

SNMP engine configuration

draft-bjorklund-netmod-snmp-cfg-01

IETF 81

Martin Björklund

mbj@tail-f.com

Jürgen Schönwälder

j.schoenwaelder@jacobs-university.de

Background

- Started early as an exercise in using YANG.
- We got customer requests for complete SNMP agent configuration support in YANG.
- It seems most people use the CLI to configure SNMP engines, even though there are standard MIBs to do this.
- Thus we believe it makes sense to standardize such a data model.
 - Some supporting voices have been heard on the ML.
- We published -00 with no text, no examples
- Based on comments on -00, we recently published -01 with fixes, descriptive text, and examples.

Objectives

- Complete configuration of an SNMP engine.
- Should be possible to co-exist with an implementation of the standard MIBs.
 - Implies that we use the same basic structure of the model
- Try to simplify areas that are complicated in the MIBs

Data Model

- YANG submodules are used in order to preserve SNMP's modularity, while using just a single namespace.
- Additional submodules can be added over time, and the current ones individually revised.

`ietf-snmp` - top module, only includes the submodules

<code>ietf-snmp-common</code>	<code>typedefs, features</code>
<code>ietf-snmp-engine</code>	<code>listen address, engine-id</code>
<code>ietf-snmp-target</code>	<code>SNMP-TARGET-MIB</code>
<code>ietf-snmp-notification</code>	<code>SNMP-NOTIFICATION-MIB</code>
<code>ietf-snmp-proxy</code>	<code>SNMP-PROXY-MIB</code>
<code>ietf-snmp-community</code>	<code>SNMP-COMMUNITY-MIB</code>
<code>ietf-snmp-usm</code>	<code>SNMP-USER-BASED-SM-MIB</code>
<code>ietf-snmp-vacm</code>	<code>SNMP-VIEW-BASED-ACM-MIB</code>

Data Model

`ietf-snmp-engine` defines configuration objects not present in the MIBs:

- which SNMP version(s) to use
- which addresses the engine listens to
 - currently UDP transport
- static engine-id
- a knob to enable / disable the engine

Next Steps

- Add a few more examples
- Clean up some minor FIXMEs
- Add TLS and DTLS?
- Adopt as WG document?

Proposed new charter text

5. Data model for configuring SNMP engines. The model must be compliant with the standard SNMPv3 MIB modules for configuring SNMP engines.

Done - Submission of individual draft(s) of an SNMP config data model

Aug 2011 - Submit first working group draft of an SNMP config data model

Nov 2011 - Submit SNMP config data model to the IESG (proposed standard)