Technische Universität München, Department of Informatics

Chair for Network Architectures and Services
Prof. Dr.-Ing. Georg Carle

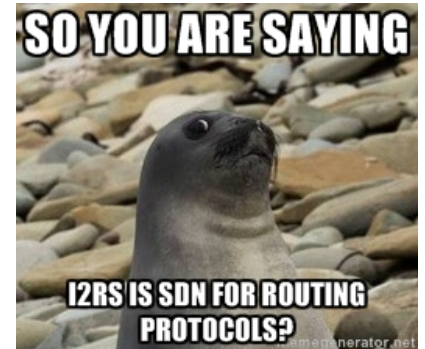**Thesis B.Sc.**

Thesis M.Sc.

Guided Research

I2RS
Interface to the Routing System

Motivation

The I2RS (Interface to the Routing System), an IETF (Internet Engineering Task Force) working group, works to develop a high-level architecture that describes the basic building-blocks necessary to the abstract and interact with routing protocols. The standardization process of the protocol is almost complete, but it lacks implementations to validate it.

I2RS facilitates real-time or event driven interaction with the routing system. These allow information, policies, and operational parameters to be injected into and retrieved from the routing system while retaining data consistency and coherency across the routers and routing infrastructure, and among multiple interactions with the routing system. The I2RS interfaces co-exist with existing configuration and management systems and interfaces.
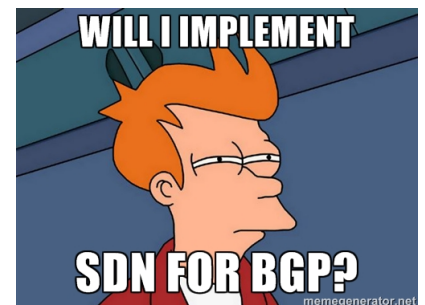
Users of the I2RS interfaces can be management applications, network controllers, and user applications that make specific demands on the network.

Your Task

Assist on the standardization process of I2RS by:

- Implementing I2RS into a Software Router (Bird, Quagga or other)
- Test a network with the protocol
- Compare an I2RS network behavior against a standard network
- Provide feedback to the I2RS working group of IETF

Contact

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