



**PeeringDB**

# Introduction to PeeringDB

Angolan Peering Forum 1.0

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**APF**

# What is PeeringDB?

- Why should my facility, IXP or network be listed in PeeringDB?
  - Helps establish new peering more efficiently, with all information easy to find in one place
    - Maintain all of your contact and connection info
    - Find other network's peering contact and connection info
    - Find interconnection facility and IXP info
- A PeeringDB record is required by many networks to peer
- Can be used for automation to generate router configurations
  - Initial configuration to setup peering quickly
  - Update configuration if maximum prefixes change

# Angola and its Neighbours

Country	IX	Facilities	Networks at IXes	Networks in Facilities	Networks total	%	Networks in PeeringDB	Networks in RIR
AO	2	4	18	8	22	31%	17	55
CD	2	2	4	0	4	28%	11	40
CG	1	2	5	2	7	47%	8	17
NA	1	0	5	0	5	19%	3	16
ZM	1	3	2	0	2	15%	3	20

# The GUI // Profile View

Você confirmou seu endereço de e-mail!

## Afilie-se à organização

Para afiliar com uma organização existente, favor inserir abaixo o ASN ou o nome da organização.  
Para registrar uma nova organização de rede, favor inserir abaixo o ASN e o nome da organização.  
Para registrar uma nova infraestrutura ou organização de ponto de troca, favor inserir abaixo o nome da organização (o ASN é opcional).

No caso da entrada RiR não poder ser recuperada para o seu ASN, favor contatar [support@peeringdb.com](mailto:support@peeringdb.com) para assistência.

## Afiliações existentes

Sua afiliação a [DE-CIX Management GmbH](#) Foi aprovado.

[Gerenciar Aplicações OAuth](#)

## Selecionar o idioma

## Alterar endereço de email

Para a validação rápida, é necessário que você use um endereço de e-mail de trabalho. Se você pretende registrar seu ASN no PeeringDB, é recomendável que você use um endereço de email que exista nos detalhes de contato público do ASN.

## Alterar senha

Select Language

Request Affiliation

Your Affiliations

Change Email and Password

# The GUI // org view

## Angola Cables

Editar

Alguns dos dados desta página estão incompletos, por favor, atualize os campos marcados com ⓘ para melhorar a qualidade dos dados.

URL do site	<a href="http://www.angolacables.co.ao">http://www.angolacables.co.ao</a>
Endereço 1	Lote Cellwave, 2º andar Via AL5, Zona XR6B
Endereço 2	
Localização ⓘ	Luanda
Código do país	AO
Notas	

### Facilities

Filter

Nome ▼	País Cidade
<a href="#">AngoNAP Fortaleza</a>	Brasil Fortaleza
<a href="#">AngoNAP Luanda</a>	Angola Luanda

### Networks

Filter

Nome ▼	ASN
<a href="#">Angola Cables</a>	37468

### Pontos de Troca

Filter

Nome ▼	País Cidade
--------	----------------

Nada correspondeu ao seu filtro.  
Você pode filtrar por **Nome**, **País** ou **Cidade**.

Facilities are Shown Here  
Angola Cables has 2 Facilities

Networks are Shown Here  
Angola Cables has 1 Network Record

Exchanges are Shown Here  
Angola Cables has 0 Exchange Record

# The GUI // net view

## Angola Cables

Organização	Angola Cables
Também conhecido como	Angola Cables
Website da Empresa	<a href="https://www.angolacables.co.ao/">https://www.angolacables.co.ao/</a>
ASN primário	37468
IRR as-set/route-set	AS-ANGOLACABLES
URL do Servidor de rotas	
URL do Looking Glass	<a href="https://lg.angolacables.co.ao/">https://lg.angolacables.co.ao/</a>
Tipo de rede	Fornecedor de Serviços de Rede
Prefixos IPv4	10000
Prefixos IPv6	5000
Níveis de tráfego	200-300 Gbps
Proporções de tráfego	Principalmente Inbound
Alcance geográfico	Global
Protocolos suportados	<input checked="" type="radio"/> Unicast IPv4 <input type="radio"/> Multicast <input type="radio"/> IPv6
Ultima atualização	2019-10-15T17:05:05Z
Notas	

## Configuração do PeeringDB

Permitir Atualização de IXP	<input type="radio"/>
IXP Update Tools	<input type="button" value="Pre-visualização"/> <input type="button" value="Postmortem"/>

## Informação da Política de Peering

Política de Peering	
Política geral	Seletivo
Localidades Múltiplas	Preferido
Requisito de Proporção	Não
Requisito de contrato	Opcional

## Contact Information

--

Editar

## Pontos de Troca de Peering Público

Filter

Troca ASN	IPv4 IPv6	Velocid... Peer RS
<a href="#">IX.br (PTT.br) São Paulo</a> ATM/MPLA 37468	187.16.221.193 2001:12f8::221:193	200G ⊙
<a href="#">IX.br (PTT.br) Fortaleza</a> ATM/MPLA 37468	200.219.146.71 2001:12f8:0:9::71	40G ⊙
<a href="#">IX.br (PTT.br) Fortaleza</a> ATM/MPLA 37468	200.219.146.166 2001:12f8:0:9::166	20G ⊙
<a href="#">NAPAfrica IX Johannesburg</a> Peering 37468	196.60.8.60 2001:43f8:6d0::60	20G ⊙
<a href="#">angonix</a> 37468	196.11.234.1 2001:43f8:9d0::925c:0:1	20G ⊙
<a href="#">AMS-IX</a> 37468	80.249.213.48 2001:7f8:1::a503:7468:1	10G ⊙
<a href="#">DE-CIX Frankfurt</a> DE-CIX Frankfurt Peering LAN 37468	80.81.193.103 2001:7f8::925c:0:1	10G ⊙
<a href="#">DE-CIX Lisbon</a> DE-CIX Lisbon Peering LAN 37468	185.1.131.8 2001:7f8:d5::925c:0:1	10G ⊙
<a href="#">DE-CIX New York</a> DE-CIX New York Peering LAN 37468	206.82.104.197 2001:504:36::925c:0:1	10G ⊙
<a href="#">ESPANIX Madrid Lower LAN</a> 37468	193.149.1.48 2001:7f8:f::48	10G ⊙
<a href="#">Equinix Ashburn</a> 37468	206.126.238.56 2001:504:0:2:0:3:7468:1	10G ⊙
<a href="#">Equinix Lisbon</a> Equinix IX - LS Metro 37468	185.1.116.30 2001:7f8:c7::3:7468:1	10G ⊙

## Private Peering Facilities

Filter

Infraestrutura ASN	Pais Cidade
<a href="#">AngoNAP Fortaleza</a> 37468	Brasil Fortaleza
<a href="#">AngoNAP Luanda</a> 37468	Angola Luanda
<a href="#">Fauinix LS1 - Lisbon</a>	Portugal

Connections to IXes are Shown Here  
Angola Cables has many Connections

Connections at Facilities are Shown Here  
Angola Cables has many Connections

# The GUI // fac view

## AngoNAP Luanda

Editar

Organização	<a href="#">Angola Cables</a>
URL do site	<a href="https://www.angolacables.co.ao/">https://www.angolacables.co.ao/</a>
Endereço 1	Avenida Pedro Castro Van Dúnem Loy
Endereço 2	Lote Cellwave, 2º andar Via AL5, Zona XR6B Talatona, Belas Sul - Angola
Localização	Luanda, , 3293
Código do país	AO
Geocódigo	-8,914886, 13,181343
Código CLLI	
NPA-NXX	
Notas	

### Local Exchanges

Filter

Troca ▼	Nome Completo	Redes
<a href="#">angonix</a>	Angola Internet Exchange Point	14

Local Exchanges are Shown Here  
AngoNAP Luanda hosts 1 Exchange

### Networks

Filter

Nome do Peer ▼	ASN
<a href="#">Angola Cables</a>	37468
<a href="#">angonix Route Servers</a>	327788
<a href="#">CMC Networks</a>	25818
<a href="#">IP WORLD</a>	328111
<a href="#">Medianova Internet</a>	21245
<a href="#">NOS</a>	2860
<a href="#">ZAP-Angola</a>	37645

Networks are Shown Here  
AngoNAP Luanda hosts 7 networks

# The GUI // ix View

IX Information is Shown Here

LAN Information is Shown Here  
angonix has 2 IPFX Records

Facility Information is Shown Here  
angonix is in 1 Facility

Peers are Shown Here

angonix

Editar

Organização	angonix
Nome Completo	Angola Internet Exchange Point
Cidade	Luanda
País	AO
Região continental	África
Tipo de mídia	Ethernet
Protocolos suportados	<input checked="" type="checkbox"/> Unicast IPv4 <input type="checkbox"/> Multicast <input checked="" type="checkbox"/> IPv6
Notas	

Informações de contato

Website da Empresa	<a href="http://angonix.net/">http://angonix.net/</a>
Website de Estatísticas d...	<a href="http://angonix.net/about-angonix/statistics/">http://angonix.net/about-angonix/statistics/</a>
Email técnico	<a href="mailto:support@angonix.net">support@angonix.net</a>
Telefone Técnico	
Email da política	<a href="mailto:support@angonix.net">support@angonix.net</a>
Telefone da Política	

LANs

Filter

Nome	dot1q	MTU
------	-------	-----

Enable IX-F Import

Pre-visualização

IPv4	196.11.234.0/24
IPv6	2001:43f8:9d0::/64

Local Facilities

Filter

Infraestrutura	País	Cidade
AngoNAP Luanda	Angola	Luanda

Peers at this Exchange Point

Filter

Nome do Peer ASN	IPv4 IPv6	Velocidade ▲ Política
<a href="#">Angola Cables</a> 37468	196.11.234.1 2001:43f8:9d0::925c:0:1	20G Selective
<a href="#">TV Cabo Angola</a> 36907	196.11.234.8 None	10G Selective
<a href="#">ZAP-Angola</a> 37645	196.11.234.2 None	10G Selective
<a href="#">Unitel SA</a> 37119	196.11.234.4 None	2G Selective
<a href="#">CMC Networks</a> 25818	196.11.234.14 None	1G Open
<a href="#">Congo Telecom</a> 37451	196.11.234.26 2001:43f8:9d0:0:5:b:0:2	1G Selective
<a href="#">G8</a> 28329	196.11.234.22 2001:43f8:9d0::6ea9:0:1	1G Selective
<a href="#">i3D.net</a> 49544	196.11.234.19 2001:43f8:9d0::c188:0:1	1G Selective
<a href="#">Packet Clearing House</a> 3856	196.11.234.11 2001:43f8:9d0::f10:0:1	1G Open
<a href="#">Packet Clearing House AS42</a> 42	196.11.234.10 2001:43f8:9d0::2a:0:1	1G Open
<a href="#">VeriSign Global Registry Services</a> 26415	196.11.234.15 2001:43f8:9d0::673f:0:1	1G Open
<a href="#">LINK BARATO.COM TELECOMUNICACOES</a> 268331	196.11.234.24 2001:43f8:9d0::4182:b:1	100M Selective
<a href="#">SAMM Sociedade de Atividades</a>	196.11.234.7	50M



# RESTful API Designed for Automation

- All operations are supported and are designed to be automated
  - Read
  - Create
  - Update
  - Delete
- Each object type has an associated tag
  - Basic types: org, net, ix, fac, poc, as\_set
  - Derived types: ixfac, ixlan, ixpfx, netfac, netixlan
- List of objects: <https://peeringdb.com/apidocs/>
- API documentation: [http://docs.peeringdb.com/api\\_specs/](http://docs.peeringdb.com/api_specs/)

# Quick Example Output in JSON

- List all networks: `curl -sG https://peeringdb.com/api/net`
- Specific: [https://peeringdb.com/api/net/7245?pretty&depth=0&fields=id,org\\_id,name,asn,created,updated](https://peeringdb.com/api/net/7245?pretty&depth=0&fields=id,org_id,name,asn,created,updated)

```
{
  "meta": {},
  "data": [
    {
      "id": 7245,
      "org_id": 9949,
      "name": „angonix Route Servers",
      "asn": 327778,
      "created": "2014-09-12T08:14:51Z",
      "updated": "2017-04-09T17:11:48Z"
    }
  ]
}
```

# Governance and Membership

- PeeringDB is a United States 501(c)(6) volunteer organization that is 100% funded by sponsorships
- Healthy organization, building financial reserves and executing the long term strategic plan
- Membership rules
  - A corporation, limited liability company, partnership or other legal business entity may be a Member of the Corporation
  - Membership is determined by having both an active PeeringDB.com account and an individual representative or role subscription to the PeeringDB Governance mailing list
  - 344 addresses subscribed to the Governance mailing list (as of April 16, 2019)
  - Governance list is at <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov>
  - More information available at <http://gov.peeringdb.com/>

# Committees

## Admin Committee

- Manage administration of user accounts and PeeringDB records
- Answer support tickets
- Cleansing and completion of PeeringDB records

Leads: Stefan Funke (Chair)

Contact: [admincom@lists.peeringdb.com](mailto:admincom@lists.peeringdb.com)

## Operations Committee

- Manage PeeringDB infrastructure

Leads: Job Snijders (Chair) and Aaron Hughes (Vice Chair)

Contact: [pdb-ops@lists.peeringdb.com](mailto:pdb-ops@lists.peeringdb.com)

## Outreach Committee

- Manage marketing and social media
- Develop and maintain presentations, workshops and webinars
- Coordinate presentations and attendance at events

Leads: Greg Hankins (Chair) and Bijal Sanghani (Vice Chair)

Contact: [outreachcom@lists.peeringdb.com](mailto:outreachcom@lists.peeringdb.com)

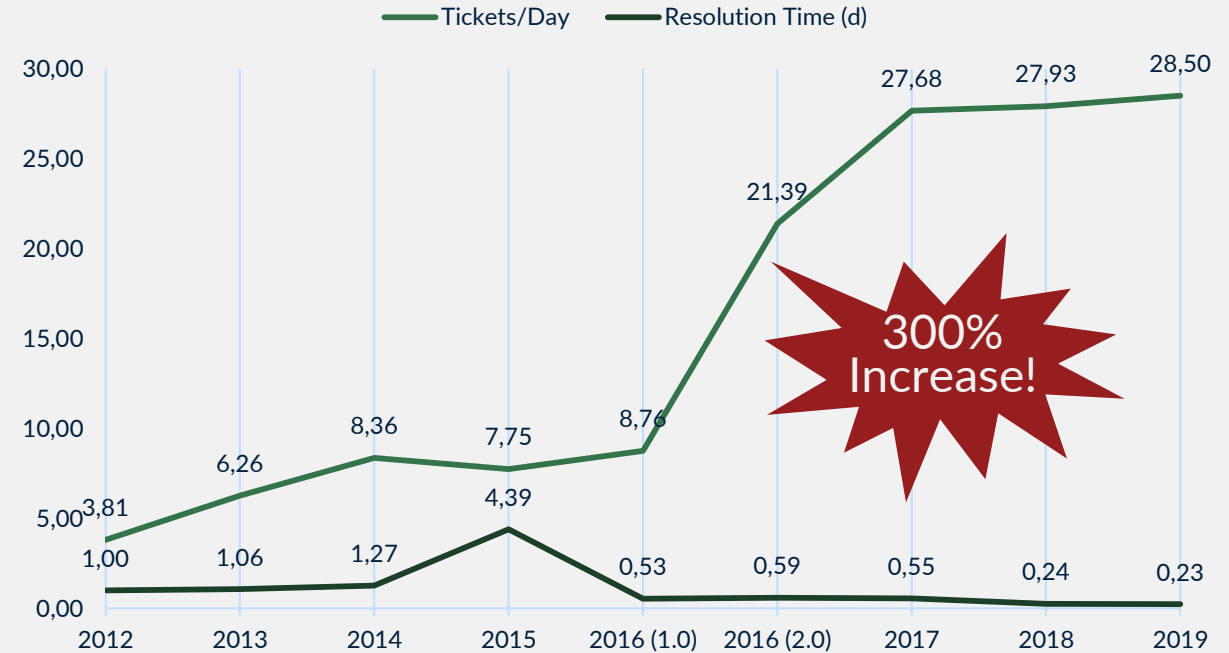
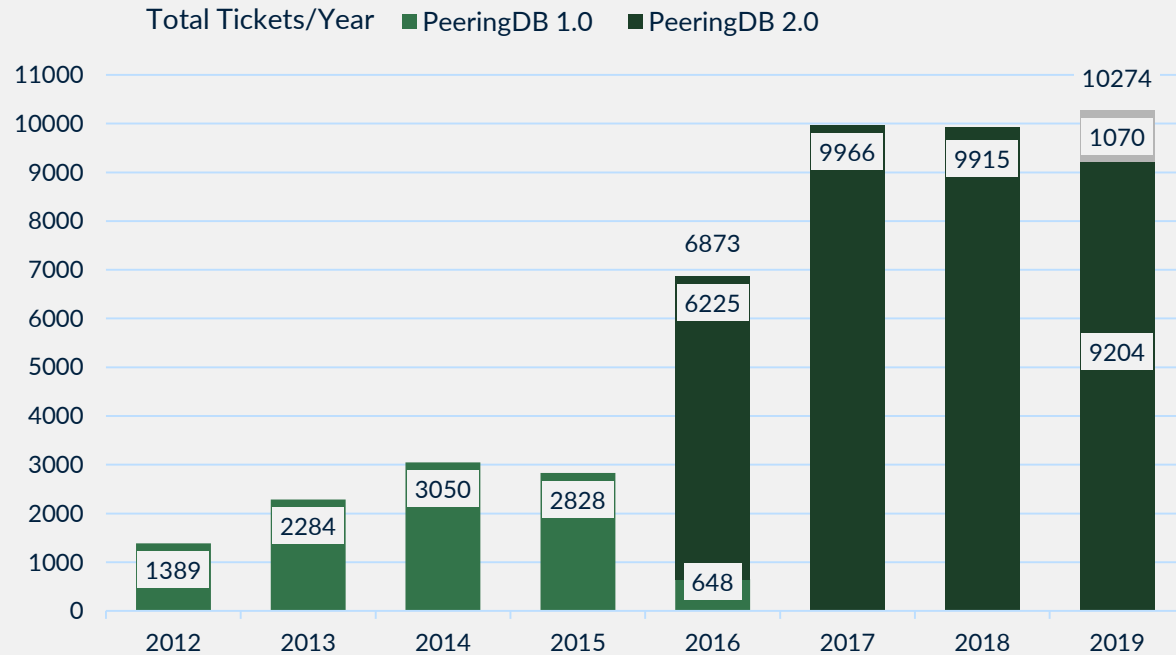
## Product Committee

- Manage roadmap and development priorities
- Ask for input from the community on desired features
- Write SoWs to solicit bids to complete requested features

Leads: Stephen McManus (Chair) and Matt Griswold (Vice Chair)

Product Manager: Filiz Yilmaz  
Contact: [productcom@lists.peeringdb.com](mailto:productcom@lists.peeringdb.com)

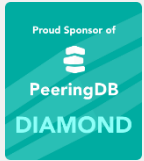
# Support Ticket Statistics



- Admin Committee volunteers are based around the world in a variety of time zones with diverse language skills
- Goal is to resolve support tickets within 24 hours

# Become a PeeringDB Sponsor!

- Diamond Sponsorship - \$25,000 / year



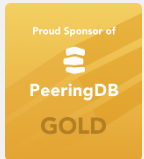
- Limited to 2 sponsors
- Very large logo on top line of Sponsors page with URL
- Diamond Sponsor badge display on all records
- Social media promotion

- Platinum Sponsorship - \$10,000 / year



- Large logo on second line of Sponsors page with URL
- Platinum Sponsor badge display on all records
- Social media promotion

- Gold Sponsorship - \$5,000 / year



- Medium logo on third line of Sponsors page
- Gold Sponsor badge display on all records
- Social media promotion

- Silver Sponsorship - \$2,500 / year



- Small logo on fourth line of Sponsors page
- Silver Sponsor badge display on all records
- Social media promotion

## Microsoft Diamond Sponsor

Organization	<a href="#">Microsoft Corporation</a>
Also Known As	8068 8069
Company Website	
Primary ASN	8075

## DE-CIX Frankfurt Platinum Sponsor

Organization	<a href="#">DE-CIX Management GmbH</a>
Long Name	Deutscher Commercial Internet Exchange
City	Frankfurt
Country	DE
Continental Region	Europe
Media Type	Ethernet



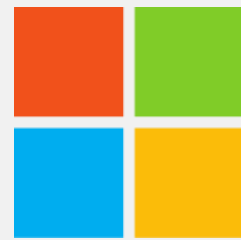
Proud Sponsor of

**PeeringDB**  Gold

Contact [sponsorship@peeringdb.com](mailto:sponsorship@peeringdb.com) for sponsorship info!

# Thank you to our sponsors!

Diamond  
Sponsor



Microsoft

Platinum  
Sponsors



Gold  
Sponsors



Silver  
Sponsors



# Feature Workflow

- All features tracked using GitHub at <https://github.com/peeringdb/peeringdb/issues> with the ZenHub overlay
  - Anyone can open a feature requests, there are no internal or hidden requests
  - Open and transparent process for feature development
  - Workflow is at <http://docs.peeringdb.com/workflow/>
- Product Committee feature process
  - Evaluate and prioritize the requests
  - Request a quote for development costs
  - Request budget from the board
  - Manage implementation and scheduling
- Your input is needed on features!

<b>Decide</b>	0% complete	5 o
No due date ⌚ Last updated about 5 hours ago		
Issues under Decide queue. Issues are kept in Decide while the Product Committee discusses the issue. Next milestone is "Consensus Reached"		
<a href="#">Edit</a>	<a href="#">Close</a>	<a href="#">Delete</a>
<b>Consensus Finalized</b>	0% complete	5 o
No due date ⌚ Last updated about 5 hours ago		
When an issue is at milestone "Consensus reached" PC members have t...(more)		
<a href="#">Edit</a>	<a href="#">Close</a>	<a href="#">Delete</a>
<b>Consensus Reached</b>	0% complete	1 o
No due date ⌚ Last updated about 6 hours ago		
Issues that are in the Consensus queue. When a decision is made abo...(more)		
<a href="#">Edit</a>	<a href="#">Close</a>	<a href="#">Delete</a>
<b>Ready for Implementation</b>	0% complete	0 o
No due date ⌚ Last updated about 6 hours ago		
Last milestone before milestone "Next release". The predecessor is "Consensus Finalized".		
<a href="#">Edit</a>	<a href="#">Close</a>	<a href="#">Delete</a>
<b>Next Release</b>	100% complete	0 o
No due date ⌚ Last updated 3 days ago		
<a href="#">Edit</a>	<a href="#">Close</a>	<a href="#">Delete</a>



# Release Process

- Announced at least one week in advance with all changes to give the community notice
  - Beta site is already running the development version for testing
  - Announced on PDB Announce list, Twitter, Facebook
- Released on Wednesdays at 0400Z and avoids
  - Mondays and Fridays
  - International holidays
  - Large conferences and events (APRICOT, EPF, GPF, NANOG, RIPE, etc.)
- List of current changes (release notes) for each version are on GitHub at <https://github.com/peeringdb/peeringdb/milestones>

# Beta Development

- Beta server
  - Available at <https://beta.peeringdb.com/>
  - Runs the latest beta software version
  - Full access over HTTP and the API
  - Database is local to the beta server only, changes are not reflected on the production servers
- Latest changes
  - Available at <https://beta.peeringdb.com/changes>
  - Redirects to the list of issues on GitHub
  - Documents all of the changes in the current beta version
- Anyone can log bugs and feature requests in GitHub at <https://github.com/peeringdb/peeringdb/issues>



# Recent Development Highlights

- Product Committee Decision Making process
  - Renewed process to act faster on issues
  - Product Committee Members to shepherd discussions
  - Logging decisions on Github for info dissemination and transparency purposes \
- Translations
  - Process documented internally to streamline the release of translated strings
  - Languages will be released at 80% maturity level
  - Working on external website to help translators - ongoing
- Vendor selection Process
  - Currently under discussion
  - Increase vendor diversity

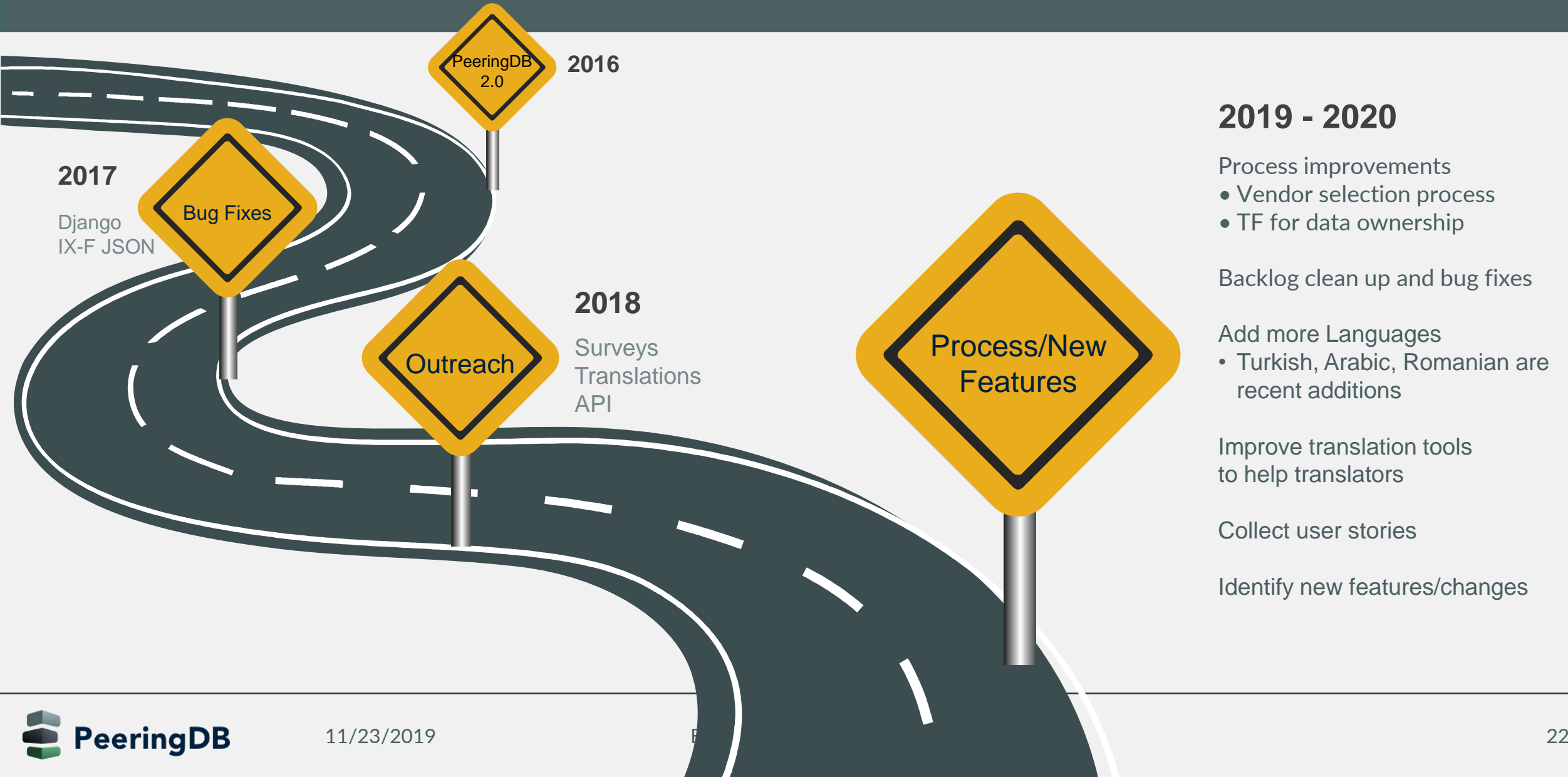
# Product Update

- Focusing on the backlog issues, bugs and translations
- Recent versions:
  - 2.15 released on 28 August 2019
  - 2.16 released on 18 September 2019
  - 2.17 due on 04 December 2019
- Fixes:
  - IANA reserved ASNs are not listed in PeeringDB
  - Better IP address validation
  - Links to maps.google.com in translations
  - Oauth correctly sets next URL (had priority due to IXP Manager release)
    - Info on Oauth at <https://docs.peeringdb.com/oauth/>
- Newlines in JavaScript Markdown renderer behave same as in the Python renderer

# Next Release and Discussions

- Focus still on the backlog issues, bug fixes and translations
- Discussions on
  - IX-F importer
  - Data deletion and how to retain deleted data for R&D purposes
- Data ownership
  - More and more discussion on who owns the data when more than one party is involved
    - ixfac, netfac, netixlan
  - Established a Task Force to work on a policy document
  - Would you like to take part? Let us know!

# What's next?



# Information and Resources

- Announce list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-announce>
- Governance list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov>
- Technical list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-tech>
- User Discuss list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/user-discuss>
- Docs, presentations, guides, tools: <http://docs.peeringdb.com/>
- Board and Officers: [stewards@lists.peeringdb.com](mailto:stewards@lists.peeringdb.com)
- Admins: [support@peeringdb.com](mailto:support@peeringdb.com)
- Presentation requests: [outreachcom@lists.peeringdb.com](mailto:outreachcom@lists.peeringdb.com)
- Uptime status: <http://status.peeringdb.com/>
-  Bugs and feature requests: <https://github.com/peeringdb/peeringdb/>
- Social media:
  -  <https://www.facebook.com/peeringdb/>
  -  <https://www.linkedin.com/company/peeringdb>
  -  [@PeeringDB](https://twitter.com/PeeringDB)



**PeeringDB**

**Questions?**