zeevee™

Intelligent AV Distribution

ZyPer Management Platform Release Notes

Software 3.0.39043

June 30th, 2023

Revision History

Date	Version	Fixes/Changes
June 30, 2023	3.0.39043	General Availability release

1. Supported platforms

ZyPer Management Platform

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

ZyPer Management Platform GUI web interface

- Google Chrome

ZyPer Encoders and Decoders

- ZyPer4K HDMI 2.0 encoders and decoders
- ZyPerXR HDMI 2.0 encoders and decoders
- ZyPerXS HDMI 2.0 encoders and decoders
- ZyPerXS Wall Plates HDMI 2.0 encoders and decoders
- ZyPer4K Netgear Module encoders
- ZyPerUHD encoders and decoders
- ZyPerUHD wall plate encoders
- ZyPerUHD Dante encoders
- ZyPerUHD60 HDMI 2.0 encoders and decoders (Not compatible with Existing ZyPerUHD devices)
- **(New)** ZyPerUHD60 HDMI 2.0 Dante encoders and decoders (Compatible with ZyPerUHD60 non-Dante devices)

2. New features

Server

- Secured ProServer MP on Ubuntu 22.04
- SSL/TLS web access with X.509 certificate management and built-in certificate authority for local deployment.
- SSH Security enhancements
- Logging Enhancements
- Digitally sign ZMP update files
- SFTP enhancements

GUI

- GUI Authentication
- GUI Session Lock
- New Account and Role Grid
- New TLS Grid
- Server Panel Modified – Added tabs

  - Network config tab
  - Security tab
- New Redundancy Grid
- New Log Panel Modified – Added tabs
  - Commands tab
  - Authentication tab

Authorization, Accounts, and Roles

- TLS support for all Management Platforms
- New User Accounts (API-based roles)
- Access-level role assignments
- Two-Factor Authentication (2FA)
- Session Idle Timer for user accounts
- Custom Login Banner and Login screen text options

Device

- New Firmware versions for all Endpoints
- Support for ZyPerUHD60 Dante encoders and decoders
- ZyPerXS/XR Security support
- Flash LEDs for all device types are now supported
- Power Save feature is now supported from the Display Grid for ZyPerUHD and U60 devices.

Bug Fixes in this release

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

3. End of support

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

4. Issues resolved

Component	Issue	Other
ZMP Server - NTP	Setting the NTP address caused ZMP to ABORT	
ZMP Server - CLI	Set server telnet mode disabled is not working correctly	
ZMP Server - dataConnect	dataTunnels not being saved after rcServer is reset	
ZMP Server – ZyPerUHD	Encoder HDMI cable disconnect and reconnect does not restart the video on the decoder for 45 seconds.	

5. Issues Outstanding

Component	Issue	Workaround
ZyPer4K HDMI 2.0	Fast Switched joins at 480I/576I display video in an improper ratio horizontally	No workaround is available at this time.
ZyPer4K HDMI 2.0	ZyPer4K Charlie - Encoder - Incorrect FPS status (cosmetic) under 420 color formats	No workaround is available at this time.
ZyPer4K HDMI 2.0 Dual HDMI	ZyPer4K Encoder Dual HDMI input - Using an Apple 4K source, UHD 60 YUV 420 8bit video is not seen on the loop out or on the decoder display	No workaround is available at this time.
ZyPer4K HDMI 2.0 Analog Expansion	If there is an active HDMI connection to the encoder and nothing is connected to the S-video port, the analog cable status shows connected 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 the video under all screens of the wall for up to 5 minutes before stabilizing.	This only happens on a modification to the video wall configurations. Unjoining all screens of the video wall with the disconnect to the video wall clears all the video. Then changes to the wall's config can be made, followed by a rejoining of the encoder to the wall.
ZyPerUHD60 - Decoder	Video wall 2 rows by 13 randomly fails to show video on one or more displays	No workaround is available at this time.
ZyPerUHD60 - Decoder	The device is reporting that it is sending video at 4096 on a 2560 max resolution monitor	Forcing a resolution in the GUI Display Grid or CLI for the decoder to 2560 60 FPS will work around this issue.
MP Server – Redundancy 22.04	Redundancy fails on the 22.04 ProServer	No workaround is available at this time.
MP Server – Scaled Streams	Encoder videoScaledStream stays enabled even when it was not used in Multiview mode	By un-joining all the other video connections involving the encoder that you are trying to connect with

		will clear this state. Then re-join the encoder to the same decoder in fast-switched mode.
MP Server - Save System config	Some system configurations like presets are not saved out of the system config.	No workaround is available at this time.
MP Server - Save System config	Some commands are saved out of order like Multiview "create" and "set" commands	No workaround is available at this time.
MP Server - NUC and ProServer	If the MP is powered on and is set for DHCP but the Switch or Switch connection is not up, the server will fail to get the DHCP address once it comes back online	A reboot of the server will allow it to get the DHCP address.
MP Server Downgrade - Video Wall	If a downgrade from 2.3 to 2.2 is done, decoders assigned to video walls will be unassigned.	Use Revert if a downgrade is needed to 2.2
MP GUI – General Session	If a User leaves the browser window for from 15 seconds to a minute the session will sometimes kick the user back out to the login screen	The user will need to log back into the GUI
MP GUI - Multiview	When removing an encoder that is assigned to multiple Multiview windows in the same configuration, the video will not be removed until the encoder is removed from all windows	Deleting the window will need to be done in the API to remove the video from the proper display window.
MP GUI -Multiview	Encoder Window, sound, and status are not indicated under the ZMP GUI Multiview config. The icon for the sound source of the Multiview does not show active sound if the window is selected for sound source and saved.	Checking the API is required to see the sound source for the Multiview config.
MP GUI -Multiview	Edit menu- The pattern button still resizes when you click on the bottom 3rd of the button when in a Multiview single panel	Click the resized button to access the drop-down menu.
MP GUI - Source	On occasion, the custom config containing "disconnect" actions will show no actions after saving the config.	Close the browser and restart it if this gets into this state.
MP GUI – Source -Join-Config	Join configs may be missing after an upgrade.	Reverting Server will also restore the join configs.
MP GUI – Source – Join Config	Join configs become corrupted when GUI sessions on separate machines are opened simultaneously. Recommended not to open a second browser if your site has a lot of join configurations saved.	Both sessions will need to be stopped and the cache cleared. The /var/www/data/config_version.txt on the MP will need to be removed. Then a new browser session can be started.
MP GUI - Preview	The preview video has vertical lines in the video on some encoders.	No workaround is available at this time.

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

6. Known Limitations

ZyPerXS HDMI 2.0

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

ZyPer4K HDMI 2.0

Component	Limitation	Workaround
Encoder - Display Port	Display port encoder: going from dp->hdmi AND res > 3840p30 takes 20s	None
Encoder – SDI	**Genlocked mode –** Audio is limited to 2 channel supports	None
Encoder - Analog	During connections using the VGA port on the expansion board, audio may not be available for the connection. This occurs one out of every 15 to 20 connects using the VGA port on this device.	We have found that resetting the port to HDMI and then back to VGA does resolve the issue.
Decoder	When swapping HDMI from ZyPer4K decoders with the HDMI unplugged for less than 5 seconds, the decoder fails to read the new EDID.	When power cycling or unplugging, wait 5 seconds before plugging the unit back in.
Decoder - Display port board	When Display port connections to a Monitor or TV are set to 3840 X 2160 60 FPS 8 bit 444, the video has been seen to stop and start again after a link training has been established. It is not every time and in testing varies depending on particular environment variables as up to 1 out of every 5 link training events. The event itself is specific to a disconnect of the Display 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. Fast-switched connections may also be used as the method of joining the Encoder to the Decoder. The advanced timing command must be used to configure the decoder for use: set decoder *decoder_name*|*decoder_mac* display-advanced-timing sync-front-porch 48

		2 sync-width 32 5 hsync-polarity auto vsync-polarity auto total-size 4000 2222
Multiview	Custom Multiview containing two windows above 2048x1080 fails to join the window to the decoder	None

ZyPerXS WP

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

ZyPerUHD

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

	connections) displays require a 10-second window if the user wants to disable this mode.	
Decoder - Independent Audio routing	Joins of Audio between the encoder and the decoders or changes in the audio to the decoder will cause a 1 to 2 second video interruption. This is because of an internal modification of this connection.	None
Decoder - Audio Limitation	The audio for the Decoder's HDMI and Analog out port is limited to only one source Encoder	None
Encoder/Decoder - Independent IR routing	Due to the implementation of independent IR joins from device to device. We are no longer able to receive IR from the device to the server.	None
Encoder/Decoder - Resolution Support	Resolution Support for ZyPerUHD does not support 4096 resolutions and will not produce resolutions at 3840 X 2160 50 FPS/60 FPS. The ZyPerUHD encoder will not recognize any video above 3840 X 2160 60 FPS YUV 420, 8 bits (in either bit rate or color format).	None
Encoder/Decoder - RS232 Configuration and routing	Changes to the RS232 configuration to support the endpoint-to-endpoint communication require the devices to be restarted. Changes to the baud rate, connection endpoints, and other rs232 communication will restart the device.	It is no longer required to reset the endpoint for device-to-device communication, only when going to or from device to server does the device reset. RS232 config changes still reboot the device when made.

ZyPer GUI

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

ZMP Security limitations

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

7. Current Device Firmware and Device Compatibility

Current Device Firmware

Device	File version
ZyPer4K HDMI2.0	**4.1.2.9**
ZyPerXS/XR/WallPlates HDMI2.0	**2.0.0.0**
ZyPer Netgear Encoder Module	**4.0.0.6**
ZyPerUHD Encoders and Decoders	**5.0**
ZyPerUHD Wallplate Encoders	**5.0**
ZyPerUHD Dante Encoders	**5.0**
ZyPerUHD60 Encoders and Decoders	**5.0**
ZyPerUHD60 Dante Encoders and Decoders	**5.0**

Firmware Compatibility

ZyPer4K HDMI 2.0, ZyPerNG, ZyPerXS/XR and ZyPerXSWP

Endpoint Firmware	MP 2.5	MP 2.5.1	MP 2.5.2	MP 2.5.3	MP 3.0
ZyPer4K 4.1.0	**X**	**X**			
ZyPer4K 4.1.2	**X**	**X**	**X**	**X**	
ZyPer4K 4.1.2.1		**X**	**X**	**X**	
ZyPer4K 4.1.2.9				**X**	**X**

ZyPerNG 4.0.0.6	**X**	**X**	**X**	**X**	**X**
ZyPerXS/XR 1.2.0.2	**X**	**X**			
ZyPerXS/XR 1.3.2.0	**X**	**X**			
ZyPerXS/XR 1.3.2.4	**X**	**X**	**X**		
ZyPerXS/XR/ WallPlate 1.5.0.1			**X**	**X**	**X**
ZyPerXS/XR/ WallPlate 1.5.0.6				**X**	**X**
ZyPerXS/XR/ WallPlate 2.0.0.0					**X**

ZyPerUHD60 support begins at update package 1.21
ZyPerUHD60 Dante support begins at 5.0 for E1 and D1s

Endpoint Firmware	MP 2.5	MP 2.5.1	MP 2.5.2	MP 2.5.3	MP 3.0
ZyPerUHD zuhd_1.16.up1	**X**	**X**	**X**		
ZyPerUHD zuhd_1.17.up1	**X**	**X**	**X**		
ZyPerUHD zuhd_1.18.up1	**X**	**X**	**X**		
ZyPerUHD zuhd_1.19.up1			**X***	**X**	
ZyPerUHD zuhd_1.21.up1				**X**	**X**
ZyPerUHD zuhd_5.0.up1					**X**
*** Hot Fix Only**					

Device Compatibility

Encoders

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

* With Icron USB
** Without Icron USB

Decoders

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

ZyPerXS/XR HDMI 2.0	4K/NG /XS/XR /WP	4K/XS/XR /WP	4K/NG/XS/ XR/WP	N/A	4K/NG /XS/XR /WP	4K/XS/ XR/WP	N/A	N/A	XR/XS/WP **
ZyPerXS Wall Plate Non-Icron USB	4K/NG /XS/XR /WP	4K/XS/XR /WP	4K/NG/XS/ XR/WP	N/A	4K/NG /XS/XR /WP	4K/XS/ XR/WP	4K/WP	4K/NG /WP	XS/XR/WP **

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

Additions

The following commands were added to support Authorization, Accounts, and Roles

create account <newUsername> password <string>|*
create account <newUsername> tempInitialPassword
create role <newRolename> allSubsystems maxAccess none|view|join|config|admin
delete account <username>
delete role <rolename>
load account all preLoginBanner terminal <bannerFilename>|none
load account all preLoginBanner webText <bannerFilename>|none
load account all preLoginBanner webImage <bannerFilename>|none
load account all postLoginBanner terminal <bannerFilename>|none
load account all postLoginBanner webText <bannerFilename>|none
load account all postLoginBanner webImage <bannerFilename>|none
logout
logout force sessionId <int>
set account all concurrentSessionsMax <int>|unlimited
set account all idleLogout minutes <int>|unlimited
set account all onThreeFailures lockoutMinutes <int>|none disableAccount true|false
set account all password complex enabled|disabled minLen <int>
set account all password duration initialExpire enabled|disabled minDays <int> maxDays <int>|unlimited
set account all authMode telnet oldAuth|backend
set account all authMode web browser|backend
set account password existing <string>|* new <string>
set account username <username> 2fa enabled|disabled
set account username <username> expirePassword enabled|disabled
set account username <username> lock
set account username <username> password new <string>|*
set account username <username> role <rolename>
set account username <username> unlock
show account active users <username>|all [since <lastChangeId:lastChangeNumber>] [wait]
show account allConfig [since <lastChangeId:lastChangeNumber>] [wait]
show account login banner filenames [since <lastChangeId:lastChangeNumber>] [wait]
show account login banner text webPreLogin|webPostLogin [since <lastChangeId:lastChangeNumber>] [wait]
show account list <username>|all [since <lastChangeId:lastChangeNumber>] [wait]
show role <rolename>|all maxAccess [since <lastChangeId:lastChangeNumber>] [wait]

The following commands were added to support TLS communication with the server to the GUI/API

generate tls ca privKeyPass <string>|* country <string> state <string> locality <string> organization <string> organizationUnit <string> email <string>
generate tls server csr privKeyPass <string>|* fqdn <string> country <string> state <string> locality <string> organization <string> organizationUnit <string> email <string>
load tls ca cert fromInput *
load tls ca cert fromFile <certsFilename>
load tls ca privateKey privKeyPass <string>|* fromInput *
load tls ca privateKey privKeyPass <string>|* fromFile <certsFilename>
load tls server caIntermediates fromInput none|*
load tls server caIntermediates fromFile <certsFilename>|none
load tls server cert fromInput *
load tls server cert fromFile <certsFilename>
load tls server privateKey privKeyPass <string>|* fromInput *
load tls server privateKey privKeyPass <string>|* fromFile <certsFilename>
set tls server mode enabled|disabled
set tls server fqdn <string>|fromCert
show tls summary
show tls pem server csr
show tls pem server cert
show tls pem server privKey
show tls pem server caIntermediates
show tls pem ca cert
show tls pem ca privKey
show tls pem ca signedCert
sign tls csr caPrivateKeyPass <string>|* fromInput *
sign tls csr caPrivateKeyPass <string>|* fromFile <certsFilename>

The following commands were added to support ZyPerXS/XR security device to server communications

set server security deviceSecurityKey <string>
set device <deviceMac|deviceName> security enabled|disabled

Deletions

No API command deletions in this release.

For more information on API command changes introduced in the ZMP v3.0 release, please see page 17 of this document.

9. Server and GUI Additions, changes, and deletions

Additions

Server Enhancement

Components: File system, OS, Server based applications, and logging

Overview: In this version, we offer the an option to purchase a ProServer on the latest 22.04 release Ubuntu version. This allowed us to custom configure the OS to be more secure for our users. In addition, other considerations like unneeded packages and re-Partitioning of the OS file system were made. This allows a more secure experience for the user.

Secured ProServer MP on Ubuntu 22.04

Some of the improvements made to the ProServer 22.04 are as follows

- Partition disk (sys, db, files) The partitioning scheme has been altered to better suit the secure OS and operating functions of the OS
- Removal of all unused components and applications on the server
- Validation of wifi being disabled on the server
- Encryption used on all trouble report using gpg2 (Available on all Platforms)
- SSL/TLS web access with X.509 certificate management and built-in certificate authority for local deployment.
- SSH Security enhancements (Available on all Platforms)

Logging Enhancements

Components: rcServer logging

Overview: Enhancements made to the Logging of the rcServer application include a new date/time format of the messages as well as authorization level messages and alerts.

Operation and Appearance:

Before rcServer.log changes

Thu Apr 13 11:50:30 2023
(0x515639;0x475742;0x474c6f;0x471d7e;0x4700bc;)RcDeviceMgrBrnt::SendTelnetCmd
DEVCMD(07_MPR01_PC_1(80:1f:12:4c:38:b1)): stop 801f124c38b1:HDMI:0 free
Thu Apr 13 11:50:30 2023 (0x471f05;0x4700bc;0x5986b4;0x501b21;0x4feca7;)RcEncoder::UpdateDevice -- Encoder 07_MPR01_PC_1(80:1f:12:4c:38:b1), stream video, mcast 0.0.0.0, mode changed disabled->disabled
Thu Apr 13 11:50:30 2023
(0x514c4c;0x471b07;0x4700bc;0x5986b4;0x501b21;)RcDeviceMgrBrnt::SendTelnetCmd
DEVCMD(07_MPR01_PC_1(80:1f:12:4c:38:b1)): start 801f124c38b1:HDMI:1
Thu Apr 13 11:50:30 2023
(0x514e1c;0x471b07;0x4700bc;0x5986b4;0x501b21;)RcDeviceMgrBrnt::SendTelnetCmd
DEVCMD(07_MPR01_PC_1(80:1f:12:4c:38:b1)): stop 801f124c38b1:HDMI:1 free
After rcSerevr.log changes

Authorization

dt=Jun-29-23-19:12:49, user=system, sid=0, msg="EVENT for server; Login -- account=admin, sessionId=2"
dt=Jun-29-23-19:20:02, user=system, sid=0, msg="EVENT for server; Logout -- account=admin, sessionId=2, reason=remoteClose"
dt=Jun-29-23-19:24:09, user=<login>, sid=0, msg="CommandLine: authenticate username admin password"
dt=Jun-29-23-19:24:09, user=system, sid=0, msg="EVENT for server; Login -- account=admin, sessionId=1"

Device commands
dt=Jun-30-23-09:58:47, user=system, sid=0, st=0x41f9d1;0x4123e6;0x411d15;0x7fdf5fba96ba;0x7fdf5ce9541d", msg="RcDeviceMgrBrnt::SendTelnetCmd DEVCMD(80:1f:12:64:3d:9f(80:1f:12:64:3d:9f)): get 801f12643d9f temperature"
dt=Jun-30-23-09:58:51, user=admin, sid=2, msg="CommandLine: join 0:1c:d5:1:11:32 0:1c:d5:1:14:2c fastSwitched"
dt=Jun-30-23-09:58:51, user=admin, sid=2, msg="Warning:(4) Decoder HDMI link not active"
dt=Jun-30-23-09:58:51, user=admin, sid=2, msg="Error:(81) Decoder has not received an EDID from the display; cannot connect"
dt=Jun-30-23-09:58:51, user=system, sid=0, msg="RcDecoder::UpdateJoinStatus -- Leaving-4a for device 0:1c:d5:1:14:2c(0:1c:d5:1:14:2c); no EDID"
dt=Jun-30-23-09:58:51, user=system, sid=0, msg="SetCommandThread -- hasVideo 1, hasAudio 0, hasUsb 0"
dt=Jun-30-23-09:58:51, user=system, sid=0, msg="RcDeviceMgrHd::SendTelnet -- DEVCMD(0:1c:d5:1:14:2c(0:1c:d5:1:14:2c)): e e_reconnect::::v;e e_stop_link::v;"

Digitally sign ZMP update files

Components: Zyper Management update packages, rcServer application

Overview: In this version, we have available digitally signed upgrade files, these files are available moving forward from 3.0 and although cannot be used on an upgrade from a version prior to 3.0, support has been implemented.

Operation and Appearance:

The new file extension is. gpg instead of the standard non-encrypted. zyper files.

The. zyper files will still be available if needed.

The .gpg file support was placed into the GUI and the CLI upgrades function in the same way as the standard. zyper files do.

SFTP/FTP enhancements

Components: ZMP Server, ZMP GUI

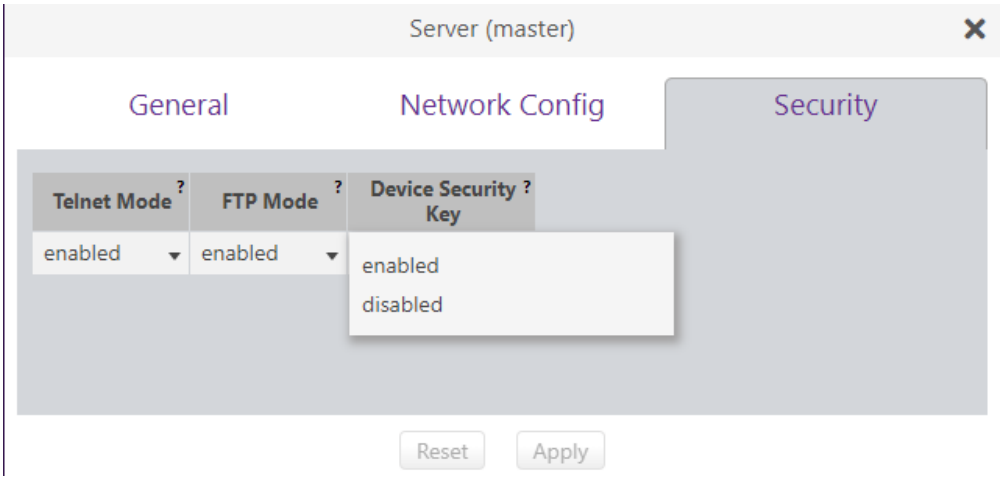
Overview: In this version, we have added the ability to disable FTP to the server. For SFTP there is now a supplied Base SFTP user to connect to the Server.

Operation and Appearance:

ZMP GUI – Server Panel

Security Tab

Under this tab, the “FTP Mode” can be enabled or disabled.

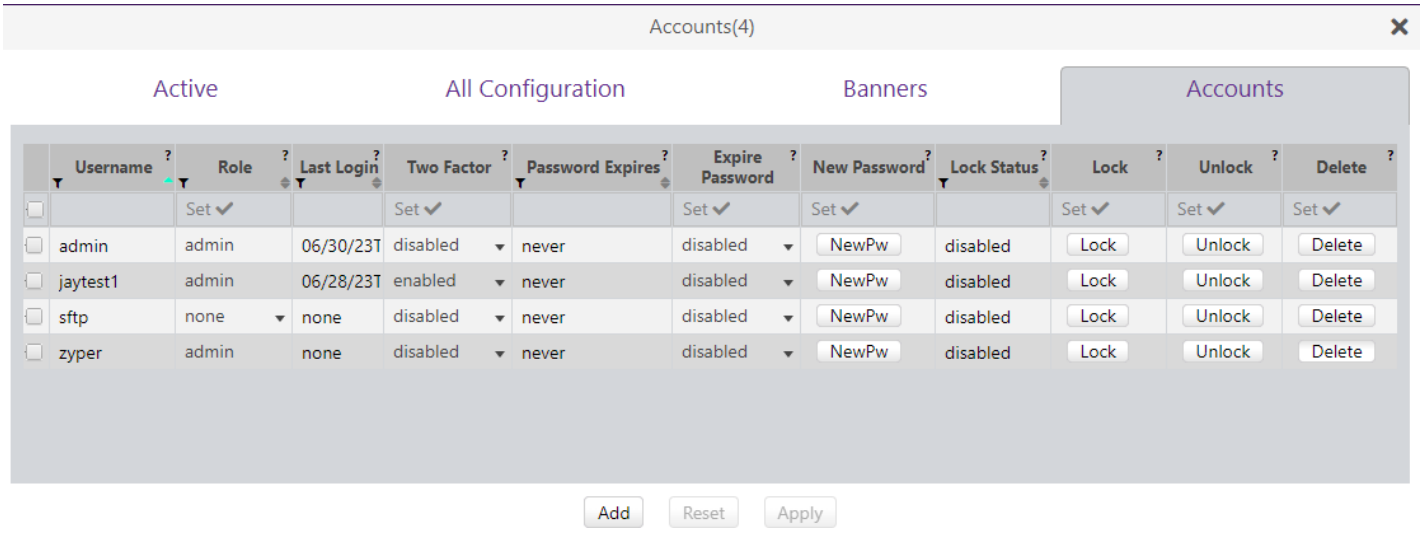


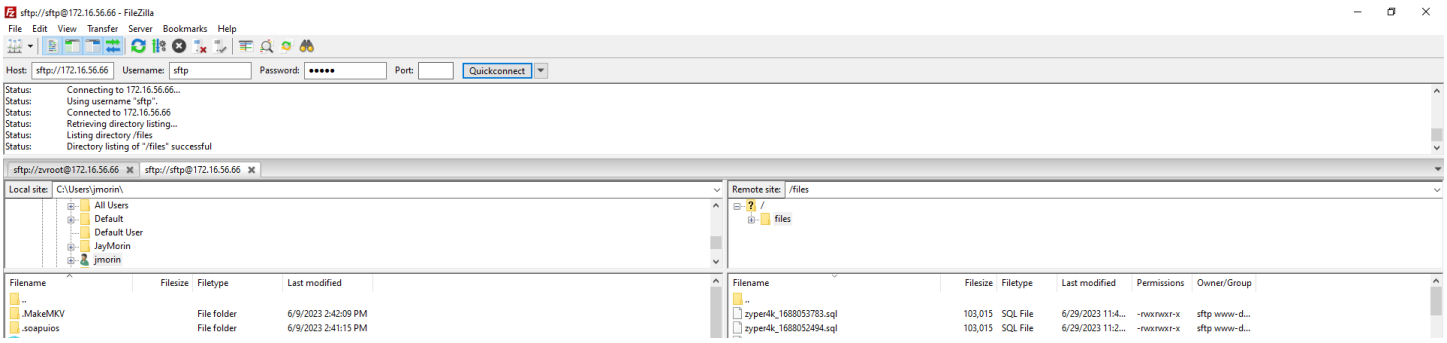
Disabled will shutdown standard FTP access to the machine

ZMP GUI – Accounts Panel

Accounts Tab

Under this tab, there is access to adjust the SFTP account and password.





Source and Display Grid enhancements
Flash LEDs for all device types is now supported

Components: ZyPer Devices, rcServer application, ZMP GUI

Overview: In this version Flash LEDS is not supported for all supported devices (except ZyPerNG units).

This feature will allow the LEDS to flash for 5 to 10 seconds before returning to their regular state.

Operation and Appearance:

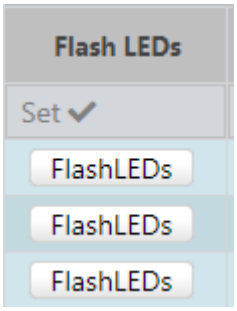
CLI

In the CLI this can be done via the use of the below command

flashLeds <deviceName|deviceMac>

GUI

In the GUI under the Device Grid, Config tab, there are now buttons for all devices.



Select the Button(s) desired and then click the “Apply” button to cause the LEDs to flash.

Power Save feature is now supported from the Display Grid for ZyPerUHD and ZyPerUHD60 devices.

Components: ZyPerUHD, ZyPerUHD60, ZMP GUI

Overview: In this version, the user can now enable the power save mode for the ZyPErUHD and ZyPerUHD60 devices.

Operation and Appearance:

Display Grid

Config -Power Save Mode

Normally done under the CLI with the below command, the user cannot enable or disable this feature under the Display Grid Config tab.

Once this is selected under the “Power Save” column

Model	Secured	IdleImage	Power Save
	Set ✔	Set ✔	Set ✔
ZyperUHD60	NA	IdleImage	disabled
ZyperUHD60	NA	IdleImage	disabled
ZyperUHD60	NA	IdleImage	disabled
ZyperUHD60	NA	IdleImage	disabled
Zyper4KWP	NA	NA	NA
ZyperUHD	NA	IdleImage	disabled
ZyperUHD	NA	IdleImage	disabled
ZyperUHD	NA	IdleImage	disabled

ZyPerXS/XR Security support

Components: ZyPerXS/XR firmware 2.0.0.0, rcServer application, ZMP GUI

Overview: For this version of 3.0 the ability to prevent other control servers or systems from managing or seeing a ZyPerXS/XR device is available through a secure feature in the CLI or GUI

To do this the MP Server will need a security key to be stored and assigned to the supported device. In turn, the device will only talk to the server that has the same key.

Operation and Appearance:

CLI

In the CLI you can run the following commands to lock the device. You must retain the key in case the key is accidentally changed in order to re-enter it to see the device again. If the key is lost the ZyPerXS/XR device will need to be factory defaults via a pin reset in order to be seen. The server key must be entered first before enabling the device for this feature.

1) Command to set the server key

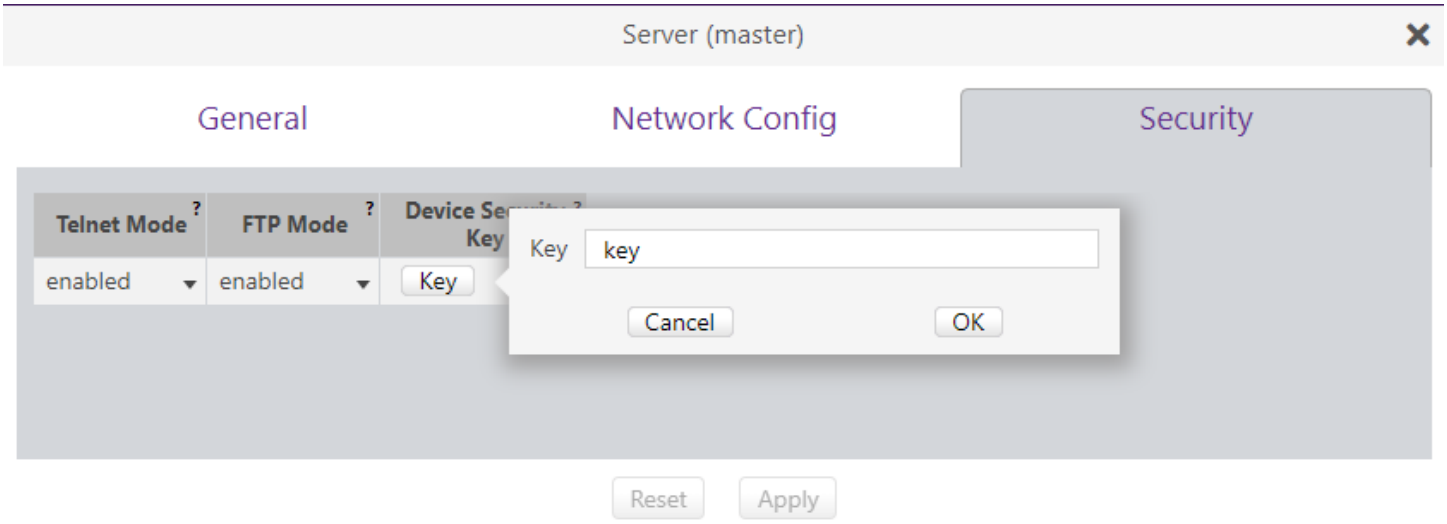
set server security deviceSecurityKey <string>

2) Command to set the Device to be security enabled.

set device <deviceMac|deviceName> security enabled|disabled

GUI

1) Through the GUI the server panel has a “Security" tab in which the key can be set
2) Select the “Key” button and it will open a menu, type in any alpha-numerical key you want 8 to 64 characters in length, and select “OK”
3) Then click the “Apply” button to save the key

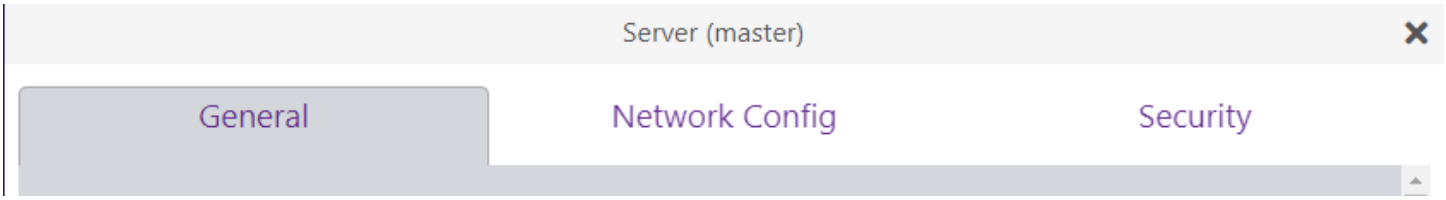


4) Go to the Device Grid you want to enable the devices for this feature.
5) Select the config tab and find the device
6) Select under the "Secured" column "enable" and click the "Apply" button to enable the device for this feature.

Each setting change will take about 5 to 10 seconds, the device in question may disappear for this time but will come back up to its prior state.

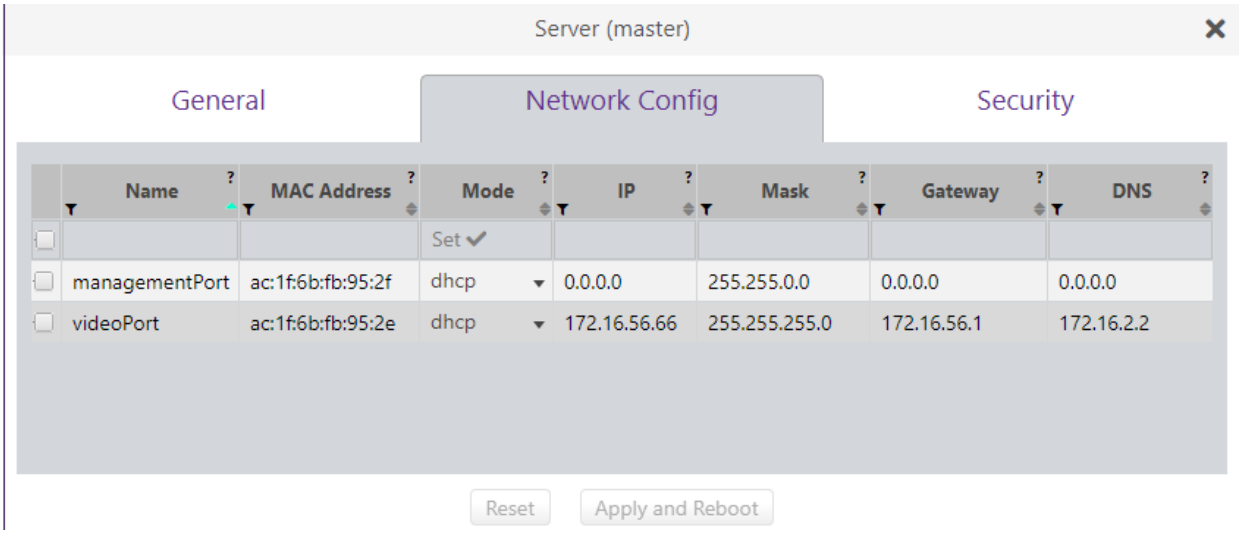
Server Panel - New tabs – General, Network Config, and Security

In 3.0, the user can use the General Server tab to change all common server settings other than the Server Interface configuration and security settings. In addition, the Redundancy configuration has been also moved out of the Server into its own Panel.



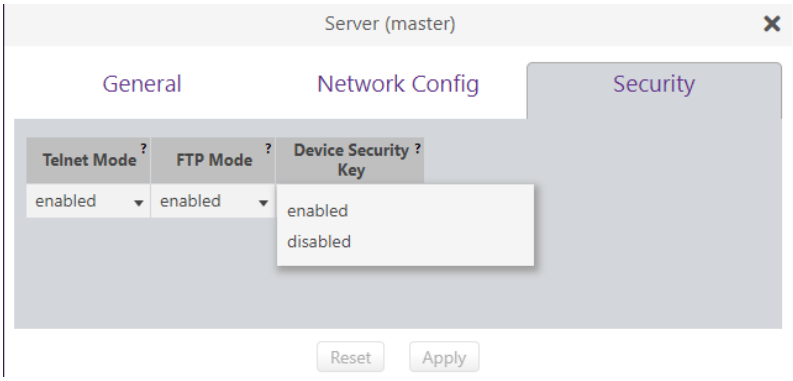
Network Config tab

In 3.0, users will be able to configure both interfaces in the GUI under this tab in the Server Panel. The IP Mode as well as DNS settings can also be configured for both VideoPort and ManagementPort.



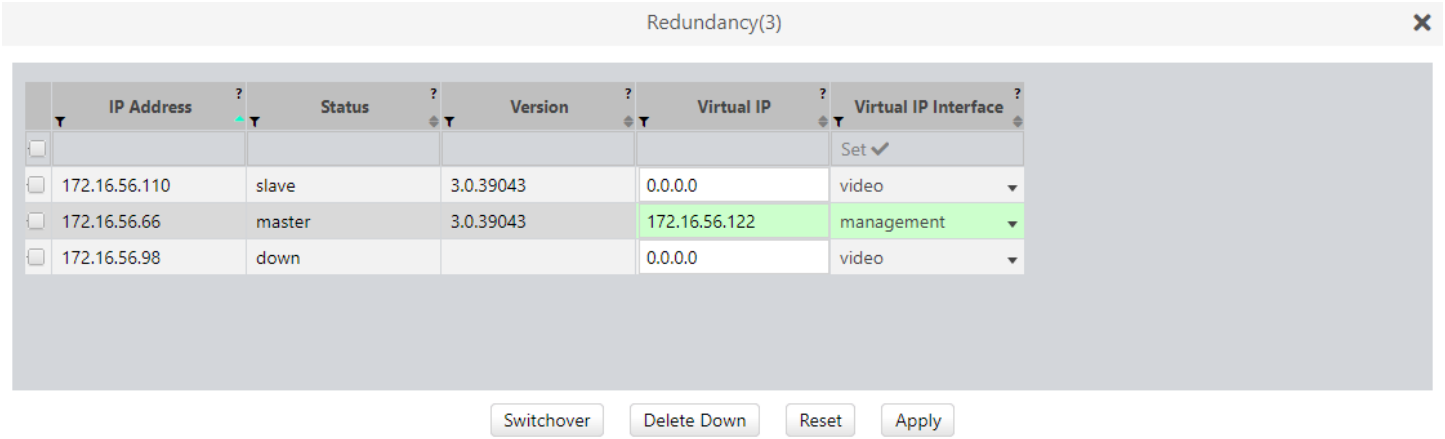
Security tab

In 3.0, under the Security tab under the Server panel, the user can now Enable or Disable Telnet and FTP Access, as well as enter a security key for the server for ZyPerXS/XR devices.



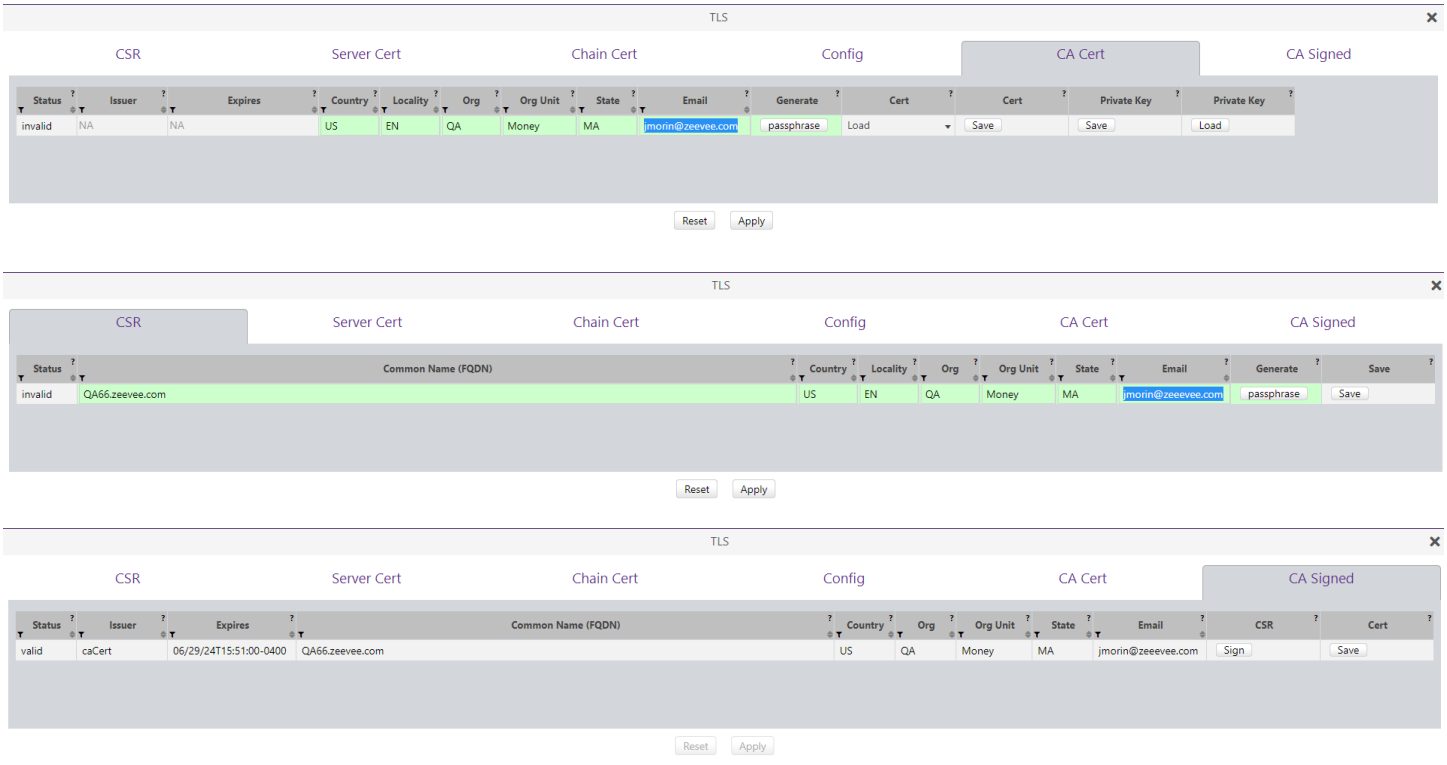
Redundancy Panel

In 3.0, the Redundancy configuration was moved out of the Server panel to its own panel. The user is now able to enter all relevant redundancy configuration information for their system including setting the virtual IP and deleting down servers. In addition, the user will be able to switch over servers as well through this Panel.



TLS Panel

In 3.0, the addition of the TLS panel will allow the user to configure TLS for Server to GUI communication. The panel consists of CA Cert and CSR tabs to create or import certificate information, CA Signed to sign a particular Cert, Server, and Chain Cert tabs to save or load certificate information. Finally, a Config tab to enable or disable TLS itself. **For further information please reference the GUI Help Panel under the TLS Section 12 or reference the 3.0 ZMP User guide.**

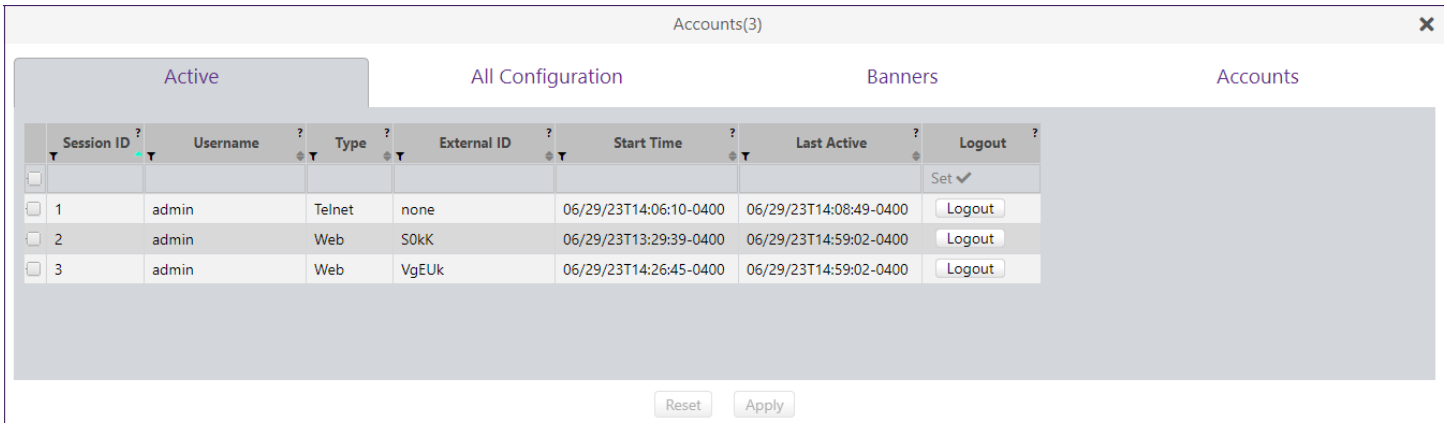


Accounts Panel

In 3.0, users can configure and manage accounts, this includes setting roles to the user accounts, setting password and access levels (through role assignments), managing account lock-out parameters, and setting specific Text and Images per login of the user under the login banner. There is also a configuration for global authorization settings under the “All Configuration” tab.

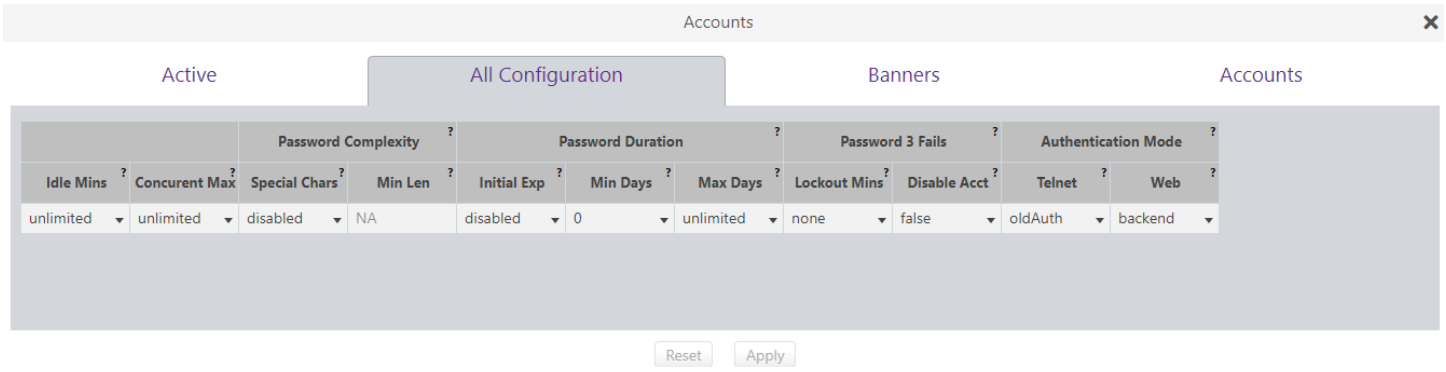
Active Tab

Settings here will allow the user to manage active accounts logged into the server. This includes a logout function to log the user out of the system. Information such as login time and last active time are available for review.



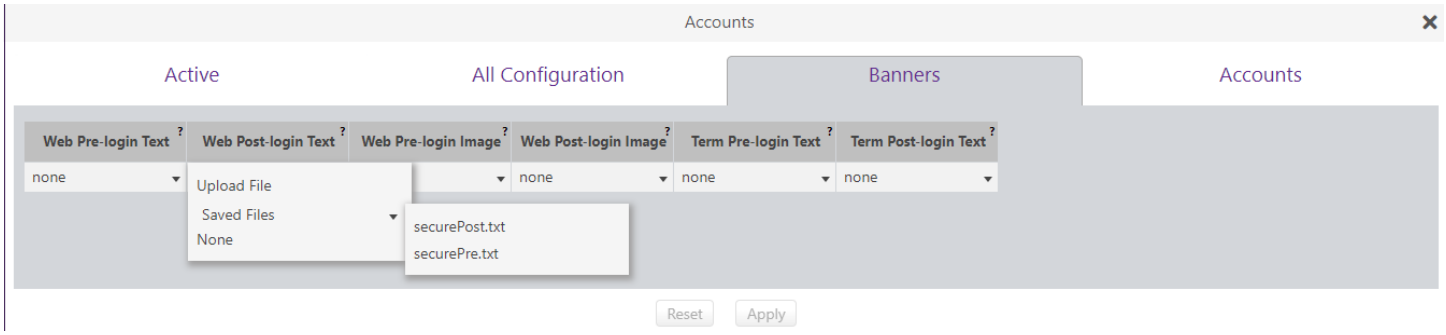
All Configuration Tab

Under the “All Configuration” tab, the user can configure the global settings for Idle sessions, max concurrent sessions, Password complexity, Password duration, Password Failure options, and Authorization Modes for Telnet and Web.



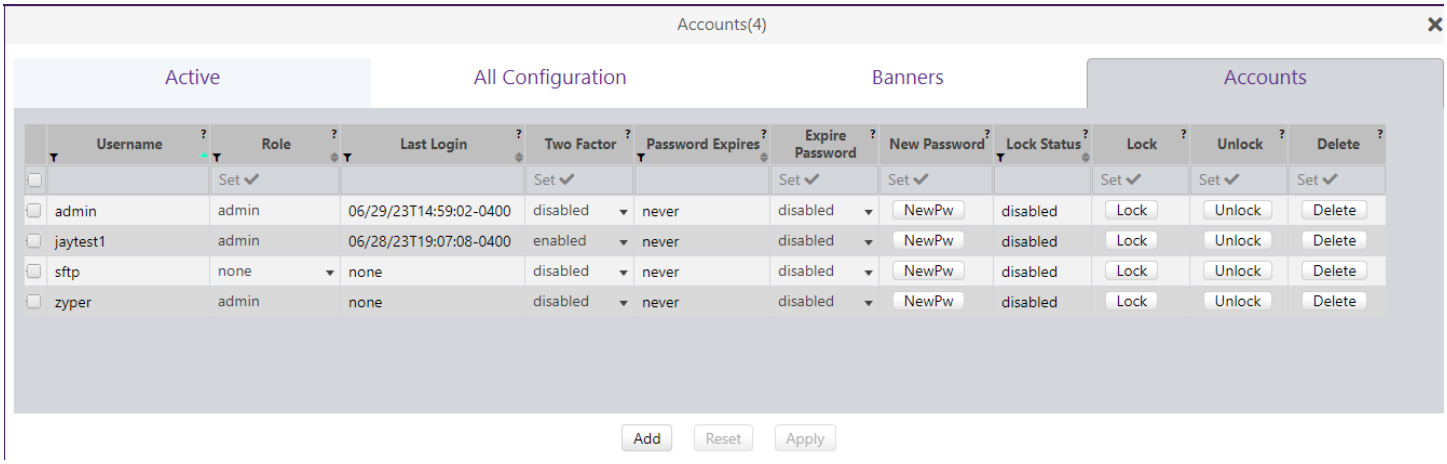
Banners Tab

In 3.0, the user can configure the banner settings that will appear in the CLI and GUI before and after proper authorization of the accounts. The Text can be displayed on both the CLI and GUI, Images for the GUI



Accounts Tab

In 3.0, the accounts can be created and managed through the Account tab under the Accounts panel. The features here allow the user to create a new account, set the Two Factor Authentication, Password Expire settings, Password, and role access the user will have. There are options to set a new Password, Lock the account, unlock the account, and delete the account as well.

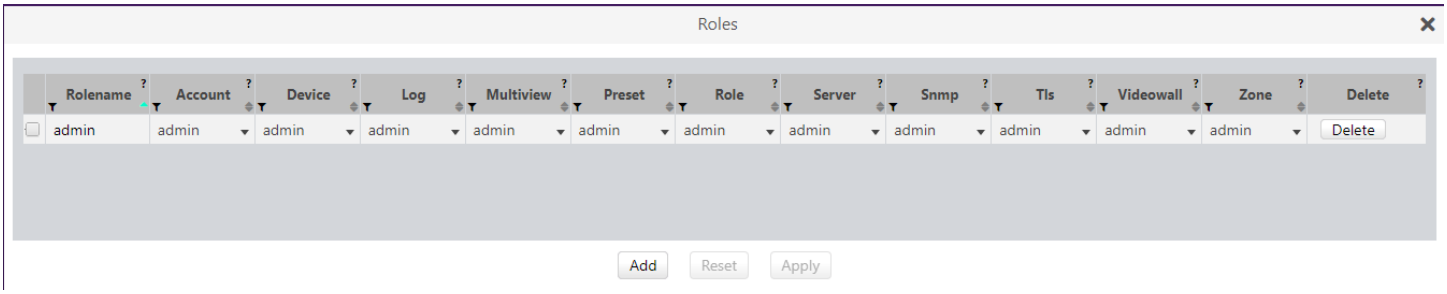


Roles Panel

Under the Roles panel, the user can create custom role access levels that can be assigned to the Accounts. This allows the user to have a particular level of access per panel of the GUI.

Levels are:

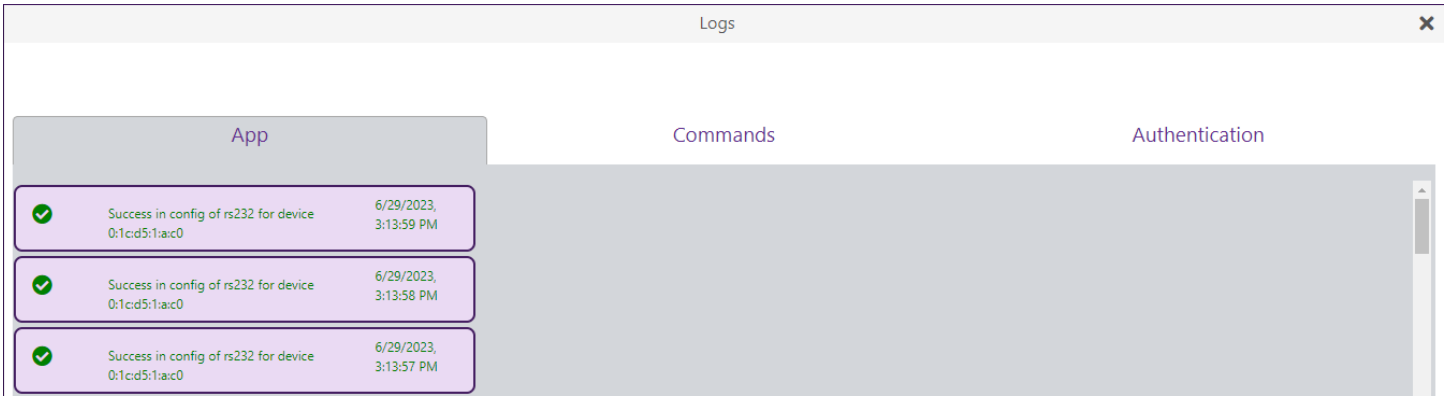
None – No access
View – View-only access
Join – View and Join access
Config – View, Join, and Config access
Admin – All access



Log Panel

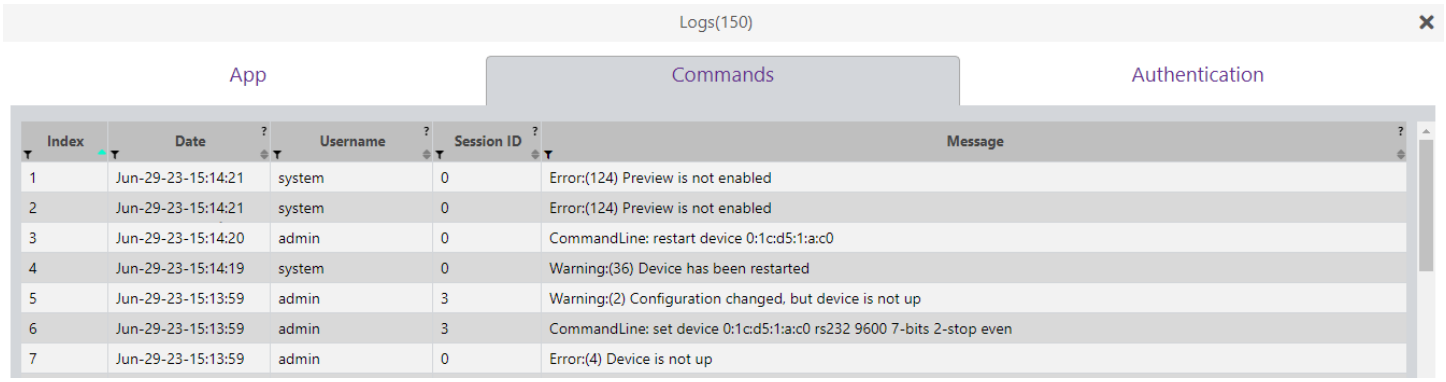
Apps Tab

The Apps tab contains the basic GUI logs displayed in prior versions of the GUI



Commands Tab

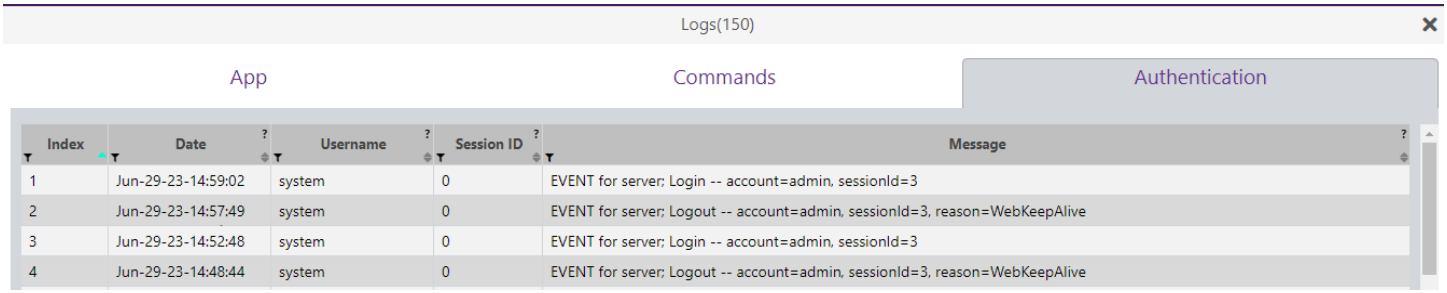
The commands tab in the log panel contains any command that is sent to the server for configuration of Devices to Server configuration commands.



Index	Date	Username	Session ID	Message
1	Jun-29-23-15:14:21	system	0	Error:(124) Preview is not enabled
2	Jun-29-23-15:14:21	system	0	Error:(124) Preview is not enabled
3	Jun-29-23-15:14:20	admin	0	CommandLine: restart device 0:1c:d5:1:a:c0
4	Jun-29-23-15:14:19	system	0	Warning:(36) Device has been restarted
5	Jun-29-23-15:13:59	admin	3	Warning:(2) Configuration changed, but device is not up
6	Jun-29-23-15:13:59	admin	3	CommandLine: set device 0:1c:d5:1:a:c0 rs232 9600 7-bits 2-stop even
7	Jun-29-23-15:13:59	admin	0	Error:(4) Device is not up

Authentication Tab

The Authentication tab under the log panel, contains any command that is sent to the server relating to authorization.



Index	Date	Username	Session ID	Message
1	Jun-29-23-14:59:02	system	0	EVENT for server; Login -- account=admin, sessionId=3
2	Jun-29-23-14:57:49	system	0	EVENT for server; Logout -- account=admin, sessionId=3, reason=WebKeepAlive
3	Jun-29-23-14:52:48	system	0	EVENT for server; Login -- account=admin, sessionId=3
4	Jun-29-23-14:48:44	system	0	EVENT for server; Logout -- account=admin, sessionId=3, reason=WebKeepAlive

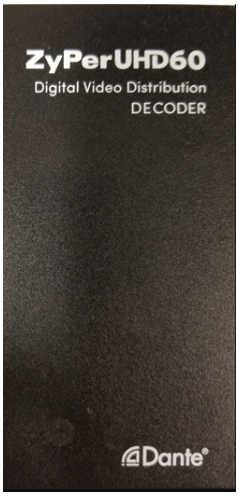
ZyPerUHD60 Dante Encoder and Decoder Support

Components: ZyPer Management CLI, ZyPer Server, ZyPer GUI ZyPerUHD60 E1 and D1

Overview: Additional changes to the rcServer to support the Dante variants of the ZyPerUHD60 encoders and decoders. These changes include new product descriptions to identify the ZyPerUHD60 units that contain the Dante feature.

Operation: The ZyPerUHD60 are configured and paired to other devices in the GUI and through the CLI like all other supported devices. Standard commands have not been changed or altered for support of this device. The commands and format of the syntax resemble the existing ZyPerUHD devices.

Appearance: The Dante encoders and decoders are identical except for the Dante logo on the top front of the unit on the right-hand side as shown below.



The following changes to the device output for config and status commands were made to allow the devices to be identified as Dante ZyPerUHD60 units.

device(0:1c:d5:1:14:2c);
device.gen; model=ZyperUHD60, type=decoder, virtualType=none, name=0:1c:d5:1:14:2c, state=Up, lastChangeId=9
device.gen; productCode=ZUHDDEC60A, productDescription=Copper Decoder - HDMI 2.0 Dante, pid=0x0

10. Upgrading and Downgrading

Unique update files are required for each platform

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

File name examples:

- ZyPerMP NUC computer: update_nuc_3.0.39043.zyper
- ZyPerMP Proserver: update_proserver_3.0.39043.zyper
- ZyPerMP VMware: update_vm_3.0.39043.zyper
- ZyPerMP Simply NUC: update_nuc2004_3.0.39043.zyper
- ZyPerMP ProServer 22.04: update_proserver2204_3.0.39043.zyper

Known issues with upgrading and downgrading

Affected Versions	Issue	Affected Hardware	Workaround
Downgrading to 2.2 from 2.3 GA and above	There is a known issue where the video wall decoders will become unassigned	All Platforms	Using the revert function to go back to 2.2 will avoid this issue. Use of revert is always preferred.

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

For versions prior to 1.8, please follow the below upgrade path

Starting Version	Jump 1	Jump 2	Jump 3	Jump 4	Jump 5	Jump 6	Jump 7
1.1.X	1.3	1.6	1.7.4	2.1	2.3.1	2.5.3	3.0
1.2.X	1.3	1.6	1.7.4	2.1	2.3.1	2.5.3	3.0
1.3.X	1.6	1.7.4	2.1	2.3.1	2.5.3	3.0	
1.4.X	1.6	1.7.4	2.1	2.3.1	2.5.3	3.0	
1.5.2.X	1.6	1.7.4	2.1	2.3.1	2.5.3	3.0	
1.6.X	1.7.4	2.1	2.3.1	2.5.3	3.0		
1.7.4.X	2.1	2.3.1	2.5.3	3.0			
1.8	2.1	2.3.1	2.5.3	3.0			
2	2.1	2.3.1	2.5.3	3.0			
2.1	2.3.1	2.5.3	3.0				
2.1.1	2.3.1	2.5.3	3.0				
2.2	2.5.1	2.5.3	3.0				
2.3	2.5.1	2.5.3	3.0				
2.3.1	2.5.3	3.0					
2.4	3.0						
2.5	3.0						
2.5.1	3.0						
2.5.2	3.0						
2.5.3	3.0						

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

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

Interface IP type and Internet state

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

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

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

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.37610	DHCP	Yes	Passed
2.5.37610	DHCP	No	Passed
2.5.37610	STATIC	Yes	Passed

2.5.37610	STATIC	No	Passed
2.5.37610	Link Local	No	Passed
2.5.1.37683	DHCP	Yes	Passed
2.5.1.37683	DHCP	No	Passed
2.5.1.37683	STATIC	Yes	Passed
2.5.1.37683	STATIC	No	Passed
2.5.1.37683	Link Local	No	Passed
2.5.2.38496	DHCP	Yes	Passed
2.5.2.38496	DHCP	No	Passed
2.5.2.38496	STATIC	Yes	Passed
2.5.2.38496	STATIC	No	Passed
2.5.2.38496	Link Local	No	Passed
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed

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

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.37610	DHCP	Yes	Passed
2.5.37610	DHCP	No	Passed
2.5.37610	STATIC	Yes	Passed
2.5.37610	STATIC	No	Passed
2.5.37610	Link Local	No	Passed
2.5.1.37683	DHCP	Yes	Passed
2.5.1.37683	DHCP	No	Passed
2.5.1.37683	STATIC	Yes	Passed
2.5.1.37683	STATIC	No	Passed
2.5.1.37683	Link Local	No	Passed
2.5.2.38496	DHCP	Yes	Passed
2.5.2.38496	DHCP	No	Passed
2.5.2.38496	STATIC	Yes	Passed
2.5.2.38496	STATIC	No	Passed
2.5.2.38496	Link Local	No	Passed
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed

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

Version-prior upgrade	Interface IP Mode	Internet Access Available?	Result of upgrade and downgrade to and from this release
2.5.37610	DHCP	Yes	Passed
2.5.37610	DHCP	No	Passed
2.5.37610	STATIC	Yes	Passed
2.5.37610	STATIC	No	Passed
2.5.37610	Link Local	No	Passed
2.5.1.37683	DHCP	Yes	Passed
2.5.1.37683	DHCP	No	Passed
2.5.1.37683	STATIC	Yes	Passed
2.5.1.37683	STATIC	No	Passed
2.5.1.37683	Link Local	No	Passed
2.5.2.38496	DHCP	Yes	Passed
2.5.2.38496	DHCP	No	Passed
2.5.2.38496	STATIC	Yes	Passed
2.5.2.38496	STATIC	No	Passed
2.5.2.38496	Link Local	No	Passed
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed

- ProServer (Base Installed Version is 1.8.34703)

Version-prior upgrade	Interface IP Mode	Internet Access available?	Result of upgrade and downgrade to and from this release
2.5.37610	DHCP	Yes	Passed
2.5.37610	DHCP	No	Passed
2.5.37610	STATIC	Yes	Passed
2.5.37610	STATIC	No	Passed
2.5.37610	Link Local	No	Passed
2.5.1.37683	DHCP	Yes	Passed
2.5.1.37683	DHCP	No	Passed
2.5.1.37683	STATIC	Yes	Passed
2.5.1.37683	STATIC	No	Passed
2.5.1.37683	Link Local	No	Passed
2.5.2.38496	DHCP	Yes	Passed
2.5.2.38496	DHCP	No	Passed
2.5.2.38496	STATIC	Yes	Passed
2.5.2.38496	STATIC	No	Passed
2.5.2.38496	Link Local	No	Passed
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	DHCP	No	Passed
2.5.3.38647	STATIC	Yes	Passed
2.5.3.38647	STATIC	No	Passed
2.5.3.38647	Link Local	No	Passed

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

Version-prior upgrade	Interface IP Mode	Internet Access available?	Result of upgrade and downgrade to and from this release
2.5.37610	DHCP	Yes	Passed
2.5.37610	STATIC	Yes	Passed
2.5.1.37683	DHCP	Yes	Passed
2.5.1.37683	STATIC	Yes	Passed
2.5.2.38496	DHCP	Yes	Passed
2.5.2.38496	STATIC	Yes	Passed
2.5.3.38647	DHCP	Yes	Passed
2.5.3.38647	STATIC	Yes	Passed

Appendix A 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 the 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 outputs 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/