

# IXP Manager Update



*i n e x*  
*i n t e r n e t n e u t r a l e x c h a n g e*

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May 16<sup>th</sup> 2013      RIPE 66 – Dublin

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# What is IXP Manager?

*i n t e r n e t n e u t r a l e x c h a n g e*

- Admin and Member Portal for IXPs
- Launched June 2010
- Open Source - GPL
  
- Frontend
  - F/LAMP Stack (PHP)
  - Zend, Doctrine2, Smarty, Bootstrap, jQuery
  
- Backend
  - PHP / Perl scripts



# Sample Admin Interface

IXP CUSTOMER ACTIONS

- Customers
- Interfaces
- Users
- Contacts
- Colocated Equipment
- Meetings

IXP ADMIN ACTIONS

- Locations
  - Cabinets
  - Switches
  - IP Addressing
  - MAC Addresses
  - Vendors
  - Console Server Connections
  - VLANs
  - IRRDB Configuration
  - Route Server Prefixes
- IXP STATISTICS
- Member Statistics - Graphs
  - Member Statistics - List
  - League Table

## AS112 Reverse DNS PROBONO MEMBER



Overview

Ports

Users

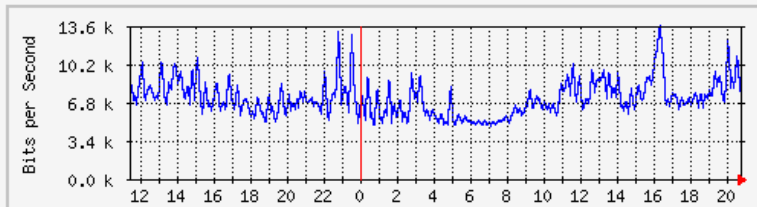
Contacts

Notes

RS Prefixes »

P2P »

### Aggregate Traffic Statistics



**Corporate Site**

<http://www.as112.net/>

**Peering Email**

[peering@inex.ie](mailto:peering@inex.ie)

**Status**

Normal

**Joined**

2006-09-07

**Type**

Pro-bono

**Left**

**Peering Policy**

open

**ASN**

112

**PeeringDB**

**AS-SET**



# Sample Member Interface

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INEX IXP Manager

Home

Member Information ▾

Peering ▾

Documentation ▾

Statistics ▾

Support

Profile

Switch Back

Overview

My Details

Ports

Prefixes »

Peering Manager »

Statistics »

Peer to Peer Traffic »

## Connection 1

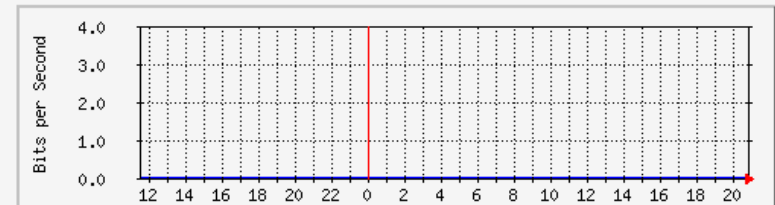
Infrastructure #1

<b>Switch:</b>	swi1-deg1-3.inex.ie	<b>Switch Port:</b>	GigabitEthernet44
<b>Speed:</b>	1000 Mbps	<b>Duplex:</b>	full
<b>Location:</b>	Telecity Kilcarbery	<b>Colo Cabinet ID:</b>	INEX-DEGK-1

### Peering VLAN #1:

<b>IPv6 Address:</b>	IPv6 not enabled.	<b>IPv4 Address:</b>	193.242.111.6/25
<b>Multicast Enabled:</b>	No		
<b>Route Server Client:</b>	Yes	<b>AS112 Client:</b>	No

### Day Graph for swi1-deg1-3 / GigabitEthernet44



## Connection 2



# Admin Features

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- CRUD operations for:
  - Members, users, interfaces
  - VLANs, IP addresses
  - PoPs, Racks, Switches, Switchports
- Traffic graphs (via MRTG backend)
- P2P Traffic Graphs (via sflow, newish)
- Port Utilisation and Traffic Change alerts
- **Auto-provisioning** of route servers and collector, ARPA, Nagios, Smokeping, MRTG, TACACS, RADIUS, Mailman



# Member Features

*i n t e r n e t n e u t r a l e x c h a n g e*

- Traffic graphs and P2P graphs
- Mailing list management
- NOC / peering / contact details update
- Peering Manager
- Peering matrices
- Other member details
- Documentation
- User management
- Route Server Prefix Analysis Tool (**new**)



# Peering Manager

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IXP Manager

Dashboard

Member Information ▾

Peering ▾

Documentation ▾

Statistics ▾

Support

Profile

About

Switch Back

Potential Peers

Potential Bilateral Peers

Peers

Rejected / Ignored Peers

You currently do not exchange any routes in any way with the following members of the exchange **over the highlighted - in red - protocol(s) and LAN(s)** because:

- either you, they or both of you are not route server clients; and
- you do not have a bilateral (direct) peering session that we have detected with them.

Member	ASN	Policy	LAN 1	LAN 2	
3 Ireland	21327	open	IPv4		<input type="checkbox"/> Request Peering <input type="checkbox"/> Notes ▾
BT Ireland	2110	open	IPv4	IPv4	<input type="checkbox"/> Request Peering <input type="checkbox"/> Notes ▾
Cable & Wireless Worldwide	1273	selective	IPv4		<input type="checkbox"/> Request Peering <input type="checkbox"/> Notes ▾
Colt Technology Services	8220	selective	IPv4		<input type="checkbox"/> Request Peering <input type="checkbox"/> Notes ▾
Interfusion Networks	34912	open	IPv4	IPv4	<input type="checkbox"/> Request Peering <input type="checkbox"/> Notes ▾
Limelight Networks	22822	selective	IPv4		<input type="checkbox"/> Request Peering <input type="checkbox"/> Notes ▾
...	...	...	...	...	...



# Route Server Prefix Analysis Tool

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INEX IXP Manager

Home

Member Information ▾

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## Route Server Prefix Analysis

Limit to Protocol... ▾

[Advertised but Not Accepted \(1\)](#)

[Advertised & Accepted \(26\)](#)

[Not Advertised but Acceptable \(13\)](#)

[Help](#)

Show  entries

Search:

Prefix	Protocol	First Seen	Origin AS
193.242.111.0/24	IPv4	2012-05-28 01:11:25	<a href="#">2128</a>
194.88.240.0/23	IPv4	2012-05-28 01:11:25	<a href="#">2128</a>
2001:7f8:18::/48	IPv6	2012-05-28 01:12:12	<a href="#">2128</a>

Showing 1 to 3 of 3 entries (filtered from 26 total entries)

← Previous 1 Next →





# Coming Soon to LONAP!

- Completing work on gaps for LONAP
  - Private VLANs / MPLS private circuits
  - Additional CRM functionality
  - Big improvements to contacts / user mgmt
  - Becoming switch vendor agnostic
- Migration scripts to port data from existing database(s)
- **Ready for internal testing by end of May**
- **Plan and begin rollout to LONAP members during June / July – woot!**



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# Thanks for Listening!



**operations@inex.ie**

**<https://github.com/inex/IXP-Manager>**

**Mailing list:**

**<https://www.inex.ie/mailman/listinfo/ixpmanager>**