SNMP GOALS

UBIQUITY
• PCs AND CRAYs

INCLUSION OF MANAGEMENT SHOULD BE INEXPENSIVE
• SMALL CODE
• LIMITED FUNCTIONALITY

MANAGEMENT EXTENSIONS SHOULD BE POSSIBLE
• NEW MIBs

MANAGEMENT SHOULD BE ROBUST
• CONNECTIONLESS TRANSPORT
PRINCIPLE OPERATION

MANAGER

SNMP

AGENTS

MIB
PRINCIPLE OPERATION

MANAGER

POLLING

TRAPS

AGENTS

MANAGER

MIB

AGENT

MIB
PRINCIPLE OPERATION

MANAGER

GET / SET

TRAP

AGENTS

MIB
PRINCIPLE OPERATION

MANAGER

TABLES

VARIABLES

AGENTS
SNMP STRUCTURE

MANAGER

AGENT

Management Application

SNMP PDUs

MIB

CONNECTIONLESS TRANSPORT SERVICE PROVIDER

UDP
STANDARDS

SMI
• STRUCTURE OF MANAGEMENT INFORMATION
  • TWO VERSIONS
  • RFC 1155, RFC 2578, ...

MIBs
• MANAGEMENT INFORMATION BASEs
  • A LARGE NUMBER OF MIBs EXIST
  • RFC 1213, ...

SNMP
• SIMPLE NETWORK MANAGEMENT PROTOCOL
  • NAME IS USED IN A MORE GENERAL SENSE
    • VERSION 1: HISTORIC (RFC 1157)
    • VERSION 3: STANDARD (RFC 3411-3416)