Contact Name:

IEEE 802.3 Working Group

Contact Email:

Stds-802-3

What type of assignment/registration are you requesting?

Generally: requesting the update of IANAIfMau*Bits accordingly since all 802.3 MAU updates from 2013 -> 2015. We have evaluated the 802.3 standard amendments during this time frame and the below are our specific recommendations for updates/changes to the IANAIfMau*Bits:

IfMauType Label	IANAifMauTypeListBits	IANAifMauAutoNegCapBits	dot3MauTypeObj	Introduced in IEEE 802.3 Version	Comments
1000BASE-PX30D 1000BASE-PX30U 1000BASE-PX40D 1000BASE-PX40U	add	N/A	add	802.3bk-2013	Follows: ifMauType: b1000BasePX20U(53),
10GBASE-PRD4 10GBASE-PRU4	add	N/A	add	802.3bk-2013	Follows: ifMauType: b10GbasePRU3(69),
10GBASE-ZR	add	N/A	add	80 km PHY is not specified within the IEEE 802.3ae standard	(no official reference however numerous vendors implemented it…)
40GBASE-R	add? 10GBASE-R Exists!	N/A	N/A?	802.3bj-2014	Should we follow same convention as 10GBASE-R? could be added
40GBASE-KR4	exists	exists	exists		
40GBASE-CR4	exists	exists	exists		
40GBASE-SR4	exists	N/A	exists		
40GBASE-FR	exists	N/A	exists		
40GBASE-LR4	exists	N/A	exists		
40GBASE-ER4	add	N/A	add	802.3bm-2015	

100GBASE-R	add? 10GBASE-R Exists!	N/A	N/A?	802.3bj-2014	Should we follow same convention as 10GBASE-R? could be added
100GBASE-KR4	add	add	add	802.3bj-2014	
100GBASE-CR4	add	add	add	802.3bj-2014	
100GBASE-CR10	exists	exists	exists		
100GBASE-SR10	exists	N/A	exists		
100GBASE-SR4	add	N/A	add	802.3bm-2015	
100GBASE-KP4	add	add	add	802.3bj-2014	
100GBASE-LR4	exists	N/A	exists		
100GBASE-ER4	exists	N/A	exists		

(*"exists"* entries indicate no change is required – these other MAU types were included for brevity)

Assignment of the ***above*** additions to the IANAifMauTypeListBits textual convention, immediately following [<<APPEND?>>]

Assignment of the ***above*** additions to the IANAifMauAutoNegCapBits textual convention, immediately following [<<APPEND?>>]

Assignment of the ***above*** additions to the dot3MauType object identities, immediately following [<<APPEND?>>]

Which registry are you requesting this assignment/registration be made in?

The assignment of the IANAifMauTypeListBits and IANAifMauAutoNegCapBits textual conventions as well as the dot3MauType object identities is contained in the IANA-MAU-MIB. IEEE Std 802.3.1-2013 imports and makes extensive reference to the IANA-MAU-MIB.

https://www.iana.org/assignments/ianamau-mib/ianamau-mib

If possible, please give a brief description of why you need this assignment/registration:

The new MAU types and the associated AutoNeg capability bits listed above were specified in amendments to:

- **IEEE Std 802.3-2012**
  - o 802.3.1 2013 was released after this, presumably no changes. (did not analyse)
- **IEEE Std 802.3bk-2013**
  - o 1000BASE-PX***, 10GBASE–PR,

- **IEEE Std 802.3bj- 2014**
  - 40GBASE-R, 40GBASE-KR4, 40GBASE-LR4,
  - 100GBASE-R , 100GBASE-CR10, 100GBASE-CR4, 100GBASE-KR4, 100GBASE-KP4,
- **IEEE Std 802.3bm-2015**
  - 40GBASE-CR4, 40GBASE-LR4, 40GBASE-ER4
  - 40GBASE-SR4, 100GBASE-SR10
  - 100GBASE-LR4, 100GBASE-ER4
  - 40GBASE-FR
  - 100GBASE-CR4, 100GBASE-KR4, 100GBASE-KP4
  - 100GBASE-SR4

, now published in IEEE Std 802.3-2015, and amendments to:

- IEEE Std 802.3-2015
- IEEE Std 802.3bw-2015
- IEEE Std 802.3by-2016
- IEEE Std 802.3bq-2016
- IEEE Std 802.3bp-2016
- IEEE Std 802.3br-2016

The description of the IANAifMauTypeListBits textual convention states that "…changes in this textual convention SHALL be synchronized with relevant changes in the dot3MauType OBJECT-IDENTITIES." The assignments are imported and referenced in the IEEE8023-MAU-MIB, which is defined in Clause 13 of IEEE Std 802.3.1-2013, "IEEE Standard for Management Information Base (MIB) Definitions for Ethernet."

Additional Information. Please include a reference to the specification or RFC (if available) that defines this number or name space:

IEEE Std 802.3-2015, subclauses 30.5.1.1.2 aMAUType and 30.6.1.1.5 aAutoNegLocalTechnologyAbility, as amended by IEEE Std 802.3bw-2015, IEEE Std 802.3by-2016, IEEE Std 802.3bq-2016, IEEE Std 802.3bp-2016 and IEEE Std 802.3br-2016.