

# IRRToolSet Hand-Over

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## 1. Background

The RAToolSet was a set of programs designed to work with Internet Routing Registries (IRR). Network administrators could use it to query IRR databases for information, and use it to help automate router configuration.

The RAToolSet project was written and maintained by the Information Sciences Institute (ISI). The RIPE NCC agreed to host the project, starting in September 2001. At this time, the project was renamed to the IRRToolSet, to better reflect the purpose of the software.

The motivation behind this move was to insure that the RAToolSet would not become unmaintained. The programs in this project are unique, and useful to network administrators.

## 2. RIPE NCC Open Source Model

While the RIPE NCC is not primarily a software development company<sup>1</sup>, it publishes the source code for some of the software that it has written. It usually writes software only when it is necessary for the operation of the organisation, when it cannot be obtained reasonably in other ways. A certain level of quality is insured, as the software needs to meet the operational needs of the company.

There are a number of benefits by publishing code, but the main motivation for publishing is the hope that it is useful to other people or organisations.

Typically software gets updated on a regular basis, as features are added or defects fixed. Releases get published infrequently, as this requires time for the release process (documenting changes for the release notes, building tools for migrating earlier installs, packaging, testing on target platforms, etc.).

## 3. Concerns About the IRRToolSet

Users at the RIPE 48 meeting reported a number of problems:

- The IRRToolSet did not track the latest RPSLNg<sup>2</sup> drafts.
- Reported bugs and submitted patches were not addressed.
- It was not possible to compile using gcc 3.x, the default compiler on systems for several years.

These concerns were raised in different forms in several working groups. It was agreed that the RIPE NCC would find a way to maintain the software better.

## 4. Handover to ISC

The RIPE NCC spent some time analysing the quality of maintenance work done on the IRRToolSet to find the root causes. The problems seemed to stem from a mismatch of the IRRToolSet with the normal model that the RIPE NCC uses for software.

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<sup>1</sup> This does not mean the RIPE NCC *cannot* be a software development company, but rather that the community has not identified this as an important activity for the organisation.

<sup>2</sup> RPSLNg is an extension to RPSL, to allow IPv6 and multicast networks to be represented.

Rather than introduce a new software development model or continue to provide support that does not meet community needs, the RIPE NCC decided to move the IRRToolSet support to an organisation better able to provide it.

The Internet Systems Consortium, Inc. (ISC) agreed to provide this support. ISC is a non-profit company that currently supports a number of different open source programs, all network related. They are well-equipped to work with the user and developer communities, for example by integrating submitted patches quickly.

The RIPE NCC believes that ISC's software development model matches the IRRToolSet requirements, and that ISC will be a better home for the software. Operators and developers will have a set-up that is more typical to collaborative open source software, from a company that is experienced and focused on it.

## **5. Current Status**

All of the issues raised at the RIPE 48 meeting have been resolved:

- The IRRToolSet now implements the latest RPSLng draft (which will become an IETF RFC shortly).
- It is also compatible with the prototype RIPE Whois server that implements the same draft.
- All known bugs have been fixed.
- All submitted patches have been merged.
- One of the patches was gcc 3.x support, so compilation with gcc 3.x is now supported.

The source code repositories have been given to ISC. The mailing list has been moved, and a web page will be set up.

## **6. Future RIPE NCC Support**

The RIPE NCC will help ISC maintain the IRRToolSet, based on our three years of experience doing this. An important part of this will be to provide client tools for any changes to the RIPE Whois server. Any other work the community feels needs to be undertaken for the IRRToolSet will also be done.