

CMPT 880 Presentation

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Svn or Git? the migration from CVCS to DVCS

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- What is DVCS and CVCS
- Why are open-source projects moving from CVCS to DVCS
- Summary
- Open discussion (if we have time)
- Not talking about security issue

CVCS and DVCS

What is CVCS

- Centralized Version Control System

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- Centralized Version Control System
- CVS, SVN .. etc

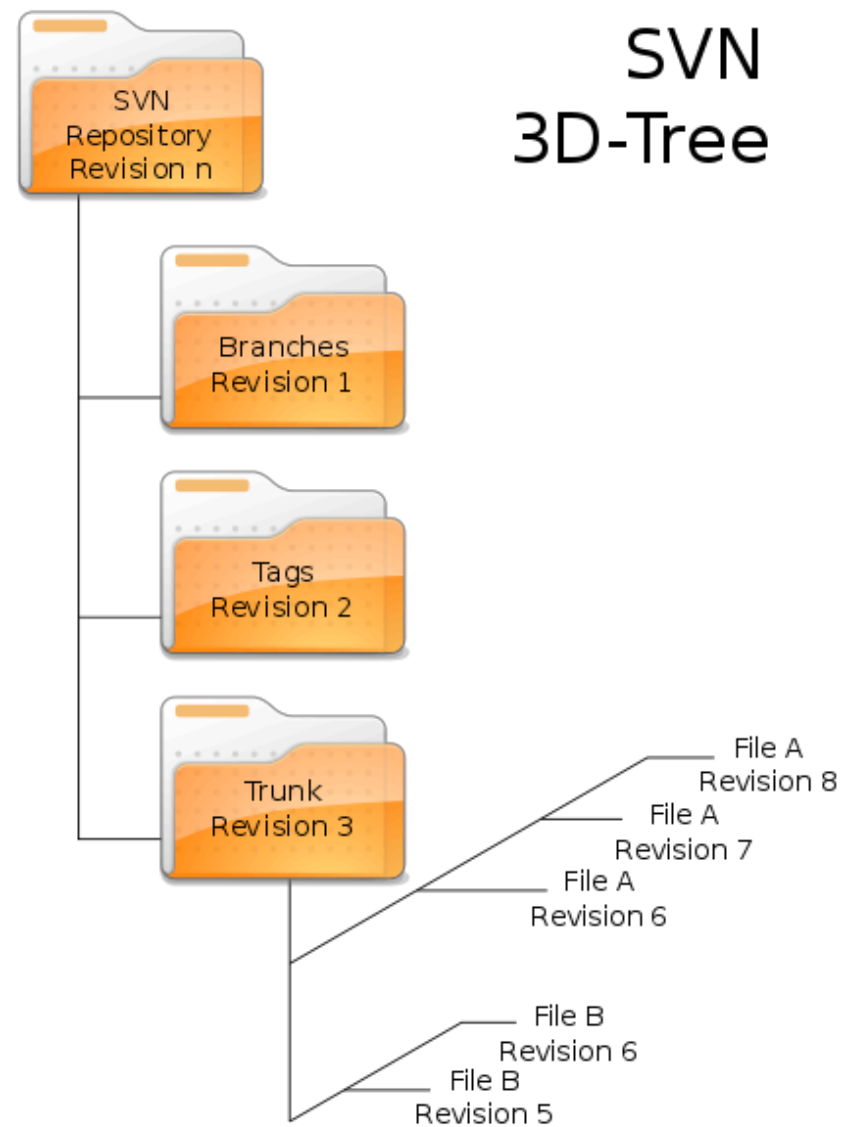
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- CVS, SVN .. etc
- Trunk, branches and tags in one repository
- File based - track revision by files

What is CVCS



Source: wikipedia

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- Distributed Version Control System
- (old) Bitkeeper
- (young) Git, Mercurial, Bzr etc
- A branch is a repository
- Content based (blob over file), focus on merge between repositories
- Offline commit (local commit)

What is DVCS



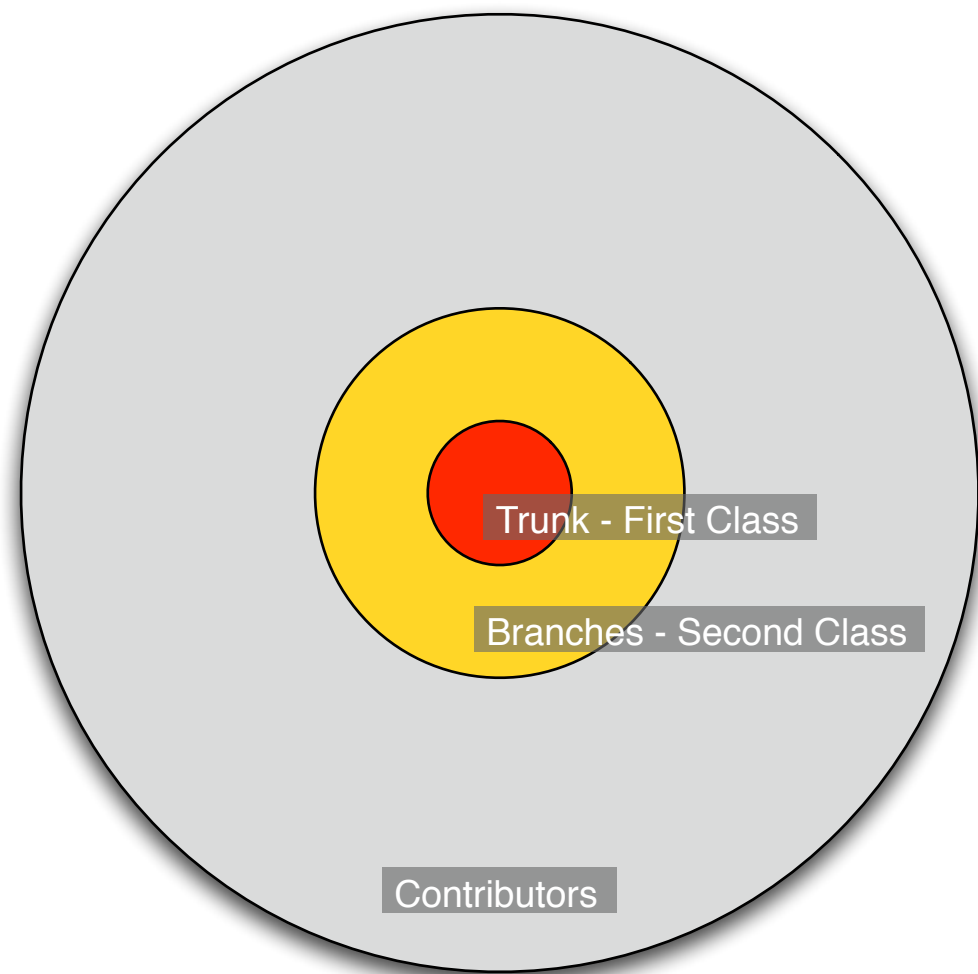
Developer network of mephisto project

Why are open-source projects moving
away from CVCS to DVCS ?

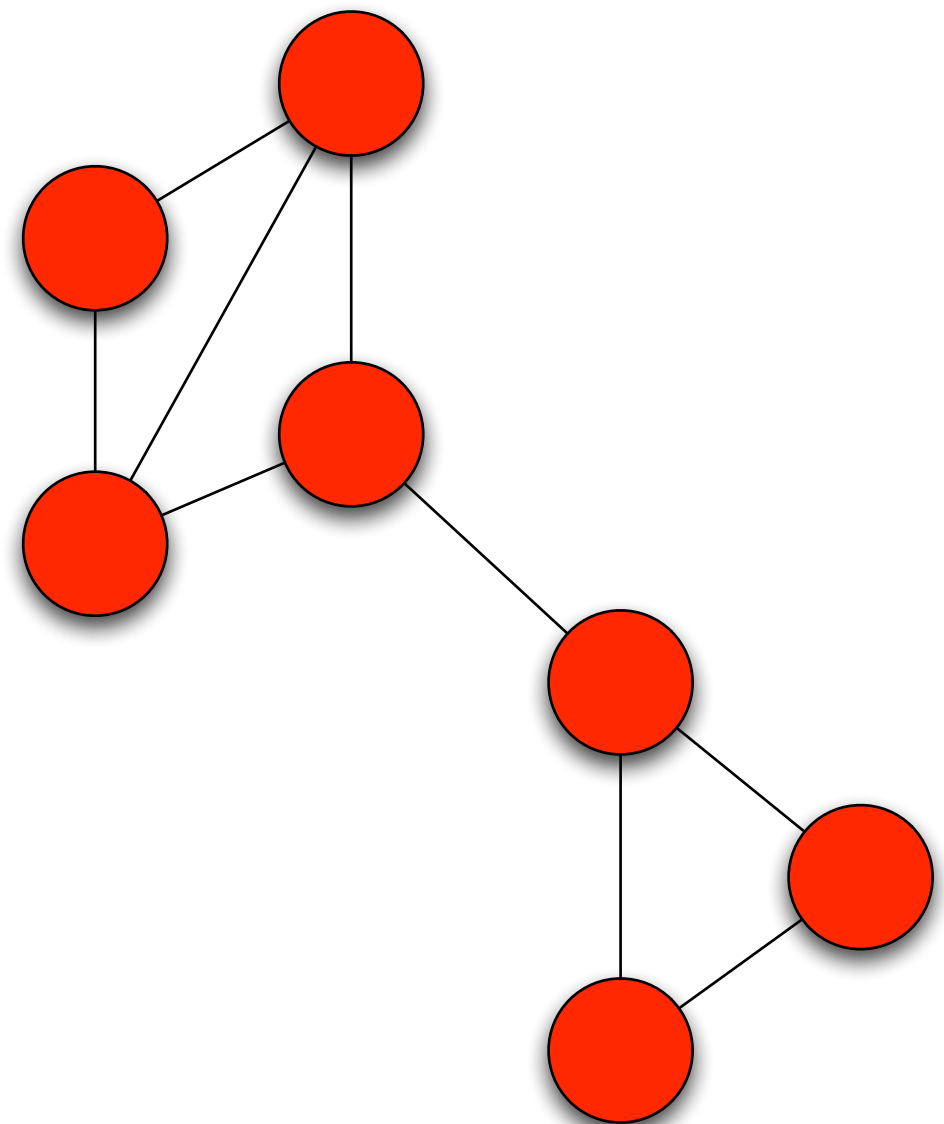
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CVCS



DVCS

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Why are open-source projects moving away from CVCS to DVCS ?

- To provide first-class access to all developers
- Simple automatic merging
- Improved support for experimental changes
- Faster? (said Linus at google talk)

Summary

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- DVCS answers to open source community administration and efficient collaboration

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- DVCS answers to open source community administration and efficient collaboration
- Right or Wrong to migrate? may depend on working environment policy and relevant factors

Reference

- B de Alwis, J Sillito (2009). Why are software projects moving from centralized to decentralized version control systems?

To appear in Proc. of the ICSE Workshop on Cooperative and Human Aspects of Software Engineering.

- BitKeeper are commercial product from BitMover Inc.
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Open discussion

- Should DVCS be introduced to Academics?