

SILENT SENTINEL ARE SPECIALISTS IN LONG RANGE
OPTICAL SENSORS INCLUDING BOTH COOLED AND
UNCOOLED THERMAL CAMERAS

FIXED MODUM – ONVIF INTEGRATION SERVICE

Version: V1.5

Date: 30/05/2020



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This manual is used as a guide. The photos, graphics, diagrams, and illustrations provided in the manual are only used for explanation, which may be different from the specific product. Please refer to the actual product. We try our best to make sure all the contents in this manual are accurate. We do not provide any representations or warranties in this manual.

If you need the latest version of this manual, please contact us. Silent Sentinel recommends that you use this manual under the guidance of professionals.

Version Control

Version	Author	Approver	Date
1.0	Xueer Lin	Matthew Short	15 th May 2020
1.1	Xueer Lin	Matthew Short	15 th May 2020
1.2	Xueer Lin	Matthew Short	19 th May 2020
1.3	Xueer Lin	Matthew Short	20 th May 2020
1.4	Xueer Lin	Matthew Short	21 st May 2020
1.5	Xueer Lin	Matthew Short	30 th May 2020

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Prerequisites

Please refer to the help desk to ensure you have the latest version of the software applications and user guides;

<https://silentsentinelhelp.helpdocs.com/fixed-modum>

Configuring ONVIF Integration Service

Install Software

Step	Description	Image
1.	Locate the installer on the provided USB stick or download from the Silent Sentinel help site.	
2.	Locate the Setup application in the extraction path.	
3.	Run the installer and follow the installation process through to completion.	
4.	Open the shortcut created on desktop.	

<p>5.</p>	<p>Click Import button to import license file for ONVIFis.</p>	<p>The screenshot shows the 'ONVIF Integration Service' window. Under the 'License information' section, there is a 'License:' label and an 'Import' button. Below it, the 'About' section is partially visible. The window title bar includes 'ONVIF Integration Service', 'OPTIONS', and 'HELP'. A keyboard shortcut 'Ctrl+Alt+d' is shown in the bottom right corner.</p>
<p>6.</p>	<p>Select and import the license file (.lic).</p> <p>Note that each license is tied to the hardware on which it is activated. It cannot be transferred to any other PC.</p> <p>Note: if a laptop has been purchased the license will have been preactivated against that laptop. If a laptop was not purchased, the license will be saved on the provided USB stick.</p>	<p>The top screenshot shows the 'IMPORT FROM' dialog box with two options: 'License file (.lic)' and 'Offline Activated License file (.act)'. Both have file selection buttons. A 'Create activation request' link is visible below. 'ok' and 'cancel' buttons are at the bottom.</p> <p>The bottom screenshot shows a Windows File Explorer window titled 'Open' with the path 'This PC > OS (C:) > Program Files > Silent Sentinel'. It displays a folder named 'ONVIFis' and a license file named 'f8277d10-83f0-47a0-a39c-975173a9cf82.lic'. The file name is entered in the 'File name' field at the bottom.</p>

<p>7.</p>	<p>Activate the license.</p>	<p>The screenshot shows a window titled "ONVIF Integration Service" with a dark blue background. At the top right, there are "OPTIONS" and "HELP" menus. The main content is under a "License information" section, which includes: <ul style="list-style-type: none"> License: Trial License ID: <code>f8277d10-83f0-47a0-a39c-975173a9cf82</code> License period: 15 Days Activation: Required Activation ID: <code>39108800255751931414109109271172377310324</code> There is an "Activate" button highlighted with a mouse cursor, and a "Delete License" button to its right. Below this is an "About" section which is currently collapsed. </p>
<p>8.</p>	<p>Click yes.</p>	<p>The screenshot shows a dialog box with the "ONVIFIS" logo at the top. The text inside reads: "Activation will tie the license to this PC. Continue?". At the bottom right, there are two buttons: "yes" (highlighted with a mouse cursor) and "no".</p>
<p>9.</p>	<p>Finish the activation.</p>	<p>The screenshot shows a dialog box titled "ONVIF INTEGRATION SERVICE". The text inside reads: "The license has been activated". At the bottom right, there is an "ok" button highlighted with a mouse cursor.</p>

Add Thermal Video to RTSP Stream

Step	Description	Image
1.	<p>Open up Onvif Integration Service (i.e. ONVIFis).</p> <p>Make sure the IP Address is the same as the PC's IP Address.</p>	
2.	<p>Go to Video & Audio Settings.</p> <p>Click Add new Media Source</p>	

<p>3.</p> <p>Tick Screen Area and change Name to MODUM.</p> <p>Have the Thermal software opened and running at the back. Then click Setup to sketch the streaming area of the thermal software.</p>	
<p>4.</p> <p>Adjust the highlighted area to cover the thermal video display. Press keyboard Enter to save the area data.</p> <p>Click OK to finish the Add Source process.</p>	

<p>5.</p>	<p>Click Test RTSP on the main window.</p>																					
<p>6.</p>	<p>Select MainStream and press ok.</p>	<table border="1" data-bbox="558 1097 1332 1422"> <thead> <tr> <th>Name</th> <th>Encoder</th> <th>Audio</th> <th>Resolution</th> <th>FPS</th> </tr> </thead> <tbody> <tr> <td>MainStream</td> <td>H264</td> <td></td> <td>1584x880</td> <td>10</td> </tr> <tr> <td>SubStream</td> <td>H264</td> <td></td> <td>1584x880</td> <td>3</td> </tr> <tr> <td>SubStreamJpeg</td> <td>Jpeg</td> <td></td> <td>1280x720</td> <td>3</td> </tr> </tbody> </table>	Name	Encoder	Audio	Resolution	FPS	MainStream	H264		1584x880	10	SubStream	H264		1584x880	3	SubStreamJpeg	Jpeg		1280x720	3
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SubStream	H264		1584x880	3																		
SubStreamJpeg	Jpeg		1280x720	3																		
<p>7.</p>	<p>A popup window of the streaming video of the enclosed area in step 4 should be displayed. Once verified, press ok to finish.</p>																					

Add Daylight Video to RTSP Stream

Step	Description	Image
1.	<p>Go to Video & Audio Settings.</p> <p>Click Add new Media Source</p>	
2.	<p>Tick Other and select RTSP in the drop-down box.</p> <p>Change Name to Daylight.</p>	

<p>3. Open ONVIF Device Manager.</p> <p>Click the tool icon at the top right corner to open <i>Application settings</i>.</p> <p>Set <i>Video streaming transport</i> as TCP.</p>	
<p>4. Open ONVIF Device Manager and open the daylight camera live video. Copy the RTSP link at the bottom of the display.</p>	

<p>5.</p> <p>Paste the link in Source URL.</p> <p>User/Pass: admin / admin</p> <p>Resolution 1920*1080</p> <p>Click Validate Connection and press ok to finish,</p>	
<p>6.</p> <p>Click Test RTSP</p>	
<p>7.</p> <p>Check if the pop-up window displays the daylight video.</p> <p>Once verified, press ok to finish.</p>	

Add Thermal & Daylight Video to RTSP Stream as Pic-in-Pic

Step	Description	Image
1.	<p>Go to Video & Audio Settings.</p> <p>Click Add new Media Source</p>	
2.	<p>Tick Combine and select Pic in Pic in the drop-down box.</p> <p>Change Name to Ti_Combine.</p> <p>Media1: DISPLAY1</p> <p>Media2: Daylight</p> <p>Press ok to finish the process.</p>	

<p>3.</p>	<p>Click Test RTSP</p>	
<p>4.</p>	<p>Check if the pop window displays the daylight and thermal combined video.</p> <p>Once verified, press ok to finish.</p>	

Set Up Motion Alert on ONVIFis

Step	Description	Image
1.	<p>Go back to the main window of ONVIFis and open Video & Audio settings tab.</p> <p>Select DISPLAY1 and untick Enable.</p>	<p>The screenshot shows the 'ONVIF Integration Service' window with the 'Video & Audio Settings' tab selected. Under 'Video & Audio Settings', the 'DISPLAY1' profile is highlighted. The 'Enable' checkbox is unchecked. Other settings include Type: Screen, Rotation: Auto, Audio: Select Audio, Video overlay: Disable, Motion events: Enable, and Live controller: Auto.</p>
2.	<p>Select Ti_Combine.</p> <p>Change Motion events to Enable.</p> <p>Open Motion Event configuration window (click the tool bar next to the drop-box)</p>	<p>The screenshot shows the 'ONVIF Integration Service' window with the 'Video & Audio Settings' tab selected. Under 'Video & Audio Settings', the 'Ti_Combine' profile is highlighted. The 'Enable' checkbox is checked. The 'Motion events' dropdown is set to 'Enable', and the 'Configure ONVIF' button is visible next to it. Other settings include Type: VideoMixer, Rotation: Auto, Audio: Select Audio, Video overlay: Disable, and Live controller: Combined Media.</p>

<p>3.</p>	<p>Set the event as following:</p> <p>Keyboard: Disable</p> <p>Mouse click: Disable</p> <p>Mouse move: Disable</p> <p>API call: Enable</p> <p>Press Close to finish.</p>	
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Open TCP port 80 in Windows Firewall

Step	Description	Image
1.	Open Control Panel and select System and Security	<p>The screenshot shows the Windows Control Panel window. The title bar reads 'Control Panel'. The breadcrumb navigation shows 'Control Panel >'. The main content area is titled 'Adjust your computer's settings' and lists various system categories. 'System and Security' is highlighted with a blue selection bar. Other visible categories include Network and Internet, Hardware and Sound, Programs, User Accounts, Appearance and Personalisation, Clock and Region, and Ease of Access.</p>
2.	Select Windows Defender Firewall	<p>The screenshot shows the 'System and Security' window in the Control Panel. The title bar reads 'System and Security'. The breadcrumb navigation shows 'Control Panel > System and Security >'. On the left, a navigation pane lists various system areas, with 'System and Security' selected. The main content area is titled 'Security and Maintenance' and lists several system settings. 'Windows Defender Firewall' is highlighted with a blue selection bar. Other visible settings include System, Power Options, File History, Back up and Restore (Windows 7), Device encryption, Storage Spaces, Work Folders, Administrative Tools, and Flash Player (32-bit).</p>

<p>3.</p>	<p>Select Advanced Settings in the left column.</p>	
<p>4.</p>	<p>In the popup window, select Inbound Rules and click New Rule.</p>	

<p>5.</p>	<p>Select Port and click Next.</p>	<p>New Inbound Rule Wizard</p> <p>Rule Type Select the type of firewall rule to create.</p> <p>Steps:</p> <ul style="list-style-type: none"> Rule Type Protocol and Ports Action Profile Name <p>What type of rule would you like to create?</p> <p><input type="radio"/> Program Rule that controls connections for a program.</p> <p><input checked="" type="radio"/> Port Rule that controls connections for a TCP or UDP port.</p> <p><input type="radio"/> Predefined: @FirewallAPI.dll_60200 Rule that controls connections for a Windows experience.</p> <p><input type="radio"/> Custom Custom rule.</p> <p>< Back Next > Cancel</p>
<p>6.</p>	<p>Select TCP.</p> <p>Type 80 in Specific local ports.</p> <p>Click Next.</p>	<p>New Inbound Rule Wizard</p> <p>Protocol and Ports Specify the protocols and ports to which this rule applies.</p> <p>Steps:</p> <ul style="list-style-type: none"> Rule Type Protocol and Ports Action Profile Name <p>Does this rule apply to TCP or UDP?</p> <p><input checked="" type="radio"/> TCP</p> <p><input type="radio"/> UDP</p> <p>Does this rule apply to all local ports or specific local ports?</p> <p><input type="radio"/> All local ports</p> <p><input checked="" type="radio"/> Specific local ports: <input type="text" value="80"/> Example: 80, 443, 5000-5010</p> <p>< Back Next > Cancel</p>

<p>7.</p>	<p>Select Allow the connection and then click Next.</p>	<p>New Inbound Rule Wizard</p> <p>Action Specify the action to be taken when a connection matches the conditions specified in the rule.</p> <p>Steps:</p> <ul style="list-style-type: none"> ● Rule Type ● Protocol and Ports ● Action ● Profile ● Name <p>What action should be taken when a connection matches the specified conditions?</p> <p><input checked="" type="radio"/> Allow the connection This includes connections that are protected with IPsec as well as those are not.</p> <p><input type="radio"/> Allow the connection if it is secure This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node. <input type="button" value="Customize"/></p> <p><input type="radio"/> Block the connection</p> <p>< Back Next > Cancel</p>
<p>8.</p>	<p>Select when this rule applies (check all of them for the port to always stay open) and then click Next.</p>	<p>New Inbound Rule Wizard</p> <p>Profile Specify the profiles for which this rule applies.</p> <p>Steps:</p> <ul style="list-style-type: none"> ● Rule Type ● Protocol and Ports ● Action ● Profile ● Name <p>When does this rule apply?</p> <p><input checked="" type="checkbox"/> Domain Applies when a computer is connected to its corporate domain.</p> <p><input checked="" type="checkbox"/> Private Applies when a computer is connected to a private network location, such as a home or work place.</p> <p><input checked="" type="checkbox"/> Public Applies when a computer is connected to a public network location.</p> <p>< Back Next > Cancel</p>

<p>9.</p>	<p>Name with “ONVIFis(TCP 80)” and Finish.</p>	<p>The screenshot shows a 'New Inbound Rule Wizard' window. On the left, a 'Steps' list includes 'Rule Type', 'Protocol and Ports', 'Action', 'Profile', and 'Name', with 'Name' selected. The main area is titled 'Name' and contains the instruction 'Specify the name and description of this rule.' Below this, there is a 'Name:' label followed by a text input field containing 'ONVIFis(TCP 80)'. Underneath is a 'Description (optional):' label followed by a larger text area. At the bottom right, there are three buttons: '< Back', 'Finish' (which is highlighted with a mouse cursor), and 'Cancel'.</p>
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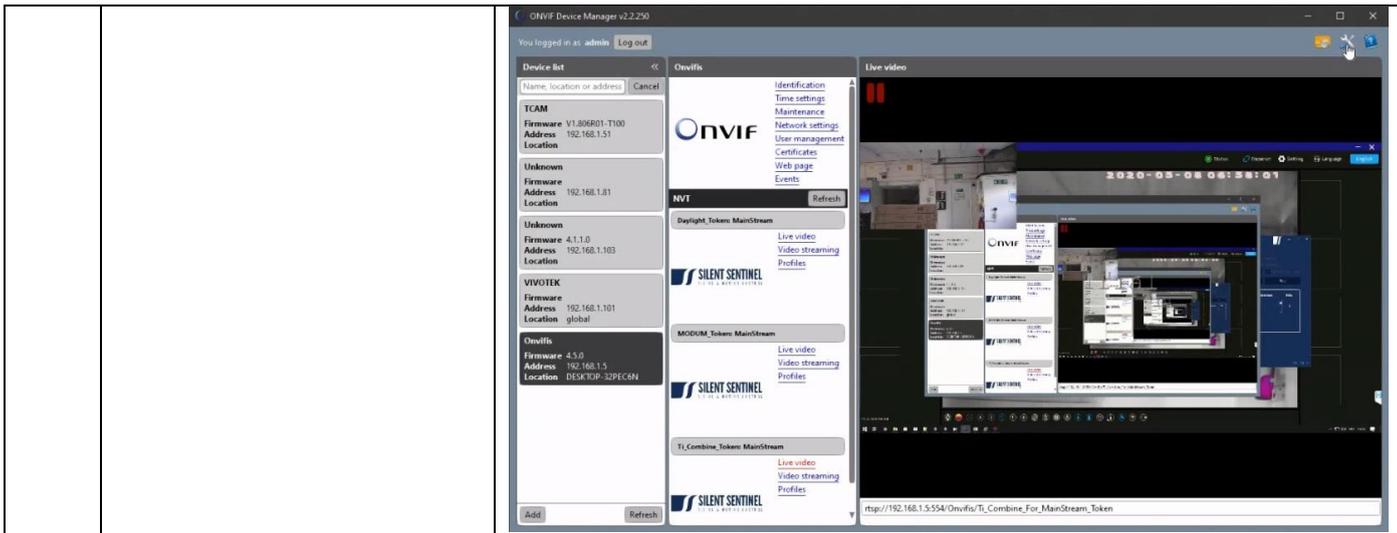
Enable Event Notification on ODM

Step	Description	Image
1.	<p>Open ODM.</p> <p>Click the tool icon at the top right corner to open <i>Application settings</i>.</p>	
2.	<p>Set <i>Event subscription type</i> to Only PullPoint.</p> <p>Set <i>Base Subscription port number</i> to 80.</p> <p>Click <i>Apply</i> to finish the process.</p>	

<p>3.</p>	<p>Click <i>Refresh</i> at the bottom of Device list.</p>	<p>The screenshot shows a mobile application interface titled "Device list". At the top, there is a search bar with the placeholder text "Name, location or address" and a "Cancel" button. Below the search bar, there is a scrollable list of device entries. Each entry displays the device name, firmware version, IP address, and location. The devices listed are:</p> <ul style="list-style-type: none"> TCAM: Firmware V1.806R01-T100, Address 192.168.1.51, Location (blank) Onvifis: Firmware 4.5.0, Address 192.168.1.170, Location LAPTOP-6HT1AJTS Unknown: Firmware (blank), Address 192.168.1.81, Location (blank) VIVOTEK VS8100-v2: Firmware (blank), Address (blank), Location (blank) <p>At the bottom of the list, there are two buttons: "Add" and "Refresh".</p>
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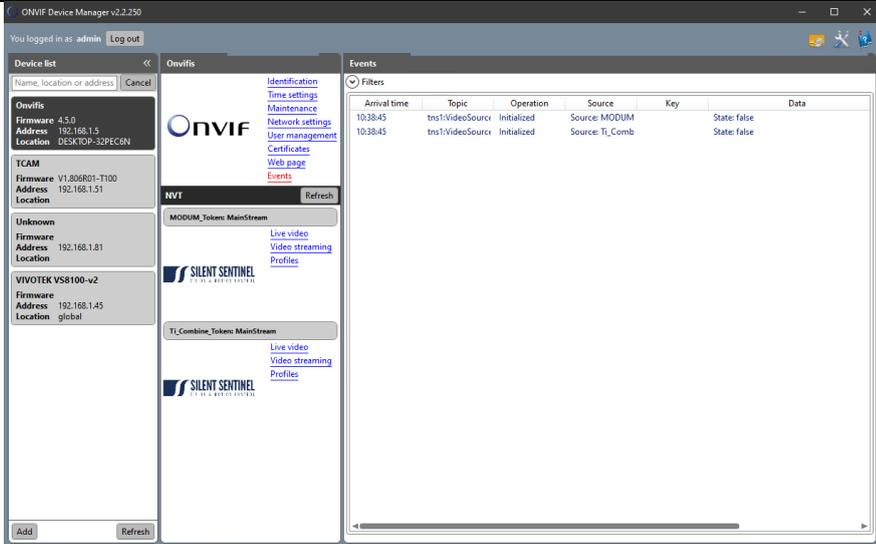
Test stream on ONVIF Device Manager

Step	Description	Image
4.	<p>In ONVIFis Window, go to Camera Settings tab. Click Start to start streaming.</p>	
5.	<p><u>Check video display</u></p> <p>Open Onvif Device Manager and select the device with PC/ONVIFis IP address (in this case, 192168.1.5).</p> <p>There should be three video sources available: Thermal, Daylight and Combined.</p> <p>Click Live Video of all three of them one by one. Check if the video is displaying properly.</p>	



6. **Check motion alert (step 6-9)**

Select Events tab of the ONVIFis device to display all the motion events from ONVIFis.

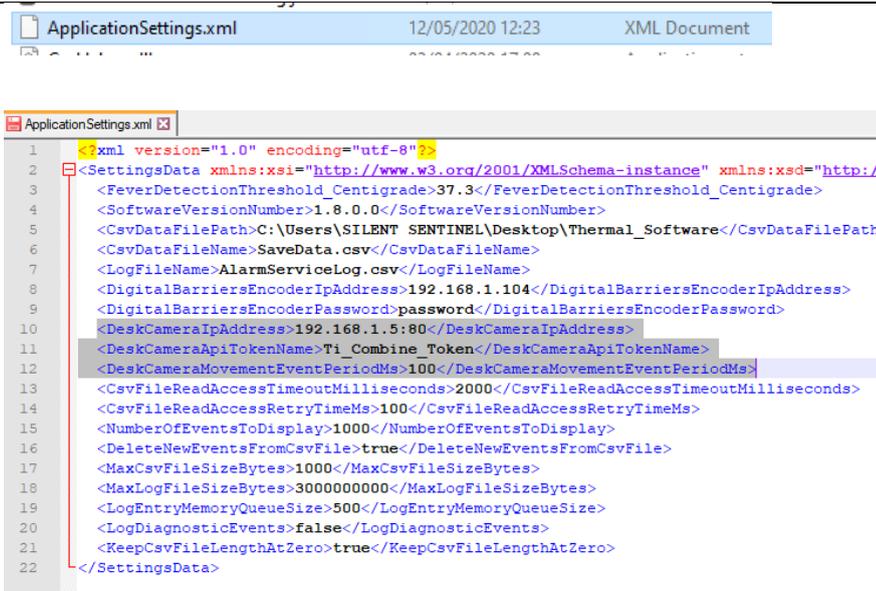


7. **Check AlarmService Configuration for ONVIFis interface**

Double click "ApplicationSettings.xml" in the AlarmService directory to open the config file.

Set DeskCameraIpAddress and ApiTokenName to what is previously configured in ONVIFis software (Onvif Integration Services).

Noted that ApiTokenName should be consistent with the source that has motion event enabled. The API



	<p>token name can be found in Configure Motion sub-window.</p>																																																													
<p>8.</p>	<p>Double click AlarmServiceUi.exe in the AlarmService directory to run the Alarm Service software.</p>																																																													
<p>9.</p>	<p>Press Trigger detection event button to generate a simulation of fever alert.</p> <p>Check the event log on ODM. Each pressing of the button should generate two events, like in the image.</p>	<table border="1"> <thead> <tr> <th>Arrival time</th> <th>Topic</th> <th>Operation</th> <th>Source</th> <th>Key</th> <th>Data</th> </tr> </thead> <tbody> <tr> <td>10:53:16</td> <td>tns1:VideoSource</td> <td>Initialized</td> <td>Source: MODUM</td> <td></td> <td>State: false</td> </tr> <tr> <td>10:53:16</td> <td>tns1:VideoSource</td> <td>Initialized</td> <td>Source: Daylight</td> <td></td> <td>State: false</td> </tr> <tr> <td>10:53:16</td> <td>tns1:VideoSource</td> <td>Initialized</td> <td>Source: Tl_Comb</td> <td></td> <td>State: false</td> </tr> <tr> <td>10:55:34</td> <td>tns1:VideoSource</td> <td>Changed</td> <td>Source: Tl_Comb</td> <td></td> <td>State: true</td> </tr> <tr> <td>10:55:34</td> <td>tns1:VideoSource</td> <td>Changed</td> <td>Source: Tl_Comb</td> <td></td> <td>State: false</td> </tr> <tr> <td>10:55:36</td> <td>tns1:VideoSource</td> <td>Changed</td> <td>Source: Tl_Comb</td> <td></td> <td>State: true</td> </tr> <tr> <td>10:55:36</td> <td>tns1:VideoSource</td> <td>Changed</td> <td>Source: Tl_Comb</td> <td></td> <td>State: false</td> </tr> <tr> <td>10:55:48</td> <td>tns1:VideoSource</td> <td>Changed</td> <td>Source: Tl_Comb</td> <td></td> <td>State: true</td> </tr> <tr> <td>10:55:48</td> <td>tns1:VideoSource</td> <td>Changed</td> <td>Source: Tl_Comb</td> <td></td> <td>State: false</td> </tr> </tbody> </table>	Arrival time	Topic	Operation	Source	Key	Data	10:53:16	tns1:VideoSource	Initialized	Source: MODUM		State: false	10:53:16	tns1:VideoSource	Initialized	Source: Daylight		State: false	10:53:16	tns1:VideoSource	Initialized	Source: Tl_Comb		State: false	10:55:34	tns1:VideoSource	Changed	Source: Tl_Comb		State: true	10:55:34	tns1:VideoSource	Changed	Source: Tl_Comb		State: false	10:55:36	tns1:VideoSource	Changed	Source: Tl_Comb		State: true	10:55:36	tns1:VideoSource	Changed	Source: Tl_Comb		State: false	10:55:48	tns1:VideoSource	Changed	Source: Tl_Comb		State: true	10:55:48	tns1:VideoSource	Changed	Source: Tl_Comb		State: false
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