Introduction

Clearvision Company History

Clearvision was established in 1997 and is the leading independent change and configuration management consultancy.

The first UK IBM Rational partner, Clearvision has offices throughout Europe and the USA. Clearvision work with clients throughout the world including global top 100 companies such as Citigroup, HSBC, Barclays, Ericsson, Sony and more.

In recent years Clearvision have helped customers combine the power and reliability of IBM Rational change and configuration management solutions with the flexibility and low-cost of open source solutions.
Development Pressures

Everyone wants more quality, faster to market with little investment or spend.

At the same time Open Source solutions are starting to reach a very acceptable level of quality and acceptance.

There are only a small handful of OS project which become well accepted by commercial organisations e.g. Linux, Apache, Subversion, NetBeans, Eclipse, Open Office, …

However there are x thousand OS projects and more than x million lines of code.

Who’s using which Open Source solution

<table>
<thead>
<tr>
<th>Subversion</th>
<th>SourceForge.net</th>
<th>JavaForge.net</th>
<th>Google.code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercurial</td>
<td>MontMorn</td>
<td>Intel - Linux</td>
<td>FreeBSD</td>
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<tr>
<td></td>
<td>NetBeans.org</td>
<td>SAGE</td>
<td>Open Solaris</td>
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<tr>
<td>GIT</td>
<td>RedHat</td>
<td>Rails Community</td>
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Subversion & Mercurial

**Subversion**

Started in February 2000 by Karl Fogel & (Jim Blandy), the author of CVS. The objective was to modernise CVS and correct all its misgivings, however be similar enough so CVS users could easily transition. The community very quickly took shape and in August 2001 produced the first usable version.

**Mercurial**

First announced on April 19th 2005. Linux kernel project needed a replacement tool which catered for distributed VC. Written in Python, generally accepted as better than SVN for distributed development. Merging was better than SVN 1.4.x
Subversion - Overview

What is Subversion?
Open source replacement for CVS.

Features:
- Directory versioning
- True version history
- Atomic commits
- Versioned metadata
- Choice of network layers
- Efficient branching and tagging
- Consistent data handling
- Easily integrated

A rapidly growing version control tool on the market (estimated @ 220,000 users per month).

Stand alone CM tool - no overlaying process or change management capability.

Development started in 2000
- Version 1.0 released in February 2004
- Version 1.5 released in June 2008

OS - Development Tools

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Change Management</th>
<th>Config Management (Control version)</th>
<th>Testing</th>
<th>Build &amp; Deploy</th>
</tr>
</thead>
<tbody>
<tr>
<td>xPlanner</td>
<td>Trac</td>
<td>Subversion</td>
<td><a href="http://www.open">http://www.open</a> sourcetesting.org/function.php</td>
<td>Cruise Control</td>
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<td>Story.Net</td>
<td>Bugzilla</td>
<td>Mercurial</td>
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<td>Nant</td>
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<td>Case Maker</td>
<td>BugTracker</td>
<td>Git</td>
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<td>Draco.net</td>
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<td>PTM</td>
<td>BugBye</td>
<td>CVS</td>
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<td>BuildStudio</td>
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</table>

The above commercial tools all integrate with Open Source Subversion

Development Tools - Commercial

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<tr>
<td>CodeBeamer</td>
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<td>Rational</td>
<td>Subversion</td>
<td>Electric Cloud</td>
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<td>Axosft</td>
<td>Jira</td>
<td>HP</td>
<td></td>
<td>Build Forge</td>
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<td>Serena</td>
<td>ClearQuest</td>
<td>McCabe</td>
<td></td>
<td>Final Builder</td>
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<tr>
<td>Rational</td>
<td>TrueQuest</td>
<td>Parasoft</td>
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<td><a href="http://www.la">http://www.la</a></td>
<td>Pivotal Tracker</td>
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<td>atuk.com/tools</td>
<td>TeamTrack</td>
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<td>reg_mgmt_t</td>
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<td>ools.html</td>
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</table>

The above commercial tools all integrate with Open Source Subversion
Open Source – Yes or No

Business Challenge

All organisations (businesses and charities) must remain competitive and should regularly review their costs and productivity.

How has open source (OS) impacted cost and efficiency;
• OS licenses, not always, but generally free to use
• Subversion is;
  – based on ‘Apache Open License’, free to use
  – generally easier to implement
  – generally easier to administer
  – becoming widely used – less training required
  – registering bugs is very transparent
  – no compulsory annual maintenance

Migration Challenge

Many companies want to change but some have concerns regarding open source alternatives;
Concerns are;
• Transition cost outstripping existing maintenance costs
• Disruption to existing projects
• Present integrations (change management, build environment, IDE’s, etc)
• Losing history
• Support
• Knowledge gap (training)
• No individual organisation to blame
• No individual organisation to insist features are added i.e. the size and wealth of a user (customer), has little impact on the community
• No guarantees the community will continue
• License challenges
  • +
Reality of OS

I could almost guarantee every company here is using some open source either directly or indirectly

Who is using:
• Apache
• TomCat
• Linux
• Eclipse
• Open Office
• NetBeans
• IBM Rational tools
• HP Testing (Mercury)

Migration Options

When migrating to any new version Control tools the options are:
• Big Bang
• Gradual
• Hybrid

Hybrid World

Use both Subversion and vendor together and integrated
• No big bang transition
• Utilise the strengths of each tool
• Naturally evolves (under guidance) and eventually becomes the norm
• Reduces pressure on development teams and the business
• Cost effective
• Removes management ‘no’ arguments (roadblocks)
• Creates a real life, self fulfilling, justification
• Compatibility with Open Source world
Hybrid – Customer example

CC & SVN hybrid

Why Hybrid?

<table>
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<tr>
<th>Challenge</th>
<th>Solutions</th>
</tr>
</thead>
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<tr>
<td>Transition cost of stripping existing maintenance tools</td>
<td>Gradual approach reduces risks whilst reducing the need to renew all licenses</td>
</tr>
<tr>
<td>Disruption to existing projects</td>
<td>Transition at your own pace (as new projects or sub-projects start)</td>
</tr>
<tr>
<td>Present integrations (change management, build environment, E2E, etc)</td>
<td>Subversion integrates with almost all commercial and OSS development tools (sometimes better than commercial tools)</td>
</tr>
<tr>
<td>Losing history</td>
<td>No data loss so long as you retain a few licenses from existing tool. Migrate using a baseline of code base</td>
</tr>
<tr>
<td>Support</td>
<td>There are several companies offering OSS support contracts. Good to have access to the community</td>
</tr>
<tr>
<td>Knowledge gap (training)</td>
<td>Considerable amount of &quot;help yourself&quot; materials on the internet. Clearvision also has very structured training courses and Web Based Training</td>
</tr>
<tr>
<td>No individual organisation to blame</td>
<td>Yes and No. Take out a support contract. Provide a resource to contribute to the community. Use source code directly</td>
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</tbody>
</table>

ALM or Point tools

Over the past 12 months Clearvision has witnessed a real shift towards collaborative solutions which transparently sit on top of point tools.

Collaborative Tools bring:
• Distributed teams closer together
• Single interface integrating to many point tool solutions
• Wiki & comment overlays aid communication

Example tools include:
CodeBeamer, CollabNet CEE, GForge, IBM Team Concert, Atlassian, (Eclipse, NetBeans),
Customer Examples

Large Bank
- Using ClearCase for 10 years
- Use to have strict policy and process enforcement
- Now allows small development projects to use SVN
- SVN is now used for 30% of all projects
- SVN is selected for 80% of new project

South African company
- Used ClearCase for 4 years
- Challenged with geographic communication problems
- Selected CodeBeamer for its collaborative approach

Questions

Thank you

Gerald Tombs - gtombs@clearvision-cm.com
Useful links

http://csharp-source.net/open-source/project-management
http://www.opensourcetesting.org/functional.php
http://www.cmcrossroads.com
http://hgbook.red-bean.com/
http://www.laatuk.com/tools/reg_mgmt_tools.html