

Den SPP

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# Agenda

- About Red Hat
- JBoss Middleware
  - Team structure
  - Example projects
    - Infinispan
    - OptaPlanner
    - Mobile
- Student opportunities

# About Red Hat

- Open-source company
- Not only Linux
  - Cloud
  - Java middleware

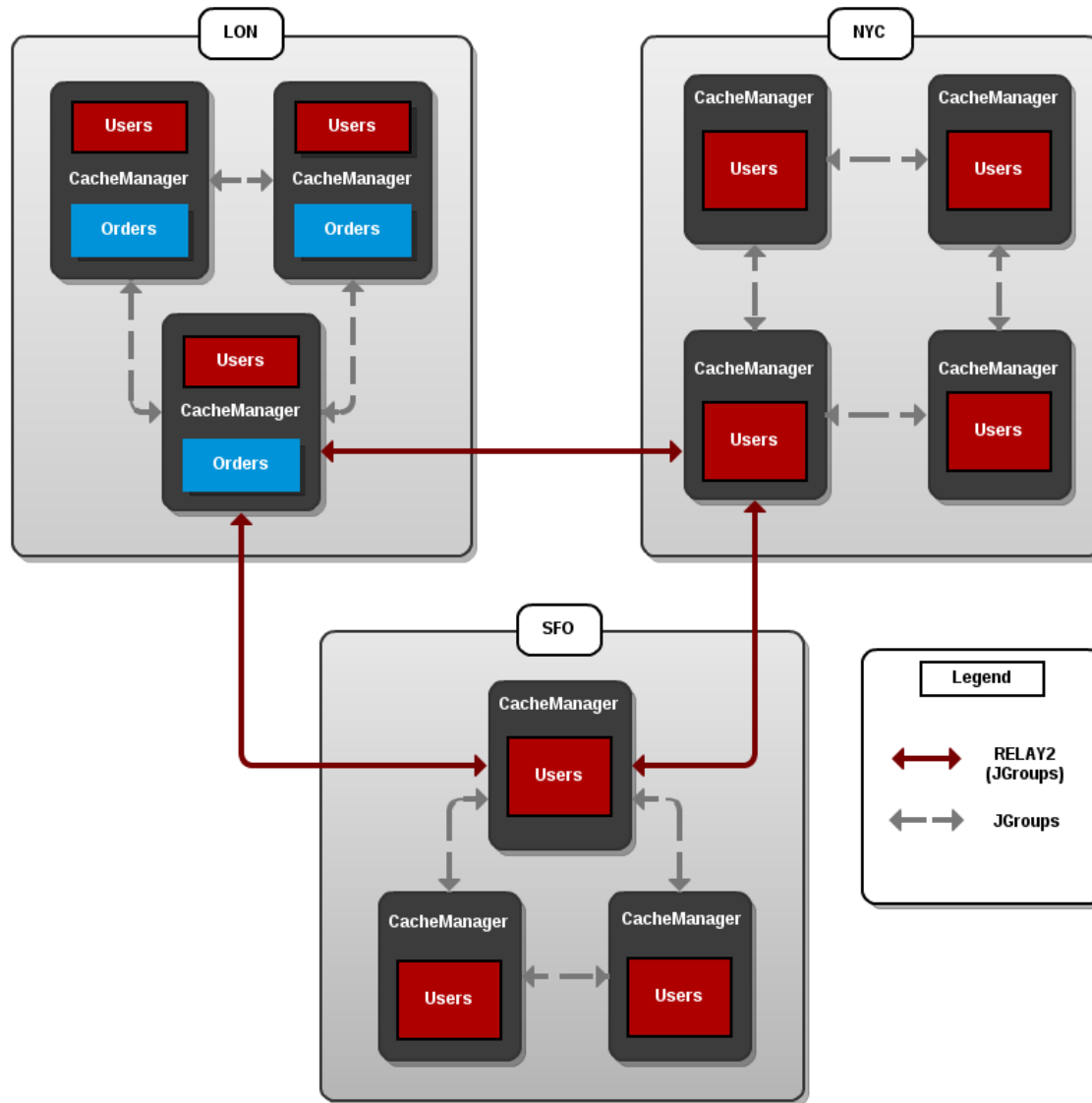
# Middleware Team

- Roughly 10 products
  - Composed of tens of projects
- Quality Assurance (more than 100)
- Productization (around 20)
  - Sustaining
- Core development (cca 5)

# Example projects

- Infinispan
  - Scalable memory grid
- OptaPlanner
  - Planning engine
- AeroGear
  - Mobile development

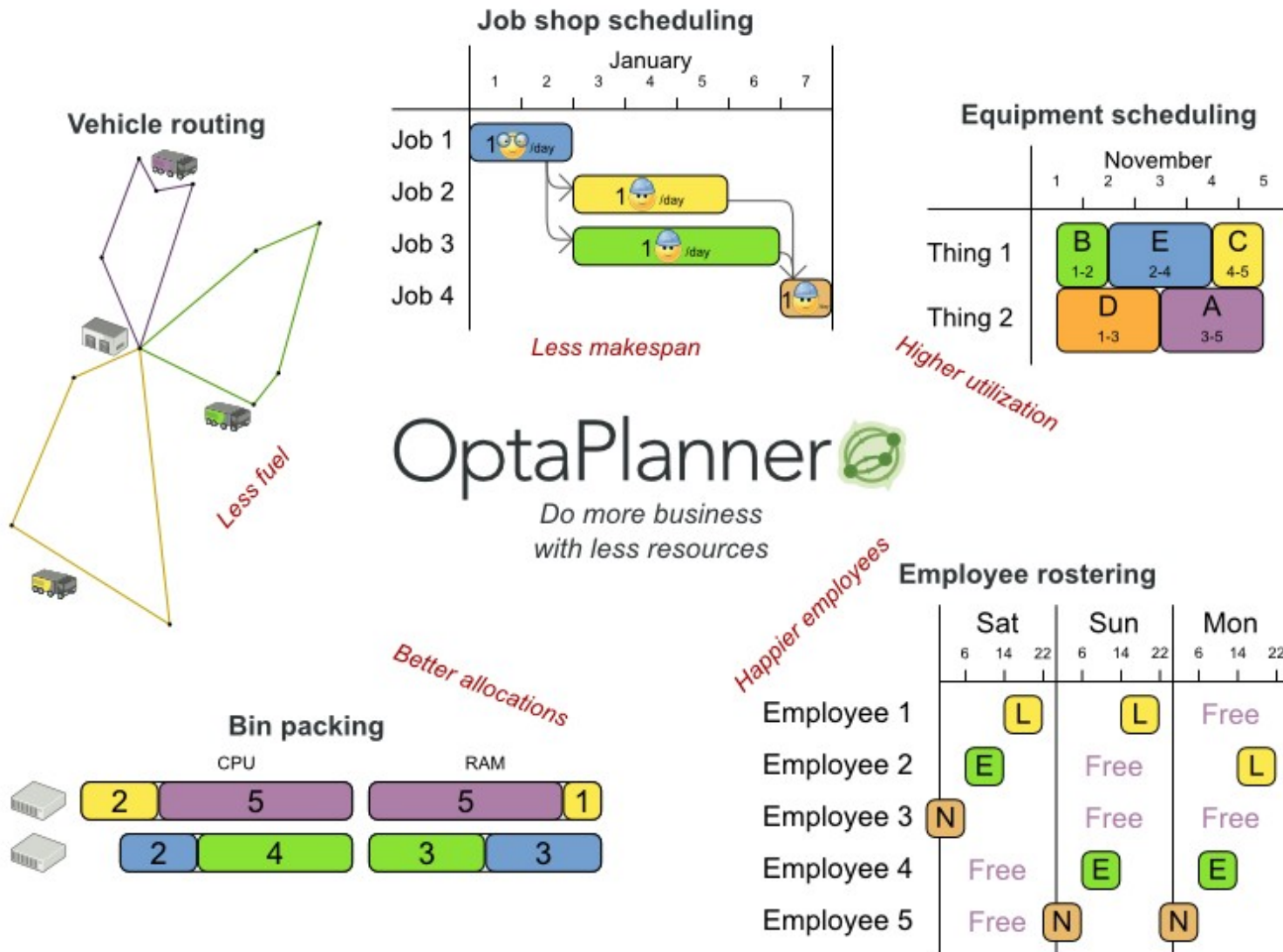
# Infinispan (1/2)



## Infinispan (2/2)

- Open-source datagrid platform
- In-Memory, Schema-less, NoSQL key-value data store
- Distributed cache (offers massive heap)
- Scalable (goal: hundreds of nodes) + Elastic
- Highly available, resilient to node failures
- Concurrent (reads and writes at the same time)
- Transactional
- Queryable (also document store)

# OptaPlanner (1/2)



**OptaPlanner**  
Do more business  
with less resources



# OptaPlanner (2/2)

- Solving planning problems
- Defined by
  - Constraints (hard, soft)
  - Score
- Algorithms supported – many
  - Tabu Search
  - Simulated Annealing
  - Prototype of Genetic Algorithm
  - ...

# AeroGear



- Unified mobile development
- Push servers
  - SimplePush
  - UnifiedPush
- Security
  - Integration with security providers like PicketLink

# Student opportunities

- Bachelor/diploma thesis
  - <https://thesis-managementsystem.rhcloud.com/>
- Courses
  - PV243 Advanced Java technologies: JBoss
- Internship
  - Mostly QA and productization
  - Selection starts **NOW**

**Questions?  
Thank You**