
Technical Document

Configuring WhatsUp Gold NMS for SNMPv3 communications with NuDesign SNMPv3 Agent Service

NuDesign Technologies, Inc.

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Table of Contents

DOCUMENT HISTORY	3
INTRODUCTION	4
CONFIGURATION	4
ABOUT NUDESIGN TECHNOLOGIES	6

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Document History

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Introduction

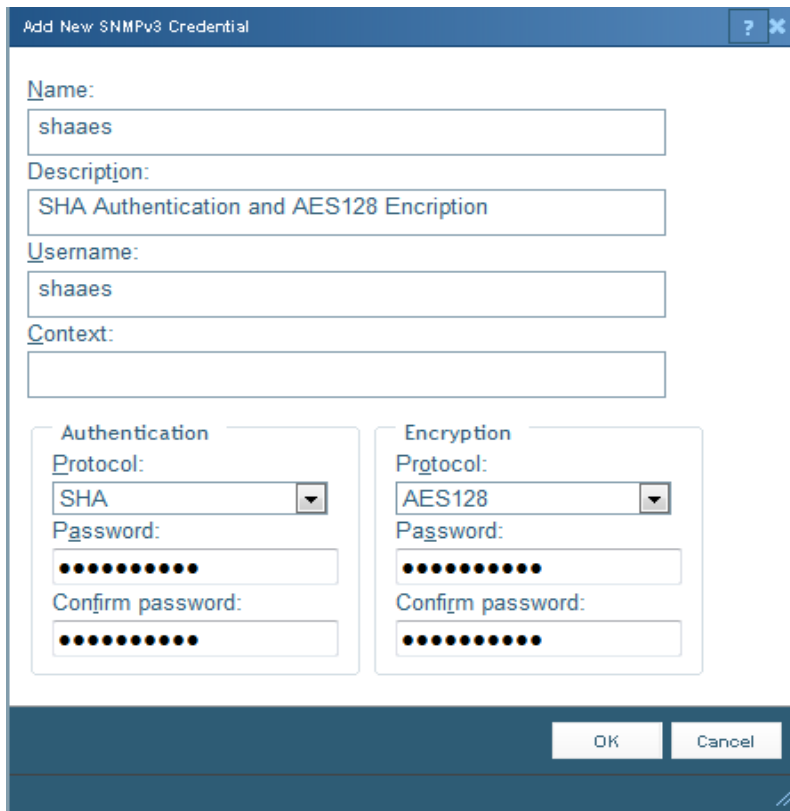
This document explains how to set up SNMPv3 credentials in a WhatsUp Gold environment for communications with NuDesign SNMPv3 Agent Service.

Configuration

When initially run WhatsUp Gold runs its Discovery Wizard which finds management objects within your network. WhatsUp Gold comes configured to discover objects which can communicate using SNMPv1 with a community string of public. Further communications suites (referred to as “Credentials”) can be selected in the Discovery Wizard, or the menu “Admin|Credentials”, namely:

- SNMP v1
- SNMP v2
- SNMP v3
- Windows
- AD0
- Telnet
- SSH
- VmWare

Choosing to add credentials with one of these “protocols” will open a dialogue with fields defined to allow you to define the additional parameters required for that protocol. For example



selecting SNMP v3 produces the following Dialogue:

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The example configuration above is based on the default configuration for a NuDesign SNMPv3 Agent Service.

NuDesign SNMPv3 Agent Service ships with the following pre-configured USM users:

Name	Authentication		Privacy	
	Protocol	Password	Protocol	Password
public	none		none	
md5	MD5	md5auth	none	
md5nopriv	MD5	md5noprivauth	none	
sha	SHA	shaauth	none	
shanopriv	SHA	shanoprivauth	none	
md5des	MD5	md5desauth	DES	md5despriv
shades	SHA	shadesauth	DES	shadespriv
md5aes	MD5	md5aesauth	AES	md5aespriv
shaaes	SHA	shaaesauth	AES	shaaespriv

User "shaaes", as used in the above example, is mapped to "grpAll" in the VacmSecurityToGroupTable. This gives any messages using these parameters "read-write" access.

```

Read/Write SNMPv3 Credentials:
  SNMPv3 Username: shaaes
  SNMPv3 Context:
  SNMPv3 Authentication
    Method: SHA
    Password | Key: shaaesauth
  SNMPv3 Privacy/Encryption
    Method: AES128
    Password | Key: shaaespriv

```

Context is a zero length string, i.e. leave SNMPv3 Context field empty.

About NuDesign Technologies

NuDesign provides software tools, libraries and applications for development of management agents and client applications used in remote configuration, monitoring and control of network devices, services, and applications. Our solutions operate over IPv4 / IPv6 networks in carrier, campus and enterprise settings. We also provide professional services supporting customers requiring specific management application and agent solutions.

Our software is based on industry standard management protocols such as NETCONF, SNMP, CLI, Web and RESTCONF protocols. Our customers are Original Equipment Manufacturers, System Integrators, Operators, Service Providers and End Users worldwide.

Our development products and software technologies provide the basis for the following solutions:

- the management Agents for embedded targets, implementing standard and custom YANG / MIB data models with secure, well integrated NETCONF / SNMPv3 / CLI and / or Web & RESTCONF access.
- the secure SNMPv3 and CLI management solutions for multiple desktop and embedded targets.
- the secure monitoring of Windows and Linux Servers using extensible SNMPv3 Agent Service for Windows or Linux with standard and / or custom extension subagents, configured with the provided SNMPv3 Configuration Editor. NuDesign SNMPv3 Service for Windows is a direct, drop-in replacement of Microsoft Windows SNMP Service (please visit www.snmp4windows.com).
- the SNMP Browser, MIB Builder and Traffic Monitor products that are feature rich, extensible, and easy to use in development, test and production environments.
- specialized SNMPv3 Management Agents and Managers for avionics AFDX[®] / ARINC664 networks and SNMPv1 products for NTCIP Transportation industry.

The highly automated management Agent / Subagent / Manager development tools, code generation wizards, multiple target development libraries, samples, evaluations with associated tutorials and our technical support enable quick learning, fast prototyping, experimentation, development and reliable production deployment.

The code generation tools facilitate organization of design process, providing for generation of project files for target OS / RTOS and a very complete and immediately compilable agent or manager source code.

For more information please visit www.ndt-inc.com, it contains NETCONF, SNMPv3 and MIB development tools and management product descriptions, tutorials and full feature product evaluations packages or call 416 737 0328 to discuss your specific needs.