Network Working Group
INTERNET-DRAFT

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Expires in six months

February 17, 2004

SS7 MTP2-User Peer-to-Peer Adaptation Layer (M2PA)
Management Information Base (MIB)
M2PA-MIB
<draft-bidulock-sigtran-m2pa-mib-00.ps>

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Abstract

The *SS7 MTP2 User Peer-to-Peer Adaptation Layer (M2PA)* [M2PA09] is a protocol supporting the transport of Signalling System No. 7 (SS7) [Q.700] Message Transfer Part (MTP) Level 3 [Q.701] signalling messages over Internet Protocol (IP) using the services of the Stream Control Transmission Protocol (SCTP) [RFC 2960]. This protocol would be used between SS7 Signalling Points using the MTP Level 3 protocol. The SS7 Signalling Points may also use standard SS7 links using the SS7 MTP Level 2 [Q.701] to provide transport of MTP Level 3 signalling messages. The protocol operates in a manner similar to MTP Level 2 so as to provide peer-to-peer communication between SS7 endpoints.

This memo defines the Management Information Base (MIB) module which describes the minimum amount of objects needed to manage the implementation of the M2PA.

1. Introduction

This memo defines the Management Information Base (MIB) module that describes managed objects for the implementation of the M2PA.

1.1. Scope

The document starts with a brief summary description of the SNMP framework and continues with the MIB explanation and security considerations among others.

1.2. Terminology

This memo supplements the terminology used in SCTP [RFC 2960] and M2PA [M2PA09] by adding the following terms:

1.3. Abbreviations

This memo supplements the abbreviates used in SCTP [RFC 2960] and M2PA [M2PA09] by adding the following abbreviations:

MIB — Management Information Base

SMI — Structure of Management Information

SNMP — Simple Network Management Protocol

1.4. Conventions

The keywords **MUST**, **MUST NOT**, **REQUIRED**, **SHALL**, **SHALL NOT**, **SHOULD**, **SHOULD NOT**, **RECOM-MENDED**, **NOT RECOMMENDED**, **MAY**, and **OPTIONAL**, when they appear in this document, are to be interpreted as described in RFC 2119 [RFC 2119].

1.5. Overview

The SNMP Management Framework presently consists of five major components:

- An overall architecture, described in RFC 2271 [RFC 2271].

- Mechanisms for describing and naming objects and events for the purpose of management, Structure of Management Information (SMI) Version 1 [RFC 1155] and Structure of Management Information (SMI) Version 2 [RFC 1902..RFC 1904]

- Message protocols for transferring management information. The first version of SNMP message protocol is called SN-MPv1 [RFC 1157]. The second version of the SNMP message protocol, which is not an Internet standards track protocol, is called SNMPv2c [RFC 1901, RFC 1906]. The third version of the message protocol is called SNMPv3 [RFC 1906, RFC 2272, RFC 2574].

- Protocol operations for accessing management information. The first set of protocol operations and associated PDU formats is described in SNMPv1 [RFC 1157]. A second set of protocol operations and assocaited PDU formats is described in SNMPv2 [RFC 1905].

  - A set of fundamental applications [RFC 2273] and view-based access control mechanism [RFC 2575].

Managed objects are accessed from a virtual informaiton store, termed the Management Information Base (MIB). Objects in the MIB are defined using the mechanisms defined in the SMI. This memo specifies a MIB module that is compliant to SMIv2. A MIB conforming to the SMIv1 can be produced through the appropriate translations. The resulting translated MIB must be semantically equivalent, except where objects or events are omitted because no translation is possible (use of Counter64). Some machine-readable information in SMIv2 will be converted into textual descriptions in SMIv1 during the translation process. However, this loss of machine-readable information is not considered to change the semantics of the MIB.

1.5.1. Structure of the MIB

Also [Q.751.1, Q.752, T1.116.1, T1.116.2]

For a detailed overview of the documents that describ the current Internet-Standard Management Framework, please refer to section 7 of RFC 3410 [RFC 3410].

Managed objects are accessed from a virtual information store, termed the Management Information Base (MIB). MIB objects are generally access through the Simple Network Management Protocol (SNMP). Objects in the MIB are defined using the mechanisms defined in the Structure and Identification of Management Information (SMI). This memo specifies a MIB module that is compliant to the SMIv2 [RFC 2578..RFC 2580].

2. Definitions

Security Considerations

IANA Considerations

Notes

Normative References

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This Internet draft expires July, 2003.

Change History

This section will be removed from the document when the document is finalized.

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$Log: draft-bidulock-sigtran-m2pa-mib-00.me,v $
Revision 0.9  2004/02/17 09:40:47  brian
- Baseline for documentation.

Revision 0.8  2003/07/26 19:14:06  brian
Added mib draft.
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