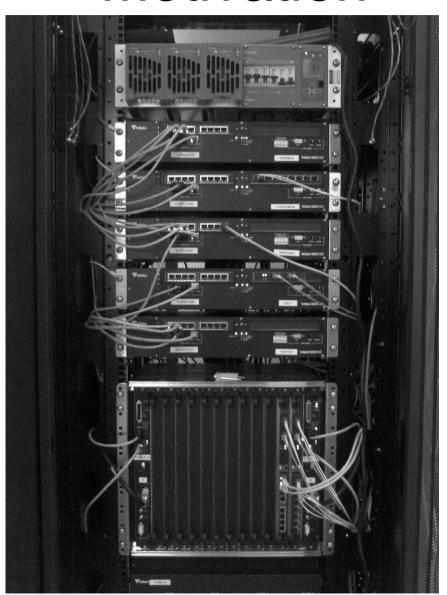
# S-38.3192 **Exercise Session:**MPLS/LDP

8.2.2008

# Motivation



#### Remember to read the instructions!



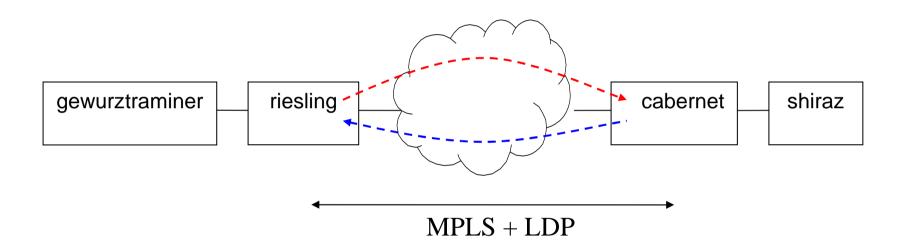
### **Exercise Report**

- The report you return should be <u>clearly</u> written.
- Use a spreadsheet program (e.g. Excel) and/or a word processing program (e.g. Word) when writing the report.
- Place the exported data into proper, well readable tables (CSV file without any editing is not like that).
- Do not forget to give titles for the tables.

## To-do List for Today

- Duplicate the IS-IS scenario!
- Configure MPLS
- Configure LDP
- Test the network

## **Network Configuration**



# Configuring MPLS

- Enable MPLS in P and PE routers
  - All IFs, excl. IFs towards CEs
- Configure TE parameters
- Router IDs and loopback addresses are required in multiple places
  - TE Router ID under MPLS conf.
  - LDP Router ID

# Configuring LDP

- Enable LDP in the MPLS network
  - IFs and LBs
- Discovery configuration (routerwide!)
- Session configuration
- Juniper default values are used as discovery and session parameter values
  - see the instructions

### Testing the Network

- LSPs cannot be seen in the network picture... just like in the real life
- Use ping like in the last exercise
  - set the ping starting time large enough (>150)
  - check the MPLS labels from the ping report

#### Today's topic: MPLS and LDP

- Do the exercise. You find it at course's website.
- Send the exercise as an email attachment to Juha.Jarvinen@netlab.tkk.fi. File type must be PDF.
- Remember the feedback questions
- Next exercise session will be on Fri 15.2.
  at 12 -14 o'clock in Maari-A

#### For the Next Exercise Session

- Topic will be MPLS/BGP L3 VPN
- Familiarize yourself with the topic
  - Read the BGP and VPN slides and additional material on the course WWW page
- Do the preliminary work!