



Technical Document

Configuring NuDesign SNMPv3 Master Agent Service and Castlerock SNMPc for SNMPv3 communications

NuDesign Technologies, Inc.

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1. Document History

Date	Rev.	Remarks	Author
Aug 3, 2010	A01	Created	Shehzad Haq

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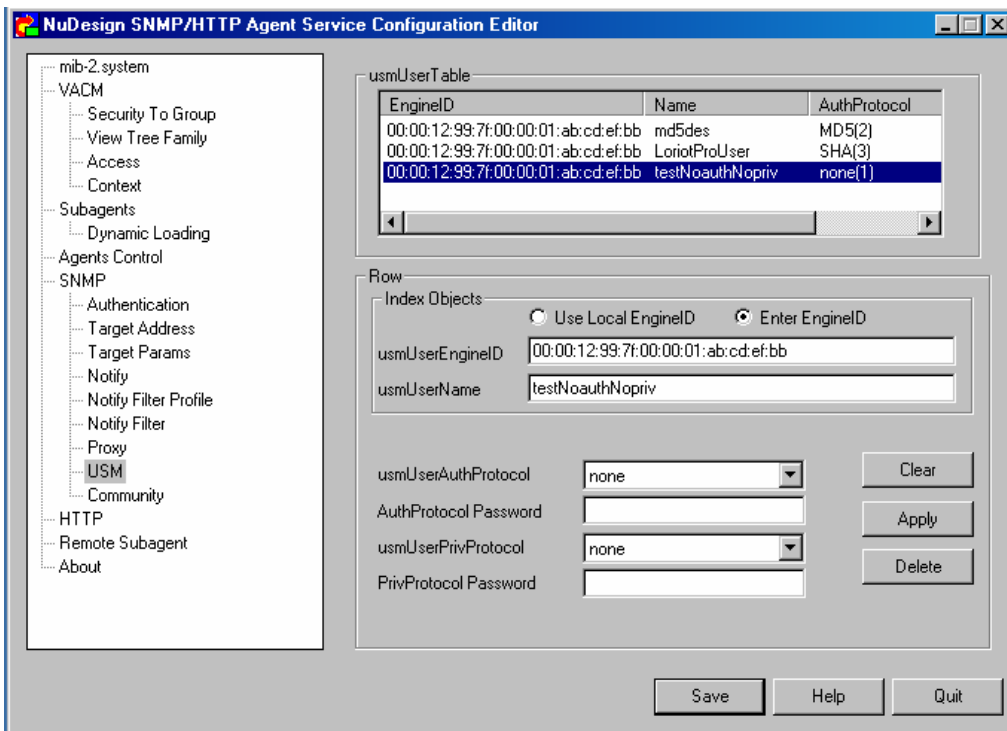
2. Introduction

This document shows how to communicate in SNMPv3 using SNMPc as the manager and NuDesign Master Agent Service.

3. SNMPv3 No Auth No Priv

The first step is to establish communication between the agent and the manager in SNMPv3 with no authentication and no privacy.

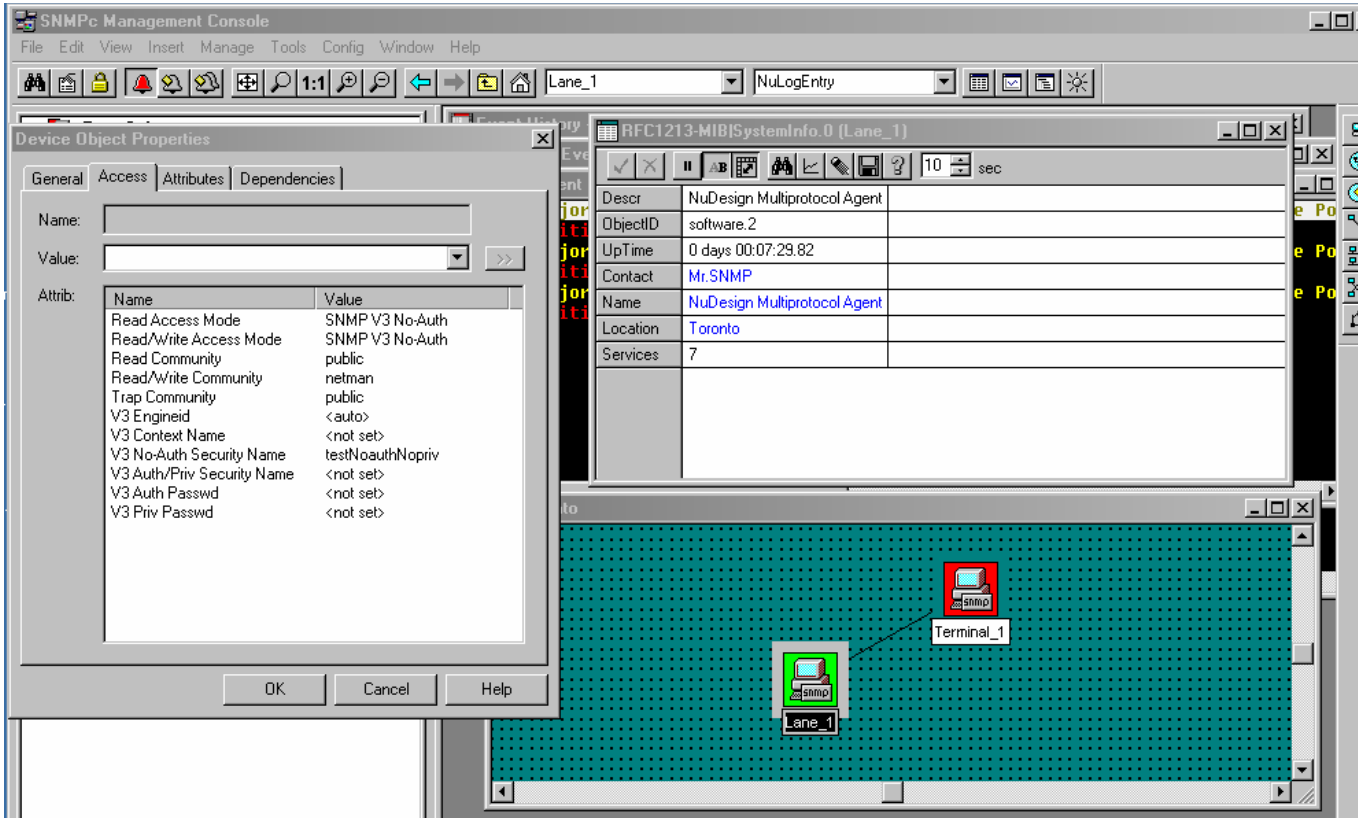
On NuDesign Master Agent service use the configuration applet to configure the Master Agent for SNMP v3. A user will need to be set up in the USM table for No Auth No Priv.



In this case, a user called 'testNoauthNopriv' is set up.

On SNMPc, a node is created and then on its properties, we set up the Read Access Mode & Write Access Modes to SNMPv3 No-Auth. “V3 No-Auth Security Name” should match the user that was set up in the agent. It is ‘testNoauthNopriv’.

After this is done, right click on the node and get the SystemInfo which is just the System group. You should see data similar to the picture below.

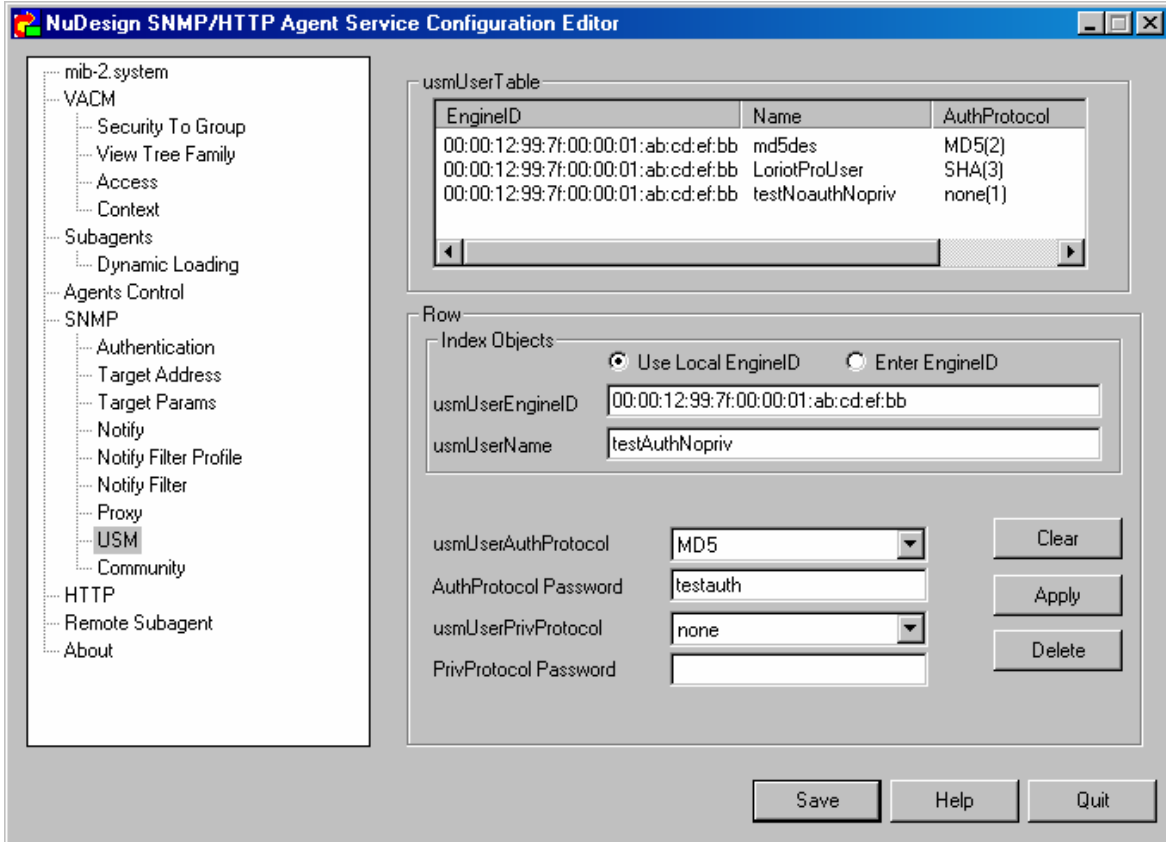


4. SNMPv3 Auth No Priv

The SystemInfo dialog should be closed as this point. We will now try to establish communication using SNMPv3 Auth No Priv using MD5.

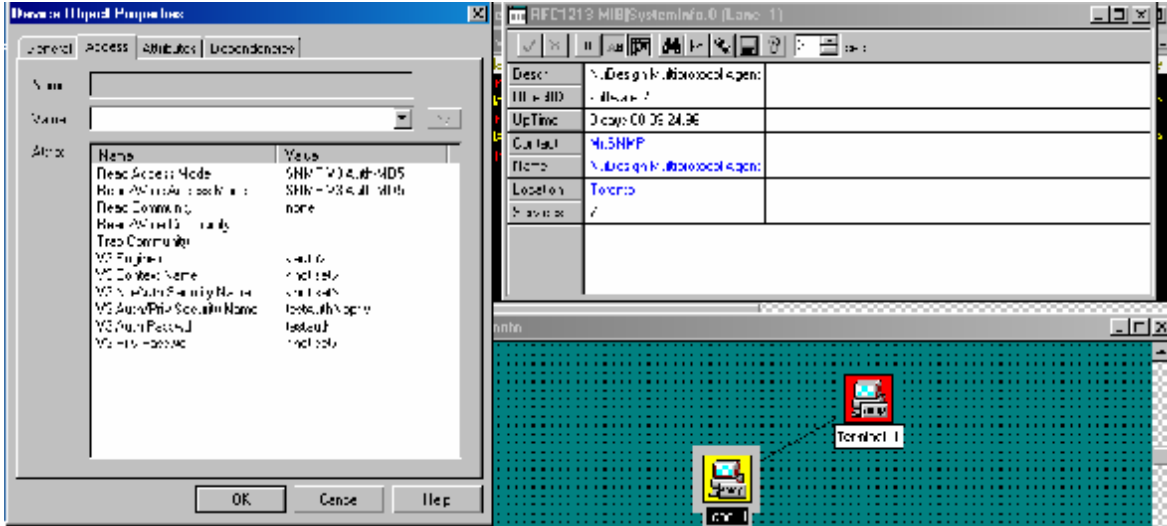
The steps are similar to the above section. First we need to setup a SNMPv3 AuthNoPriv user. We call it ‘testAuthNopriv’. The AuthProtocol password used is ‘testauth’.

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On SNMPc, a node is created and then on its properties, we set up the Read Access Mode & Write Access Modes to SNMPv3 Auth-MD5. “V3 Auth/Priv Security Name” should match the user that was set up in the agent. It is ‘testAuthNopriv’.

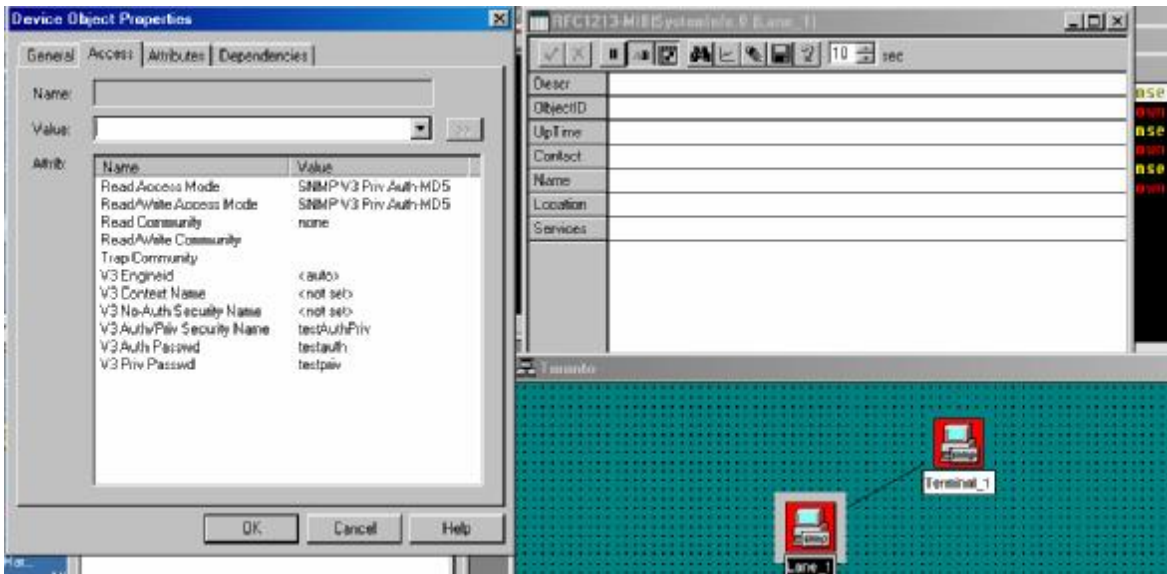
Again, we should see data in the SystemInfo dialog box.



5. SNMPv3 Auth Priv

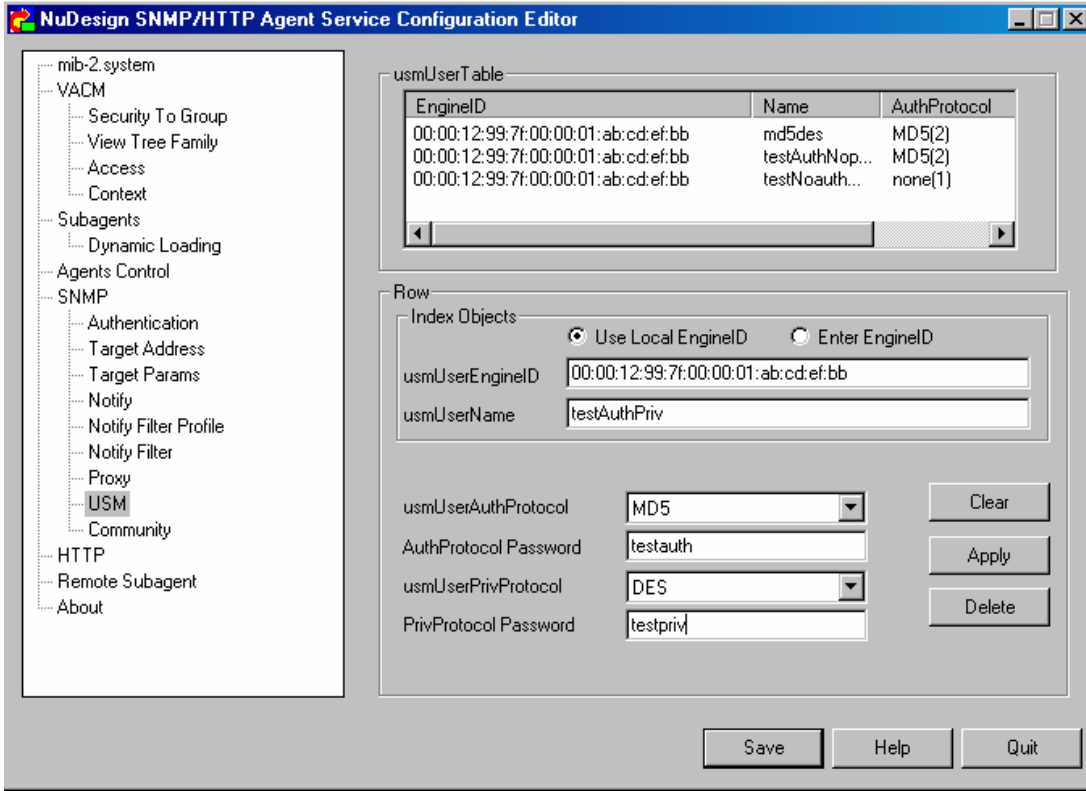
It is important to close the SystemInfo box and configure the manager for SNMPv3 AuthPriv communication. The user should be “testAuthPriv” with the passwords being “testAuth” and “testPriv”.

Open the SystemInfo dialog box and you will see no data. That means that the agent has not been configured properly.

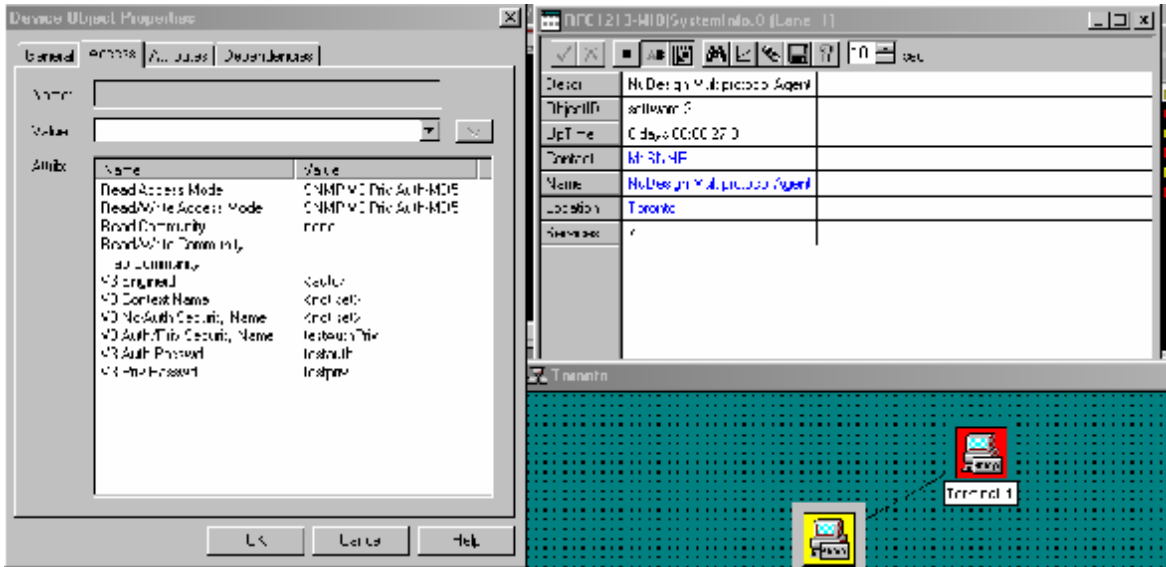


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On the agent add a new user with above username and passwords. Run the agent.



Now, go back to the SystemInfo box and restart it. You should have the system group data.



6. 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.