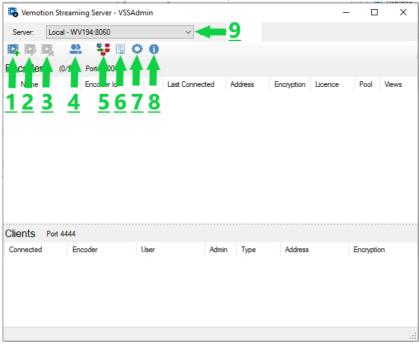


Vemotion Streaming Server

Definition: The Vemotion Stream Server is used to consolidate and distribute the Vemotion video streams.

The below screen is your welcome screen to the Vemotion Streaming Server. Please scroll down to see further information on each tab.

- 1. Add encoder Here you can add additional encoders to the Vemotion Streaming Server.
- 2. Edit encoder Allows you to edit the encoder configuration.
- 3. Delete encoder Allows you to delete encoders from your Vemotion Streaming Server.
- 4. Users Here you can set permissions as well as which streams users are able to access.
- 5. **Server replication** Here users can replicate configurations from one streaming server to another. (This option will only be visible when enabled in your options menu.)
- 6. Client Licenses If you require streams may only be viewed through Vemotion Viewers installed on specific devices you can apply a licence. This licence should match the licence installed on the Vemotion Viewer.
- 7. **Options** This opens the options / settings pages for your Vemotion Streaming Server.
- 8. About This provides you with software and Vemotion licence information.
- 9. Server This shows you which server you are connected to.



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Add encoder – Select the add encoder icon on your home screen.

👪 Vemotion Streaming Server -	VSSAdmin					-		×
Server: Local - WV194:8060		~ •	Connected					
R D R 3. 😲	5 O O							
coders (1/50) Port 8000								
Name Enco	der Id	La	st Connected	Address	Encryption	Licence	Pool	Views

In this window you can set up the following.

Add New Encoder		×
	[]	
Name	Name	
Encoder Id	Ad ~	
Licence	Any \checkmark	
Mobile	Config	
Access	Users	
Email Notifications Comma separate Events	d list of email addresses for encoder notifications Number Of Events Enabled: 0 External Host (Server Options):	
PGP Video Encryp Status: Ur		On / Off
	Generate Query Assign	Remove
	ОК	Cancel

- 1. Name This is the name of the encoder that will be presented to the user in their list of streams they connect to. It is helpful to add a camera name / location.
- 2. Encoder ID This needs to match your encoder, example VBOX123456. The encoder ID is the key to being able to connect to the server.
- 3. License Select the appropriate licence for your application.
- 4. Config Please see full brief below.
- 5. Users Set which users will be granted access and their permissions to this encoders stream.
- 6. Email Notification Add users you would like to be notified via email in the case of an event.

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7. Events – Tick the check box for events notifications you would like to activate.

Encoder: Stream Not (0.5%		D - D
Event	On / Off	Source Filter	Information Filter	Data Filter
Ю				
Bookmark				
VMD				
Recording				
GPS				
ONVIF				
Tamper				
Hardware				
Vibration				
Seismic				

Above you can select the events you would like to turn on / off

8. PGP video encryption – Allows user to setup video encryption using PGP encryption.

PGP encryption allows the user to be able to assign keys to the encoder in order to encrypt the recorded files. Keys can be produced by bespoke software or a common standard like PGP4Win v3.1.1. The process of encryption and decryption will require Streaming Server to push the keys to the encoder and V264 to decrypt once downloaded.

PGP Key Generation	×
Pass Phrase	
Identity	
Output Name	
Generate Keys Close	

Above you can see your PGP encryption setup. Your Identity and output name are auto filled however you are able to edit this information.

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- 2. **Mobile Config** This option will only be available if you have selected the mobile licence and will allow you to configure your mobile encoder. In this config window you are presented with the following three tabs.
 - 1. General tab Allows you to turn on / off the following features
 - 1. Auto connect Will automatically connect when turned on.
 - 2. Date / time overlay Will show the date and time on your stream.
 - 3. Push to talk audio Will enable the PTT (push to talk) feature on your viewer. This allows you to push a button on your screen to send audio To the desired location providing your device is compatible.
 - 4. Bluetooth microphone Allows you to connect a Bluetooth microphone.
 - 5. Background mode Allows app to run in the background while streaming.
 - 6. Torch Turns on torch when app is opened.
 - 7. Theme colour Allows you to set the colour theme on your app.
 - 8. Default video source Set the default camera / source as your input.
 - 9. Live video Will open your app with a live stream automatically.

10 Live audio – Will open your app with live audio automatically.

- 11. Send location Will provide GPS data. Your device must have this capability.
- 12. Encode using H265 Default is H264. This will change the codec to H265.

General Profiles and Recording Servers and RTSP	Reset and Copy
State Editable Auto Connect ✓ Date Time Overlay ✓ Push To Talk Audio ✓ Bluetooth Microphone ✓ Background Mode ✓ Torch ✓	Reset Reset All Copy To All
Theme Colour	
Transmission Default Video Source Back ~	
State Editable Live Video	

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2. Profiles and recording tab – Allows you to add, edit and configure profile options as well as configure recording options.

dit Mobile E	ncoder Configu	tion	>
General P	rofiles and Record	9 Servers and RTSP	
D (1		Reset and Copy	
Profiles Default		Editable Add Reset	
Deraul	352*288 6fps 1		
	352*288 25fps	Edit	
	· · ·	Delete	
	640*480 10fps		
	640*480 30fps		
	1280*720 5fps		
	960*540 30fps		
	1280*720 30fps	SUUUKDPS	
Au Profile A Profil	Increment Profile to Change Profile uto Change Time e Decrease Time		
Record	-	Editable	
	Activation	Not Allowed ~	
	Pre-event Buffer	0 🚖 Seconds	
	Archive Max Size		
	Pre-event Buffer		

Profiles

- 1. **Profiles** Select your preferred default profile from a list of available profiles. You are able to add, edit or delete profiles within this list.
- 2. Auto increment profile Ticking this option will allow the profiles to incrementally increase the selected profile until it reaches your target profile while ensuring it stays within the bandwidth availability.
- 3. Auto change profile When this option is enabled your encoder will revert to your default profile when you are not actively using it. You are able to set timeout below.
- 4. **Profile auto change time** Set the timeout (in seconds) for your decoder to revert to to your default profile.
- 5. **Profile decrease time** If there is low bandwidth available this option will automatically decrease your profile incrementally until you fall within the bandwidth limit. Timer set in seconds.



Recording

- 1. Activation Select from the following three options in the dropdown.
 - Not allowed
 - User / client controlled (Gives the end user control)
 - Always on
 - 2. **Pre-event buffer** Enable this option to include a pre set amount of time in your recording.
 - 3. Archive max size Set the maximum capacity in gigabytes recordings are able to Within the storage location.
 - 4. Pre-event buffer Tick this to enable this feature.

5. Include audio – Tick this to include audio in your saved recordings.

Edit Mobile Encoder Config	uration		×
General Profiles and Recor	ding Servers and RTSP		Reset and Copy
Profiles	Editable 🗸	2	Reset
Default Profile		Add	
352*288 6fps	100kbps	Edit	Reset All
352*288 25fps	300kbps		Copy To All
640*480 10fps	400kbps		
640*480 30fps	800kbps		Legacy Functionality
1280*720 5fps	s 500kbps		
960*540 30fps	s 1200kbps		
1280*720 30fp	os 3000kbps		
Auto Increment Profile Auto Change Profile Profile Auto Change Time Profile Decrease Time	· ☑ • 30 ◆		
Recording	Editable 🗹	2	
Activation	Hot Horrod		
Pre-event Buffer	Not Allowed User / Client Controlled		2
Archive Max Size			
Pre-event Buffer			
Include Audio			OK Cancel

Reset and copy

- 1. Reset Reset this encoder to the default configuration.
- 2. **Reset all** This option allows you to select from a list of encoders or all your

encoders and reset them to the default configuration at the same time.

3.Copy to all – Allows you to select which encoders you would like to copy your configuration to.



- 3. Servers and RTSP tab In this tab you are able to configure additional servers and RTSP sources.
 - 1. Server Here you can add, edit, or delete servers.
 - 1. To add a server you will need the host name, encoder id, port number, and select if you are using encryption.
 - 2. RTSP sources Here you can add external RTSP sources for restreaming.
 - 1. To add an RTSP source you will need the source address as well as you will need to Select the transport protocol from the following options; TCP, UDP, and Multicast.
- 4. This tab also allows you to reset or copy your configuration to all / selected encoders

simultaneously.

Edit Mobile Encoder Configuration	'n		×	
General Profiles and Recording Additional Servers Host	E	dd Reset and Copy Reset dt Copy To Al lete Legacy Functionality		
RTSP Sources	E	dd dit lete		← Servers and RTSP tab.

Encoder Serv	er	×	
Host:]	
Encoder ID:			
Port:	8000		
Encryption:	No Encryption ~		
	OK Cancel		← Adding a server.

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RTSP Source			\times	
Address:	[
Transport:	ТСР	~		
		OK Cancel		← Adding an RTSP source.

3. Users – Here you will be able to configure user settings.

🛂 Vemotion Streaming Server - VSSAdmi	in			- 🗆 >	×
Server: Local - WV194:8060	V 🗸 Connected				
Q IŞ Q, 🙁 👯 🗟 🔿	0				
Encoders (0/Port 8000					
Name Encoder Id	Last Connected	d Address	Encryption Licence	e Pool Views	s
Clients Port 4444					
Connected Encoder	User Ad	fmin Type /	Address	Encryption	
🚹 Client / Server Version Mismatch					.::

4. Users window – Here you are able to add, edit and delete users to / from the users list.

Users X Admin Name Super User VB1x Web Web Advanced VISer Name VB1x VB1x VB1x Veb Veb Advanced
Admin Name Super User VB1x Web Web Advanced
Admin Name Super User VB1x Web Web Advanced
Vser Name
Close



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5. Select the add user icon to create a new user.

Users				×
4 🧈 🕹				
A Name	Super User	VB1x	Web	Web Advanced
User Name				

6. An add user window will now be open with the following options.

User

- 1. Name Create the username. This can be a name of your choice.
- 2.**Password** Create your user password or use the 'randomise' button to create a password for you.
- 3. Ops channel Allows you to select one encoder as the Ops channel.

When connecting to the server using a Vemotion Viewer, the user can opt to connect to a specific video feed, if they are allowed to, or the 'Ops Channel' if a default stream is specified.

When connecting to the 'Ops Channel', the video feed presented to the user upon connection is called the 'Default Stream' and is set using this option.

When connected to the Ops Channel, the feed that the user is watching can be changed dynamically within the Vemotion Viewer application in the users tab.

Note: To allow the user access to the Ops Channel, set a default stream. If no default stream is set, the Ops Channel will not be presented to the user for selection.

- 4. Admin Remote access This gives access rights to the VSSAdmin / client tool to access a remote streaming server for configuration.
- 5. **Super user** Allocating this user as a super user ensures they can always login using viewer Irrespective of licenses / viewers in use.

Permission

- 1. **PTZ control** enable user to use PTZ on enabled devices.
- 2. Switch camera Enable user to change the selected camera on the encoder.
- 3. Change video quality Allow user to change the profile used in the Vemotion Viewer.
- 4. Local recording Allow user to record to their local computer.

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- 5. Local Snapshot Allow user to take and save snapshots to their local computer.
- 6. Assign video to users Gives user permission to assign a stream to another users OPS channel.
- 7. Recordings / event access Gives user access to recordings and events.
- 8. Recordings / event control Allows user to download and delete recordings.
- 9. Audio output control User can send audio to source through Vemotion Viewer.
- 10. Alarm output control Allows user to set alarms through Vemotion Viewer.
- 11. Encryption services Allows user to access encryption settings through Vemotion Viewer.
- 12. **remote services** Allows user to access camera & encoder config pages through Vemotion Viewer.
- 15. Select all Ticks all the above features

Encoder access

1. Select the encoders you wish this user to have access to.

Jser	Encoder Access
Name	Name
Password Randomise	
Ops Channel (None) ~	
Admin - Remote Access (Maximum reached)	
Super User	
Permissions	
PTZ Control	
Switch Camera	
Change Video Quality	
☑ Local Recording	
🗹 Local Snapshot	
Assign Video To Users	
Recordings/Event Access	
Recordings/Event Control	
Audio Output Control	
Alarm Output Control	
Encryption Services	
Remote Services	
Mobile Viewer	
Web Viewer (Maximum reached)	
Web Advanced Viewer (Maximum reached)	
Select All	
Mobile	
Edit	Select All

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7. Select the Server replication icon. (This icon will only be visible if the feature has been enable through the options menu.)

Server: Local - WV194:8060 ✓ ✓ Connected III III III III III IIII IIII IIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		
Encoders (0/50) Port 100		
Name coder Id Last Connected Address Encryption Licence	Pool \	Views

- 8. In the Server replication window, you will see a list of available servers. Below your servers list you have the following options.
 - 1. Manually added servers click this to add, edit or remove servers. In order to add a a server you will need to know the Ip address, description (you can decide on this) and the port the server is using.
 - 2. Link servers to group When servers are added to this group they will adopt the Configuration of the replicated server.
 - 3. Copy configuration Select the server configurations will be copied from / to.
 - 4. Check configuration matches checks to ensure configurations are the same.
 - 5. Add & remove buttons These allow you to add or remove a server from the "Replication Group Servers"

Server Repli	cation							>
Available Se	ervers				Replication Group Se	rvers		
Manually Added	Machine Name	Port	Server	Replication Server Count	Machine Name	Port	Server	
	WV194	8060	Local	0				
	anually Added Column		4	Link Servers To Group ->			🕈 🗭 Add	- 📮 Remove
■M+ Manu	ally Added Servers		é	Copy Configuration ->				
			\$°.	Check Configuration Matches ->				Close

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9. Select the options icons.

4 Vemotion Streaming Server - VSSAdmin		-	
Server: Local - WV194:8060	V 🗸 Connected		
III ID III. 🙁 💱 🗟 🗘 🛈			
Encoders (0/50) Port 8000			
Name Encoder	Last Connected Address	Encryption Licence	Pool Views

- 10. Your Options window will now be open displaying two tabs.
 - 1. VSS admin options tab Here you can set server connection options.
 - 1. Connection time out to server Will try to connect for the allocated amount of time.
 - 2. **Streaming server advertisement request port** Set your outgoing port for your Streaming Server.
 - 3. **Streaming server advertisement receive port** Set your Streaming Server inbound port.
 - 4. **Replication enabled** This will allow you to replicate Streamer server configurations onto another Streaming server. (Done through replication icon on the home page.)
 - 5. Timeout (seconds) Will try to connect for the allocated amount of time
 - 6. This window also allows you to manually add, edit, or remove servers.

2 Connect	ever Options - Local - WV194:8060	
	on time out to server (seconds)	
	Server Advertisement Request Port	
262 🖨 Streamin	Server Advertisement Recieve Port	
Replicatio	Enabled 2 🖨 Timeout	(seconds)
lanually Added Serv	rs	
IP Address	Port Description	Add
		Edit
		Remove

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- 2. Server option local tab In this tab you are able to set recording and server options.
 - 1. Enable recording Tick this box to enable and set recording options.
 - 2. **Overwrite** Ticking this will allow recordings to overwrite the oldest recordings once your storage is full.
 - 3. Stop when full Will stop recording once your storage has reached its limit.
 - 4. Video Storage (local path on server) Select storage location.
 - 5. Video length Your videos will automatically be split into files, select the length for each video file.
 - 6. Allow disk space (GB) Allocate disk space available for recordings to be saved.
 - 7. **Retention period (days)** This is how long your videos will remain saved until it is replaced with current footage.
 - 8. External host name Address of the server that your Vemotion Viewer connects to. This feature will allow for email alerts.
 - 9. Backup Will backup your Streaming Server settings to a file location of your choice.

ptions			2
VSSAdr	min Optio	ns Sever Options - Local - WV194:8060	
	ording nabling R Oven Stop	write when full	
c:\S	treaming	(local path on server): ServerVideo Storage	
2	turned .	/ideo Length (minutes) Nocated Disk Space (GB) - maximum of 2GB for OS disk	
0	÷	Retention period (days)	
Вас	kup	External Host Name (e.g. vma.vemotion.com) Restore	
		ОК	

10. **Restore** – Restore Streaming Server settings from a saved backup.



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11. Select the about icon.

🔩 Vemotion Streami	ng Server - VSSAdmin				_		×
Server: Local - WV	/194:8060	 Connected 					
	💱 🗟 🗘 🚺						
Encoders (0/50)	Port 8000						
Name	Encoder Id	Last Connected	Address	Encryption	Licence	Pool	Views

12. The about window will provide you software and licence information. This will include how many licences you own as well as how many are currently in use. Select the licence button in order to see or update your licence.

	\	on	notion		
	v				
/SSAdmin v3.12.8.0 Server Version: v3.12.7.0 Copyright © 2018-2020					2
This software is made po	ssible	by the following	open source projects		
Licence Valid					
Server Instance	:		Desktop Super User Connections	:	1
Admin Licences	:	. (,	Desktop User Connections	: 1	0
Any Encoders	: 5	0 (0 used)	Max Monitor Clients	:	0
Windows Encoders	:	0 (0 used)	Mobile Super User Connections	:	1
Linux Encoders	:	0 (0 used)	Mobile User Connections	: 1	0
Mobile Encoders		0 (0 used)	Mobile Max Users	: 1	1 (0 used)
Mobile Pool Encoders	:	0 (0 used)	RTSP/ONVIF User Connections	:	0
Mobile Pool Concurrency	:	D	Web Super User Connections	:	0
Allow SSL	: Ye	s	Web User Connections	:	0
Allow PGP Encryption	: Ye	S	Web Max Users	:	0 (0 used)
Server Recording	: Ye	s	Web Adv Super User Connections	:	0
Max Recordings	:	0	Web Adv User Connections	:	0
Allow VProxy	: Ye	S	Web Adv Max Users	:	0 (0 used)
			Max Users	: 2	0 (1 used)