

Mayo 2022

Manual de Instalación de RIPE ATLAS

Deployathon RIPE ATLAS

ISOC Capítulo de Panamá

Deployathon RIPE ATLAS

Para el evento hemos creado una cuenta de correo de gmail y una cuenta de RIPE ATLAS la cual utilizará para registrar el equipo Raspberry Pi en la plataforma de RIPE ATLAS.

La cuenta de correo que usted utilizará tiene el formato isocpanama.probe.#@gmail.com en donde el símbolo “#” será remplazado por el número que está escrito en el kit Raspberry Pi que se le entregó. El password del correo es: DeployathonRipeAtlas. **Favor no cambie los passwords de las cuentas de correo ni de RIPE ATLAS** que se les están entregando, estas son necesarias para trasladar un equipo ya registrado.



Google

Crear tu cuenta de Google

Ir a Gmail

Nombre: ISOCPanama Apellido: probe30

Nombre de usuario: isocpanama.probe.30 @gmail.com

Puedes usar letras, números y signos de puntuación

Disponible: [sisocpanama](#) [isocpanamas](#)
[sisocpanama759](#)

Contraseña: DeployathonRipeAtlas Confirmación: DeployathonRipeAtlas

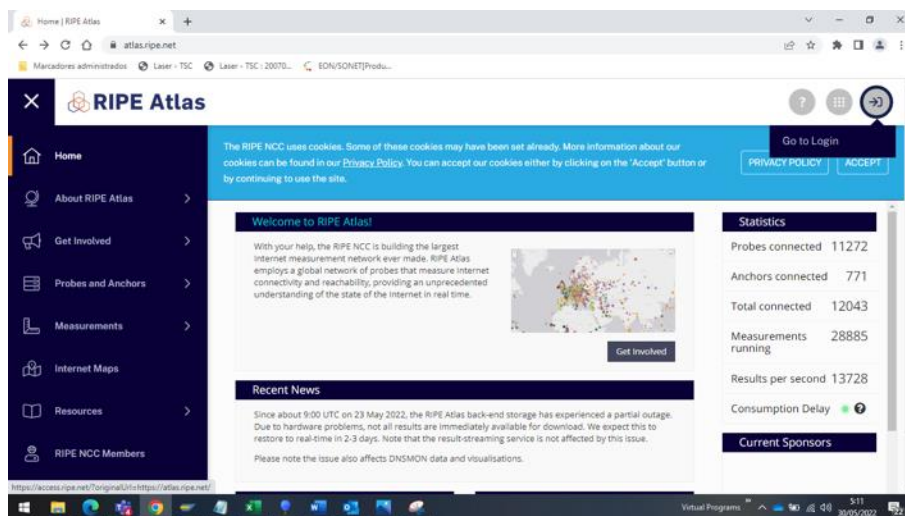
Usa 8 o más caracteres con una combinación de letras, números y símbolos

Mostrar contraseña

Acceder a tu cuenta en su lugar [Siguiente](#)

Una cuenta. Todos los servicios de Google a tu disposición.

Para entrar a su cuenta de RIPE ATLAS por favor dirigirse a <https://atlas.ripe.net/> y utilizar la cuenta de correo de gmail que se le creó para el evento (isocpanama.probe.#@gmail.com) y utilice la contraseña: *ISOCPanama*. A continuación se detalla paso a paso cómo entrar a su cuenta de RIPE ATLAS.



Home | RIPE Atlas

atlas.ripe.net

Marcadores administrados Later - TSC Later - TSC - 20070... EDN/SONET/Prods...

RIPE Atlas

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Welcome to RIPE Atlas!

With your help, the RIPE NCC is building the largest internet measurement network ever made. RIPE Atlas employs a global network of probes that measure Internet connectivity and reachability, providing an unprecedented understanding of the state of the Internet in real time.

[Get Involved](#)

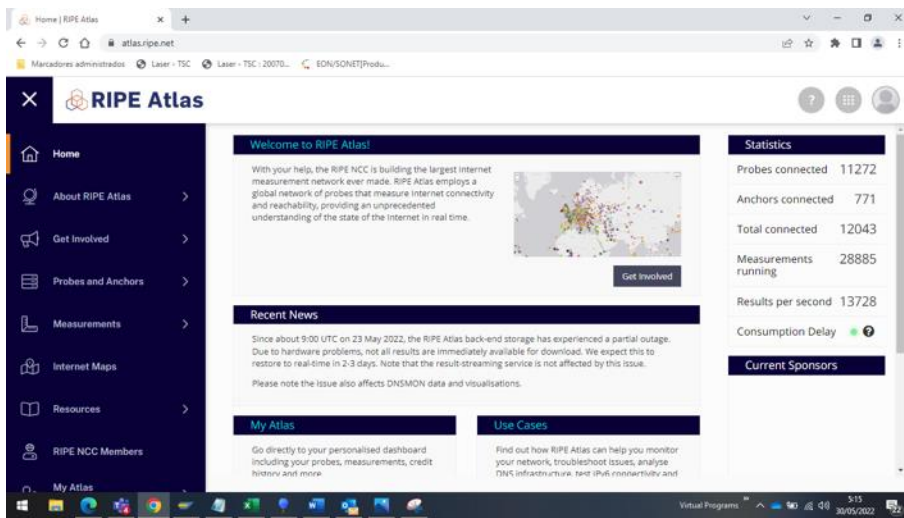
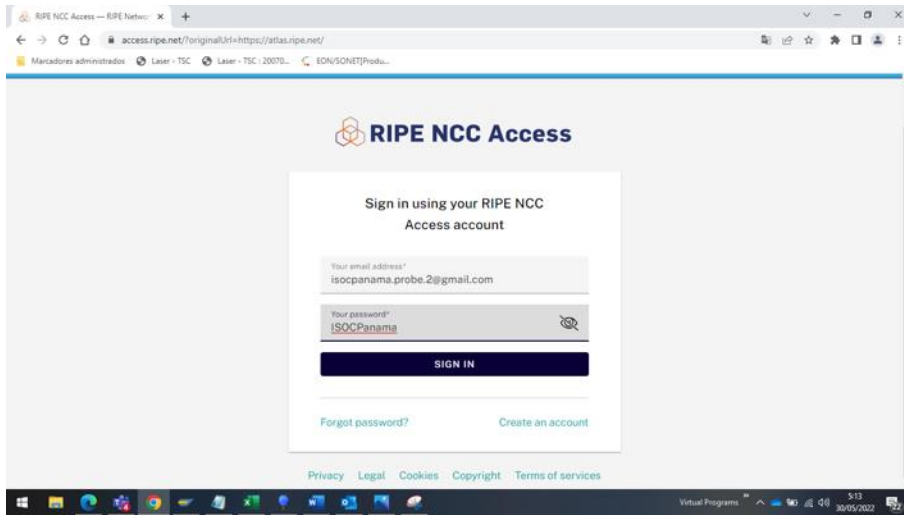
Recent News

Since about 9:00 UTC on 23 May 2022, the RIPE Atlas back-end storage has experienced a partial outage. Due to hardware problems, not all results are immediately available for download. We expect this to restore to real-time in 2-3 days. Note that the result-streaming service is not affected by this issue. Please note the issue also affects DNSMON data and visualisations.

Statistics

Probes connected	11272
Anchors connected	771
Total connected	12043
Measurements running	28885
Results per second	13728
Consumption Delay	● ●

Current Sponsors



Manual de Instalación

1. Conexión de su Raspberry Pi



El primer paso es conectar su Raspberry Pi a todos los periféricos requeridos para iniciar el proceso de instalación: teclado y mouse USB, Monitor HDMI, cable de red Ethernet a su router de Internet y finalmente la fuente de poder.

Al encenderlo debe llegar al desktop/escritorio del sistema operativo (SO).

El paso a paso de instalación de la plataforma RIPE ATLAS en los equipos Raspberry Pi lo hemos tomado del siguiente link url: <https://github.com/RIPE-NCC/ripe-atlas-software-probe/blob/master/INSTALL.rst>

De igual forma pueden encontrar un tutorial de instalación paso a paso en el video de youtube que se detalla a continuación <https://www.youtube.com/watch?v=8uvzE6bhks4>

To create a deb for Debian or Debian-based distros

Currently only the Debian Build system includes support for amd64, arm64, and armhf.

- Get the needed tools: `sudo apt update && sudo apt install git tar fakeroot libssl-dev libcap2-bin autoconf automake libtool build-essential`
- Clone the repo: `git clone --recursive https://github.com/RIPE-NCC/ripe-atlas-software-probe.git`
- Build the needed .deb file in the current working directory: `./ripe-atlas-software-probe/build-config/debian/bin/make-deb`

(Please note if you are running Ubuntu it may be required to checkout the devel branch of this repo. If this is the case and the .deb build does not complete without failing this is the command sequence to follow before trying the install of the .deb);

- `cd ripe-atlas-software-probe` << this will change into the root directory of the git repo that you have clone
- `git checkout devel` << this will checkout the DEVEL branch instead of the MASTER branch
- `git submodule update` << this will update the submodule within this branch
- `cd ..` << this take you back to where you started
- `./ripe-atlas-software-probe/build-config/debian/bin/make-deb` << this will retry the build
- Install this .deb file: `sudo dpkg -i atlaswprobe-?????.deb`
- The public key is stored in `/var/atlas-probe/etc/probe_key.pub`
- Then register your probe at <https://atlas.ripe.net/apply/swprobe/>

2. Actualizar el sistema operativo y obtener las herramientas necesarias:

Comandos

```
sudo apt update
sudo apt install git tar fakeroot libssl-dev libcap2-bin autoconf automake libtool build-essential
```

```
probe30@raspberrypi:~$ sudo apt update
Hit:1 http://raspbian.raspberrypi.org/raspbian bullseye InRelease
Hit:2 http://archive.raspberrypi.org/debian bullseye InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
probe30@raspberrypi:~$ sudo apt install git tar fakeroot libssl-dev libcap2-bin autoconf automake libtool build-essential
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
build-essential is already the newest version (12.9).
fakeroot is already the newest version (1.25.3-1.1).
fakeroot set to manually installed.
git is already the newest version (1:2.30.2-1).
libcap2-bin is already the newest version (2:2.44-1).
autoconf is already the newest version (1.34+dfsg-1).
tar is already the newest version (1.34+dfsg-1).
libssl-dev is already the newest version (1.1.1n-0+deb11u2+rpt1).
libssl-dev set to manually installed.
The following packages were automatically installed and are no longer required:
  libfuse2 libpcap40 libsonic0
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  autotools-dev libltdl-dev libsigsgev2 m4
Suggested packages:
  autoconf-archive gnu-standards autoconf-doc gettext libtool-doc gfortran | fortran95-compiler gcj-jdk m4-doc
The following NEW packages will be installed:
  autoconf automake autotools-dev libltdl-dev libsigsgev2 libtool m4
0 upgraded, 7 newly installed, 0 to remove and 0 not upgraded.
Need to get 2,096 kB of archives.
After this operation, 6,454 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://mirror.umd.edu/raspbian/raspbian bullseye/main armhf libsigsgev2 armhf 2.13-1 [34.3 kB]
Get:2 http://mirror.umd.edu/raspbian/raspbian bullseye/main armhf m4 armhf 1.4.18-5 [186 kB]
Get:3 http://mirror.umd.edu/raspbian/raspbian bullseye/main armhf autoconf all 2.69-14 [313 kB]
Get:4 http://raspbian.raspberrypi.org/raspbian bullseye/main armhf autotools-dev all 20180224.1+nmul [77.1 kB]
Get:5 http://mirror.umd.edu/raspbian/raspbian bullseye/main armhf automake all 1:1.16.3-2 [814 kB]
Get:6 http://mirror.umd.edu/raspbian/raspbian bullseye/main armhf libltdl-dev armhf 2.4.6-15 [159 kB]
Get:7 http://mirror.umd.edu/raspbian/raspbian bullseye/main armhf libtool all 2.4.6-15 [513 kB]
Fetched 2,096 kB in 3s (678 kB/s)
Selecting previously unselected package libsigsgev2:armhf.
(Reading database ... 180559 files and directories currently installed.)
Preparing to unpack .../0-libsigsgev2_2.13-1_armhf.deb ...
Unpacking libsigsgev2:armhf (2.13-1) ...
Selecting previously unselected package m4.
Preparing to unpack .../1-m4_1.4.18-5_armhf.deb ...
Unpacking m4 (1.4.18-5) ...
Selecting previously unselected package autoconf.
Preparing to unpack .../2-autoconf_2.69-14_all.deb ...
Unpacking autoconf (2.69-14) ...
Selecting previously unselected package autotools-dev.
Preparing to unpack .../3-autotools-dev_20180224.1+nmul_all.deb ...
Unpacking autotools-dev (20180224.1+nmul) ...
Selecting previously unselected package automake.
Preparing to unpack .../4-automake_1:1.16.3-2_all.deb ...
Unpacking automake (1:1.16.3-2) ...
Selecting previously unselected package libltdl-dev:armhf.
Preparing to unpack .../5-libltdl-dev_2.4.6-15_armhf.deb ...
Unpacking libltdl-dev:armhf (2.4.6-15) ...
Selecting previously unselected package libtool.
Preparing to unpack .../6-libtool_2.4.6-15_all.deb ...
Unpacking libtool (2.4.6-15) ...
Setting up autotools-dev (20180224.1+nmul) ...
Setting up libsigsgev2:armhf (2.13-1) ...
Setting up libtool (2.4.6-15) ...
Setting up m4 (1.4.18-5) ...
Setting up autoconf (2.69-14) ...
Setting up automake (1:1.16.3-2) ...
update-alternatives: using /usr/bin/automake-1.16 to provide /usr/bin/automake (automake) in auto mode
Setting up libltdl-dev:armhf (2.4.6-15) ...
Processing triggers for libc-bin (2.31-13+rpt2+rp1+deb11u2) ...
Processing triggers for man-db (2.9.4-2) ...
Processing triggers for install-info (6.7.0.dfsg.2-6) ...
probe30@raspberrypi:~$
```

3. Clonar el repositorio de github:

Comandos

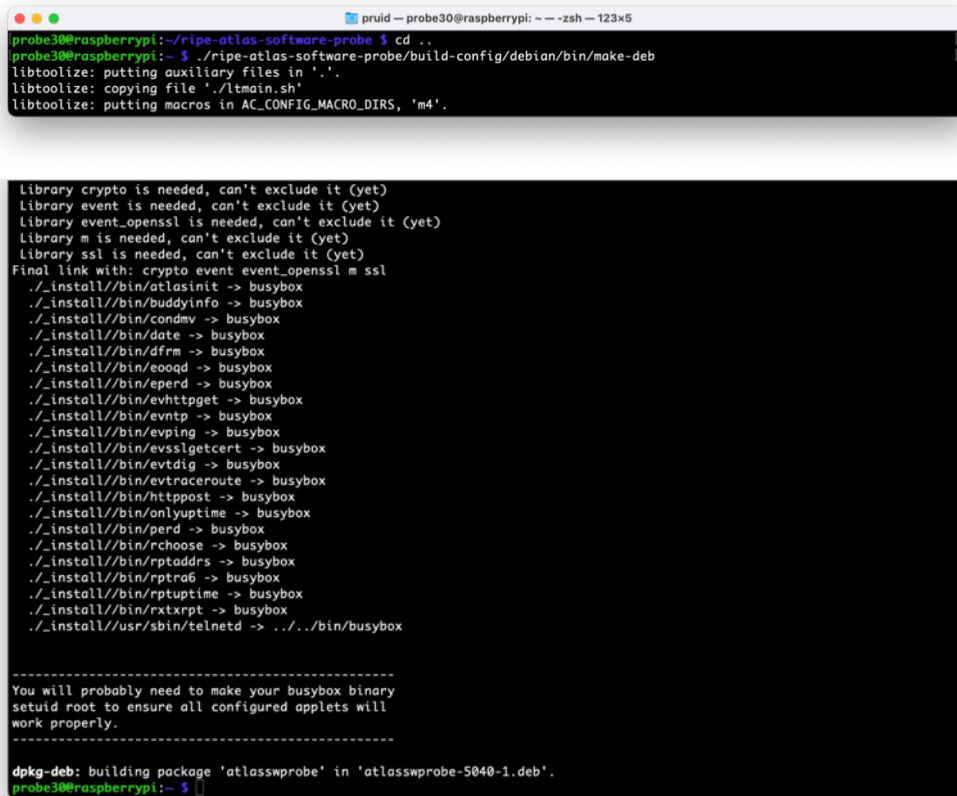
```
git clone --recursive https://github.com/RIPE-NCC/ripe-atlas-software-probe.git
```

```
pruid - probe30@raspberrypi: ~ -- ssh probe30@192.168.0.114 -- 123x19
probe30@raspberrypi:~$ git clone --recursive https://github.com/RIPE-NCC/ripe-atlas-software-probe.git
Cloning into 'ripe-atlas-software-probe' ...
remote: Enumerating objects: 1055, done.
remote: Counting objects: 100% (124/124), done.
remote: Compressing objects: 100% (13/13), done.
remote: Total 1055 (delta 116), reused 111 (delta 111), pack-reused 931
Receiving objects: 100% (1055/1055), 156.12 KiB | 1.02 MiB/s, done.
Resolving deltas: 100% (549/549), done.
Submodule 'github-busybox' (https://github.com/RIPE-NCC/ripe-atlas-software-busybox.git) registered for path 'probe-busybox'
Cloning into '/home/probe30/ripe-atlas-software-probe/probe-busybox' ...
remote: Enumerating objects: 9588, done.
remote: Counting objects: 100% (489/489), done.
remote: Compressing objects: 100% (268/268), done.
remote: Total 9588 (delta 280), reused 371 (delta 219), pack-reused 9099
Receiving objects: 100% (9588/9588), 10.05 MiB | 3.32 MiB/s, done.
Resolving deltas: 100% (4392/4392), done.
Submodule path 'probe-busybox': checked out '2c770cac764aba42ea9d204fd28494f91782b4a9'
probe30@raspberrypi:~$
```

4. Construir el archivo .deb en el directorio de trabajo actual:

Comando

```
./ripe-atlas-software-probe/build-config/debian/bin/make-deb
```



```
probe30@raspberrypi:~/ripe-atlas-software-probe $ cd ..
probe30@raspberrypi:~$ ./ripe-atlas-software-probe/build-config/debian/bin/make-deb
libtoolize: putting auxiliary files in '.'.
libtoolize: copying file './ltmain.sh'
libtoolize: putting macros in AC_CONFIG_MACRO_DIRS, 'm4'.

Library crypto is needed, can't exclude it (yet)
Library event is needed, can't exclude it (yet)
Library event_openssl is needed, can't exclude it (yet)
Library m is needed, can't exclude it (yet)
Library ssl is needed, can't exclude it (yet)
Final link with: crypto event event_openssl m ssl
./_install/bin/atlasinit -> busybox
./_install/bin/buddyinfo -> busybox
./_install/bin/condmv -> busybox
./_install/bin/date -> busybox
./_install/bin/dfm -> busybox
./_install/bin/echoq -> busybox
./_install/bin/eperd -> busybox
./_install/bin/evhttpget -> busybox
./_install/bin/evntp -> busybox
./_install/bin/evping -> busybox
./_install/bin/evsslgetcert -> busybox
./_install/bin/evtdig -> busybox
./_install/bin/evtraceroute -> busybox
./_install/bin/httppost -> busybox
./_install/bin/onlyuptime -> busybox
./_install/bin/perd -> busybox
./_install/bin/rchoose -> busybox
./_install/bin/rptaddr -> busybox
./_install/bin/rptr6 -> busybox
./_install/bin/rptuptime -> busybox
./_install/bin/rxtxprt -> busybox
./_install/usr/sbin/telnetd -> ../bin/busybox

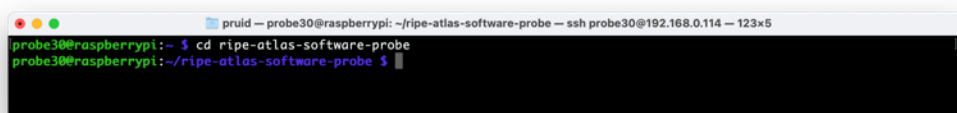
-----
You will probably need to make your busybox binary
setuid root to ensure all configured applets will
work properly.
-----

dpkg-deb: building package 'atlasswprobe' in 'atlasswprobe-5040-1.deb'.
probe30@raspberrypi:~$
```

4.1. Comprobación del DEVEL banch del repositorio:

Comando

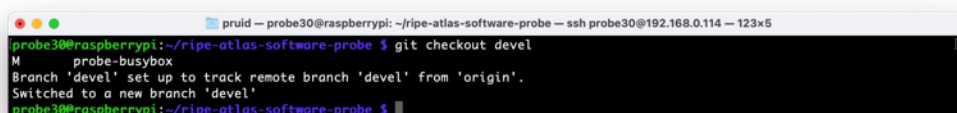
```
cd ripe-atlas-software-probe << esto cambiará al directorio root del repositorio git que se clonó
```



```
probe30@raspberrypi:~/ripe-atlas-software-probe $ cd ripe-atlas-software-probe
probe30@raspberrypi:~/ripe-atlas-software-probe $
```

Comando

```
git checkout devel << esto hará que se compruebe la DEVEL branch en lugar de la MASTER branch
```



```
probe30@raspberrypi:~/ripe-atlas-software-probe $ git checkout devel
M   probe-busybox
Branch 'devel' set up to track remote branch 'devel' from 'origin'.
Switched to a new branch 'devel'
probe30@raspberrypi:~/ripe-atlas-software-probe $
```

Comando

`git submodule update` << esto actualizará el submodule en este branch

```

pruid — probe30@raspberrypi: ~/ripe-atlas-software-probe — ssh probe30@192.168.0.114 — 123x5
probe30@raspberrypi:~/ripe-atlas-software-probe $ git submodule update
Submodule path 'probe-busybox': checked out '2ab871143adacbf6f30525861075e468f68e71c3'
probe30@raspberrypi:~/ripe-atlas-software-probe $

```

Comando

`cd ..` << esto te llevará donde empezaste

```

pruid — probe30@raspberrypi: ~ — ssh probe30@192.168.0.114 — 123x5
probe30@raspberrypi:~/ripe-atlas-software-probe $ cd ..
probe30@raspberrypi:~ $

```

Comando

`./ripe-atlas-software-probe/build-config/debian/bin/make-deb` << esto reintentará la construcción

```

pruid — probe30@raspberrypi: ~ — ssh probe30@192.168.0.114 — 123x5
probe30@raspberrypi:~/ripe-atlas-software-probe $ cd ..
probe30@raspberrypi:~ $ ./ripe-atlas-software-probe/build-config/debian/bin/make-deb
libtoolize: putting auxiliary files in '.'.
libtoolize: copying file './ltmain.sh'
libtoolize: putting macros in AC_CONFIG_MACRO_DIRS, 'm4'.

```

```

pruid — probe30@raspberrypi: ~ — ssh probe30@192.168.0.114 — 123x23
./_install/bin/evping -> busybox
./_install/bin/evsslgetcert -> busybox
./_install/bin/evstdig -> busybox
./_install/bin/evtraceroute -> busybox
./_install/bin/httpppost -> busybox
./_install/bin/onlyuptime -> busybox
./_install/bin/perd -> busybox
./_install/bin/rchoose -> busybox
./_install/bin/rptaddr -> busybox
./_install/bin/rptaddr6 -> busybox
./_install/bin/rptuptime -> busybox
./_install/bin/rxtxprt -> busybox
./_install/usr/sbin/telnetd -> ../../bin/busybox

-----
You will probably need to make your busybox binary
setuid root to ensure all configured applets will
work properly.
-----

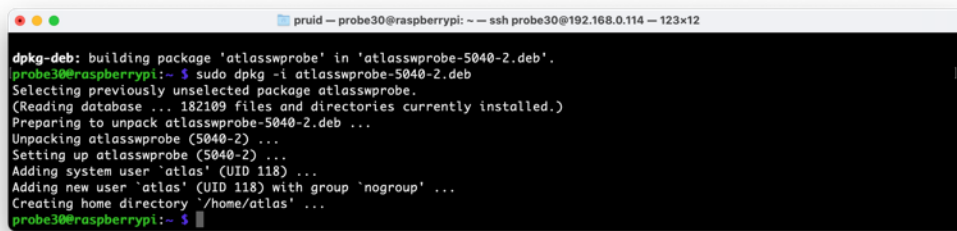
dpkg-deb: building package 'atlasswprobe' in 'atlasswprobe-5040-2.deb'.
probe30@raspberrypi:~ $

```

5. Instalar el archivo atlasswprobe-?????.deb. creado en el paso anterior:

Comando

```
sudo dpkg -i atlasswprobe-?????.deb
```



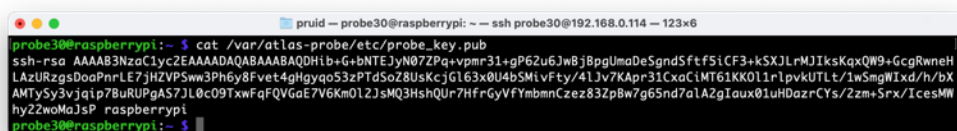
```

dpkg-deb: building package 'atlasswprobe' in 'atlasswprobe-5040-2.deb'.
probe30@raspberrypi:~$ sudo dpkg -i atlasswprobe-5040-2.deb
Selecting previously unselected package atlasswprobe.
(Reading database ... 182109 files and directories currently installed.)
Preparing to unpack atlasswprobe-5040-2.deb ...
Unpacking atlasswprobe (5040-2) ...
Setting up atlasswprobe (5040-2) ...
Adding system user 'atlas' (UID 118) ...
Adding new user 'atlas' (UID 118) with group 'nogroup' ...
Creating home directory '/home/atlas' ...
probe30@raspberrypi:~$

```

6. Buscaremos la llave pública

```
cat /var/atlas-probe/etc/probe_key.pub
```



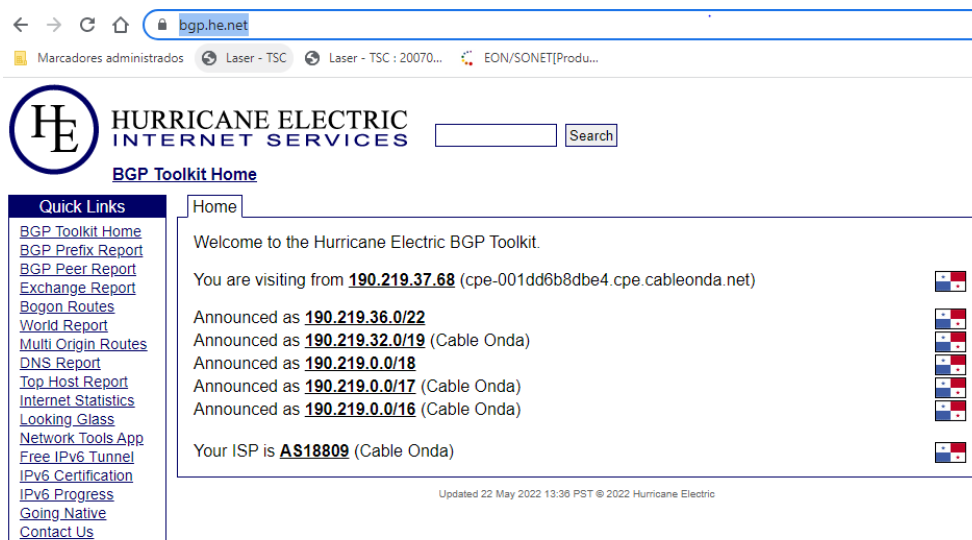
```

probe30@raspberrypi:~$ cat /var/atlas-probe/etc/probe_key.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDHib+G+bNTEJyN07ZPq+vpmr31-gP62u6JwBjBpgUmaDeSgndSftf5iCF3-kSXJLrMJIksKqxQW9+GcgRwneH
LAZURzgsDodaPnrLE7jHvZVPSww3Ph6y8Fvet4ghIgyqo53zPtDsoz8UsKcJG163x0U4bSMlvFty/4L3v7KApr31CxaCiMT61KK01lr1pvKUTL/1wSmgWIXd/h/bX
AMTy3vjqip7BuRUPgA57JL0c09TxfFQVgGdE7V6Km0L2JsMQ3HshQUr7HfrGyVfYmBmmCze283ZpBw7g65nd7aL2gIaux01uHDazrCYs/Zzm+SrX/IcesMM
hy22woMaJSP raspberrypi
probe30@raspberrypi:~$

```

7. Buscar el Sistema Autónomo BGP (ASN) de su proveedor de internet

En el navegador abrir <https://bgp.he.net/>



← → ↻ 🏠 bgp.he.net

📌 Marcadores administrados 🌐 Laser - TSC 🌐 Laser - TSC : 20070... 🌐 EON/SONET[Produ...

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Home

Welcome to the Hurricane Electric BGP Toolkit.

You are visiting from **190.219.37.68** (cpe-001dd6b8dbe4.cpe.cableonda.net)

Announced as **190.219.36.0/22**

Announced as **190.219.32.0/19** (Cable Onda)

Announced as **190.219.0.0/18**

Announced as **190.219.0.0/17** (Cable Onda)

Announced as **190.219.0.0/16** (Cable Onda)

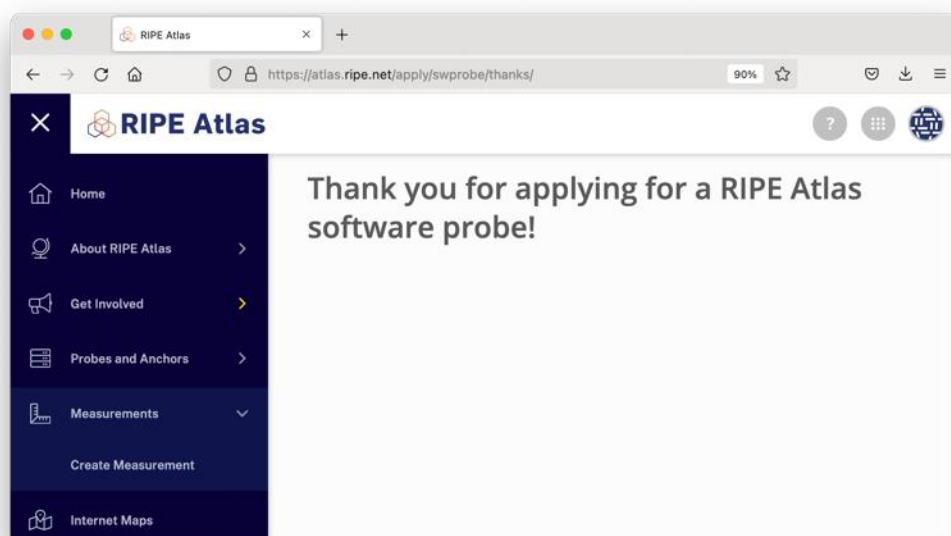
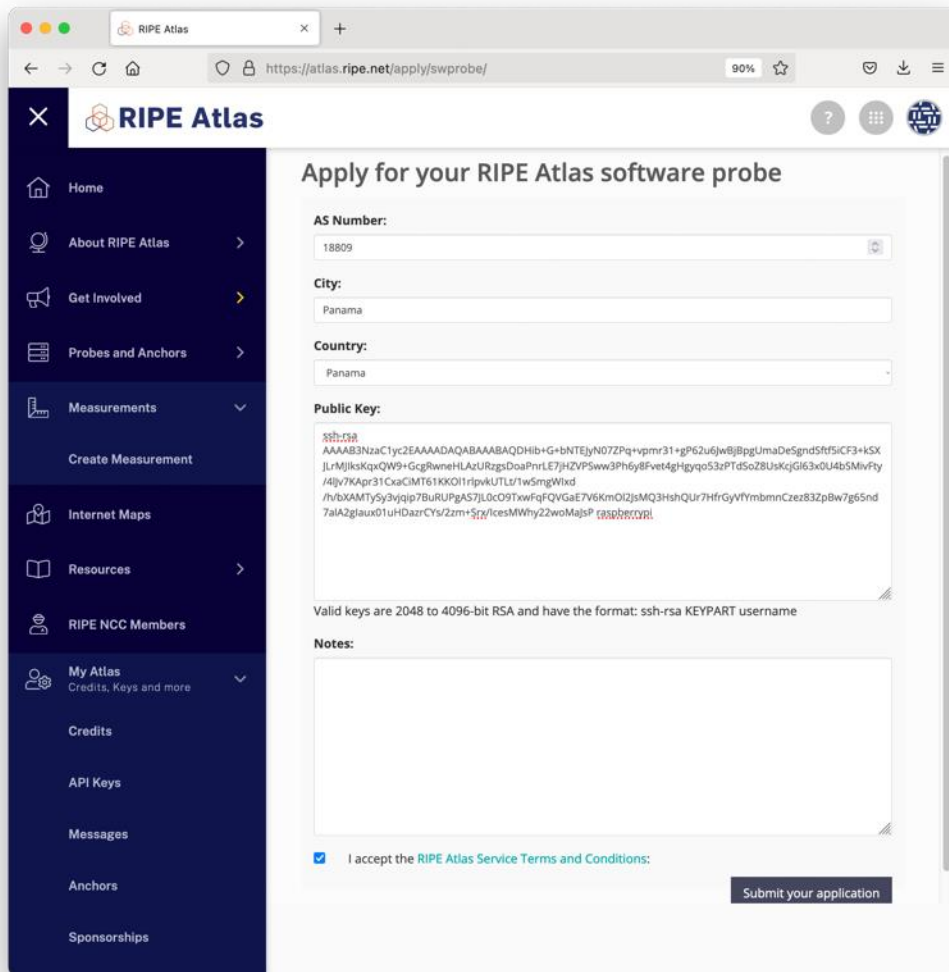
Your ISP is **AS18809** (Cable Onda)

Updated 22 May 2022 13:36 PST © 2022 Hurricane Electric

8. Registro del probe/sonda de software en RIPE ATLAS:

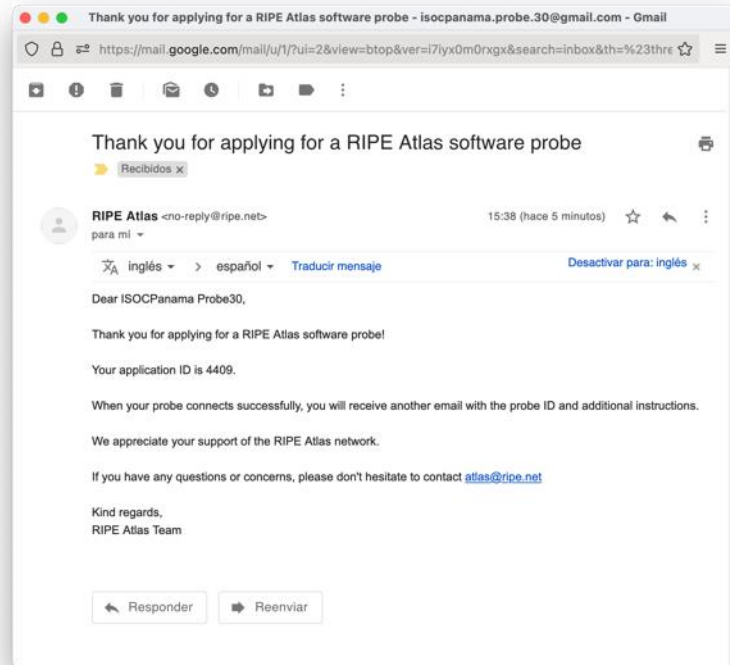
Acceso directo al registro en <https://atlas.ripe.net/apply/swprobe/>

En la página web <https://atlas.ripe.net> debe ir a MyAtlas → host a probe → apply online → the software probe application form.



9. Confirmación de aplicación de RIPE ATLAS.

Recibirás un correo con la confirmación de tu aplicación y cuando la sonda se conecte satisfactoriamente recibirás otro correo con instrucciones adicionales.



10. Confirmación de Creación del probe en RIPE ATLAS

