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Connector™

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Syslog Connector Differences in Sentinel 6

Product Version(s): Requires Sentinel 6.0 or higher

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Contents

About this Guide

This manual gives you a general understanding of this Connector and the differences between this connection method in Sentinel 6 and previous versions of Sentinel. It is intended mainly for the system administrators to configure the Connector to establish connection between Collector and Event Source.

Additional Documentation

The other manuals on this product are available at the following URLs:

- http://www.novell.com/documentation/sentinel5
- http://www.novell.com/documentation/sentinel6
- http://support.novell.com/products/sentinel/collectors.html

The additional documentation includes:

- Sentinel User's Guide for Sentinel 6
- Syslog Guide for Sentinel 5
- Audit Guide for Sentinel 5
- Syslog Connector Guide for Sentinel 6
- Documentation for individual Collectors

Documentation Conventions

The following are the conventions used in this manual:

- `ls, --help`: commands, options
- Go to *Start* > *Program Files* > *Control Panel* to perform this action: Multiple actions in a step
- Any references to Sentinel 5.x also apply to Sentinel 4.x. Sentinel 5.x is used for simplicity.
- For more information, refer to *Chapter Name* in *Guide Name*: This is a reference to a chapter/section in another book.

NOTE: Any important notes for the user are mentioned as a Note.

Caution: A Caution indicates information that the user should read to avoid a potentially undesirable result.

Introduction

Sentinel 6 includes an all-new Event Source Management framework for deploying, managing, and troubleshooting event collectors from within the Sentinel console. This framework allows for management of all event collection components from within an intuitive, graphical interface. This GUI replaces functionality previously in the Sentinel Collector Builder and provides a number of new features not available in previous versions of Sentinel.

Collectors and connectors are now created as plug-ins to Sentinel (previously, connector functionality was built into Collector Builder). Collectors and connectors are stored within a central repository in the Sentinel system and are configured and deployed through a simple, wizard based interface. Other ESM features include a collector debugger, the ability to open filters on a single data source with a single mouse click, and integrated right-click actions for analysis and management tasks such as viewing the raw data or creating a Sentinel Active View.

The addition of Event Source Management has led to some differences in how collectors are stored, managed, and deployed within Sentinel. The objective of this document is to instruct users of Sentinel 6 on how to use collectors written for Sentinel 5.x with the syslog connection method with the Sentinel 6 software (including the Event Source Management framework.) This document assumes familiarity with the following topics:

- Importing connectors into Sentinel 6
- Importing collectors into Sentinel 6
- Configuring parameters in Sentinel 6
- General differences between collector management in Sentinel 6 and previous versions (For more information, refer to *Using 5.x Collectors in Sentinel 6*.)

For more information about using Sentinel 6, please refer to the Sentinel User's Guide, Chapter 8 on Event Source Management.

This document focuses on the syslog connector and the differences between using this connection method in Sentinel 6 and previous versions.

Device Configuration

There are many different source devices that may connect to the syslog. The configuration of those devices for collecting data using Sentinel should not be different for 5.x and 6.x.

Collector/Connector Functionality

The general functionality of the syslog connector is the same in Sentinel 6 as in previous versions. There are two components to the connector:

- Syslog Server/Proxy: This component listens on a TCP or UDP port for syslog messages.
- Syslog Connector: This client component registers to the server for all messages (or for filtered messages).

NOTE: References to the Syslog Connector in the Sentinel 6 documentation are equivalent to the Syslog Connector Client or Syslog Client in Sentinel 5.x documentation.

For more information about the functionality of any 5.x collector that used a syslog connection method, refer to the 5.x documentation for that collector.

There are multiple differences in functionality between the Syslog Connector for Sentinel 5.x and Sentinel 6.

- Syslog in Sentinel 5.x listens on TCP and UDP ports at the same time for the syslog messages from sources.
- Syslog in Sentinel 6 listens on only one port. This port can be TCP, UDP, or SSL.
- Syslog in Sentinel 6 adds support for SSL connections to the source device.
- Syslog in Sentinel 5.x listens over a dedicated port for connections from Syslog Clients. It was invoked using -connector <port number> because the Syslog Server and the Client component could be running on different machines and thus on different JVM's.
- Syslog in Sentinel 6 does not use a socket to send messages between the Syslog Server and the Syslog Connector. Instead, messages are sent as callbacks. The Server and the Connector component run on the same machine using the same JVM.
- The Syslog Connector in Sentinel 5.x supports events from Novell applications that implement Novell's Audit API.
- The Syslog Connector in Sentinel 6 is exclusively for syslog messages. To collect events from Novell audit applications that implement the Audit API, there is a Sentinel 6 Audit Connector. This connector is described in audit_connector.pdf.

Syslog Server/Proxy Configuration

The collector and Syslog Connector should be imported into Event Source Management using the procedures in the *Event Source Management* chapter of the *Sentinel User's Guide.* During the import, there are several configuration options in Sentinel 6 that replace configuration options in Sentinel 5.x.

In Sentinel 5.x, configuration options for the Syslog Server could be stored in a file called syslog.conf, located in %ESEC_HOME%\wizard\syslog\config or $ESEC_HOME/wizard/syslog/config. This file is used when Syslog Server starts up if the Syslog Server is configured as a service. Alternatively, the same commands could be used if starting the Syslog Server from a command line.

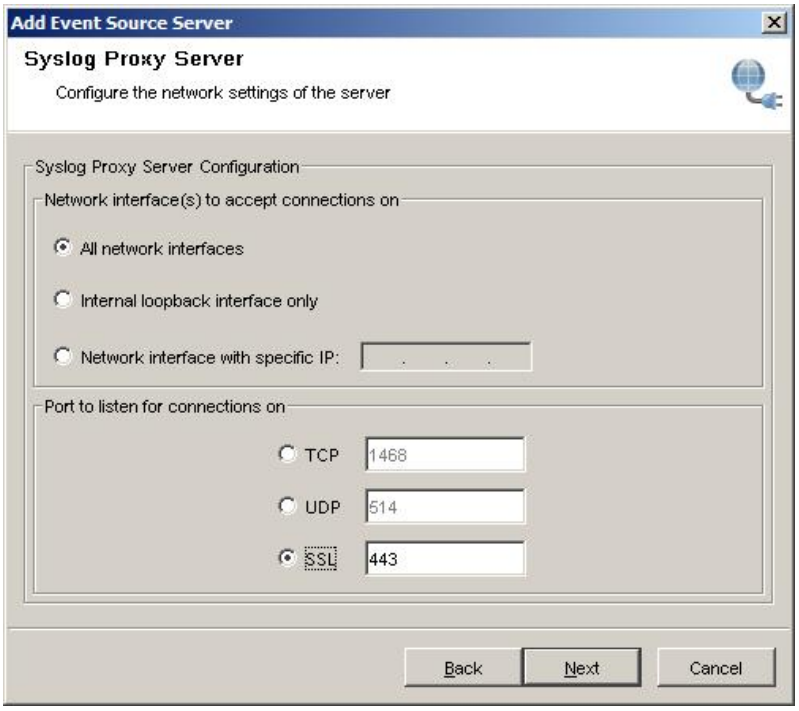
In Sentinel 6, options for the Syslog Server are configured in the Event Source Management interface as properties of the Event Source Server.

Ports

The ports on which the syslog connector listened were configured in the syslog.conf file using the following commands:

`-udp <port>`	Port for listening for UDP messages from devices (default 514)
`-tcp <port>`	Port for listening for TCP connections from devices (default 1468)

In Sentinel 6, this option is configured in Event Source Management (ESM) when adding a new Syslog Event Source Server. This option is configured on the following screen:



Novell Audit Connection

In Sentinel 5.x, connections to Novell Audit are configured in the syslog.conf file using the –`audit` option:

`-audit <port>` Port for listening for messages from Novell Audit (default 289)

In addition, Sentinel 5.x had the following options in the syslog.conf file for Novell Audit:

```
–auditQueueSize
-authentication
-Dsentinel.audit.password
-Dsentinel.audit.keystore
-Dsentinel.audit.configuration
```

In Sentinel 6, there is a special connector designed for Novell Audit, so these parameters are all irrelevant for the Sentinel 6 Syslog Connector.

Socket Connections

Syslog 5.1.3 has the following –`connector` option

`-connector <port>`	Port for listening for TCP connections from connectors (default 9091)

Since in Syslog 6.0 the Server and the connector component runs on the same machine (same JVM), there was no need to use socket to send messages from Syslog Server to Connector.

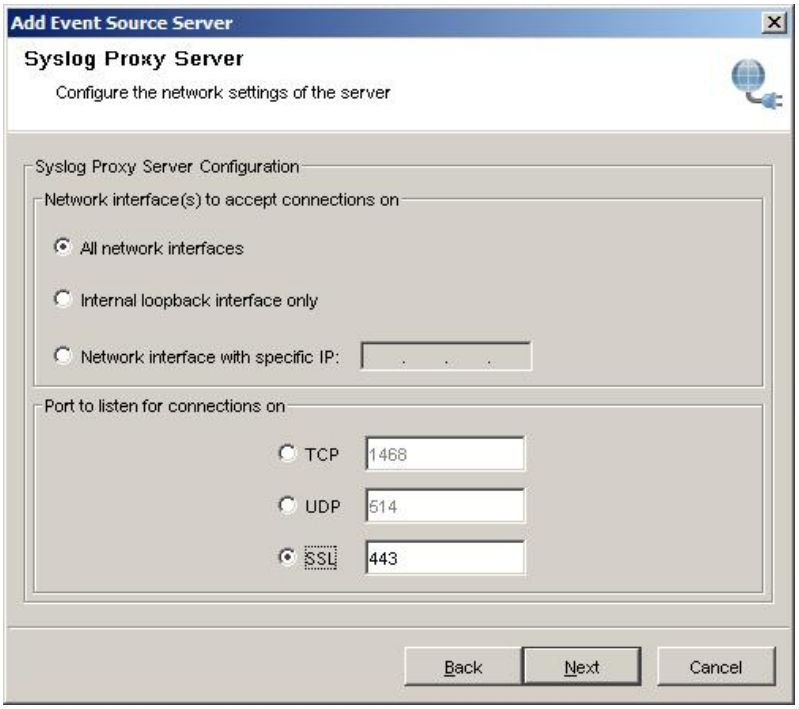
Multiple Syslog Clients on One Machine

In Sentinel 5.x, Syslog could be bound to one specific IP address on a multiple IP machine. In this situation, the port values in the `-connector` parameter can be replaced by `IP address:port`

value. For example, a machine with two IP addresses (*e.g.*, 192.168.0.10 and 192.168.0.11) could be set to bind the TCP port with IP 192.168.0.10 and the UDP port with IP 192.168.0.11. In the section of syslog.conf for the connector port with the local loop back address, the file would be modified to read:

```
wrapper.app.parameter.3=-tcp
wrapper.app.parameter.4=192.168.0.10:1468
wrapper.app.parameter.5=-udp
wrapper.app.parameter.6=192.168.0.11:514
wrapper.app.parameter.7=-connector
wrapper.app.parameter.8=127.0.0.1:9091
```

However, in Sentinel 6, only one type of connection (TCP. UDP, or SSL) is possible per Collector Manager. The Syslog Proxy Server configuration screen provides the option to bind a port to all the IP addresses on the machine or to a particular IP address of that machine



Message Buffer Size

In Sentinel 5.x, the message buffer size for Syslog is set using the option `-messageSize` in the syslog.conf

`-messageSize`	Number of messages to be buffered. These messages will be sent again in the case of a temporarily lost connection. If the option value is not used or if the option value is less than 0, the value will default to 5000. This option was possible for all clients except Novell Audit.

In Sentinel 6, the message buffer size for the Syslog Connector is fixed at 10,000.

Syslog Server Logging

In Sentinel 5.x, the messages received by the Syslog Server can be logged into a file using the following option in the syslog.conf file:

`-log <file path to log file>`	Name of a log file to append to This option does not apply to Novell Audit.

The Syslog Server in Sentinel 6 does not include this option.

Miscellaneous Options

In Sentinel 5.x, the options `–shared` and `–private` were used to indicate whether the Server should accept Syslog Client connections from a remote machine.

`-private`	Accepts connector connections only from the local machine (default option)
`-shared`	Accepts connector connections from local and remote machines.

In Sentinel 6, the Syslog Server and Syslog Client run on the same machine (using the same JVM), so this option is not needed.

Syslog Client Configuration

As mentioned above, the Collector and Syslog Connector should be imported into Event Source Management using the procedures in the *Event Source Management* chapter of the *Sentinel User's Guide*. During the import, there are several configuration options in Sentinel 6 that replace configuration options in Sentinel 5.x.

In Sentinel 5.x, configuration options for the Syslog Client could set in the Rx/Tx Value during the port configuration for the syslog-based Collector. For simplicity, they could also be added to a command line in a batch file; the batch file would then be used as the Rx/Tx Value in the port configuration. (This is the recommended method because some commands require double quotations.)

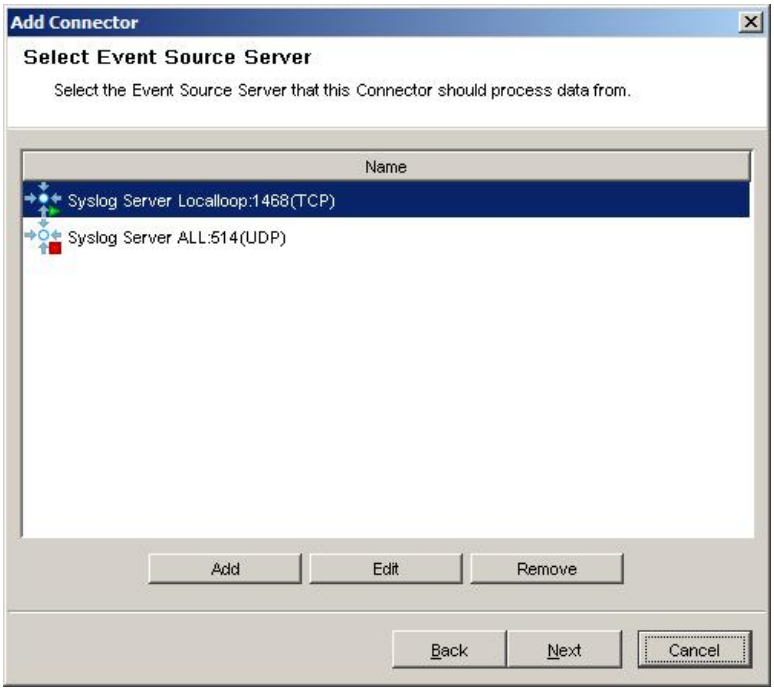
In Sentinel 6, options for the Syslog Client are configured in the Event Source Management interface as properties of the Connector and the Event Source.

Syslog Proxy Server Connection

In the Sentinel 5.x, the Syslog Connector option `–proxy` is used to specify the Syslog Server that this connector needs to connect to.

-proxy <host:port number>	The Syslog Proxy to connect to, in the format host:port (default is 127.0.0.1:9091)

In Sentinel 6, the proxy server connection is configured on the *Select Event Source Server* screen in the Syslog Connector configuration wizard.

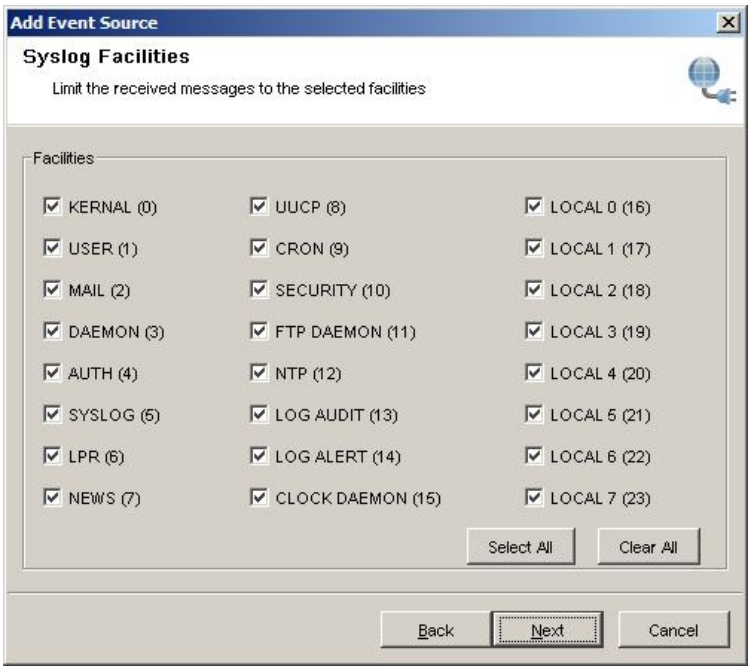


Filtering by Syslog Facilities

In Sentinel 5.x, the `-facilities` option is used to specify the types of facilities this Connector is interested in.

`-facilities <facility1,facility2,…>`	Comma separated list of desired facilities (default is all facilities) Not applicable to Novell Audit.

In Sentinel 6, facilities are configured on the *Syslog Facilities* screen in the Syslog Event Source configuration wizard.

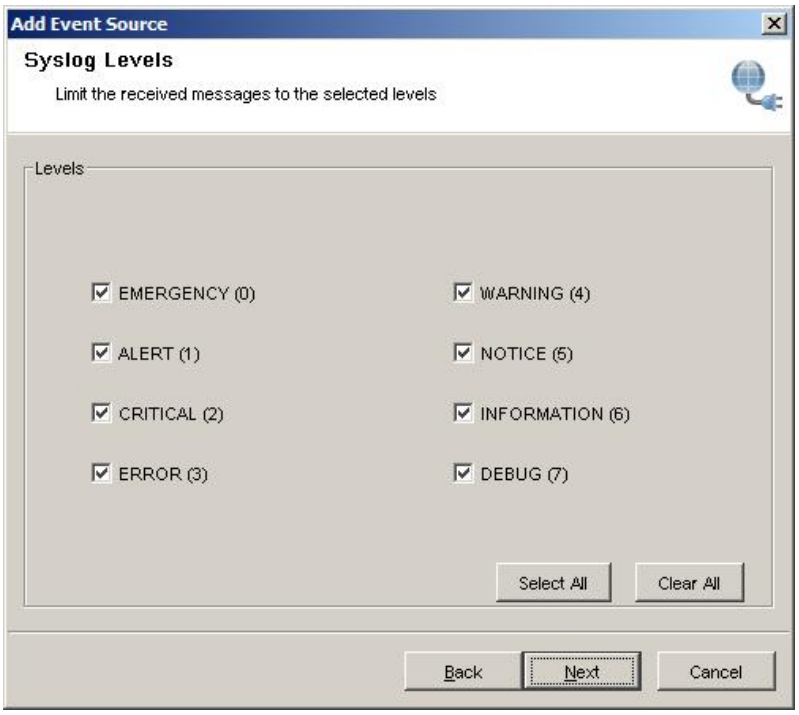


Filtering by Syslog Levels

In Sentinel 5.x, the option `-levels` is used to specify the levels this Connector is interested in.

`-levels <level1, level2,…>`	Comma separated list of desired severities (default is all levels). Not applicable to Novell Audit.

In Sentinel 6, syslog levels are configured on the *Syslog Levels* screen in the Syslog Event Source configuration wizard.

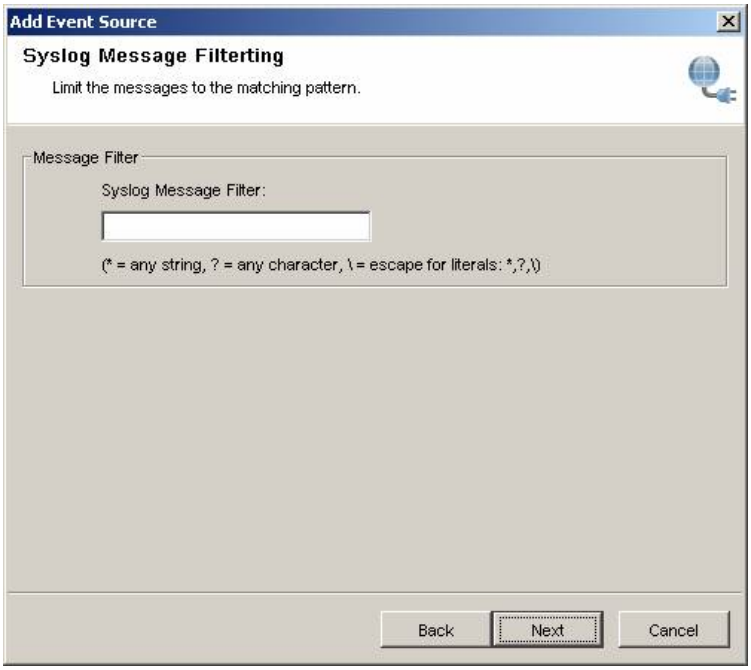


Filtering by Message Content

In Sentinel 5.x, the option `-body` is used to specify that the Connector is interested in messages that include a specific regular expression.

`-body <regular expression>`	Regular Expression string found in the desired message bodies. Not applicable to Novell Audit.

In Sentinel 6, regular expressions are configured on the *Syslog Message Filtering* screen in the Event Source configuration wizard.

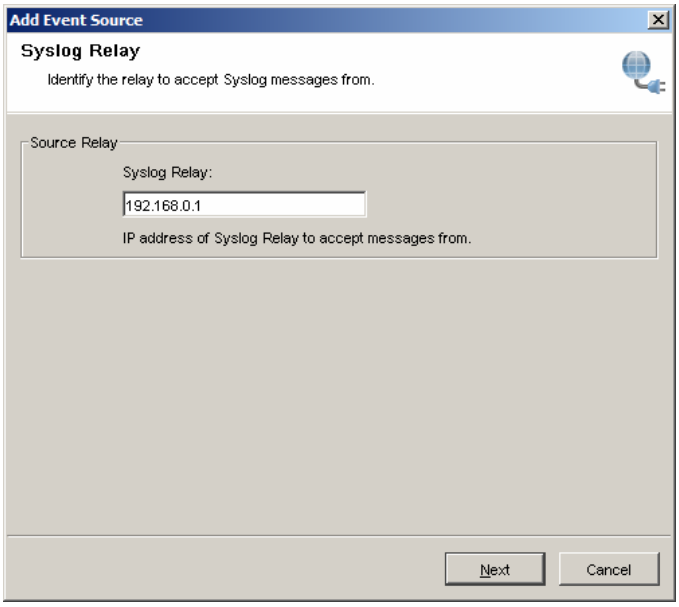


Filtering by Source IP

In Sentinel 5.x, the option `-sender` is used to specify that the connector is interested in message originating at a particular IP address.

`-sender <Source IP1[/integer subnet mask], Source IP2[/integer subnet mask],…>`	Comma separated list of desired senders (default is all senders). Not applicable to Novell Audit.

In Sentinel 6, the IP addresses from which the Syslog Connector is interested in receiving messages are configured on the *Syslog Relay* screen in the Event Source configuration wizard.



Syslog Client Message Logging

In Sentinel 5.x, the messages received by the Syslog Connector Client can be logged into a file using the following option:

`-log <file path to log file>`	Name of a log file to append to

In Sentinel 6, the Syslog Connector Client does not include an equivalent option.

Miscellaneous Options

In addition to the changes described above, several options from the Sentinel 5.x Syslog Connector do not have an equivalent in Sentinel 6. These 5.x options are described below:

`-host < IP1[/integer subnet mask]|Hostname1 | Hostname Regex1, IP2[/integer subnet mask`	Comma separated list of desired hosts (default is all hosts). Not applicable to Novell Audit.
`-retry`	Time in milliseconds the client waits before attempting to reconnect to the proxy. No longer relevant in Sentinel 6 because the Syslog Server/Proxy and Syslog Connector are always on the same machine.

Revision History

Revision 01

Initial Document

June 2007