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A Uniform Resource Name (URN) Formal Namespace for the Latvian National Government Integration Project

Status of This Memo

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Abstract

This document describes a Uniform Resource Name (URN) namespace that is engineered by a consortium (general contractor, Olimps LTD, and subcontractors, ABC software LTD, Microsoft Latvia LTD, Riga Internet eXchange (RIX) Technologies LTD, and Microlink LTD) for naming information resources published and produced by the Latvian National Government Integration Project (Latvian abbreviation IVIS).

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1. Introduction

The IVIS uses and produces many kinds of information resources such as E-services, E-service instances, specifications, standards, working documents, and XML schemas. An ID in IVIS has to be unique for global use every time.

2. Specification Template

Namespace ID:

"IVIS" requested according to [RFC3406].

Registration information:

Registration Version Number: 1
Registration Date: 2006-MM-DD

Declared registrant of the namespace:

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Declaration of structure:

The Namespace Specific String (NSS) of all URNs assigned by the IVIS will have the following hierarchical structure (ABNF, according to [RFC4234]):

```
<NID> ::= "IVIS"

<NSS>            ::= <IVIS Org ID>:<ResID - suffix>

<IVIS Org ID>    ::= 1*<number>    { subsystem ID from IVIS database}

<ResID - suffix> ::= 1*(<upper> | <lower> | <number> | <other>)
{an ID generated by IVIS subsystem that is unique within
this subsystem}
```

```
<other>          ::= "(" | ")" | "+" | "," | "-" | "." |
                     "=" | "@" | ";" | "$" |
                     "_" | "!" | "*"

<upper>          ::= "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" |
                     "I" | "J" | "K" | "L" | "M" | "N" | "O" | "P" |
                     "Q" | "R" | "S" | "T" | "U" | "V" | "W" | "X" |
                     "Y" | "Z"

<lower>          ::= "a" | "b" | "c" | "d" | "e" | "f" | "g" | "h" |
                     "i" | "j" | "k" | "l" | "m" | "n" | "o" | "p" |
                     "q" | "r" | "s" | "t" | "u" | "v" | "w" | "x" |
                     "y" | "z"

<number>         ::= "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" |
                     "8" | "9"
```

Relevant ancillary documentation:

IVIS ancillary documentation is under development.

Identifier uniqueness considerations:

Uniqueness is guaranteed by the IVIS that issues the numbers. The numbers are not reassigned.

Identifier persistence considerations:

Persistence of identifiers is dependent upon the persistence of the system name assignment by system name holders.

Process of identifier assignment:

All the assignments of identifiers are fully controlled and managed by the IVIS and its subsystems.

Process of identifier resolution:

The holders of system names are responsible for operating or delegating resolution servers for the system in which they have assigned URNs.

Rules for Lexical Equivalence:

The entire URN is case insensitive.

Conformity with URN syntax:

IVIS schema URN fully conforms to [RFC2141] syntax, except that symbols "’" and ":" were excluded from <other>.

Validation mechanism:

<IVIS Org ID> could be validated by using a special IVIS database service. <ResID - suffix> could be validated by an appropriate subsystem.

Scope:

Global.

3. Example

The following examples are not to be real. They are provided for pedagogical purposes only.

URN:IVIS:000000:DOC-METADATA
URN:IVIS:000000:NDR1021365

4. Community Considerations

Every Latvian ministry’s local authority produces many kinds of different documents, offers public services. Each of the information resources is already uniquely identified within an authority-producer. The IVIS URN namespace helps unify information resource identifiers by using existent Latvian government authority identification procedures to produce E-services and different documents where many parties are involved. Any citizen or organization with Internet web browser capability will be entitled to access the namespace and its associated application, registration, and resolution services. The primary IVIS namespace usage is to identify information resources, such as XML messages, their schemas, and other resources, which can be public or have a special destination, when a few different parties are involved in the interchange.

5. IANA Considerations

This document includes a RUN Network Identifier (NID) registration for IVIS for entry in the IANA registry of URN NIDs (see [RFC2434] for more information).

6. Namespace Considerations

To select necessary identifier schema, we spend a lot time and decided on URN, because an IVIS URN namespace has to resolve the following problems:

- Information resource uniqueness

  Uniqueness makes it possible to find a necessary resource and call it anytime. Uniqueness gives stability in message sending and storing operations.

- Namespace understandability

  IVIS URN consists of parts, which can guarantee namespace legibility.

- Information resource resolution

  One of the IVIS namespace parts identifies the place where the resource can be found (resolved).

  Therefore, a new URN assignment is required, and individual URNs shall be assigned through the process of development of each XML schema.

7. Security Considerations

There are no additional security considerations besides those normally associated with the use and resolution of URNs in general.

8. Acknowledgements

Since the specification described in this document is derived from [RFC3305], [RFC3616], [RFC3986], [RFC3622], and [RFC3406] the acknowledgements in those documents still apply. In addition, the author wishes to acknowledge Leslie Daigle, Ted Hardie, and Dinara Suleymanova for their suggestions and review.

9. References

9.1. Normative References

[RFC3406] Daigle, L., van Gulik, D., Iannella, R., and P. Faltstrom, "Uniform Resource Names (URN) Namespace Definition Mechanisms", BCP 66, RFC 3406, October 2002.

[RFC3986] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, January 2005.

9.2. Informative References

[RFC2434] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", BCP 26, RFC 2434, October 1998.

[RFC3305] Mealling, M. and R. Denenberg, "Report from the Joint W3C/IETF URI Planning Interest Group: Uniform Resource Identifiers (URIs), URLs, and Uniform Resource Names (URNs): Clarifications and Recommendations", RFC 3305, August 2002.

[RFC3616] Bellifemine, F., Constantinescu, I., and S. Willmott, "A Uniform Resource Name (URN) Namespace for Foundation for Intelligent Physical Agents (FIPA)", RFC 3616, September 2003.

[RFC3622] Mealling, M., "A Uniform Resource Name (URN) Namespace for the Liberty Alliance Project", RFC 3622, February 2004.

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[RFC2141] Moats, R., "URN Syntax", RFC 2141, May 1997.

[RFC4234] Crocker, D., Ed. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", RFC 4234, October 2005.

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