Registration of Enumservices for experimental, private or trial use
draft-ietf-enum-x-service-regns-00

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Abstract

This document provides a guide to the creation of new IANA registrations of experimental, private or trial ENUM (E.164 Number Mapping) services. It is also to be used for updates of those experimental, private or trial Enumservice (X-Enumservice) registrations.
1. Introduction

This document provides a guide to the creation of new IANA registrations of X-Enumservices. This document aims to enhance section 3 of RFC 3761 [3], where the registration procedure for Enumservices was initially documented at a high level. It further complements the Guide and Template for IANA Registrations of Enumservices [2].

The X- Enumservice registration is intended to allow people to use the template for ordinary Enumservices to describe what X- Enumservice strings exist in NAPTR Resource Records and to describe how they are used, but not (yet) to require a full IETF review and change control.

This is needed as some trials use URL schemes that are not registered, and so cannot be used in Standards Track Enumservice registrations. Also, until trials have been completed, it may not be appropriate to produce a Standards Track document, as Enumservice syntax details, use and issues of security / privacy may not have been analyzed fully at that point.

For the purpose of this document, 'x-registration document' and 'x-registration' refer to an Internet Draft proposing the IANA registration of an X- Enumservice following the procedures outlined herein. The terms 'registration document' and 'registration' refer to an Internet Draft proposing the IANA registration of an ordinary Enumservice as defined in [2].

2. Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [1].

3. Required Sections and Information

An x-registration document for an X- Enumservice is similar to a ordinary Enumservice registration as described in Guide and Template for IANA Registrations of Enumservices [2] except for the following:

- Enumservice Name:

  The Enumservice Name MUST contain the prefix "X-".

  e.g. "X-Foo"
o Enumservice Type:

    The Type MUST be prefixed with "x-". To avoid confusion a name
    SHOULD be equal to type (but in lower case).

    e.g. "x-foo"

o URI Schemes:

    The Uniform Resource Identifier (URI) [8] Schemes, which are
    used with an X-Enumservice do not necessarily need to be
    documented in an IETF document. If a publicly referenceable
    document is available it MUST be referenced in the
    x-registration document. In case there is no publicly
    referenceable document, the URI Scheme MUST be sufficiently
    described in the x-registration document.

o Functional Specification:

    This section quite depends on how much publicly available
    documentation about the service already exists.

o Intended Usage:

    For the Intended Usage RFC 3761 [3] is extended with
    "EXPERIMENTAL", "PRIVATE", and "TRIAL". One of those is to be
    used.

    e.g. "TRIAL"

4. The Process of Registering New X-Enumservices

    This section describes the process by which someone shall submit a
    new X-Enumservice for review and comment, how such proposed
    X-Enumservices shall be reviewed, and how x-registrations shall be
    published.

    Figure 1 and Figure 2 depict an overview on the X-Enumservice
    registration process. Figure 1 describes, what an author of an I-D
    describing an X-Enumservice has to carry out, before he can formally
    submit said I-D for publication. Figure 2 describes what happens
    afterwards including the expert review:
4.1. Step 1: Read This Document In Detail

This document and the specification for ordinary Enumservice registrations [2] describe all of the necessary sections required and recommended, makes suggestions on content, and provides sample XML.

4.2. Step 2: Submit An Internet-Draft

An Internet-Draft containing the x-registration shall be submitted in accordance with RFC 2026 [5] and RFC 2223bis [6], as well as RFC 3761 [3], and any other documents applicable to the Internet-Draft process. This Internet-Draft shall be submitted as an "Individual Submission".
4.3. Step 3: Request Comments from the IETF Community

After the Internet-Draft has been published, the author(s) shall send an email to <enum@ietf.org>, in which comments on said Internet-Draft are requested.

Suggested Format of Announcement:

To: enum@ietf.org
Subject: Comments on <I-D Name Here>

The author is requesting comments and feedback from the ENUM and IETF communities on the I-D listed below.

The I-D is available at: <INSERT URL to I-D ON IETF WEB SITE HERE>

Abstract of the I-D:
<INSERT I-D ABSTRACT HERE>

The author(s) should allow a reasonable period of time to elapse, such as two to four weeks, in order to collect any feedback. The author(s) shall then consider whether or not to take any of those comments into account, by making changes to the Internet-Draft and submitting a revision to the I-D editor, or otherwise proceeding. The following outcomes are the ways the author(s) shall proceed, and it is up to the authors’ judgement as to which one to choose.

4.3.1. Outcome 1: No Changes Needed

No changes to the Internet-Draft are made, and the author(s) proceed(s) to Step 4 below.

This outcome is recommended when the feedback received does not lead to a new revision of the Internet-Draft.

4.3.2. Outcome 2: Changes, but no Further Comments Requested

The author(s) update(s) the Internet-Draft and is/are confident that all issues are resolved and do not require further discussion. The author(s) proceed(s) to Step 4 below.

This outcome is recommended when minor objections have been raised, or minor changes have been suggested.

4.3.3. Outcome 3: Changes and Further Comments Requested

The author(s) update(s) the Internet-Draft, and proceed(s) to Step 3 above, which involves sending another email to <enum@ietf.org> to
request additional comments for the updated version.

This outcome is recommended when substantial objections have been raised, or substantial changes have been suggested.

4.4. Step 4: Submit I-D for Publication

The author(s) submit the Internet-Draft containing the x-registration to be published as an RFC. The IETF publication process includes IANA actions such as adding the service to the IANA X-Enumservice registry. It is RECOMMENDED that an X-Enumservice registration is published as either a Informational, or Experimental RFC.

However, if the author insists to publish an X-Enumservice registration as Standards Track or Best Current Practice (BCP), the process for ordinary Enumservice registrations [2] applies, which means apart from the "X-" prefix there is no difference to an ordinary Enumservice registration.

5. Expert Review

A new X-Enumservice MUST undergo expert review before publication and is initiated by IANA before a new X-Enumservice added to the IANA registry. Expert review for X-Enumservices is conducted the same way as defined for ordinary Enumservice registrations [2]. However, the barriers for approval are rather low compared to ordinary Enumservice registrations.

Expert review for X-Enumservices for will include an initial evaluation of whether this specification will have issues in transferring to a Standards Track document (for example, if it uses an unregistered URL scheme, or that the security and privacy analysis is incomplete at this stage). It will also indicate whether the use of this X-Enumservice will clash with any other (X-)Enumservices or cause damage to other compliant ENUM components, and should be used only in private configurations where all involved components are aware of its use.

Expert reviews for X-Enumservices do not normally result in rejection, unless its use will cause serious negative impact to ENUM, DNS or the Internet. However, authors SHOULD address issues raised during expert review in an update of the x-registration document, before a new X-Enumservice is added to the IANA registry.

The results of such an expert review MUST be appended to the x-registration document and will be recorded along with the specification itself.
The following Figure 2 shows the process for an X-Enumservice registration to go through Expert Review:

```
+-------------------------------------+  
| I-D comes in for publication as RFC |  
+-------------------------------------+  
      \  
      |  
      | I-D arrives at IANA |  
      +---------------------+  
      |  
      | IANA initiates Expert Review |  
      +---------------------+  
      |  
      | Expert(s) Review(s) X-Registration |<--------+  
      +------------------------------------+         |  
      |                           |  
      |                           |  
      |                           |  
      | Appeal process | rejection . results . issues | by expert(s) . in: . raised by . expert(s) |  
      +---------+              .  Expert .               +------------+  
      |  
      |  
      |  
      | approval by expert(s) |  
      +---------------------+  
      |  
      | Add results of Expert Review and submit updated I-D |  
      +------------------------------------------------------+  
      |  
      | IANA inserts X-Enumservice to Registry |  
      +-------------------------------------+  
      |  
      | X-Registration is published as RFC |  
      +-------------------------------------+  
```

Figure 2

As the steps before and after Expert Review are standard procedures, those are not further described herein. In the following a description of the Expert Review process:
5.1. IANA initiates Expert Review

IANA contacts an expert that conducts the expert review. The X-Enumservice expert review process shall then be followed to conclusion. The pool of experts is the same as for ordinary Enumservice registrations [2].

5.2. Expert(s) Review(s) the Internet Draft

The Experts review the X-Enumservice according to the guidelines in this Section 5.

5.2.1. Outcome 1: Experts Approve X-Enumservice

In this case, the proposed X-Enumservice has been endorsed and approved by the experts, and the Internet-Draft proceeds further.

5.2.2. Outcome 2: Experts Raise Issues, Changes Required

The experts raise issues that prevent approval of the proposed X-Enumservice. If they believe that, with changes, the proposed X-Enumservice will be approved, then they may recommend that the author(s) make changes and submit a revised version that undergoes another review by the experts.

5.2.3. Outcome 3: Experts Reject X-Enumservice

The experts raise issues that result in rejection of the proposed X-Enumservice. If they believe that, even with changes, the proposed X-Enumservice will not be approved, the process normally terminates. However, if the author(s) disagrees(s) with this judgement, he has the possibility to appeal. Appeals follow the common IETF appeal process as described in section 7 of [7] and section 6.5 of RFC 2026 [5].

5.3. Add Results of Expert Review

The author(s) include(s) the results of the Expert review to the Internet-Draft containing the x-registration and submit the updated version.

5.4. IANA inserts X-Enumservice to Registry

IANA inserts the X-Enumservice to the corresponding Registry and the x-registration proceeds on its way to publication as RFC.
6. Security Considerations

Since this document does not introduce any technology or protocol, there are no security issues to be considered for this memo itself.

7. IANA Considerations

This document introduces three new strings for Intended Usage as defined in RFC 3761 [3]. These new strings are: "EXPERIMENTAL", "PRIVATE", and "TRIAL". The revision of RFC 3761 [3] RFC3761bis [4] shall contain these new strings. Furthermore the dash in the 'X-' string needs to be put into the set of allowed characters in an Enumservice Type. In case the revision of RFC 3761 is not yet ready at publication time of this memo, an intermediary regime needs to be defined.

An IANA Registry for X-Enumservices is to be defined.

8. Acknowledgements

The author wishes to thank Alexander Mayrhofer and Lawrence Conroy for their contributions to this document.

9. References

9.1. Normative References


9.2. Informative References


Appendix A. Changes

[RFC Editor: This section is to be removed before publication]

draft-ietf-enum-x-service-reg-00:
  o Spelled out the Expert Review Process
  o Added ASCII-arts and descriptions
  o Now Working Group Item

draft-hoeneisen-enum-x-service-reg-02:
  o Name must have ‘X-‘ prefix (Feedback L. Conroy)
  o Type should be equal to Name (Feedback L. Conroy)

draft-hoeneisen-enum-x-service-reg-01:
  o added dash issue
  o introduced abbreviation X-Enumservice and used it throughout the document
  o clarified section URI Schemes
  o added to section Expert Review

draft-hoeneisen-enum-x-service-reg-00:
  o Initial version

Appendix B. Open Issues

[RFC Editor: This section should be empty before publication]
  o Sync with RFC3761bis: e.g. Intended Usage "EXPERIMENTAL", "PRIVATE", and "TRIAL"; dash in ‘X-‘ to allowed chars
  o Is there a need for "duration" of X-Enumservice registrations?
o Describe how to submit a x-registration document to IANA
o Will there be an additional (IANA) Registry or just use the same IANA Registry as for ordinary Enumservice registrations?
o Require a first Security analysis for trial registrations?

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