DYMO, NHDP, and SMF MANET MIBs

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Introduction

- Three MIBs related to MANET WG protocols:
  - DYMO MIB <ietf-manet-dymo-mib-00.txt> [1]
  - NHDP MIB <ietf-cole-manet-nhdp-mib-00.txt> [2]
  - SMF MIB <ietf-cole-manet-smf-mib-00.txt> [3]
- Supports configuration, state, performance and notifications for the associated MANET protocols
- DYMO MIB has seen significant work since previous drafts; MIB compiles
- NHDP MIB is a shell, drawing heavily from the Information Base section of the current NHDP draft - looking for help from the NHDP developers (volunteers?)
- SMF MIB has defined Objects, but not Notifications and Conformance
Common Structure of the MIBs

- xxxx --> DYMO, NHDP or SMF
- xxxxMIBNotifications Group - informs
- xxxxMIBObjects Group - collection of managed objects, comprised of:
  - xxxxConfiguration Group - objects and tables for protocol/device configuration, e.g., objects in Section 6 of DYMO draft [4], hosts and interfaces tables
  - xxxxState Group - current state info, e.g., DYMO routing table
  - xxxxPerformance Group - objects, e.g. aggregate and per interface, useful for protocol tuning, trouble shooting
- xxxxMIBConformance Group - basic and full conformance
Tactical Questions and Issues

- (DYMO-MIB) dymoRouting Table and RFC 4292 “IP Forwarding Table MIB” - these describe current routes within the local device.
- (DYMO-MIB) Is a peers Table useful - this would contain a list of recently know members of the DYMO routing domain.
- (NHDP-MIB) The LIB’s Local IF Set Table - overlaps with MIB II Interface Group?
- (NHDP-MIB) The LIB’s Removed Interface Address Set Table - how is this used and is the information in the MIB II Interface group sufficient?
- Each draft has a detailed list of work items in back - Open Issues Section.
Strategic Questions and Issues

- (ALL MIBs) How will these MIBs be used?
  - e.g., if I know this device supports DYMO, then I can configure it. But how do I know it supports DYMO?
  - How do I re-configure a device in the MANET and expect continuity of communication?

- Modular MANET WG protocol set
  - Do we need a capabilities MIB?
  - How do I initially configure these protocols at startup?
  - Do we need a baseline configuration for initial communications and for recovery from mis-configuration?

- (ALL MIBs) Thought on protocol performance issues and associated local measurements to help in network diagnostics and how they would be used is needed
References


