IEEE P802f

March 2020 Electronic Meetings in lieu of Plenary Session in Atlanta, GA, USA

Project Details

- This amendment specifies YANG modules that contain the EtherType information, including a compact human-readable name and description. The name and description for an initial set of EtherTypes are defined for inclusion in the IEEE Registration Authority EtherType public listing. This amendment also addresses errors and omissions in IEEE Std 802 description of existing functionality.

- PAR approved: 2020-02-13

- https://standards.ieee.org/project/802f.html

History

- The IETF has created a YANG model that includes a subset of the IEEE Ethertypes
  - RFC 8519: https://datatracker.ietf.org/doc/rfc8519/
    - Contains ietf-ethertypes YANG module: https://github.com/YangModels/yang/blob/master/standard/ietf/RFC/ietf-ethertypes%402019-03-04.yang
  - Official IEEE Registry: http://standards-oui.ieee.org/ethertype/eth.txt
  - IANA Registry: https://www.iana.org/assignments/ieee-802-numbers/ieee-802-numbers.xhtml

Compare Information

- ietf-ethertype includes items that do not appear in the IEEE registry
  - Examples:
    - wlan decimal: 2114 hex: 0x0842 description: Wake-on-LAN
    - srp (Stream Reservation Protocol) the abbreviation is used and doesn't appear in the IEEE registry
- The some of the descriptions in the ietf-ethertype module are missing information found in the IEEE registry

Observations about ietf-ethertypes module

- It is a subset of information found in the IEEE registry
- There are "well-known" names that are included that are not part of the IEEE registry
- There are differences in description
- There are ethertypes that aren't defined in the IEEE registry
- The implementation uses enums
  - So the list of ethertypes can't be expanded (as it could be if identities were used)

Discussion points

- Process for updating IEEE Registry to include "well-known" name to be established
- Determine if there is a way to support generating the ieee ethertypes module from the IEEE Registry
  - Marc has developed a tool
  - How to capture the output as part of an IEEE Standard?
- Determine if there is an agreeable way to produce a full ieee ethertypes module, but do it in such a way to allow consumers to load only a subset of the ethertypes (concern with size of model and how management systems would display the full list)

Next Steps

- Test the automatic generation
- Discuss options with YANG Doctors
- Agree on how to create the IEEE document for the ethertypes module
- RAC
  - Well Known name
  - Short Description
- Proposals for subsetting
- Get the missing ethertypes added to the IEEE ethertypes list (bigger RAC issue)