How to Improve your Geographically Distributed Software Development Process With Git or Mercurial

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Agenda

- Introduction
- Working Distributed
- DVCS / Centralized
- Live Demo
- QA

Intland

- Intland Software is the leading provider of enterprise-class collaboration solutions that boost the productivity of development and business projects.

- Intland is leading Eclipse Integration for DVCS (Mercurial, Git is coming …)

Intland's Customers

codeBeamer is contributing to the success of …

- Continental is coordinating its off-shore software development across India, Germany with codeBeamer

- MSG systems is a software outsourcing partner developing embedded solutions with over 1,500 employees mainly for large German automotive. codeBeamer is a central platform for client interaction safeguarding transparency and efficiency

SIEMENS

- Siemens as outsourcing partner is developing software component for a large German automotive

Leading technology firms realized the value of codeBeamer in distributed development

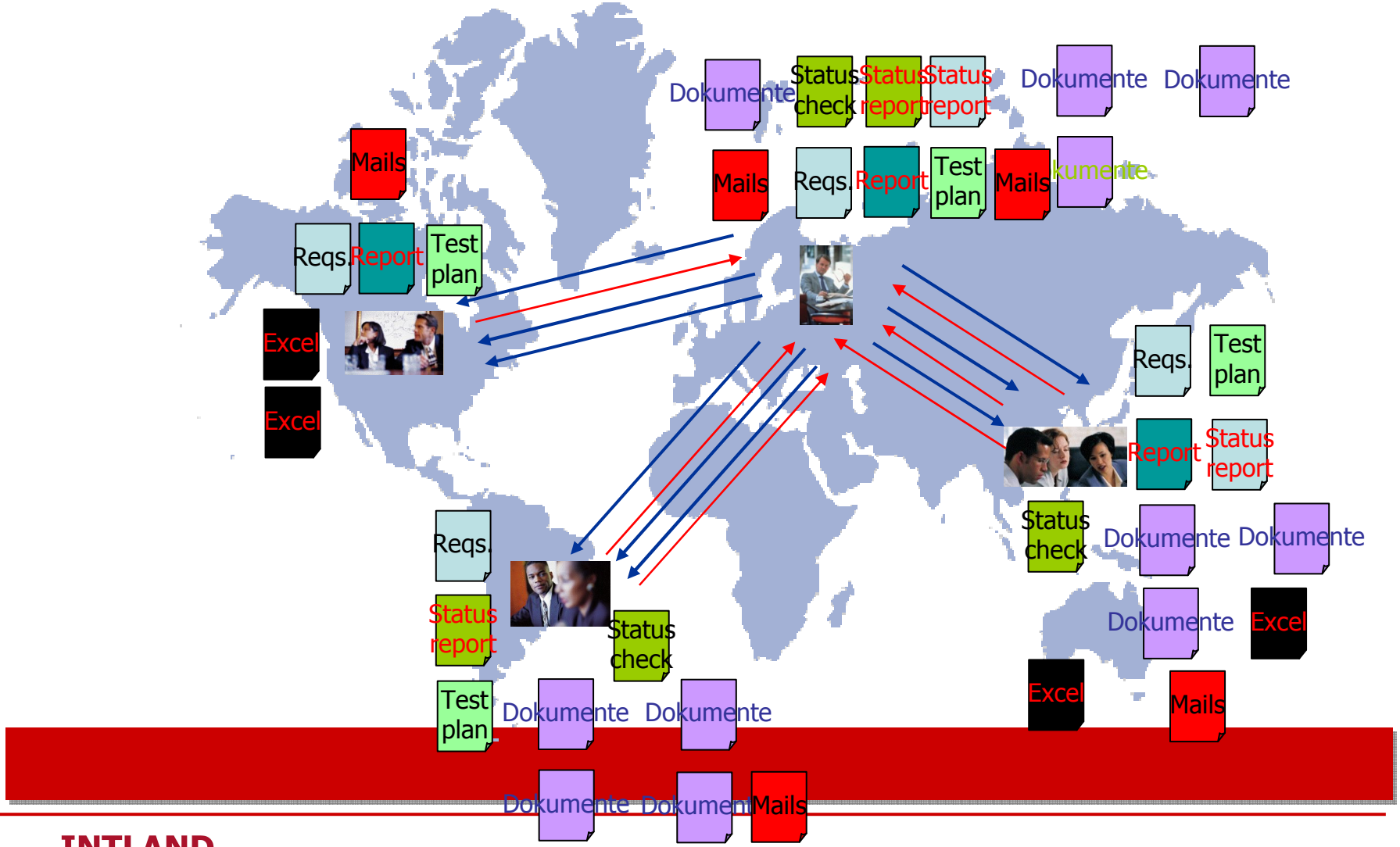
Working Distributed

- Modern IT strategies comprise distributed software development elements like outsourcing, near-shore and off-shore as these provide significant advantages:
  - Utilizing best qualified human capital in the organization regardless of its physical location (near-shore, off-shore)
  - Increase flexibility by converting fixed into variable costs and leveraging external know-how (outsourcing)
  - Labour cost arbitrage (off-shore)

- However, distributed structures bring also a number of challenges along. Increased complexity of projects evoke:
  - Higher coordination costs, lack of transparency and control
  - Generated know-how is lost after project end and not available for re-use
  - Higher risk of failure

Distributed software development must be supported by collaboration tools like codeBeamer

Users working around the World

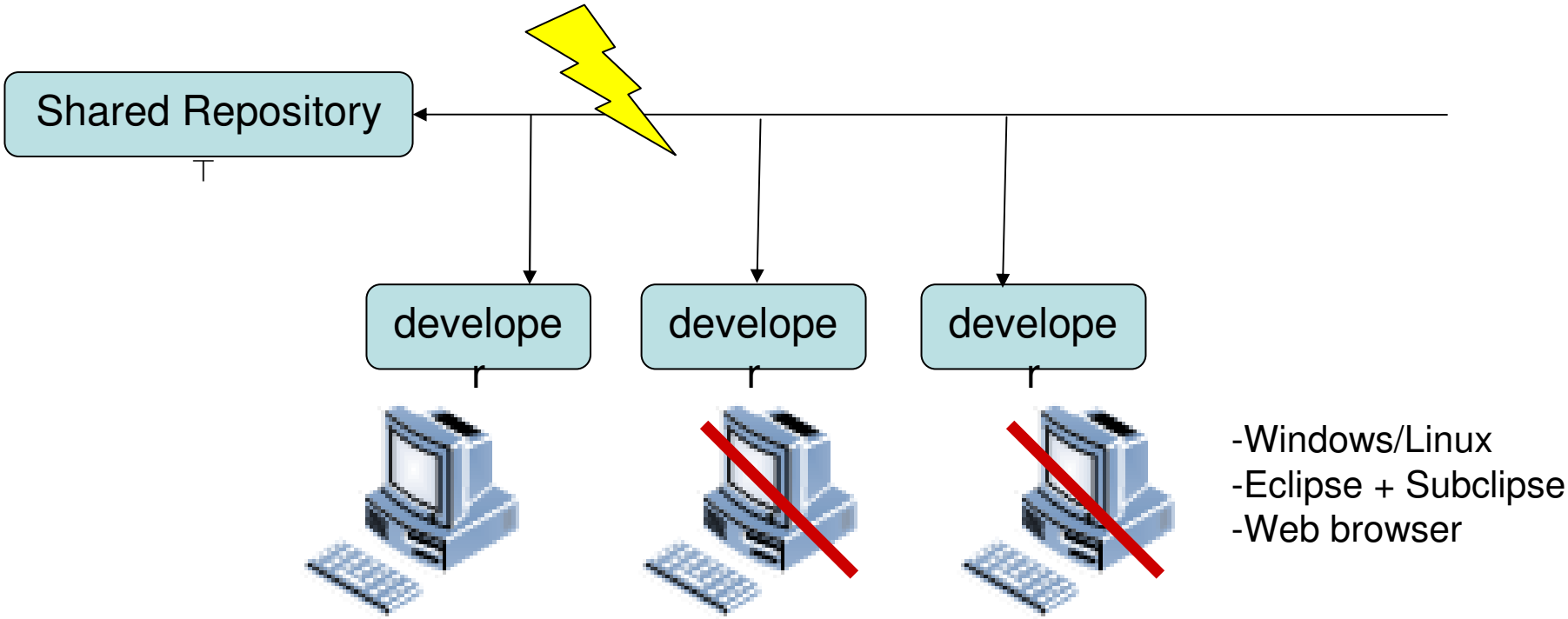


Decentralized Version Control System v.s. Centralized

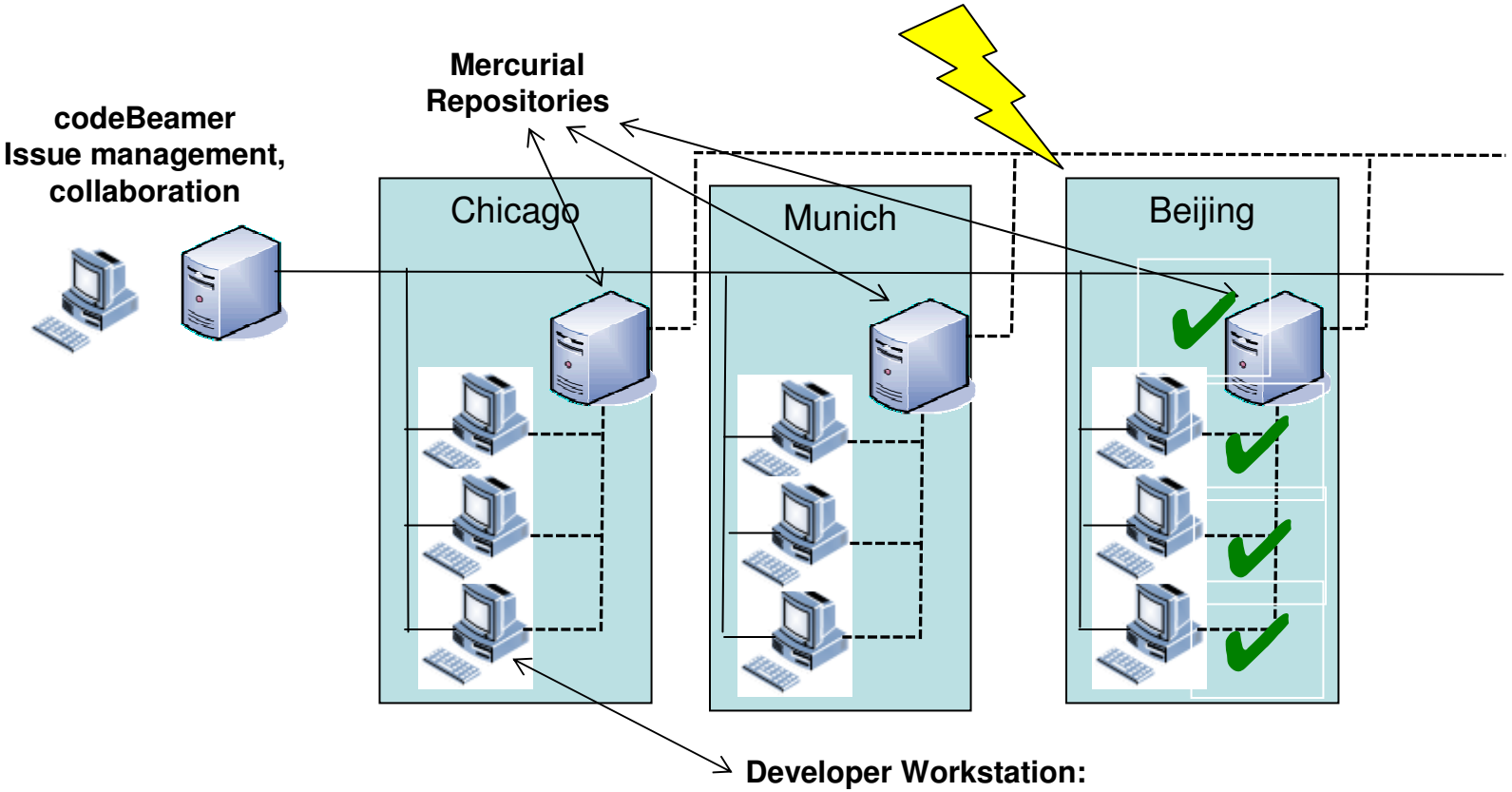
- Everyone has a local sandbox. You can make changes and roll back, all on your local machine. The system is indifferent to the vagaries of your server infrastructure.
- It works offline. You only need to be online to share changes.
- It's fast. Branches, Diffs, commits and reverts are all done locally.
- It handles changes well. Distributed version control systems were built around sharing and merging changes.
- Every developer "has his own branch"
- Simple Backup

Working with Centralized VCS system

Centralized systems (SVN, CVS, ClearCase, Synergy, ..)



Deployment infrastructure with Mercurial, Eclipse

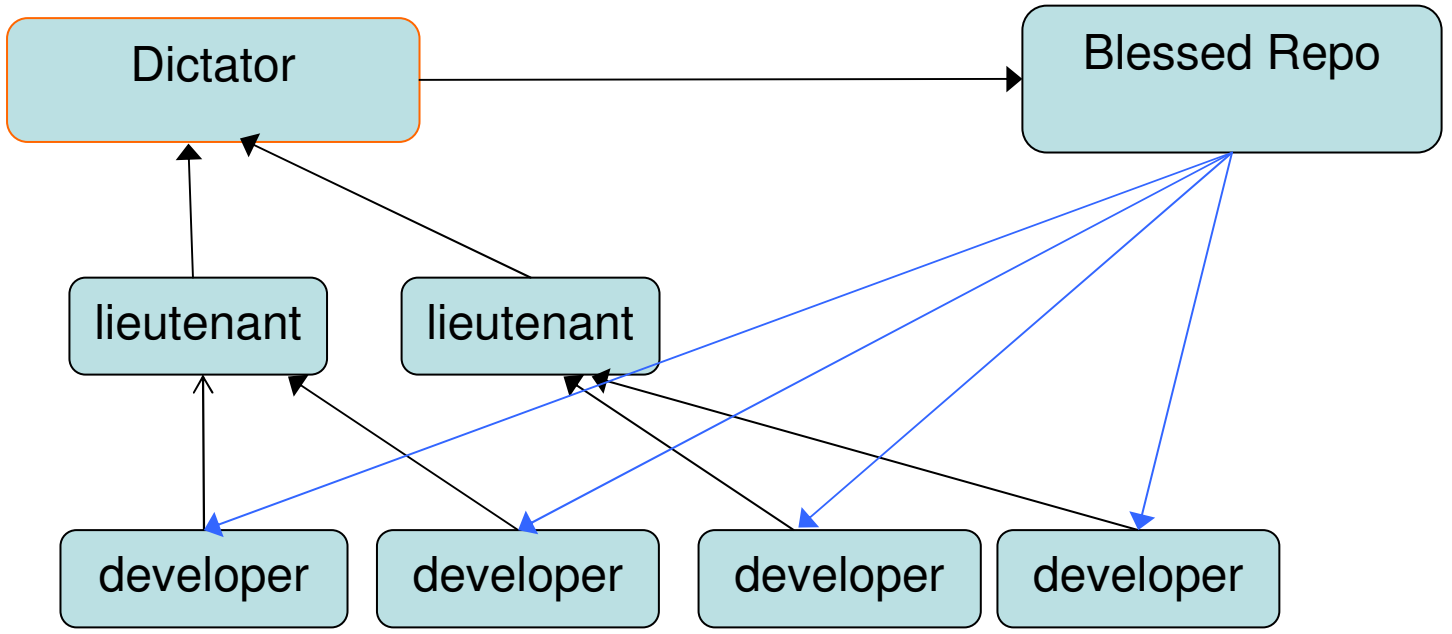


Working on the decentralized way

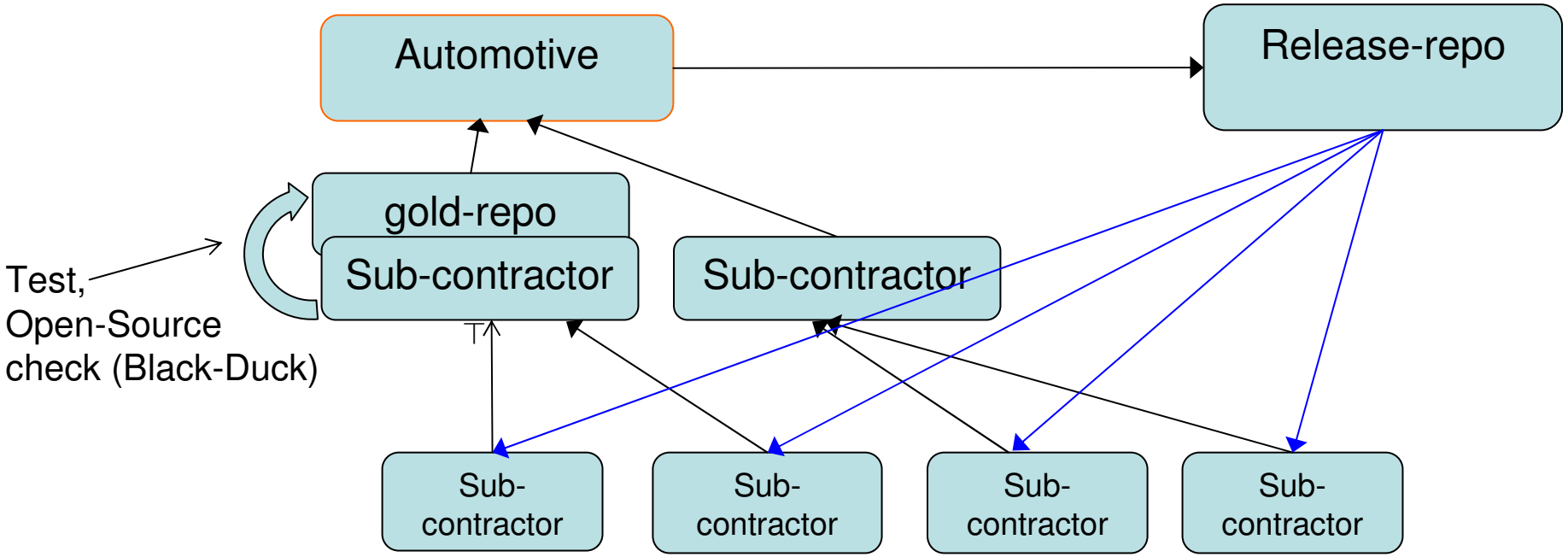
Distributed version control system.

i.e. Git or Mercurial

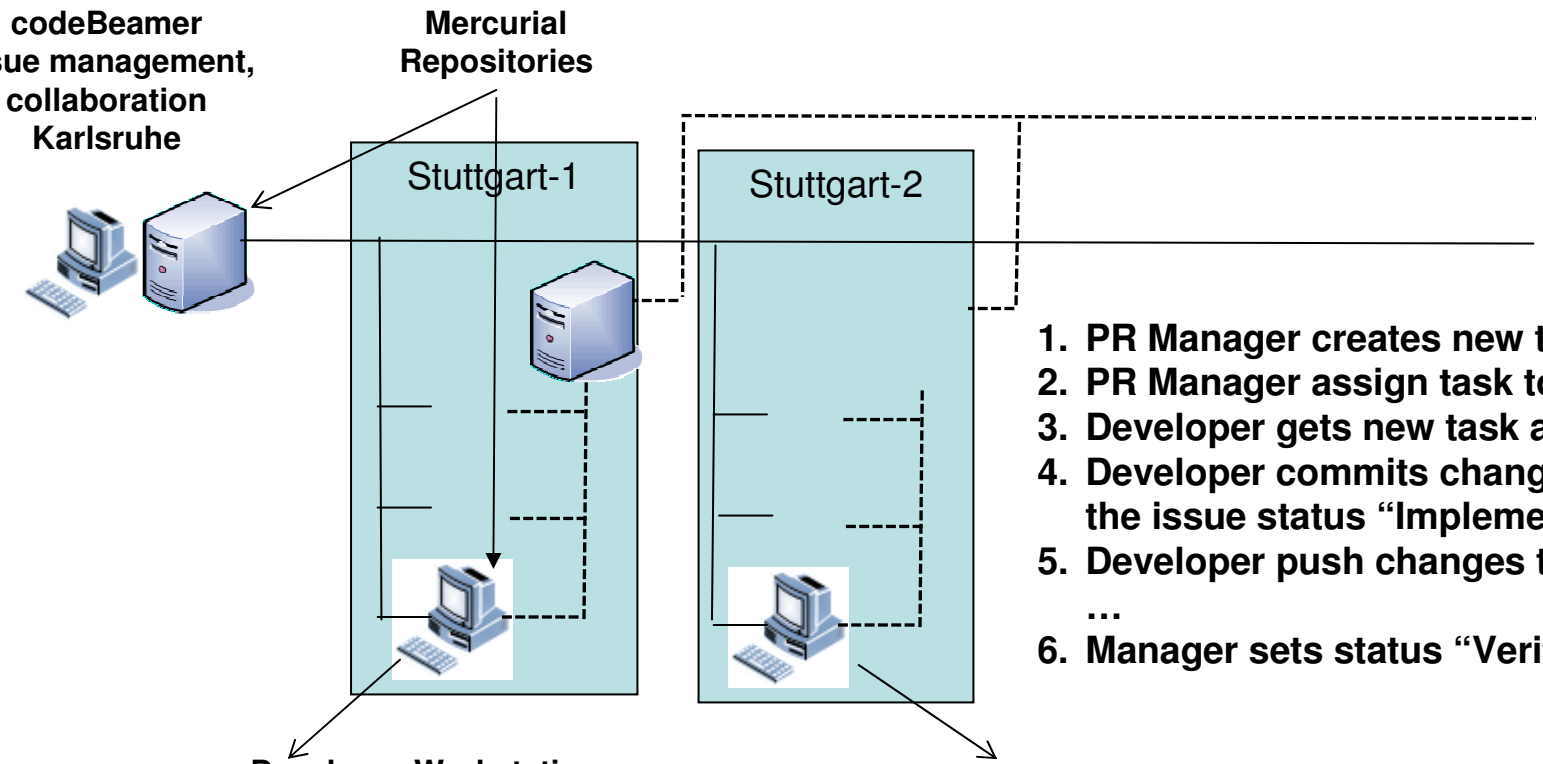
like (Linux, Mozilla, Sun's Java development)



Automotive sub-contractor workflow



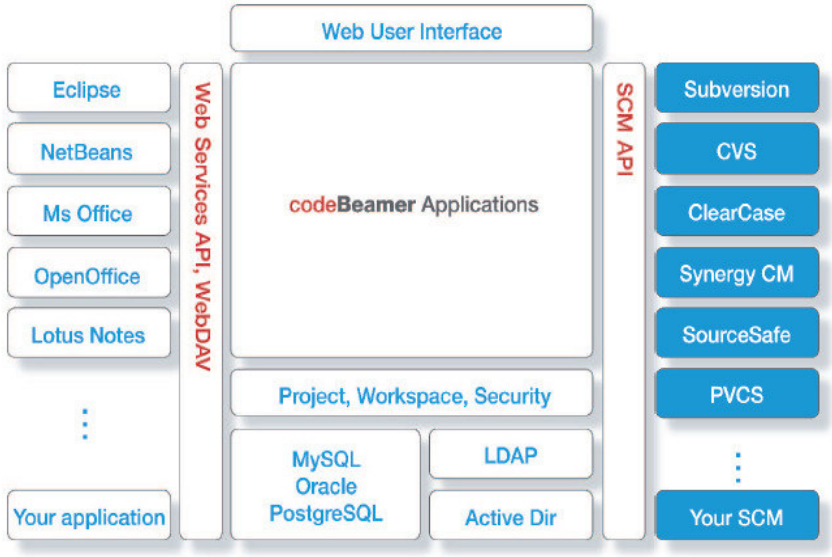
Demo Scenario: iPhone 4



1. PR Manager creates new task "iPhone 4"
2. PR Manager assign task to Developer
3. Developer gets new task and implements
4. Developer commits changes, and change the issue status "Implemented"
5. Developer push changes to "Karlsruhe"
   …
6. Manager sets status "Verified"

codeBeamer Collaboration & ALM

- codeBeamer is the award winning collaborative software development solution for distributed teams
- It provides project management, wikis and knowledge management, document management, task, requirement and defect management, configuration management (ITIL), continuous integration, version control, source code analysis and forums through a single, integrated and secure environment



- For individual solutions, the single applications can also be implemented step by step with the option of a later integration
- codeBeamer can be implemented as behind the firewall or as SaaS model
- Administrative and infrastructure costs are minimal. codeBeamer has low cost of ownership and high productivity, which provides quick cash back and high returns on investment

codeBeamer is the technology leading distributed development solution available

Contact & further information

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