

ZyPer Management Platform Release Notes

Software 2.3.37103

October 21, 2021

Revision History

Date	Version	Fixes/Changes
October 21, 2021	2.3.37103	General Availability release

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1. Supported platforms

ZyPer Management Platform

- VMWare ESXi appliance on Ubuntu v16.04
- VMWare ESXi appliance on Ubuntu v14.04.2
- ProServer on Ubuntu v16.0.4
- Intel NUC (Generation 2) on Ubuntu v16.0.4
- Gigabyte NUC on Ubuntu v14.04.2

ZyPer Management Platform GUI web interface

• Google Chrome

Encoders and decoders

- ZyPerXS HDMI 2.0 encoders and decoders
- ZyPerUHD2 encoders and decoders
- ZyPerUHD Dante encoders
- ZyPer4K HDMI 2.0 encoders and decoders
- ZyPer4K HDMI 1.4 encoders and decoders
- ZyPer4K Netgear Module encoders
- ZyPerUHD encoders and decoders
- ZyPerHD encoders and decoders (Last Release supporting ZyPerHD units)
 - Note: Release 2.3.x will be the final release to support ZyPerHD

Device Firmware

- ZyPerXS HDMI 2.0 1.2.0.2
- ZyPerUHD2 Encoders 2.0.0.0
- ZyPerUHD2 Decoders 1.1.10
- ZyPerUHD Dante Encoder 2.0.4
- ZyPerUHD 2.0.4
- ZyPer4K HDMI 2.0 4.1.2
- ZyPer Netgear Module Encoders 4.0.0.6

Please note: For secondgeneration UHD devices, use the firmware update file with the ".bin2" file extension. First-generation and second-generation hardware can be determined by the device MAC address.

- For MAC addresses that begin with: 34:1b:22 use the file extension .bin
- For MAC addresses that begin with: 6c:df:fb use the file extension .bin2

In addition, the "ZyPerUHD Dante encoders" will still use the first-generation firmware updates.

2. New features

API Enhancements:

- Clone Multiview Command
- Multiview Channel up/down Encoder function
- Preset Schedules now can set time in AM/PM

MP Server

- License Key applies only to ZyPer4K devices
- rcServer log file rotation now uses logrotate for loggging management

MP GUI

- Preset Calendar view now has a time clock for the Month, Week, Day and Agenda display
- Multiview 19 window support GUI
- Multiview Copy/Rename
- Multiview New Patterns for the user to select

Failover Enhancements

• Server and Management ports cannot be on the same IP subnets

End of ZyPerHD support

• Release 2.3.x will be the final release to support ZyPerHD

Reminder: As of 2.2 release

- ZyPer Management Platform Mobile mode (no longer supported)
- ZyPerUSB no longer supported as a device (removed for this version)

3. Issues resolved

Component	Issue	Other
The Device Grid now allows multiple device reboots	In the device grids, there was no ability to reboot multiple devices.	
MP - ProServer	Default Route changes or is lost when Ethernet connection is down for either interface.	
Multiview	Only 9 windows are supported in the GUI while Multiview configurations build in the API can consist of 19 windows. If one of these Multiview's is selected for edit in the GUI only 9 windows are shown.	
Multiview Video Artifact	Resolved an issue with Interlaced 1080I 50 from the SDI input was showing artifacts of video in the Multiview.	
Preview - Bleed Through video	Resolved an issue where the preview was bleeding through the device details menu and preview settings menu.	
RcServer Segfualt	Multiple Segfaults are being seen on the rcServer	

ZyPer4K Extended	After a delete of the extended board ZyPer4K, the device is	
Board lost after	rediscovered without the extended board capabilities	
delete		

4. Issues Outstanding

Component	Issue	Workaround
ZyPer4K HDMI 2.0	Fast Switched joins at 4801/5761 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, I found that 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 andnothing is connected to the S- video port, the analog cable status shows connected and 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 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 rejoin 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.
MP - Server	4K HDMI 2.0 - Some Decoders may not show receiving video set to yes when video is being received and displayed.	A join to another encoder corrects the issue, connecting to the original encoder fixes the status.
MP - Server	Encoder videoScaledStream stays enabled even when it was not used in Multiview 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.

MP – NUC	Power off via Shutdown command on the 1 st	Manual power off on the NUC power button is
	generation NUCs does not shutdown the	required to shut it off.
	server.	
Multiview	When removing an encoder that is assigned to	Deleting the window will need to be done in
	multiple Multiview windows in the same	the API to remove the video from the proper
	configuration, the video will not be removed	display window.
	until the encoder is removed from all	
	windows	
ZMP GUI –	Cannot join HDMI audio separately in the GUI	Use the API to set audio separately.
ZyPerUHD -	for ZyPerUHD devices. Instead of a Join, the	
Analog Audio	GUI sends a disconnect for analog audio for	
-	the device.	
ZMP GUI -	Encoder Window, sound, status is not	Checking the API is required to see the sound
Multiview	indicated under the ZMP GUI Multiview	source for the Multiview config.
	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.	
ZMP GUI -	Edit menu- Pattern button still resizes when	Click the resized button to access the drop
Multiview	you click on the bottom 3 rd of the button	down menu.
	when in a Multiview single panel	
ZMP GUI - Source	On occasion, the custom config containing	Close the browser and restart it if this gets into
	"disconnect" actions will show no actions	this state.
	after saving the config.	
ZMP GUI -	When you first upgrade from 1.7.4 or 1.8 the	Edit the Join config for the fast switch and add
Upgrade - ZUHD	ZyPerUHD shows the Join config for Fast	the audio to the configuration or select to reset
	switched without the Audio. In 2.0 and 2.1	to defaults to receive the new join config.
	this is now required to get Audio to connect	
	when using the GUI	
ZMP Downgrade -	If a downgrade from 2.3 to 2.2 is done,	Use Revert if a downgrade is needed to 2.2
Video Wall	decoders assigned to video walls will be	
	unassigned.	
Preview	Preview video has vertical lines in the video	No workaround is available at this time.
	on some encoders.	
Save System	ZyPerXS devices are not saved out of the	No workaround is available at this time.
config	system config.	
Save System	Some system configurations like presets are	No workaround is available at this time.
config	not saved out of the system config.	
Save System	Some commands are saved out of order like	No workaround is available at this time.
config	Multiview "create" and "set" commands	
MP – Does not	If the MP is powered on and is set for DHCP	A reboot of the server will allow it to get the
obtain DHCP IP	but the Switch or Switch connection is not up,	DHCP address.
	the server will fail to get the DHCP address	
	once it comes back online	
Upgrade	VM: The previousVersion field showed as N/A	No workaround is available at this time.
	in server info after upgraded the server from	
	1.7.4 to 1.8	

5. Known limitations

ZyPerXS HDMI 2.0

Component	Limitation	Workaround
Encoder	No Overlay is available for this product.	Working as Designed
Encoder -	HID USB is available only on this product, USB	Working as Designed
Decoder	is not compatible with ZyPer4K HDMI 2.0 units.	
Encoder -	If the ZyPer encoder or decoder is connected to	Delete the device and the units will be added
Decoder	the MP system network before the upgrade,	back in properly. This is true for Decoders as
	the units will show up as decoders after the	well to gain full functionality.
	upgrade to 2.2 and above.	

ZyPer4K HDMI 2.0

Component	Limitation	Workaround
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 variant	When Display port connections to a Monitor or TV that are set to 3840 X 2160 60 FPS 8 bit 444, the video has been seen to stop and start again after a link training has been established. It is not every time and in testing varies depending on particular environment variables as up to 1 out of every 5 link training events. The event itself is specific to a disconnect of Display port connection or power event of the end points.	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. 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 <i>decoder_name</i> <i>decoder_mac</i> display- advanced-timing sync-front-porch 48 2 sync-width 32 5 hsync-polarity auto vsync-polarity auto total-
Encoder – SDI board variant	Genlocked mode – Audio is limited to 2 channel supports	size 4000 2222 None
Encoder - Analog Board variant	During connections using the VGA port on the expansion board, audio may not be available	We have found that resetting the port to HDMI and then back to VGA does resolve the issue.

	for the connection. This occurs one out of every 15 to 20 connects using the VGA port on this device.	
Multiview	Resolution of 2560 X 1440 is not supported for the Multiview window	None
Multiview	Custom Multiview containing two windows above 2048x1080 fails to join window to the decoder	None

ZyPerUHD

Component	Limitation	Workaround
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, that 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 	None
Encoder	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
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	None

	interruption. This is because of an internal	
	reconnect within the device in order to modify	
	this connection.	
Audio Limitation	The audio for the Decoder's HDMI and Analog	None
	out port is limited to only one source of the	
	Encoder's audio.	
Independent IR	Due to the implementation of independent IR	None
routing	joins from device to device. We are no longer	
	able to receive IR from the device to the	
	server.	
Resolution	Resolution Support for ZyPerUHD does not	None
Support	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).	
RS232	Changes to the RS232 configuration to support	It is no longer required to reset the endpoint
Configuration and	the endpoint-to-endpoint communication	for device to device communication, only when
routing	require the devices to be restarted. Changes to	going to or from device to server does the
-	the baud rate, connection endpoints, and	device reset. RS232 config changes still reboot
	other rs232 communication will restart the	the device when made.
	device.	

ZyPer GUI

Component	Limitation	Workaround
After Upgrade	After upgrading to 2.3, the connection tool tips under the Display Panel Icons show only video connected.	A refresh of the GUI will show all connections on the Display Panel Icons
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 a 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.

ZMP Redundancy and VMWare

Component	Limitation	Workaround
ZMP with dual	Setting the Management Interface (eth1) on a	None
NICs	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	Starting in the upgrades to 1.8, VM Hosted	None
Management	ZMPs require the use of the update_vm to	
Platform –	upgrade to 1.8 and beyond. Reverting to 1.7X	
VMWare updates	and 1.6 versions are possible through the use	
	of the standard update_nuc file if needed.	
VMware	There is no support for virtual machines	None
Redundancy	hosting the ZMP image under 1.8, only single	
Support	server deployments are supported.	

6. Current device firmware

Device	File version
ZyPer4K HDMI2.0	4.1.2
ZyPerXS HDMI2.0	1.2.0.2
ZyPer Netgear Encoder Module	4.0.0.6
ZyPer4K HDMI1.4	2.10.x
ZyPerUHD Encoders (MAC addresses that begin with: 34:1b:22)	2.0.4
ZyPerUHD Decoders (MAC addresses that begin with: 34:1b:22)	2.0.4
ZyPerUHD Wallplate Encoders	2.0.4
ZyPerUHD Dante Encoders	2.0.4
ZyPerUHD2 Encoders (For MAC addresses that begin with: 6c:df:fb)	2.0.0.0
ZyPerUHD2 Decoders (For MAC addresses that begin with: 6c:df:fb)	1.1.10
ZyPerHD* Encoders	2.12.3
ZyPerHD* Decoders	2.12.4

* Release 2.3.x will be the final release to support ZyPerHD

7. API Additions, changes, and deletions

Additions

- clone multiview <multiviewName> to <newMultiviewName>
- set multiview <multiviewName> windowNumber <int> channel up|down

Changes

Added PM and AM to hour setting

set preset <presetName> schedule <presetScheduleName> month jan|feb|mar|apr|may|jun|jul|aug|sep|oct|nov|dec|all dayOfMonth

With the feature to prevent multiple default gateways, the command can now execute with a none for the gateway:ip.

• set server ip server static <address:ip> <mask:ip> <gateway:ip> |none <dns-server:domainName> |none reboot

Misc

Factory Default changes for RS232– Through the versions of ZMP 1.8 to 2.1, when ZyPerUHD devices are reset to default the following default baud rates will be applied.

- In 1.8 the default is 38400
- In 2.0 the default is 9600
- In 2.1 or later the default is 115200

Deletions

• No API command deletions in this release.

For more information on API command changes introduced in ZMP v2.3 release, please see page 16 of this document.

8. 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_2.3.37103.zyper
- ZyPerMP Proserver: update_proserver_2.3.37103.zyper
- ZyPerMP VMware: update_vm_2.3.37103.zyper

Known issues with upgrading and downgrading

Affected Versions	Issue	Affected Hardware	Workaround
Moving to 1.7.4 from prior versions	The ZMP Generation 2 can only be upgraded through the service rcServer update command	ZMP NUC generation 2	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
Moving back to 1.7.4 after being upgraded	The ZMP Generation 3 comes installed with 1.7.4.33922 pre-installed and is upgradable. However, in a downgrade scenario after an upgrade, it cannot be downgraded to anything less than 1.8.34961	ZMP NUC generation 3	If downgrading, you will need to go to 1.8.34961
Downgrading to 1.7.1	Downgrading to 1.7.1X version of the software will require the user to clear the cache in order to see the "Roles or Users" panel.	ZMP NUC generation 1 and 2	Clearing the browser Cache
Upgrading from a version prior to 1.6	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.	ZMP NUC generation 1 and 2	1.3 and 1.4 versions should be upgraded to 1.6 prior to upgrading to the new releases
Upgrading to 1.6 and above	1.5.2 cannot upgrade to releases above 1.7.X through the GUI due to the file size limitations of the new release.	ZMP NUC generation 1 and 2	Upgrading to 1.6 first will allow GUI upgrades. Alternatively upgrading using the API will work as well.
Downgrading to 1.6 or 1.5.2	If downgrading to 1.5.2 or 1.6, you may have to clear the browser cache before logging back into the MaestroZ – A error may occur in the browser alerting you to a cert error, this was actually due to the login to the REST	ZMP NUC generation 1 and 2	Clearing the browser cache

	· · · · · · · · · · · · · · · · · · ·		
	server (which is not present on		
	versions prior 1.7.X), the browser may		
	maintain this login path on the next		
	login until the cache is cleared.		
Downgrading to	If downgrading to either 1.5.2 and 1.6,	ZMP NUC	N/A
1.6 or 1.5.2	the user in MaestroZ will not be able	generation 1 and 2	
	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.		
Upgrading to	If ZyPer4K units exist on the network	All Platforms	Deleting these devices in the API
2.2	and are available to the MP prior		or GUI will allow the system to
	toupgrading to 2.2, these devices will		discoverthem properly.
	show up as decoders only and not		
	contain all functionality.		
Upgrading to	When adding ZyPerXS units to an	All Platforms	Resetting the Join config to factory
2.2	existing system it is necessary to set		defaults – will need to do this on a
	the Join Config to factory defaults in		ZyPer4K Source Icon.
	order to generate a valid Join Config		
	for the XS units.		
Downgrading to	There is a known issue where the	All Platforms	Using the revert function to go
2.2 from 2.3 GA	video wall decoders will become		back to 2.2 will avoid this issue.
	unassigned		Use of revert is always preferred.

Other Notes: Beginning in 1.7.4 there is a saved file that includes the export from the database prior to an update. This file 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.

For versions prior 1.8, please follow the below upgrade path

Starting Version	Jump 1	Jump 2	Jump 3	Jump 4	Jump 5
1.1.X	1.3	1.6	1.7.4	2.1	2.3
1.2.X	1.3	1.6	1.7.4	2.1	2.3
1.3.X	1.6	1.7.4	2.1	2.3	
1.4.X	1.6	1.7.4	2.1	2.3	
1.5.2.X	1.6	1.7.4	2.1	2.3	
1.6.X	1.7.4	2.1	2.3		
1.7.4.X	2.1	2.3			
1.8	2.1	2.3			
2.0	2.1	2.3			
2.1	2.3				
2.1.1	2.3				
2.2	2.3				

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

• ZMP Generation 1

- ZMP new Generation 2 and 3
- VMware
- ProServer

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
- ZMP GigByte NUC (Generation 1)

Version Prior	Interface IP	Internet Access	Result of upgrade and downgrade
Upgrade	Mode	available?	to and from this release
2.1.35919	DHCP	Yes	Passed
2.1.35919	DHCP	No	Passed
2.1.35919	STATIC	Yes	Passed
2.1.35919	STATIC	No	Passed
2.1.35919	Link Local	No	Passed
2.1.1.36550	DHCP	Yes	Passed
2.1.1.36550	DHCP	No	Passed
2.1.1.36550	STATIC	Yes	Passed
2.1.1.36550	STATIC	No	Passed
2.1.1.36550	Link Local	No	Passed
2.3.37103	DHCP	Yes	Passed
2.3.37103	DHCP	No	Passed
2.3.37193	STATIC	Yes	Passed
2.3.37193	STATIC	No	Passed
2.3.37103	Link Local	No	Passed

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

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

Version prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.1.35919	DHCP	Yes	Passed
2.1.35919	DHCP	No	Passed
2.1.35919	STATIC	Yes	Passed
2.1.35919	STATIC	No	Passed
2.1.35919	Link Local	No	Passed
2.1.1.36550	DHCP	Yes	Passed
2.1.1.36550	DHCP	No	Passed
2.1.1.36550	STATIC	Yes	Passed
2.1.1.36550	STATIC	No	Passed
2.1.1.36550	Link Local	No	Passed
2.3.37103	DHCP	Yes	Passed
2.3.37103	DHCP	No	Passed
2.3.37103	STATIC	Yes	Passed
2.3.37103	STATIC	No	Passed
2.3.37103	Link Local	No	Passed

Version prior	Interface IP	Internet Access	Result of upgrade and downgrade
upgrade	Mode	Available?	to and from this release
2.1.35919	DHCP	Yes	Passed
2.1.35919	DHCP	No	Passed
2.1.35919	STATIC	Yes	Passed
2.1.35919	STATIC	No	Passed
2.1.35919	Link Local	No	Passed
2.1.1.36550	DHCP	Yes	Passed
2.1.1.36550	DHCP	No	Passed
2.1.1.36550	STATIC	Yes	Passed
2.1.1.36550	STATIC	No	Passed
2.1.1.36550	Link Local	No	Passed
2.3.37103	DHCP	Yes	Passed
2.3.37103	DHCP	No	Passed
2.3.37103	STATIC	Yes	Passed
2.3.37103	STATIC	No	Passed
2.3.37103	Link Local	No	Passed

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

• ProServer (Base Installed Version is 1.8.34703)

Version prior	Interface IP	Internet Access	Result of upgrade and downgrade
upgrade	Mode	available?	to and from this release
2.1.35919	DHCP	Yes	Passed
2.1.35919	DHCP	No	Passed
2.1.35919	STATIC	Yes	Passed
2.1.35919	STATIC	No	Passed
2.1.35919	Link Local	No	Passed
2.1.1.36550	DHCP	Yes	Passed
2.1.1.36550	DHCP	No	Passed
2.1.1.36550	STATIC	Yes	Passed
2.1.1.36550	STATIC	No	Passed
2.1.1.36550	Link Local	No	Passed
2.3.37103	DHCP	Yes	Passed
2.3.37103	DHCP	No	Passed
2.3.37103	STATIC	Yes	Passed
2.3.37103	STATIC	No	Passed
2.3.37103	Link Local	No	Passed

- VMWARE ESXi 14.04
- VMWare ESXI Rev2 for 16.04 <u>- (</u>2.2 (Initial Release)

Version prior upgrade	Interface IP Mode	Internet Access available?	Result of upgrade and downgrade to and from this release
2.1.35919	DHCP	Yes	Passed
2.1.35919	STATIC	Yes	Passed
2.1.1.36550	DHCP	Yes	Passed
2.1.1.36550	STATIC	Yes	Passed
2.3.37103	DHCP	Yes	Passed
2.3.37103	STATIC	Yes	Passed

Appendix A New Features

The following new features were added to 2.2.36791 release to enhances several areas valued to our customers.

This Appendix provides a basic overview of the new features for this release, there is an explanation of most of the command set for each newly added item(s). However, for further details of these new features and a full listing of the command's subset, please reference the "ZyPer Management Platform User Manual" for 2.2.36791 GA release.

API Enhancements

Clone Multiview Command

Components: ZyPer Management Platform API

Overview: In this version, we offer the ability to clone a specific Multiview configuration. Users will be able to enter this command and the server will create a copy with a user-defined name. The Clone command will copy the window positions, size, assigned encoders, title information, canvas size, and audio information.

Changes:

• There is a new API "clone" command that allows the user in the API to copy the config.

Operation:

• Cloning a Multiview

clone multiview <multiviewName> to <newMultiviewName>

Appearance and states:

Zyper\$ clone multiview JMV33 to JMV33COPY Success

multiview(JMV33);

multiview.gen; audioSourceWindow=none, canvasWidth=3840, canvasHeight=2160

multiview.window1; encoderName=80:1f:12:4b:a9:a6, encoderMac=80:1f:12:4b:a9:a6, percentPosX=5, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window2; encoderName=80:1f:12:4b:c2:ef, encoderMac=80:1f:12:4b:c2:ef, percentPosX=35, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window3; encoderName=80:1f:12:4b:e2:b4, encoderMac=80:1f:12:4b:e2:b4, percentPosX=65, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window4; encoderName=80:1f:12:4c:20:e8, encoderMac=80:1f:12:4c:20:e8, percentPosX=35, percentPosY=35, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window5; encoderName=80:1f:12:4d:44:41, encoderMac=80:1f:12:4d:44:41, percentPosX=65, percentPosY=35, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window6; encoderName=d8:80:39:59:93:ee, encoderMac=d8:80:39:59:93:ee, percentPosX=35, percentPosY=65, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window7; encoderName=d8:80:39:9b:9:a2, encoderMac=d8:80:39:9b:9:a2, percentPosX=65, percentPosY=65, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window8; encoderName=80:1f:12:4c:1f:1e, encoderMac=80:1f:12:4c:1f:1e, percentPosX=5, percentPosY=35, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window9; encoderName=80:1f:12:49:50:82, encoderMac=80:1f:12:49:50:82, percentPosX=5, percentPosY=65, percentSizeX=30, percentSizeY=30, layer=1;

multiview(JMV33COPY);

multiview.gen; audioSourceWindow=none, canvasWidth=3840, canvasHeight=2160

multiview.window1; encoderName=80:1f:12:4b:a9:a6, encoderMac=80:1f:12:4b:a9:a6, percentPosX=5, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window2; encoderName=80:1f:12:4b:c2:ef, encoderMac=80:1f:12:4b:c2:ef, percentPosX=35, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window3; encoderName=80:1f:12:4b:e2:b4, encoderMac=80:1f:12:4b:e2:b4, percentPosX=65, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window4; encoderName=80:1f:12:4c:20:e8, encoderMac=80:1f:12:4c:20:e8, percentPosX=35, percentPosY=35, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window5; encoderName=80:1f:12:4d:44:41, encoderMac=80:1f:12:4d:44:41, percentPosX=65, percentPosY=35, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window6; encoderName=d8:80:39:59:93:ee, encoderMac=d8:80:39:59:93:ee, percentPosX=35, percentPosY=65, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window7; encoderName=d8:80:39:9b:9:a2, encoderMac=d8:80:39:9b:9:a2, percentPosX=65, percentPosY=65, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window8; encoderName=80:1f:12:4c:1f:1e, encoderMac=80:1f:12:4c:1f:1e, percentPosX=5, percentPosY=35, percentSizeX=30, percentSizeY=30, layer=1;

multiview.window9; encoderName=80:1f:12:49:50:82, encoderMac=80:1f:12:49:50:82, percentPosX=5, percentPosY=65, percentSizeX=30, percentSizeY=30, layer=1;

Success

Multiview Channel up/down Encoder function

Components: ZyPer Management Platform API

Overview: In this version, there is a feature added to allow the encoders of a specific Multiview window to

Changes: Under the "set server ip" API command, there is an additional field that can be added that allows the user to add the DNS server IP.

Operation:

In order to use the up or down channel feature in the Multiview, the participating encoders must follow the naming convention used for the main "Up/Down channel" feature. Thus, encoders must contain the suffix of _001 and increment this suffix for each encoder that will participate in the order of 1 being the first encoder. The Encoder will cycle through on the specified window with the current encoder number.

set multiview <multiviewName> windowNumber <int> channel up|down

Example

set multiview JMV33 windowNumber 3 channel up

set multiview JMV33 windowNumber 3 channel down

Appearance and States

Multiview config before the command is issued

multiview(JMV33);

multiview.gen; audioSourceWindow=none, canvasWidth=3840, canvasHeight=2160 multiview.window1; encoderName=<mark>A6_001</mark>, encoderMac=80:1f:12:4b:a9:a6, percentPosX=5, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

Multiview config after the command is issued

multiview(JMV33); multiview.gen; audioSourceWindow=none, canvasWidth=3840, canvasHeight=2160 multiview.window1; encoderName=EF_002, encoderMac=80:1f:12:4b:c2:ef, percentPosX=5, percentPosY=5, percentSizeX=30, percentSizeY=30, layer=1;

Note: If there is an encoder not receiving video the below message will be seen after the command is given, this is to alert the user that a particular source is not being received and is normally issued because the config of the Multiview is saved with the new encoder designation.

Zyper\$ set multiview JMV33 windowNumber 1 channel up Channel changed to EF_002 Error:(83) Multiview JMV33, window 7, encoder A2_011(d8:80:39:9b:9:a2) hdmi link is down; skipping window Success

Preset Schedules now can set time in AM/PM

Components: ZyPer Management API

Overview: In this release, we have added the ability under the API to select AM or PM time for the Preset schedule time. Under the API for the hour setting for a Preset Schedule, the user can enter 24-hour time or a 12-hour time with the suffix of "am" or "pm"

Changes to the API: In the set preset *preset_name* schedule *schedule_name* month dayOfMonth dayOfWeek hour parameter now accepts am or pm values.

Appearance and states

set preset <presetName> schedule <presetScheduleName> month jan|feb|mar|apr|may|jun|jul|aug|sep|oct|nov|dec|all dayOfMonth <int>|all dayOfWeek sunday|monday|tuesday|wednesday|thursday|friday|saturday|weekday|weekend|all hour <string>|all minute <int>

Zyper\$ set preset jmp schedule afternoon month all dayOfMonth all dayOfWeek all hour 12pm minute 20

Zyper\$ show preset jmp schedule afternoon

preset(jmp);

preset.schedule.afternoon; mode=enabled, color=zvPurple, month=all, dayOfMonth=all, dayOfWeek=all, hour=12pm, minute=20

Server and Management ports cannot be on the same IP subnet.

Components: ZyPer Management API (ProServer)

Overview: In this version, we now prevent the user from being able to set the ProServer "server" and "management" ports to the same subnet. Under the "set server ip" command we examine the IP and subnet being configured and determine if the other ProServer port is on the same subnet, if so a message will appear after the command is entered. In addition to this feature, the command will also now only allow one default gateway between the two interfaces.

Operation:

set server ip server static <address:ip> <mask:ip> <gateway:ip> | none <dns-server:domainName> | none reboot

Zyper\$ show server config

server(10.10.0.6);

server.gen; autoEdidMode=enabled, redundancy=enabled

server.ipServerAddress; mode=static, address=10.10.0.6, mask=255.255.255.0, gateway=10.10.0.1, dns=none

Zyper\$ set server ip management static 10.10.0.112 255.255.255.0 10.10.0.1 none reboot

Error: (141) Server IP address and Management IP address cannot be on (or within) the same subnet

Zyper\$ set server ip management static 10.30.0.6 255.255.255.0 10.30.0.1 none reboot

Error:(142) Server interface already has a default gateway

License Key applies only to ZyPer4K devices

Components: MP Server

Overview: In this release, the license key limit of devices now only applies to the max number of ZyPer4K, ZyPerXS devices seen by the server. Any ZyPerUHD or ZyPerHD devices are exempt from the server device limitation.

API Changes: The output of the "show server info" on the second "server license" line now has the below fields.

- Zyper4KLimit
- Zyper4KDevices
- Zyper4KDevicesExceeded

Example of the output line from "show server info"

Appearance and States

server.license; Zyper4KLimit=unlimited, Zyper4KDevices=23, allDevices=34, allDevicesUp=31, Zyper4KDevicesExceeded=0

Limitations: license key application does not remove already detected ZyPer4K devices, a reset is required of the server for the devices to be limited and not shown by the server if the device ZyPer4K count is exceeded.

rcServer log file rotation now uses logrotate for logging management

Components: MP Server, Server OS

Overview: In this release, the management of the rcServer logs is now handled by the logrotate application on the MP OS. This change removes the management of the server logs from our application.

Appearance and States:

The changes made should not affect the API or Server operation and are transparent to the user

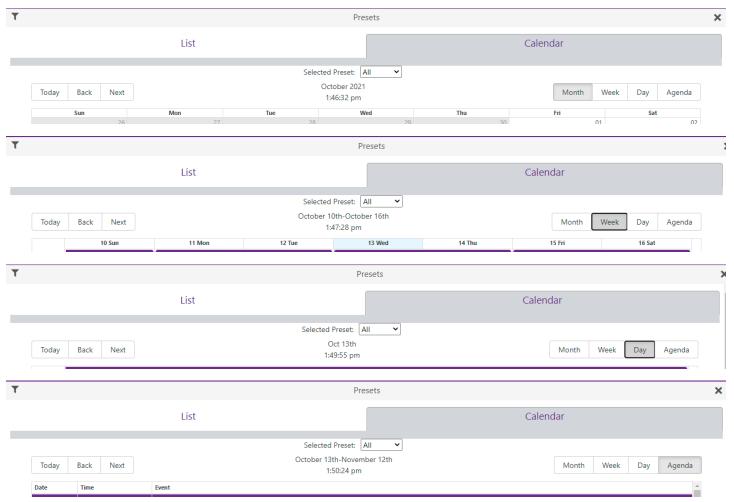
GUI Enhancements

Preset Calendar view now has a time clock for the Month, Week, Day and Agenda display

Components: ZyPer Management GUI

Overview: In this release, we have added a time clock for the Preset calendar view under the Month, Week, Day, and Agenda selections. This places a time clock based off of the GUI host machine time in the center top part of the menu. This allows the user to identify the current time and the time of the scheduled presets.

Appearance and States



Multiview 19 window support GUI

Components: ZyPer Management GUI

Overview: In this release, we have added the ability to see up to 19 Multiview windows under the GUI. This matches the max windows in the API that can be assigned to a Multiview. This removes the GUI limitation of 9 windows as a maximum seen under the GUI.

Appearance and states:

		Multiview (12)		×
		Editor		×
0, 0 20 x 20	20, 0 20 × 20	40, 0 20 x 20	60, 0 20 x 20	■ -80, 0 20 × 20
0, 20 20 x 20	■ 20, 20 20 × 20	40, 20 20 x 20	60, 20 20 x 20	80, 20 20 x 20
0, 40 20 x 20	■ 20, 40 20 × 20	40, 40 20 x 20	₩ 60, 40 20 x 20	■ 80, 40 20 x 20
0, 60 20 x 20	20, 60 20 × 20	40, 60 20 x 20	€ 60, 60 20 x 20	
80 85 90				
95 JMV19window	Save Copy/Rename -			Patterns 🔻

Above is the max window allowed in the Multiview configured, below is a representation of these windows when populated by active encoders.



Multiview Copy/Rename

Components: ZyPer Management GUI

Overview: In this release, we have added the ability to Copy/Rename Multiview configurations in the GUI. This function has been added to the Multiview edit menu and when selected will allow the user to copy a config to a different name or rename the existing Multiview (like the prior save as, feature in previous versions).

Operation:

			Multiview (13)		3
			Editor		×
0, 0 20 x 20	-2	20, 0 20 x 20	40, 0 20 x 20	60, 0 20 x 20	■ 80,0 20×20
0, 20 20 x 20		20, 20 20 x 20	40, 20 20 x 20	60, 20 20 x 20	■ 80, 20 20 × 20
0, 40 20 x 20	-12	4 20, 40 20 x 20	40, 40 20 x 20	60, 40 20 x 20	₹ 80, 40 20 × 20
0, 60 20 x 20	17-	4 20, 60 20 x 20	40, 60 20 x 20	60, 60 20 x 20	
30 35 90 95		Enable Copy Enable Rename			
JMV19window	Save	Copy/Rename 🕶			Patterns 🔻

- 1) When you select copy, enter the new name you want to save to copy as
- 2) Click the "Copy" button below and you will see the new Multiview upon the menu exiting

JMV19windowCopy	Сору	Patterns 🔻
JMV19windowCopy		

- 1) When you select rename, enter the new name you want for the Multiview
- 2) Click the "Save" button to save the Multiview with the new name

JMV19windowRenamed	Save		 Patterns 🕶
JMV19windowRenamed			
JMV19windo 🚺 🖉			

Multiview New Patterns for the user to select

Components: ZyPer Management GUI

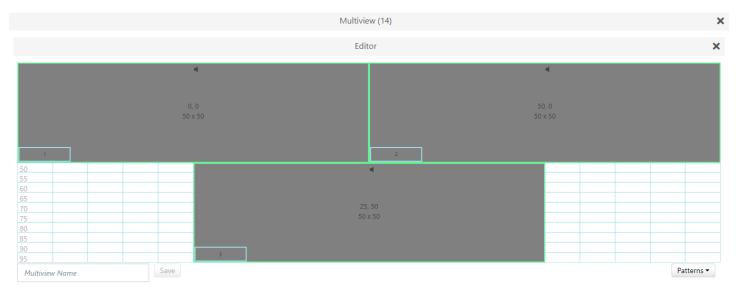
Overview: In this release, we have added 4 new Multiview patterns to the standard set of configurations.

These new patterns were added to the "Pattern" drop-down button

- Two on top, one on bottom
- Four rows by four columns
- Four rows by four columns, two on top
- Four rows by four columns, two on left

Appearance and States:

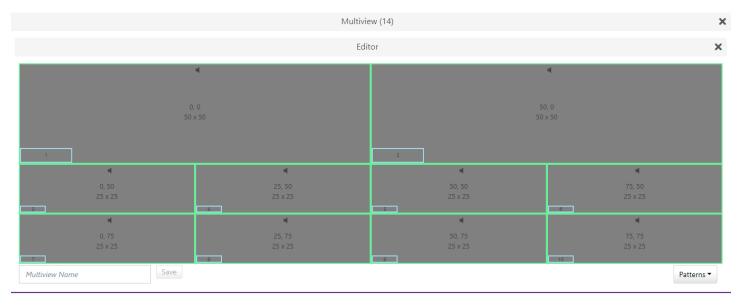
Two on top, one on bottom



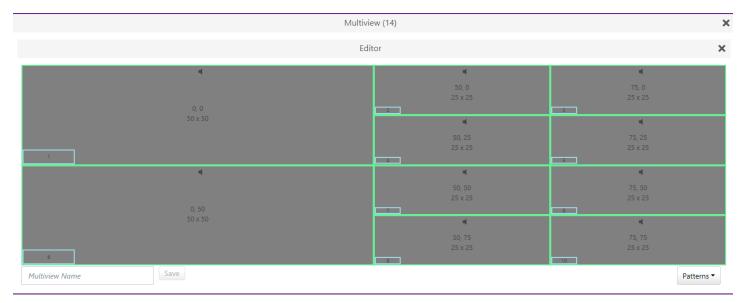
Four rows by four columns

Multiview (14)				
Editor				
0, 0 25 x 25	25, 0 25 x 25	50, 0 25 x 25	₹ 75, 0 25 × 25	
0, 25 25 x 25	25, 25 25 x 25	50, 25 25 x 25	75, 25 25 x 25	
0, 50 25 x 25	25, 50 25 x 25	50, 50 25 x 25	75, 50 25 x 25	
0, 75 25 x 25	25, 75 25 x 25	50, 75 25 x 25	75, 75 25 x 25	
Multiview Name Save	·		Patterns ▼	

Four rows by four columns, two on top



Four rows by four columns, two on left



Appendix B New CamelCase Replaces Hyphenated Formatting (Introduced in ZMP v2.2 release)

Overview

A major effort has been made in 2.2 to make the API more consistent, both input commands and resulting output. Backward compatibility was a critical goal of this effort whenever possible. There are two main mechanisms implemented to assist with backward compatibility:

- Deprecated commands: they will continue to work in 2.2 but will not be included in help or auto-complete.
- CamelCase or hyphenated commands: all commands can be entered either as camelCase or hyphenated. Only camelCase commands are in help and auto-complete.

The result is that all but a very few commands (e.g. *load encoderEdid* and audio-related parameters) from 2.1 will work in 2.2. However, there is some API output that has changed. While this is minimal, it may require some changes to third-party applications processing the output.

CamelCase Commands – 100% Backward Compatible

Commands in 2.1 are mostly hyphenated. A major change in 2.2 is to "default" all command tokens to camelCase. *However, all commands changed to camelCase are 100% backwardly compatible*:

- API Help will show only camelCase command syntax
- API autocompletion will only complete camelCase syntax
- But: API input will still accept the hyphenated commands as defined in 2.1

For example, the following versions of the same command are accepted in 2.2: set decoder dec1 display-size auto set decoder dec1 displaySize auto

CamelCase Show Output

Most of the output in 2.1 is already camelCase. However, to make the interface as consistent as possible, there are a few tokens that changed to camelCase in 2.2. In most cases they are fairly obscure output but may require changes in third-party applications.

For more information on the updated CamelCase formatting, please reference the latest version of the **ZyPer Management Platform User Guide** found on our website's documentation page.

https://www.zeevee.com/documentation/