

## XML Namespace Name: URN or URL?

### Issue

*Is it better to formulate an XML Schema namespace as a URN or a URL?*

Example:

urn:publishing:book

versus

<http://www.publishing.com/book>

### What is an XML Schema Namespace Name?

- Namespace names are unique values.
- Namespace names are just labels.
- There is no requirement (or expectation) to resolve the namespace to an online resource.
- The XML Schema Part 0: Primer (<http://www.w3.org/TR/xmlschema-0>) states that target namespaces enable us to distinguish between definitions and declarations from different vocabularies.

### What is a Uniform Resource Identifier (URI)?

- URI Generic Syntax (RFC 2396 – <http://www.ietf.org/rfc/rfc2396.txt>) defines the following:
  - Identifier: An identifier is an object that can act as a reference to something that has identify.
  - A URI can be further classified as a locator, a name, or both.
    - The term "Uniform Resource Locator" (URL) refers to the subset of URI that identify resources via a representation of their primary access mechanism (e.g., their network "location"), rather than identifying the resource by name or by some other attribute(s) of that resource.
    - The term "Uniform Resource Name" (URN) refers to the subset of URI that are required to remain globally unique and persistent even when the resource ceases to exist or becomes unavailable.

### The Case for URN

- URNs are easier to conceptualize as a name and not a location. And since namespaces are intended to uniquely identify something, not locate something, one could argue this is a better marriage.
- Users do not expect URNs to locate an entity/resource as they do with URLs.
- Many tool vendors automatically convert URLs to hyperlinks (i.e., turn it blue and make it clickable), which incorrectly implies that a URL formatted namespace name is a location.

## **The Case for URL**

- URLs are integral to the World Wide Web (www). With a URL, there is *potentially* a resource as well. That resource could contain documentation (a schema, pointers to other schemas, etc.). If in the future the W3C decides to have a namespace name point to resource, the appropriate syntax will already be in use and namespace names will not have to change.
- The URL syntax is familiar and memorable to www users.
- URL schema names are already managed. (See <http://www.w3.org/Addressing/> for more information.) Therefore, it would be easier to ensure namespace names are unique. In other words, with URLs it would be difficult to have two organizations with identical namespace names.
- One could come up with a namespace scheme that would eliminate the current confusion about the namespace URI being a location. For example, the namespace name could be prefaced with something like “namespace://” or “xmlns://” or “ns://”.

## **Best Practice**

Whether to use a URN or a URL for an XML Schema namespace name is predominately a personal preference. However, there seems to be a slight preference for using a URL because it provides the opportunity for pointing to something (e.g., a Resource Directory Description Language (RDDL) document) in the future.