



# RSA Endpoint Integration Guide

for RSA NetWitness® Platform 11.3



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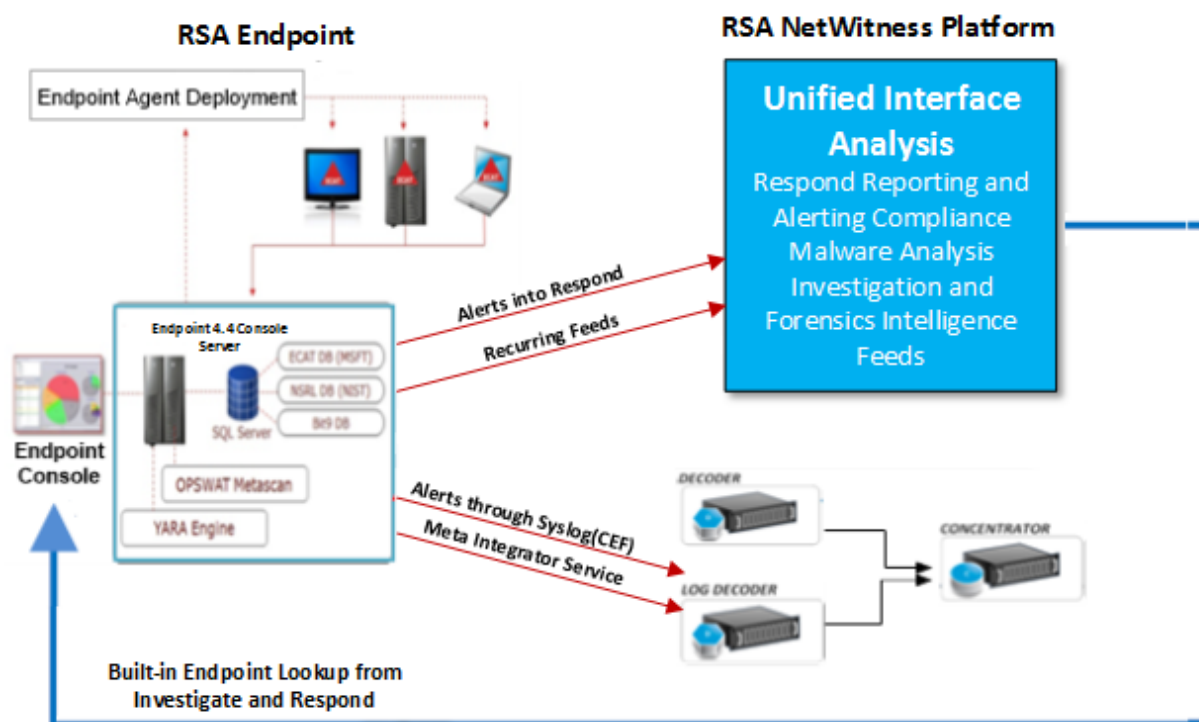
## RSA NetWitness Endpoint Integration

RSA customers who are using RSA NetWitness Endpoint 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later can integrate into NetWitness Platform 11.x in several different ways.

**Note:** In Version 11.2 and later, the following components are rebranded:

- RSA NetWitness Suite to RSA NetWitness Platform
- Packet Decoder to Network Decoder

### Integration Options



### Integration Methods

The following are the RSA NetWitness Endpoint integration methods:

- Configure Endpoint Alerts through Respond
- Configure Contextual Data from Endpoint through Recurring Feed
- Configure Endpoint Alerts through Syslog into a Log Decoder
- Configuring Meta Integrator service in the NetWitness Endpoint 4.4.0.2 or later directly to a Log Decoder

**Endpoint alerts into NetWitness Respond.** This integration provides the capability for forwarding Endpoint alerts to Respond.

**Contextual data from Endpoint through a NetWitness Platform Live recurring feed.** This integration can enrich the session displayed in NetWitness Platform Investigation with contextual information; some examples include the host operating system, MAC address, IIOC score, and other data that may not be present in the log or packet data.

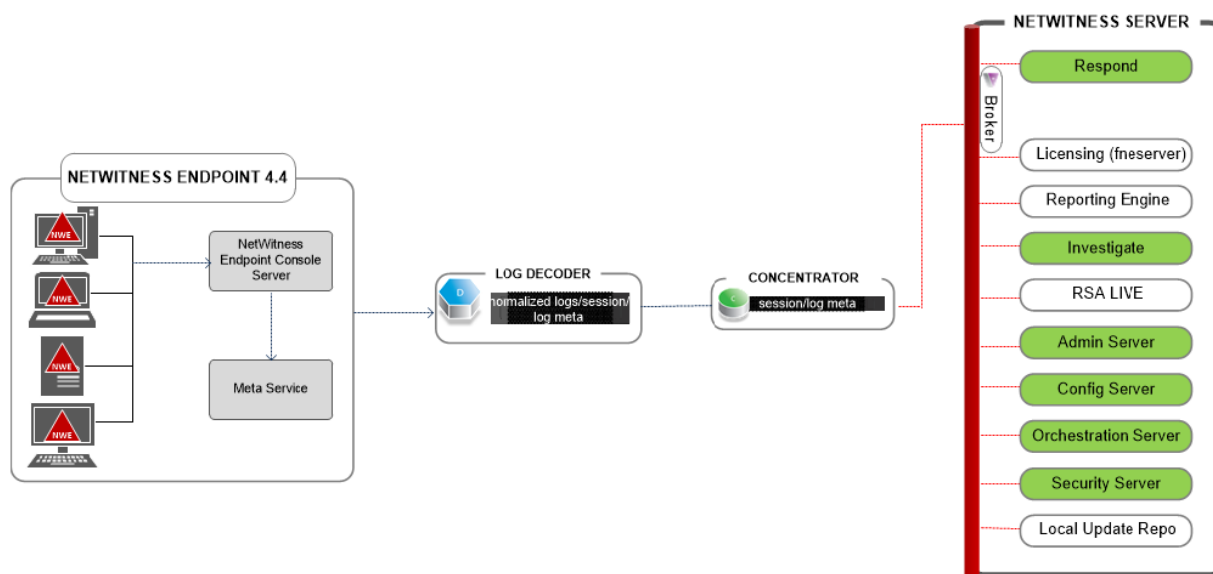
**NetWitness Endpoint alerts through Syslog (CEF) into NetWitness Platform Log Decoders.** This integration provides the capability to forward Endpoint events through Syslog and to correlate the events with other log or packet metadata in the NetWitness Platform ecosystem.

(For Version 11.1 and later) **NetWitness Endpoint directly to a Log Decoder.** This integration lets you view the Endpoint metadata in the **Investigate > Navigate** and **Event Analysis** view similar to Logs and Packets.

**Note:** For information on NetWitness Endpoint 4.4.0.x integration with NetWitness Platform, see *NetWitness Endpoint Configuration Guide*.

## NetWitness Endpoint Meta Integration

The NetWitness Platform provides seamless integration allowing Endpoint metadata to be included into the NetWitness work flow. This lets analyst to investigate an incident and respond using packet, log, and endpoint metadata. The endpoint metadata provides further indicators and context related to a host, user, process, or file. It also provides tracking data that provide data of what has transpired with a host, user, process, or file.



## Built-in NetWitness Endpoint Lookup

With the RSA NetWitness Endpoint user interface (UI) installed on the same machine where the analyst is using a browser to access NetWitness Platform, the built-in NetWitness Endpoint Lookup from NetWitness Platform Investigation and NetWitness Platform Respond provides right-click access to the NetWitness Endpoint console server for the following meta keys: IP address (ip-src, ip-dst, ipv6-src, ipv6-dst, orig\_ip), host (alias-host, domain.dst), client, and file-hash. These are described in the "Launch an External Lookup of a Meta Key" topic in *Investigation and Malware Analysis User Guide* and the "View Alerts" topic in *NetWitness Respond User Guide*.

NetWitness Platform configuration is not required for endpoint lookup when you are using one of the built-in parsers, NetWitness Endpoint or CEF, and you have not customized the default meta keys used when loading metadata in Investigation. For more information, see "Manage and Apply Default Meta Keys in an Investigation" topic in the *Investigation and Malware Analysis User Guide*.

**Note:** The exception occurs if you customize NetWitness Platform by editing the display setting for the default meta keys in Investigation, add meta keys to the table-map-custom.xml file, or customize NetWitness Endpoint feeds. Some configuration is required to add the custom meta keys to the context menu NetWitness Endpoint Lookup in the **ADMIN > System** view as described in the "Add Custom Context Menu Actions" topic in the *System Configuration Guide*.

## NetWitness Endpoint Alerts and Indicators of Compromise

NetWitness Endpoint IIOC (Instant Indicator of Compromise) is a database query that NetWitness Endpoint runs on collected NetWitness Endpoint scan data to determine the presence of potential malware on scanned hosts. RSA NetWitness Endpoint 4.1.2 or later ships with IOCs that users can enable and mark as alertable. RSA NetWitness Endpoint runs IOC queries regularly on new scan data, which is collected and stored in the database. If the IOC query is satisfied, this indicates a potential indicator of compromise, and the event can be reported to a user or sent to an external system as an alert.

Possible types of alerts are:

- Machine alert: This alert indicates that the machine in question is suspicious.
- Module alert: This alert indicates that a module, such as a file, a DLL, or an executable, is suspicious. It contains details about the module in question.
- Event alert: This alert represents any other suspicious activity detected by NetWitness Endpoint that does not fall into the above categories.

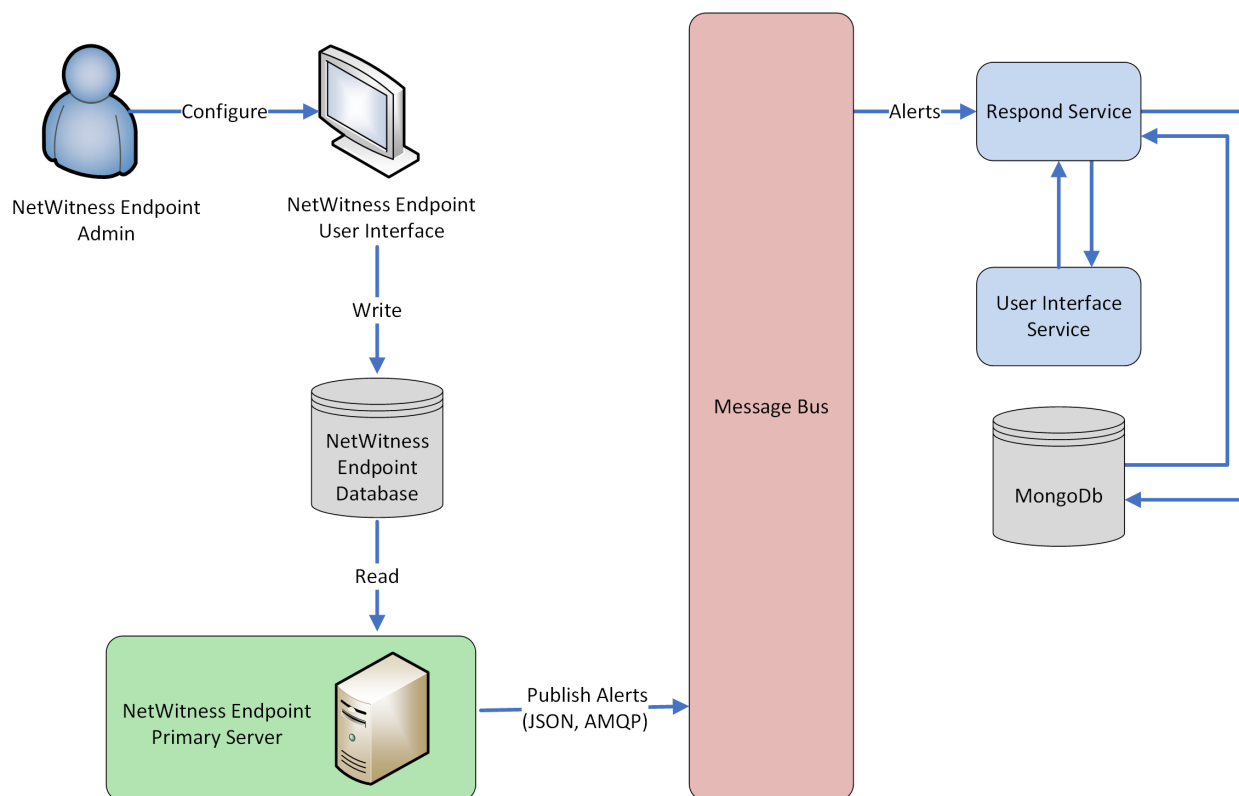
Each of these alert types can be sent to NetWitness Platform.

## Configure NetWitness Endpoint Alerts to Respond

This procedure is required to integrate NetWitness Endpoint with NetWitness Platform so that the NetWitness Endpoint alerts are picked up by the Respond component of NetWitness Platform and displayed in the **RESPOND > Alerts** view.

**Note:** RSA supports NetWitness Endpoint versions 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later for NetWitness Respond integration. For more information, see the "RSA NetWitness Suite Integration" topic in the *NetWitness Endpoint User Guide*.

The diagram below represents the flow of NetWitness Endpoint alerts to the Respond Incident List view of NetWitness Platform and its display in the **RESPOND > Alerts** view.



### Prerequisites

Ensure that you have the following:

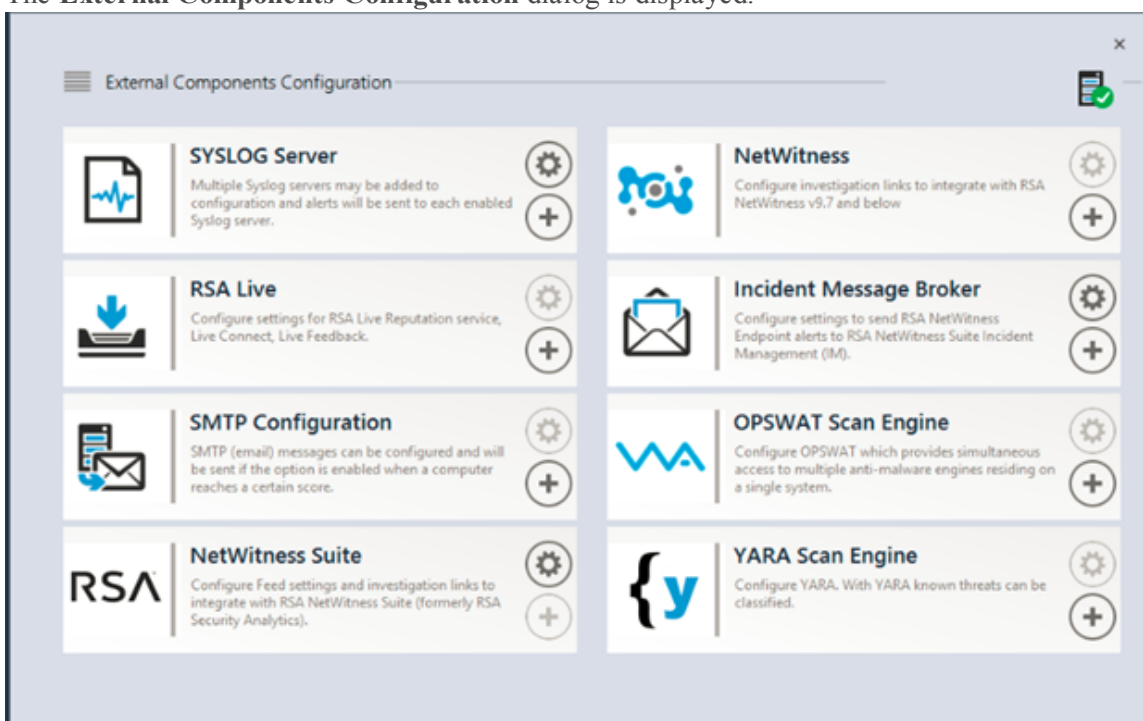
- The Respond service is installed and running on NetWitness Platform.
- NetWitness Endpoint 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later is installed and running.

## Configure NetWitness Endpoint to Forward NetWitness Endpoint Alerts

To configure NetWitness Endpoint to send alerts to Respond to the NetWitness Platform user interface:

1. In the NetWitness Endpoint user interface, click **Configure > Monitoring and External Components**.

The **External Components Configuration** dialog is displayed.



2. From the components listed, select **Incident Message Broker** and click + to add a new IM broker.
3. Enter the following fields:
  - a. **Instance Name:** Enter a unique name to identify the IM broker.
  - b. **Server Hostname/IP address:** Enter the Host DNS or IP address of the IM broker (NetWitness Server).
  - c. **Port number:** The default port is 5671.
4. Click **Save**.
5. Navigate to the **ConsoleServer.exe.config** file in **C:\Program Files\RSA\ECAT\Server**.
6. Modify the virtual host configurations in the file as follows:
 

```
<add key="IMVirtualHost" value="/rsa/system" />
```

**Note:** In NetWitness Platform 11.0 and 11.1, the virtual host is "/rsa/system". For version 10.6.x and below, the virtual host is "/rsa/sa".

7. Restart the API Server and Console Server.



8. To set up SSL for Respond Alerts, perform the following steps on the NetWitness Endpoint primary console server to set the SSL communications:

- a. Export the NetWitness Endpoint CA certificate to .CER format (Base-64 encoded X.509) from the personal certificate store of the local computer (without selecting the private key).
- b. Generate a client certificate for NetWitness Endpoint using the NetWitness Endpoint CA certificate. (You MUST set the CN name to ecat. Run cmd.exe console with Administrator rights.)

```
makecert -pe -n "CN=ecat" -len 2048 -ss my -sr LocalMachine -a sha1 -sky  
exchange -eku 1.3.6.1.5.5.7.3.2 -in "NweCA" -is MY -ir LocalMachine -sp  
"Microsoft RSA SChannel Cryptographic Provider" -cy end -sy 12  
c:\client.cer
```

Note: In the previous code sample, if you upgraded to version 4.3 (or later) from a previous version and did not generate new certificates, you should substitute "EcatCA" for "NweCA". Or, if your current operating system has PowerShell version 5.1 or later, you can use the following code sample:

```
PS C:\> New-SelfSignedCertificate -KeyExportPolicy Exportable -Subject  
"CN=ecat" -KeyAlgorithm RSA -KeyLength 2048 -CertStoreLocation  
"cert:\LocalMachine\My" -HashAlgorithm SHA256 -KeySpec KeyExchange -  
TextExtension @"(2.5.29.37={text}1.3.6.1.5.5.7.3.2,1.3.6.1.5.5.7.3.1)" -  
Provider "Microsoft RSA SChannel Cryptographic Provider" -KeyUsage  
DigitalSignature, KeyEncipherment, KeyAgreement -Signer (Get-ChildItem -  
Path Cert:\LocalMachine\My\ -DnsName NweCA)-NotAfter (Get-Date).AddYears  
(5); Export-Certificate -Cert (Get-ChildItem -Path  
Cert:\LocalMachine\My\ -DnsName ecat) -FilePath C:\Client.cer
```

- c. Make a note of the thumbprint of the client certificate generated in step b. Enter the thumbprint value of the client certificate in the IMBrokerClientCertificateThumbprint section of the ConsoleServer.Exe.Config file as shown.

```
<add key="IMBrokerClientCertificateThumbprint"  
value="896df0efacf0c976d955d5300ba0073383c83abc"/>
```

9. On the NetWitness Server, copy the NetWitness Endpoint CA certificate file in .CER format into the import folder:  
/etc/pki/nw/trust/import
10. Issue the following command to initiate the necessary Chef run:  
orchestration-cli-client --update-admin-node  
This appends all of those certificates into the truststore.
11. Restart the RabbitMQ server:  
systemctl restart rabbitmq-server  
The NetWitness Endpoint account should automatically be available on RabbitMQ.
12. Import the /etc/pki/nw/ca/nwca-cert.pem and /etc/pki/nw/ca/ssca-cert.pem files from the NetWitness Server and add them to the Trusted Root Certification stores in the Endpoint Server.

## Troubleshooting

This section suggests how to resolve problems you may encounter when you configure NetWitness Endpoint alerts to Respond.

Known Issues	Solutions
Orchestration fails on admin node.	You must copy and paste the content of NweCA or EcatCA certificate in <code>/etc/rabbitmq/ssl/truststore.pem</code> and restart the Rabbitmq service.

## Configure Contextual Data from NetWitness Endpoint Through Recurring Feed

---

You can configure RSA NetWitness Endpoint data in RSA NetWitness Platform to provide contextual data from NetWitness Endpoint to Decoder and Log Decoder sessions. This configuration adds contextual meta values in addition to the instant IOC alerts that can be used to build correlations to other metadata in the NetWitness Platform ecosystem.

Administrators can configure NetWitness Platform to consume system scan contextual data from NetWitness Endpoint through a NetWitness Platform Live recurring feed. This integration can enrich the session from a Decoder or Log Decoder with contextual information displayed in NetWitness Platform Investigation; some examples include the host operating system, MAC address, IIOC score, and other data that may not be present in the log or packet data into sessions from a Decoder or Log Decoder.

**Note:** Although this feature is targeted for customers with a Network Decoder, a recurring feed can also be implemented in Log Decoders.

**Caution:** In an environment with many NetWitness Endpoint hosts, using recurring feed may result in decreased performance on the NetWitness Platform ingest devices (Decoder and Log Decoder).

### Prerequisites

- Version 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later NetWitness Endpoint Console server and NetWitness Server Version 10.4 and above installed.
- Version 11.0 or 11.1 RSA Decoder and Concentrator connected to the NetWitness Server in the network.

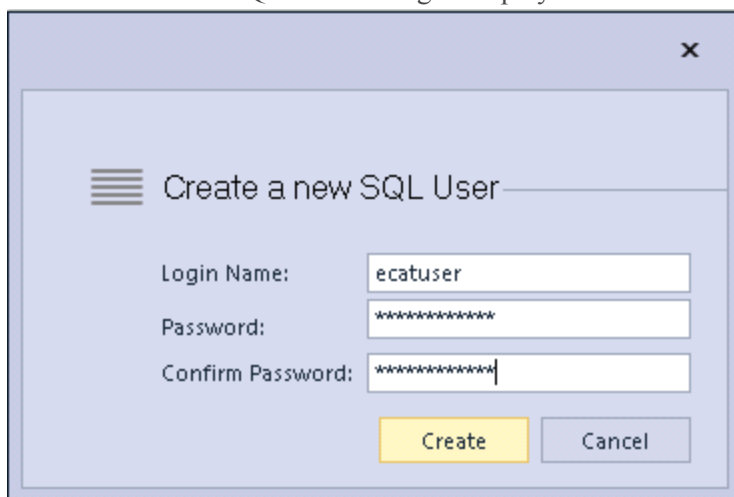
**To Configure Contextual Data from NetWitness Endpoint Through Recurring Feed, perform the following:**

1. Enable the NetWitness Endpoint Feed for NetWitness Platform in the NetWitness Endpoint User Interface.
2. Export the NetWitness Endpoint CA Certificate from the NetWitness Endpoint Console server and Import it into NetWitness Platform trust store.
3. Configure the NetWitness Platform Concentrator service to define which meta keys are indexed.
4. Create a recurring feed in NetWitness Platform Live.

### Enable the NetWitness Endpoint Feed for NetWitness Platform

1. In the NetWitness Endpoint user interface, create SQL user in NetWitness Endpoint:
  - a. Open the NetWitness Endpoint user interface and log on using the proper credentials.
  - b. From the menu bar, select **Configure > Manage Users and Roles**, right-click in the pane, and select **create sql user**.

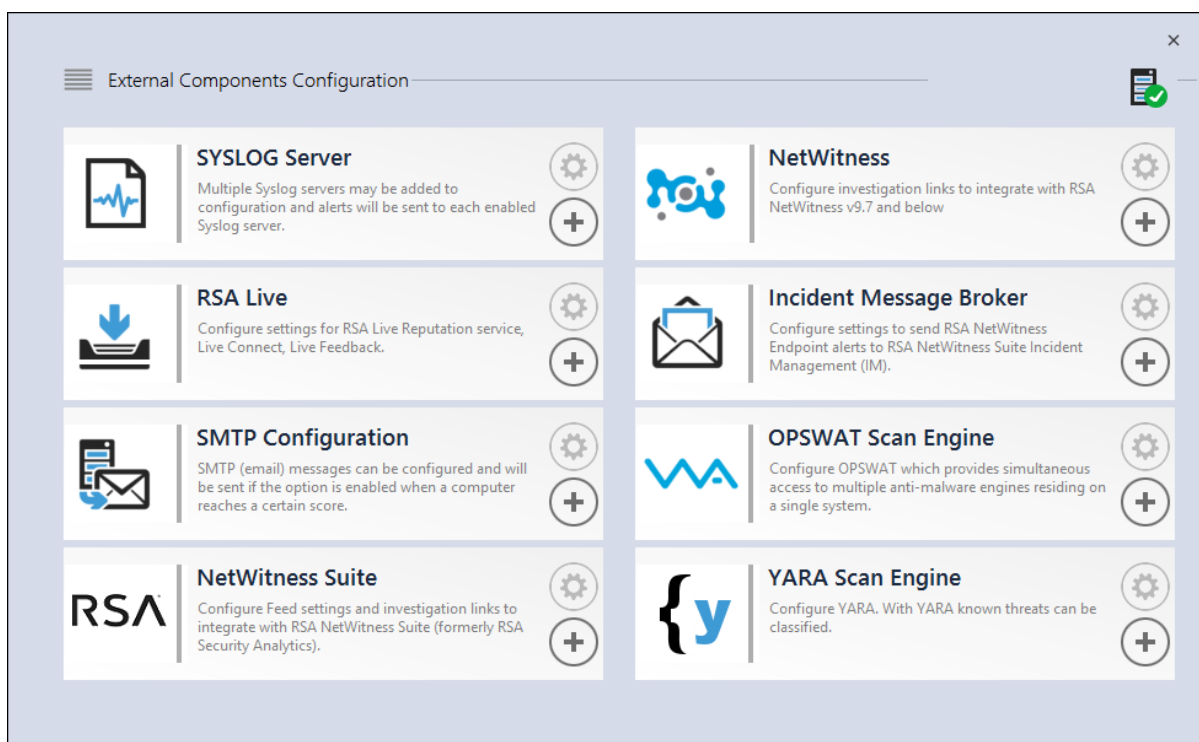
The Create a new SQL User dialog is displayed.



The dialog box is titled "Create a new SQL User". It contains three input fields: "Login Name:" with the text "ecatuser", "Password:" with masked characters "\*\*\*\*\*", and "Confirm Password:" with masked characters "\*\*\*\*\*". At the bottom are two buttons: "Create" (highlighted in yellow) and "Cancel".

- c. Enter the **Login Name** and **Password** and click **Create**.
2. From the menu bar, select **Configure > Monitoring External Components**.

The External Components Configuration dialog is displayed.



The dialog box is titled "External Components Configuration". It displays a grid of eight configuration options, each with an icon, a title, a description, and a gear icon for settings and a plus icon for adding:

- SYSLOG Server**: Multiple Syslog servers may be added to configuration and alerts will be sent to each enabled Syslog server.
- NetWitness**: Configure investigation links to integrate with RSA NetWitness v9.7 and below.
- RSA Live**: Configure settings for RSA Live Reputation service, Live Connect, Live Feedback.
- Incident Message Broker**: Configure settings to send RSA NetWitness Endpoint alerts to RSA NetWitness Suite Incident Management (IM).
- SMTP Configuration**: SMTP (email) messages can be configured and will be sent if the option is enabled when a computer reaches a certain score.
- OPSWAT Scan Engine**: Configure OPSWAT which provides simultaneous access to multiple anti-malware engines residing on a single system.
- NetWitness Suite**: Configure Feed settings and investigation links to integrate with RSA NetWitness Suite (formerly RSA Security Analytics).
- YARA Scan Engine**: Configure YARA. With YARA known threats can be classified.

3. In NetWitness Platform, click +.  
The NetWitness Platform dialog is displayed.

4. In the **NetWitness Platform** panel, in **On**, enter the name to identify the NetWitness Platform component.
5. In the **NetWitness Platform Connection** panel, perform the following.
  - a. In the **Server Hostname/IP** field, enter the host name or IP address of the NetWitness Server.
  - b. In the **Port** field, enter the port number. By default port number is 443.
6. In the **Configure NetWitness Platform** panel, perform the following:
  - a. In the **Servers Time Zone** field, select the time zone for the component from the drop-down list.
  - b. In the **Device Identifier** field, enter the NetWitness Platform concentrator device ID.

**Note:** You can find the Device Identifier in NetWitness Platform when you look up a Concentrator or Broker in **Investigation > Navigate > <Concentrator or Broker Name>**. The Device Identifier is the number in the URL after "investigation." For example, in the URL `https://<IP address>investigation/319/navigate/values`, the Device Identifier is **319**.

The **URI** field is populated when you click **Save**.

7. In the **Query Optimization** panel, in the **Do Not Perform Query Older Than** field, enter the number of days to limit the query period. Enter **0** if you want to discard this feature.

8. In the **Query Time Range** panel, perform the following:
  - a. In the **Minimum** field, enter the number of minutes for the minimum query time range. This value is used to automatically increase the time range submitted to NetWitness Platform. This ensures that a query returns a positive response if the NetWitness Endpoint Agent's reported time is slightly different than NetWitness Endpoint's time.
  - b. In the **Maximum** field, enter the number of minutes to limit the time range. This value is used to automatically limit the time range submitted to NetWitness Platform, so that a query does not overload the NetWitness Server.
9. In the **Configure RSA NetWitness Endpoint Feeds for NetWitness Platform** panel, perform the following:
  - a. Select **Enable RSA NetWitness Endpoint Feed**.
  - b. In the **URL** field, enter the **SQL Username** and **Password** (configured in step 1) to access the location of the feed.  
The **URL** field is populated when you click **Save**.
  - c. Enter the time interval for the frequency at which feeds are published.
10. In the **Feed Publishing Interval** panel, in the **Time Interval** field, select the time interval in **hrs** and **mins** for the frequency at which feeds are published.
11. In the **Enable URL access to below user to** panel, enter the **Username** and **Password** of the NetWitness Endpoint user.
12. Click **Save**.  
A feed is created.

## Export the NetWitness Endpoint SSL Certificate

**Note:** This procedure works only for NetWitness Platform 10.5 and above because Java 8 support was added for 10.5. If you are using an earlier version of NetWitness Platform, refer to the applicable version of this guide.

**To export the NetWitness Endpoint CA certificate from the NetWitness Endpoint Console server and copy it to the NetWitness Platform host:**

1. Log on to the NetWitness Endpoint Console.
2. Open MMC.
3. Add a certificate snap-in for **Computer account**.
4. Export the certificate named **NweCA** (in NetWitness Endpoint 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later fresh install) or **EcatCA** (in NetWitness Endpoint upgraded from previous version to 4.3.0.4 or 4.3.0.5).
  - a. Export without a private key.
  - b. Export in DER encoded binary X.509 (.CER) format.

- c. Name it **NweCA.cer** (in NetWitness Endpoint 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later fresh install) or **EcatCA.cer** (in NetWitness Endpoint upgraded from previous version to 4.3.0.4 or 4.3.0.5).
  5. Copy the NetWitness Endpoint CA certificate to the NetWitness Platform host:
    - For NetWitness Endpoint 4.3.0.4, 4.3.0.5 or 4.4 fresh installation:  

```
scp NweCA.cer root@<sa-machine>:.
```
    - For NetWitness Endpoint upgraded from previous version to 4.3.0.4 or 4.3.0.5:  

```
scp EcatCA.cer root@<sa-machine>:.
```
  6. To import the NetWitness Endpoint CA certificate into the NetWitness Platform Trusted store, perform the following:
    - a. Check the Java version installed on your NetWitness Platform using the following command:  

```
java -version
```

The openjdk version is displayed. For example, openjdk version "1.8.0\_71"
    - b. To set the JDK parameter, navigate to java directory. Enter the following commands:
      - `JDK=/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.141-1.b16.el7_3.x86_64/jre/`
      - For NetWitness Endpoint fresh installation:  

```
$JDK/bin/keytool -import -v -trustcacerts -alias nweca -file  
~/NweCA.cer -keystore $JDK/lib/security/cacerts -storepass changeit
```
      - For NetWitness Endpoint upgraded from previous version:  

```
$JDK/bin/keytool -import -v -trustcacerts -alias ecatca -file  
~/EcatCA.cer -keystore $JDK/lib/security/cacerts -storepass changeit
```
- Note:** \$JDK represents the full path of the current Java version.
- When prompted for certificate update confirmation, enter **Yes**.
7. On the NetWitness Platform host, do one of the following:
    - For NetWitness Endpoint 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later fresh installation, edit **/etc/hosts** to map the IP address of the NetWitness Endpoint Console server to the name **NweServerCertificate** by adding the following line to the file:  

```
<ip-address-ecat-cs> NweServerCertificate
```
    - For NetWitness Endpoint upgraded from previous version to 4.3.0.4 or 4.3.0.5, edit **/etc/hosts** to map the IP address of the upgraded NetWitness Endpoint Console server to the name **ecatserverexported** by adding the following line to the file:  

```
<ip-address-ecat-cs> ecatserverexported
```
  8. To restart NetWitness Platform, enter the following command:  

```
service jetty restart
```

## Configure the NetWitness Platform Concentrator Service

1. Log on to NetWitness Platform and go to **ADMIN > Services**.
2. Select a Concentrator from the list and select **View > Config**.

3. Select the **Files** tab, and from the **Files to Edit** drop-down menu, select **index-concentrator-custom.xml**.
4. Add the following NetWitness Endpoint meta keys to the file and click **Apply**. Make sure that this file contains the XML sections already; if the lines are not included, add them. The following lines are examples; make sure the values match your configuration and the column names you included in the feed definition, where:

**description** is the name of the meta key you want to display in NetWitness Platform Investigation.  
**level** is "IndexValues"

**name** matches the column name of the CSV file that NetWitness Platform uses while defining the recurring feed (see the table in *Configure the Recurring Custom Feed Task in NetWitness Platform* below).

```
<key description="Gateway" format="Text" level="IndexValues" name="gateway"
valueMax="250000" defaultAction="Open"/>

<key description="Risk Number" format="Float64" level="IndexValues"
name="risk.num" valueMax="250000" defaultAction="Open"/>

<key description="Strans Addr" format="Text" level="IndexValues"
name="stransaddr" valueMax="250000" defaultAction="Open"/>

<key description="Domain" format="Text" level="IndexValues" name="domain"
valueMax="250000" defaultAction="Open"/>

<key description="User Account" format="Text" level="IndexValues"
name="username" valueMax="250000" defaultAction="Open"/>

<key description="Ecat Connectiontime" format="Text" level="IndexValues"
name="ecat.ctime" valueMax="250000" defaultAction="Open"/>

<key description="Ecat Scantime" format="Text" level="IndexValues"
name="ecat.stime" valueMax="250000" defaultAction="Open"/>
```

5. Restart the Concentrator to activate the custom key updates.

## Configure the Recurring Custom Feed Task in NetWitness Platform

1. Log on to NetWitness Platform and go to **CONFIGURE > Custom Feeds**.  
The Feeds view is displayed.
2. In the toolbar, click **+**.  
The Setup Feed dialog is displayed.
3. In the Setup Feed dialog, select **Custom Feed** and click **Next**.  
The Configure a Custom Feed wizard is displayed, with the Define Feed form open.
4. In the **Define Feed**, perform the following:
  - a. In the **Feed Type** field, select **CSV**.
  - b. In the **Feed Task Type** field, select **Recurring**.
  - c. In the **Name** field, enter the name of the feed. For example, EndpointFeed.
  - d. Enable the **Upload As Csv File Feed** checkbox to upload the feed as a CSV file.



- e. In the **URL** field, enter the URL with the hostname of the Windows server on which NetWitness Endpoint is installed:
  - For NetWitness Endpoint 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later fresh installation, use the URL **https://NweServerCertificate:9443/api/v2/feed/machines.csv**.
  - For NetWitness Endpoint upgraded from previous version to 4.3.0.4 or 4.3.0.5, use the URL **https://ecatserverexported:9443/api/v2/feed/machines.csv**.
- f. Enable the **Authenticated** checkbox and enter the username and password as noted in *Enable the ECAT Feed* above.
- g. Click **Verify** to check if NetWitness Platform can reach the web resource.

The screenshot shows the 'Configure a Custom Feed' dialog box with the 'Define Feed' tab selected. The dialog has four tabs: 'Define Feed', 'Select Services', 'Define Columns', and 'Review'. The 'Define Feed' tab contains the following fields and options:

- Feed Type:** Radio buttons for **CSV** (selected) and **STIX**.
- Feed Task Type:** Radio buttons for **Adhoc** and **Recurring** (selected).
- Name \***: Text input field containing 'ECATFeed'.
- Upload As Csv File Feed**: Checkbox, currently unchecked.
- URL \***: Text input field containing 'https://EcatServerExported:9443/ext/feed/machines.csv'. A **Verify** button is to the right of the field.
- Authenticated**: Checked checkbox. Next to it are **User Name** (text input 'sa') and **Password** (text input '\*\*\*\*\*').
- Use Proxy**: Unchecked checkbox.
- Recur Every**: A numeric input '2' followed by a dropdown menu set to 'Minute (s)'.
- Date Range**: Unchecked checkbox.
- Advanced Options**: A collapsed section indicated by a downward arrow and the text 'Advanced Options'.

- h. Define the schedule and click **Next**
5. In the **Select Services** tab, select the Decoder or groups to consume the feed. Click **Next**.
6. In the **Define Columns** tab, enter the column names as shown in the table below and save the feed.

**Configure a Custom Feed**

Define Feed | Select Services | **Define Columns** | Review

**Define Index**

Type: ☒ IP ☐ IP Range ☐ Non IP

Index Column: 2 ☐ CIDR

**Define Values**

Column	1	2 (Index)	3	4
Key	alias.host		stransaddr	gateway
	WIN2KB-60	10.31.204.60	10.31.204.60	10.31.204.1

Reset Cancel Prev Next

The following table shows the columns in the CSV file for the NetWitness Endpoint feed.

Column	Name	Description	Column Name in NetWitness Platform (Meta Key Name)
1	MachineName	Host name of the Windows agent	alias.host
2	LocalIp	IPv4 address	IP type (indexed column)
3	RemoteIp	Far end IP as seen by the router	stransaddr
4	GatewayIp	IP of the gateway	gateway
5	MacAddress	MAC address	eth.src
6	OperatingSystem	Operating system used by the Windows Agent	OS
7	AgentID	Agent ID of the host (unique ID assigned to the agent)	client
8	ConnectionUTCTime	Last time when the agent connected to NetWitness Endpoint server	ecat.ctime
9	Source Domain	Domain	domain.src
10	ScanUTC time	Last time when the agent was scanned	ecat.stime

Column	Name	Description	Column Name in NetWitness Platform (Meta Key Name)
11	UserName	Username of the client machine	username
12	Machine Score	Score of the agent indicating the suspicious level	risk.num

**Note:** In the table, the recommended index setting is LocalIp. However, if the LocalIp for NetWitness Endpoint Agent PC is allocated by a DHCP Server and the DHCP lease has expired, and if the IP is then re-allocated to another PC, the metadata created by the feed will be incorrect. To avoid this risk, use the machine name or the Mac address instead of the localIP address as the Feed's index. For example, to use a Mac address, you could enter the values as shown in the following figure.

**Configure a Custom Feed**

Define Feed > Select Services > Define Columns > Review

**Define Index**

Type: ☐ IP ☐ IP Range ☒ Non IP

Index Column: 5 Service Type:  ☐ Truncate Domain

Callback Key (5): eth.src

**Define Values**

Column	1	2	3	4	5 (Index)	6	7
Key	alias.host	ip.src	stransaddr	gateway		OS	client

## Result

When viewing feed data in NetWitness Platform, upon a match of the indexed value (ip.src), meta data is populated in Investigation, Reporting, and Alerting Interfaces.

# Configure Endpoint Alerts Through Syslog into a Log Decoder

You can configure the use of RSA NetWitness Endpoint data in RSA NetWitness Platform to provide NetWitness Endpoint alerts through Syslog into Log Decoder sessions. This generates metadata that is used by NetWitness Platform Investigation, Alerts, and Reporting Engine.

For NetWitness Platform networks that are consuming logs, this integration of NetWitness Endpoint with NetWitness Platform pushes NetWitness Endpoint events to the Log Decoder through common event format (CEF) syslog messages and generates metadata that is used by NetWitness Platform Investigation, Alerts, and Reporting Engine. The use case for this integration is SIEM Integration to allow centralized event management, correlation of NetWitness Endpoint events with other Log Decoder data, NetWitness Platform reporting on NetWitness Endpoint events, and NetWitness Platform alerting of NetWitness Endpoint events.

## Prerequisites

The following are required for this integration:

- Version 4.3.0.4, 4.3.0.5, 4.4, 4.4.0.2, or later NetWitness Endpoint UI.
- NetWitness Server Version 11.1 is installed.
- Version 10.4 or later RSA Log Decoder and Concentrator connected to the NetWitness Server in the network.
- Port UDP- 514 or TCP - 1514 open from NetWitness Endpoint server to Log Decoder in the firewall.

## Procedure

1. Deploy the required parser (CEF or rsaecat) to the Log Decoder as described in the "Manage Live Resources" topic in *Live Services Management*. After you deploy the parser, make sure the parser is enabled. For more information, see "Services Config View - General Tab" in the *Malware Analysis Configuration Guide*.

**Note:** Use only one of these parsers. When the CEF parser is deployed, it supersedes the NetWitness Endpoint parser, and all CEF messages into NetWitness Platform are processed by the CEF parser. Enabling both parsers is an unnecessary burden on performance.

2. Configure NetWitness Endpoint to send syslog output to NetWitness Platform and generate NetWitness Endpoint alerts to the Log Decoder.
3. (Optional) Edit the table mapping in `table-map-custom.xml` and the `index-concentrator-custom.xml` to add fields based on user preferences for metadata to be mapped to NetWitness Platform.

## Configure NetWitness Endpoint to Send Syslog Output to NetWitness Platform

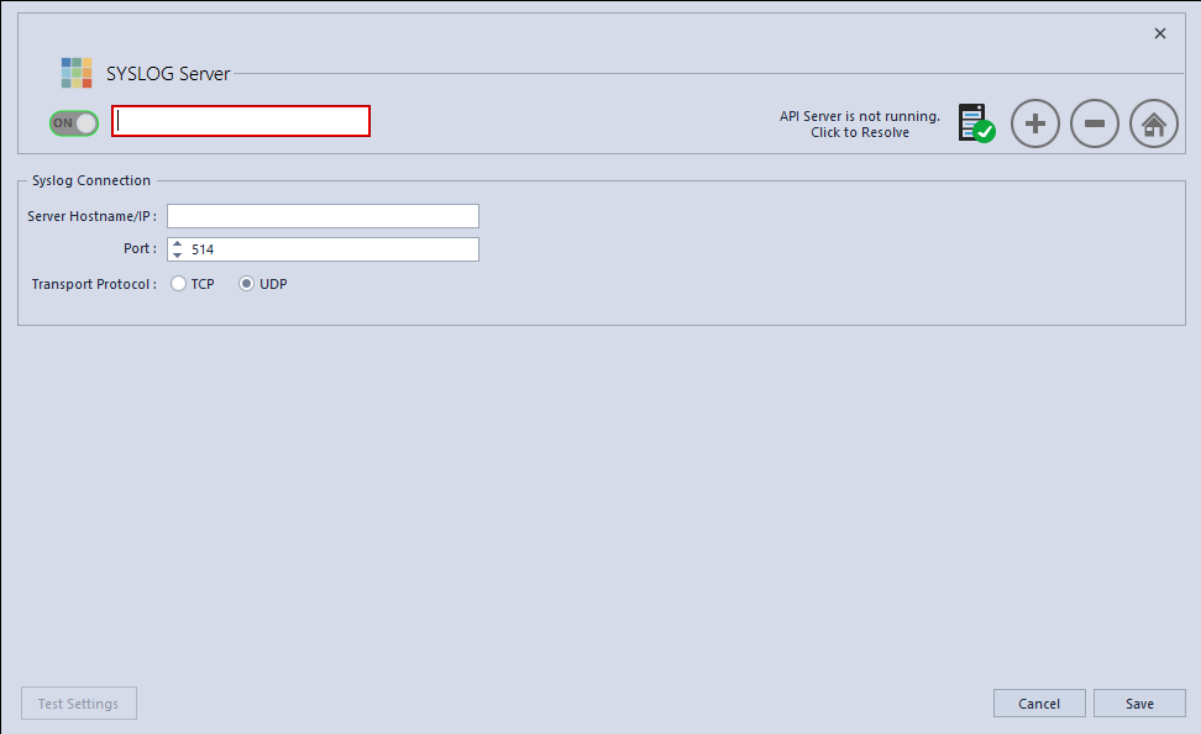
**To add the Log Decoder as a Syslog external component and generate NetWitness Endpoint alerts to the Log Decoder:**

1. Open the NetWitness Endpoint user interface and log on using the proper credentials.
2. From the menu bar, select **Configure > Monitoring and External Components**.

The External Components Configuration dialog is displayed.

3. In **SYSLOG Server**, click **+**.

The SYSLOG Server dialog is displayed.



4. In the **NetWitness Platform** panel, in **On**, enter the descriptive name for the Log Decoder.
5. In the **Syslog Connection** panel, perform the following to enable Syslog messaging:

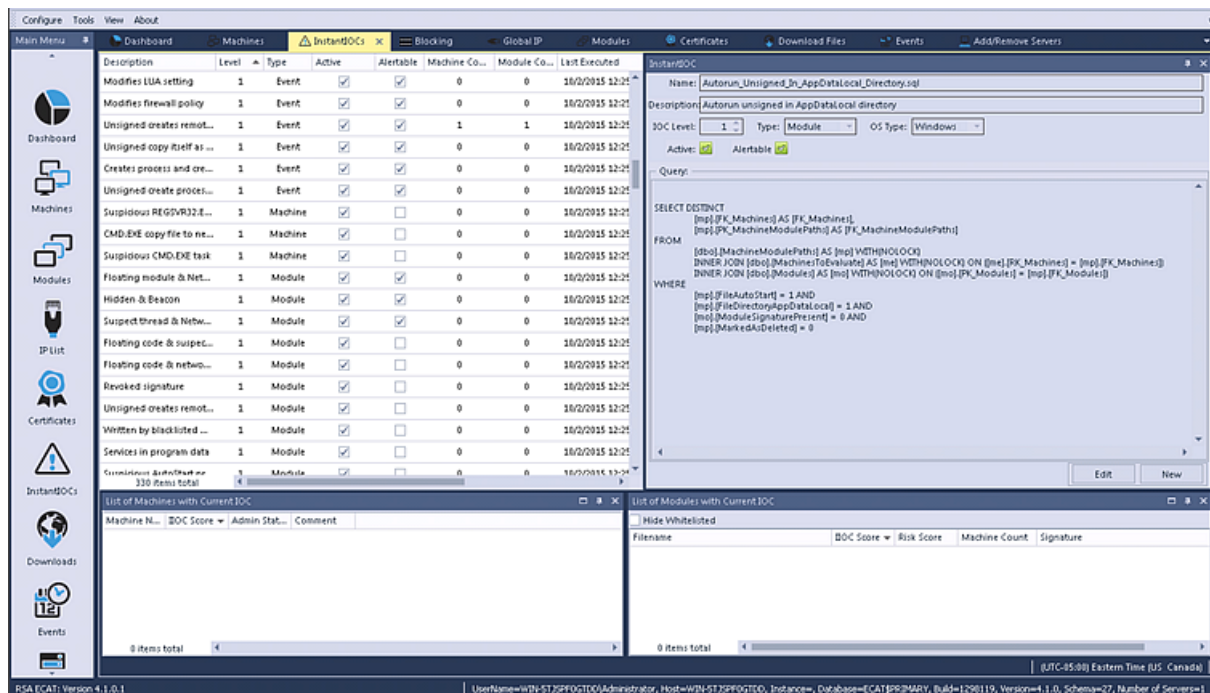
**Server Hostname/IP** = The hostname DNS or IP address of the RSA Log Decoder

**Port** = 514

**Transport Protocol** = Select **UDP** or **TCP** as appropriate for your Syslog server for the transport protocol.

6. Click **Save**.
7. Open the **InstantIOCs** window in the NetWitness Endpoint UI and, in the **Alertable** column, click

to enable each IIOC for which you want alerts sent to the Log Decoder.



When the instant IOCs are triggered, Syslog alerts from the NetWitness Endpoint server are sent to the Log Decoder. Log Decoder alerts are then aggregated to the Concentrator. These events are injected into the Concentrator as metadata.

## Edit the Table Mapping in table-map-custom.xml

In the default RSA table-map.xml provided by RSA, the meta keys in the table-map.xml file are set to Transient. In order to view the meta keys in Investigation, the keys must be set to None. To make changes to the mapping, you must add the entries to the table-map-custom.xml on the Log Decoder.

This is the list of meta keys in table-map.xml.

NetWitness Endpoint Fields	NetWitness Platform Mapping	Transient in NetWitness Platform
agentid	client	No
CEF Header Hostname Field	alias.host	No
CEF Header Product Version	version	No
CEF Header Product Name	Product	Yes
CEF Header Severity	severity	Yes
CEF Header Signature ID	event.type	No
CEF Header Signature Name	event.desc	No

NetWitness Endpoint Fields	NetWitness Platform Mapping	Transient in NetWitness Platform
destinationDnsDomain	ddomain	Yes
deviceDnsDomain	domain	Yes
dhost	host.dst	No
dst	ip.dst	No
end	endtime	Yes
fileHash	checksum	No
fname	filename	No
fsize	filename.size	No
gatewayip	gateway	Yes
instantIOCLLevel	threat.desc	No
instantIOCName	threat.category	No
machineOU	dn	No
machineScore	risk.num	No
md5sum	checksum	No
os	OS	No
port	ip.dstport	No
protocol	protocol	Yes
Raw Message	msg	Yes
remoteip	stransaddr	Yes
rt	alias.host	No
sha256sum	checksum	No
shost	host.src	No
smac	eth.src	No
src	ip.src	No
start	starttime	No
suser	user.dst	No
timezone	timezone	No
totalreceived	rbytes	Yes

NetWitness Endpoint Fields	NetWitness Platform Mapping	Transient in NetWitness Platform
totalsent	bytes.src	No
useragent	user.agent	No
userOU	org	Yes

The following seven keys are not in `table-map.xml`; to use these keys in NetWitness Platform you need to add them to `table-map-custom.xml`, and set the flags to `None`.

NetWitness Endpoint Fields	NetWitness Platform Mapping	Transient in NetWitness Platform
moduleScore	cs.modulescore	Yes
moduleSignature	cs.modulesign	Yes
Target module	cs.targetmodule	Yes
YARA result	cs.yarareult	Yes
Source module	cs.sourcemodule	Yes
OPSWATResult	cs.opswatresult	Yes
ReputationResult	cs.represult	Yes

Here are the entries to be added to the `table-map-custom.xml` if required.

```
<mapping envisionName="cs_represult" nwName="cs.represult" flags="None"
envisionDisplayName="ReputationResult"/>
<mapping envisionName="cs_modulescore" nwName="cs.modulescore" format="Int32"
flags="None" envisionDisplayName="ModuleScore"/>
<mapping envisionName="cs_modulesign" nwName="cs.modulesign" flags="None"
envisionDisplayName="ModuleSignature"/>
<mapping envisionName="cs_opswatresult" nwName="cs.opswatresult" flags="None"
envisionDisplayName="OpswatResult"/>
<mapping envisionName="cs_sourcemodule" nwName="cs.sourcemodule" flags="None"
envisionDisplayName="SourceModule"/>
<mapping envisionName="cs_targetmodule" nwName="cs.targetmodule" flags="None"
envisionDisplayName="TargetModule"/>
<mapping envisionName="cs_yarareult" nwName="cs.yarareult" flags="None"
envisionDisplayName="YaraResult"/>
```

**Note:** Restart the Log Decoder or reload the log parsers for the changes to take effect.

## Configure the NetWitness Suite Concentrator Service

- Log on to NetWitness Platform and go to **ADMIN > Services**.
  - Select a Concentrator from the list and select **View > Config**.



2. Select the **Files** tab, and from the **Files to Edit** drop-down list, select **index-concentrator-custom.xml**.
3. Add the NetWitness Endpoint meta keys to the file and click **Apply**. Make sure that this file contains the XML sections already; if the lines are not included, add them.
4. Restart the Concentrator.
5. To add the Concentrator as a data source in the Reporting Engine, in the **ADMIN > Services** view, select the Reporting Engine and Select **View > Config > Sources**.  
NetWitness Endpoint meta is populated in Reporting Engine, and you can run reports by selecting the appropriate meta keys.

## Example

**Note:** The following lines are examples; make sure the values match your configuration and the column names you included in the feed definition, where:  
**description** is the name of the meta key you want to display in NetWitness Platform Investigation.  
**level** is "IndexValues"  
**name** is the NetWitness Endpoint meta key name from the table below

```
<language>
<key description="Product" format="Text" level="IndexValues" name="product"
valueMax="250000" defaultAction="Open"/>
  <key description="Severity" format="Text" level="IndexValues" name="severity"
valueMax="250000" defaultAction="Open"/>
  <key description="Destination Dns Domain" format="Text" level="IndexValues"
name="ddomain" valueMax="250000" defaultAction="Open"/>
  <key description="Domain" format="Text" level="IndexValues" name="domain"
valueMax="250000" defaultAction="Open"/>
  <key description="Destination Host" format="Text" level="IndexValues" name="host.dst"
valueMax="250000" defaultAction="Open"/>
  <key description="End Time" format="TimeT" level="IndexValues" name="endtime"
valueMax="250000" defaultAction="Open"/>
  <key description="Checksum" format="Text" level="IndexValues" name="checksum"
valueMax="250000" defaultAction="Open"/>
  <key description="Filename Size" format="Int32" level="IndexValues" name="filename.size"
valueMax="250000" defaultAction="Open"/>
  <key description="Gateway" format="Text" level="IndexValues" name="gateway"
valueMax="250000" defaultAction="Open"/>
  <key description="Domain OU" format="Text" level="IndexValues" name="dn"
valueMax="250000" defaultAction="Open"/>
  <key description="Risk Number" format="Float64" level="IndexValues" name="risk.num"
valueMax="250000" defaultAction="Open"/>
  <key description="ReputationResult" format="Text" level="IndexValues"
name="cs.represult" valueMax="250000" defaultAction="Open"/>
  <key description="Module Score" format="Text" level="IndexValues" name="cs.modulescore"
valueMax="250000" defaultAction="Open"/>
  <key description="Module Sign" format="Text" level="IndexValues" name="cs.modulesign"
valueMax="250000" defaultAction="Open"/>
  <key description="opswat result" format="Text" level="IndexValues"
name="cs.opswatresult" valueMax="250000" defaultAction="Open"/>
  <key description="source module" format="Text" level="IndexValues"
name="cs.sourcemodule" valueMax="250000" defaultAction="Open"/>
  <key description="Target Module" format="Text" level="IndexValues"
name="cs.targetmodule" valueMax="250000" defaultAction="Open"/>
  <key description="yara result" format="Text" level="IndexValues" name="cs.yarareresult"
valueMax="250000" defaultAction="Open"/>
  <key description="Protocol" format="Text" level="IndexValues" name="protocol"
valueMax="250000" defaultAction="Open"/>
  <key description="Event Time" format="TimeT" level="IndexValues" name="event.time"
```

```
valueMax="250000" defaultAction="Open"/>
  <key description="Source Host" format="Text" level="IndexValues" name="host.src"
valueMax="250000" defaultAction="Open"/>
  <key description="Start Time" format="TimeT" level="IndexValues" name="starttime"
valueMax="250000" defaultAction="Open"/>
  <key description="Timezone" format="Text" level="IndexValues" name="timezone"
valueMax="250000" defaultAction="Open"/>
  <key description="Received Bytes" format="UInt64" level="IndexValues" name="rbytes"
valueMax="250000" defaultAction="Open"/>
  <key description="Agent User" format="Text" level="IndexValues" name="user.agent"
valueMax="250000" defaultAction="Open"/>
  <key description="Source Bytes" format="UInt64" level="IndexValues" name="bytes.src"
valueMax="250000" defaultAction="Open"/>
  <key description="Strans Address" format="Text" level="IndexValues" name="stransaddr"
valueMax="250000" defaultAction="Open"/>
</language>
```

## Result

Analysts can:

- Create NetWitness Platform alerts based on NetWitness Endpoint events by configuring NetWitness Endpoint events as an enrichment source.
- Create ESA rules using NetWitness Endpoint meta as described in the "Add Rules to the Rules Library" topic in the *Alerting Using ESA Guide*.
- Report on NetWitness Endpoint events using NetWitness Endpoint meta as described in the "Configure a Rule" topic in the *Reporting Guide*.
- View NetWitness Endpoint alerts in NetWitness Respond as described in the "View Alerts" topic in *NetWitness Respond User Guide*.
- View NetWitness Endpoint meta keys in Investigation along with standard NetWitness Platform core meta keys as described in the "Conduct an Investigation" topic in *Investigation and Malware Analysis User Guide*.