

YANG Status Statement

Considers for YANGsters

yangsters-smansfield-yang-status-statement-v01

Modifying a published module

- RFC 7950 section 11
 - <https://www.rfc-editor.org/rfc/rfc7950.html#section-11>
 - Contains the guidelines for modification of a published module
- The status statement
 - <https://www.rfc-editor.org/rfc/rfc7950.html#section-7.21.2>
 - Provides three options that indicate the status of the node
 - current
 - deprecated
 - obsolete

Example of change (From Qcw D2.0 ballot)

```
container bridge-port {
  description
  # "Bridge Port is an extension of the IETF Interfaces model
  # (RFC7223).";

  leaf component-name {
  # type string;

  description
  "Used to reference configured Component node.";
}

1177 container bridge-port {
1178   description
1179   # "Bridge Port is an extension of the IETF Interfaces model (RFC7223).";
1180   # leaf bridge-name {
1181   #   type leafref {
1182   #     path '/dot1q:bridges/dot1q:bridge/dot1q:name';
1183   #   }
1184   #
1185   # // mandatory true; yang 1.1 only
1186   # description
1187   #   "Used to reference configured Bridge node.";
1188   # }
1189   leaf component-name {
1190   # type leafref {
1191   #   path
1192   #     '/dot1q:bridges'+
1193   #     '/dot1q:bridge[dot1q:name=current()'+
1194   #     '/../'+
1195   #     '/bridge-name]'+
1196   #     '/dot1q:component'+
1197   #     '/dot1q:name';
1198   #   }
1199   #
1200   # // mandatory true; yang 1.1 only
1201   # description
1202   #   "Used to reference configured Component node.";
1203   # }
```

Published
module
type is
changed

Updated
module

Guidance from RFC 7950

A "type" statement may be replaced with another "type" statement that does not change the syntax or semantics of the type. For example, an inline type definition may be replaced with a typedef, but an int8 type cannot be replaced by an int16, since the syntax would change.

- This guidance indicates that the change in type from string to leafref is not a backward compatible change because the syntax of the value has changed.
- Therefore "deprecating" component-name and creating a new leaf (for example) component-name-ref with the status of current would be proper

Discussion

- We have the option of ignoring the guidance
- If anyone has implemented the bridge model, their implementations would break if they tried to use the new bridge module once Qcw is published.
- However, the existing bridge model was arguably incorrect, so one argument is that leafref and the subsequent path statements fix a bug.
- Now that IEEE 802.1 has several modules that are published, people that review YANG should review section 11 of RFC 7950 for guidance when updating published modules.