zeevee

Signal Intelligence

ZyPer Management Platform Release Notes

Software 2.0.35268

May 20th, 2019

Revision History

Date	Version	Fixes/Changes
May 20, 2019	2.0.35268	General Availability release

Contents

1. Supported platforms

ZyPer Management Platform

- ProServer on Ubuntu v16.0.4
- Gigabyte NUC on Ubuntu v14.04.2
- Intel NUC (Generation 2) on Ubuntu v16.0.4
- VMWare appliance on Ubuntu v14.04.2

ZyPer Management Platform GUI web interface

- Google Chrome
- Safari 10.3.2 for iPad (ZyPer Management Platform mobile mode)
- Android tablet 7.0 (ZyPer Management Platform mobile mode)

Encoders and decoders

- ZyPer4K HDMI 2.0 encoders and decoders
- ZyPer4K HDMI 1.4 encoders and decoders
- ZyPerUHD
- ZyPerHD
- ZyPerUSB

2. New features

GUI Enhancements:

- Name Change: MaestroZ is now ZyPer Management Platform Graphical User Interface (or ZMP GUI for short)
- ZMP GUI Device Grid panel: tabular view of all devices
- ZMP GUI Updated Zone Panel configuration
- Long Name Support for Devices, Walls, Multiviews, Zones and EDID names.

API Enhancements:

- Save and Restore MP Database information and configuration.
- API support for direct management of zones
- Enhanced device status output under the API, including full HDMI active status as well as detailed EDID parameters

EDID Enhancements:

- Extensive set of built-in EDID files for ZyPer4K and ZyPerUHD. Support for all common resolutions, SDR, HDR-10 with BT2020, and from PCM-only to HBR audio. In total, 46 available EDIDs.

Audio Enhancements:

- ZyPer4K and ZyPerUHD compressed audio support for fast switched connections
- ZyPerUHD audio connection control added to the ZMP GUI

Multiview Fast Transitions and Video Wall Enhancements:

- ZyPer4K Multiview Fast Transitions
- Video Wall Max Decoder support increased to 9X9

RS232 and IR enhancements:

- ZyPerUHD independent RS232 and IR connections (requires ZyPerUHD Firmware version 0.10.x or later).
- ZyPer4K and ZyPerUHD Device Data Relay Support for RS232 and IR commands: effectively direct communication to each device over TCP
- ZMP GUI RS232 command Relay

3. Issues resolved

Component	Issue	Other
ZMP GUI	When renaming Sources or Display icons, if the order of said device is changed, a different device could receive the name instead. This also could prevent the user from being unable to alter the name to what they want if the name matches	
ZMP GUI	On the ZyPer4K HDMI 2.0, join or un-join the audio with "analog-audio" prompted the unexpected Error:(29) message	

4. Issues Outstanding

Component	Issue	Workaround
NUC Version 1 Hardware	Power off via shutdown on the 1st generation NUCs will no longer shut down the server.	Manual power off on the NUC power button is required to shut it off.
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 of the window will need to be done in the API in order to remove the video from the proper display window.
Multiview	Redundancy failover does not maintain active Multiview video on the displays.	The config remains intact, a join of the Multiview to the decoder in question is needed to restore the video.
Multiview	Encoder Window, sound, status is 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.
rcServer	4K HDMI 2.0 - Some Decoders may not show receiving video set to yes when the video is being received and displayed.	A connect to another encoder corrects the issue, connection to the original encoder can then be made and the state is correct.
rcServer	Encoder videoScaledStream staying enabled when it was not actually used in Multiviews mode	By un-join 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.
Server Redundancy	When failing over to a new master, if the old master resumes, the failover occurs again back to the original server	No Workaround at this time interrupts ZyPer Management Platform function for a second.

Upgrade	VM: The previousVersion field showed as N/A in server info after upgraded the server from 1.7.4 to 1.8	No Workaround at this time
ZMP GUI	One NUC two browsers - "Server is not available"	Wait until the F5 refresh occurs to continue working (generally within 3-5 seconds of receiving the message).
ZMP GUI	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.
ZMP GUI	Encoder Config menu- "Video Port" does not show the port configured and in use for the device.	The API requires a reference in order to see which video port is selected.
ZyPer4K HDMI 2.0	Fast-Switched joins at 480I/576I displays video in an improper ratio horizontally	No Workaround at this time.
ZyPer4K HDMI 2.0	ZyPer4k Charlie - Encoder - Incorrect FPS status (cosmetic) under 420 color formats	No Workaround at this time.
ZyPerUHD	ZyPerUHD - HDCP does not report on the UHD encoders, in addition, it allows video traffic to flow to devices that do not support the HDCP version	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 and it works.
ZyPerUHD Video Wall	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.
ZyPerHD	In the ZMP GUI under the config of the encoder, the ZyPerHD Encoder shows it supports the new compressed audio option for the EDID. This feature is not supported on the ZyPerHD.	Feature if selected will do nothing as the devices have a hard-coded EDID.

5. Known limitations

ZyPer4K HDMI 2.0

Component	Limitation	Workaround
Decoder	When swapping HDMI from ZyPer4K decoders with the HDMI unplugged less than 5 seconds, the decoder fails to read the new EDID. (7669)	When power Cycling or unplugging, wait 5 seconds before plugging the unit back in.

Decoder - Display port board variant	- For the Display port connections to a Monitor or TV that are to be shown at 3840 X 2160 60 FPS 8 bit 444. Video has been seen to stop and start again on the screen 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 Display port connection or power event of the endpoints.	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 Genlocked connection, sources must be using reduced blanking timing, limiting pixel clock to 550MHz. The fast-switched connection may also be used as the method of joining the Encoder to the Decoder. The below 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
Encoder – SDI board variant	**Genlock mode –** Audio is limited to 2 channel support (7506)	No Workaround at this time.
Encoder - Analog Board variant	During connections using 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 port to HDMI and then back to VGA does resolve the issue.
Multiview	Resolution of 2560 X 1440 is not supported for the Multiview window (8938	None

ZyPerUHD

Component	Limitation	Workaround
Decoder	Display with standard timing first 2560x1440 showed bad video in source 720p60. The bad video appeared after changed the resolution from 1080p60 to 720p60 or changed resolution from 480p to 720p60 (after switching the resolution back and forth for about 1 minute or 2). This is a limitation for the ZyPerUHD device.	
Decoders	When the UHD Decoder is downscaling from UHD 3840 X 2160 60 420 8 bit 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.	Power Cycle of the TV is required

Decoders - Sleep mode	In addition, 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.	Power Reset of the Decoder will be required
Encoder	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 – Will always report 8 bit	
Encoder	It is seen sometimes under the Encoder EDID settings on the encoders that the EDID may not be the same seen under the joined decoder. This is part of the design however 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 encoders connection.	
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 reconnect within the device in order to modify this connection.	None
Independent IR routing	Changes to the IR connections to support Independent IR joins, prevent configurations from device to server or server to device. The new join with the data relay will allow data sent to the device but will not receive from the device to the server.	None
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 bit (in either bit rate or color format).	None
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.	None

ZyPerUSB

Component	Limitation	Workaround
Decoder	USB Cameras that are connected to the unit when paired together will not have power to the Camera.	The Camera will need to be unplugged and reconnected in order for the camera to receive power and function.

| GUI - Filtering | No Filtering is available for ZyPerUSB - Connections will not be able to be filtered via Storage type or HID. | |

ZyPer API

Component	Limitation	Workaround
API Command	The commands for "set video-wall-encoder" and "set video-wall-decoder" have been deprecated however will still function in this version.	
API Command	API Zones do not support mixed device types, so ZyPer4K and ZyPerUHD devices are not allowed to be in the same Zone. The first added device decides the Type of product for the Zone.	

ZMP Redundancy and VMWARE

Component	Limitation	Workaround
ZMP GUI	After server switched over, some Displays with video streaming color in Green showed as Yellow in new master server unless refresh the browser)	
ZMP 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.	
ZyPer Management Platform – VMWare updates	Starting in the upgrading to 1.8, on VM Hosted machines for the ZMP will require the use of the update_vm to upgrade to 1.8 and beyond. Reverting to 1.7X and 1.6 versions are possible through the use of the standard update_nuc file if needed.	
VMware Redundancy Support	There is no support for virtual machines hosting the ZMP image under 1.8, only single server deployments are supported.	

6. Current device firmware

Device	File version
ZyPer4K HDMI2.0	3.5.2
ZyPer4K HDMI1.4	2.11.5
ZyPerUHD Encoders	0.10.3

ZyPerUHD Decoders	0.10.2
ZyPerUHD Wallplate Encoders	0.10.3
ZyPerHD Encoders	2.12.3
ZyPerHD Decoders	2.12.4

7. API Additions, changes, and deletions

Additions

Zone – adding zone functionality to the API

- add zone-display <zoneName[.zoneName]> <decoderMac|decoderName|wallName>
- create zone <[zoneName.]newZoneName>
- delete zone <zoneName[.zoneName]>
- delete zone-display <zoneName[.zoneName]> <decoderMac|decoderName|wallName>
- show zones

Data-connect – rs232 and ir communications through custom TCP port

- data-connect <deviceName> none rs232|ir
- data-connect <deviceName> server rs232|ir [tcp-port <port:int>]
- data-connect <deviceName> <deviceName>|none rs232|ir
- show data-relays
- set server data-transfer-mode telnet|raw

Additional "load encoder edid" options

- load encoder-edid <encoderMac|encoderName> built-in <edid-builtin>
- load encoder-edid <encoderMac|encoderName> saved <edid-saved>

Save and restore database for disaster recovery

- save server database <filename>
- restore server database <filename>

New audio command syntax allowing for compressed audio

- set server encoder-default-audio-format force-pcm|allow-compressed
- set encoder <encoderMac|encoderName> audio-format force-pcm|allow-compressed|server-default
- set encoder <encoderMac|encoderName> analog-audio-out source none|hdmi-audio-downmix
- set encoder <encoderMac|encoderName> audio-format force-pcm|allow-compressed|server-default

Multiview – additional commands enabling a configuration of a single window

- set multiview <multiviewName> canvas-size <pixelsHoriz:int> <pixelsVert:int>
- set multiview <multiviewName> window-number <int> layer <int>
- set multiview <multiviewName> window-number <int> position position-x <int> position-y <int>
- set multiview <multiviewName> window-number <int> size size-x <int> size-y <int>

Misc

- set decoder <decoderMac|decoderName> display-resolution source-ignore-edid
- logging level <int>
- logging note <string>

Changes – Syntax changes are underlined

New video wall commands have been added to better align with other commands.

- NEW: set decoder <decoderMac|decoderName> display-advanced-timing auto (*)
- NEW: set decoder <decoderMac|decoderName> display-advanced-timing active-size <pixelsHoriz:int> <pixelsVert:int> fps <float> total-size <pixelsHoriz:int> <pixelsVert:int> sync-front-porch <pixelsHoriz:int> <pixelsVert:int> sync-width <pixelsHoriz:int> <pixelsVert:int> sync-polarity h-positive|h-negative v-positive|v-negative (*)
    - OLD: set decoder <decoderMac|decoderName> display-advanced-timing sync-front-porch <pixelsHoriz:int>|auto <pixelsVert:int>|auto sync-width <pixelsHoriz:int>|auto <pixelsVert:int>|auto hsync-polarity positive|negative|auto vsync-polarity positive|negative|auto total-size <pixelsX:int>|auto <pixelsY:int>|auto

(*) The previous "set decoder display-advanced-timing" command was updated and split into 2 separate commands.

- NEW: set decoder <decoderMac|decoderName> display-resolution auto
    - OLD: set decoder <decoderMac|decoderName> display-size auto
- NEW: set decoder <decoderMac|decoderName> display-resolution source
    - OLD: set decoder <decoderMac|decoderName> display-size source
- NEW: set decoder <decoderMac|decoderName> display-resolution active-size <pixelsHoriz:int> <pixelsVert:int> fps <float>
    - OLD: decoder <decoderMac|decoderName> display-size width <int> height <int> fps <float>
- NEW: set decoder <decoderMac|decoderName> analog-audio-out source analog-audio|hdmi-audio-downmix
    - OLD: set decoder <decoderMac|decoderName> analog-audio-out source none|analog|hdmi-downmix
- NEW: set decoder <decoderMac|decoderName> hdmi-audio-out source analog-audio|hdmi-passthrough-audio|hdmi-audio
    - OLD: set decoder <decoderMac|decoderName> hdmi-audio-out source none|analog|hdmi|hdmi-downmix
- NEW: set multiview <multiviewName> window-number <int> encoder-name <encoderName>|none position-x <int> position-y <int> size-x <int> size-y <int> layer <int>
    - OLD: set multiview <multiviewName> window-number <int> encoder-name <encoderName> position-x <int> position-y <int> size-x <int> size-y <int> layer <int>
- NEW: stop encoder <encoderMac|encoderName> stream video|video-scaled|hdmi-audio|analog-audio
    - OLD: stop encoder <encoderMac|encoderName> stream video|video-scaled|hdmi-downmix-audio|analog-audio
- NEW: start encoder <encoderMac|encoderName> stream video|video-scaled|hdmi-audio|analog-audio
    - OLD: start encoder <encoderMac|encoderName> stream video|video-scaled|hdmi-downmix-audio|analog-audio
- NEW: set encoder <encoderMac|encoderName> analog-audio-out source none|hdmi-audio-downmix
    - OLD: set encoder <encoderMac|encoderName> analog-audio-out source none|hdmi-downmix

Deletions

- DELETED: join <encoderMac|encoderName>|none <decoderMac|decoderName> analog-audio [hdmi-out|analog-out]
- DELETED: join <encoderMac|encoderName>|video-source|none <decoderMac|decoderName> audio
- DELETED: join <encoderMac|encoderName>|video-source|none <decoderMac|decoderName> hdmi-downmix-audio hdmi-out

- **DELETED:** join <encoderMac|encoderName>|video-source|none <decoderMac|decoderName> hdmi-downmix-audio analog-out
- **DELETED:** set server enhanced-logging enabled|disabled reboot

8. ZyPer Management Platform additions, changes, and deletions

New Logo and Name Changes: GUI now contains our new logo and reference for MaestroZ, which is now called the ZyPer Management Platform.

Additions

New panel: Device Grid

- View all devices in a single panel
- View devices
    - Name of device
    - Type: encoder/decoder
    - Model: ZyPer4K/ZyPerUHD/ZyPerHD
    - IP address and subnet mask
    - EDID information
   - Connected encoder

ZMP GUI RS232 Send

- ZyPer4K
    - RS232 - Enter RS232 command string to be sent to the device attached to the ZyPer device
    - An RS232 cable connection from the Encoder/Decoder to the device to be controlled is required

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- ZyPerUHD
  - o RS232 - Enter RS232 command string to be sent to the device attached to the ZyPer device
  - o An RS232 cable connection from the Encoder/Decoder to the device to be controlled is required
  - o ZyPerUHD - Must select Connect to enable RS232 communication with the attached device
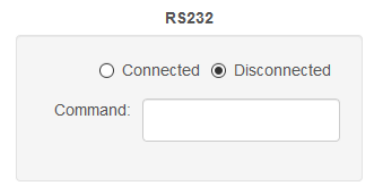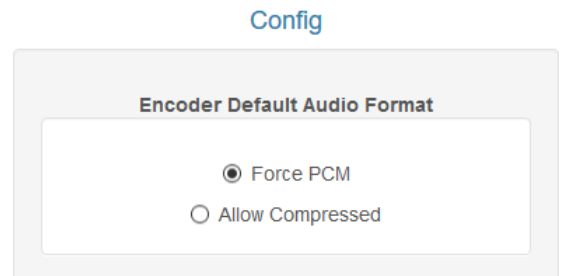
Changes

Interface changes

- Updated ZeeVee logo
- Renaming MaestroZ to ZyPer Management Platform

Server panel changes

- Encoder Default Audio Format (ZyPer4K only)
  - o Force PCM *(default value)*
  - o Allow Compression

As noted, downmixing HDMI audio (sending audio out of the analog port) can only be done if the HDMI stream is PCM – not compressed. For more information on compressed audio, please see Appendix A under the "Audio Enhancements" section

Source panel changes

- EDID mode radio button made read-only by default. See "Show Advanced Controls" section above for more details.
- License field is hidden by default. See "Show Advanced Controls" section above for more details.
- When in redundant server mode, Virtual IP address can be set for either the Video or Network interface.
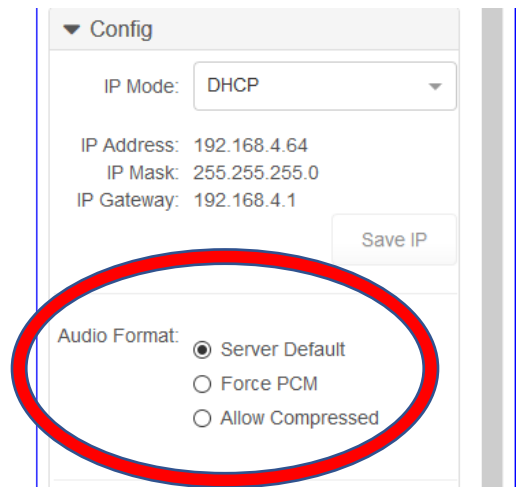
New Audio Config for ZyPerUHD

- Independent audio routing now supported in the ZMP GUI
- Ability to select audio input
    - Downmix = HDMI port
    - Analog = analog port on encoder

New Zone Panel Changes

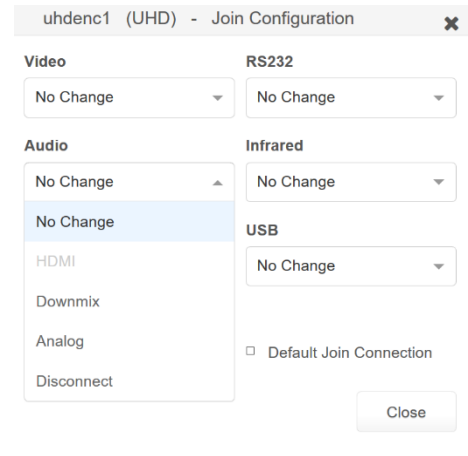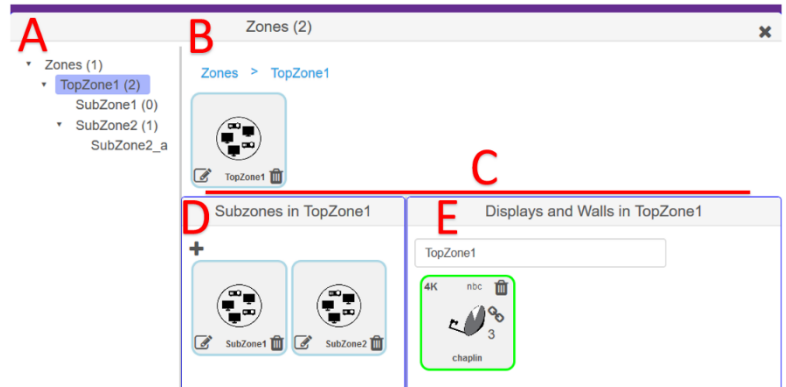A. All Zones listed in a tree format
B. Current selected Zone or SubZone
C. Items below the letter "C" in the sample image are members of the highlighted Zone or SubZone in Section B.
D. SubZones, if any, of selected Zone or Subzone.
E. Member Displays and VideoWalls of the current Zone or SubZone

See Appendix A – New Features for more information

9. Upgrading and Downgrading

Unique update files required for each platform

Starting with release v1.8, the ZyPer MP update file will be available in three, platform-specific versions. Please use the correct version for the hardware platform being updated.

File name examples:

- ZyPerMP NUC computer: update_nuc_2.0.35268.zyper
- ZyPerMP Proserver: update_proserver_2.0.35268.zyper
- ZyPerMP VMware: update_vm_2.0.35268.zyper

Known issues with upgrading and downgrading

- The following note is only applicable to moving to the 1.7.4 platform. The ZMP generation 2 hardware can only be updated through the service rcServer update command.

    The process is shown below

    From the ZMP OS command line perform the below commands.
    - sudo service rcServer stop
    - sudo service rcServer update /srv/ftp/files/update_...

- The ZMP Generation 3 (Pentium processor class NUC) comes with 1.7.4.33922 pre-installed and is upgradable. However, in a downgrade scenario after the upgrade, it cannot be downgraded to anything less than 1.8.34961.

- Upon upgrading the system (beginning in 1.7.4) there is a saved file that includes the export from the database prior update. This can be used to restore the database to the state it was in prior to 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 prior to the upgrade.

- Downgrading to the 1.7.1X version of the software will require the user to clear the cache in order to see the "Roles or Users" panel.

- There is reduced support in downgrading due to the extensive additions to the newer versions. In particular, the 1.3 to 1.4 versions require additional steps to recover from the change in database tables, fields and features that are not present at the time of the original version. Due to this, all 1.3 and 1.4 versions should be upgraded to 1.6 prior upgrading to the new releases

- If downgrading to 1.6. or 1.5.2, you may have to clear the browser cache before logging back in to the ZyPer Management Platform – An error may occur in the browser alerting you to a cert error, this was actually due to the login to the REST server (which is not present on version prior 1.7.X), the browser may maintain this login path on the next login until the cache is cleared.

- If downgrading to either 1.5.2 or 1.6, the user in ZyPer Management Platform will not be able to add zones. This is due to the "datetime" format change in the zone table when Maria DB replaces MySQL. Reverting back keeps Maria DB thus the command sent to create the zone fails because of the format mismatch of the datetime.

1.5.2 cannot upgrade to releases above 1.7.X through the GUI due to the file size limitations of the new release.

Note: For versions prior 1.7.4, please follow the below upgrade path before upgrading to 2.0

1.1 to 1.3 to 1.6 to 1.7.4
1.2 to 1.3 to 1.6 to 1.7.4
1.3 to 1.6 to 1.7.4
1.4 to 1.6 to 1.7.4
1.5 to 1.6 to 1.7.4
1.6 to 1.7.4

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

- ZMP NUC GigaByte hardware
- ZMP NUC Intel hardware (current)
- VMware
- ProServer

Interface IP type and internet state

- Interface IP type: Defines how the interface acquired it's IP
- Internet state: Defines whether or not the server can reach the outside internet
  - Online – can reach the internet
  - Offline – cannot reach the internet

- **ZMP GigByte NUC**

Starting Version	Interface IP type	Internet state	Result
1.7.1.33493	DHCP	Online	Passed
1.7.1.33493	DHCP	Offline	Passed
1.7.1.33493	STATIC	Online	Passed
1.7.1.33493	STATIC	Offline	Passed
1.7.1.33493	Link-Local	Offline	Passed
1.7.3.33736	DHCP	Online	Passed
1.7.3.33376	DHCP	Offline	Passed
1.7.3.33736	STATIC	Online	Passed
1.7.3.33736	STATIC	Offline	Passed
1.7.3.33736	Link-Local	Offline	Passed
1.7.4.33922	DHCP	Online	Passed
1.7.4.33922	DHCP	Offline	Passed
1.7.4.33922	STATIC	Online	Passed
1.7.4.33922	STATIC	Offline	Passed
1.7.4.33922	Link-Local	Offline	Passed
1.8.34703	DHCP	Online	Passed
1.8.34703	DHCP	Offline	Passed
1.8.34703	STATIC	Online	Passed
1.8.34703	STATIC	Offline	Passed
1.8.34703	Link-Local	Offline	Passed

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

Starting Version	Interface IP type	Internet state	Result
1.7.4.33922	DHCP	Online	Passed
1.7.4.33922	DHCP	Offline	Passed
1.7.4.33922	STATIC	Online	Passed
1.7.4.33922	STATIC	Offline	Passed
1.7.4.33922	Link-Local	Offline	Passed
1.8.34703	DHCP	Online	Passed
1.8.34703	DHCP	Offline	Passed
1.8.34703	STATIC	Online	Passed
1.8.34703	STATIC	Offline	Passed
1.8.34703	Link-Local	Offline	Passed

- **VMWARE**

Starting Version	Interface IP type	Internet state	Result
1.7.1.33493	DHCP	Online	Passed
1.7.1.33493	STATIC	Online	Passed
1.7.3.33736	DHCP	Online	Passed
1.7.3.33736	STATIC	Online	Passed

1.7.4.33922	DHCP	Online	Passed
1.7.4.33922	STATIC	Online	Passed
1.8.34703	DHCP	Online	Passed
1.8.34703	STATIC	Online	Passed

- **ProServer (Base Installed Version is 1.8.34703)**

Starting Version	Interface IP type	Internet state	Result
1.8.34703	DHCP	Online	Passed
1.8.34703	DHCP	Offline	Passed
1.8.34703	STATIC	Online	Passed
1.8.34703	STATIC	Offline	Passed
1.8.34703	Link-Local	Offline	Passed

Appendix A - New Features

The following new features were added to 2.0.35268 GA to enhance several areas valued to our customers.

GUI Enhancements:

ZyPer Management Platform GUI "Device Grid" panel

Components: ZyPer Management Platform GUI

Details: A New Panel was created to provide a Grid view of all ZyPer devices present on the system. The Feature allows the user better visibility to the device and it's configuration specific. In this version, the following columns are present under this view:

- **Device Name** – Default MAC name or given Name from the user
- **Device Type** – Possible inputs: Encoder or Decoder
- **Device MAC** – MAC of the ZyPer Device
- **Device Model** - Possible inputs: ZyPer4k, ZyPerUHD, ZyPerHD or ZyPerUSB
- **Device IP Address** – IP Address (Static, DHCP or Link-Local) of the ZyPer Device
- **Device SubnetMask** – Subnet Mask of the ZyPer Device
- **Device Edid Type** – Possible Values: Builtin, Auto or Blank - The Default value is Auto or Blank if it is a ZyPerHD or Decoder. In order to change the "EDID type" to Builtin, a builtin EDID must be selected from the "EDID Info" drop down.
- **Device Edid Info** – Name from the EDID presented to the Device (Note: Decoders load the EDID from the Display automatically).
    - o Note: With version 2.0, ZyPerHD encoders will show a loaded EDID name instead of "unknown". This will be overridden by the internal static EDID.
- **Device Connection** – Decoder only: This will show the encoder the device is connected to.
- **Device Receiving Video Status** - This shows if the Device is receiving video, Encoders will show if it detects source video, Decoders will show if it detects Encoder Video Stream.

Operation: To enable the panel it is best practice to close out all other Panels in order to see all the fields. Once the panel option is selected the devices will populate the page, vertical navigation is available with the scroll bar on the righthand side of the panel.

The following functions are available with the ZMP v2.0 Device Grid:

Filter – Access to the filtering mechanism is the same as seen in the standard Source and Display Panels. Sorting by alphanumerical order or by device Type/Status can be done through the top Filter Icon on the Top of the Panel which will toggle the filtering on or off.
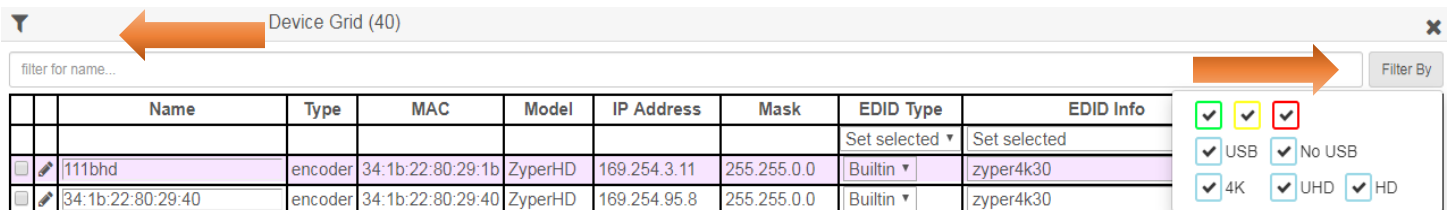
Select Multiple Devices – By checking the box in this column you add the device for mass selection. This is used to modify the Device Edid type and info for multiple units.

Name Box edid – By Clicking into the Device "Name" field the user will be able to edit the name of the device. Clicking out of the box to save the name

Edit Pencil for Device Configuration – Selecting the Pencil Icon in this column will open the standard "Device Configuration" Menu.

EDID Type – This Dropdown can be used to select "Builtin" or "Auto" for the Devices "Edid Type"

EDID Info – This Drop-down selection will provide a list of "Builtin" edids to load on the Encoder device. Selecting the Edid to load will also toggle the "EDID Type" to "Builtin" automatically.

ZMP GUI Updated Zone Panel configuration

Components: ZyPer Management Platform GUI

Details: In this version, we have refined the Zone Panel to allow more effective navigation and management

The Tree View Right-Click Options

Under the Tree View Pane in the Zone panel, the supported right click options are supported
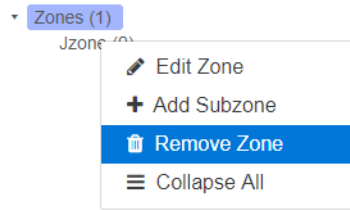
Primary Zone Level

- Add Zone
- Collapse All

Additional Zone and Subzone level

- Edit Zone
- Add Subzone
- Remove Zone
- Collapse All

Operation: The new orientation of the Zone Panel is divided into three areas and one submenu that allows the user to manage the zone name

- **Tree view –** Use to navigate and right click options to manage zone structure.
- **Subzones in the *zone* –** Add Button to add or manage Zones and Subzone or to drag and drop Encoders to the Zone
    - o This opens a name box over the "Displays and Walls in" pane. After the Zone is named this box can be closed by clicking the X button in the top right-hand side of the pane. This will return the "Displays and Walls in" pane.
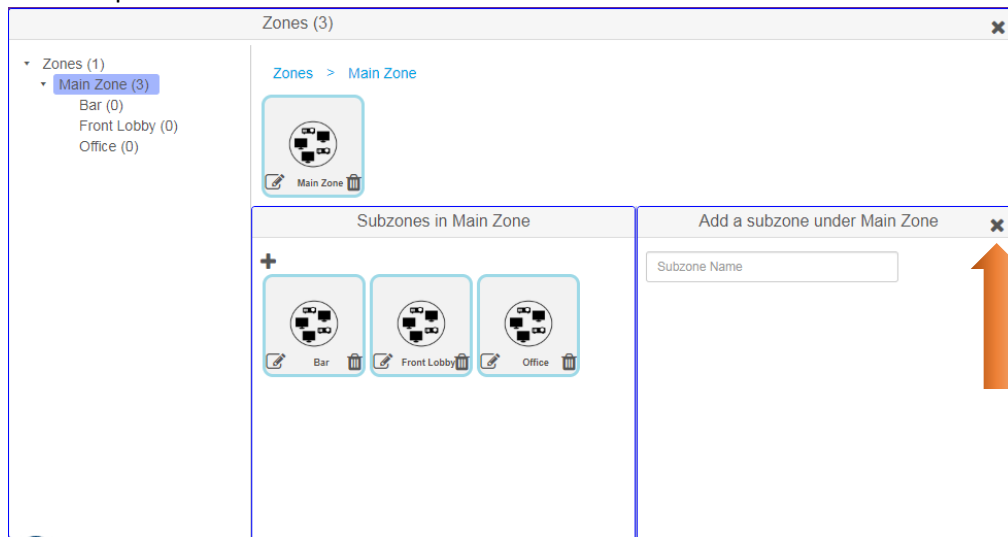
- **Displays and Walls in the *zone* –** Allows user to add displays and video walls to the Zone selected.

To apply an encoder to a Zone you can Drag and drop the encoder to any Zone Icon on any of the Panel Panes.

Editing a Zone is done by clicking the zone Icon "Edit Pencil" link in the "Subzones in" panel. However, the "Edit Pencil" is disabled under the main Icon circled below.
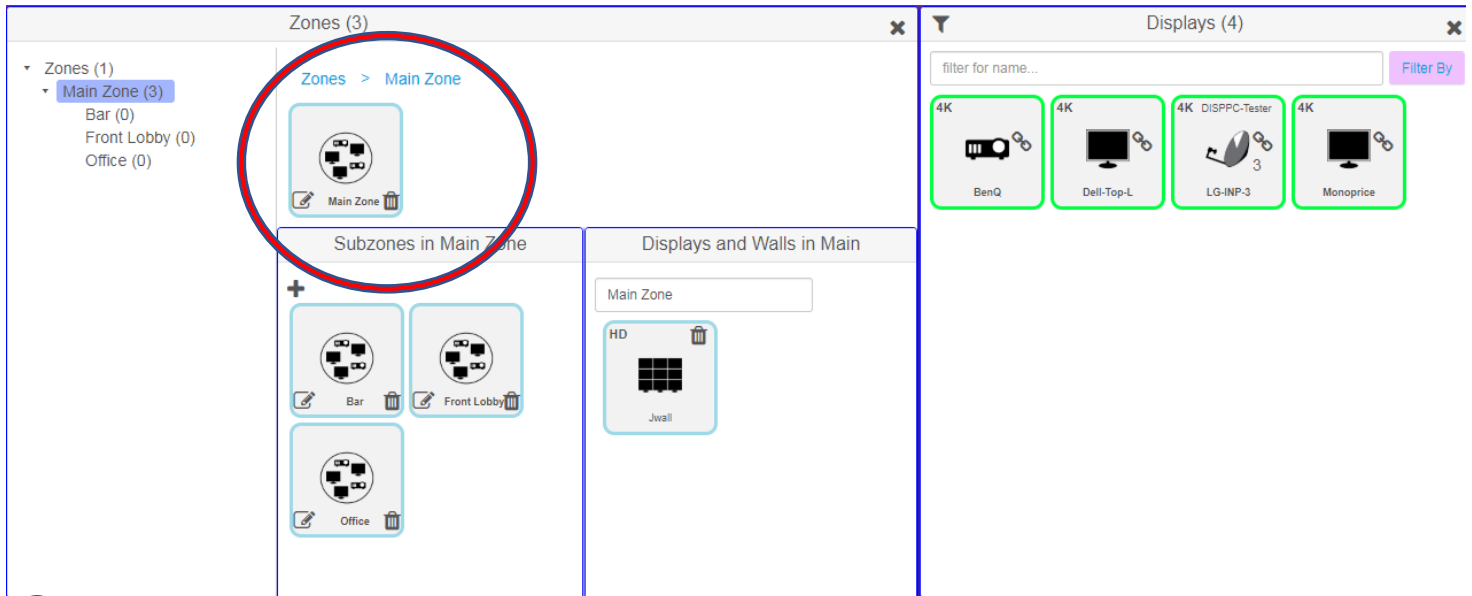
Long Name Support for Devices, Walls, Multiview, Zone and EDID names

Components: ZyPer Management Platform GUI

Details: Enhancements made in the ZyPer Management Platform GUI now allow names of the Devices, Multiview, Video Walls, Zones up to 255 characters in length.

Operation: Name lengths will show up to 16 to 18 characters on most of the item Icons, the hover option, however, will display the full name and all the item characters for the name (limited to the size of the screen and screen resolution).

Seen on the Icon:

- **Device name –** 16 to 18 characters
- **Multiview –** 8 to 10 characters
- **Video Wall –** 8 to 10 characters
- **Zone** – 8 to 10 characters

Seen on the Hover of the mouse (pending resolution and ZMP GUI Screen size)

- **Device name –** 256 characters
- **Multiview –** 256 characters
- **Video Wall –** 256 characters
- **Zone** – 256 characters

Example Hover over
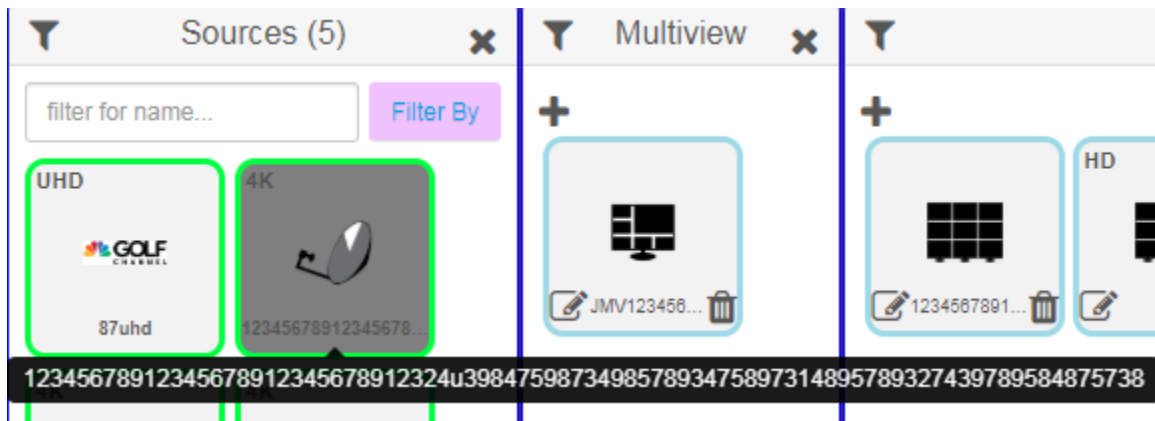
Below is a summary of the current long name outputs:

- **Multiview:** Name field in Editor showed a maximum of **33** characters such as: **longNameMV12345678903234567890423**
- **Video-Walls**: Name field in Editor showed a maximum of **20** characters such as: **wall22Name2234567890**
- **Zones:** Name field showed maximum **80** chars such as: **Zone12Long2234567890323456789042345678905234567890623456789072345678908234567890**

API Enhancements:

Save and Restore MP Database information and configuration

Components: API, MP Database

Details: There is now a way to backup and restore the database configuration under the API. We have added additional commands that now export the zyper4k database to the "/srv/ftp/files" folder on the MP. The feature is used for customers who are in need of hardware replacement and do not want to lose their configuration. In addition, one could create a duplicate MP for redundancy use or to restore their configuration if ever compromised.

Operation: Using the below commands under the API will allow the user to backup and restore the database. A reset of the server is required on restore so this should be done after hours or with a window where the operation can be interrupted.

To Save:

save server database *filename*

To Restore:

restore server database *filename*

Limitations:

- Restorations are limited to the same hardware type (NUC, ProServer, VMWARE)
- Restorations cannot be done on versions prior to ZMP 2.0.
- Restorations have to be on the same version of the release to avoid database inconsistencies from newly introduced or changes to the database fields.

API support for Basic Zones

Components: API, Zones, Database

Details: In this version of ZyPer Management Platform, Zones can now be created, configured and managed in the API. The user can manage existing Zones or create new ones, add displays and video walls**.**

Operation: The below commands can be used to configure the zones in the API. Creation of zones in the API is at a single level. There is no subzone support under the API, users will need to use the Zones under the ZMP GUI in order to manage multi-level Zones.

Show zones example

```
Zyper$ show zones
  Jzone; 34:1b:22:80:2d:e9, 77uhd, Jwall
Success
```

Jzone = name of the main zone
34:1b:22:80:2d:e9 = the MAC address of a ZyPerUHD Decoder
77uhd = the name of a ZyPerUHD Decoder
Jwall = the name of a ZyPerUHD video wall

Create zone example

Created 3 zones and 1 subzone

```
Zyper$ create zone Velociraptor-pen
Success
Zyper$ create zone T-Rex-pen
Success
Zyper$ create zone ObservationRM
Success
Zyper$ create zone Velocir-feeding-area
Success

Zyper$ show zones
  Jzone; 34:1b:22:80:2d:e9, 77uhd, Jwall
  Velociraptor-pen; empty
  T-Rex-pen; empty
  ObservationRM; empty
  Velocir-feeding-area; empty
```

Add zone-display example

- **For decoder**

Added Decoder Ducky and Sarah to the Velocir-feeding-area.

```
Zyper$ add zone-display Velocir-feeding-area Ducky
Success
Zyper$ add zone-display Velocir-feeding-area Sarah
Success

Zyper$ show zones
```

> Jzone; 34:1b:22:80:2d:e9, 77uhd, Jwall
> Velociraptor-pen; empty
> T-Rex-pen; empty
> ObservationRM; empty
> **Velocir-feeding-area**; Ducky, Sarah, Blue-Video-Wall

Limitations: The assignment of devices and video walls is limited to Device type, so separate Zones will need to be created for each product type if there is a mixed environment. (ZyPer4K, ZyPerUHD and ZyPerHD devices will need to be separate)**.** If adding to a zone, mixed ZyPer products the GUI version of Zones will need to be used.

Addition of Zones in the GUI will not be seen in the API, however API added zones can be seen by the GUI once the browser is refreshed.

Canned EDIDs and Device Output Status changes:

ZyPer4K, ZyPerUHD Standard set of EDID files for 4K, UHD, HD, and HBR Audio variants ("Canned EDIDs"), Enhanced API status output for devices.

Components: API, Encoder EDID, Resolution and Device Status

Details: As part of 2.0 we are now supplying Canned EDID to be selected by our system and loaded manually by the user. The canned EDIDs supplied should cover the wide range of displays and are most likely to be chosen automatically versus the display EDIDs. The advantages are listed below.

- The builtin EDIDs will help prevent cases where the EDID from the display is incorrect or in a bad format.
- They also allow the user to select an EDID that fits there need, versus trying to build one from scratch.
- Finally, the builtin EDIDs allow more flexibility and versatility for shared sources.

Under the Device status output, the "Edid" and "Resolution" fields have been extended to cover further data and information on resolution capabilities.

The default behavior of the device will remain as "auto edid", however, the server will most likely choose a builtin due to enhanced compatibilities. Manually loading a builtin or saved/custom EDID will still disable auto EDID on the encoder if desired.

Due to these changes, there have been some changes to the "load" CLI command ("save device-edid" has remained unchanged).

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Load CLI commands prior 2.0

load encoder-edid encoderMac|encoderName *name_of_file* ← Loads the EDID file and disables auto EDID.
load encoder-edid encoderMac|encoderName default ← Loads the default EDID for this device
load encoder-edid encoderMac|encoderName auto ← Turns on auto EDID.

Load CLI commands for 2.0 and above

load encoder-edid encoderMac|encoderName **built-in** *name_of_file* ← Loads the builtin EDID file and disables auto edid. Hitting the tab key instead of entering a "name_of_file" will display the list of builtin EDIDs for selection
load encoder-edid encoderMac|encoderName **saved-in** *name_of_file* ← Loads the saved EDID file and disables auto EDID
Unchanged - load encoder-edid encoderMac|encoderName default ← Loads the default EDID for this device
Unchanged - load encoder-edid encoderMac|encoderName auto ← Turns on auto EDID.

NOTE: The Server "Edid" settings remain unchanged.

There have been several changes to the status output in the version. The status for resolution and video timings have been expanded and some of the fields have changed.

Changes to the Encoder Status output

Resolution fields

The main "hdmiInput" field was left unchanged however we now supply the resolution timings, pixel clock and color specifications of the source.

Unchanged - device.hdmiInput; cableConnected=connected, hdcp=active, hdcpVersion=HDCP_1_4, hdmi2.0=yes, horizontalSize=1920, verticalSize=1080, fps=29.970, interlaced=yes
(New) device.hdmiInput; hTot=2200, hBlank=280, hFront=88, hSync=44, hSyncPol=positive
(New) device.hdmiInput; vTot=1125, vBlank=45, vFront=564, vSync=5, vSyncPol=positive
Changed - device.hdmiInput; pixelClock=74.175, colorEncoding=YCBCR_444, colorDepth=8, colorSpace=BT-709, colorQuantRange=limited, timingStandard=unknown timing

Edid fields

The edid fields have been broken out to display the edid mode, file information, and resolution details. Audio information from the edid is also displayed.

Changed - device.autoEdid; mode=disabled
Changed - device.edid; sourceType=file, sourceFilename=zyperUhd60-hdr-hbraudio
Changed - device.edid; edidStatus=valid, edidMonitorName=zuhd60HdrHbr
(New) device.edid; firstDescriptorPreferredResolution=yes
(New) device.edid; maxFps=61.00, maxPixelClockMhz=600.00, maxDeepColorPixelClockMhz=600.00, rgbColorDepth=12, yuv420ColorDepth=12
(New) device.edid; only420=none, also420=3840-60+3840-50+3840-24, yuvQuantRange=default, rgbQuantRange=from-avi-info-frame
(New) device.edid.audio.PCM; channels=8, sampleRates=176.4hz-96hz-88.2hz-48hz-44.1hz-32hz, sampleBits=16-20
(New) device.edid.preferredResolution; pixelClockMhz=594.00, sizeX=3840, sizeY=2160, fps=60.00
Changed - device.edid.maxResolution; pixelClockMhz=594.00, sizeX=3840, sizeY=2160, fps=60.00

Pre 2.0 format

device.hdmiInput; cableConnected=connected, hdcp=active, hdcp-version=HDCP_1_4, hdmi-2.0=yes, horizontalSize=1920, verticalSize=1080, fps=29.96, interlaced=yes
device.hdmiInput; active-color-mapping=YUV444, active-colorDepth=8
device.hdmiInput; activePixelClockMhz=62
device.edid; edid-status=valid, edid-monitor-name=z4k60Hdr
device.autoEdid; decoder-name=unknown

device.edid; filename=none
device.edid; edid-status=valid, edid-monitor-name=z4k60Hdr
device.autoEdid; decoder-name=unknown
device.edid; filename=none

Changes to the Decoder Status output

As with the Encoder, the Decoders now display Resolution timings, pixel clock and color information as well.

(New) device.hdmiOutput; video-timing-source=display-edid-max-resolution
Unchanged - device.hdmiOutput; cableConnected=connected, hdcp=active, hdcpVersion=HDCP_1_4, hdmi2.0=yes, horizontalSize=1920, verticalSize=1080, fps=59.940, interlaced=no
(New) device.hdmiOutput; hTot=2200, hBlank=280, hFront=88, hSync=44, hSyncPol=positive
Changed - device.hdmiOutput; pixelClock=148.351, colorEncoding=RGB, colorDepth=8, colorSpace=sRGB, colorQuantRange=limited, timingStandard=CEA-861-F VIC-16
Changed - device.hdmiOutput; streamDatarate=1631Mbps

The EDID information for the Display is broken out as we showing the preferred and max resolutions.

Changed - device.edid; sourceType=decoder
Unchanged - device.edid; edidStatus=valid, edidMonitorName=DELL U2414H
Changed - device.edid; firstDescriptorPreferredResolution=yes
Changed - device.edid; maxFps=76.00, maxPixelClockMhz=170.00, maxDeepColorPixelClockMhz=0.00, rgbColorDepth=8, yuv420ColorDepth=0
(New) device.edid; only420=none, also420=none, yuvQuantRange=default, rgbQuantRange=default
(New) device.edid.audio.PCM; channels=2, sampleRates=48hz-44.1hz-32hz, sampleBits=16-20
(New) device.edid.preferredResolution; pixelClockMhz=148.50, sizeX=1920, sizeY=1080, fps=60.00
(New) device.edid.maxResolution; pixelClockMhz=148.50, sizeX=1920, sizeY=1080, fps=60.00

Pre 2.0 format

device.hdmiOutput; cableConnected=connected, hdcp=active, hdcp-version=HDCP_1_4, hdmi-2.0=yes, horizontalSize=1920, verticalSize=1080, fps=60.00, interlaced=no
device.hdmiInput; active-color-mapping=RGB:YUV444, active-colorDepth=8
device.hdmiOutput; preferred-horizontalSize=1920, preferred-verticalSize=1080, preferred-fps=60.00
device.hdmiOutput; maxPixelClockMhz=170, supported-color-mappings=RGB:YUV444, max-colorDepth=8
device.hdmiOutput; activePixelClockMhz=124
device.edid; edid-status=valid, edid-monitor-name=DELL U2414H
device.hdmiOutput; streamDatarate=1631Mbps

Possible EDID loads per device type

EDID file	ZyPer4K	ZyPerUHD	ZyPerHD	Notes
zyper-default	Yes	Yes	Not Supported	
zyper4k30	Yes		Not Supported	
zyper4k60	Yes		Not Supported	
zyper4k60-420	Yes		Not Supported	
zyper4k60-420_hdmi14	Yes		Not Supported	
zyper4k60-hbraudio	Yes		Not Supported	
zyper4k60-hd-hdr	Yes		Not Supported	
zyper4k60-hdr	Yes		Not Supported	
zyper4k60-hdr-bt2020	Yes		Not Supported	
zyper4k60-hdr-bt2020-hbraudio	Yes		Not Supported	
zyper4k60-hdr-hbraudio	Yes		Not Supported	
zyperHd60	Yes	Yes	Not Supported	
zyperPc	Yes	Yes	Not Supported	Supports particular PC video formats, may present a pink hue on a source not PC in origin
zyperUhd30	Yes	Yes	Not Supported	
zyperUhd30-hbraudio	Yes	Yes	Not Supported	
zyperUhd60	Yes		Not Supported	
zyperUhd60-420	Yes		Not Supported	
zyperUhd60-420_hdmi14	Yes	Yes	Not Supported	
zyperUhd60-hbraudio	Yes		Not Supported	
zyperUhd60-hd-hdr	Yes		Not Supported	
zyperUhd60-hdr	Yes		Not Supported	
zyperUhd60-hdr-bt2020	Yes		Not Supported	
zyperUhd60-hdr-bt2020-hbraudio	Yes		Not Supported	
zyperUhd60-hdr-hbraudio	Yes		Not Supported	

Audio Enhancements:

ZyPer4K and ZyPerUHD Compressed Audio support for fast switched connections

Components: API, Fast Switched EDID manipulation

Details: In this version, we have added the ability to send to the source an EDID that supports compressed audio under a fast-switched connection. In Previous versions of the code, only Genlock mode would be able to do this. In 2.0 we no longer replace the audio section of the EDID with an LPCM only specification when a device is connected in fast switched. This allows the EDID to be passed down to the source device with the compressed audio entries, allowing the source to choose the format if supported. The source device has to have support for auto-selecting the audio format from the EDID for this to work. This enhancement opens up the ZyPerUHD and ZyPer4K product line to obtain better audio formats in fast switched.

Operation: By Default, the enhancement is configured so it emulates prior 2.0 configurations. This is so there is no impact on the customer base if upgrading to this new version. We have added "Server Level" and "Device Level"

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controls to turn this on for the system devices. By manipulating these settings, the user can enable either all the devices across the board or enable a single device at a time. The Devices can be set to either follow the "Server Level" setting (Default) or have its own setting on the "Device Level" that will override the server. Resetting to factory default on a device, returns it to follow the server setting.

Settings are as follows:

Device Level Setting (Priority over "Server Level")

server-default - Default Setting – When set the device will follow the Server Level setting.

force-pcm – When set the system, forces the EDID replacement of supported audio to LPCM only on fast switched connections.

allow-compressed - When set, the system will not alter the supported audio formats in the EDID passed down to the source.

Example:

Zyper$ set encoder APPLETV audio-format allow-compressed
Success

API field in the Device config output
device.hdmiAudioIn; format=allow-compressed

Server Level Setting

force-pcm– Default setting - When set, the "Server Level" value for the units that follow the server, forces the EDID replacement of supported audio to LPCM only on fast switched connections.

allow-compressed – When set, the "Server Level" value for the units that follow the server, will not alter the supported audio formats in the EDID passed down to the source.

Example:

Zyper$ set server encoder-default-audio-format allow-compressed
Success

API field in the server config output
server.encoder-defaults; hdmi-audio-format=allow-compressed

ZMP GUI Audio changes under the configuration for ZyPerUHD audio connects.

Components: API, ZMP GUI, ZyPerUHD audio

Details: In this version due to audio changes, we have refined the ZyPer Management Platform GUI, Join Configuration for the ZyPerUHD audio. Under ZyPerUHD, the ability to join audio from the Encoder to the Decoder allows the below connections.

ZyPerUHD Encoder Audio	Decoder Output Ports
HDMI in	Decoder HDMI and Decoder Analog Ports output what is sent to the Encoder HDMI in**
Analog in	Decoder HDMI and Decoder Analog Ports output what is sent to the Encoder Analog in**
**ZyPerUHD encoders can route audio separate from the video stream, but as shown above, the audio will be the same out both decoder ports.	

Where we only define one audio stream for either HDMI out and Analog out there is no need to specify which Decoder output port, we assign the audio too. Thus, in the GUI now there is only the field for the audio connect under the Join Configurations. The Join Configurations after the upgrade will be altered to reflect this under the menu.

Operations

To configure this under the Join Configurations menu, select to create a new Join Configuration under the device and select the appropriate parameters for the connection. Then save off the configuration for future use.
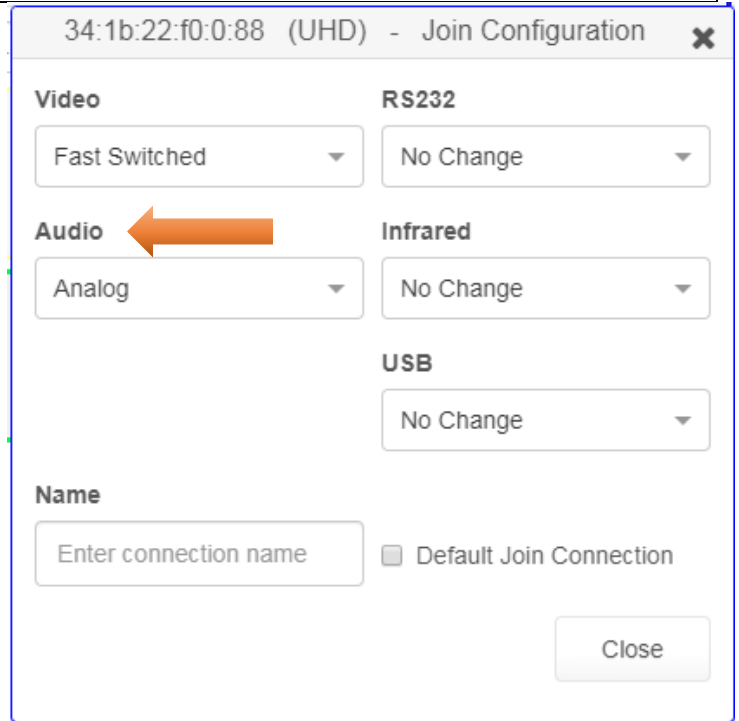
Multiview Fast Transitions and Video Wall Enhancements:

ZyPer4K Multiview Fast Transitions

Components: Server, Multiview

Details: In this version, we have altered the way the internal commands are sent to join the Multiview configurations and Displays. This Enhances the speed of which devices are added, changed within the Multiview, along with the speed of initial display on a destination decoder. This also allows separate Multiview joins to avoid flash outs of video typically seen in the prior version. Overall the API commands remain the same and should not affect prior scripting of configuration and joins.

Note: As noted in the "Known Issue" section of this document, if there is an encoder shared in multiple windows in the same Multiview configuration, changes of said encoder designation can only be done by the delete window and add window commands below.

Example:

delete multiview-window *multiview_name* window *<int>*
set multiview <multiviewName> window-number <int> encoder-name <encoderName>|none position-x <int> position-y <int> size-x <int> size-y <int> layer <int>
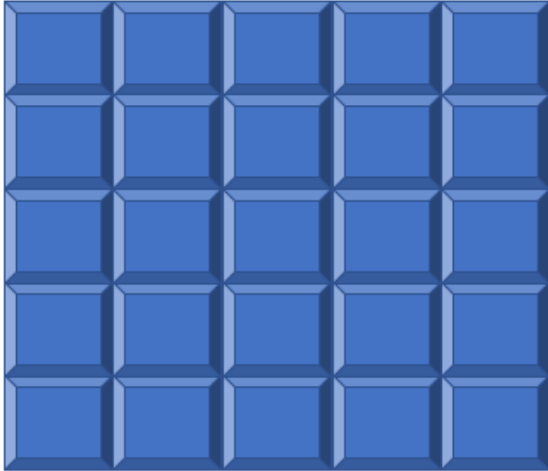
Video Wall Max Decoder support increased to 9X9
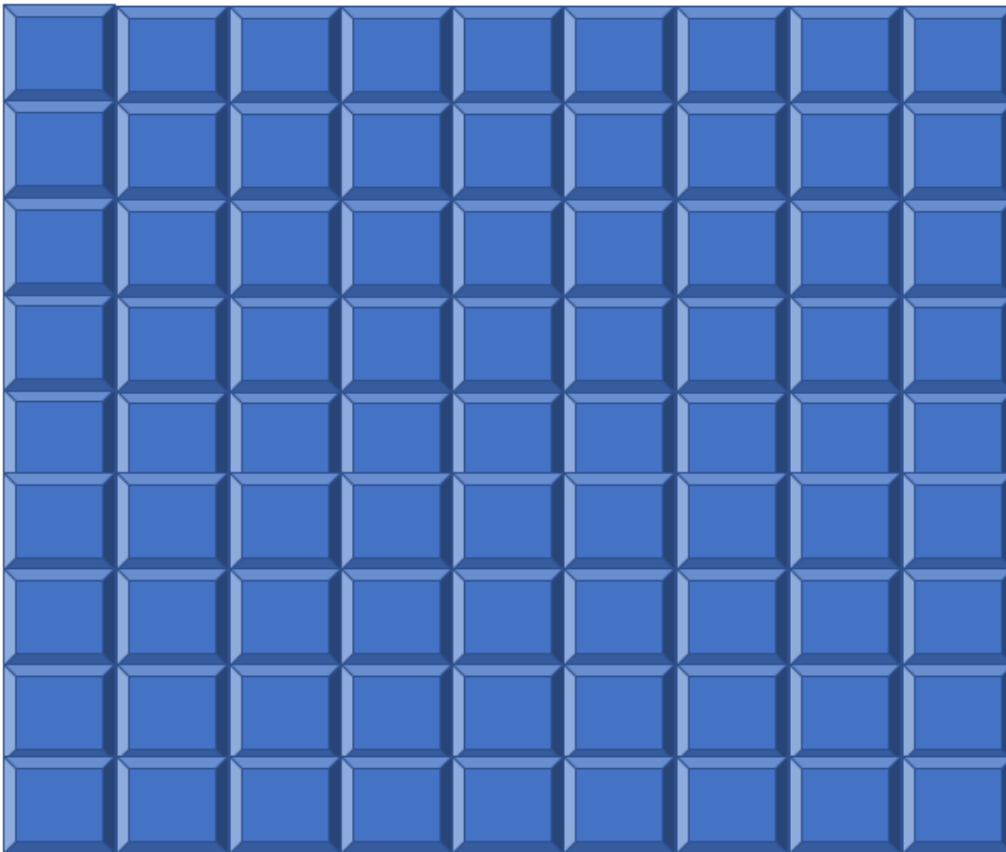
Components: Server, Video Wall

Details: In this version we have enhanced the video wall support to a max of 9X9 for ZyPerUHD and ZyPer4K. There are no changes to the API commands for this to work, the 9X9 feature is available after the upgrade.

Operation:

Prior 2.0 Video Wall configuration Max (5X5)

2.0 Video Wall configuration Max

RS232 and IR enhancements:

ZyPerUHD independent RS232 and IR connections (requires latest ZyPerUHD Firmware).

Details: The latest ZyPerUHD firmware allows routing for independent RS232 and IR connections between devices. In changing this in the design we lose the ability to route IR from the server to the Device, but do gain the ability to route independently from any ZyPerUHD encoder to any ZyPerUHD decoder. Routing from RS232 endpoint to Endpoint is also an addition feature on this release for the ZyPerUHD product line

Components: ZyPerUHD encoders with 10.3 firmware and ZyPerUHD decoders with 10.2 firmware.

Executed Via: ZyPer Management Plateform GUI or API command

Operation: The ZyPer Management Plateform GUI now allows the use to build a custom join configuration to contain RS232 and or IR connections. These configs can be used to connect the ZyPerUHD devices for these functions. The API now allows the "switch" command to connect the ZyPerUHD devices

Command Example:

switch <transmit:deviceMac|deviceName> <receive:deviceMac|deviceName|ip>|server|none ir
switch <transmit:deviceMac|deviceName> <receive:deviceMac|deviceName|ip>|server|none rs232

Limitations: Due to the changes to the IR connections to support Independent joins, the system is not able to support ZyPerUHD connections from device to server or server to device. The new join with the data relay will allow data sent to the device but will not receive from the device to server direction.

ZyPer4K and ZyPerUHD Server to Device Data Relay Support for RS232 and IR commands.

Components: API, Server

Details: In this version, we added the ability to relay RS232 or IR data sent to a port on the MP server, to the endpoint devices. A new API command was created to configure the connection from Server to Device. In addition, the command allows you to specify the port for said communication or leave blank and the server will choose a port automatically. A session can then be started from a local machine to the MP server IP and port number designated. Data strings from the source machine can then be sent to the server and it will forward them to the devices specified in the connection. There is also a new "show data-relays" API command to list out all of these data relay connections specified on the server. The connection is left until they are torn down or if the server fails over or is rebooted. (if a failover occurs, the data relay connections must be configured again). Port range is 1024 to 49152

Operation: By using the below commands the user can configure data relay connections between the device and server via a specified port. Using the "show data relays" command to then confirm the port configuration. A session can then be started to connect to the IP and port in which strings can be entered in the session followed by a carriage return to send.

Data relay

```
        Zyper$ data-connect d8:80:39:9b:e:2e server rs232 tcp-port
            port            Integer range from 1024 to 49152
        Zyper$ data-connect d8:80:39:9b:e:2e server rs232 tcp-port
        Relay TCP port = 44444; telnet handshake mode
        Success
```

Show data relay

> Zyper$ show data-relays
> data-sessions(d8:80:39:9b:e:2e);
>   device: name=d8:80:39:9b:e:2e
>   rs232-tcp: port=44444
>   rs232-connections: none
> Success
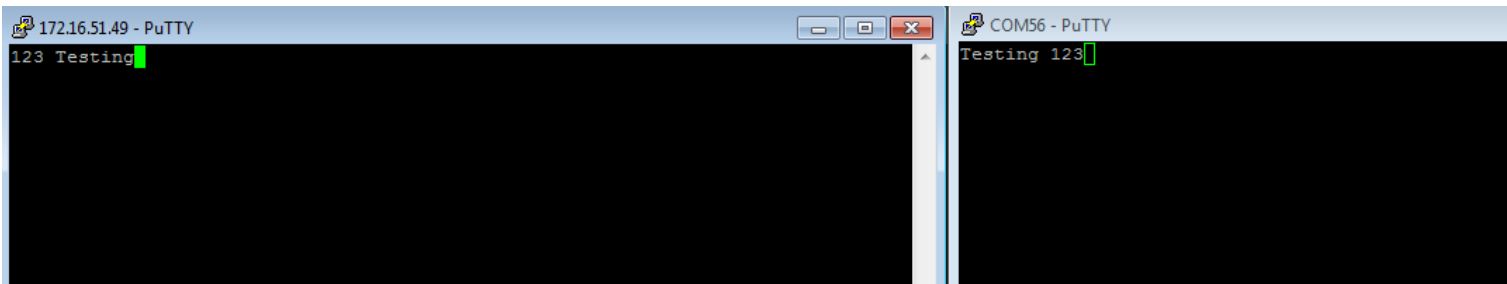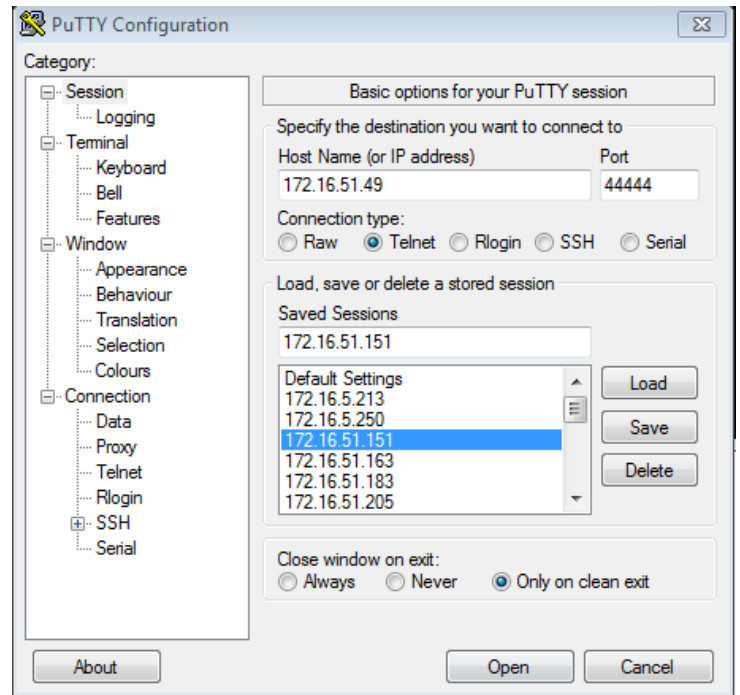
To disconnect:

> Zyper$ data-connect d8:80:39:9b:e:2e none rs232
> Success
> Zyper$ show data-relays
> Success

ZMP GUI RS232 command Relay

Components: ZMP GUI

Details: In this version, we have added to the GUI an ability to send RS232 commands from the Server to the Endpoint devices. The feature was added under "Device Details" menu, under Actions for each device. It consists of a single text entry field that the user can enter the RS232 command in Hex or plain text, then click outside the field to send the string to the server which is forwarded to the device.

Operation: For ZyPerUHD devices, there is a "connected" radio button that is required to be selected before commands can be sent to the endpoint. This is because of the way ZyPerUHD connections are made in this fashion. For the ZyPer4K and ZyPerHD devices, there is no need to connect the device to a server.
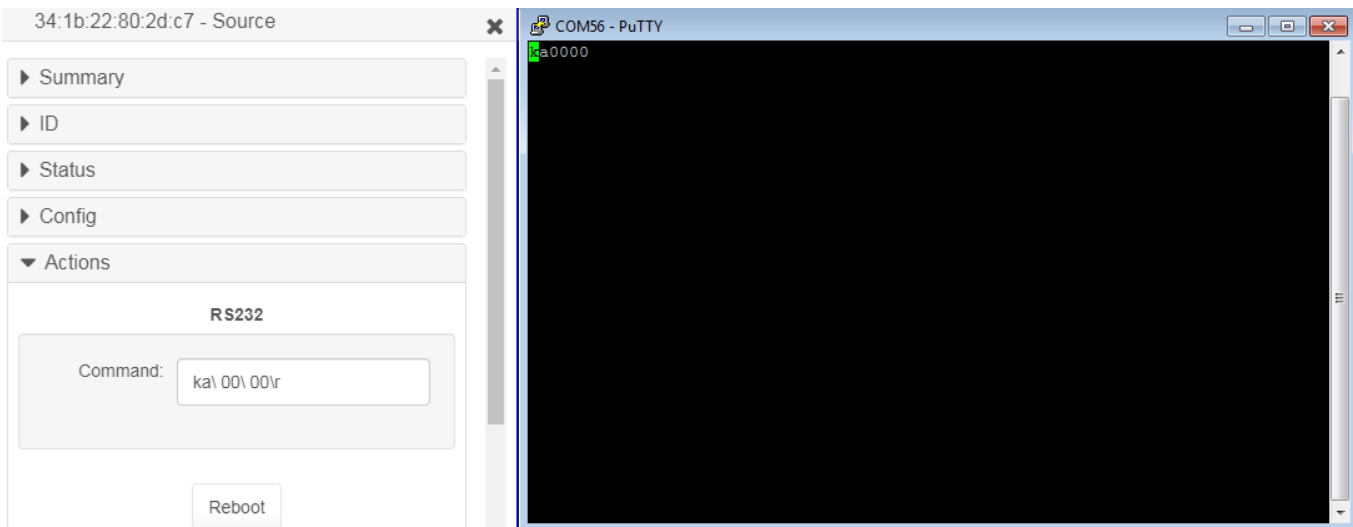
ZyPer4K
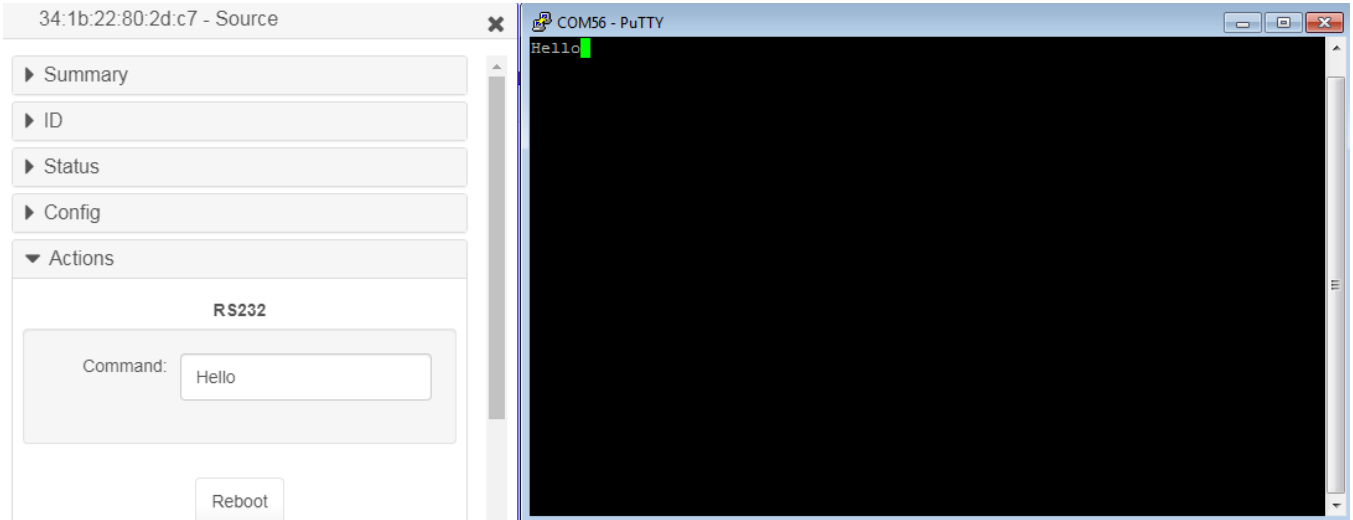
ZyPerUHD
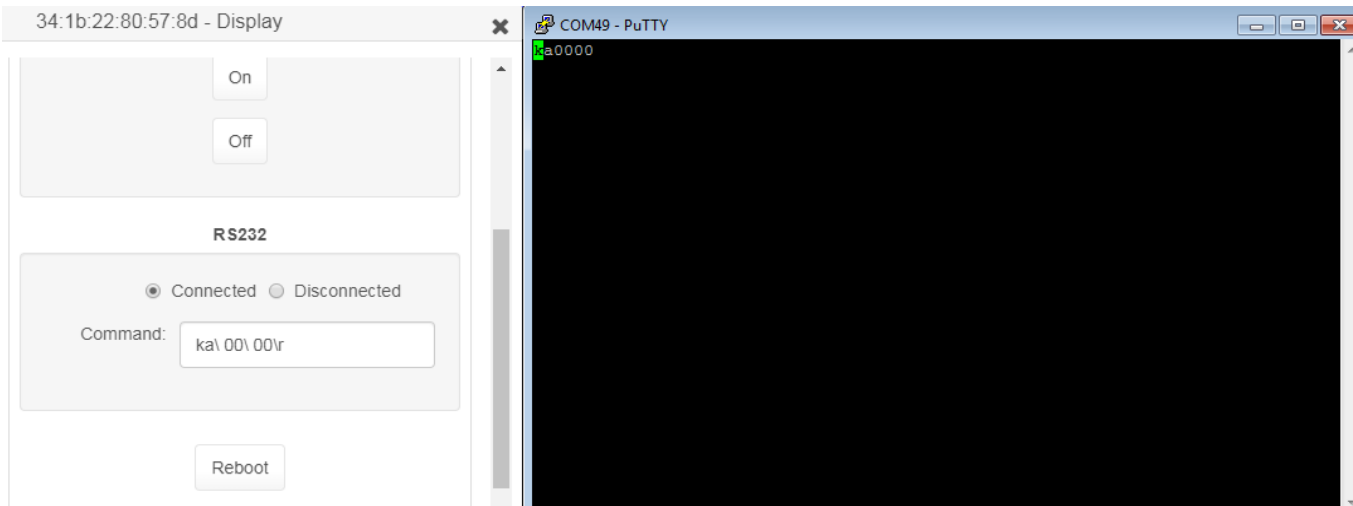
ZyPerHD

Appendix B - ZyPer Management Platform API commands additions Alphabetical order

Additions

- add zone-display <zoneName[.zoneName]> <decoderMac|decoderName|wallName>
- create zone <[zoneName.]newZoneName>
- delete zone <zoneName[.zoneName]>
- delete zone-display <zoneName[.zoneName]> <decoderMac|decoderName|wallName>
- data-connect <deviceName> none rs232|ir
- data-connect <deviceName> server rs232|ir [tcp-port <port:int>]
- data-connect <deviceName> <deviceName>|none rs232|ir
- load encoder-edid <encoderMac|encoderName> built-in <edid-builtin>
- load encoder-edid <encoderMac|encoderName> saved <edid-saved>
- logging level <int>
- logging note <string>
- save server database <filename>
- restore server database <filename>
- set encoder <encoderMac|encoderName> audio-format force-pcm|allow-compressed|server-default
- set encoder <encoderMac|encoderName> analog-audio-out source none|hdmi-audio-downmix
- set encoder <encoderMac|encoderName> audio-format force-pcm|allow-compressed|server-default
- set decoder <decoderMac|decoderName> display-resolution source-ignore-edid
- set multiview <multiviewName> window-number <int> layer <int>
- set multiview <multiviewName> window-number <int> position position-x <int> position-y <int>
- set multiview <multiviewName> window-number <int> size size-x <int> size-y <int>
- set multiview <multiviewName> canvas-size <pixelsHoriz:int> <pixelsVert:int>
- set server encoder-default-audio-format force-pcm|allow-compressed
- set server data-transfer-mode telnet|raw
- show data-relays
- show zones