RIPE Atlas Probes

APOPS / Xi'An

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Issues & Questions to atlas@ripe.net

Atlas Probe? What's That?

A Measurement Device

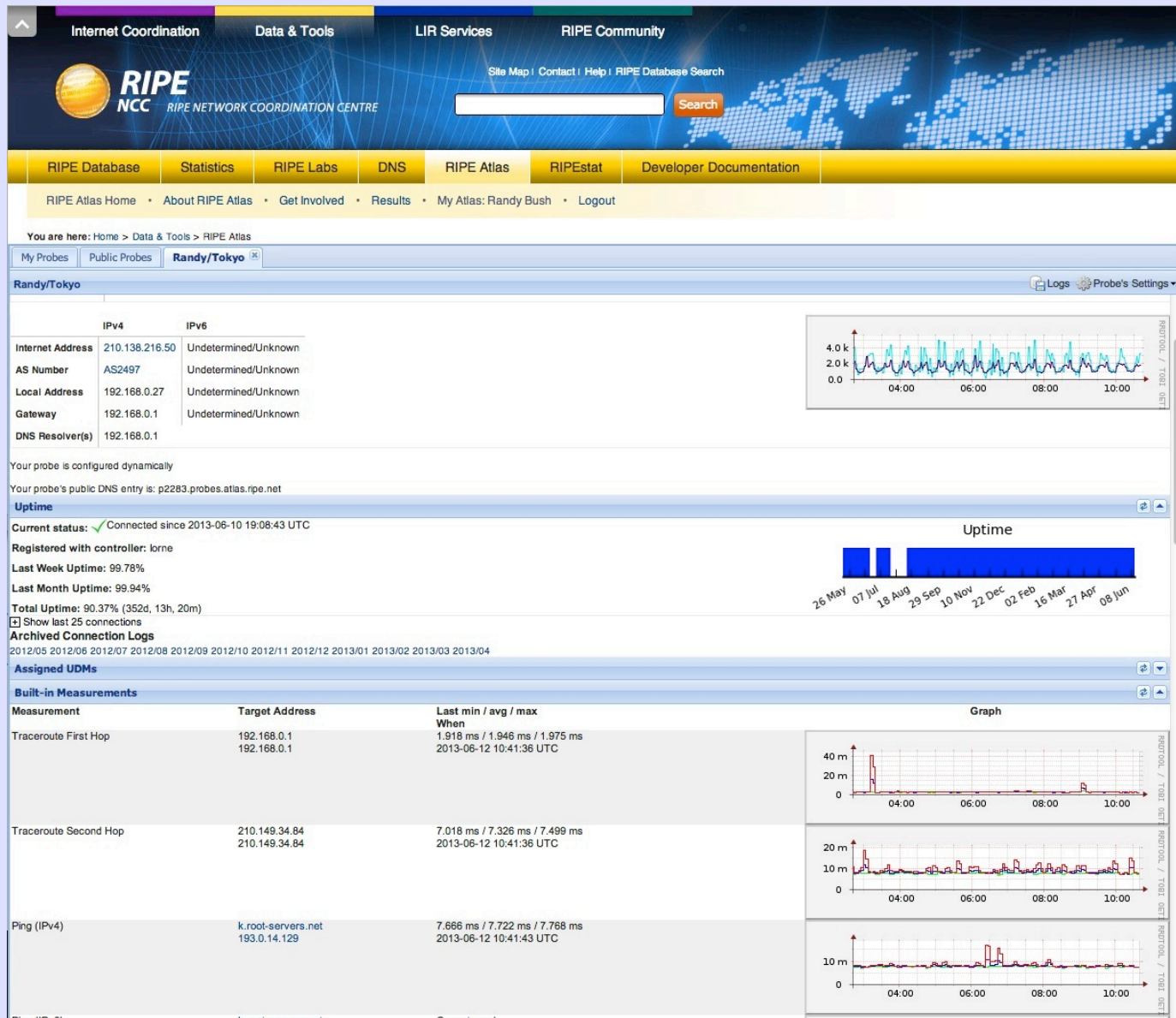# Used to be Tiny

Ethernet

USB Power

Bigger & Cheaper

More for Your Money? ☺

That's Nice
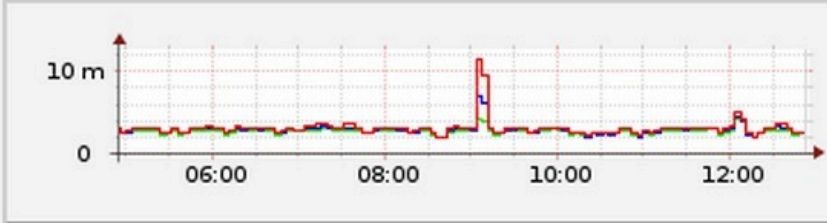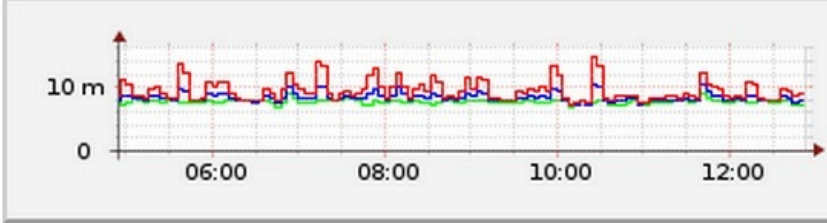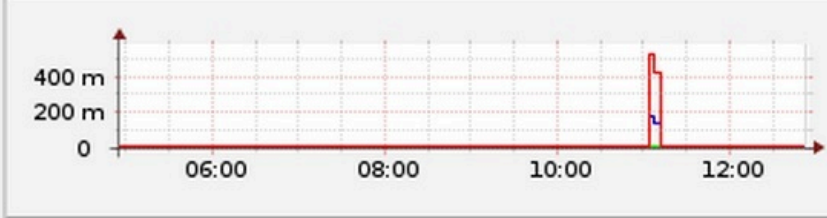
But What Does it

DO?

Measurements!!

Example Pings

Measurement	Target Address	Last min / avg / max When	Graph
Traceroute First Hop	192.168.0.1 192.168.0.1	2.946 ms / 2.988 ms / 3.030 ms 2013-06-12 12:53:45 UTC	
Traceroute Second Hop	210.149.34.84 210.149.34.84	7.821 ms / 8.422 ms / 9.058 ms 2013-06-12 12:53:45 UTC	
Ping (IPv4)	k.root-servers.net 193.0.14.129	7.813 ms / 13.483 ms / 24.672 ms 2013-06-12 12:53:48 UTC	

3,711 Probes

And You Can See Measurements From Them All!

You Can Even Conduct Your Own Experiments on Your and Other People's Probes

Participation and Benefits

Anyone can become a RIPE Atlas probe host

Major personal and operational benefit:

See your network from the outside!

Have at your fingertips >3,500 external vantage points

to do pings & traceroutes towards your network

Built-in measurements available to everyone

Maps, data from public probes, API to download raw data

But, if you want to ping home from around the Internet, then you have to have registered a probe yourself
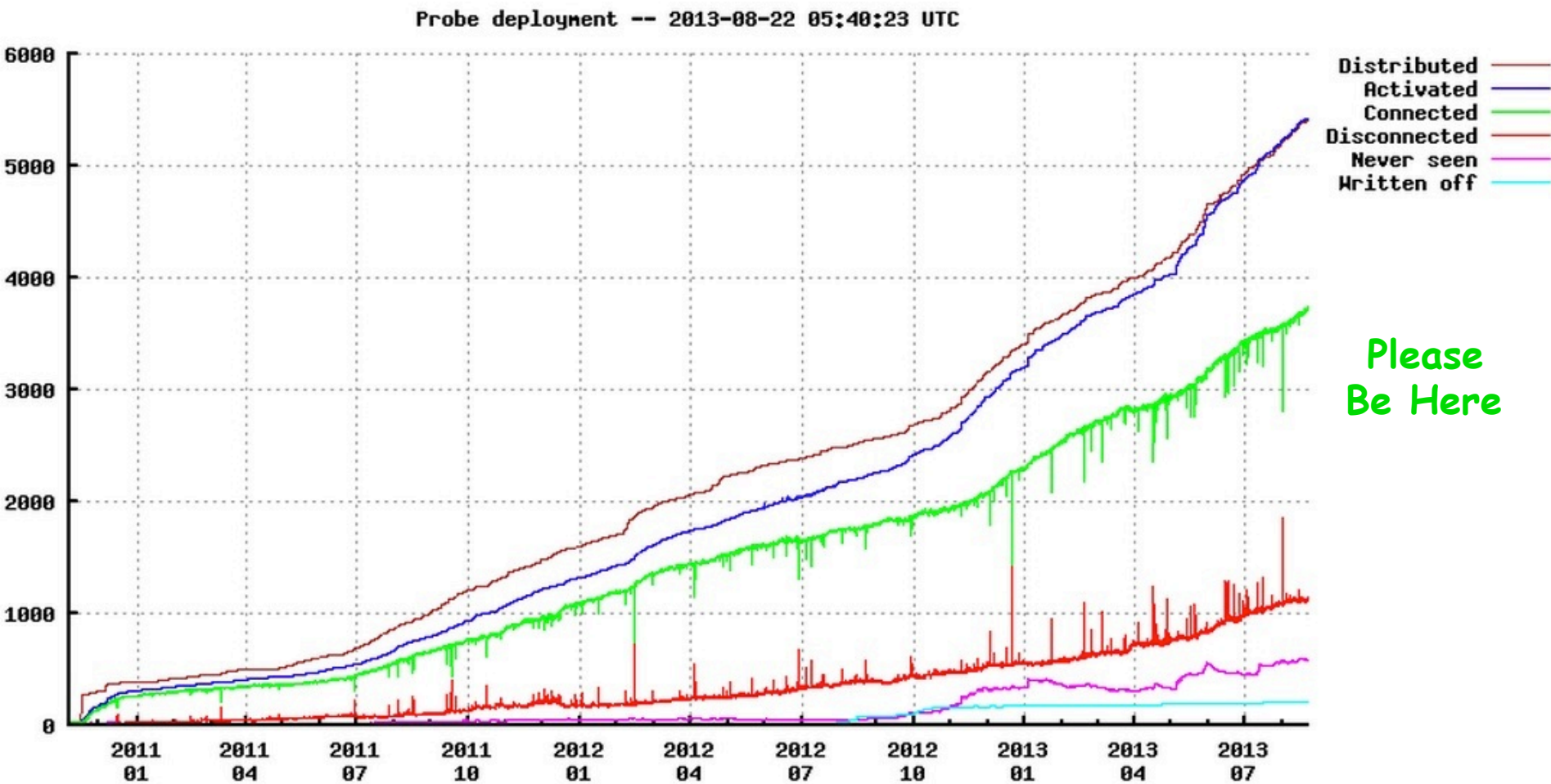
Resources

- Powered by USB (500mA or greater)

- Internet connectivity via Ethernet

- It will attempt to configure itself with DHCP

- Uses 4-6 Kbps of bandwidth (< 2GB/month)

- Needs to be able to do: DHCP, DNS, HTTP(S), and ICMP at a minimum

Lots of Ways to Plug In

Plug It In!

Be On The Green Line

Probe deployment -- 2013-08-22 05:40:23 UTC

Distributed
Activated
Connected
Disconnected
Never seen
Written off

Please Be Here

As Percentage

Probe deployment (relative to distributed amount) -- 2013-08-22 05:40:24 UTC

Activated%
Connected%
Disconnected%
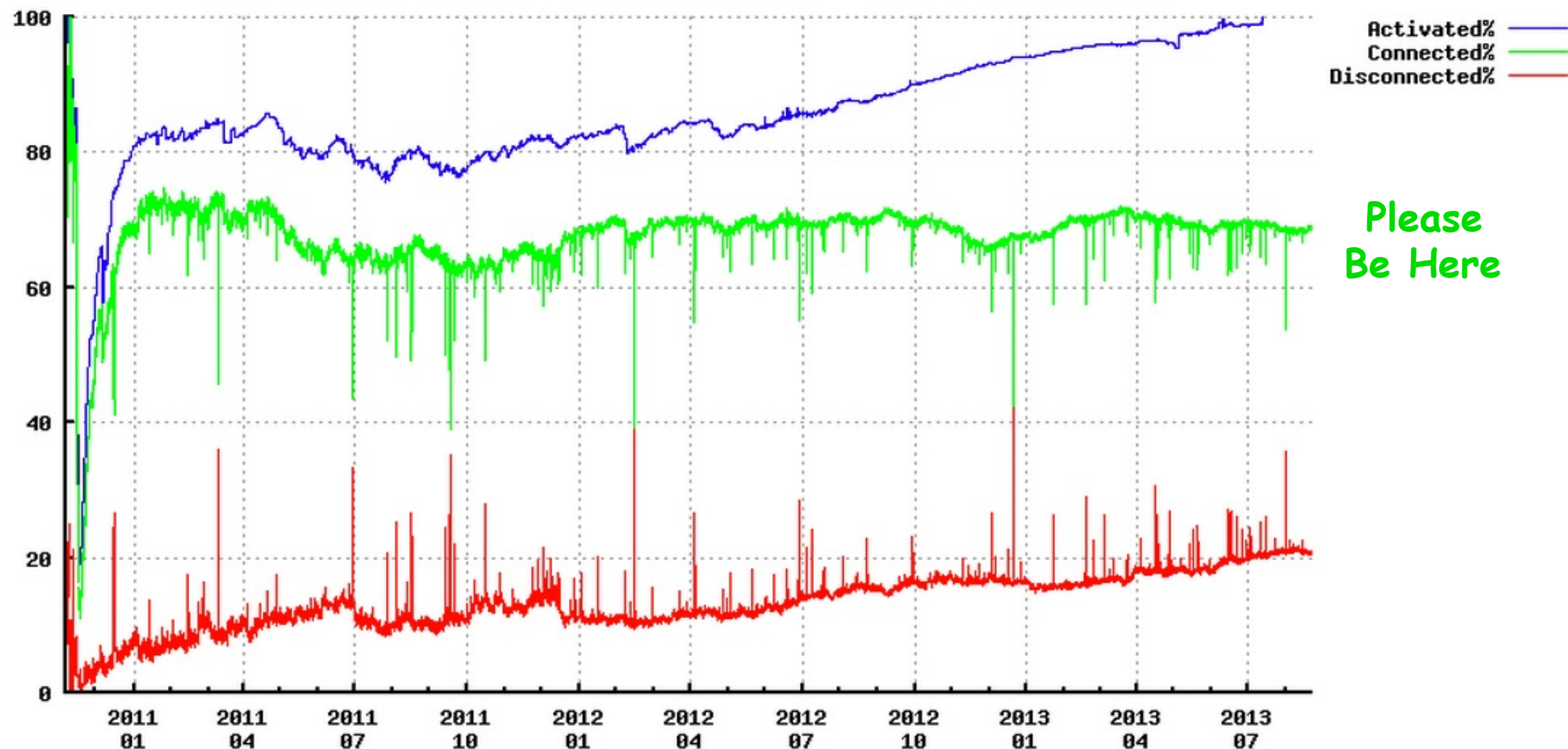
Please
Be Here

Set-Up Instructions

Become a RIPE Atlas Host

Hosting a RIPE Atlas probe is easy and requires just three steps: Create a RIPE NCC Access account, apply for or register your probe, and plug it in. That's all it takes!

Step 1 - Create a RIPE NCC Access account

If you don't already have a RIPE NCC Access account, please create one. By doing so, you'll become a member of the RIPE Atlas community and will be able to apply for a probe.

Step 2 - Apply for a probe - OR - Register a probe you already have

Apply for a probe

You can apply online for your own RIPE Atlas probe. You can choose to have your probe sent to you by post or pick it up at a meeting.

Register a probe you already have

IMPORTANT: If you applied for your RIPE Atlas probe online, your probe was automatically registered as part of the application process and you can skip to step 3 below. If you received your probe without having first applied for it (at a meeting or some other way) and you have not yet completed this step, you need to register your probe.

Step 3 - Plug in the probe

After receiving your probe from us, you should bring it home (or to the destination network) and plug it in.

- Use a UTP cable to connect your probe to an Ethernet port on your home router, switch, etc.
- Use a USB power outlet to power the probe. In many cases there's one on your switch/router. You can also use a USB charger to connect the probe to a power supply.
- In most networks, the probe will be able to get an IP address with DHCP and nothing further needs to be done to connect the probe. If you do not have a DHCP server already, you can configure DHCP or configure a static IP address (static configuration is necessary for an IPv6-only network).

And that's it! If you have version 1 or 2 of the probe (black), you'll know it's activated once the lights start blinking. If you have version 3 (white), the first, third and fourth LEDs will light up when the probe has fully connected.

I Can Give You a Probe
You Have to Register
Your EMail with Me

Plug it In

Then Register at RIPE

Register at RIPE

https://atlas.ripe.net/register/

⚠ If you already have a RIPE Atlas probe, and you have already filled in these details, either when app a meeting or elsewhere, you do not need to fill them in again.

On what sort of network will you be installing the probe? *   Residential/Consumer

Service Provider *

What's the connection speed like on that network? *   < 1 Mb/s

AS Number ⓘ   Optional

My network supports IPv4 ⓘ   ☐

IPv4 Network Prefix   Optional

My network supports IPv6 ⓘ   ☐

IPv6 Network Prefix   Optional

How did you receive your probe? *   From conference/training

Please tell us where/when you received your probe *

And Send in a Picture!