

Google fiber

Google Fiber Peering Policy

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 an open 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 address space (at least one /24 of IPv4 and/or one /48 of IPv6 space)
- 24x7 NOC contact capable of resolving BGP routing issues, denial of service attacks and security issues (or more generically, network issues)
- Customer prefix filtering
- Presence at one or more of the Internet Exchanges or private peering interconnection facilities listed for Google Fiber in PeeringDB
- ASN record completed in PeeringDB
- MD5 passwords are requested 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 do not peer with 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 should have the ability to peer at a minimum of 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 sufficient traffic volume.
- Google Fiber may 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. These routes would be relevant to the local peering region.

Maximum prefixes

We suggest peers set a max-prefix of at least 50 (IPv4) and 30 (IPv6) routes on peering sessions with Google Fiber.

Related ASNs

Alongside AS16591, Google Fiber also manages the following ASNs: AS19448.

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:

- the requesting network's complete contact information (name, phone, and email of a network representative)
- the requesting network's ASN
- a 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, whether or not the requesting network meets the criteria set forth in this Google Fiber Peering Policy.

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 BGP session flaps, route flaps, excessive routes, denial of service attacks or spam.