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Telephone Number Mapping (ENUM) Service Registration for H.323

Status of this Memo

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Abstract

The H.323 specification defines a means for building multimedia communication services over an arbitrary Packet Based Network, including the Internet. This document registers a Telephone Number Mapping (ENUM) service for H.323 according to specifications and guidelines in RFC 3761.

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1. Introduction

The H.323 specification [2] defines a means for building multimedia communication services over an arbitrary Packet Based Network, including the Internet. When H.323 is used in the context of the Internet, it would be useful to take advantages of such services as domain name system (DNS) and ENUM in order to help facilitate the completion of multimedia calls.

This document registers an ENUM service for H.323 according to specifications and guidelines in RFC 3761 [3].

2. ENUM Service Registration

As defined in [3], the following is a template covering information needed for the registration of the enumservice specified in this document.

- Service Name: "E2U+H323"
- URI Scheme(s): "h323:"
- Functional Specification: see section "3. The E2U+H323 ENUM Service"
- Security considerations: see section "5. Security Considerations"
- Intended usage: COMMON
- Author: Orit Levin
- Any other information that the author deems interesting: None

3. The E2U+H323 ENUM Service

This document defines the "E2U+H323" service to be used in the "service" sub-field of the "enumservice" as defined in [3].

The H.323 related ENUM record MUST be populated with a standard H.323 URL as defined in [2]. This URL MAY include parameters specifying the specific protocols and the transport means the H.323 entity supports.

The H.323 entity MUST fully comply with the procedures defined in [3] for both record retrieval and processing by the DNS client.

If, as a result of the ENUM DNS lookup, an H.323 URL matching local policies and capabilities is retrieved, the procedure defined in section O.8.1 "Locating H.323 Destination" of [5] SHOULD be performed.

4. Conventions used in this document

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 BCP 14, RFC 2119 [1].

5. Security Considerations

The h323-URL information, once populated in the DNS, effectively becomes publicly accessible. The access to the H.323 destinations (published using ENUM) can be secured by techniques and procedures defined in H.235 [4] - the security framework for H.323. The framework defines means for achieving integrity, authentication, non-repudiation, encryption, etc. for H.323 calls. An analysis of threats specific to the dependence of ENUM on the DNS, and the applicability of DNSSEC [6] to these, is provided in [3].

6. IANA Considerations

This document registers the E2U+H323 ENUM service according to specifications and guidelines in RFC 3761 [3] and the definitions in this document.

7. References

7.1. Normative References

[1] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

[2] "Packet-based multimedia communications systems", ITU-T Recommendation H.323, 2003.

[3] Faltstrom, P. and M. Mealling, "The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)", RFC 3761, April 2004.

[4] "Security and encryption for H-Series(H.323 and other H.245-based) multimedia terminals", ITU-T Recommendation H.235, 2003.

[5] "Usage of URLs and DNS", ITU-T Recommendation H.323 Annex O, 2003.

7.2. Informative References

[6] R. Arends, et al., "Protocol Modifications for the DNS Security Extensions", Work in Progress, February 2004.

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9. Full Copyright Statement

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