



Technical Document

Configuring PRTG Network Monitor for SNMPv3 communications with NuDesign Agent Service

NuDesign Technologies, Inc.

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Document History

Date	Rev.	Remarks	Author
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Introduction

This document explains how to set up SNMPv3 credentials in a PRTG Network Monitor environment for communications with NuDesign SNMPv3 Agent services.

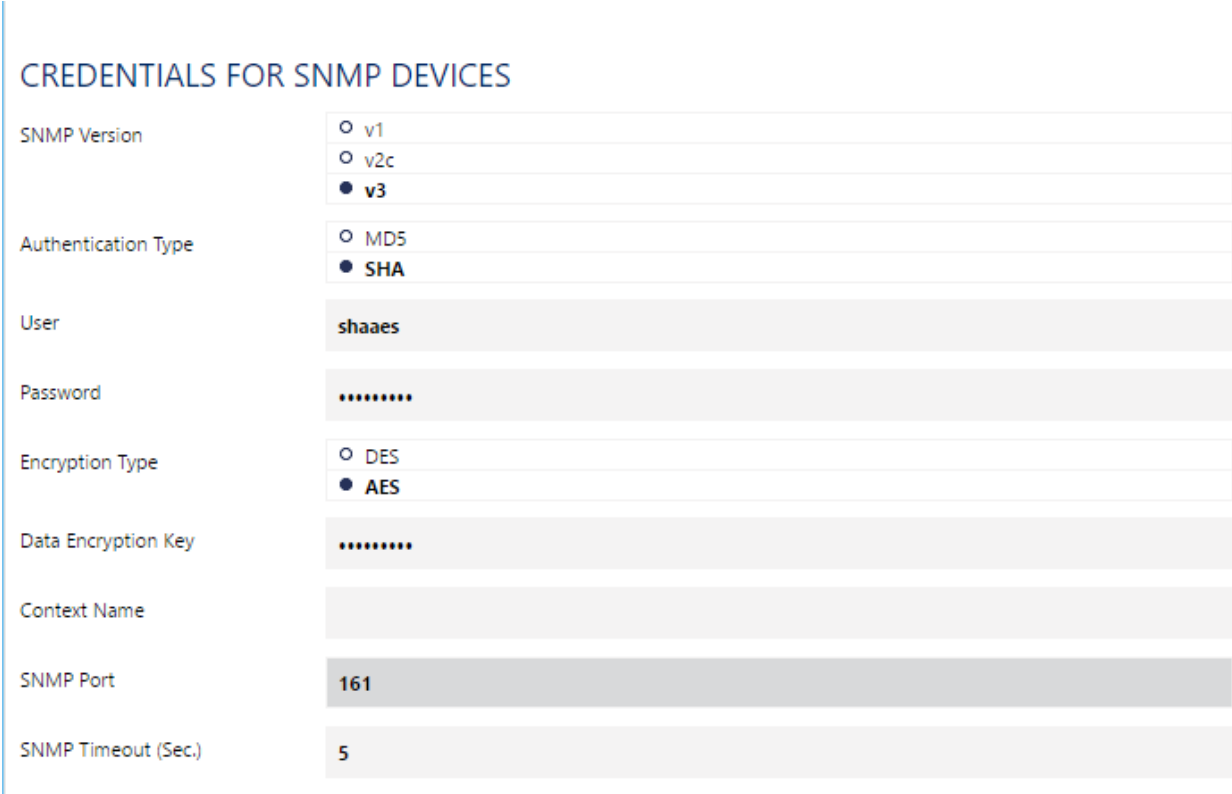
Configuration

When initially run, PRTG Network Monitor runs it's Discovery Wizard which finds management objects within your network. PRTG Network Monitor comes configured to discover objects which can communicate using **SNMPv1** with a community string of **'public'**.

From any node in the Device view at which you wish to establish SNMPv3 credentials, right click on the node and select **'Edit'**. From the next menu select **'Settings'**. From the subsequent page, scroll down until you see the

'CREDENTIALS FOR SNMP DEVICES'

section. Uncheck the entry and you should see something line the following ...



CREDENTIALS FOR SNMP DEVICES	
SNMP Version	<input type="radio"/> v1 <input type="radio"/> v2c <input checked="" type="radio"/> v3
Authentication Type	<input type="radio"/> MD5 <input checked="" type="radio"/> SHA
User	shaaes
Password	*****
Encryption Type	<input type="radio"/> DES <input checked="" type="radio"/> AES
Data Encryption Key	*****
Context Name	
SNMP Port	161
SNMP Timeout (Sec.)	5

Note: the entries, above and below, are based on the default configuration of the NuDesign SNMPv3 service. If you have changed its configuration, you will have to substitute with the same credentials you changed to.

For "**SNMP Version**", select "**v3**".

For "**Authentication Type**", select "**SHA**".

For USM "**User**" specify "**shaaes**" and for authentication '**password**' is "**shaaesauth**".

For "**Encryption Type**", select "**AES**", for "**Data Encryption Key**" enter "**shaaespriv**".

Leave the other fields at defaults, including "**Context Name**", leaving it empty.

As noted earlier, the example configuration above is based on the default configuration for a NuDesign SNMPv3 agent service. NuDesign agents ship 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

* These users are supplied for evaluation purposes only. They are **NOT** suggested for a production environment.

User "**shaaes**", as used in the above example, is mapped to "**grpAll**" in the **VacmSecurityToGroupTable**. This gives any **SNMPv3** 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
```

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

About NuDesign Technologies

NuDesign provides software development tools, libraries, components and applications for the management and monitoring of networks, systems, services, applications, desktop and embedded devices. The company also provides professional services to customers requiring specific management solutions.

NuDesign's focus is on industry standard management protocols like SNMP and emerging management protocols using HTTP and XML/SOAP transport.

NuDesign's customers are Original Equipment Manufacturers, System Integrators, Service Providers and End Users worldwide.

The benefits of deploying NuDesign's management software technologies are lower costs and reliable, low risk, quick-to-market solutions:

- The End User management products are feature rich, extensible, yet very easy to use out of a box.
- The middleware components come with easy to understand and re-use coding examples.
- The highly automated agent development tools with associated tutorials enable fast prototyping and development, and facilitate organization and design process while supporting multiple target environments with generation of very complete and immediately compilable agent code.

NuDesign's products and services include:

- SNMP development tools and components - SNMP / WEB / CLI agent code visual generation tools for multiple desktop and embedded targets, with standalone Agent and Master Agent / Extension Subagent architectures.
- SNMP components for development of management applications and SNMP MIB building / browsing, managing and testing applications.
- SNMP Management Applications - supporting SNMPv3 Agent and MIB management features, including Graphing, Get, Set, Walk, SNMP packet Trace and Scripting capabilities, Trap Send / Receive applets.
- Host resource monitoring products, and IP services and infrastructure monitoring products.
- Design and Support Services - specific network / element management & monitoring products, porting SNMP code to custom embedded hardware, developing custom management applications. Developing new products that require SNMP / WEB based management interfaces or adding WEB interfaces to existing products.

For more information please visit www.ndt-inc.com, it contains SNMP 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.