IEEE RAC EtherType ad hoc
status update

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EtherType adhoc – phase 1

- Request from 802.1 WG to have early coordination on P802f
  - YANG model for EtherTypes
- Created at Aug 7, 2020 RAC
- Attendees included
  - RAC members
  - RAC administrator
  - P802f editor and YANGsters chair
  - IEEE IT staff as-needed

- Adhoc met 8 times
  - Oct 8, 2020
  - Oct 15, 2020
  - Oct 29, 2020
  - Nov 12, 2020
  - Dec 10, 2020
  - Jan 14, 2021
  - Jan 28, 2021
  - Mar 25, 2021

Accomplishments

1. Separated two instances of EtherType ranges on the public listing (Note: "=" should be "-") to ensure that searches will return results for assignments within the range.

2. EtherType 0x0800 added back on the EtherType public listing

3. IT confirmed that all EtherTypes are on the public listing

4. IT confirmed feasibility of enhancing the .csv file to prevent it from changing some assignments to scientific notation

5. IT confirmed that the changes to the public listing (e.g., making data-of-assignment public) is possible to be limited to only the EtherType public listing

EtherType adhoc – phase 2

- Report from phase 1 recommended to continue adhoc to progress action items

- Agreed at Apr 27, 2021 RAC

- Attendees to include
  - RAC members
  - RAC administrator
  - P802f editor and YANGsters chair
  - IEEE IT staff as-needed

- Adhoc met …
  - May 20, 2021
  - Jun 17, 2021
  - Jul 22, 2021
  - …
  - Aug 26, 2021
  - Sept 30, 2021
  - Oct 28, 2021
  - Dec 9, 2021

Action items (1)
Solution agreed, awaiting implementation

1. Enhance the .csv file to prevent it from changing some assignments to scientific notation
   - A popular convention is that a field formatted as = "text" will be interpreted as text. Microsoft Excel, Apple Numbers, Google Sheets, and LibreOffice all convert such formats correctly upon "Open".
   - <mark>Gating for P802f</mark>

2. Elastic Search improvements (i.e., search all fields instead of just assignment & company name)

3. EtherType public listing contains uppercase and lowercase letters - need consistency (preference from group is ALL CAPS)
   - <mark>Gating for P802f</mark>

4. EtherType public listing text file improvement needed - address merges with protocol description
   - <mark>Gating for P802f</mark>

5. There are EtherType records in the Public listing that have duplicate entries. Reconcile and remove duplicates.
   - (e.g., 0A00, 0A01, 0B01, 0B02, 0B03, 0B04, 0B05, 0B06, 0B07, 8100, 8101, 8102, 8103, 810A, 810B, 810C, 810D, 810E, 882B)
   - <mark>Gating for P802f</mark>

6. Consistency of EtherType vs Ethertype (EtherType preferred) on web and public listing

Action items (2)
Solution agreed, implementation in progress

7. Align 802.1/802.3/802.11/802.21 assigned EtherTypes to have the same address, a description that is the protocol name and the standard reference.

   - 802.3 completed, 802.1 in process (88E7 needs verification), 802.11 and 802.21 in approval.
   - Gating for P802f

8. Editorial clean up of the "Use of the IEEE Assigned EtherType with IEEE Std 802.3 Local and Metropolitan Area Networks" tutorial

   - Currently an Appendix in P802f draft under ballot to collect comments
   - Separate out before SA ballot and update

Action items (3)
Under study

9. Consistency of hex representation of EtherTypes

    - No consistent style for identifying an EtherType value as a hexadecimal number
      [0800 vs 08-00 vs 0x0800 vs 0800 (hex) vs 0800_{16}] is defined.

    - RAC should define for its usage – ??? "0800 (hex)" preferred and "0800" for TXT/CSV/YANG ???

    - Standards define for their usage -- IEEE Editorial reviewing conventions for 2023 style manual

10. For EtherTypes used in standards, is it of interest to the RAC to introduce a "Short Description" field in order to clearly identify the usage of the EtherType (e.g., for registry entries that have "Protocol Unavailable")?

    - P802f will define a short description for its set of EtherTypes

    - Incorporate a "Notes" field that the RAC will maintain?

11. EtherTypes below 0600 (hex)

    - Protocol should be marked as "Not valid as a Type value" rather than "Protocol unavailable."

12. Should the company/organization labelling in public listing (searchable database, CSV, TXT) be consistent?

    - If so, should they all be "Company", or "Organization" or "Entity" or "Assignee", or ...