SMIng – The Next Generation SMI

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Evolution of Management Technologies

OMG (CORBA) 1.0 2.0 2.2 2.3.1

ITU (TMN) M.30 M.3010 M.3100 M.3400

ISO (CMIP) OSI RM.4 CMIP CMIS GDMO

IETF (SMI) SNMPv1 SNMPv2p SNMPv2c SNMPv3 SNMPv3

IETF (SnMP) [S] [P] [D/E] [P] [D]

IETF (SMI) SMiv1 SMiv2 SMiv2 SMiv2

IETF (SPPI)

IETF (COPS)

DMTF (DMI) 1.0 2.0 2.0s

DMTF (CIM) 2.0 2.2

IETF (LDAP) LDAP LDAPv2 LDAPv3

 LDAP

LDAPv2 [P]

LDAPv3 [P]
What is SMIng?

- The objective is to replace both the SMIv2 and the SPPI with a single, merged language as the data definition language for the monitoring, configuration, and provisioning of network devices.

- The language developed will enable the modeling of network management information in a manner that provides the benefits of object-oriented design. To achieve this, the language must allow the design of highly reusable syntactic/semantic components (templates) that can be reused by multiple IETF working groups for convenience, consistency, and to maximize interoperability in device management.

- The language will provide for the definition of a transport-independent model so as to allow a variety of implementation-specific technologies to be derived from a single definition. To demonstrate this, the working group will define two technology specific transport mappings: one for SNMP, and one for COPS.
Major SMIng WG Milestones

Nov 2000  –  IRTF documents complete & submitted to IETF

Dec 2000  –  Meet at 50th IETF (Minneapolis)

May 2001  –  WG Last Call on requirements document

Aug 2001  –  Meet at 51st IETF (London)

Sep 2001  –  WG Last Call on core language documents

Nov 2001  –  WG Last Call on mapping documents on SNMP and COPS-PR

Dec 2001  –  Meet at 52nd IETF (Salt Lake City)

Mar 2002  –  Meet at 53rd IETF (Minneapolis ?) and close WG
Current List of SMIng Documents

• SMIng Requirements:
  – draft-ietf-sming-reqs-00.txt

• Core Language Specification:
  – draft-ietf-sming-01.txt

• Core SMIng Modules:
  – draft-ietf-sming-modules-01.txt
  – draft-ietf-sming-inet-modules-01.txt

• SNMP Mapping:
  – draft-ietf-sming-snmp-01.txt

• COPS-PR Mapping:
  – draft-ietf-sming-copspr-00.txt
Pointers

- SMIng WG Charter:

- SMIng WG Mailing List:
  - [sming@ops.ietf.org](mailto:sming@ops.ietf.org) (subscribe via sming-request@ops.ietf.org)

- SMIng WG Chair:
  - David Durham (Intel)

- SMIng Project Web Site

- SMIng WG Interim Meeting:
  - Seattle (May 18-19)