RIPE Atlas

User Defined Measurements
Functionality and Implementation

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New Features of RIPE Atlas

In the past months we focused on behind-the-scenes work:

- Support for handling more measurements
- Many internal components to handle details:
  - Measurement scheduling
  - Task distribution
  - Data collection and visualisation

Now we can start to cash in on many of these…

New Features of RIPE Atlas

Recently we made major upgrades:

- More built-in ping destinations

- New: traceroutes to built-in destinations

- New: DNS anycast checks

- Preparations for "User Defined Measurements"

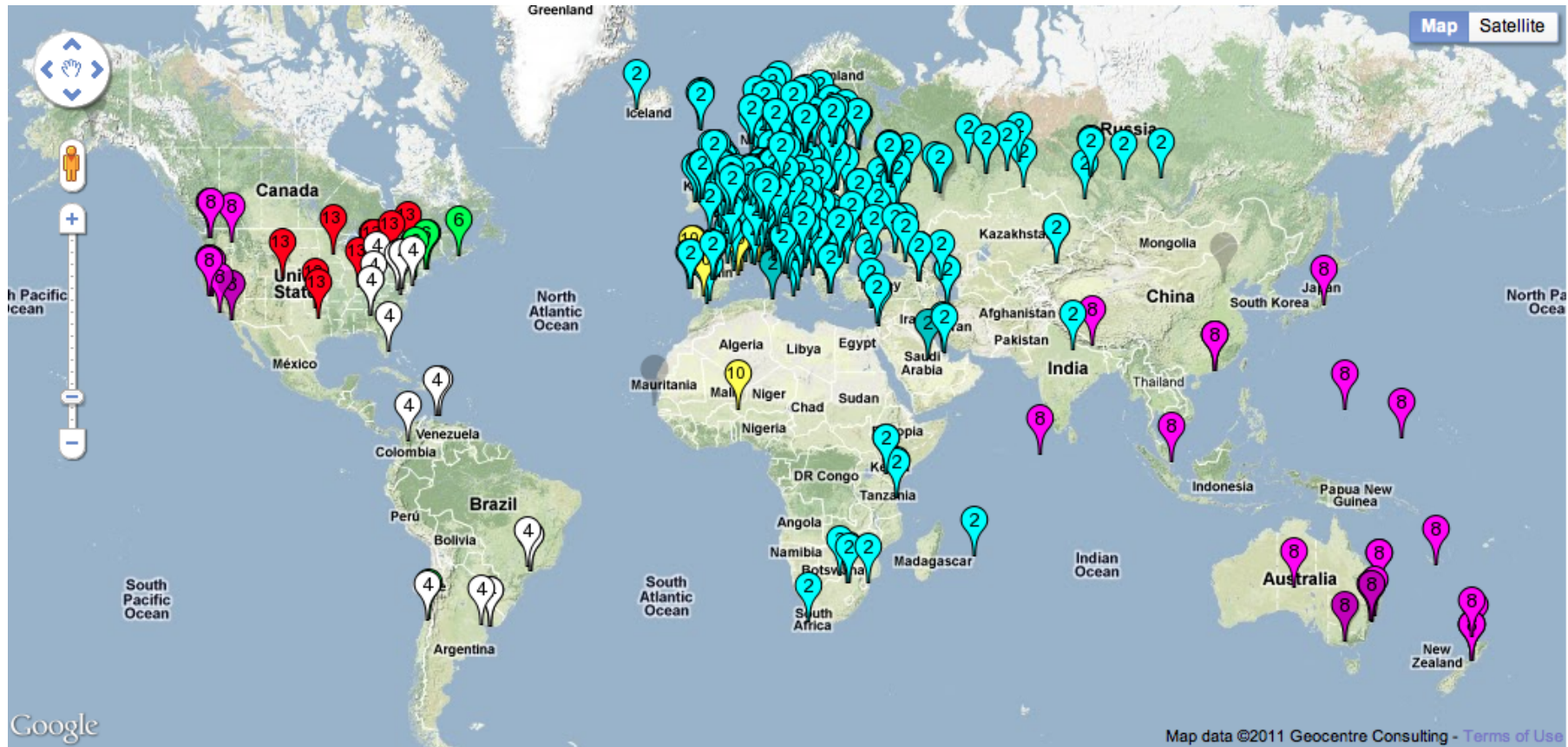# New Features of RIPE Atlas

More built-in ping destinations:

- Virtually all root name servers

- Some unicast servers too

Traceroutes to built-in destinations:

- To provide background information if there are events you want to look into

New Features of RIPE Atlas

DNS anycast checks (c-root)

New Features of RIPE Atlas

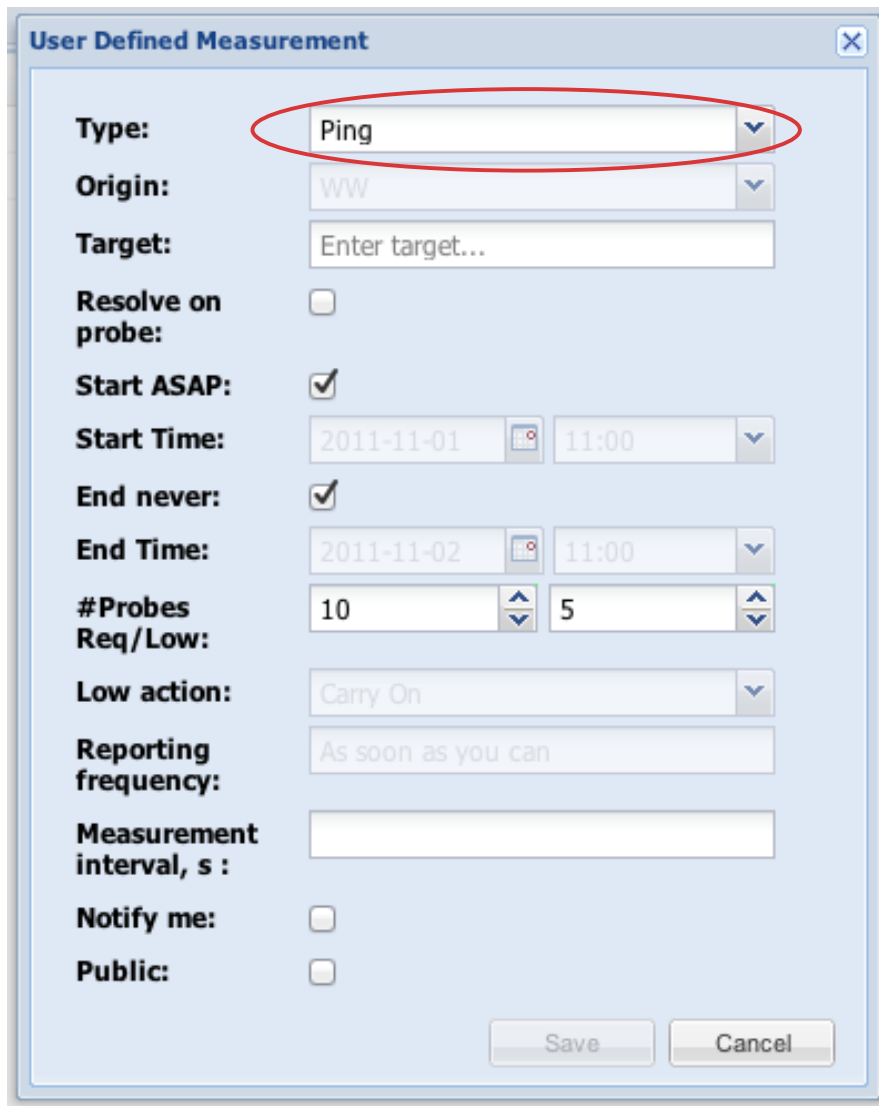## DNS anycast checks (i-root)

User Defined Measurements

Strategy:

- Start with a basic set of variables that can be set by the user

- Enable more and more features over time

- Allow more and more resource usage over time

- Add more measurement types – based on user demand

All of this ties into the "credit system".

Specify Your Measurement…

Currently:
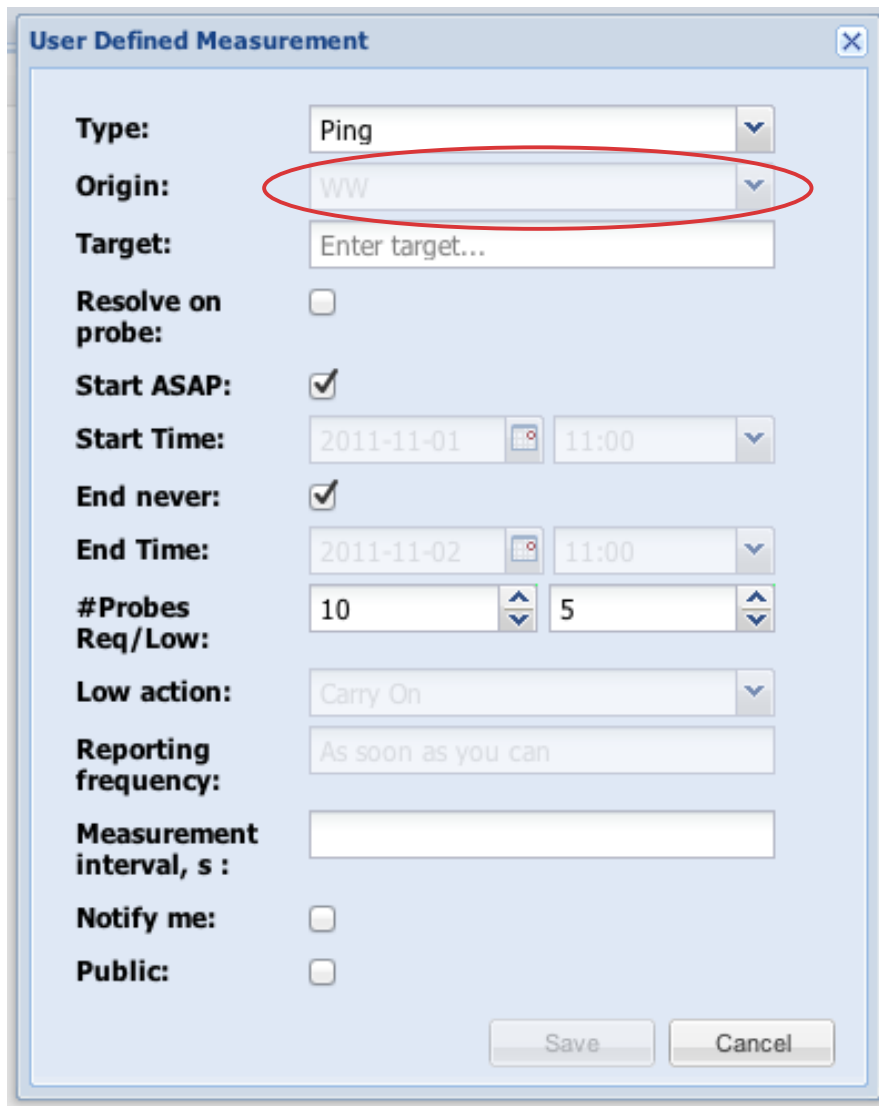
- Ping: v4/v6

- Traceroute: v4/v6

Coming up:

- DNS query

- Others (later)

Specify Your Measurement…
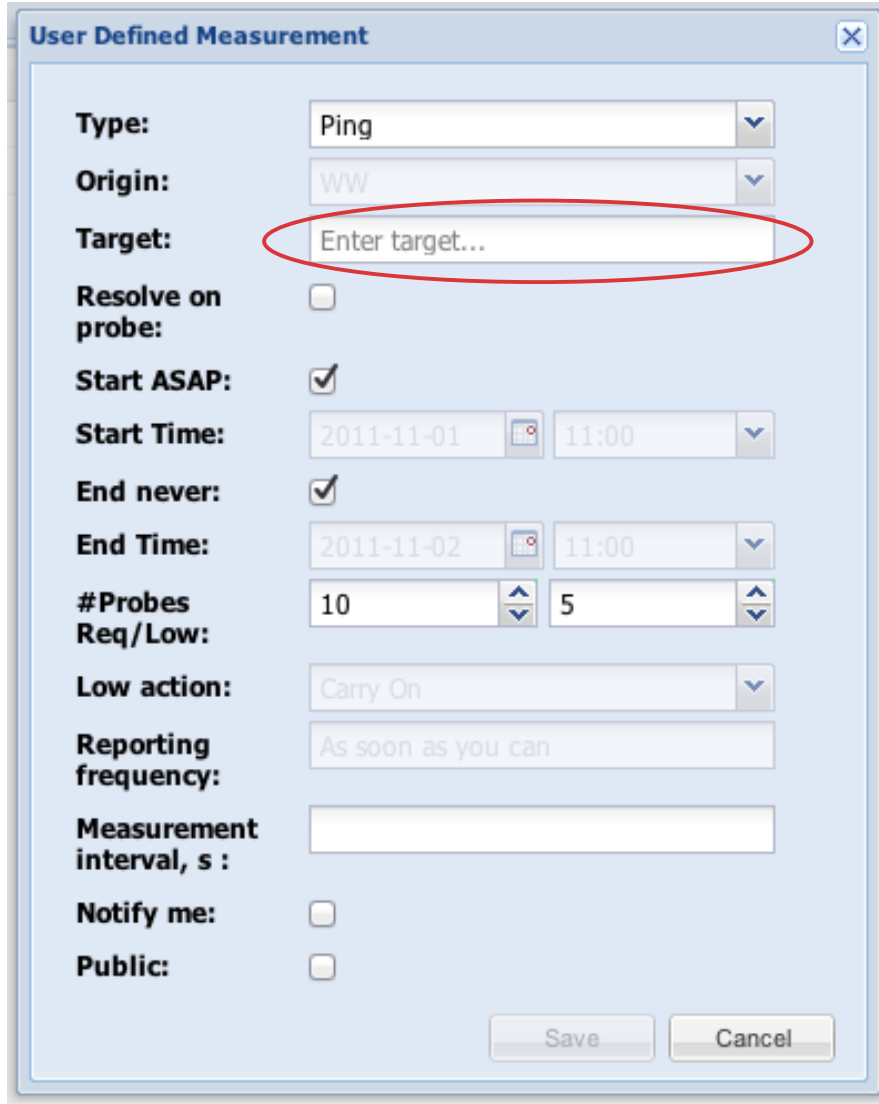
Currently:

- Worldwide

Coming up:

- From a region

- From a country

- From an AS

- From a prefix

- From a probe

Specify Your Measurement...
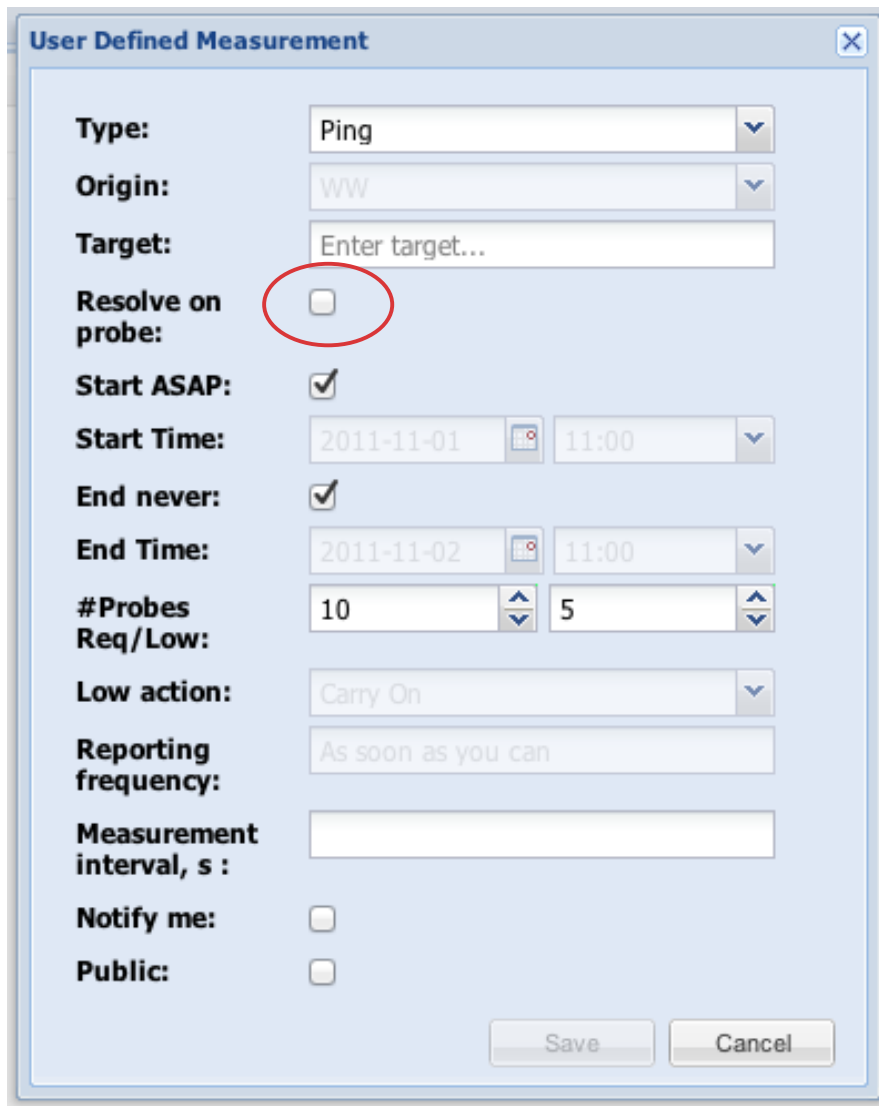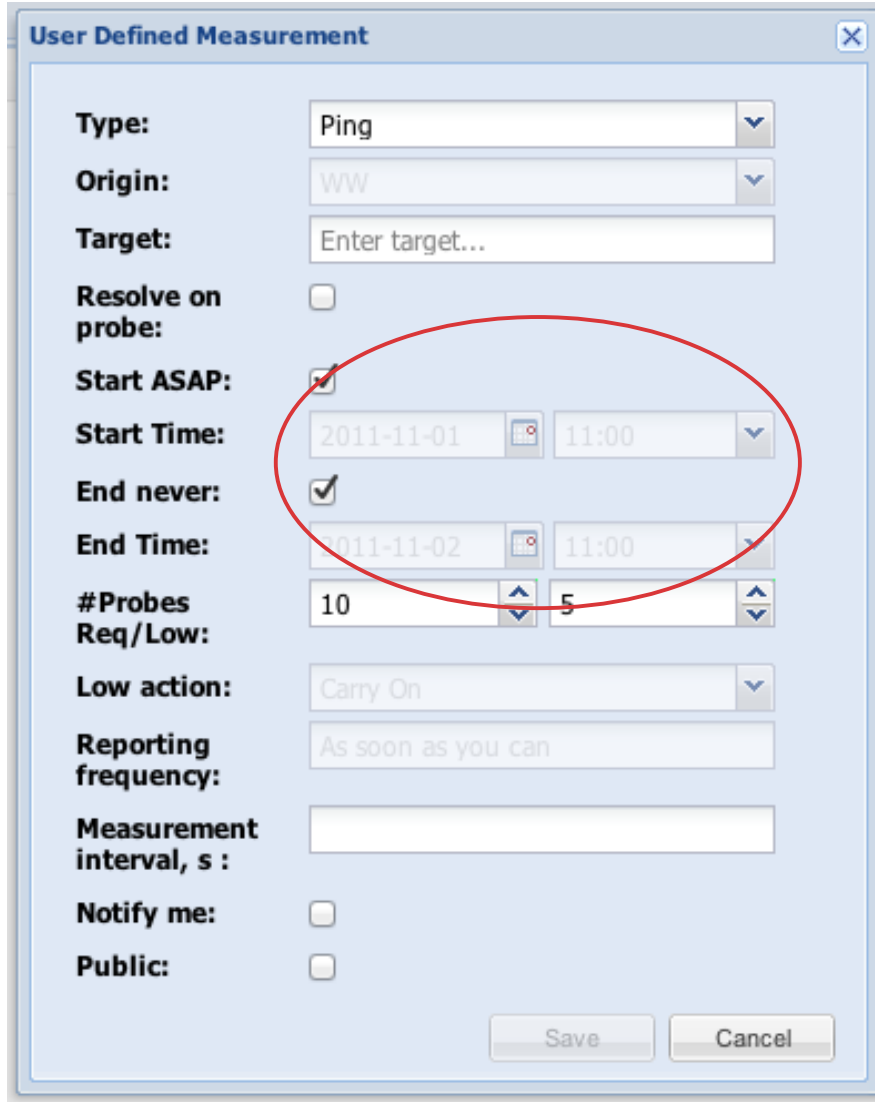

Currently:

- IP or name

Specify Your Measurement...

Resolve centrally:

- Probes get IP as destination

Resolve on probe:

- Each probe resolves independently

Specify Your Measurement…
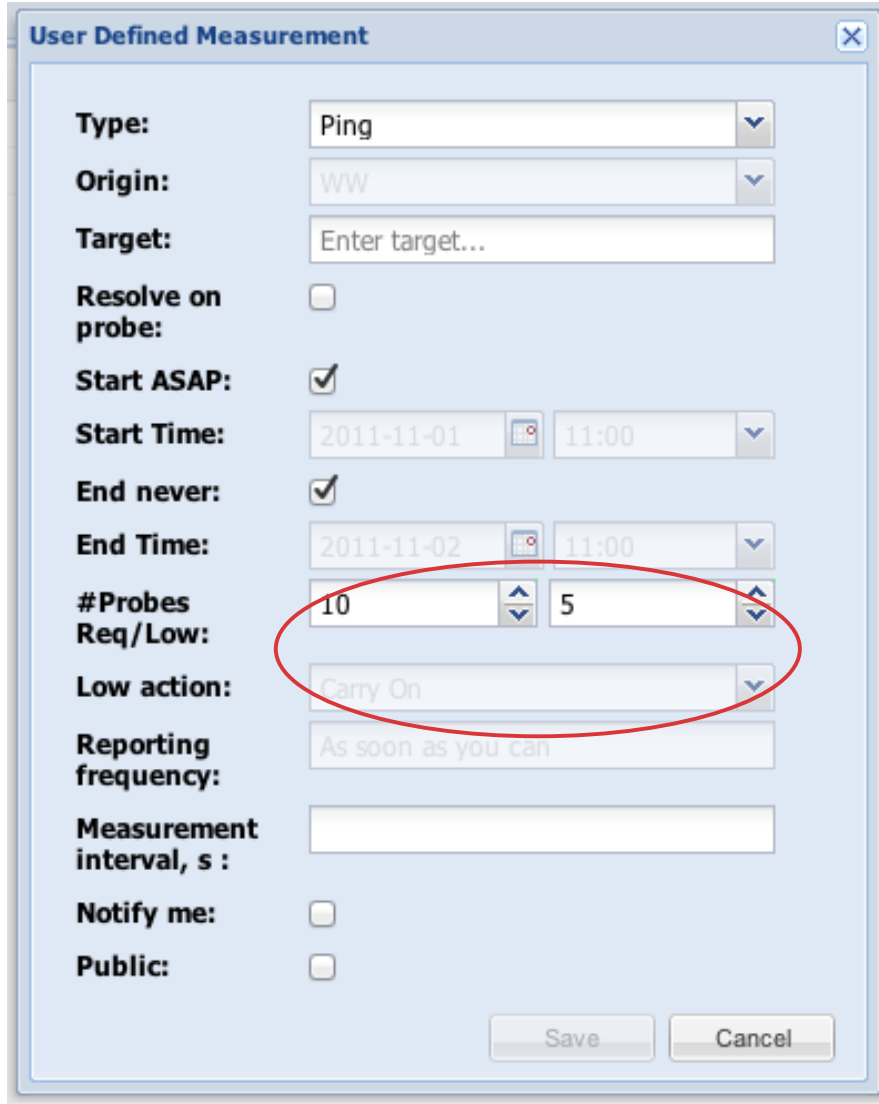
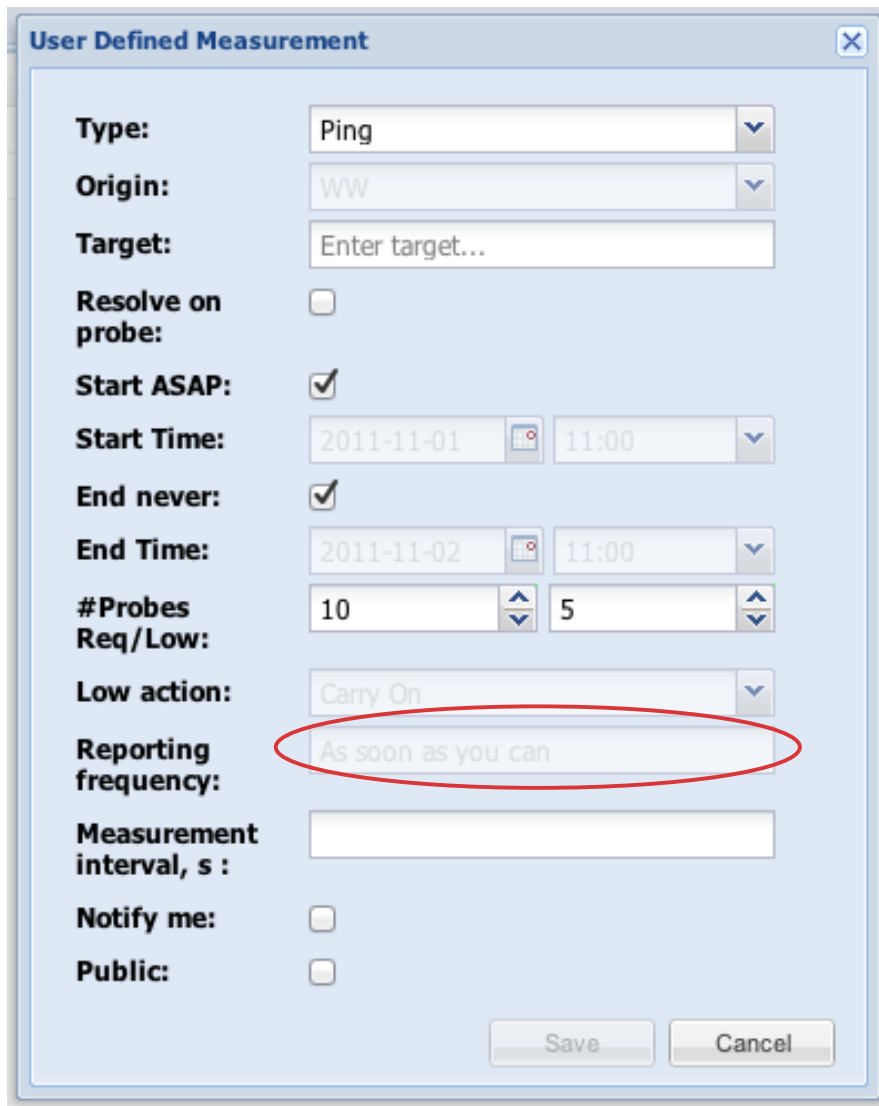- Controlling when and how long the measurement should run

Specify Your Measurement...

How many probes?

- Requested
  - I'd like to have this many
- Minimum
  - Low threshold for further action
- Low action (later):
  - What to do at low threshold

Specify Your Measurement…

How often to report?

- Currently:
  - ASAP

- Later:
  - It does not have to be real-time

Specify Your Measurement…
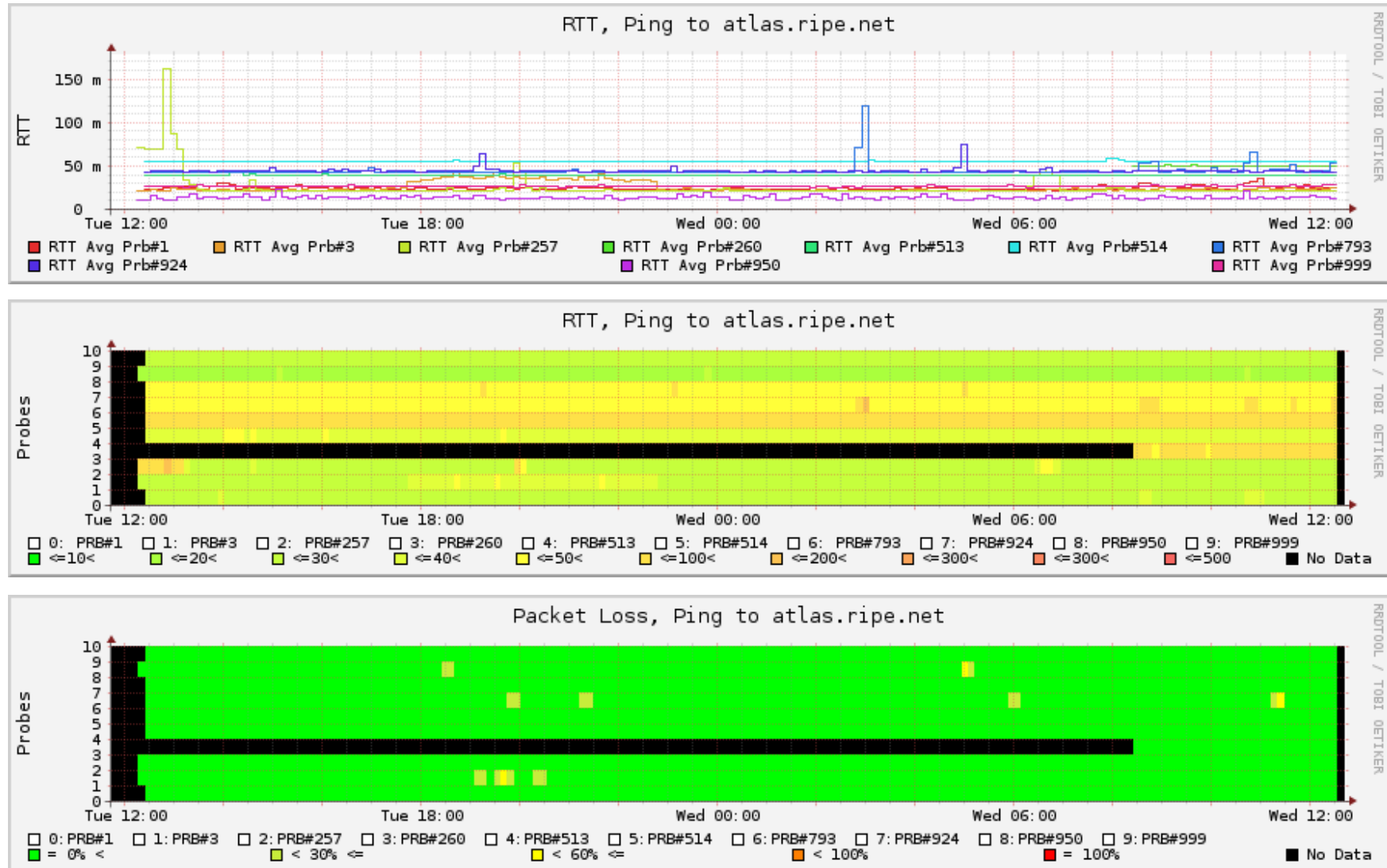

Other:

- Decrease measurement frequency

- Notify me if something happens

- Make data public

Results of a "ping" UDM

RIPE Atlas - The Road Ahead

We're starting to test UDM in real life. If you're interested in beta-testing:

- Drop a mail to atlas-dev@ripe.net
- We'll likely have more beta testers then we can handle…

RIPE Atlas - The Road Ahead

Planned next steps include:

- Real-time access to (raw) data

- APIs to interact with the system

- Automatic alerts and notifications

- …

- Your preferences?

Questions?