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The rsync URI Scheme

Abstract

This document specifies the rsync Uniform Resource Identifier (URI) scheme.

Status of This Memo

This document is not an Internet Standards Track specification; it is published for informational purposes.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Not all documents approved by the IESG are a candidate for any level of Internet Standard; see Section 2 of RFC 5741.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at http://www.rfc-editor.org/info/rfc5781.

1. Introduction

URIs were previously defined in RFC 2396, which was obsoleted by RFC 3986 [RFC3986]. The procedures for registering new URI schemes are defined in RFC 4395 [RFC4395]. The rsync utility provides fast incremental file transfer [rsync]. This document defines a URI scheme for rsync.

2. rsync URI registration

This section contains the registration template for the rsync URI scheme in accordance with RFC 4395 [RFC4395]. This URI scheme is for the rsync protocol using TCP as the transport protocol. Other transports, such as rsync over SSH, are not supported by this URI scheme.

URI scheme name: rsync

Status: provisional

URI scheme syntax: An rsync URI describes a source or destination for the rsync application including a hostname, path, and optional user and port. The generic form of the rsync URI is:

rsync://[user@]host[:PORT]/Source

The rsync URI follows the general syntax from RFC 3986 and is defined by the following ABNF [RFC5234]:

```
   rsyncuri        = "rsync:" hier-part
                     ; See RFC 3986 for the definition
                     ; of hier-part
```

URI scheme semantics: An rsync URI may be used as either a source or destination for the rsync application. If the port is not specified, it defaults to 873.

Encoding considerations: Since the rsync URI is defined using standard elements from RFC 3986, no special encoding considerations are present.

Applications/protocols that use this URI scheme name: The only application that uses rsync URIs is rsync.

Interoperability considerations: Since only one application is expected to make use of rsync URIs, this URI scheme is expected to have few interoperability concerns.

Security considerations: Section 7 of RFC 3986 describes general security considerations for URI schemes. The considerations about reliability and consistency, malicious construction, rare IP address formats, sensitive information, and semantic attacks all apply to rsync URIs. The considerations about transcoding do not apply. Given how rsync is regularly used, it is expected that most applications will not be bothered by data accessed via a given rsync URI changing over time.

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References: see Section 5.

3. IANA Considerations

IANA has registered the rsync provisional URI scheme using the template in Section 2.

4. Security Considerations

Many security considerations for the usage of URIs are discussed in Section 7 of [RFC3986]. The considerations about reliability and consistency, malicious construction, rare IP address formats, sensitive information, and semantic attacks all apply to rsync URIs. The considerations about transcoding do not apply. The rsync URI scheme has no particularly unique security considerations.

The security considerations of the rsync protocol are not covered in this document.

5. Normative References

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

[RFC4395] Hansen, T., Hardie, T., and L. Masinter, "Guidelines and Registration Procedures for New URI Schemes", BCP 35, RFC 4395, February 2006.

[RFC5234] Crocker, D., Ed., and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008.

6. Informative References

[rsync] http://rsync.samba.org/.

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