Google Fiber

Peering Policy

Introduction

This document sets forth Google Fiber's policy for settlement-free peering. Google Fiber updates this policy on occasion and maintains the current version at www.fiber.google.com/peering.

Google Fiber is listed in PeeringDB, the industry database for peering information for network operators. Please review our PeeringDB entry for the most current list of Google Fiber's public and private peering locations. New peering requests should be emailed to peering@googlefiber.net.

Google Fiber has a selective peering policy, subject to certain requirements. At times, local infrastructure requirements or constraints may make it necessary for us to modify these requirements on a temporary or long-term basis.

Operational requirements

Networks wishing to peer with Google Fiber must have the following:

- Publicly routable ASN
- Publicly routable IP address space (at least one /24 of IPv4 and/or one /48 of IPv6 space)
- 24x7 NOC contact capable of resolving service issues
- Customer prefix filtering
- Presence at one or more of the Internet Exchanges or private peering interconnection facilities listed for Google Fiber in PeeringDB
- Up to date ASN record and contact information in PeeringDB
- MD5 passwords are desired for all BGP sessions
- Minimum traffic requirements as set forth below

Other requirements

Public peering

- **Traffic**: ASNs exhibiting more than 15 Mbps of Google Fiber traffic at peak, in either direction, can request peering via a bilateral BGP session over an Internet Exchange. We

may peer with some route servers.

Private peering

- **Diversity**: A requesting network should have the ability to peer with Google Fiber at a reasonable level of diversity (e.g., metro, facility, router) in a location where Google Fiber has a peering point of presence.
- **Traffic**: A requesting network must have the ability to peer at a 10GE (10,000 Mbps) or greater capacity level at each interconnection point, with a minimum utilization of 10% of such capacity.
- Google Fiber prefers private peering, also known as Private Network Interconnect (PNI), for networks with certain traffic profiles (volume, trend, etc.) or traffic categories.
- Google Fiber may de-pref or remove a public peering session once a corresponding PNI has been established.

Routing policy

In general, networks that have established peering sessions with AS16591 will receive all AS-GOOGLE-FIBER routes. At times, local infrastructure requirements or constraints may result in a more limited set of routes being advertised via AS16591.

Maximum prefixes

We suggest peers set a max-prefix of at least 200 (IPv4) and 30 (IPv6) routes on peering sessions with Google Fiber. Refer to our [PeeringDB entry](#) for the latest number of prefixes.

Related ASNs

Alongside AS16591, Google Fiber may reannounce prefixes from the following on-net ASNs:

- AS19448
- AS-GOOGLE-IT
- AS6432
- AS19165

The AS-GOOGLE-FIBER aut-num object in RADb contains the most current list of ASNs.

Peering process

All requests for settlement-free peering should be submitted via e-mail to peering@googlefiber.net. The e-mail request should include the following for the requesting network:

- Link to PeeringDB entry
- Complete contact information:name, phone, and email of a network representative (or posted in PeeringDB)
- ASN
- List of suggested interconnection points that would meet the criteria set forth in this Google Fiber Peering Policy

Google Fiber reserves the right to grant or refuse peering with a requesting network at the

discretion of the peering team. Google Fiber also reserves the right to: (1) terminate peering for any reason upon 30 calendar days' prior notice to the other party; and (2) to terminate peering immediately should any event detrimentally affect, or threaten to detrimentally affect, the Google Fiber network. Examples of such events include but are not limited to; BGP session flaps, route flaps, excessive routes, denial of service attacks, or unsolicited bulk/commercial emails or other traffic that can be classified as spam.