Quick Start Guide

DW metapix ADVANCED SOLUTIONS

DW-BJMAiP80TR-LX	DW-BJMAiP100TR-LX	DW-BJMAiP120TR-LX

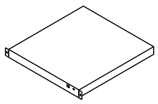
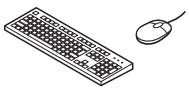
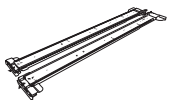
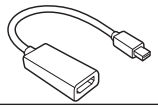
Default Login Information for DW Spectrum

Username: **admin**	Password: **admin12345**

Default login information for the server's OS

Username: **dwuser**	Password: **Dw5pectrum**

WHAT'S IN THE BOX

P-Rack™ server		1	Keyboard and mouse		1 set	Rail kit		1 set
Quick start guide		1	Power cable		1 set	Mini-DP to True HD Adapter		1

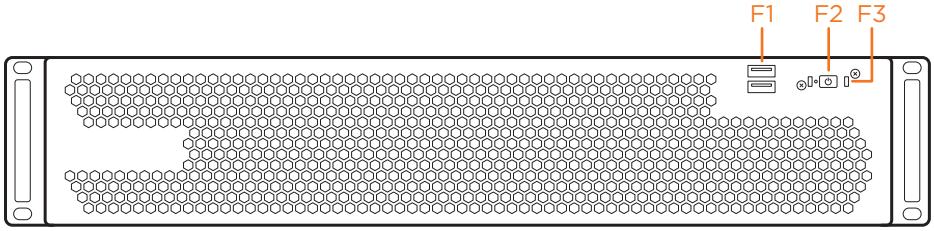
NOTE: Download all your support materials and tools in one place.

1. Go to: **http://www.digital-watchdog.com/support-download/.**
2. Search your product by entering the part number in the '**Search by Product**' search bar. Results for applicable part numbers will populate automatically based on the part number you enter.
3. Click '**Search**'. All supported materials, including manuals, Quick Start Guides (QSG), software and firmware will appear in the results.

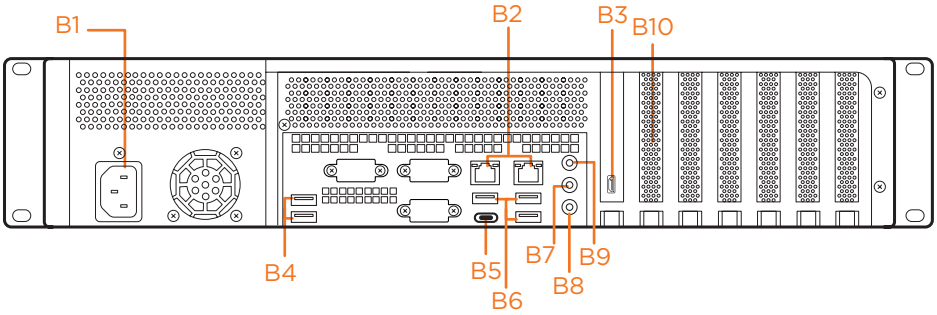
Attention: This document is intended to serve as a quick reference for initial setup. See the DW Spectrum® IPVMS full manual for more information on features and functionality.

Tel: +1 (866) 446-3595 / (813) 888-9555
Technical Support Hours: 9:00AM – 8:00PM EST, Monday through Friday
digital-watchdog.com

HARDWARE OVERVIEW



F1 2x USB 2.0 ports
F2 Power button
F3 HDD status LED



B1 Power Output
B2 2x 2.5Gb Ethernet (RJ45)
B3 Mini DP Video Output
B4 USB 3.2 Gen2 Type-A Port
B5 USB 3.2 Gen2 Type-C Port
B6 USB 3.2 Gen2 Type-A Port
B7 Front Speaker (Lime)
B8 Microphone (Pink)
B9 Audio Line In (Light Blue)
B10 RAID

Default login information for DW Spectrum

Username: **admin**	Password: **admin12345**

Default Login Information for the server's OS

Username: **dwuser**	Password: **Dw5pectrum**

SPECIFICATIONS

PART NUMBER		**DW-BJMAiPxxxTR-LX**
Included DW Spectrum IP licenses		4 (1x DW-SPECTRUMLSC004)
Form factor		2U Rack mount
Operating system		Ubuntu 22.04 Desktop LTS
OS on SSD		480GB SSD
CPU		12th Gen Intel® Core™ i7 processor
Memory		32GB
Ethernet port		1 x 1Gb Ethernet, 1x 2.5Gb Ethernet
Max video storage rate (Mbps)		320 Mbps
Maximum HDD		6 x SATA HDD
Storage Options		80TB, 100TB, 120TB (Raw storage size)
RAID		RAID5
Max # of analytic streams(secondary)		12
Video-out	Outputs	1x miniDP
	Graphics Card	NVIDIA 2000 ADA 12GB
Ai Processor		NVIDIA CUDA
Pre-loaded VMS software		DW Spectrum
DW Spectrum Client supported OS		Cross-platform - Windows, Linux Ubuntu and Mac
Pre-loaded Analytic software		DW Metapix Gateway
DW Spectrum Mobile apps		iOS and Android
Keyboard and mouse		Included
Power Supply		400W**
Operating humidity		20-90% RH
Dimension (WxDxH)		17.3" x 21.9" x 3.5" (439.3 x 557.1 x 88.9 mm)
Other certification		CE, FCC, NDAA, TAA
Warranty		5 year limited

** UPS recommended
Specifications and components mentioned are subject to change without notice.

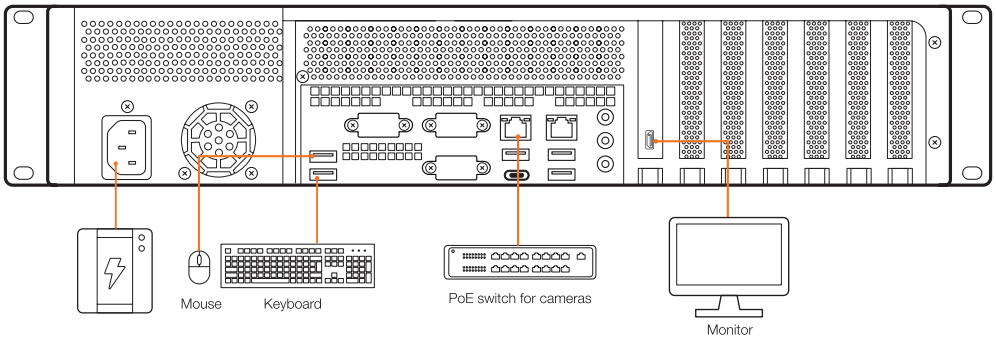
SETTING UP THE SERVER

STEP 1: Connect external devices, power and network.

1. Connect a monitor, USB keyboard, USB mouse and network cable to one of the Ethernet ports (B9 on the diagram). Configure the camera's network first, then configure the server's local network.

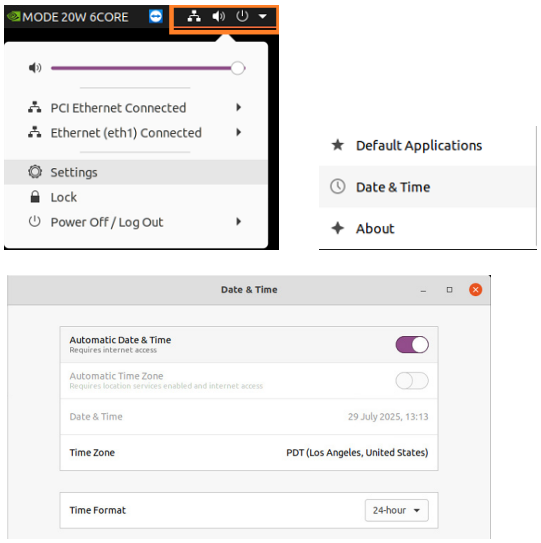
NOTE A monitor, keyboard, and mouse are required only for initial server configuration and can be disconnected afterward.

2. Connect the server to an appropriate power source. A UPS system rated at 1000 VA or higher per PSU is recommended.
3. Power up the server if the server does not turn on automatically by pressing the power button (F2 on the diagram).

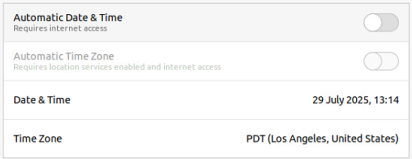


STEP 2: Configure date and time

1. Open **Settings**. Scroll to the bottom of the list on the left and click **Date & Time.**

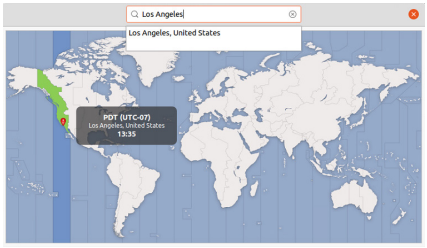


2. Turn OFF **Automatic Date & Time** and **Automatic Time Zone.**



3. Click **Date & Time** and set correct date and time.

4. Click **Time Zone** and set to correct time zone (type one of the largest cities in the time zone).



STEP 3: Configure network

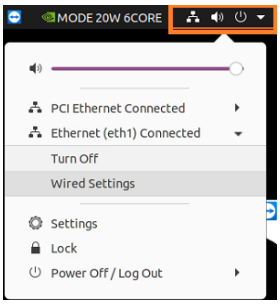
Please have the following information ready before starting the network configuration.

	Camera network	Local network (LAN)
IP address		
Subnet mask / Netmask		
Default gateway / Gateway	Not applicable	
DNS servers	Not applicable	

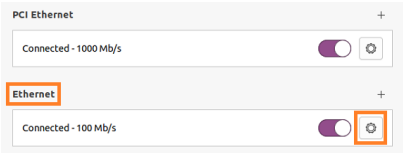
* Camera network and local network cannot be on the same network.

NOTE If you are not sure what information to enter, contact your Network Administrator or Internet Service Provider.

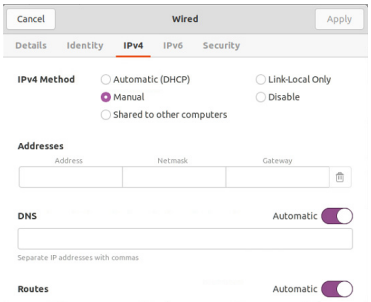
1. Open **Wired Settings** under **Ethernet (eth1) Connected**.



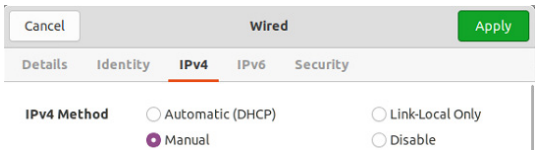
2. Click under the **Ethernet**.



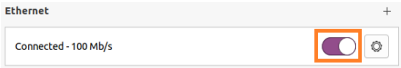
3. Change to **Manual**, then enter **Address, Netmask,** and **Gateway**.



4. Click **Apply** to save.



5. Restart the connection by switching it off, then turn it on.

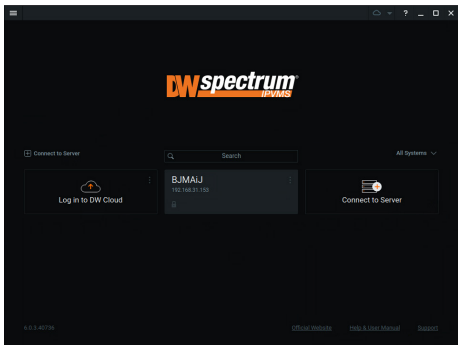


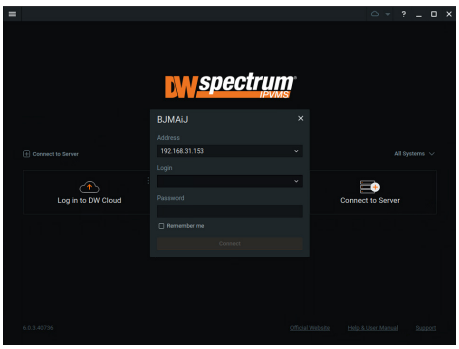
SETTING UP THE DW SPECTRUM MEDIA SERVER

Login: **admin**
Password: **admin12345**

STEP 1: Initial run

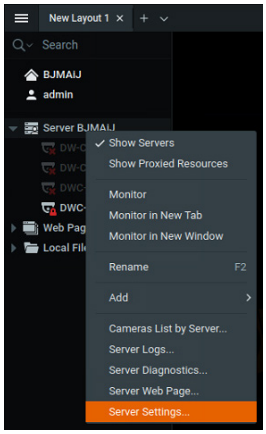
1. Open the DW Spectrum client.
2. Click on the pre-configured server.
3. If it does not log in automatically, enter the default password and click **Connect**.



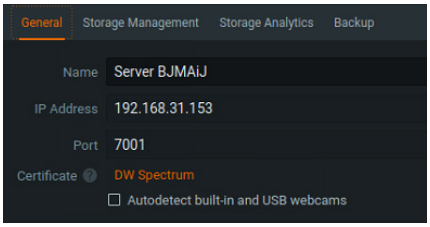


STEP 2: Rename the server

1. Right-click on the server name in the resource panel, then click **Server Settings.**

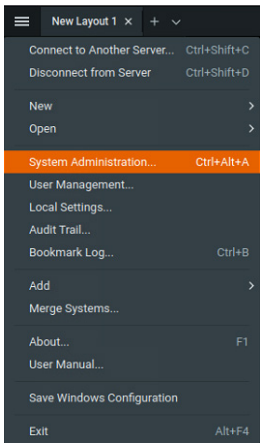


2. Go to the **General** tab and enter the new server name in the name field. Click **OK**.

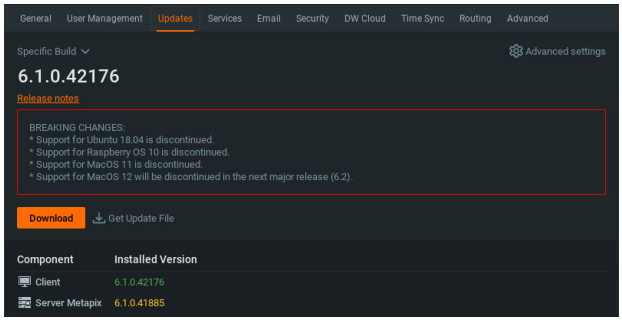


STEP 3: Check for updates

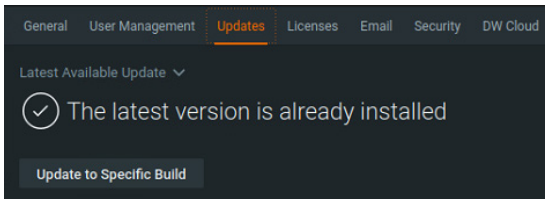
1. Click on the menu , then click **System Administration.**



2. Go to the **Updates** tab. If the system requires an update, click the **Download** button.



If you are on the latest version, it will say “The latest version is already installed.”

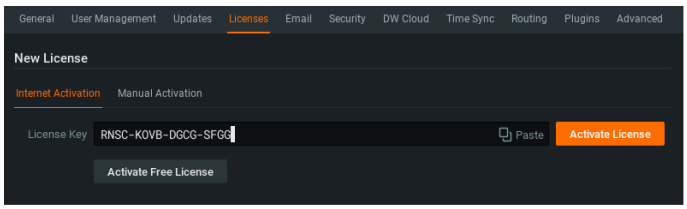


3. Click **OK** when the update is complete.

STEP 4: Activate licenses

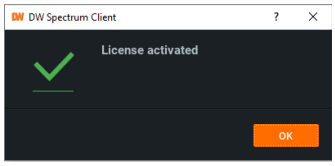
NOTE: An active Internet connection is required.

1. Click on the menu , then click **System Administration.**
2. Go to the Licenses tab. Enter the license key and click **Activate License.**



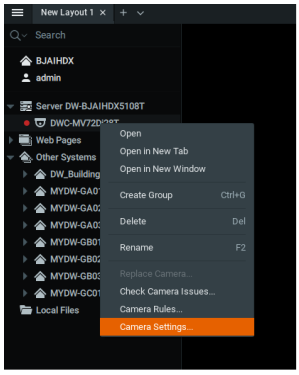
* Click **Activate Free License** to use a free, four-channel license for 30 days.

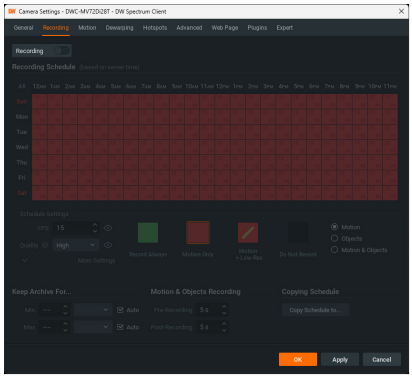
Click **OK** when all necessary license keys are activated.



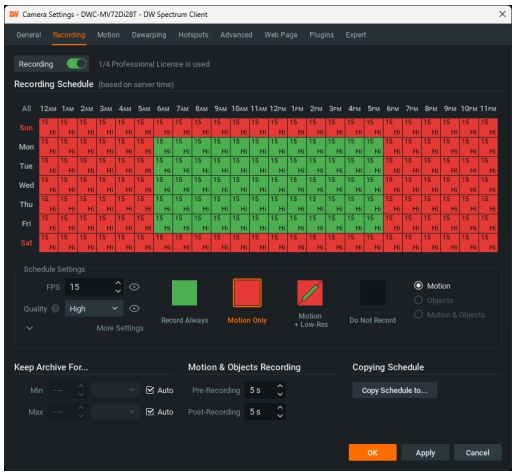
STEP 5: Configure recording

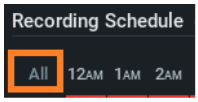
1. Right-click a camera in the resource list on the left side and click **Camera Settings.**
2. Click the **Recording** tab.





3. Click the **Recording** toggle to activate recording for that camera.
4. Set quality, FPS, and recording type.
5. Click and drag over the recording schedule to apply the settings to any number of days and times.



* Click **All** to apply the recording settings to the entire schedule. 

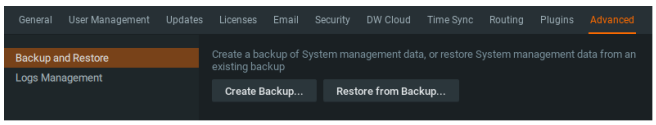
6. Click **OK** when the necessary recording schedule is set. A red circle will appear next to the camera in the resource list.

NOTE: A Recording License is required to allow a camera to record to the archive.

STEP 6: Backup database

1. Go to the **System Administration** window and click on the **General** tab.
2. Click **Create Backup.**
3. Navigate to the folder to which you want to save the database and enter a name for the backup file. Click **Save**.

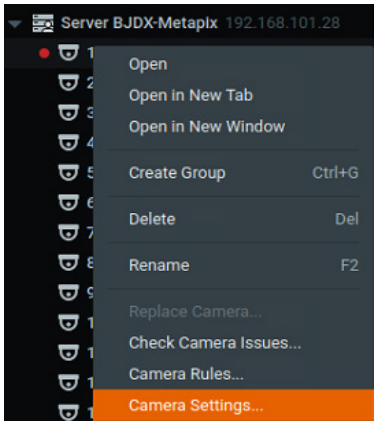
   It is strongly recommended to create a database backup to external storage media before and after each update, in case a system restore point is needed.

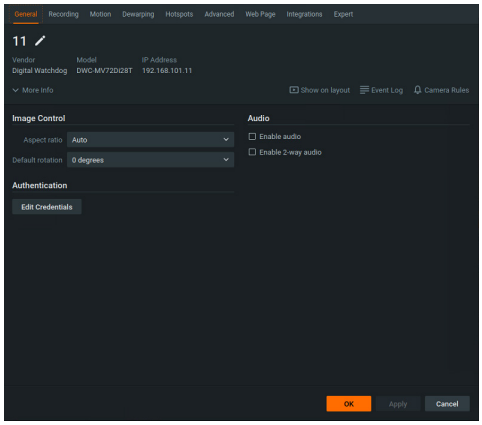


NOTE: More information and instructions are available in the DW Spectrum user manual.

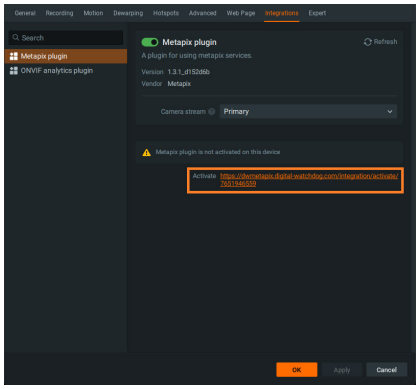
ACTIVATE THE METAPIX PLUGIN

1. In the DW Spectrum client, right-click a camera to be used with Metapix. Click **Camera Settings...**

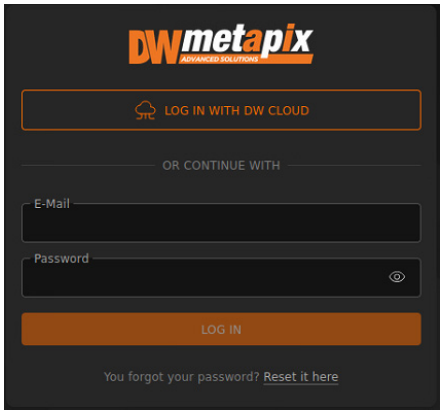


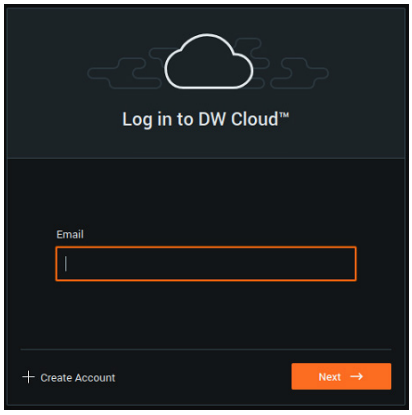


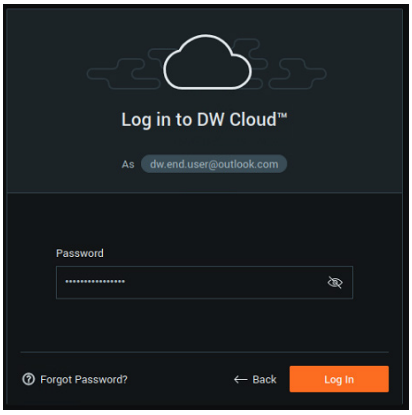
2. Click the **Integrations** tab. Select the **Metapix plugin**. Click the orange **https://dwmetapix.digital-watchdog.com/** link.



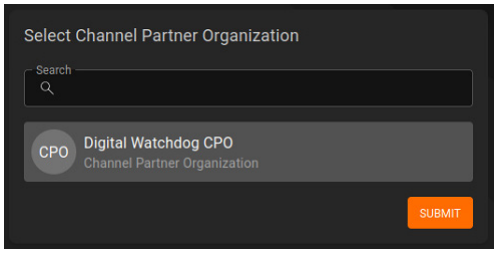
3. A new browser window will open. Click the **With DW Cloud** button, and log in using your DW Cloud account.



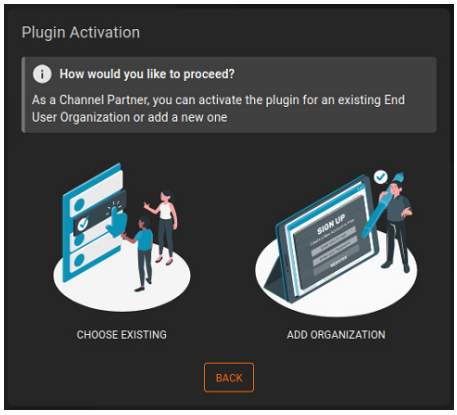




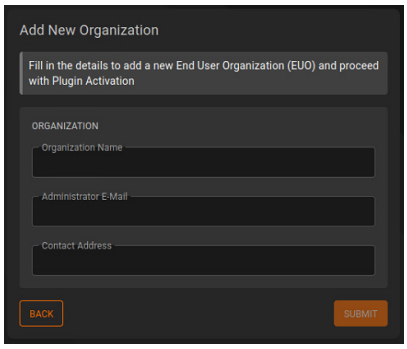
4. Select your **Channel Partner Organization**. Click **Submit**.



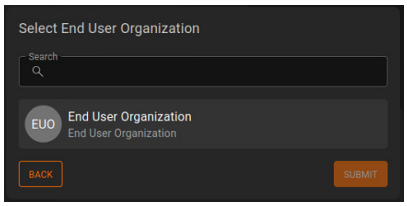
5. If the server belongs to a new end user organization, click **Add Organization**. To add the server to an existing end-user organization, click **Choose Existing.**



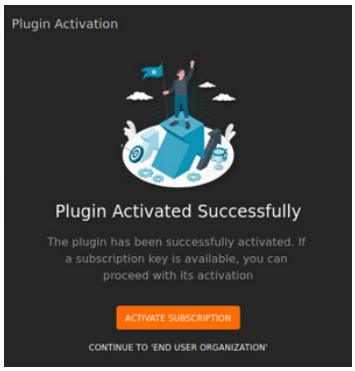
Add Organization: Enter the organization's name, administrator's email, and address.

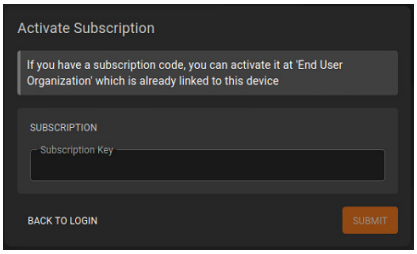


Choose Existing: Select the end-user organization.



6. Click **Submit**.
7. The Metapix plugin is now activated for the server. Click the **Activate Subscription** button.

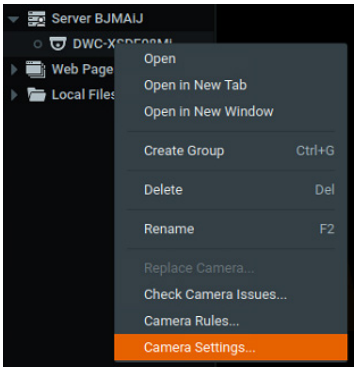




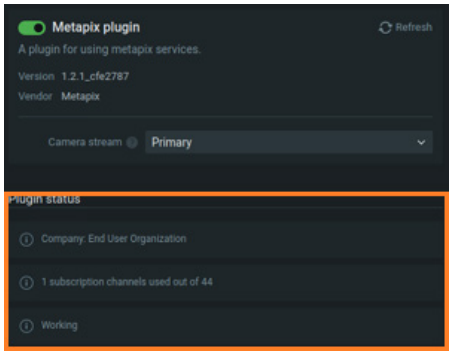
8. Copy and paste a subscription key and click **Submit**.

CONFIGURING METAPIX SETTINGS

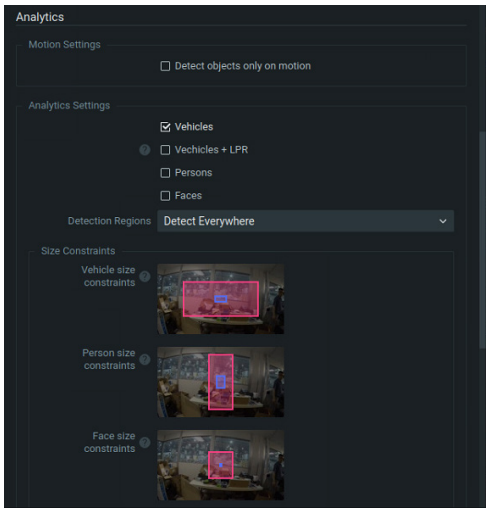
1. In the DW Spectrum client, right-click on a camera to be used with Metapix and select **Camera Settings.**



2. Click the **Integrations** tab and select the **Metapix plugin**. Verify that the *plugin status* shows:
   - Subscription channels are being used.
   - The connection to the cloud is active - shown simply as *Working.*



3. Scroll down to see more options and settings.



Motion Settings:

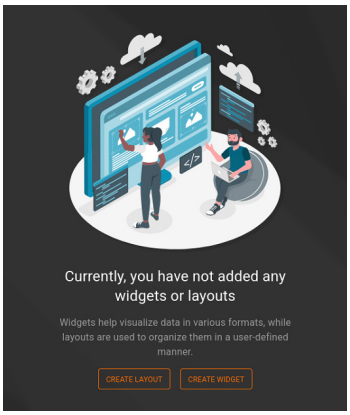
- Detect objects only on motion: Recommended for locations that have a lot of stationary objects, like parking lots

Analytics Settings:

- Vehicles: Motor vehicles (cars, trucks, etc.)
- Vehicles + LPR: Motor vehicles and license plate recognition.
- Persons: Detect people without age or gender approximation.
- Faces: Detect faces only, with age and gender approximation.

Visualize data

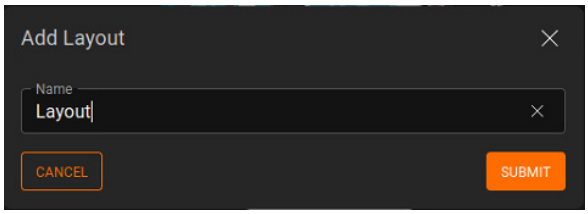
1. Click the button on the Metapix Cloud page to open the dashboard.



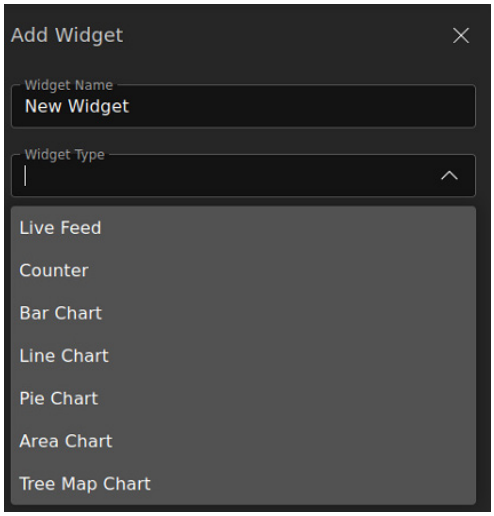
A widget is one way to visualize data. A layout can display multiple widgets at once.

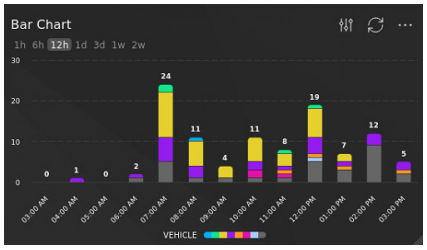
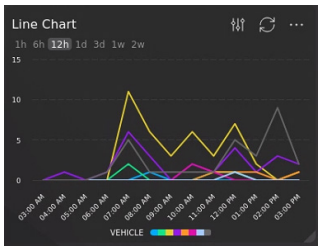
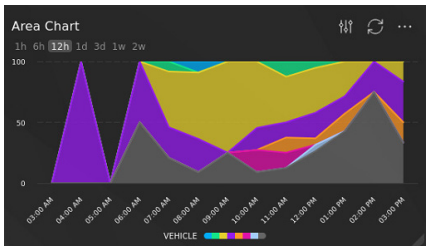
2. Click **Create Layout** and add a name. Click **Submit** to continue.

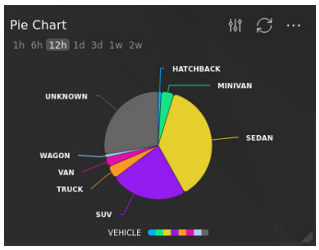
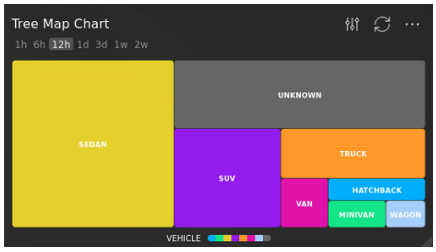
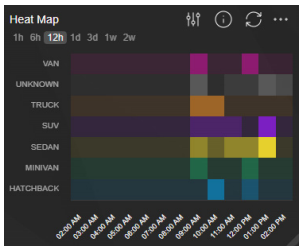
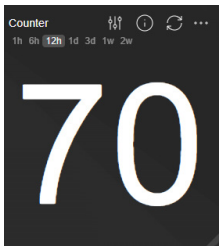
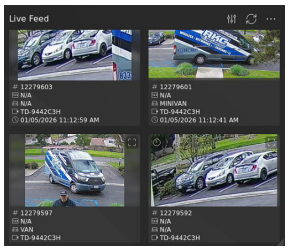
NOTE: This step can be skipped if only a single widget is needed.



3. Click **Create Widget** and choose a widget depending on the type of data needed.



Bar Chart: Number of objects detected over time	
Line Chart: Number of objects detected over time	
Area Chart: Number of objects detected over time	

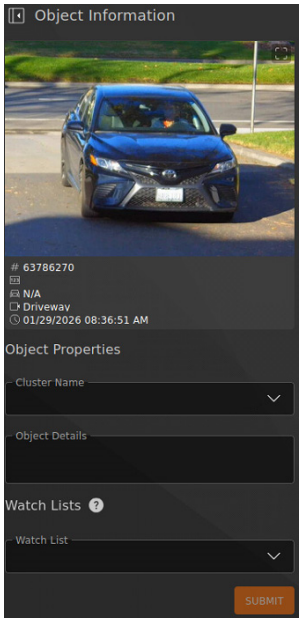
Pie Chart: Divide one object class into specific types (e.g., vehicles into trucks, etc.).	
Tree Map Chart: Divide one object class into specific types (e.g., vehicles into trucks, etc.).	
Heat Map: Number of objects detected over time	
Counter: Quantity of objects detected	
Live Feed: Images processed by Metapix	

4. Click **Submit** to add the widget to the layout.
   Additional widgets can be added to the layout by clicking the button.

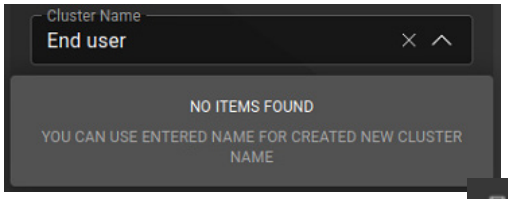
Watch Lists

STEP 1: **Create a watch list**

1. Click an image in the live feed widget to open its object information.



2. Enter a **Cluster Name.** All similar objects will be added to this cluster. Optionally, enter any **Object Details** - these apply only to the currently selected object.

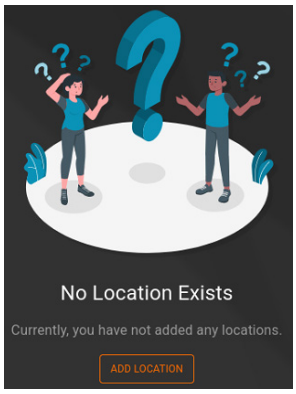


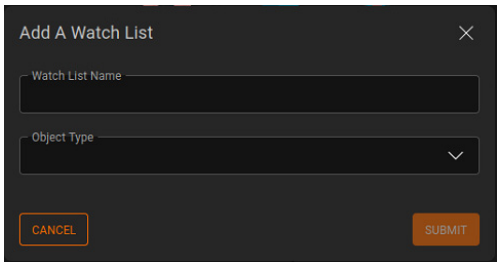
3. Click **Submit** to save changes. Click the button to return to the dashboard. The cluster name has now been added to all similar objects.

STEP 1: **Using watch lists**

1. Click the button to open the watch list menu.
2. Click **Add Watch List**. Enter a name (letters and numbers only) and select an **Object type.**

   Watch lists can be created for Faces or Vehicles. At least one filter needs to be changed to create a watch list.





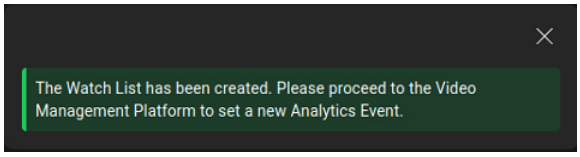
Face

- Cluster Name: Initial cluster to be added. More can be added later.
- Age: Approximate age of the person
- Gender: Apparent gender of the person

Vehicle

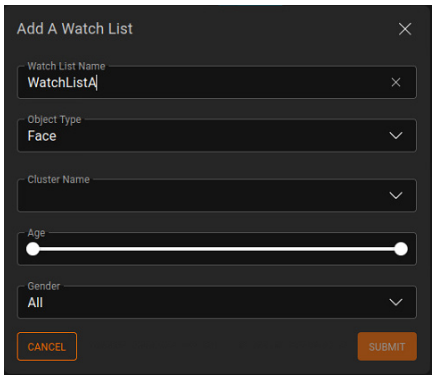
- Vehicle Type: Sedan, hatchback, truck, etc.
- Vehicle License Plate: The license plate number as detected by Metapix

3. Click **Submit** to save the watch list. Close the following window to continue using Metapix.

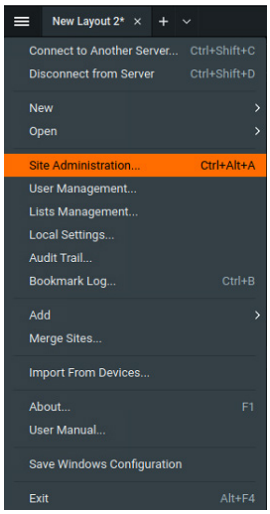


4. Click the button to change any of the filters. Click to return to the watch list section.

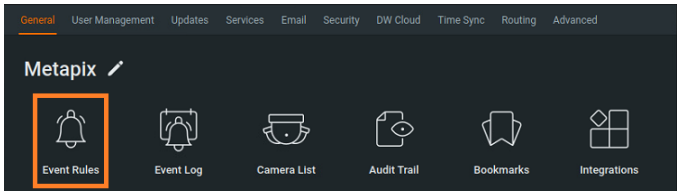
5. In the watch list section, click the / button to change the filters. Click the button in the top right corner to add a filter.

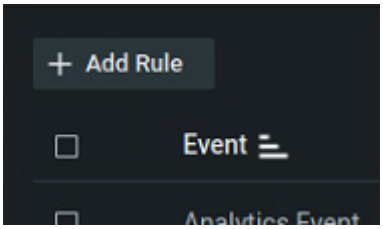


6. In the DW Spectrum client, click the and select **System Administration.**

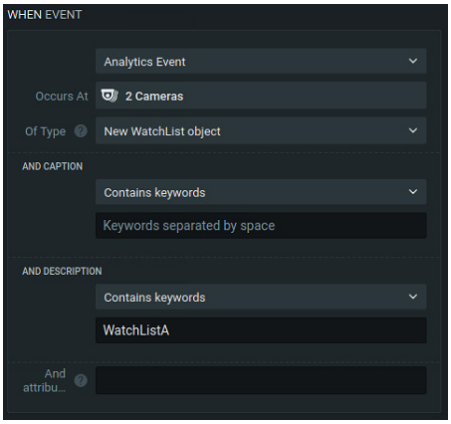


7. Click **Event Rules**. Click the **+ Add Rule** button.





8. Under **Event**, set the following:
   - **When:** Analytics Event
   - **At:** A camera or cameras to look for objects
   - **Event Type:** New WatchList object
   - **Description contains:** Name of the watch list



9. Set an **Action** to be performed when the event is triggered. All other options in this field are dependent on the action to be performed.

NOTE: This products is covered by one or more claims of the HEVC Patents listed at patentlist.accessadvance.com.

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