

# **HPE Security ArcSight Connectors**

SmartConnector for HPE-UX Audit File

Configuration Guide

November 30, 2016

#### **Configuration Guide**

#### SmartConnector for HPE-UX Audit File

November 30, 2016

Copyright © 2005 - 2016 Hewlett Packard Enterprise Development LP

#### Warranty

The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise Development LP shall not be liable for technical or editorial omissions contained herein. The information contained herein is subject to change without notice. The network information used in the examples in this document (including IP addresses and hostnames) is for illustration purposes only. Hewlett Packard Enterprise Development LP products are highly flexible and function as you configure them. The accessibility, integrity, and confidentiality of your data is your responsibility. Implement a comprehensive security strategy and follow good security practices. This document is confidential.

#### Restricted Rights Legend

Confidential computer software. Valid license from Hewlett Packard Enterprise Development LP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Follow this link to see a complete statement of Hewlett Packard Enterprise Development LP copyrights, trademarks and acknowledgements:

https://www.protect724.hpe.com/docs/DOC-13026.

## **Revision History**

Date	Description
11/30/2016	Updated installation procedure for setting preferred IP address mode.
08/30/2016	HP has changed to HPE, including Device Vendor.
06/30/2016	Removed support for HPE-UX 11.0 due to end of support by the vendor.
03/31/2016	Updated HPE-UX Audit 11i v3 Device Custom Number 1 mapping.
05/15/2012	Added new installation procedure.
05/15/2011	Added mapping for Source Address for HPE-UX Audit 11i v3.
03/30/2011	Updated mappings.
02/15/2011	Updated command to convert binary file to text format.

## SmartConnector for HPE-UX Audit File

This guide provides information for installing the SmartConnector for HPE-UX Audit File and customizing the device for log event collection. HPE-UX Binary Audit versions 11i v1, v2 and v3 are supported.

## **Product Overview**

The HPE-UX Auditing System records instances of access by subjects to objects and to detects any repeated attempts to bypass the protection mechanism, as well as any misuses of privileges.

## Configuring HPE-UX Auditing

The auditing system provides administrators with a mechanism to select users and activities to be audited. All auditing tasks can be done manually using the following audit commands:

#### audsys

Starts and stops auditing; sets and displays audit file information.

#### audusr

Selects users to be audited.

#### audevent

Changes or displays event or system call status.

#### audomon

Sets the audit file monitoring and size parameters.

#### audisp

Displays the audit record. Run this command against the logs to convert the binary audit logs into human readable form (text) before depositing them in the folder to be monitored by the connector.

The HPE-UX Reference provides details on these commands.

The system supplies default auditing parameters at installation. Some of these defaults are activated automatically, some must be enabled.

If auditing is currently turned off, it will be turned on when your changes are activated. Changes to audit are retained as new defaults at system reboot.

#### Notes:

- By default, when system auditing is on, the audit status for all users is on. New users added to the system are automatically audited. You must explicitly turn audit off for these users, if desired. Changes take effect at the user's next login.
- The event types admin, login, and moddac are selected as default values by the system. Both Audit Success and Audit Failure are on. This is the minimum event type selection recommended

for running a Trusted System. A record is written when the event type is selected for auditing *and* the user initiating the event has been selected for auditing.

■ The following audit monitor and log parameters are provided with default values shown. They can be changed using SAM or audit commands.

Primary log file path name /.secure/etc/audfile1
Primary log file switch size (AFS) 1000 KB
Auxiliary log file path name /.secure/etc/audfile2
Auxiliary log file switch size (AFS) 1000 KB
Monitor wake up interval 1 minute
Allowable free space minimum (FSS) 20% (of file system)
Start sending warning messages when log reaches 90%

You can assess the size of your file systems using the bdf command. Choose a file system with adequate space for your audit log files. For example, using the system-supplied defaults, the /.secure/etc file system must have more than 5000 KB available for the primary audit log file and it must have more than 20% of its file space available.



HPE recommends that the primary and auxiliary audit log files reside on separate file systems; therefore, you should provide a new path name for the auxiliary log file. If the file system containing the primary log file is full and no auxiliary log file is specified, any nonroot process that generates audit data will block inside the kernel. Also, if a nonroot process is connected to the system terminal, it will be terminated.

For complete information about the HPE-UX Auditing System, see the HPE-UX Reference.

#### Install the SmartConnector

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



Connector Appliance/ArcSight Management Center supports mounting for Network File System (NFS) and CIFS (Windows) shares. When you install this connector on one of these devices, establish a CIFS mount on the device before adding the connector. Provide this share name during connector configuration. For more information, see **Remote File Systems** in the Connector Appliance or ArcSight Management Center Administrator's Guide.

## **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). This configuration guide takes you through the installation process with **ArcSight Manager** (encrypted) as the destination.

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**

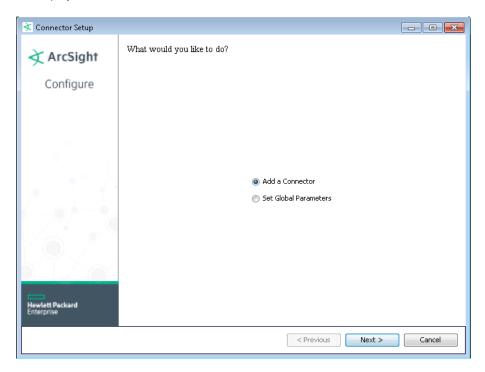
Unless specified otherwise at the beginning of this guide, this SmartConnector can be installed on all ArcSight supported platforms; for the complete list, see the *SmartConnector Product and Platform Support* document, available from the HPE SSO and Protect 724 sites.

- 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)**

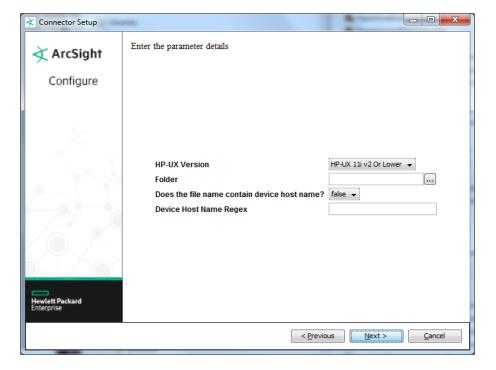
If you choose to perform any of the operations shown in the following table, do so before adding your connector. After installing core software, you can set the following parameters:

Global Parameter	Setting
Set FIPS mode	Set to 'Enable' 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 'Disable'.
Set Remote Management	Set to 'Enable' 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 'Disable'.
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	If 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. When both values are present, the initial setting is 'IPv4'.

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 the "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 HPE-UX Audit File and click Next.
- 3 Enter the required SmartConnector parameters to configure the SmartConnector, then click Next.



Parameter	Description
HPE-UX Version	Select the HPE-UX version; 'HPE-UX 11i v2 or Lower' or 'HPE-UX 11i v3 or Higher'.
Folder	Absolute path to the folder containing the event log files.
Does the file name contain device host name?	Select true if the file name contains the device host name. The default value is False.
Device Host Name Regex	Enter a regular expression to retrieve the host name from the file name.

#### **Select a Destination**

- 1 The next window asks for the destination type; make sure **ArcSight Manager (encrypted)** is selected and click **Next**. (For information about this destination or any of the other destinations listed, see the *ArcSight SmartConnector User Guide*.)
- 2 Enter values for the Manager Host Name, Manager Port, User and Password required parameters. This is 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 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 standalone 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 some SmartConnectors, a system restart is required before the configuration settings you made take effect. If a **System Restart** window is displayed, read the information and initiate the system restart operation.



Save any work on your computer or desktop and shut down any other running applications (including the ArcSight Console, if it is running), then shut down the system.

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.

## HPE-UX Audit 11i v3 Mappings to ArcSight ESM Fields

ArcSight ESM Field	Device-Specific Field
Additional data	Error
Device Custom Number 1	GID (GroupID)
Device Custom Number 3	ErrorCode
Device Custom String 1	PPID (Parent PID)
Device Custom String 2	AuditTag
Device Custom String 3	TTY
Device Custom String 4	Grp (Real Group)
Device Custom String 5	Groups
Device Custom String 6	Return1 (Return Value 1)
Device Event Class ID	Event
Device Product	'HPE-UX Binary Audit'
Device Receipt Time	Time
Device Vendor	'HPE'
Name	Event
Source Address	source
Source Process Name	PID
Source User ID	UID
Source User Name	User
Source User Privileges	EffectivePrivileges

## HPE-UX Audit 11i v2 and Earlier Mappings to ArcSight ESM Fields

ArcSight ESM Field	Device-Specific Field
Agent (Connector) Severity	High=Failure, Low=Success
Device Action	Status (S=Success, F=Failure)
Device Custom Number 1	RealGroupId (Real GID)
Device Custom Number 2	EffectiveUserId (Effective UID)
Device Custom Number 3	EffectiveGroupId (Effective GID)
Device Custom String 1	ParentProcessId (Parent PID)
Device Custom String 2	Auditld
Device Custom String 3	TTY
Device Custom String 4	RealGroup
Device Custom String 5	EffectiveGroup
Device Custom String 6	ReturnValue1
Device Event Category	EventType
Device Event Class ID	Event
Device Product	'HPE-UX Binary Audit'
Device Receipt Time	Time
Device Severity	Status (S=Success, F=Failure)
Device Vendor	'HPE'
Name	Event
Source Process Name	ProcessId
Source User ID	RealUserId
Source User Name	User