

IBM Security QRadar
Version 7.2.0

*Checking the Integrity of Event and
Flow Logs Technical Note*



Note: Before using this information and the product that it supports, read the information in [Notices and Trademarks](#) on [page 5](#).

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CHECKING THE INTEGRITY OF EVENT AND FLOW LOGS

You check the integrity of event and flow logs to determine if the logs were modified.

Unless otherwise noted, all references to QRadar refer to IBM Security QRadar SIEM, IBM Security QRadar Log Manager and IBM Security QRadar Network Anomaly Detection. References to flows do not apply to QRadar Log Manager

Before you begin

This procedure assumes that log hashing is enabled for your QRadar SIEM system. See the *IBM Security QRadar SIEM Administration Guide* for information on enabling the Flow Log Hashing or Event Log Hashing parameters.

About this task

To access the help message, type `-h` anywhere in the command line.

Use the parameters in **Table 1** to check the integrity of event and flow logs..

Table 1 Checking the integrity of event and flow logs

Command	Description
<duration>	Length of time (in minutes), preceding the end time, to scan the logs. For example, if <code>-d 5</code> is entered, all logs five minutes preceding the end time are scanned.
<database name>	Type of log to be scanned. Valid logs types are events and flows.
<endtime>	Desired end time for the scan in the following format including the quotation marks: "yyyy/mm/dd hh:mm" where hh is specified in 24-hour format. If no end time is entered, the current time is used.
<hash algorithm>	Hashing algorithm to be used. This algorithm must be the same one that was used to create the hash keys. If no algorithm is entered, SHA-1 is used.

Table 1 Checking the integrity of event and flow logs (continued)

Command	Description
<code><hash root directory></code>	Location of the log hashing. This argument is only required if the log hashing is not in the location specified in the configuration file, that is <code>/opt/qradar/conf/arielConfig.xml</code> .
<code><hmac key></code>	key used for Hash-based Message Authentication Code (HMAC) encryption. If you do not specify an HMAC key and your system is enabled for HMAC encrypted, the <code>check_ariel_integrity.sh</code> script defaults to the key specified in the System Settings.

Procedure

Using SSH, log in to QRadar as the root user:

Username: **root**

Password: **<password>**

Step 1 Type the following command:

```
/opt/qradar/bin/check_ariel_integrity.sh -d <duration>
-n <database name> [-t <endtime>] [-a <hash algorithm>]
[-r <hash root directory>] [-k <hmac key>]
```

For example, to validate the last ten minutes of event data, type the following command:

```
/opt/qradar/bin/check_ariel_integrity.sh -n events -d 10
```

Results

If a FAILED or ERROR message is returned, the hash key generated from the current data on the disk does not match the hash key that was created when the data was written to the disk; either the key or the data have been modified.

A

NOTICES AND TRADEMARKS

What's in this appendix:

- [Notices](#)
- [Trademarks](#)

This section describes some important notices, trademarks, and compliance information.

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