Intelligent AV Distribution

ZyPer Management Platform Release Notes

Software 4.1.0.41828

November 19th, 2025

Revision History

Date	Version	Fixes/Changes
September 4th 2025	4.1.0.41597	GA version
September 17th 2025		Change Updating Redundant Servers to Downgrade Redundant Servers
September 29th 2025	4.1.0.41659	Updated 0E and 1D notes, also added bug fix for 2E video port
November 19th 2025	4.1.0.41828	Updated GA – Includes fixes for hung sessions and redundancy failovers

1. Supported Platforms

ZyPer Management Platform

- ProServer (Rev B) on **Ubuntu v22.04**
- Simply NUC (Rev E) on **Ubuntu v20.04**
- ProServer (Rev A) on **Ubuntu v16.0.4**
- NUC (Rev F) on **Ubuntu v24.04**
- VMWare ESXi appliance (Rev B) on **Ubuntu v22.04**

Note: The Management platform ZyPerUHD60-ZEMP support is not included in this release and is scheduled for future release.
Special Note: In this release there is no mixed Server type support for redundancy (only same server type supported for redundancy)

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
- ZyPerXR HDMI 2.0 encoders and decoders
- ZyPerXS HDMI 2.0 encoders and decoders
- ZyPerXS Wall Plates HDMI 2.0 encoders and decoders
- ZyPerXSE HDMI 2.0 encoders and decoders
- ZyPerXSE HDMI 2.0 encoders and decoders with Dante and Icron USB
- ZyPerXSE Rev 2 HDMI 2.0 encoders and decoders
- ZyPerXSE Rev 2 HDMI 2.0 encoders and decoders with Dante and Icron USB

(NEW) Kramer KDS Family

- KDS17 Enc (Pending Official Firmware Release)
- KDS17 Enc Sw2 (Pending Official Firmware Release)
- KDS17 Dec (Pending Official Firmware Release)

ZyPerUHD30 Family

- ZyPerUHD30 encoders and decoders
- ZyPerUHD30 Wall Plate encoders
- ZyPerUHD30 Dante encoders

ZyPerUHD60 Family (Not compatible with ZyPerUHD30 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

Important Notes:

ZyPerUHD60

- **On the ZyPerUHD60-2s, these devices do not support any update package prior to 5.2.**

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

- **On the ZyPerUHD60 0E and 1D devices once upgrade to 5.12 will not be able to be downgraded below 5.12. All other UHD60 devices downgrading will be available.**

ZyPerXSE Rev1

- ***Certain USB hubs can cause power issues with the ZyPerXSE Rev1. This usually occurs when connecting the USB* hub into the ZyPerXSE Rev1 after boot up. When this happens the Utility port flashes the link LEDs briefly (this is due to the excess power draw and is the best way to determine if the HUB could cause power issues on the device.**

2. New Features

GUI, Server and Device

KVM Support for ZyPerXS, ZyPerXR, ZyPerXSE rev1, ZyPerXSE rev2

Components: ZyPerXS/XR/XSE HID USB Endpoints, MP Server, MP GUI

Description: In this version of the ZMP we have a new KVM feature supported on the XS/XR, XSE Rev1 and Rev2s. This feature functions on XS/XRs and HID versions of our XSEs. If running XSEs with Icron, the Icron can be turned off and HID mode will be available for this KVM feature.

CLI Changes:

The following commands have been added to support this feature:

- create kvm <newKvmName>
- delete kvm <kvmName>
- delete kvm <kvmName> row <int> col <int>
- rename kvm <kvmName> newName <newKvmName>
- set kvm <kvmName> row <int> col <int> decoder <decoderName|decoderMac>
- set kvm <kvmName> row <int> col <int> encoder <encoderMac|encoderName>
- set kvm <kvmName> row <int> col <int> homePosition
- set kvm <kvmName> row <int> col <int> multiview <multiviewName>
- set kvm <kvmName> row <int> col <int> usbSource
- set kvm all hotkeyBase ctrl-ctrl|shift-shift|alt-alt|scroll-scroll|print-print
- show kvm config [since <lastChangeId:lastChangeNumber>] [wait]
- show kvm swapped [since <lastChangeId:lastChangeNumber>] [wait]
- start kvm <kvmName>
- stop kvm <kvmName>

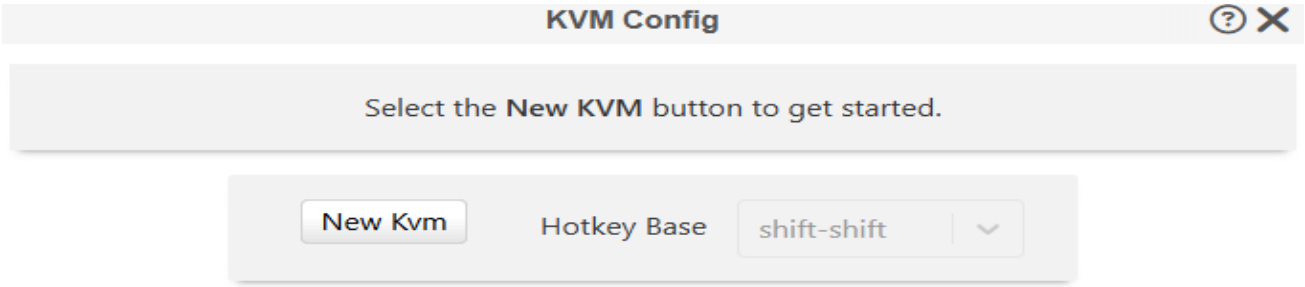
GUI Changes:

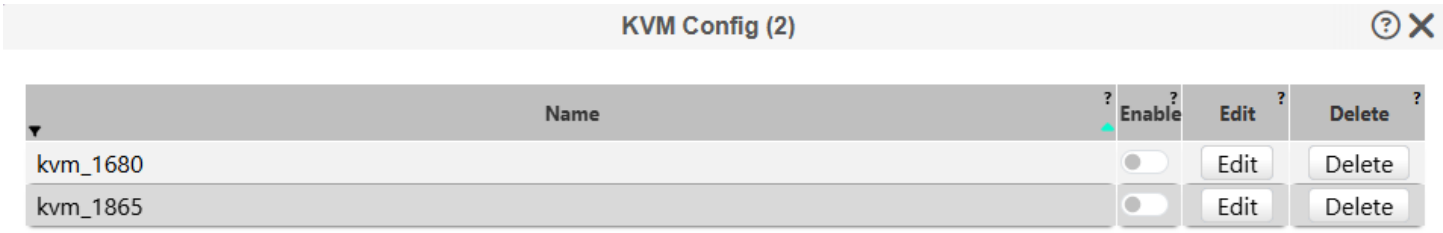
KVM Panel

A New KVM panel was added to the GUI to manage the KVM feature, this interacts with the Source, Display and Multiview panels to allow drag and drop operations for the device icons into the KVM

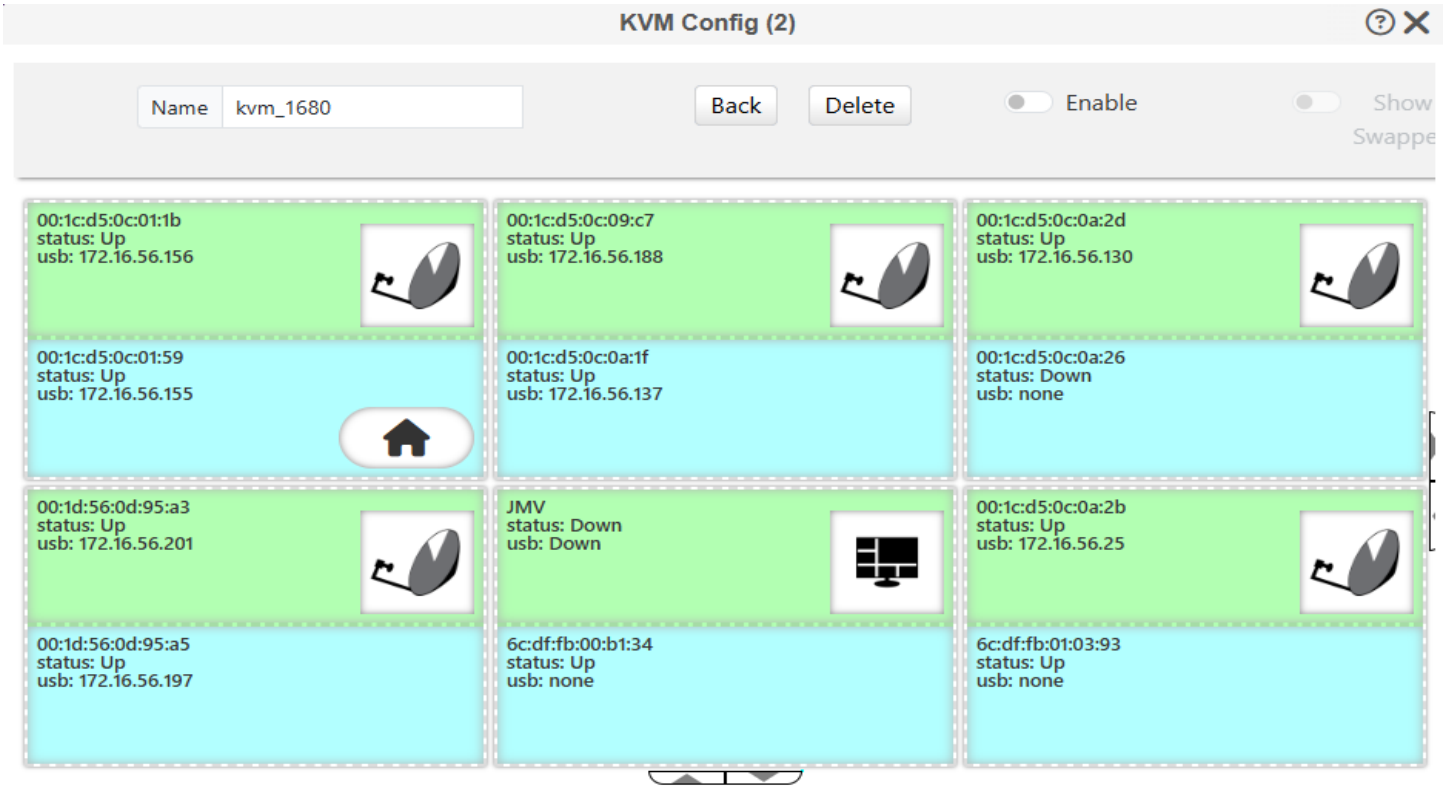
Under the main panel you will be able to select to create a new KVM, Edit an Existing one, delete and enable or disable KVMs from a top view.

In addition, management of the HotKey is available to allow the user to configure the keys used to switch between the active KVM windows from the source keyboard.

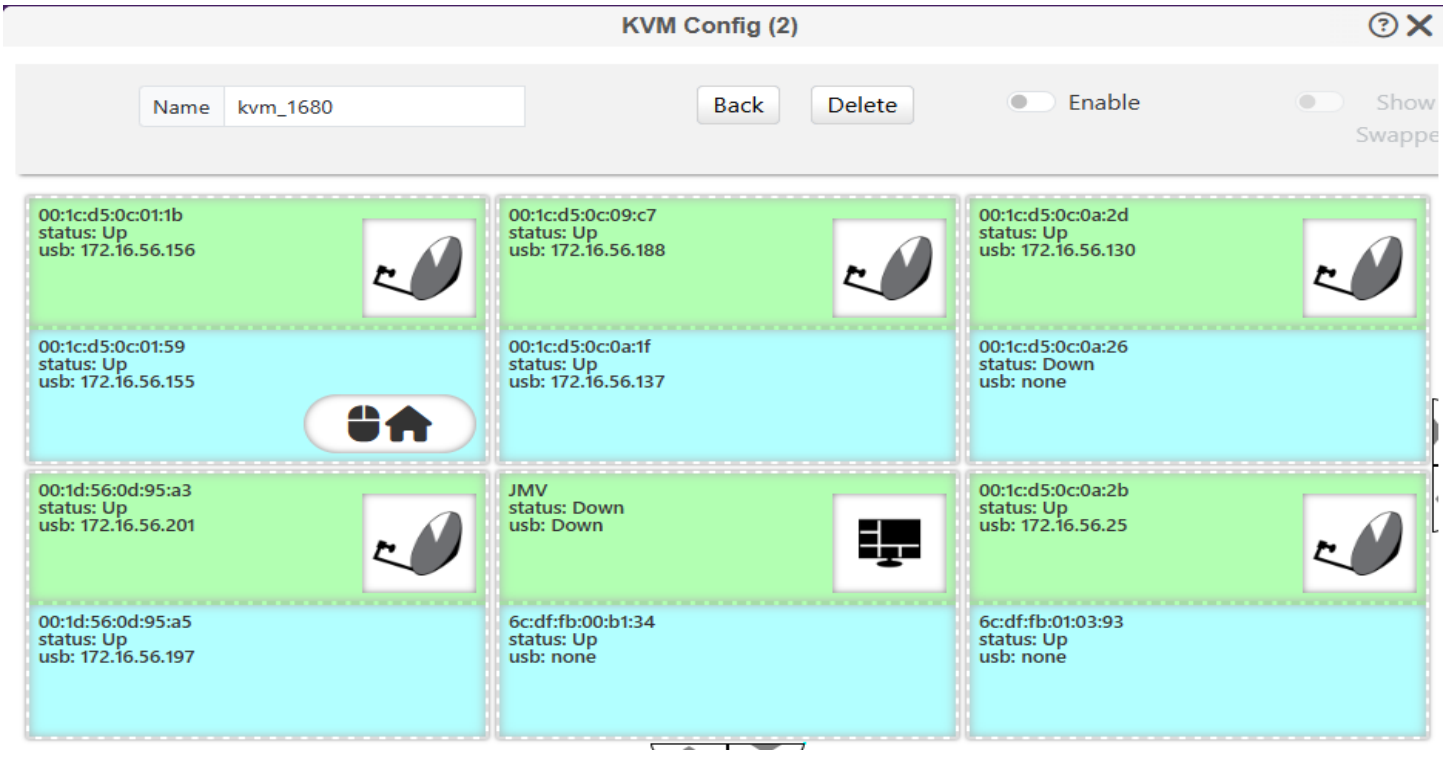




In the Create/Edit menu the user can create the KVM structure up to 9X9 source/displays and drag and drop encoders, decoders and multiviews into the KVM design



Once this is done the user can then select a home position for where the HID devices will start in and a HID source that the devices are plugged into a designated decoder. These devices such as a mouse and keyboard will then function on the home position encoders source device when the KVM is enabled.



At this point the KVM can be enabled, and the system will join all devices video and USB for the user.

There is a feature to show the Swapped USB Home positions which will show the user the prior position.

Limitations:

- Each KVM designation is required to have it's own source Encoder unless for Demo purposes. This is because of the overlap of mouse positions in a shared encoder and screen. This applies to Multiview designations as well which cannot share a source with another main window or Multiview in the KVM

- Only None Icron or Enabled HID mode XSE Rev1 and Rev2s are compatible with the KVM system.

On Icron XSEs to switch to HID mode on the device, the command below can be used.

- *set device deviceMac|deviceName usbType hid*

Isolation Mode support

Components: MP Server and GUI

Description:

In this release we have added a mode to isolate the MP Server from other MPs and manage only the defined devices. This allows the user to establish sub systems in a single network with particular sets of devices. For more information on the management of devices in isolation mode see the latest MP users guide.

CLI Changes

The commands below were added to the CLI to support Isolation mode

- set server isolationMode enabled|disabled

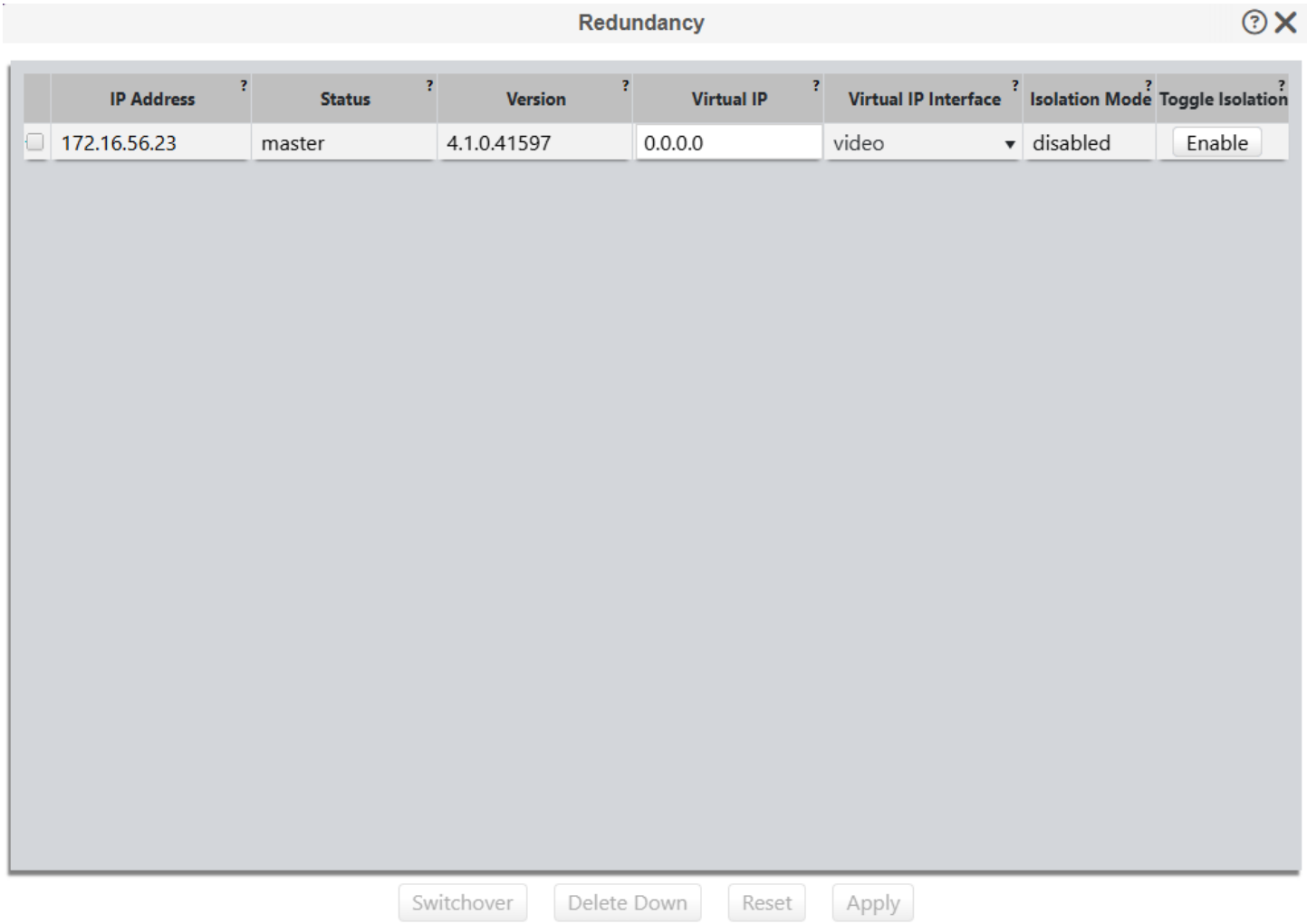
In the server config output the below field was added to show the state of the isolation mode

- server.discover; mode=broadcast, isolation=disabled

GUI Changes

In the GUI the below additions were made to the redundancy tab

- Isolation Mode – Shows the current state of the isolation mode
- Toggle Isolation - Enable or Disable Isolation mode



Process for implementing Isolation Mode

Case 1: Existing 2xMP (call them 1.1 and 1.2) in redundancy mode, not in isolation mode ==> change to isolation mode

- Issue isolation mode from master
- Both MPs will be in isolation mode
- Both will only manage existing devices
- If a new device is added, it must be manually added on the master
- Important: there is no functional change at the end of this process.
    - The MPs still know about each other and all existing devices will be managed by them

Case 2: Existing MP1.1, MP1.2 in redundancy mode AND in isolation mode ==> add new single isolated MP-2.1

- Bring up MP-2.1 on physically separate network
- Set MP-2.1 to isolation mode
- Move MP-2.1 to active network along with MP1.1/1.2
    - MP2.1 will not see MP1.1/MP1.2 and MP1.1/MP1.2 will not see MP2.1
    - MP2.1 will not discover any devices
- Manually add devices to MP2.1 (ones not managed by MP1.1/MP1.2)

Case 3: Existing MP1.1/MP1.2 in redundancy mode and in isolation mode; MP2.1 in isolation mode ==> Add MP2.2 as redundant to MP2.1

- Bring up new MP2.2 on physically separate network
- Set MP2.2 to isolation mode
- Manually add MP2.1 to MP2.2
- Manually add MP2.2to MP2.1
- Move to MP2.2 to active network
    - Strongly recommend shutting MP2.2 down, connecting to active network, bring up
    - This will ensure it will become the slave, and the DB on MP2.1 will not be lost
- Now, there are two isolated MP redundant pairs!

Limitations: **Not supported for the ZyPerUHD60-ZEMP in this release. See the upgrade and downgrade section of this document for details on upgrading and downgrading these servers in redundant scenarios.**

VAM Enhancement and fixes

Components: MP Server, MP GUI

Description: Multiple Enhancements were made in this release for the VAM system. This includes the ability to draw containers and name them for better organization of the network devices. There is also better control on the VAM canvas Zoom in and out. Better Control over the navigation of the Canvas in general and multiple other fixes.

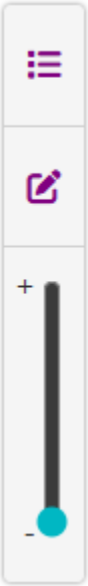
GUI Changes:

New Controls

Hamburger Menu: For VAM devices management

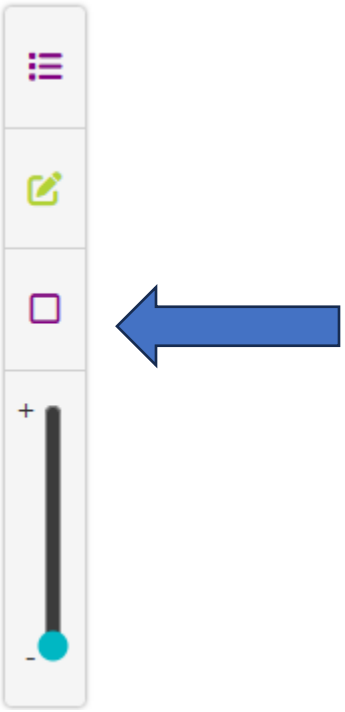
Edit Mode: For organizing/changing device positions, drawing containers.

Zoom control: To allow easy zoom in and out for the VAM canvas

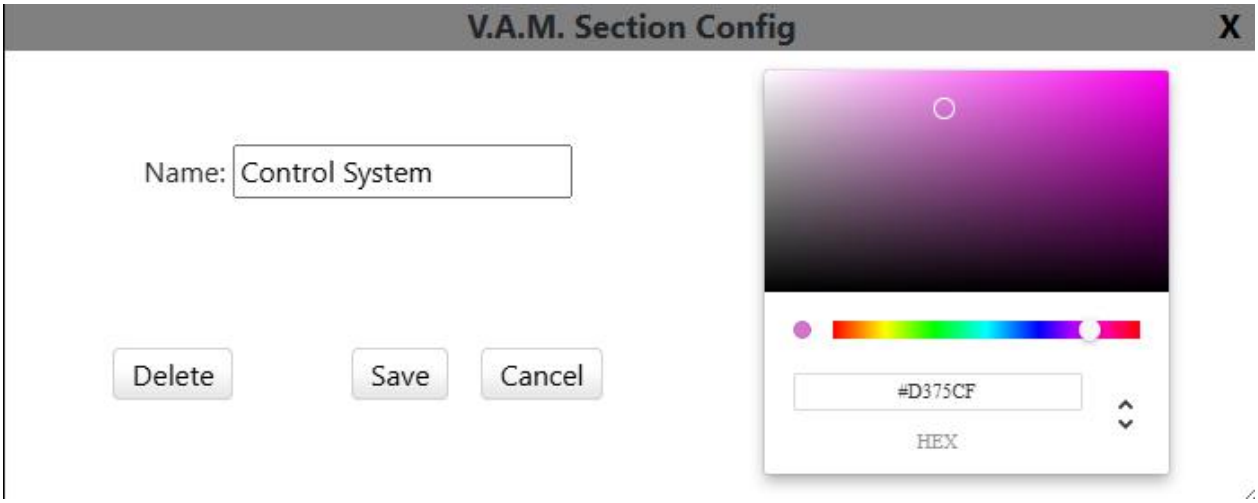


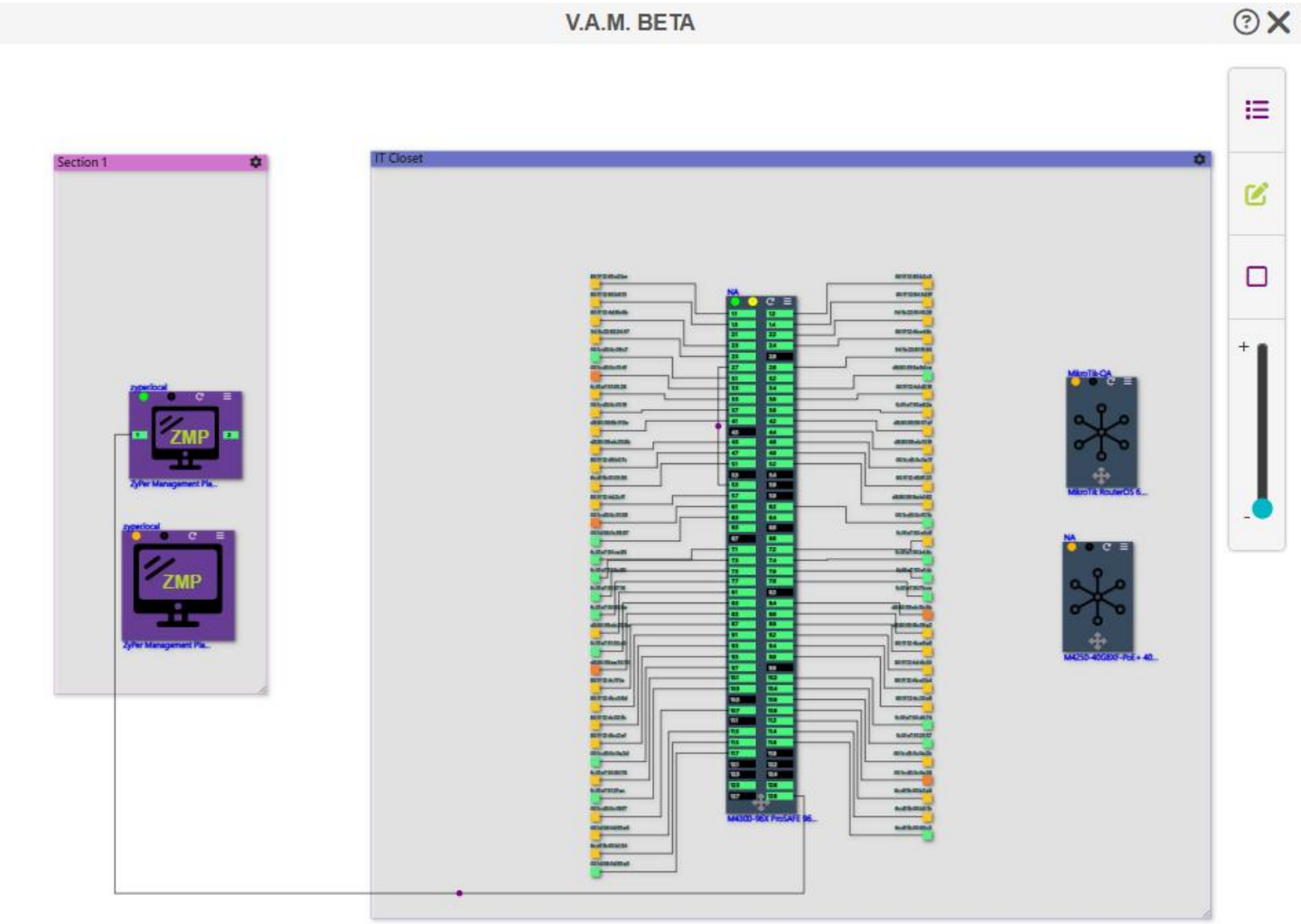
Drawing containers:

Once edit mode is enabled by clicking on the draw containers box, you will be able to draw boxes and label them for device organization. This creates a draggable container that can be resized actively which devices can be placed into. After the devices are in the container and the container is proper sized, the container with all the devices can then be moved around the VAM canvas. This will automatically adjust interconnections in the canvas as well.



Clicking the Containers gear at the top right will bring up a menu for the user to name the container and select a color scheme.





Bug Fixes:

The following VAM bugs were fixed in this release

Component	Description
ZMP - GUI – VAM netNode	Window may be hidden behind other panels
ZMP Server - VAM Charts	There is no MBPS in on the charts for any of the Encoders, also no MBPS out for any Decoders
ZMP GUI - VAM - netNode	Under the Net Node table for the Switches, if you expand a menu to show the data, the other submenus are pushed too far down.
ZMP GUI - VAM - Stream Trace -	UHD60 Decoder Stream trace is shown in Teal lines, but encoder is Greyed out
ZMP - Server - VAM + redundancy + snmp	Account rep - netNode 172.16.52.24 failed authentication: system
ZMP - GUI - VAM	Cannot Delete Device (switch), No CLI cmd sent
ZMP - Server - VAM - Uptime	If you close and re-open the Network nodes window, the Uptime goes back to the time when Window was first opened after a screen refresh

KDS17 Interop Support (Pending Kramer KDS Firmware release)

Components: ZyPerUHD60 and KDS17 Endpoints, MP Server, MP GUI

In this version of the ZMP we now support the KDS17 Encoders and Decoders. This includes the ability to interoperate the devices with the ZyPer UHD60 product line. This is dependent on the official release of the KDS17 software meaning that this functionality will require this new KDS17 firmware in order to support the interop support with the ZyPerUHD60s

CLI Changes

In this release the CLI support for the KDS17 allows management of the device similar to the existing UHD60 in its feature set.

The appearance of the device in the status and config is shown below. All commands for the UHD60 will be the same for the KDS17.

Device Status output

Encoder

```
Zyper$ show device status 97
device(00:1d:56:0c:95:97);
  device.gen; model=KDS17, type=encoder, virtualType=none, name=00:1d:56:0c:95:97, state=Up, uptime=0d:1h:1m:2s,
lastChangeId=1238
  device.gen; productCode=KDS17, productDescription=Copper Encoder - HDMI 2.0 Dante, pid=0x0
  device.ports; videoPort=hdmi
  device.firmwareUpdate; status=idle, loadingFile=none, percentComplete=0
  device.hdmiInput; cableConnected=connected, hdcp=inactive, hdcpVersion=none, hdmi2.0=no, horizontalSize=1920,
verticalSize=1080, fps=60.000, interlaced=no
  device.hdmiInput; hTot=2200, hBlank=280, hFront=88, hSync=44, hSyncPol=positive
  device.hdmiInput; vTot=1125, vBlank=45, vFront=4, vSync=5, vSyncPol=positive
  device.hdmiInput; pixelClock=148.500, colorEncoding=RGB, colorDepth=8, colorSpace=BT601, colorQuantRange=default,
timingStandard=CEA-861-F VIC-16
  device.edid; sourceType=file, sourceFilename=zyper4k60-hdr
  device.edid; edidStatus=valid, edidMonitorName=z4k60Hdr
  device.edid; firstDescriptorPreferredResolution=yes
  device.edid; maxFps=61.00, maxPixelClockMhz=600.00, maxDeepColorPixelClockMhz=600.00, rgbColorDepth=12,
yuv420ColorDepth=12
  device.edid; only420=none, also420=3840-60+3840-50+3840-30+4096-60+4096-30+4096-50, yuvQuantRange=default,
rgbQuantRange=fromAviInfoFrame
  device.edid.audio.PCM; channels=8, sampleRates=176.4Khz-96Khz-88.2Khz-48Khz-44.1Khz-32Khz, sampleBits=16-20
  device.edid.preferredResolution; pixelClockMhz=594.00, sizeX=4096, sizeY=2160, fps=60.00
  device.edid.maxResolution; pixelClockMhz=594.00, sizeX=4096, sizeY=2160, fps=60.00
  device.videoStream; inputFps=60.00, inputDatarate=3564Mbps, compressionFactor= 0.11, streamFps=60.00,
streamDatarate=400Mbps
  device.kvm; name=none, active=NA, positionRow=NA, positionCol=NA
  device.previewStream; status=down, recvData=false
  device.dante; sampleRate= 0.0Khz
lastChangeIdMax(1253);
lastDeleteIdMax(1);
```

Decoder

```
device(00:1d:56:0c:96:1f);
```

device.gen; model=KDS17, type=decoder, virtualType=none, name=00:1d:56:0c:96:1f, state=Up, uptime=0d:1h:0m:40s, lastChangeId=1240
device.gen; productCode=KDS17, productDescription=Copper Decoder - HDMI 2.0 Dante, pid=0x0
device.ports; videoPort=hdmi
device.firmwareUpdate; status=idle, loadingFile=none, percentComplete=0
device.hdmiOutput; videoTimingSource=displayEdidMaxResolution
device.hdmiOutput; cableConnected=disconnected, hdcp=NA, hdcpVersion=NA, hdmi2.0=NA, horizontalSize=NA, verticalSize=NA, fps=NA, interlaced=NA
device.hdmiOutput; hTot=NA, hBlank=NA, hFront=NA, hSync=NA, hPol=NA
device.hdmiOutput; vTot=NA, vBlank=NA, vFront=NA, vSync=NA, vPol=NA
device.hdmiOutput; pixelClock=NA, colorEncoding=NA, colorDepth=NA, colorSpace=NA, colorQuantRange=NA, timingStandard=NA
device.hdmiOutput; streamDatarate=400Mbps
device.edid; sourceType=decoder
device.edid; edidStatus=valid, edidMonitorName=KDS7 Decoder
device.edid; firstDescriptorPreferredResolution=yes
device.edid; maxFps=60.00, maxPixelClockMhz=297.00, maxDeepColorPixelClockMhz=300.00, rgbColorDepth=12, yuv420ColorDepth=0
device.edid; only420=3840-50+3840-60+4096-50+4096-60, also420=none, yuvQuantRange=fromAviInfoFrame, rgbQuantRange=fromAviInfoFrame
device.edid.audio.PCM; channels=2, sampleRates=48Khz-44.1Khz-32Khz, sampleBits=16
device.edid.preferredResolution; pixelClockMhz=297.00, sizeX=4096, sizeY=2160, fps=30.00
device.edid.maxResolution; pixelClockMhz=297.00, sizeX=4096, sizeY=2160, fps=30.00
device.connectedEncoder; mac=00:1d:56:0c:95:97, name=00:1d:56:0c:95:97, receivingVideoFromEncoder=no, reason=decoder hdmi down
device.connectedEncoderAnalogAudio; mac=none, name=none, receivingAudioFromEncoder=no
device.connectedEncoderDanteAudio; mac=none, name=none, receivingAudioFromEncoder=no
device.connectedEncoderHdmiAudio; mac=00:1d:56:0c:95:97, name=00:1d:56:0c:95:97, receivingAudioFromEncoder=yes
device.activeVideoWall; name=none
device.kvm; name=none, active=NA, positionRow=NA, positionCol=NA
device.dante; sampleRate= 0.0Khz

Device Config output

Encoder

Zyper$ show device config 97
device(00:1d:56:0c:95:97);
device.gen; model=KDS17, type=encoder, virtualType=none, name=00:1d:56:0c:95:97, state=Up, lastChangeId=386
device.gen; productCode=KDS17, productDescription=Copper Encoder - HDMI 2.0 Dante, SN=07240013700071
device.gen; firmware=2.3.1.4
device.gen; utilityPort=onlyDanteAudio
device.optionalPorts; mode=auto, video=none, usb=full, analogAudio=yes, rs232=yes, ir=yes
device.hdmi; hdcpMode=enabled, 5vControl=disabled
device.ports; videoPort=auto
device.ip; mode=static, address=172.16.56.142, mask=255.255.255.0, gateway=172.16.56.1
device.danteIp; port=utility, mode=dhcp, address=169.254.1.39, mask=255.255.0.0, gateway=NA
device.danteVlan; mode=disabled, vlanId=2
device.rs232; sendingToMacOrIp=none(0.0.0.0), tunnelPort=none, terminationChars=\x0A\x0D, baudrate=115200, dataBit=8, stop_Bit=1, parity=none
device.ir; sendingToMacOrIp=none(0.0.0.0), tunnelPort=none, irProcMode=zyperTrigger
device.source; iconImageName=GenericVideoSource, manufacturer=none, model=none, location=none, serialNumber=07240013700071
device.audioOutSourceType; analogOutSourceType=none, danteOutSourceType=hdmiAudioDownmix
device.edid; loadMode=auto, audio=serverDefault
device.usb; filter=none, internalIpAddress=none
device.sendIpMcastRange; first=224.0.0.1, last=239.255.255.255

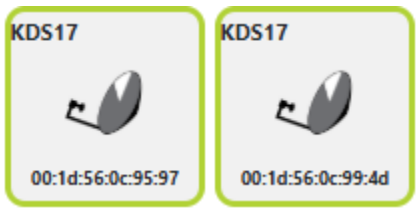
device.videoStream; ipMcastAddr=226.32.0.1, mode=enabled
device.analogAudioStream; ipMcastAddr=0.0.0.0, mode=disabled
device.hdmiAudioStream; ipMcastAddr=226.48.0.1, mode=enabled
device.danteAudioStream; ipMcastAddr=0.0.0.0, mode=disabled
device.previewStream; mode=disabled
lastChangeIdMax(399);
lastDeleteIdMax(1);

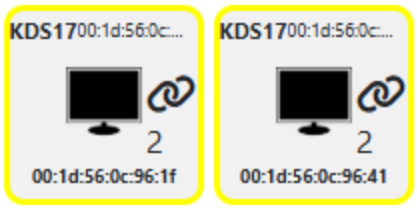
Decoder

device(00:1d:56:0c:96:1f);
device.gen; model=KDS17, type=decoder, virtualType=none, name=00:1d:56:0c:96:1f, state=Up, lastChangeId=387
device.gen; productCode=KDS17, productDescription=Copper Decoder - HDMI 2.0 Dante, SN=07240013800039
device.gen; firmware=2.3.1.4
device.gen; utilityPort=onlyDanteAudio
device.optionalPorts; mode=auto, video=none, usb=full, analogAudio=yes, rs232=yes, ir=yes
device.hdmi; hdcpMode=forceVersion1.4, 5vControl=disabled
device.ports; videoPort=auto
device.ip; mode=dhcp, address=172.16.56.144, mask=255.255.255.0, gateway=172.16.56.1
device.danteIp; port=utility, mode=dhcp, address=169.254.1.40, mask=255.255.0.0, gateway=NA
device.danteVlan; mode=disabled, vlanId=2
device.rs232; sendingToMacOrIp=none(0.0.0.0), tunnelPort=none, terminationChars=\x0A\x0D, baudrate=0, dataBit=0, stop_Bit=0, parity=none
device.ir; sendingToMacOrIp=none(0.0.0.0), tunnelPort=none, irProcMode=zyperTrigger
device.power; powerSave=disabled
device.osd; osdStatusMode=enabled
device.display; iconImageName=GenericDisplay, manufacturer=none, model=none, location=none, serialNumber=07240013800039
device.edid; preferMode=max
device.display; mode=stretch
device.displayResolution; allParameters=auto
device.displayTiming; allParameters=auto
device.connectedEncoder; macAddr=00:1d:56:0c:95:97, name=00:1d:56:0c:95:97, connectionMode=fastSwitched
device.audioConnections; analogSourceMac=none, analogSourceName=none, danteAudioSourceMac=none, danteAudioSourceName=none, hdmiAudioSourceMac=00:1d:56:0c:95:97, hdmiAudioSourceName=00:1d:56:0c:95:97
device.autoAudioConnections; hdmiAudioFollowVideo=true
device.audioOutSourceType; analogOutSourceType=joinedAudio, hdmiOutSourceType=hdmiAudio, danteOutSourceType=none
device.usb; filter=none, internalIpAddress=none
device.usbUplink; macAddr=none, name=none

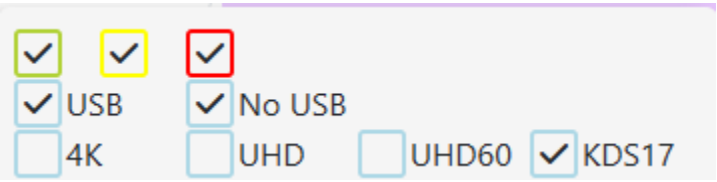
GUI Changes

Source and display panel Icons





Filter addition



Compatibility Matrix

Encoders

Device	Video	Video Wall	Preview	Audio	Analog Audio	RS232	IR	USB
ZyPerUHD60 Encoders	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17*	UHD60 KDS17
ZyPerUHD60 Wallplates	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17*	UHD60 KDS17
KDS17 Encoders	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60* KDS17	UHD60 KDS17
KDS17 Encoder Sw2	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60* KDS17	UHD60 KDS17

* IR is defaulted to directional on MP connections, see limitation below

Decoders

Device	Video	Video Wall	Preview	Audio	Analog Audio	RS232	IR	USB
UHD60 Decoders	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17*	UHD60
KDS17 Decoders	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60 KDS17	UHD60* KDS17	KDS17

* IR is defaulted to directional on MP connections, see limitation below

Limitations:

- There is an IR directional setting which is not supported in the MP server for the KDS17. This applies to KDS17 to KDS17 or UHD60 and KDS17 interop. In order to change the direction of the IR on the KDS17 to something other than encoder into decoder out, the use of the KDS17 internal page will need to be used.
- True Link Local IP mode is not supported in the KDS17 and was taken out of supported capabilities of the IP mode settings in the rcServer. Instead, the KDS17 has a default IP that gets applied instead of a Link Local one

AES67 support on UHD60 encoders and decoders (direct URL only)

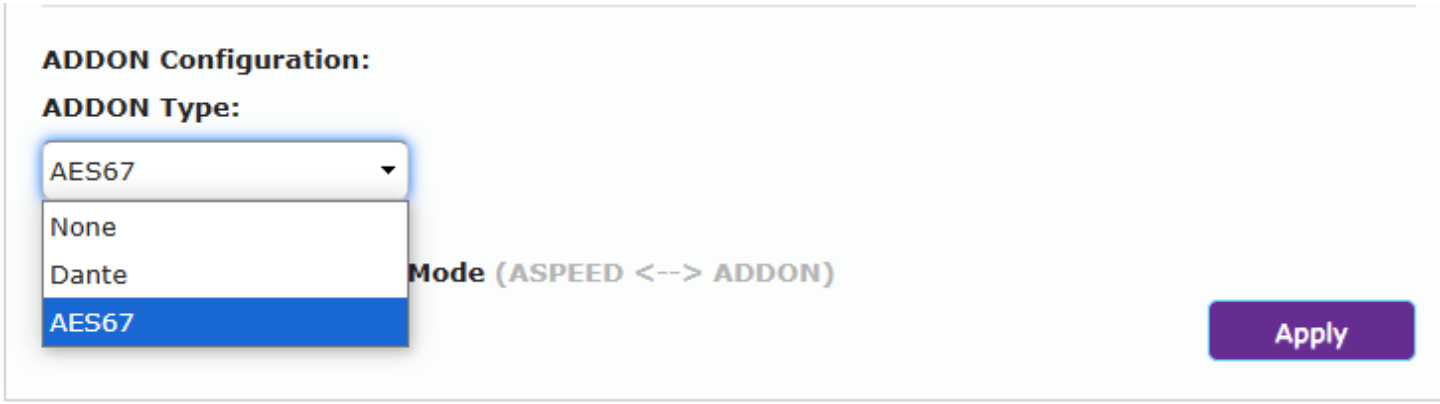
Components: ZyPerUHD60 Internal GUI with latest 5.12 firmware

Description: In this version of Device Endpoint firmware (5.12), there is now official support for AES67. This can be enabled via the direct URL GUI to the device (ZMP support set for a future release)

Step 1) Turn on the AES67 support

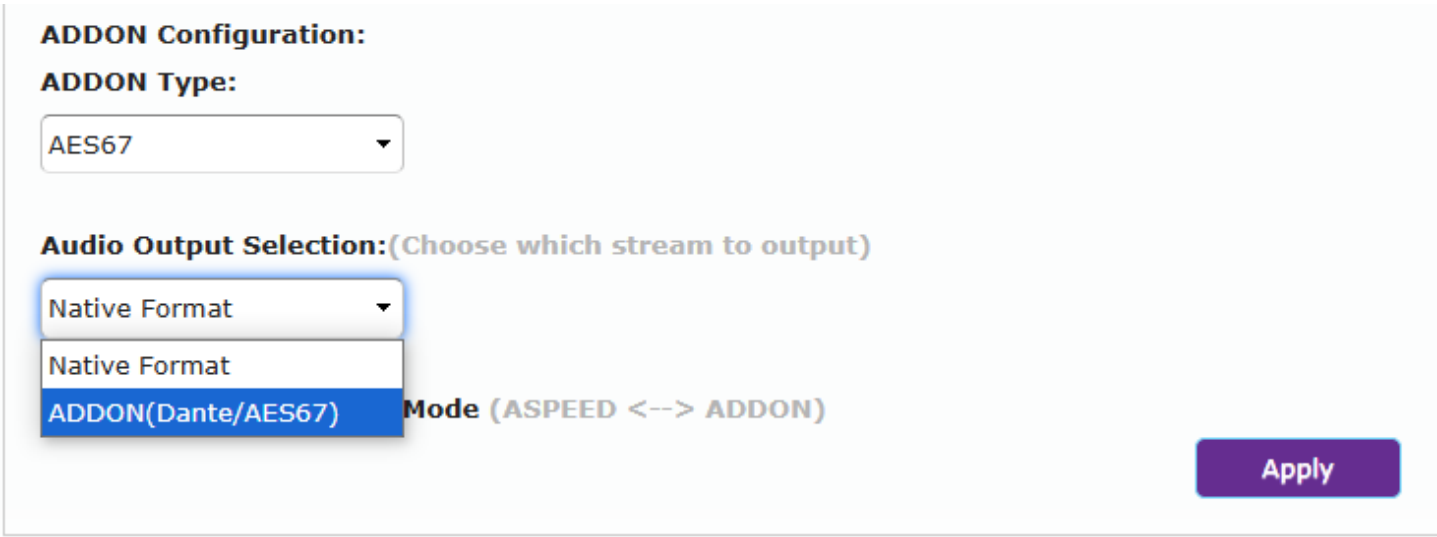
Under the functions GUI tab under the ADDON type, AES67 needs to be selected.

Encoder



If you want to hear the audio out to the decoder audio, the “Audio Output Selection:” needs to be set to ADDON(Dante/AES67

Decoder

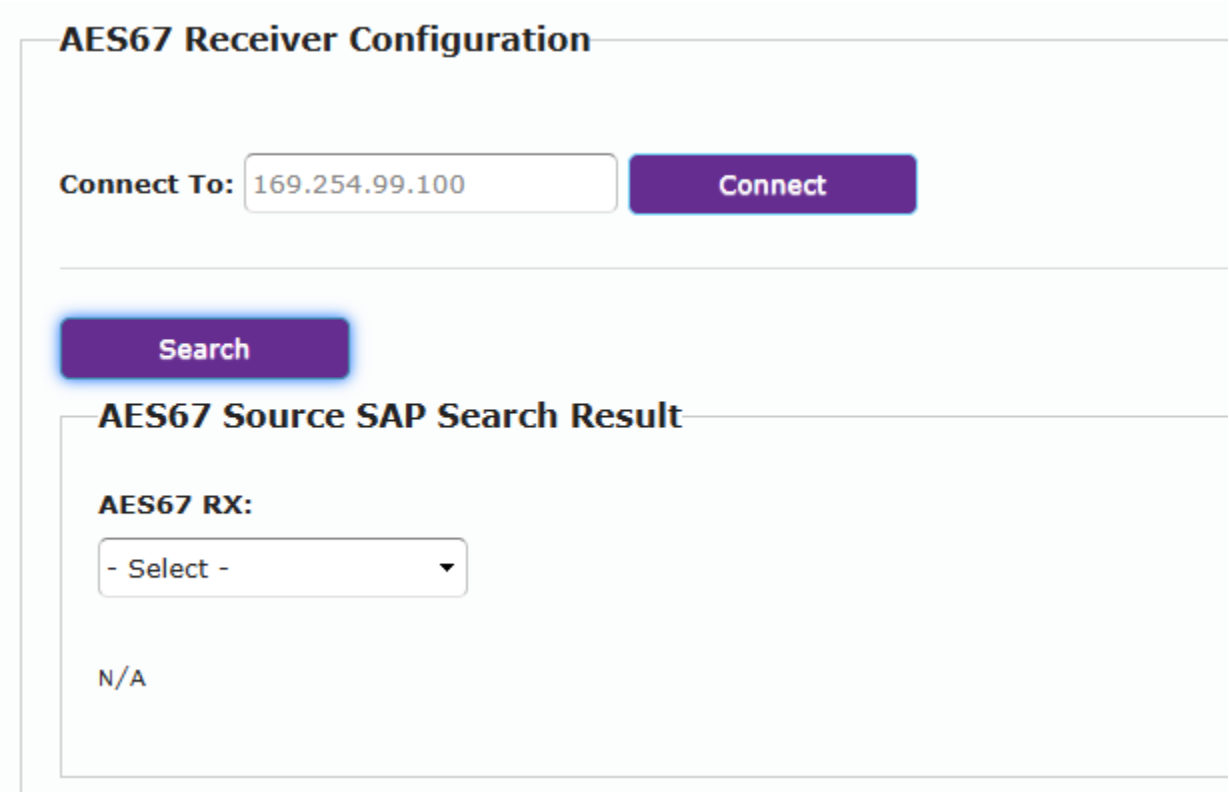


After this is set a reboot of the device is required for changes to take effect.

Step 2) On the Decoder, in the AES67 tab, you need to then do a search to find the available streams

Press Search and this will provide a listing of streams, then under the AES67 RX select the stream to listen too.

Once this is selected press the “Connect” button.



Honorable mentions for this release:

- **Introduction of a new NUC, rev F**

In this release the “NUC Rev F” has been introduced to handle all MP functions from it’s predecessor the NUC Rev E. NUC Rev E will still be supported for this version and some future versions, this is a replacement hardware moving forward.

- **Trouble Report Serial number support**

In this release the Trouble report will now contain the serial number of the server in the file name of the report. The exception is the VM versions of the server where it will contain the MAC address in the filename. This is to provide more effective identification of the saved TRs.

- **LDAP Support for NUC F, ProServer 22.04 and VM22.04**

In this release LDAP support from 4.0.4 is now available on NUC F, ProServer 22.04 and VM 22.04

- **Isaac Fixes**

In this release the below issues have been resolved under the isaac support

- ISAAC - Registering Panel with videoPort IP instead of managementPort IP
- ISAAC - Decoder Resolution does not appear unless it changes.
- ISAAC - ZMP continually registers new panel on every startup.
- ISAAC - status.VIDEO-SOURCE does not show all the decoders on startup

- **New UHD60 Firmware fixes**

See the "UHD30/60 Firmware package 5.12" section in this release note for more info

- **New ZyPerXS/XR/XSWP/XSE firmware fixing the 802.1X support**

See the "ZyPer XS/XR, XS Wallplate and XSEs Firmware" section in this release note for more info

3. End of Life

- **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
- **No Longer Supported** - Intel NUC (Generation 2 Rev C and Generation 3 Rev D) on Ubuntu v16.0.4 **(Replaced by the NUC F)**
- **No Longer Supported -** VMWare ESXi appliance on Ubuntu v16.04 **(Replaced by the VMWARE 22.04 Rev B)**

4. Issues Resolved

Component	Issue	Notes
(New) ZyPer MP – Server	Sessions hang up with QSYS integration, ZMP web gui hangs at "waiting for server", and telnet/ssh are not accessible.	
(New) ZyPer MP - Server	Multitude of redundancy fixes included interop support for all MP platforms, redundancy logging and redundancy lock ups on failover	
(New) ZyPer MP - Server	danteIpGatway fix for xse and kds17	
(New) ZyPerUHD60	UHD60s sometimes do not come up after restart. This is due to telnet IAC sometimes spanning tcp buffers and not being handled correctly.	
ZyPerUHD60 2E MP Server	ZyPerUHD60- 2Es are unable to set Video Ports to the HDMI Option or USB-C and only have Auto or HDMI	
ZyPer XS, XR, XSE, XS Wallplate Firmware	In the release of 2.2.0 endpoint firmware, 802.1x is now official support. This was briefly support for a patch in 2.1.0.1 released in an early endpoint firmware. This was not included in 2.1.0.9 firmware.	
ZyPer MP - Server Redundancy	Banners, Presets, and Join Configurations are not redundant between servers	
ZyPer MP - Server Redundancy	Redundancy fails on the 22.04 ProServer	
ZyPer MP - Server	Segfault fixes on the server	

ZyPer MP - Server	Multicast Streams on encoders are left enabled and running without a device connection	
ZyPer MP - Server	Duplicate IP with the ICRON USB - The message does not repeat on every command output in the CLI	
ZyPer MP - GUI VAM	Stream trace does not work sometimes, this occurs randomly.	

5. Issues Outstanding

Component	Issue	Workaround
ZyPer4K HDMI 2.0 12G SDI	Video blinks out for a second when the MP service restarts.	No workaround is available at this time.
ZyPer4K HDMI 2.0 12G SDI	Continuous "RcDeviceBrnt::ConvertDeviceData -- video port auto-changed" with some resolutions using the 12G Decimator.	No workaround is available at this time.
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 – 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	Slave server allowed to run update device and convert commands on devices	No workaround is available at this time.
MP Server - Redundancy	After updating the slave to 4.0.2.40405 redundancy is now disabled	No workaround is available at this time.
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 Server – Accounts	Password minDays setting is not enforced	No workaround is available at this time.
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.

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	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.

	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 Port connection or power event of the endpoints.	For a Genlocked connection, sources must be using reduced blanking timing, limiting pixel clock to 550MHz. 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 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
Encoder – Dante devices	Rebooting the device forces the Dante audio to source HDMI audio	None
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.

Kramer KDS17 and UHD60/KDS17 Interop

Component	Limitation	Workaround
KDS17 / UHD60	There is an IR directional setting which is not supported in the MP server for the KDS17. This applies to KDS17 to KDS17 or UHD60 and KDS17 interop	In order to change the direction of the IR on the KDS17 to something other than encoder into decoder out, the use of the KDS17 internal page will need to be used.
KDS17	True Link Local IP mode is not supported in the KDS17 and was taken out of supported capabilities of the IP mode settings in the rcServer. Instead, the KDS17 has a default IP that gets applied instead of a Link Local one.	None

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
KVM	Each KVM designation is required to have it's own source Encoder unless for Demo purposes. This is because of the overlap of mouse positions in a shared encoder and screen. This applies to Multiview designations as well which they cannot share a source with another main window or Multiview in the KVM	No workaround to this issue.

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	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.
MP Redundancy	Reverting slave of redundant pair from 4.0.2 to 3.2 leaves redundancy for both MPs in an undetermined state	Restarting the rcServer will also the slave to function again.
MP Isolation Mode	Isolation Mode - change a device from DHCP to a different Static IP - ZMP does not rediscover	No workaround to this issue

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/Wall Plates HDMI2.0	**2.2.0**
ZyPerXSE HDMI2.0 Rev1 and Rev2	**2.2.0**
ZyPerUHD Encoders and Decoders	**5.12**
ZyPerUHD Wallplate Encoders	**5.12**
ZyPerUHD Dante Encoders	**5.12**
ZyPerUHD60 Encoders and Decoders	**5.12**
ZyPerUHD60 Dante Encoders and Decoders	**5.12**
Kramer KDS 17 ENC	**Official Release version Pending**
Kramer KDS 17 ENC-SW	**Official Release version Pending**
Kramer KDS 17 Dec	**Official Release version Pending**

Firmware Compatibility

ZyPer4K HDMI 2.0 ZyPerXS/XR, ZyPerXSWP and ZyPerXSE Rev1/Rev2

Endpoint Firmware	MP 2.5.3	MP 3.0	MP 3.1	MP 3.2	MP 4.0	MP 4.0.2	MP 4.0.3	MP 4.1.0
ZyPer4K 4.1.2	X							
ZyPer4K 4.1.2.1	X							
ZyPer4K 4.1.2.9	X	X	X	X	X	X	X	X
ZyPerNG 4.0.0.6	X	X	X	X	X	X	X	X
ZyPerXS/XR/XS WallPlate 1.5.0.1	X	X						
ZyPerXS/XR/XS WallPlate 1.5.0.6	X	X						
ZyPerXS/XR/XS WallPlate 2.0.0.0		X	X	X				

ZyPerXS/XR/XS WallPlate 2.1.0.1					X	X	X	
ZyPerXS/XR/XS WallPlate/XSE 2.1.0.9						X	X	
ZyPerXS/XR/XS Wallplate/XSE 2.2.0								X

- ZyPerUHD60 support begins at update package 1.21 for 0E and 1D units.
- ZyPerUHD60 Dante support begins at update package 5.0 for 1E and 1D units.
- ZyPerUHD60 2E, 2D and 2E Dante, 2D Dante support begins at update package 5.3.

Endpoint Firmware	MP 2.5.3	MP 3.0	MP 3.1	MP 3.2	MP 4.0	MP 4.0.2	MP 4.0.3	MP 4.1.0
ZyPerUHD zuhd_1.19.up1	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	X	X	
ZyPerUHD zuhd_5.8.3.up1							X	
ZyPerUHD zuhd_5.8.5.up1							X	
ZyPerUHD zuhd_5.12.up1								X
* Hot Fix Only								

WARNING: 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.

WARNING: On the ZyPerUHD60 0E and 1D Models once upgrade to 5.12 will not be able to be downgraded below 5.12. All other UHD60 devices downgrading will be available.

Device Compatibility

ZyPer 4K Devices

Encoders

Device	Video	Multiview	Video Wall	Preview	Audio	Analog Audio	RS232	IR	USB
ZyPer4K HDMI 2.0	4K XS	4K XS	4K XS	4K	4K XS	4K XS	4K XSWP	4K XSWP	4K XSE ***

	XR XSWP XSE	XR XSWP XSE	XR XSWP XSE		XR XSWP XSE	XR XSWP XSE	XSE		
ZyPerXS Wall Plate Icron USB	4K XS XR XSWP XSE	4K XS XR XSWP XSE	4K XS XR XSWP XSE	N/A	4K XS XR XSWP XSE	4K XS XR XSWP XSE	4K XSWP XSE	4K XSWP	XSWP* XSE***
ZyPerXS/XR HDMI 2.0	4K XS XR XSWP XSE	4K XS XR XSWP XSE	4K XS XR XSWP XSE	N/A	4K XS XR XSWP XSE	4K XS XR XSWP XSE	N/A	N/A	XR XS XSWP** XSE***
ZyPerXS Wall Plate Non-Icron USB	4K XS XR XSWP XSE	4K XS XR XSWP XSE	4K XS XR XSWP XSE	N/A	4K XS XR XSWP XSE	4K XS XR XSWP XSE	4K XSWP XSE	4K XSWP	XR XS XSWP** XSE***
ZyPerNG	4K XS XR XSWP XSE	N/A	4K XS XR XSWP	N/A	4K XS XR XSWP	4K XS XR XSWP	N/A	4K XSWP	N/A

* With Icron USB
** Without Icron USB
*** See USB compatibility chart below in the Appendix A

Decoders

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

* With Icron USB
** Without Icron USB
*** See USB compatibility chart below in the Appendix A

Icron USB Cross compatibility - broken out (for device firmware interop see Appendix A)

		Decoders						
	USB Routing	Z4K-XS	Z4K-XR	XS-WallPlate	XS-WallPlate Icron	Z4K-Icron	Z4K-XSE	Z4K-XSE Dante+Icron
Encoders	Z4K-XS	Yes	Yes	Yes	No	No	Yes	Yes (Disable Icron)
	Z4K-XR	Yes	Yes	Yes	No	No	Yes	Yes (Disable Icron)
	Z4K-WallPlate	Yes	Yes	Yes	No	No	Yes	Yes (Disable Icron)
	Z4K-WallPlate-Icron	No	No	No	Yes	Yes	No	Yes
	Z4K-Icron	No	No	No	Yes	Yes	No	Yes
	Z4K-XSE	Yes	Yes	Yes	No	No	Yes	Yes (Disable Icron)
	Z4K-XSE Dante+Icron	Yes (Disable Icron)	Yes (Disable Icron)	Yes (Disable Icron)	Yes	Yes	Yes (Disable Icron)	Yes

Red = USB Not Supported between devices
Yellow = USB HID Supported between devices (May require Icron to be disabled on XSE unit)
Green = Full USB 2.0 Supported between devices

Limitations:

- **Certain USB hubs can cause power issues with the ZyPerXSE Rev1.**
  - This usually occurs when connecting the USB hub into the ZyPerXSE Rev1 after boot up.
  - When this happens the Utility port flashes the link LEDs briefly (this is due to the excess power draw and is the best way to determine if the HUB could cause power issues on the device.

ZyPer UHD30/60 Firmware package 5.12

New features added:

- Add TLS 1.2 supported on HTTPS/Websockets
- Add capability for working together with KDS-17
- [2E][2EA][2EMP][2D][2DA] Default Gateway always be on LAN1
- [2E][2EA][2EMP][1WE] Removing Auto Switching Page's "Apply" button, make "Select Input" and "Switching Mode" take effect immediately.
- Add API attributes Get "/api/v1/settings/audio" with AES67 routing information.
- Add the Network Web UI pop the "Reboot Required" dialog for asking user reboot immediately.
- Add AES67 transmission multicast address and port configuration API.
- Unified FW for 0E/0EA/1E/1EA/2E/2EA/2EMP
- Unified FW for 1D/1DA/2D/2DA.
- New timing 3840x1080.
- New timing 3840x1620.

- Add billboard as a type of USB_DISABLE_CLASSES.

Improvements:

- Add the feature the routed AES67 Transmitter IP address will be saved.
- Reduced the signal lost detection report delay on Encoder from 5 seconds to 1 second, changes the stream lost detection report delay on Decoder to immediately.
- Keep SSH HOST KEY constant until factory reset.
- Ignore invalid ch_select configuration on encoders
- Saving AES67 configuration for next booting.
- Switching to idle screen will keep the current resolution for enhancing the experience.
- Improving boot up time.
- astparam will always return a default value when there is no configuration instead of 'not defined'.

Issues fixed:

- Fixed issue converted model does not work with 1.9.x unified FW.
- Fixed issue NTP updated time has zone difference in system log.
- Fixed issue with the DVI EDID from sink cannot get video output.
- [2E][2EA][2EMP] USB host on USB-C port is not working on 1.9.x FW.
- Fixed issue after password is changed, the old API token is still available for using for a time pierid.
- Fixed the issue Some Player reboots make the Encoder crash auto reboot. [Extron SMP352]
- Fixed the issue when unit bootup, Dante has low chance cannot boot up.
- Fixed the issue BT2020 HDCP failed will show purple instead of black screen.
- Fixed the issue the HDCP configuration from API changed to Follow Sink will require a re-plug.
- Fixed the issue V1.9.x Web password cannot backward be compatible with V1.8.x when downgrading.
- Fixed the issue re-plug HDMI Input or standby/wakeup source make no video.
- Fixed the issue USB2.0 speaker/headphone may have the pop noise.
- Fixed the issue when Decoder output is set lower than 1920x1080, the idle image loses part of picture.
- Fixed the issue change the audio addon may cause no audio issue.
- Fixed the issue some monitors may cause EDID read check sum error and no video output.
- Fixed the issue when output timing is between 1080 and 2160, the idle pattern cannot override full video content.
- Fixed the issue when DHCP obtained IP address too fast on power up, Dante may not work.
- [2D][2EA][2EMP][2D][2DA] Fixed the issue when dual network interface in same subnet, cannot be connected by controller, will be marked offline by controller.
- Fixed the issue there might be no video output after factory reset on decoder unless re-plug the HDMI output cable.
- [1WE][2E][2EA][2EMP] Fixed the issue when only USB Host connected, it does not work.
- [1E][2EA][2E][2EA][2EMP] Fixed the issue when analog switch from input to output, audio source does not change to HDMI automatically.
- [1WE][2E][2EA][2EMP] Fix audio source incorrect display in gbstatus.
- Fixed the macOS 15.x USB over IP compatible issue.
- Fixed the issue after unit reboot Web UI does not require password.
- Fix the issue audio info status shows incorrect value.

ZyPer XS/XR, XS wallplates and XSEs Firmware package 2.2.0

- Support for 802.1X Official release

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 Rev F: update_nuc2404_4.1.0.41828.zyper
- ZyPerMP Proserver: update_proserver_4.1.0. 41828.zyper
- ZyPerMP VMware: update_vm2204_4.1.0. 41828.zyper
- ZyPerMP Simply NUC Rev E: update_nuc2004_4.1.0. 41828.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
Upgrading from version 4.0.2	After updating the slave to 4.0.2.40405 redundancy is now disabled	All Platforms	Enable and Disable Isolation mode to clear the state of the server.

Other Notes: Beginning in 1.7.4 the database is automatically saved during 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: ftp://IPADDRESS_of_ZMP/files . Where “zyperversion” is the version, the system was on before the upgrade.

Downgrading Redundant Servers

The following is a step-by-step procedure if you need to downgrade redundant servers to a release earlier than 4.1.0.xxxxx

1) **Backup the database using “save server database <filename>”**
   Example:
   ```
   Zyper$ save server database OCT31
   Saved database to 09-03-25db
   Success
   ```
2) **Shutdown the Secondary(slave) server and update the Primary(master) once it is in a single server only state.**
3) **Once the Master has been updated, shut it down**

4) **Start up the Slave server and let it become master.**
5) **Once the server is in a single server only state, upgrade the server.**
6) **After the server is updated shut down the server.**
7) **Turn on the original Master Server**
8) **Once the Master is up and operating ok, start the original Slave server.**
9) **Verify both the Master and Slave are functioning properly on the system.**

For versions prior to 3.2, please follow the below upgrade path

Starting Version	Jump 1	Jump 2	Jump 3	Jump 4	Jump 5	Jump 6	Jump 7	Jump8
1.1.X	1.3	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0.3	4.1.0
1.2.X	1.3	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0.3	4.1.0
1.3.X	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0.3	4.1.0	
1.4.X	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0.3	4.1.0	
1.5.2.X	1.6	1.7.4	2.1	2.3.1	2.5.3	4.0.3	4.1.0	
1.6.X	1.7.4	2.1	2.3.1	2.5.3	4.0.3	4.1.0		
1.7.4.X	2.1	2.3.1	2.5.3	4.0.3	4.1.0			
1.8	2.1	2.3.1	2.5.3	4.0.3	4.1.0			
2	2.1	2.3.1	2.5.3	4.0.3	4.1.0			
2.1	2.3.1	2.5.3	4.0.3	4.1.0				
2.1.1	2.3.1	2.5.3	4.0.3	4.1.0				
2.2	2.5.1	2.5.3	4.0.3	4.1.0				
2.3	2.5.1	2.5.3	4.0.3	4.1.0				
2.3.1	2.5.3	4.0.3	4.1.0					
2.4	3.0	4.0.3	4.1.0					
2.5	3.0	4.0.3	4.1.0					
2.5.1	3.1	4.0.3	4.1.0					
2.5.2	3.1	4.0.3	4.1.0					
2.5.3	4.0.3	4.1.0						
3.0	4.0.3	4.1.0						
3.1	4.0.3	4.1.0						
3.2	4.1.0							
4.0	4.1.0							
4.0.2	4.1.0							
4.0.3	4.1.0							
4.0.4	4.1.0							

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

- ZMP Generation 5 NUCs (Rev F 24.04)
- ZMP Generation 4 NUCs (Rev E 20.04)
- ZMP VMware B (22.04)
- ProServer (Rev A 16.04)
- ProServer (Rev B 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

(NEW) INTEL NUC - REV F – Generation 5 - Ubuntu 24.04 (Initial Release 4.1.0.41596) (Base Version, no Prior MP version support)

SIMPLY NUC - REV E – Generation 4 - Ubuntu 20.04 (Initial Release 2.4.37311)

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.3.39237	DHCP	Yes	Passed
2.5.3.39237	DHCP	No	Passed
2.5.3.39237	STATIC	Yes	Passed
2.5.3.39237	STATIC	No	Passed
2.5.3.39237	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
3.2.40113	DHCP	Yes	Passed
3.2.40113	DHCP	No	Passed
3.2.40113	STATIC	Yes	Passed
3.2.40113	STATIC	No	Passed
3.2.40113	Link Local	No	Passed
4.0.3.41103	DHCP	Yes	Passed
4.0.3.41103	DHCP	No	Passed
4.0.3.41103	STATIC	Yes	Passed
4.0.3.41103	STATIC	No	Passed
4.0.3.41103	Link Local	No	Passed

ProServer – REV A - Generation 1 – Ubuntu 16.04 (Initial Release 1.8.34703)

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.3.39237	DHCP	Yes	Passed
2.5.3.39237	DHCP	No	Passed
2.5.3.39237	STATIC	Yes	Passed
2.5.3.39237	STATIC	No	Passed
2.5.3.39237	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
3.2.40113	DHCP	Yes	Passed
3.2.40113	DHCP	No	Passed
3.2.40113	STATIC	Yes	Passed

3.2.40113	STATIC	No	Passed
3.2.40113	Link Local	No	Passed
4.0.3.41103	DHCP	Yes	Passed
4.0.3.41103	DHCP	No	Passed
4.0.3.41103	STATIC	Yes	Passed
4.0.3.41103	STATIC	No	Passed
4.0.3.41103	Link Local	No	Passed

VMWare ESXI - Rev B – Ubuntu 22.04 (Initial Release 4.0.4.41407)

Version-prior upgrade	Interface IP Mode	Internet Access available?	Result of upgrade and downgrade to and from this release
4.0.4.41407	DHCP	Yes	Passed
4.0.4.41407	STATIC	Yes	Passed

ProServer - Rev B – Generation 2 - Ubuntu 22.04 (Initial Release 3.0.39043)

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
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
3.2.40113	DHCP	Yes	Passed
3.2.40113	DHCP	No	Passed
3.2.40113	STATIC	Yes	Passed
3.2.40113	STATIC	No	Passed
3.2.40113	Link Local	No	Passed
4.0.3.41103	DHCP	Yes	Passed
4.0.3.41103	DHCP	No	Passed
4.0.3.41103	STATIC	Yes	Passed
4.0.3.41103	STATIC	No	Passed
4.0.3.41103	Link Local	No	Passed

Appendix A

Supported USB Interop Cases

Icron Interop Results:

Encoders	Encoder Icron Firmware Rev	Decoders	Decoder Icron Firmware Rev	USB Mouse or Keyboard	USB storage	USB camera	Touch Screen	Hub up to four devices	Survives fail over	Survives device reboot / rcServer restart	Notes
XSE Rev2 Encoder	2.0.6	XSE Rev2	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev2 Encoder	2.0.6	XSE Rev1	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	Need a hub for rev1 Decoder
XSE Rev2 Encoder	2.0.6	Charlie New Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev2 Encoder	2.0.6	XS Wall plate	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev1 Encoder	2.0.6	XSE Rev2	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev1 Encoder	2.0.6	XSE Rev1	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	Need a hub for rev1 Decoder
XSE Rev1 Encoder	2.0.6	Charlie New Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev1 Encoder	2.0.6	XS Wall plate	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev1 Encoder	1.9.4	XSE Rev2	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev1 Encoder	1.9.4	XSE Rev1	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/ Passed	Need a hub for rev1 Decoder
XSE Rev1 Encoder	1.9.4	Charlie New Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XSE Rev1 Encoder	1.9.4	XS Wall plate	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/ Passed	
Charlie Encoder New Icron HW	2.0.6	XSE Rev2	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder New Icron HW	2.0.6	XSE Rev1	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	Need a hub for rev1 Decoder
Charlie Encoder New Icron HW	2.0.6	Charlie New Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder New Icron HW	2.0.6	Charlie Old Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder New Icron HW	2.0.6	Charlie Old Icron HW	1.9.4	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder New Icron HW	2.0.6	XS Wall plate	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder	2.0.6	Charlie New Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	

Old Icron HW											
Charlie Encoder Old Icron HW	2.0.6	Charlie Old Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder Old Icron HW	2.0.6	Charlie Old Icron HW	1.9.4	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder Old Icron HW	1.9.4	Charlie New Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder Old Icron HW	1.9.4	Charlie Old Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
Charlie Encoder Old Icron HW	1.9.4	Charlie Old Icron HW	1.9.4	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XS wallplate	1.9.4	XSE Rev2	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XS wallplate	1.9.4	XSE Rev1	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	Need a hub for rev1 Decoder.
XS wallplate	1.9.4	Charlie New Icron HW	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	
XS wallplate	1.9.4	XS Wall plate	2.0.6	Passed	Passed	Passed	Passed	Passed	Passed	Passed/Passed	

HID Interopt Results:

HID to HID Testing (No Icron Present on either Encoder or Decoder)

Encoder	Decoder	USB Mouse or Keyboard	Touch Screen	Hub	Survives Redundancy Failover	Survives Device restart and rcServer reset	Notes
XSE Rev2 Encoder	XSE Rev2	Passed	Passed	Passed	Passed	Passed	
XSE Rev2 Encoder	XSE Rev1	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev2 Encoder	XS Decoder	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev1 Encoder	XSE Rev2	Passed	Passed	Passed	Passed	Passed	
XSE Rev1 Encoder	XSE Rev1	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev1 Encoder	XS Decoder	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XS Encoder	XSE Rev2	Passed	Passed	Passed	Passed	Passed	
XS Encoder	XSE Rev1	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XS Encoder	XS Decoder	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen

HID to HID Testing (No Icron on the Encoder, Icron turned off on the Decoder)

Encoder	Decoder	USB Mouse or Keyboard	Touch Screen	Hub	Survives Redundancy Failover	Survives Device restart and rcServer reset	Notes
XSE Rev1 Encoder HID Mode (No Icron)	XSE Rev2 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	
XSE Rev1 Encoder HID Mode (No Icron)	XSE Rev1 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev1 Encoder HID Mode (No Icron)	XSE Rev2 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	
XSE Rev1 Encoder HID Mode (No Icron)	XSE Rev1 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XS Encoder	XSE Rev2 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	
XS Encoder	XSE Rev1 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen

HID to HID Testing (Icron turned off on Encoder, No Icron on the Decoder)

Encoder	Decoder	USB Mouse or Keyboard	Touch Screen	Hub	Survives Redundancy Failover	Survives Device restart and rcServer reset	Notes
XSE Rev2 Encoder HID Mode (Icron Present)	XSE Rev2 HID (No Icron)	Passed	Passed	Passed	Passed	Passed	
XSE Rev2 Encoder HID Mode (Icron Present)	XSE Rev1 HID (No Icron)	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev2 Encoder HID Mode (Icron Present)	XS Decoder	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev1 Encoder HID Mode (Icron Present)	XSE Rev2 HID (No Icron)	Passed	Passed	Passed	Passed	Passed	
XSE Rev1 Encoder HID Mode (Icron Present)	XSE Rev1 HID (No Icron)	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev1 Encoder HID Mode (Icron Present)	XS Decoder	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen

HID to HID Testing (Icron tuned off on both Encoder and Decoder)

Encoder	Decoder	USB Mouse or Keyboard	Touch Screen	Hub	Survives Redundancy Failover	Survives Device restart and rcServer reset	Notes
XSE Rev2 Encoder HID (Icron Present)	XSE Rev2 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	
XSE Rev2 Encoder HID (Icron Present)	XSE Rev1 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen
XSE Rev1 Encoder HID (Icron Present)	XSE Rev2 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	
XSE Rev1 Encoder HID (Icron Present)	XSE Rev1 HID (Icron Present)	Passed	Passed	Passed	Passed	Passed	Requires Hub for touch screen