

CruiseControl

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Agenda

- Continuous Integration - introduction
 - CruiseControl – implementation of CI
 - Build loop
 - Results presentation servlet
 - Summary
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What is continuous integration?

- One of many Extreme Programming practices
 - Source code integration as often as possible
 - Single integration machine and „integration queue”
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CI benefits

- ❑ Removes integration sessions
 - ❑ Minimizes number of integration bugs
 - ❑ Improves team work
 - ❑ Delivers latest best executable
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CI success factors

- ❑ Single source code repository
 - ❑ Automated build scripts
 - ❑ Automated tests
 - ❑ Developers discipline (as always ;-)
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Successful integration

- All the latest sources are checked out of the CMS
 - Every file is compiled from scratch
 - The resulting files are linked and deployed for execution
 - Suite of tests is run against the system
 - If every test passes, then there is a **successful build**
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Agenda

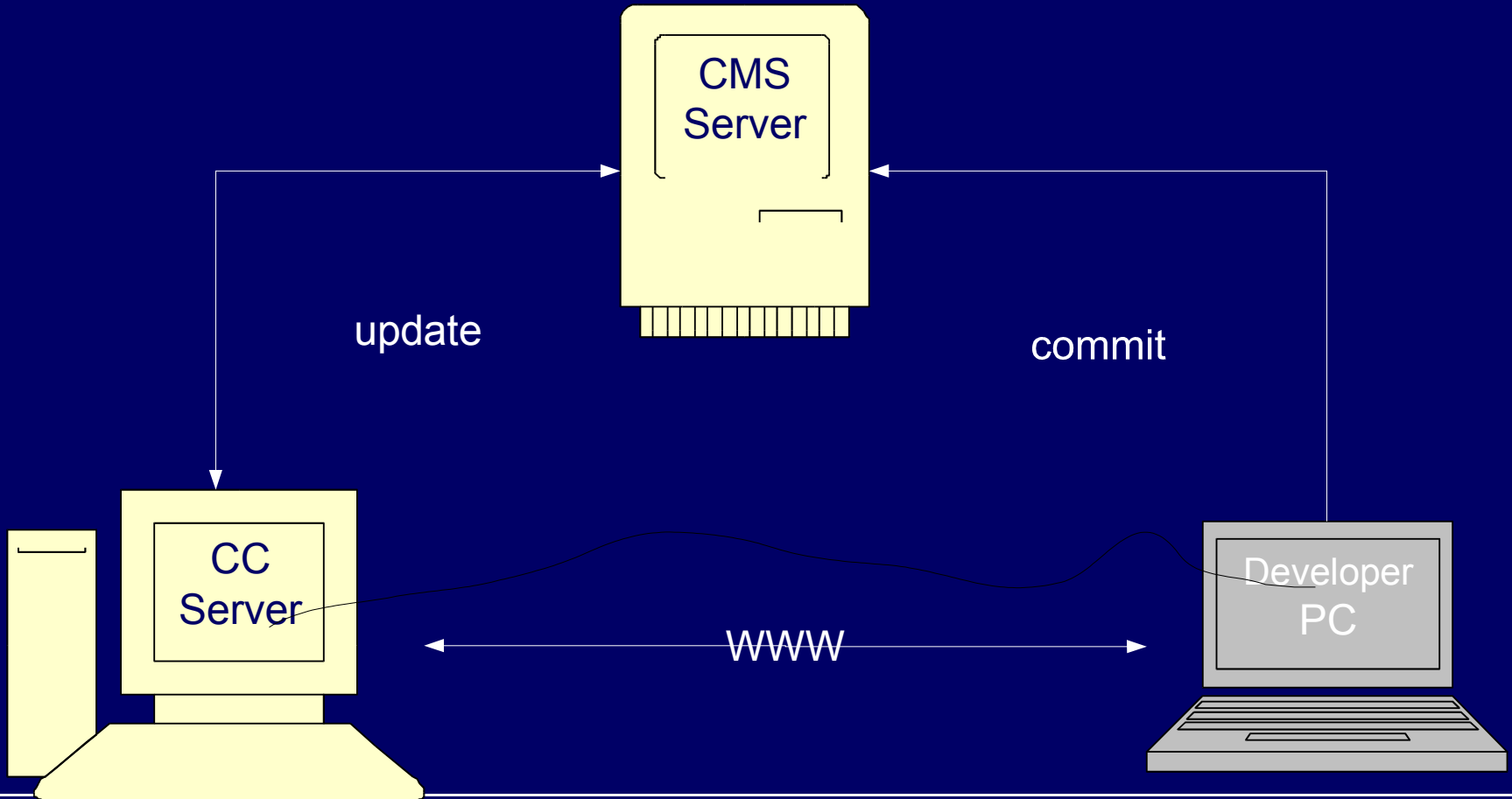
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CruiseControl

- Free and open source
 - Java and .NET versions
 - Consists of two applications
 - Build loop tool
 - Results publication servlet
 - Works with many CMS systems (CVS, ClearCase, VSS, ...)
 - Works with Maven and Ant
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How does it work?





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Build loop tool

- ❑ One instance supports multiple projects
 - ❑ Each project can have many build types
 - ❑ Two types of build period configurations
 - ❑ CC stores build logs and build artifacts
 - ❑ Can be used as a Windows service
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Build loop configuration

- bootstrapper
 - cvsbootstrapper
 - modificationset
 - cvs
 - schedule
 - maven
 - log
 - publishers
 - emailpublisher
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Results presentation servlet

- ❑ One instance supports multiple projects and builds
 - ❑ Displayed pages are generated from CC logs
 - ❑ Servlet gives access to full build history and build artifacts
 - ❑ JMX administration is possible
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Summary

- CI is a really good practice
 - CC is a useful tool
 - CC + Maven/Ant = 😊
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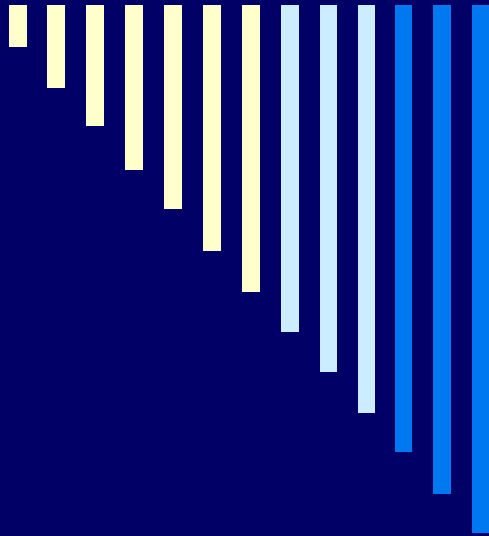
Links

□ Knowledge

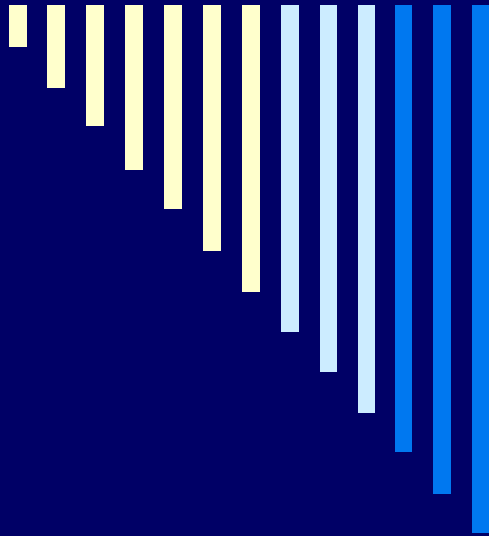
- <http://www.extremeprogramming.org>

□ Tools

- <http://cruisecontrol.sourceforge.net>
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Any questions?



Thank you 😊

