

**RSA® NETWITNESS®**  
**Logs**  
**Implementation Guide**

**Sentryo ICS CyberVision 2.0.3**

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Last Modified: November 12, 2018



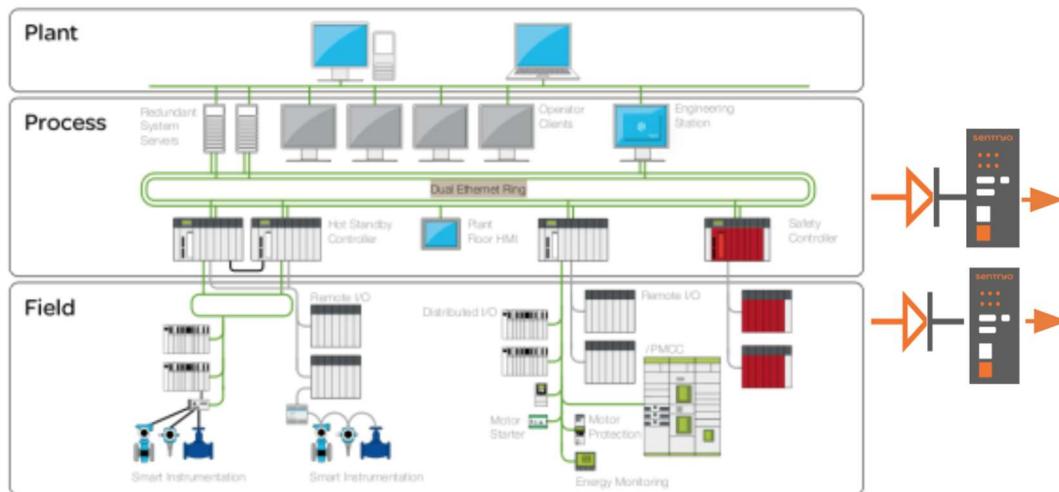
## Solution Summary

Sentryo ICS CyberVision is a network monitoring and threat intelligence platform that provides cyber-resilience for Industrial Control Systems (ICS) and SCADA networks.

The solution relies on the use of sensors, and the data processed goes through a central analytics software to provide data visualization. The sensors passively analyze industrial network communications to provide meaningful information about network assets, advanced anomaly detection and alerts in real-time for any threat to operational continuity and system integrity.

Using ICS CyberVision with RSA NetWitness helps SOC and NOC administrators to investigate and remediate anomalies in their network and cloud infrastructures through a single unified interface.

RSA NetWitness Features	
Sentryo ICS CyberVision 2.0.3	
<b>Integration package name</b>	Common Event Format
<b>Device display name within NetWitness</b>	sentryo_cybervision
<b>Event source class</b>	SCADA
<b>Collection method</b>	Syslog CEF



## RSA NetWitness Community

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The RSA NetWitness Community is an online forum for customers and partners to exchange technical information and best practices with each other. All NetWitness customers and partners are invited to register and participate in the [RSA NetWitness Community](#).

## Release Notes

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Release Date	What's New In This Release
12/5/2017	Initial support for Sentryo ICS CyberVision.
10/23/2018	Added additional keys, 16 Char NW Key names, NetWitness 11.2 Support

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**!> Important: The RSA NetWitness CEF parser is dependent on the partner adhering to the CEF Rules outlined in the *ArcSight Common Event Format (CEF) Guide*. A copy of the Common Event Format guide can be found on <http://protect724.hp.com/>.**

**Eg. Jan 18 11:07:53 host CEF:Version | Device Vendor | Device Product | Device Version | Signature ID | Name | Severity | [Extension]**

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**!> Important: The time displayed in the CEF log header is parsed into evt.time.str. No other time formats are parsed by default.**

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## Partner Product Configuration

### Before You Begin

This section provides instructions for configuring the Sentryo ICS CyberVision with RSA NetWitness. This document is not intended to suggest optimum installations or configurations.

It is assumed that the reader has both working knowledge of all products involved, and the ability to perform the tasks outlined in this section. Administrators should have access to the product documentation for all products in order to install the required components.

All Sentryo ICS CyberVision components must be installed and working prior to the integration. Perform the necessary tests to confirm that this is true before proceeding.

**Note: This document assumes that the user has a working ICS CyberVision installation and solely walks them through the configuration of syslog. If they do not have a working instance or have trouble using the tool itself, they can refer to the official documentation on <https://sentryo.zendesk.com/hc/en-us> to set up and use ICS CyberVision for their ICS (it is required to register an account on [sentryo.zendesk.com](https://sentryo.zendesk.com) before accessing the documentation).**

### Sentryo ICS CyberVision Configuration

1. In the webapp, the Admin page shows the Syslog configuration panel. Click on **Configure** to expand it.

The screenshot shows the Sentryo Admin interface. The top navigation bar includes links for Map, Components, Reports, Events, Monitor, and Admin. The Admin tab is selected. On the left, a sidebar menu lists System, Sensors, Users, Events, API, License, and Capture. The main content area is titled 'System'. It contains sections for 'Diagnostics' (with a 'GENERATE DIAGNOSTIC INFORMATION' button), 'System update' (with a 'SYSTEM UPDATE' button), and 'Syslog configuration'. The 'Syslog configuration' section displays the message 'Syslog configuration no configuration found' and features a prominent 'CONFIGURE' button, which is highlighted with a red rectangular box.

2. The Syslog configuration panel unfolds and lets the user configure the required parameters for their SIEM.

The screenshot shows the 'Syslog configuration' panel. At the top left is a logo with a square icon containing a grid. To its right is the text 'Syslog configuration'. Below this are four tabs: 'Protocol' (selected), 'Host', 'Port', and 'Format'. At the bottom are two buttons: 'SAVE CONFIGURATION' (blue) and 'CANCEL' (grey).

### ***Protocol selection***

3. The product currently supports three protocols for the network communication with the SIEM: UDP, TCP and TLS over TCP. The user can click on the drop-down menu to select one of the three.

The screenshot shows the 'Protocol' tab selected in the 'Syslog configuration' panel. It displays three options: 'UDP' (selected), 'TCP', and 'TCP + TLS'. The other tabs ('Host', 'Port', 'Format') are visible at the top but are not selected.

### ***Format selection***

4. The product currently supports four formats for the syslog messages:

- Standard syslog (RFC 5424)
- BSD syslog (RFC 3164)
- CEF-compliant standard syslog
- CEF-compliant BSD syslog

The screenshot shows the 'Format' tab selected in the 'Syslog configuration' panel. It displays four options: 'Standard' (selected), 'Standard/CEF', 'RFC3164', and 'RFC3164/CEF'. The other tabs ('Protocol', 'Host', 'Port') are visible at the top but are not selected.

## Network

5. The IP/port of the SIEM must also be filled in.

Syslog configuration

Syslog configuration

Protocol	Host	Port	Format
UDP	192.168.1.153	5555	RFC3164/CEF

## Final steps

6. Clicking on the **Save configuration** button will make the changes effective.
7. The user should then see a line that reflects the configuration they just entered.

Syslog configuration

Syslog configuration **UDP 192.168.1.153:5555 (RFC3164/CEF)**

## RSA NetWitness Configuration

### Deploy the enVision Config File

In order to use the RSA Common Event Format, you must first deploy the *enVision Config File* from the **NetWitness Live** module. Log into NetWitness and perform the following actions:

**!> Important: Using this procedure will overwrite the existing table\_map.xml.**

1. From the NetWitness menu, select **Configure > Live Content**.
2. In the keywords field, enter: **enVision**.
3. NetWitness will display the **Envision Config File** in Matching Resources.
4. Select the checkbox next to **Envision Config File**.

The screenshot shows the RSA NetWitness interface with the 'CONFIGURE' tab selected. In the 'Live Content' section, a search for 'enVision config file' has been entered. The 'Matching Resources' table displays one result: 'Envision Config File' (Subscribed: yes, Created: 2014-03-07 11:50 AM, Updated: 2018-08-27 8:15 AM, Type: Log Device, Description: This file is used to upda...').

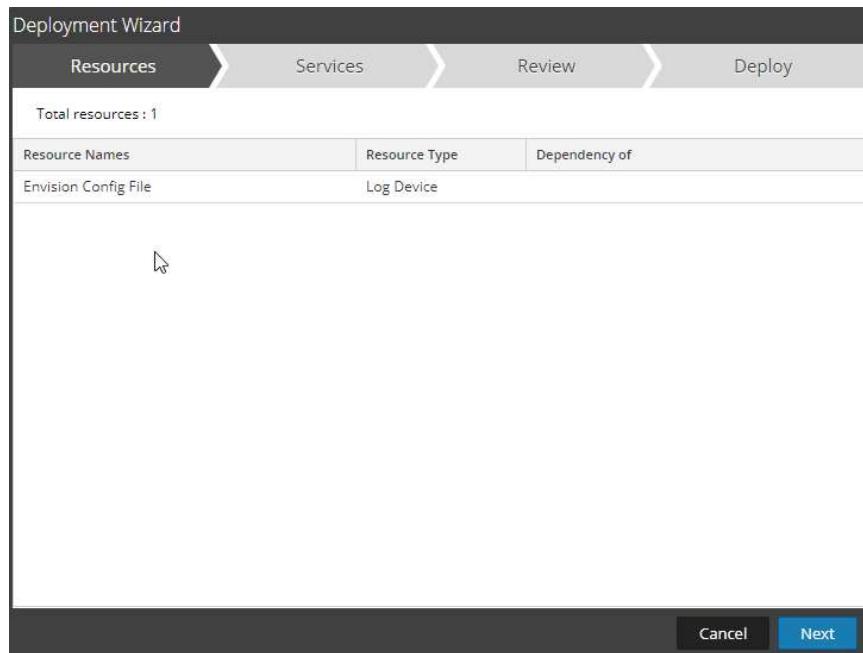
Subscribed	Name	Created	Updated	Type	Description	
<input type="checkbox"/>	yes	Envision Config File	2014-03-07 11:50 AM	2018-08-27 8:15 AM	Log Device	This file is used to upda...

5. Click **Deploy** in the menu bar.

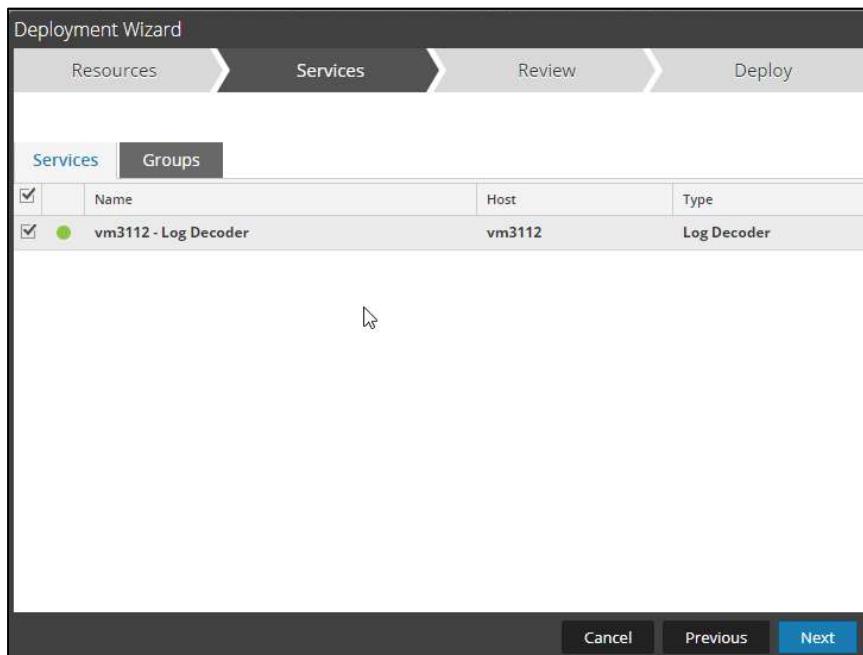
The screenshot shows the RSA NetWitness interface with the 'CONFIGURE' tab selected. The 'Matching Resources' table now shows the 'Envision Config File' with the 'Subscribed' checkbox checked, indicating it has been deployed.

Subscribed	Name	Created	Updated	Type	Description	
<input checked="" type="checkbox"/>	yes	Envision Config File	2014-03-07 11:50 AM	2018-08-27 8:15 AM	Log Device	This file is used to upda...

6. Select **Next**.

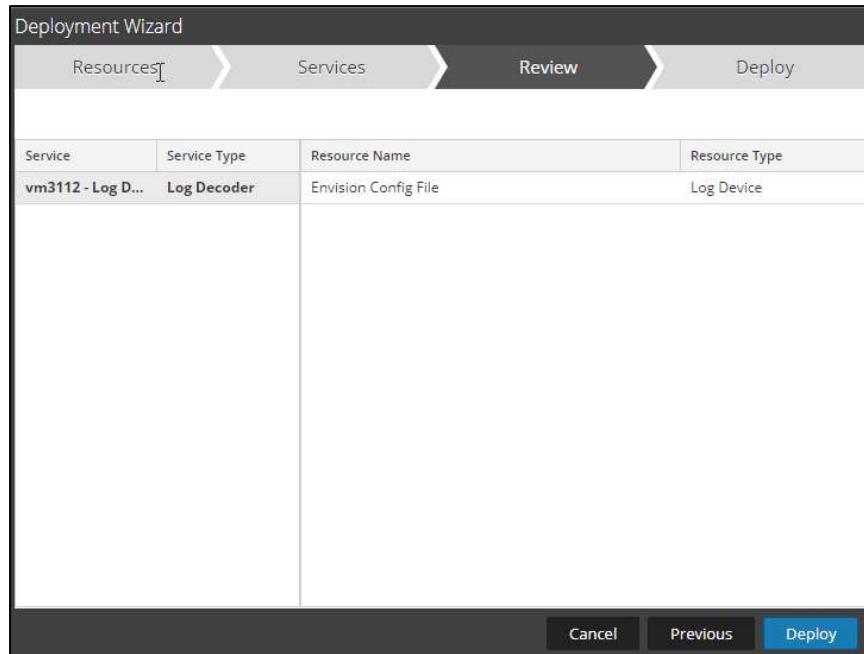


7. Select the **Log Decoder** and select **Next**.

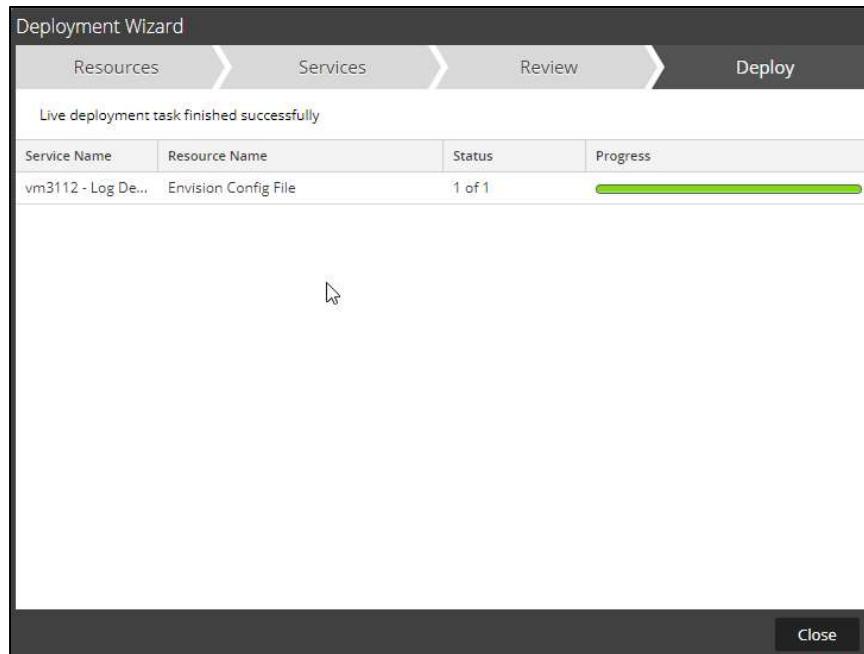


**! > Important: In an environment with multiple Log Decoders, deploy the Envision Config File to each Log Decoder in your network.**

8. Select **Deploy**.



9. Select **Close**, to complete the deployment of the Envision Config file.



## Deploy the Common Event Format

Next, you will need to deploy the *Common Event Format* file from the **NetWitness Live** module. Log into NetWitness and perform the following actions:

1. From the NetWitness menu, select **Live > Search**.
2. In the keywords field, enter: **Common Event Format**

Search Criteria

Keywords

Category

- FEATURED
- THREAT
- IDENTITY
- ASSURANCE
- OPERATIONS
- SPECTRUM
- MALWARE ANALYSIS

3. RSA NetWitness will display the **Common Event Format** in Matching Resources.

The screenshot shows the RSA NetWitness Live interface. The top navigation bar includes links for RSA, RESPOND, INVESTIGATE, MONITOR, CONFIGURE (which is selected), and ADMIN. The main content area has two sections: 'Search Criteria' on the left and 'Matching Resources' on the right. In the 'Search Criteria' section, the 'Keywords' field contains 'Common Event Format'. In the 'Matching Resources' section, there is a table with one row of data. The table columns are: Subscribed, Name, Created, Updated, Type, and Description. The single row shows: no, Common Event Format, 2014-09-17 4:49 PM, 2018-08-04 12:21 AM, Log Device, and 10.4 or higher.Log Dev.

Subscribed	Name	Created	Updated	Type	Description
no	Common Event Format	2014-09-17 4:49 PM	2018-08-04 12:21 AM	Log Device	10.4 or higher.Log Dev

4. Select the checkbox next to **Common Event Format**.

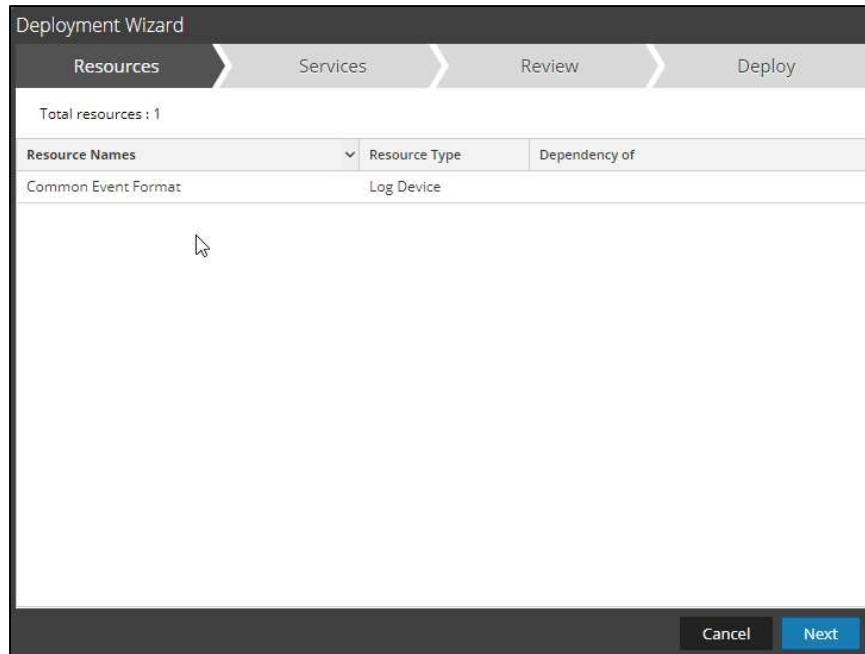
This screenshot is identical to the previous one, but the 'Subscribed' checkbox for the 'Common Event Format' entry in the 'Matching Resources' table is now checked.

Subscribed	Name	Created	Updated	Type	Description
<input checked="" type="checkbox"/>	Common Event Format	2014-09-17 4:49 PM	2018-08-04 12:21 AM	Log Device	10.4 or higher.Log Dev

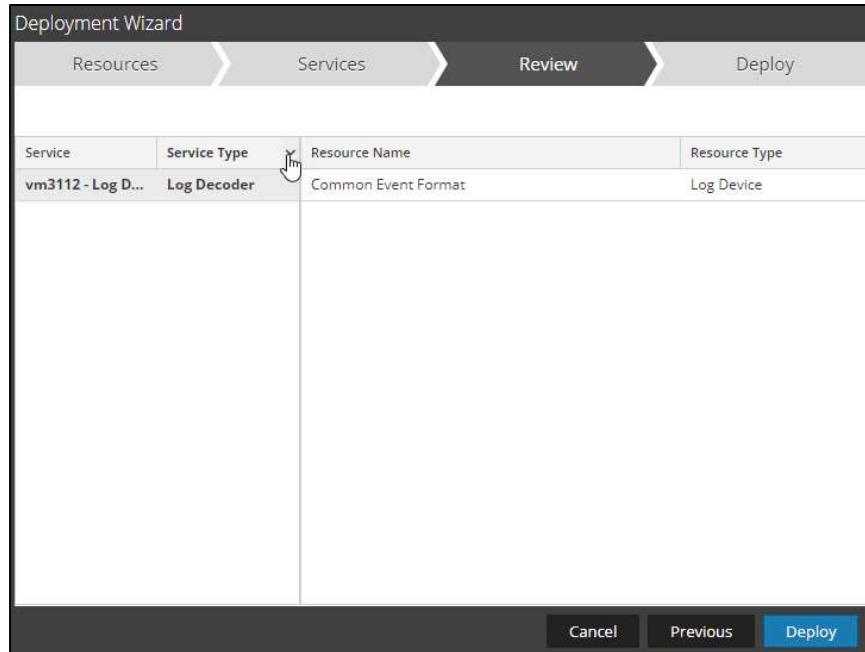
5. Click **Deploy** in the menu bar.

This screenshot shows the RSA NetWitness Live interface with a red horizontal bar highlighting the 'Deploy' button in the top menu bar. The rest of the interface is identical to the previous screenshots.

6. Select **Next**.

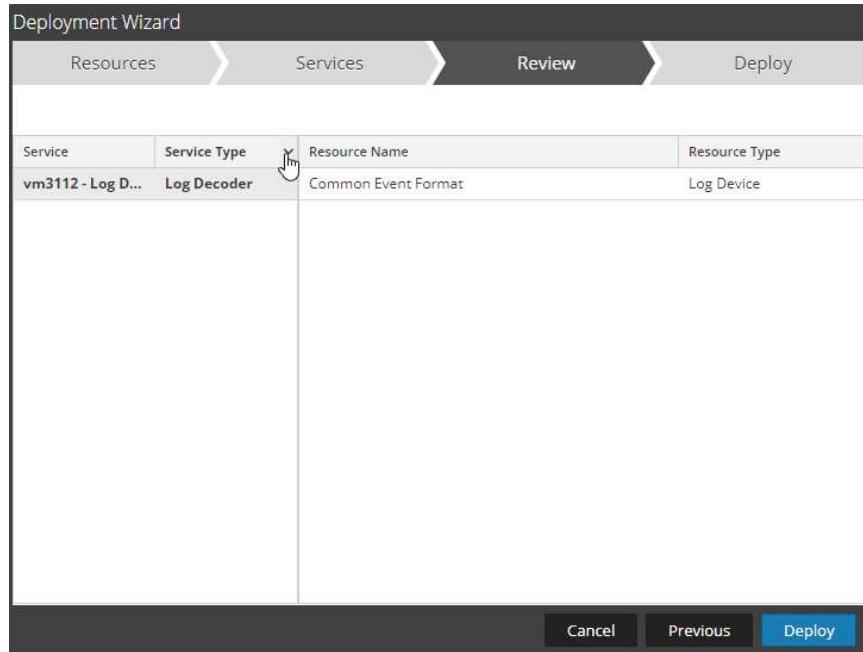


7. Select the **Log Decoder** and Select **Next**.

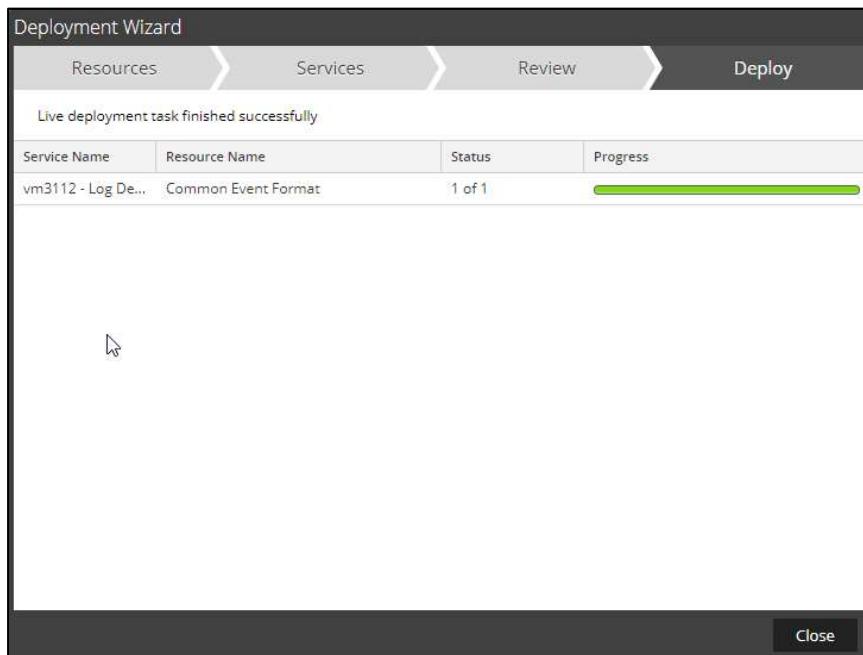


**!> Important: In an environment with multiple Log Decoders, deploy the Common Event Format to each Log Decoder in your network.**

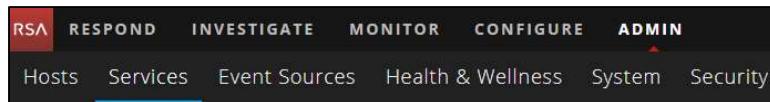
8. Select **Deploy**.



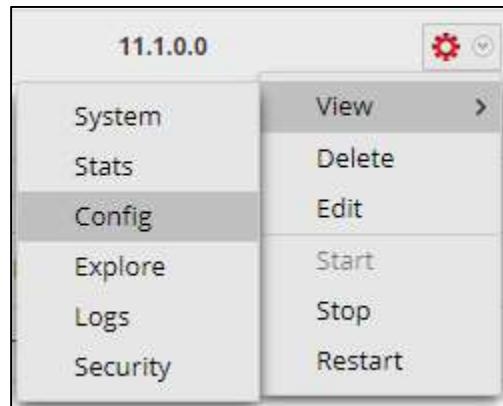
9. Select **Close**, to complete the deployment of the Common Event Format.



10. Ensure that the CEF Parser is enabled on the Log Decoder(s) by selecting **Admin > Services** from the NetWitness Dashboard.



11. Locate the Log\_Decoder and click the gear  to the right and select **View>Config**.



12. Check the box next to the **cef** Parser within the Service Parsers Configuration and select **Apply**.

Service Parsers Configuration		Enable All	Disable All
Name	Config Value		
casiteminder	<input type="checkbox"/>		
cef	<input checked="" type="checkbox"/>		
celerra	<input type="checkbox"/>		
checkpointfw	<input type="checkbox"/>		
checkpointfw1	<input type="checkbox"/>		
ciscoace	<input type="checkbox"/>		
ciscoacsxp	<input type="checkbox"/>		
ciscoasa	<input type="checkbox"/>		
ciscoidsxml	<input type="checkbox"/>		

## ***Edit the Common Event Format to collect Sentryo event times***

**! ▷ Important: The cef.xml file is overwritten by NetWitness Live during updates. It is important to maintain backups of the file in the event of a typing error or unforeseen event.**

1. Using WinSCP or other application to access the RSA NetWitness Log Decoder open an SSH connection to the NetWitness Log Decoder.
2. Locate the /etc/netwitness/ng/envision/etc/devices/cef folder. Backup **cef.xml** and edit the existing **CEF.XML** file.
3. Locate the end of the <MESSAGE> section and copy/paste the following line below into the file before the start of the<VendorProducts> section.

Example:

```
<MESSAGE
    id1="sentryo_cybervision"
    id2="sentryo_cybervision"
    functions="@event_time:*EVNTTIME($HDR, '%B %F
%Z',event_time_string)&gt;" 
    content="&lt;msghold&gt;" />
```

## Edit the Common Event Format Custom to support custom fields

**! Important: The cef-custom.xml file is not overwritten by NetWitness Live during updates, however it is important to maintain backups of the file in the event of a typing error or unforeseen event.**

1. Using WinSCP or other application to access the RSA NetWitness Log Decoder open a connection and locate the **/etc/netwitness/ng/envision/etc/devices/cef** folder. If the cef-custom.xml file does not exist create one. If the file exists create a backup **cef-custom.xml** and edit the file.
2. If this is a new cef-custom.xml file, copy the following into the file, otherwise copy only the required sections.

Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<DEVICEMESSAGES>
<!--
# cef-custom.xml Reference: https://community.rsa.com/docs/DOC-79189
-->
<VendorProducts>
    <Vendor2Device vendor="Sentryo" product="Sentryo CyberVision"
device="sentryo_cybervision" group="SCADA"/>
</VendorProducts>
    <ExtensionKeys>
        <ExtensionKey cefName="version" metaName="version"/>
        <ExtensionKey cefName="severity" metaName="severity"/>
        <ExtensionKey cefName="cat" metaName="category"/>
        <ExtensionKey cefName="msg" metaName="msg"/>

        <ExtensionKey cefName="smac" metaName="smacaddr"/>
        <ExtensionKey cefName="dmac" metaName="dmacaddr"/>
        <ExtensionKey cefName="src" metaName="saddr"/>
        <ExtensionKey cefName="dst" metaName="daddr"/>
        <ExtensionKey cefName="spt" metaName="sport"/>
        <ExtensionKey cefName="dpt" metaName="dport"/>

        <ExtensionKey cefName="spriv" metaName="spriv"/>
        <ExtensionKey cefName="SCVAuthorId" metaName="SCVAuthorId"/>
        <ExtensionKey cefName="SCVEventType" metaName="SCVEventType"/>
        <ExtensionKey cefName="SCVFlowId" metaName="SCVFlowId"/>

        <ExtensionKey cefName="SCVFlowControlActionValue"
metaName="SCVFlowControlActionValue"/>
            <ExtensionKey cefName="SCVFlowControlActionProcessName"
metaName="SCVFlowControlActionProcessName"/>
                <ExtensionKey cefName="SCVFlowSrcComponentId"
metaName="SCVFlowSrcComponentId"/>
                    <ExtensionKey cefName="SCVFlowDstComponentId"
metaName="SCVFlowDstComponentId"/>
                        <ExtensionKey cefName="SCVFlowControlActionVarName"
metaName="SCVFlowControlActionVarName"/>

                    <ExtensionKey cefName="SCVUsernewValue"
metaName="SCVUsernewValue"/>
                        <ExtensionKey cefName="SCVUseroldEmailvalue"
metaName="SCVUseroldEmailvalue"/>
                            <ExtensionKey cefName="SCVUsernewValue"
metaName="SCVUsernewValue"/>
                                <ExtensionKey cefName="SCVUseroldvalue"
metaName="SCVUseroldvalue"/>
                                    <ExtensionKey cefName="SCVUsernewValue"
metaName="SCVUsernewValue"/>
                                        <ExtensionKey cefName="SCVUseroldAdminvalue"
metaName="SCVUseroldAdminvalue"/>
                                            <ExtensionKey cefName="SCVUserAction"
metaName="SCVUserAction"/>
                                                <ExtensionKey cefName="SCVUseroldvalue"
metaName="SCVUseroldvalue"/>
                                                    <ExtensionKey cefName="SCVUsernewValue"
metaName="SCVUsernewValue"/>
                                                        <ExtensionKey cefName="SCVUseroldAdminvalue"
metaName="SCVUseroldAdminvalue"/>
```

```

        <ExtensionKey cefName="SCVFlowForcedVariableVarName"
metaName="SCVFlowForcedVariableVarName"/>
            <ExtensionKey cefName="SCVSensorLogFlowId"
metaName="SCVSensorLogFlowId"/>
                <ExtensionKey cefName="SCVSensorId" metaName="SCVSensorId"/>
                <ExtensionKey cefName="SCVSensorOldCaptureMode"
metaName="SCVSensorOldCaptureMode"/>
                    <ExtensionKey cefName="SCVSensorNewCaptureMode"
metaName="SCVSensorNewCaptureMode"/>
                        <ExtensionKey cefName="SCVSensorOldCustomInput"
metaName="SCVSensorOldCustomInput"/>
                            <ExtensionKey cefName="SCVSensorAction"
metaName="SCVSensorAction"/>
                                <ExtensionKey cefName="SCVSensorNewName"
metaName="SCVSensorNewName"/>
                                    <ExtensionKey cefName="SCVFlowCommunicationType"
metaName="SCVFlowCommunicationType"/>
                                        <ExtensionKey cefName="SCVUserId" metaName="SCVUserId"/>
                                        <ExtensionKey cefName="SCVImportDataUpdateSuccess"
metaName="SCVImportDataUpdateSuccess"/>
                                            <ExtensionKey cefName="SCVImportDataMigrationRequired"
metaName="SCVImportDataMigrationRequired"/>
                                                <ExtensionKey cefName="SCVImportDataDumpFilename"
metaName="SCVImportDataDumpFilename"/>
                                                    <ExtensionKey cefName="SCVExceptionLabel"
metaName="SCVExceptionLabel"/>
                                                <ExtensionKey cefName="SCVFlowLoginFailureProtocol"
metaName="SCVFlowLoginFailureProtocol"/>
                                                    <ExtensionKey cefName="SCVFlowLoginFailureAttempt0"
metaName="SCVFlowLoginFailureAttempt0"/>
                                                        <ExtensionKey cefName="SCVFlowLoginFailureNumberOfAttempts"
metaName="SCVFlowLoginFailureNumberOfAttempts"/>
                                                        <ExtensionKey cefName="SCVFlowLoginFailureAttempt2"
metaName="SCVFlowLoginFailureAttempt2"/>
                                                <ExtensionKey cefName="SCVComponentOldName"
metaName="SCVComponentOldName"/>
                                                    <ExtensionKey cefName="SCVComponentNewName"
metaName="SCVComponentNewName"/>
                                                        <ExtensionKey cefName="SCVComponentPropertiesNumber"
metaName="SCVComponentPropertiesNumber"/>
                                                    <ExtensionKey cefName="SCVsbsUpdateUpdated"
metaName="SCVsbsUpdateUpdated"/>
                                                        <ExtensionKey cefName="SCVTokenName" metaName="SCVTokenName"/>
                                                        <ExtensionKey cefName="SCVTokenEnable" metaName="SCVTokenEnable"/>
                                                        <ExtensionKey cefName="SCVTokenAction" metaName="SCVTokenAction"/>
                                                        <ExtensionKey cefName="SCVTokenTokenName"
metaName="SCVTokenTokenName"/>
                                                    <ExtensionKey cefName="SCVTokenTokenEnable"
metaName="SCVTokenTokenEnable"/>
                                                        <ExtensionKey cefName="SCVEventMetadataNewSyslogExport"
metaName="SCVEventMetadataNewSyslogExport"/>
                                                        <ExtensionKey cefName="SCVEventMetadataIsRetroactive"
metaName="SCVEventMetadataIsRetroactive"/>
                                                    <ExtensionKey cefName="SCVEventMetadataOldSeverity"
metaName="SCVEventMetadataOldSeverity"/>
                                                        <ExtensionKey cefName="SCVEventMetadataNewSeverity"
metaName="SCVEventMetadataNewSeverity"/>
                                                        <ExtensionKey cefName="SCVEventMetadataOldSyslogExport"
metaName="SCVEventMetadataOldSyslogExport"/>
                                                        <ExtensionKey cefName="SCVVulnsNumber" metaName="SCVVulnsNumber"/>
                                                        <ExtensionKey cefName="SCVVulnVulnId"
metaName="SCVVulnVulnId"/>
                                                    <ExtensionKey cefName="SCVVulnId" metaName="SCVVulnId"/>
                                                    <ExtensionKey cefName="SCVVulnAction" metaName="SCVVulnAction"/>

```

</ExtensionKeys>

</DEVICEMESSAGES>

## **Edit the NetWitness Table-Map-Custom.xml file**

**!> Important: The Table-Map-Custom.xml file is not overwritten by NetWitness Live during updates, however it is important to maintain backups of the file in the event of a typing error or unforeseen event.**

1. Using WinSCP or other application to access the RSA NetWitness Log Decoder open a connection and locate the **/etc/netwitness/ng/envision/etc/** folder.
2. If one exists, backup the **table-map-custom.xml** and then edit the existing **table-map-custom.xml** file.
3. Copy and paste the entire section below into a new file or only the lines between the **<mappings>...</mappings>** if the **table-map-custom.xml** file exists;

Example:

```

<?xml version="1.0" encoding="utf-8"?>
<!--
# attributes:
#   envisionName: The name of the column in the universal table
#   nwName:          The name of the NetWitness meta field
#   format:         Optional. The language key data type. See
LanguageManager. Defaults to "Text".
#   flags:          Optional. One of None|File|Duration|Transient.
Defaults to "None".
#   failureKey:    Optional. The name of the NW key to write data if
conversion fails. Defaults to system generated "parse.error" meta.
#   nullTokens:    Optional. The list of "null" tokens. Pipe separated.
Default is no null tokens.
-->
<mappings>
    <mapping envisionName="starttime" nwName="start" flags="None"
format="TimeT" envisionDisplayName="StartTime"/>
        <mapping envisionName="endtime" nwName="endtime" flags="None"
format="TimeT" envisionDisplayName="EndTime,rt,end"/>

        <mapping envisionName="cat" nwName="cat" flags="None"
envisionDisplayName="cat"/>
            <mapping envisionName="msg" nwName="msg" flags="None" format="Text"
envisionDisplayName="Message"/>
                <mapping envisionName="severity" nwName="severity" flags="None"
envisionDisplayName="Severity|SeverityLevel"/>
                    <mapping envisionName="smacaddr" nwName="eth.src" flags="None"
format="MAC" envisionDisplayName="SourceMacAddress"
nullTokens="Unknown|Irresolvable"/>
                        <mapping envisionName="dmacaddr" nwName="eth.dst" flags="None"
format="MAC" envisionDisplayName="DestMacAddress|DestinationMacAddress"/>
                            <mapping envisionName="saddr" nwName="ip.src" flags="None" format="IPv4"
envisionDisplayName="ServerAddress|SourceIPAddress|SourceAddress|Address|LocalA
ddress|ClientAddress" failureKey="ipv6.src" nullTokens="(null)|-"/>
                                <mapping envisionName="daddr" nwName="ip.dst" flags="None" format="IPv4"
envisionDisplayName="ForeignAddress|DestinationAddress|DestinationIPAddress|Loc
alAddress" failurekey="ipv6.dst" nullTokens="(null)|-"/>
                                    <mapping envisionName="sport" nwName="ip.srcport" flags="None"
format="UInt16" envisionDisplayName="SourcePort|LocalPort|ServerPort"
nullTokens="-|(null)"/>
                                        <mapping envisionName="dport" nwName="ip.dstport" flags="None"
format="UInt16" envisionDisplayName="ForeignPort|DestinationPort" nullTokens="-
|(null)|null"/>

        <mapping envisionName="spriv" nwName="spriv" flags="None"/>
        <mapping envisionName="SCVAuthorId" nwName="SCVAuthorId" flags="None"/>
        <mapping envisionName="SCVEventType" nwName="SCVEventType" flags="None"/>
        <mapping envisionName="SCVFlowId" nwName="SCVFlowId" flags="None"
envisionDisplayName="SCVFlowId"/>

```

```

        <mapping envisionName="SCVFlowControlActionValue"
nwName="SCVFloConActVal" flags="None"
envisionDisplayName="SCVFlowControlActionValue"/>
        <mapping envisionName="SCVFlowDstComponentId" nwName="SCVFlowDstCompId"
flags="None"/>
        <mapping envisionName="SCVFlowSrcComponentId" nwName="SCVFlSrcCompId"
flags="None"/>
        <mapping envisionName="SCVUsernewValue" nwName="SCVUsernewValue"
flags="None"/>
        <mapping envisionName="SCVUserOldEmailValue" nwName="SCVUsrOldEmailVal"
flags="None"/>
        <mapping envisionName="SCVUserNewAdminValue" nwName="SCVUsrNewAdmVal"
flags="None"/>
        <mapping envisionName="SCVUserAction" nwName="SCVUserAction"
flags="None"/>
        <mapping envisionName="SCVUserOldValue" nwName="SCVUserOldValue"
flags="None"/>
        <mapping envisionName="SCVUserNewEmailValue" nwName="SCVUsrNewEmailVal"
flags="None"/>
        <mapping envisionName="SCVUserOldAdminValue" nwName="SCVUsrOldAdmVal"
flags="None"/>
        <mapping envisionName="SCVFlowForcedVariableVarName"
nwName="SCVFlowFVVNam" flags="None"/>
        <mapping envisionName="SCVSensorLogFlowId" nwName="SCVSnsrLgFlwId"
flags="None"/>
        <mapping envisionName="SCVSensorId" nwName="SCVSensorId" flags="None"/>
        <mapping envisionName="SCVSensorOldCaptureMode" nwName="SCVSnsrOlCapMode"
flags="None"/>
        <mapping envisionName="SCVSensorNewCaptureMode" nwName="SCVSnsrNwCapMode"
flags="None"/>
        <mapping envisionName="SCVSensorOldCustomInput" nwName="SCVSnsrOlCusInpt"
flags="None"/>
        <mapping envisionName="SCVSensorAction" nwName="SCVSensorAction"
flags="None"/>
        <mapping envisionName="SCVSensorNewName" nwName="SCVSensorNewName"
flags="None"/>
        <mapping envisionName="SCVFlowCommunicationType"
nwName="SCVFlowCommunicationType" flags="None"/>
        <mapping envisionName="SCVUserId" nwName="SCVUserId" flags="None"/>
        <mapping envisionName="SCVImportDataUpdateSuccess"
nwName="SCVImprtDUpScs" flags="None"/>
        <mapping envisionName="SCVImportDataMigrationRequired"
nwName="SCVImprtDMigrRqd" flags="None"/>
        <mapping envisionName="SCVImportDataDumpFilename"
nwName="SCVImprtDDmpFnm" flags="None"/>
        <mapping envisionName="SCVExceptionLabel" nwName="SCVExceptionLabel"
flags="None"/>
        <mapping envisionName="SCVFlowLoginFailureProtocol"
nwName="SCVFlwLgnFlPrtcl" flags="None"/>
        <mapping envisionName="SCVFlowLoginFailureAttempt0"
nwName="SCVFlwLgnFlAtmt0" flags="None"/>
        <mapping envisionName="SCVFlowLoginFailureNumberOfAttempts"
nwName="SCVFlwLgnFlNAtmt" flags="None"/>
        <mapping envisionName="SCVFlowLoginFailureAttempt2"
nwName="SCVFlwLgnFlAtmt2" flags="None"/>
        <mapping envisionName="SCVComponentOldName" nwName="SCVComponentOldName"
flags="None"/>
        <mapping envisionName="SCVComponentOldName" nwName="SCVCmpntOldName"
flags="None"/>
        <mapping envisionName="SCVComponentNewName" nwName="SCVCmpntNewName"
flags="None"/>
        <mapping envisionName="SCVComponentPropertiesNumber"
nwName="SCVCmpntPropNum" flags="None"/>
        <mapping envisionName="SCVsbsUpdateUpdated" nwName="SCVsbsUpdateUpdated"
flags="None"/>
        <mapping envisionName="SCVTokenName" nwName="SCVTokenName" flags="None"/>
        <mapping envisionName="SCVTokenEnable" nwName="SCVTokenEnable"
flags="None"/>
        <mapping envisionName="SCVTokenAction" nwName="SCVTokenAction"
flags="None"/>

```

```

<mapping envisionName="SCVTokenTokenName" nwName="SCVTknTknName"
flags="None"/>
    <mapping envisionName="SCVTokenTokenEnable" nwName="SCVTknTknEnable"
flags="None"/>
        <mapping envisionName="SCVEventMetadataNewSyslogExport"
nwName="SCVEvntMtNwSysEx" flags="None"/>
            <mapping envisionName="SCVEventMetadataIsRetroactive"
nwName="SCVEvntMtIsRetro" flags="None"/>
                <mapping envisionName="SCVEventMetadataOldSeverity"
nwName="SCVEvntMt0Selv" flags="None"/>
                    <mapping envisionName="SCVEventMetadataNewSeverity"
nwName="SCVEvntMtNwSelv" flags="None"/>
                        <mapping envisionName="SCVEventMetadataOldSyslogExport"
nwName="SCVEvntMt0SyExp" flags="None"/>
                            <mapping envisionName="SCVVulnsNumber" nwName="SCVVulnsNumber"
flags="None"/>
                                <mapping envisionName="SCVVulns0vulnId" nwName="SCVVulns0vulnId"
flags="None"/>
                                    <mapping envisionName="SCVVulnId" nwName="SCVVulnId" flags="None"/>
                                    <mapping envisionName="SCVVulnAction" nwName="SCVVulnAction"
flags="None"/>
                                        <mapping envisionName="SCVFlowControlActionProcessName"
nwName="SCVF1CtlActPrcNm" flags="None"
envisionDisplayName="SCVFlowControlActionProcessName"/>
                                            <mapping envisionName="SCVFlowControlActionVarName"
nwName="SCVF1CtlActVarNm" flags="None"/>

</mappings>

```

#### 4. Restart the Log Decoder services.

Example: Sentryo Collection Example within NetWitness Investigator:

	<input type="checkbox"/> Collection Time	Event Type	Theme	Size	Details
	2018-10-23T21:33:15	Log	sentryo_cybervision	801 bytes	<p>&lt;&gt; FF:EE:DD:CC:BB:AA -&gt; AA:BB:CC:DD:EE:FF</p> <p>&lt;&gt; 4.3.2.1 -&gt; 1.2.3.4</p> <p>&lt;&gt; sessionid: 289510</p> <p>device.ip : 10.100.169.146</p> <p>medium : 32</p> <p>device.type : sentryo_cybervision</p> <p>device.class : SCADA</p> <p>alias.host : cybervision[783];</p> <p>version : 1.0</p> <p>event.type: flow_control_action</p> <p>event.desc: New &lt;Process Name&gt; control action (&lt;Variable Name&gt;; &lt;New Value&gt;) has been detected from 4.3.2.1:4321 to 1.2.3.4:1234</p> <p>severity : 1</p> <p>category : Run Orders</p> <p>msg: New &lt;Process Name&gt; control action (&lt;Variable Name&gt;; &lt;New Value&gt;) has been detected from 4.3.2.1:4321 to 1.2.3.4:1234</p> <p>netname : other src</p> <p>country.src : United States</p> <p>latdec.src : 37.751</p> <p>longdec.src : -97.822</p> <p>isp.src : Level 3 Communications</p> <p>org.src : Level 3 Communications</p> <p>netname : other dst</p> <p>country.dst : United States</p> <p>latdec.dst : 37.751</p> <p>longdec.dst : -97.822</p> <p>isp.dst : APNIC Debogon Project</p> <p>org.dst : APNIC Debogon Project</p> <p>analysis.session : not top 20 dst</p> <p>ip.srport: 4321</p> <p>ip.dprt: 1234</p> <p>SCVFloConActVal : &lt;New Value&gt;</p> <p>SCVF1CtlActPrcNm : &lt;Process Name&gt;</p> <p>SCVF1Wld : c5a1bda5-512e-4560-8578-d46da8f7998a</p> <p>SCVFloSrCompld : e616fc74-713b-40b1-990c-94b3b351c3e7</p> <p>SCVFloDstCompld : 8b572be4-57cc-4e8d-b748-c057d83ab966</p> <p>SCVEventType : flow_control_action</p> <p>SCVF1CtlActVarNm : &lt;Variable Name&gt;</p> <p>event.time : 2018-Nov-20 14:48:07.000</p> <p>msg.id : sentryo_cybervision</p> <p>device.disc : 100</p> <p>did : vm3112</p>

## Certification Checklist for RSA NetWitness

Date Tested: November 12, 2018

Certification Environment		
Product Name	Version Information	Operating System
RSA NetWitness	11.2	Virtual Appliance
Sentryo ICS CyberVision	2.0.3	Proprietary

NetWitness Test Case	Result				
<b>Device Administration</b> Partner's device name appears in Device Parsers Configuration Device can be enabled from Device Parsers Configuration Device can be disabled from Device Parsers Configuration Device can be removed from Device Parsers Configuration	<table border="1"><tr><td>✓</td></tr><tr><td>✓</td></tr><tr><td>✓</td></tr><tr><td>✓</td></tr></table>	✓	✓	✓	✓
✓					
✓					
✓					
✓					
<b>Investigation</b> Device name displays properly from Device Type Displays Meta Data properly within Investigator	<table border="1"><tr><td>✓</td></tr><tr><td>✓</td></tr></table>	✓	✓		
✓					
✓					

✓ = Pass ✗ = Fail N/A = Non-Available Function

## Troubleshooting

### If the “Configure” button is greyed out.

- This can happen when the license is not properly installed or does not enable syslog.  
Refer to <https://sentryo.zendesk.com/hc/en-us/articles/207923945-Contract-Licenses> for further help with licenses.

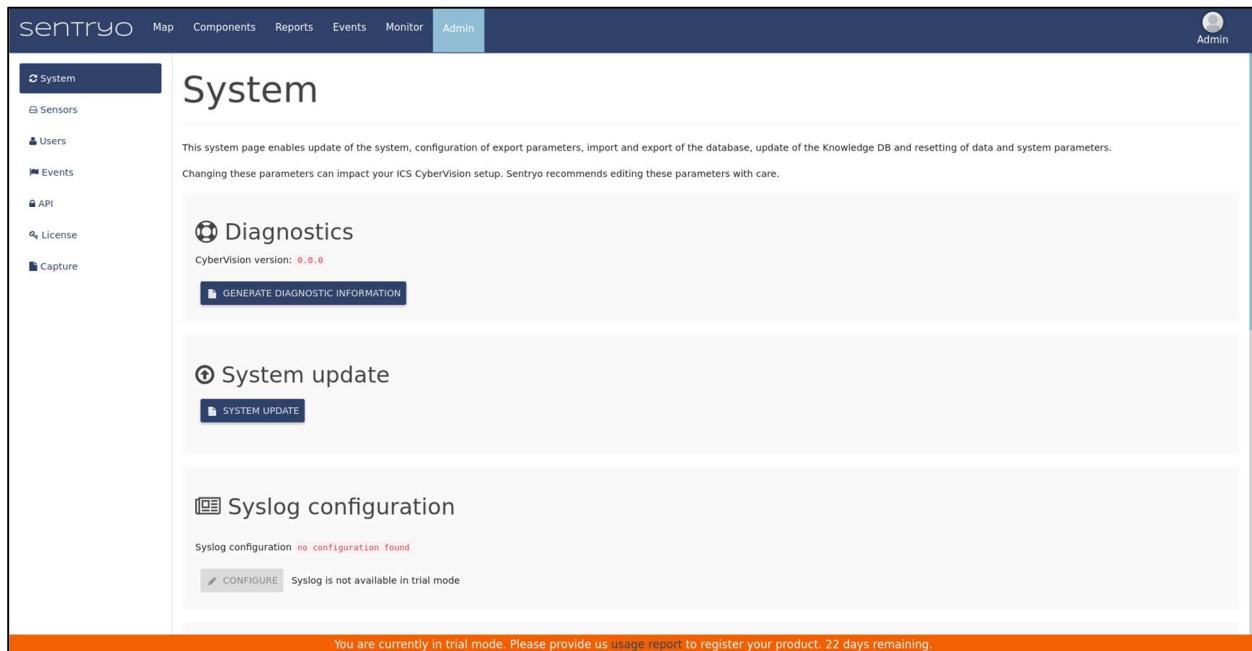


Fig 1. Screenshot of ICS CyberVision without a license, thus with syslog disabled.

### If RSA NetWitness does not receive any messages from ICS CyberVision

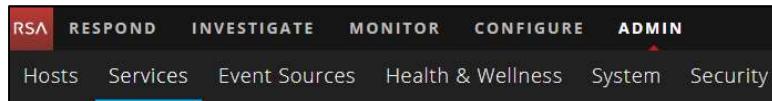
- Make sure the SIEM is connected to and reachable from the Administration interface of ICS CyberVision and not its collection interface.

## Appendix

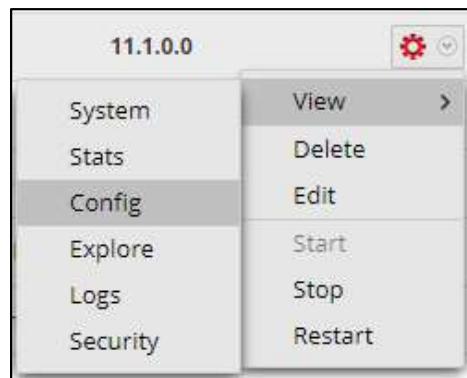
### NetWitness Disable the Common Event Format Parser

To disable the NetWitness Common Event Format Parser and not delete it perform the following:

1. Select the NetWitness **Admin > Services**.



2. Select the Log Decoder, then select **View > Config**.



3. From the **Service Parses Configuration** window, scroll down to the **cef** parser and uncheck the Config Value checkbox.

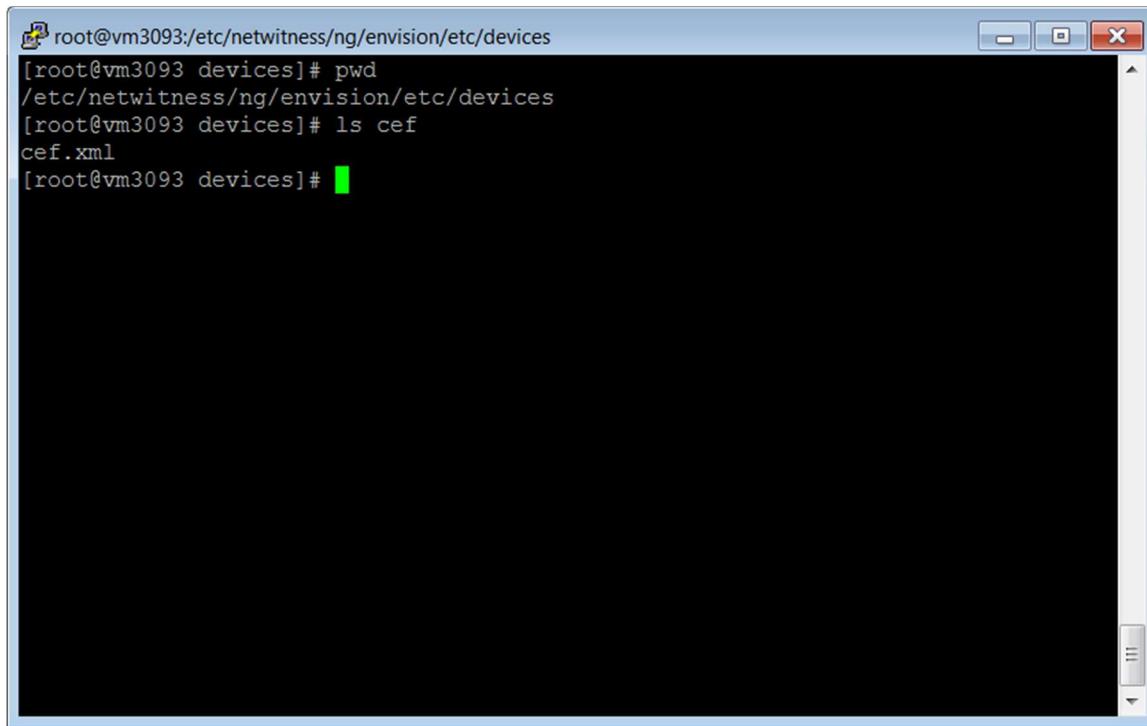
Service Parses Configuration		Enable All	Disable All
Name	Config Value		
casiteminder	<input type="checkbox"/>		
cef	<input checked="" type="checkbox"/>		
celerra	<input type="checkbox"/>		
checkpointfw	<input type="checkbox"/>		
checkpointfw1	<input type="checkbox"/>		
ciscoace	<input type="checkbox"/>		
ciscoacsxp	<input type="checkbox"/>		
ciscoasa	<input type="checkbox"/>		
ciscoidsxml	<input type="checkbox"/>		

4. Click **Apply** to save settings.

## NetWitness Remove Device Parser

To remove the NetWitness Integration Package files from the environment, perform the following:

1. Connect to the NetWitness Log Decoder/Collector Server using SSH and open the **/etc/netwitness/ng/envision/etc/devices** folder.



The screenshot shows a terminal window with the following command history:

```
[root@vm3093 devices]# pwd
/etc/netwitness/ng/envision/etc/devices
[root@vm3093 devices]# ls cef
cef.xml
[root@vm3093 devices]#
```

2. Search for and delete the CEF folder and its contents.