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IANA Guidelines for the Registry of Remote Monitoring (RMON) MIB modules

Status of this Memo

Copyright Notice

Abstract

This document defines the procedures for IANA to administer and maintain the Object Identifier (OID) tree under the Remote Monitoring (rmon) root. This memo also documents the currently assigned values.

1. Introduction

The RMONMIB Working Group so far has maintained its own registry for OID assignments for new MIB modules under the root OID for rmon [RFC2819]. This has worked reasonably well, although errors had to be corrected at a late stage one or two times, and a few now defunct assignments have been made as well.

It is also a somewhat non-standard way of doing things, because normally a new standards track MIB module will get a MIB root assigned at the time that the module is being published as part of an RFC.

This document lists the currently assigned rmon OIDs. It also describes the procedures and rules for new assignments and asks IANA to take over the responsibility for existing and future assignments.

The current assignments are not all too logical. Initially normal MIB OIDs were assigned under rmon, but at a later time the WG used the rmon root OID to create new MIB modules underneath it. Some

people will claim 'an OID is just an OID', and while this is true, it does not make things easier if the organisation of OIDs is not logical. However, we cannot change what has been assigned in the past. From now on, only MODULE-IDENTITY macro (MIB root) assignments will be made (by IANA) under the 'rmon' node. Within a MIB module, the working group authors/editors can then assign their own OIDs according to normal procedures.

2. Currently assigned OIDs under the rmon root

At the time of this writing, the following OIDs have been assigned and IANA has picked up this information in their public registry of assigned values. They are listed as part of the already existing smi-numbers registry at:

http://www.iana.org/assignments/smi-numbers

...mib-2.rmon (1.3.6.1.2.1.16)

The assignments under ...mib-2.rmon were maintained by the RMONMIB Working Group until publication of RFC 3737. Some (early) assignments may not look all too logical. That is true, but that is history and cannot be changed. From now on, only MODULE-IDENTITY macro (MIB root) assignments will be made (by IANA) under the 'rmon' node.

Key: nnn == { rmon nnn }

nnn	descriptor	OID Type	Document
0	rmonEventsV2	Notifications root	[RFC2819]
1	statistics	OID	[RFC2819]
2	history	OID	[RFC2819]
3	alarm	OID	[RFC2819]
4	hosts	OID	[RFC2819]
5	hostTopN	OID	[RFC2819]
6	matrix	OID	[RFC2819]
7	filter	OID	[RFC2819]
8	capture	OID	[RFC2819]
9	event	OID	[RFC2819]
10	tokenRing	OID	[RFC1513]
11	protocolDir	OID	[RFC2021]
12	protocolDist	OID	[RFC2021]
13	addressMap	OID	[RFC2021]
14	nlHost	OID	[RFC2021]
15	nlMatrix	OID	[RFC2021]
16	alHost	OID	[RFC2021]
17	alMatrix	OID	[RFC2021]
18	usrHistory	OID	[RFC2021]
19	probeConfig	OID	[RFC2021]
20	rmonConformance	OID	[RFC2021]
21	mediaIndependentStats	OID	[RFC3273]
22	switchRMON	M-I	[RFC2613]
23	apm	M-I	[RFC3729]
24	available		
25	pmCapsMIB	M-I (defunct)	
26	dsmonMIB	M-I	[RFC3287]
27	interfaceTopNMIB	M-I	[RFC3144]
28	reserved for sspmMIB	M-I	[..rmonmib-sspm-mib-nn.txt]
29	hcAlarmMIB	M-I	[RFC3434]
30	reserved for tpmMIB	M-I	[..rmonmib-tpm-mib-nn.txt]
31	reserved for raqmon	M-I	[..rmonmib-raqmon-mib-nn.txt]
32	reserved for raqmonDs	M-I	[..rmonmib-raqmon-pdu-nn.txt]

Key: xxx == { rmon.rmonConformance xxx }

...mib-2.rmon.conformance (1.3.6.1.2.1.16.20)

xxx	descriptor	OID Type	Document
1	rmon2MIBCompliances	OID	[RFC2021]
2	rmon2MIBGroups	OID	[RFC2021]
3	smonMIBCompliances	OID	[RFC2613]
4	smonMIBGroups	OID	[RFC2613]
5	hcRMON	M-I	[RFC3273]
6	hcRmonMIBCompliances	OID	[RFC3273]
7	hcRmonMIBGroups	OID	[RFC3273]
8	rmonMibModule	M-I	[RFC2819]
9	rmonCompliances	OID	[RFC2819]
10	rmonGroups	OID	[RFC2819]

3. How to request a new assignment for a MIB module

When anyone is writing a internet-draft for which a new assignment is needed/wanted under the rmon OID, then the proper way to do so is as follows:

```
EXAMPLE-MIB DEFINITIONS ::= BEGIN

IMPORTS
  rmon          FROM RMON-MIB

  .. other imports ..

exampleMIB  MODULE-IDENTITY

  ... other normal MODULE-IDENTITY stuff ...

::= { rmon nnn }  -- IANA: please assign nnn
                  -- RFC-Editor: replace nnn with IANA-assigned
                  --             number and remove this note
```

IANA will assign the number as part of the RFC publication process.

4. Security Considerations

This memo describes procedures for IANA assignment of OBJECT IDENTIFIER values, and has no impact on the security of the Internet.

5. IANA Considerations

IANA has picked up the initial set of assignments and integrated them into the existing registry for smi-numbers at:

http://www.iana.org/assignments/smi-numbers

The list is presented in Section 2.

IANA is requested to maintain this registry for future assignments. New assignments can only be made via Standards Action as described in [RFC2434].

IANA will assign the number as part of the RFC publication process.

6. Acknowledgments

This document was produced as a result of discussion between the Operations and Management AD responsible for Network Management and the WG chair for the RMONMIB Working Group. Thanks to Andy Bierman for keeping and administering the registry up to this point in time.

The document has been reviewed by the RMONMIB Working Group.

7. Normative References

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[RFC2819] Waldbusser, S., "Remote Network Monitoring Management Information Base", STD 59, RFC 2819, May 2000.

[RFC3144] Romascanu, D., "Remote Monitoring MIB Extensions for Interface Parameters Monitoring", RFC 3144, August 2001.

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[RFC3287] Bierman, A., "Remote Monitoring MIB Extensions for Differentiated Services", RFC 3287, July 2002.

[RFC3434] Bierman, A. and K. McCloghrie, "Remote Monitoring MIB Extensions for High Capacity Alarms", RFC 3434, December 2002.

[RFC3729] Waldbusser, S., "Application Performance Measurement MIB", RFC 3729, March 2004.

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Acknowledgement

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