

# NetWitness<sup>®</sup> Platform XDR

## NGINX Event Source Log Configuration Guide

# NGINX

## Event Source Product Information:

**Vendor:** [NGINX](#)

**Event Source:** NGINX

**Versions:** 1.22

## NetWitness Product Information:

**Supported On:** NetWitness Platform XDR 12.2 and later

**Event Source Log Parser:** nginx

**Collection Method:** Logstash

**Event Source Class.Subclass:** Web Logs

## Contact Information

NetWitness Community at <https://community.netwitness.com> contains a knowledge base that answers common questions and provides solutions to known problems, product documentation, community discussions, and case management.

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To configure the NGINX event source, you must complete these tasks:

- I. [Install and Configure FileBeat Service on a Nginx Server](#)
- II. [Deploy NGINX Parser from Live](#)
- III. [Setup the NGINX Event Source in the NetWitness Platform XDR](#)

# Install and Configure FileBeat Service on a Nginx Server

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Install and Configure FileBeat service on a Nginx server to collect the access and error logs.

## To install and configure the FileBeat service in the Event Source (Nginx server):

1. Download and install the FileBeat, use the commands that work with your system.

```
curl -L -O https://artifacts.elastic.co/downloads/beats/filebeat/filebeat-8.6.0-x86_64.rpm
sudo rpm -vi filebeat-8.6.0-x86_64.rpm
```

2. Open the `/etc/filebeat/filebeat.yml` file and make the below configuration changes.

- a. Change the value to **true** to enable input configuration.

```
enabled: true
```

- b. Provide the Logstash server IP and Port of Beats pipeline.

```
output.logstash:
# The Logstash hosts
hosts: ["<Logstash IP>:<Port>"]
eg: "192.168.1.1:5044"
```

- c. Comment the default configuration for Elasticsearch.

```
# ----- Elasticsearch Output -----
-----
#output.elasticsearch:
# Array of hosts to connect to.
#hosts: ["localhost:9200"]
```

3. Click **Save** and **close** the `filebeat.yml` file.
4. From the installation directory, enable the NGINX module.

```
filebeat modules enable nginx
```

5. Open the `/etc/filebeat/modules.d/nginx.yml` file and make below configuration changes.

- a. Change the value to **true** to enable input configuration.

```
- module: nginx
# Access logs
access:
enabled: true
```

- b. Set the location of the logs to where NGINX server is configured to generate access logs.

```
# Set custom paths for the log files. If left empty, Filebeat will choose
the paths depending on your OS.
```

```
var.paths: ["/var/log/nginx/access.log"]
```

- c. Change the value to true to enable input configuration.

```
# Error logs
```

```
error:
```

```
enabled: true
```

- d. Set the location of the logs to where NGINX server is configured to generate error logs.

```
# Set custom paths for the log files. If left empty, Filebeat will
choose the paths depending on your OS.
```

```
var.paths: ["/var/log/nginx/error.log"]
```

- e. Save and close the `nginx.yml` file.

- f. Restart the **filebeat** service.

```
Systemctl restart filebeat.service
```

**Note:**

- Install and configure the NGINX server by following reference, <https://docs.nginx.com/nginx/admin-guide/installing-nginx/installing-nginx-open-source/>.
- Install the FileBeat service, follow <https://www.elastic.co/guide/en/beats/filebeat/current/filebeat-installation-configuration.html>.

## Deploy NGINX Parser from Live

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NGINX parser requires resources available in Live in order to collect logs.

### To deploy `nginx` content from Live:

1. In the NetWitness Platform XDR menu, select **Configure > Live Content**. Browse Live for NGINX parser by typing **nginx** into the Keywords text box and click **Search**.
2. Select the item returned from the Search.
3. Click **Deploy** to deploy the NGINX parser to the appropriate Log Decoder using the Deployment Wizard.

**Note:** If the number of messages in the queue is very high, create multiple instance of the Beats pipeline for NGINX to ingest the messages at a higher rate.

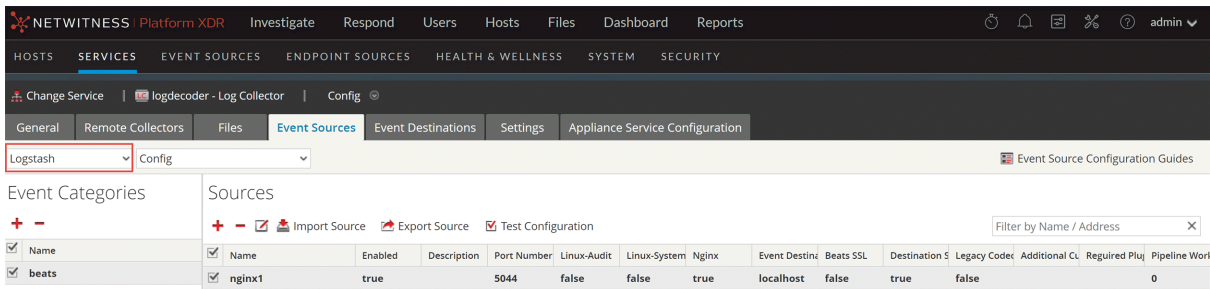
For more details, see the [Add or Update Supported Event Source Log Parsers](#) topic, or the Live Resource Guide on NetWitness Link.





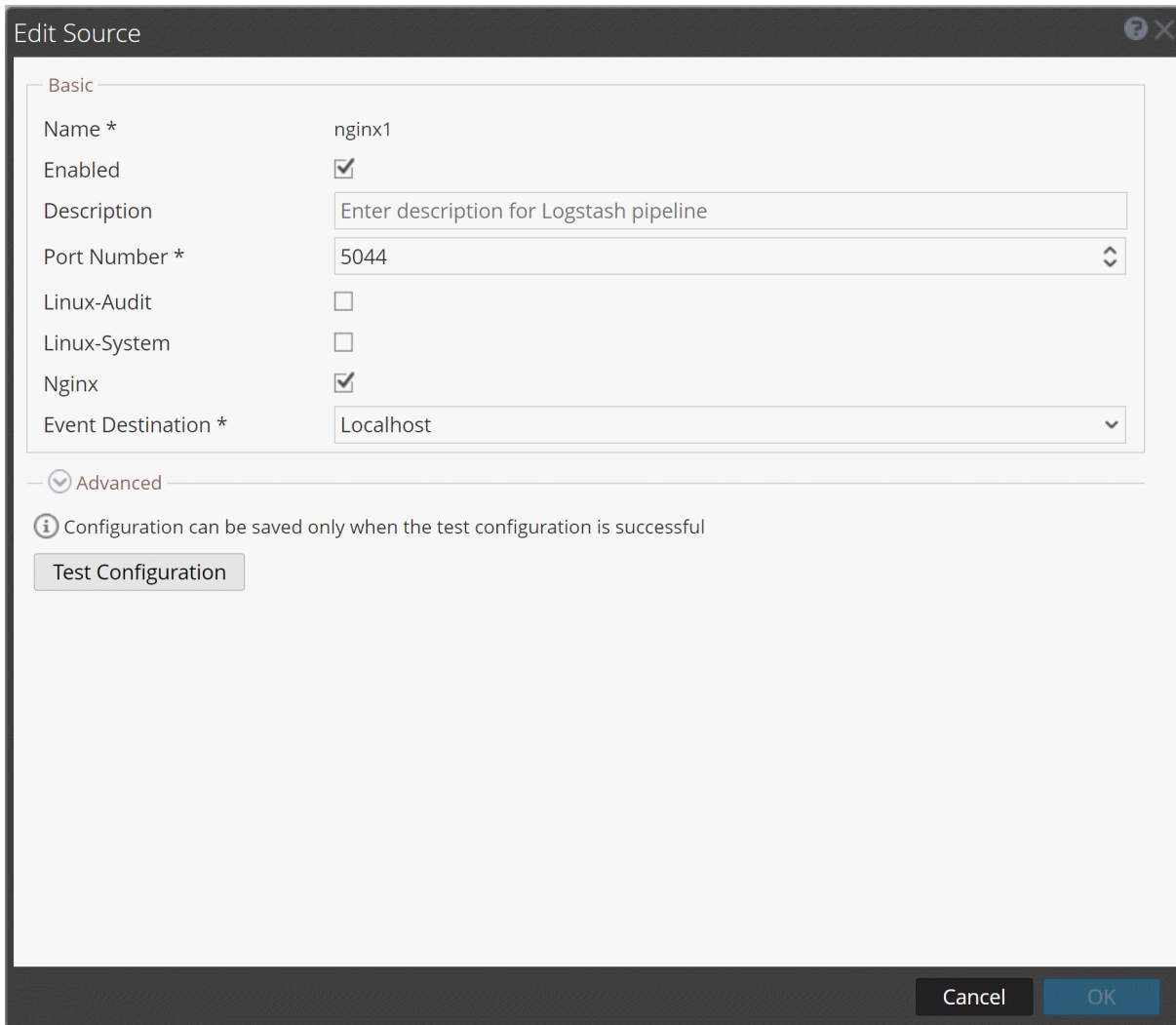
# Setup the NGINX Event Source in the NetWitness Platform XDR

To configure the NGINX Event Source:

1. In the NetWitness Platform XDR menu, select **Admin > Services**.
2. In the **Services** grid, select a Log Collector service, and from the **Actions** (⚙️) menu, choose **View > Config**.
3. In the **Event Sources** view, select **Logstash / Config** from the drop-down menu.



4. In the **Event Categories** panel toolbar, click  .
5. Select **beats** from the list and in the **Sources** panel, click  .  
The **Add Source** dialog is displayed.



6. Define parameter values, as described in [NGINX Collection Configuration Parameters](#).

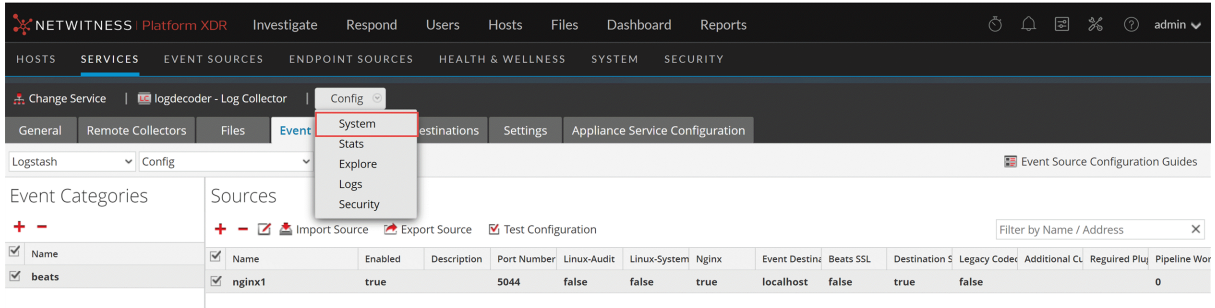
7. Click **Test Configuration**.

The result of the test is displayed in the dialog box. If the test is unsuccessful, edit the device or service information and retry.

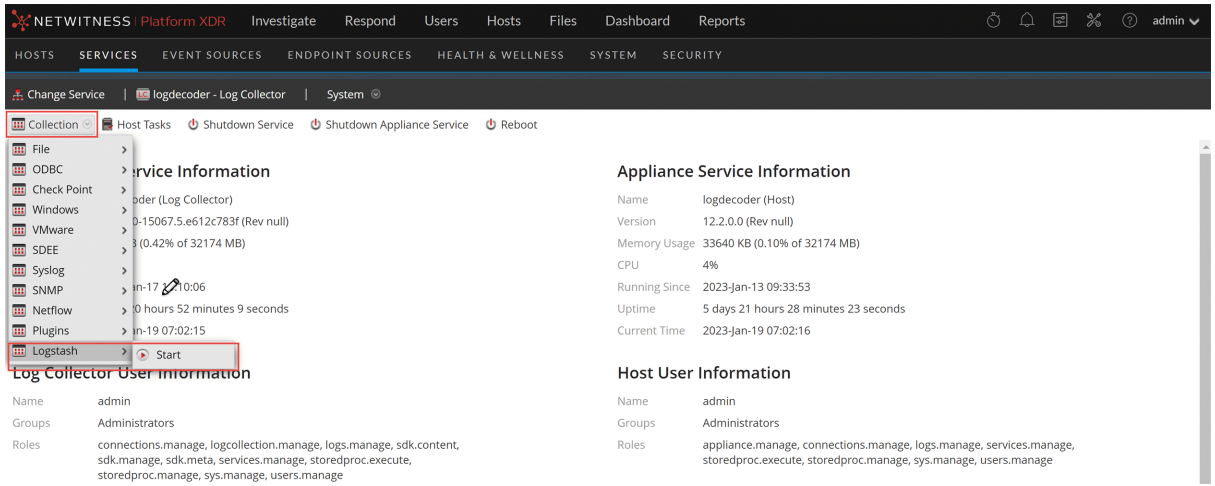
**Note:** The Log Collector takes approximately **60** seconds to return the test results. If it exceeds the time limit, the test times out and RSA NetWitness Platform displays an error message.

8. If the test is successful, click **OK**. The new event source is displayed in the **Sources** panel.

9. Save the configuration. From the **Actions** menu choose **System**.



10. In the **Collection** drop-down menu, select **Logstash** > **Start**, to start the log collection.



## NGINX Collection Configuration Parameters

The tables below list the configuration parameters required for integrating NGINX with NetWitness Platform XDR.

**Note:** Fields that are followed by an asterisk (\*) are mandatory.

### Basic Parameters

Name	Description
Name *	Enter an alpha-numeric, descriptive name for the source. This value is only used for displaying the name on this screen.
Enabled	Select the checkbox to enable the event source configuration to start collection. The checkbox is selected by default.
Description	Enter the description for the Logstash pipeline.

Name	Description
Port Number *	Enter the port number (for example, 5044) that you configured for your event sources
Nginx	Select the checkbox to enable processing for Nginx.
Event Destination *	The NetWitness Log Decoder to which the event logs have to be sent.
Test Configuration	Checks the configuration parameters specified in this dialog to make sure they are correct.

## Advanced Parameters

Name	Description
Debug	<p><b>Caution:</b> Only enable debugging (set this parameter to <b>On</b> or <b>Verbose</b>) if you have a problem with an event source and you need to investigate this problem.</p> <p><b>Caution:</b> Enabling debugging will adversely affect the performance of the Log Collector.</p> <p>Enables or disables debug logging for the event source. Valid values are:</p> <ul style="list-style-type: none"> <li>• <b>Off</b> = (default) disabled</li> <li>• <b>On</b> = enabled</li> <li>• <b>Verbose</b> = enabled in verbose mode - adds thread information and source context information to the messages.</li> </ul> <p>This parameter is designed for debugging and monitoring isolated event source collection issues. If you change this value, the change takes effect immediately (no restart required). The debug logging is verbose, so limit the number of event sources to minimize performance impact.</p>
Beats SSL	<p>Select this checkbox to communicate using beats SSL. The security of data transmission is managed by encrypting information and providing authentication with SSL certificates. This check box is not selected by default.</p> <p><b>Note:</b> Ensure that you copy the server SSL certificate and the key (generated in your system) to <code>/etc/logstash/pki</code> on Log Collector, which is used during SSL connection. <code>/etc/logstash/pki</code> is a path in the Log Collector node.</p>

Name	Description
Certificate *	Select the name of a server SSL certificate located at <code>/etc/logstash/pki</code> .
Key *	Select the name of a server SSL key located at <code>/etc/logstash/pki</code> .
Destination SSL	Select the check box to communicate using SSL. The security of data transmission is managed by encrypting information and providing authentication with SSL certificates. This check box is selected by default.
Legacy Codec	Select this check box to communicate using legacy codec. This check box is not selected by default. If legacy codec is selected, the output of the log is in logstash codec json format otherwise the output of the log is in plain format.
Additional Custom	Use this text box for any additional configuration, in case you have multiple inputs or another set of outputs to send somewhere in addition to a NetWitness Log Collector or Log Decoder. For example, you can configure the data to be sent to Elasticsearch. In this case, each event that is sent to Netwitness Platform XDR will also be sent to Elasticsearch.
Required Plugins	<p>Specify the required plugins in a comma separated list.</p> <div style="border: 1px solid green; padding: 5px;"> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>- Backup and restore is not supported for custom plugins.</li> <li>- If the test connection failed due to required plugin is not installed, you must install the required plugin. For more information, see <a href="#">Install or Manage Logstash Plugin</a>.</li> </ul> </div>
Ports	<p>Enter a port number (for example, 5000 or UDP:5000, TCP:5000) and ensure the Enabled box is checked. This allows the plugins to collect logs over the network (For example, UDP, TCP).</p> <div style="border: 1px solid red; padding: 5px;"> <p><b>IMPORTANT:</b> If you are configuring beats event source, make sure you provide beats event source port (For example, 5044) in the advance configuration even if you have updated the port in the basic parameters.</p> </div>
Pipeline Workers	Number of pipeline worker threads allocated for logstash pipeline.

## Getting Help with NetWitness Platform XDR

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### Self-Help Resources

There are several options that provide you with help as you need it for installing and using NetWitness:

- See the documentation for all aspects of NetWitness here: <https://community.netwitness.com/t5/netwitness-platform/ct-p/netwitness-documentation>.
- Use the **Search** and **Create a Post** fields in NetWitness Community portal to find specific information here: <https://community.netwitness.com/t5/netwitness-discussions/bd-p/netwitness-discussions>.
- See the NetWitness Knowledge Base: <https://community.netwitness.com/t5/netwitness-knowledge-base/tkb-p/netwitness-knowledge-base>.
- See Troubleshooting section in the guides.
- See also [NetWitness® Platform Blog Posts](#).
- If you need further assistance, [Contact NetWitness Support](#).

### Contact NetWitness Support

When you contact NetWitness Support, please provide the following information:

- The version number of the NetWitness Platform XDR or application you are using.
- Logs information, even source version, and collection method.
- If you have problem with an event source, enable **Debug** parameter (set this parameter to **On** or **Verbose**) and collect the debug logs to share with the NetWitness Support team.

Use the following contact information if you have any questions or need assistance.

NetWitness Community Portal	<a href="https://community.netwitness.com">https://community.netwitness.com</a> In the main menu, click <b>Support &gt; Case Portal &gt; View My Cases</b> .
International Contacts (How to Contact NetWitness Support)	<a href="https://community.netwitness.com/t5/support/ct-p/support">https://community.netwitness.com/t5/support/ct-p/support</a>
Community	<a href="https://community.netwitness.com/t5/netwitness-discussions/bd-p/netwitness-discussions">https://community.netwitness.com/t5/netwitness-discussions/bd-p/netwitness-discussions</a>

## Feedback on Product Documentation

You can send an email to [nwdocsfeedback@netwitness.com](mailto:nwdocsfeedback@netwitness.com) to provide feedback on NetWitness Platform documentation.