Network Working Group
Request for Comments: 4157
Category: Historic

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August 2005

The prospero URI Scheme

Status of This Memo

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Abstract

This document specifies the prospero Uniform Resource Identifier (URI) scheme that was originally specified in RFC 1738. The purpose of this document is to allow RFC 1738 to be made obsolete while keeping the information about the scheme on standards track.

1. Introduction

URIs were previously defined in RFC 2396 [RFC2396], which was updated by RFC 3986 [RFC3986]. Those documents also specify how to define schemes for URIs.

The first definitions for many URI schemes appeared in RFC 1738 [RFC1738]. Because that document has been made obsolete, this document copies the prospero URI scheme from it to allow that material to remain on standards track.

2. Scheme Definition

The prospero URL scheme is used to designate resources that are accessed through the Prospero Directory Service. The Prospero protocol is described in the original Prospero specification [PROSP].

Historical note: The Prospero protocol was not widely implemented and almost no Prospero servers are in use today.

A prospero URL takes the form:

prospero://<host>:<port>/<hsoname>;<field>=<value>

If :<port> is omitted, the port defaults to 1525. No username or password is allowed.

The <hsoname> is the host-specific object name in the Prospero protocol, suitably encoded. This name is opaque and interpreted by the Prospero server. The semicolon ";" is reserved and may not appear without quoting in the <hsoname>.

Prospero URLs are interpreted by contacting a Prospero directory server on the specified host and port to determine appropriate access methods for a resource. The access methods might themselves be represented as different URLs. External Prospero links are represented as URLs of the underlying access method and are not represented as Prospero URLs.

Note that a slash "/" may appear in the <hsoname> without quoting, and no significance may be assumed by the application. Though slashes may indicate hierarchical structure on the server, such structure is not guaranteed. Note that many <hsoname>s begin with a slash, in which case the host or port will be followed by a double slash: the slash from the URL syntax, followed by the initial slash from the <hsoname> (e.g., <URL:prospero://example.com//pros/name> designates a <hsoname> of "/pros/name").

In addition, after the <hsoname>, optional fields and values associated with a Prospero link may be specified as part of the URL. When present, each field/value pair is separated from each other and from the rest of the URL by a ";" (semicolon). The name of the field and its value are separated by a "=" (equal sign). If present, these fields serve to identify the target of the URL. For example, the OBJECT-VERSION field can be specified to identify a specific version of an object.

3. Security Considerations

Many security considerations for URI schemes are discussed in [RFC3986]. [PROSP] uses passwords in the clear for authentication, and offers no privacy, both of which are considered extremely unsafe in current practice.

4. Informative References

[RFC1738] Berners-Lee, T., Masinter, L., and M. McCahill, "Uniform Resource Locators (URL)", RFC 1738, December 1994.

[RFC2396] Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifiers (URI): Generic Syntax", RFC 2396, August 1998.

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

[PROSP] Neuman, B. and S. Augart, "The Prospero Protocol", USC/Information Sciences Institute, June 1993.

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Acknowledgement

Funding for the RFC Editor function is currently provided by the Internet Society.