

Network Working Group  
Request for Comments: 4663  
Category: Informational

D. Harrington, Ed.  
Effective Software Consulting  
September 2006

## Transferring MIB Work from IETF Bridge MIB WG to IEEE 802.1 WG

### Status of This Memo

This memo provides information for the Internet community. It does not specify an Internet standard of any kind. Distribution of this memo is unlimited.

### Copyright Notice

Copyright (C) The Internet Society (2006).

### Abstract

This document describes the plan to transition responsibility for bridging-related MIB modules from the IETF Bridge MIB Working Group to the IEEE 802.1 Working Group, which develops the bridging technology the MIB modules are designed to manage.

## Table of Contents

1. Introduction .....	2
1.1. Motivation .....	3
2. New IEEE MIB Work .....	3
2.1. New MIB PARs .....	3
2.2. IEEE MIB Modules in ASCII Format .....	4
2.3. OID Registration for New MIB Modules .....	5
3. Current Bridge MIB WG Documents .....	6
3.1. Transferring Current Bridge MIB WG Documents .....	6
3.2. Updating IETF MIB Modules .....	6
3.3. Clarifications on Variables Mapping and Compliance .....	8
4. Mailing List Discussions .....	9
5. IETF MIB Doctor Reviews .....	9
5.1. Introduction .....	9
5.2. Review Guidelines .....	10
5.3. Review Format .....	13
5.4. Review Weight .....	14
6. Communicating the Transition Plan .....	15
7. Security Considerations .....	15
8. IANA Considerations .....	15
9. Intellectual Property Considerations .....	16
Appendix A. Contributors .....	18
Appendix B. Sample Text for IEEE to Request Rights from Authors ..	19
Normative References .....	20
Informative References .....	20

## 1. Introduction

This document describes the plan to transition responsibility for bridging-related MIB modules from the IETF Bridge MIB WG to the IEEE 802.1 WG, which develops the bridging technology the MIB modules are designed to manage. The current Bridge MIB WG documents are

- o "Definitions of Managed Objects for Bridges" [RFC4188],
- o "Definitions of Managed Objects for Bridges with Rapid Spanning Tree Protocol" [RFC4318]
- o "Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering, and Virtual LAN Extensions" [RFC4363], and
- o "Definitions of Managed Objects for Source Routing Bridges" [RFC1525].

This document is meant to establish some clear expectations between IETF and IEEE about the transition of Bridge MIB WG MIB modules to the IEEE 802.1 WG, so that the plan can be reviewed by the IESG, IAB, IETF, and IEEE. Some case-by-case situations might arise, which will be handled by the appropriate liaisons, but this document describes the general strategy.

### 1.1. Motivation

Having SNMP MIB modules to provide management functionality for its technologies is important for the 802.1 community, so it needs to charter this work as part of the Project Authorization Requests (PARs) for each new project, to ensure that resources are being mobilized for execution. This is also true with respect to MIB support for already completed 802.1 projects - maintenance projects need to include the development of SNMP MIB modules.

The IESG has mandated that IETF WGs that produce a protocol are also required to develop the corresponding MIB module rather than leave that to "the SNMP experts" to do later. Part of the motivation was obviously to make the protocols more manageable, but part of the motivation was also balancing the workload better and getting the content experts more involved in the management design. If such work comes into the IETF from other standards development organizations (SDOs), then we encourage the other SDO to bring in subject matter expertise to work with us, or, even better, to take the lead themselves.

The manpower problem is certainly an aspect that is relevant. IEEE 802 MIB documents could be developed in the IETF, but only if the subject matter experts come to IETF to participate in (lead) the work. The content experts need to be more involved in the MIB module development, and resources need to be dedicated to completing the work, whether editing is done in the IEEE or the IETF. The IETF finds it acceptable if other organizations (like IEEE 802) do MIB documents themselves, and the IETF offers to help review them from an SNMP/MIB/Structure of Management Information (SMI) perspective. This is true even after the transition, since quality MIB modules are important for smooth management of the Internet and the technologies it runs on.

## 2. New IEEE MIB Work

### 2.1. New MIB PARs

The IEEE-SA Standards Board New Standards Committee (NesCom) deals with the Projects Approval Requests; see <http://standards.ieee.org/board/nes/>. PARs are roughly the

equivalent of IETF Working Group Charters and include information concerning the scope, purpose, and justification for standardization projects.

Following early discussions concerning the transfer of MIB work from the IETF Bridge MIB WG to the IEEE 802.1 WG, the development of SMIV2 MIB modules associated with IEEE 802.1 projects has been included within the scope of the work of new projects.

The latest Project Approval Requests (PAR) of the 802.1 projects, starting with the P802.1ah (Provider Backbone Bridges) approved in December 2004, include explicit text on this respect.

For example, the PAR form of the IEEE 802.1ah, Provider Backbone Bridges [PAR-IEEE802.1ah], includes in Section 13, "Scope of Proposed Project", an explicit reference to 'support management including SNMP'.

Although it is not mandatory that the MIB development work be specified explicitly in a new PAR to have the work done (see work done in IEEE 802.1AB [IEEE802.1AB] and IEEE 802.1AE [IEEE802.1AE]), it is recommended that IEEE 802.1 WG PARs include explicit wording in the scope section wherever there is a need for MIB development as part of the standard.

Since the IETF Bridge MIB WG does not intend to develop MIB modules in the future, submitters of new work in the bridge management space should be directed to the IEEE 802.1 WG, and it should be recommended that they not publish their proposed MIB modules as Internet-Drafts.

## 2.2. IEEE MIB Modules in ASCII Format

Making MIB modules freely and openly available in an ASCII format will be a critical factor in having the SNMP community accept the transfer of 802.1 MIB development from IETF Bridge MIB WG to IEEE 802.1 WG. Although 802.1 can certainly decide to publish MIB modules only in the PDF format that they use for their documents, without publishing an ASCII version, most network management systems can import a MIB module that is in ASCII format but not one in PDF format. Not publishing an ASCII version of the MIB module would negatively impact implementers and deployers of MIB modules and would make IETF review of MIB modules more difficult.

The 802.1 WG web site requires a password for access to standards in development. The WG has started making the MIB module portion of their documents available as separate ASCII files during project development and allowing IETF participants to access these documents for pre-standard review purposes.

IEEE 802 has a policy whereby approved specifications are available for a fee for the first six months after approval, and freely available six months after they are approved. Once the specification is approved, the ASCII version of the MIB module is made freely available on the 802.1 WG website (see <http://www.ieee802.org/1/files/public/MIBs/> or <http://www.ieee802.org/1/pages/MIBS.html>).

There may be some issues about what gets included in the freely available specification. The SMIV2 MIB module alone will probably be insufficient; some discussion of the structure of the MIB, the relationship to other MIB modules, and security considerations will also need to be made available to ensure appropriate implementation and deployment of the MIB module within the Internet environment. For most implementers, the freely available specification six months after approval will be adequate.

### 2.3. OID Registration for New MIB Modules

The IETF and IEEE 802 have separate registration branches (arcs) in the Object Identifier (OID) tree. The Bridge MIB modules are registered under the IETF branch, and some assignments are maintained by IANA. The administration of the IEEE 802 arc is documented in [IEEE.802b].

As the IEEE 802.1 WG updates the IEEE 802.1 standards, the changes may include needed modifications to supplement the existing tables. This can be handled by developing an IEEE MIB module that augments the existing tables, or that reuses the indexing of the existing tables. The new modules can be registered under the 802.1 registration branch, as was done with the 802.1X MIB module.

When the changes only require the addition of one or two objects to the existing MIB modules, it may seem simpler for the 802.1 WG to define additional managed objects within the IANA-controlled registration tree. This approach is not recommended because of the difficulties of coordinating the changes between the two organizations, and of working the changes through the processes while trying to remain timely for each organization. Such additions would probably require approval by the Area Directors of Operations and Management after IETF MIB Doctor review. This would create dependencies between the work of the two organizations, and it might generate special cases for IANA to prevent the IEEE from being bogged down by IETF processes.

The approach of developing an IEEE MIB module and defining a new compliance clause is simpler than dealing with such dependencies.

We need a balance between disruption to existing implementations and efficiency in making changes. Keeping the existing trees in their place minimizes disruption to existing implementations.

### 3. Current Bridge MIB WG Documents

#### 3.1. Transferring Current Bridge MIB WG Documents

During review of the legal issues associated with transferring Bridge MIB WG documents to the IEEE 802.1 WG, it was concluded that the IETF does not have sufficient legal authority to make the transfer without the consent of the document authors.

RFC1286, RFC1493, and RFC1525 apparently precede any specific IETF document describing the copyright and intellectual property rights that authors grant to the IETF. RFC2674 falls under RFC 2026 [RFC2026] rules. The three recent updates, [RFC4188], [RFC4318], and [RFC4363], fall under BCP 78, as documented in RFC3978 [RFC3978].

To permit them to perform maintenance and development of derivations works from documents containing the BRIDGE-MIB [RFC4188], P-BRIDGE-MIB, Q-BRIDGE-MIB [RFC4363], and RSTP-MIB [RFC4318], the IEEE 802.1 WG will need to get permission from the authors and/or the companies to whom the authors have assigned their intellectual property rights in these documents.

The IETF legal counsel for IPR matters and the IEEE Standards Association Manager of Standards Intellectual Property have agreed upon a sample letter for use by the IEEE 802.1 WG to request the necessary permissions from the authors, which is shown in Appendix B. The Bridge MIB WG chairs reviewed the author lists for the documents and provided the list of authors and their last known addresses and the documents with which they were associated to the IEEE Standards Association Manager of Standards Intellectual Property.

The IETF will retain all the rights granted at the time of publication in the published RFCs.

#### 3.2. Updating IETF MIB Modules

The updates to the Bridge MIB WG documents addressed changes documented in 802.1t, 802.1u, 802.1v, and 802.1w. These amendments were merged with 802.1D-1998 by the IEEE 802.1 WG to form 802.1D-2004. The Bridge MIB WG did not address changes that resulted from that merger of documents.

The 802.1 WG will need to work through the management objects in the existing documents to determine whether they are consistent with new emerging specifications, including 802.1D-2004. During the final work on these documents in the Bridge MIB WG, there were some issues that we decided not to resolve, which allows them to be dealt with as part of the future work in the 802.1 WG.

Work on the following items was deferred to the IEEE:

- o The 'autoEdgePort' parameter (802.1D-2004 clause 17.3.3).
- o The BridgeID object.
- o References to 802.1D-1998 were not updated to 802.1D-2004.
- o Some objects in RFC4363 may have been obsoleted in 802.1D-2004
- o Description of dot1dPortOutboundAccessPriority seems wrong, but it followed the description in 802.1D-1998.
- o An issue was raised concerning dot1dTpPortInFrames and dot1dTpPortOutFrames. This is an issue left over from RFC 1493.

It was thought that the IEEE might be able to write separate documents containing updates to their technologies, such as 802.1Q, and to include a separate MIB module to augment the IETF MIB modules. However, recent changes to the IEEE standards are expected to require that the way the MIB tables are INDEXED be changed, which is not allowed under SMI rules, so the IEEE will need to rewrite the MIB modules and assign object identifiers under the ieee802 branch.

For backwards compatibility, the existing IETF documents will still be valid and remain unchanged.

If an 802.1 WG document must update or obsolete the IETF version of a Bridge MIB document, the 802.1 WG can create and submit an internet-draft to the IESG to be published as an RFC that points to the openly available IEEE copy and the IEEE standard. The IESG would need to approve the publication of the RFC. The RFC status would be reflected in the RFC-INDEX and also in the database, so it will be reflected on the RFC-Editor web page. Thus, we don't have a problem with synchronization between the copies being published.

### 3.3. Clarifications on Variables Mapping and Compliance

As the 802.1 WG handles the MIB development, the IEEE-standard "managed variables" and the associated IEEE MIB module objects will probably correspond, as many existing BRIDGE-MIB objects already correspond to 802.1 management variables, such as these from 802.1Q.

Virtual Bridge MIB object	IEEE 802.1Q-2003 Reference
dot1qBase	
dot1qVlanVersionNumber	12.10.1.1 read bridge vlan config
dot1qMaxVlanId	12.10.1.1 read bridge vlan config
dot1qMaxSupportedVlans	12.10.1.1 read bridge vlan config
dot1qNumVlans	
dot1qGvrpStatus	12.9.2.1/2 read/set garp applicant controls

IEEE allows definitions to be clarified in a manner that can actually alter the semantics of a managed variable somewhat, such as by changing the range. SMI rules generally prevent changing the semantics of defined MIB objects without obsoleting the current object and replacing it with an object with a new descriptor and OID registration. It is expected that, once both an IEEE MIB definition and the "managed variable" descriptions are in the same document, this problem will go away, as IEEE can update both at the same time in the approved manner.

The need to fix a description in an IETF Bridge MIB module in a manner that would not be SMI legal would precipitate the need to define an IEEE MIB module, which might copy and replace the whole IETF MIB module or just add the necessary objects. Copying the IETF MIB module, changing the descriptors, and reassigning new IEEE OIDs would not be backwards compatible, and existing applications would need to be updated to access the new objects. Therefore it is recommended that the IETF MIB module not be copied and modified unless doing so is really necessary.

The current practice in the 802.1 WG is to define the management variables and then a mapping table to associated MIB module objects (as shown above). The 802.1 WG could redefine the mapping from an IEEE managed variable to a new IEEE MIB object if the 802.1 management variable semantics changed, thus allowing the 802.1 WG to 'do it right' by SMI rules, supplementing the old MIB object with a new one. An updated mapping would be reflected in the compliance clause of the supplemental SMIV2 MIB module; it may be desirable to document the old mapping information in the description clause of the new object in the SMIV2 MIB module.

Often, the mapping of 802 variables to MIB objects isn't a 1:1 mapping and doesn't have to be. In the future, 802.1 variables may be invented with Web-based services in mind, but today the primary focus is on SNMP usage, and incorporating MIB modules into the specs themselves will likely further that focus. The level of redirection that exists today between 802 variables and MIB objects might be useful for the transition process when 802.1 management variable semantics are changed and MIB objects are supplemented.

The existing Bridge documents represent the current state of bridging management, and the documents contain compliance clauses describing the current requirements to be compliant to the IETF standards. As the IEEE develops addition MIB modules, new compliance clauses will define the new "state of the art", without needing to obsolete the old MIB objects or the old compliance clauses. Therefore, the plan is that the current Bridge MIB modules will be "frozen in time", and updated only via the development of independent MIB modules by the 802.1 WG.

#### 4. Mailing List Discussions

The Bridge MIB WG has completed its documents, and the WG has been closed.

The mailing list will remain open for a while. The mailing list administrators will discourage discussion of ongoing IEEE MIB module work on the Bridge MIB WG list and ask that the discussion be moved to the IEEE list, with a notice comparable to the following:

This work is out of scope for the Bridge MIB WG mailing list. The appropriate mailing list for IEEE 802.1 MIB module discussion is STDS-802-1-L@listserv.ieee.org.

To subscribe to the STDS-802-1-L list, go to

<http://www.ieee802.org/1/email-pages/>

To see the general information about 802.1, including how they work and how to participate, go to <http://www.ieee802.org/1/>

To see presentations on the technology, go to

<http://www.ieee802.org/1/files/public/> and look in the docs2004, docs2005, and docs2006 directories.

#### 5. IETF MIB Doctor Reviews

##### 5.1. Introduction

The leaders of the Bridge MIB WG, 802.1 WG, IETF O&M area, and IEEE 802 project have discussed having IETF MIB Doctors review IEEE 802 developed MIB modules. This is a loose offering.

The expectation is that IETF will maintain a group of MIB Doctors who can review IEEE 802 - developed MIB modules, when a MIB Doctor is available and willing to do such review. It is the choice of individual MIB Doctors to provide technical advice and MIB Doctor reviews, and it is the willingness of the 802.1 editors and the support of the 802.1 chairs that determine whether the advice is accepted. This is not as formalized as it is in the IETF.

In the IETF, the O&M area directors get "pushed" by other area directors to have MIB module documents reviewed by MIB Doctors when they start to come to WG Last Call, IETF Last Call, and certainly no later than when they appear on the IESG agenda. This demand requires prioritization of requests for MIB Doctor reviews by the area directors and prioritization by MIB Doctors when deciding whether to accept a request to review documents.

When there are many IETF MIB documents in the queue and an IEEE MIB module document comes along for review, it will be the choice of the individual MIB Doctors whether to accept such a request, and how to prioritize their work.

It will be helpful to MIB Doctors if the 802.1 chair requests a review early in development, after a MIB module design has been established but before an editor has done much detailing of the MIB module, so that a MIB Doctor can ensure that the table relationships and indexing are reasonable. Then it will be helpful if the 802.1 chair requests reviews only for important ballots, such as sponsor ballots, rather than for every revision.

It is recommended that the 802.1 WG establish its own MIB Doctor review team, to provide a review of MIB modules and to resolve most issues before requesting a review from the IETF MIB Doctors. This will help the 802.1 WG avoid delays caused by dependency on IETF MIB Doctors, and pre-reviewed documents will make it easier for an IETF MIB Doctor to find time to perform a requested review. The IETF is willing to make a loose offering to help the 802.1 WG establish and train such an IEEE MIB Doctor team.

## 5.2. Review Guidelines

The IETF has developed Guidelines for Authors and Reviewers of MIB Documents [RFC4181] so that authors and other WG members can check their document against the guidelines before requesting a MIB Doctor review. The 802.1 WG editor should use the RFC4181 guidelines before requesting a MIB Doctor review.

RFC4181 also intended to help editors by guiding MIB Doctors, so reviews by different MIB Doctors will remain fairly consistent. Each MIB Doctor has his or her own "pet peeves", and RFC4181 can help an editor know whether a review point is based on the consensus of the MIB Doctors, or on a pet peeve.

Many SMI constraints, IETF editing constraints, and best current practices are discussed in RFC4181. However, many aspects of good MIB design (e.g., table fate-sharing, good index choices) are more art than science and are not discussed in the guidelines. Those might be more useful to other SDOs (and IETF editors) than guidelines relating to IETF boilerplate requirements. The MIB Doctors have discussed starting a design guidelines document.

RFC4181 was used for reviewing the 802.1AB [IEEE802.1AB] and 802.1AE [IEEE802.1AE] documents. During those reviews, there were some anomalies about the IEEE use of the guidelines that we need to evaluate further.

For example, in the IETF boilerplates, some of the terms have different meanings in IETF and IEEE, and different editing style guidelines are being used by the different bodies. It would be good to develop an 802 MIB boilerplate that is consistent with the IETF boilerplate, in purpose if not in terminology.

The IETF uses [RFC4181] as a reference document for IETF documents containing MIB modules. It is recommended that in time IEEE 802.1 WG develop its own guidelines for IEEE MIB modules review. Until this happens, Section 3 (General Documentation Guidelines) and Section 4 (SMIv2 Guidelines) in RFC4181 can be used, with the following exceptions and modifications:

- o In the introductory paragraphs of Section 3, the list of sections that must be included in a MIB document should be adapted to the IEEE needs and style guide.
- o Sections 3.1 through 3.4 apply as in the IETF document, with the mention that the IETF boilerplate could be edited to comply to the IEEE needs and style guide.
- o Section 3.5 (IANA Considerations) does not apply but may be replaced by a section with IEEE recommendations on naming and OID space assignments.
- o Sections 3.6 does not apply.

- o Section 3.7 (Copyright Notices) does not apply and may be replaced with text corresponding to the IEEE copyright rules. The exception is the case where a document was originally issued by the IETF, and then taken over by the IEEE, in which case, unless the document authors agree otherwise, notices concerning the IETF copyrights (as described in Section 3.7) and IEEE copyrights must be included.
- o Section 3.8 (Intellectual Property) does not apply and may be replaced with a notice reflecting the intellectual property rules of the IEEE.
- o Sections 4.1 and 4.2 apply as in the IETF document.
- o Section 4.3 (Naming Hierarchy) applies with changes related to the OID root of the IEEE 802.1 MIB modules.
- o Sections 4.4 to 4.8 apply as in the IETF document
- o Section 4.9 applies, but some interesting problems may arise if IETF-designed modules are being taken over and continued by the IEEE. In order to comply to the requirement, the IEEE should continue to work and maintain the MIB module in the IETF OID space.

An IETF MIB document template that contains all the required sections, following RFC Editor guidelines and the MIB review guidelines, is under development to help editors get started developing a MIB module document. The template will help MIB Doctors check new MIB modules more efficiently by providing the most up-to-date MIB module boilerplate, with sections in the preferred order, suggestions for what to include in certain sections, and the references required to support boilerplate text. It is recommended that the IEEE 802.1 WG establish a comparable template, following the IEEE editing guidelines and the RFC4181 guidelines, where appropriate.

Such an IEEE template could simply be the management clause of an 802.1 document, to be filled in with technology-specific information. In 802.1AB, the MIB clause was restructured to include modified IETF boilerplates and security considerations. This might be a good start on such an IEEE template. It would be helpful to MIB Doctors and editors if the unmodified template was available in ASCII format for automated comparison to a document in development, to verify that the appropriate boilerplate text is being used.

When the 802.1 WG creates a PAR for 802.1 Bridge MIB maintenance, the creation of such a template might be included in the PAR.

The IETF MIB documents include the following text relative to the Internet Management Framework as part of the standard boilerplate:

For a detailed overview of the documents that describe the current Internet-Standard Management Framework, please refer to Section 7 of RFC 3410 [RFC3410].

Managed objects are accessed via a virtual information store, termed the Management Information Base, or MIB. MIB objects are generally accessed through the Simple Network Management Protocol (SNMP). Objects in the MIB are defined using the mechanisms defined in the Structure of Management Information (SMI). This memo specifies a MIB module that is compliant to the SMIV2, which is described in STD 58, RFC 2578 [RFC2578], STD 58, RFC 2579 [RFC2579], and STD 58, RFC 2580 [RFC2580].

It is recommended that the IEEE 802.1 standards that contain MIB modules include a similar sub-section in the MIB section of the IEEE document, and the appropriate references in their reference section.

If IEEE 802.1 WG wants to craft its own guidelines, based on RFC4181, it will need to get the author's permission.

### 5.3. Review Format

The 802.1 WG uses a template for comments, in the following format, so the onus to provide new text is on the reviewer, not on the editor.

NAME:

COMMENT TYPE:

[E=Editorial, ER=Editorial Required]

[T=Technical, TR=Technical Required]

CLAUSE:

PAGE:

LINE:

COMMENT START:

COMMENT END:

SUGGESTED CHANGES START:

SUGGESTED CHANGES END:

MIB Doctor reviews in the IETF are typically done in simple text email and often contain a long list of review comments. MIB Doctor reviews sometimes raise a general design issue rather than an issue with specific text, and some MIB Doctor comments refer to "global" problems, such as many objects that do not specify persistence requirements.

For global problems, IETF MIB Doctors are not required to provide the replacement text for each of these instances when doing 802.1 MIB module reviews. For example, if the naming of objects does not follow recommended conventions throughout the document, the MIB Doctor can point out the relevant clause in RFC4181 without suggesting each replacement object name. This is an important concession to the IETF MIB Doctors, to better suit the nature of their reviews, even though this puts the onus on the editor to fix the problem without explicit suggested changes.

During the transition, the chair and vice-chair of the 802.1 WG are willing to accept simple emails, as long as they give enough information to understand what the problem is and how to fix it. The comments should include a problem description, a suggested resolution, and a page and line number. It would be helpful if comments are submitted in the preferred format, since this makes it easier for the editor to understand exactly what is being requested, to log the comment for review, and to review the comment in the meeting environment. The majority of MIB comments can usually be handled outside the official balloting process.

#### 5.4. Review Weight

In the IETF, MIB Doctor review happens as part of the process of approving a standard. When a document is submitted to the IESG for approval as a standard, the area director/IESG requests a MIB Doctor review. Failure to pass the review can stop forward progress of a document in the standardization process at the discretion of the area director. MIB Doctors take their role seriously and perform detailed reviews.

In the IEEE, the board that approves a standard is separate from the 802.1 WG, and the reviews MIB Doctors will do according to this transition plan are done within the 802.1 WG. So a MIB Doctor review in the 802.1 WG is akin to an IETF WG chair asking for a MIB Doctor to sanity-check the work, rather than to a formal "MIB Doctor review".

Formally, comments from any origin carry the same weight in 802.1; even voting status in the WG doesn't make one's comments more weighty than those of a non-voter. The 802.1 WG is not permitted to ignore any comments, regardless of origin. Serious comments are always taken seriously and never ignored.

The IEEE typically requires that comments be officially submitted in a specific format, including proposed replacement text, which is then reviewed at the meetings, and the decisions are documented in disposition documents. These comments and dispositions are available

from the 802.1 private website. IETF participants can be given the password to the website by the 802.1 WG chair, so that they can see previous and current comments and dispositions.

We should not give the impression that the IEEE documents have received the organized, coordinated, and formalized MIB Doctor review as done in the IETF, if such review is done on an ad hoc basis, and not necessarily as part of the advancement process. We need to be clear what is said, because the phrase "This document has passed MIB Doctor review" has quite some weight in the IETF. We need to clarify whether to describe the reviews done as having been done by an "IETF MIB Doctor" or "IEEE 802 MIB Doctor", or by a generic "MIB Doctor".

MIB Doctor reviews be copied to the document editor, and to the 802.1 chair.

## 6. Communicating the Transition Plan

The transition plan was discussed in the Bridge MIB WG at IETF61 and included a presentation, "Bridge MIB Transition to IEEE 802.ppt", available in the proceedings.

The intent to transition was also posted on the Bridge MIB WG mailing list during notices of the Bridge MIB WG closure, including the WG Action announcement of February 15, 2006.

The transition was discussed with the 802.1 WG at the San Antonio, San Francisco, and Garden Grove meetings. Presentations are available in <http://www.ieee802.org/1/files/public/docs2004/new-bridge-mib-transition-1104.ppt>, <http://www.ieee802.org/1/files/public/docs2005/liaison-ietf-congdon-0705.pdf>, and <http://www.ieee802.org/1/files/public/docs2005/liaison-ietf-congdon-0905.pdf>.

## 7. Security Considerations

This document describes a plan to transition MIB module responsibility from the IETF Bridge MIB WG to the IEEE 802.1 WG. It does not impact security.

## 8. IANA Considerations

Although this document discusses issues related to IANA assignment of OIDs, no IANA actions are required by this document.

## 9. Intellectual Property Considerations

On November 29, 2005, a teleconference was held that included Jorge Contreras, Scott Bradner, Bernard Aboba, Bert Wijnen, and David Harrington, to discuss the Intellectual Property Issues. The following is a summary of the conclusions:

The IETF/ISOC gets a non-exclusive copyright license from RFC authors so that the IETF can publish RFCs, let third parties translate RFCs into other languages, let third parties reproduce RFCs as-is and create derivative works within the IETF standard process. The author(s) retain all of their rights other than the right to withdraw the permission for the IETF to do the above.

If anyone (including the IEEE) wants to reproduce any RFC as-is, he or she can do so without any specific permission, but it has to be "as-is" (and that includes the ISOC copyright notice) since the right for third parties to reproduce RFCs is part of the rights the IETF gets from the author(s).

The author(s) of a RFC can tell another group (e.g., the IEEE) that the other group can produce its own versions of the RFC, since the IETF does not get from the author(s) the right to stop them from doing so.

If the author(s) give another group the permission to create derivative works, this has nothing (legally) to do with the IETF, since the agreement is just between the author(s) and the other group. Because of that, there is no reason for an ISOC copyright to appear, since the new document is not an IETF document. It would be nice if the other group were to include a note to say that their document is based on RFC XXXX, and the authors can insist on that if they want to, but the IETF has no formal role in granting permissions, so the IETF cannot require the pointer to the RFC.

There is a desire to ensure that the IETF has sufficient rights to do derivatives of its own works. If the IETF decides, as part of a liaison arrangement with another SDO, to hand over maintenance of a specification to them, and if the authors give the other SDO permission to create derivative works, the IETF still retains the permission granted by the authors to create derivative works within the IETF standard process.

The IETF strongly recommends that any derivative works developed by another standards body DO acknowledge that the work builds on prior IETF work, with reference to the RFC(s) the work derives from. MIB modules compliant to the IETF Best Current Practices documented in RFC4181 contain REVISION clauses that document how/where earlier versions were published.

On January 11, 2006, another teleconference was held, to review the legal issues with Claudio M. Stanziola, the IEEE Standards Association Manager of Standards Intellectual Property. As a result of that discussion, the IETF Legal Counsel on IPR matters has crafted a sample document that other SDOs may use as a guideline for producing their own documents on "how to ask the question" to solicit authors' permissions. The template is included in this document in Appendix B.

## Appendix A. Contributors

Dan Romascanu  
Avaya  
Atidim Technology Park, Bldg. #3  
POB 58173  
Tel Aviv, 61581  
Israel  
Phone +972 3-645-8414  
EMail: dromasca@avaya.com

Tony Jeffree  
Chair, 802.1 WG  
11A Poplar Grove  
Sale  
Cheshire M33 3AX  
UK  
Phone: +44 161 973 4278  
EMail: tony@jeffree.co.uk

Paul Congdon  
Vice Chair, 802.1 WG  
Hewlett Packard Company  
HP ProCurve Networking  
8000 Foothills Blvd, M/S 5662  
Roseville, CA 95747  
US  
Phone: +1 916 785 5753  
EMail: paul.congdon@hp.com

Bert Wijnen  
Lucent Technologies  
Schagen 33  
3461 GL Linschoten  
NL  
Phone: +31-348-407-775  
EMail: bwijnen@lucent.com

Bernard Aboba  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052  
US  
Phone: +1 425 818 4011  
EMail: bernarda@microsoft.com

## Appendix B. Sample Text for IEEE to Request Rights from Authors

> "Dear Author,

The IEEE P802.1 working group wishes to incorporate portions of IETF RFC XXXX (specifically YYY MIB modules) as part of IEEE Draft Standard P802.1 and to develop, modify and evolve such portions as part of the IEEE standardization process.

Because the authors of contributions to the IETF standards retain most intellectual property rights with respect to such contributions under IETF policies in effect during the development of RFC XXXX, and because you are an author of said document, the IEEE hereby requests that you kindly agree to submit your contributions in RFC XXXX to the IEEE for inclusion in IEEE P802.1. Please note that IETF is aware of and supports this request.

Attached hereto, please find a copyright permission letter template that we ask you kindly to sign and return, granting the aforementioned rights to the IEEE.

Sincerely yours, IEEE"

## References

## Normative References

- [RFC1525] Decker, E., McCloghrie, K., Langille, P., and A. Rijsinghani, "Definitions of Managed Objects for Source Routing Bridges", RFC 1525, September 1993.
- [RFC2026] Bradner, S., "The Internet Standards Process -- Revision 3", BCP 9, RFC 2026, October 1996.
- [RFC3978] Bradner, S., "IETF Rights in Contributions", BCP 78, RFC 3978, March 2005.
- [RFC4188] Norseth, K. and E. Bell, "Definitions of Managed Objects for Bridges", RFC 4188, September 2005.
- [RFC4318] Levi, D. and D. Harrington, "Definitions of Managed Objects for Bridges with Rapid Spanning Tree Protocol", RFC 4318, December 2005.
- [RFC4363] Levi, D. and D. Harrington, "Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering, and Virtual LAN Extensions", RFC 4363, January 2006.

## Informative References

- [IEEE802.1AB] "IEEE Std 802.1AB-2005, Standard for Local and metropolitan area networks - Station and Media Access Control Connectivity Discovery", IEEE Std 802.1AB-2005 IEEE Std, 2005.
- [IEEE802.1AE] "IEEE P802.1AE-2006, Draft Standard for Local and metropolitan area networks - Media Access Control (MAC) Security.", <http://www.ieee802.org/1/files/private/ae-drafts/d4/802-1ae-d4-0.pdf> IEEE Draft, January 2006.
- [IEEE.802b] Institute of Electrical and Electronics Engineers, "Local and Metropolitan Area Networks: Overview and Architecture, Amendment 2: Registration of Object Identifiers", IEEE Standard 802, 2004.
- [PAR-IEEE802.1ah] "<http://standards.ieee.org/board/nes/projects/802-1ah.pdf>", 802-1ah IEEE PAR, December 2004.

- [RFC2578] McCloghrie, K., Perkins, D., and J. Schoenwaelder, "Structure of Management Information Version 2 (SMIv2)", STD 58, RFC 2578, April 1999.
- [RFC2579] McCloghrie, K., Perkins, D., and J. Schoenwaelder, "Textual Conventions for SMIv2", STD 58, RFC 2579, April 1999.
- [RFC2580] McCloghrie, K., Perkins, D., and J. Schoenwaelder, "Conformance Statements for SMIv2", STD 58, RFC 2580, April 1999.
- [RFC3410] Case, J., Mundy, R., Partain, D., and B. Stewart, "Introduction and Applicability Statements for Internet-Standard Management Framework", RFC 3410, December 2002.
- [RFC4181] Heard, C., "Guidelines for Authors and Reviewers of MIB Documents", BCP 111, RFC 4181, September 2005.

#### Author's Address

David Harrington (editor)  
Effective Software Consulting  
Harding Rd  
Portsmouth NH  
USA

Phone: +1 603 436 8634  
EMail: dbharrington@comcast.net

## Full Copyright Statement

Copyright (C) The Internet Society (2006).

This document is subject to the rights, licenses and restrictions contained in BCP 78, and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

## Intellectual Property

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in BCP 78 and BCP 79.

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at <http://www.ietf.org/ipr>.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at [ietf-ipr@ietf.org](mailto:ietf-ipr@ietf.org).

## Acknowledgement

Funding for the RFC Editor function is provided by the IETF Administrative Support Activity (IASA).

