

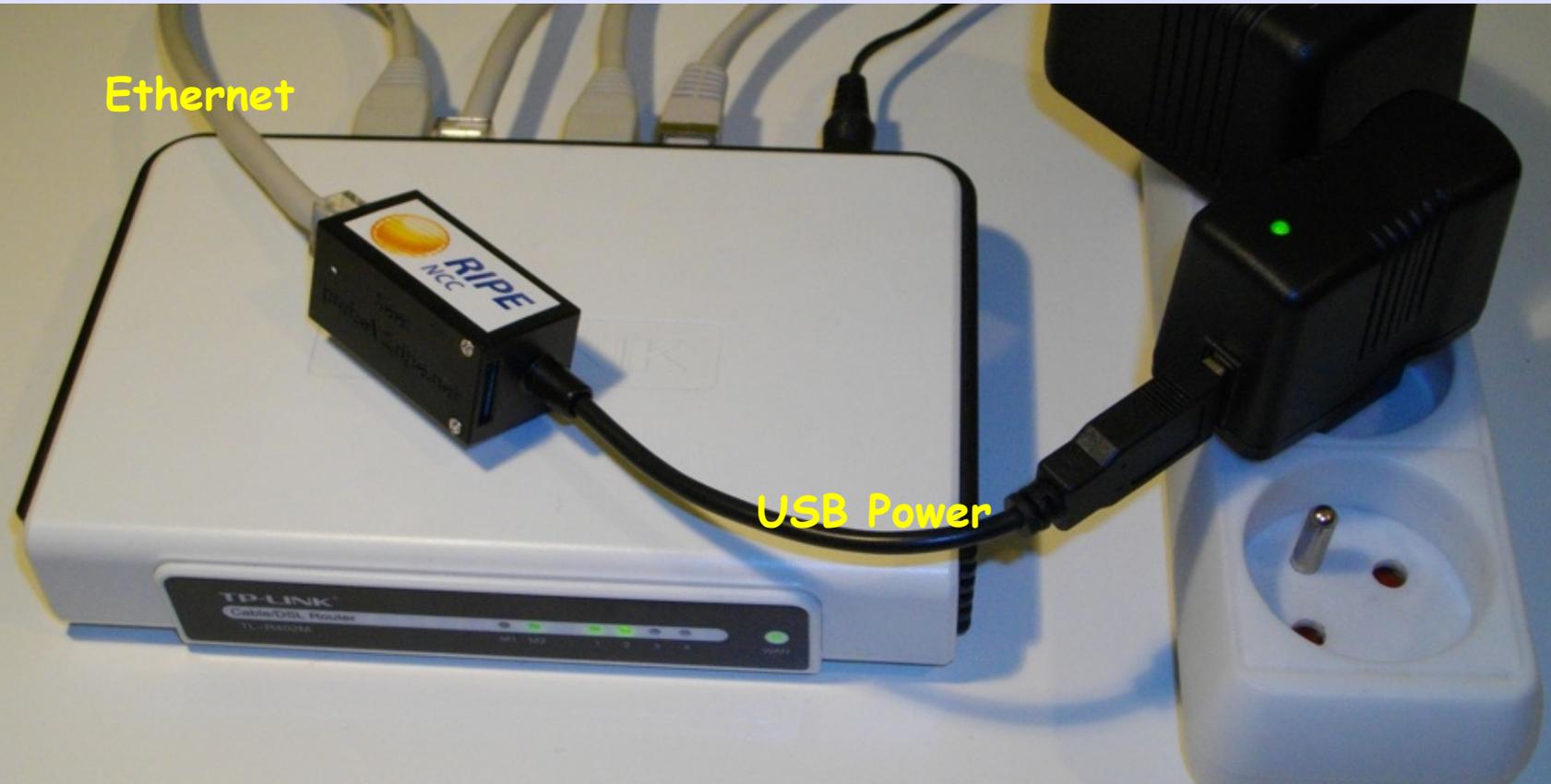
# RIPE Atlas Probes

Issues & Questions to [atlas@ripe.net](mailto:atlas@ripe.net)

Atlas Probe?  
What's That?

A Measurement Device

# Used to be Tiny



# Bigger & Cheaper



More for Your Money? 😊

That's Nice

But What Does it

DO?

# Measurements!!

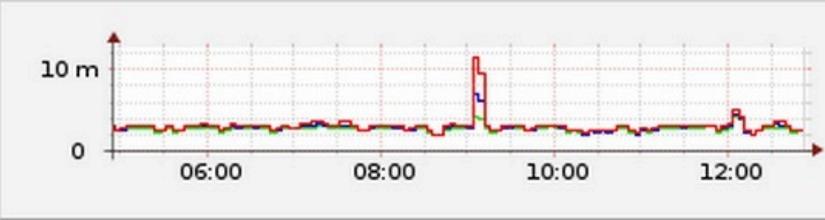
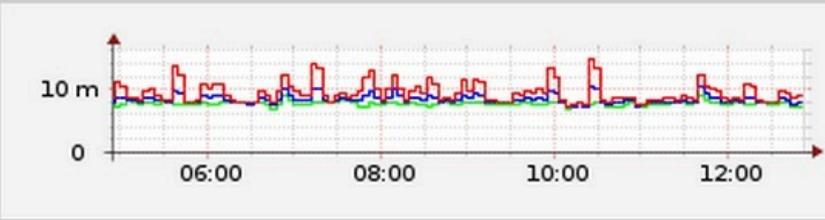
The screenshot displays the RIPE Atlas interface for a specific probe named 'Randy/Tokyo'. The top navigation bar includes 'Internet Coordination', 'Data & Tools', 'LIR Services', and 'RIPE Community'. Below this is a search bar and a secondary navigation bar with links to 'RIPE Database', 'Statistics', 'RIPE Labs', 'DNS', 'RIPE Atlas', 'RIPEstat', and 'Developer Documentation'. The main content area is divided into several sections:

- Probe Information:** A table showing IPv4 and IPv6 details for the probe.

	IPv4	IPv6
Internet Address	210.138.216.50	Undetermined/Unknown
AS Number	AS2497	Undetermined/Unknown
Local Address	192.168.0.27	Undetermined/Unknown
Gateway	192.168.0.1	Undetermined/Unknown
DNS Resolver(s)	192.168.0.1	
- Uptime:** A bar chart showing the probe's uptime over time, with a legend indicating 'Uptime'.
- Assigned UDMs:** A section for User Defined Measurements, currently empty.
- Built-in Measurements:** A table showing various measurements performed by the probe.

Measurement	Target Address	Last min / avg / max When
Traceroute First Hop	192.168.0.1 192.168.0.1	1.918 ms / 1.946 ms / 1.975 ms 2013-06-12 10:41:36 UTC
Traceroute Second Hop	210.149.34.84 210.149.34.84	7.018 ms / 7.326 ms / 7.499 ms 2013-06-12 10:41:36 UTC
Ping (IPv4)	k.root-servers.net 193.0.14.129	7.866 ms / 7.722 ms / 7.788 ms 2013-06-12 10:41:43 UTC
- Graphs:** Three line graphs showing the results of the measurements over time, with legends for 'Traceroute First Hop', 'Traceroute Second Hop', and 'Ping (IPv4)'.

# 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	

RRDTOOL / TOBI OETI RRDTOOL / TOBI OETI RRDTOOL / TOBI OETI

# 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**

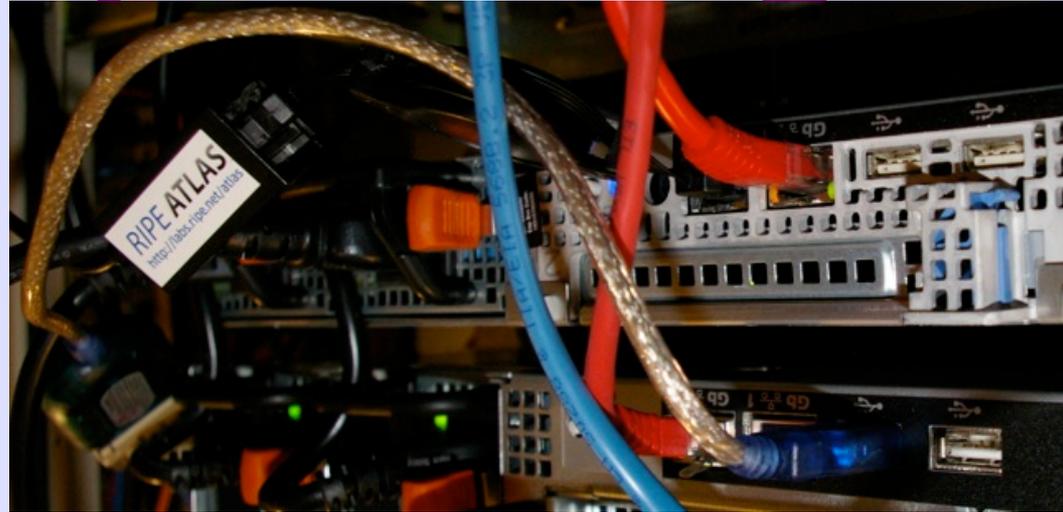
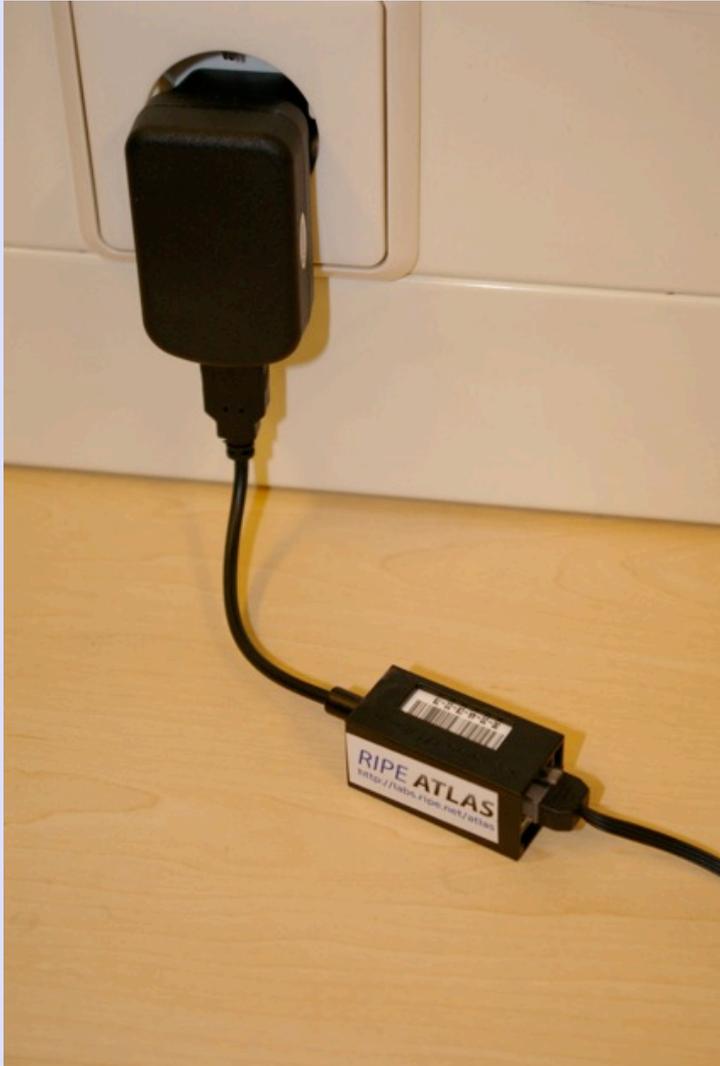
**Maps, data from public probes, API to download  
raw data**

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

# Resources

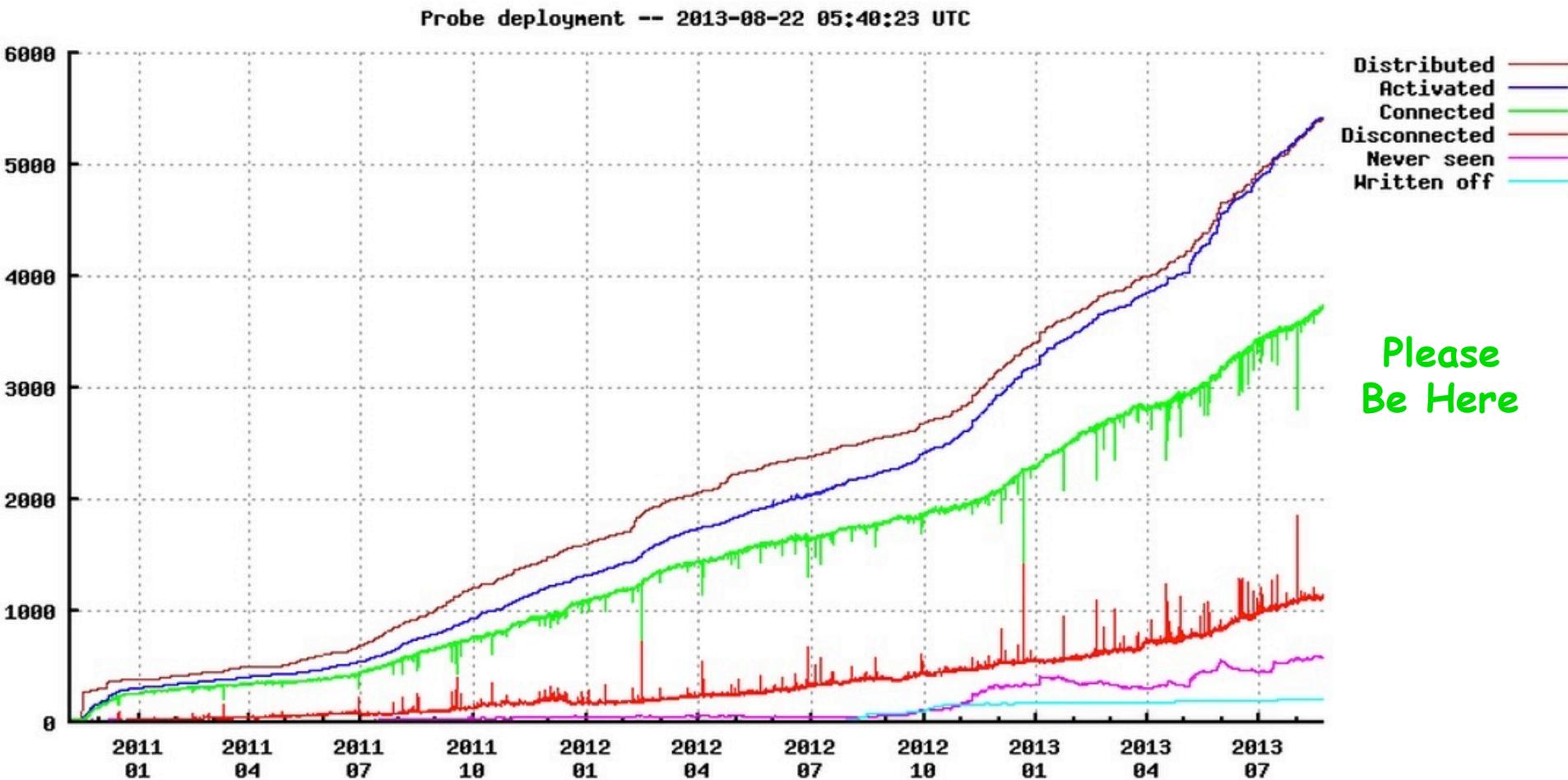
- Powered by USB (500mA or greater)
- Internet connectivity via Ethernet
- It will attempt to configure itself with DHCP
- Uses 4-6 Kbps of bandwidth (< 2GB/month)
- Needs to be able to do: DHCP, DNS, HTTP(S), and ICMP at a minimum

# Lots of Ways to Plug In



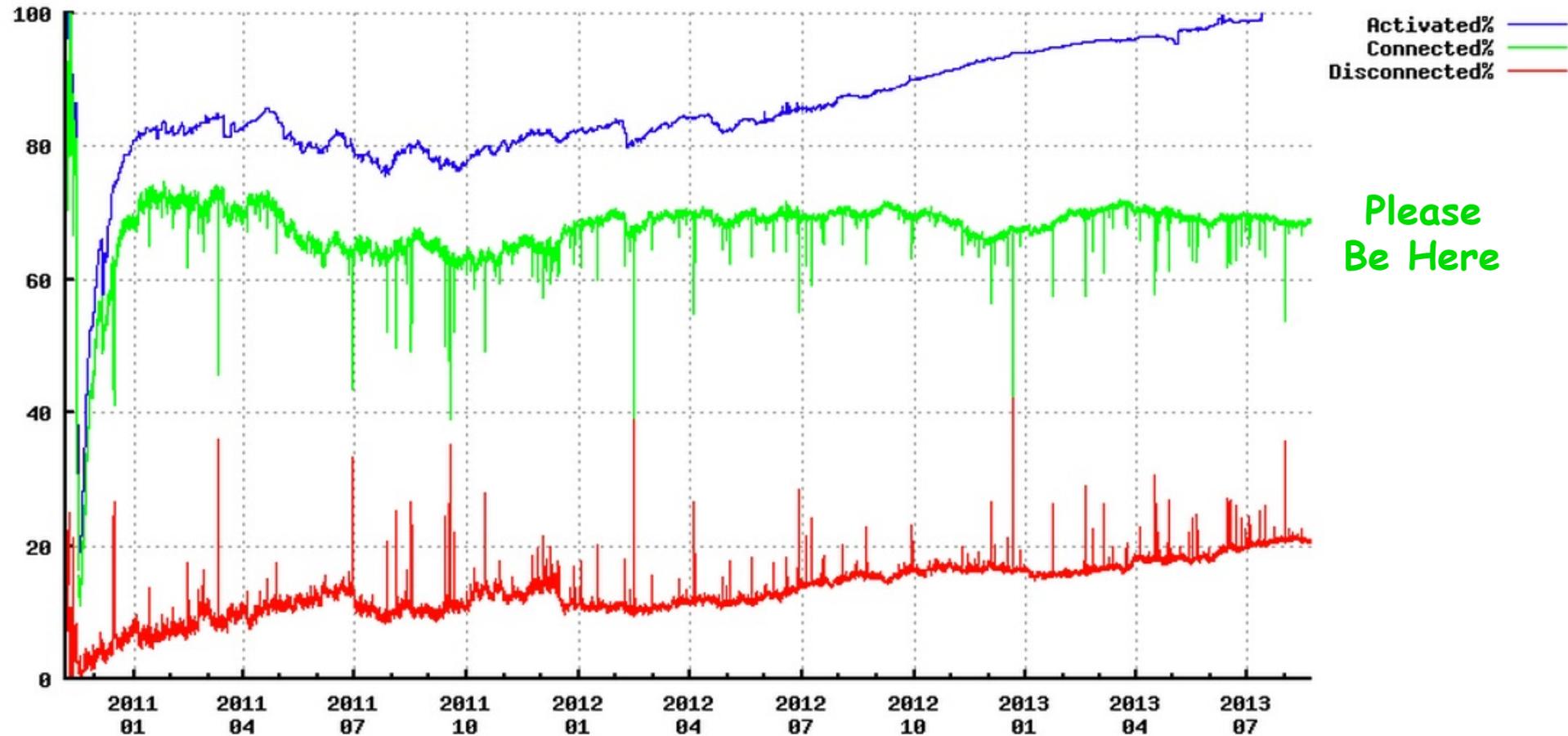
Plug It In!

# Be On The Green Line



# As Percentage

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



# Set-Up Instructions

 <https://atlas.ripe.net/get-involved/become-a-host/>

## 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 attending a meeting or elsewhere, you do not need to fill them in again.

On what sort of network will you be installing the probe? \*

Service Provider \*

What's the connection speed like on that network? \*

AS Number ⓘ  Optional

My network supports IPv4 ⓘ

IPv4 Network Prefix

My network supports IPv6 ⓘ

IPv6 Network Prefix

How did you receive your probe? \*

Please tell us where/when you received your probe \*

# And Send in a Picture!

