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HPE Security ArcSight Connectors

SmartConnector for Apache HTTP Server
Error File

Configuration Guide

October 17, 2017

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Revision History

Date	Description
10/17/2017	Added encryption parameters to Global Parameters.
11/30/2016	Updated installation procedure for setting preferred IP address mode.
08/14/2015	Updated versions supported.
06/30/2012	Added support for version 2.4. Added and updated mappings.
05/15/2012	Added new installation procedure.
09/30/2011	Updated Log File Name parameter description.
02/11/2010	Added support for FIPS Suite B and CEF File transport.
06/30/2009	Global update to installation procedure for FIPS support.
11/12/2008	Updated configuration guide name.
09/25/2008	Added image of installation parameter screen.
03/01/2008	Update to installation procedure.
09/20/2007	General content update; correction to error log path.

SmartConnector for Apache HTTP Server Error File

This guide provides information for installing the SmartConnector for Apache HTTP Server Error File and configuring the device for event collection. This SmartConnector is supported on AIX, Linux, and Solaris platforms. Apache HTTP Server versions 1.3 and 2.4 are supported.

Product Overview

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows NT. Apache is a secure, efficient, and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP server error log (whose name and location is set by the ErrorLog directive), is the most important log file. This is where the Apache server sends diagnostic information and records any errors it encounters when processing requests. It is the first place to look when a problem occurs with starting the server or with the operation of the server, because it will often contain details of what went wrong and how to fix it. (See the Apache HTTP Server documentation for more information.)

Configuring Apache HTTP Server for Event Collection

To configure the Apache HTTP Server SmartConnector:

- 1 Make sure that you are using Apache's default log formats.

The SmartConnector for Apache HTTP Server Error Log uses only four Apache default log formats. The default formats must appear in Apache's configuration file, `/etc/apache/httpd.conf`, as the following:

```
ErrorLog "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\" %T
%v" full
ErrorLog "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\" %P
%T" debug
ErrorLog "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\""
combined
ErrorLog "%h %l %u %t \"%r\" %>s %b" common
```

- 2 In Apache's configuration file, `/etc/apache/httpd.conf`, change the following line to:

```
customlog /var/log/apache/error.log<log file>
```

where `<log file>` is one of the following: full, debug, combined, or common.

Install the SmartConnector

The following sections provide instructions for installing and configuring your selected SmartConnector.

Prepare to Install Connector

Before you install any SmartConnectors, make sure that the ArcSight products with which the connectors will communicate have already been installed correctly (such as ArcSight ESM or ArcSight Logger).

For complete product information, read the *Administrator's Guide* as well as the *Installation and Configuration* guide for your ArcSight product before installing a new SmartConnector. If you are adding a connector to the ArcSight Management Center, see the *ArcSight Management Center Administrator's Guide* for instructions, and start the installation procedure at "Set Global Parameters (optional)" or "Select Connector and Add Parameter Information."

Before installing the SmartConnector, be sure the following are available:

- Local access to the machine where the SmartConnector is to be installed
- Administrator passwords

Install Core Software

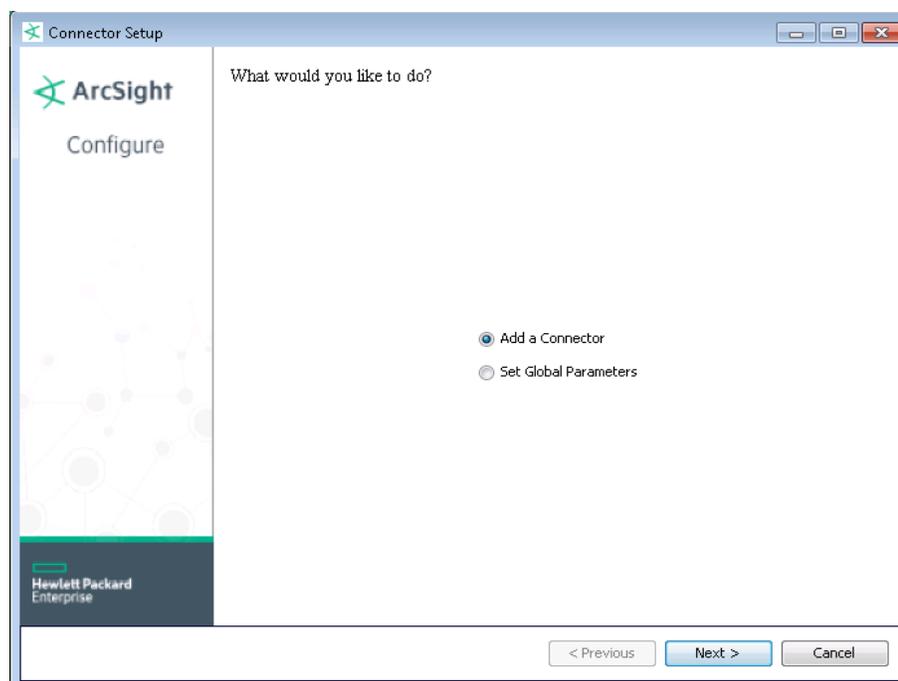
Unless specified otherwise at the beginning of this guide, this SmartConnector can be installed on all ArcSight supported platforms; for the complete list, see the *SmartConnector Product and Platform Support* document, available from the HPE SSO and Protect 724 sites.

- 1 Download the SmartConnector executable for your operating system from the HPE SSO site.
- 2 Start the SmartConnector installation and configuration wizard by running the executable.

Follow the wizard through the following folder selection tasks and installation of the core connector software:

Introduction
Choose Install Folder
Choose Shortcut Folder
Pre-Installation Summary
Installing...

- 3 When the installation of SmartConnector core component software is finished, the following window is displayed:



Set Global Parameters (optional)

If you choose to perform any of the operations shown in the following table, do so before adding your connector. You can set the following parameters:

Parameter	Setting
FIPS mode	Select 'Enabled' to enable FIPS compliant mode. To enable FIPS Suite B Mode, see the SmartConnector User Guide under "Modifying Connector Parameters" for instructions. Initially, this value is set to 'Disabled'.
Remote Management	Select 'Enabled' to enable remote management from ArcSight Management Center. When queried by the remote management device, the values you specify here for enabling remote management and the port number will be used. Initially, this value is set to 'Disabled'.
Remote Management Listener Port	The remote management device will listen to the port specified in this field. The default port number is 9001.
Preferred IP Version	When both IPv4 and IPv6 IP addresses are available for the local host (the machine on which the connector is installed), you can choose which version is preferred. Otherwise, you will see only one selection. The initial setting is IPv4.

The following parameters should be configured only if you are using HPE SecureData solutions to provide encryption. See the *HPE SecureData Architecture Guide* for more information.

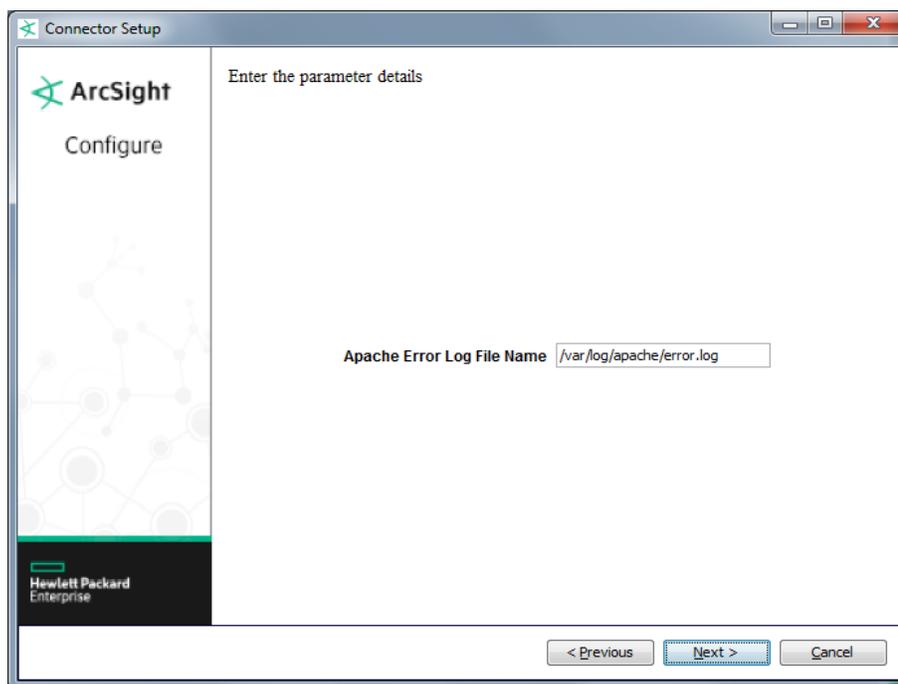
Parameter	Setting
Format Preserving Encryption	Data leaving the connector machine to a specified destination can be encrypted by selecting 'Enabled' to encrypt the fields identified in 'Event Fields to Encrypt' before forwarding events. If encryption is enabled, it cannot be disabled. Changing any of the encryption parameters again will require a fresh installation of the connector.
Format Preserving Policy URL	Enter the URL where the HPE SecureData Server is installed.
Proxy Server (https)	Enter the proxy host for https connection if any proxy is enabled for this machine.
Proxy Port	Enter the proxy port for https connection if any proxy is enabled for this machine.

Parameter	Setting
Format Preserving Identity	The HPE SecureData client software allows client applications to protect and access data based on key names. This key name is referred to as the identity. Enter the user identity configured for HPE SecureData.
Format Preserving Secret	Enter the secret configured for HPE SecureData to use for encryption.
Event Fields to Encrypt	Recommended fields for encryption are listed; delete any fields you do not want encrypted and add any string or numeric fields you want encrypted. Encrypting more fields can affect performance, with 20 fields being the maximum recommended. Also, because encryption changes the value, rules or categorization could also be affected. Once encryption is enabled, the list of event fields cannot be edited.

After making your selections, click **Next**. A summary screen is displayed. Review the summary of your selections and click **Next**. Click **Continue** to return to proceed with "Add a Connector" window. Continue the installation procedure with "Select Connector and Add Parameter Information."

Select Connector and Add Parameter Information

- 1 Select **Add a Connector** and click **Next**. If applicable, you can enable FIPS mode and enable remote management later in the wizard after SmartConnector configuration.
- 2 Select **Apache HTTP Server Error File** and click **Next**.
- 3 Enter the required SmartConnector parameters to configure the SmartConnector, then click **Next**.



Parameter	Description
Apache Error Log File Name	The absolute path to the location of the log files (such as the default <code>/var/log/apache/error.log</code>).

Prior to installing the Apache HTTP SmartConnector, make sure the Apache HTTP Server is configured to use Apache default log formats. The default formats must appear in Apache's configuration file, `/etc/apache/httpd.conf`. Make sure these logs are not rotated by Apache.

Select a Destination

- 1 The next window asks for the destination type; select a destination and click **Next**. For information about the destinations listed, see the *ArcSight SmartConnector User Guide*.
- 2 Enter values for the destination. For the ArcSight Manager destination, the values you enter for **User** and **Password** should be the same ArcSight user name and password you created during the ArcSight Manager installation. Click **Next**.
- 3 Enter a name for the SmartConnector and provide other information identifying the connector's use in your environment. Click **Next**. The connector starts the registration process.
- 4 If you have selected ArcSight Manager as the destination, the certificate import window for the ArcSight Manager is displayed. Select **Import the certificate to the connector from destination** and click **Next**. (If you select **Do not import the certificate to connector from destination**, the connector installation will end.) The certificate is imported and the **Add connector Summary** window is displayed.

Complete Installation and Configuration

- 1 Review the **Add Connector Summary** and click **Next**. If the summary is incorrect, click **Previous** to make changes.
- 2 The wizard now prompts you to choose whether you want to run the SmartConnector as a stand-alone process or as a service. If you choose to run the connector as a stand-alone process, select **Leave as a standalone application**, click **Next**, and continue with step 5.
- 3 If you chose to run the connector as a service, with **Install as a service** selected, click **Next**. The wizard prompts you to define service parameters. Enter values for **Service Internal Name** and **Service Display Name** and select **Yes** or **No** for **Start the service automatically**. The **Install Service Summary** window is displayed when you click **Next**.
- 4 Click **Next** on the summary window.
- 5 To complete the installation, choose **Exit** and Click **Next**.

For instructions about upgrading the connector or modifying parameters, see the *SmartConnector User Guide*.

Run the SmartConnector

SmartConnectors can be installed and run in stand-alone mode, on Windows platforms as a Windows service, or on UNIX platforms as a UNIX daemon, depending upon the platform supported. On Windows platforms, SmartConnectors also can be run using shortcuts and optional Start menu entries.

If the connector is installed in stand-alone mode, it must be started manually and is not automatically active when a host is restarted. If installed as a service or daemon, the connector runs automatically when the host is restarted. For information about connectors running as services or daemons, see the *ArcSight SmartConnector User Guide*.

To run all SmartConnectors installed in stand-alone mode on a particular host, open a command window, go to `$ARCSIGHT_HOME\current\bin` and run: `arcsight connectors`

To view the SmartConnector log, read the file `$ARCSIGHT_HOME\current\logs\agent.log`; to stop all SmartConnectors, enter `Ctrl+C` in the command window.

Device Event Mapping to ArcSight Fields

The following section lists the mappings of ArcSight data fields to the device's specific event definitions. See the *ArcSight Console User's Guide* for more information about the ArcSight data fields.

Apache HTTP Server Error Log Mappings to ArcSight ESM Fields

ArcSight ESM Field	Device-Specific Field
Additional data	pid
Additional data	signal
Application Protocol	'http'
ArcSight Severity - High	error
ArcSight Severity - Low	notice, info, or debug
ArcSight Severity - Medium	warn
ArcSight Severity - Very High	emerg, alert, or crit
Destination Process Name	'apache'
Device Action	action taken by the device
Device Custom Date 1	Server Built Time
Device Custom Number 3	ThreadId
Device Custom String 2	Host OS
Device Custom String 5	Mutex
Device Event Class ID	Message
Device Process ID	ProcessId
Device Process Name	One of (Module, "apache")
Device Product	'apache'
Device Receipt Time	ParserMultipletimestamp(Date,"EEE MMM dd HH:mm:ss yyyy","EEE MMM dd HH:mm:ss.SSS yyyy")
Device Severity	Severity
Device Vendor	'Apache'
File Name	File name
Name	Message
Source Address	Source address
Target User ID	user
Target Web URL	URL
Transport Protocol	'TCP'