Open Source Routing Forum

ISC

"Technology Leadership for the Common Good" Keith Mitchell EIX WG, RIPE62



Open Source Routing Forum

ISC has been asked to build a "Open Source Routing Forum" that will invest, time, resources, and testing infrastructure to help serve the community – striving towards forward movement and quality code.

The near term objective is to help efforts like Quagga, Zebra, BIRD, OpenFlow, and other projects with:

- Normal Testing build validate/sanity, functional, unit, system, regression, performance, etc – submitting bugs back via Bugzilla, GNATs, TRAC, etc.
- Agile/Scrum Program Management investment.
- Committer/Engineer fixing bugs and coding new features.

Quality Open Source Routing Code is a Foundation for new innovation and development.





WHY invest in Open Source Routing?

The Internet is not finished! We have interesting and diverse problems that emerge as the Internet grows

Innovation Bottleneck! The industry does not have enough routing research in private, public, and academic institutions. This lack of research stifles innovation and poses a potential danger

Open Source Routing projects allow public, private, and academic researchers to try new ideas with conservative efforts.

Offers flexibility and platform choice needed by IXP Route Servers

OPEN SOURCE MAKES SENSE

Rough consensus & running code to validate new research ideas is the foundation for the Internet's progress.





How can Public Benefit ISC Serve This Community?

Services

- DNS "F-ROOT"
- Managed Open Source Support
- DNS Secondary Server Resiliency (SNS)
- Global Network for the Public Benefit (hosting a range of open source code)

Production Quality Open Source Development

- DNS Servers BIND
- DHCP
- AFTR (IPv4 to IPv6 & Overlay Servers)
- RPKI (Securing BGP)
- More to come ... first reference, standards based code.
- FORUMS---BIND, DHCP, etc

Operational Training

- Operations Meeting Empowerment (APRICOT, AFNOG, NANOG, etc)
- Training based on Operational Deployment
- Empowering Decision & Policy Realms.

Maintaining the Spirit of the Internet through Global Convergence

- Standards drivers with first implementation of standards based code.
- Policy Meetings Empowering Spheres of Influence



ISC "co-federated" model of Open Source Development





OPEN SOURCE ROUTING FORUM FOSTERING INNOVATION FOR OPEN SOURCE ROUTING PROTOCOLS



ISC's Public Service Approach

Goal is to <u>serve</u> several key open source routing communities by applying ISC's software engineering experience:

Dedicated OSRF Staff:

• Program Manager to help with everything from meetings, commit criteria, bug queues, finding homes for orphan code, etc.

• Test Engineer who builds, automates, and runs the testing suite. Helps committers and submitters move to a "test driven development" model.

• Coder to fix bugs, pick up orphaned code, and work on road map items that are critical to the open source code.

Open Source Test Bed that will automate Sanity, Unit, System, Boundary, Fuzz, Regression, and "Agile" Test Driven Development.

• Strive to test before pushed to the community

• Automatically submit all the bugs and results

Quarterly OSRF Community Calls, and an Annual Face to Face Meeting sponsored by Google.





How can you help?

Participation, Community Support, and Feedback

- How can this OSRF effort help the IXP community?
- How can it help your operations?

– What are the top three things you would like to see out of the open source routing community that might now be possible?

Funding

– OSRF is a 2011 ISC "Incubation" Forum. We use organizational membership to start and validate the public service forum. If you are interested, please contact ISC – every little bit helps.

 Donations in Kind work. For example Mu Dynamics has stepped up with loaning us testing equipment to take our own regression test bed to the next level.



