



Industrializing eZ Publish

Project development

2010-06-25, by Jérôme Vieilledent



Summary



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- Development environment
 - ▶ OS
 - ▶ Coding environment
 - ▶ Synchronicity



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- Development environment
 - ▶ OS
 - ▶ Coding environment
 - ▶ Synchronicity
- Industrializing Tests and Delivery
 - ▶ Automating delivery
 - ▶ Unit tests in eZ Publish
 - ▶ Continuous integration platform

Development environment

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Development environment

Several issues to solve when working on a project as a team



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- Developers' OS
 - ▶ Can be VERY heterogeneous
 - ▶ IT Departments may impose an OS (Windows in most cases)
 - ▶ **BUT you need to work in an environment as close as possible from the target environment**
 - ▶ VMs are a suitable solution (Virtual Box, VMWare...)



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- Developers' coding environment
 - ▶ Each developer has its preferred IDE
 - ▶ **Unicity** rimes with **productivity** => Choose **only one IDE** (I chose Eclipse)
 - ▶ Easier for developer support or when welcoming a new developer in the team
 - ▶ A good IDE provides all needed tools all-in-one



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- Developers' synchronicity
 - ▶ Sharing the same sources (SCM like Subversion or Git)
 - ▶ Sharing the same database
 - ▶ Sharing the same media files
 - ▶ Even when working with developers who are far from each other

Development environment : a solution

- **Eclipse PDT with useful plugins**
 - ▶ **Smile eZ Publish plugin** (TPL syntax highlight, code completion & content class view)
 - ▶ **eZClipse** (TPL & INI syntax highlight)
 - ▶ **Subversive**
 - ▶ **Mylyn** (Bug tracker integration : Mantis, Trac, Bugzilla, Jira...)
 - ▶ **FileSync** (see below)
- **Virtual Box**
 - ▶ With an image close to target environment (let's say Ubuntu Server)
 - ▶ Can be run from a dedicated *headless* server with **VBoxHeadless**
- **FileSync Eclipse plugin**
 - ▶ Sync your workspace with a remote server
 - ▶ Your remote server has to be accessible from your local/host computer
 - ▶ Samba or SSHFS are good solutions
- Common dedicated **MySQL server**
- **eZ Publish** (Database cluster mode enabled) + useful extensions
- **Subversion**



Development environment : a solution

- **«Foreign» developers case**
 - ▶ Different geographical centers working together on the same project
 - ▶ Freelances
 - ▶ Everyone needs to share the same database (Data & Cluster files)

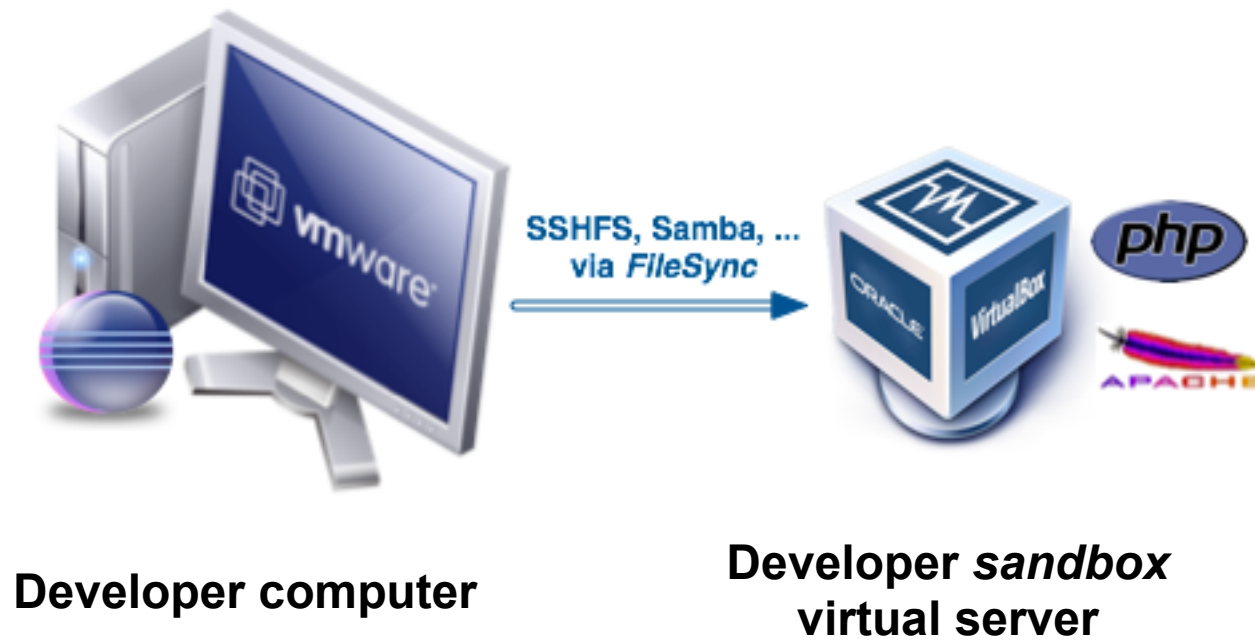


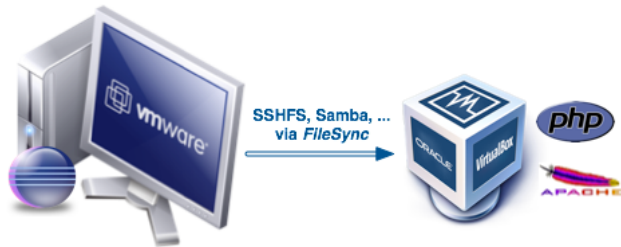
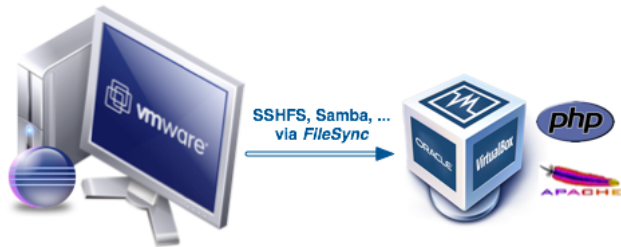
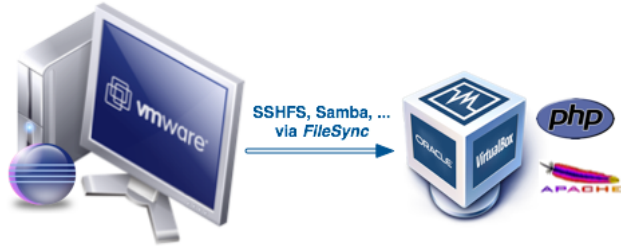
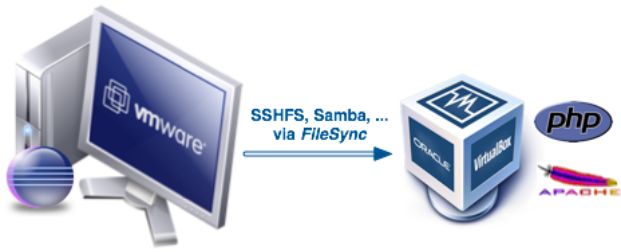
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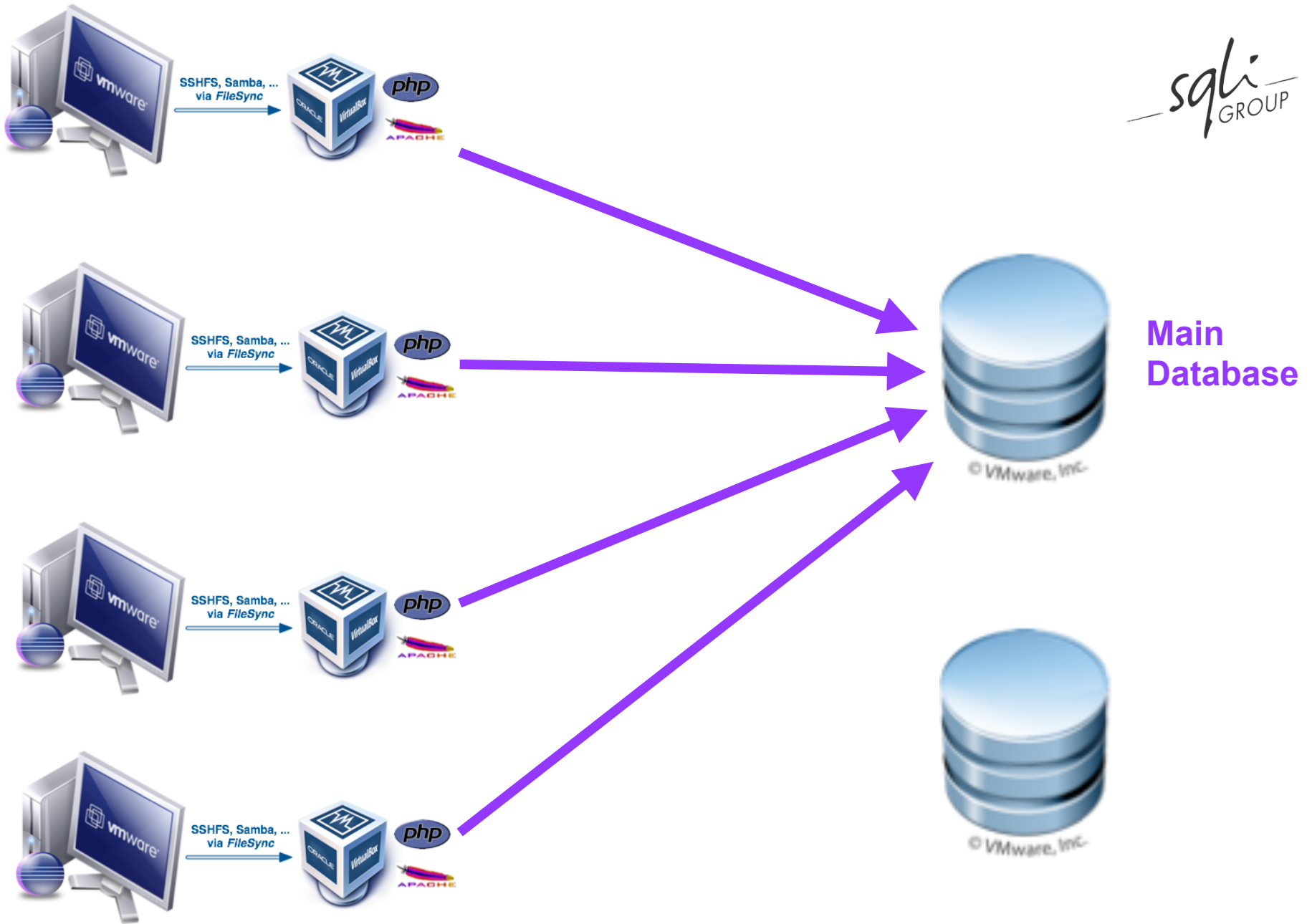
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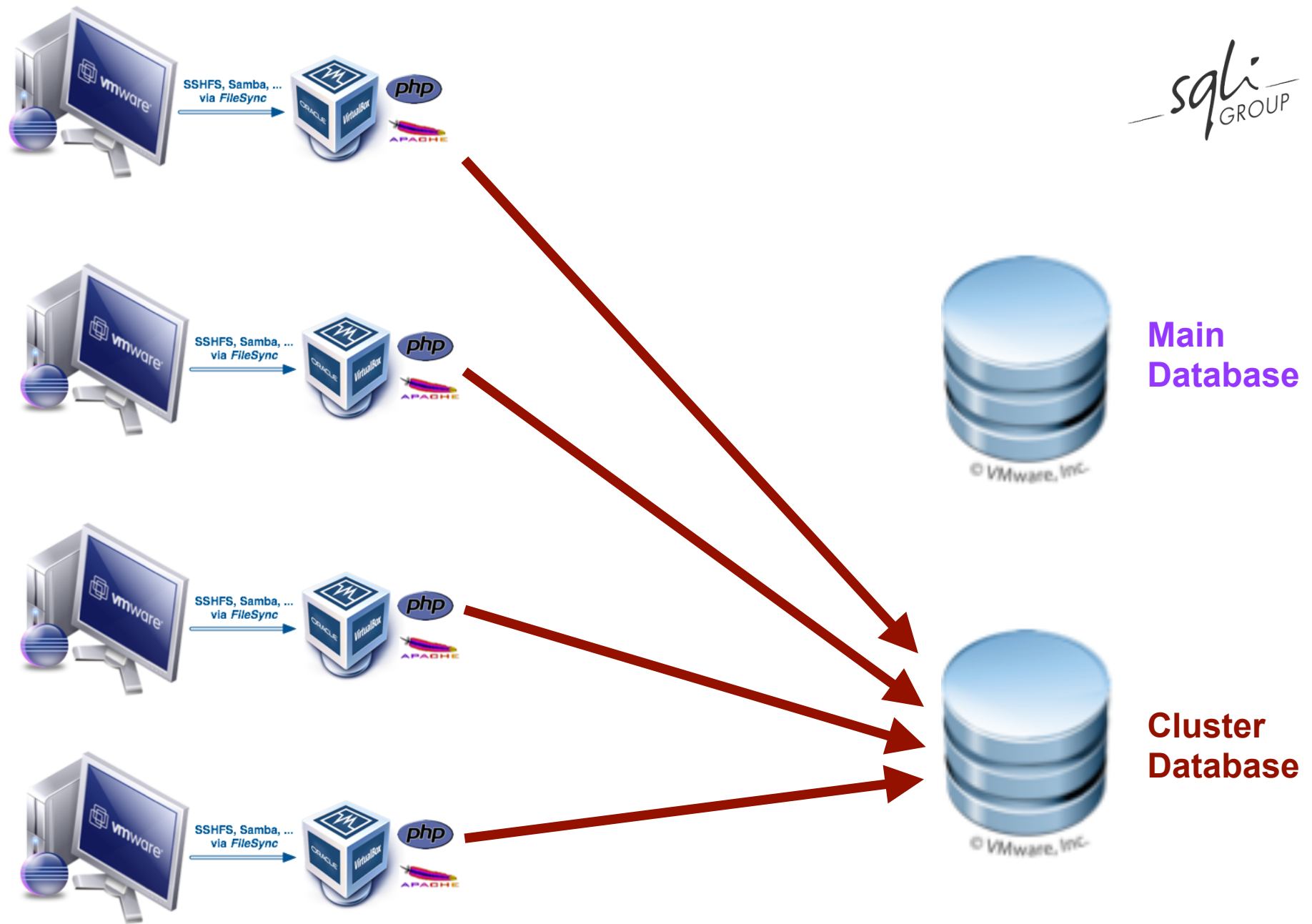
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- **Solution**
 - ▶ Dedicated Virtual Box Headless server, located in the Project Headquarter
 - ▶ Each foreign developer has its dedicated remote VBox
 - ▶ Sources are sent through SSHFS or Samba (with VPN) via FileSync automatically
 - ▶ Each VBox is local to the database server
 - ▶ Developer accesses to its own development server through HTTP and/or SSH
 - ▶ Fast and secure :-)









Industrializing tests and delivery

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Automating delivery

Use scripts to deploy your developments & project configuration

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- eZ XML Installer

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 - ▶ Create / Update content classes, objects and roles

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- ▶ Soon on projects.ez.no ;-)


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Unit tests in eZ Publish

- Unit tests development are **NEVER** a waste of time
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 - ▶ You spend 10-20% less time debugging in the client's test phase
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- **eZ Publish has a test framework**
 - ▶ Based on **PHPUnit**
 - ▶ Only available from SVN (<http://pubsvn.ez.no/nextgen>)
 - ▶ ... And GitHub (<http://github.com/ezsystems/ezpublish>)
 - ▶ Handy kernel wrapper to easily manipulate content classes/objects/nodes
 - ▶ Run your tests with a temporary and droppable database
 - ▶ More info on **eZPedia**
 - http://ezpedia.org/en/ez/testing_ez_publish_test_system
 - ▶ PHPUnit is compatible with **Selenium** (automated functional tests)



Continuous Integration Platform

- Automatically *builds* your application
- Updates from your SCM
- Runs your unit and functional tests
- Tests your code against your coding standards (PHPCodeSniffer)
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=> Control

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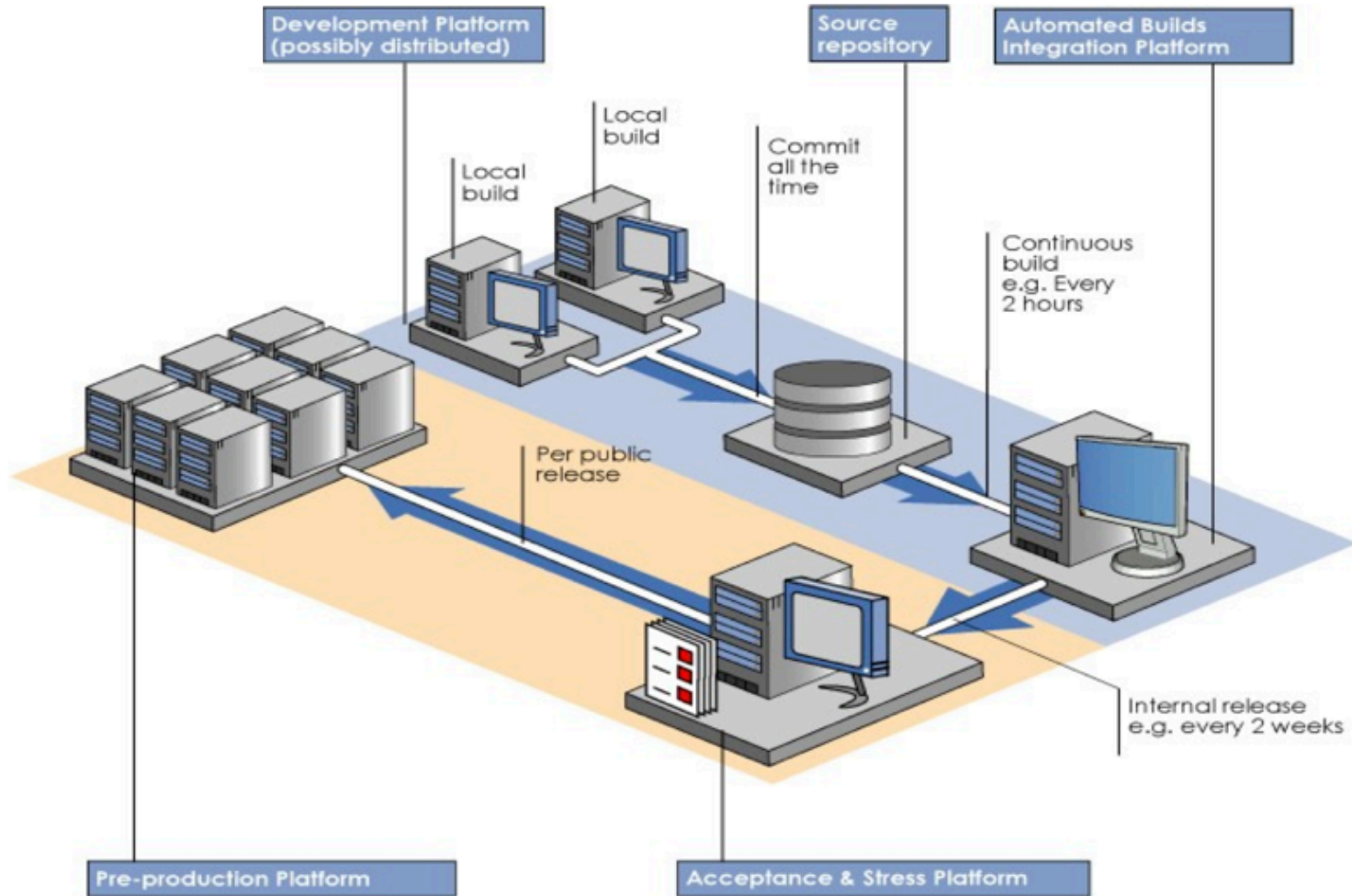
=> Stability

2 main platforms to remember

=> PHPUnderControl (<http://www.phpundercontrol.org>)

=> Hudson (<http://hudson-ci.org/>)

Continuous Integration Platform



Questions ?

- My Blog : <http://www.lolart.net> (french, soon in english)
- My Company : <http://www.sqli.com>

