

RIPE NCC Staff Guide to RIPE Atlas

What is RIPE Atlas?

RIPE Atlas is a global network of probes that measure Internet capacity, traffic, speed and performance, and is providing an unprecedented understanding of the state of the Internet in real time. There are currently about 2,000 active probes in the RIPE Atlas network, concentrated in the RIPE NCC service region. The RIPE NCC collects the data from this network and provides useful analyses and graphs based on the aggregated results. RIPE Atlas hosts can also use the network to conduct their own measurements.

What is a host?

A host is any individual who plugs in a registered probe and, in doing so, becomes part of the RIPE Atlas network. Hosts do not have to be members of the RIPE NCC, but they will need to create a RIPE NCC Access account (at no charge) in order to register their probe. Hosts earn credits for the time their probes remain connected, and can redeem these credits for their own user-defined measurements using other probes throughout the RIPE Atlas network.

How do the probes work?

The probes are small hardware devices that hosts attach to an Ethernet port on their router via a UTP cable. They are powered by USB. We prefer that hosts keep their probes running 24/7, but they can be unplugged at any time.

Probes use a very small amount of bandwidth, and hosts can set a limit on the amount of bandwidth their probes use. The probes conduct different measurements and relay this data to the RIPE NCC, where it is aggregated with data from the rest of the RIPE Atlas network. The probes cannot determine any information about the content passing to or from their host computers.

How do you get a probe?

Those interested in hosting a probe need to submit an application, and those who are given a probe need to register it, at <https://atlas.ripe.net/apply/>

How do hosts set up their probes?

In order to activate their probe, users will need to complete three simple steps:

1. Create a RIPE NCC Access account at <https://access.ripe.net/registration>
2. Register their RIPE Atlas probe at <https://atlas.ripe.net/apply/>
(Note: If users have already been given a probe, they will need to select "Already got one" as their method of delivery when registering. They will also need to enter the MAC address, which can be found on the probe.)
3. Plug in their probes. They will be able to see their probe in the "My Probes" tab within about half an hour: <https://atlas.ripe.net/atlas/myprobes.html>

Please note that previously, RIPE Atlas hosts needed a PIN code to register their probes. PIN codes are no longer used and hosts do not need one in order to register their probe.

What are the benefits for hosts?

RIPE Atlas hosts aren't only helping to create the world's largest Internet measurement network – they also earn credits they can use to conduct their own user-defined measurements using the entire RIPE Atlas network, which can provide valuable information about the performance of the host's own network(s).

Is there a cost for the probes?

There is no fee for hosting a probe. However, individuals and organizations can choose to become a RIPE Atlas sponsor of a block of probes. Each block consists of eight probes, and the cost of sponsoring is €256 per probe (i.e. €2048 per block of eight probes).

What is a sponsor?

A sponsor is an individual or organization that pays for the support of a number of probes (available in blocks of eight). Sponsors can distribute probes themselves to whomever they like; they can “adopt” existing probes that are already active in the network; or they can sponsor future probes that the RIPE NCC will distribute.

Sponsors enjoy additional benefits, such as earning the equivalent number of credits that each of their sponsored probes earns. With these credits, sponsors can perform their own user-defined measurements. Anyone interested in becoming a sponsor can learn more at <https://atlas.ripe.net/sponsors> or email atlas@ripe.net

Procedure for distributing probes at meetings

Try to identify people who are most likely to actually take their probe home, register it and plug it in. It is also ideal to identify potential hosts in areas that are under-represented in the current RIPE Atlas network (inside and outside our service region).

- Get the business card of everyone you give a probe to
- Look at the MAC address on the probe
- Find that MAC address on the MAC list you’ve gotten from CS, and fill in the host’s name and email address on the form next to the MAC address (or write down their name, email address and MAC address on a sheet of paper)
- Help them create a RIPE NCC Access account online (if they don’t already have one) at <https://access.ripe.net/registration>
- Help them register their probe online at <https://atlas.ripe.net/apply/>
- Remind them that they need to plug in their probe as soon as possible, and that they will begin earning credits as soon as they do, which can be used to conduct their own user-defined measurements

If you cannot help the host set up a RIPE NCC Access account and register their probe with them, it is important to obtain their business card and write the MAC address of the probe they’ve received on their business card (or at the very least, write down their name, email address and probe MAC address on a sheet of paper) to give to CS.

Useful websites and mailing lists

RIPE Atlas website: <http://atlas.ripe.net>

RIPE Atlas FAQs: <https://atlas.ripe.net/faq>

Apply for a RIPE Atlas probe: <https://atlas.ripe.net/apply/>

Getting started with your probe: <https://atlas.ripe.net/getting-started>

Conducting user-defined measurements: <https://atlas.ripe.net/atlas/udm.html>

RIPE Atlas sponsor benefits: <https://atlas.ripe.net/sponsors>

Mailing list for RIPE Atlas: <http://www.ripe.net/mailman/listinfo/ripe-atlas>

If you still have a question or need help, email atlas@ripe.net