



IXP Manager

An Open Source Success Story for Better Internet Connectivity

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Internet Neutral Exchange Association
Company Limited by Guarantee



August 2020

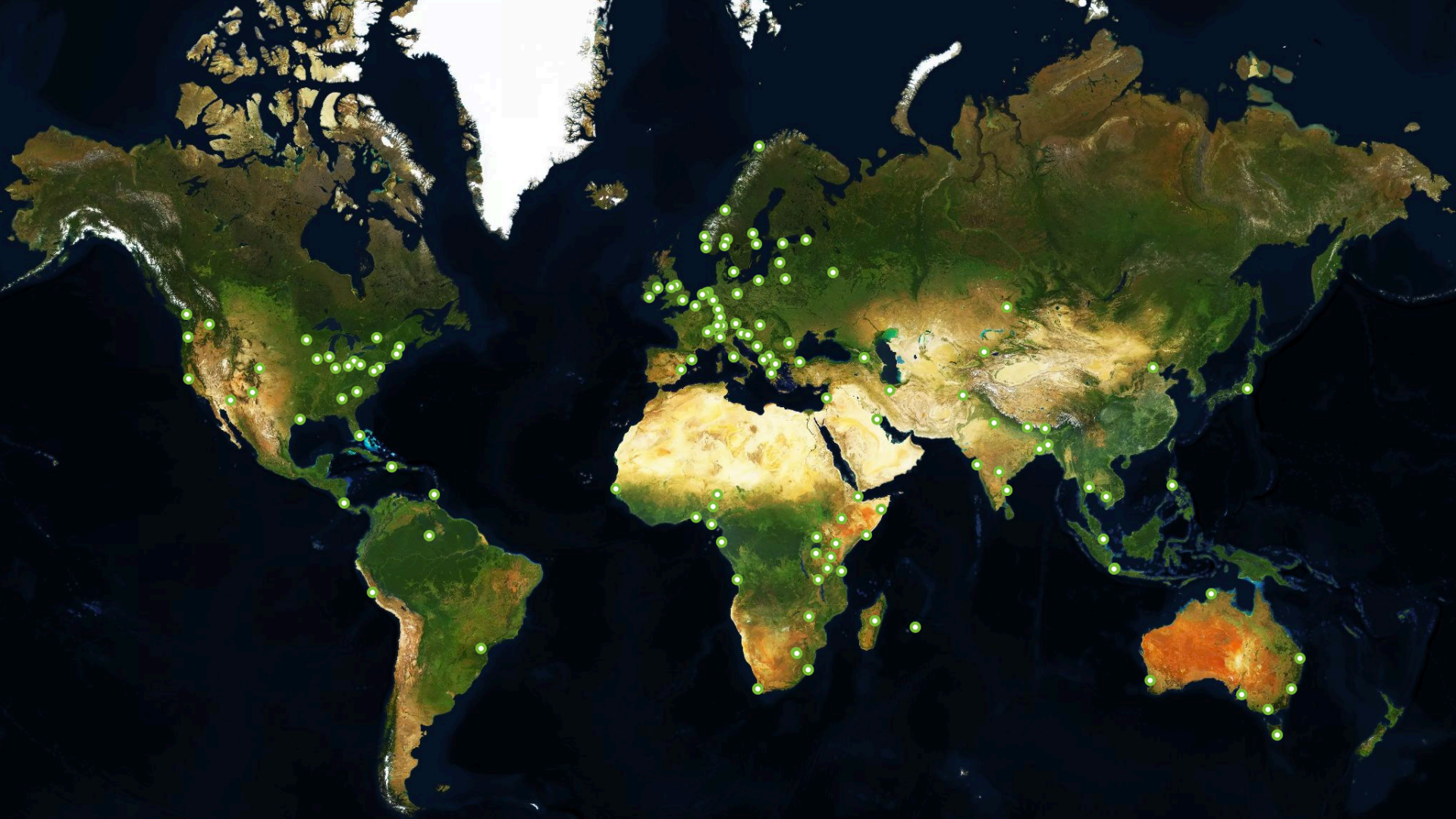
Powering Peering at
130 IXPs connecting
5,710 networks
through **7,561 ports**
providing **73 Tbs**
of capacity with over
15 Tbps of peak traffic
from **1 very happy team**



~~August 2020~~
October 2020

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Why Open Source IXP Manager?

Our vision for IXP Manager and the basis for making it a free-to-use, open source project was that it might **enable the creation of IXPs wherever they are required**. The existence of these IXPs would, in turn, **create a stronger, open, more robust and better connected internet**.

We're especially proud that IXP Manager helps these IXPs start from the best place possible: secure by default, proven configurations and implementing best practice.

www.ixpmanager.org

6,062

Connected Networks

81Tb

Connected Capacity

7,975

Connected Ports

There are at least **145** IXPs Powering Peering using IXP Manager around the world to connect **6,062** networks of which **3,796** are unique. The edge peering capacity of these networks is **81Tb** over **7,975** connected ports. We aggregate traffic statistics from 91 IXP Manager platforms which show us that the peak traffic exchanged is **19.67 Tbps**.

Port Breakdown

368

100Gb

4,232

10Gb

2,230

1Gb

1,196

Other

Source of Information and Methodology

77

Poll via IXP Manager

58

Poll via PeeringDB

5

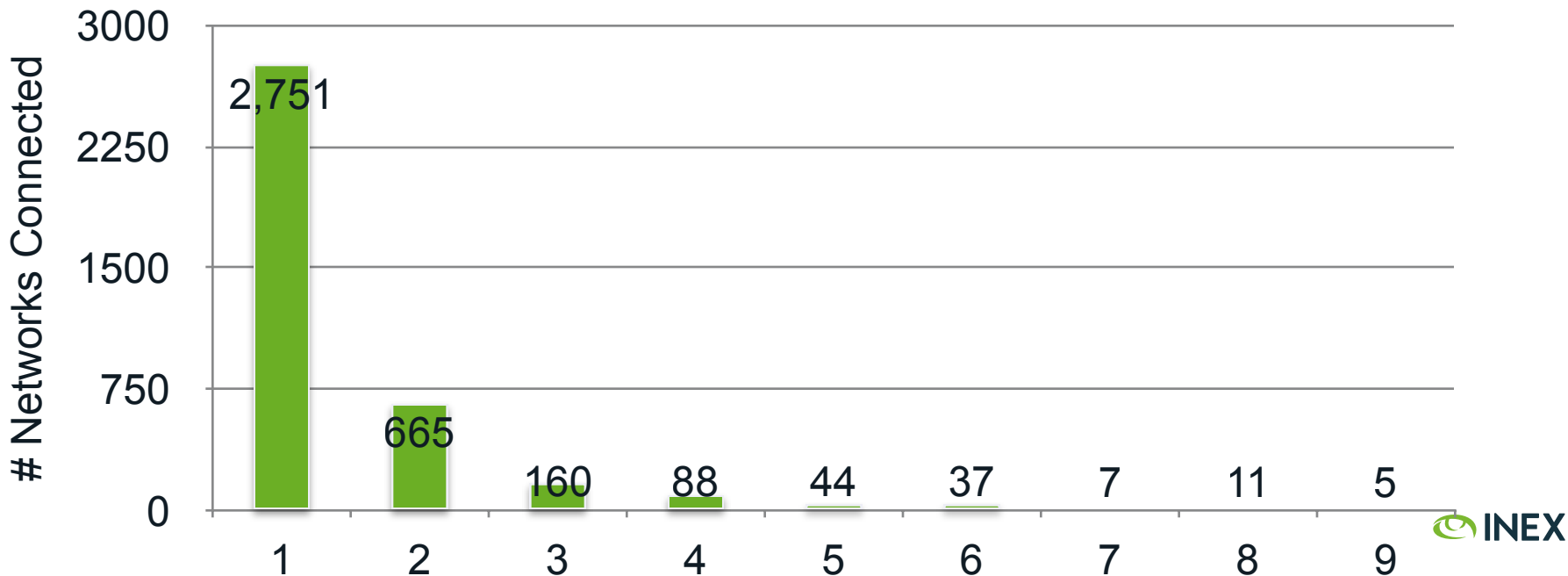
Poll via Direct IX-F Export

- 5 are not currently polled: no IX-F or PeeringDB entry found.
- Traffic statistics from 91 IXPs because their Grapher API endpoint is available.
- IXP Manager has no call home function.

Statistics

Networks Peering at Multiple Exchanges

20 networks connect to **at least ten** IXPs using the IXP Manager platform



Network	ASN	# IXPs
Cloudflare	13335	53
Hurricane Electric	6939	51
Packet Clearing House AS42	42	40
Packet Clearing House	3856	40
Google LLC	15169	35
Akamai Technologies	20940	34
Microsoft	8075	32
Amazon.com	16509	28
Facebook Inc	32934	25
Netflix	2906	23
VeriSign Global Registry Services	26415	23
Yahoo!	10310	19
DNS-OARC-112	112	17
Fastly, Inc.	54113	14

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Thanks

Thanks and Acknowledgements

Ongoing development of IXP Manager is focused on delivering the functionality to meet the evolving requirements of IXPs around the world who use the platform to meet their members' peering needs. This ongoing development is financially supported by sponsorship from a number of IXPs who use the platform and also the benevolence of industry patrons who have committed to enhancing the functionality, security and scalability of the worlds' most trusted IXP management platform.

Can you help: <https://www.ixpmanager.org/sponsor-now>

Any questions?

<https://www.ixpmanager.org/> - [@ixpmanager](#)

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(additional slides follow with background information)

What is IXP Manager



- Free and open source software platform for IXPs
- Powering peering at 145 exchanges in 65 countries
- Full stack management platform
- Teaches and implements best practice
- Mature: started in 2005, open sourced in 2011
- Supported by INEX, patrons and IXP sponsors
- Modern technology stack



INEX

- Peering point for the island of Ireland, member owned association, not for profit, founded in 1996
- ~110 members (inc. ~98% of eyeballs)
- >500Gbps of IP data exchanged at peak
- Dual infrastructure, 8 PoPs, own dark fibre
- Opened INEX Cork in 2016
- IXP Manager / Salt / Napalm automation
- Home of IXP Manager