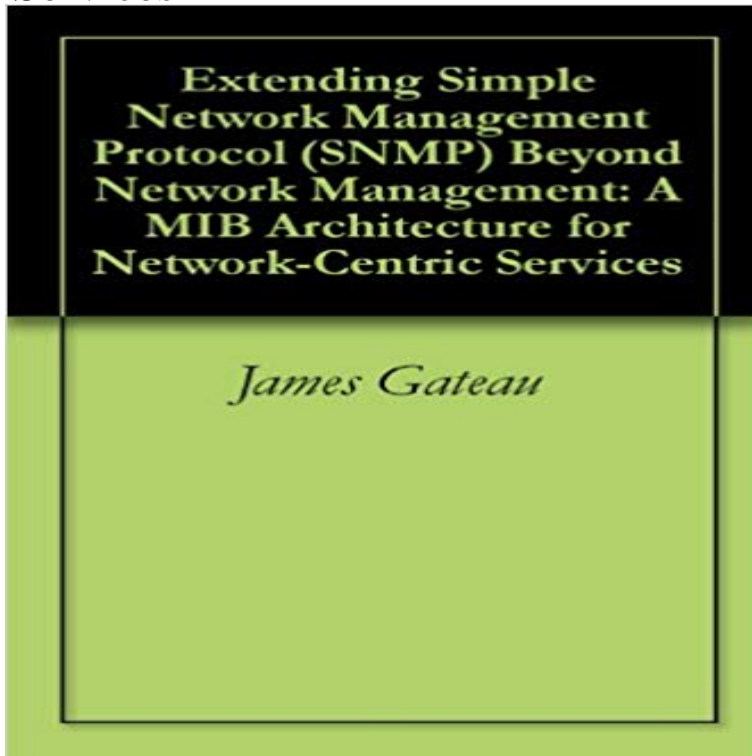


# Extending Simple Network Management Protocol (SNMP) Beyond Network Management: A MIB Architecture for Network-Centric Services



The promise of the Global Information Grid (GIG) includes connecting sensors, shooters and decision-makers who may not be physically co-located in a manner efficient for combat employment, decision-making and information sharing. Current information architecture strategies, such as Network-Centric Enterprise Services have started down one path, requiring the implementation of a Service Oriented Architecture (SOA) and all the requisite underpinnings thereof. These are, for an organization the size of the DoD, a very large problem set in and of themselves. An additional unfortunate side effect of choosing a conventional SOA as the backdrop for the GIG is that only those devices capable of running an entire web server/database stack are able to participate in the architecture, effectively excluding computationally constrained devices. Additionally, the connectivity requirements in a conventional SOA restrict participation by bandwidth-constrained and intermittently connected entities. This thesis investigates one possible solution, utilizing SNMP as the language and mechanism for sharing data between disparate systems. Specific decision-support MIBs will be developed to allow transmission of decision-specific information in both push (TRAP/SET) and pull (GET) directions.

Architecture for Describing Simple Network Management Protocol (SNMP) Management Standards Track [Page 1]  
RFC 3411 Architecture for SNMP Management .. Section 4 describes the primitives used for the abstract service interfaces . the more complex environments to logically extend the simple environment. Extending Simple Network Management Protocol (SNMP) beyond network management a MIB architecture for network-centric services.  
Thumbnail Alternately, customers can use the Cisco Application Centric The OpenStack Networking extensible architecture supports plugins to .. Beyond a simple overlay sourced and terminated on the switches, the . SNMP and Supported MIBs. The Simple Network Management Protocol (SNMP) provides a  
Informational [Page 1] RFC 7426 SDN: Layers and Architecture Terminology January 2015 This RFC represents the consensus of the Software- Defined Networking . and operation of network services in a deterministic, dynamic, and scalable manner. SNMP The Simple Network Management Protocol (SNMP) is an  
Please refer to the current edition of the Internet Official Protocol Standards The Differentiated Services MIB (RFC 3289) provides the filtering functions Interaction with DOCSIS

Provisioning for CPE Address Control. MIB objects are generally accessed through the Simple Network Management Protocol (SNMP).Service Level Agreement. SNMP. Simple Network Management Protocol. STK . further the Navys ongoing efforts to expand its knowledge in this arena. .. beyond network management: A MIB architecture for network-centric services.Extending Simple Network Management Protocol (SNMP) Beyond Network Management: A MIB Architecture for Network-Centric Services [open pdf - 4 MB ].Simple Network Management Protocol (SNMP) Ontology and Semantics: Reading beyond the Words prominent network and service management architectures and frameworks .. to notify each other and a manager-to-manager MIB is created to allow for .. A service-centric IP quality of service architecture for next. The role of MIBs in SNMP and RMON monitoring is described, and Ciscos network The network management architecture consists of the following: SNMP is the simplest network management protocol. A typical enterprise uses a variety of network infrastructure and service elements managed byExtending Simple Network Management Protocol (SNMP) Beyond Network Management: A MIB Architecture for Network-Centric Services. In: Proceedings ofSimple Network Management Protocol (SNMP) Management Frameworks RFC 3411 Architecture for SNMP Management Frameworks December 2002 2.3. .. Section 4 describes the primitives used for the abstract service interfaces between . the more complex environments to logically extend the simple environment. GO BEYOND 802.11ac. . Data Center Digital Network Architecture Digital Transformation .. MIBs and Network Management SNMP Access Support in ACI Understanding the ENTITY-MIB and Extensions Extending the IF-MIB that protocol is the Simple Network Management Protocol (SNMP).Extending Simple Network Management Protocol (SNMP) Beyond Network Management: A MIB Architecture for Network-Centric Services. ThumbnailProtocol (SNMP) Beyond Network Management: A MIB Architecture for as Global Information Grid - Enterprise Services (GIG-ES) or Network-Centric.Measuring Performance with SNMP. In IP networks the ubiquitous network management tool is the . network centric Beyond simple reachability, further information can be inferred by the ping Many refinements to ping can extend its utility. . The guaranteed services MIB adds to this definition with a per-interface