

The Peering Database

The [Peering Database](#) is a freely available, user-maintained database of networks which take part in the global Internet. It is considered the authoritative source of all information relating to network operators who participate in peering around the world.

The database facilitates the global interconnection of networks at Internet Exchange Points (IXPs), data centres, and other interconnection facilities, and is the first stop in making interconnection decisions.

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- [What is the PeeringDB](#)
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Background

In the early Internet (of the 1990s) there were few network operators and interconnect points around the world that interconnections were relatively straightforward to seek out and implement (in the author's experience anyway). In March 1999 there were 4640 ASNs in the Internet with only 800 providing transit. This compares with today's total exceeding 73000 ASNs and over 10000 ASNs providing transit, never mind that almost every country in the world now has at least one Internet Exchange Point if not a datacentre facilitating commercial interconnects.

In the 1990s establishing new interconnects by attending in major Internet operations meetings (NANOG, RIPE, AfNOG, APRICOT and so on), with network information passed on by word of mouth or email or even by letter!

With the rapid growth of the Internet in the late 1990s and early 2000s, there needed to be a more scalable way for a Network Operator to get their "peering information" out to the global Internet operations community. And hence the PeeringDB was born.

What is the Peering DB

The Peering DB is a repository of the important information that network operators need to determine whether an interconnection is feasible, makes commercial sense, makes technical sense, and is even technically feasible. While the Peering DB website has much more detailed information, the Peering Toolbox is highlighting the key points.

Here are some example entries to show what is possible. The first example (publicly accessible) is of LINX, the London Internet Exchange:

PeeringDB

Search here for a network, IX, or facility.

Advanced Search

Peers

Connections

Open Peers

Total Speed

% with IPv6

Organization

Also Known As

Long Name

City

Country

Continental Region

Media Type

Service Level

Tier

Last Updated

Notes

Contact Information

Company Website

Traffic Stats Website

Technical Email

Technical Phone

Policy Email

Policy Phone

Sales Email

Sales Phone

Health Check

LAN

MTU

IX-F Member Export URL

Visibility

Peers at this Exchange Point

Filter

Peer Name	ASN	Speed	Policy
IPv4	IPv6		
as20.networks	33920	2G	Selective
195.66.225.115	2001:7fb:4::8400:1		
Q1 Telecom (Q1.T)	201603	10G	Open
2001:7fb:4::3:14cd:1	195.66.227.214		
Q12 Smile Telecom	9116	10G	Open
195.66.225.114	2001:7fb:4::239c:1		
Q12 Smile Telecom	9116	10G	Open
195.66.226.90	2001:7fb:4::239c:2		
1&1 Versatel Deutschland GmbH	6081	100G	Selective
2001:7fb:4::22b1:1	195.66.224.245		
100 Percent IT	20915	1G	Open
195.66.225.213	2001:7fb:4::51b3:1		
23M GmbH	47447	10G	Open
2001:7fb:4::b957:1	195.66.227.70		
24Shells Inc	55081	10G	Open
2001:7fb:4::d729:1	195.66.227.116		
31173 Services AB	39351	10G	Open
2001:7fb:4::99b7:1	195.66.226.62		
4D Data Centres Ltd	31463	10G	Selective
400.00.000.000	2001:7fb:4::7b:1		

which shows a screen capture of what is available at their LON1 site, a scrollable list of the participants, how to contact LINX, etc.

The second example below shows that of a AWS (Amazon Web Services), one of the major content networks on the Internet:

PeeringDB

Search here for a network, IX, or facility.

Advanced Search

Peers

Connections

Open Peers

Total Speed

% with IPv6

Organization

Also Known As

Long Name

Company Website

ASN

IRR as-set/route-set

Route Server URL

Looking Glass URL

Network Type

IPv4 Prefixes

IPv6 Prefixes

Traffic Levels

Traffic Ratios

Geographic Scope

Protocols Supported

Last Updated

Public Peering Info Updated

Peering Facility Info Updated

Contact Info Updated

Notes

Contact Information

Company Website

Traffic Stats Website

Technical Email

Technical Phone

Policy Email

Policy Phone

Sales Email

Sales Phone

Health Check

LAN

MTU

IX-F Member Export URL

Visibility

Public Peering Exchange Points

Filter

Exchange	ASN	Speed	RS Peer
IPv4	IPv6		
AKL-IX (Auckland NZ)	16509	100G	
43.243.21.113	2001:7fa:11:6:0:407d:0:2		
AKL-IX (Auckland NZ)	16509	100G	
43.243.21.112	2001:7fa:11:6:0:407d:0:1		
AMS-IX	16509	600G	
80.249.210.100	2001:7fb:1::a501:6509:1		
AMS-IX	16509	600G	
80.249.210.217	2001:7fb:1::a501:6509:2		
AMS-IX Chicago	16509	100G	
206.108.115.36	2001:504:30:1:0:a501:6509:1		
AMS-IX Hong Kong	16509	10G	
103.247.139.10	2001:d0:296:a501:6509:1		
AMS-IX Hong Kong	16509	10G	
103.247.139.74	2001:d0:296:a501:6509:2		
AMS-IX Mumbai	16509	10G	
223.31.200.29	2001:a48:44:100b:0:a501:6509:2		
AMS-IX Mumbai	16509	10G	
223.31.200.30	2001:a48:44:100b:0:a501:6509:1		
Any2Denver	16509	100G	
206.51.46.87	2605:600:303:303:87		
Any2West	16509	100G	
206.72.210.146	2001:504:13:146		

Private Peering Facilities

Filter

Facility	Country
ASN	City
151 Front Street West Toronto	Canada
16509	Toronto
165 Halsey Meet-Me Room	United States of America
16509	Newark
35 John Street / 250 Front Street West	Canada
16509	Toronto

This one shows the Public peering and Private peering facilities AWS is present at. So a potential peer

can check which locations they share with AWS, and then contact them about peering. The page for AWS contains data about number of prefixes, traffic ratios, etc, plus the IP addressing used at the various public Internet connect points. All this is designed to make it easier for prospective peers to assess and reach out to AWS for peering.

And the final example shows Aereion (formerly Telia Carrier), the operator of AS1299, one of the international transit carriers serving the global Internet:

PeeringDB Search here for a network, IX, or facility. [Advanced Search](#)

Twelve99

Organization	Aereion
Also Known As	Aereion, Old Telia Carrier
Long Name	
Company Website	https://www.aereion.com/
ASN	1299
IRR as-set/route-set	RIPE:AS-TELIANET RIPE:AS-TELIANET-V6
Route Server URL	
Looking Glass URL	https://lg.twelve99.net/
Network Type	NSP
IPv4 Prefixes	550000
IPv6 Prefixes	100000
Traffic Levels	100+Tbps
Traffic Ratios	Balanced
Geographic Scope	Global
Protocols Supported	<input checked="" type="checkbox"/> Unicast IPv4 <input type="checkbox"/> Multicast <input checked="" type="checkbox"/> IPv6 <input checked="" type="checkbox"/> Never via route servers
Last Updated	2022-02-04T13:28:51Z
Public Peering Info Updated	
Peering Facility Info Updated	2022-04-28T18:22:56
Contact Info Updated	2021-09-09T14:07:44

Public Peering Exchange Points

Exchange	ASN	Speed	RS Peer
IPv4	IPv6		
No filter matches. You may filter by Exchange, ASN or Speed.			

Private Peering Facilities

Facility	Country
ASN	City
123.NET - DC1 - 24700 Northeastern	United States of America
1299	Southfield
1530 Swift	United States of America
1299	North Kansas City
1623 Farnam	United States of America
1299	Omaha
365 Data Centers Buffalo (BU1)	United States of America
1299	Buffalo
365 Data Centers Detroit (DT1)	United States of America
1299	Southfield
365 Data Centers Nashville (NA1)	United States of America
1299	Nashville
365 Data Centers Tampa (TA1)	United States of America
1299	Tampa
3U Rechenzentrum Berlin	Germany
1299	Berlin
910Telecom Denver	United States of America
1299	Denver
ptel Frankfurt	Germany
1299	Frankfurt
Aereion Düsseldorf DDF/B	Germany
1299	Düsseldorf
Aereion London HEX	United Kingdom
1299	London
Aereion Moscow MSK/D1	Russia

Notes

AS1299 is matching RPKI validation state and reject invalid prefixes from peers and customers. Our looking-glass marks validation state for all prefixes. Please review your registered RDAs to reduce number of invalid prefixes.

All trouble ticket requests or support related emails should be sent to support@aereion.com.

As of June 1 2021, Aereion and its affiliates are no longer part of or affiliated with Telia Company.

[Translate](#)

again showing the type of data that are published in the PeeringDB.

Creating a PeeringDB Entry

The Peering Toolbox recommends (strongly) that any entity with their own AS Number and address space should create an entry in the Peering DB. There is no cost to doing so.

A tutorial on how to create an entry is currently beyond the scope of the Peering DB - but the best advice is to look at other PeeringDB entries and use what those entries have to guide what is needed for your own one.

Simply create an account, and populate it with the mandatory entries - and place as much information there as you possibly can. This should minimally be:

- Organisation name
- Organisation website
- ASN
- IRR as-set (you created one earlier)
- Network Type
- Number of IPv4 prefixes
- Number of IPv6 prefixes

- Traffic Levels
- Traffic Ratios (inbound to your network, or out from your network)
- Geographic Scope (ie what locations do you serve)
- Protocols supported (IPv4 and IPv6 are common)
- Peering Policy (Open, Selective, Restricted)
- Contact information (NOC, Policy/Admin, Technical)
- Public Peering Points (if applicable)
- Private Peering Facilities (if applicable)

Why a PeeringDB entry

Today very few network operators will considering peering with an entity that has no PeeringDB entry. In fact, many will make it a requirement before they will even respond to a peering request. Indeed, some operators will go as far as using information in the PeeringDB for configuring peering sessions with their peers, making it essential that the entries are kept up to date.

Therefore, the Peering Toolbox recommendation is that all Network Operators with their own Internet Resources and who wish to take part in the global peering community must create and maintain their PeeringDB entry.

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From:

<https://bgp4all.com/pfs/> - **Philip Smith's Internet Development Site**

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