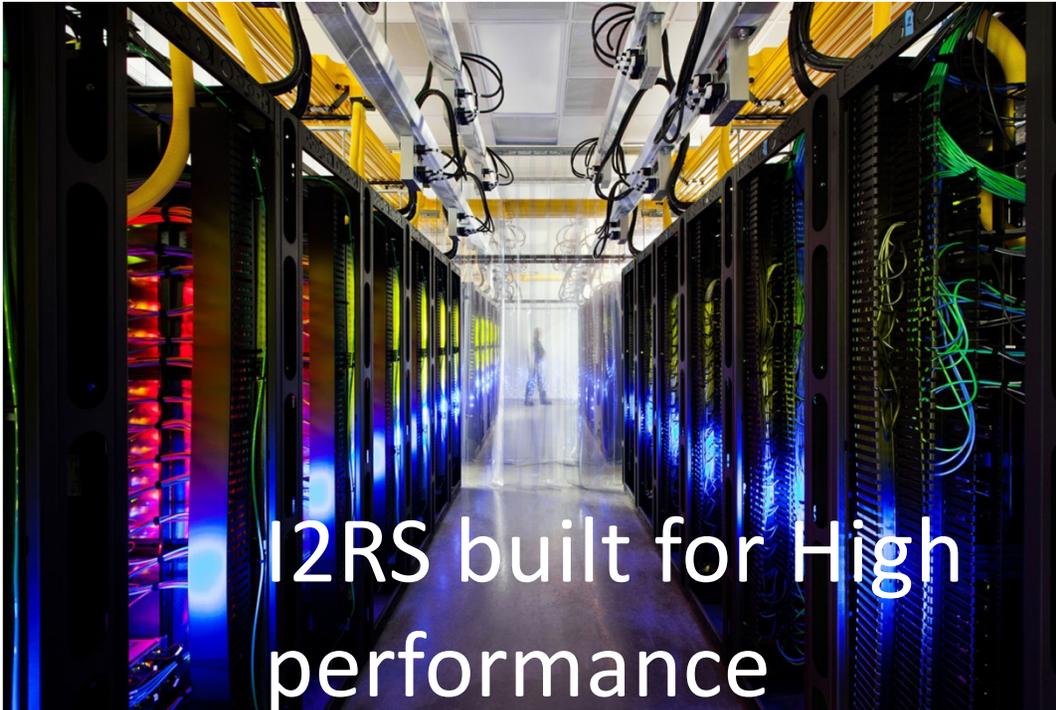


# I2RS

## Building the NG routing interface



**Not the Pizza  
box CLI**

**Sue Hares, Eric Voit, and others**

# I2RS



Focused on

## I2RS Concepts

- Programmatic
- Ephemeral state
- High Speed Publication/subscription stream
- Traceability
- Some configuration
- Lots of Analytics in Data Models

80% Analytics  
20% Config

Multiple  
streams



Operator's  
needs

# Original Goals for Hackathon

1. Add delete subscription” capability to the YANG push code that we built for OpenDaylight Beryllium

1. (Eric Voit) - event/logging change

2. Build and run VM Edwin Cordeiro’s I2RS VM

The tutorial and VM are available at:

– <http://www.net.in.tum.de/pub/i2rs/I2RS-Dev-VM.ova> -  
md5: af70741cd12b39a9644b0881df516a55

3. Load I2RS data models into ODL Libraries + connect to route add/delete

4. Some combination of the above

# Modified Goals for Hackathon

1. Add delete subscription” capability to the YANG push code that we built for OpenDaylight Beryllium (Eric Voit) - event/logging change

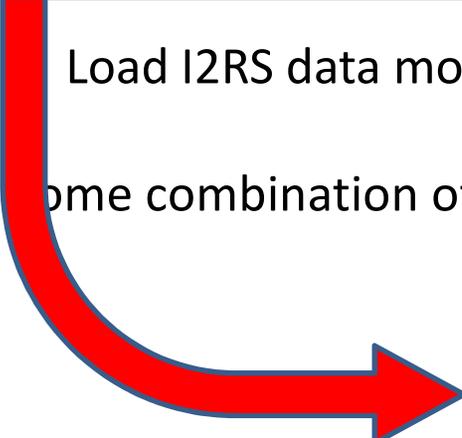
2. Build and run VM Edwin Cordeiro’s I2RS VM

The tutorial and VM are available at:

- <http://www.net.in.tum.de/pub/i2rs/I2RS-Dev-VM.ova> - md5: af70741cd12b39a9644b0881df516a55

3. Load I2RS data models into ODL Libraries + connect to route add/delete

4. Some combination of the above



**NEW Goal/Project 5: Hack together an I2RS Client and Server and get an i2rs <route-add> RPC working.**

# New Goal #5

**Challenge:** Hack together an I2RS Client and Server and get an i2rs <route-add> RPC working

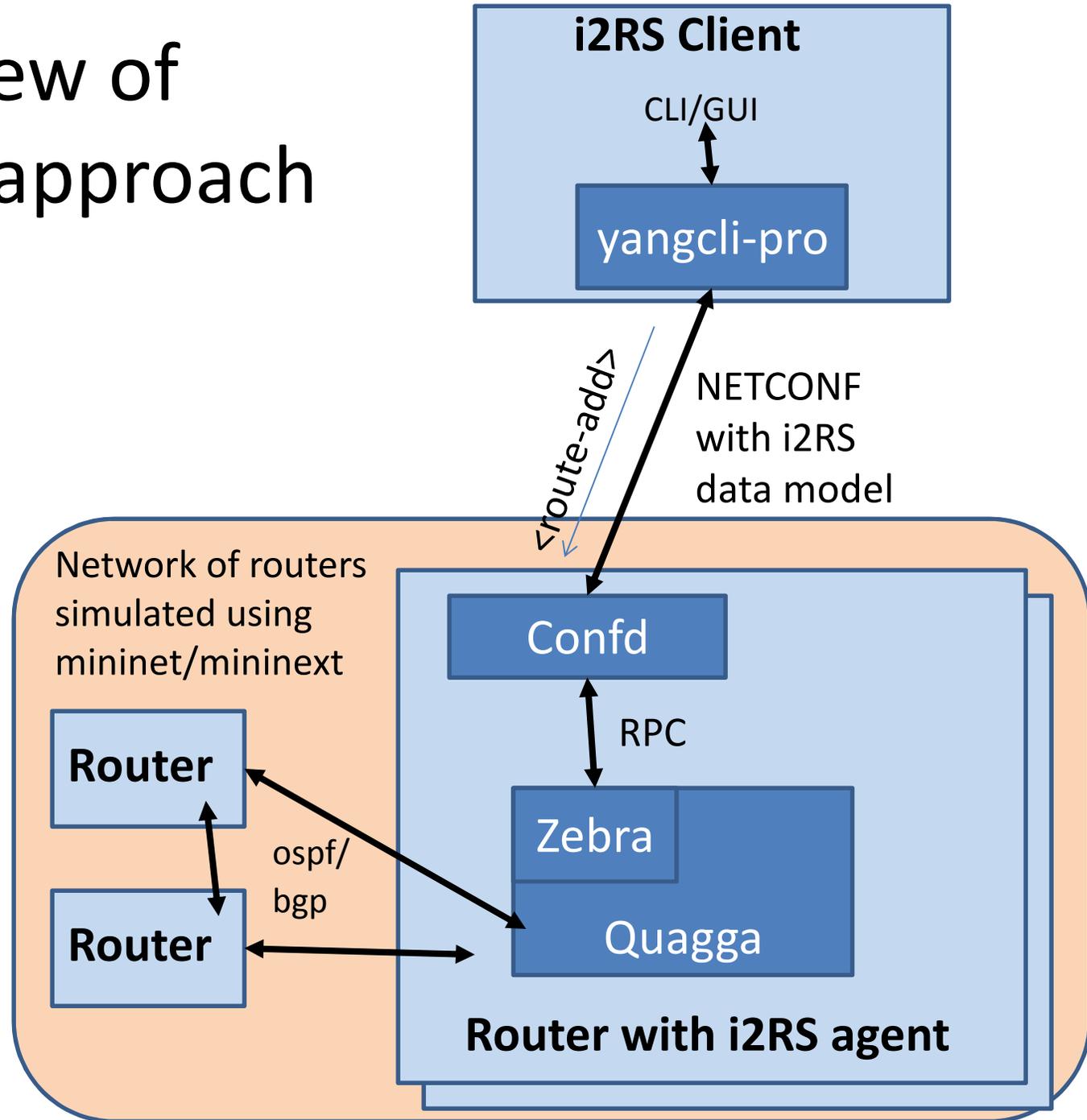
## **Tools , Environments & Code:**

- Dev & execution environment: Linux (Ubuntu 14.3 native or in Virtual Box)
- mininet and mininetx (simulated network of routers)
- yangcli-pro (YumaPro)
- Quagga 1.0.20160315 (including Zebra for route table access)
- Cisco/Tail-f confd 6.1
- ietf-i2rs-rib YANG model from draft-ietf-i2rs-rib-data-model-05.txt

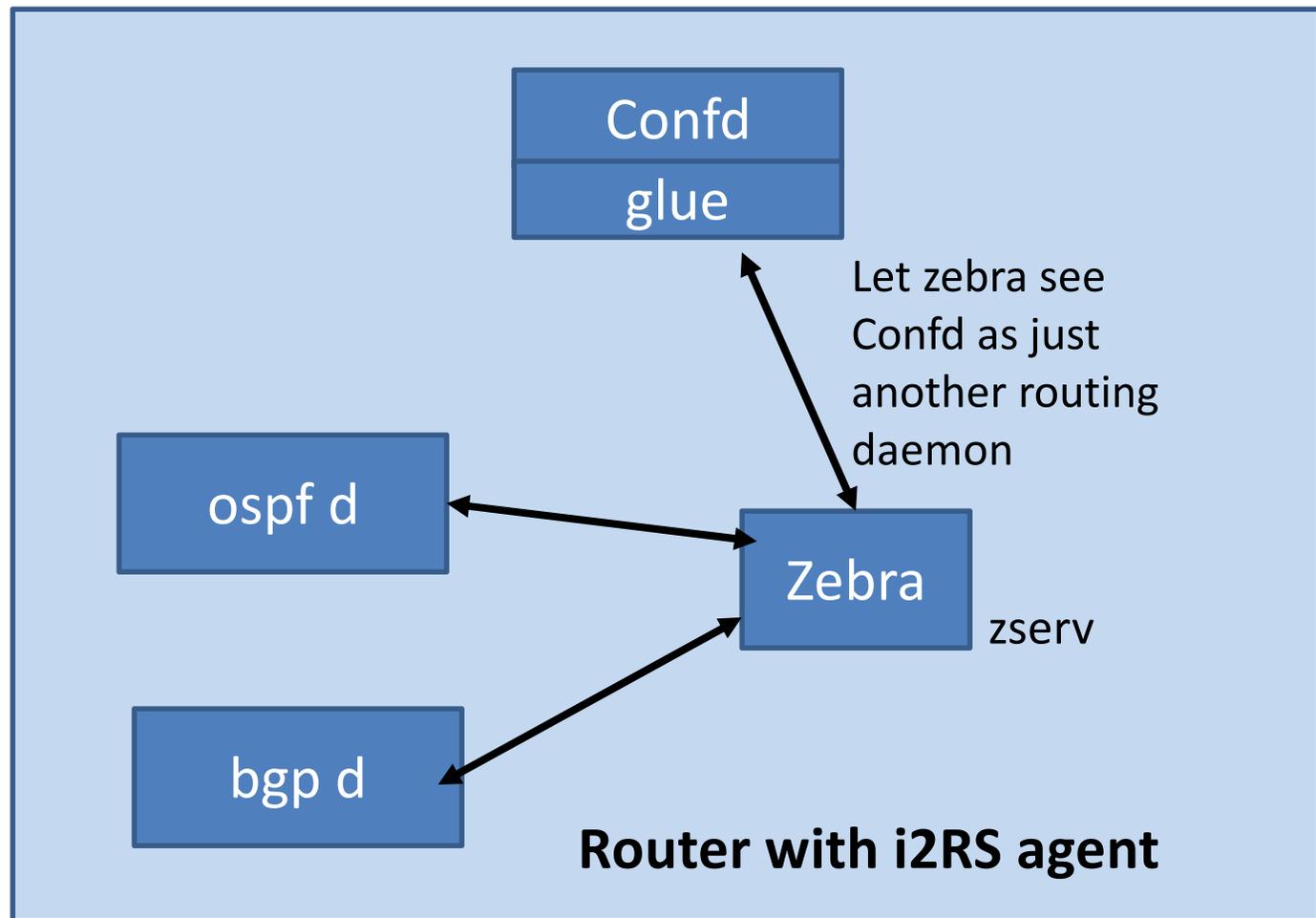
## **Participants:**

- Sue Hares (leader)
- Don Fedyk
- Jason Sterne
- Lucy Yong
- Mamadou Tahirou

# Overview of target approach



# Glueing Confd to Quagga



# Tools / Environment Notes

**virtual box:** our laptops ran out of horsepower when trying to tackle the original project/goal #2 (6G memory, had lots of stuff in it, 5G ova gave us troubles on USB sticks – mystery)

**confd:** building confd requires: `sudo apt-get install libssl-dev`