Version 4.1.3 Release Notes

Pathscape Software	Pathscape v4.1.3
Release Date	April 5, 2021

Please see sections below for full release notes on the major release of Pathscape v4.1 and directly below this paragraph for just the bug fixes in the v4.1.3 release.

v4.1.3 Bug Fixes	
Vignette Show Files	Offline Device Replacement and Show file load doesn't load Vignette snapshots/zones
Virtual Vignette Sliders	Pathscape can echo Vignette events while running which results in more predictable levels when moving a slider with the mouse.
RDM Sub devices	Pathscape hangs when discovering RDM devices with RDM sub-devices. Examples of RDM sub devices are dimmers in dimmer racks or relays in a relay panel such as SNAP.
Limit check on property boxes	Pathscape didn't limit snapshot/zone creation to 64. You could type in any integer, but only 1-64 were valid.
Delete Row cleanup	Removing clock events can sometimes result in an empty row in the Device View.
Vignette with yellow dot	Vignette snapshots and zones won't send over multicast. As a reminder, the dot is colored to show a device's state; red is offline, yellow is network subnet issues and green is a valid unicast connection between the device and your computer. Pathscape can send many properties over multicast (yellow).
Load Clock Events	Clock events loaded from a show file are not editable.
Clock Event cleanup	Transactions are created for Vignette clock upon show file save when no actual change has been made.

v4.1 New Features	
Rental Security Mode	For Pathway Connectivity devices with a front UI (QUATTRO, OCTO and VIA rack mount gear), firmware v6.1 allows an end user to permanently opt out of the security features offered by Pathscape. When receiving devices from the factory or after a factory default you will be offered an option on the front panel. Figure 1: The default selection on first boot is to wait for Pathscape to add the device to a security domain. This is the same behaviour as v5.0 firmware. Using the encoder on the front panel, you may choose to always configure from the front panel giving Pathscape Read Only permissions or you may opt out of security all together to allow configuration through the front panel or by using Pathscape. **NOTE:** This mode of operation will allow any unauthorized user on the network the ability to make configuration changes to devices. It should only be used on dark networks and with knowledge of the risks involved. See Figure 2: for a QR code linking to a video describing the three security options (normal, local, none) Note: eLink, which has a front UI, is not included in the v6.1 release. Stay tuned.
NICs evaluated during runtime	Previous versions of Pathscape only interrogated the operating system for a list of Network Interface Controllers at start up. You can now disable or enable NICs on the fly and devices on those LANs will appear or go off line as appropriate. This is also true if you plug in your network cable or turn on WiFi to a network that has devices.

Ping added to Right-Click menu	One of the first steps in debugging any network gear is to check if you can Ping it. This traditionally was done by opening a terminal window and typing the command and IP address. This release adds the ability to right-click on any device and ping it without having to re-type its IP address. You can also type any other IP address in this dialog to test other devices on your network. Figure 3:

v4.1 Changes	
Performance	If your network is VERY large (for example hundreds of Pathports with hundreds of universes), you may have experienced performance issues during initial discovery upon launch. Performance improvements are more than tenfold.
Zebra Striping in DMX Patch grid	To make editing of large shows with many universes on wide screens easier, we've added zebra striping to the DMX Patch Grid. Figure 4
Other cell colors in DMX Patch	Reference Figure 5 for color examples. Cells that cannot be selected are *dark grey* because they are Input Ports and the cells are Custom Patches; only standard patches may be assigned to Input ports. Cells that are *medium grey* may not be selected because they belong to a device that is not in the current Security Domain or are Read Only. *Red* cells are change attempts on devices that are not on line. *Yellow* depicts patch changes that are still in the transaction editor. Selected ports highlight the whole row *blue*.
Multi-Select in DMX Patch	Holding down shift and clicking allows you to select a range of ports in the DMX Patch tab. You may also Ctrl-Click to select non-adjacent ports. Right-clicking allows you to Enable/Disable ports, change port direction and select universes en-masse. The Enable/Disable option is new to this version of Pathscape. Figure 6
DMX Patch Buttons	As seen in Figure 7 , the buttons below the DMX Patch grid have changed. Gone are NEW, COPY, EDIT and DELETE, as those are moved into the CUSTOM PATCH EDITOR dialog. The RANGE editor to customize the columns shown is now simplified to ADD UNIVERSE and HIDE UNUSED UNIVERSES. Note, you can no longer re-arrange columns to take them out of numerical order and as before, all Custom Patch universes appear before the column for UNIV 1.
ETH: Link Up	On the front display of QUATTROs and OCTOs, the link status is shown as ETH: Link Up vs the symbol (N). This allows scrolling of other messages on this row of text.
Red highlights in Transaction Editor	If a device is off line or has limited connectivity (subnet issues), any transaction that cannot go (for instance, a new patch) will be highlighted in red with a status message in the Transaction Editor describing the connection issue. Figure 8 ,
Grey text for non-editable values	Properties shown in the grid of the Device tab that are non-editable are shaded grey showing you cannot edit them. This is because they have been discovered but are part of a Security Domain that you are not logged into presently. Clicking on those cells will not select the device. You must click on black text to highlight a device.
Subdevice selection across tabs	If you expand a Pathport to see its ports and select one, when you go to the DMX Patch tab, that port will be selected and vice-versa.

v4.1 Bug Fixes	
Waking up on MacOS	If you leave Pathscape running as your Mac goes to sleep, the message viewer may queue many messages and cause Pathscape to display the wait cursor.
Errant rows after a Rediscover	The Rediscover button has been cleaned up. In past releases, you may have notices some rows with N/A until you changed views.
Virtual Console	Virtual Console "Stop DMX" button crashed when transmitting Pathport protocol. Stopping DMX on all protocols apart from sACN may have sent random values in last frame.
Spurious On Line/Off Line messages	A number of cleanups for devices that were in the wrong subnet range and also for Cognito and Choreo coming and going on/off line.
MacOS Dark Mode	Some combo box text was obscured when editing in dark mode. Some text was black text on black background in other views.

Auto Identify	Turning on or off Auto Identify from the Device menu didn't work correctly on the currently selected device; it required a selection change.
ssACN on Local Security	Devices with Read Only Security (formally called Locally Secured) are not allowed to transmit or receive Pathway ssACN.
EAPS Ring Protection	Multiple fixes and improvements in switch handling of EASP. Better reporting on Ring Fail messages on Transit and Master devices. Backlight flashes only on devices where error exists. Better Initialization and heal times on boot and link up (fiber and copper). In Pathscape, VLANs must now be enabled before you can turn on EAPS Ring Protection.
LLDP on Gen1 OCTO and QUATTRO	Legacy OCTOs and QUATTROS will now report their LLDP Partner correctly.
RSTP vs. IGMP	If IGMP Snooping was enabled and RSTP was enabled, it may have taken up to 30 seconds before multicast forwarded (sACN) flowed on a link that just went active. Fixes have reduced that time to seconds.
Input ports stale data	Pathport will stop receiving network DMX if an input port to the same universe went inactive on the same device. May have been seen on the Vignette Gateways with DMX ports.

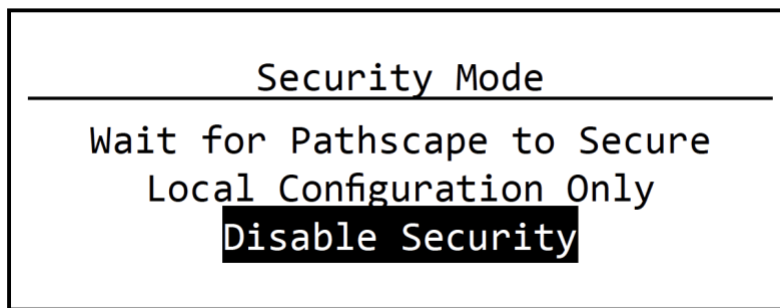| Known Issues	
Limited RDM PID support	Some Manufacturer specific Properties are not shown
Offline RDM Devices	Even with background discovery turned on, RDM Devices that go off-line will still appear on-line (green dot) in the Device view.

Figure 1 - Front Panel Opt Out of Security

Figure 2 - YouTube video "Opting Out of Security" showing three security options
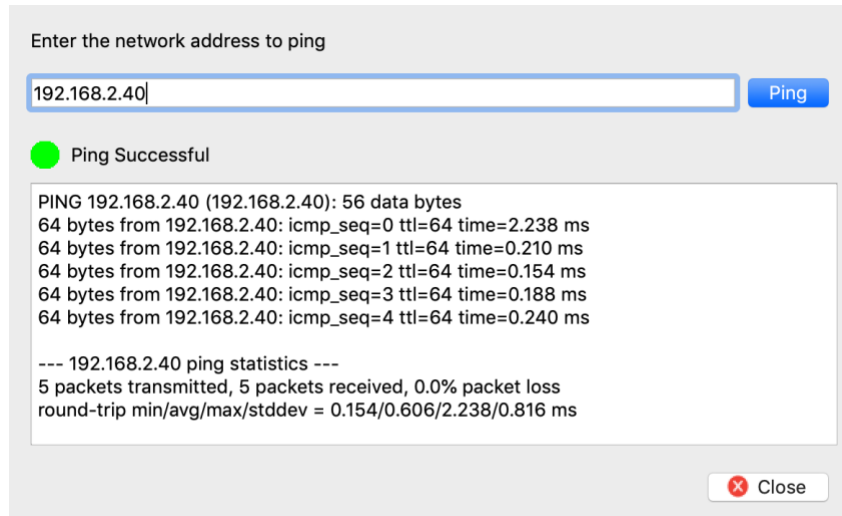
Figure 3 - Ping of device on Right-Click menu

Subdev #	DMX Enable	Port Dir	Assigned	Univ 1	Univ 2	Univ 3	Univ 4	Univ 5	Univ 6	Univ 7	Univ 8
A	Enabled	Output	Univ 1	✓							
B	Enabled	Output	Univ 2		✓						
C	Enabled	Output	Univ 3			✓					
D	Enabled	Output	Univ 4				✓				
A	Enabled	Output	Univ 5					✓			
B	Enabled	Output	Univ 6						✓		
C	Enabled	Output	Univ 7							✓	
D	Enabled	Output	Univ 8								✓

Figure 4 - Zebra Striping in DMX Patch

Security Domain	Device Parent	Subdev Name	Subdev #	DMX Enable	Port Dir	Assigned	Unpatched	Bob	House	House Lx M	Robert	Univ 1	Univ 2
🔒 24WML	C-DMX	Port B	B	Enabled	Input	1						✓	
🔒 Stage	Demo DMX	Port A	A	Enabled	Output	Univ 1	Medium grey - Device not in current domain (amber padlock) ✓						
🔒 Stage	Demo DMX	Port B	B	Enabled	Input	1						✓	
🔒 24WML	My 6824	Port A	A	Enabled	Input	2	Dark grey - Input port can only be Standard Universes						✓
🔒 24WML	My 6824	Port B	B	Enabled	Output	Univ 2							✓
🔒 24WML	My 6824	Port C	C	Enabled	Output	Univ 1	Red - Transaction cannot be sent as device off-line					✓	
🔒 24WML	My 6824	Port D	D	Enabled	Output	Univ 4							
Disabled by User	Rack Quattro	Port A	A	Enabled	Output	Univ 2	Yellow - Changes in patch ready to send						✓
Disabled by User	Rack Quattro	Port B	B	Enabled	Output	Univ 6	Light grey - odd zebra stripe						
Disabled by User	Rack Quattro	Port C	C	Enabled	Output	Univ 7	White - even zebra stripe						

Figure 5 - Color of cells in DMX Patch grid
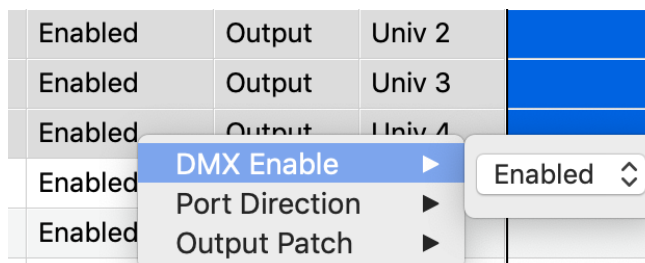
Figure 6 - Multi-Select in DMX Patch Grid

Old:

New:
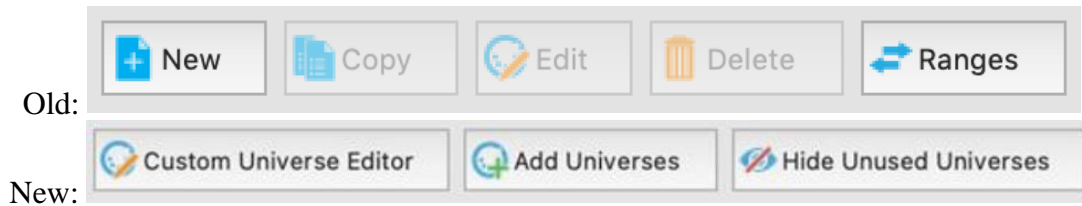
Figure 7 - DMX Patch Column Buttons

New Setting	Status
Univ 2	Ready to send.
Univ 1	Device is offline.
Univ 2	Not logged in to domain.

Figure 8 - Status in Transaction Editor

If you have an questions or issues, as always, please contact support@pathwayconnect.com.