On ifType numbers and transmission OID numbers for the 802.16f and 802.16i MIBs

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Base Document:

None.

Purpose:

Use as a basis for negotiations with IANA on ifType numbers and SNMP transmission subtree OID numbers.

802.16f is saying:

9.3.2.1 MIB-2 integration

The Internet Assigned Numbers Authority (IANA) has assigned the following ifType to point-to-multipoint broadband wireless access:

```
IANAifType ::= TEXTUAL-CONVENTION
        SYNTAX INTEGER {
        propBWAp2Mp (184) -- prop broadband wireless access point to multipoint
}
```

WirelessMAN interface table is located under transmission subtree, as follows.

```
wmanIfMib ::= {transmission 184}-- WMAN interface table2
```

IANAifType:

Look at what's assigned in

http://www.iana.org/assignments/ianaiftype-mib.

IANAifType is NOT an OID assignment. It is simply an enumeration! If I do:

get ifType.43

and get back

ifType.43 = 184

Then this MIB allows me to map that to propBWAp2Mp.

The OID assignment is not necessarily coupled to this IANAifType value at all! As it states in http://www.iana.org/assignments/ianaiftype-mib:

> *The relationship between the assignment of ifType values and of OIDs to particular media-specific MIBs is solely the purview of IANA and is subject to change without notice. Quite often, a media-specific MIB's OID-subtree assignment within MIB-II's 'transmission' subtree will be the same as its ifType value. However, in some circumstances this will not be the case, and implementors must not pre-assume any specific relationship between ifType values and transmission subtree OIDs.*

So, where do I find where the OID values under transmission are listed?

Here! -> http://www.iana.org/assignments/smi-numbers

Looking for the text:

Prefix: iso.org.dod.internet.mgmt.mib-2.transmission (1.3.6.1.2.1.10)

You'll find all of the assignments. 184 is currently ***unassigned***!

- **Problem 1**: Actually, we do not have the “right” to the OID 184, as it is unassigned. IANA could theoretically assign it to something else.
- **Resolution 1**: Ask IANA for OID 184 as soon as possible, since 802.16 do not ”own” 184 yet.

- **Problem 2**: We do not know if we have the right to create a MIB and add it to the MIB-II, the way we have done.
- **Resolution 2**: Go ask the IETF Area Director for the Operations and Management Area if we can do that.

If you did pay attention, you noticed that the discussion so far:

1. dealt only with 802.16f and not 802.16i, and
2. has a proposed remedy that does not alter the standard.

So, what about 802.16i?

Proposal for 802.16i:

2. Get a new IANAifType from IANA for 802.16, as proposed in contribution C80216i-06_010r1.doc.
3. Keep using OID ..transmission.184 for hanging in the 802.16 subtree.
   - But this requires that IANA accepts that we use different numbers for ifType and transport OID.