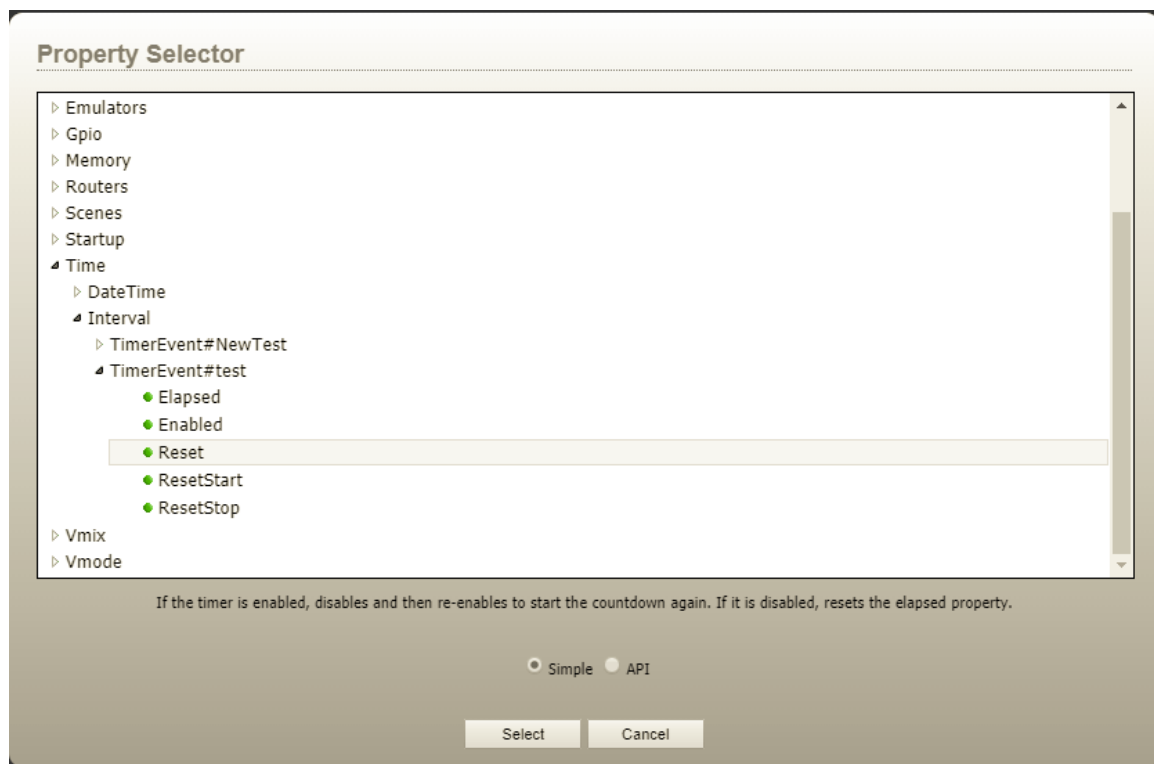


Version 1.3.5.01 Changes

Interval Timers

Interval timers now have three additional write only properties available. These are Reset, ResetStart, and ResetStop. These are available in the Logic Flows simple tree when an interval timer endpoint is selected in the logic flow. Since these are write only properties they will not be shown when interval timer start points are selected – only endpoints.



All three properties accept true/false values and setting any of them to true will initiate the reset. They do not need to be set to false again afterwards as passing the true value is just a trigger to initiate the reset. The value is not retained. These properties can be thought of more as actions than traditional properties.

The description of each of these properties is as follows:

- **Reset:** If the timer is enabled, this property will disable and then re-enable the timer to start the countdown over. If the timer is disabled, this will set the elapsed property to false.
- **ResetStart:** Stops the timer (if it is running) and then starts the timer to reset the countdown.

- ResetStop: Disables the timer and changes the elapsed state to false.

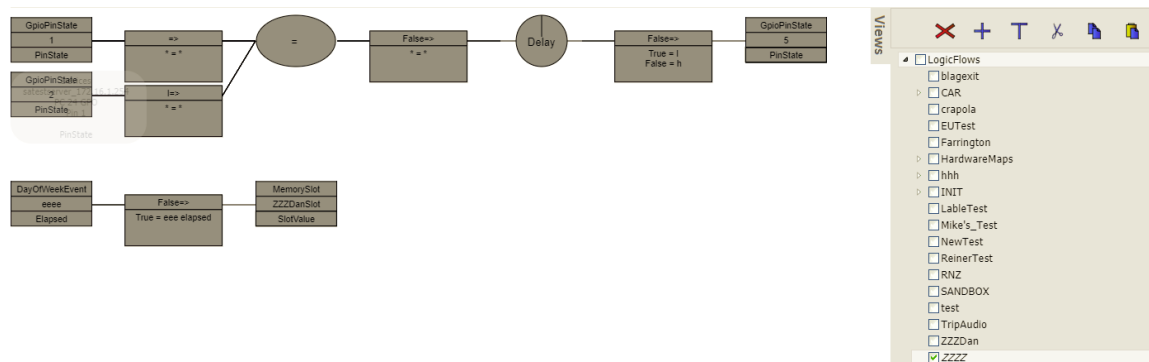
Logic Flow Changes

View Cut, Copy, and Paste

The views tab in Logic Flows now includes additional tools for cut, copy, and paste of entire views.



These tools will only be enabled when a single view is selected. To copy a view, select the view folder and deselect any other views and click the copy icon. Once a view is on the clipboard, the paste icon will be enabled. Select a new parent view folder, deselect all other folders, and click paste. The system will ask for a new name for the new view to be pasted, and it will then paste the copied view using the new name. You cannot select multiple views for copy and paste operations though if you select a view with child views those child views are a part of the copy operation.



In the example above ZZZDan was copied to the clipboard. Then we selected the LogicFlows view and pasted using the name ZZZZ. It is important to note that all pasted logic flows will be in a disabled state. After selecting the ZZZ folder you will notice the pasted flows are disabled.

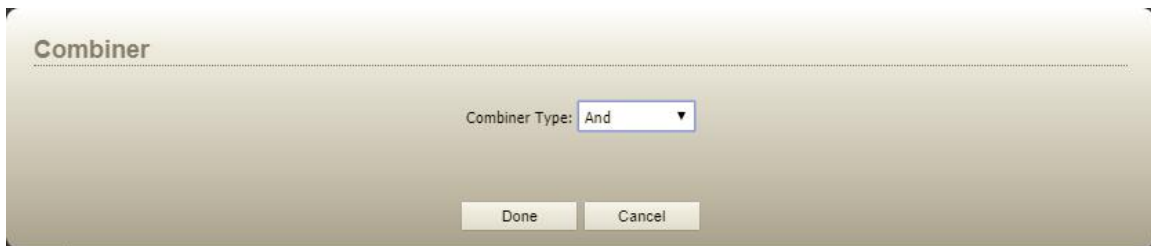
It is assumed that after completing a copy and paste you will want to modify the start and end points of the flow to reproduce behavior using different endpoints. It is also important to note that view Copy and Paste operations are completed by the Core PRO appliance rather than the browser and so do not require an apply.

Note: Under the hood the browser sets a write only CopyTo property on the copied view folder object via a SapV2 set message. The value used in the set message is the path to which the view should be copied. The PathfinderCore PRO logic flow engine then handles the data cloning.

Cut works the same way as copy except that after pasting, the original view is deleted. It is important to note that the paste creates disabled flows whether the operation started as a cut or a copy. Therefore, if you are cutting and pasting you will still need to reenable the pasted flows.

Combiner Editing

Double clicking on a combiner no longer rotates through the combiner types. Instead it will open a dialog for selecting the type of combiner and filling in any parameters that the combiner requires.

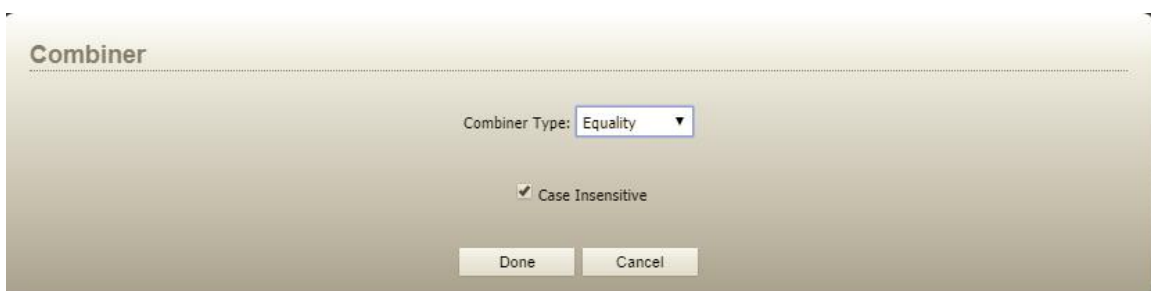


Use the drop down to select the combiner type. Only combiners that accept the number of inputs that are currently assigned to the combiner will be present in the dropdown. For example, a single input will yield a dropdown list that includes Not, PassThru, and Delay. Delay is new and described below. Whereas two inputs will result in a dropdown list that includes And, Or, Nor, etc. The list will express options that match the number of inputs to the combiner.

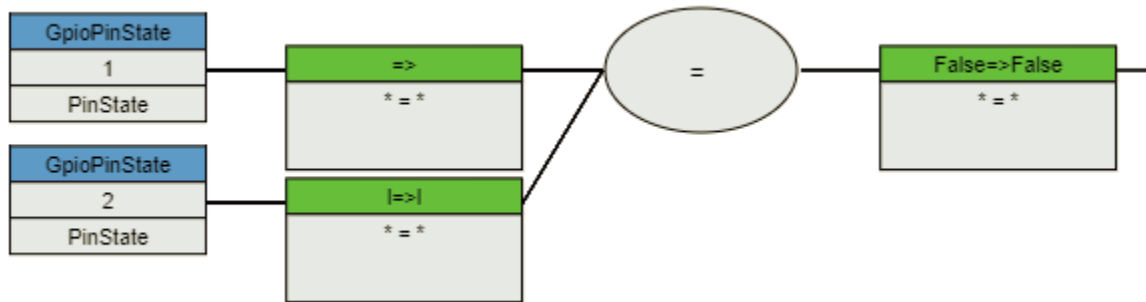
In some cases, selecting a combiner type will display additional configuration options. Examples are presented below with the new Equality and Delay combiners.

Equality Combiner

The equality combiner takes multiple inputs and will result in an output value of True or False depending on whether all input values match. To create an equality combiner, add a combiner to the flow and make sure the combiner has at least two inputs. Then double click on the combiner and select equality from the dropdown.



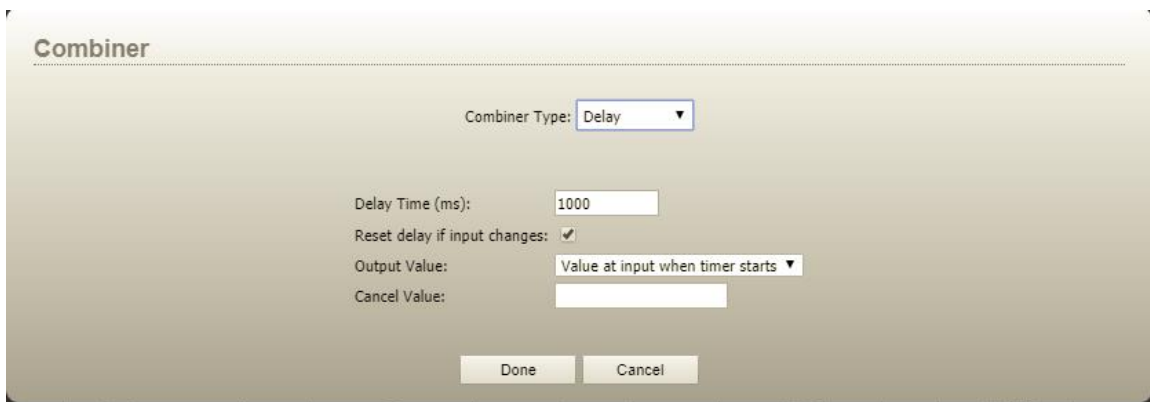
The equality combiner also has a case insensitive checkbox which defines whether comparisons are done in a case sensitive or insensitive way. Click Done once configured properly.



This combiner can be used in situations where the primary concern is whether the property states are equivalent or not.

Delay Combiner

The delay combiner takes a single input and introduces delay directly into the logic flow. It works like a passthru combiner in that it takes the input value and passes it through to the output but only after a configured number of milliseconds. There are also some additional parameters that can affect how this combiner functions. To create a delay combiner, create a new combiner with a single input. Double click on it and select the delay combiner type. Several configuration options will appear.



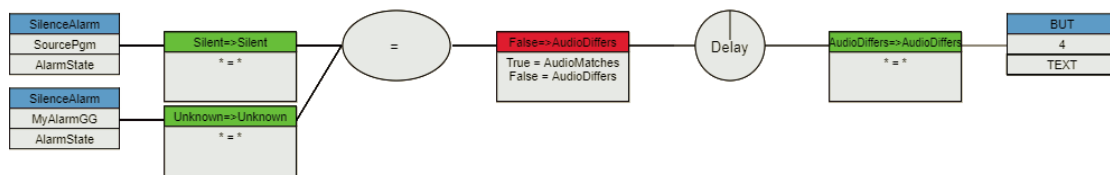
- Delay Time: Defines the number of milliseconds to delay.
- Reset delay if input changes: The delay countdown starts every time the input changes its value. If this option is selected the countdown will be reset whenever the input value changes. If you have a parameter that is fluttering and you only want an action to happen if it settles down to a fixed value for more than x milliseconds, this option should be checked. If you want to value to happen x milliseconds after a change even if additional changes happen during the countdown (delay time) then this option should be unchecked.

- **Output Value:** Defines whether the value that is passed through is the input value at the start of the delay countdown or the end of the countdown. This option accounts for the possibility that the input value could change again during the delay countdown and allows you to define which value gets passed through. The options are:
 - Value at input when timer starts
 - Value at input when timer ends
- **Cancel Value:** Allows you to define an input value that will cancel the timer and not make any change to the combiner output (not pass any different value through).

Delay combiners can be used in many situations where you need to introduce some delay into a logic flow. Previously this required using an interval timer. Therefore, there will be many situations where an interval timer is no longer necessary to accomplish the task as the delay can be built directly into the flow. This also reduces licensing requirements as the delay combiner does not require an intermediary timer endpoint.

Interval timers are still useful in situations where a single delay needs to be stopped, started, reset, or manipulated by different flows.

Delay/Equality Flow Example

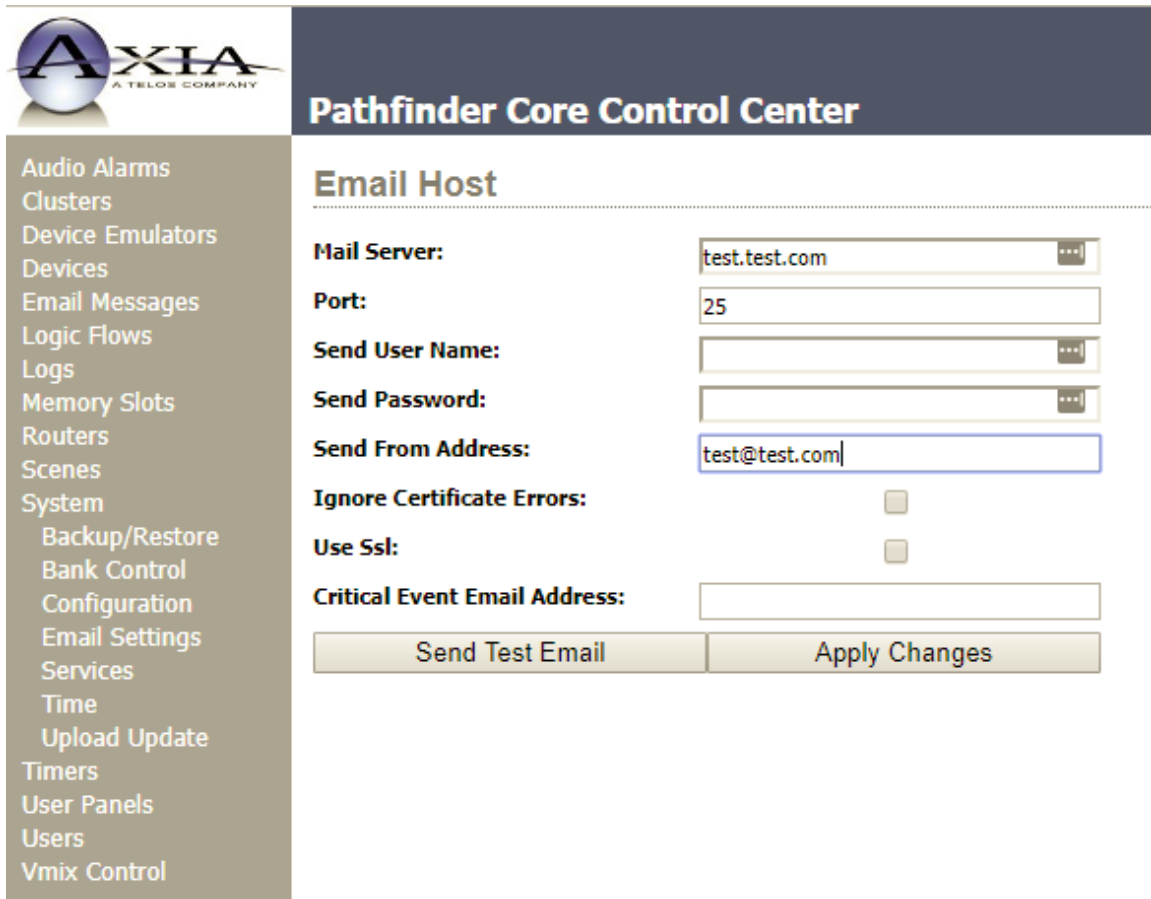


This is an example that uses the new combiners available in 1.3.5.01. In this example, the equality combiner outputs true or false depending on whether two silence alarms are in the same state. This can be useful if two audio channels should have the same audio. Silence is expected in certain situations but we are trying to make sure that if audio is present on one, it is present on both and if it is silent on one then it is silent on both. True or False is translated into a message of AudioMatches or AudioDiffers. A delay is introduced to expunge short variations of alarm states and only pass on definitive states. This is one example of how these new combiners might be used.

Version 1.3.6.02 Changes

Email Host

When configuring the email host settings, using a blank user name and password will now cause PathfinderCore PRO to skip including any credentialing in the email send. This should allow PathfinderCore PRO to send emails to email servers that are protected by source IP address rather than user credentials.



The screenshot shows the Pathfinder Core Control Center interface. On the left is a navigation menu with the AXIA logo and a list of menu items: Audio Alarms, Clusters, Device Emulators, Devices, Email Messages, Logic Flows, Logs, Memory Slots, Routers, Scenes, System, Backup/Restore, Bank Control, Configuration, Email Settings, Services, Time, Upload Update, Timers, User Panels, Users, and Vmix Control. The main content area is titled "Email Host" and contains the following configuration fields:

- Mail Server:** test.test.com
- Port:** 25
- Send User Name:** (empty field)
- Send Password:** (empty field)
- Send From Address:** test@test.com
- Ignore Certificate Errors:**
- Use Ssl:**
- Critical Event Email Address:** (empty field)

At the bottom of the configuration area are two buttons: "Send Test Email" and "Apply Changes".

Please note that after applying a blank password, the password field will likely show a series of stars. This does not mean the blank password has not been applied. In addition to masking the characters of a password, password fields also mask the length of the password with a constant number of stars. So even a blank password will display with some stars after it has been applied to the system.

Delay Combiner

Two additional properties have been added to Delay combiners which allow the delay combiner to operate in a momentary fashion.

Combiner

Combiner Type: Delay ▾

Delay Time (ms): 8000

Reset delay if input changes:

Output Value: Value at input when timer starts ▾

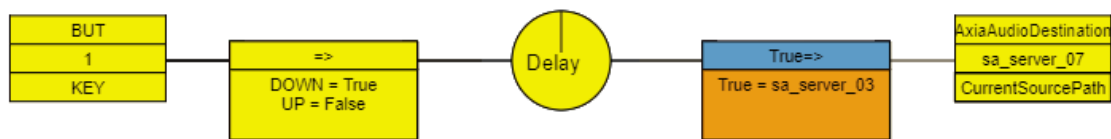
Cancel Value:

Clear output after countdown completes:

Clear Value:

Done Cancel

In many cases you may want the delay to pass a value through after the delay but then reset the output for the next change. For example, if we want a flow that requires a user to hold a button down for a length of time before making a change, the flow might look something like:



Our goal with this flow is the following:

- If the button is pressed, start a 5 second timer
- If the button is released cancel the timer
- If the button is held for 5 seconds make the route change

The Delay combiner has an input value and an output value. Changes only get passed to the output translator when the combiner's output value changes. And the delay is only analyzed for countdown when the combiner's input value changes. For this example we would set the delay combiner parameters like:

Combiner

Combiner Type: Delay ▾

Delay Time (ms): 5000

Reset delay if input changes:

Output Value: Value at input when timer starts ▾

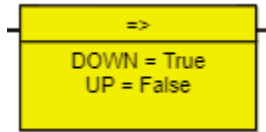
Cancel Value: False

Clear output after countdown completes:

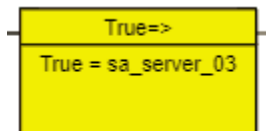
Clear Value: False

Done Cancel

- If the user presses the button the input value gets set to True based on the inbound translation:



- The timer starts counting.
- If the user releases the button before the timer elapses, the input value of the combiner gets set to False. Since this matches the cancel value the delay timer stops counting.
- If the user does not release the button for 5 seconds, then the true value gets passed to the combiner output which is being monitored by the output translator:



- A route change is made.
- Since the “Clear Value” and “Clear Output after countdown completes” options are set, the output value of the combiner is then set to False again so it is ready for the next button press.
- When the User releases the button, the combiner input is set to False but since that is the Cancel field no change to the combiner output is made.

Without the clear value and clear output after countdown options, the output of the combiner would remain true and so the next press would not change the output and therefore would not trigger another route. If we cleared the Cancel value and did not use the new clear options, then releasing the button would pass false to the output but 5 seconds after the button was released.

It is important to note that a cancel value if set will cancel the countdown but the cancel value does not get passed through.

These parameters will allow you to produce differing effects depending on the required goal.