

RIPE Atlas & Routing Information Service (RIS) at FrancelIX



Arnaud FENIOUX - FrancelIX
#GM2015



PowerEdge R320



Routing Information Service (RIS)

Control-plane vision

RIS Collector

collects and stores Internet routing data from several locations around the globe.

RIS data can be accessed via RIPEstat (stat.ripe.net) :

- Routing status
- Announced prefixes
- ASN Neighbours
- BGP looking Glass
- BGPlay
- RISwhois
- ...

stat.ripe.net

RIPE **stat**

At a Glance (4)

Routing (11)

DNS (1)

Anti Abuse (1)

Database (5)

Geographic (2)

Activity (2)

Suggestions (1)

+ MyView ?

AS Overview (AS57734)

✓ Originating
Prefix(es)

Holder of this ASN:

**FRANCEIX France IX Services
SASU,FR**

Show IANA Registry Information

Showing results for AS57734 as of 2015-09-16
08:00:00 UTC

[source data](#) [embed code](#) [permalink](#) [info](#)

Registry Browser (AS57734)

Last updated on 2015-06-01 at 13:21:18
UTC.

aut-num: AS57734

Geoloc (AS57734)



► Geoloc details

Data is based on MaxMind's GeoLite
City data set and valid for the stated
query time (see below)

Showing results for AS57734 as of 2015-09-01
00:00:00 UTC

[source data](#) [embed code](#) [permalink](#) [info](#)

Routing Status (AS57734)

Routing tab

At a Glance (4)

Routing (11)

DNS (1)

Anti Abuse (1)

Database (5)

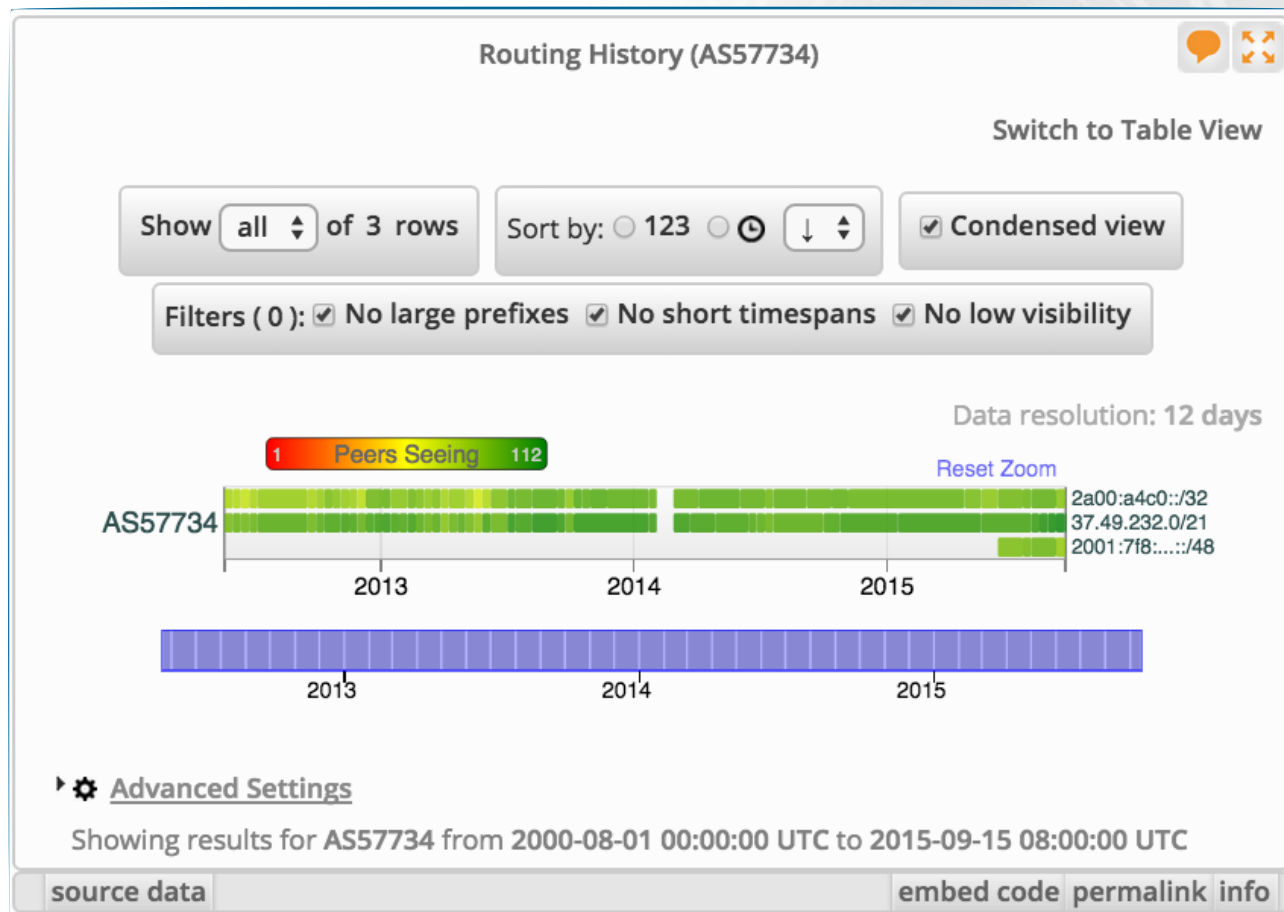
Geographic (2)

Activity (2)

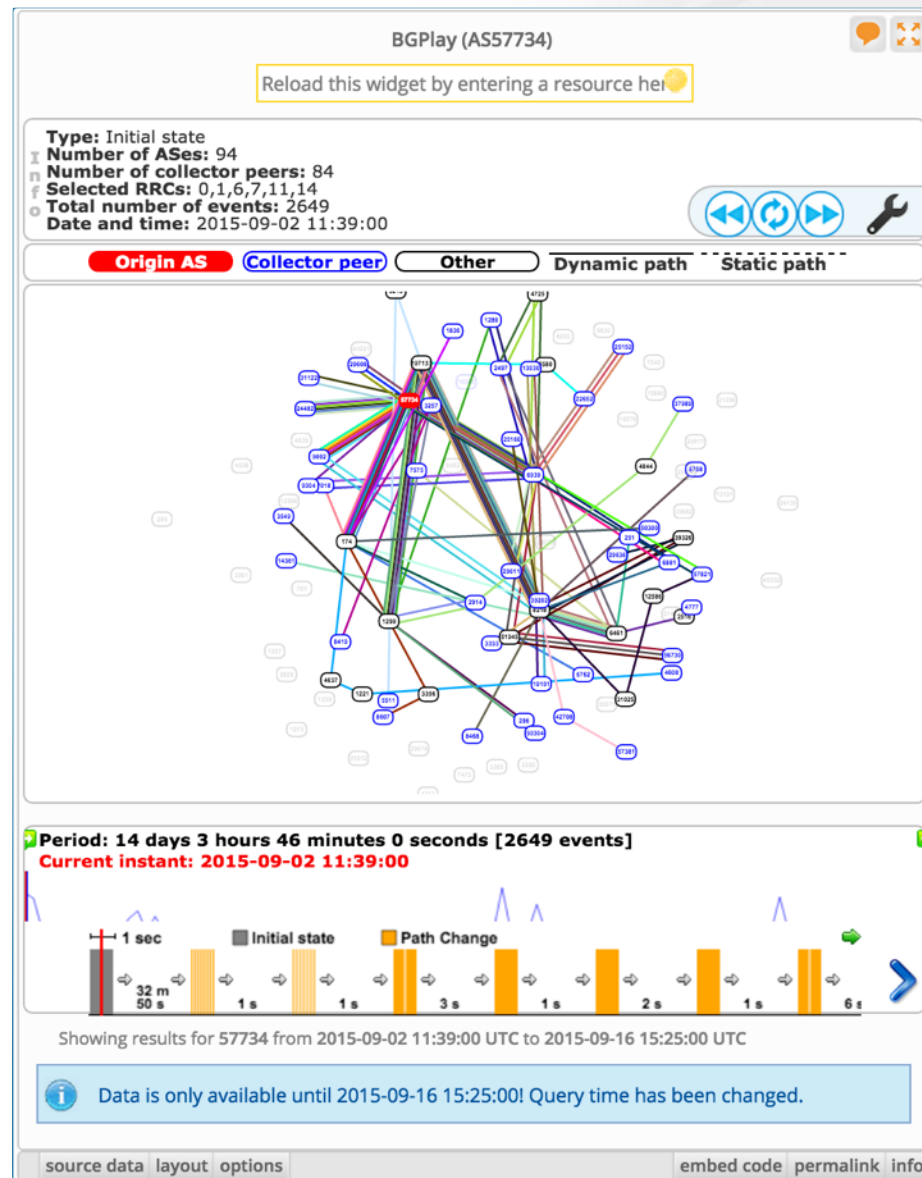
Suggestions (1)

+ MyView

?



BGPlay



Hijack detection

BGP hijack detection in real time

by Nicolas Vivet (Network Security engineer, ANSSI)

*Détection d'usurpations BGP en temps réel
par Nicolas Vivet (Ingénieur sécurité réseaux, ANSSI)*

In 2014 :

- 1500 French AS watched
- 70 millions BGP messages analysed
- 300 abnormal conflicts detected

<https://www.afnic.fr/fr/l-afnic-en-bref/actualites/actualites-generales/9333/show/jcsa15-retour-sur-la-journee-du-conseil-scientifique-de-l-afnic-2015.html>



PowerEdge R320

DELL

RIS-COLLECTOR

RIPE Atlas

anchors and probes

Data-plane vision

FranceIX's Anchor

FranceIX

General

Network

Built-in Measurements

User-defined Measurements

General Information

Edit

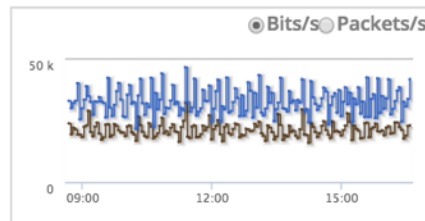
Id	6118
MAC Address	00:00:24:D1:5E:B0
Architecture	centos
Firmware Version	4700
Router Type	None
Bandwidth Limit	Not set
DNS Entry	Simple: p6118.probes.atlas.ripe.net
Shared Publicly	Yes

User Tags

System Tags

Anchor
Resolves A Correctly
Resolves AAAA Correctly
IPv4 Works | IPv6 Works
IPv4 Capable
IPv6 Capable

Connection & Traffic



Connected Time

20 hours

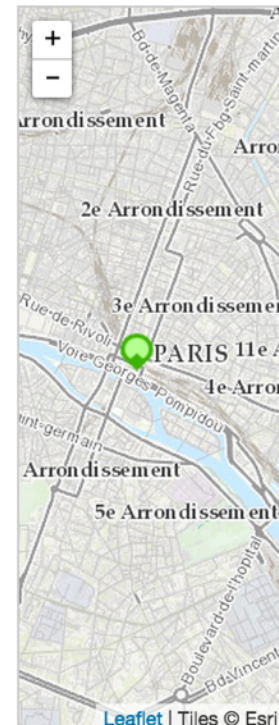


FranceIX 20 hours

Firmware #6118
4700

Architecture centos

MAC Address
00:00:24:D1:5E:B0



Check types

- **Ping**
 - Address Family / Nbr of Packets / Size
- **Traceroute**
 - Address Family / Timeout / Protocol / port / ...
- **DNS**
 - Address Family / Query Type / Local resolvers /...
- **SSL**
 - Address Family / Port / ...
- **HTTP**
 - Address Family / URL /
- **NTP**
 - Address Family / Nbr of Packets / Timeout

Create a check

atlas.ripe.net

- RIPE Atlas <<
- About RIPE Atlas >
- Get Involved >
- Results >
- My Atlas** v
 - Probes
 - Measurements
 - Credits
 - API Keys
 - Messages
 - Anchors
 - LIR Benefits
 - Claim 1 Million Credits
 - IPv6 Connectivity Test
 - Quick Look
 - Settings

Create a New Measurement

Step 1 Definitions

▼ Ping measurement to ripe-atlas-anchor.franceix.net x

Target:

ripe-atlas-anchor.franceix.net

An IP address or hostname

Description:

Ping measurement to ripe-atlas-anchor.fran

A free-form description of this measurement

Address Family*:

IPv4

Interval:

500

How often this should be done (seconds between samples). Note that this value is ignored for one-off measurements.

Packets:

1

Size:

48

Resolve on Probe:

☐

Force the probe to do DNS resolution

[> Advanced Options](#)

+ Ping

+ Traceroute

+ DNS

+ SSL

+ HTTP

+ NTP

Step 2 Probe Selection

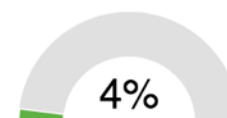
Worldwide

50

x

Costs summary

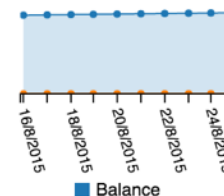
Daily cost: 8600 credits



This measurement would cost 4.0% of your daily income

The new cost of all your measurements would be 4.0% of your daily income

You will not run out of credits in a year



Total Expenses

Probes selection

Create your selection

In this panel you can manually create a probe selection. If you need more help or you want to visualize where the probes are, please use the wizard selection.

Type (mandatory)

area

Area (mandatory)

WW (Worldwide)

Number of probes (mandatory)

50

Include tags

system-ipv6-works

Exclude tags

Cancel Add

Tags : <https://atlas.ripe.net/docs/probe-tags/>

Status Check + Nagios

- Create a RIPE Atlas ping measurement
- Retrieve results from a unique URL :
https://atlas.ripe.net/api/v1/status-checks/MEASUREMENT_ID/?permitted_total_alerts=2

```
{  
  "total_alerts":1,  
  "global_alert":false,  
  "probes":{...}  
}
```

- Define your alerts accordingly

https://labs.ripe.net/Members/suzanne_taylor_muzzin/introducing-ripe-atlas-status-checks

Tutorial

Practical use-case of RIPE Atlas probes for network measurement / diagnostic
by Stéphane Bortzmeyer (R&D Engineer AFNIC)

*Utilisation pratique des sondes RIPE Atlas
pour des mesures / diagnostic réseau
par Stéphane Bortzmeyer (Ingénieur R&D Afnic)*

<https://www.afnic.fr/fr/l-afnic-en-bref/actualites/actualites-generales/9333/show/jcsa15-retour-sur-la-journee-du-conseil-scientifique-de-l-afnic-2015.html>

Merci !

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