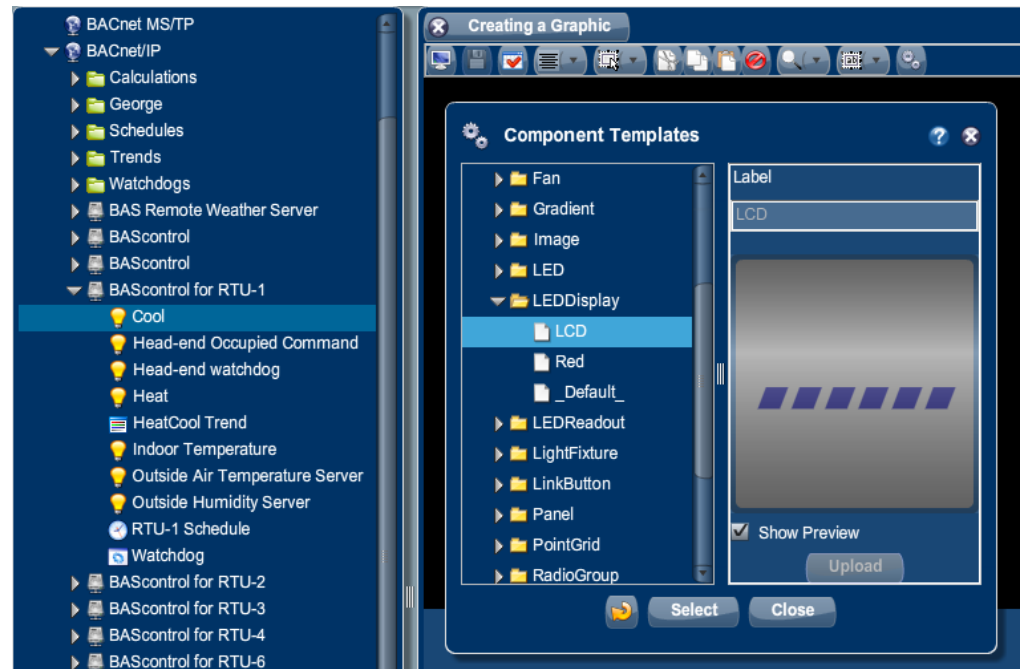
(Graphics continue on the next slide.)

BASview — Graphics — Component Editing

❖ To edit a component, the graphic containing it must be in edit mode. Then right-click the component and select "Properties".

❖ Note that the point which has been given control of the graphic component is reported in to the right of the edit mode toolbar.
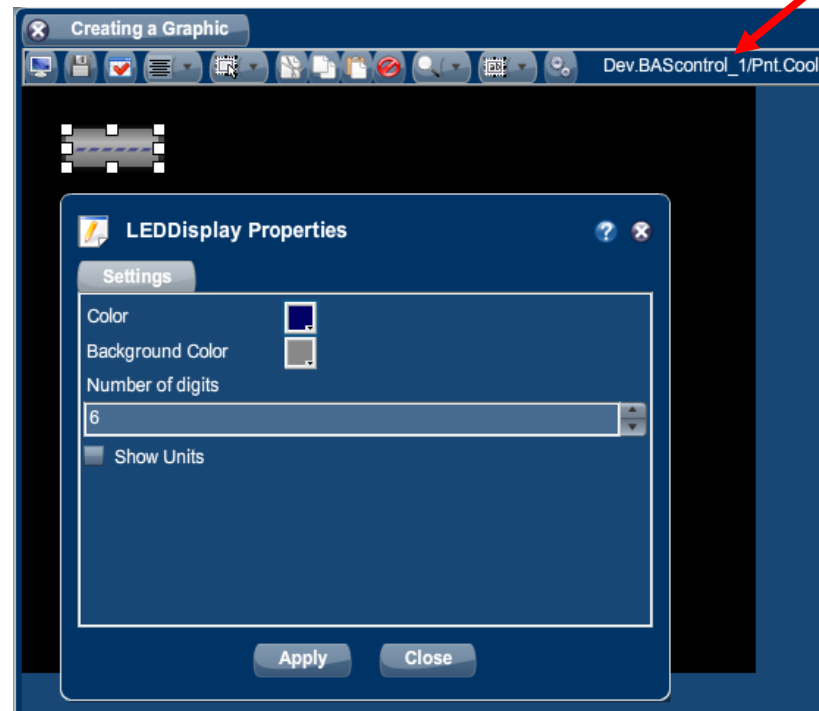
BASview — Graphics with Binary Points

❖ The BASview includes a **Component Templates** list of stock animations which can be triggered by **binary** points.

❖ For example, if your thermostat indicates its fan is operational, you can show a spinning fan.

❖ Here we dragged in a binary point and selected the Fan animation from the list.

❖ The "Animation" folder will contain any GIFs that you choose to **add** to the BASview.
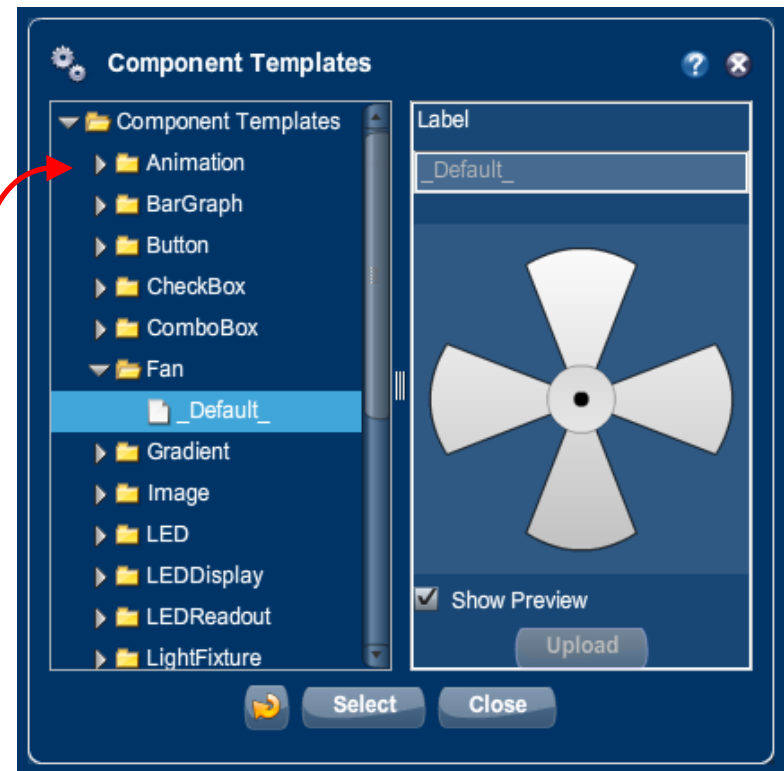
(Graphics continue on the next slide.)

BASview — Graphics — Component Animation

❖ To animate a component, open the graphic that contains it and the enter the graphic edit mode.

❖ In the **Device Tree**, choose the point that will be use to control the component.

❖ Drag and drop this point onto the component.

❖ Then edit the properties of the component .
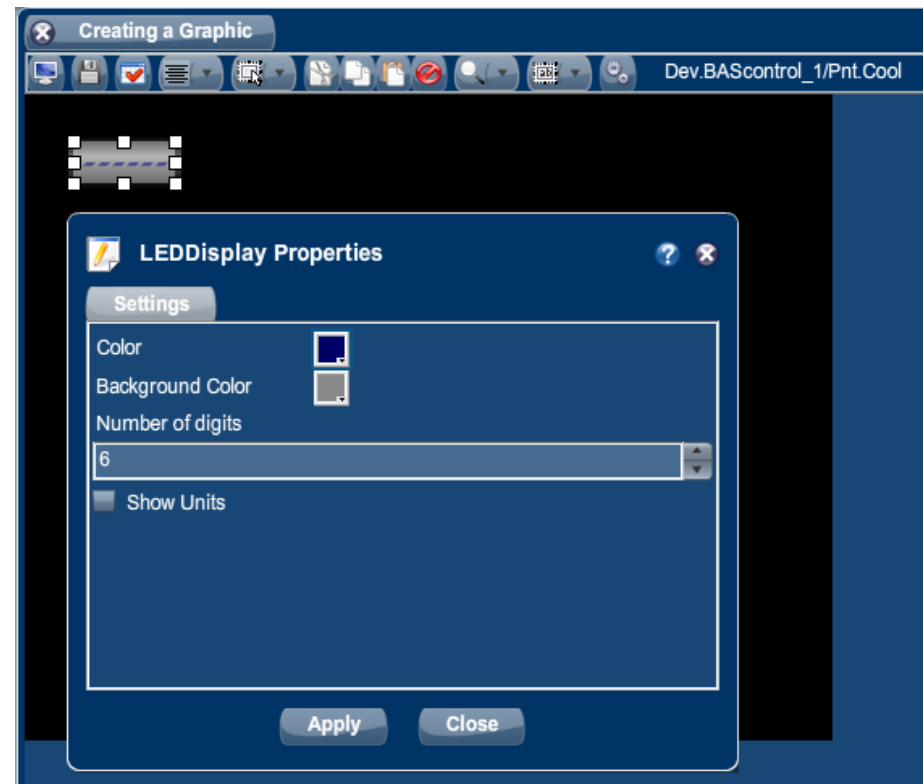
BASview — Graphics — Using Imported Animations

❖ BASview can use Animated GIFs from many sources.

❖ Open any graphic node in the **Device Tree** for editing — then add a component.

❖ In the resulting **Component Templates** window, choose "Animation" and the "_Default_" option to create a blank placeholder (64-bit x 64-bit) for the graphic to be imported.

(Graphics continue on the next slide.)
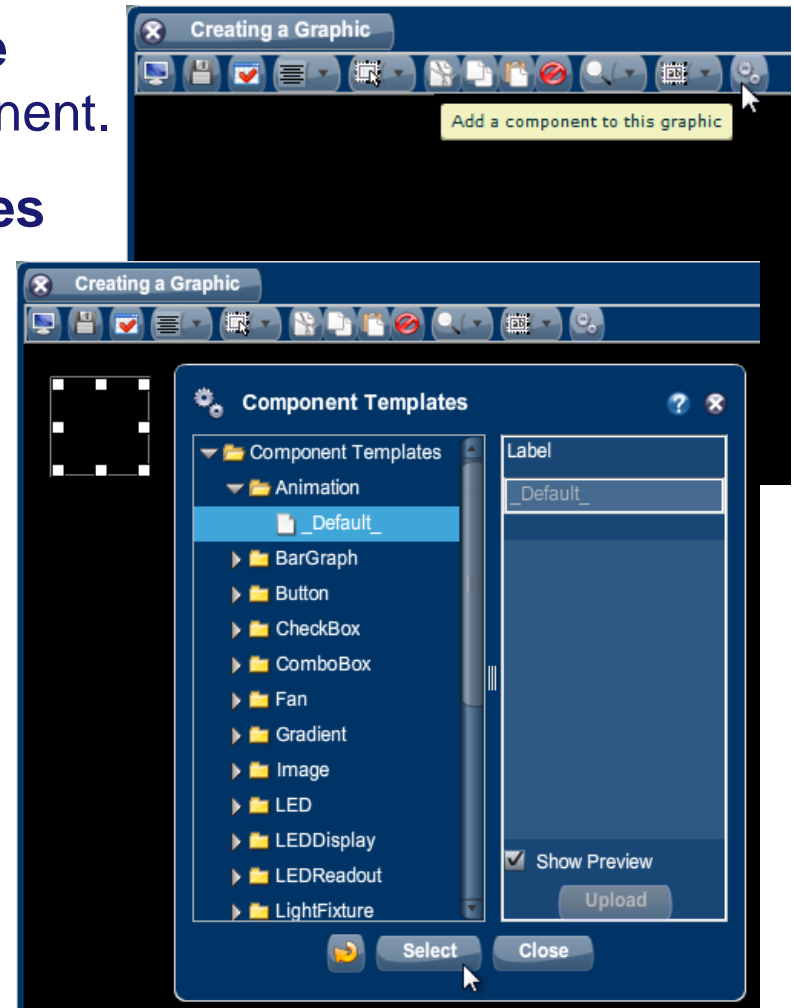
BASview — Graphics — Using Imported Animations

❖ Right-click the placeholder to see its menu options, then choose "Properties".

❖ In the **Animation Properties** window, click "Select" to choose the animated GIF to be uploaded for this component.

(Graphics continue on the next slide.)
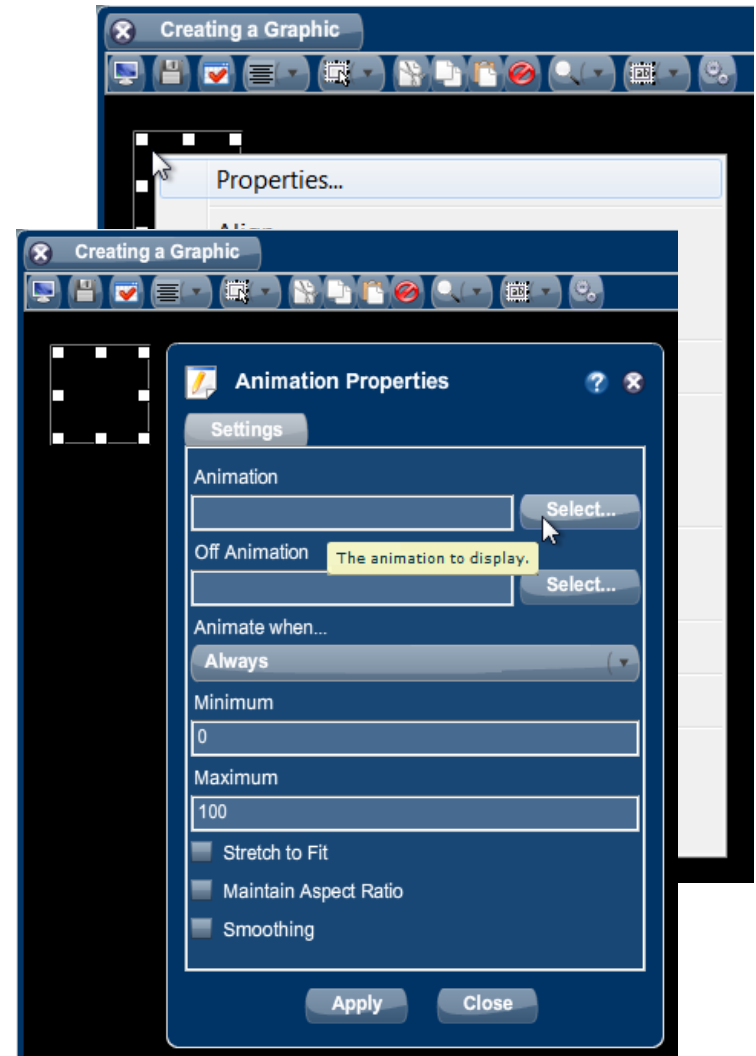
BASview — Graphics — Using Imported Animations

❖ The **Animation Properties** window "Select" button opens another window, the **Select Animation** window shown here.

❖ Here you can click the "Upload" button to import a new GIF or choose a GIF from the list of those already imported.

❖ Clicking the "Upload" button allows you to choose a GIF from your PC via an HTML screen that opens in a new window.

❖ Any GIF that you upload is added to the "Animation Files" list — where it can also be used by other components.

(Graphics continue on the next slide.)

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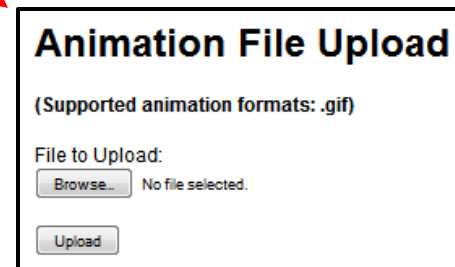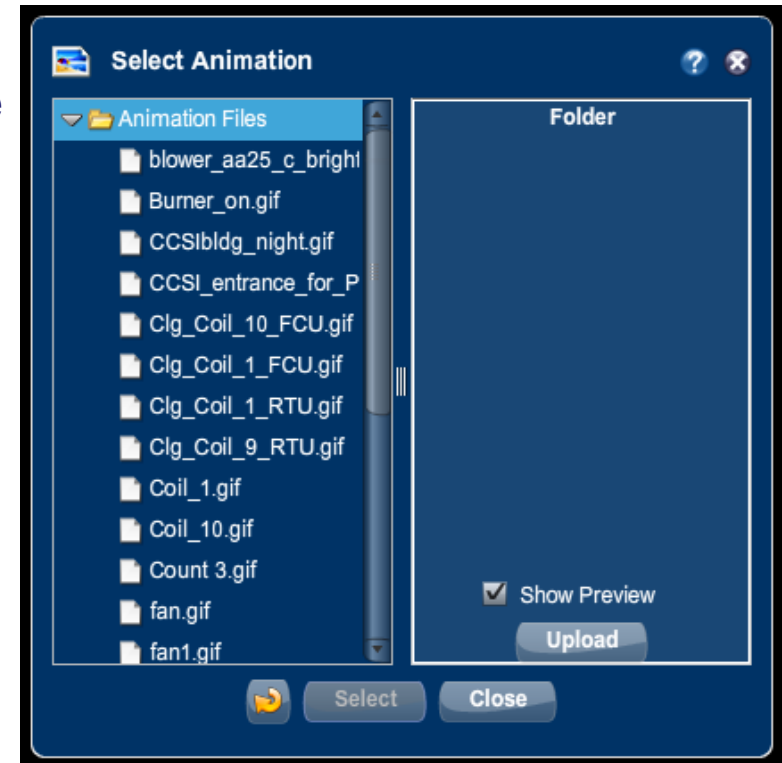
BASview — Graphics — Using Imported Animations

❖ Any uploaded GIF in the **Select Animation** list can be used by any component.

❖ Here, as an example of an imported GIF, we have selected a nighttime image of the CCSI headquarters building — and a preview of it appears in the right pane.

(Graphics continue on the next slide.)
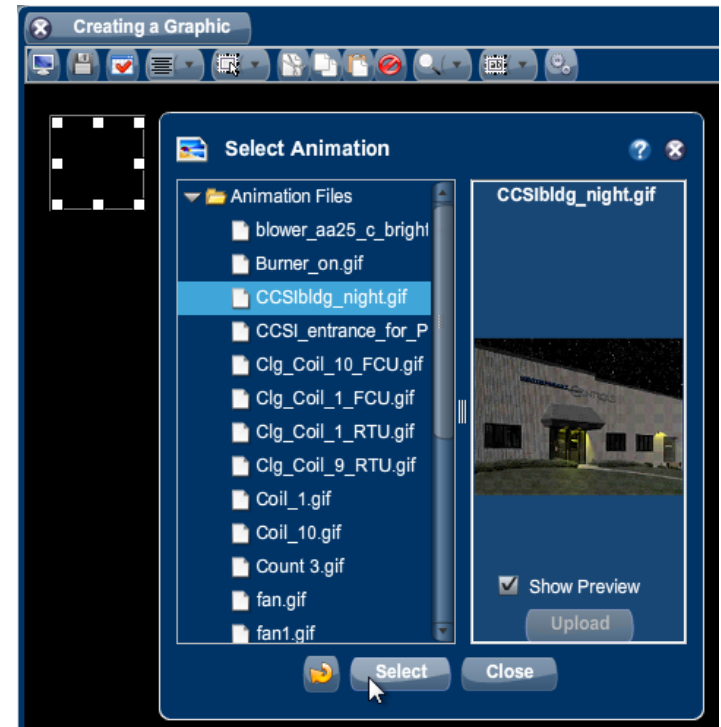
BASview — Graphics — Using Imported Animations

❖ After the **Select Animation** window is closed, the placeholder will contain your selected GIF.

❖ Usually the placeholder frame dimensions are inappropriate and the GIF must be re-sized.

❖ When you drag a frame control to re-size the frame, its full size becomes apparent and may be extend beyond the graphic workspace as shown here.

(Graphics continue on the next slide.)

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BASview — Graphics — Using Imported Animations

❖ After re-sizing the GIF frame and completing the editing session, the result could to be a clipped GIF — like that shown to the right.

❖ Notice that the selected GIF file name now appears in the "Animation" box.

❖ To avoid clipping the selected GIF, check the option "Stretch to Fit".

❖ Also, checking "Maintain Aspect Ratio" will preserve the ratio despite re-sizing.

❖ Click the "Apply" button at the bottom of the window to complete your edits.

(Graphics continue on the next slide.)
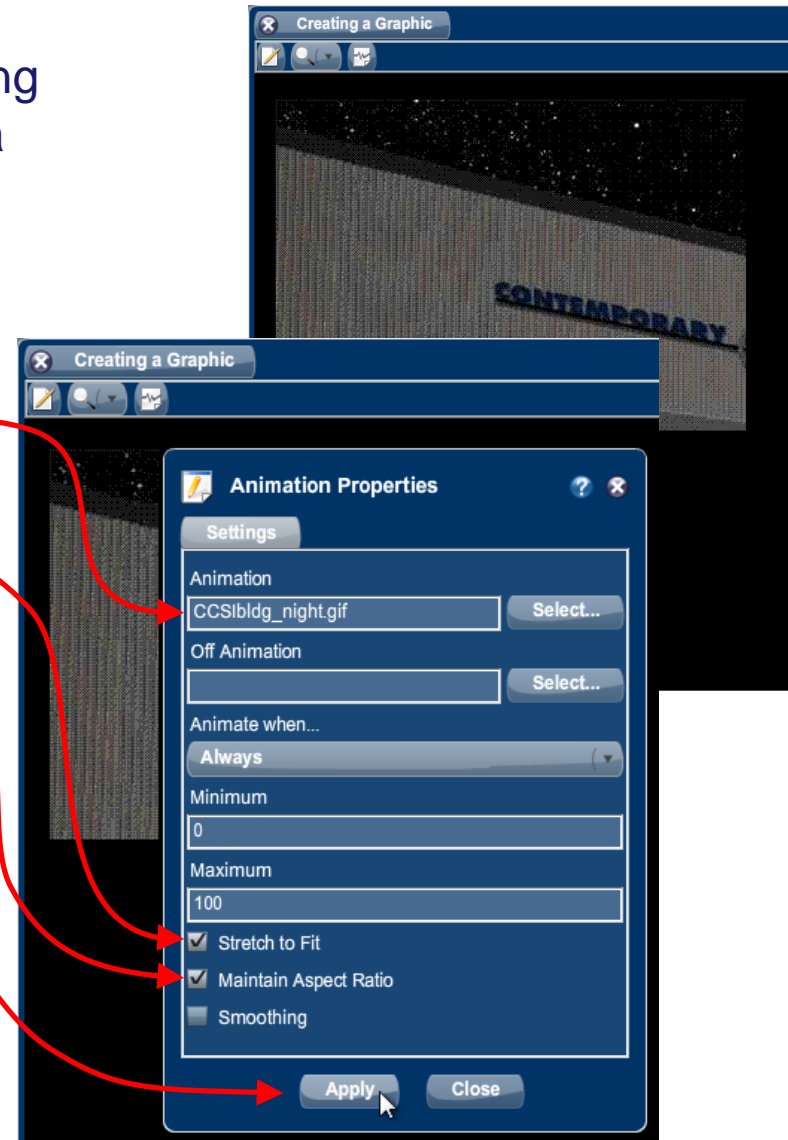
BASview — Graphics — Using Imported Animations

❖ After a "stretch-to-fit" operation, the result should be something like what you see to the right.

❖ This same GIF can be used many times.

❖ Different instances of the GIF can be given different dimensions — as shown below.
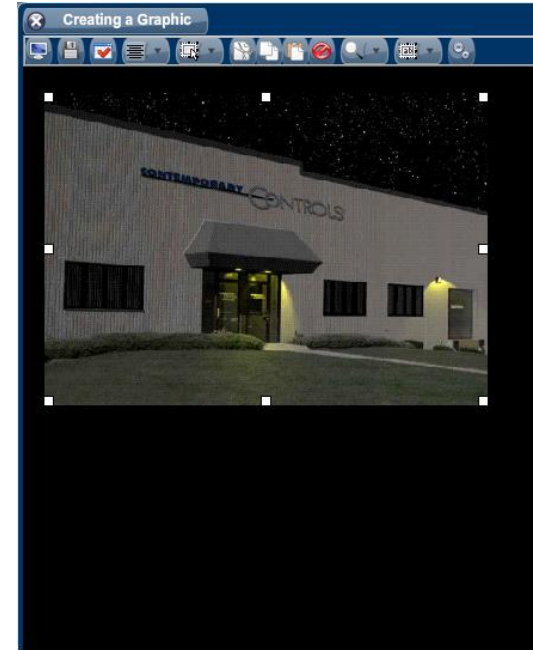
BASview — Graphics — Animation Options

❖ **You can indicate to an animation:**

- ○ Which file to use when the value is non-zero.

- ○ Which file to use when the value is off (optional).

- ○ How the point controls the animation.

- ○ Minimum & maximum values for the animation.

- ○ To "smooth" the GIF to help with viewing.
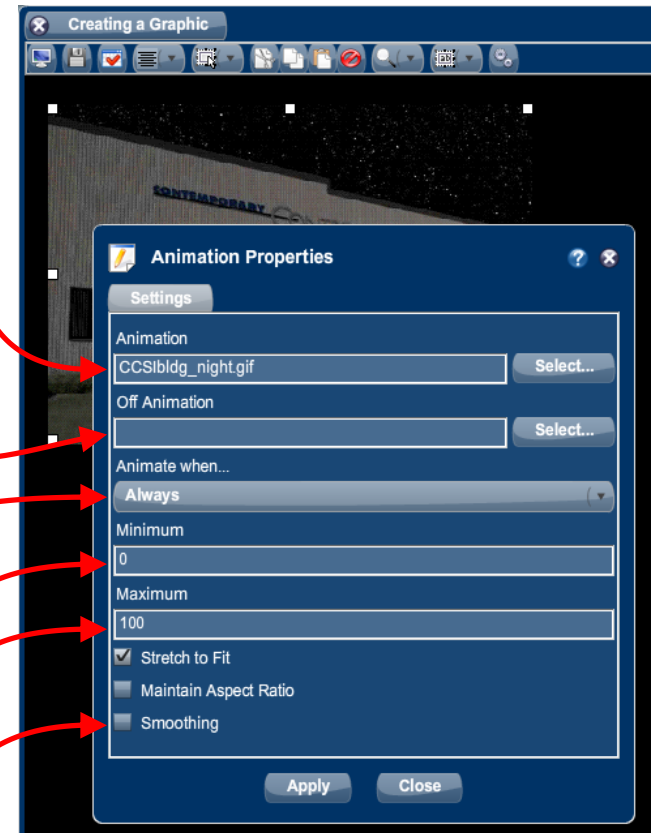
BASview — Graphics — Single Frame Animations

❖ BASview can also show a **single frame** from an animated GIF.

❖ You can place many images as frames within one GIF — each frame would then correspond to one image to be displayed.

❖ In a duct animation, for example, you could indicate the position of the duct with just one of many images in the animated GIF — choosing that which corresponds to the current duct position.

❖ To do this you would select "Convert value to a single frame" and then map the min/max point range to appropriate frame numbers.
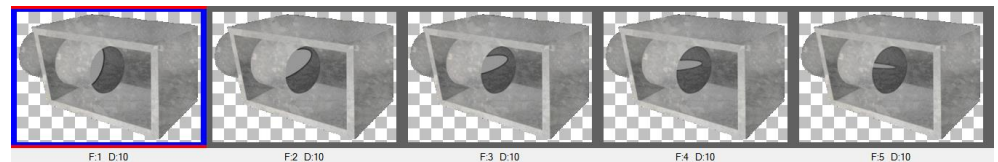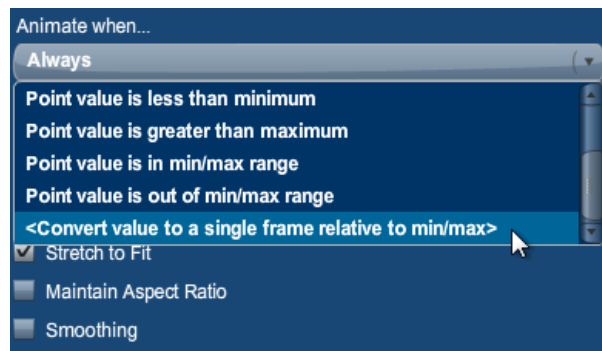
BASview — Graphics — Background Images

❖ Your graphic background can be a solid color or an image.

❖ You can upload GIFs or JPGs to serve as background images.

❖ Press the Edit icon and you will see **Graphic Properties** screen.

○ Select the "Use Background Image" radio button then the "Select" button to select a stock file or upload a new one.

○ Or specify the **Width** and **Height** of a color to serve as the background.
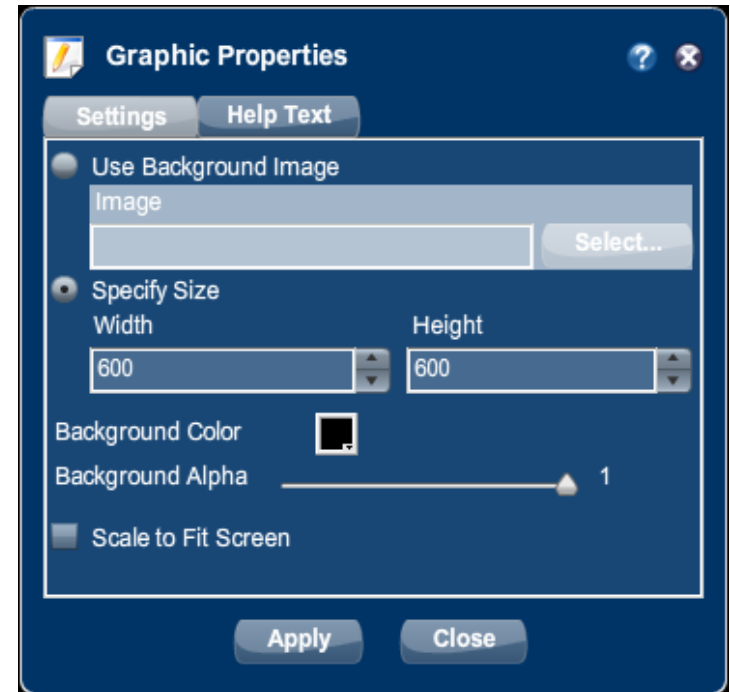
BASview — Graphics and Links

❖ You can associate various elements with a graphic, as follows.

❖ Open a **Graphic** screen in edit mode.

❖ Drag and drop a trend from the **Device Tree** to the screen and a **Component Templates** window appears.

❖ Select "Button" and invisible and then click "Select" to create a placeholder.

❖ Select an image for the placeholder as previously described.

❖ Here is a sample trend icon.
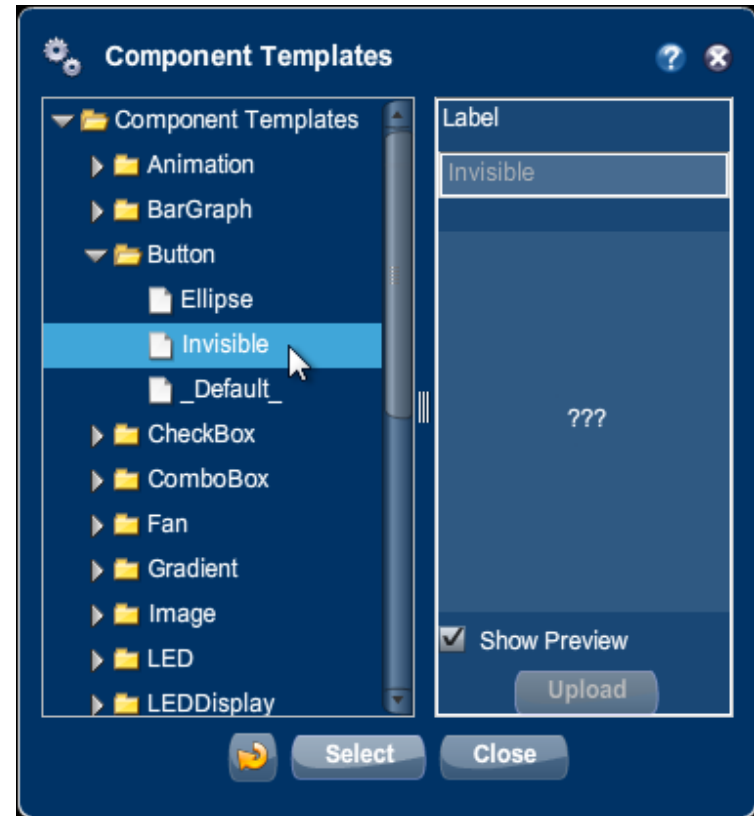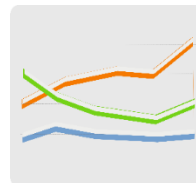
BASview — Graphics and Links

❖ You can also use a provided button.

❖ Under the "Button" folder, select the "Ellipse" or "_Default_" style.

❖ You can label the button as well.

❖ Here we show an elliptical button (which would be round if we were to set its width equal to its height).

❖ After editing, the value and label "@" codes are replaced with their actual values.
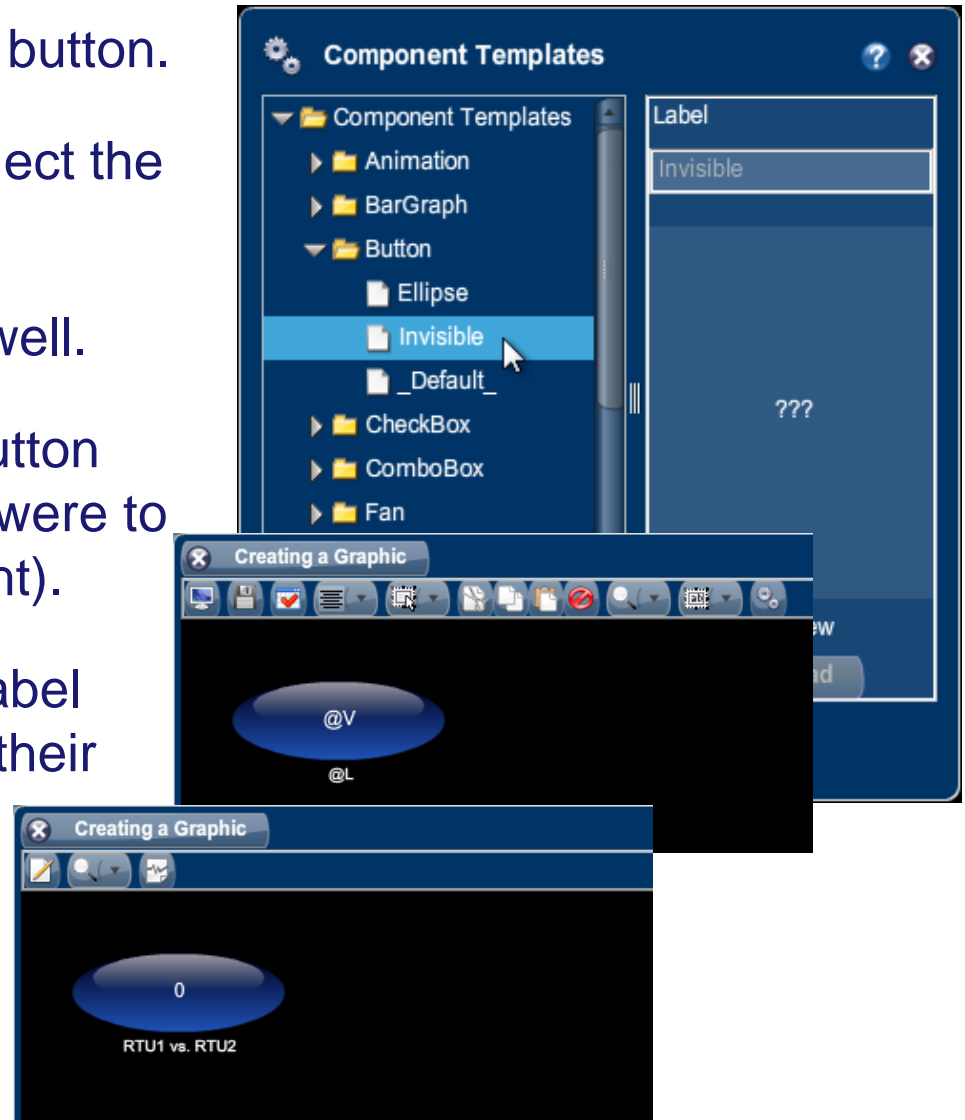
BASview — Graphics Saving

❖ After creating a graphic, exit the edit mode and save the graphic.

❖ To save your work and view the operation of your graphic, press the Save icon.

BASview — Graphics — Other Features

❖ Other graphical components available in BASview include:

- Bar graph
- Checkbox
- Combo box
- Gradient
- LED
- LED readout
- Light fixture

- Panel
- Point grid
- Radio group
- Shape
- Slider
- Spinner
- Switch
- Text label

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BASview — Graphics Example 1
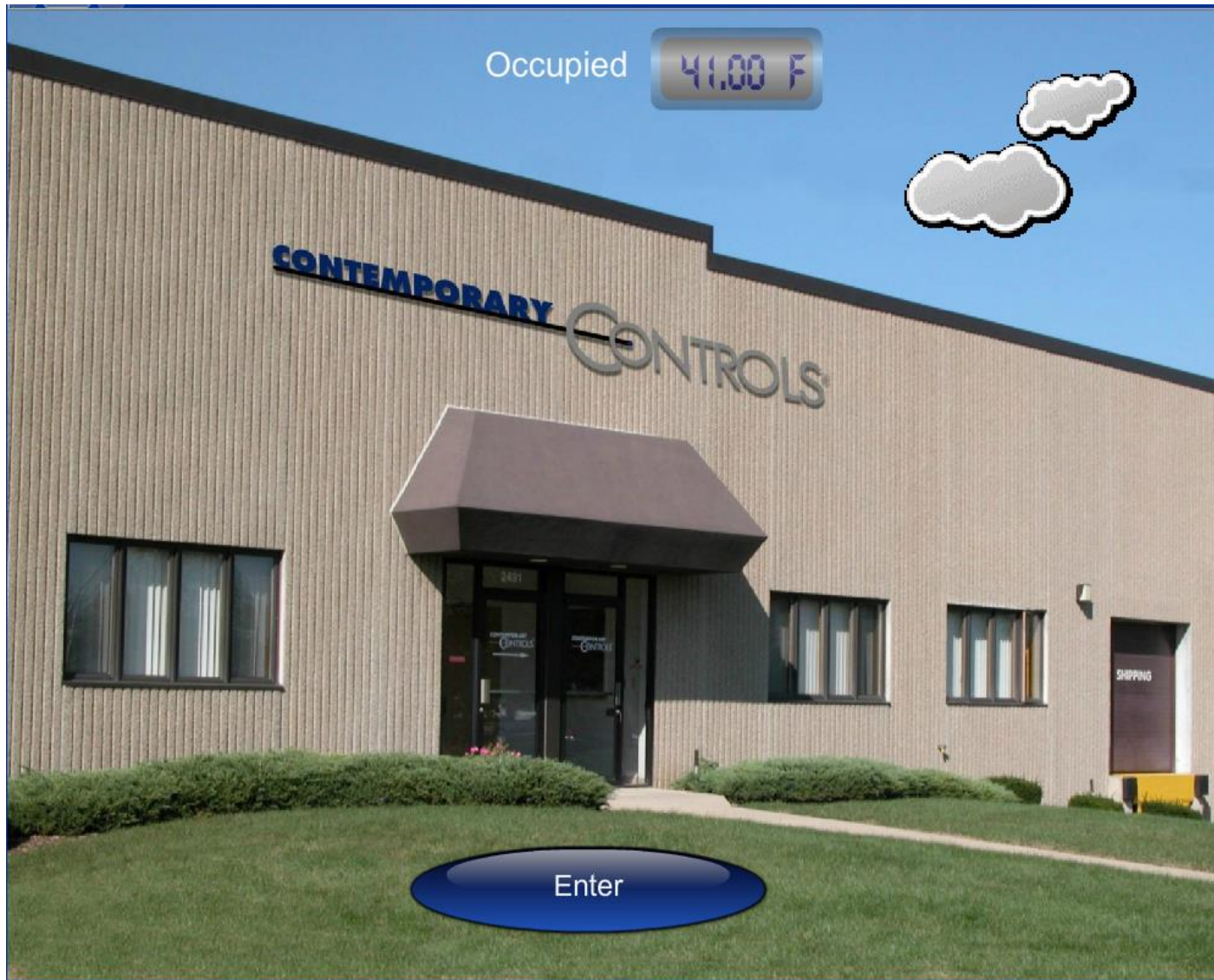
BASview — Graphics Example 2
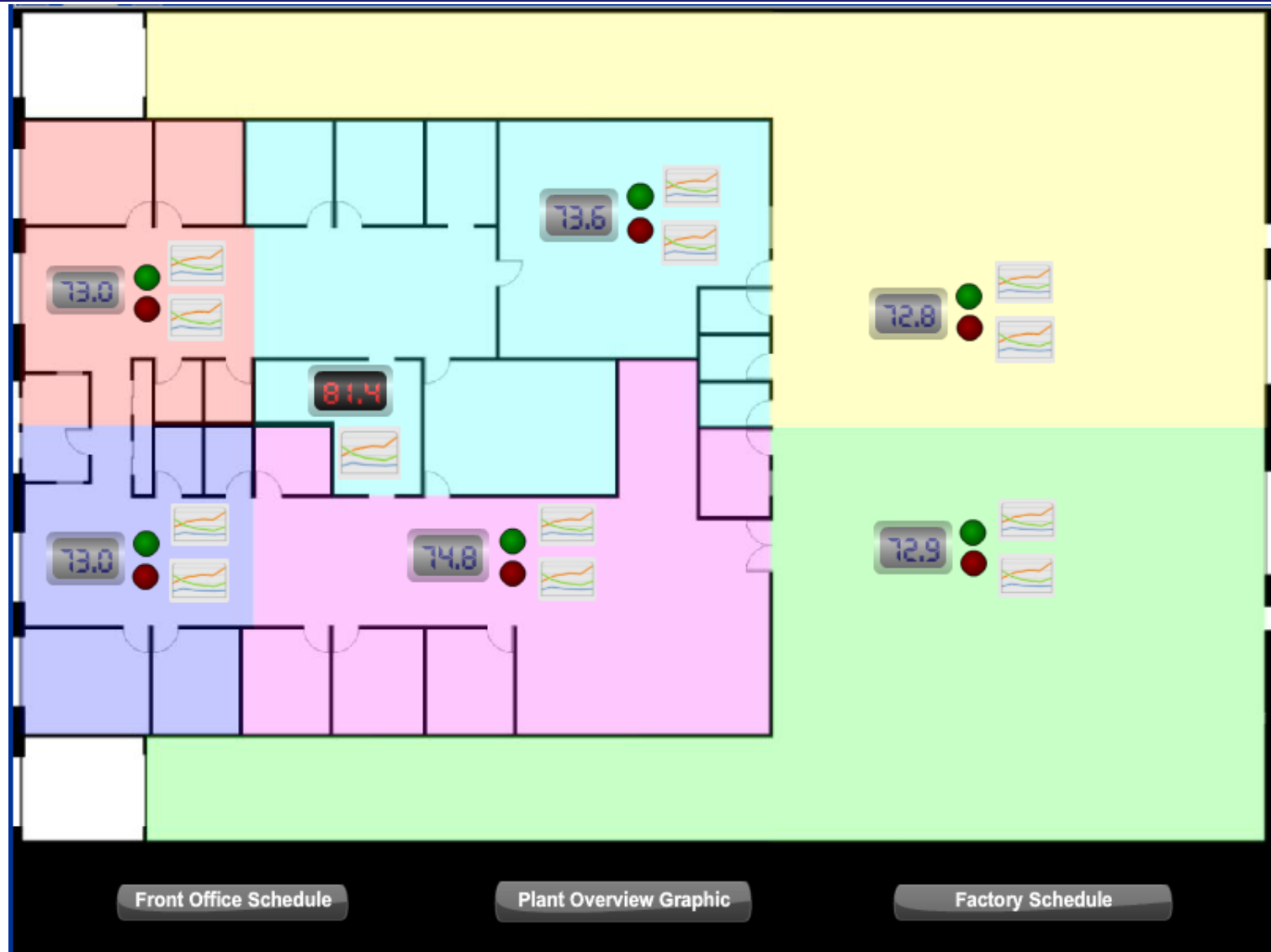
BASview — Graphics Example 3
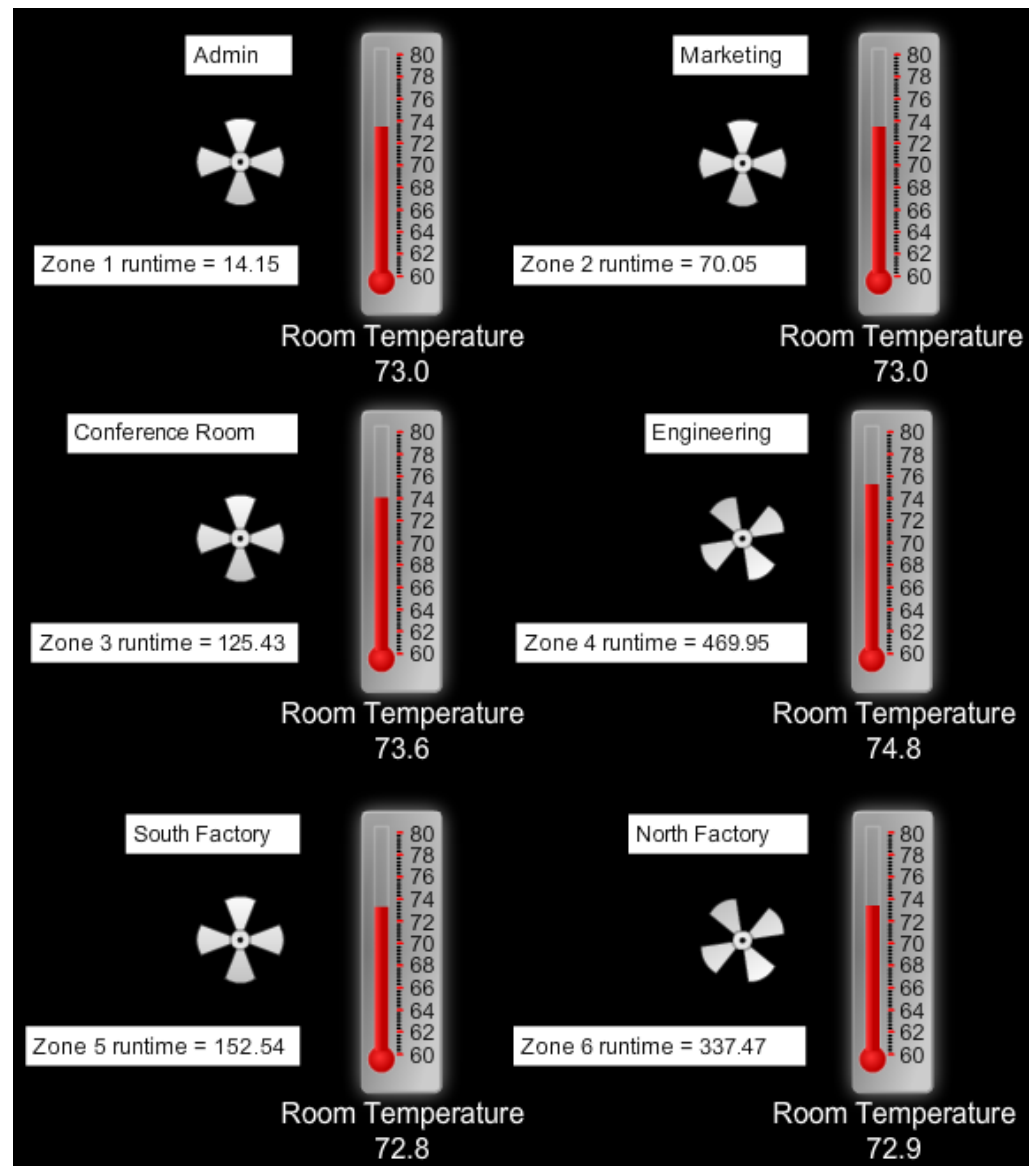
BASview — Graphics Example 4

BASview — Graphics Example from Building Automation Systems, Inc.

BASview — Templates

❖ One of the most useful of BASview's many features are its templates.

❖ With templates you can — basically — copy and paste "something" you have already created.

❖ This is extremely useful when you doing similar things over and over.

❖ Your template can be as simple or as complex as you like.

❖ You could have a device, its points, its schedule and its graphics all in one template.

❖ For example, if you had 48 VAVs you could create one VAV with its points, schedules, graphics, alarms and put this into a template which you can use 47 times.

BASview — Templates
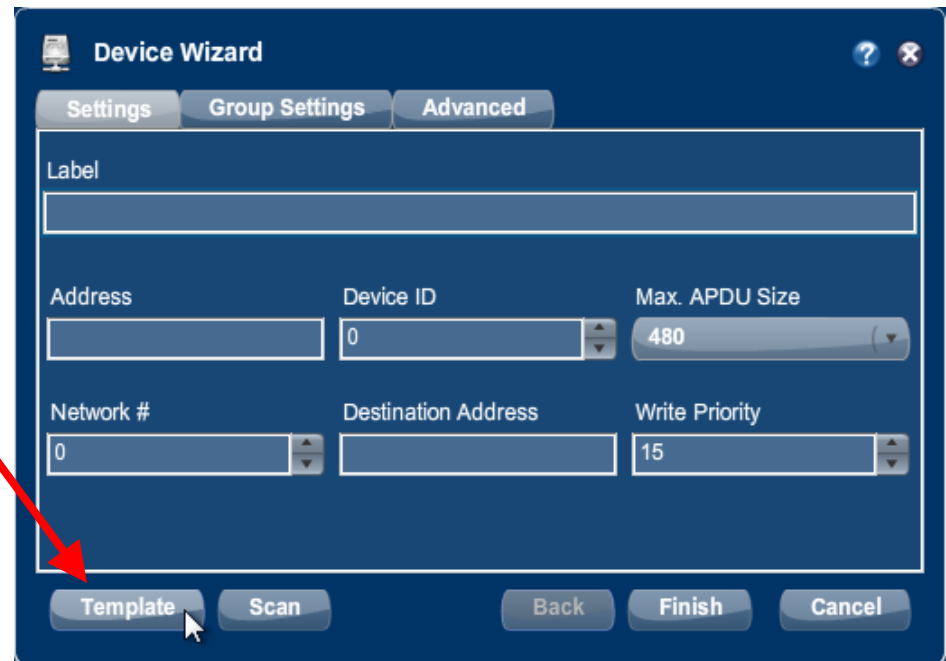
❖ To create a template, go to the **Device Tree** and select the portion of the tree which you want to make into a template, then select "Save as Template".

❖ Anything below that point (within the selected portion) will be copied into the template.

❖ The copied material can be devices, points, alarms, trends, schedules, graphics, programs, calculations, and runtimes.
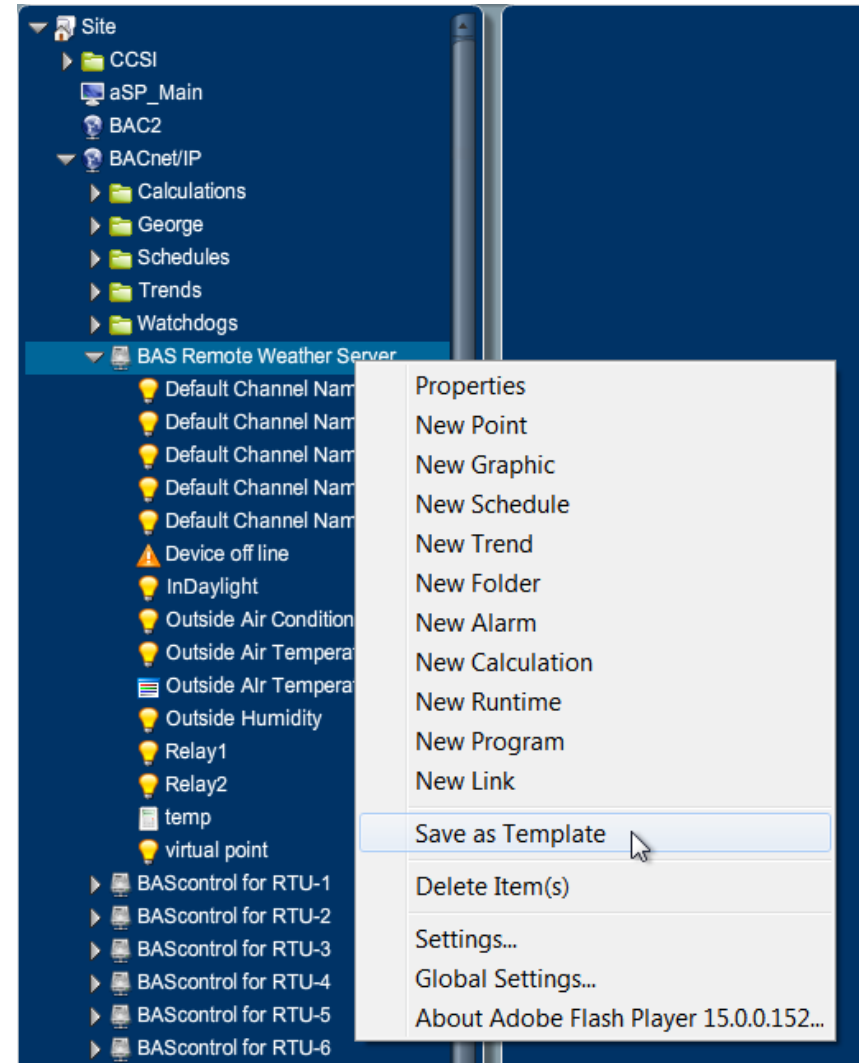
BASview — Using Templates

❖ To use the template, add a new element to the tree using the highest element type in your template.

❖ In our example we have chosen to add a "New Device".

❖ Click "Template" and a **Device Template** window opens.

(continue on the next slide.)

BASview — Using Templates

❖ Select the template you created and press the "Select" button.

❖ A new element will be placed in your tree using your template.

❖ Modify the new elements so they have the appropriate addresses.

❖ For example if you created a template for a VAV you will need to apply the proper address for each new VAV added by this template.

Device Templates

Device Templates
- BAS_Remote_Weather_Server
- Reflow_Oven_BAS_Remote
- Reflow_Template
- Server_Room_BAS_Remote
- VT7652A1000B
- Zone_1_Admin_Stat

Label

Description

Upload

Select   Close
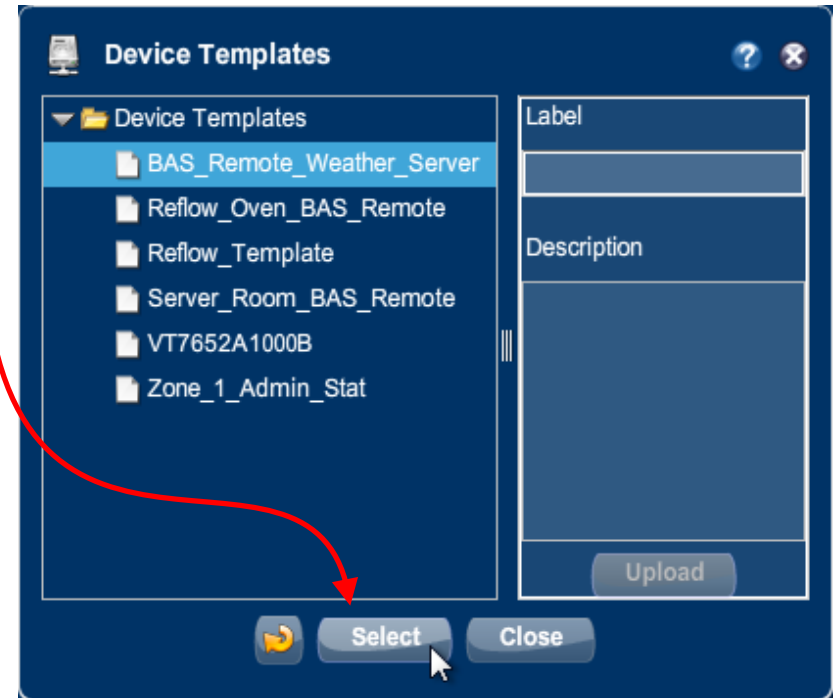
BASview — Runtime

❖ A runtime **counts the time** equipment has **run**.

❖ Right-click on a **Device Tree** node and select "New Runtime".

❖ You can set the runtime **limit**.

❖ Once exceeded, an **alarm** is generated.

❖ An **email** can also be generated.
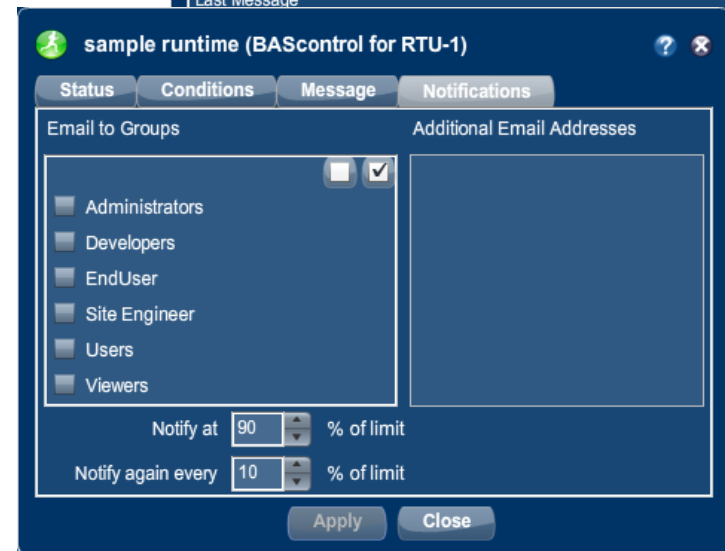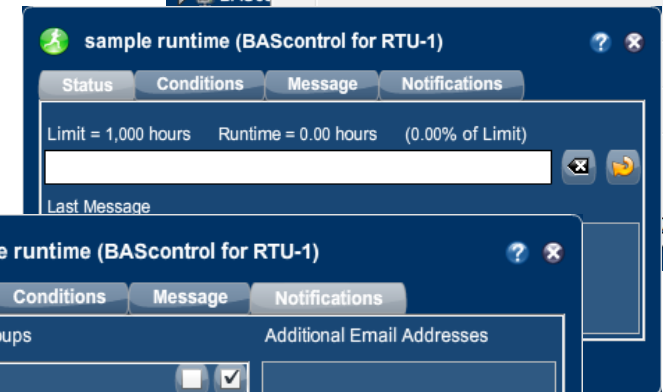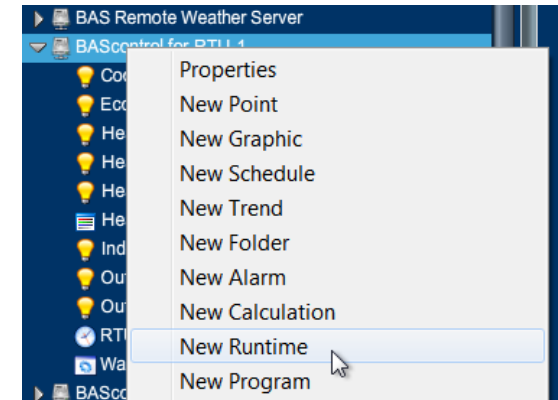
BASview — Runtime Conditions

❖ After a runtime is created, left-click it to set its properties.

❖ Like Alarms, you can set **conditions** for certain equipment activity.
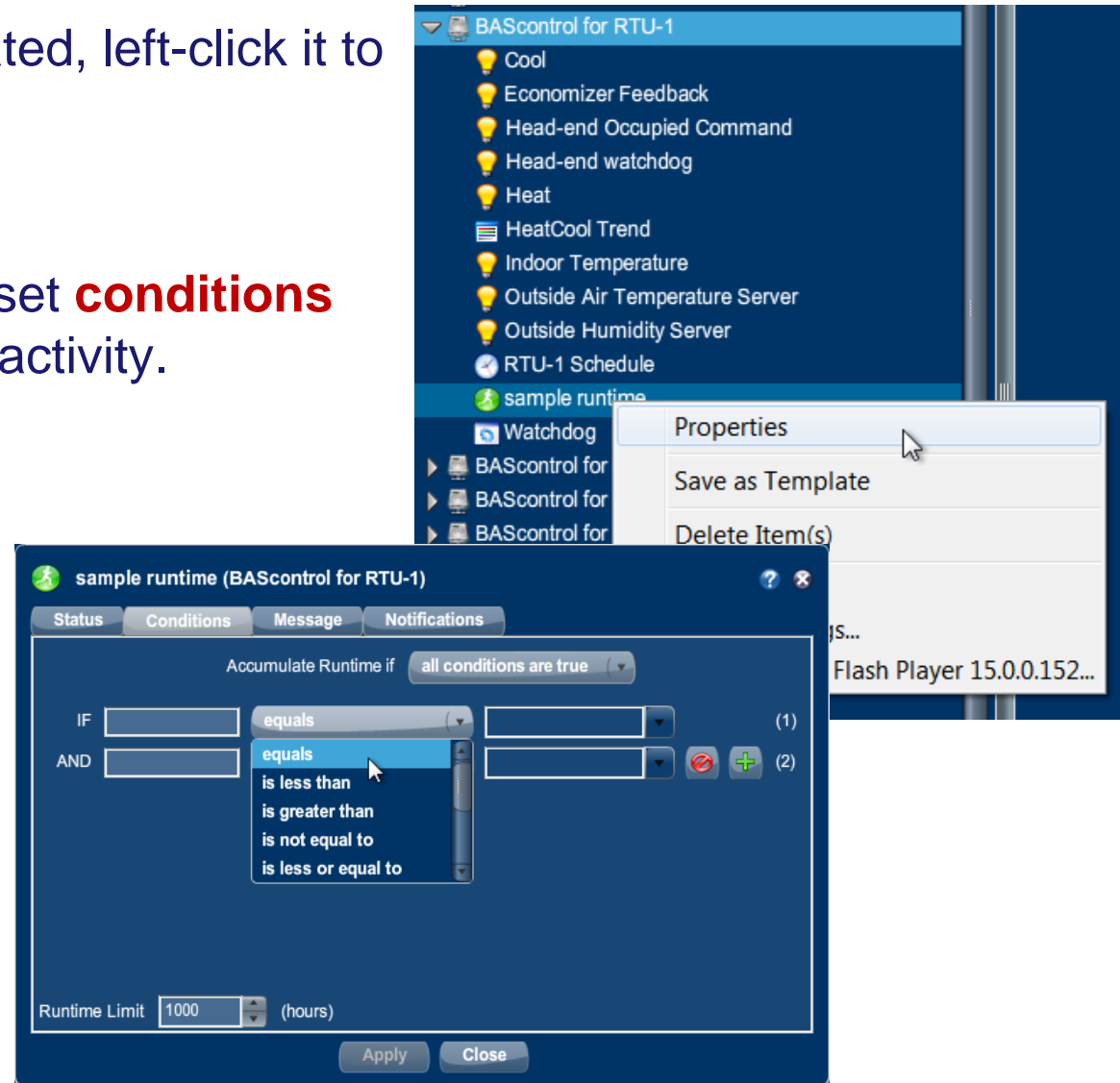
BASview — Calculations

❖ A handy way to manipulate a data point in the BASview is with **Calculations** .

❖ You can see the max, min, average, median, or sum for a point.

❖ You can convert to Fahrenheit or Celsius or enter your own conversion equation.
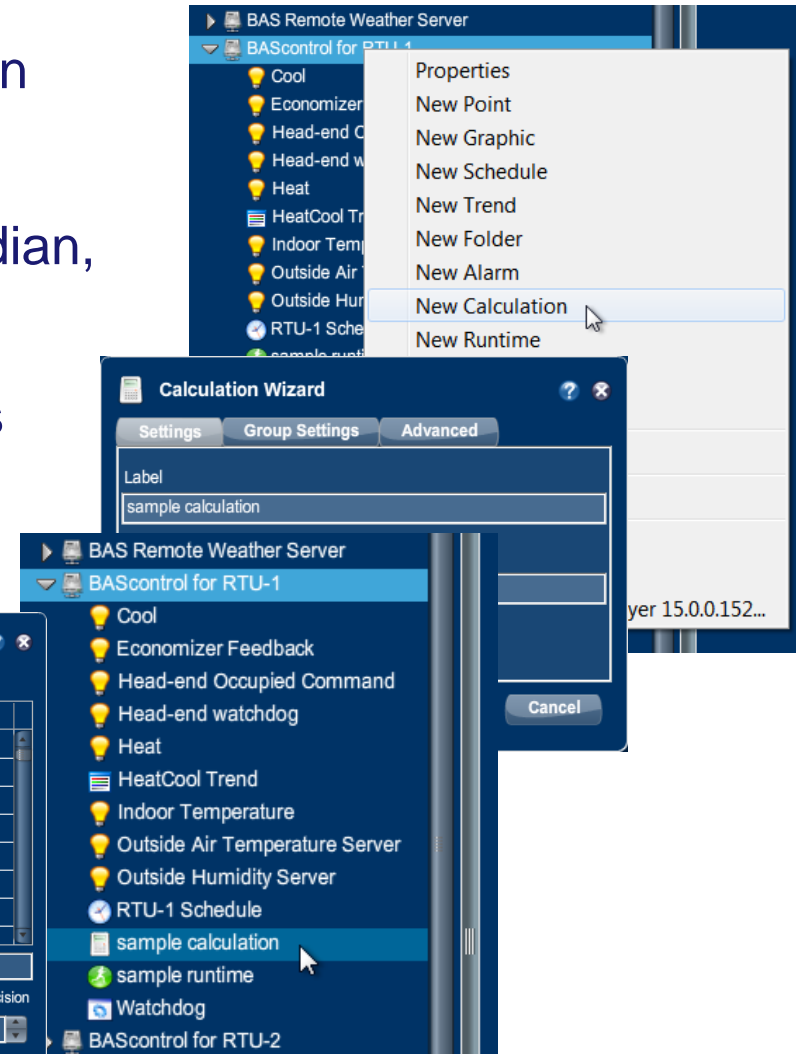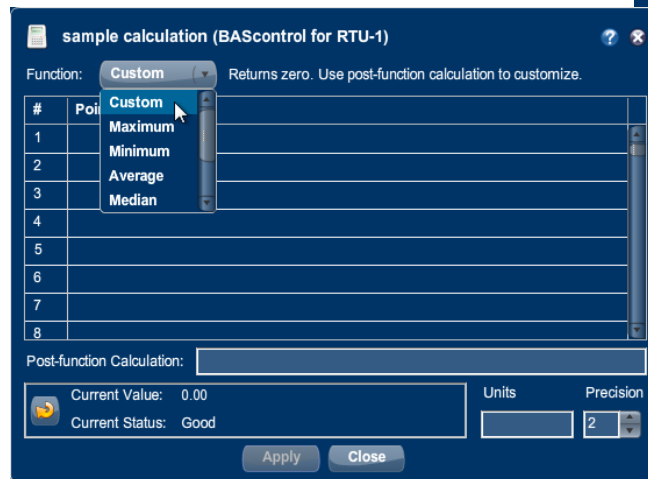
BASview — Programs

❖ BASview supports user **Python** programs.

❖ Select "New Program" to create a program.

❖ Once created, left-click the program's node icon to edit it.

(continue on the next slide.)
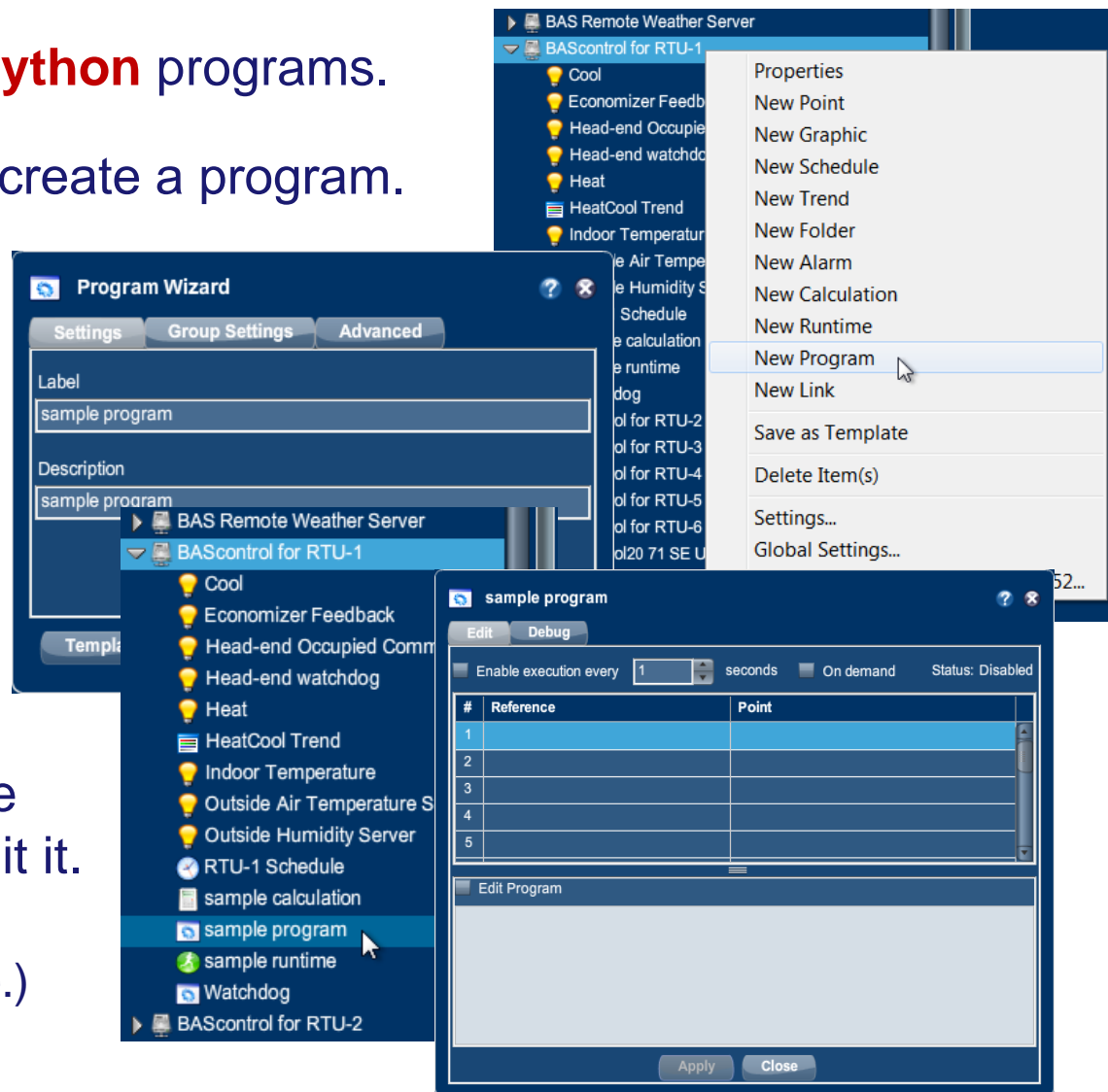
BASview — Programs

❖ Drag **points** from the tree into the reference boxes.

❖ Use the Reference **name** in your program.

❖ You can read/write points from the tree.

❖ Programs can execute **periodically** or on **demand**.

❖ Print statements in the program allow viewing the output in the debug tab.
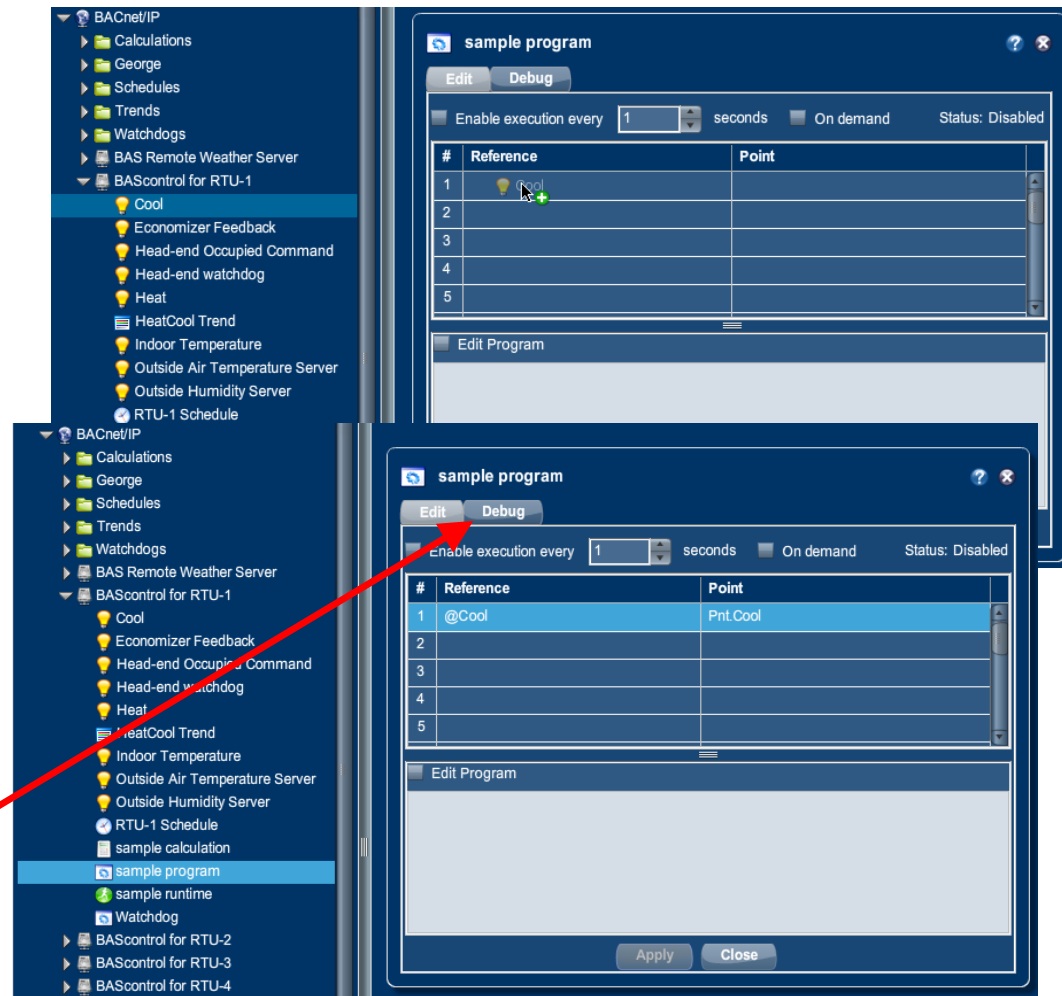
BASview — Program Example

❖ getValue() is used to **read** the point.

❖ setValue() is used to **write** the point.

❖ Ramp example.

❖ Press 🔵 for more info.
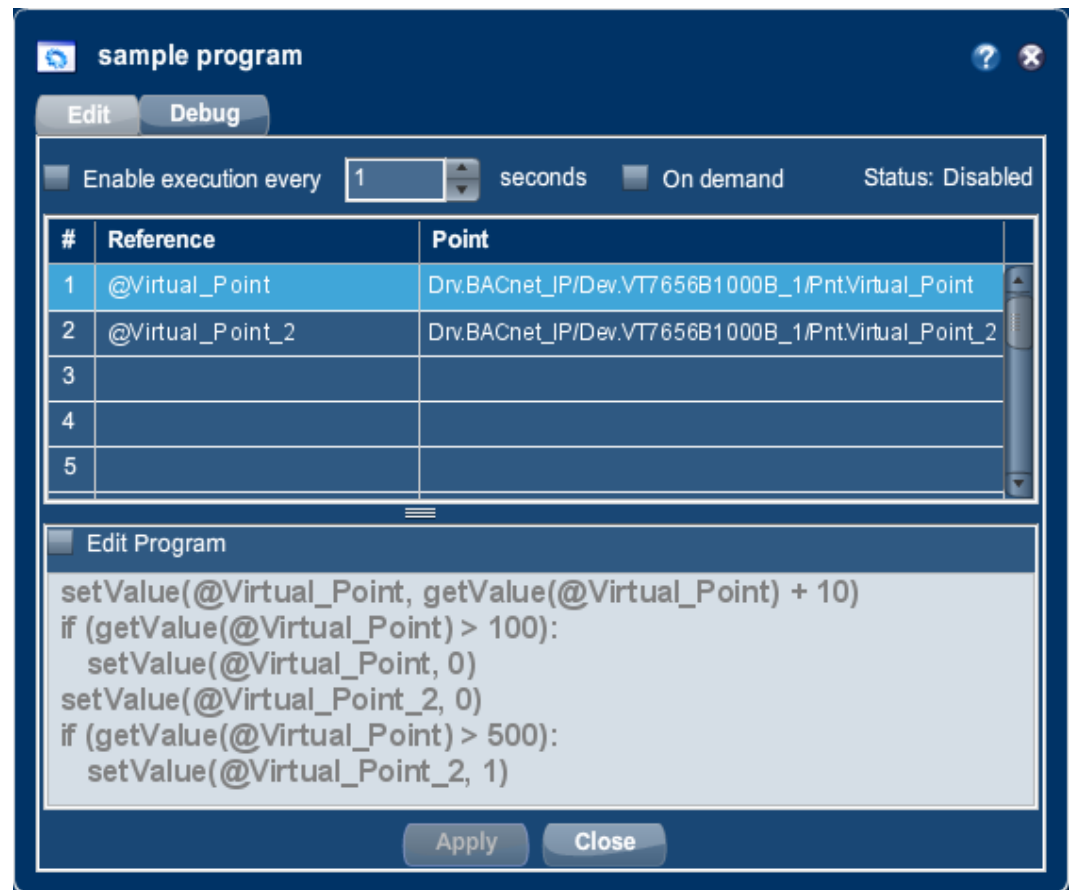
BASview — Program Execution Cycle Times

❖ The Program execution cycle defaults to 1 second.

❖ This is fine for debugging simple programs. However …

❖ If you are reading/writing BACnet points, you should probably give it more time between executions — at least a minute — to allow the writes and reads to occur.

❖ If your Program is doing a lot of BACnet writing, you should change this value to at least a minute to avoid disturbing the BACnet polling of the BASview.

BASview — Backup and New Firmware

❖ You can **backup** your work or **copy** it to a new BASview using the "Backup Database" and the "Restore Database" selections under the Admin drop-down menu.
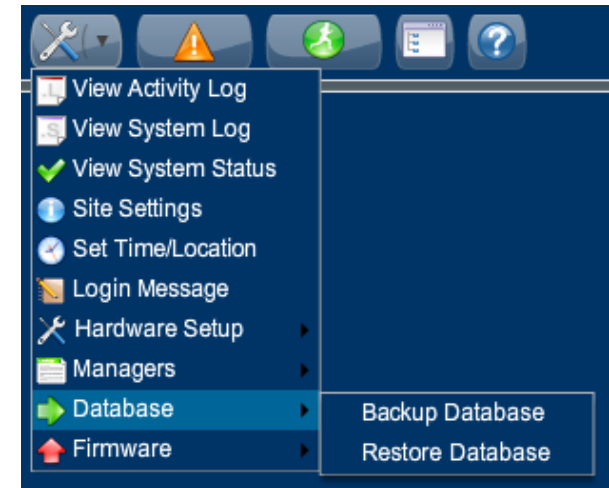
❖ You can **upload new firmware** by selecting "Update Firmware" under the same menu.
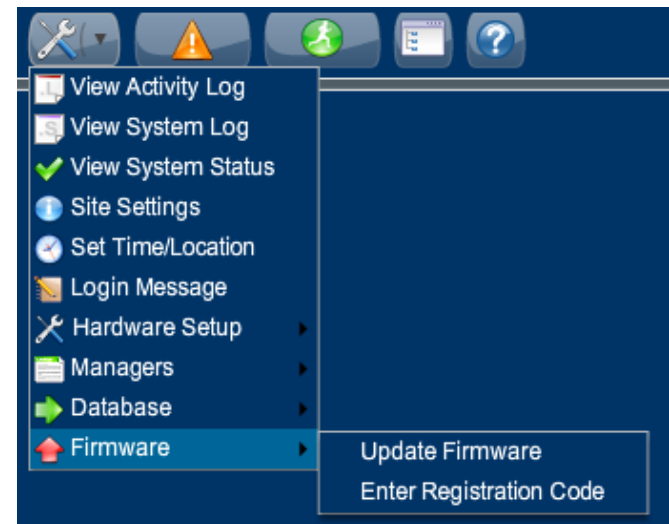
BASview — Flash and the Mobile Interface

❖ The web browser used with the BASview must (in most cases) support Flash — but many mobile devices do not support Flash.

❖ A small set of features can be accessed from the BASview via its Mobile interface.

Corporate Headquarters
Contemporary Controls BASview

Username _____

Password _____

Login

(Switch to Flash Interface)

JavaScript and "cookies" must be enabled in your browser.

Contemporary Controls BASview (Version 1.42d)

❖ The Mobile login is available at the normal Flash login — or can also be accessed at **BASview_IPaddress/mobile**. The Mobile login uses the same credentials as the Flash login.

BASview — Mobile Interface

❖ The Mobile Interface lets you view the values of the points associated with all of the graphics in your unit.

❖ If writeable, you can also write to the values.

❖ You can view any folders you created and what is located in these folders.

❖ You can view the alarm log.

❖ You can override schedules.

❖ An example of the main Mobile Interface page appears to the right.
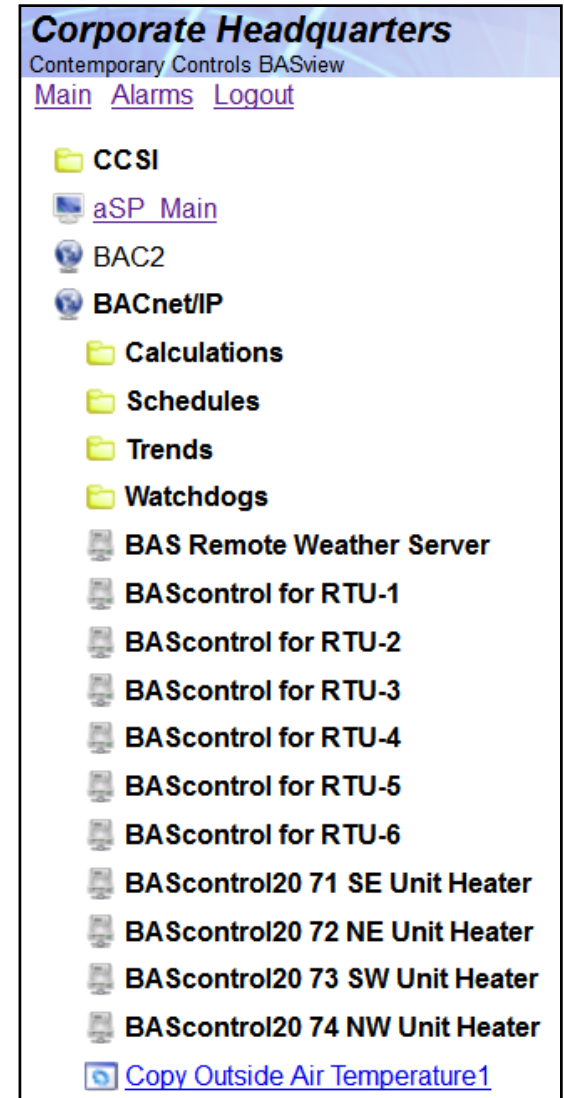
❖ SP_Zone1–6 graphics are contained in the aSP_Main folder

❖ For example, by selecting SP_Zone1, you can show the values for the points in that graphic.

Corporate Headquarters
Contemporary Controls BASview
Main   Alarms   Logout

📁 CCSI
🖥 aSP_Main
🌐 BAC2

Corporate Headquarters
Contemporary Controls BASview
Main   Alarms   Logout

Graphic: aSP_Main

Name	Value	Status	Manual	Parent	Type
SP_Zone1	0	Good	Auto		Graphic
SP_Zone2	0	Good	Auto		Graphic
SP_Zone3	0	Good	Auto		Graphic
SP_Zone4	0	Good	Auto		Graphic
SP_Zone5	0	Good	Auto		Graphic
SP_Zone6	0	Good	Auto		Graphic

Contemporary Controls BASview (Version 1.42d)
BAScontrol20 72 NE Unit Heater
BAScontrol20 73 SW Unit Heater

Corporate Headquarters
Contemporary Controls BASview
Main   Alarms   Logout

Graphic: SP_Zone1

Name	Value	Status	Manual	Parent	Type
Cooling Status	Off	Good	Auto	Zone 1 Admin Stat	Point
Fan Status	Off	Good	Auto	Zone 1 Admin Stat	Point
Heating Status	Off	Good	Auto	Zone 1 Admin Stat	Point
Occupancy	Occupied	Good	Auto	Zone 1 Admin Stat	Point
Occupied Cool Setpoint	78 F	Good	Auto	Zone 1 Admin Stat	Point
Occupied Heat Setpoint	73 F	Good	Auto	Zone 1 Admin Stat	Point
Room Temp Override	Normal	Good	Auto	Zone 1 Admin Stat	Point
Room Temperature	78.2 F	Good	Auto	Zone 1 Admin Stat	Point
Unoccupied Cool Setpoint	85 F	Good	Auto	Zone 1 Admin Stat	Point
Unoccupied Heat Setpoint	63 F	Good	Auto	Zone 1 Admin Stat	Point

Contemporary Controls BASview (Version 1.42d)

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BASview — Mobile Interface Devices

❖ The Mobile Interface does not require Flash support — so it can be used with most Mobile devices.

- iPhones
- iPads
- Android phones
- Android tablets

❖ Mobile Interface provides access to all features of the BASview that you want on a small mobile device — as it would be difficult to view your BASview graphics or trends from your phone.

BASview — Conclusion

❖ BASview is a very powerful tool to work with system Alarms, Trends, Schedules, Graphics and Control.

❖ It is both a Building Controller and a GUI for devices.

❖ All of its features are contained in its small metal box.

❖ Many building controllers are programs which must be purchased and which call for a PC which must also be purchased.

❖ We only covered a portion of what BASview can do.

❖ Use the BASview online help to learn more about the features discussed and about those which were not discussed.

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