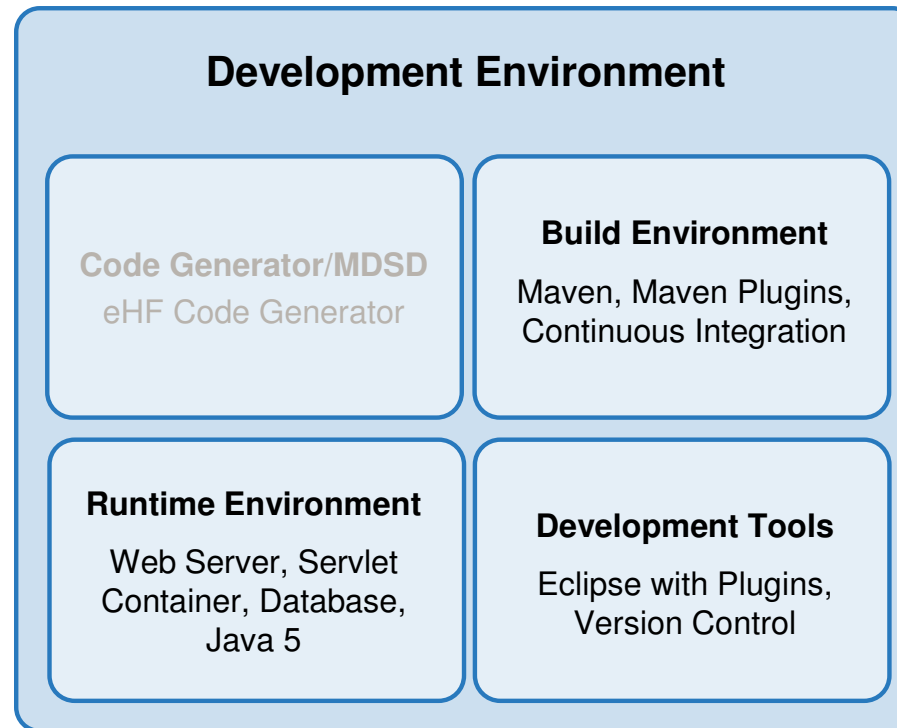


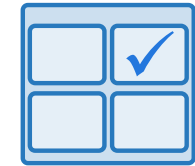
# eHF – Development Environment

<Audience>

<Presenter> / <Date>

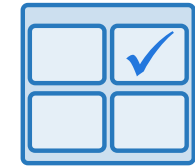
# Agenda





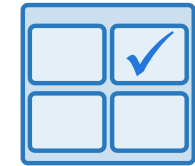
## Build Environment

- The eHF build environment is based on Maven 1.1
- eHF provides a number of Maven 1.1 plugins to support the developer
  - build plugin
  - deploy plugin
  - customization plugin
- eHF uses a meta definition for different build configurations to generate complete CruiseControl environments
- eHF provides a dependency finder to organize a full integration build according to the dependency tree



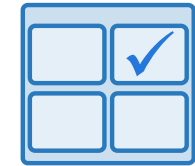
## Build Environment build plugin

- contains the custom goals to support:
  - the fully automated module build (on local developer environments as well as central build servers)
  - the usage of the eHF Generator
  - the forced execution of automated unit tests
  - the bootstrapping of necessary data for a module.



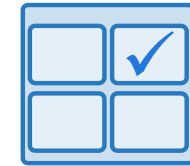
## Build Environment deploy plugin

- contains the custom goals to support:
  - the creation of a distributable artifact
  - the installation of a distributable artifact
  - the import of additional data in the database
  - the execution of database upgrade steps
  - the execution of database encryption steps.



## Build Environment customization plugin

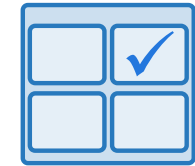
- contains the custom goals to support:
  - the localization of prebuilt distributable artifacts
  - the branding of prebuilt distributable artifacts



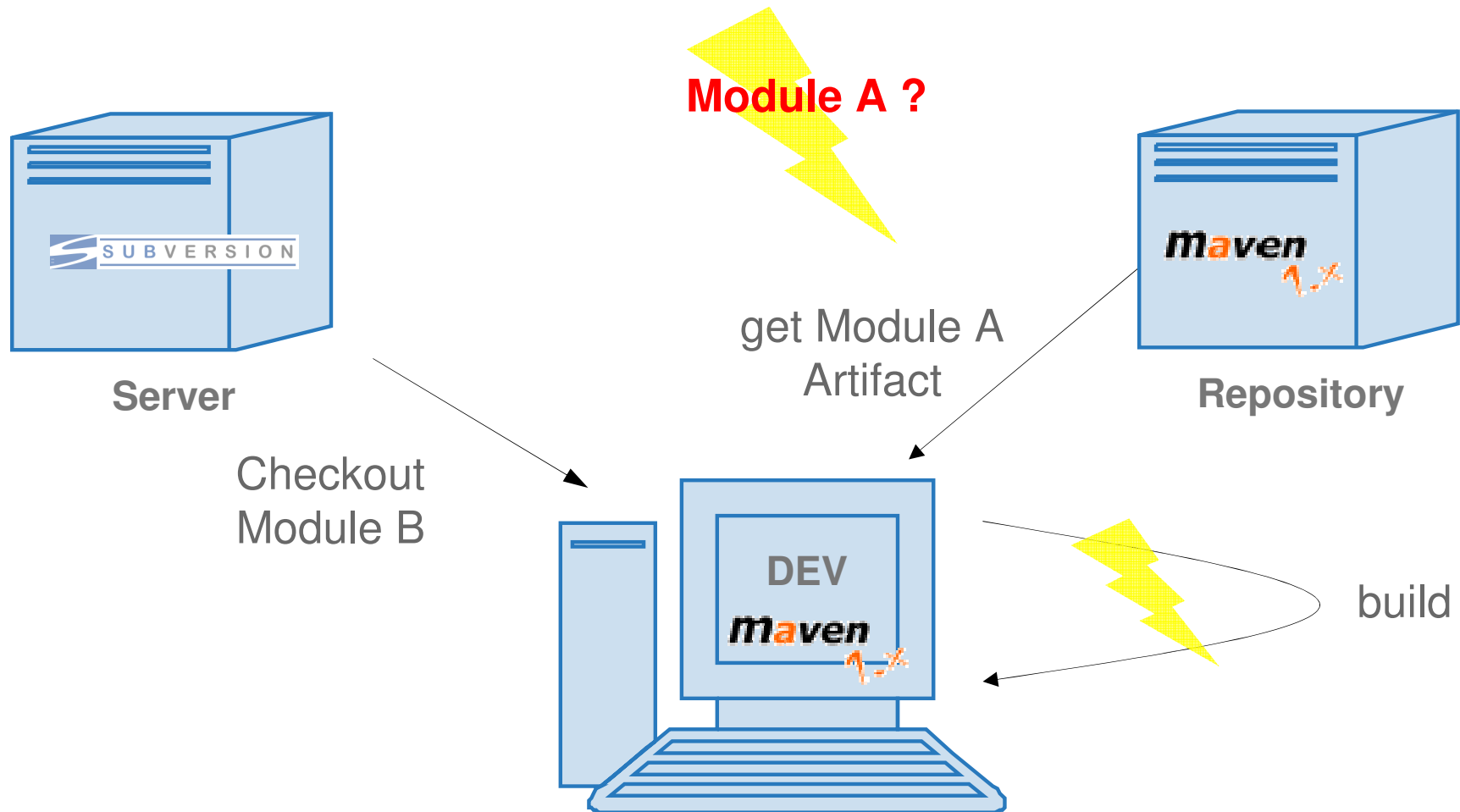
## Build Environment – continuous integration

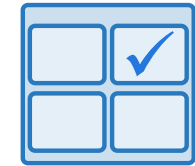
*„Continuous Integration is a software development practice where members of a team **integrate** their work **frequently**, usually each person integrates at least **daily** - leading to multiple integrations per day. Each integration is verified by an **automated** build (including test) to detect integration errors **as quickly as possible**. Many teams find that this approach leads to **significantly reduced** integration problems and allows a team to develop cohesive software **more rapidly**.“*

[sic!] Martin Fowler (<http://martinfowler.com/articles/continuousIntegration.html>)

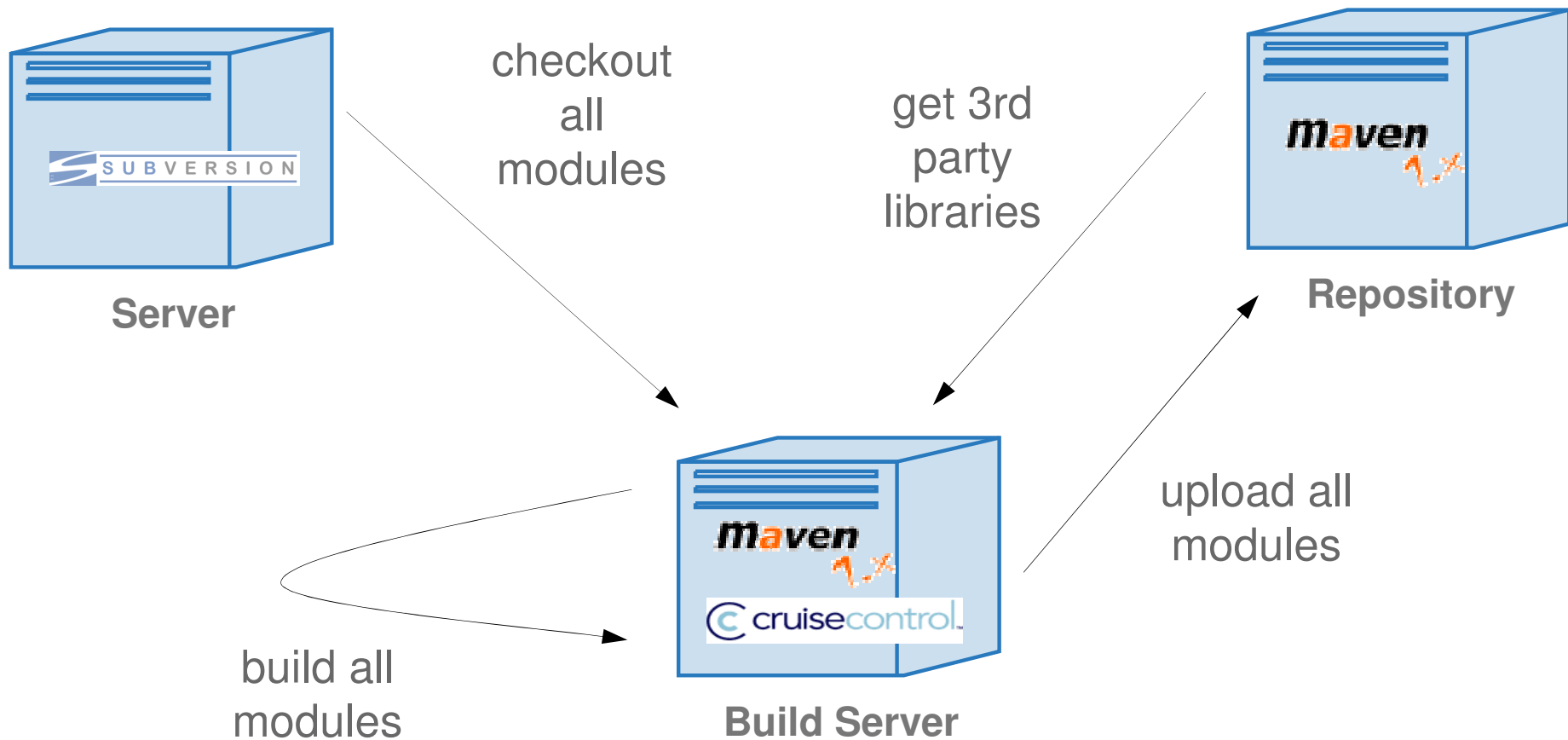


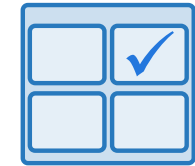
# Build Environment – Continuous Integration Local Developer Desktop





# Build Environment – Continuous Integration Central Build Server





## Build Environment Outlook

- We are currently working on the extraction of functional elements of our jelly plugins to create ANT tasks. These ANT tasks might then be used in Maven 1 and Maven 2 build environments.
- We preparing the migration from Maven 1 to Maven 2
- CruiseControl will be replaced with Hudson in the near future, as soon as the meta build generator is able to fully generate a configuration.
- There will be functional enhancements to the customization plugin to support custom feature sets.



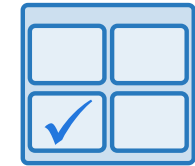
## Runtime Environment Supported Platforms

| # | CPU | OS         | 32/64 Bit | Web Container | JVM*      |
|---|-----|------------|-----------|---------------|-----------|
| 1 | x86 | SLES 10    | 64        | Tomcat 6.0    | Sun JDK 6 |
| 2 | x86 | Solaris 10 | 64        | Tomcat 6.0    | Sun JDK 6 |
| 3 | x86 | Win2003    | 64        | Tomcat 6.0    | Sun JDK 6 |

\* On 64 bit systems we recommend using 32bit JVM due to memory (factor 1.5) and performance reasons.

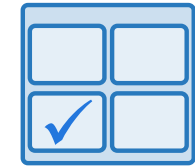
## Supported Oracle Versions

| # | Database | Version | 32/64 Bit |
|---|----------|---------|-----------|
| 1 | Oracle   | 10g RAC | 32        |
| 2 | Oracle   | 10g RAC | 64        |



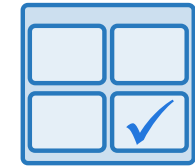
## Runtime Environment

- Java 6 runtime environment
  - **reference uses Java 1.6.0\_07**
- Web Server & SSL EndPoint
  - **reference uses Apache 2.2.8**
- Servlet Container to host a web application
  - **reference uses Tomcat 6.0.13**
- Database
  - **reference uses HypersonicSQL 1.8.2 (developer)**  
**Oracle 10 g (build server)**



## Runtime Environment Outlook

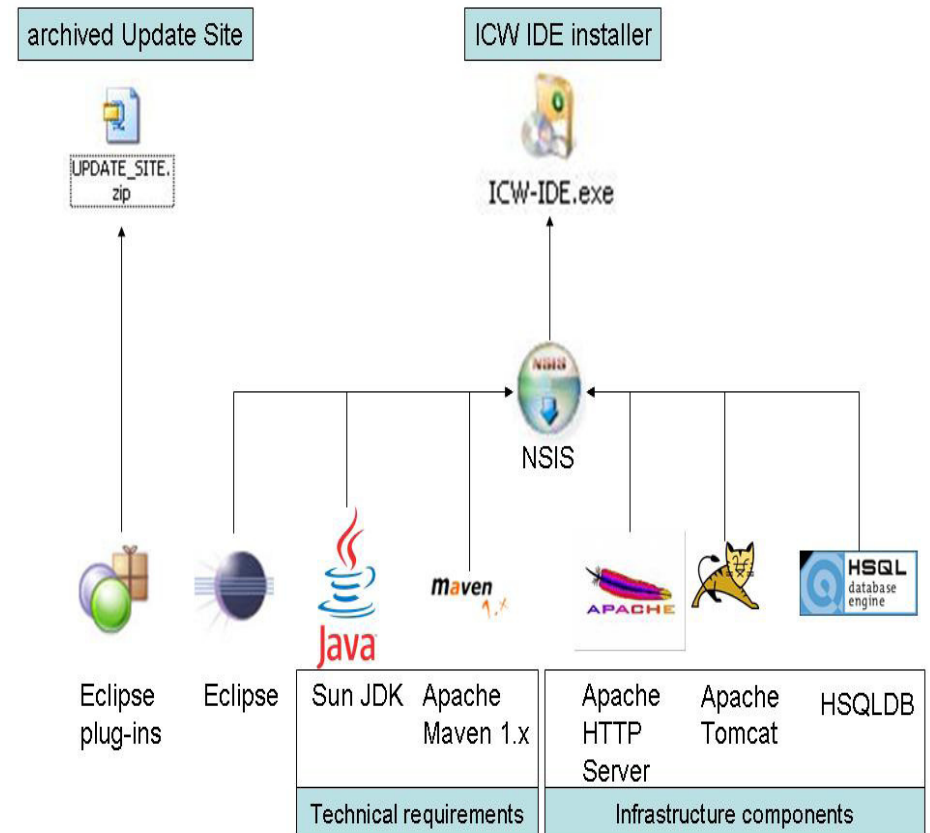
- Servlet Container
  - activities to support Glassfish 2.0
- Database
  - activities to support MySQL Community Edition 5

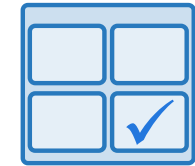


# Development Tools

## ICW IDE

- ICW provides an installation package to setup a local developer environment
  - Eclipse installation package
  - archived Eclipse update site
  - Java Development Kit
  - Maven 1.1
  - Infrastructure components (Apache, Tomcat, HSQLDB)





# Development Tools

## ICW IDE

- Eclipse IDE
  - Eclipse Europa is included in the latest ICW IDE package
  - a preconfigured default workspace
- archived Eclipse update site with plugins for
  - Eclipse Modeling Framework (EMF)
  - AspectJ DevelopmentTools (AJDT)
  - openArchitectureWare (oAW)
  - Web Standard Tools (WST)
  - JEE Standard Tools (JST)
  - Checkstyle
  - Subversive
  - Hibernate Tools
  - Spring IDE
  - XML Schema Infoset Model (XSD)

# Thank you for your attention!

**<presenter>@icw.de**