# exacqVision Redwall PIE-1
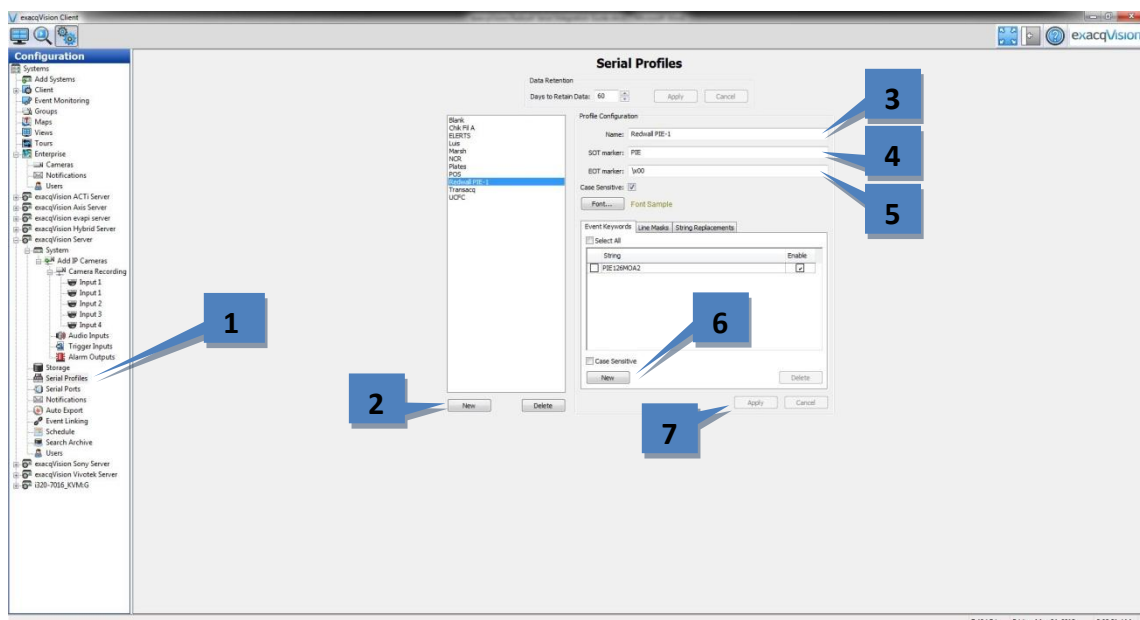# Serial Integration Guide

## 1   Requirements

Redwall PIE-1 serial integration works with any exacqVision system. This document assumes that the exacqVision server and Redwall PIE-1 are both installed and running, and that Redwall PIE-1 has been configured with the desired serial information.

Minimum software requirements:

- exacqVision version 5.4 or later
- Redwall PIE-1 with configured events via the PIE-1 webGUI

## 2   Serial Configuration

1. On the exacqVision server, select **Serial Profiles** from the tree (see image below).
2. Click the **New** button under **Existing Profiles**.
3. Enter a new **Profile Name** such as **Redwall PIE-1**.
4. For the **SOT marker**, enter **PIE**.
5. For the **EOT** marker, enter **\x00**.
6. Under **Event Key Words** click **New**, and enter the key word configured in Redwall PIE-1 to be sent out serially (in this example, **PIE126MOA2**). Repeat for any additional key words.
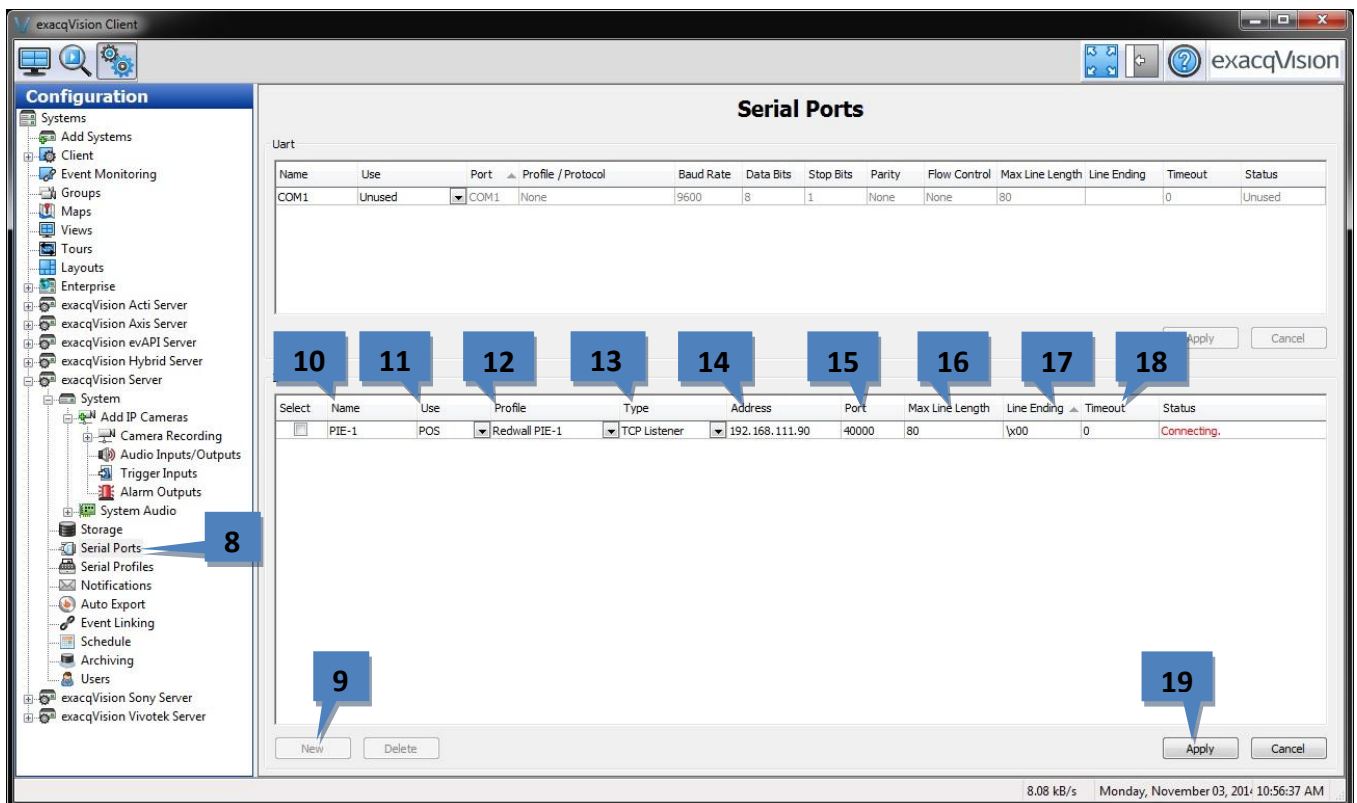7. Click **Apply**.

8.  On the exacqVision server, select **Serial Ports** from the tree (see image below).
9.  Click the **New** button.

    **NOTE:** The following steps should be completed using the **IP** section of the page, not the UART section.

10.  In the **Name** column, enter a name such as **PIE-1.**
11.  In the **Use** column, select **POS**.
12.  In the **Profile** column, select the previously created profile from the drop-down list.
13.  In the **Type** column, select **TCP Listener.**
14.  In the **Address** column, enter the IP address of Redwall PIE-1.
15.  In the **Port** column, enter the port number.
16.  In the **Max Line Length** column, enter a length. The default is 80.
17.  In the **Line Ending Column**, enter **\x00**.
18.  In the **Timeout Column**, enter **0**.
19.  Click **Apply**.

**NOTE:** The status will change to **Connected** when the Redwall PIE-1 system sends out the serial information.  You may also notice that Status toggles between a **Connected** and **Connecting** state.  This is ok as long as the data is being received.
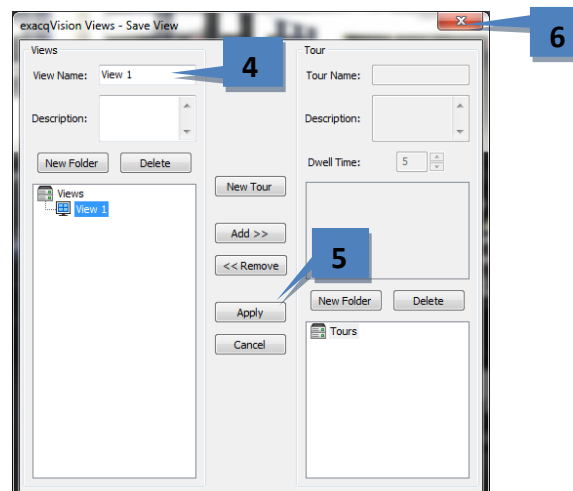
# 3 Event Monitoring "View" Configuration

1. On the exacqVision server, select **Live View** (see image below).
2. Drag the camera you want to view into the view window (in this example **Input 1**).
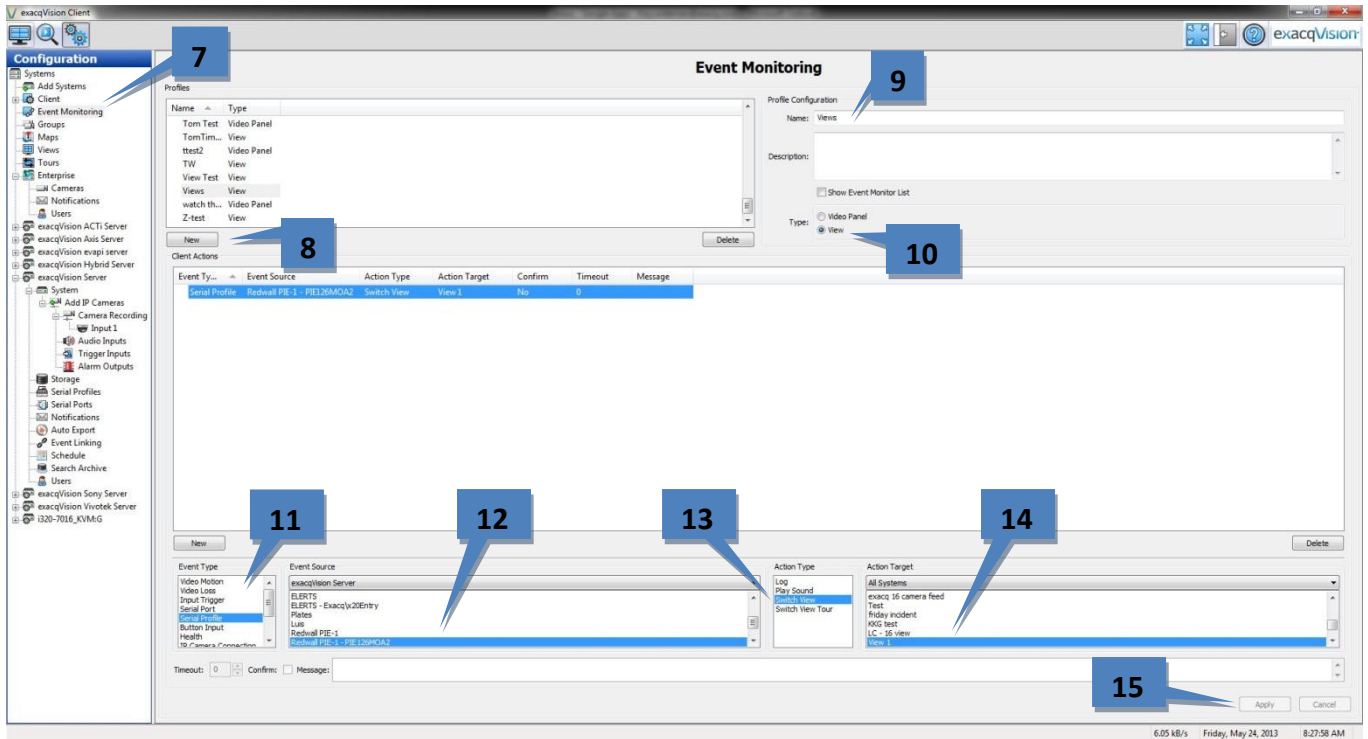3. Click the **Save View** button to open the Save View window.



4. Enter a **View Name** (in this example **View 1)**.
5. Click **Apply**.
6. Close the **Save View** dialog box by clicking on the red X in the upper-right corner.

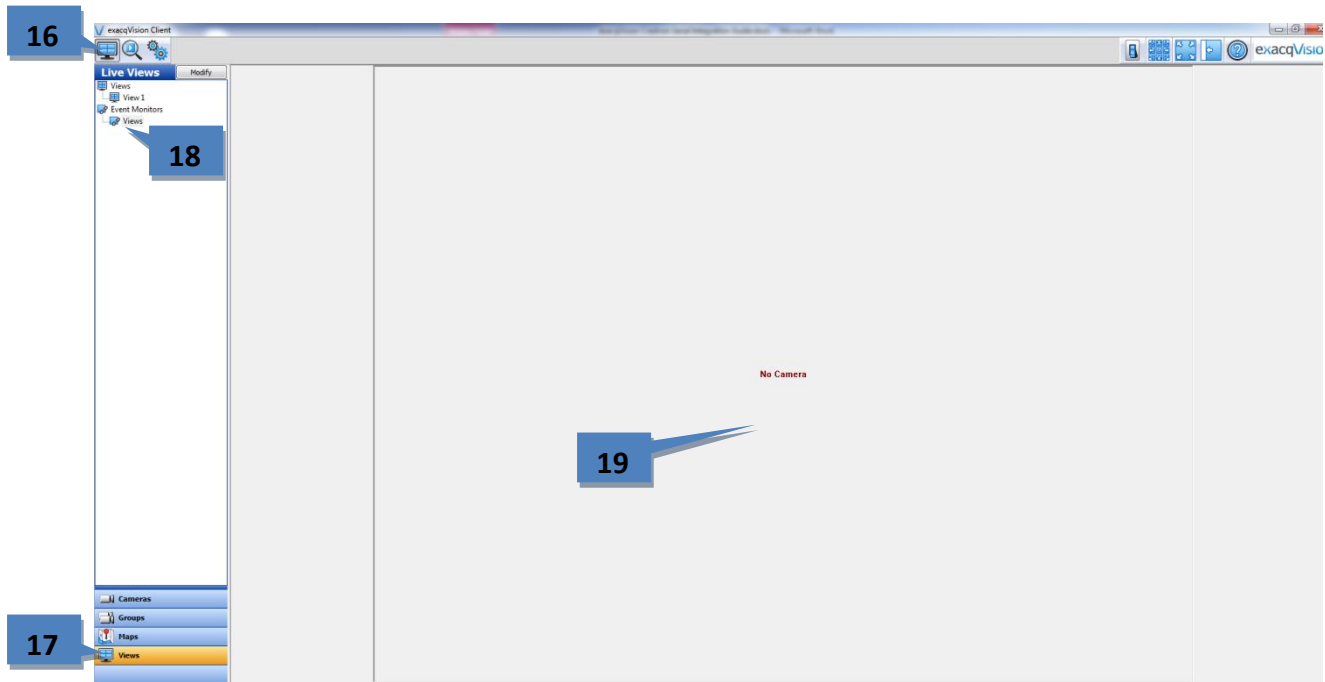**NOTE:** You can create additional views by repeating steps 3-6.

7. On the exacqVision server, select **Event Monitoring** from the tree (see image below).
8. Click the **New** button under **Profiles**.
9. In the **Name** box, select a name (in this case **Views)**.
10. For **Type**, select **View**.
11. Under **Event Type**, select **Serial Profile**.
12. Under **Event Source**, select the previously created profile and key word (in this example **Redwall PIE-1 – PIE126MOA2**).
13. Under **Action Type**, select **Switch View**.
14. Under **Action Target**, select the previously created view (in this example **View 1)**.
15. Click **Apply**.

**NOTE:** If you have more than one view and key word in your profile, you can link additional views by clicking **New** under **Client Actions** and repeating the process.

16. On the exacqVision server, select **Live View** (see image below).
17. Click on **Views** in under the tree.
18. Double-click the Event Monitoring profile created previously under Event Monitors (in this example **Views)**.
19. When you send the serial data from the Redwall PIE-1 system, the view will change as defined by the Event Monitoring profile.

**NOTE:** An image will not be displayed until the serial data is transmitted to the exacqVision server, and only if the data matches the key word in the serial profile for the event monitoring configuration. If you want to display an image before sending serial data, a default view must be defined.



**NOTE:** To see the views in full screen, press F11, F8, and then F4. To return to the standard view, press the buttons in the same sequence.

# 4 Event Linking Configuration

1. On the exacqVision server, select **Event Linking** from the tree (see image below).
2. Click the **New** button.
3. Under **Event Type**, select **Serial Profile**.
4. Under **Event Source**, select the previously created profile and key word (in this example **Redwall PIE-1 – PIE126MOA2**).
5. Under **Action Type**, select **Record Video**.
6. Under **Action Target**, select a camera to record (in this example **Input 1)**.
7. Click **Apply**.

**NOTE:** If you have more than one key word in your profile, you can create additional event links by clicking **New** and repeating the process.