

MIBs location 802.16g Reference Model

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For discussion of the 802.16g reference model

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Outline

- Present 802.16g Reference Model
- 802.16f Fixed MIBs Definition and Use
- Mobile MIBs Definition and Use
- Impact of location of MIBs
- Recommendation
- Discussion

Present 802.16g Reference Model



- Service Access Points (SAPs)
 - Logical interfaces
 - Not Implementation specific
 - Codifies interaction and parameters
- Management SAP
 - Example functional aspects
 - Network Monitoring
 -
- Control SAP
 - Example functional aspects
 - Authentication
 - Accounting

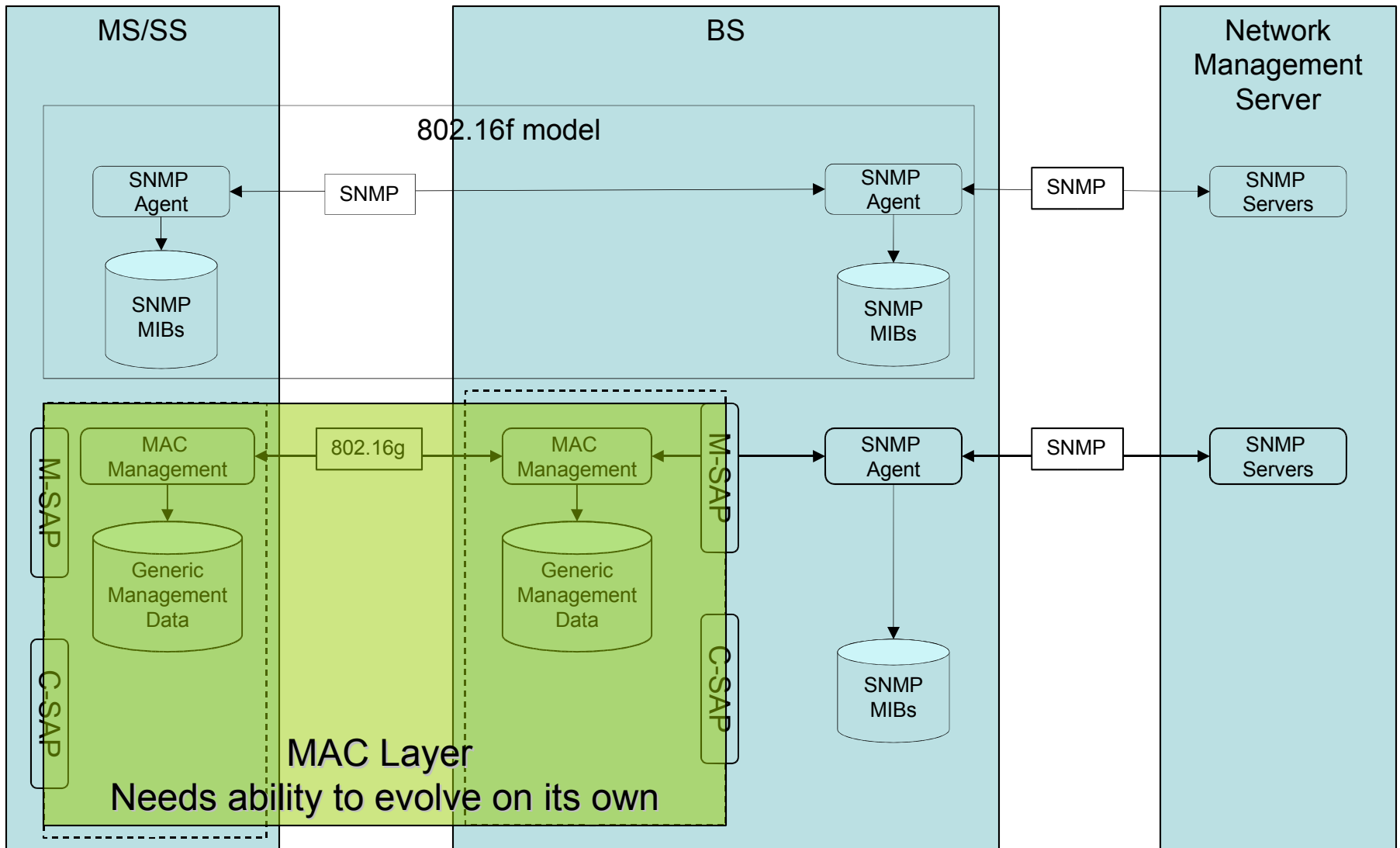
802.16f Fixed MIB Definition & Use

- Defines an SMIv2 protocol neutral MIB with SNMP as most likely protocol for use
 - Two MIBs : (1) wmanIfMib and (2) wmanDevMib defined
- Both (1) & (2) mandatory on BS. Also mandatory on SS implementing SNMP.
 - SNMPv2 compatible, SNMPv3 optional but recommended for secure and flexible access to MIB
 - **Important Implications!:** If SNMP is not used over the air, then SS need not implement MIBs (1) and (2).
 - MAC management messages or some other protocol required to manage SS
 - Parameters definitions if not using MIBs it is currently undefined (as 802.16f does not cover)

Mobile MIBs Definition and use

- 802.16i project proposed
- Understanding is:
 - A protocol neutral definition will be done using IRP methodology
 - SNMP MIB will be one of the solution sets
 - XML/CORBA based solution sets also may be defined
- Over the Air definitions will still need to be optimal

Impact of Location of MIBs



Recommendation

- Option 1:
 - Define MIB within the MAC Management Entity (ME)
- Option 2:
 - Define MIB outside MAC Management Entity
- Option 3:
 - Define MIB partially within ME and partially without
 - Allows implementations to scale over the SAP interfaces
 - Allows MAC layer protocol independence

Discussion

Backup

Architectural Model

