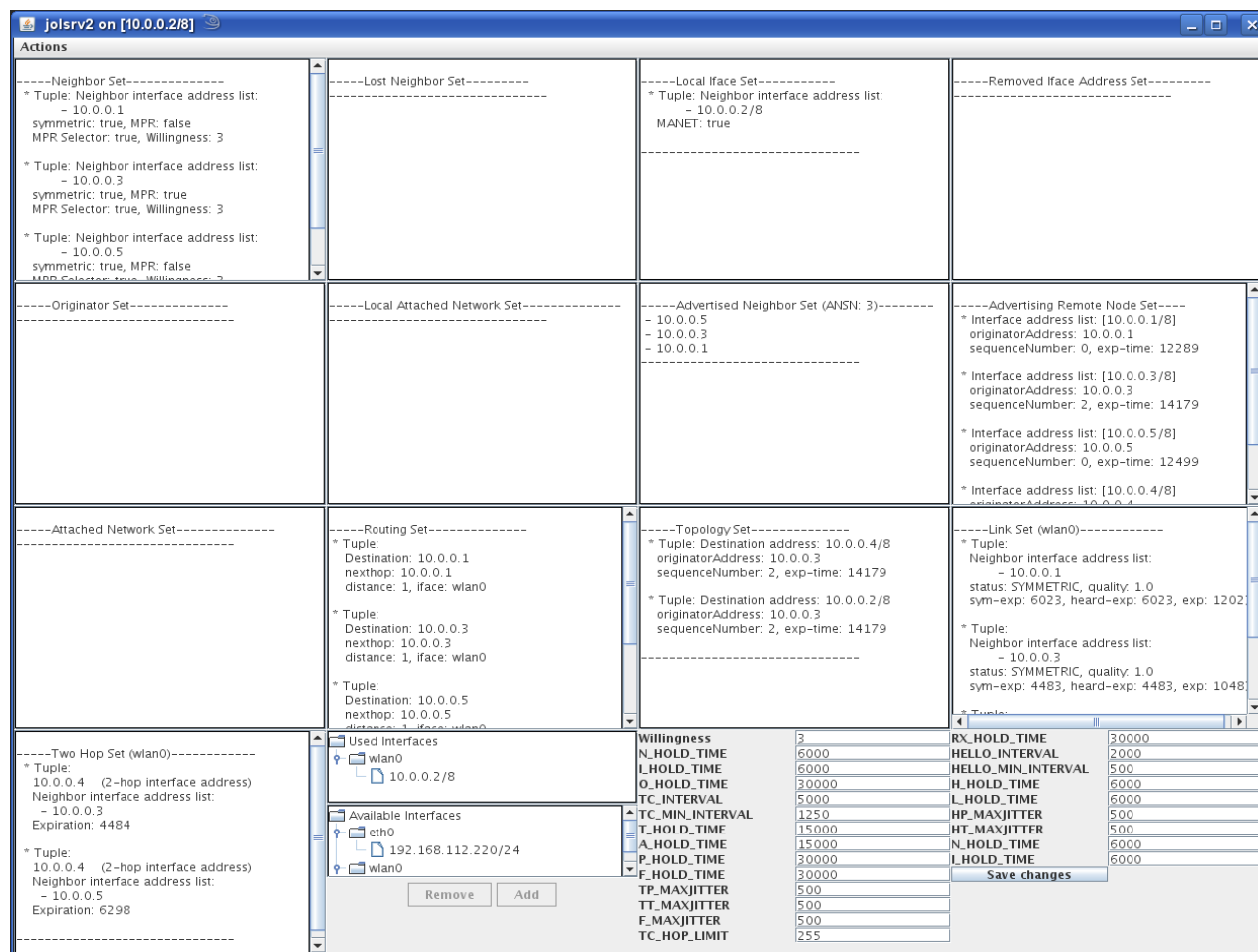


# Monitoring and Management of NHDP / OLSRv2

Ulrich Herberg,  
5<sup>th</sup> OLSR Interop Vienna, 2009

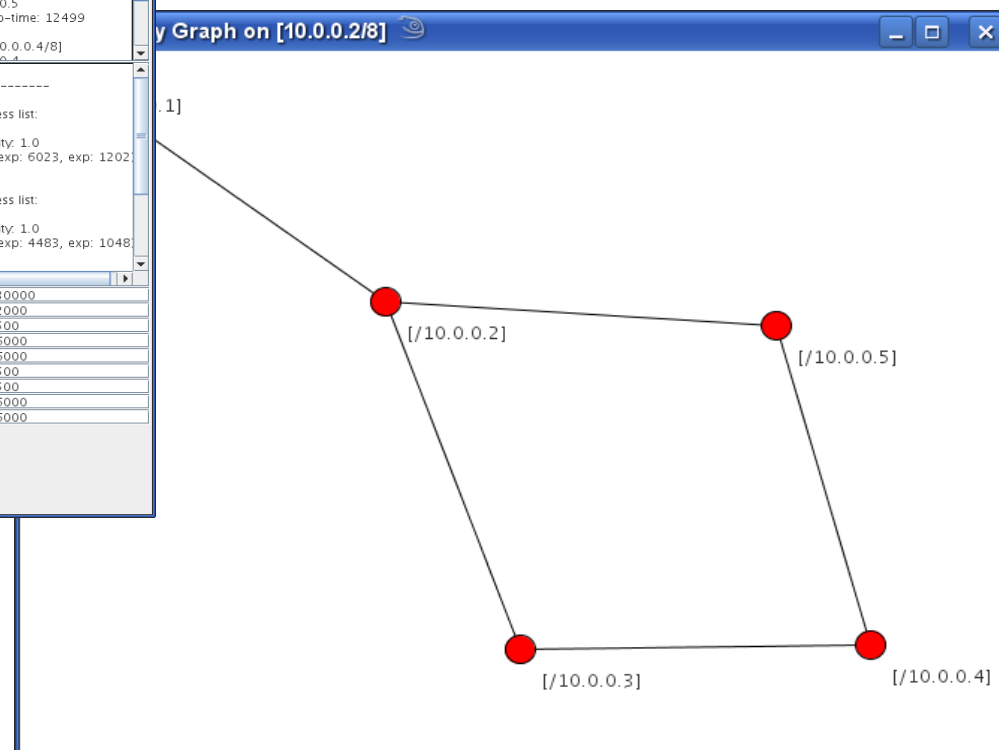
# Monitoring and Management of JOLSRv2 using Java RMI



The screenshot shows the 'jolsrv2 on [10.0.0.2/8]' application window. It features a grid of configuration panels for different OLSRv2 sets:

- Neighbor Set:** Lists neighbor interface address lists for 10.0.0.1, 10.0.0.3, and 10.0.0.5.
- Originator Set:** Empty panel.
- Attached Network Set:** Empty panel.
- Two Hop Set (wlan0):** Shows tuples for 2-hop interface addresses 10.0.0.4 and 10.0.0.5.
- Routing Set:** Lists tuples for destinations 10.0.0.1, 10.0.0.3, and 10.0.0.5.
- Topology Set:** Lists tuples for destination addresses 10.0.0.4/8 and 10.0.0.2/8.
- Link Set (wlan0):** Shows tuples for neighbor interface address lists 10.0.0.1 and 10.0.0.3.
- Used Interfaces:** A tree view showing 'wlan0' and 'eth0' under 'Available Interfaces'.
- Parameters Table:** A table of OLSRv2 parameters such as Willingness, RX\_HOLD\_TIME, HELLO\_INTERVAL, etc.

- remote connection to OLSRv2 via RMI
- display of all sets
- add/remove interfaces and addresses, change parameters

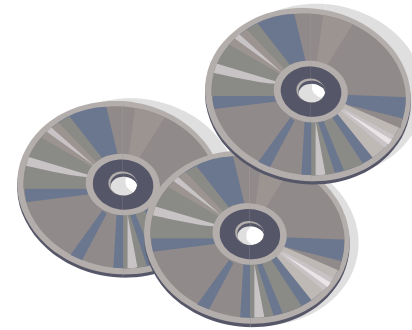


# What's MIB?

data transport (e.g., SNMP)



data content (MIB)



data structure (SMI)



MIB Documents



## When to define a MIB?

- In principle IETF wants all new IETF technologies to be manageable using a combination of syslog, SNMP, Netconf, and IPFIX
- At a minimum the IESG wants state monitoring and fault notifications (usually via a MIB module)
- Configuration using MIB modules is not mandatory, but fine if a WG wants it

## How can I motivate my WG comrades to care about MIB documents?

- Once you know how to do a MIB it is FUN
- It helps to better understand your own protocol or technology
- Users of your protocol will be happy to hear it is manageable from the start as opposed to management being an afterthought

# The NHDP/OLSRv2 MIB

- draft-ietf-manet-nhdp-mib  
draft-ietf-manet-olsrv2-mib
- Divided into several groups:
  - Configuration Group (intervals, parameters, etc.)
  - State Group (sets)
  - Performance Group
  - Notification Group

## Open Discussion

- Do we need monitoring and management?
- How do you manage/monitor your OLSRv2 implementation?
- Do you have ideas for new elements in performance / notifications group?
- Would you be interested in implementing a MIB?
- What other ideas do you have about monitoring and management?