A Graphical SNMP MIB Editor and Net-SNMP Agent Builder

Overview

The Simple Network Management Protocol (SNMP) is used extensively in managing today’s heterogeneous networks. SNMP managers and agents from different vendors can communicate with each other because they use a common mechanism to exchange data (protocol). They also share a common understanding of the data being exchanged. This common understanding is defined in Management Information Base (MIB) files.

MIBs are written using the Abstract Syntax Notation (ASN.1) specification language and must adhere to the grammar specified in the Structure of Management Information (SMI) specifications. The complex, arduous task of creating MIB definition files can now be simplified by using the SimpleMIBEditorPro. It is an easy to use, graphical tool that simplifies the process of creating SMI conforming MIB definition files, without requiring the user to be knowledgeable about the nitty-gritty details of ASN.1 syntax. It guides the user in creating both SNMPv1 and SNMPv2 SMI documents by gathering information in easy to understand dialog boxes and automatically converting it into syntactically correct ASN.1 notation. SimpleMIBEditorPro creates new SNMPv1 and SNMPv2 MIBs, automatically corrects many common errors in existing MIB definition files, and also converts MIBs from one SMI to another.

Once the MIB is defined, the work of building an SNMP Agent begins. SimpleMIBEditorPro also assists in creating stub interface functions that link the MIB variables defined to the underlying instrumentation for the popular, public domain, Net-SNMP based Agent. Unlike the “mib2c” utility, the interface functions for the entire MIB can be created at once using the graphical interface. The code generation is done via a Tcl based interpreter and the Tcl source files are provided for easy modifications and user-defined enhancements.

Features

SimpleMIBEditorPro is an intuitive graphical editor that automatically creates SMI compliant MIB documents and builds stub interface functions for Net-SNMP based agents. Using this tool you can simply and quickly:

- Create new SNMPv1 and SNMPv2c SMI MIBs.
- Edit existing MIBs after automatically correcting many common errors.
- Convert MIBs from one SMI to another.
- Get suggestions on MIB module structure in accordance with IETF guidelines.
- Get guidance on enterprise tree organization.
- Create SMI conforming SNMP table definitions by filling in information in dialog boxes.
- View the MIB as a graphical object registration tree in the Tree view.
- Generate Net-SNMP specific stub interface functions for the entire MIB tree.
- Build makefiles or invoke the associated IDE like VC++ or Eclipse to complete agent creation.
- View, Edit or Add code generation functions in Tcl if required.

System Requirements

SimpleMIBEditorPro supports

- Microsoft Windows 2000/XP and RedHat Linux 9.0+
- Net-SNMP Version 5.4+