ONE IDENTITY™

syslog-ng Premium Edition 7.0.17

Release Notes

October 2019

These release notes provide information about the syslog-ng Premium Edition release.

About this release

Welcome to syslog-ng Premium Edition (syslog-ng PE) version 7 and thank you for choosing our product. This document describes the new features and most important changes since the latest release of syslog-ng PE. The main aim of this paper is to aid system administrators in planning the migration to the new version of syslog-ng PE. The following sections describe the news and highlights of syslog-ng PE 7.

Starting with version 7, syslog-ng Premium Edition is released as a rolling release. For details, see the Version policy.

Supported platforms

The syslog-ng Premium Edition application is officially supported on the following platforms. Note that the following table is for general reference only, and is not always accurate about the supported platforms and options available for specific platforms. The latest version of this table is available at https://syslog-ng.com/log-management-software/supported-platforms. Unless explicitly noted otherwise, the subsequent releases of the platform (for example, Red Hat Enterprise Linux 7 and its update releases like 7.2) are also supported.

Table 1: Platforms supported by syslog-ng Premium Edition

	x86	x86_64	SPARC	SPARC64	PowerPC	IA64
CentOS 6	-	✔	-	-	-	-
CentOS 7	-	✔	-	-	-	-
Debian 8 (jessie)	-	✔	-	-	-	-
Oracle Linux 6	-	✔	-	-	-	-
Oracle Linux 7	-	✔	-	-	-	-
Red Hat EL 6	-	✔	-	-	-	-
Red Hat EL 7	-	✔	-	-	-	-
SLES 12	-	✔	-	-	-	-
Ubuntu 16.04 LTS (Xenial Xerus)	-	✔	-	-	-	-
Ubuntu 18.04 LTS (Bionic Beaver)	-	✔	-	-	-	-

⚠ **CAUTION:**

Certain sources and destinations are not supported on every platform (particularly, the `sql()` destination, and the `hdfs()` destination). For details, see the description of the specific source and destination.

⚠ **CAUTION:**

If you are planning to use Python in syslog-ng PE (for example, Python parser or Python template function) on RHEL 6 platform, then you have to manually install Python 2.7. If the Python version on the machine is not 2.7, you will receive a similar error message during startup:

```
[2017-07-27T13:42:03.606679] Reading shared object for a candidate module:
path='/opt/syslog-ng/lib/syslog-ng', fname='mod-python.so', module='mod-python'
[2017-07-27T13:42:03.606994] Error opening plugin module: module='mod-python',
error='libpython2.7.so.1.0: cannot open shared object file: No such file or
directory'
```

For details about the syslog-ng Agent for Windows application, see the syslog-ng Agent for Windows documentation. For an agent-less solution, see the list of supported platforms.

For using syslog-ng PE on other platforms (for example, AIX, FreeBSD, HP-UX, Solaris, Microsoft Windows), see the list of supported platforms in the syslog-ng PE version 6 Administration Guide.

New features in syslog-ng PE 7.0.17

Fetching logs from Office 365

Starting with syslog-ng PE version 7.0.17, you can fetch logs from your Office 365 account using the Office 365 Management Activity API. For details, see "office365: Fetching logs from Office 365" in the Administration Guide.

Upgrade improvements

The upgrade from syslog-ng PE version 6 has been improved and made more robust. If you are upgrading from syslog-ng PE version 6, first upgrade to the latest available 6.0.x maintenance release. For details on the upgrade process to syslog-ng PE version 7, see "Upgrading from syslog-ng PE 6.0.x to version 7" in the Administration Guide.

New features in syslog-ng PE 7.0.17

Enhancements

Detailed documentation about upgrading from syslog-ng PE 6 to version 7 is available at "Upgrading from syslog-ng PE 6.0.x to version 7" in the Administration Guide.

New features in syslog-ng PE 7.0.14

Google Stackdriver destination

The stackdriver destination of syslog-ng PE can send log messages to the Google Stackdriver cloud. Google Stackdriver is a widely used metrics, event, and log aggregator and analyzer system. For details, see "stackdriver: Sending logs to the Google Stackdriver cloud" in the Administration Guide.

Elasticsearch HTTP destination

Version 7.0.14 of syslog-ng PE can directly post log messages to an Elasticsearch deployment using the Elasticsearch Bulk API over the HTTP and Secure HTTP (HTTPS) protocols. For details, see "elasticsearch-http: Sending messages to Elasticsearch HTTP Event Collector" in the Administration Guide.

Windows Server 2019 logs

The Windows Event Collector application now supports Windows Server 2019.

Enhancements

- The `syslog-ng-ctl reload` command now has a return value: 0 if the operation was successful, 1 otherwise.
- Instead of dropping incoming messages that are too long, you can now trim them using the `trim-large-messages()` option of the `syslog()` source.

New features in syslog-ng PE 7.0.13

Linux Audit Parser

The Linux Audit Parser can parse the log messages of the Linux Audit subsystem (`auditd`). The syslog-ng PE application can separate these log messages to name-value pairs. For details, see "Linux audit parser" in the Administration Guide.

Processing arrays in Windows Eventlog messages

The `windowsevent()` source can now automatically process XML arrays, making the array elements available as name-value pairs. For example, the following XML array becomes available as name-value pairs:

```
<Event xmlns="http://schemas.microsoft.com/win/2004/08/events/event">
  <System>
    <EventID>5059</EventID>
  </System>
  <EventData>
    <Data Name="SubjectUserSid">S-1-5-18</Data>
    <Data Name="SubjectUserName">WIN-K1678A68SQ6$</Data>
  </EventData>

Name-value pairs:
Event.System.EventID = 5059
Event.EventData.SubjectUserSid = S-1-5-18
Event.EventData.SubjectUserName = WIN-K1678A68SQ6$
```

For details, see "windowsevent: Collecting Windows event logs" in the Administration Guide.

Docker support

Installing the syslog-ng Premium Edition application in Docker containers is now officially supported on CentOS 7, Red Hat EL 7.5, and Ubuntu 18.04 (Bionic Beaver) platforms. For details, see "Installing syslog-ng in Docker" in the Administration Guide.

Enhancements

- The `persist-tool` utility is now part of the syslog-ng PE package. For details, see the `persist-tool` manual page.

New features in syslog-ng PE 7.0.12

Send log messages directly to Splunk HEC

Version 7.0.12 of syslog-ng PE can directly post log messages to a Splunk deployment using the HTTP Event Collector (HEC) over the HTTP and Secure HTTP (HTTPS) protocols. The solution is optimized for performance, and supports sending messages in batch mode, multithreaded message sending, and load-balancing to multiple Splunk indexer nodes.

HTTPS connection, as well as password- and certificate-based authentication is supported. The content of the events is sent in JSON format.

For details, see "splunk-hec: Sending messages to Splunk HTTP Event Collector" in the Administration Guide.

Ubuntu 18.04 (Bionic Beaver) support

Version 7.0.12 of syslog-ng PE is now available on the Ubuntu 18.04 platform. Note that the Java-based drivers of syslog-ng PE (used for Apache Kafka, Elasticsearch, HDFS) require Java 8, Java 10 is not supported.

http() destination improvements

The `http()` destination now supports load balancing, so a single syslog-ng PE instance can feed log data to multiple HTTP servers, for example, multiple ingestion nodes of an Elasticsearch cluster. For details, see "Batch mode and load balancing" in the Administration Guide.

HTTP and HTTPS redirections now also handled automatically.

Enhancements

- The `syslog()` and `network()` drivers now support the `so-reuseport()` option that allows multiple sockets on the same host to bind to the same port, improving the performance of multithreaded network server applications running on top of multicore systems.

- The Cisco parser now supports Cisco Catalyst formatted triplets.

New features in syslog-ng PE 7.0.11

Write your own destination in Python

Extending syslog-ng PE in Python has been supported for several releases, but so far this feature was mostly undocumented. Now you can find more details about this feature in "python: writing custom Python destinations" in the Administration Guide.

Write your own message source in Python

Starting with syslog-ng PE version 7.0.11, you can write custom message sources in Python. Both server-style and fetcher-style sources are supported. For more details, see "python: writing server-style Python sources" in the Administration Guide and "python-fetcher: writing fetcher-style Python sources" in the Administration Guide.

Reset the license counter

You can now configure syslog-ng PE to reset the counter that stores the list of known hosts. That way, you can make syslog-ng PE forget old clients that do not exist anymore, and otherwise would be counted against the license limit. This is especially useful in large datacenters or cloud environments where the client hosts are deployed and removed frequently.

For details, see the "Global options" in the Administration Guide.

Enhancements

- When `hdfs-append-enabled` is set to `true`, syslog-ng PE will append new data to the end of an already existing HDFS file. Note that in this case, archiving is automatically disabled, and syslog-ng PE will ignore the `hdfs-archive-dir` option.

- New template functions are available: `url-decode()`, `url-encode()` and `base64-encode ()`. For details, see "Template functions of syslog-ng PE" in the Administration Guide.

- The `syslog-ng-ctl config` command can display the contents of the configuration file that syslog-ng PE is currently running.

Deprecated features

The elasticsearch() destination has been deprecated, because it supports only ElasticSearch version 1.x, which has been End-of-Life since January, 2017. Use the elasticsearch2() destination instead.

New features in syslog-ng PE 7.0.10

Send logs using the Advanced Log Transport Protocol (ALTP)

Using the new Advanced Log Transfer Protocol (ALTP), you can send (and receive) log messages in a reliable way over the TCP transport layer. ALTP is a proprietary transport protocol that prevents message loss during connection breaks. The transport is used between syslog-ng PE hosts (for example, a client and a server, or a client-relay-server), and interoperates with the flow-control and reliable disk-buffer mechanisms of syslog-ng PE, thus providing the best way to prevent message loss.

ALTP is the successor of the Reliable Log Transport Protocol (RLTP) introduced in version 6 LTS. Starting with version 7.0.9, the syslog-ng PE application can receive messages sent using RLTP from hosts that are running version 6 of syslog-ng PE or the syslog-ng Agent for Windows application. Starting with version 7.0.10, syslog-ng PE can now also send messages using ALTP to hosts that are running version 6 or at least version 7.0.9 of syslog-ng PE or the syslog-ng Agent for Windows application. For details, see "Advanced Log Transfer Protocol " in the Administration Guide.

An additional change regarding the Advanced Log Transfer Protocol is that the global `flush-lines()` option does not affect the batch size of ALTP anymore. Instead, a new ALTP has been introduced, called `batch-size()`. For details, see "ALTP options" in the Administration Guide.

Enhancements

- The `failover()` option allows you to specify what happens after syslog-ng PE fails over to a secondary server. Additionally, the `failover-servers()` option has been deprecated and removed from the document. For more information about the `failover()` option, see "syslog-ng(): Forward logs to another syslog-ng node" in the Administration Guide.

- You can now refer to any additional parameters at the end of the argument in a block by adding three dots to it (…). It tells syslog-ng PE that this macro accepts `__VARARGS__`, therefore any name-value pair can be passed without validation. For details, see "Reusing configuration blocks" in the Administration Guide.

- You can now make parameters mandatory in block definitions by defining them with empty brackets (). For details, see "Reusing configuration blocks" in the Administration Guide.

Highlights of 7.0.9

Receive logs using the Advanced Log Transport Protocol (ALTP)

With the new Advanced Log Transport Protocol (ALTP) you can receive log messages in a reliable way over the TCP transport layer. ALTP is a proprietary transport protocol that prevents message loss during connection breaks. The transport is used between syslog-ng PE hosts (for example, a client and a server, or a client-relay-server), and interoperates

with the flow-control and reliable disk-buffer mechanisms of syslog-ng PE, thus providing the best way to prevent message loss.

ALTP is the successor of the Reliable Log Transport Protocol (RLTP) introduced in version 6 LTS. Starting with version 7.0.9, the syslog-ng PE application can receive messages sent using RLTP from hosts that are running version 6 of syslog-ng PE or the syslog-ng Agent for Windows application. For details, see "Advanced Log Transfer Protocol " in the Administration Guide.

Easily receive and parse messages from remote hosts

The `default-network-drivers()` source is a special source that uses multiple source drivers to receive and parse several different types of syslog messages from the network. For details, see "default-network-drivers: Receive and parse common syslog messages" in the Administration Guide.

Transfer log messages and their key-value pairs between syslog-ng nodes

The Enterprise-wide message model or EWMM allows you to deliver structured messages from the initial receiving syslog-ng component right up to the central log server, through any number of hops. It does not matter if you parse the messages on the client, on a relay, or on the central server, their structured results will be available where you store the messages. Optionally, you can also forward the original raw message as the first syslog-ng component in your infrastructure has received it, which is important if you want to forward a message for example, to a SIEM system. To make use of the enterprise-wide message model, you have to use the syslog-ng() destination on the sender side, and the default-network-drivers() source on the receiver side.

Clearer configuration using if, else, elif conditions

You can use `if {}`, `elif {}`, and `else {}` blocks to configure conditional expressions. For details, see "if-else-elif: Conditional expressions" in the Administration Guide.

Message parsing

syslog-ng PE version 7.0.9 includes parsers for the sudo and iptables applications.

Compliance and integration

You can now store and forward the incoming messages exactly as received using the `store-raw-message` source flag and the `RAWMSG` macro. These are especially useful if you are forwarding the messages to a SIEM, or if you have to preserve the original message for legal reasons. For details, see "Macros of syslog-ng PE" in the Administration Guide.

Enhancements

- The `ignore-tns-ora()` option has been added to the document. For details, see "Using the sql() driver with an Oracle database" in the Administration Guide.

Highlights of 7.0.8

Client-side failover

The `failover-servers()` option of the `network()` and `syslog()` destinations is now available in syslog-ng PE version 7.

For more information, see "Client-side failover" in the Administration Guide.

New log path flag: `drop-unmatched`

A new log path flag, `drop-unmatched`, has been added. The new flag causes messages to be dropped along a log path when they do not match a filter or are discarded by a parser. For details, see "Log path flags" in the Administration Guide.

Support for Elasticsearch's Shield security discontinued

Elasticsearch deleted the Shield `.jar` files required for syslog-ng PE to work with Shield so support for Shield has been removed.

Support for POSIX regular expressions discontinued

Support for POSIX regular expressions has been removed. All "posix" regular expressions are automatically switched to "pcre". In case you have POSIX regular expressions configured, ensure that your regexps work with PCRE, and also specify `type("pcre")` explicitly.

Highlights of 7.0.7

Logstore destination

The `logstore()` destination that was available only in syslog-ng PE version 6 is now available in version 7.0.7, allowing you to store messages in encrypted files.

For more information, see "logstore: Storing messages in encrypted files" in the Administration Guide.

Password-protected private keys

Starting with syslog-ng PE version 7.0.7, you can use password-protected private keys in the `network()` and `syslog()` source and destination drivers.

For more information, see "Password-protected keys" in the Administration Guide.

Highlights of 7.0.6

Windows Event Collector for syslog-ng PE

The Windows Event Collector (WEC) acts as a log collector and forwarder tool for the Microsoft Windows platform. It collects the log messages of Windows-based hosts over HTTPS (using TLS encryption and mutual authentication), and forwards them to a syslog-ng PE server. In Windows terminology, this tool allows you to define source-initiated subscriptions, and have them forwarded to a syslog-ng PE server.

Unlike the syslog-ng Agent for Windows, the Windows Event Collector is a standalone tool that does not require installing on the Windows-based host itself. This can be an advantage when your organization's policies restrict or do not allow the installation of third-party tools. The Windows Event Collector sits between your Windows hosts and your syslog-ng Premium Edition server, accepting log messages from the remote Windows side with WinRM and feeding them to syslog-ng Premium Edition 7.0.

For more information, see:

- Windows Event Collector Administration Guide
- "windowsevent: Collecting Windows event logs" in the Administration Guide

Support for unsetting a group of fields

In addition to unsetting a macro or a field of a message, you can now explicitly unset a group of fields too, using the `groupunset()` rewrite rule.

For more information, see "Unsetting message fields" in the Administration Guide.

Highlights of 7.0.5

XML parser

A new parser, the XML parser has been added, which processes input in XML format, and then adds the parsed data to the message object. Use this parser to interoperate with applications that produce XML-encoded log messages.

The XML parser allows you to extract information from XML logs, and use this information in your logging pipeline, for example, in filters, and also to further process the extracted data using syslog-ng or other tools. In addition, parsing XML logs helps you normalize your log messages, and convert them to a common format.

For details, see "XML parser" in the Administration Guide.

Cisco parser

A new parser, the Cisco parser has been added, which is capable of parsing the log messages of various Cisco devices. The messages of these devices often do not completely comply with the syslog RFCs, making them difficult to parse. The `cisco-parser()` of syslog-

ng PE solves this problem, and can separate these log messages to name-value pairs, extracting also the Cisco-specific values.

For more information, see "Cisco Parser" in the Administration Guide.

New `systemd-journal()` source option

A new `systemd-journal()` source option, `read-old-records()`, has been added. Previously, syslog-ng PE started reading records from the journald system service right from the very beginning of the journal. This was often a lengthy process. The new option lets you specify whether you want to read only new records from the journal or all records, starting from the beginning of the journal.

For more information, see "systemd-journal: Collecting messages from the systemd-journal system log storage" in the Administration Guide.

Configurable JVM options for Java destinations

You can now fine-tune your Java Virtual Machine (JVM) options when configuring Elasticsearch, Hadoop Distributed File System (HDFS), and Apache Kafka destinations. Previously, settings of the Java Virtual Machine could not be overriden from the syslog-ng PE configuration file, resulting sometimes in suboptimal memory utilization. The new `jvm-options()` allows you to configure these Java settings from syslog-ng PE as a global option.

For details, see:

- "Elasticsearch2 destination options (DEPRECATED)" in the Administration Guide
- "HDFS destination options" in the Administration Guide
- "Kafka destination options" in the Administration Guide
- "Global options" in the Administration Guide

Changes in HDFS destination options

The following changes have been introduced with regards to HDFS files:

- *New option `hdfs-append-enabled()`:* A new option has been added, which enables syslog-ng PE to append new data to the end of an already existing HDFS file. This means that, when setting this parameter to `true`, there is no need anymore to open a new file once a file has been closed.

  For further details, see "HDFS destination options" in the Administration Guide.

- *Support for macros in file names and file paths:* `hdfs-file()` now supports the usage of macros, meaning that syslog-ng PE can create files on HDFS dynamically, using macros in the file (or directory) name.

  For further details, see "HDFS destination options" in the Administration Guide.

New TLS options

The following new TLS options have been added:

- `dhparam-file()`: Allows you to specify a file that contains the Diffie-Hellman parameters for key exchanges, generated by the `openssl dhparam` utility.
- `ecdh-curve-list()`: Allows you to specify the curves permitted when using Elliptic Curve Cryptography (ECC).

Oracle Linux 6 platform now supported in syslog-ng PE

The Oracle Linux 6 platform is now supported in syslog-ng PE.

For a complete list of supported platforms, see "Supported platforms" in the Administration Guide.

Highlights of 7.0.4

RHEL6 support

Red Hat Enterprise Linux 6 platform is now supported. For details, see "Supported platforms" in the Administration Guide.

New osquery source

The osquery application allows you to ask questions about your machine using an SQL-like language. For example, you can query running processes, logged in users, installed packages and syslog messages as well. You can make queries on demand, and also schedule them to run regularly.

The `osquery()` source of syslog-ng PE allows you read the results of periodical osquery queries and automatically parse the messages. For details, see "osquery: Collect and parse osquery result logs" in the Administration Guide.

New HTTP destination

The syslog-ng PE application can directly post log messages to web services using the HTTP protocol, without having to use Java.

HTTPS connection, as well as password- and certificate-based authentication is supported. For details, see "http: Posting messages over HTTP without Java" in the Administration Guide.

Look up GeoIP2 data from IP addresses

The syslog-ng PE application can lookup IP addresses from an offline GeoIP2 database, and make the retrieved data available in name-value pairs. Depending on the database used, you can access country code, longitude, and latitude information, and many more in addition to what you could access with `geoip()`. For details, see "Looking up GeoIP2 data from IP addresses" in the Administration Guide.

You can use the `geoip2` template function to format messages to contain GeoIP data. For details, see "Template functions of syslog-ng PE" in the Administration Guide.

The geoip() parser is deprecated.

The geoip() parser is now deprecated. Use the geoip2 parser instead.

Highlights of 7.0.3

Reading Net-SNMP traps

Using the snmptrap() source, you can read and parse the SNMP traps of the Net-SNMP's snmptrapd application. syslog-ng PE can read these traps from a log file, and extract their content into name-value pairs, making it easy to forward them as a structured log message (for example, in JSON format). For details, see "snmptrap: Read Net-SNMP traps" in the Administration Guide.

Monitor syslog-ng PE more effectively

syslog-ng PE version 7.0.3 also includes new metrics. For details, see "Metrics and counters of syslog-ng PE" in the Administration Guide.

Also note the following changes compared earlier syslog-ng PE versions:

- The stored counter was renamed to queued.
- The output of the syslog-ng-ctl query command was changed from <counter-name>: <counter-value> to <counter-name>=<counter-value>

Ported from the syslog-ng PE 6 LTS product line

- The functionality of wildcard file sources are available in syslog-ng PE 7.0.3 as a separate source driver. For details, see "wildcard-file: Collecting messages from multiple text files" in the Administration Guide.

Other changes

- The default value of the log-msg-size() option has been increased to 64k. That way syslog-ng PE will not truncate long log messages, which are getting increasingly common.
- The syslog-debun utility now supports IBM AIX.
- The hdfs() destination now supports Kerberos authentication. For details, see "Kerberos authentication with syslog-ng hdfs() destination" in the Administration Guide.
- The new basename() and dirname() template functions allow you to easily separate the path and filenames. For details, see "Template functions of syslog-ng PE" in the Administration Guide.

Highlights of 7.0.2

Python support: message parsers and template functions

The Python Log Parser allows you to write your own parser in Python. Practically, that way you can process the log message (or parts of the log message) any way you need. For example, you can import external Python modules to process the messages, query databases to enrich the messages with additional data, and many other things. For details, see "Python parser" in the Administration Guide.

You can write your own template function in Python. You can define a Python block in your syslog-ng PE configuration file, and define one or more Python functions in it. You can use these functions as template functions. For details, see the manual pages.

Monitor syslog-ng PE more effectively

The new monitoring() source allows you to granularly select which statistics of syslog-ng PE you want to monitor. In addition, the statistics are available as structured name-value pairs, so you can format the output similarly to other log messages. That way, you can easily convert the statistics and metrics, for example, into JSON or WELF format, and send the results into your monitoring database. For details, see "The monitoring() source" in the Administration Guide.

syslog-ng PE version 7.0.2 also includes the monitoring-welf() source, which is a preconfigured monitoring() source that generates statistics messages in WELF format. Starting with version 7.0., syslog-ng PE uses this driver for new installations to generate statistics (earlier versions use the internal() source for this purpose).

Ported from the syslog-ng PE 6 LTS product line

- The functionality of syslog-ng-query application is available in syslog-ng PE 7.0.2, as part of the syslog-ng-ctl utility.

Highlights of 7.0

Enriching data

You can use an external database file to append custom name-value pairs to incoming logs, thus extending, enriching, and complementing the data found in the log message. For example, you can create a database (or export it from an existing tool) that contains a list of hostnames or IP addresses, and the department of your organization that the host belongs to, the role of the host (mailserver, webserver, and so on), or similar contextual information. For details, see "Enriching log messages with external data" in the Administration Guide.

You can correlate and aggregate information from log messages using a few simple filters that are similar to SQL GROUPBY statements. You do not even have to configure a pattern

database. Also, when correlating messages containing numerical information, you can use numerical template functions that work on numerical values of a correlation context. For details, see "Correlating log messages" in the Administration Guide and "Template functions of syslog-ng PE" in the Administration Guide.

Improved configuration flexibility

You can define configuration objects inline, where they are actually used, without having to define them in a separate object. This is useful if you need an object only once, for example, a filter or a rewrite rule, because it makes the configuration much easier to read. Every object can be defined inline: sources, destinations, filters, parsers, rewrite rules, and so on. For details, see "Defining configuration objects inline" in the Administration Guide.

From now on, every configuration object is a log expression. Every configuration object is essentially a configuration block, and can include multiple objects. To reference the block, only the top-level object must be referenced. That way you can use embedded log statements, junctions and in-line object definitions within source, destination, filter, rewrite and parser definitions. For example, a source can include a rewrite rule to modify the messages received by the source, and that combination can be used as a simple source in a log statement. For details, see "Using channels in configuration objects" in the Administration Guide.

To make the configuration more readable, and to help avoid misconfiguration, you can use human-readable units when setting configuration options, for example, `log-fifo-size(2Mb)`. For details, see "Notes about the configuration syntax" in the Administration Guide.

Other changes

- The default value of `log-msg-size()` is 8192 instead of 65536. Increase it if needed.
- The `skip-cluster-health-check()` option is available for the `elasticsearch2()` destination. For details, see "Elasticsearch2 destination options (DEPRECATED)" in the Administration Guide.
- The `qdisk-dir` option of syslog-ng PE is not available as a command-line option, use the `dir()` option of `disk-buffer()` in the configuration of the destination instead.
- Several features and platforms that are available in syslog-ng Premium Edition 6 LTS are not yet available in syslog-ng PE 7. For details, see Differences in features between syslog-ng PE 6 LTS and 7.

Deprecated features

The following is a list of features that are no longer supported starting with syslog-ng PE 7.0.17.

- Version 7.0.14 and later does not support the Debian Wheezy and Ubuntu 12.04 LTS (Precise Pangolin) platforms.

- Since ElasticSearch version 1.x has reached its end of life, its support has been removed from syslog-ng PE. Use the `elasticsearch2` destination instead.

Resolved issues

The following is a list of issues addressed in this release.

Table 2: General resolved issues in syslog-ng PE 7.0.17

Resolved Issue	Issue ID
WEC: handle invalid UTF-16 characters gracefully	SYSLOGDEV-4182
Fix TID reinitialization mechanism in ALTP during restart	SYSLOGDEV-4333
splunk-hec(): Fix an error in handling indexed fields	SYSLOGDEV-4689
Fix persist structure during upgrade from PE version 6	SYSLOGDEV-4787
RPM upgrade overwrites WEC configuration	SYSLOGDEV-4812
Reliable disk queue corruption fixes	SYSLOGDEV-4826
ALTP ack_timeout fix	SYSLOGDEV-4835
WEC: forwarded logs have incorrect hostname	SYSLOGDEV-4847
OpenSSL upgraded to 1.0.2t	SYSLOGDEV-4981
OpenSSL upgraded to 1.1.0l on Ubuntu Bionic	SYSLOGDEV-4982

Table 3: General resolved issues in syslog-ng PE 7.0.16

Resolved Issue	Issue ID
Crash in patterndb during context timeout	SYSLOGDEV-4945
Memory leak in dbparser	SYSLOGDEV-4925
OpenSSL upgraded to 1.1.0k on Bionic platform	SYSLOGDEV-4831
OpenSSL upgraded to 1.0.2s	SYSLOGDEV-4829
syslog-ng hangs under high load	SYSLOGDEV-4745
Incorrect numerical operators in filter statements	SYSLOGDEV-4785

Resolved Issue	Issue ID
Bad quotation in splunk-hec() destination prevents load-balancing working correctly	SYSLOGDEV-4794
http destination should give a warning if workers() is less than urls()	SYSLOGDEV-4929
geoip2 does not include IP address in the error messages	SYSLOGDEV-4928
Infinite loop during reload	SYSLOGDEV-4927
Improve error handling in --preprocess-into	SYSLOGDEV-4926
Reset timezone on configuration reload	SYSLOGDEV-4924
Flushing destination on reload is slow	SYSLOGDEV-4923
Wildcard filesource crashes	SYSLOGDEV-4922

Table 4: General resolved issues in syslog-ng PE 7.0.14

Resolved Issue	Issue ID
Crash in network source with ALTP due to idle timer	SYSLOGDEV-4711
OpenSSL 1.0.2r upgrade	SYSLOGDEV-4742
http-destination stuck when reverting to old configuration	SYSLOGDEV-4747
syslog-ng segmentation fault on statistics query	SYSLOGDEV-4759
WEC: Adds list support to Windowsevent-parser	SYSLOGDEV-4789

Table 5: General resolved issues in syslog-ng PE 7.0.13

Resolved Issue	Issue ID
Fix loggen parameters	SYSLOGDEV-4684
Fix seeking in logstore using lgstool cat command	SYSLOGDEV-4680
Empty disk queue truncate fix	SYSLOGDEV-4628
Memory leak during reload when using the app-parser	SYSLOGDEV-4564
Race condition during reload when using license-counter-reset	SYSLOGDEV-4540

Table 6: General resolved issues in syslog-ng PE 7.0.12

Resolved Issue	Issue ID
non-reliable diskq: fixes false positive corruption detection	SYSLOGDEV-4674
Dqtool reported disk queue corrupted false positively	SYSLOGDEV-4407
Append $(basename) to filename template correctly	SYSLOGDEV-4673
SSL: Multiple ca-dir() related issues fixed	SYSLOGDEV-4669
Fix frequent disconnects of syslog() driver when using TLS	SYSLOGDEV-4667
OpenSSL upgraded to 1.0.2q	SYSLOGDEV-4650
File destination fd leak after reload when time-reap elapsed	SYSLOGDEV-4609
hdfs: fd leak during reload	SYSLOGDEV-4581
tls: Handle allow-compress correctly	SYSLOGDEV-4580
Socket leak when using udp destination with spoof-source enabled	SYSLOGDEV-4552

Differences in features between syslog-ng PE 6 LTS and 7

In general, syslog-ng Premium Edition version 7 has much more features than version 6 LTS, therefore One Identity recommends using version 7 for all deployments, except when a feature that you require is only available in version 6 LTS. In case you need help with migrating from version 6 LTS to 7, contact our Support Team for help. Also note that as an alternative to the syslog-ng Agent for Windows application, syslog-ng PE version 7 supports an agent-less solution to fetch log messages from Windows hosts.

Features available only in syslog-ng PE 6 LTS

The following features that are available in syslog-ng Premium Edition 6 LTS are not available in syslog-ng PE 7.

- The SNMP destination (snmp()).
- The SQL source (sql()).
- The allow-compress(), ca-dir-layout(), and cert-subject() options related to TLS transport.
- The syslog-ng PE 7 application is currently supported only on Linux platforms. For a detailed list, see "Supported platforms" in the Administration Guide.
- The spoof-interface() options of the network() and syslog() destinations.
- The read-old-records() and use-syslogng-pid() options of the file() source.

- The `replace()`, `cut()`, and `format-snare()` template-functions.

- The `${OSUPTIME}` macro is not available.

- When syslog-ng PE 6 started, its startup message included the hash of its configuration file. This has been removed from the startup messages.

- Reading and writing log files located on network shares is not supported.

- FIPS-compliant packages are not available.

Features that have been changed or replaced in syslog-ng PE 7

The following options and features have changed, and require you to modify your configuration file.

- Configuring the size of disk-buffers has changed. Instead of `log-disk-fifo-size` (`<size>`), use the `disk-buffer(disk-buf-size(<size>) reliable(no))` option. For details, see "Using the disk-buffer option and memory buffering" in the Administration Guide.

- To store disk-buffer files in a specific folder, use the `disk-buffer(dir ("/your/diskbuffer/directory"))` option. You cannot set this directory from the command-line, `--qdisk-dir` command-line option is not available.

- The RLTP transport protocol has been renamed to ALTP, so you have to use `transport (altp)` instead of `altp`. Also, the `message-acknowledgement-timeout()` option has been deprecated and has no effect. For details, see "Reliability and minimizing the loss of log messages" in the Administration Guide.

- Wildcard support has been removed from the file source driver and moved to the separate `wildcard-file()` source. Also, the `force-directory-polling()` option has been replaced with the `monitor-method("poll")` option. For details, see "wildcard-file: Collecting messages from multiple text files" in the Administration Guide.

- The `mark-mode("host-idle")` option does not work. Remove it from your configuration.

- Certain labels in the output of the `syslog-ng-ctl stats` command have been changed, for example, the "stored" counter has been renamed to "queued".

- If you use the `multi-line-prefix()` or `multi-line-garbage()` options in your configuration, add also the `multi-line-mode("regexp")` option. Note that now the `multi-line-prefix()` and `multi-line-garbage()` options do not have a timeout.

- When comparing values in filter expressions (for example, in a filter, conditional rewrite, lgstool), note that the '==' operator now works only on numerical values. To test if two strings are identical, use the `eq` operator. For example:

```
filter f_host {"${HOST}" eq "localhost1234"};
```

- Timequality fields in RFC5424-formatted log messages are not available (the `timeQuality isSynced="0/1" tzKnown="0/1"` SDATA fields are not available.

- The file-related SDATA fields that were available for log messages that syslog-ng PE

read from a file source (`file@18372.4 position="34" size="34" name="/path/and/filename"`) are not available.

Platforms not supported in syslog-ng PE 7

The following platforms are supported only in syslog-ng Premium Edition 6 LTS.

- AIX
- FreeBSD
- HP-UX
- Oracle Linux 5, 6
- openSUSE
- Solaris
- Windows

For a complete list of supported platforms, see "Supported platforms" in the Administration Guide.

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Upgrade and installation instructions

To install or upgrade syslog-ng Premium Edition, follow the instructions in "Installing syslog-ng" in the Administration Guide.

More resources

Additional information is available from the following:

- Online product documentation

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Section 5

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Section 6

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Section 7

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