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**The vnd and prs Trees for URI Scheme Names
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Abstract

This document describes a way in which individuals and vendors can define URI schemes in a way that avoids name collisions, but with relaxed registration requirements. This is done by allowing URI schemes that start with "vnd-" or "prs-", analogous to similar mechanism MIME media types.

Note

Discuss this document on uri@w3.org. A HTML version of this document can be found at <http://larry.masinter.net/vnduri.html>.

1. Introduction

The registration process for URI schemes, described in [RFC 2717](#) [2], requires IESG review and approval of all proposed scheme names within the "IETF tree", which encompasses simple, short, often descriptive URI scheme names (such as http:, fax:, or mailto:).

However, there are circumstances where it is desirable to allocate a URI scheme name outside of this process. This document establishes alternative trees, "vnd-" and "prs-", corresponding to the similar concept for MIME type registrations[4]. The rules for use and registration of URI schemes with in these trees are intended to be analogous those for the corresponding MIME type trees.

The "vnd-" tree is used for URI schemes associated with available products or services; "vendor" or "producer" are construed as equivalent and broadly. The registration belongs to the vendor or organization producing software or offering a service that utilizes the URI scheme. Registration in the vendor tree is distinguished by the leading "vnd-", followed, at the discretion of the registration, either by the scheme name or (preferably) by an IANA-approved designation of the producer's name, followed by the specific scheme name. Designations of producers should match those used for media types, and follows the same criteria.

Similarly, the "prs-" tree is intended for URI schemes used experimentally or as individual contributions. The owner of "personal" registrations and associated specifications is the person or entity making the registration, or one to whom responsibility has been transferred as described below.

Note that earlier drafts of this document suggested using "." as the delimiter between "vnd" and the URI scheme. However, [RFC 2717](#) [2] reserved the "-" character for non-IETF registrations (and not "."), so the delimiter was changed for compatibility. Because these earlier drafts were available for several years, however, there may be some URI schemes with "vnd." still in use.

[2. Syntax](#)

The general syntax for these new trees follows the syntax recommended in [RFC 2717](#) [2]:

```
scheme      = ("vnd-" / "prs-") [ vendor-id "-" ] scheme-id
vendor-id   = ALPHA *(ALPHA / DIGIT / "+" )
scheme-id   = ALPHA *(ALPHA / DIGIT / "+" / "-" / "." )
```

[2.1 Syntax notes](#)

Note that [RFC 2396](#) [1] limits the characters in URI scheme names to include only letters, digits, plus ("+"), period ("."), or hyphen ("-"); further, that although scheme names are case insensitive, the canonical form is lowercase and documents that specify schemes must do so using lowercase letters. These restrictions apply to <vendor-id> and <scheme-id>.

To avoid confusion, a <vendor-id> may not contain a hyphen "-" or a period ".".

[2.2 Choosing a vendor-id](#)

The vendor-id is an IANA-approved designation, consisting of a short string of characters that is sufficient to uniquely identify the organization.

To avoid exhaustion of the namespace, vendors are encouraged to establish only one vendor-id, although it is recognized that large organizations may actually consist of multiple sub-units. Organizations should use the same vendor-id for MIME types and URI schemes.

The organization may be a business (whether for-profit or not), governmental unit, educational institution, or any other entity, organization or community which is regularly engaged in producing software. The term "vendor" is used in this document for simplicity.

IANA may choose to reject a request for a particular vendor-id or propose a different vendor-id based on IANA's best judgment as to whether the string proposed is appropriate for the organization requesting it.

[2.3 Syntax for scheme-id](#)

There are no formal restrictions on the scheme-id except that the characters be chosen from those allowed in a URI scheme name

(letters, digits, plus, period, hyphen), and be registered using the lowercase form. The registrar is encouraged to select a scheme-id that is short and descriptive of its purpose.

3. Requirements for Scheme Name Registration

3.1 General Requirements

The purpose of registration is to give notice to the Internet community of the existence the scheme. Registration of the vendor-id is required, and serves to partition the namespace (and avoid collision).

Similarly, to avoid collision and misuse, registration of "prs-" and "vnd-" schemes without vendor-id parts is required.

If the vendor-id is registered, registration of a specific scheme-id is optional; if supplied, the registrar may supply whatever information is appropriate. Registration may only consist of the scheme name, or might include a pointer to appropriate documentation of the scheme's syntax and semantics.

3.2 Registering the vendor-id

The request for vendor-id registration may be sent separately, or may be included in a scheme name registration. The initial request for vendor-id names must contain the proposed vendor-id, the vendor's legal business name, principal business address, telephone number, and contact information for a person or position that will be responsible for the use of the vendor's subtree. The vendor should inform IANA if of changes in this information, and may explicitly transfer ownership of its vendor-id and associated subtree.

A given vendor-id can be issued only once, and it does not expire. This is to avoid possible name collisions, since using a registered vendor-id means there may be URI schemes that are not otherwise registered.

IANA should maintain a public registry of the vendor-id's, together with contact information for each vendor so registered. A form for submission of this information (together with scheme information as appropriate) is provided in this document.

3.3 Publishing Scheme-Specific Information

While public exposure and review of a URI scheme created in the "vnd-" or "prs-" tree is not required, it is encouraged. The 'uri-review@ietf.org' mailing list may be used for review of new URI schemes, even if they are not in the IETF tree.

Publication of the scheme description as an Informational RFC may be appropriate for those schemes of sufficient interest to the IETF

community; however, this mechanism is usually appropriate only for URI schemes in the IETF tree.

Note that a separate, explicit request should be made to IANA (at IANA@iana.org) to register schemes; discussion on uri-review@ietf.org is insufficient. The request should follow the form is provided in [Appendix A](#) of this document.

Internet Drafts intended for publication as Informational RFCs describing new URI schemes should also contain an 'IANA Considerations' section with the request for registration included. The registration would occur at the time of publication of the document as an RFC.

[3.4](#) Change Control

The vendor is the owner of all schemes within its registered tree, has sole responsibility for management of the sub-tree created by its vendor-id, and owns change control for any URI schemes deployed therein. If a vendor publishes information about a vnd URI scheme by either of the methods described above, changes to the syntax or semantics of that URI scheme must be subsequently published by the same medium as originally employed.

4. Security Considerations

The vendor identified by the vendor-id part of the URI scheme name should be consulted for any information regarding the URI scheme and its implementation. To that end, vendors must provide a point of contact that can be reasonably authenticated, for instance, common business contact information (business address, telephone number, etc.). (This is addressed in the registration section above.)

The registration process encourages vendors to analyze and disclose the security implications of using particular URI schemes. Unregistered schemes or those without appropriate security considerations may be unsafe to use.

5. IANA Considerations

IANA currently maintains a registry of URI scheme names, per the requirements of [RFC 2717](#). Scheme names established under this process should also be entered in that registry, when requested.

IANA should maintain a separate registry of vendor-id strings, relating the vendor-id to the vendor information (business contact information, etc.) provided in the registration. The vendor-id string list should be used also for vendor strings used in media types, as per [RFC 2048](#). IANA should reject a vendor-id registration if it duplicates an existing registration, seems inappropriate, confusing, misleading, or too similar to another registered vendor-id, at IANA's discretion. IANA may offer an alternative vendor-id string that IANA considers more appropriate.

A party whose vendor-id registration has been rejected or modified may ask for review of the registration by the IESG, in the manner described in [RFC 2026, section 6.5](#).

6. Registration forms

Form for vendor information:

Vendor-ID: proposed identifier
Name: formal name of organization
Address: full name of organization
Telephone: full telephone number
Type: type of organization (corporation, educational
 institution, etc.)

Contact Information: name of contact person and location
information

The form for scheme names follows [RFC 2717, section 6.0](#).

Scheme name:
Scheme syntax:
Character encoding considerations:
Intended usage:
Applications and/or protocols which use this URL scheme name:
Interoperability considerations:
Security considerations:
Relevant publications:

Normative References

- [1] Berners-Lee, T., Fielding, R. and L. Masinter, "Uniform Resource Identifiers (URI): Generic Syntax", [RFC 2396](#), August 1998.

Informative References

- [2] Petke, R. and I. King, "Registration Procedures for URL Scheme Names", [RFC 2717](#), November 1999.
- [3] Masinter, L., Alvestrand, H., Zigmond, D. and R. Petke, "Guidelines for New URL Schemes", [RFC 2718](#), November 1999.
- [4] Freed, N., Klensin, J. and J. Postel, "Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures", [RFC 2048](#), November 1996.

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