User manual for the AgileR 2.0

Software Version: 1.11.x and higher

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SAFETY INSTRUCTIONS

Please read the following instructions to preserve your own safety before using any equipment. Carefully observe all warnings, precautions and instructions on both devices and this operation manual. Retain this manual for future reference.

Water and Moisture
Do not operate device in a wet environment, for example near a bathtub, kitchen sink or laundry tub. Do not use the device in areas with high humidity, like a wet basement or near a swimming pool. Never install communication cables in wet environments or areas with high humidity, unless the jacks and cables are specifically designed so. Do not touch the product with wet hands.

Cleaning
Unplug every communication line and in special the power source before cleaning and polishing to prevent an electric shock. Do not use liquid or aerosol cleaners. Use a slightly wet lint-free cloth for cleaning the exterior of the device.

Ventilation
Do not block any of the ventilation shafts of the device. Never cover the slots and openings to prevent overheating. Do not install the device near heat sources as radiators, kitchen appliances and other devices that produce heat. Do not place the device in direct sunlight or close to a sun-heated surface.

Lightning
Never use the device during a lightning storm. Be careful connecting and disconnecting communication cables during lighting storms.

Dust
Do not operate the device in areas with high concentrations of dust.

Vibration
Do not operate the device in areas with vibration or places with an unstable surface.

Power Connection
This product works on a dangerous voltage. Do not attempt to open this product when the power line is connected or where this action requires any tool. This product should always be powered by a grounded outlet. Never connect the power cord coming with the system to any other device or product.

When the product has visual damage, do not connect any power supply but contact the company. Connecting the power supply could lead to unrepairable damage. The power cord / power supply connection serves as the main disconnect device for this equipment.

The power cord must be always easily accessible. Make sure the power cord will not get stuck between surrounding objects, is walked on, or got items placed upon it. Pay particular attention to the plugs, receptacles and the device jacks. Do not tug the power cord. If the provided plug does not fit the jack, contact an electrician. Never install cables or any peripherals without unplugging the device from its power source.

Servicing
Do not service the device. Removing and opening the device may expose you to dangerous voltages and other hazards, and warranty will expire. Leave servicing to qualified service employees only.

Unplug the power source from the device and contact service employees when the following defects or errors occur:

- If the power cord or plug is damaged or frayed
- If liquid has been spilled into the device
- If objects have fallen in or on the device
- If the device has been exposed to rain or moisture
- If the device has been dropped and has been exposed to a major shock
- If the cabinet has been damaged
- If the device seems overheated or is overheated
- If the device emits smoke or a abnormal smell
- If the device fails to operate according to the operating instructions

Accessories
Only use accessories specified by the manufacturer, or sold with the device.

Communication Lines
Do not use communication equipment to report a gas leak in the vicinity of the leak.

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PRODUCT WARRANTY

Warranty Start Date: "Start Date" as used in this policy means the date this product is shipped from the facilities of Mobile Viewpoint B.V.

Mobile Viewpoint B.V. warrants that for a period of one (1) year from the Start Date, the Mobile Viewpoint B.V. hardware purchased by customer ("Hardware") shall be free of defects in material and workmanship under normal authorized use consistent with the product instructions. This product warranty extends only to the original purchaser. In the event that Mobile Viewpoint B.V. receives notice during the warranty period that any Hardware does not conform to its warranty, Customer's sole and exclusive remedy, and Mobile Viewpoint B.V. sole and exclusive liability, shall be for Mobile Viewpoint B.V., at its sole option, to either repair or replace the non-conforming Hardware in accordance with this limited warranty. Hardware replaced under the terms of any such warranty may be refurbished or new equipment substituted at the option of Mobile Viewpoint B.V.. Mobile Viewpoint B.V. will use commercially reasonable efforts to ship the replacement Hardware. Actual delivery times may vary depending on the customer location.

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Version
User manual version USA
Hardware version: WMT AgileR 2.0, Playout Server and Videomanager.
August 5, 2014

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2. INTRODUCTION

The User Manual contains all essential information for operating the WMT, Playouts and Videomanager . This manual includes a description of the system functions and capabilities modes of operation. Step-by-step procedures for using the AgileR 2.0 , Videomanager, and Playout servers. We use a lot of picture to make it easier to understand.

3. HOW DOES THE AGILER 2.0, VIDEOMANAGER AND PLAYOUT WORK

The AgileR 2.0 connects through the mobile operator network and/or Ethernet network to our cloud Videomanager. The Playout server is also connected to Videomanager. The Videomanager says to AgileR 2.0 where the playout is located and how to reach it through the internet. This setup makes it very easy to manage your WMT and Playout server at one central place. In the figure below you can see how a whole setup works.

4. DEFINITIONS

Term	*Definition*
APN	Access Point Name, the name of the access point that is used to connect to the mobile provider.
BNC	Bayonet-Neil-Concelman connector for connecting a camera.
IP	Internet Protocol, a protocol used to create a network between computers.
LED	Light Emitting Diode, which can be the display or one of the lights in the buttons.
PC	Personal Computer, which can be used to configure a WMT.
RTT	Round Trip Time, the time it takes for a packet to travel from one point to another and back again.
SIM	Subscriber Identity Module, a smartcard with information for accessing a mobile network.
WMT	Wireless Multiplex Terminal, the unit described in this document.
XLR	A connector for connecting an audio device.

5. AGILER 2.0 USAGE AND SPECIFICATIONS

The AgileR 2.0 can be used on the back of a camera or in a backpack. The pictures show the different use cases and also the minimum distance between the aerial of the unit and the human body. The Unit complies with the FCC regulations for RF exposure to the human body (SAR) when taking into account a minimum distance of 2.5 cm between the aerial and the human body. See chapter 10 for more detals

Figure 1: Back of the camera with antenna array

Figure 2:Minimum distance between the head and the unit aerial must be bigger than 2.5 cm using it on the back of a camera

Figure 3: also insure that the distance between the antenna array and the head is bigger than 2.5 cm carying the AgileR in a backpack

In case of

Technical specifications

Interfaces
10/100/1000 base-t via USB Ethernet adapter
SD;SD- SDI,SD-HDMI, composite + 2x analog audio
HD;HD- SDI,HD-HDMI
Mini jack IFB/Audio return
USB for Store & Forward FTP file transfer
Touch screen
6 simcards modems
Wi-Fi

Video input formats:
SD; full D1, ½ horizontal, ¼ resolution in Pal and NTSC mode
HD; 720p50, 720p60 and 720p59,94
HD; 1080i50, 1080i60 and 1080i59,94

Supported Video Encoding:
H.264 main profile MVP codec
Framerate 50, 60, 59,94
On the fly resolution change (as of sw 1.0.9.5)
Videobitrate between 64 Kbit and 8 Mbit

Recording
On Internal solid state disk separate from live

Supported Audio Encoding:
AAC 96-128 kHz LFE

IP management Network Interface:
10/100/1000 base-T (combined with fixed IP connection via dongle)

Mobile Network Interface (6 times):
LTE Bands:
B2 (1900 Mhz)
B4 (AWS) (1700/2100 MHz)
B5 (850 MHz)

Hardware:
Dedicated appliance
Weighs approximately 1,5 kilograms
21cmx15cmx7,5cm (W x b x h)

Power source
Any voltage between 12 and 24 volt like 14.4 volt Li-ion V-Mount cells

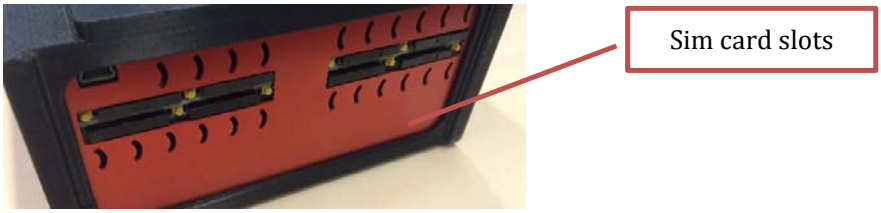
Operating system
Embedded Linux

Local storage
32 Gigabyte
Error correction methods implemented

Forward Error Correction (FEC)
H.264 layer redundancy (MobileViewpoint IPR)

6. CONNECTING THE AGILER 2.0

1. Make sure that the power is switched off
2. The backpack version of the AgileR 2.0 has a bottom plate that needs to be unscrewed to get to the sim cards
3. Insert the SIM's into the SIM slots on the bottom of the unit. Use a thin object such as a pencil to press the yellow button next to a SIM slot to release it. Place the SIM in the SIM cardholder and place it back in the slot.
4. Connect the antennas to the SMA coax connectors on the top of the WMT housing
5. Connect the video output of the video camera to the BNC SDI Input/HDMI/Analogue connector on the top of the WMT housing;
6. Connect the AC/DC adapter to the XLR 4 pole power connector and switch the WMT on.
7. Configure the WMT client



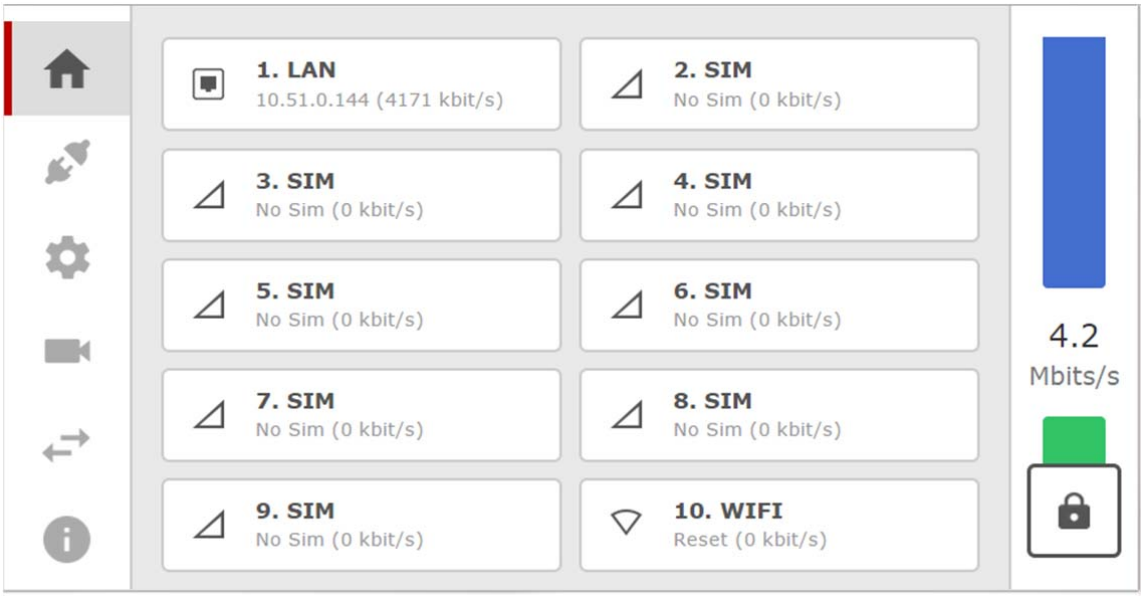
7. OPERATING THE WMT CLIENT

This chapter describes the usage of the WMT client by LCD touch screen. This will give you an interactive way to control the WMT client. The client is divided in multiple interactive pages which can be opened by using the tabs on the left side.

Before you select a tab, be sure the “Display Lock” is off. Make sure the button on the right- is turned to green. You can scroll the button to the bottom by touching it and pulling it to the right. The display is now unlocked and you can start configuring. When the display is not used for a certain amount of time, it will automatically lock to prevent changes by accident.

Overview

Picture 2 shows the “Overview” tab on the LCD touch screen. This screen provides you basic status information on the individual connections and the sum of the current bandwidth usage.



Picture 1: Overview screen of the WMT.

Viewing the status of a connection

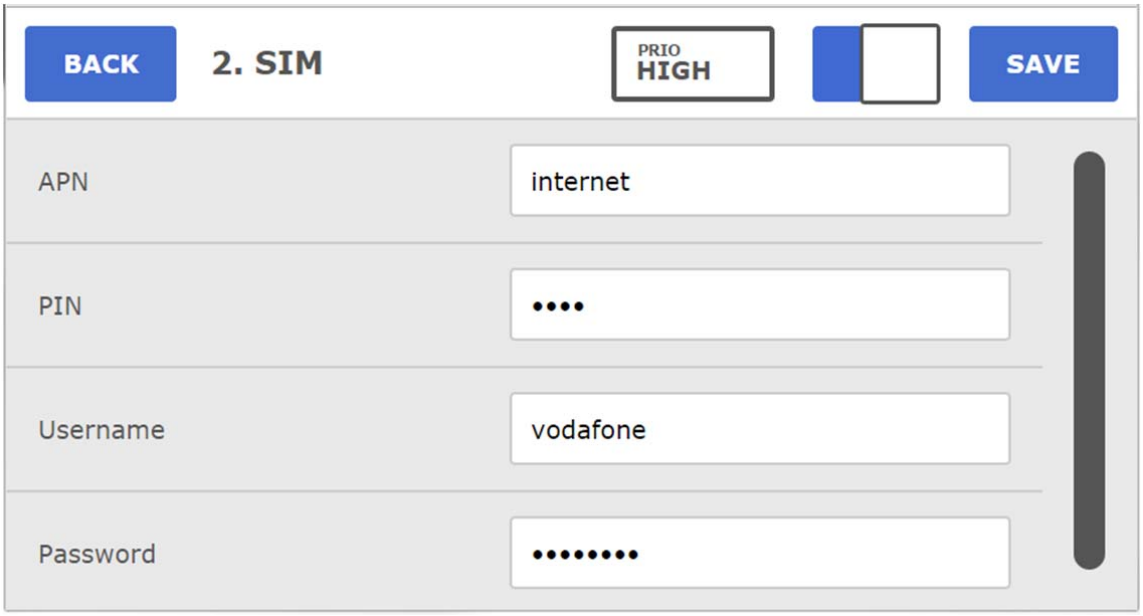
The overview page has been divided into the amount of connections that you have on your system. The example above has 10 connections in total. Each connection shows the signal strength, connection status and bitrate per sim. Each tile functions as a button. When you click on a connection you will jump into the settings of the connection.

Connection status

It shows **connected** in case everything is correctly configured and the WMT server/backend is on line. It will show **searching** when there is no coverage or aerial connected and **config** when the pin code is ok, but is unable to connect with the data network. The most common reason the WMT cannot connect is the wrong APN or user name and password. When using prepaid, this could mean the connection is out of balance.

Viewing the settings of a connection

By tapping a connection it is possible to access the settings like pin code APN and username/password. For Wireless, connection 10 if available, it is possible to select the Wi-Fi network and to submit the authentication string. You can also change the priority per connection or disable the connection completely.



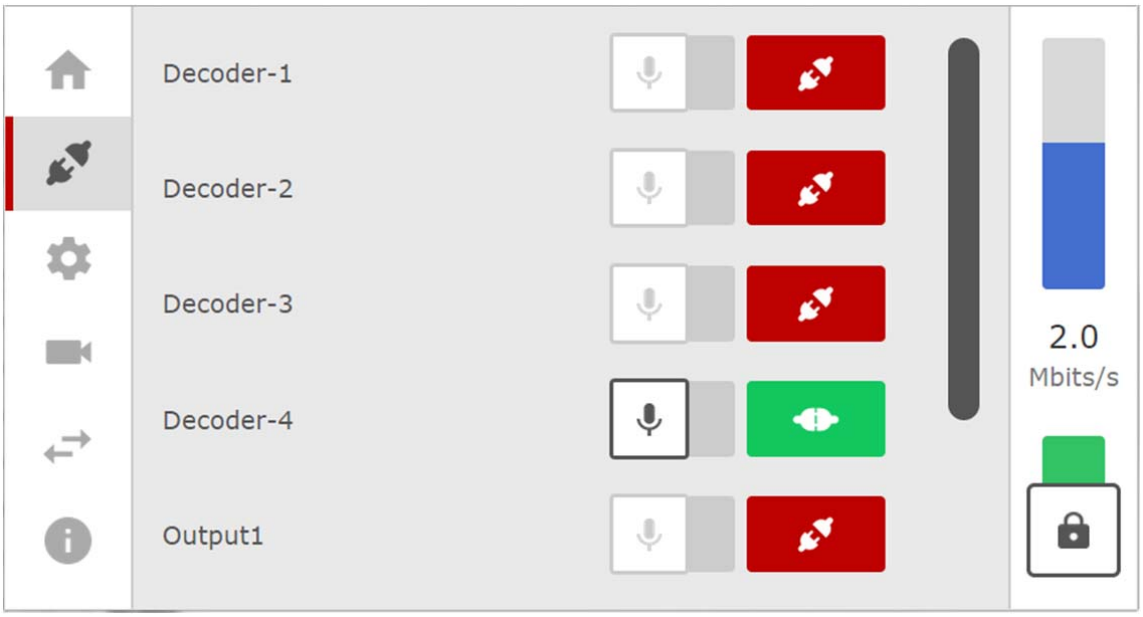
Picture 2: The connection settings

Used bandwidth

The number at the right of the screen represents the sum of the used bandwidth from all connections.

Connect

The connect page gives you the ability to connect your WMT to a Playout that you have within your account. If you press the red button of one of the decoder ports, it will send the WMT video to this output. There is also an IFB button present. You can switch this on or off by sliding it to the right or left. To disconnect the Playout you can press the connect button again. The button will turn red once the playout has been disconnected.



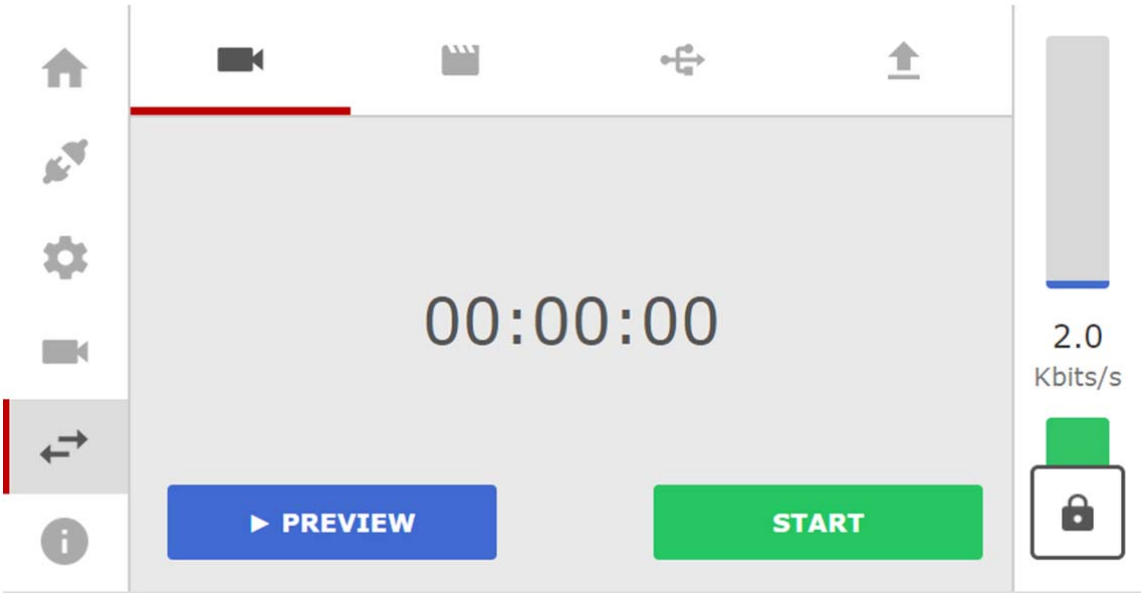
Picture 3: Connect page

Transfer

The Transfer page gives you the ability to transfer files that are stored on a USB flash drive or the recorded files that are located on the system or camera.

When you click on the Transfer icon, you will see the Record and Transfer screen. This option can record the camera feed (live from the camera or a stored video) when pressing the 'start' button and transfer it as soon as you press the 'stop' button. An FTP server needs to be filled in to make use of this feature.

The Store & Forward function can be used to upload files to a FTP server using the Transport screen. By inserting an USB-stick you can copy files from the stick to the WMT which will upload them to the FTP server after you enable "Store & Forward" in the settings screen (please check the settings paragraph in this chapter). The FTP server can be configured by the web interface.

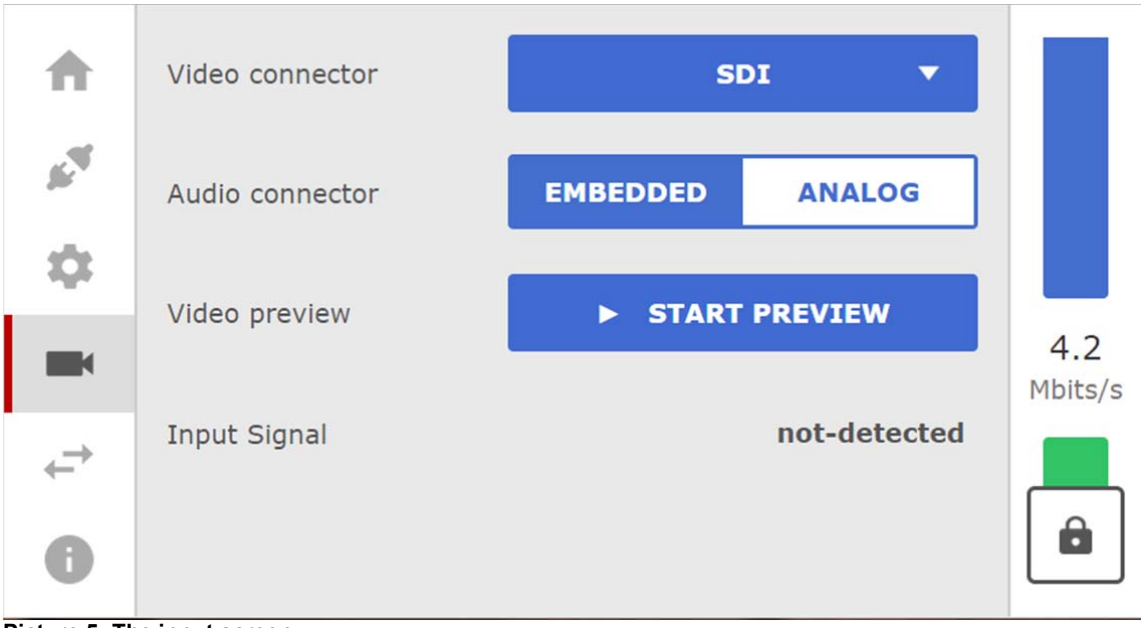


Picture 4: The Transport screen. Here you can start a recording from the camera and transfer it as soon as the 'stop' button is pressed.

Input

The preview functionality will show you the live video that is currently on the in selected connector (SDI, HDMI, Firewire or Composite). In case the connector is not attached, the wrong connector is attached, or the camera that is attached to the connector is not running you will see a no signal screen as shown below.

Press “Start Preview” to start the preview. The preview will automatically stop after 10 seconds to preserve battery power.



Picture 5: The input screen

The preview tab shows the input signal or in case of no input the no signal image. The preview will automatically stop after 10 seconds to preserve battery power. When previewing the image the audio bars will indicate audio input levels.

If you connected a camera to the correct connector, selected the right connector, but still get no signal, check your Input settings in the “Settings” screen. Make sure that both WMT and camera send and receive the same in-and output. If the camera has a output of 720p at 50Hz, and the WMT is set to PAL, a no signal message will appear at the preview screen. Check your camera settings and the WMT settings to ensure you got the right settings enabled.

Input Signal

The input signal is the input that is connected to the WMT. Make sure that the output from the camera of transmitting device is the same as the chosen input on the WMT, otherwise a “no signal” screen will be shown. Also make sure the camera transmits SD or HD, depending on the chosen settings.

The encoder input can be set to the following settings:

- PAL
- NTSC
- 720p 50Hz (HD only)
- 720p 59Hz (HD only)
- 720p 60Hz (HD only)

- 1080i 50Hz (HD only)
- 1080i 59Hz (HD only)
- 1080i 60Hz (HD only)

*** **NOTE:** Input values may vary, depending on your software version. Contact service employees if your requested input is not on the list.

Connectors

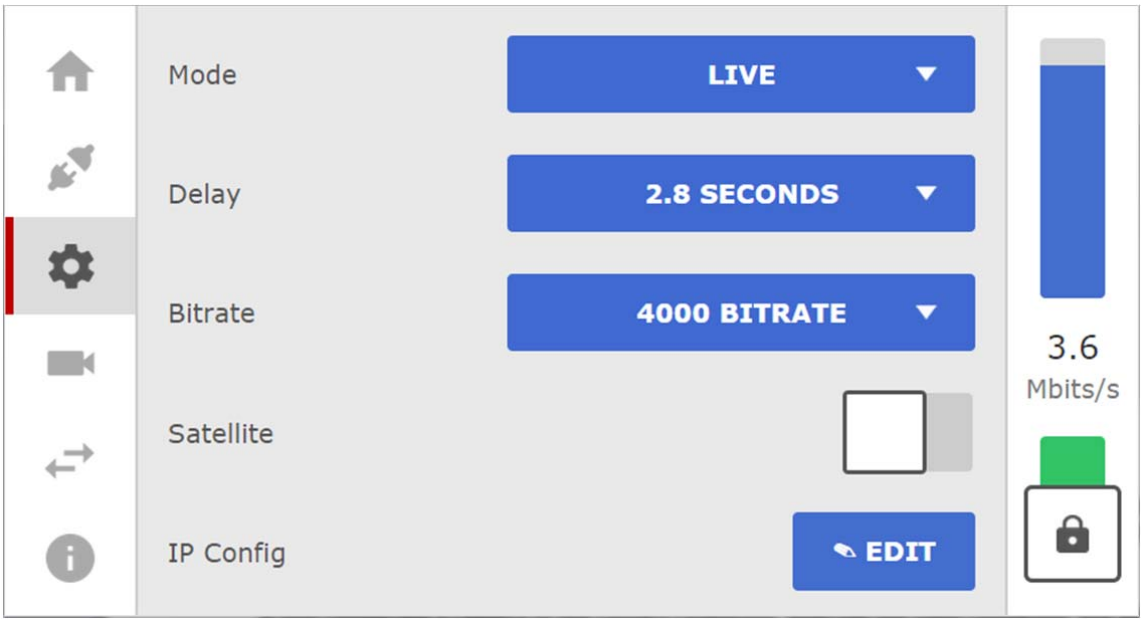
The WMT has the following connectors to connect a camera or other device. Different systems may have different connectors. When you order your system, make sure the right connector is on it to ensure you can connect your equipment to the WMT.

Labels next to the connectors help you finding the different connectors on your system.

- SDI
- HDMI
- Composite
- Firewire

Settings

The settings page can be used to configure in-and output settings, and some other basic configuration. The advanced configurations have to be done in the WMT web interface as described in the next chapter. Picture 5 illustrates the settings page.



Picture 6: The settings screen.

Modus

The modus section can be used to set the mode the WMT works in. The WMT has the following modus:

- **Disabled**
  When the WMT is disabled, it does not send any data to the server. Your videostream will be black and the preview will be disabled.

- **Live**
  When the WMT is set to live, it will send audio and video to the server. You can preview this audio/video at the preview section.

- **SAF (Store And Forward)**
  When the WMT is set to SAF (Store And Forward) it will send data to the FTP server. Files that have been selected to send in the "Transport" screen will now be sent. While the WMT is set to SAF it will not transmit audio and video. The preview will be disabled.

  all contents of the input signals is stored on the internal solid state disk.
  .

- **SAF + record (19 inch only)**
  When the WMT is set to SAF + record files the system is in **Continuous Picture Technology (CPT)** mode. File parts that are recorded are send immediately to the server. The playout will play those files after a programmed delay. The delay is set in the

Delay
Delay means the delay between both ends (camera and playout). You can set the delay manually. You can set the delay from 0.8 till 20 seconds.

Satellite
If you are using a satellite dish with the WMT client you need to make sure that you put the satellite switch on.

IP config
Via settings you can set the client number which is normally 1 in a point to point set-up. In case a separate server is used the number can be between 1 and 20. The Server IP is the public IP number of the server or server playout in a point to point set-up.

*** **NOTE:** Output values may vary, depending on your software version. Contact service employees if your requested input is not on the list.

Info

Picture 7 illustrates the info screen. You can check serial number, software version, hardware version, current server IP address and the client number. You can also restart the WMT, in case this is required or refresh the gui when a license has been changed.

Picture 7: The info screen

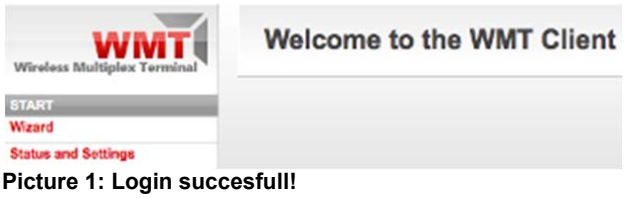
THE WEB INTERFACE

This chapter will describe the web interface, which can be accessed by requesting the network address of the WMT in a web browser. Different menus will be described in this chapter.

Accessing the web interface

Access the WMT Web Interface using the following steps:

1. Connect a laptop or other PC directly with the second Ethernet port. This management port is located at the left side of the WMT
2. Use the following IP and subnet values: IP 198.18.0.50, subnet mask 255.255.255.0
3. Browse to the following address: http://198.18.0.1
4. By default, you have to provide login details.: user, leave empty, password pokon
5. Picture 1 illustrates the screen when you have successfully logged in.



Picture 1: Login succesfull!

First time: use the configuration wizard

When you log on for the first time, the WMT needs to be configured. You can use the "First Time Configuration Wizard" to set your WMT client configuration settings. Simply click "Wizard" and follow these steps:

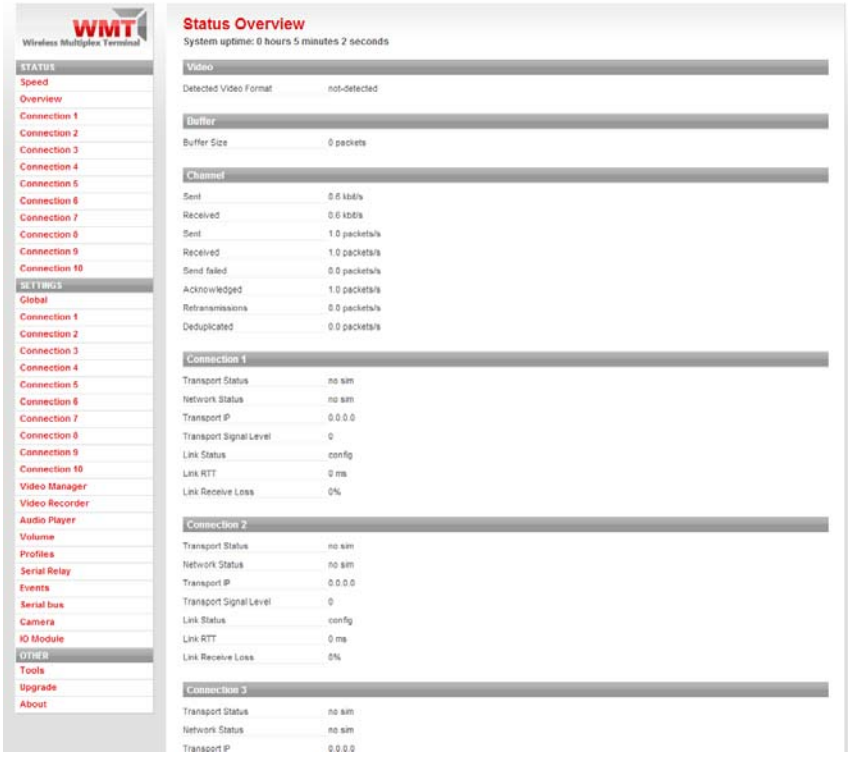
1. *Step 1: Installing a license key*
   By default, your license key is already installed. If this is not the case, contact Mobile Viewpoint. We will e-mail your license key as soon as possible. Click 'Next' to continue to the next step.
2. *Step 2: Global configuration*
   - Client number: Each WMT client must identify itself with a unique number to the WMT server;
   - System name: You can add your own system name to each WMT client;
   - Server IP: Fill in the WMT server (back-end) IP address.

   Click 'Next' to continue to the next step.
3. *Step 3: Connection configuration*
   For each connection you will need to configure the following settings:
   - SIM pin code: Enter the pin code of the SIM. The default pin code is 0000. The pin code is only required when the SIM requires a pin code;
   - UMTS APN: The access point name for connecting to the mobile network;
   - UMTS Username: The username used to get access to the mobile network;
   - UMTS Password: The password used to get access to the mobile network.

   Click 'Next' to continue to the next step.
4. *Step 4: Completing the wizard*
   If all steps within the wizard are completed, you will see the text 'Wizard Succeeded'. Click 'Done' to exit the wizard.

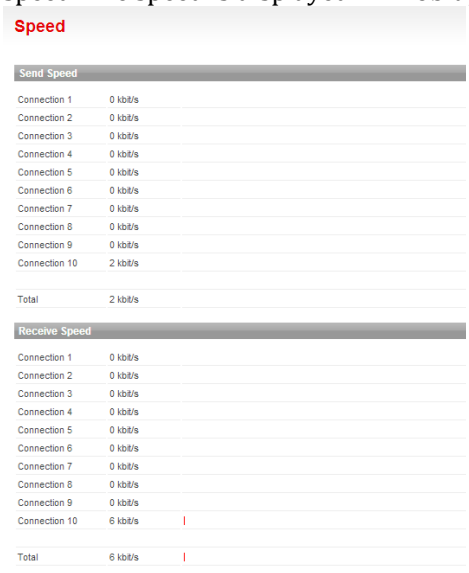
Status

This section will give you information about the current status. You can access this section after clicking 'Status and Settings' when you have logged in.



Speed

This page will give you information about the current speed. You will see information about all connections independently and all connections in total. You can see both sent and received speed. The speed is displayed in kilobit per second (Kbit/s).



Overview

The overview page gives you an overview of all connections and connection status.

- Buffer Size: The size of the current buffer
- Send Packets/sec: The amount of packets sent each second over this connection;

- Send Bytes/sec: The amount of bytes sent each seconds over this connection;
- Send failed/sec: The amount of packets failed to sent each second over this connection;
- Acked packets/sec: The amount of acknowledged packets sent second over this connection;
- Retransmission/sec: The amount of retransmissions (packets) each second over this connection;
- Received Packets/sec: The amount of received packets each second over this connection.

Connection

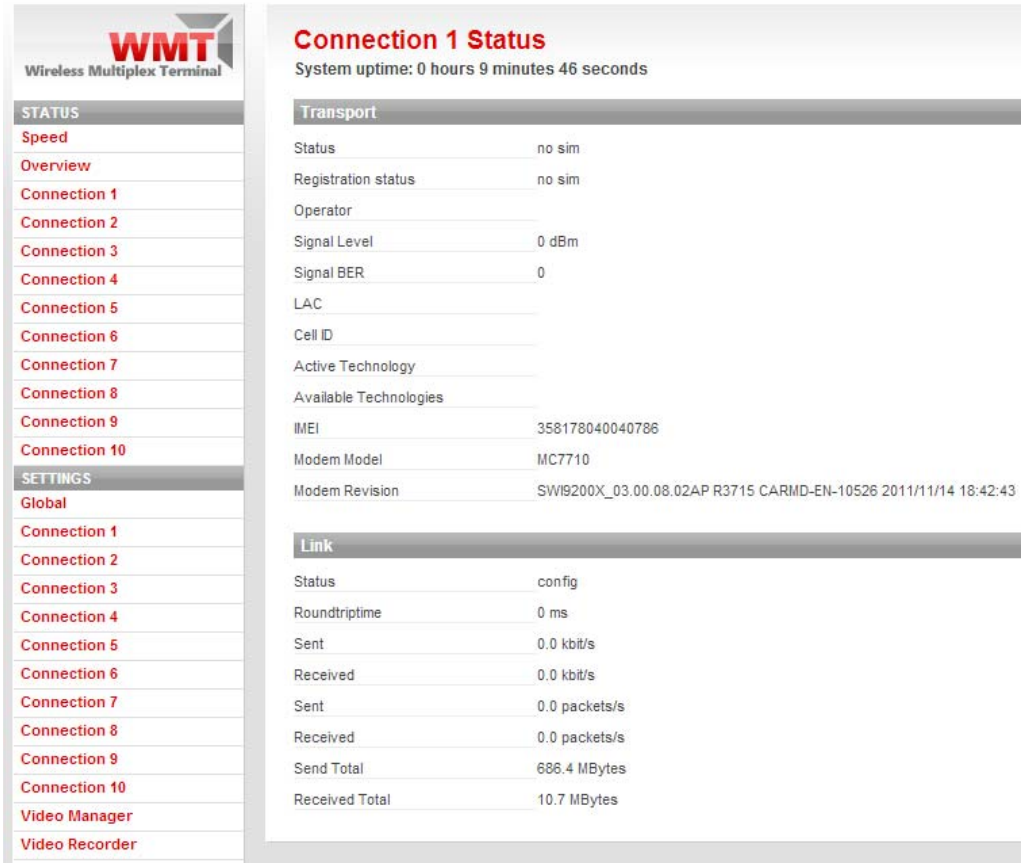
Each available connection has its own status page. You will see the following information when you open a status page:

- Status: The status of the connection;
- Operator: The operator of the connection;
- Signal level: The signal strength of the connection;
- Active Technology: The technology of the connection currently being used (for example HSDPA);
- Available Technologies: The technologies supported by the current connection.

Besides information about the psychical connection, you will also find information about the link:

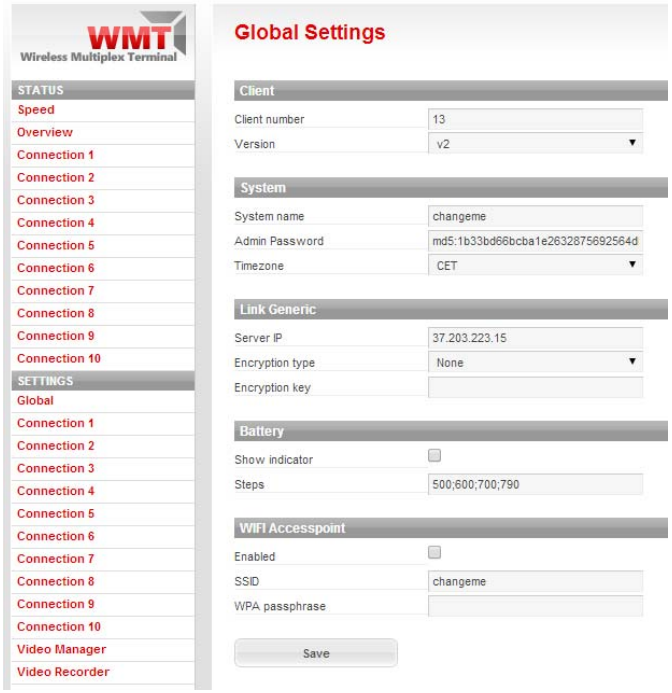
- Status: The status of the link;
- Roundtrip time: The time a packet takes to get from WMT to WMT Server and back.
- Send bytes/s: The amount of bytes sent each second;
- Send packets/s: The amount of packets sent each second;
- Received bytes/s: The amount of bytes received each second;
- Received packets/s: The amount of packets received each second.
- Send Total: the total amount of data sent on this connection/SIM card. Reset of the number takes place by **Tools**, reset totals.
- Received total: the total amount of data received on this connection/SIM card

The sum of all above is the total data used and can be used to give a indication of the complete usage of the WMT.



Settings

You can access this section after clicking 'Status and Settings' when you have logged in.



Global configuration

You can change the global configuration parameters by clicking 'Global' in the Settings section. You will see the following settings you can change:

- Client number: The WMT client number to identify the WMT client on the WMT server always use version V2.
- System name: The name of the system the client runs on;
- Admin password: You can change the password of the client with this field;
- Server IP: The IP address used to communicate with the server;
- Encryption type: The type of encryption used to encrypt data between the client and server;
- Encryption key: The key used to encrypt the data between the client and server.
- Battery indicator (Will only work on the latest models)
    - Enabling the battery indicator will show the status of the battery at the touchscreen. Due to the fact people can connect different batteries it is possible to configure the thresher hold values yourself.
    - Known values for normal Lion batteries: 14.4;15.4;16.4
    - Known values for MobileViewpoint 12 volt iron lithium polymer batteries: 12; 12.75;13.5

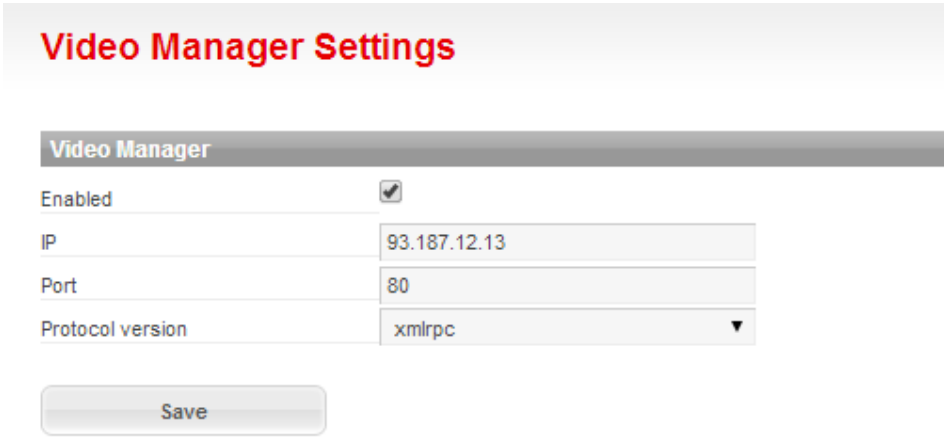
Use the 'Save' button to commit your changes.

Connections
You can change the settings for each available connection. The number of connections corresponds with the amount of SIM slots on the device. You can change the connection settings by selecting a connection from the Settings section. You can change the following settings:

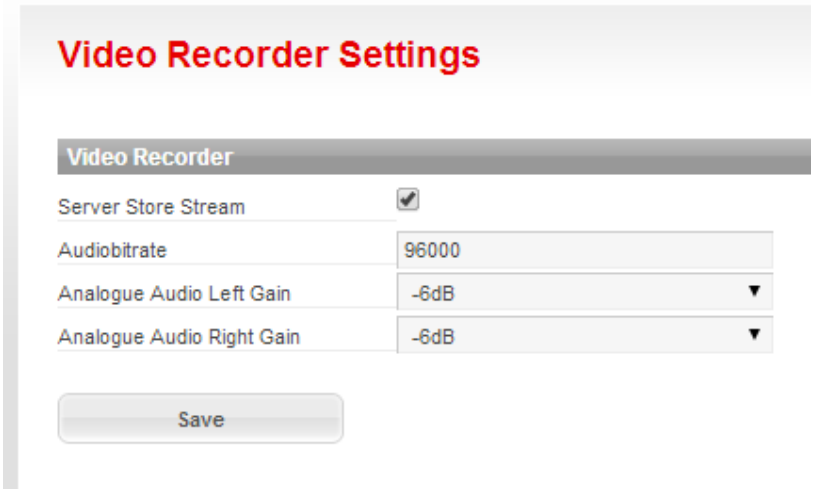
- Enabled: Enable or disable the connection using this checkbox;
- SIM Pin code: A SIM pin code used to active the SIM;
- UMTS APN: The name of the access point from the mobile provider;
- UMTS Username: The username used to access the APN;
- UMTS Password: The password used to access the APN.

Use the ' Save' button to commit your changes.

Video manager
When using the video manager this option should be enabled. The IP address of the video manager is 93.187.12.13 port 80.
For WMT Clients XMLPC protocol should be used. For Playouts and Playout server JSONrpc be used.



Video recorder



Within the video recorder settings you can define de URL used to fetch the stream from the server by a playout. This setting will be set by default automatically using the videomanager.

Enabling the Server Store Stream option will enables the server to record video.

No signal image
You can change the no signal image by uploading a picture with the following specifications:

- PNG image
- 720 x 576
- 8-bit/color RGB
- Non-interlaced

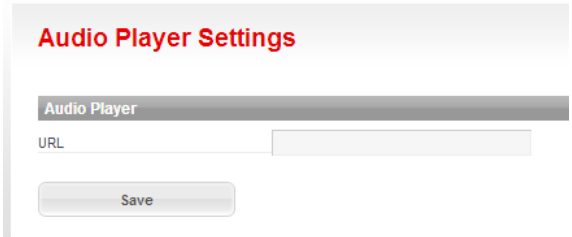
Audio player
In the audio player configuration contains the audio retour or IFB settings. In case of a set-up together with the video manager these settings are configured automatically. In case of a point-to-point set-up the settings need to be done manually.

When using a point-to-point set-up make sure the audio player is enabled. Configure the right URL to retrieve the audio stream (RTSP). The URL should be configured compliant with the one configured in the playout. When using factory settings these are the default settings:

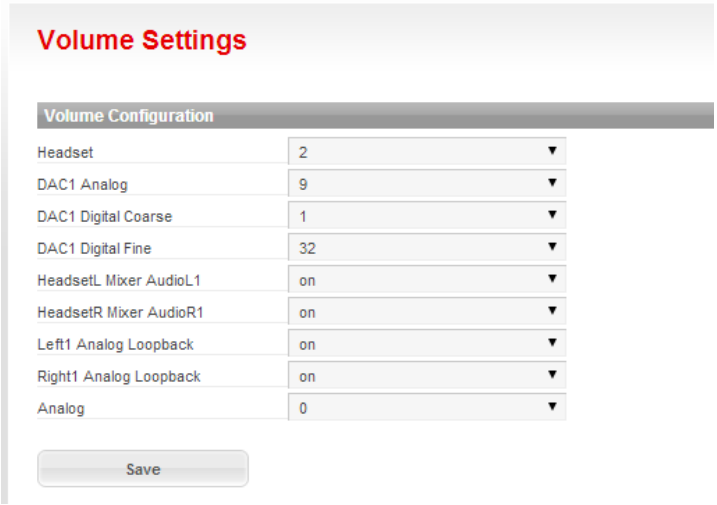
rtsp://[ip-server]/playout-[serial playout].sdp

For example: *rtsp://192.168.0.10/playout-7320.sdp*

Note that in a set-up behind a NAT the internal IP number is used.



Volume
In the volume configurations you can define the settings of the headset, DAC1 Analog, DAC1 Digital coarse, DAC1 Digital Fine, headset mixer left and right and the left and right analog loopback. The settings in figure below are default on the WMT and should work fine in most cases.



Profiles

The profile section is equal to the Settings screen on the LCD screen on the WMT, except that it is located inside a web interface.

Modus
The modus section can be used to set the mode the WMT works in. The WMT has the following modus:

- **Disabled**
  When the WMT is disabled, it does not send any data to the server. Your videostream will be black and the preview will be disabled.

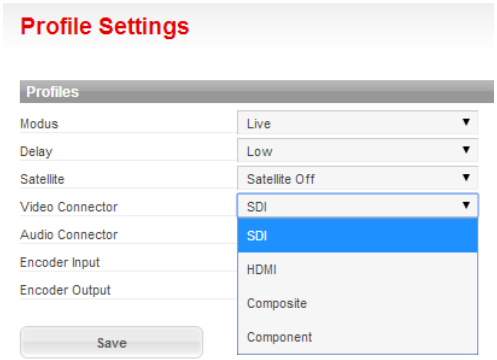
- **Live**
  When the WMT is set to Live, it will send audio and video to the server. You can preview this video at the preview section.

- **SAF (Store And Forward)**
  When the WMT is set to SAF (Store And Forward) it will send data to the FTP server. Files that have been selected to send in the “Transport” screen will now be sent. While the WMT is set to SAF it will not transmit audio and video. The preview will be disabled.

Delay
Delay means the delay between both ends (camera and playout). The delay can set to 6 different values. The delay is for both audio and video.

Value	Delay
Ultra low (audio only)	0,8 seconds
Very low	1,8 seconds
Low	2,8 seconds
Medium	5,0 seconds
High	10 seconds
Very High	20 seconds

Connectors
The WMT has the following connectors to connect a camera or other device. Different systems may have different connectors. When you order your system, make sure the right connector is on it to ensure you can connect your equipment to the WMT. In the dropdown menu you can select the correct input connector.



Encoder input
The encoder input is the input that is connected to the WMT. Make sure that the output from the camera of transmitting device is the same as the chosen input on the WMT, otherwise a "no signal" screen will be shown. Also make sure the camera transmits SD or HD, depending on the chosen settings.

The encoder input can be set to the following settings:

- PAL
- NTSC
- 720p 50Hz (HD only)
- 720p 59Hz (HD only)
- 720p 60Hz (HD only)
- 1080i 50Hz (HD only)
- 1080i 59Hz (HD only)
- 1080i 60Hz (HD only)

*** **NOTE:** Input values may vary, depending on your software version. Contact service employees if your requested input is not on the list.

Encoder output
The encoder output is the output that the WMT transmits. The WMT can convert different

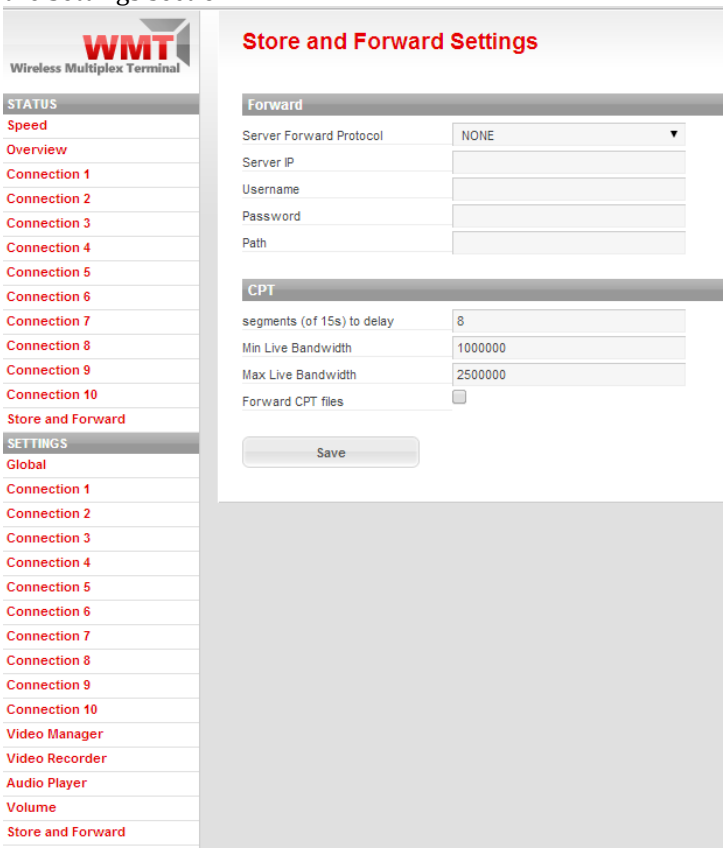
Output	Quality
Best Quality	Interlaced with intra frames and automatic down scaling of the resolution
Medium Quality	The maximum Bitrate is capped at 1.5 Mbit SD and 3 Mbit HD and automatic down scaling of the resolution
Lower Quality	The maximum Bitrate is capped at 1 Mbit SD and 2.5 Mbit HD and forced at half resolution.

signals to lower quality to save bandwidth. The following settings are possible:

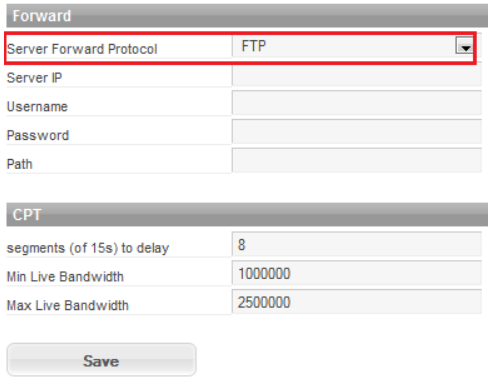
*** **NOTE:** Output values may vary, depending on your software version. Contact service employees if your requested input is not on the list.

Change the current profile
The current profile is highlighted in blue. To change the profile to a new profile, press the requested profile for a few seconds.

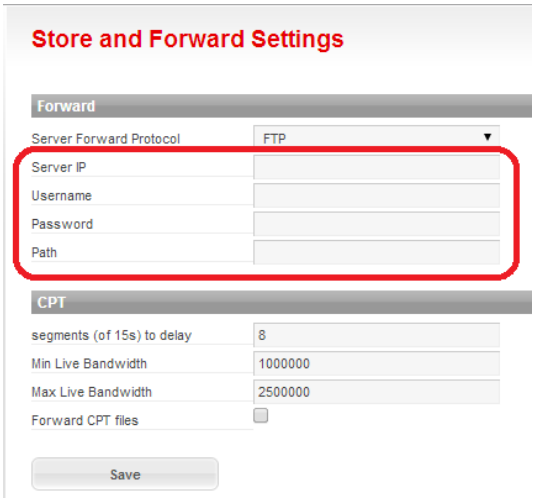
Store and Forward
Before you can use the Store and Forward functionality, it needs to be configured. This can be done by opening the Store and Forward configuration page by clicking 'Store and Forward' in the Settings section.



You need to select the FTP protocol in the Server Forward Protocol option.



Also provide information about the FTP server where the file(s) have to be stored. Click the 'Save' button to commit your changes. Transfer a small test file to ensure your FTP settings are correct.



To send files using the Store and Forward functionality, click 'Store and Forward' in the Other section. This will open a page where you can upload a file. After selecting a file and clicking the 'Upload' button, you can view the status of the upload by clicking 'Store and Forward' in the Status section. This will open a page with an overview of the queued file transfers.

Other tab

Status tab

With the priority buttons (up and down) you can change the order in which the files will be uploaded to the FTP server. If there is a file in the list that shouldn't be uploaded click on the Stop & Delete button to remove the file from the WMT client.

The upload speed can be monitored and is listed above the overview of the uploaded files. The estimates in the overview are calculated using the upload speed. When the file upload is complete, the finished flag will be set to 1. Because the backend needs to perform some actions after the file is uploaded, a situation can occur where the file is 100% uploaded and the finished flag is not set to 1.

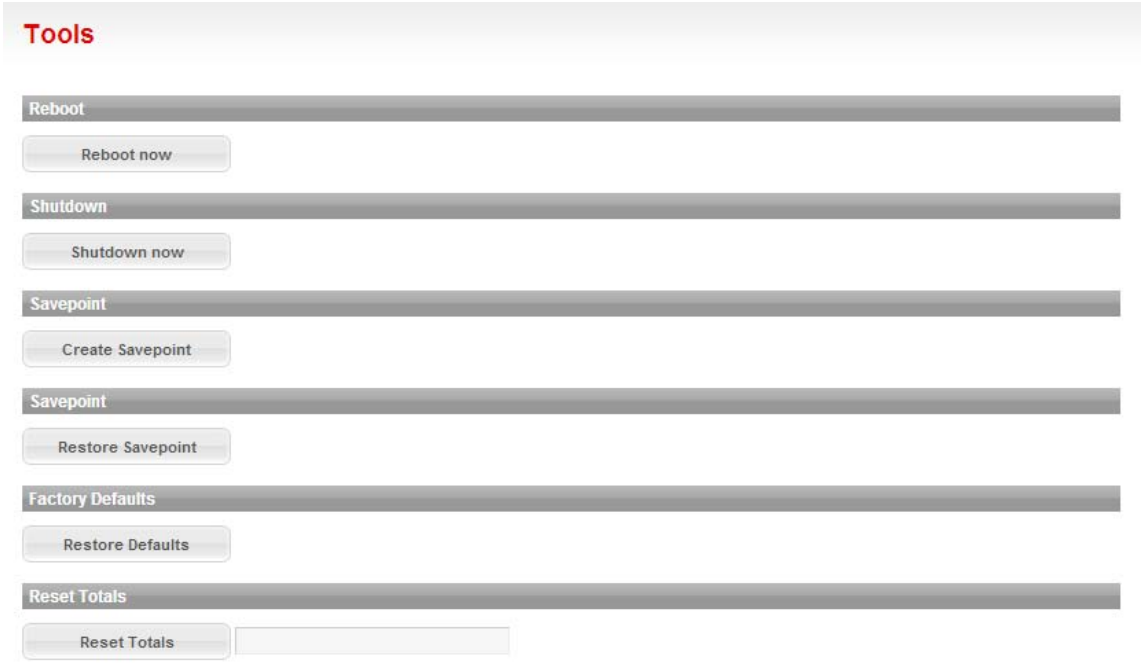
Serial Relay, Events, Serial Bus, Camera and IO Module

Can only be used for security observation setups. This feature can be configured by Mobile Viewpoint employees only.

Other

You can access this section after clicking 'Status and Settings' when you have logged in.

Tools



Rebooting the WMT client

You can reboot the WMT client by opening the 'Tools' page and clicking the 'Reboot now' button. After confirming this, the client will be rebooted.

Shutdown the WMT client

You can shutdown the WMT client by opening the 'Tools' page and clicking the 'Shutdown now' button. After confirming this, the client will be shutdown.

Create/restore a Savepoint
A Savepoint is a backup of the current configuration. You can create a Savepoint by clicking the 'Create Savepoint' button after opening the 'Tools' page. After confirming this, the Savepoint will be created.

You can restore a Savepoint by clicking 'Restore Savepoint' at the same page. This will restore the configuration of the WMT client back to a Savepoint created earlier.

Restoring factory defaults
You can restore the WMT client configuration back to the factory defaults. Please note your current configuration will be deleted. You will need to provide your license key again.

To restore the factory defaults; click 'Restore Defaults' after opening the 'Tools' page. After confirming this, the factory defaults will be restored.

NOTE: After resetting your settings are permanently lost and cannot be restored.

Reset totals
You can reset the data usage totals per connection. Submit the number of the connection and click reset totals.

Upgrade

When a new software release is released, it is possible to upgrade your system on this page. Select the file you want to upgrade to (provided by Mobile Viewpoint) and select upgrade. Your system will now be upgraded.

IMPORTANT: Only use upgrade files provided by Mobile Viewpoint. Using other software or files may result in breaking the system.

About

This page will provide you global information about the WMT client, such as the software version used, information about the hardware and the license installed.

8. RF POWER SPECIFICATION

Note that the WMT uses Sierra Wireless LTE modems MC7355 which support multiple LTE bands however the software limts the WMT using the following bands:

- B2 (1900 Mhz), max 22dBM
- B4 (AWS) (1700/2100 MHz) , max 22dBM
- B5 (850 MHz), max 22dBM

9. FCC REGULATIONS:

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Icrease the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user‘s authority to operate the equipment.

10. FCC RF EXPOSURE INFORMATION (SAR)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
End users must follow the specific operating instructions for satisfying RF exposure compliance.
The SAR limit set by the FCC is 1.6W/kg.
For this device, the highest reported SAR value is: 0.29 W/kg (body-worn at 25mm distance).