

# Component-based system for management of multilevel virtualization of networking resources

System komponentowy wspomagający wielopoziomową  
wirtualizację zasobów sieciowych

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# Agenda

- General information

- Motivation

- Thesis aim

- The CM4J system presentation ( Core, Gui )

- Tests results

- Summary

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# General information

- Project initailly started //tutaj bys napisal co robiles u jarzaba i jak zetknales sie z jimsem
- Supervisor: **prof. dr hab. inż. Krzysztof Zieliński**
- Technical supervisor: **mgr Marcin Jarzab**



# Motivation

- Interest in distributed systems, computer networking
- Lack of applications offering creation of virtualized networks
- Desire to learn the crossbow library and Solaris OS

# Thesis aim

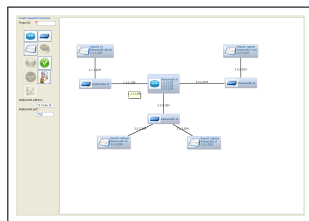
- "There exists a component-based architecture which enables construction of a system that would facilitate working with fully isolated virtualized network resources grouped in projects"

# The CM4J system presentation

Tu generalnie o stworzonym systemie

# The CM4J system presentation - GUI

- Designing desired network structure with requested virtual appliances,
- Discovering and modifying already created projects,
- Monitoring
- Automatic logging using Secure Shell (SSH)



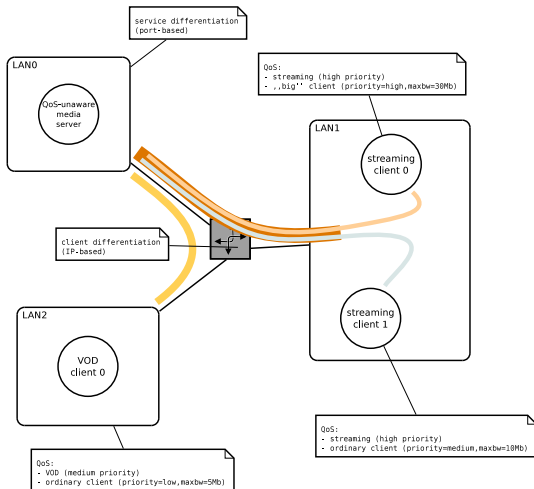
# Tests results

- Prepared multimedia test case
- Streaming server and VOD server
- Client differentiation
- Different scenarios

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Wstawic wykresy, tabele potwierdzajace dzialanie systemu, opisac ze system zostal stworzony z gui z uprzednio stworzonych snapshotow, generalnie testowany rowniez z gui przez shella



# Summary

- Prepared complete software system
- Met every production process step: requirements analysis, feasibility analysis, architecture design, implementation, test
- Master of science thesis creation
- Thesis statement proved by performed tests
- Expectations for future system's utilization together with JIMS