



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for Quest Software Foglight NMS with Avaya IP Office – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration procedures required to allow Quest Software Foglight NMS to collect call detail data from Avaya IP Office utilizing Avaya Call Detail Recording (CDR).

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

# 1. Introduction

These Application Notes describes a compliance-tested CDR solution comprised of Avaya IP Office and Quest Software Foglight Network Management System (NMS).

Quest Software Foglight NMS is an enterprise network performance monitoring and configuration management solution. It auto-discovers key metrics for network resources, including hardware, VoIP infrastructure, operating systems, virtual infrastructure, databases, middleware, applications, and services.

## 2. General Test Approach and Test Results

The feature test cases were performed manually. Calls were manually established using the intra switch environment.

The serviceability test cases were performed manually by disconnecting and reconnecting the LAN connection to the Foglight NMS server.

### 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing included basic call, transfer, and conference.

The serviceability testing focused on verifying the ability of Quest Software Foglight NMS to recover from adverse conditions, such as disconnecting/reconnecting the LAN connection to Quest Software Foglight NMS.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

### 2.2. Test Results

All test cases were executed and verified.

### 2.3. Support

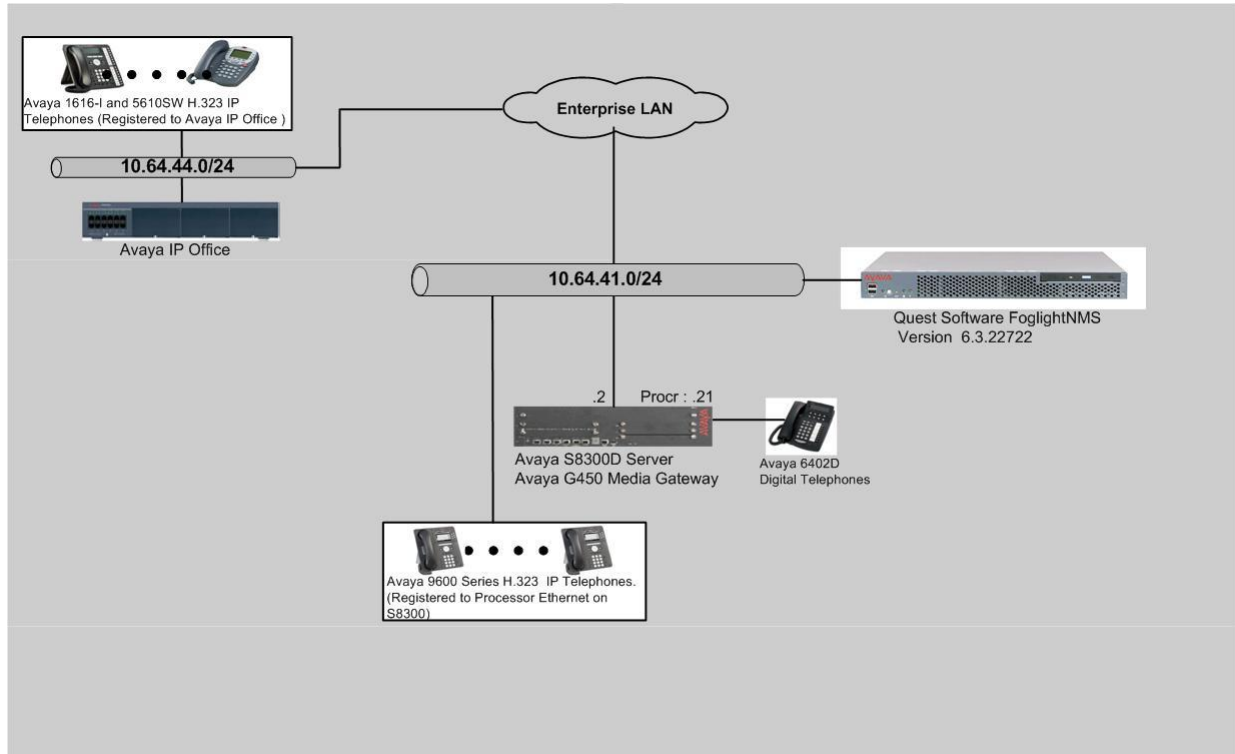
Technical support on Quest Software Foglight NMS can be obtained through the following:

- **Phone:** (800) 306-9329 Option 9 Ext. 17873  
(949) 754-8000  
(949) 754-8080
- **Email:** [nmsquestions@quest.com](mailto:nmsquestions@quest.com)

### 3. Reference Configuration

**Figure 1** provides the test configuration used for the compliance test. The configuration consists of an Avaya IP Office and Quest Software Foglight NMS.

*Note: An Avaya S8300D Server and an Avaya G450 Media Gateway were included to simulate trunk calls.*



**Figure 1: Test configuration for Quest Software Foglight NMS**

## 4. Equipment and Software Validated

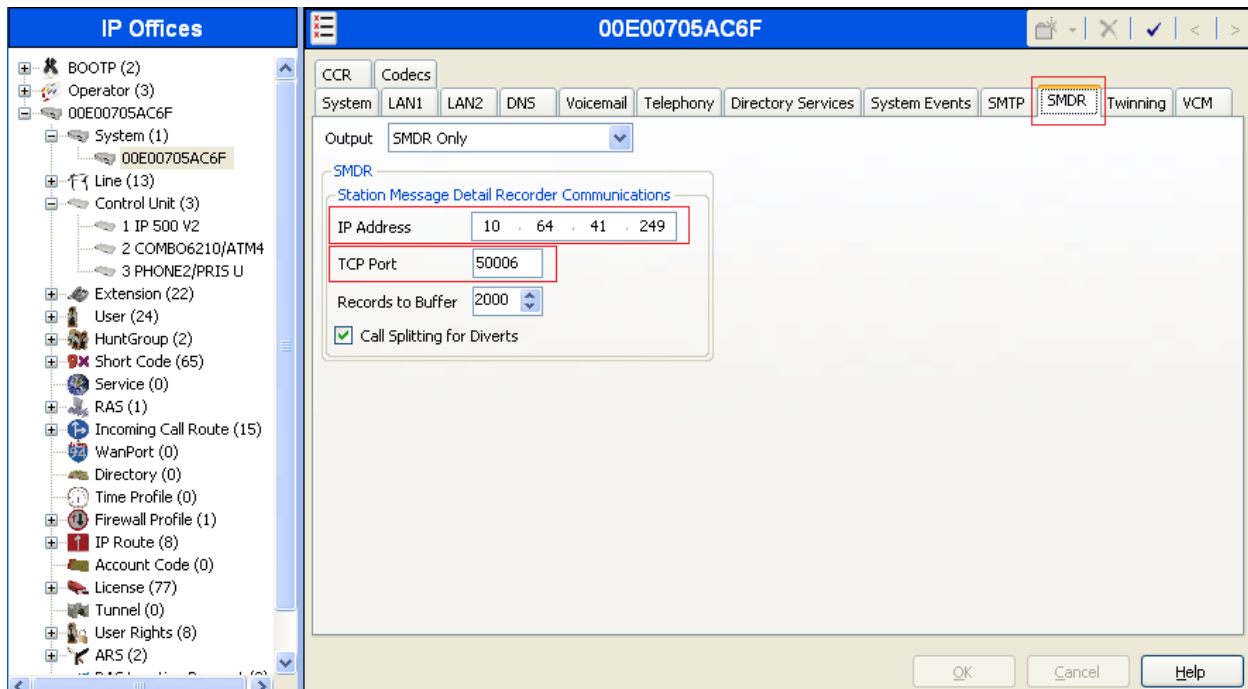
The following equipment and software/firmware were used for the test configuration provided.

Equipment		Software/Firmware
Avaya IP Office 500 V2		8.0(16)
Avaya IP Office Manager		10.0 (16)
Avaya 9600 Series IP Telephones		
	9630 (H.323)	3.1
	9650 (H.323)	3.1
Avaya1616-I (H.323)		1.3.0
Avaya 1416 Digital Telephone		-
Quest Software Foglight NMS on Windows 2003 server		6.3.22722

## 5. Configure Avaya IP Office

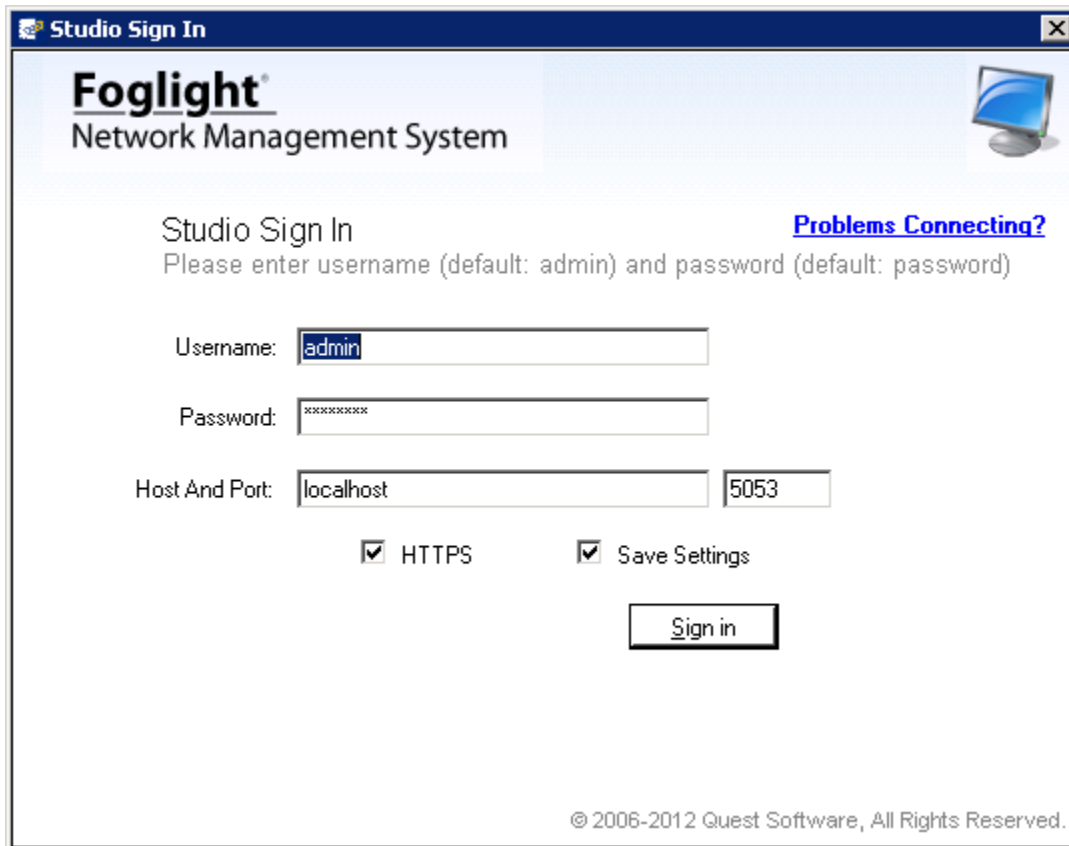
This section describes the configuration of Avaya IP Office for CDR. From a PC running the Avaya IP Office Manager application, select **Start → Programs → IP Office → Manager** to launch the Manager application. Select the proper IP Office system, and log in with the appropriate credentials (not shown). Select the **System** menu from the left pane. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **IP Address:** Enter the IP address of the Avaya IP Office
- **TCP Port:** Enter the Quest Software Foglight NMS listening port, which is set to 50006



## 6. Configure Quest Software Foglight NMS for Avaya IP Office

This section describes the configuration of Quest Software Foglight NMS. From a PC running the Foglight NMS application, double click the Foglight Studio NMS icon to launch the Foglight NMS application. Provide credentials and click the **Sign in** tab.



**Studio Sign In**

**Foglight®**  
Network Management System

Studio Sign In [Problems Connecting?](#)  
Please enter username (default: admin) and password (default: password)

Username:

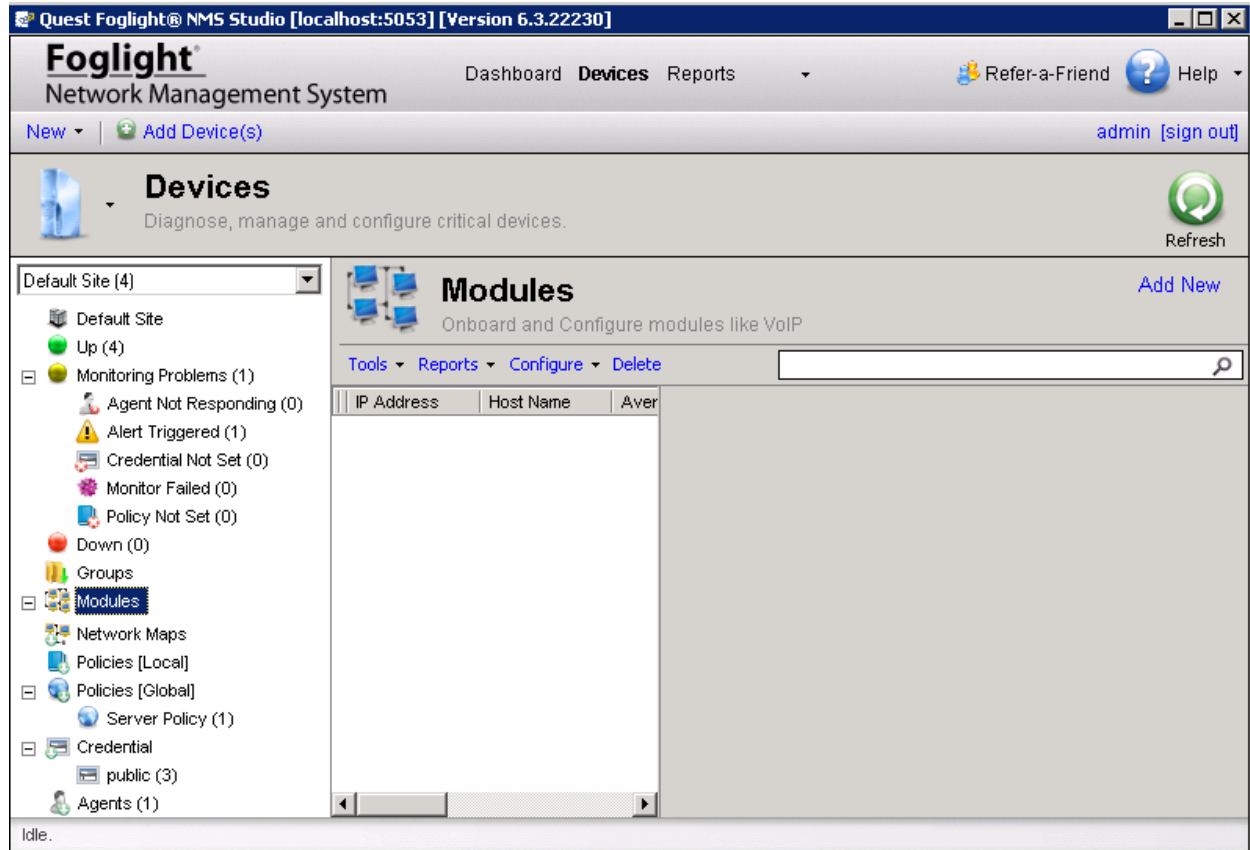
Password:

Host And Port:

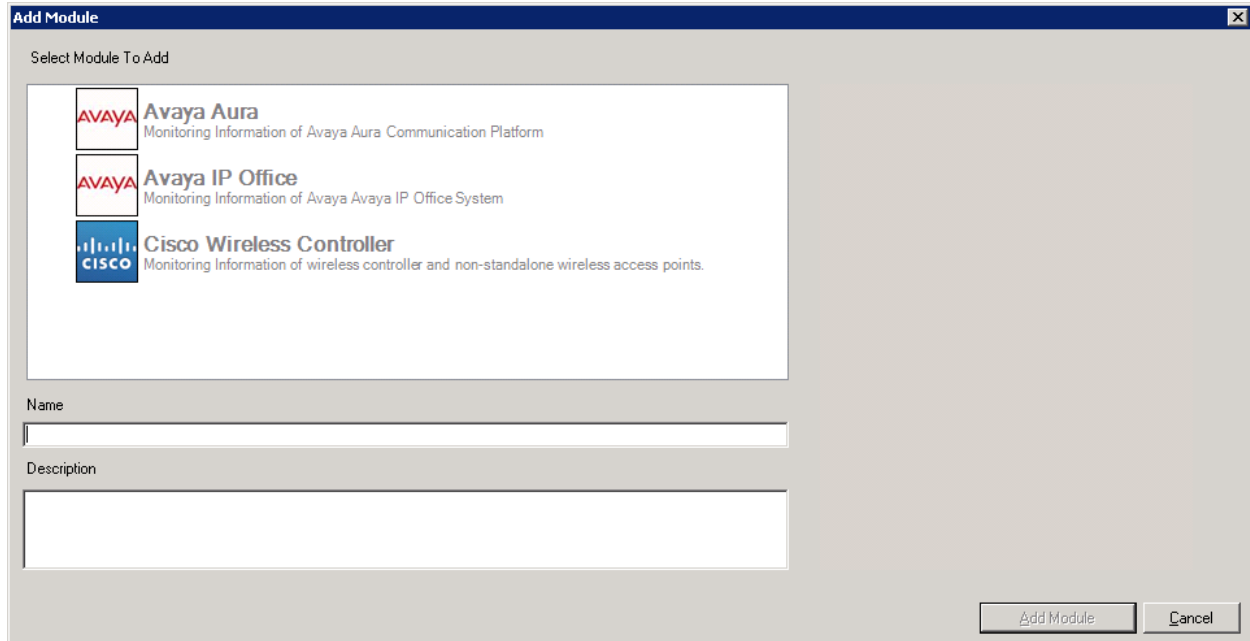
☒ HTTPS ☒ Save Settings

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Right mouse click **Modules** from the left pane of the screen, and select **Add New**.

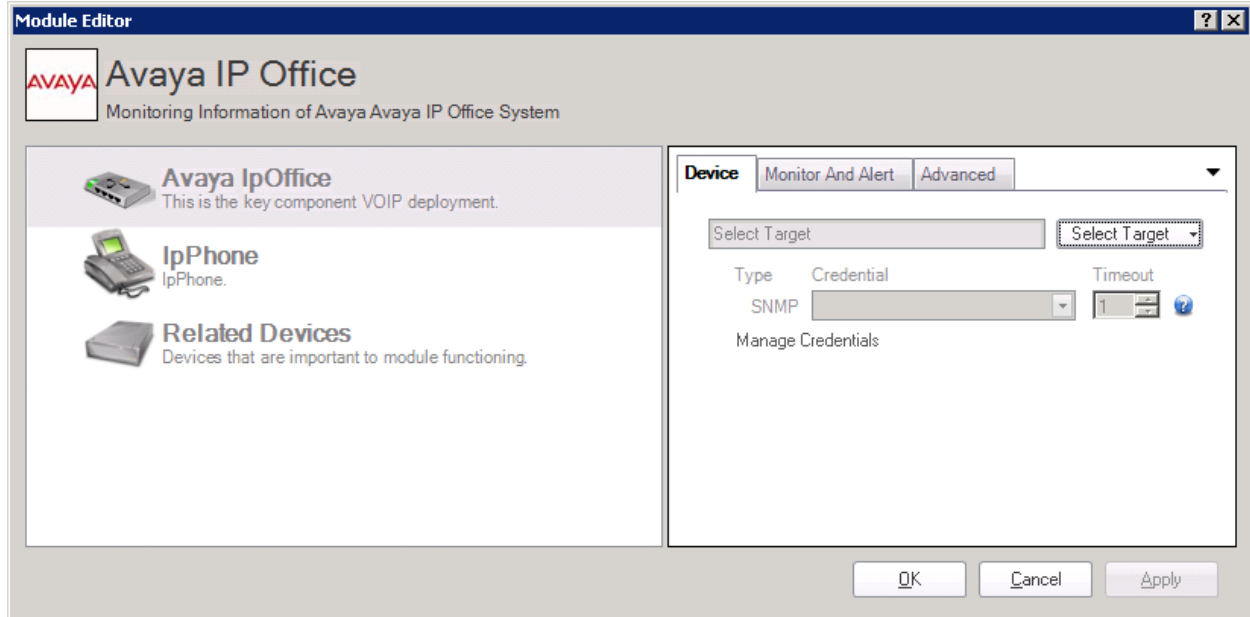


Select **Avaya IP Office** from the list of available modules, and select the **Add Module** tab.



The 'Add Module' dialog box has a title bar with a close button. Below the title bar is a section labeled 'Select Module To Add' containing a list of three modules: 'Avaya Aura' (Monitoring Information of Avaya Aura Communication Platform), 'Avaya IP Office' (Monitoring Information of Avaya Avaya IP Office System), and 'Cisco Wireless Controller' (Monitoring Information of wireless controller and non-standalone wireless access points). Below this list are two text input fields labeled 'Name' and 'Description'. At the bottom right are two buttons: 'Add Module' and 'Cancel'.

From the Module Editor page, click **Select Target** under the Device menu on the right pane, and select **Add a new device**.




The 'Module Editor' window has a title bar with a help icon and a close button. The main area is titled 'Avaya IP Office' with the subtitle 'Monitoring Information of Avaya Avaya IP Office System'. On the left is a sidebar with three items: 'Avaya IpOffice' (This is the key component VOIP deployment.), 'IpPhone' (IpPhone.), and 'Related Devices' (Devices that are important to module functioning.). On the right is a pane with a tabbed interface. The 'Device' tab is selected, showing a 'Select Target' dropdown menu, a 'Type' dropdown menu (set to 'SNMP'), a 'Credential' dropdown menu, and a 'Timeout' spinner (set to '1'). Below these are buttons for 'Manage Credentials', 'OK', 'Cancel', and 'Apply'.



From the Add Device Wizard page, enter the IP address of Avaya IP Office and choose the SNMP community string and click **Next**.

**Add Device Avaya IpOffice - Avaya IP Office in Default Site**

 **Avaya IpOffice**  
This is the key component VOIP deployment.

**Target(s)**  
10.64.44.21

**Default Site Discovery Agent**  
WORKGROUP\WIN-SVR-2003 [Change](#)  
*Default agent is selected for site.*

☐ Exclude Existing Devices From Discovery  
☒ Ping [advanced](#)  
*Techniques to find prospective devices on the network to add to your device database*

**Credentials**


Type	Credential	Timeout
SNMP	public	10

[Manage Credentials](#)

< Back Next Cancel

Select **Finish**.

**Add Device Avaya IpOffice - Avaya IP Office in Default Site**

 **Avaya IpOffice**  
This is the key component VOIP deployment.

**Running Time:** 0 hours 0 mins 5 secs [Refresh](#) [Stop](#)

IP	DNS	Ping	SNMP	Role	Operating System	Vendor
10.64.44.21		0 ms	V1 Responding	Router	Unknown	Avaya Communication

Network Discovery Completed.

Back Finish Cancel

## 7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and Quest Software Foglight Network Management System.

- Place a call and verify that the Foglight NMS received the CDR record for the call.

## 8. Conclusion

These Application Notes describe the procedures for configuring Quest Software Foglight NMS to collect call detail records from Avaya IP Office. The Foglight NMS successfully passed all compliance testing.

## 9. Additional References

The following Avaya product documentation can be found at <http://support.avaya.com>.

- [1] IP Office 8.0 IP Office Installation, Document Number 15-601042, Issue 25b, March 08, 2012
- [2] IP Office Release 8.0 Manager 10.0, Document Number 15-601011, Issue 28h, March 28 2012
- [3] IP Office System Status Application, Issue 06b, November 12, 2011 Document Number 15-601758
- [4] IP Office System Monitor, Document Number 15-601019, Issue 02b

The following Foglight NMS product documentation is available from Quest Software.

- [5] Foglight NMS Product Page  
<http://www.quest.com/foglight-network-management-system/>
- [6] Foglight NMS Community  
<http://communities.quest.com/community/nms>
- [7] Foglight NMS Knowledgebase  
<http://communities.quest.com/community/nms/knowledgebase>

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