



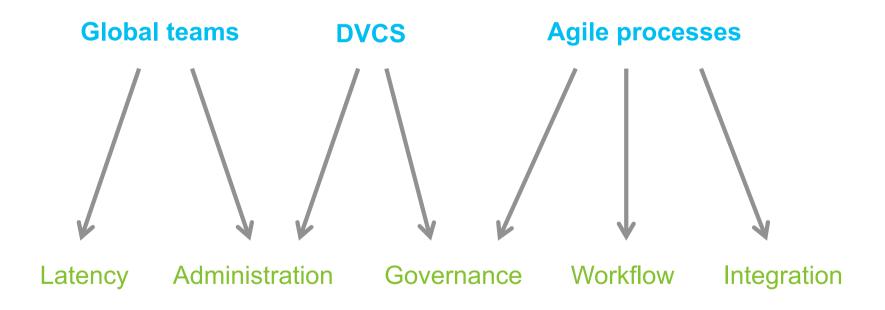
Individuals and interactions over processes and tools.

 Manifesto for Agile Software Development, 2001

What We'll Talk about Today



3 Key Trends and 5 Pain Points



Delegate Poll



Which of these are your main development challenges?

Please select all that apply.

- Latency
- Workflow
- Governance
- Administrative Overheads
- Integration



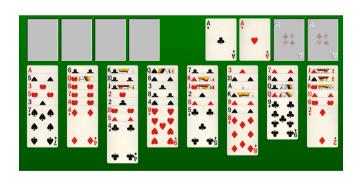


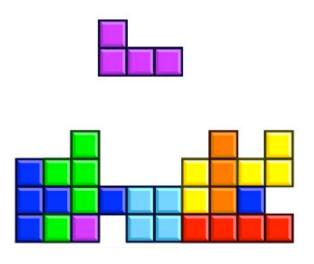
Pain Point #1 Latency

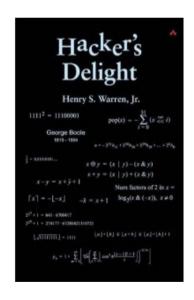
Latency



SCM latency means reduced developer productivity.







Two Key New Latency Problems

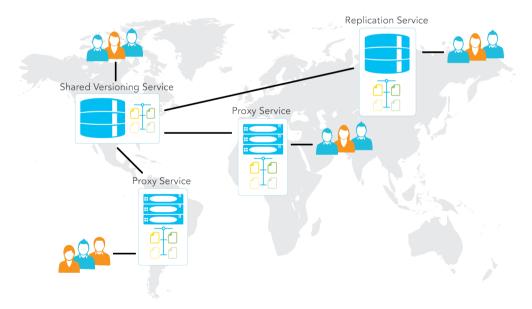


- Global teams
- Continuous Integration
 - CI can account for >50% of load on SCM servers.

Global Project Staffing



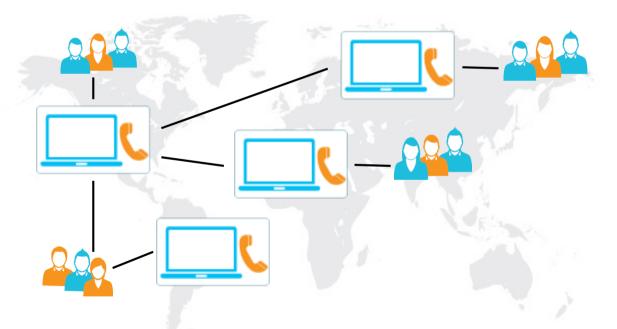
- Global development -> virtual teams
- Developer and infrastructure may be on different continents
- Team membership may change quickly



Prepare for the Staffing Shuffle



 Solve performance problems before you know the geographic configuration of the team



Accelrys



- Leading provider of scientific innovation lifecycle management software
- Hot standby
- Perforce proxies for global development teams







Pain Point #2 Workflow

Componentization



- Components are individually well-versioned
- How to track compatible versions across components?
- Track component versions separately, or can your SCM system do it?

DVCS Usage



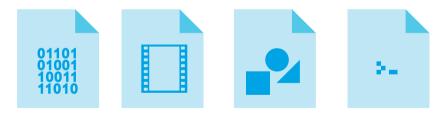
- Git, Hg and other DVCS provide strong versioning within a software component
- Difficult to track versions across
 - Software components
 - Configuration data
 - Binary assets

Non-Code Assets



- Configuration files
- Binary assets

Save time: keep all needed resources in a common system.



NVIDIA



- Many teams using Perforce
 - Hardware
 - Software
 - Legal
- Many kinds of assets
 - Code
 - Hardware design
 - Office documents







Pain Point #3 Governance

Versioning: Legal issues



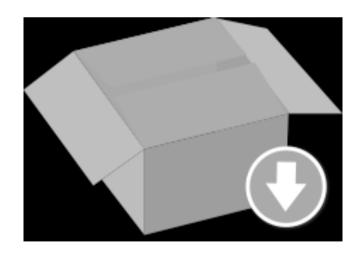
- Establish prior use defence against patent trolls
- Track compliance with open source and other thirdparty licences
- Code escrow



Build, Test, Release



- Do Developers, CI, and QA get the same build?
- Can you reconstruct a "historic" build?
- Is the environment versioned together with code and assets?



NYSE Euronext



- Track installed versions of all assets
 - Executables
 - Configuration
 - Scripts
- 198 projects
- 6600 releases/year







Pain Point #4 Administrative Overhead

Admin to User Ratio



- Large area of difference among SCM systems.
- Can range from 1:30 to 1:1000 or more



Key Admin Tasks



- Backup/recovery
- HA/DR
- Administration for replicas build/test farms, analytics, other Agile needs
- Upgrades
- User and Permissions Management

Trend Micro



- Previous SCM system required a dedicated server per location
- Migration to Perforce
 - Increased performance
 - Reduced admin requirements
 - Perforce branching model enables sharing among projects







Pain Point #5: Integration Nightmares

Core vs. Context



- Administrators should not be rewriting basic code for essential integrations.
- Look for SCM with well-tested integrations for the rest of the ALM stack.

Essential ALM Package for 2013



Agile Planning

Issue Tracking

Code Review

Continuous Integration

Build/Deploy

NetApp



- Build environments
- Test environments
- Data retention and distribution



How SCM Can Help



- Latency
- Workflow
- Governance
- Administration
- Integration











And > 5,500 Other Leading Companies

Delegate Poll

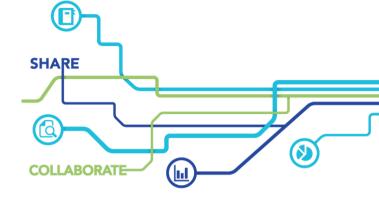


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Questions?

