

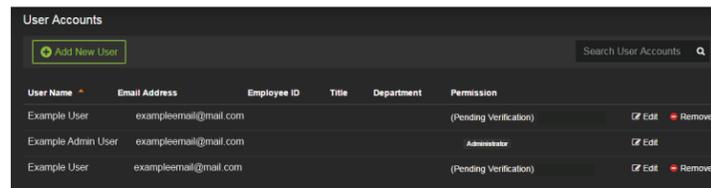
Creating a Company Account

Company accounts are created to segregate different customer accounts, permissions, and recorders from one another. Company accounts can only be created by a channel partner. Once created, the channel partner can assign recorders to companies or create accounts for end users.

1. Log in to your OWS account from a web browser.
2. Enter your registered **Username** and **Password**.
3. Click **Add Company**.
4. Enter a **Company Name**, and then click **Add Company Account**.

Adding Users to OWS

1. Log in to your OWS account from a web browser.
2. Click **Connect** in the row of the **Company Account** you wish to add users to.
3. Click **User Management**, and then click **User Account**.
4. Click **Add New Users**, and then enter the appropriate user information.
5. Click **Add New User**.



Managing User Permissions

To make User Management more efficient, permissions are managed through User Groups rather than through individual users. User Management can be performed locally on individual recorders or performed centrally in the cloud through OWS.

NOTE OpenEye recommends performing all user management using OWS.

Three default permission levels are available:

- **User** - basic Live view and Search functionality
- **Super User** - basic Live view and Search functionality, ability to export and view video clips.
- **Admin** - all Live view, Search, and Export functionality, access to recorder setup and group management.

Adding a User to a Group

1. Log in to your OWS account using a web browser.
2. Click the **Company Account** appropriate for your desired user.
3. Click **User Management**, and then click **User Groups**.
4. In the row of your desired **User Group**, click **Edit**.
5. Click **Users**, and then click **Add User**.
6. Select the user you want to add to the User Group, and then click **Save**.

Removing a User from a Group

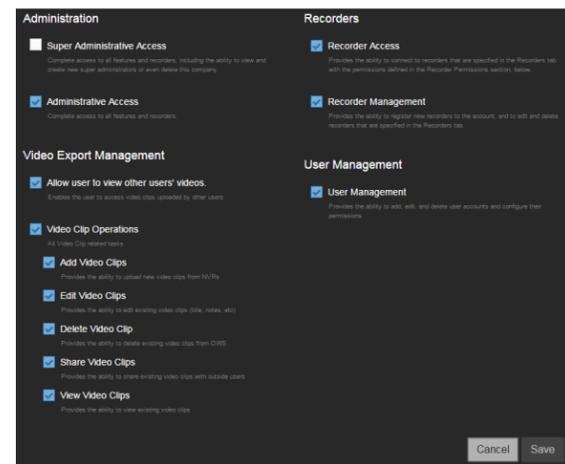
1. In the appropriate **Company Account**, click **User Management**, and then click **User Groups**.
2. In the row of your desired User Group, click **Edit**.
3. Click **Users**, and then click **Remove** in the row of the desired User Group.

Adding a New User Group

1. Log in to your OWS account using a web browser.
2. Click the **Company Account** appropriate to your desired User.
3. Click **User Management**, and then click **User Groups**.
4. Click **Add New User Group**.
5. Type a **Name** and **Description** for the **User Group**, and then click **Save**.

Modifying Group Level Permissions

1. Click the **Company Account** appropriate to your desired User.
2. Click **User Management**, and then click **User Groups**.
3. Click **Edit** in the row of the desired **User Group**.
4. Click one of the following and edit the desired permission:
 - **Web Services Permissions** - These permissions pertain to Video Archive, User Management, and Recorder permissions from the OWS website.
 - **Recorder Permissions** - All Live view, Search, and Setup functions available through the Thin Client, Mobile, and Command Station applications.
 - **Remote Client Permissions** - These permissions pertain to shared Command Station permission.



Modifying Recorder Access

1. Click the **Company Account** appropriate to your desired User.
2. Click **User Management**, and then click **User Groups**.
3. Click **Edit** in the row of the desired **User Group**.
4. Click the **Recorders** tab.
5. To add recorder access, click **Add Recorder**, select the appropriate recorders, and then click **Save**.
6. Click **Remove** in the row of the recorder you want to remove.

NOTE Users who are also assigned to another group with permission to access the recorder removed from this group will still be able to access the recorder.

Quick Installation Guide ML / MG-Series Cloud Managed Appliance

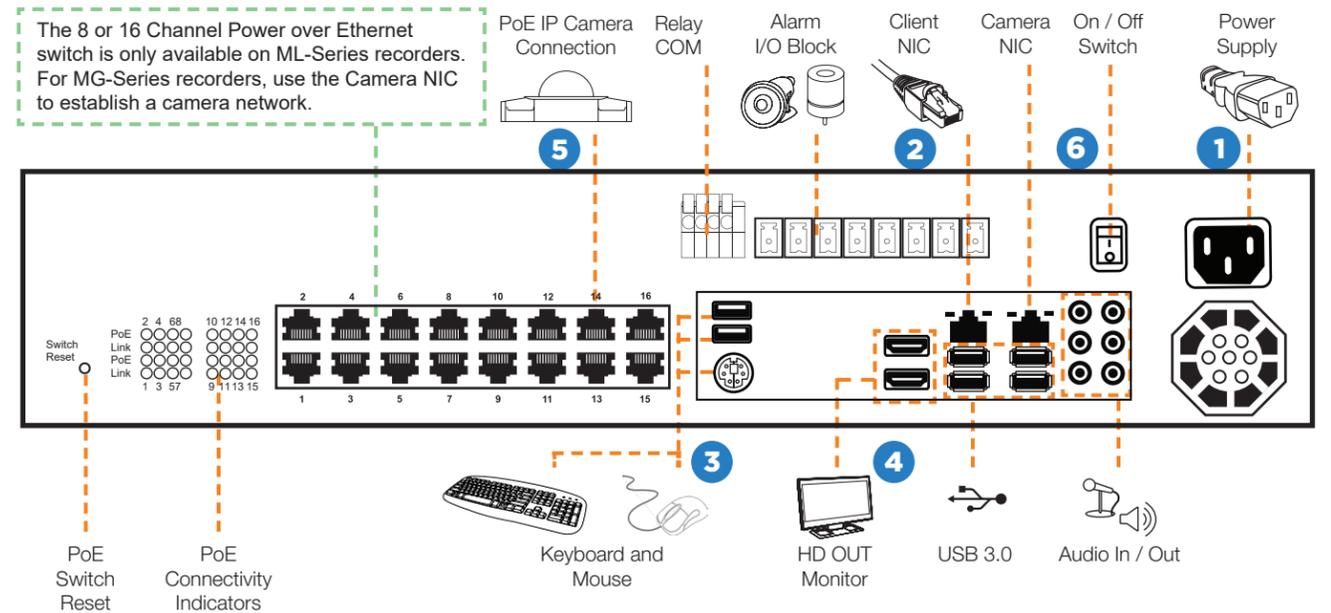
This guide will assist you with the initial setup of your cloud managed appliance and recording software. This guide includes hardware setup, software setup, network configuration, and connecting your appliance to the Web Services Portal.

SETTING UP YOUR RECORDER FOR THE FIRST TIME

1. Plug the supplied power cord into the recorder. Do NOT connect the plug to a power source at this time.
2. Connect the network cable intended for remote connections to the Client NIC.
3. Connect the supplied **keyboard** and **mouse** using the USB ports.
4. Connect a **monitor** using the HDMI or DVI-I ports.
5. Connect the **cameras** to PoE ports, or the external camera network.
6. Connect the **power cord** to a power source, and then turn the recorder ON.
7. Log in to the Apex Server recorder using the default credentials:
 - Username:** admin
 - Password:** 1234
8. Follow the **Setup Wizard** to complete basic setup of your system.

NOTE The Camera NIC is intended for use with a dedicated camera network.

NOTE The MG-Series Apex recorder does not have Power Over Ethernet ports. For these models, use the Camera NIC to connect a camera network.



The 8 or 16 Channel Power over Ethernet switch is only available on ML-Series recorders. For MG-Series recorders, use the Camera NIC to establish a camera network.

NOTE If analog video is required, an active HDMI to VGA adapter is available upon request.

Network Settings

Remote Communication Port	80 (8888 used if 80 is blocked)
Client NIC IP Address	DHCP
Camera NIC (External Switch)	192.168.51.1 / 255.255.255.0 (Gateway and DNS blank)
Camera PoE	192.168.50.1, 192.168.50.2 (reserved for internal communication), 192.168.50.11-26 (Reserved for On-board PoE Camera Ports)

**PoE reserved IP addresses apply to ML-Series recorders only

CAMERA MANAGEMENT

Apex Server software makes it easy to add and configure IP cameras. ML-Series Apex recorders will automatically detect and add OpenEye and ONVIF IP cameras connected to the on-board PoE switch. MG-Series Apex recorders will detect cameras connected to the Camera NIC.

NOTE Third party cameras may need to be configured using a third party program before being added to Apex Server. Cameras that don't support ONVIF can be configured to record via RTSP streaming.

Adding Auto-Detected Cameras

Apex Server software automatically detects ONVIF Profile S compliant cameras set to DHCP. Cameras not meeting these requirements must be configured manually.

1. Click **Setup** , and then click **Cameras**.
2. Click **Add Cameras**.
3. For automatically detected cameras, select the camera(s) using the check boxes, and then type the appropriate **Username** and **Password**.
4. Click **Add**.

NOTE The ML-Series Apex recorder will automatically detect and add most cameras connected to the on-board PoE switch as long as the cameras are set to DHCP.

Adding Cameras Manually

1. Click **Setup** , and then click **Cameras**.
2. Click **Add Cameras**.
3. For cameras not automatically detected, click **Add Cameras Manually**.
4. Select the ONVIF or the RTSP protocol, and then type the appropriate **Title**, **IP Address**, **Username**, and **Password**.

NOTE When using RTSP, specify the individual URL streams for your cameras. For instructions regarding these streams, consult the camera manual.

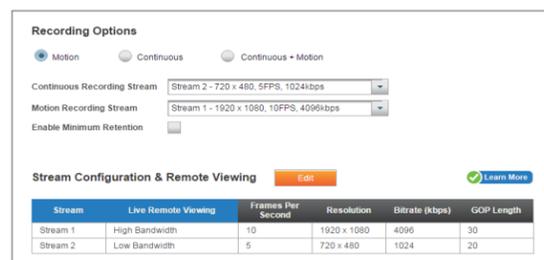
5. Click **Add Cameras**.

Configuring Recording Settings

For optimal motion detection, cameras should be configured with a secondary stream of 720x576 or lower. Apex will still detect motion using a higher resolution stream if a 720x576 or lower stream is not available, but this will consume more system resources.

1. Click **Setup** , and then click **Cameras**.
2. Select the desired camera, and then click the **Live / Recording** tab.
3. Configure the settings as desired.

NOTE Continuous + Motion recording is the default setting for all cameras upon connection to your Apex recorder.



The screenshot shows the 'Recording Options' section with radio buttons for 'Motion', 'Continuous', and 'Continuous + Motion'. Below are dropdown menus for 'Continuous Recording Stream' (Stream 2 - 720 x 480, 5FPS, 1024kbps) and 'Motion Recording Stream' (Stream 1 - 1920 x 1080, 10FPS, 4096kbps). There is a checkbox for 'Enable Minimum Retention'. The 'Stream Configuration & Remote Viewing' section includes an 'Edit' button and a 'Learn More' link. A table below shows stream configurations:

Stream	Live Remote Viewing	Frames Per Second	Resolution	Bitrate (kbps)	GOP Length
Stream 1	High Bandwidth	10	1920 x 1080	4096	30
Stream 2	Low Bandwidth	5	720 x 480	1024	20

ADVANCED CAMERA MANAGEMENT

Cameras set to static IP addresses, third party cameras, and cameras not supported by ONVIF may not be detected automatically. To configure cameras not automatically detected by Apex Server software, follow the steps below.

Configuring OpenEye Cameras with a Static IP Address (Linux models only)

1. Click **Setup** , and then click **Support Tools**.
2. Click **Launch Support Tools**.
3. Click **Network Camera Manager**.
4. Note the discovered **IP address** for the desired camera.
5. Click **Exit** to return to Apex Server software.
6. Follow the steps in the *Adding Cameras Manually* section, typing the **Static IP Address**.

NOTE Network Camera Manager can be launched from the Windows desktop icon.

Configuring OpenEye Cameras with DHCP (Linux models only)

1. Click **Setup** , and then click **Support Tools**.
2. Click **Launch Support Tools**.
3. Click **Network Camera Manager**.
4. Select your desired cameras, and DHCP, and then click **Apply**.
5. Click **Exit** to return to Apex Server software.
6. Follow the steps in the *Adding Auto-Detected Cameras* section to add the camera.

NOTE OpenEye cameras on Windows can be configured with DHCP by launching Network Camera Manager from the Windows desktop icon.

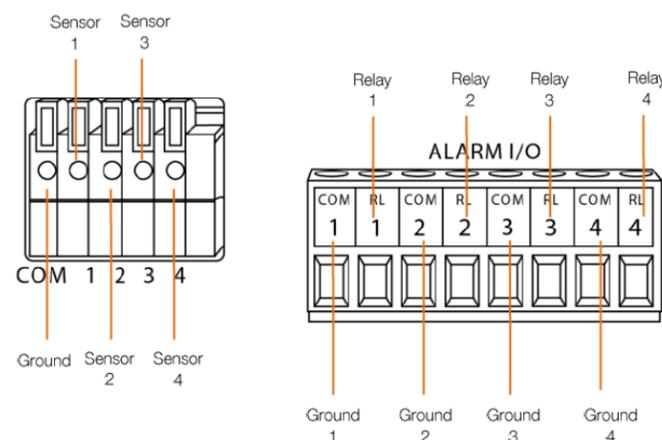
Adding Third Party Cameras

Third party cameras may require installing a manufacturer camera discovery tool on a separate PC. Once the camera discovery tool is installed, follow the steps for adding a camera with a static IP address or using DHCP as outlined above.

Adding Cameras Not Supported by ONVIF

You must add cameras that are not ONVIF-compliant using the RTSP stream of the camera. Consult the manufacturer's camera manual for more detailed information regarding RTSP streams. When you know the URL for the RTSP stream of your camera, follow the steps in the *Adding Cameras Manually* section, selecting RTSP protocol.

SENSOR / RELAY CARD



ADVANCED NETWORK SETUP

In some cases, advanced network settings may be applied to set up an optimal local or remote connection. The following steps are optional. Please contact an OpenEye support technician if you are unsure of your video network.

Direct Connection

With direct connection, network traffic bypasses the OWS cloud relay service, allowing for optimal connection speeds. This configuration requires additional steps, including router configuration, in order to forward traffic to the appropriate Apex recorder.

NOTE Visit http://portforward.com/English/routers/port_forwarding/ for instructions regarding router configuration for direct connection.

1. Access the **router** used for Internet communication and forward **TCP port 80** to the internal address of the Apex Server recorder.
2. Use a web browser to log in to your OWS account. Click **My Recorders**, and then click **Edit** in the row of your desired recorder.
3. Click **Remote Network Settings**, and then type the **static IP** or **DDNS entry** for the router in the **IP Address** or **Domain** field, and **80** in the **Port** field.
4. Click **Save**.

LAN Smart Forwarding

To optimize local connections, OWS uses a feature called LAN Smart Forward (LSF). This feature allows OWS to detect if the machine using the remote client software is on the same local network. OWS then automatically switches from a cloud relay connection to a direct connection. This ensures the fastest connection between client and recorder.

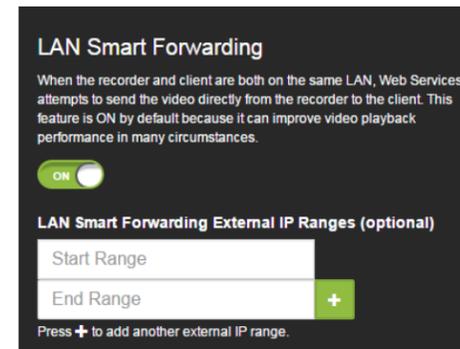
The following conditions are required for LAN Smart Forwarding:

- You must already have an OWS account, and the appliance must be connected to OWS with LAN Smart Forwarding configured (see the OpenEye Web Services section for more information).
- Both client and recorder use the same external IP address, or IP addresses within an acceptable range.
- The Client NIC port must be used for the Internet connection.

To enable LAN Smart Forwarding:

1. Use a web browser to log in to your OWS account, and then click on your desired **Company Account**.
2. Click **My Recorders**, and then click **Edit** in the row of the desired recorder.
3. Click the **Remote Network Settings** tab.
4. Set **LAN Smart Forwarding** to On.

NOTE If your recorder and client machines have different external IP addresses, enter the IP range in which the client and recorder reside.



The screenshot shows the 'LAN Smart Forwarding' configuration page. It has a toggle switch set to 'ON'. Below is a section for 'LAN Smart Forwarding External IP Ranges (optional)' with input fields for 'Start Range' and 'End Range', and a '+' button to add more ranges. A note at the bottom says 'Press + to add another external IP range.'

OPENEYE WEB SERVICES

OpenEye Web Services is a cloud based management solution which allows you to administer all your users, recorders, and VMS installations from one central location. To get the most out of your new web-managed recorder, we strongly recommend connecting it to the Web Services portal.

Creating an OpenEye Web Services Account

To begin using OWS, you will need to add individual companies to associate with customers.

NOTE If you do not already have an OWS account, visit <http://ows.openeye.net>

Connecting a Recorder to OWS

In the previous *OpenEye Web Services Connection* section, you enabled OpenEye Web Services on your Apex Server recorder.

Now, you will need to add the recorder to the appropriate Company Account.

1. Log in to your OWS account at ows.openeye.net from a web browser.
2. Select the appropriate **Company Account**, and then click **Add**.

NOTE Once you have enabled an Apex recorder to connect with OWS, it will appear on your OWS account as an unassigned recorder. Assign the recorder to the appropriate Company Account.

Users associated with this Company Account will now be able to remotely access the Apex Server recorder.

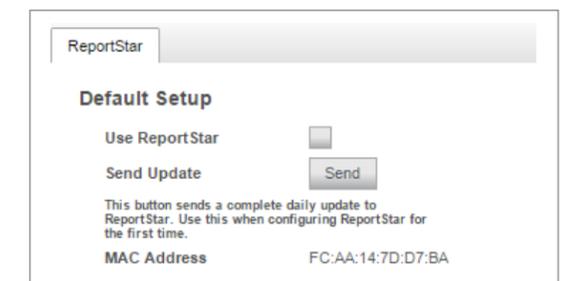
OPENEYE WEB SERVICES CONNECTION

1. On your Apex Server recorder, click **Setup** , and then click the **Global Configurations** tab.
2. Click **Web Services Account**.
3. Type your OpenEye Web Services Account **Email** and **Password**, or the **Recorder Registration Code**.
4. Click **Connect**.

REPORTSTAR CONNECTION

1. Click **Setup** , and then click **ReportStar**.
2. Select **Use ReportStar**.
3. Configure the settings as desired.

NOTE If you do not already have a ReportStar account, visit www.reportstar.com/newaccount.



The screenshot shows the 'ReportStar Default Setup' page. It has a 'Use ReportStar' checkbox checked. Below is a 'Send Update' button with a 'Send' sub-button. A note says 'This button sends a complete daily update to ReportStar. Use this when configuring ReportStar for the first time.' At the bottom, the 'MAC Address' is displayed as 'FC:AA:14:7D:D7:BA'.