

# An Overview of the IETF Network Management Standards

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IETF #82, Taipei, Taiwan  
O&M Area Working Group WG

[mehmet.ersue@nsn.com](mailto:mehmet.ersue@nsn.com)  
[bclaise@cisco.com](mailto:bclaise@cisco.com)

# Changes since Prague

## Things we did since last time:

- Added a note that IETF has not used the FCAPS view as an organizing principle for its data models.
- Added a note indicating that IETF has not developed so far specific technologies for the management of sensor networks.
- Added [I-D.weil-shared-transition-space-request] assuming that it'll get published pretty fast
- Reduced subsections RADIUS and DIAMETER with text on expired drafts.
- Extended dispatcher tables in Appendix A
- Removed text on expired drafts
- Cleaned up bugs, nits and open issues
- Added RFC references

# Next Steps

- Close the issue of adding information on the high-level overview of IETF MIB modules
  - Proposal: Provide a chapter for the high-level overview of IETF MIBs as complementary to the management task-based view
- Provide NIST SGIP IP Suite WG for comments after this meeting.

What's next:

- Have another WGLC after the update.

# Back-up

#### 4. Network Management Data Models

This section lists management data models standardized at IETF, which can be reused and applied to different management solutions. The subsections below are structured following the management application view and focus mainly on the management data models for the network management tasks fault, configuration, accounting, performance, and security management.

The advancement process for management data models beyond Proposed Standard status, has been defined in [BCP27][RFC2438] with a more pragmatic approach and special considerations on data model specification interoperability. However, most IETF management data models never advance beyond Proposed Standard.

This section gives an overview of management data models that have reached Draft or Proposed Standard status at the IETF. In exceptional cases important Informational RFCs are referred.

The different data models covered in this section are MIB modules, IPFIX Information Elements, SYSLOG Structured Data Elements, and YANG modules.

Note that IETF does not use the FCAPS view as an organizing principle for its data models. However, FCAPS view is used widely outside of IETF for the realization of management tasks and applications. This document provides an overview of IETF data models with an FCAPS view to enable people outside of IETF to understand the relevant data models. There are many technology-specific IETF data models, such as transmission and protocol MIBs, which are not mentioned in this document and can be found at [RFCSEARCH].

# Draft Audience & Focus

- Draft audience:
  - People interested in getting an overview of current set of IETF management technologies
  - Non-IETF bodies interested in using IETF management protocols
- Common question to answer:
  - Which IETF technologies and data models can be used to build a management application, e.g. for network monitoring, fault mgmt.?
- In-focus:
  - IETF Network Management technologies and standards
    - outline technology options and building blocks
  - Data models addressing the management application view
    - describe and map to network management tasks like fault, configuration, accounting, performance, and security management
- Out-of-focus:
  - Data models not in direct focus of network management tasks
    - technology specific MIBs, e.g. TCP MIB, IPv6 MIB, etc.
    - MIB modules related to transmission , e.g. ISDN MIB, ATM MIB, etc.

- Many thanks to the contributors:
  - IPFIX, PSAMP (Juergen Quittek, Benoit Claise)
  - YANG (Juergen Schönwälder)
  - RADIUS and DIAMETER (Jouni Korhonen)
  - DHCP (Ralph Droms)
  - EMAN (Benoit Claise)
- and initial reviewers in OPSAWG ML

We need more reviewers.