

YANG Guidelines Update

draft-ietf-netmod-rfc6087bis-01
NETMOD WG
IETF #91 Honolulu, HI, USA

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v0.1

Agenda

- Review Issues Addressed in -01
- Next Steps

Issues 1 - 2

- **Issue 1: Tree Diagrams:**
 - Added Section 3 so RFCs with YANG modules can use an Informative reference to this RFC for tree diagrams.
 - Updated guidelines to reference this RFC when tree diagrams are used
- **Issue 2: XPath function restrictions:**
 - Added paragraphs in XPath usage section for 'id', 'namespace-uri', 'name', and 'lang' functions
 - **Mailing List Update:**
 - The 'namespace-uri' function is not included in this restriction. This function MUST return the module namespace-stmt value.

Issue 3

- **Issue 3: XPath function document order issues:**
 - Added paragraph in XPath usage section about node-set ordering for 'local-name', 'namespace-uri', 'name', 'string' and 'number' functions. Also any function that implicitly converts a node-set to a string.
- **Mailing List Update:**
 - Document order text should be updated (from Lada):

The 'preceding', 'following', 'preceding-sibling' and 'following-sibling' axes MAY be used if document order is not relevant to the outcome of the expression (e.g., check for global uniqueness of a parameter value). Otherwise these axes SHOULD NOT be used.

A server is only required to maintain the relative XML document order of all instances of a particular user-ordered list or leaf-list. The 'preceding-sibling' and 'following-sibling' axes MAY be used if they are evaluated in a context where the context node is a user-ordered 'list' or 'leaf-list'.

Issues 4 - 6

- **Issue 4: XPath preceding-sibling and following-sibling:**
 - Checked and text in XPath usage section already has proposed text from Lada.
- **Issue 5: XPath 'when-stmt' reference to descendant nodes:**
 - Added exception and example in XPath Usage section for augmented nodes.
- **Issue 6: XPath numeric conversions:**
 - Changed 'numeric expressions' to 'numeric and boolean expressions'

Issue 7

- **Issue 7: XPath module containment:**
 - Added sub-section on XPath wildcards
 - Mailing List Update:
 - Wildcard text should be updated (from Jernej):

It is possible to construct XPath expressions that will evaluate differently when combined with several modules within a server implementation, then when evaluated within the single module. This is due to the fact that expression evaluation is done within a server against all the nodes from all namespaces. An expression such as

```
//*[local-name() = 'services']//*[local-name() = 'active']
```

could unexpectedly evaluate to true when another module that happens to match the expression's location path is added to the server implementation. Such expressions SHOULD not be used.

Augmentation represents a special case. If augmented objects are expected to match the wildcard expansion it is possible for a 'must' or 'when' expression that uses the '*' node test to always evaluate to false if processed within a single YANG module. In such cases, the 'description' statement SHOULD clarify the intent.

```
when /foo/services/*/active {  
  description  
    "No services directly defined in this module.  
    Matches objects that have augmented the services container."  
}
```

Issues 8 - 10

- **Issue 8: status-stmt usage:**
 - Added text to Lifecycle Management section about transitioning from active to deprecated and then to obsolete.
- **Issue 9: resource identification in notifications:**
 - Add text to Notifications section about identifying resources and using the leafref data type.
- **Issue 10: single quoted strings:**
 - Added text to Data Types section about using a single-quoted string for patterns.

Next Steps

- Try to get more reviews
- Wait until YANG 1.1 is ready to start WGLC