

**S2 Security Corporation NetBox™
and
exacqVision Network Video Recorder**

Setup and Integration Guide

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Requirements for exacqVision NVR/S2 NetBox Integration

The hardware, software, and licenses required for your S2 NetBox™ NVR features are listed below.

In addition to those items it will be necessary for you to have:

- Direct access to the exacqVision machine
- Login username and password to the Network Controller with setup privileges.

Hardware

At this release the NVR feature is tested to work with the following devices:

- **S2 NetBox version 4.0 or later.**
- **exacqVision Server with version 3.6 or later:** The server can be purchased with pre-installed software, or the software can be manually installed on an existing server.

Software and Licenses

- **exacqVision Server License.**
- **exacqVision Web Service version 1.1 or later:** This service handles communication between the web server running the S2 administrative controls and the exacqVision server handling the cameras.
- **exacqVision OVID Service:** This service handles communications between the S2 NetBox and the exacqVision server handling the cameras.
- **Browser:** This integration should work with most major browsers. It has specifically been verified for use with Internet Explorer 6.0 or later, Firefox, Chrome, and Safari.

Setting up exacqVision NVR and S2 NetBox Integration

1. Install the exacqVision services on the exacqVision server

Refer to the exacqVision documentation for all phases of the installation and setup of the exacqVision Server, cameras, and events. The following procedures are recommended for the best integration:

Configure a user associated with the S2 NetBox

1. Open the exacqVision Client on the NVR or separate computer and connect to the exacqVision server with an administrator account.
2. In the Configuration mode, expand the server in the tree and select Users.
3. On the Users page, click New and type a Username and Password and then confirm the password. The Username of "S2Netbox" and Password of "Netbox" match the default Username and Password of the S2 NetBox.
4. Select Power Search or Full Admin as the User Group, or select a custom group that allows searching and viewing live video and configuring and controlling soft triggers. If you would like to control a PTZ camera through the S2 interface, the User Group should also allow PTZ control.
5. Click Apply.

Run the web service installers and configure them to autostart

1. **Windows:** Copy the OVID installer (ovid.exe) and exacqVision Web Service installer (exacqVisionWebService.exe) to the server. Run the installers and follow the instructions provided. Select the option to automatically run the Web Service when the computer starts.

Linux: Copy the OVID installer package (ovid.deb) and exacqVision Web Service installer package (exacqVisionWebService.deb) to the server. Run the installers and follow the instructions provided. Be sure to install the dependencies suggested by the installer.
2. Verify that the exacqVision Web Service has been installed by opening a browser and directing it to the IP address of the NVR. This should return the login page for the Web Service.

2. Point the S2 NetBox to the exacqVision NVR

Configure the exacqVision NVR in the S2 NetBox

1. In the S2 Security Application select **Setup : Cameras : Configure exacqVision**.
2. In the **exacqVision IP Address** text box enter the IP address of the NVR.

3. The **exacqVision Username** and **exacqVision Password** fields default to "S2Netbox" and "Netbox" respectively. We recommend that you leave these defaults here and in the exacqVision system.

4. Click **Check Connection**.

NOTE: The **Check Connections** button initiates communication over port 3010. The **Discovered Information** and **Settings** sections will automatically fill in.

5. Wait for the operation to complete and read the message box.

NOTE: The message box may indicate some error condition. This error must be fixed before you can proceed.

6. If the message indicates that the exacqVision server is available for configuration then click Save.

7. Click the **List DVR Cameras** link at the bottom of the **Discovered Information** section. A list of camera names appears. You cannot change these names here.

8. Verify that the camera list is correct and complete. These cameras were previously set up during the configuration of the exacqVision NVR through its own UI.

Configure the public IP and video motion settings

1. In the S2 Security Application select **Setup : Cameras : Configure exacqVision**.
2. **Public IP Address:** This IP address automatically fills in when you save a new NVR configuration.
3. **Public HTTP port:** This port number defaults to 80. This port must map to the Web Service Port on the exacqVision Server.

NOTE: If this address or port is on another subnet or behind a firewall you may have to change this to the external public address of the router or firewall. The network administrator will have to setup the port translation for communications and video to and from this address.

4. **Combine VMD events arriving within seconds:** Video Motion Detection (VMD) events occurring within the specified number of seconds are combined into one network controller event.

Example: If you set this field to 60 seconds, then additional motion detection events will not be reported by the network controller unless at least 60 seconds has passed since the last motion detection on that camera.

5. If you have modified any of the **Settings** information, click **Save**.

3. Verify live video from the S2 NetBox interface

Verify that you can see exacqVision video from the NetBox interface

1. Select **Monitor : Cameras**.
2. Select a camera connected to the exacqVision system.
3. Verify that you can see live video from this exacqVision connected camera.

4. Set up and verify Video Motion Detection from exacqVision

Verify that exacqVision VMD triggers S2 NetBox events

1. Ensure that you have configured VMD events on the exacqVision system. You can set the field of motion and sensitivity per camera.
2. Select **Setup : Alarms : Events** and define an S2 event.
3. Select **Setup : Alarms : Virtual Inputs** and assign your S2 event to an exacqVision connected camera **Video Motion Event**. Make sure the **Virtual Input** is either **Always Armed** or using a currently active time specification. Also verify that both the **Virtual Input** and the **Video Motion Event** are **Enabled**.
4. Select **Monitor : Live Monitoring : Monitoring Desktop** and create motion on that camera.
5. Verify that your S2 event was triggered.

5. Set up and verify video recording actions from S2 NetBox

Verify that S2 NetBox events record video

1. Select **Setup : Alarms : Events** and define an S2 event with a **Record Video** action. Be sure to select an exacqVision connected camera.
2. Assign a trigger to this record video event. You can select **Setup : Alarms : Inputs** and assign the event to the **Off-normal Event**, or you can select **Setup : Access Control : Portals** and assign the event to the **System-wide : Held** state of a portal.
3. Select **Monitor : Live Monitoring : Monitoring Desktop** and trigger the event. (Hold the portal open or set the input into an alarm state.)
4. Verify that the event was triggered and click the video icon to view the recorded video.

Appendix: Network Port Setup

The following ports can be blocked by the Windows Firewall on the computer with the exacqVision Server installed. The exacq OVID Service software adds itself to the list of applications that can open ports on the firewall.

- Port 3010 is opened by the exacq OVID Service software for the S2 NetBox to initiate configuration communications to and from the exacqVision Server, send commands to the exacqVision Server to control cameras, and receive video motion event reports from the exacqVision Server.
- Port 80 must be open for the browser to pull video from the exacqVision Web Service.