

# Updated Proposal for an MSTP- MIB, and .1ad MIB extensions

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# Where we are with MIBs

1. Current 802.1 position is that all new projects will include an SNMP MIB (when appropriate)
2. Some 802.1 projects occurred or progressed within the 'grey area' of the decision above and don't have a MIB (e.g. 802.1ad, 802.1s, Q-Rev)
3. A separate 802.1 project will be needed to fill in the 'grey areas'
4. IETF is wrapping up work on RSTP extensions. This is the bridge WG's final work item.
5. 802.1 has received proposals for MSTP MIBs, but not a lot of progression of those documents.

# MSTP MIB Contributions

Current documents available in docs2004

- ruzin-mstp-mib-00
- malhotra-mstpmib-01
- frattura-mstp-mib-0411.txt

<http://www.ieee802.org/1/files/public/docs2004>

# Current Situation

- Proposed project would be an amendment to 802.1Q-Rev.
- No IETF RFC required, but close MIB Doctor review is necessary
- Current document creation strategy:
  - Start with Ruzin text as base text for MIB
  - Ruzin, et al, to include new objects for clause 12 of 802.1ad
  - Ruzin, et al, to align with RSTP MIB work from IETF
  - Ruzin, et al, produce an ASCII MIB file
  - ‘Someone’ in 802.1 incorporates into 802.1Q document.

# Expected Deliverables

- PAR and 5 Criteria to start a project
- ASCII MIB
- Framemaker amendment document (i.e. the standard we will actually ballot on)
  - Updated portions of base document
  - Management object cross reference table
  - MIB
  - Security considerations and other typical IETF boilerplate

# Scope

- This standard defines SMIv2 (IETF STD 58) MIB modules for the management of VLAN-aware Bridge capabilities including Spanning Tree Protocols and Provider Bridges.

ptc2

ptc1

## Slide 6

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**ptc1**

And any necessary updates to 802.1Q to represent the management variables

Paul Congdon, 11/15/2004

**ptc2**

This standard defines SMIV2 (IETF STD 58) MIB modules for the management of VLAN bridge capabilities including Spanning Tree Protocols and Provider Bridges

Paul Congdon, 5/12/2005

# Purpose

- The purpose of this standard is to update and complete SMIv2 (IETF STD 58) MIB modules that support standardized management of the capabilities defined in Std 802.1Q.



# Reason

- SMIv2 (IETF STD 58) MIB modules accessed via SNMPv3 (IETF STD 62) are a standard method of managing IEEE 802.1 bridge functionality. However, there is no standardization effort in place to define MIB modules for the recently completed enhancements to Std IEEE 802.1Q. This amendment will specify such MIB modules.

# 5 Criteria

## 1. Broad Market Potential

This project will enhance the manageability of all 802.1 bridges supporting Std IEEE 802.1Q. Std IEEE 802.1Q is the accepted standard for a network of VLAN-aware Bridges.

## 2. Compatibility

This project will define MIB modules in compliance with IETF STD 58. The definition of the managed objects shall be compatible with existing management standards.

# 5 Criteria (cont)

## 3. Distinct Identity

There are no other IEEE projects with the same scope and purpose. The IETF Bridge Working Group is no longer accepting new work items and has requested that IEEE 802 take on this work item.

## 4. Technical Feasibility

A number of vendor specific proprietary MIB modules exist today which are shipping commercially. A number of non-commercial MIB modules have also been developed. The proposed MIB module will be modeled after these existing, proven solutions.

# 5 Criteria (cont)

## 5. Economic Feasibility

SMIv2 MIB modules are widely deployed today. Experience has shown that implementing SMIv2 MIB modules does not incur any significant incremental costs.