

INTERNET-DRAFT
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TRILL Directory Extensions
<[draft-ietf-trill-directory-extensions-00.txt](#)>

Abstract

TRILL (Transparent Interconnection of Lots of Links) push and pull directories ([RFC 7067](#)) specified in [draft-ietf-trill-directory-assist-mechanisms](#) provide directory services to TRILL switches but not to end stations. This document extends those services so that end stations can pull directory information from Pull Directory servers and can have directory information pushed to them from Push Directory servers. In each case, at least one co-operating edge TRILL switch is required.

Status of This Memo

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Directory Assisted TRILL Encap

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1. Introduction

TRILL (Transparent Interconnection of Lots of Links) [[RFC6325](#)] push and pull directories [[RFC7067](#)] specified in [[Directory](#)] provide directory services to TRILL switches but not to end stations. This document extends those services so that end stations can pull directory information from Pull Directory servers and can have directory information pushed to them from Push Directory servers. In each case, at least one co-operating edge RBridge is required.

[Section 2](#) specifies the extensions to Pull Directories. [Section 3](#) Specifies the extensions to Push Directories.

1.1 Terminology

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 [[RFC2119](#)].

TBD

[2](#). Extensions to Pull Directory

Pull Directory support is optionally extended to end station clients as specified in this section.

When Pull Directory support is provided by an edge RBridge to end stations, the messages used are as specified in [\[Directory\]](#) for the support of a Pull Directory hosted on an end station with the following changes:

- (1) a different RBridge Channel [\[RFC7178\]](#) protocol number is used, and
- (2) the roles of the end station and edge RBridge are reversed, that is, instead of the edge RBridge using a Pull Directory on an end station there is an end station using a Pull Directory service through an edge RBridge.

An end station can tell which, if any, of the edge RBridges to which it is attached support this service by examining their TRILL IS-IS Hellos messages to see if they support the "Pull Directory Service to End Station" RBridge Channel Protocol (see [Section 4](#)).

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[3.](#) Extensions to Push Directory

TBD

[4.](#) IANA Considerations

IANA is requested to assign an RBridge Channel protocol number from the range assigned based on standards action as the "Pull Directory Service to End Station" protocol adding a line to the RBridge Channel Protocols registry on the TRILL Parameters web page as follows:

Protocol	Description	Reference
-----	-----	-----
TBD	Pull Directory Service to End Station	[this document]

5. Security Considerations

TBD

For security considerations of directory services, see [[Directory](#)].

For general TRILL security considerations, see [[RFC6325](#)].

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Normative References

- [RFC2119] - Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), DOI 10.17487/RFC2119, March 1997, <<http://www.rfc-editor.org/info/rfc2119>>.
- [RFC6325] - Perlman, R., Eastlake 3rd, D., Dutt, D., Gai, S., and A. Ghanwani, "Routing Bridges (R Bridges): Base Protocol Specification", [RFC 6325](#), DOI 10.17487/RFC6325, July 2011, <<http://www.rfc-editor.org/info/rfc6325>>.
- [RFC7178] - Eastlake 3rd, D., Manral, V., Li, Y., Aldrin, S., and D. Ward, "Transparent Interconnection of Lots of Links (TRILL): R Bridge Channel Support", [RFC 7178](#), DOI 10.17487/RFC7178, May 2014, <<http://www.rfc-editor.org/info/rfc7178>>.
- [Directory] - D. Eastlake, L. Dunbar, R. Perlman, Y. Li, "TRILL: Edge Directory Assist Mechanisms", [draft-ietf-trill-directory-assist-mechanisms](#), work in progress.

Informative References

- [RFC7067] - Dunbar, et, al "Directory Assistance Problem and High-Level Design Proposal", [RFC7067](#), Nov, 2013.

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The document was prepared in raw nroff. All macros used were defined within the source file.

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