

NetWitness[®] Platform

IBM DB2 Universal Database Event Source Configuration Guide

IBM DB2

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Event Source Product Information:

Vendor: [IBM](#)

Event Source: DB2 Universal Database

Versions: 7,8, 8.1, 9.1, 9.5, 9.7, 10.x, 11.5.6 (File Collection for AIX)

Note: NetWitness supports the major version. In case of any configuration changes or logs not parsing in a minor version, please open a case in the NetWitness Community Portal for support.

Additional Downloads:

- For Windows: DB2GetAudit.vbs, DB2Audit.conf, sftpageant.conf.ibmdb2, DatabaseList.conf
- For AIX: DB2AuditScript.sh, DB2Audit.conf, DatabaseList.conf

RSA Product Information:

Supported On: NetWitness Platform 12.0 and later

Event Source Log Parser: ibmdb2

Collection Method: File, ODBC

Event Source Class.Subclass: Storage.Database

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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February, 2024

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Configure IBM DB2

To configure file collection, see the instructions below for your platform. To configure ODBC collection on the NetWitness Platform, see [Configure NetWitness Platform for ODBC Collection](#).

- I. Configure IBM DB2. Depending on your platform, do one of the following:
 - [Configure IBM DB2 UDB for Windows](#), or
 - [Configure IBM DB2 UDB for AIX](#)
- II. [Configure RSA NetWitness Platform for SFTP and File Collection](#)

For table reference, see [Reference Tables](#) below.

Configure IBM DB2 UDB for Windows

To configure IBM DB2 UDB for Windows, you must complete these tasks:

1. [Download and Edit IBM DB2 Scripts](#)
2. [Configure the IBM DB2 Audit Facility](#)
3. [Set Up the Windows Task Scheduler](#)

Download and Edit IBM DB2 Scripts

To download and edit IBM DB2 scripts:

1. On the IBM DB2 server, create a **DB2_Audit** folder on the C: drive.
2. To download the necessary scripts for IBM DB2, follow these steps:
 - a. Download the **DB2GetAudit.vbs** VBScript file and the **DB2Audit.conf** configuration file, and paste the files into the **DB2_Audit** folder.
 - b. (Optional) If you want to enable DB Level Auditing, download the **DatabaseList.conf** file. Open the file in a text editor, and add each database at the instance level you want audited, with one database name per line and no special characters.

Note: For DB Level Auditing to function properly, you must create and activate all the necessary policies for the required tables and databases.

3. In the **DB2_Audit** folder, create a **Data** folder, an **Archive** folder, and an **Archive_BackUp** folder to store, archive, and back up your raw log data.
4. In the **DB2Audit.conf** file, set the following parameters:

```
Bin_Path=Bin_Path  
Data_Path=Data_Path  
Archive_BackUp_Path=Archive_BackUp_Path  
Archive_Path=Archive_Path
```

where:

- *Bin_Path* is the path to the IBM **Bin** folder.
 - *Data_Path* is the path to the **Data** folder within the **DB2_Audit** folder on your C: drive, for example, C:\DB2_Audit\Data.
 - *Archive_BackUp_Path* is the path to the **Archive_BackUp** folder within the **DB2_Audit** folder on your C: drive, for example, C:\DB2_Audit\Archive_BackUp.
 - *Archive_Path* is the path to the **Archive** folder within the **DB2_Audit** folder on your C: drive, for example, C:\DB2_Audit\Archive.
5. Click **File > Save**.

Configure the IBM DB2 Audit Facility

To configure the IBM DB2 audit facility:

1. On the IBM DB2 server, click **Start > All Programs > IBM DB2 > RSADB2 > Command Line Tools > Command Line Processor**.

2. To update the database buffer sites, follow these steps:

- a. In the command prompt, type:

```
update dbm cfg using AUDIT_BUF_SZ 100
```

- b. In the command prompt, type:

```
quit
```

3. To enable the audit facility, follow these steps:

- a. To reset the audit facility to the default settings, type:

```
db2audit configure reset
```

- b. To activate auditing settings, on separate command prompts, type:

```
db2audit configure scope audit status both
```

```
db2audit configure scope checking status both
```

```
db2audit configure scope secmaint status both
```

```
db2audit configure scope sysadmin status both
```

```
db2audit configure scope objmaint status both
```

```
db2audit configure scope validate status both
```

```
db2audit configure scope context status both
```

4. To set the data and archive path, type:

```
db2audit configure datapath "Data_Path" archivepath "Archive_Path"
```

where:

- *Data_Path* is the path to the **Data** folder within your **DB2_Audit** folder on the C: drive.
- *Archive_Path* is the path to the **Archive** folder within your **DB2_Audit** folder on the C: drive.

5. To start the audit facility, type:

```
db2audit start
```

Set Up the Windows Task Scheduler

To set up the Windows Task Scheduler:

1. On the IBM DB2 server, click **Start > Settings > Control Panel**.
2. Click **Scheduled Task > Add Scheduled Task**.
3. In the Scheduled Task Wizard, click **Next**.
4. Select any application from the list, and click **Next**.
5. In the **Type a name for this task** field, type **IBMDB2_Audit**.
6. Under the **Perform this task** field, select **Daily**, and click **Next**.
7. Select the start time and start date, and click **Next**.
8. In the user name and password fields, enter the server logon credentials, and click **Next**.
9. Select **Open advanced properties for this task when I click Finish**, and click **Finish**.
10. On the **Task** tab of the advanced properties window, complete the fields as follows.

Field	Action
Run	Type " C:\WINDOWS\system32\wscript.exe DB2GetAudit.vbs "
Start	Enter the path to the DB2_Audit folder.

11. On the **Schedule** tab, click **Advanced**.
12. Select **Repeat task**, and complete the fields as follows.

Field	Action
Every	Select 6 hours as the frequency of time the RSA NetWitness Platform uses to collect logs from IBM DB2. Note: If the time increment for event collection is greater than 6 hours, the database buffer that is set to 100 when configuring the audit facility must be increased.
Until	Select Duration .
Hour(s)	Type 24 .

13. Click **Apply**.

Configure IBM DB2 UDB for AIX

To configure IBM DB2 UDB for AIX, you must complete these tasks:

1. [Download and Edit IBM DB2 Scripts](#)
2. [Configure the IBM DB2 Audit Facility](#)
3. [Configure the DB2 Audit Script as a cron job](#)

Download and Edit IBM DB2 Scripts

To download and edit IBM DB2 scripts:

1. On the IBM DB2 server, create a **DB2Audit** directory in your home directory. Ensure that the directory name contains no spaces or underscores, for example, `/home/db2user/DB2Audit`, where *db2user* is your DB2 instance name.
2. Download the **DB2AuditScript.sh** shell script file and the **DB2Audit.conf** configuration file RSA Link here: <https://community.rsa.com/docs/DOC-45601>.
3. (Optional) If you want to enable DB Level Auditing, download the **DatabaseList.conf** file. Open the file in a text editor, and add each database at the instance level you want audited, with one database name per line and no special characters.

Note: For DB Level Auditing to function properly, you must create and activate all the necessary policies for the required tables and databases.

4. Copy these files into the **DB2Audit** directory.
5. In the **DB2Audit** directory, create a **Data** directory, an **Archive** directory, and an **Archive_BackUp** directory to store, archive, and back up your raw log data.
6. Open the **DB2Audit.conf** file, and set the following parameters:

```
Bin_Path=Bin_Path
Data_Path=Data_Path
Archive_BackUp_Path=Archive_BackUp_Path
Archive_Path=Archive_Path
```

where:

- *Bin_Path* is the path to the IBM **adm** directory where the IBM db2audit script resides, for example, `/home/db2user/sqllib/adm`.
- *Data_Path* is the path to the configured **Data** directory mentioned in the configuration file, **DB2Audit.conf**, for example, `/home/db2user/DB2AuditData/`.
- *Archive_BackUp_Path* is the path to the configured **Archive_BackUp** directory mentioned in the **DB2Audit.conf** configuration file, for example, `/home/db2user/DB2ArchiveBackup`.
- *Archive_Path* is the path to the configured **Archive** directory mentioned in the **DB2Audit.conf** configuration file, for example, `/home/db2user/DB2AuditArchive`.

Configure the IBM DB2 Audit Facility

To configure the IBM DB2 Audit Facility:

1. On the IBM DB2 server, from the Terminal or Console, type:

```
db2
```

Note: If the path is set, the DB2 Command Line Processor opens with a prompt that looks like **db2 =>**.

If the Command Line Processor displays the message, "db2 not found", either set the system path to include the DB2 Bin path, for example, `/opt/IBM/db2/V9.X/bin`, or you can change directories to `/opt/IBM/db2/V9.X/bin`, and type `./db2`.

2. To update the database buffer sites, follow these steps:

- a. Open a command prompt, and type:

```
update dbm cfg using AUDIT_BUF_SZ 100
```

- b. In the command prompt, type:

```
quit
```

3. To enable the audit facility, follow these steps:

- a. To reset the audit facility to the default settings, open a command prompt, and type:

```
db2audit configure reset
```

- b. To activate auditing settings, on separate command prompts, type:

```
db2audit configure scope audit status both
db2audit configure scope checking status both
db2audit configure scope secmaint status both
db2audit configure scope sysadmin status both
db2audit configure scope objmaint status both
db2audit configure scope validate status both
db2audit configure scope context status both
```

4. To set the data and archive path, type:

```
db2audit configure datapath Data_Path archivepath Archive_Path
```

where:

- *Data_Path* is the path to the configured **Data** directory set in the **DB2Audit.conf** file.
- *Archive_Path* is the path to the configured **Archive** directory set in the **DB2Audit.conf** file.

5. To start the audit facility, open a command prompt, and type:

```
db2audit start
```

Configure the DB2 Audit Script as a cron Job

To configure the DB2 audit script as a cron job:

1. Add the following paths to your **PATH** environment variable:

```
/home/db2user/bin
/home/db2user/sqllib/bin
/home/db2user/sqllib/adm
/home/db2user/sqllib/misc
/home/db2user/sqllib/db2tss/bin
```

Note: You may want to edit the **.profile** file in your **/home** directory to add these to the **PATH** environment variable so that the paths are sourced when you log on to the shell. This ensures that the cron daemon has access to the files in these paths to execute your DB2 Audit commands.

A typical line in the **.profile** file in your **/home** directory looks like the following:

```
PATH=/home/db2user/bin:/home/db2user/sqllib/bin:/home/db2user/sqllib/adm:/home/db2user/sqllib/
misc:/home/db2user/sqllib/db2tss/bin

export PATH
```

2. Configure the cron job. For information on how to configure a cron job, go to:

<http://publib.boulder.ibm.com/infocenter/aix/v6r1/index.jsp?topic=/com.ibm.aix.cmds/doc/aixcmds1/crontab.htm>

When you specify a line for running this script, the line should look like the following:

```
10 0-23 * * * . ~/.profile;command or script/DB2AuditScript.sh_path
```

where:

- *command or script* is the command or script to be executed.
- *DB2AuditScript.sh_path* is the path of the **DB2AuditScript.sh** file.

Warning: The **. ~/.profile;** portion of this line is read as **<period><space><tilde><slash><period>profile<semicolon>**.

All of the words denote their exact symbols, including space, so a line in your **.cron** file for this script should look like the following:

```
10 10 * * * . ~/.profile;/home/db2user/DB2Audit/DB2AuditScript.sh
```

This line runs the script on the tenth minute of the tenth hour, every day.

Configure NetWitness Platform for SFTP and File Collection

Set up the SFTP Agent, and configure the Log Collector for File Collection.

Set Up the SFTP Agent



To set up the SFTP Agent Collector, download the appropriate PDF from NetWitness Link:

- To set up the SFTP agent on Windows, see [Install and Update SFTP Agent](#)
- To set up the SFTP agent on Linux, see [Configure SFTP Shell Script File Transfer](#)

Configure the Log Collector for File Collection

Perform the following steps to configure the Log Collector for File collection.

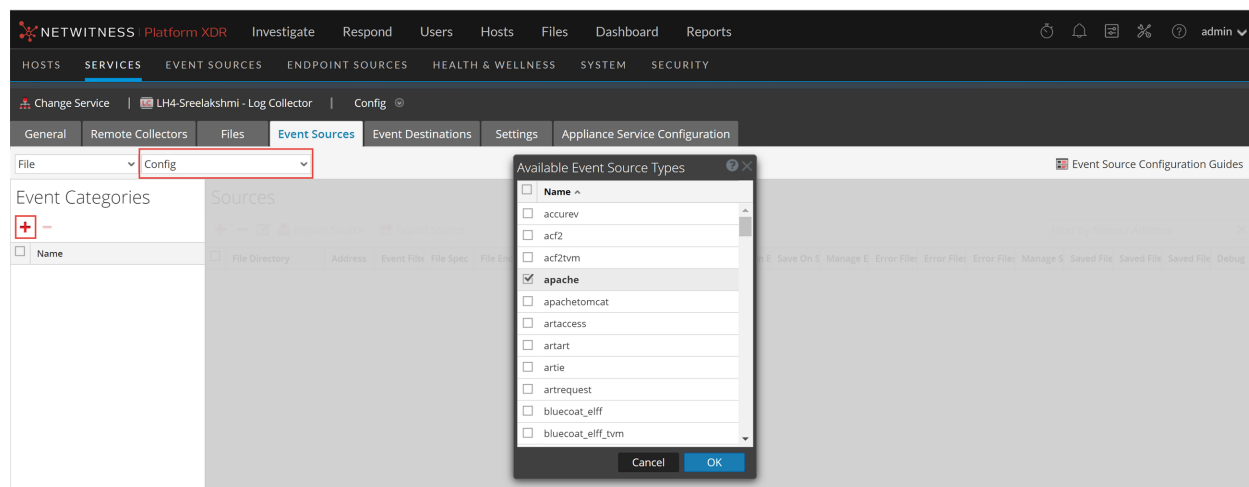
To configure the Log Collector for file collection:

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

The Event Categories panel displays the File event sources that are configured, if any.

4. In the **Event Categories** panel toolbar, click **+**.

The **Available Event Source Types** dialog is displayed.

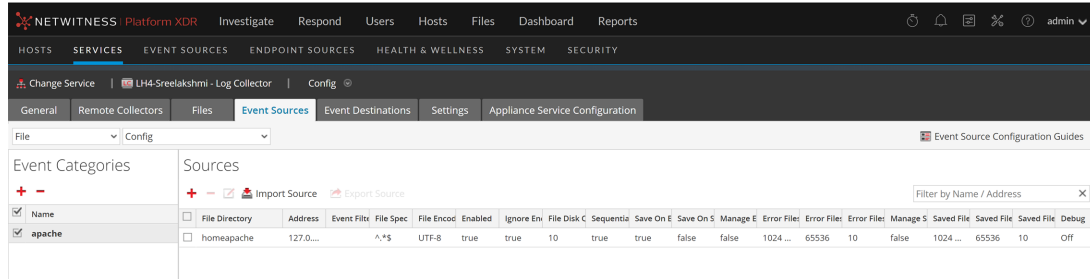


1. Select the correct type from the list and click **OK**.

Select **ibmdb2** from the **Available Event Source Types** dialog.

The newly added event source type is displayed in the Event Categories panel.

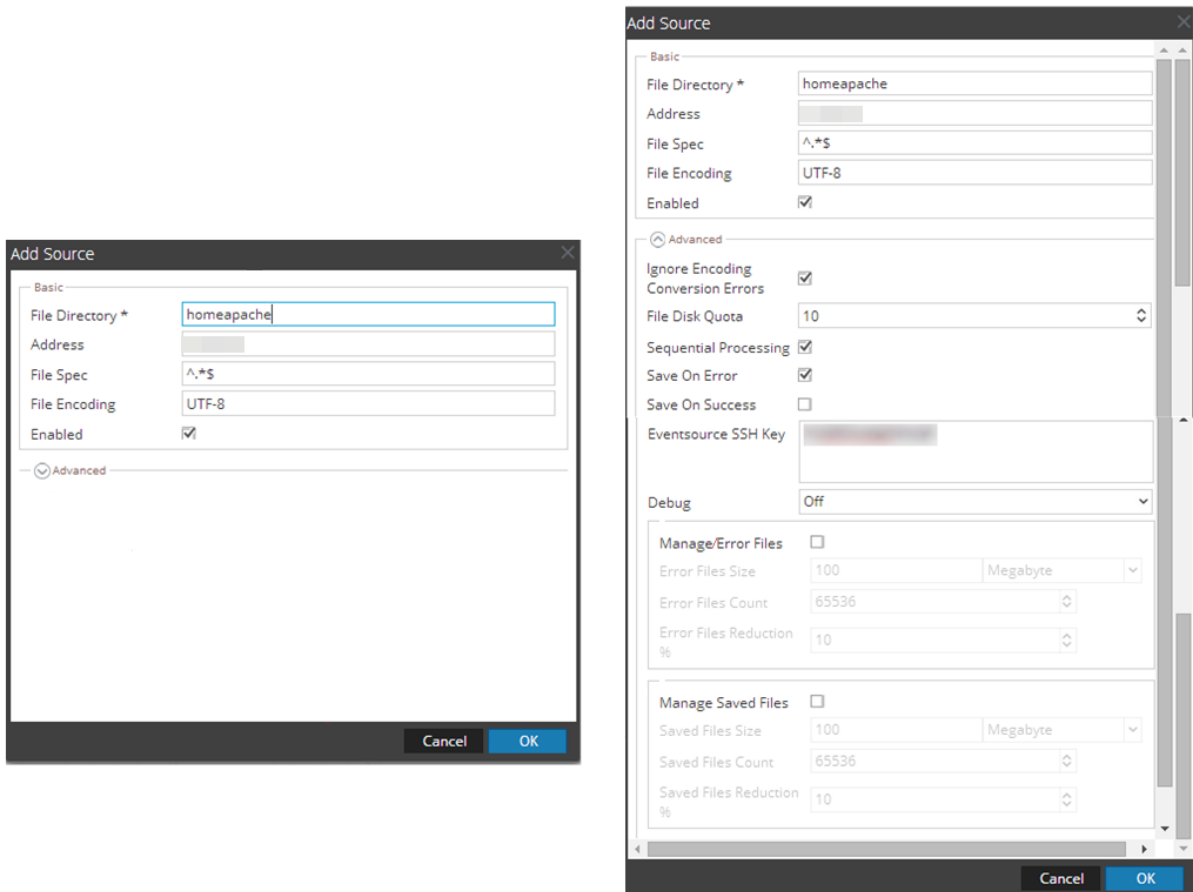
Note: The image below uses **Apache** as an example only. Your screen will look different, depending on which Event Source type you are configuring.



6. Select the new type in the Event Categories panel and click **+** in the Sources panel toolbar.

The **Add Source** dialog is displayed.

Note: Again, the image below uses **Apache** as an example only. Your screen will look different, depending on which Event Source type you are configuring.



7. Add a File Directory name, modify any other parameters that require changes, and click **OK**.
8. Stop and Restart File Collection. After you add a new event source that uses file collection, you must stop and restart the NetWitness File Collection service. This is necessary to add the key to the new event source.

Configure NetWitness Platform for ODBC Collection



To configure ODBC collection in [[[Undefined variable SAVariables.ProductName]]], perform the following procedures:

- I. Ensure the required parser is enabled
- II. Configure a DSN
- III. Add the Event Source Type

Ensure the Required Parser is Enabled

If you do not see your parser in the list while performing this procedure, you need to download it in RSA NetWitness Platform Live.



Ensure that the parser for your event source is available:

1. In the **NetWitness** menu, select  (Admin) > **Services**.
2. In the **Services** grid, select a Log Decoder, and from the **Actions** () menu, choose **View > Config**.
3. In the **Service Parsers Configuration** panel, search for your event source, and ensure that the **Config Value** field for your event source is selected.

Note: The required parser is **ibmdb2**.

Configure a DSN

Configure a DSN (Data Source Name):

1. In the **NetWitness** menu, select  (Admin) > **Services**.
2. In the **Services** grid, select a Log Collector service and from the **Actions** () menu, choose **View > Config > Event Sources**.
3. In the Log Collector **Event Sources** tab, select **ODBC/DSNs** from the drop-down menu.
4. The DSNs panel is displayed with the existing DSNs, if any.
5. Click **+** to open the **Add DSN** dialog.

Note: To add a DSN template, see the **Configure a DSN** topic in the *Log Collection Configuration Guide*, available in [NetWitness Community](#).

6. Choose a **DSN Template** from the drop down menu and enter a name for the DSN. (Use this name



when you set up the ODBC event source type.)

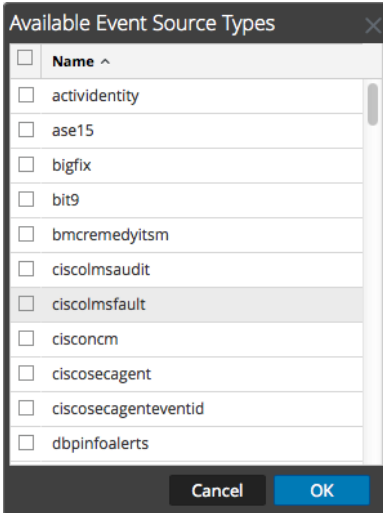
7. Fill in the parameters and click **Save**.

Field	Description
DSN Template	Choose the correct template from the available choices.
DSN Name	Enter a descriptive name for the DSN
Parameters section	
Database	Specify the database used by DB2
PortNumber	Specify the Port Number. The default port number is 50000
HostName	Specify the hostname or IP Address of DB2
Driver	Depending on your NetWitness Log Collector version: <ul style="list-style-type: none"> • For 10.6.2 and newer, use /opt/netwitness/odbc/lib/R3db227.so • For 10.6.1 and older, use /opt/netwitness/odbc/lib/R3db226.so

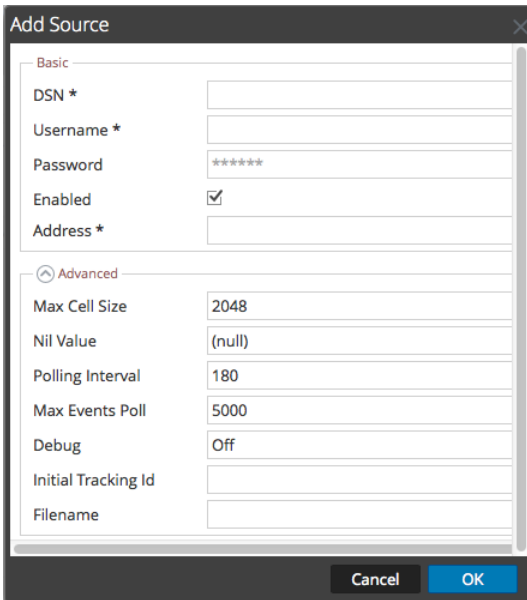
Add the Event Source Type

Add the ODBC Event Source Type:

1. In the **NetWitness** 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 Log Collector **Event Sources** tab, select **ODBC/Config** from the drop-down menu.
The Event Categories panel is displayed with the existing sources, if any.
4. Click **+** to open the **Available Event Source Types** dialog.



5. Choose the log collector configuration type for your event source type and click **OK**.
 In the **Available Event Source Types** dialog, select **ibmdb2**.
7. In the **Event Categories** panel, select the event source type that you just added.
8. In the **Sources** panel, click **+** to open the **Add Source** dialog.



9. Enter the DSN you configured during the **Configure a DSN** procedure.
10. For the other parameters, see the **ODBC Event Source Configuration Parameters** topic in the *Log Collection Configuration Guide*, available in [NetWitness Community](#).

Reference Tables

This event source collects data from the **ibmdb2.xml** table, using the following typespec files:

- AUDIT.AUDIT
- AUDIT.SYSADMIN
- AUDIT.VALIDATE
- AUDIT.OBJMAINT
- AUDIT.SECMAINT

Getting Help with NetWitness Platform

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 the documentation for Logstash JDBC input plugin here: <https://www.elastic.co/guide/en/logstash/current/plugins-inputs-jdbc.html>.
- 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 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	https://community.netwitness.com In the main menu, click Support > Case Portal > View My Cases .
International Contacts (How to Contact NetWitness Support)	https://community.netwitness.com/t5/support/ct-p/support
Community	https://community.netwitness.com/t5/netwitness-discussions/bd-p/netwitness-discussions

Feedback on Product Documentation

You can send an email to feedbacknwdocs@netwitness.com to provide feedback on NetWitness Platform documentation.