ZyPer Management Platform Release Notes

Software 4.0.40300

June 24th, 2024

Revision History

Date	Version	Fixes/Changes
June 14th 2024	4.0.40280	Updated GA version
June 24th 2024	4.0.40300	Updated GA version, fixes include Session idle timeout, UHD30 rejoin on encoder HDMI interrupt, UHD30 LowLatacny settting and new PackageList

1. Supported Platforms

ZyPer Management Platform

- ProServer on **Ubuntu v22.04**
- Simply NUC (Rev E) on **Ubuntu v20.04**
- ProServer on **Ubuntu v16.0.4**
- Intel NUC (Generation 2 Rev C and Generation 3 Rev D) on **Ubuntu v16.0.4**
- VMWare ESXi appliance on **Ubuntu v16.04**

ZyPer Management Platform GUI web interface

- Google Chrome

ZyPer Encoders and Decoders

ZyPer4K Family

- ZyPer4K HDMI 2.0 encoders and decoders
- ZyPer4K 12GSDI / HDMI 2.0 encoders
- ZyPer4K Netgear Module encoders
- ZyPerXR HDMI 2.0 encoders and decoders
- ZyPerXS HDMI 2.0 encoders and decoders
- ZyPerXS Wall Plates HDMI 2.0 encoders and decoders

ZyPerUHD Family

- ZyPerUHD encoders and decoders
- ZyPerUHD Wall Plate encoders
- ZyPerUHD Dante encoders

ZyPerUHD60 Family (Not compatible with Existing ZyPerUHD devices)

- ZyPerUHD60 HDMI 2.0 encoders and decoders
- ZyPerUHD60 HDMI 2.0 Dante encoders and decoders
- ZyPerUHD60-2 HDMI 2.0 encoders and decoders
- ZyPerUHD60-2 HDMI 2.0 Dante encoders and decoders
- ZyPerUHD60 HDMI 2.0 Wall plate encoders

NOTE: On the UHD60-2s, these devices do not support any update package prior to 5.2.

WARNING: Installing older firmware update files on ZyPerUHD60-2 devices will cause the units to become inoperative.

2. New Features

GUI, Server and Device

- Visual Analyze Monitor (VAM) **BETA version**
- 802.1X support for ZyPer XS/XR and XS wallplates
- ZyPerUHD60 Adjusted Serial Addresses

Server

- Duplicate Multicast Detection and Reporting
- Enhanced Duplicate Address Detection and Reporting
- Correct ZyPerUHD60 product IDs
- Disable Redundancy per server
- Multicast Device Discovery
- ZyPer4K Expansion Encoders - Force Option board Configuration

GUI

- New Zones Panel
- Adjusted main hamburger panel selection order

Device

- ZyPer UHD30 ZyPer 60 Low Latency video configuration
- ZyPer UHD60 Dante static IP configuration for Dante enabled ZyPerUHD60-2s
- ZyPer UHD30/60 Firmware package 5.8
- ZyPer XS/XR and XS wallplate Firmware package 2.1.0.1

Bug Fixes in this release

- Resolved multiple issues in this version see section 4 “Issues resolved”

3. End of Support

- **No Longer Supported -** Gigabyte NUC (Generation 1 Rev A) on Ubuntu v14.04.2
- **No Longer Supported -** VMWare ESXi appliance on Ubuntu v14.04.2

4. Issues Resolved

Component	Issue	Other
MP GUI - Display Grid	Export extracts text "IdleImage" from the idle image field and puts it in the column	
MP GUI – General Session	If a User leaves the browser window for from 15 seconds to a minute the session will sometimes kick the user back out to the login screen	The user will need to log back into the GUI
MP Server	New UHD package list file for 5.8	
MP – Server	Idle Time logout does not end the session properly when backend auth is set to oldAuth.	

ZyPerUHD30	Implemented Low Latency adjustments for UHD30 decoders to fix customer issues with SDI converter stability
ZyPerUHD30	When the HDMI connection is restored to a UHD30 encoder the decoder is not getting the proper command to rejoin the encoder.
ZyPerUHD60	Fixes for UHD60 encoder and decoders now support 1500 MTU for all packets Max length. Fixes also for UHD60 decoder flicker to Idle on new joins
ZyPer4K – Expansion Boards	ZyPer4K products were not being discovered with their corresponding expansion boards on the encoder models during restart or network loss
ZyPer4K – Expansion Boards	ZyPer4K expansion boards now have a feature to force the board to a certain expansion which transcends resets and power resets.

5. Issues Outstanding

Component	Issue	Workaround
ZyPer4K HDMI 2.0 12G SDI	SDI video reports a resolution that the decoder scales down instead of up in genlock scaled	No workaround is available at this time.
ZyPer4K HDMI 2.0	Fast Switched joins at 480I/576I display video in an improper ratio horizontally	No workaround is available at this time.
ZyPer4K HDMI 2.0	ZyPer4K Charlie - Encoder - Incorrect FPS status (cosmetic) under 420 color formats	No workaround is available at this time.
ZyPer4K HDMI 2.0 Dual HDMI	ZyPer4K Encoder Dual HDMI input - Using an Apple 4K source, UHD 60 YUV 420 8bit video is not seen on the loop out or on the decoder display	No workaround is available at this time.
ZyPer4K HDMI 2.0 Analog Expansion	If there is an active HDMI connection to the encoder and nothing is connected to the S-video port, the analog cable status shows connected with the last S-video resolution.	No workaround is available at this time.
ZyPerUHD	ZyPerUHD - HDCP is not reported on the UHD encoders. Also, it allows video traffic to flow to devices that do not support the HDCP version used.	Restart or reboot the encoder to gain the correct information.
ZyPerUHD	ZyPerUHD - Decoder - UHD 60 8 bit 420 - When connecting a UHD60 encoder to a Decoder with a display that has only 1080 support, when rebooting the device, it does not always return video	After about two minutes the video comes back.
ZyPerUHD	There is a known issue with ZyPerUHD video walls above 3X3. Changes to an active video wall of sizes larger than 3X3 cause fluctuations in the video under all screens of the wall for up to 5 minutes before stabilizing.	This only happens on a modification to the video wall configurations. Unjoining all screens of the video wall with the disconnect to the video wall clears all the video. Then changes to the wall's config can be made, followed by a rejoining of the encoder to the wall.

ZyPerUHD60 - Decoder	Video wall 2 rows by 13 randomly fails to show video on one or more displays	No workaround is available at this time.
ZyPerUHD60 - Decoder	The device is reporting that it is sending video at 4096 on a 2560 max resolution monitor	Forcing a resolution in the GUI Display Grid or CLI for the decoder to 2560 60 FPS will work around this issue.
MP Server – Redundancy 22.04	Redundancy fails on the 22.04 ProServer	No workaround is available at this time.
MP Server – Scaled Streams	Encoder videoScaledStream stays enabled even when it is not used in Multiview mode	By un-joining all the other video connections involving the encoder that you are trying to connect with will clear this state. Then re-join the encoder to the same decoder in fast-switched mode.
MP Server - Save System config	Some system configurations like presets are not saved out of the system config.	No workaround is available at this time.
MP Server - Save System config	Some commands are saved out of order like Multiview “create” and “set” commands	No workaround is available at this time.
MP Server - NUC and ProServer	If the MP is powered on and is set for DHCP but the Switch or Switch connection is not up, the server will fail to get the DHCP address once it comes back online	A reboot of the server will allow it to get the DHCP address.
MP GUI – VAM	Stream trace does not work sometimes, this occurs randomly.	A refresh of the browser or clearing the cache sometimes resolves this issue.
MP GUI – General Session	Upgrading from 2.5.3.X to 3.X will require a cache clear of the browser before getting the login screen.	Clearing the Brower cache will fix this issue.
MP GUI - Multiview	When removing an encoder that is assigned to multiple Multiview windows in the same configuration, the video will not be removed until the encoder is removed from all windows	Deleting the window will need to be done in the API to remove the video from the proper display window.
MP GUI -Multiview	The Encoder Window, sound, and status are not indicated under the ZMP GUI Multiview config. The icon for the sound source of the Multiview does not show active sound if the window is selected for sound source and saved.	Checking the API is required to see the sound source for the Multiview config.
MP GUI -Multiview	Edit menu- The pattern button still resizes when you click on the bottom 3rd of the button when in a Multiview single panel	Click the resized button to access the drop-down menu.
MP GUI - Source	On occasion, the custom config containing “disconnect” actions will show no actions after saving the config.	Close the browser and restart it, if this gets into this state.
MP GUI – Source -Join-Config	Join configs may be missing after an upgrade.	Reverting the Server will also restore the join configs.
MP GUI - Preview	The preview video has vertical lines in the video on some encoders.	No workaround is available at this time.

MP GUI – TLS Panel	Setting TLS mode to either enabled or disabled results in a "Network request failed" message, though the command takes on the ZMP	No workaround is available at this time.
MP – Accounts	Password minDays setting is not enforced	No workaround is available at this time.

6. Known Limitations

ZyPerXS HDMI 2.0

Component	Limitation	Workaround
Encoder	No Overlay is available for this product.	Working as Designed
Encoder-Decoder	HID USB is available only on this product, USB is not compatible with ZyPer4K HDMI 2.0 units.	Working as Designed

ZyPerXS WP

Component	Limitation	Workaround
Encoder and Decoders	ZyPerXS Wallplates with Icron expansion boards for USB connections are not compatible with the ZyPer4K with Icrons	With updated Icrons cards on the ZyPer4K HDMI2.0 devices, this is now possible. However, the ZyPer4K devices must have the new Icron board.

ZyPer4K HDMI 2.0

Component	Limitation	Workaround
Encoder - Display Port	Display port encoder: going from dp->hdmi AND res > 3840p30 takes 20s	None
Encoder – SDI	**Genlocked mode –** Audio is limited to 2 channel supports	None
Encoder - Analog	During connections using the VGA port on the expansion board, audio may not be available for the connection. This occurs one out of every 15 to 20 connects using the VGA port on this device.	We have found that resetting the port to HDMI and then back to VGA does resolve the issue.
Decoder	When swapping HDMI from ZyPer4K decoders with the HDMI unplugged for less than 5 seconds, the decoder fails to read the new EDID.	When power cycling or unplugging, wait 5 seconds before plugging the unit back in.
Decoder - Display port board	When Display port connections to a Monitor or TV are set to 3840 X 2160 60 FPS 8 bit 444, the video has been seen to stop and start again after a link training has been established. It is not every time and in testing varies depending on particular environment variables as up to 1 out of every 5 link training events. The event itself is specific to a disconnect of the Display	To work around this problem, the following guidelines must be implemented to obtain reliable 3840 X 2160 60 FPS during these particular instances of fault. For a Genlocked connection, sources must be using reduced blanking timing, limiting pixel clock to 550MHz.

	Port connection or power event of the endpoints.	Fast-switched connections may also be used as the method of joining the Encoder to the Decoder. The advanced timing command must be used to configure the decoder for use: set decoder *decoder_name*|*decoder_mac* display-advanced-timing sync-front-porch 48 2 sync-width 32 5 hsync-polarity auto vsync-polarity auto total-size 4000 2222
Multiview	Custom Multiview containing two windows above 2048x1080 fails to join the window to the decoder	None

ZyPerUHD60

Component	Limitation	Workaround
Encoder - HDCP	HDCP, interlacing state, Bit sample, Color Space, and Color Format states may not report correctly on UHD encoders • HDCP status – May not report correctly • Interlacing State – Will always show "no" • Color Space – Will always report 444 • Color Format – Will Always report RGB Color bit depth –always reports 8-bit	None
Encoder -EDID	Under the Encoder information output, the EDID used for the encoder may not match the decoder it is joined to. This is part of the design, as the system will load an EDID that it feels is most compatible. This could be an EDID that is either stored in its database or from an active decoder that shares the encoder's connection.	Working as designed
Encoder - Dante devices	Rebooting the device forces the Dante audio to source HDMI audio	None
Encoder or Decoder 2 with Dante enabled	Dante port set to DHCP on the same subnet as the main media port, it will report the same IP as the media port	Working as designed Media port and Dante Port cannot be on the same network
Decoders - Sleep mode	When using the sleep mode feature to set the display to sleep (regardless of the decoder connections) displays require a 10-second window if the user wants to disable this mode.	A power reset of the Decoder will be required
Decoder - Independent Audio routing	Joins of Audio between the encoder and the decoders or changes in the audio to the decoder will cause a 1 to 2 second video interruption. This is because of an internal modification of this connection.	None
Decoder - Audio Limitation	The audio for the Decoder's HDMI and Analog out port is limited to only one source Encoder	None

Encoder/Decoder - Independent IR routing	Due to the implementation of independent IR joins from device to device. We are no longer able to receive IR from the device to the server.	None
Encoder/Decoder - RS232 Configuration and routing	Changes to the RS232 configuration to support the endpoint-to-endpoint communication require the devices to be restarted. Changes to the baud rate, connection endpoints, and other rs232 communication will restart the device.	It is no longer required to reset the endpoint for device-to-device communication, only when going to or from the device to the server does the device reset. RS232 config changes still reboot the device when made.

ZyPerUHD

Component	Limitation	Workaround
Encoder - HDCP	HDCP, interlacing state, Bit sample, Color Space, and Color Format states may not report correctly on UHD encoders • HDCP status – May not report correctly • Interlacing State – Will always show “no” • Color Space – Will always report 444 • Color Format – Will Always report RGB Color bit depth –always reports 8-bit	None
Encoder -EDID	Under the Encoder information output, the EDID used for the encoder may not match the decoder it is joined to. This is part of the design, as the system will load an EDID that it feels is most compatible. This could be an EDID that is either stored in its database or from an active decoder that shares the encoder's connection.	Working as designed
Encoder - Dante	ZyPerUHD encoders with the Dante expansion if HDCP is disabled MacBook video will not negotiate	None
Decoder - Scaling	When the UHD Decoder is downscaling from UHD 3840 X 2160 60 420 8 bits to 1080P 60 on a display, if a reboot (power cycle or restart command) occurs to the Decoder the Display will not return video.	To recover from this state the device needs to be rejoined to display video once more.
Decoders - CEC off|on	It has been found that on some Samsung displays, the CEC “on” command will not return the monitor to an active state. One monitor that experienced this issue was a Samsung 4K UN40JU6500. To activate the TV after encountering this event, a power on must be done.	A power Cycle of the TV is required
Decoders - Sleep mode	When using the sleep mode feature to set the display to sleep (regardless of the decoder connections) displays require a 10-second window if the user wants to disable this mode.	A power reset of the Decoder will be required
Decoder - Independent Audio routing	Joins of Audio between the encoder and the decoders or changes in the audio to the decoder will cause a 1 to 2 second video interruption. This is because of an internal modification of this connection.	None

Decoder - Audio Limitation	The audio for the Decoder's HDMI and Analog out port is limited to only one source Encoder	None
Encoder/Decoder - Independent IR routing	Due to the implementation of independent IR joins from device to device. We are no longer able to receive IR from the device to the server.	None
Encoder/Decoder - Resolution Support	Resolution Support for ZyPerUHD does not support 4096 resolutions and will not produce resolutions at 3840 X 2160 50 FPS/60 FPS. The ZyPerUHD encoder will not recognize any video above 3840 X 2160 60 FPS YUV 420, 8 bits (in either bit rate or color format).	None
Encoder/Decoder - RS232 Configuration and routing	Changes to the RS232 configuration to support the endpoint-to-endpoint communication require the devices to be restarted. Changes to the baud rate, connection endpoints, and other rs232 communication will restart the device.	It is no longer required to reset the endpoint for device-to-device communication, only when going to or from the device to the server does the device reset. RS232 config changes still reboot the device when made.

ZyPer Server

Component	Limitation	Workaround
Duplicate IP warning	Duplicate IP with the ICRON USB - The message does not repeat on every command output in the CLI	None
Server Multicast reporting	Multicast Streams on encoders are left enabled and running without a device connection	None

ZMP Redundancy and VMWare

Component	Limitation	Workaround
MP with dual NICs	Setting the Management Interface (eth1) on a ProServer or a dual NIC NUC ZMP device to an IP not accessible to the originating ZyPer Management Platform Source machine could cause an inability to access the Management port after it is set.	To correct this, the user should enter the ZyPer Management Platform under the "Video-Network" IP from a device on that network and correct the Management NIC interface address.
MP Redundancy	Banners, Presets, and Join Configurations are not redundant between servers	The user will need to set up the Join config on both servers, Presets and Banner files can be copied from the primary server to the secondary under the /srv/ftp/files folder accessible through SFTP and guest account.
MP Redundancy	The following settings under all account config for the accounts have to be set the same on each server • authMode • concurrentSessionsMax • idleLogout • onThreeFailures • password	These settings will need to be set on each server and should match to ensure that they are consistent on failover.

MP Redundancy	The two-factor authentication is not supported under redundant server configurations. The two-factor authentication is bound per server. Failover servers will take any code and allow access.	No workaround to this issue
MP Redundancy	Account Locking and unlocking are local to the server and changes to the locking state will not be carried over to the fail-over server.	Changes will need to be made to both servers for the account.

ZMP Security limitations

Component	Limitation	Workaround
ZMP Server – InitialExpire	When InitialExpire is enabled, the user is forced to choose a password with a minimum length even if minLen=NA	None
ZMP Server – TLS	Currently, TLS is unable to be configured in a redundant server environment. Current support is for Single Server implementations.	None

ZyPer GUI

Component	Limitation	Workaround
Join Config	Under the join configurations for UHD or U60 encoders and decoders. If a connection is made for audio and the decoders follow video is set to true, no audio connection will be sent. This happens with individual audio connections with no video defined.	Through the API the join audio connection can be made.
Upgrade	After upgrading to 2.3 and above, the connection tooltips under the Display Panel Icons show only video connected.	A refresh of the GUI will show all connections on the Display Panel Icons
Preview - Thumbnail	When starting Thumbnail videos, sometimes the icons show a pinwheel instead.	A stop and start of the thumbnail video by clicking on the Icon will remedy this issue. Alternatively, a refresh of the GUI will show all the videos enabled.
Video wall	If the name of a Decoder is changed and the video wall that contains said decoder is then opened for editing, the Decoder will no longer be present under the configuration.	After the Decoder name is changed but before the video wall is opened for edit, a refresh can be done. Then the video wall will contain the Decoder with the changed name.

7. Current Device Firmware and Device Compatibility

Current Device Firmware

Device	File version
ZyPer4K HDMI2.0	**4.1.2.9**
ZyPerXS/XR/WallPlates HDMI2.0	**2.1.0.1**
ZyPer Netgear Encoder Module	**4.0.0.6**

ZyPerUHD Encoders and Decoders	**5.8**
ZyPerUHD Wallplate Encoders	**5.8**
ZyPerUHD Dante Encoders	**5.8**
ZyPerUHD60 Encoders and Decoders	**5.8**
ZyPerUHD60 Dante Encoders and Decoders	**5.8**

Firmware Compatibility

ZyPer4K HDMI 2.0, ZyPerNG, ZyPerXS/XR and ZyPerXSWP

Endpoint Firmware	MP 2.5.1	MP 2.5.2	MP 2.5.3	MP 3.0	MP 3.1	MP 3.2	MP 4.0
ZyPer4K 4.1.0	X						
ZyPer4K 4.1.2	X	X	X				
ZyPer4K 4.1.2.1	X	X	X				
ZyPer4K 4.1.2.9			X	X	X	X	X
ZyPerNG 4.0.0.6	X	X	X	X	X	X	X
ZyPerXS/XR 1.2.0.2	X						
ZyPerXS/XR 1.3.2.0	X						
ZyPerXS/XR 1.3.2.4	X	X					
ZyPerXS/XR/ WallPlate 1.5.0.1		X	X	X			
ZyPerXS/XR/ WallPlate 1.5.0.6			X	X			
ZyPerXS/XR/ WallPlate 2.0.0.0				X	X	X	
ZyPerXS/XR/ WallPlate 2.1.0.1							X

- **ZyPerUHD60 support begins at update package 1.21 for E0 and D0 units.**
- **ZyPerUHD60 Dante support begins at update package 5.0 for E1 and D1 units.**
- **ZyPerUHD60 E2, D2 and E2 Dante, D2 Dante support begins at update package 5.3.**

Endpoint Firmware	MP 2.5.1	MP 2.5.2	MP 2.5.3	MP 3.0	MP 3.1	MP 3.2	MP 4.0
ZyPerUHD zuhd_1.16.up1	X	X					
ZyPerUHD zuhd_1.17.up1	X	X					
ZyPerUHD zuhd_1.18.up1	X	X					
ZyPerUHD zuhd_1.19.up1		X*	X				
ZyPerUHD zuhd_1.21.up1			X	X			
ZyPerUHD zuhd_5.0.up1				X	X		
ZyPerUHD zuhd_5.2.up1						X	
ZyPerUHD zuhd_5.3.up1						X	
ZyPerUHD zuhd_5.4.up1						X	
ZyPerUHD zuhd_5.5.up1						X	
ZyPerUHD zuhd_5.6.up1						X	
ZyPerUHD zuhd_5.7.up1						X	
ZyPerUHD zuhd_5.7.1.up1						X	
ZyPerUHD zuhd_5.8.up1							X
*** Hot Fix Only**							

NOTE: On the UHD60-2s, these devices do not support any update package prior to 5.2.

WARNING: Installing older firmware update files on ZyPerUHD60-2 devices will cause the units to become inoperative.

***WARNING:* For Firmware updates to decrypt properly, the time on the server should be closely in sync to the current time. If the time is prior the decryption key time the update will fail.**

***WARNING:* ZyPerUHD60 Device on Firmware 5.7.1 and higher requires all devices to be on this 5.7.1 or higher to interop between encoder and decoder, this is due to the MTU of 1500 being enforced as the max size packet.**

Device Compatibility

Encoders

Device	Video	Multiview	Video Wall	Preview	Audio	Analog Audio	RS232	IR	USB
ZyPer4K HDMI 2.0	4K/XS/XR/WP	4K/XS/XR/WP	4K/XS/XR/WP	4K	4K/XS/XR/WP	4K/XS/XR/WP	4K/WP	4K/WP	4K
ZyPerXS Wall Plate Icron USB	4K/XS/XR/WP	4K/XS/XR/WP	4K/XS/XR/WP	N/A	4K/XS/XR/WP	4K/XS/XR/WP	4K/WP	4K/WP	WP*
ZyPerXS/XR HDMI 2.0	4K/XS/XR/WP	4K/XS/XR/WP	4K/XS/XR/WP	N/A	4K/XS/XR/WP	4K/XS/XR/WP	N/A	N/A	XR/XS/WP**
ZyPerXS Wall Plate Non-Icron USB	4K/XS/XR/WP	4K/XS/XR/WP	4K/XS/XR/WP	N/A	4K/XS/XR/WP	4K/XS/XR/WP	4K/WP	4K/WP	XS/XR/WP**
ZyPerNG	4K/XS/XR/WP	N/A	4K/XS/XR/WP	N/A	4K/XS/XR/WP	4K/XS/XR/WP	N/A	4K/WP	N/A

* With Icron USB
** Without Icron USB

Decoders

Device	Video	Multiview	Video Wall	Preview	Audio	Analog Audio	RS232	IR	USB
ZyPer4K HDMI 2.0	4K/NG/XS/XR/WP	4K/XS/XR/WP	4K/NG/XS/XR/WP	4K	4K/NG/XS/XR/WP	4K/XS/XR/WP	4K/WP	4K/NG/WP	4K
ZyPerXS Wall Plate Icron USB	4K/NG/XS/XR/WP	4K/XS/XR/WP	4K/NG/XS/XR/WP	N/A	4K/NG/XS/XR/WP	4K/XS/XR/WP	4K/WP	4K/NG/WP	4K/WP*
ZyPerXS/XR HDMI 2.0	4K/NG/XS/XR/WP	4K/XS/XR/WP	4K/NG/XS/XR/WP	N/A	4K/NG/XS/XR/WP	4K/XS/XR/WP	N/A	N/A	XR/XS/WP**
ZyPerXS Wall Plate Non-Icron USB	4K/NG/XS/XR/WP	4K/XS/XR/WP	4K/NG/XS/XR/WP	N/A	4K/NG/XS/XR/WP	4K/XS/XR/WP	4K/WP	4K/NG/WP	XS/XR/WP**

8. New CLI and API Additions, changes, and deletions

Additions

GUI, Server and Device

Visual Analyze Monitor VAM (BETA)

Components: CLI, Server, SNMP, GUI

Overview: The Visual Analysis Monitor tool allows the user to simplify installations and resolve more complex configuration issues on the AV network. The tool focuses on the below values

- Visually showing the devices and their connections to and from the customer network equipment. In addition to showing the main configuration details of the switches and any warnings/errors detected within the configuration.
- Analyzing data with the use of charts and statistics to allow the user to compare devices and identify any anomalies seen on the AV network. Events are reported on each switch under warnings or errors and visual indications such as red lines on network links will appear indicating the over subscriptions of traffic.
- Monitoring the devices status and alerting conditions will help isolate problems seen during production. The user will have complete view of the Zeevee AV network.

Although the main way to benefit from VAM is through the GUI, there is a CLI component to the tool which provides an overview of statistics along with some configuration commands. Although not as useful as the Graphic interface this is the backbone of what is seen in the GUI. All information is summarized here in the CLI output of the new VAM commands.

Operation and Appearance:

The Zeevee application server will require an SNMP account be added to the server. Once entered the MP will be the primary point of operation and discovery for all other devices. Once the credentials are entered for the MP, VAM will discover the connected Network switch, this too will need to have the SNMP user configured on the switch and then its credentials added to the MP via the configuration. At this point the Switch will allow VAM through use of SNMP to discover all Zeevee based AV endpoints and what ports they are connected to on the switch. Additional switches may be detected, and a similar process will be needed to expand VAMs discovery of AV devices and switches. Essentially the entire AV network could be discovered and mapped out providing the supported switches are in place.

Below is a simple step by step to configure VAM using the CLI

1. Start the MP, Switches and endpoints
2. Login to the CLI
3. Add an MP SNMP user using the CLI
4. Add the MP and SNMP credentials using the CLI (The network switch connected to the MP will then be discovered)
5. Set the SNMP credentials for the new switches discovered. (endpoints and other connected switches will be discovered and plotted)
6. Configure additional Switches SNMP users and enter the SNMP credentials on the MP

CLI commands added in this version support VAM:

- **Adding a SNMP user to the MP (existing command)**
    - **If you want a V3 SNMP user**

      add snmp user v3 accessLevel readOnly auth SHA512 encrypted no username

    - **If you want a V2 SNMP user**

      add snmp user v2c accessLevel readOnly community

- **Adding or deleting network devices to the MP manually, this will configure the device and the authorize it under VAM**

    - **If you added a V3 user**

add snmp netNode ipAddress <ipAddr:ip> snmp v3 authType sha1|sha512 username <string> password <string>

- **If you added a V2 user**
  add snmp netNode ipAddress <ipAddr:ip> snmp v2c communityName <string>

- **Deleting Nodes**
  delete snmp netNode byName <ipOrNameOrId:ipOrNameOrChassisId>
  delete snmp netNode byId <int>

- **Managing existing device configuration and credentials**

  set snmp netNode <ipOrNameId:ipOrNameOrChassisId> version v3 authType sha1|sha512 username <string> password <string>
  set snmp netNode <ipOrNameId:ipOrNameOrChassisId> version v2c communityName <string>
  set snmp netNode <ipOrNameId:ipOrNameOrChassisId> ipAddress <ipAddr:ip>

- **Device configuration and statistics**

  show snmp netNode all justChanges since <lastChangeId:lastChangeNumber>] [wait]
  show snmp netNode <ipOrNameOrId:ipOrNameOrChassisId>|all general|snooping|warnings
  show snmp netNode <ipOrNameOrId:ipOrNameOrChassisId>|all vlan <int>|all snooping
  show snmp netNode <ipOrNameOrId:ipOrNameOrChassisId>|all port <slotPort>|all state|ipAddrs|peer|snooping|vlan|stats
  show snmp netNode <ipOrNameOrId:ipOrNameOrChassisId>|all multicastForwardingDb

Below is the simple step by step to Configure VAM using the GUI

1. Login to the GUI and the SNMP panel
2. Add a new SNMP user and note down the credentials
3. Open the VAM Panel
4. Click on the hamburger for the ZMP Icon
5. Enter the SNMP user credentials that were just created

This will now show the connected network switch for the ZMP, acquire the network switch SNMP user.

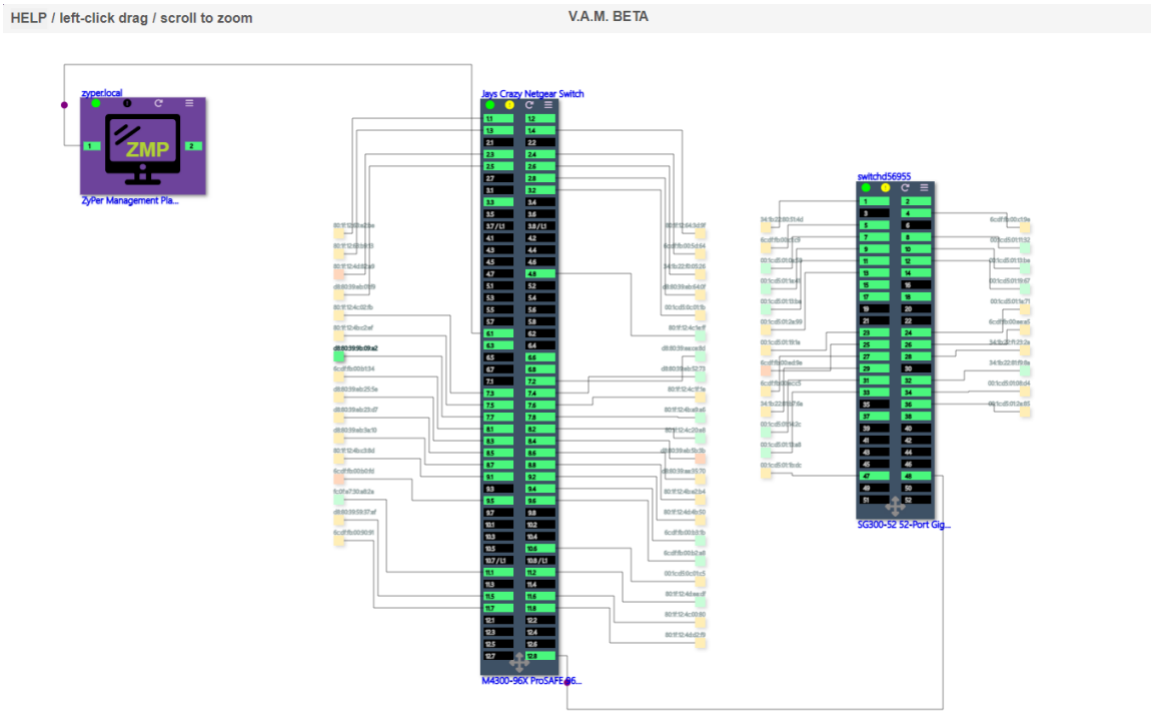
6. Click the network switch icons hamburger menu
7. Enter the network switch SNMP credentials

Zeevee AV endpoints should populate at this point for this switch.

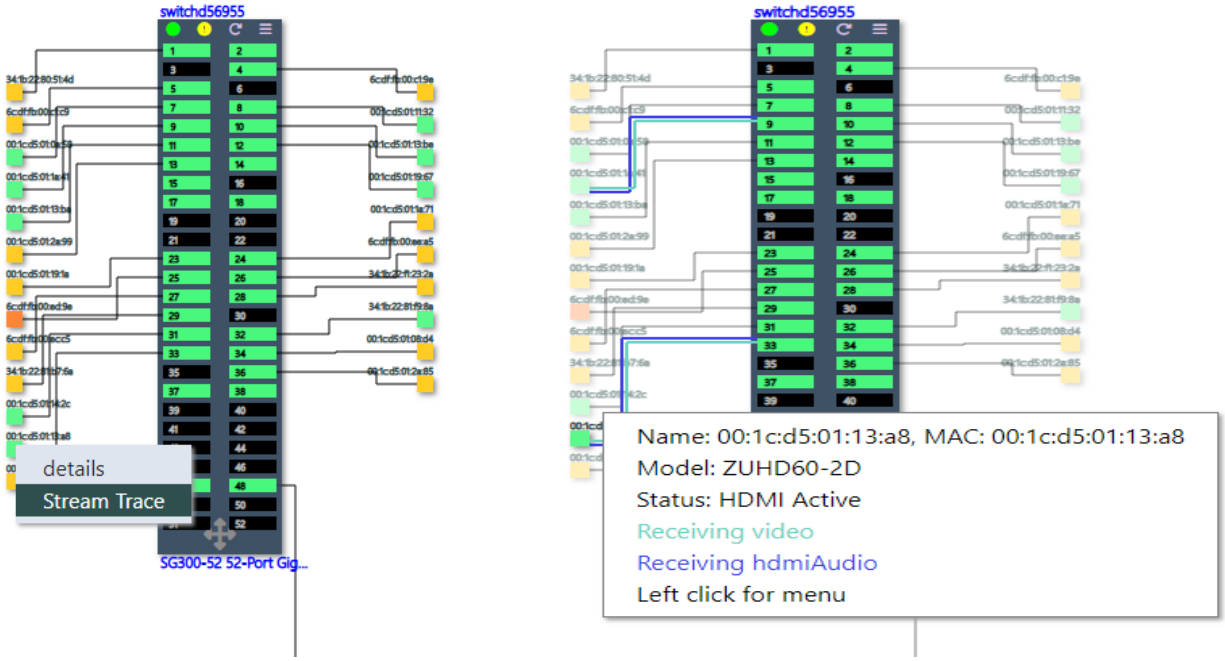
8. Repeat as needed steps 5-6 to populate participating network switches.

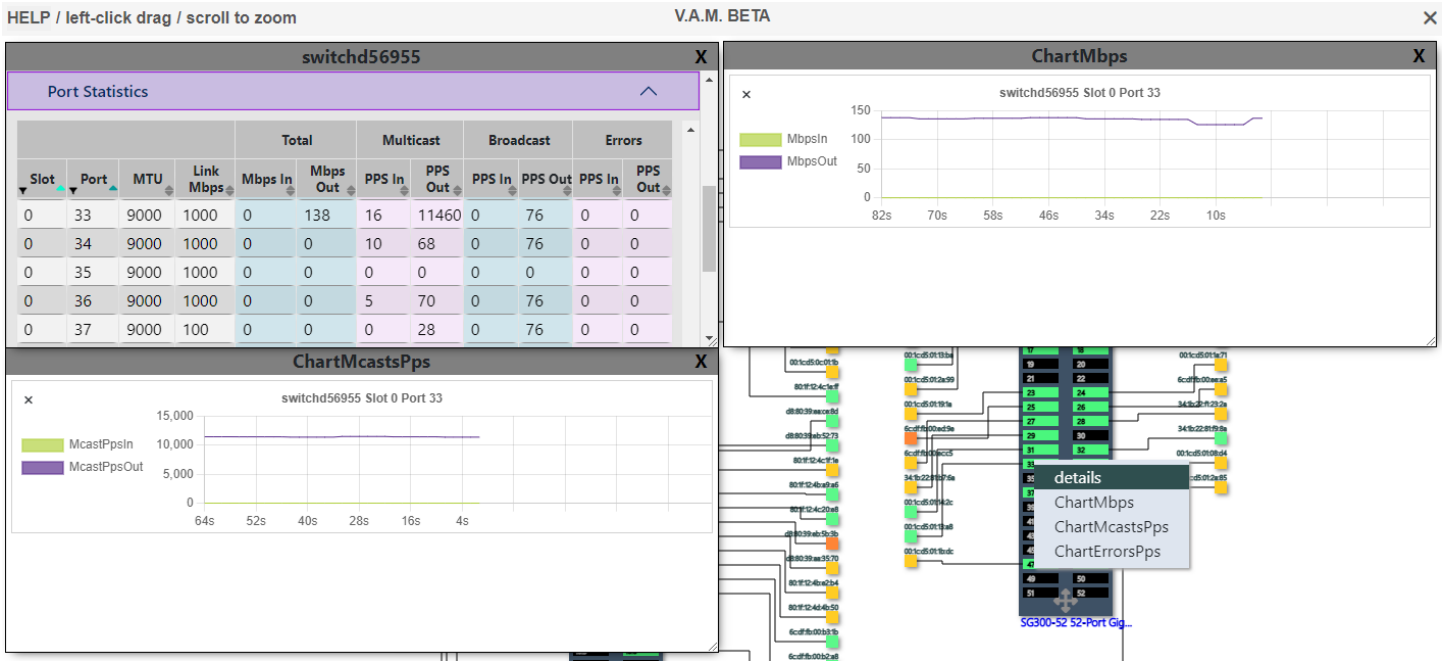
GUI Appearance

Visualize



Analyze and Monitoring





Limitations: Only the Netgear M4300, Cisco 300SG switches are supported in this version of VAM

802.1X support for ZyPer XS/XR and XS wallplates

Components: Server, GUI, ZyPerXS/XR and XS Wall plates

Overview: In this version on MP, we have the ability for the ZyPer XS line to support 802.1X with use of a third-party RADIUS server. This feature uses our current TLS model and adds the capability to set the device for use in an 802.1X environment.

Currently the feature will allow a properly configured XS model endpoint access to the network port it is connected to. After the RADIUS server and switch are configured, the device will authenticate through the switch to the RADIUS server in order to obtain access to the connected switch port.

Operation and Appearance:

The device starts out with access to the switch port. Then secured settings are applied to participating devices. This is followed by a procedure to generate the proper TLS certs which are loaded on the device and RADIUS server. The device will get restarted so it can then try to authenticate. If access is granted, the device will then be seen by the Zeevee MP.

Steps to configure Devices and the System for 802.1X support.

Note: This assumes that the RADIUS and switch ports are configured to handle this authentication method. It is also assumed that the MP is already configured for TLS.

1. Configure the Security key under the Security tab in the Server GUI panel.
2. Set Secured field to Enabled for e each participating device under the Device Grid Config tab.
3. In the 802.1X panel, open the Device CSR and generate a CSR, Save the Device CSR
4. In the Zeevee CA panel, sign the Device CSR, Save the signed Device Cert.
5. In the 802.1X panel, open the Device Cert tab and load the Signed Device Cert, save the Device CSR and privKey

6. In the 802.1X panel, open the Radius CSR tab and generate a radius CSR, save the Radius CSR and privKey
7. In the Zeevee CA panel, sign the Radius CSR, Save the signed Radius Cert

Limitations: None

ZyPerUHD60 Adjusted Serial Addresses

Components: CLI, Server, GUI

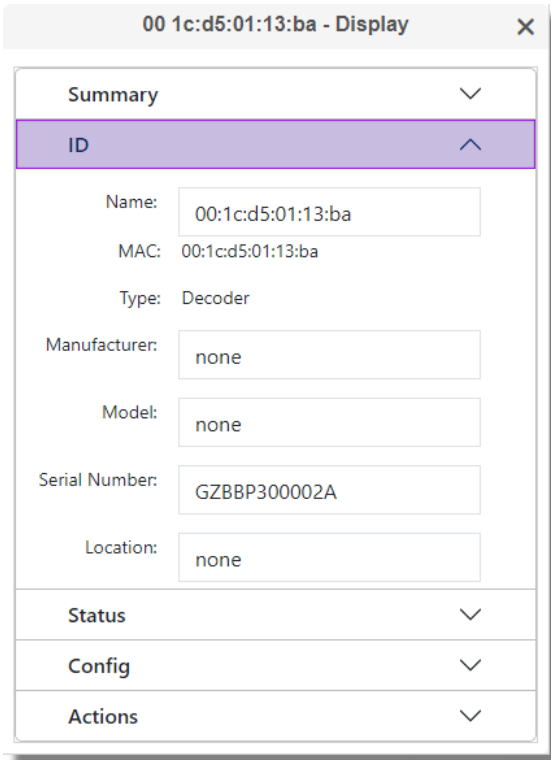
Overview: In this release we are now able to provide the true ZyPerUHD60 serial number under the device config. This is Also propagated to the GUI under the Source/Display Panels, Device Details ID information.

Operation and Appearance:

- **Under the CLI here is what the output will look like.**

  Zyper$ show device config 00:1c:d5:01:13:ba
  device.gen; productCode=ZUHD60-2DA, productDescription=Copper Decoder+ - HDMI 2.0 Dante, SN=GZBBP300002A

- **Under the GUI here is where the serial numbers are displayed.**



Limitations: This is limited to ZyPerUHD60 devices only.

Server

Duplicate Multicast Detection and Reporting

Components: CLI, Server

Overview: In this version we have enhanced our multicast conflict detection and reporting.

Operation and Appearance:

This feature is automatic and built into the operation of the server. When a conflict is detected, the server will post an alert at the end of the output of a CLI command as well as in the server log. This alert/message will show the multicast address in question and the device MAC

CLI output added to support Multicast detection errors

- **Message under the CLI output**

  ```
  AllocaIpMcast -- device <dev>: mcast conflict, mcast=<mcast>,
  ownerMac=<devMac>, streamType=<typeString>
  ```

- Message under the rcServer.log

  ```
  RcDevice::AllocaIpMcast -- device <deviceName or MAC>: mcast conflict,
  mcast=<MC Address>, ownerMac=<OwnerMAC Address>, streamType=<Stream in
  question>
  ```

Limitations:

Enhanced Duplicate Address Detection and Reporting

Components: CLI, Server

Overview: In this version we have implemented duplicate IP address detection and reporting for all Zeevee A/V devices and servers. When a duplicate IP address is detected an error message will be presented on the output of the CLI commands. This will appear until the duplicate IP is resolved by config or the offending device goes offline/disconnected.

Devices reported

- Zeevee AV Endpoints
- Zeevee AV Endpoint Icron USB extended devices
- Zeevee AV Dante Enabled devices designated on the utility port
- Zeevee MP Ethernet ports

Operation and Appearance:

On detection of the duplicate IP, the CLI output will show the "Duplicate IP" message at the bottom of the output of the command.

```
Zyper$ show device config 80:1f:12:4c:02:fb
device(80:1f:12:4c:02:fb);
  device.gen; model=Zyper4K, type=encoder, virtualType=none, name=80:1f:12:4c:02:fb,
state=Up, lastChangeId=190
  device.gen; productCode=Z4KENCF3, productDescription=Fiber Encoder - HDMI 2.0, SN=none
  device.gen; firmware=4.1.2.9
  device.gen; ethernetManagementPortMode=disabled
  device.optionalPorts; video=none, usb=none, analogAudio=yes, rs232=yes, ir=yes
  device.hdmi; hdcpMode=enabled, 5vControl=disabled
  device.ports; videoPort=auto
  device.ip; mode=static, address=172.16.56.228, mask=255.255.255.0, gateway=172.16.56.1
  device.rs232; sendingToMacOrIp=none(0.0.0.0), tunnelPort=none,
terminationChars=\x0A\x0D,  baudrate=2400, dataBit=7, stop_Bit=2, parity=odd
  device.ir; sendingToMacOrIp=none(0.0.0.0), tunnelPort=none, irProcMode=zyperTrigger
  device.source; iconImageName=GenericVideoSource, manufacturer=none, model=none,
location=none, serialNumber=none
```

```
  device.audioOutSourceType; analogOutSourceType=none
  device.edid; loadMode=auto, audio=serverDefault
  device.usb; filter=none, internalIpAddress=none
  device.sendIpMcastRange; first=224.1.1.1, last=239.255.255.255
  device.videoStream; ipMcastAddr=224.1.1.36, mode=disabled
  device.videoScaledStream; ipMcastAddr=0.0.0.0, mode=disabled
  device.analogAudioStream; ipMcastAddr=0.0.0.0, mode=disabled
  device.hdmiAudioStream; ipMcastAddr=0.0.0.0, mode=disabled
  device.previewStream; mode=disabled
lastChangeIdMax(192);
Warning:(62) Duplicate IP addresses exist; use 'show server info' for list
Success
```

Limitations: Due to the frequency of polling, the message may not appear in every CLI output message.

Correct ZyPerUHD60 product IDs

Components: CLI, Server, ZyPerUHD60s

Overview: In this version we now report matching product ids for the ZyPerUHD60, these IDs correspond with the unit model numbers on the devices opposed to an internal ID created for the product. This was done to eliminate the confusion between these two device identifiers. The Product IDs are part of the CLI output of the device config and status.

Operation and Appearance:

CLI output changed to support the matching product IDs.

- **Config and Status output lines**

  device.gen; productCode=ZUHD60-2DA, productDescription=Copper Decoder+ - HDMI 2.0 Dante, pid=0x0

- **Conversion Table for effected devices**

Model	Description	Unique Ports	Old Product Description	New Product Description
0E*	ZyPerUHD60 Encoder	Separate 3.5mm analog in port	ZUHDENC60	ZUHD60-0E
0EA*	ZyPerUHD60 Encoder with Dante	Separate 3.5mm analog in port	ZUHDENC60A	ZUHD60-0EA
1E	ZyPerUHD60 Encoder	Combined Analog In/Out Phoenix port, HDMI loop out	ZUHDENC60V2	ZUHD60-1E
1EA	ZyPerUHD60 Encoder with Dante	Combined Analog In/Out Phoenix port, HDMI loop out	ZUHDENC60V2A	ZUHD60-1EA
2E	ZyPerUHD60 Encoder	Additional HDMI, USB-C video Input, additional Network Utility Port	ZUHDENC60V3	ZUHD60-2E
2EA	ZyPerUHD60 Encoder with Dante	Additional HDMI, USB-C video Input, additional Dante Network Port	ZUHDENC60V3A	ZUHD60-2EA
1D	ZyPerUHD60 Decoder	Standard Decoder Ports	ZUHDDEC60	ZUHD60-1D
1DA	ZyPerUHD60 Decoder with Dante	Standard Decoder Ports	ZUHDDEC60A	ZUHD60-1DA
2D	ZyPerUHD60 Decoder	Additional Network Utility Port	ZUHDDEC60V2	ZUHD60-2D
2DA	ZyPerUHD60 Decoder with Dante	Additional Dante Network Port	ZUHDDEC60V2A	ZUHD60-2DA

Limitations: This feature is limited to the ZyperUHD60 devices.

Disable Redundancy per server

Components: CLI, Server, Redundancy Database, ProServer, VMWare, NUC Rev E

Overview: In this version of MP, we allow the Redundancy to be disabled. Configuring a server in this way will prevent the other server from seeing the server as up. The disabled server will also not consider the other server and report as the Primary Server. This will lead to an instance where both servers will be Primary (Master) so caution is advised. This feature is useful for diagnosing redundancy issues and temporarily removing a redundant server from active database updates.

Operation and Appearance:

CLI commands added in this version support the redundancy disable function

- **The command below will disable redundancy mode on the server**

  set server redundancy mode disabled

- **The following command will enable redundancy participation**

  set server redundancy mode enabled

Limitations:

Multicast Device Discovery

Components: Zeevee ZV endpoints, Server

Overview: In this version we now can set the MP server to discover the Endpoints via multicast versus the default broadcast discover mode. Once enabled in this mode the server will send a multicast discovery packets out the main Ether port (Static or DHCP addressed). The switch will get the multicast packet for 224.0.1.188 and forward discovery packets back to the source ethernet IP. The server will then be able to discover the devices across multiple subnets.

Some switch configuration is needed for this to function. IP helpers and Multicast forwarding settings are required for this to work. Once implemented on the switch the setting on the ZMP can be set.

This mode change will also affect the existing setting of the MP server discovery (for redundancy) mode which is assumed.

Operation and Appearance:

CLI commands added in this version support multicast discovery mode

- To set the multicast discovery mode in the MP the below command will be needed.
  - **Zyper$ set server discoverMode all**
    - **broadcast** ← Default method of discovery limited to single subnet discovery
    - **multicast** ← Multiple subnet device and MP server discovery
    - **none** ← Only disables discovery of ZyPerUHD30/60 devices

Limitations:

ZyPer4K Expansion Encoders - Force Option board Configuration

Components: CLI, Server, ZyPer4K Encoder Expansion cards

Overview: In this version we allow the user to set the Expansion board type, this is for use on devices that have an expansion board that is not detected on startup of the MP server. The setting is saved to the database where any additional resets the device config is recalled

Operation and Appearance:

CLI commands added in this version support ZyPer4K expanded board force settings

- **The settings below are available.**

  Zyper$ set device 80:1f:12:4b:c2:ef optionCard type

  - **analog** ← Analog Option Card
  - a**uto** ← Auto detects the option card – Default setting
  - **displayPort** ← Display Port Option Card
  - **hdmiOptionalIn** ← HDMI option Card
  - **hdsdi** ← 3G SDI Option Card
  - **sdi12g** ← 12G SDI Option Card

Limitations: This feature is limited to ZyPer4K Encoder devices.

GUI

New Zone Panel

Components: GUI, Zones

Overview: In this version of ZMP GUI, the Zones have been enhanced and simplified in order to provide a better customer experience.

The Zones refit provides users with a single way to add, modify and manage the zones and its components.

Operation and Appearance:

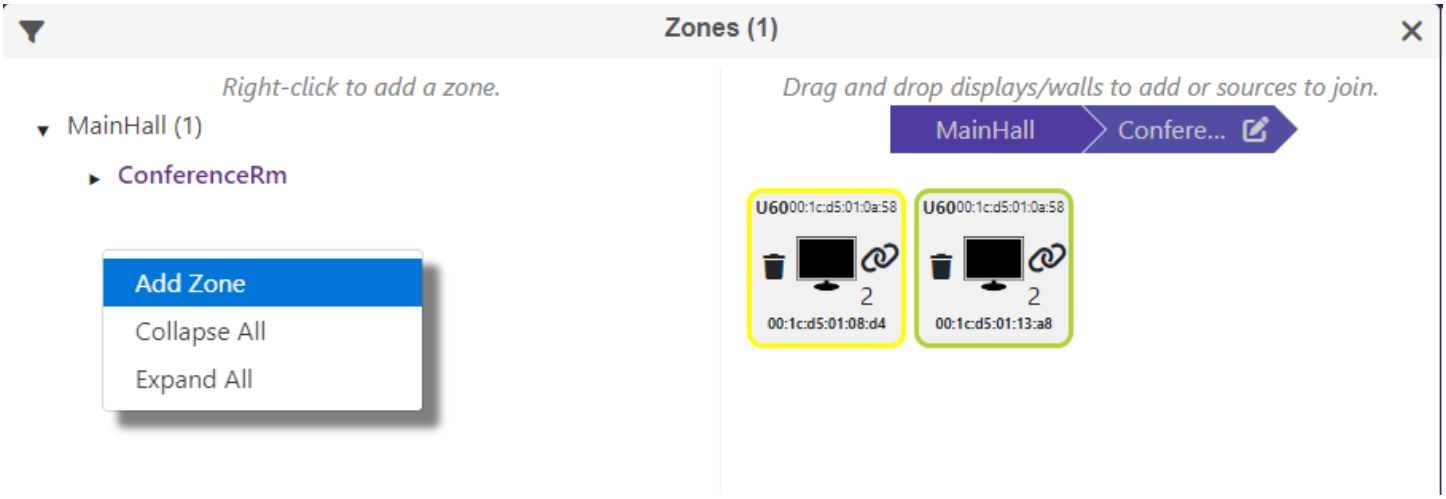
Zone Menu Functions

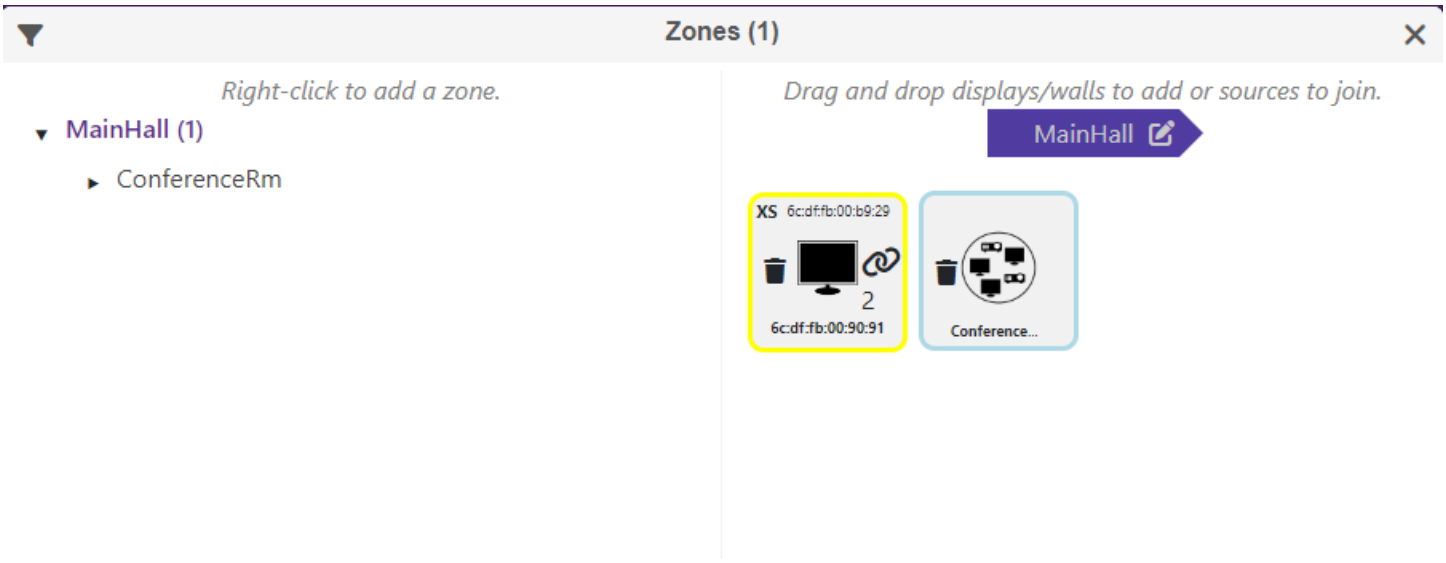
- **Zone right side – Tree View**
  - **Navigate Zones/SubZones** – Click on Triangle on right of Zone Name to Expand or Collapse
  - **Create Zone** – Right Click Background
  - **Create SubZone** – Right Click Background
  - **Collapse All** – Right Click Background
  - **Expand All** – Right Click Background
  - **Delete Zone** – Hover on Zone name – Click Trash Can
  - **Delete SubZone** – Hover on Zone name – Click Trash Can

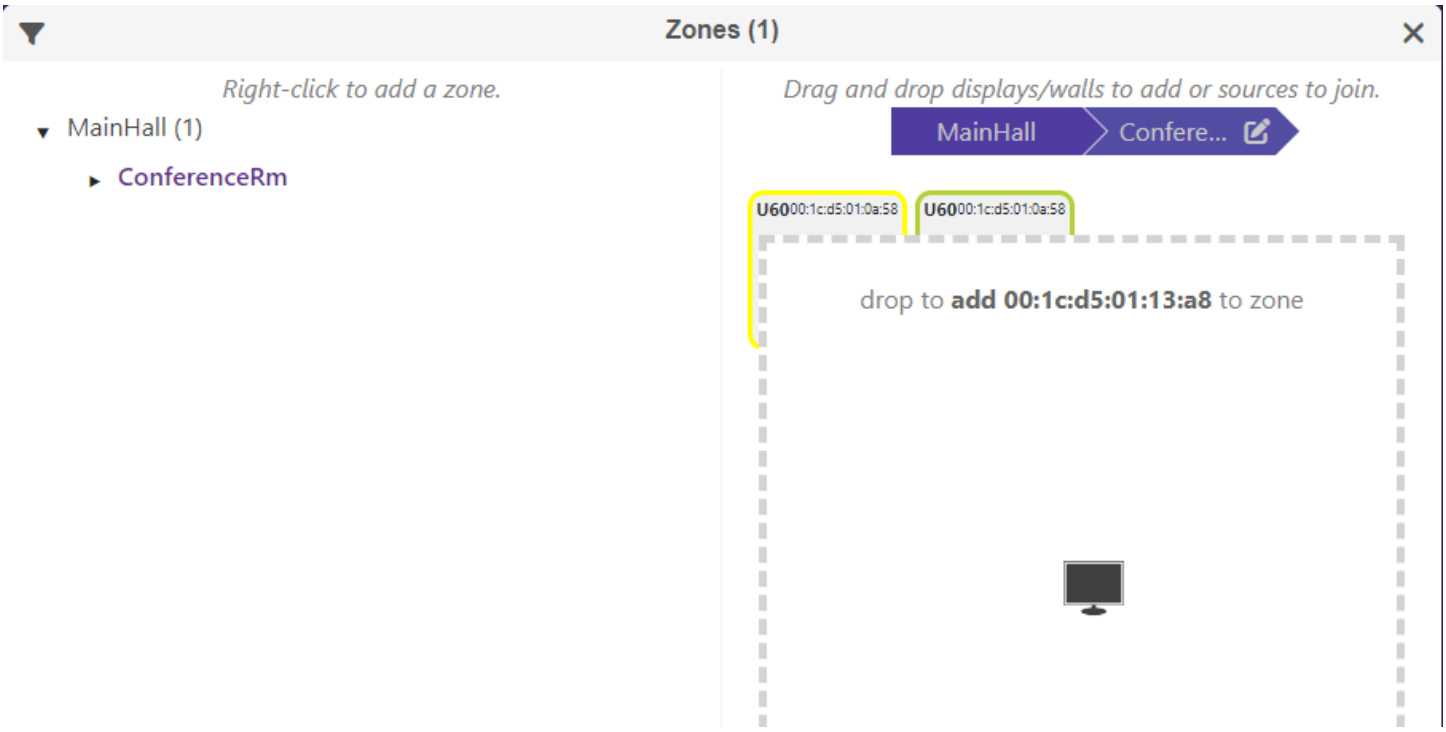
Zone left side - Device and Wall add/delete

- **Rename Zone** - Edit Tool Tip on Top Bar
- **Rename SubZone** - Edit Tool Tip on Top Bar
- **Navigate SubZones** - Click on SubZone to bring it up
- **Add Subzone** - Right Click Background – Brings up box on Right side
- **Add Decoder to Zone** - Drag and drop Decoder to left side Panel and a Add box will appear

- **Add Wall to Zone** - Drag and drop Wall to left side Panel and a Add box will appear
- **Add Source to Zone** - Drag and drop Source to left side Panel and a Add box will appear
- **Delete Decoder or Wall** - On Device or Wall icon Click on Tash can







Limitations: Changes made in the GUI to Zones will require a refresh of the GUI in order to be seen.

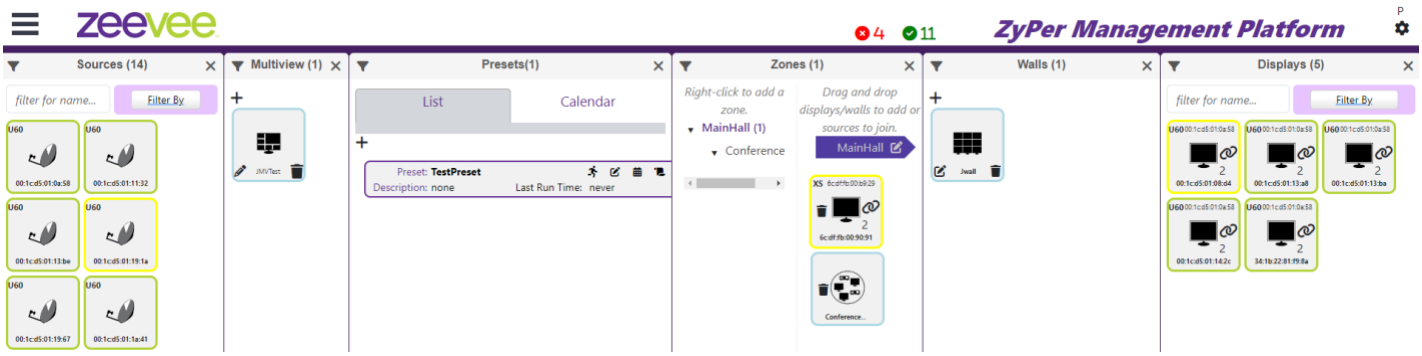
Adjusted main hamburger panel selection order

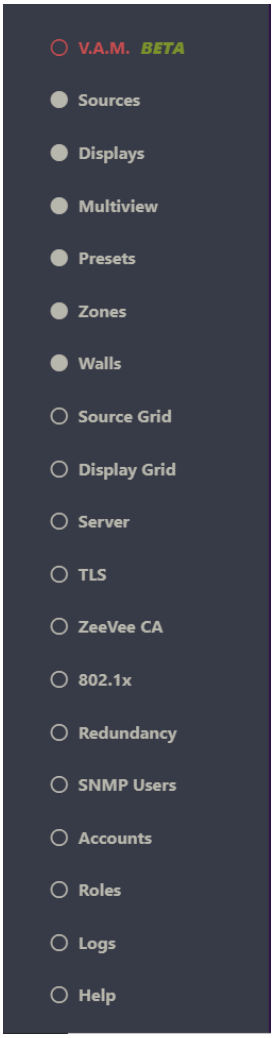
Components: ZMP GUI

Overview: In this version of MP, we have changed the arrangement of the panels displayed under the Main Hamburger menu. This is to optimize the selection of panels to make a more efficient selecting experience. In addition to this, when the panels open we kept the Source and Display panels on either side of the Multiview, Presets, Zones and Walls in order to keep the joins and unjoins of devices flowing properly.

Operation and Appearance:

- **Below are the current settings for the panel options**





Limitations: none

Device

ZyPerUHD60 and ZyPerUHD30 Low Latency video configuration

Components: ZyPerUHD30 and ZyPerUHD60 Decoders, Server

Overview: In this release we have a feature that can adjust the latency setting of the UHD60 and UHD30 decoders. This was implemented to resolve issues with the frame rate stabilizing from the Decoder HDMI on initial join of Video.

Although Low Latency is enabled by default, there is a known interop issue where the Decoder with certain splitters will cause unstable video and thus needs to be disabled to resolve.

Operation and Appearance:

CLI commands added in this version support disabling low latency mode

- **Using the below command will configure the decoder low latency disabled. This will cause the frame rate to stabilize on initial connect faster than in low latency mode.**

  set decoder 00:1c:d5:01:13:ba lowLatency disabled

- **To set this back to low latency mode, use the following command or reset the device to factory default.**

set decoder 00:1c:d5:01:13:ba lowLatency enabled

Limitations:

ZyPer UHD60 Dante static IP configuration for Dante enabled ZyPerUHD60-2s

Components: ZyPerUHD60 Dante 2's, Server

Overview: In this release we now have the ability to set the "Dante only" utility port to a static IP address.

Note: The Dante IP being set to static does require it to be on a different subnet than the media port in this mode.

Operation and Appearance:

- **To configure this feature**
  1. Disconnect any cables from the utility port
  2. Set the utility port to "Dante only"
  3. Using the below commands will set the Dante IP to static

     set device <device name or MAC> dante ip static <ipaddress> <subnet mask> <default gateway>

  4. **Connect the ethernet cable from the Dante network to the utility port**

- **To set this back to DHCP mode (default mode) use the below command**

  set device <device name or MAC> dante ip dhcp

Limitations: Limited only to ZyPerUHD60 Dante 2 Encoder or 2 Decoder units. After being set the device will reboot.

ZyPer UHD30/60 Firmware package 5.8

The following fixes are included in the 5.8 update package that are new since 5.7

ZUHD60-0E/1E/1D

1. Fix the issue decoder switching may flash the engineering OSD information.
2. Fix the issue EDID on ZUHD60-1E is not saved after rebooting.
3. Fix the issue decoder may overlay the OSD on video after switching.
4. Fix the issue repeat echo 0 to screen off will cause black screen between switching.
5. Dante AV-A Video Routing support, default off.
6. OSD MENU AV Routing support, default off.
7. Add LLDP support, default off.
8. Video Ultra Low Latency support.
9. Change MTU to 1500, no jumbo required.

ZUHD60-2E/ZUHD60-2D

1. Fix the issue decoder switching may flash the engineering OSD information.
2. Fix the issue EDID on ZUHD60-2E is not saved after rebooting.
3. Dante AV-A Video Routing support, default off.

4. OSD MENU AV Routing support, default off.
5. Add LLDP support, default off.
6. Video Ultra Low Latency support.
7. Change MTU to 1500, no jumbo required.

ZUHD60-0EA/1EA/1DA

1. Fix the issue decoder switching may flash the engineering OSD information.
2. Fix the issue EDID on ZUHD60-1EA is not saved after rebooting.
3. Fix the issue decoder may overlay the OSD on video after switching.
4. Fix the issue repeat echo 0 to screen off will cause black screen between switching.
5. Fix the issue after Dante Controller routing video (if enabled), the regular MAC address routing cannot get video.
6. Dante AV-A Video Routing support, default off.
7. OSD MENU AV Routing support, default off.
8. Add LLDP support, default off.
9. Video Ultra Low Latency support.
10. Change MTU to 1500, no jumbo required.

Known issues / limitations:

1. When Dante Video Routing enabled, analog output on Encoder, and ARC on Encoder will not work.

ZUHD60-2EA/2DA

1. Fix the issue decoder switching may flash the engineering OSD information.
3. Fix the issue EDID on ZUHD60-2EA is not saved after rebooting.
4. Dante AV-A Video Routing support, default off.
5. OSD MENU AV Routing support, default off.
6. Video Ultra Low Latency support.
7. Change MTU to 1500, no jumbo required

Known issues / limitations:

1. When Dante Video Routing enabled, analog output on Encoder, and ARC on Encoder will not work.

ZyPer XS/XR and XS wallplate Firmware package 2.1.0.1

1. Included support for 802.1X
2. HDMI audio status not updated when no audio source.
3. Force Output command does not persist after reboot.
4. Certain touch screens not working with USB HID interface.
5. 10GBaseT interface not working after loss of power during firmware update.
6. Intermittent DHCP discovery and request packets with Auto-IP source.
7. Mouse connected via USB HID cannot wake up remote PC when in sleep mode.
8. USB HID fails when keyboard with embedded Smart Card reader used.
9. Fujitsu Smart Reader keyboard not working with USB HID interface.
10. Analog audio drops when video 4K60.

9.Upgrading and Downgrading

Unique update files are required for each platform

Starting with release v3.0, the ZyPer MP update file will be available in five, platform-specific versions. Please use the correct version for the hardware platform being updated.

File name examples:

- ZyPerMP NUC computer: update_nuc_4.0.40300.zyper
- ZyPerMP Proserver: update_proserver_4.0.40300.zyper
- ZyPerMP VMware: update_vm_4.0.40300.zyper
- ZyPerMP Simply NUC: update_nuc2004_4.0.40300.zyper
- ZyPerMP ProServer 22.04: update_proserver2204_4.0.40300.zyper

Known issues with upgrading and downgrading

Affected Versions	Issue	Affected Hardware	Workaround
Downgrading to 2.2 from 2.3 GA and above	There is a known issue where the video wall decoders will become unassigned	All Platforms	Using the revert function to go back to 2.2 will avoid this issue. Use of revert is always preferred.
Upgrading from versions Prior to 3.0	After upgrading to 3.X and above, the browser will show a blank screen instead of a login prompt	All Platforms	Clearing the cache will resolve the issue

Other Notes: Beginning in 1.7.4 there is a saved file that includes the export from the database before an update. This file can be used to restore the database to the state it was in before the upgrade. The file is called: zyper.*zyperversion*.sql and resides on the ZMP under the folder: /srv/ftp/files. Where “zyperversion” is the version, the system was on before the upgrade.

For versions prior to 2.5.3, please follow the below upgrade path

Starting Version	Jump 1	Jump 2	Jump 3	Jump 4	Jump 5	Jump 6	Jump 7
1.1.X	1.3	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0
1.2.X	1.3	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0
1.3.X	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0	
1.4.X	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0	
1.5.2.X	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0	
1.6.X	1.7.4	2.1	2.3.1	2.5.3	4.0		
1.7.4.X	2.1	2.3.1	2.5.3	4.0			
1.8	2.1	2.3.1	2.5.3	4.0			
2	2.1	2.3.1	2.5.3	4.0			
2.1	2.3.1	2.5.3	4.0				
2.1.1	2.3.1	2.5.3	4.0				
2.2	2.5.1	2.5.3	4.0				

2.3	2.5.1	2.5.3	4.0
2.3.1	2.5.3	4.0	
2.4	3.0	4.0	
2.5	3.0	4.0	
2.5.1	3.1	4.0	
2.5.2	3.1	4.0	
2.5.3	4.0		
3.0	4.0		
3.1	4.0		
3.2	4.0		

Upgrade and downgrade support for the following platforms of the management server

- ZMP Generation 2 and 3 NUCs (Rev C and Rev D 16.04)
- ZMP new Generation 4 NUCs (Rev E 20.04)
- VMware 16.04
- ProServer 16.04
- ProServer 22.04

Interface IP type and Internet state

- Interface IP Mode: Defines how the interface acquired its IP
- Internet Access Available? Defines whether the server can reach the outside internet

- INTEL NUC Celeron ZMP (Base Installed Version is 1.7.4.33922) Generation 2

(In the prior release notes this generation 2 was labeled Pentium, this was a type-o as this generation was a Celeron processor)

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed
3.0.39043	DHCP	Yes	Passed
3.0.39043	DHCP	No	Passed
3.0.39043	STATIC	Yes	Passed
3.0.39043	STATIC	No	Passed
3.0.39043	Link Local	No	Passed
3.1.39170	DHCP	Yes	Passed
3.1.39170	DHCP	No	Passed
3.1.39170	STATIC	Yes	Passed
3.1.39170	STATIC	No	Passed
3.1.39170	Link Local	No	Passed
3.2.39546	DHCP	Yes	Passed

3.2.39546	DHCP	No	Passed
3.2.39546	STATIC	Yes	Passed
3.2.39546	STATIC	No	Passed
3.2.39546	Link Local	No	Passed

- INTEL NUC Pentium ZMP (Base Installed Version is 1.7.4.33922) Generation 3

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed
3.0.39043	DHCP	Yes	Passed
3.0.39043	DHCP	No	Passed
3.0.39043	STATIC	Yes	Passed
3.0.39043	STATIC	No	Passed
3.0.39043	Link Local	No	Passed
3.1.39170	DHCP	Yes	Passed
3.1.39170	DHCP	No	Passed
3.1.39170	STATIC	Yes	Passed
3.1.39170	STATIC	No	Passed
3.1.39170	Link Local	No	Passed
3.2.39546	DHCP	Yes	Passed
3.2.39546	DHCP	No	Passed
3.2.39546	STATIC	Yes	Passed
3.2.39546	STATIC	No	Passed
3.2.39546	Link Local	No	Passed

- SIMPLY NUC Celeron ZMP (Base Installed Version is 2.4.37311) Generation 4

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed
3.0.39043	DHCP	Yes	Passed
3.0.39043	DHCP	No	Passed
3.0.39043	STATIC	Yes	Passed
3.0.39043	STATIC	No	Passed

3.0.39043	Link Local	No	Passed
3.1.39170	DHCP	Yes	Passed
3.1.39170	DHCP	No	Passed
3.1.39170	STATIC	Yes	Passed
3.1.39170	STATIC	No	Passed
3.1.39170	Link Local	No	Passed
3.2.39546	DHCP	Yes	Passed
3.2.39546	DHCP	No	Passed
3.2.39546	STATIC	Yes	Passed
3.2.39546	STATIC	No	Passed
3.2.39546	Link Local	No	Passed

- ProServer (Base Installed Version is 1.8.34703)

Version-prior upgrade	Interface IP Mode	Internet Access available?	Result of upgrade and downgrade to and from this release
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed
3.0.39043	DHCP	Yes	Passed
3.0.39043	DHCP	No	Passed
3.0.39043	STATIC	Yes	Passed
3.0.39043	STATIC	No	Passed
3.0.39043	Link Local	No	Passed
3.1.39170	DHCP	Yes	Passed
3.1.39170	DHCP	No	Passed
3.1.39170	STATIC	Yes	Passed
3.1.39170	STATIC	No	Passed
3.1.39170	Link Local	No	Passed
3.2.39546	DHCP	Yes	Passed
3.2.39546	DHCP	No	Passed
3.2.39546	STATIC	Yes	Passed
3.2.39546	STATIC	No	Passed
3.2.39546	Link Local	No	Passed

- VMWare ESXI Rev2 for 16.04 – (2.2 Initial Release)

Version-prior upgrade	Interface IP Mode	Internet Access available?	Result of upgrade and downgrade to and from this release
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	STATIC	Yes	Passed
3.0.39043	DHCP	Yes	Passed
3.0.39043	STATIC	Yes	Passed

3.1.39170	DHCP	Yes	Passed
3.1.39170	STATIC	Yes	Passed
3.2.39546	DHCP	Yes	Passed
3.2.39546	STATIC	Yes	Passed

- 22.04 ProServer (Base Installed Version is 3.0.39043)

Version-prior upgrade	Interface IP Mode	Internet Access available?	Result of upgrade and downgrade to and from this release
3.1.39170	DHCP	Yes	Passed
3.1.39170	DHCP	No	Passed
3.1.39170	STATIC	Yes	Passed
3.1.39170	STATIC	No	Passed
3.1.39170	Link Local	No	Passed
3.2.39546	DHCP	Yes	Passed
3.2.39546	DHCP	No	Passed
3.2.39546	STATIC	Yes	Passed
3.2.39546	STATIC	No	Passed
3.2.39546	Link Local	No	Passed