

# Blackjack<sup>®</sup> MINI<sup>™</sup>

Servers Powered by DW Spectrum<sup>®</sup> IPVMS

Non-RAID	RAID1
DW-BJMINI2T	DW-BJMINI8TR
DW-BJMINI4T	DW-BJMINI16TR
DW-BJMINI8T	DW-BJMINI20TR
DW-BJMINI12T	
DW-BJMINI16T	
DW-BJMINI20T	



Default Login Information for DW Spectrum<sup>®</sup> IPVMS

Username: <b>admin</b>	Password: <b>admin12345</b>
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Default login information for the management page

Username: <b>admin</b>	Password: <b>admin1234</b>
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## WHAT'S IN THE BOX

12V DC adapter and power cable



1 set

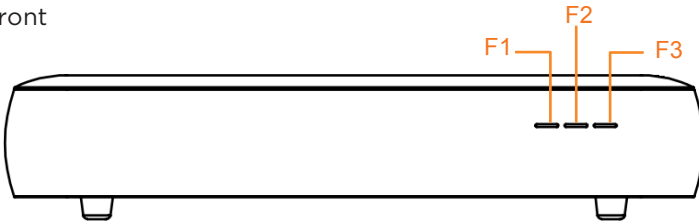
**NOTE:** Download all your support materials and tools in one place.

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<sup>®</sup> full manual for more information on features and functionality.

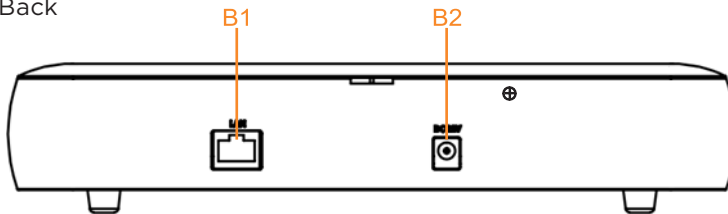
## BLACKJACK<sup>®</sup> MINI<sup>™</sup> HARDWARE

Front



- F1 HDD1 LED
- F2 HDD2 LED
- F3 POWER LED

Back



- B1 LAN (gigabit Ethernet port)
- B2 DC power port (12V)  
(no power switch)

Default Login Information for DW Spectrum<sup>®</sup> IPVMS

Username: <b>admin</b>	Password: <b>admin12345</b>
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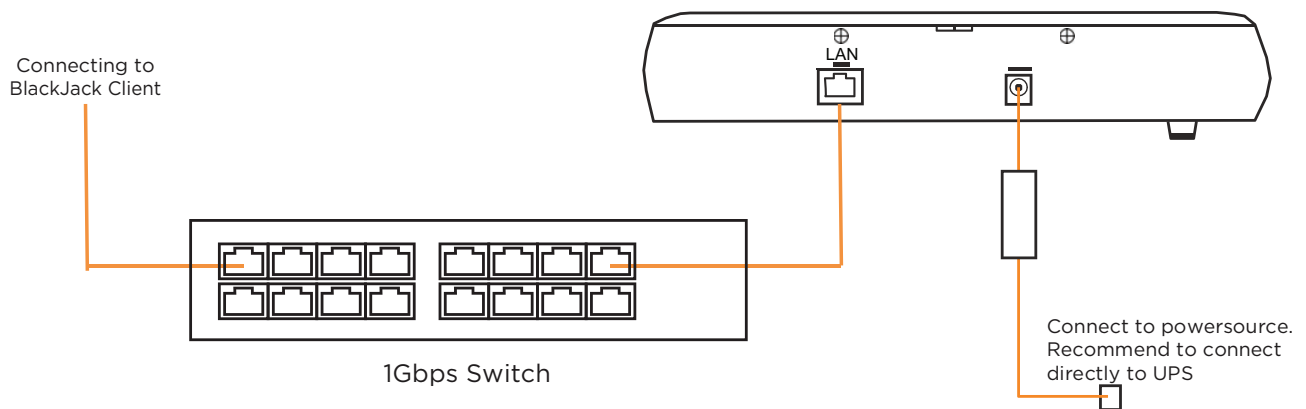
Default login information for the management page

Username: <b>admin</b>	Password: <b>admin1234</b>
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## SETTING UP THE SERVER

Prepare a computer running Windows<sup>®</sup> operating system and install DW Spectrum<sup>®</sup> Client and DW IP Finder<sup>™</sup>. Connect the computer to the same network or network switch where the Blackjack<sup>®</sup> MINI<sup>™</sup> will be connected.

- DW Spectrum<sup>®</sup> client can be downloaded from following site in the software tab.  
(Make sure to download “client” only)  
<https://digital-watchdog.com/productdetail/DW-Spectrum-IPVMS/>
- DW IP Finder<sup>™</sup> can be downloaded from following site in the software tab.  
<https://digital-watchdog.com/productdetail/DW-IP-Finder/>



### STEP 1: Connecting the power cable.

1. Connect the power cable to the DC power port. The device will automatically power on.
2. You can check whether the power is on at the front power LED.

## STEP 2: Connecting to the network



1. Locate the network switch where the Blackjack<sup>®</sup> MINI<sup>™</sup>, cameras and the computer running DW Spectrum<sup>®</sup> client will be connected.
2. Connect a network patch cable from the Ethernet LAN adapter (RJ45) on the Blackjack<sup>®</sup> MINI<sup>™</sup> to the network switch. (Network cable not included).

**NOTE:** A Gigabit switch is required for stable performance.

The screenshot displays the DW IP Finder v4.4.11 interface. On the left, there is a sidebar with navigation options: 'Select a network to scan' (set to Local Area Connection [192.168.0.186]), 'Filter results' (set to All), 'Show/hide thumbnail view' (checked), 'Refresh thumbnails' (Refresh Thumbnail button), 'Bulk IP assignment' (Bulk IP Assignment button), 'Bulk password assignment' (Bulk Password Assignment button), 'Firmware upgrade' (FW Upgrade button), and 'Selected camera's username and password' (fields for Username and Password, and a Log in button). The main area shows a table of discovered devices with columns: Name, IP Address, Model, MAC Address, Netmask, Gateway, Port, DHCP, Version, Ping Test, IP Conf., and Uptime. A 'Thumbnail' column on the left of the table shows camera preview images. On the right side of the interface, there are additional controls: 'Firmware version', 'Camera's uptime', 'Open IP configuration settings', 'Ping camera', 'Camera's network information', and 'Camera's name, IP and MAC addresses'. The table contains the following data:

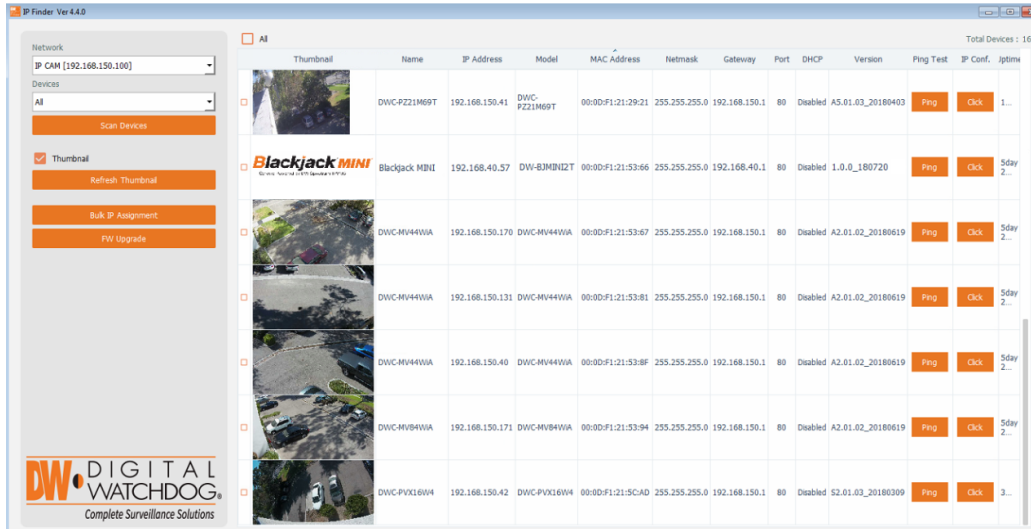
Name	IP Address	Model	MAC Address	Netmask	Gateway	Port	DHCP	Version	Ping Test	IP Conf.	Uptime
DWC-MPTZ30X	192.168.150.34	DWC-MPTZ30X	00:07:D8:19:10:1A	255.255.255.0	192.168.150.1	80	Disabled	1.9.94-X2_release	Ping	Click	
DWC-MV44WA	192.168.150.40	DWC-MV44WA	00:0D:F1:21:53:8F	255.255.255.0	192.168.150.1	80	Disabled	A2.01.02_20180619	Ping	Click	28day 14hrs 1mins
DWC-PZ21M69T	192.168.150.41	DWC-PZ21M69T	00:0D:F1:21:29:21	255.255.255.0	192.168.150.1	80	Disabled	A5.01.03_20180403	Ping	Click	39day 15hrs 54mins
DWC-PVX16W4	192.168.150.42	DWC-PVX16W4	00:0D:F1:21:5C:A0	255.255.255.0	192.168.150.1	80	Disabled	S2.01.03_20180309	Ping	Click	56day 16hrs 46mins
DWC-PF5M1TR	192.168.150.61	DWC-PF5M1TR	00:0A:61:1A:00:14	255.255.255.0	192.168.150.1	80	Disabled	-	Ping	Click	--
DWC-PVFSM2TR	192.168.150.62	DWC-PVFSM2TR	00:0A:61:1A:26:E7	255.255.255.0	192.168.150.1	80	Disabled	-	Ping	Click	--
DWC-MF4WH	192.168.150.63	DWC-MF4WH	00:0D:F1:20:FB:60	255.255.255.0	192.168.150.1	80	Disabled	A2.01.02_20180619	Ping	Click	28day 14hrs 0mins

DWIP Finder v4.4.11 is shown.

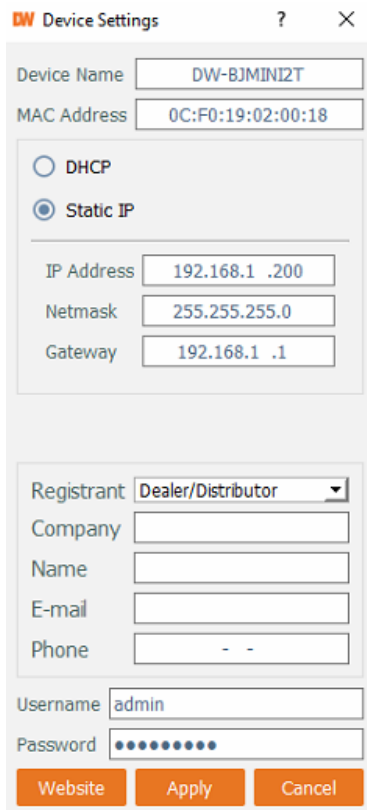
3. From the Windows-based Blackjack<sup>®</sup> server, client or any Windows<sup>®</sup> PC, open DW IP Finder<sup>™</sup> by double clicking on the DW IP Finder<sup>™</sup> icon on  the desktop or click on DW IP Finder<sup>™</sup> from the Start Menu > All Programs > DW IP Finder<sup>™</sup>
4. If the DW IP Finder<sup>™</sup> is not installed or not the latest version, download and install from the following URL: <https://digital-watchdog.com/productdetail/DW-IP-Finder/>.
  - Under the software tab, download the latest software file.
  - Install the DW IP Finder<sup>™</sup> by following the installation wizard.
    - \* Requires DW IP Finder<sup>™</sup> 4.3.17 or later version.
5. When DW IP Finder<sup>™</sup> is launched, click  to scan the current network for all supported DW<sup>®</sup> devices.

6. If the Blackjack<sup>®</sup> MINI<sup>™</sup> is not listed, change the Network\* by clicking the drop down and select another network if it exists. Then click **Scan Devices** to scan the network for the Blackjack<sup>®</sup> MINI<sup>™</sup>.

7. Find the Blackjack<sup>®</sup> MINI<sup>™</sup> in the list, then either double click on the **Blackjack MINI** or click on the **Click** under the IP Conf. column.



8. From the “Device Settings” dialog, enter the server’s IP address, netmask and gateway. Click Apply to save.



9. Click **Scan Devices** to update the IP address of the Blackjack<sup>®</sup> MINI<sup>™</sup>.

10. Follow #7 to open the “Device Settings” dialog and register the product.

Select registrant, enter company, name, e-mail and phone number. Click Apply to save.

\* Internet connection is required for product registration.

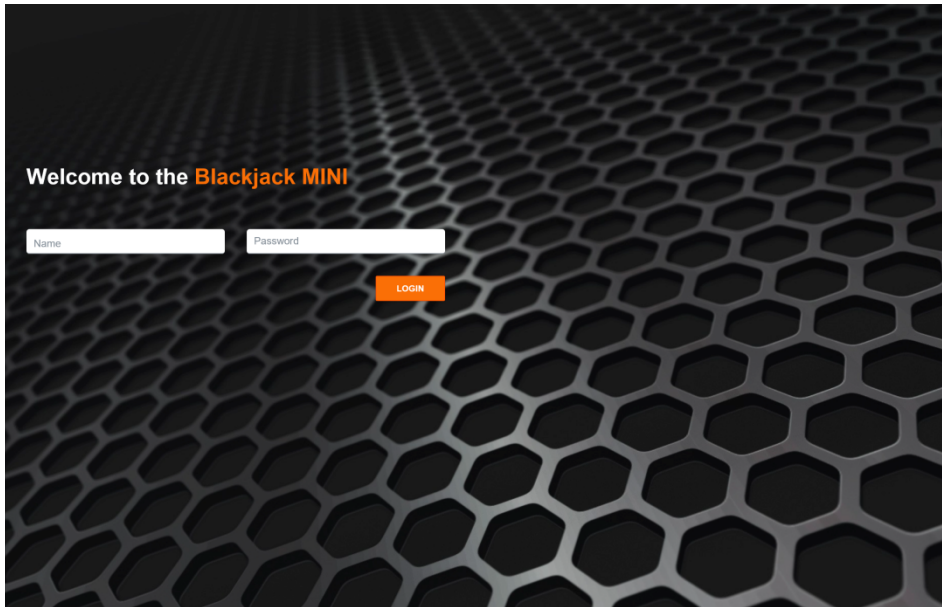
**NOTE:** Default IP information:

IP address: 192.168.1.200,  
Subnet-mask: 255.255.255.0  
Gateway: 192.168.1.1

\* Consult with your IT or network administrator if you do not have IP information.

11. If you have separate subnet for the cameras, you can assign secondary IP address for the cameras' network from the Blackjack<sup>®</sup> MINI<sup>™</sup>'s management web page and follow steps a. through g below. If the cameras are not on a separate subnet, you can proceed to "Step 3: Setting Date and Time".

a. To login to the web server, enter the IP address of the Blackjack<sup>®</sup> MINI<sup>™</sup> in the address bar of a web browser or click on the **Website** button in the above "Device Settings" in the DW IP Finder<sup>™</sup>.



b. When the web page is opened, enter the user name and password.

**NOTE:** Default login Information

Login name: **admin**, Password: **admin1234**

\* The default password warning dialog box will appear. Click "change later" to change the password later.

c. Click on the **System** tab and then click on the **Network** from the drop-down list.

d. Enter the secondary IP address and subnet mask information where the cameras are connected. The secondary IP address cannot be the same subnet as the primary IP address.

**Network**

**TCP/IP Configuration**

Network Type  Static  Dynamic

MAC Address

Primary IP Address

Subnet Mask

Default Gateway

Secondary IP Address  (Use for camera network)  
Must not be same subnet as Primary IP Address

Subnet Mask

**DNS Settings**

Primary DNS

Secondary DNS

**APPLY**

e. Click OK on the warning message.

All connections may be disconnected.  
Are you sure you want to apply?

**CANCEL** **OK**

f. Click **APPLY** to apply all changes.

g. Click OK on the “success” dialog box.

Success to change the network settings.  
Please login again.

**OK**

### STEP 3: Setting the server's date and time

The Blackjack<sup>®</sup> MINI<sup>™</sup> server will automatically sync its time with pool.ntp.org time server if it is connected to the Internet.

1. Open the Blackjack<sup>®</sup> MINI<sup>™</sup>'s management page by following Step2, 11a and 11b.
2. Click on the **System** tab then click on the **Date & Time** from the drop-down list.
3. Verify the current time is correct. If the date and/or time are incorrect, proceed to next lines. If the data and time are correct, skip to 6.
4. Change the time zone to the correct time zone if needed. (Time zone's default settings is Pacific Time).
5. If the current time is not correct, change the time setting mode to manual and adjust the date and time accordingly.

The screenshot shows the 'System' configuration page with the 'Date & Time' section active. It includes fields for 'Current Time' (2018-07-20 08:32:34), 'Time Zone Settings' (set to '(GMT-08:00) Pacific Time (US & Canada), 1'), and 'Time Settings'. Under 'Time Settings', the 'Manual' mode is selected, with 'Date' (2018-07-20) and 'Time' (10:58:40) fields. There is also an option to 'Synchronize with NTP Server' with a server address of 'pool.ntp.org'. An 'APPLY' button is located at the bottom of the form.

6. Click Apply to save all changes.
7. Click OK to close the success dialog box.

Success



## CONFIGURE CAMERAS USING DW<sup>®</sup> IP FINDER<sup>™</sup>

Refer to the camera's QSG to configure any DW<sup>®</sup> IP camera's IP address using DW<sup>®</sup> IP finder<sup>™</sup>.

### DW Spectrum<sup>®</sup> IPVMS Client

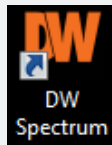


Windows

#### WINDOWS-BASED SOFTWARE MANUAL LAUNCH

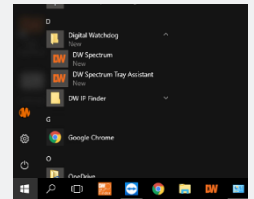
To launch the DW Spectrum<sup>®</sup> software on the Windows-based system:

**OPTION 1:** Double-click the DW Spectrum<sup>®</sup> desktop icon.



OR

**OPTION 2:** Go to 'Start' on the bottom left and select DW Spectrum<sup>®</sup> in the Digital Watchdog folder



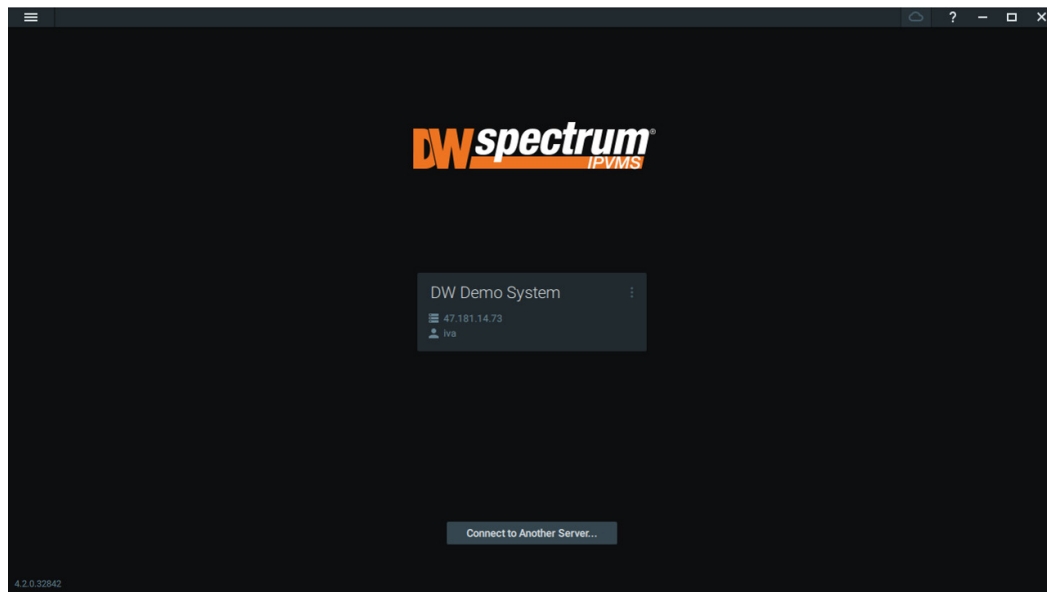
## SETTING UP THE DW SPECTRUM<sup>®</sup> MEDIA SERVER

### STEP 1: Initial run from the DW Spectrum<sup>®</sup> client.

1. Open DW Spectrum<sup>®</sup> client by double click on the DW Spectrum<sup>®</sup> icon

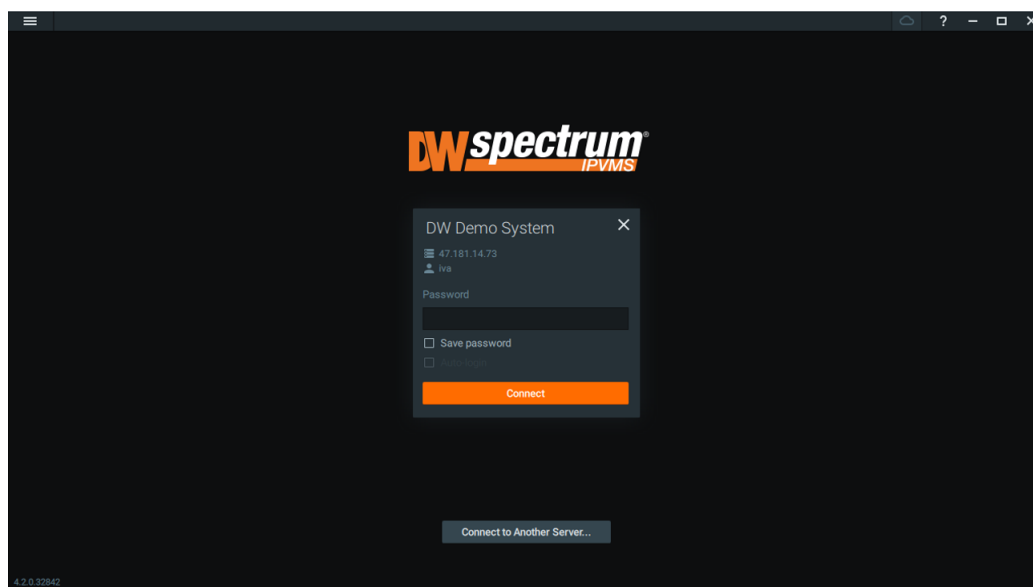


2. Click on the pre-configured Blackjack<sup>®</sup> MINI<sup>™</sup>.



3. Enter the server's password and click connect.

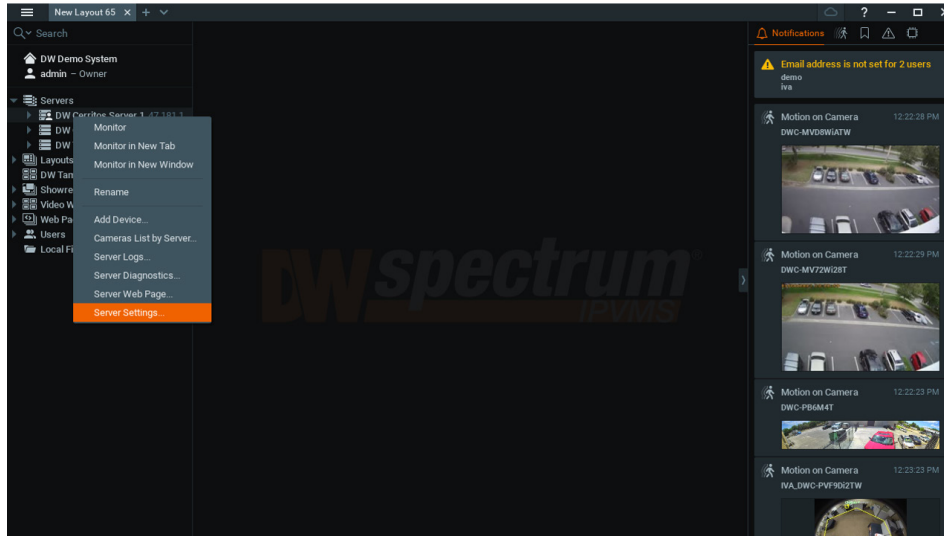
\* Default password: admin12345 (case sensitive).



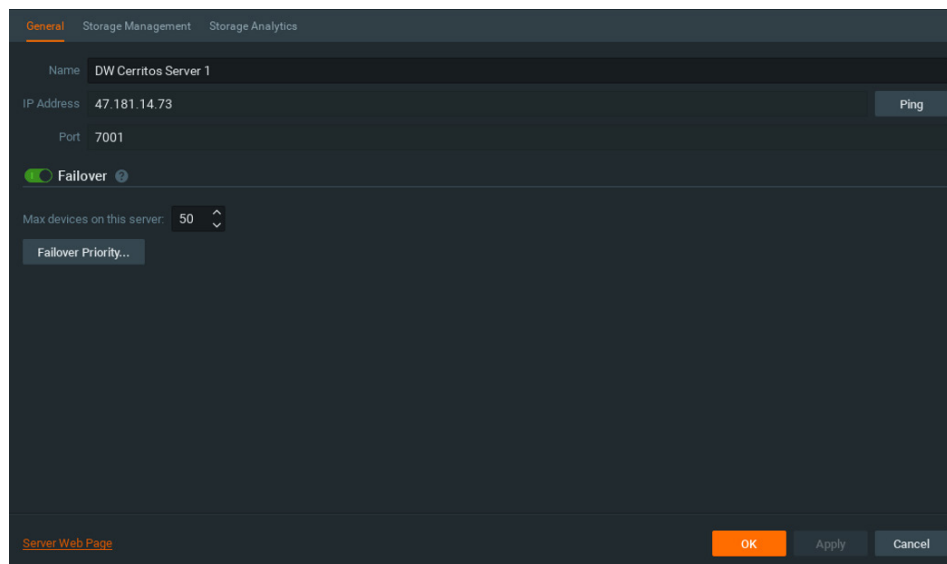


## STEP 2: To rename the server

1. Right click on the server name listed on the resources then click server settings.

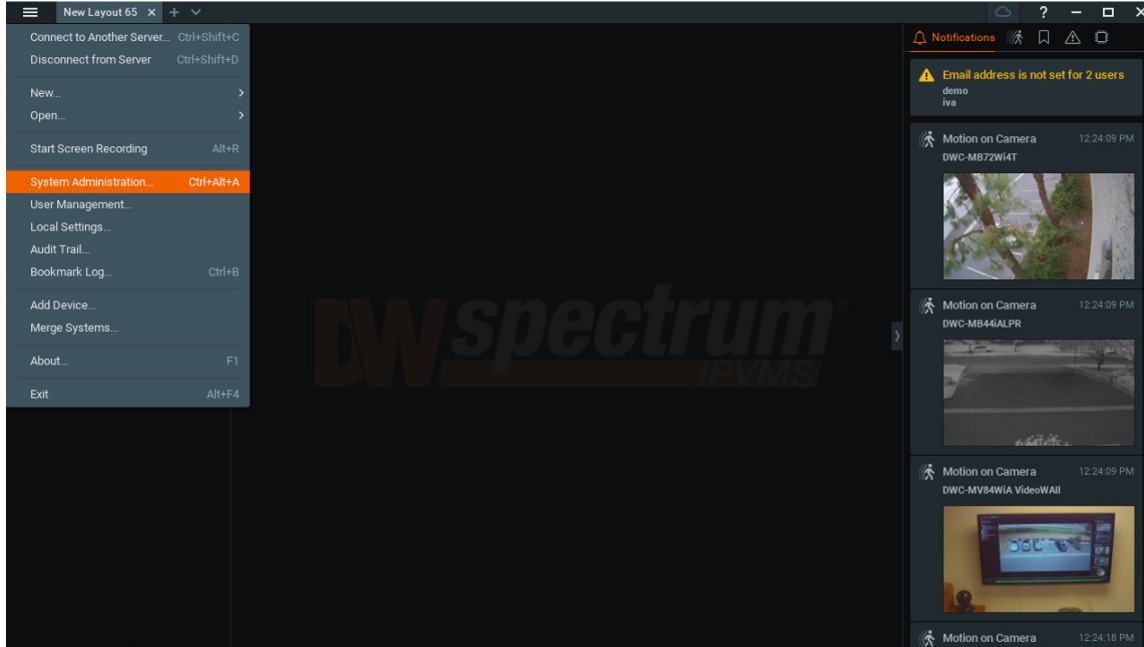


2. Go to general tab, type in the new server name in the name field and click OK.

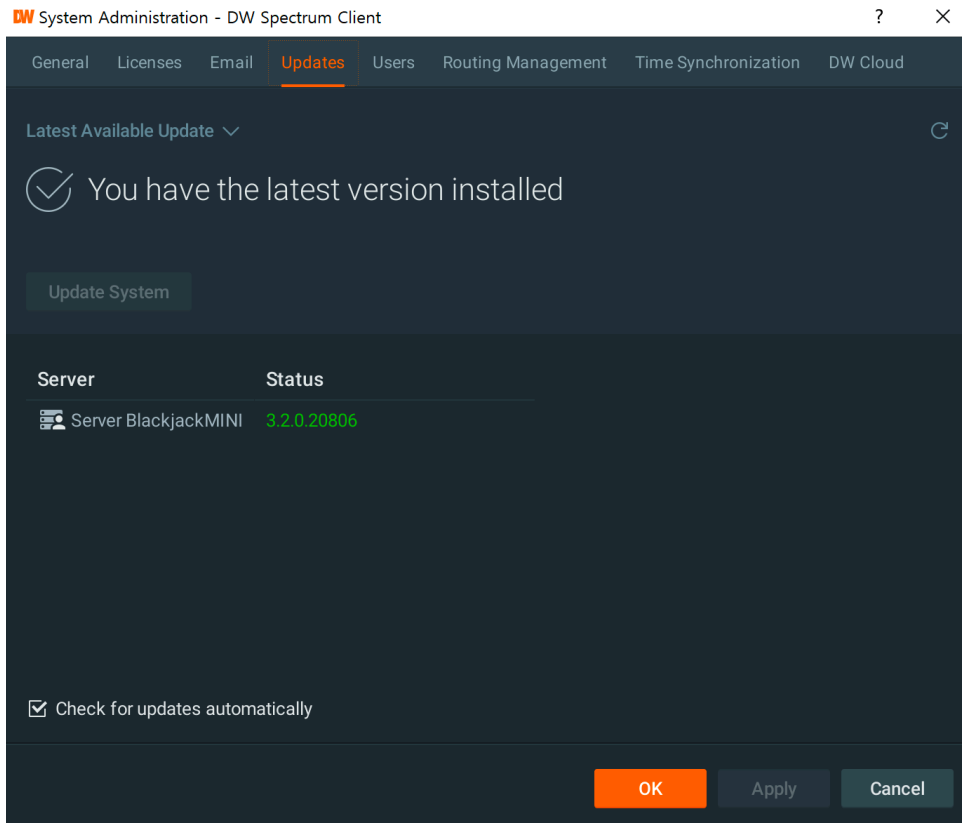


## STEP 3: To check for update

1. Go to the menu on the top left  and click system administration from the drop-down list.



2. Go to the updates tab.



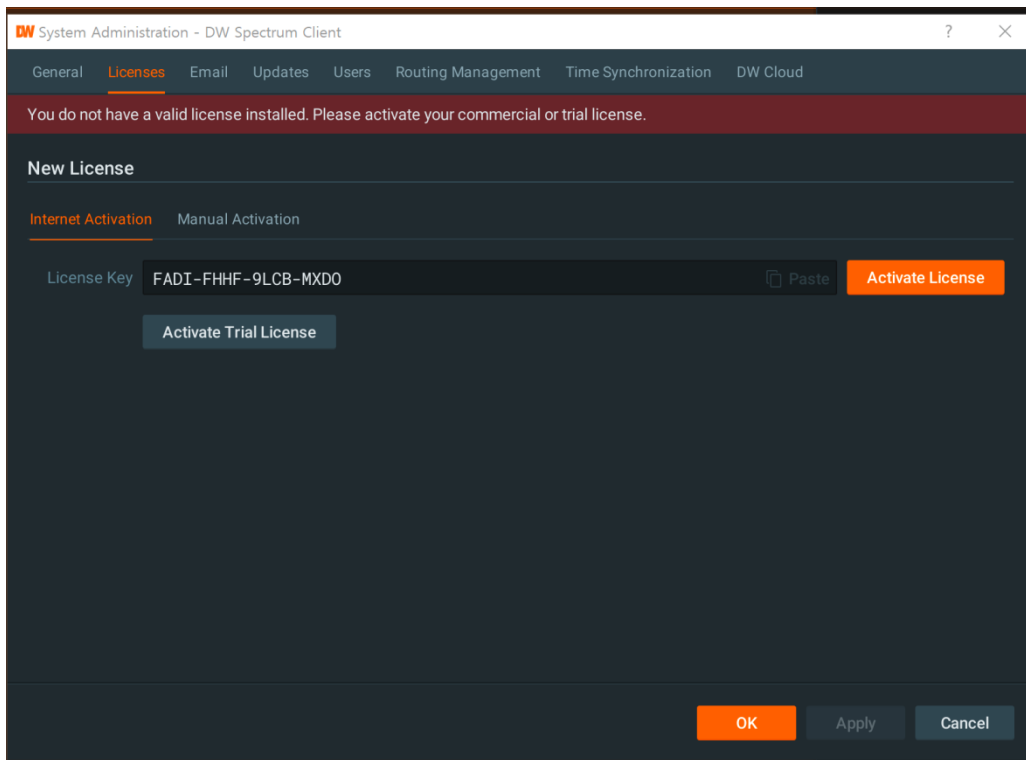
\* If you are on the latest version, the dialog will say “You have the latest version installed” and the update system button will be disabled.

## STEP 4: Enter and activate licenses

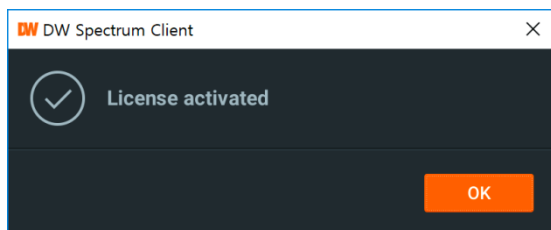
1. Go to the system administration dialog from the top menu's drop-down options and click on the license tab.

2. Enter the license key and click “Activate License”. (Internet connection is required)

\* Click on “Activate Trial License” if you have not purchased a valid license key.



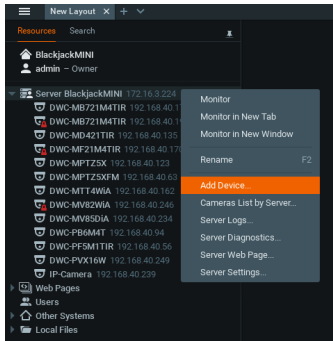
3. Click OK once the license key is activated.



## STEP 5: Configure recording

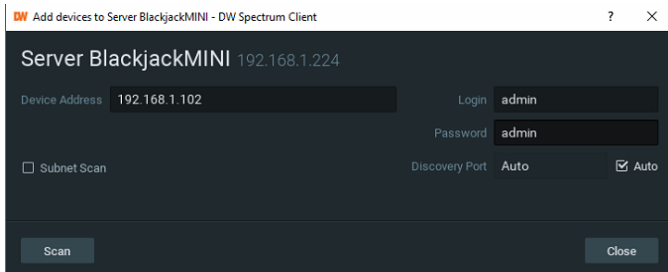
\* Supported cameras and devices on the same network as the server will be added automatically under the server's resource tree. The cameras and other network devices must have the same network settings as the server. If the cameras are not listed, follow the steps below to add the cameras manually. Skip to 1 if all cameras have been discovered automatically.

a. Right-click on the server and select "Add Device" from the context menu.

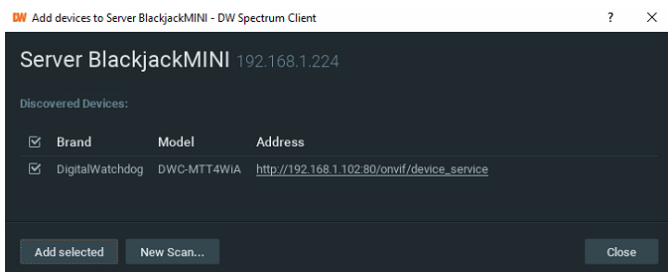


b. Enter the IP address of the camera in the device address field. Enter the camera's username and password. Leave the Discovery Port to Auto.

\* The IP address of the cameras can be obtained via the DW IP Finder<sup>™</sup>.

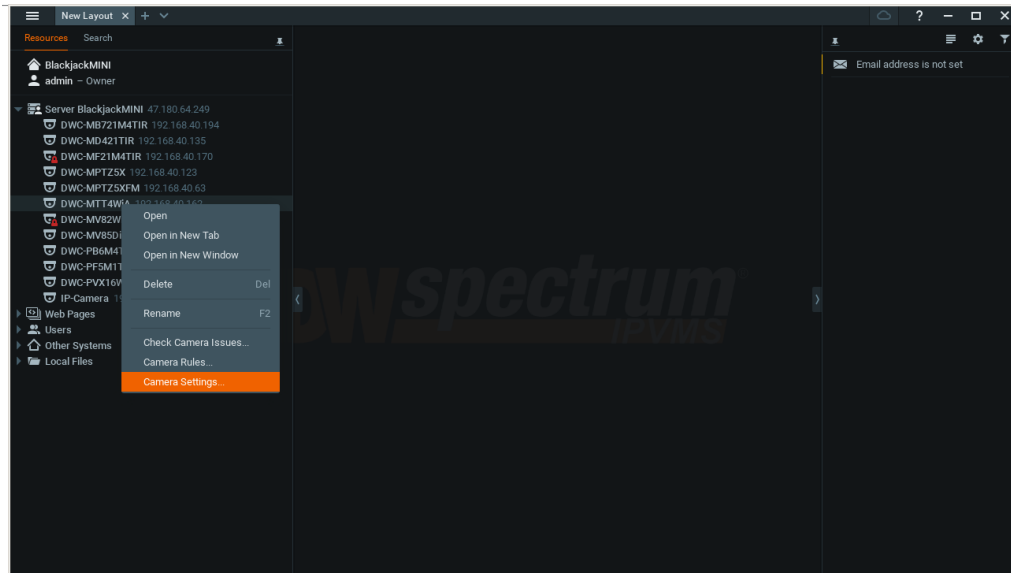


c. Once the camera is discovered, check the box next to it from the results and click "Add Selected".

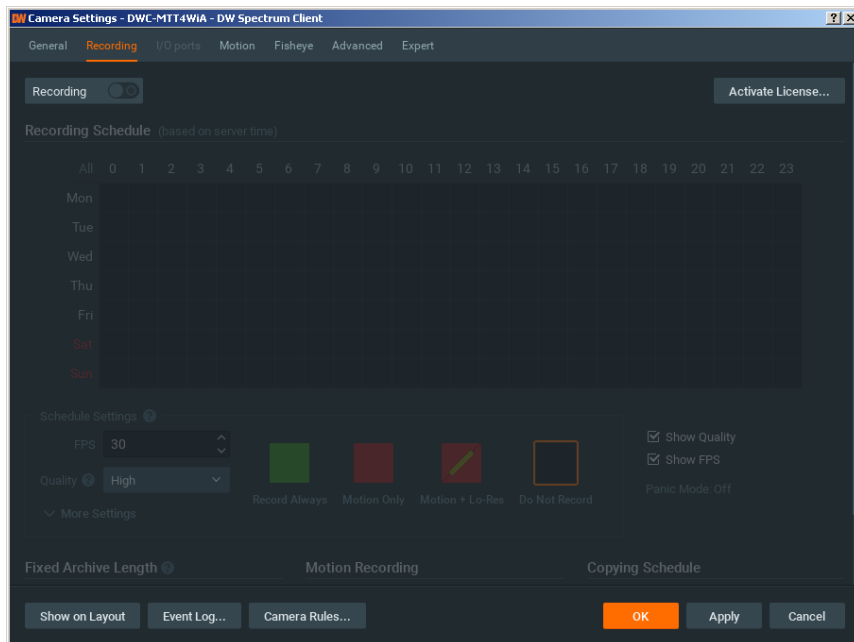


d. Repeat until all the cameras are added.

1. Right-click on the camera to setup recording. Click on "Camera Settings" from the context menu.



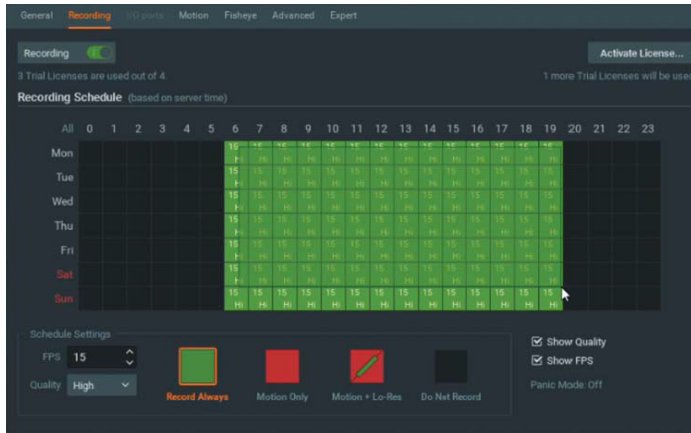
2. Go to the recordings tab.



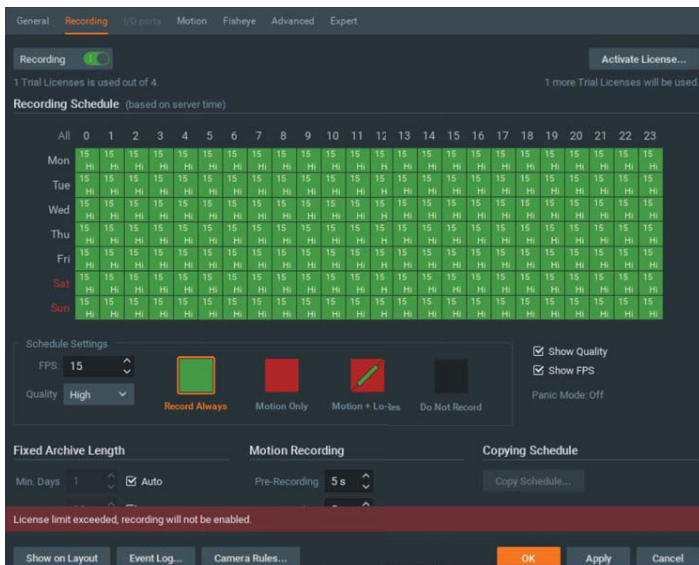
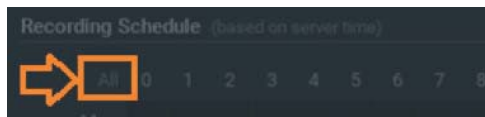
3. Click  to turn on recording. (Recording enabled  )

4. Configure the schedule settings for quality, FPS and recording type.

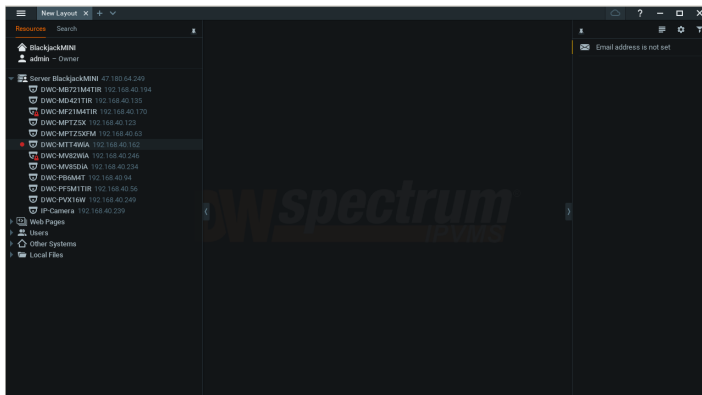
5. Click and drag the mouse over the recording schedule to apply the recording setting to multiple days and hours.




\* Click on “All” to apply to the entire schedules.

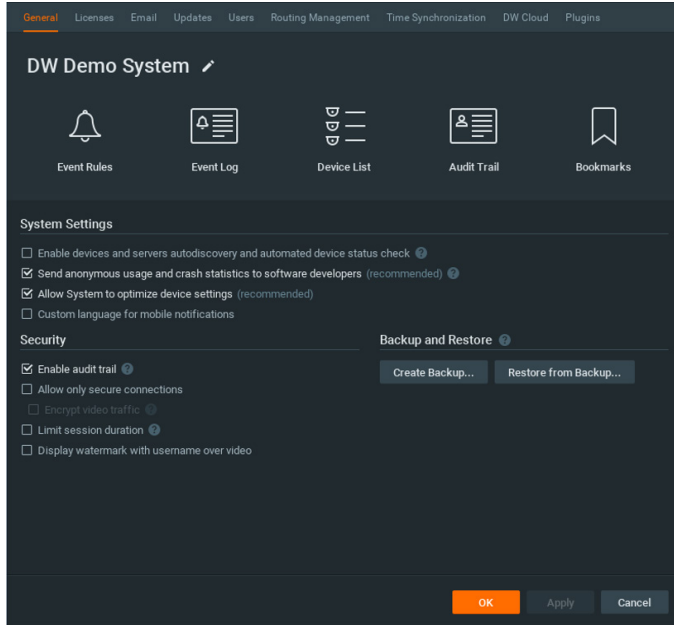



6. A red dot will appear next to the camera in the resource tree once recording is started.

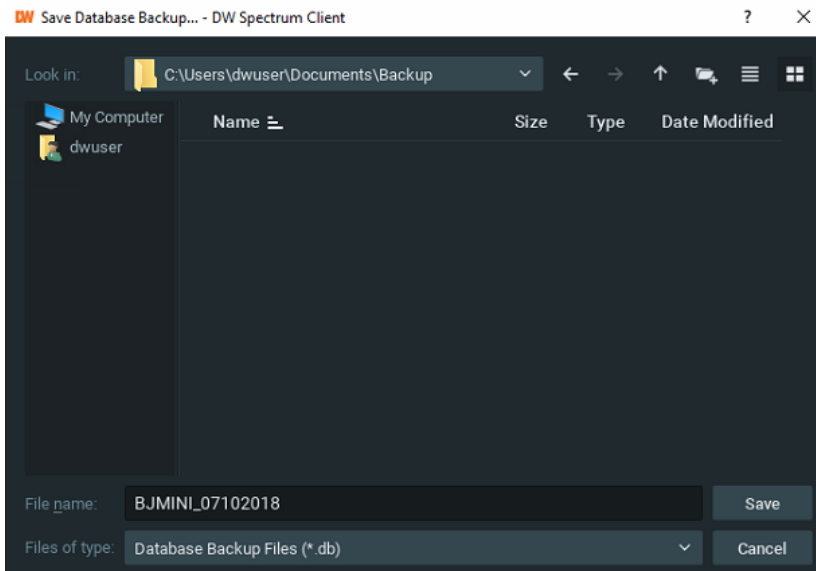


## STEP 6: Backup database

1. Click on the menu  on the top left of the screen and click on “System Administration” from the drop-down list.



2. Click on 
3. Navigate to the folder where you want to save and enter the name of the backup file. Click Save.



\* It is strongly recommended to backup your data to an external storage media.

**NOTE** More information and instructions are available in the DW Spectrum<sup>®</sup> IPVMS user manual.

# TROUBLESHOOTING TIPS

Problem	Possible solutions
My camera does not auto-discover	<ol style="list-style-type: none"> <li>1. Is the camera in the same LAN network as the media server?</li> <li>2. Is your camera compatible with DW Spectrum®? (Refer to our website for full list of supported cameras.)</li> <li>3. Is the camera updated to its latest firmware?</li> <li>4. If your camera is integrated with DW Spectrum® via ONVIF, make sure ONVIF is enabled on your camera.</li> <li>5. Try adding the camera manually.</li> <li>6. Try rebooting the server after installation. Allow up to 2 minutes for the server to map your network and detect all supported devices.</li> </ol>
Videos are slow	<ol style="list-style-type: none"> <li>1. Are you accessing the same cameras from multiple clients? (LAN and WAN)</li> <li>2. Do you have a Gigabit network? Check your network speed.</li> </ol>
My camera appears disconnected	<ol style="list-style-type: none"> <li>1. Under camera settings, make sure the user name and password are correct.</li> <li>2. Under the camera settings, use the 'Ping' button to make sure the camera is connected to the network properly.</li> <li>3. If you can connect to the camera's web viewer, try rebooting the camera and/or restore it to factory default.</li> <li>4. Make sure your camera is using the latest firmware available.</li> <li>5. Make sure that the camera is connected to the same network as the server.</li> <li>6. If you are connecting to a camera that is integrated with DW Spectrum® via the ONVIF protocol (see list), make sure ONVIF is enabled.</li> <li>7. Make sure your user has permissions to view that specific camera.</li> </ol>
I cannot get playback video from my camera	<ol style="list-style-type: none"> <li>1. Do you have network connection between client and server (in case server and client are not on the same machine)?</li> <li>2. Make sure your user has playback viewing permissions for the selected channel.</li> <li>3. Make sure the camera is set to a recording mode that would provide recorded video for the selected time and environment.</li> <li>4. On the server side, check the media server log to make sure the camera you are trying to watch has not been unexpectedly disconnected.</li> </ol>
I get an 'unauthorized' message on my camera	<ol style="list-style-type: none"> <li>1. Make sure the camera's user name and password are properly entered in the camera's general information under the camera settings menu.</li> <li>2. If necessary, try rebooting the camera to apply the camera's user name and password.</li> </ol>

## DW SPECTRUM SYSTEM REQUIREMENTS

### Recommended specs for the full client

	Single-monitor DW Spectrum workstation	Dual-monitor DW Spectrum workstation	Quad-monitor DW Spectrum workstation
Processor	Intel i5 8th gen or AMD Ryzen 5 3000 Quad-Core or better	Intel i7 8th gen or AMD Ryzen 7 3000 Quad-Core or better	Intel i9 or AMD Ryzen 9 Quad-Core or better
Video card	Intel HD Graphics onboard GPU or better	Intel HD Graphics onboard GPU or better	GeForce GTX 1650 or better
RAM	8 GB DDR3 1600 MHz or better	16 GB DDR3 1600 MHz or better	32 GB or better
NIC	1Gbps or better	2 x 1 Gbit or better	2 x 1 Gbit or better
Storage	Dedicated SSD or NVME disk for the OS, 128 GB or larger	Dedicated SSD or NVME disk for the OS, 128 GB or larger	Dedicated SSD or NVME disk for the OS, 128 GB or larger
OS supported	Microsoft Windows OS <ul style="list-style-type: none"> <li>• Windows 8 - Released: October 2012   EoS: 01/2023</li> <li>• Windows 8.1 - Released: October 2013   EoS: 01/2023</li> <li>• Windows 10 - Released: July 2015</li> <li>• Windows Server 2012 - Released: August 2012   EoS: 10/2023</li> <li>• Windows Server 2012 R2 - Released: October 2013   EoS: 10/2023</li> <li>• Windows Server 2016 - Released: October 2016   EoS: 01/2027</li> <li>• Windows Server 2019 - Released: October 2018   EoS: 01/2029</li> </ul>		
	Ubuntu (Debian-based Linux) OS <ul style="list-style-type: none"> <li>• Ubuntu 16.04 LTS "Xenial Xerus" - Released: April 2016   EoS: 04/2024</li> <li>• Ubuntu 18.04 LTS "Bionic Beaver" - Released: April 2018   EoS: 04/2028</li> </ul>		
	Macintosh OS <ul style="list-style-type: none"> <li>• macOS 10.14 "Mojave" - Released: September 2018</li> <li>• macOS 10.15 "Catalina" - Released: October 2019</li> <li>• macOS 11.0, 11.1, 11.2 "Big Sur" - Released: November 2020</li> </ul>		
**NOTE: DW Spectrum IPVMS for macOS is only supported by the DW Spectrum Client.			

\* Except Storage Server version

Important: OS not listed will not be supported by DW® Tech Support

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Fax: (813) 888-9262



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