Micro Focus Security ArcSight Logger Forwarding

Software Version: 8.3.0

Configuration Guide for Logger Forwarding Connector for NNMi

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Documentation Revision History

Date	Product Version	Description
08/05/2022	8.3.0	Updated supported Logger versions.
06/25/2018	7.9.0.8088.0	Updated supported Logger versions.
06/25/2018	7.8.0.8072.0	Micro Focus rebranding Updated supported Logger versions.
08/30/2016	7.3.0.7837.0	HPE branding. Updated supported Logger versions.
02/15/2016	7.1.7.7609.0	Support for version 10.0. Installation support for Windows 2012 R2. Support for RHEL 7.1. Support for 64-bit on Linux and Windows platforms. Support for Logger 6.0.
09/28/2012	5.2.3.6287.0	Added support for selected HP H3C and HP ProCurve submessages. Added support for HP NNMi 9.20, patch 1 and a new connector installation wizard. Event data is forwarded as CEF Syslog from Logger to the Logger Forwarding Connector for HP NNMi. The parsing is now enabled only in the corresponding release of the SmartConnectors. Forwarding events from supported devices such as Cisco Router, HP H3C, and HP ProCurve directly to the Logger Forwarding Connector without SmartConnectors or Logger is not a supported configuration.
05/15/2012	5.2.1.6206.0	Added support for selected Cisco Router sub-messages.
11/15/2011	5.1.7.6081.0	Added support for JRE 1.6.0_26.

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Chapter 1: ArcSight Logger Forwarding Connector for NNMi

This guide provides information on installing and configuring the ArcSight Logger Forwarding Connector for NNMi on Windows, Linux and Solaris platforms. This Logger Forwarding Connector software supports **Logger 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 7, 7.1 and 7.2**, and **NNMi 10.60.**

See "Supported Cisco Router, Micro Focus H3C, and Micro Focus ProCurve Sub-Messages" on page 16 for details on supported Cisco Router sub-messages.

Note the following:

- You must upgrade to Micro Focus NNMi 10.60 or later to be able to use the current Logger Forwarding Connector for Micro Focus NNMi. If you have a previous version of Micro Focus NNMi installed, the current Logger Forwarding Connector for Micro Focus NNMi will not function.
- Use the latest version of the SmartConnector with the current Logger Forwarding Connector for NNMi. If you plan to process events from Micro Focus ProCurve devices, you must also install the latest SmartConnector build.

  Note: The following changes start with the next release:

  - Windows and Linux 64-bit operating systems will be supported.
  - Solaris operating system will no longer be supported.

About Micro Focus ArcSight Logger and Micro Focus NNMi

Micro Focus ArcSight Logger is a log management solution that is optimized for extremely high event throughout, efficient long-term storage, and rapid data analysis. Logger receives and stores events; supports search, retrieval, and reporting; and can forward selected events.The Micro Focus ArcSight Logger Forwarding Connector allows you to send these event logs from Logger to the Micro Focus Network Node Manager (Micro Focus NNMi).

Micro Focus Network Node Manager (NNMi) provides continual network discovery using unified fault, availability, and performance monitoring. Micro Focus NNMi enables network management teams to detect, locate, and diagnose faults and performance

degradations of the network quickly, analyze the business and service impact of outages, and increase network staff efficiency and productivity.

Using the Micro Focus ArcSight Logger Forwarding Connector and the Micro Focus NNMi integration install, network staff can view syslog messages from Logger in the NNMi console.

Sending Events From Logger to NNMi

Logger sends events to the Logger Forwarding Connector using CEF Syslog, which then forwards the events to NNMi via SNMP. For Logger to send events to the Logger Forwarding Connector, a Logger forwarder must be created to send these events. For instructions on how to create a forwarder to send the events, see "Creating a Forwarder to Forward Events" on page 15.

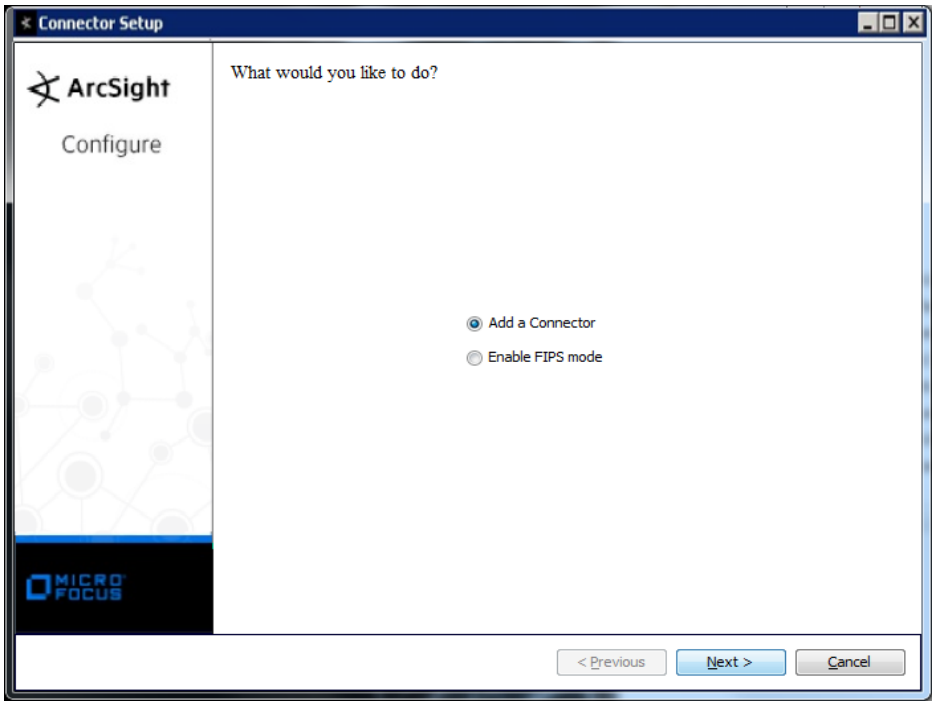
Chapter 2: Installing the Connector

Before you install the connector, make sure that the ArcSight products with which the connectors will communicate have already been installed correctly (the ArcSight Logger, for example) and you have assigned appropriate privileges.

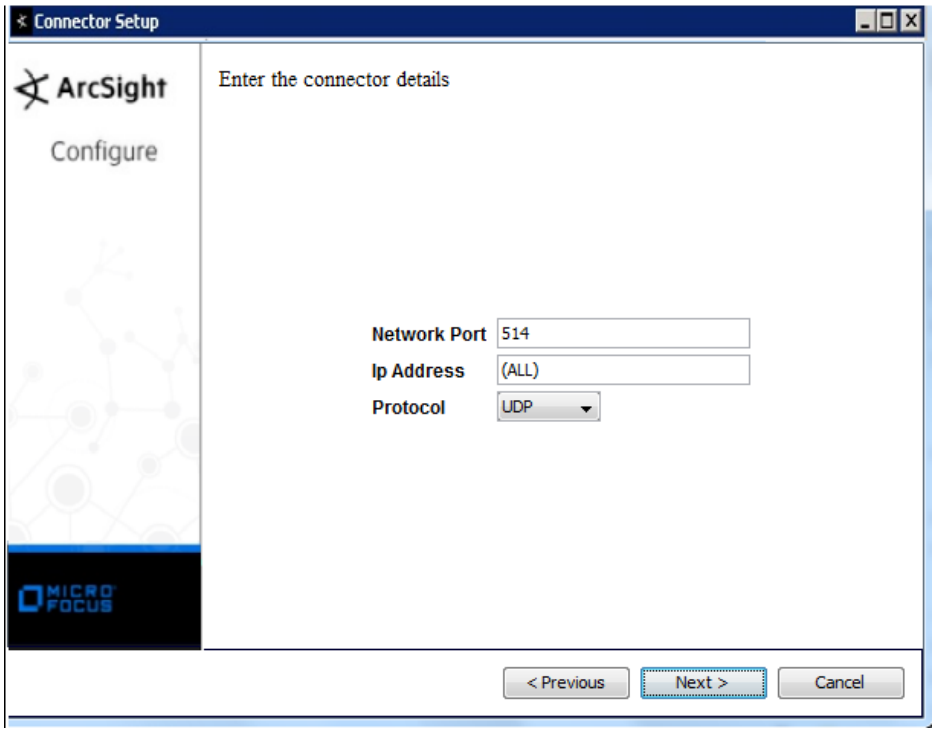
1. Download the Micro Focus ArcSight executable for your operating system from **My Updates** on the Micro Focus SSO site.
2. Start the Micro Focus ArcSight Installer by running the executable.

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

   Introduction
   Choose Install Folder
   Choose Install Set
   Choose Shortcut Folder
   Pre-Installation Summary
   Installing...
3. Select **Add a Connector**.

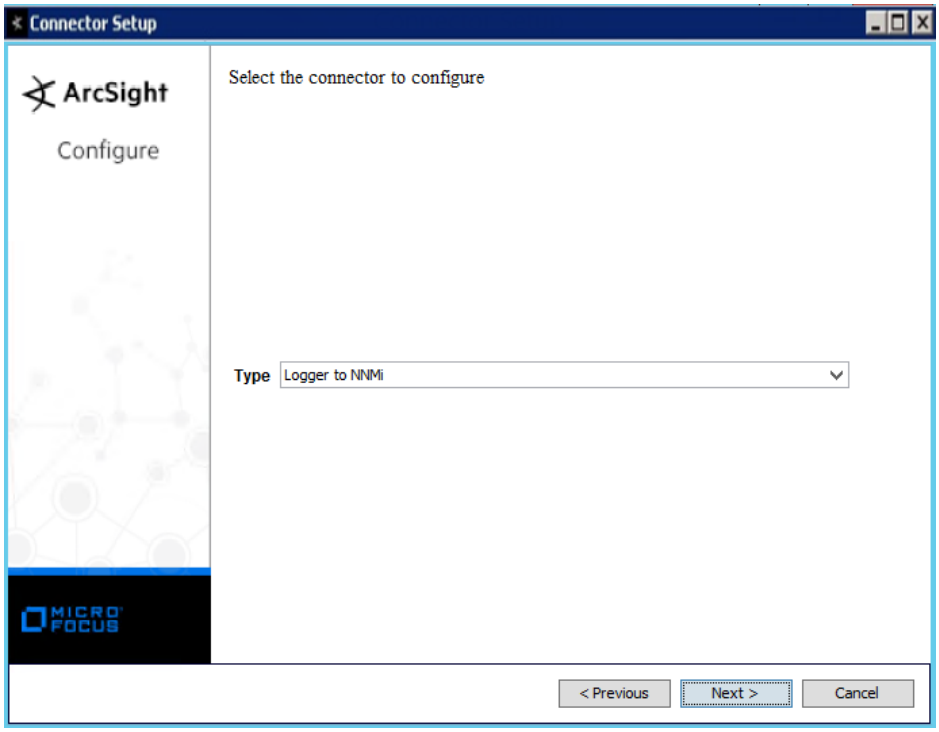


4. Click **Next**. **Logger to NNMi** is selected by default.
5. Click **Next**. Enter the Logger information.

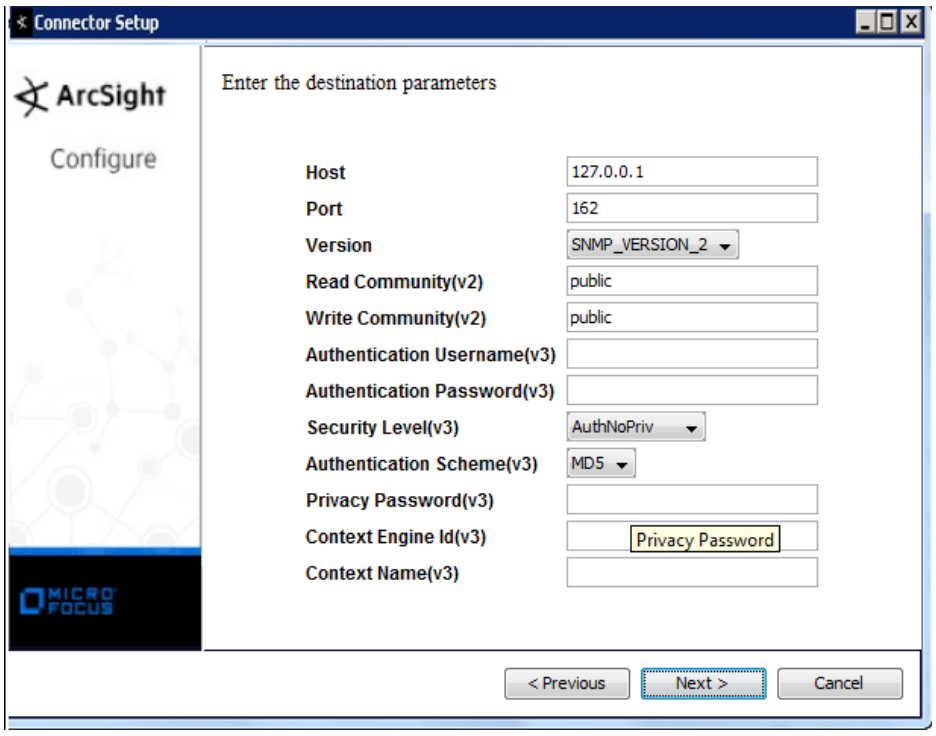


Parameter	Description
Network Port	514 or another port that matches the Receiver (the port to which the Forwarding Connector sends events)
IP Address	IP or host name of the Logger
Protocol	UDP or Raw TCP **Note**: Whichever protocol you choose, it must match that of the forwarder type chosen during Logger Forwarder configuration.

6. Click **Next**. **Micro Focus NNMi** is selected by default.



7. Click **Next**. Fill in the parameter information required for connector configuration.



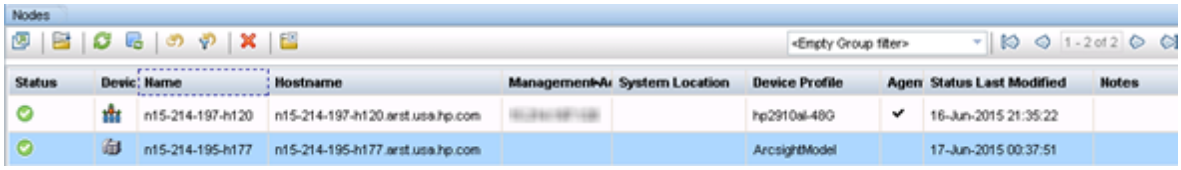
Parameter	Description
Host	Enter the Host name or IP address of the NNMi device.
Port	Enter the port to be used by the adaptor to forward events. The default port is **162**. To determine if the trap port monitored by NNMi is other than the default, use the NNMi command: `$NnmInstallDir/bin/nnmtrapconfig.ovpl -showProp` See the *NNMI ArcSight Logger Integration Guide*, Micro Focus ArcSight Logger chapter for details on Micro Focus NNMI and Logger integration.
Version	Accept the default value of **SNMP_VERSION_2**. SNMP_VERSION_3 is not available at this time.
Read Community(v2)	Enter the SNMP Read Community name.
Write Community(v2)	Enter the SNMP Write Community name.
Authentication Username(v3)	For use with SNMP v3. This is not available at this time.
Authentication Password(v3)	Enter the authentication password.
Security Level(v3)	The default value is **AuthNoPriv**
Authentication Scheme(v3)	The default value is **MD5**.
Privacy Password(v3)	Enter the privacy password.
Context Engine Id(v3)	Enter the context engine.
Context name(v3)	Enter the context name.

8. Click **Next**. Enter a name for the connector and provide other information identifying the connector's use in your environment.
9. Click **Next**. Read the installation summary and click **Next**. If the summary is incorrect, click **Previous** to make changes.
10. When the connector completes its configuration, click **Next**. The Wizard now prompts you to choose whether you want to run the connector as a process or as a service.

    If you choose to run the connector as a service, the Wizard prompts you to define service parameters for the connector.
11. Click **Next**. Choose **Exit**, to complete the connector installation, or choose **Continue**, to continue to make connector modifications. Click **Next** to exit or continue.

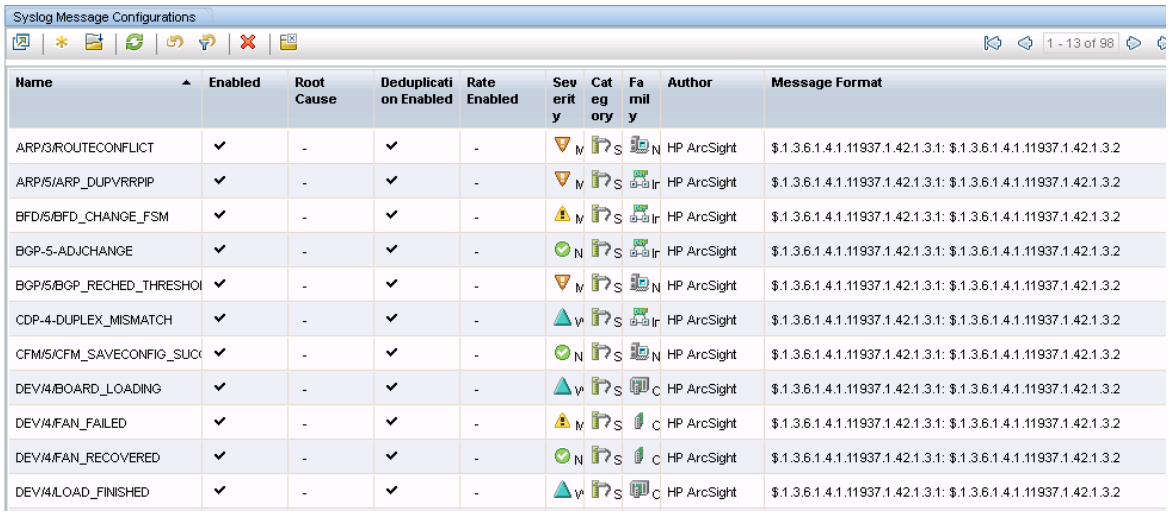
Configure for Micro Focus Network Node Manager (NNMi)

Add new node for the VM with the IP address where you want to receive trap.


Nodes
<Empty Group filter>
1 - 2 of 2
Status
Devic
Name
Hostname
Management A
System Location
Device Profile
Agen
Status Last Modified
Notes
n15-214-197-h120
n15-214-197-h120.arst.usa.hp.com
hp2910al-48G
16-Jun-2015 21:35:22
n15-214-195-h177
n15-214-195-h177.arst.usa.hp.com
ArcsightModel
17-Jun-2015 00:37:51

NNMi Console

These modules are automatically filled in the NNMi Console:


Syslog Message Configurations

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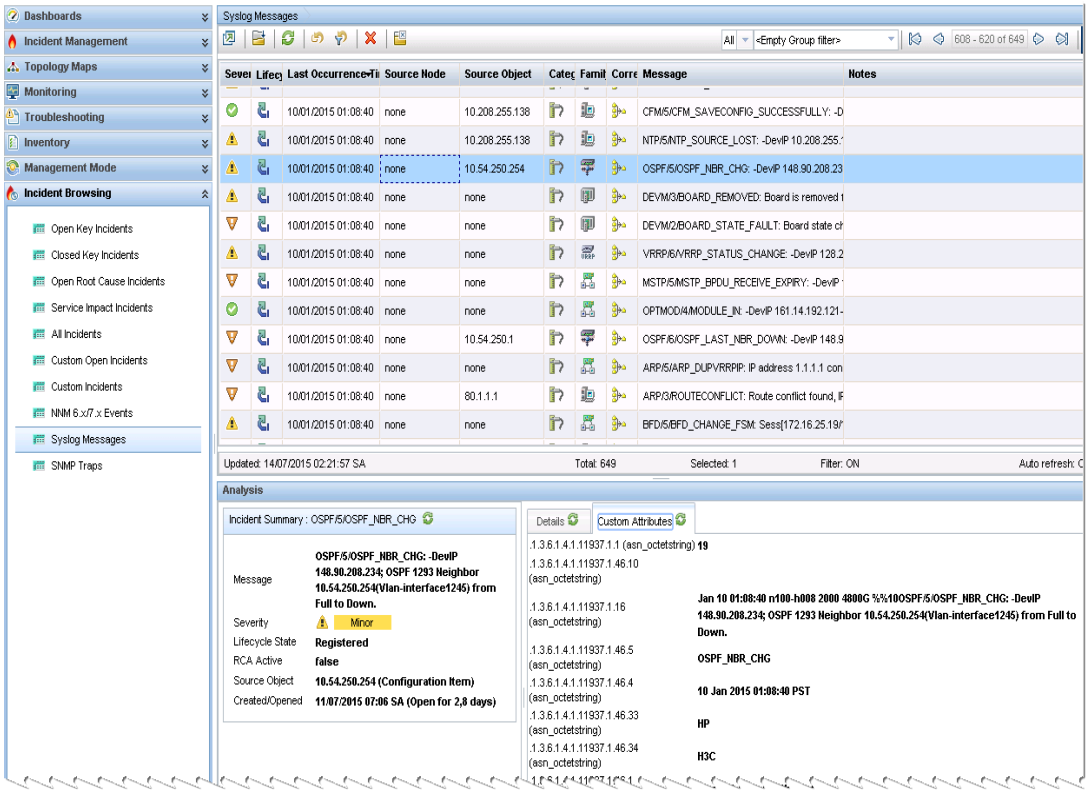
Name	Enabled	Root Cause	Deduplication Enabled	Rate Enabled	Severity	Category	Family	Author	Message Format
ARP/3/ROUTECONFLICT	✔	-	✔	-	M	S	N	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
ARP/5/ARP_DUPVRRPIP	✔	-	✔	-	M	S	Ir	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
BFD/5/BFD_CHANGE_FSM	✔	-	✔	-	M	S	Ir	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
BGP-5-ADJCHANGE	✔	-	✔	-	N	S	Ir	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
BGP/5/BGP_RECHED_THRESHOI	✔	-	✔	-	M	S	N	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
CDP-4-DUPLEX_MISMATCH	✔	-	✔	-	W	S	Ir	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
CFM/5/CFM_SAVECONFIG_SUC	✔	-	✔	-	N	S	N	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
DEV/4/BOARD_LOADING	✔	-	✔	-	W	S	C	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
DEV/4/FAN_FAILED	✔	-	✔	-	M	S	C	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
DEV/4/FAN_RECOVERED	✔	-	✔	-	N	S	C	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2
DEV/4/LOAD_FINISHED	✔	-	✔	-	W	S	C	HP ArcSight	$.1.3.6.1.4.1.11937.1.42.1.3.1: $.1.3.6.1.4.1.11937.1.42.1.3.2

See "Supported Cisco Router, Micro Focus H3C, and Micro Focus ProCurve Sub-Messages" on page 16 for a complete list of supported sub-messages.

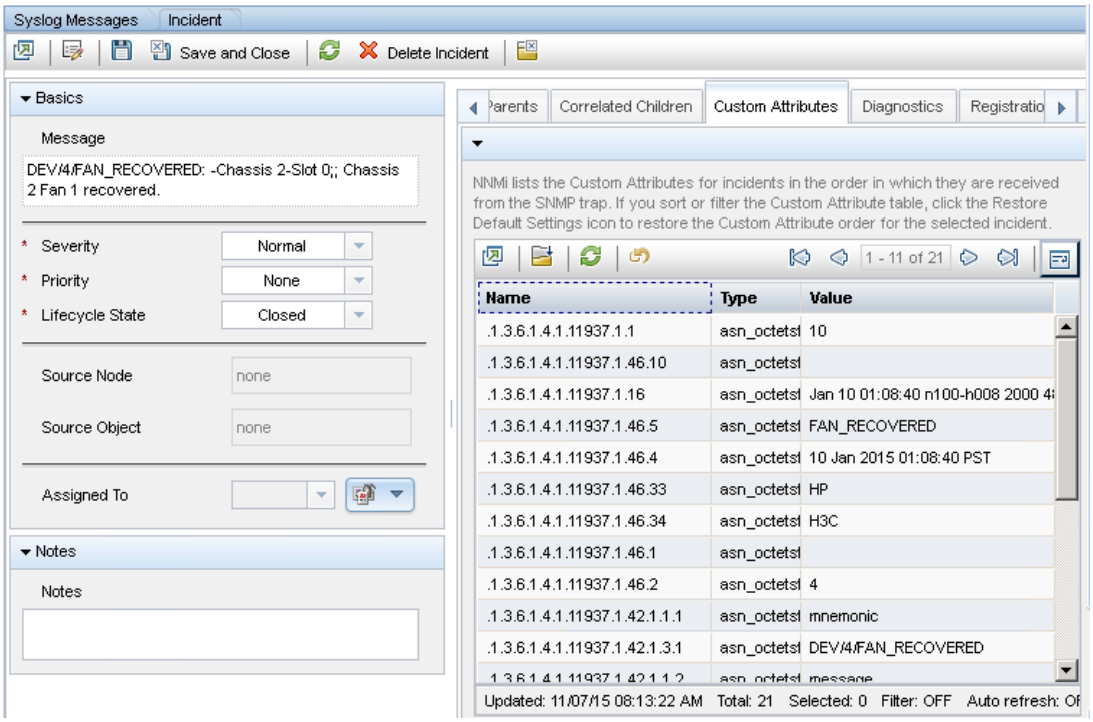
When events are sent from Forwarding Connector to NNMi, only events which contain attribute **mnemonic**, shown below, are parsed in **syslog message** incident.

```
CEF:0|HP|H3C|4800G|WROAM_ROAM_OUT_FAILED|WROAM_ROAM_OUT_FAILED|Medium|
eventId=809 msg=Client 001c-bf93-6f44, Failed to roam:  Maximum roam-out clients reached.
rawEvent=Sep  6 11:15:17 hostname 2000 4800G %%10WROAM/4/WROAM_ROAM_OUT_FAILED:Client
001c-bf93-6f44, Failed to roam:  Maximum roam-out clients reached. catdt=Switch art=1436623052291
cat=WLAN Roaming deviceSeverity=4 rt=1410027317000 cs1=2000
cs2=WROAM/4/WROAM_ROAM_OUT_FAILED cs3=10 cs1Label=Manufacturer cs2Label=Message Name
cs3Label=Syslog Version cs6Label=Group cn2Label=Slot ID cn3Label=VLAN ID ahost=agilis50-
bn.ARCPARTNERS.COM agt=15.215.8.66 agentZoneURI=/All Zones/ArcSight System/Public Address Space
Zones/Hewlett-Packard Company av=7.1.4.0.0 atz=America/Los_Angeles
aid=3TQ1ffU4BABCAAmxwlRKx8A\=\= at=syslog dvchost=hostname dtz=America/Los_Angeles
deviceFacility=WROAM _cefVer=0.1 ad.message=Client 001c-bf93-6f44, Failed to roam:  Maximum roam-
out clients reached. ad.mnemonic=WROAM/4/WROAM_ROAM_OUT_FAILED
```

Incidents for these valid events would be shown in the incident view.



Detail of an incident:



Chapter 3: Logger Forwarders

Logger **Forwarders** allow you to send all events, or events which match a particular filter, to another destination, in this instance to the Logger Forwarding Connector for NNMi. For more detailed information on Logger Forwarders, see the *ArcSight Logger Administrator's Guide*.

Note: You cannot configure a Logger Forwarder to send data to a destination on the same system.

Logger forwarding uses several forwarder types, but the Logger Forwarding Connector operates with UDP and TCP forwarder types only.

- **UDP Forwarders** forward events as User Datagram Protocol messages, such as Syslog format datagrams.
- **TCP Forwarders** forward events as Transmission Control Protocol messages.

Creating a Forwarder to Forward Events

In order to successfully forward events from Logger to NNMi, a Logger Forwarder must be created. To do so, complete the following steps in the Logger web application.

1. Click **Configuration** from the top-level menu bar.
2. Click **Event Input/Output** in the left panel.
3. Click the **Forwarder** tab, then click **Add**. The **Add Forwarder** page appears.
4. Enter a name for the new forwarder and choose either “UDP Forwarder” or “TCP Forwarder”.

   Caution: Whichever forwarder type you choose, it must match that of the SmartConnector protocol and port chosen during installation.

5. Click **Next**.
6. The **Edit Forwarder** page appears.
7. Within the **Query** field, create a query to filter the events sent to NNMi, or leave the default, **NONE**, to send all events.
8. Continue to fill in the remaining parameters, ensuring that the **Ip/Host** field contains the correct Logger Forwarding Connector IP address and that the **Port** number matches that of the connector.
9. Click **Save**. The following page appears.

10. New forwarders are initially disabled, so click the disabled icon (⃠) to enable the new forwarder.

    The forwarder is now enabled.

    Note: To create a specific filter for **NNMi**, refer to the Micro Focus NNMi documentation.

    Tip: Wait a few minutes after enabling a forwarder before disabling it. Likewise, wait before enabling a forwarder that has just been disabled. Background tasks initiated by enabling or disabling a forwarder can produce unexpected results if they are interrupted.

Appendix A: Supported Cisco Router, Micro Focus H3C, and Micro Focus ProCurve Sub-Messages

This appendix lists Cisco Router, Micro Focus H3C, and Micro Focus ProCurve sub-messages, for which additional mappings were provided in this release.

Cisco Router Sub-messages

The following Cisco Router sub-messages are provided:

- BGP-5-ADJCHANGE
- CDP-4-DUPLEX_MISMATCH
- DTP-3-NONTRUNKPORTFAIL
- DTP-3-TRUNKPORTFAIL
- DTP-5-NONTRUNKPORTON
- DTP-5-TRUNKPORTCHG
- DTP-5-TRUNKPORTON
- FR-5-DLCICHANGE
- LINEPROTO-5-UPDOWN
- LINK-3-UPDOWN
- STANDBY-3-DUPADDR
- LINK-4-ERROR
- PAGP-5-PORTFROMSTP
- PAGP-5-PORTTOSTP
- PORT_SECURITY-2-PSECURE_VIOLATION_VLAN
- SNMP-5-MODULETRAP
- SPANTREE-5-PORTLISTEN

- SPANTREE-5-ROOTCHANGE
- SPANTREE-6-PORTFWD
- SPANTREE-6-PORTLISTEN
- STACKMGR-6-MASTER_ELECTED
- STACKMGR-6-MASTER_READY
- STACKMGR-6-STACK_LINK_CHANGE
- STANDBY-6-STATECHANGE
- SYS-3-MOD_CFGMISMATCH1
- SYS-3-MOD_CFGMISMATCH2
- SYS-3-MOD_CFGMISMATCH3
- SYS-3-MOD_CFGMISMATCH4
- SYS-3-PKTBUFBAD
- SYS-3-PORT_COLL
- SYS-3-PORT_COLLDIS
- SYS-3-PORT_IN_ERRORS
- SYS-3-PORT_RUNTS
- SYS-4-SYS_LCPERR4
- SYS-5-MOD_INSERT
- SYS-5-MOD_OK
- SYS-5-MOD_REMOVE
- SYS-5-MOD_RESET
- SYS-5-RELOAD
- SYS-5-RESTART
- SYS-5-SYS_LCPERR5

Micro Focus H3C Sub-messages

The following Micro Focus H3C sub-messages are provided:

- CFM/5/CFM_SAVECONFIG_SUCCESSFULLY
- NTP/5/NTP_SOURCE_LOST
- DEV/4/FAN_FAILED
- OSPF/5/OSPF_NBR_CHG
- DEVM/3/BOARD_REMOVED
- DEV/4/FAN_RECOVERED
- DEVM/2/BOARD_STATE_FAULT
- VRRP/6/VRRP_STATUS_CHANGE
- DEV/4/POWER_FAILED
- DEV/4/POWER_RECOVERED
- MSTP/5/MSTP_BPDU_RECEIVE_EXPIRY
- OPTMOD/4/MODULE_IN
- OSPF/6/OSPF_LAST_NBR_DOWN
- ARP/5/ARP_DUPVRRPIP
- ARP/3/ROUTECONFLICT
- BFD/5/BFD_CHANGE_FSM
- BGP/5/BGP_RECHED_THRESHOLD
- DEV/4/BOARD_LOADING
- DEV/4/LOAD_FINISHED
- DEVM/2/POWER_FAILED
- DEVM/5/POWER_RECOVERED
- DEVM/3/RPS_ABSENT
- DEVM/5/RPS_NORMAL
- DEVM/5/SYSTEM_REBOOT

- DEV/4/POWER_ABSENT
- DEV/4/SYSTEM_REBOOT
- LDP/5/LDP_SESSION_DOWN
- OPTMOD/5/CHKSUM_ERR
- OPTMOD/5/IO_ERR
- OPTMOD/5/MOD_ALM_OFF
- OPTMOD/5/MOD_ALM_ON
- OPTMOD/4/MODULE_OUT
- OPTMOD/3/TYPE_ERR
- PIM/5/PIM_NBR_DOWN
- STM/4/LINK_STATUS_CHANGE
- STM/3/STM_LINK_STATUS_DOWN
- STM/6/STM_LINK_STATUS_UP

Micro Focus ProCurve Sub-messages

The following Micro Focus ProCurve sub-messages are provided:

- RMON_PMGR_PORT_UP
- RMON_CHASSIS_FAN_STATUS
- RMON_STP_NEW_ROOT
- RMON_LACP_DYNAMIC_TRUNK_OFF_LINE
- RMON_LACP_DYNAMIC_TRUNK_ON_LINE
- RMON_LACP_ERROR_CONDITION_BLOCK
- RMON_POEMGR_PD_DENIED_POWER
- RMON_POEMGR_PD_OVERCURRENT
- RMON_POEMGR_INTERNAL_50V_FAULT
- RMON_BOOT_CRASH_RECORD0
- RMON_BOOT_CRASH_RECORD1
- RMON_BOOT_NO_CRASH_RECORD
- RMON_BOOT_SELFTEST_FAILURE
- RMON_SSH_DISABLED
- RMON_SSH_ENABLED
- RMON_CHASSIS_POWER_STATUS
- RMON_CHASSIS_HEARTBEAT_FAILURE

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Feedback on Configuration Guide for Logger Forwarding Connector for NNMi (Logger Forwarding Connector for NNMi 8.3.0)

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