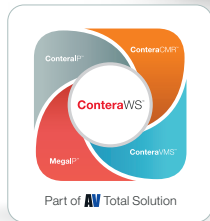


ConteraCMR™ Cloud Managed Recorder Series

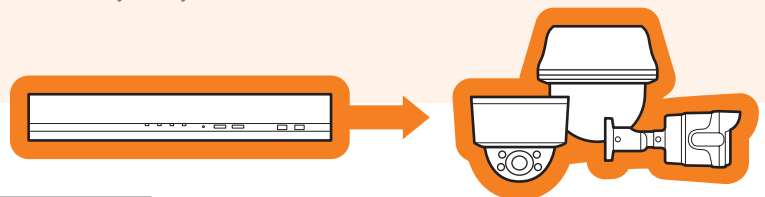


Quick Installation Guide

This guide will assist you with the initial setup of your ConteraCMR™ cloud managed appliance and recording software. This guide includes hardware setup, software setup, network configuration, and connecting your appliance to the ConteraWS™ 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.
Note: The Camera NIC is intended for use with a dedicated camera network.
Note: For models with PoE ports, use the Camera NIC to connect a camera network.
- 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 Windows Only - Sign in with default log in credentials:
Username: NVRAdmin
Password: dvr4321
- 8 Windows Only - Open the Contera Server login on the desktop.
- 9 Log in to the Contera Server Recorder using the default credentials:
Username: admin
Password: 1234
- 10 Follow the **Setup Wizard** to complete basic setup of your system.



Network Information

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 Onboard PoE Camera Ports)

Camera Management

Contera Server software makes it easy to add and configure IP cameras.

Contera 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 the Server. Cameras that don't support ONVIF can be configured to record via RTSP streaming.

Adding Auto-Detected Cameras:

Contera 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 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.

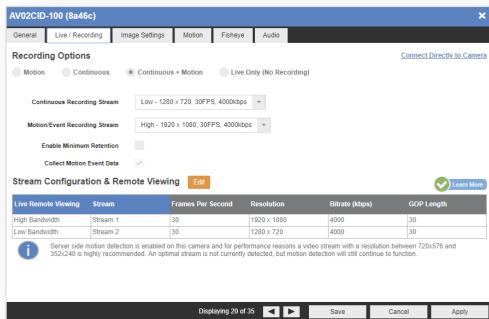
5. Click **Add Cameras**.

Configuring Recording Settings:

For optimal motion detection, cameras should be configured with a secondary stream of 720x576 or lower. Contera 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 recorder.



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 Contera Server software, follow the steps below.

Configuring Arecont Vision® Cameras with a Static IP Address (Linux models only):

1. Click **Setup** , and then click **Support Tools**.
2. Click **Launch Support Tools**.
3. Click **AV IP Utility**.
4. Note the discovered **IP address** for the desired camera.

5. Click **Exit** to return to Contera 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 Arecont Vision Cameras with DHCP (Linux models only):

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

Note: Arecont Vision cameras on Windows can be configured with DHCP by launching Network Camera Manager from the Windows desktop icon.

Adding Third Party Cameras:

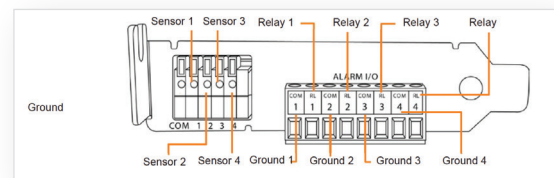
Third party cameras may require installing a manufacturer camera discovery tool on a separate PC. Once the camera discovery tool is installed, follow the steps for adding a camera with a static IP address or using DHCP as outlined above.

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

Contera Server version 1.2 or higher is required for use of the Sensor/Relay Card. See page 36 of the Contera Server Software Manual for instructions on setting up the Sensor/Relay Card on the software.



Note: Do not remove the Alarm I/O adapter. It is permanently attached to ensure full integrity of the connections. A small fine-tip screwdriver might be needed to access the lock screws on the adapter.

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 Arecont Vision support technician if you are unsure of your video network.

Direct Connection:

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

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

1. Access the **router** used for Internet communication and forward **TCP port 80** to the internal address of the Contera Server recorder.

2. Use a web browser to log in to your ConteraWS™ 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, ConteraWS uses a feature called LAN Smart Forward (LSF). This feature allows ConteraWS to detect if the machine using the remote client software is on the same local network. ConteraWS then automatically switches from a cloud relay connection to a direct connection. This ensures the fastest connection between client and recorder.

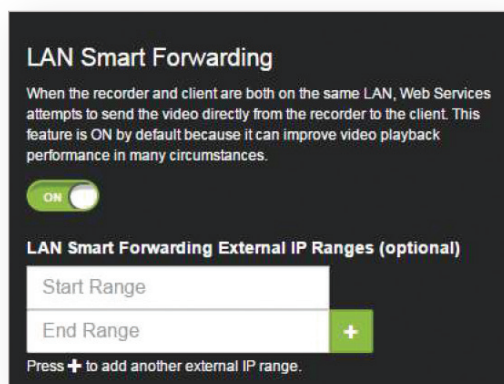
The following conditions are required for LAN Smart Forwarding:

- You must already have an ConteraWS account, and the appliance must be connected to ConteraWS with LAN Smart Forwarding configured (see the ConteraWS 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 ConteraWS 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.



ConteraWS Web Services (ArecontVision-WS.com)

1. On your Recorder, click **Setup**, and then **navigate** to the **Remote Services** tab.
2. Click **Web Services**.
3. Type your **Registration Code**.

Note: If you do not have your Recorder Registration Code, you may enter your ConteraWS Email and Password instead. It is recommended to use a Recorder Registration Code if available though.

4. Click **Connect**.

ConteraWS Web Services Connection

ConteraWS 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.

Please note that all following instructions are executed at a Channel Partner level. For more detailed instructions on how to operate at an End User level, please consult the ConteraWS Software Manual, available at www.arecontvision.com.

To begin using ConteraWS, you will need a Channel Partner ConteraWS account. If you do not have one already, please contact Arecont Vision® at www.arecontvision.com.

Connecting a Recorder to ConteraWS:

If you entered your Recorder Registration Code in the previous section, your recorder will be automatically added to your ConteraWS Company Account.

Users associated with your Company Account and with the appropriate permissions will now be able to remotely access the Server recorder.

Creating a Customer Account:

A Customer Account is an ConteraWS End User account created under a Channel Partner account and managed by the Channel Partner. Customer Accounts can only be created by the Channel Partner. Once created, the Channel Partner can assign recorders to Customer Accounts and create End User accounts.

1. Log in to your ConteraWS account from a web browser using your registered **Username** and **Password**.
2. On the Management Portal, click **Add New Account**.
3. Enter an **Account Name**.
4. (Optional) Enter an **Account ID**, **City**, **State/Province**, and **Time Zone**.
5. Click **Add Company Account**.

Creating a Customer Account:

1. Log in to your ConteraWS account from a web browser using your registered **Username** and **Password**.
2. Click **Settings** , and then click **Users**.
3. Click **Add New User**, and then enter the appropriate user information.
4. Click **Add New User**.

Note: This method creates users at the Channel Partner level. To create users at an End User level, complete step 1, then click **Connect** next to the Company Account you wish to add users to, then complete steps 2-4.

Managing User Permissions:

User permissions are managed via assignment of individual users to User Groups. User Groups are classifications which grant users permissions to access various aspects of a Channel Partner or Customer Account. User and User Group Management should always be performed through ConteraWS.

Three default permission levels are available:

- **User** – Basic Live View, Search, and Clip Share functionality.
- **Super User** – Live View, Search, Clip Sharing, Editing, Deleting, and Recorder Management.
- **Admin** – All permissions, including full administrative access and the ability to manage Users and User Groups.

Note: Default user group permissions cannot be edited. Creating a new user group will allow customization of available permissions.

Adding a User to a Group:

1. Log in to your ConteraWS account using a web browser using your registered **Username** and **Password**.
2. Click **Settings** , then click **User Groups**.
3. In the row of your desired User Group, click **Edit**.
4. Click **Users**, and then click **Add User**.
5. Select the user you want to add to the User Group, and then click **Save**.

Note: Automatically include all users in the User Group by checking the box so labeled at the top of the list.

Adding a Group to a User:

1. Log in to your ConteraWS™ account using a web browser using your registered **Username** and **Password**.
2. Click **Settings** , then click **Users**.
3. Click **Edit** next to the desired user.
4. Click **Group Membership**, and then click **Add User to User Group**.
5. Select the **User Groups** you want to include the user in, and then click **Save**.

Removing a User from a Group:

1. Click **Settings** , and then click **User Groups**.
2. In the row of your desired User Group, click **Edit**.
3. On the **Users** tab, click the X next to the user to be removed.

Adding a New User Group:

1. Log in to your ConteraWS account using a web browser using your registered **Username** and **Password**.
2. Click **Settings** , and then click **User Groups**.
3. Click **Add New User Group**.
4. Type a **Name** and **Description** for the User Group, and then click **Create**.

Modifying Group Level Permissions:

1. Log in to your ConteraWS account using a web browser using your registered **Username** and **Password**.
2. Click **Settings** , and then click **User Groups**.
3. Click **Edit** next to the desired User Group.
4. Click one of the following and edit the desired permission:
 - **ConteraWS Permissions** – These permissions pertain to Video Clips, User Management, Recorders, Alerts, and Reports from the ConteraWS website.
 - **Recorder Permissions** – All Live View, Web Services, and Setup functions are available through the ConteraVMS Thin Client, ConteraVMS Thick Client, and ConteraMobile™ App.
 - **AV IP Utility™ Permissions** – View and Manage Shared Camera layouts for ConteraVMS.

Modifying Device Access:

1. Log in to your ConteraWS account using a web browser using your registered **Username** and **Password**.
2. Click **Settings** , and then click **User Groups**.
3. Click **Edit** in the row of the desired User Group.
4. Click the **Recorders/Cameras** tab.
5. To add device access, click **Add Recorder** or **Add Camera**, select the appropriate device groups or devices, and then click **Add**.

Note: To remove a device group or device, click the dropdown arrow next to a device, then click **Remove Recorder**.

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.

Creating a Health Alert:

1. Log in to your ConteraWS account using a web browser using your registered **Username** and **Password**.
2. Select **Rules** from the Alerts dropdown menu on the main navigation bar.
3. Click **Add New Rule**.

4. Name your alert rule and give it a **Description** as desired.
5. Click **Add**.
6. Define the parameters of the alert rule.
7. Add **Recorders**, **Cameras** and **Users** to the alert rule as needed.
8. Click **Save** when finished.

Note: For more information about creating Alerts, please refer to the ConteraWS Software Manual available at www.arecontvision.com.

Creating a Report:

1. Log in to your ConteraWS account using a web browser using your registered **Username** and **Password**.
2. Click **Reports** on the main navigation bar.
3. Click **Add New Report**, then select the Report Type you'd like to use and click **Next**.
4. Enter a **Report Name** and **Report Description**.
5. Click **Create**.
6. Add **Recorders** and **Users** to your report.
7. Click **Save** when finished.

Note: For more information about creating Reports, please refer to the ConteraWS Software Manual available at www.arecontvision.com.

Viewing and Exporting Alert History:

1. Log in to your ConteraWS account using a web browser using your registered **Username** and **Password**.
2. Select **History** from the Alerts dropdown menu on the main navigation bar.
3. Click **Show Filters**.
4. Use the fields to specify which alerts to view.
5. Click **Apply** when finished.
6. Click **Export**.
7. Click **Export** again.



Go to: ArecontVision-WS.com