

UDDI URI Scheme Registration with IANA

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Abstract

This IETF document reproduces the UDDI keying scheme definition found in the OASIS UDDI Version 3 Specification [2] and is published as an RFC for ease of access and IANA registration. Change control is retained within OASIS

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 [RFC-2119](#) [3].

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[1.](#) **Introduction**

The OASIS Universal Description Discovery & Integration (UDDI) Version 3 Specification provides a system for registering and discovering the information required to use a Web service and information about the provider offering the Web service. The focus of UDDI is the definition of a set of services supporting the description and discovery of (1) businesses, organizations, and other Web services providers, (2) the Web services they make available, and (3) the technical interfaces which may be used to access those services. Each of the enumerated entities is uniquely identified in a UDDI registry by a unique key to facilitate queries and updates pertaining to the entity.

[1.1](#) **Licensing and Availability**

The UDDI Version 3 Specification may be used under the terms set forth in the OASIS IPR Policy [4]. Under that policy, information regarding claims and licenses is available at [<http://www.oasis-open.org/committees/uddi-spec/ipr.php>]

[2.](#) **URI Scheme Formal Syntax Definition and Character Encoding**

A UDDI URI is the unique key for each entity in a UDDI registry. The complete ABNF grammar in [Section 2.1](#) is the only authoritative syntax definition.

[2.1](#) **ABNF Grammar**

The following syntax specification uses the augmented Backus-Naur Form (BNF) as described in [RFC-2234](#) [5].

```
uddiScheme           = %d117.100.100.105 ; "uddi" in lower case
uddiKey              = keyGeneratorKey / nonKeyGeneratorKey
nonKeyGeneratorKey   = uuidKey / domainKey / derivedKey
uuidKey              = uddiScheme ":" uuid_part
```

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```

uuid_part      = 8HEXDIG "-"
                4HEXDIG "-"
                4HEXDIG "-"
                4HEXDIG "-"
                12HEXDIG

domainKey      = uddiScheme ":" hostname

hostname       = *(domainlabel ".") toplevel ["."]

domainlabel    = alphanum /
                alphanum *(alphanum / "-") alphanum

toplevel      = ALPHA / ALPHA *(alphanum / "-") alphanum

alphanum       = ALPHA / DIGIT

derivedKey     = nonKeyGeneratorKey ":" KSS

keyGeneratorKey = nonKeyGeneratorKey ":" "keygenerator"

KSS            = 1*uric ; KSS MUST NOT BE "keygenerator"

Uric           = reserved / unreserved / escaped

reserved       = ";" / "/" / "?" / ":" / "@" / "&" /
                "=" / "+" / "$" / ","

unreserved     = alphanum / mark

mark           = "-" / "_" / "." / "!" / "~" / "*" /
                "'" / "(" / ")"

escaped        = "%" HEXDIG HEXDIG

```

There are some extra restrictions on domain names that are not captured in the ABNF syntax above:

1. The maximum length of a string representation of a domain name is 253 characters/octetets.
2. The maximum length of an individual domainlabel is 63 characters/octetets.
3. KSS must not be "keygenerator"

3. Intended Usage

A UDDI URI is intended to represent a uddiKey to reference an entity within a given UDDI registry. Within a given registry each uddiKey references only one entity. The uddiKey for an entity can be used for internal referencing pointers from one UDDI entity to another using a uddiKey. An example of an internal reference in UDDI is that several Web services implementing the same specification should all reference the same Web service concept (tModel) by using the uddiKey for the tModel in the technical fingerprint of the service (tModelKey contained in a child of the bindingTemplate). The uddiKey for an entity can also be used for external referencing where the combination of a SOAP endpoint to access the registry plus a UDDI key allows a UDDI aware application to retrieve a particular entity in that registry.

4. Applications and or protocols which may use the UDDI URI scheme

UDDI aware applications make extensive use of the UDDI URI scheme to identify the entities in a registry. These UDDI aware applications use a particular UDDI URI within a particular registry to reference the meta-data for Web service providers (businessEntity elements) and Web service concepts (tModel elements) and the actual Web service meta-data itself (businessService and bindingTemplate elements).

5. Security Considerations

When a UDDI URI is carried within SOAP messages to a UDDI registry, security is addressed by framework and policies of the UDDI node receiving the message as part of the registry. As indicated in the UDDI specification, the security is addressed within the corresponding protocol.

In general, security, as it relates to the usage and carriage of a UDDI URI, is considered as an issue that should be addressed within scope of UDDI security framework and policies or other relevant protocols and is not within the scope of this document.

The primary security issue relating specifically to a UDDI URI is that the mapping between the entity and the UDDI URI is registry specific. This means that it is necessary for applications for and users of UDDI registries to ensure that no assumption about identity of an entity is derived solely from the uddiKey.

6. IANA Considerations

The purpose of this document is serving as a reference point for the purposes of registering the UDDI URI scheme with IANA.

Having the URI registered with IANA will ensure that there is no duplication of the URI scheme "uddi". This document reproduces the exact definition of the scheme from the UDDI Version 3.0 specification

[NOTE to IANA: Replace RFC XXXX with the RFC number of this document]

Registration Template

URI scheme name: uddi

URI scheme syntax: [Section 2](#) of RFC XXXX

Character encoding considerations: [Section 2](#) of RFC XXXX

Intended usage: [Section 3](#) of RFC XXXX

Applications and/or protocols which use this scheme: Section of RFC XXXX

Interoperability considerations: None. ([Section 2](#) of RFC XXXX contains the first version of UDDI URI definition.)

Security considerations: [Section 5](#) of RFC XXXX

Relevant publications: [2]

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References

- 1 Bradner, S., "The Internet Standards Process -- Revision 3", [BCP 9](#), [RFC 2026](#), October 1996.
- 2 OASIS UDDI Specification Technical Committee, Committee Specification, "UDDI Version 3.0", OASIS, July 2002
- 3 Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997
- 4 OASIS Policy on Intellectual Property Rights, OASIS, [at <http://www.oasis-open.org/who/intellectualproperty.php>]

- 5 Crocker, D. and Overell, P.(Editors), "Augmented BNF for Syntax Specifications: ABNF", [RFC 2234](#), Internet Mail Consortium and Demon Internet Ltd., November 1997

Acknowledgments

This document is prepared and posted with the agreement of the OASIS UDDI Specification Technical Committee.

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<http://www.oasis-open.org/committees/uddi-spec>

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