

IANA Interface Type Registry

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with the help of

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Background

- The NETMOD working group is working on a YANG data model for network interfaces
- The idea is to reuse existing IANA registries as much as possible, serializing them into YANG where necessary
- Interface types are important to conditionally augment generic interface configuration objects with interface type specific configuration objects

Observation #1

- Dan Romascanu is currently acting as the expert reviewer for new assignments
- It seems there is no document that defines this IANA registry and provides guidelines about the registries' purpose and goals, likely due to its long history.

Observation #2

- There seems to be a lack of guidelines what constitutes an interface type and what not.
- For example, there is a single interface type for tunnels (and you have to dig into the TUNNEL-MIB to find out the type of tunnel encapsulation this tunnel interface type represents), but then we also have mplsTunnel and gtp interface types.
- There is no way to represent a type hierarchy (e.g. a tunnel interface type is an abstract type for l2tp, gre, sixOverFour, ... interface types).

Observation #3

- Some definitions lack usable descriptions and/or references (some interface types have no description at all).

Observation #4

- There are sometimes no clear guidelines which interface type definition should be used in case there are choices possible.

Observation #5

- There is no private interface number type space that can be used without registering with IANA (e.g. a number space scoped by a PEN).

Questions

- Is it worth trying to improve the current IANA interface type registry?
- If no, would it be acceptable to have another interface type identification scheme for configuration that uses YANG identities instead of a centrally administered number space?