ENUM -- Telephone Number Mapping

Working Group
Internet-Draft

Updates: <u>3762</u>, <u>3764</u>, <u>3953</u>, <u>4143</u>, <u>4002</u>, <u>4238</u>, <u>4355</u>, <u>4415</u>, <u>4769</u>,

4969, 4979, 5028 (if approved)

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Update of legacy IANA Registrations of Enumservices draft-hoeneisen-enum-enumservices-transition-01

Status of this Memo

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Abstract

This document specifies a revision of all Enumservices that have been registered at IANA under the nowadays obsolete regime of [RFC3761]. It mainly adds the new fields to the IANA Registration Template as specified in [I-D.ietf-enum-enumservices-guide], and makes at the same time some corrections of editorial nature.

Internet-Draft Update legacy Enumservice Registrations May	2008
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1. Introduction

[I-D.ietf-enum-enumservices-guide] has obsoleted the IANA registration section of [RFC3761]. In the IANA registry for Enumservices, there are several entries that had been made under RFC 3761 regime. Those do not conform to the new guidelines as specified in [I-D.ietf-enum-enumservices-guide]. To ensure consistency among the Enumservice registrations, the document adds the new fields to the existing IANA registrations and makes some editorial corrections at the same time.

However, this document does only add the missing fields from the IANA Registration Template as specified in the IANA Considerations of [I-D.ietf-enum-enumservices-guide], but does not complete the (nowadays) missing sections of the corresponding Registration Documents. These documents have to be revised in order to conform with the new regime for Enumservice registrations as specified in [I-D.ietf-enum-enumservices-guide].

This document updates the following RFCs:

- o [RFC3762]
- o [RFC3764]
- o [RFC3953]
- o [RFC4143]
- o [<u>RFC4002</u>]
- o [<u>RFC4238</u>]
- o [<u>RFC4355</u>]
- o [<u>RFC4415</u>]
- o [<u>RFC4769</u>]
- o [<u>RFC4969</u>]
- o [<u>RFC4979</u>]
- o [<u>RFC5028</u>]
- o [I-D.ietf-enum-calendar-service]

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 [RFC2119].

3. IANA Considerations

3.1. Enumservice Registrations

IANA replaces the existing Enumservice Registrations by the following:

[Note for RFC Editor: Please replace any instance of RFCTHIS with the RFC number of this document before publication] Assigned Enumservice Values email:mailto o Enumservice Class: Application-based, Common o Enumservice Type: "email" o Enumservice Subtype: "mailto" o URI Scheme(s): 'mailto' o Functional Specification: * This Enumservice indicates that the resource can be addressed by the associated URI in order to send an email. o Security Considerations: See Section 6 of [RFC4355] o Intended Usage: COMMON o Registration Document(s): * [RFC4355] (Updated by RFCTHIS) * [RFCTHIS] o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny o Further Information: N/A ems:mailto

- o Enumservice Class: Application-based, Common
- o Enumservice Type: "ems"
- o Enumservice Subtype: "mailto"
- o URI Scheme(s): 'mailto'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified by the associated URI is capable of receiving a message using an email protocol.
 - * EMS content is sent over SMTP using the format specified by TS 23.140 [15] <u>Section 8.4.4</u> and TS 26.140 [16] <u>Section 4</u>, as an MMS message. Within such a message, EMS content is carried as either a text or application/octet-stream MIME sub-part (see TS 26.140 [16], Section 4.1).
 - * For references see [RFC4355].

- o Security Considerations:
 - * There are no specific security issues with this Enumservice. However, the general considerations of <u>Section 6 of [RFC4355]</u> apply.
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4355] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information: N/A

ems:tel

- o Enumservice Class: Application-based, Common
- o Enumservice Type: "ems"
- o Enumservice Subtype: "tel"
- o URI Scheme(s): 'tel'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified by the associated URI is capable of receiving a message using the Enhanced Message Service (EMS) [14] (For reference see [RFC4355]).
- o Security Considerations:
 - * There are no specific security issues with this Enumservice. However, the general considerations of <u>Section 6 of [RFC4355]</u> apply.
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4355] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information:
 - * Note that an indication of EMS can be taken as implying that the recipient is capable of receiving SMS messages at this address as well.

fax:tel

- o Enumservice Class: Application-based, Subset
- o Enumservice Type: "fax"
- o Enumservice Subtype: "tel"
- o URI Scheme(s): 'tel'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified by the associated URI is capable of being contacted to provide a communication session during which facsimile documents can be

sent.

- * A client selecting this NAPTR will have support for generating and sending facsimile documents to the recipient using the PSTN session and transfer protocols specified in [12] and [13] in [RFC4355] in short, they will have a fax program with a local or shared PSTN access over which they can send faxes.
- o Security Considerations: See Section 6 of [RFC4355]
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4355] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information: N/A

ft:ftp

- o Enumservice Class: Application-based, Subset
- o Enumservice Type: "ft"
- o Enumservice Subtype: "ftp"
- o URI Scheme(s): 'ftp'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified by the associated URI is a file service from which a file or file listing can be retrieved.
- o Security Considerations: See <u>Section 5 of [RFC4002]</u>
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4002] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information: N/A

h323

- o Enumservice Class: Protocol-based
- o Enumservice Type: "h323"
- o Enumservice Subtype: N/A
- o URI Scheme(s): 'h323'
- o Functional Specification: See Section 3 of [RFC3762]
- o Security Considerations: See section 5 of [RFC3762]
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC3762] (Updated by RFCTHIS)
 - * [RFCTHIS]

```
o Author(s): Orit Levin
o Further Information: N/A
ical:access
o Enumservice Class: Data- / Format-based
o Enumservice Type: "ical"
o Enumservice Subtype: "access"
o URI Scheme(s): 'http', 'https'
o Functional Specification:
   * This Enumservice indicates that the resource identified is a
      URI used for Internet Calendaring which is available to access
      a user's calendar (for example free/busy status). Supported
      URI Schemes are 'http:' or 'https:' URIs for the CalDAV [7]
      protocol.
o Security Considerations: See Section 3 of [RFC-ietf-enum-calendar-
  service-04.txt]
o Intended Usage: COMMON
o Registration Document(s):
     [RFC-ietf-enum-calendar-service-04.txt] (Updated by RFCTHIS)
      [RFCTHIS]
o Author(s): Author: Rohan Mahy
o Further Information: N/A
ical:sched
o Enumservice Class: Data- / Format-based
o Enumservice Type: "ical"
o Enumservice Subtype: "sched"
o URI Scheme(s): 'mailto', 'http', 'https'
o Functional Specification:
   * This Enumservice indicates that the resource identified is a
      URI used for scheduling using Internet Calendaring. Supported
      URI Schemes are the 'mailto:' URI for the iMIP [6] protocol,
      and 'http:' or 'https:' URIs for a planned scheduling extension
      [15] to the CalDAV [7] protocol.
o Security Considerations: See Section 3 of [RFC-ietf-enum-calendar-
  service-04.txt]
o Intended Usage: COMMON
o Registration Document(s):
      [RFC-ietf-enum-calendar-service-04.txt] (Updated by RFCTHIS)
      [RFCTHIS]
o Author(s): Rohan Mahy
o Further Information: N/A
```

```
ifax:mailto
o Enumservice Class: Application-based, Subset
o Enumservice Type: "ifax"
o Enumservice Subtype: "mailto"
o URI Scheme(s): 'mailto'
o Functional Specification: See Section 1 of [RFC4143]
o Security Considerations: See <u>Section 3 of [RFC4143]</u>
o Intended Usage: COMMON
o Registration Document(s):
     [RFC3413] (Updated by RFCTHIS)
      [RFCTHIS]
o Author(s): Kiyoshi Toyoda, Dave Crocker
 Further Information:
     The URI Scheme is "mailto" because facsimile is a profile of
     standard Internet mail and uses standard Internet mail
     addressing.
im
o Enumservice Class: Application-based, Common
o Enumservice Type: "im"
o Enumservice Subtype: N/A
o URI Scheme(s): 'im'
o Functional Specification:
   * This Enumservice indicates that the resource identified is an
      'im:' URI. The 'im:' URI scheme does not identify any
     particular protocol that will be used to handle instant
     messaging receipt or delivery, rather the mechanism in RFC3861
     [4] is used to discover whether an IM protocol supported by the
     party querying ENUM is also supported by the target resource.
o Security Considerations: See Section 3 of [RFC5028]
o Intended Usage: COMMON
o Registration Document(s):
  * [RFC5028] (Updated by RFCTHIS)
  * [RFCTHIS]
o Author(s): Rohan Mahy
o Further Information: N/A
mms:mailto
```

```
o Enumservice Class: Application-based, Common
```

o Enumservice Type: "mms"

o Enumservice Subtype: "mailto"

- o URI Scheme(s): 'mailto'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified by the associated URI is capable of receiving a message using an email protocol.
 - * MMS messages are sent over SMTP using the format specified by TS 23.140 [15] Section 8.4.4 and TS 26.140 [16] Section 4.
 - * Within and between MMS Environments (MMSE, network infrastructures that support the MultiMedia Service), other pieces of state data (for example, charging-significant information) are exchanged between MMS Relay Servers. Thus, although these servers use SMTP as the "bearer" for their application exchanges, they map their internal state to specialized header fields carried in the SMTP message exchanges. The header fields used in such MMSE are described in detail in [17].
 - * For references see [RFC4355]
- o Security Considerations:
 - * There are no specific security issues with this Enumservice. However, the general considerations of <u>Section 6 of [RFC4355]</u> apply.
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4355] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information:
 - * The MMS Architecture describes an interface between the MMSE and "legacy messaging systems" (labelled as MM3) which accepts "standard" SMTP messages. Thus although the MMS Relay Server that supports this interface appears as a standard SMTP server from the perspective of an Internet-based mail server, it acts as a gateway and translator, adding the internal state data that is used within and between the MMS Environments. This mechanism is described in [17], which also includes references to the specifications agreed by those bodies responsible for the design of the MMS.

mms:tel

- o Enumservice Class: Application-based, Common
- o Enumservice Type: "mms"
- o Enumservice Subtype: "tel"
- o URI Scheme(s): 'tel'
- o Functional Specification:

- * This Enumservice indicates that the resource identified by the associated URI is capable of receiving a message using the Multimedia Messaging Service (MMS) [15].
- * For references see [RFC4355].
- o Security Considerations:
 - * There are no specific security issues with this Enumservice. However, the general considerations of <u>Section 6 of [RFC4355]</u> apply.
 - * For references see [RFC4355].
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4355] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information:
 - * Note that MMS can be used as an alternative to deliver an SMS RP- DATA RPDU if, for example, the SMS bearer is not supported. If an entry includes this Enumservice, then in effect this can be taken as implying that the recipient is capable of receiving EMS or SMS messages at this address. Such choices on the end system de do have two small caveats; whilst in practice all terminals supporting MMS today support SMS as well, it might not necessarily be the case in the future, and there may be tariff differences in using the MMS rather than using the SMS or EMS.

pres

```
0 Enumservice Class: Application-based, Common
0 Enumservice Type: "pres"
0 Enumservice Subtype: N/A
0 URI Scheme(s): 'pres'
0 Functional Specification: See Section 4 of [RFC3953]
0 Security Considerations: See Section 6 of [RFC3953]
0 Intended Usage: COMMON
0 Registration Document(s):
    * [RFC3953] (Updated by RFCTHIS)
    * [RFCTHIS]
0 Author(s): Jon Peterson
0 Further Information: See Section 3 of [RFC3953]
```

o Enumservice Class: Application-based, Subset (??)

```
o Enumservice Type: "pstn"
o Enumservice Subtype: "sip"
o URI Scheme(s): 'sip'
o Functional Specification:
   * These Enumservices indicate that the resource identified can be
     addressed by the associated URI in order to initiate a
     telecommunication session, which may include two-way voice or
     other communications, to the PSTN.
o Security Considerations: See Section 7 of [RFC4769]
o Intended Usage: COMMON
o Registration Document(s):
     [RFC4769] (Updated by RFCTHIS)
      [RFCTHIS]
o Author(s): Jason Livingood, Richard Shockey
o Further Information:
  * A Number Portability Dip Indicator (npdi) should be used in
     practice (see examples below in <u>Section 4 of [RFC4769]</u>).
pstn:tel
o Enumservice Class: Application-based, Ancillary
o Enumservice Type: "pstn"
o Enumservice Subtype: "tel"
o URI Scheme(s): 'tel'
o Functional Specification:
     These Enumservices indicate that the resource identified can be
     addressed by the associated URI in order to initiate a
     telecommunication session, which may include two-way voice or
     other communications, to the PSTN. These URIs may contain
     number portability data as specified in RFC4694 [10].
o Security Considerations: See Section 7 of [RFC4769]
o Intended Usage: COMMON
o Registration Document(s):
     [RFC4769] (Updated by RFCTHIS)
     [RFCTHIS]
o Author(s): Jason Livingood, Richard Shockey
o Further Information:
   * A Number Portability Dip Indicator (npdi) should be used in
      practice (see examples below in Section 4 of [RFC4769]).
sip
o Enumservice Class: Protocol-based
```

o Enumservice Type: "sip"

```
o Enumservice Subtype: N/A
o URI Scheme(s): 'sip', 'sips'
o Functional Specification: See Section 4 of [RFC3764]
o Security Considerations: See Section 6 of [RFC3764]
o Intended Usage: COMMON
o Registration Document(s):
   * [RFC3764] (Updated by RFCTHIS)
  * [RFCTHIS]
o Author(s): Jon Peterson
o Further Information: See Section 3 of [RFC3764]
sms:mailto
o Enumservice Class: Application-based, Common
o Enumservice Type: "sms"
o Enumservice Subtype: "mailto"
o URI Scheme(s): 'mailto'
o Functional Specification:
   * This Enumservice indicates that the resource identified by the
      associated URI is capable of receiving a message using an email
      protocol.
   * SMS content is sent over SMTP using the format specified by TS
      23.140 [15] Section 8.4.4 and TS 26.140 [16] Section 4, as an
      MMS message. Within such a message, SMS content is carried as
      either a text or application/octet-stream MIME sub-part (see TS
      26.140 [16], <u>Section 4.1</u>)
   * For references see [RFC4355].
o Security Considerations:
   * There are no specific security issues with this Enumservice.
      However, the general considerations of Section 6 of [RFC4355]
      apply.
o Intended Usage: COMMON
o Registration Document(s):
   * [RFC4355] (Updated by RFCTHIS)
   * [RFCTHIS]
o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
o Further Information: N/A
sms:tel
o Enumservice Class: Application-based, Common
o Enumservice Type: "sms"
o Enumservice Subtype: "tel"
o URI Scheme(s): 'tel'
```

- o Functional Specification:
 - * This Enumservice indicates that the resource identified by the associated URI is capable of receiving a message using the Short Message Service (SMS) [14] in [RFC4355].
- o Security Considerations:
 - * There are no specific security issues with this Enumservice. However, the general considerations of <u>Section 6 of [RFC4355]</u> apply.
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4355] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information: N/A

vcard

- o Enumservice Class: Data- / Format-based
- o Enumservice Type: "vcard"
- o Enumservice Subtype: N/A
- o URI Scheme(s): 'http', 'https'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified is a plain vCard, according to RFC2426, which may be accessed using HTTP / HTTPS [7].
 - * Clients fetching the vCard from the resource indicated should expect access to be restricted. Additionally, the comprehension of the data provided may vary depending on the client's identity.
- o Security Considerations: See <u>Section 5 [RFC4969]</u>
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4969] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Alexander Mayrhofer
- o Further Information:

voice:tel

- o Enumservice Class: Application-based, Common
- o Enumservice Type: "voice"
- o Enumservice Subtype: "tel"
- o URI Scheme(s): 'tel'
- o Functional Specification:

- * The kind of communication indicated by this Enumservice is "Interactive Voice". From a protocol perspective, this communication is expected to involve bidirectional media streams carrying audio data.
- * A client may imply that the person controlling population of a NAPTR holding this Enumservice indicates their capability to engage in an interactive voice session when contacted using the URI generated by this NAPTR.
- o Security Considerations: See Section 5 of [RFC4415]
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4415] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information:
 - * This Enumservice indicates that the person responsible for the NAPTR is accessible via the PSTN (Public Switched Telephone Network) or PLMN (Public Land Mobile Network) using the value of the generated URI.
 - * The kind of subsystem required to initiate a Voice Enumservice with this Subtype is a "Dialler". This is a subsystem that either provides a local connection to the PSTN or PLMN, or that provides an indirect connection to those networks. The subsystem will use the telephone number held in the generated URI to place a voice call. The voice call is placed to a network that uses E.164 numbers to route calls to an appropriate destination.
 - * Note that the PSTN/PLMN connection may be indirect. The end user receiving this NAPTR may have a relationship with a Communications Service Provider that accepts call initiation requests from that subsystem using an IP-based protocol such as SIP or H.323, and places the call to the PSTN using a remote gateway service. In this case the Provider may either accept requests using "tel:" URIs or has a defined mechanism to convert "tel:" URI values into a "protocol-native" form.
 - * The "tel:" URI value SHOULD be fully qualified (using the "global phone number" form of RFC3966 [10]). A "local phone number" as defined in that document SHOULD NOT be used unless the controller of the zone in which the NAPTR appears is sure that it can be distinguished unambiguously by all clients that can access the resource record and that a call from their network access points can be routed to that destination.

- o Enumservice Class: Application-based, Common (??)
- o Enumservice Type: "vpim"
- o Enumservice Subtype: "ldap"
- o URI Scheme(s): 'ldap'
- o Functional Specification: See Sections 3.2 3.3 of [RFC4238]
- o Security Considerations:
 - * Malicious Redirection:

One of the fundamental dangers related to any service such as this is that a malicious entry in a resolver's database will cause clients to resolve the E.164 into the wrong LDAP URI. The possible intent may be to cause the client to connect to a rogue LDAP server and retrieve (or fail to retrieve) a resource containing fraudulent or damaging information.

- * Denial of Service:
 - By removing the URI to which the E.164 maps, a malicious intruder may remove the client's ability to access the LDAP directory server.
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4238] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Greg Vaudreuil
- o Further Information: N/A

vpim:mailto

- o Enumservice Class: Application-based, Common
- o Enumservice Type: "vpim"
- o Enumservice Subtype: "mailto"
- o URI Scheme(s): 'mailto'
- o Functional Specification: See Sections 4.2 4.4 of [RFC4238]
- o Security Considerations:
 - * Malicious Redirection:

One of the fundamental dangers related to any service such as this is that a malicious entry in a resolver's database will cause clients to resolve the E.164 into the wrong email URI. The possible intent may be to cause the client to send the information to an incorrect destination.

- * Denial of Service:
 - By removing the URI to which the E.164 maps, a malicious intruder may remove the client's ability to access the resource.
- * Unsolicited Bulk Email:

The exposure of email addresses through the ENUM service provides a bulk mailer access to large numbers of email addresses where only the telephone number was previously known.

```
o Intended Usage: COMMON
o Registration Document(s):
    * [RFC4238] (Updated by RFCTHIS)
    * [RFCTHIS]
o Author(s): Greg Vaudreuil
o Further Information:
```

- * Error Conditions:
 - + E.164 number not in the numbering plan
 - + E.164 number in the numbering plan, but no URIs exist for that number
 - + E2U+vpim:mailto Service unavailable of email addresses where only the telephone number was previously known.

web:http

- o Enumservice Class: Application-based, Common
 o Enumservice Type: "web"
 o Enumservice Subtype: "http"
 o URI Scheme(s): 'http'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified by the associated URI is capable of being a source of information. It has to be noted that the kind of information retrieved can be manifold. Usually, contacting a resource by an "http:" URI provides a document. This document can contain references that will trigger download of many different kinds of information, like audio or video or executable code. Thus, one can not be more specific about the kind of information that can be expected when contacting the resource.
- o Security Considerations: See Section 5 of [RFC4002]
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4002] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information: N/A

web:https

```
o Enumservice Class: Application-based, Common
o Enumservice Type: "web"
o Enumservice Subtype: "https"
o URI Scheme(s): 'https'
o Functional Specification:
```

- * This Enumservice indicates that the resource identified by the associated URI is capable of being a source of information, which can be contacted by using TLS or Secure Socket Layer protocol. It has to be noted that the kind of information retrieved can be manifold. Usually, contacting a resource by an "https:" URI provides a document. This document can contain all different kind of information, like audio or video or executable code. Thus, one can not be more specific what information to expect when contacting the resource.
- o Security Considerations: See <u>Section 5 of [RFC4002]</u>
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4002] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Rudolf Brandner, Lawrence Conroy, Richard Stastny
- o Further Information: N/A

xmpp

- o Enumservice Class: Protocol-based
- o Enumservice Type: "xmpp"
- o Enumservice Subtype: N/A
- o URI Scheme(s): 'xmpp'
- o Functional Specification:
 - * This Enumservice indicates that the resource identified is an XMPP entity.
- o Security Considerations: See Section 6 of [RFC4979]
- o Intended Usage: COMMON
- o Registration Document(s):
 - * [RFC4979] (Updated by RFCTHIS)
 - * [RFCTHIS]
- o Author(s): Alexander Mayrhofer
- o Further Information: N/A

4. Security Considerations

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

5. Acknowledgements

The authors would like to thank Alfred Hoenes for his prompt feedback to this document.

6. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", <u>BCP 14</u>, <u>RFC 2119</u>, March 1997.
- [RFC3761] Faltstrom, P. and M. Mealling, "The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)", RFC 3761, April 2004.
- [I-D.ietf-enum-enumservices-guide]
 Hoeneisen, B., Mayrhofer, A., and J. Livingood, "IANA
 Registration of Enumservices: Guide, Template and IANA
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Appendix A. Former Content of the IANA Repository

Todo: Copy-Paste from existing IANA Repository

Appendix B. Document Changelog

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

draft-hoeneisen-enum-enumservices-transition-00:

- o bernie: integrated feedback from Alfred Hoenes
 - * Typos / corrections
 - * Removed the words "remote" and "scheme" in existing registrations
 - * changed "URL" to "URI" in existing registrations
 - * changed "headers" to "header fields" in existing "mms:mailto" registration
- o bernie: Added Acknowledgements section

<u>draft-hoeneisen-enum-enumservices-transition-00</u>:

- o bernie: Initial version
- o bernie: Imported and adjusted existing IANA Enumservice registrations
- o bernie: Removed Name and added Class fields
- o bernie: Put caption to each Enumservice
- o bernie: Sorted alphabetically
- o bernie: All URI Schemes without colon
- o alex: Added classification

Appendix C. Open Issues

[RFC Editor: This section should be empty before publication]

- o How can these Enumservices be changed in future?
- o Authors of Enumservices to review the changes
- o Maybe get rid of quotes in Type, Subtype and URI Scheme
- o Maybe change presentation of prose parts (quotes, colons)

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