# URN Namespace for IEEE 802 considerations

Glenn Parsons

August 2015

### 1. Where to document?

- an IETF RFC is needed to define a root
   http://www.iana.org/assignments/urn-namespaces/urn-namespaces.xhtml
- the same RFC can document the underlying IEEE namespace, or can point to an IEEE document
  - For IETF these documents define the namespace:
    - RFC 2648 IETF namespace
    - RFC 3553 URN subspace for parameters
    - RFC 6087 URN for YANG modules
  - For ISO the full definition is in their RFC 5141.
  - For OMA in RFC 4358 they define variables and refer to the OMA naming authority
- Two document approach preferred.
  - And we would point to a new RAC tutorial:
    - https://standards.ieee.org/develop/regauth/tut/oid.pdf
  - And include an IEEE 802 specific section on URN in the 802 O&A.

## IEEE Std 802 amendment URN namespace

- New clause 11
  - Based on clause 10, but to add URN allocation

OVERVIEW AND ARCHITECTURE

IEEE Std 802-2014

### 10. Allocation of OID values in IEEE 802 standards

#### 10.1 General

From time to time, various IEEE 802 standards have a requirement to allocate OID values. The most common example is for defining management information base (MIB) objects for SNMP, but other examples exist. MIB modules describe the structure of the management data of a device subsystem and use a hierarchical name space based on OIDs to identify variables. This clause specifies a simple and consistent OID hierarchy, based on the use of the OID value that has been assigned by ISO to identify the IEEE 802 series of standards. This hierarchy should be used by all current and future IEEE 802 Working Groups and can be used flexibly to meet the needs of the standards developed by those working groups. This establishes a consistent practice within IEEE 802 for the development and allocation of OIDs. Consistency of OID allocation facilitates implementation and operation of IEEE 802—compliant equipment.

# 2. Who owns the IETF document (IETF needs a named author)?

- IEEE RA staff (preferred)
- IEEE RAC members
- interested individuals
- IEEE 802 leaders

### 3. What is the root?

• IEEE (preferred)

- IEEE 802
- IEEE 802.1

# 4. What is the namespace structure? (Assuming IEEE is the root)

- flat (everything assigned by the RAC)
- hierarchical based on type (like IETF)
- hierarchical based on document (like for the SNMP MIB)
- Using examples this would look like either:
  - urn:ieee:802.1Q-yang
  - urn:ieee:paramaters:xml:namespace:yang:802.1Q
  - urn:ieee:standards-association-numbered-series-standards:lan-man-stds: ieee802dot1:ieee802dot1yang:802.1Q
- Latter is the default (to be like the OID)