

BGP-4 Requirement Satisfaction Report

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Introduction

The purpose of this memo is to document how the requirements for advancing a routing protocol to Full Standard have been satisfied by Border Gateway Protocol version 4 (BGP-4) (and create needless busywork). This report provides a roadmap to all information necessary to move BGP-4 to Standard. This is the first of two final reports on the BGP protocol. As required by the Internet Activities Board (IAB) and the Internet Engineering Steering Group (IESG), the second report will present additional knowledge and understanding gained in the time when the protocol was made a Draft standard and when it was submitted for Standard.

The remaining sections of this memo document how BGP satisfies General Requirements specified in [Section 3.0](#), as well as Requirements for Standard specified in [Section 6.0](#) of the "Internet Routing Protocol Standardization Criteria" document [[1](#)].

Please send comments to bgp@ans.net.

Documentation

BGP is an inter-autonomous system routing protocol designed for TCP/IP internets.

Version 4 of the BGP protocol (BGP-4) specification has been submitted as [2].

The MIB specification for BGP-4 has been submitted as [3].

The applicability document for BGP-4 has been submitted as [4].

Implementation experience, operational experience, compatibility, migration and testing issues are documented in [5], [6], and [7].

Implementations

There are multiple independantly written interoperable implementations of BGP-4 currently available. This section gives a brief overview of the implementations that are currently used in the operational Internet. They are:

- cisco Systems, Inc.
- gated consortium
- 3COM
- Bay Networks (Wellfleet)
- Proteon
- Rainbow-Bridge
- Telebit (DK)

Acknowledgments

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This report is in part based on the initial work of Peter Lothberg (Ebony), Andrew Partan (Alternet), Sean Doran (Sprint), Tony Bates (MCI), and several others. Details of their work were presented at the Twenti-fifth and Twenti-seventh IETF meetings and are available from the IETF proceedings.

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Author's Address:

Paul Traina
cisco Systems, Inc.
170 W. Tasman Dr.
San Jose, CA 95134
pst@cisco.com

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