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Route Leaks -- Requirements for Detection and Prevention thereof
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Abstract

The Border Gateway Protocol, version 4, (BGP4) provides the means to advertise reachability for IP prefixes. This reachability information is propagated in a peer-to-peer topology. Sometimes routes are announced to peers for which the local peering policy does not permit. And sometimes routes are propagated indiscriminantly, once they have been accepted.

This document considers the situations that can lead to routes being leaked, and tries to find acceptable definitions for describing these scenarios.

The purpose of these definitions is to facilitate discussion on what a route leak is, and what the scope of the problem space for route leaks is. This, in turn, is intended to inform a requirements document for detection of (and prevention of) route leaks. And finally, the definitions and requirements are intended to allow proposed solutions which meet these criteria, and to facilitate evaluation of proposed solutions.

The fundamental objective is to "solve the route leaks problem".

Author's Note

Intended Status: Informational.

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1. Introduction

1.1. Rationale

This document is a placeholder, version 00 to meet the cut-off deadline.

1.2. Requirements

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](#)].

1.3. Terminology

The reader is assumed to be familiar with the IETF.

2. Security Considerations

None per se.

3. IANA Considerations

This document contains no IANA-specific material.

4. Acknowledgements

To be added later.

5. References

5.1. Normative References

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