

SOFTWARE LIFE CYCLE AND PROJECT MANAGEMENT: TECHNOLOGY STACK AND WMS (WORKSPACE MANAGEMENT SYSTEM)

Companies must face the challenge to standardize their business software life cycle providing the infrastructure and tools to manage and develop projects in a standard and effective way and reusing the experience gained in previous projects. To this end Technology Reply has designed and developed the Technology Stack solution: a set of components and methodologies which can be used during the software development process.

THE SCENARIO

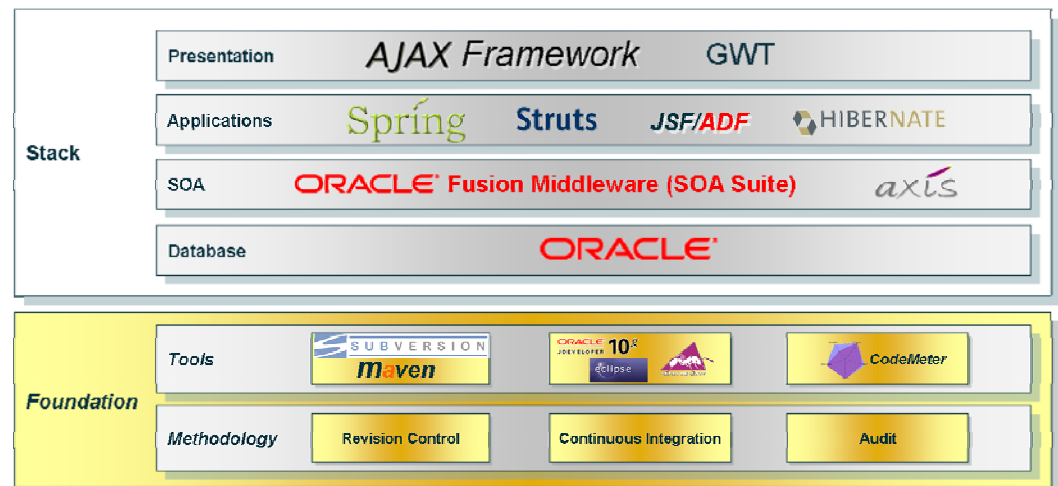
The size of the company and the number of delivered projects require the use of common standards and methodologies for architecture and project management. The information generated by the project during its life cycle is a heritage to be leveraged in order to support procedures and practices of future projects.

THE SOLUTION

Technology Stack is the solution designed and developed by Technology Reply: a set of components and methods which can be used during the software development process.

The project envisages a workspace where tools supporting its own life cycle are available. The Workspace Management System (W.M.S.) manages and organizes the project space through the creation of a specific workspace.

THE SYSTEM



The objective has been achieved through the following:

- Definition of Technology Stack. The Stack is a set of:
 - components (framework, libraries, ...)
 - working tools (IDE, RAD, build tool, collaboration, ...)
 - methodologies and process models
 - best practices

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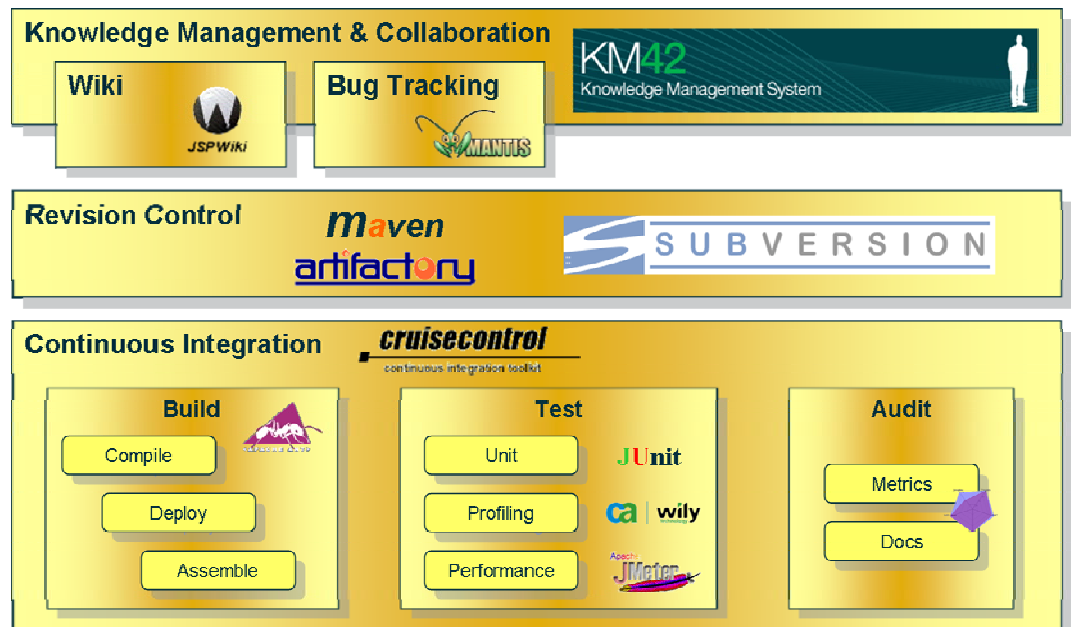
- Use of a unique tree structure of the software project:
 - to achieve efficiency and to minimize the set-up and initialization times of development environments
 - to be independent from the development environment
- Definition of an ecosystem, the W.M.S. providing the environments on which the project life cycle and the technology stack are based.

THE ADVANTAGES

The solution implemented by Technology Reply has the following advantages:

- Standardization of the software life cycle
- Simplification of the knowledge-sharing process among project teams
- Minimization of start-up and initialization times within the project team
- Simplification of the hardware and software management within the factory

THE RESULT



The W.M.S. (Workspace Management System) is a set of tools supporting the software life cycle. It is made up of the following elements:

- KM42: It is the Reply's Knowledge Management tool. It contains the documentation produced by projects and subdivided by single customer.
- JSPWiki: It is the wiki tool supporting the knowledge sharing process among projects. Each customer has one's own wiki which is a "living" environment for

the information of the relevant projects; obviously, Technology Reply too has its own wiki.

- Mantis: This tool for bug tracking is used in the acceptance test and post go-live phases in order to control and manage the change and incident management processes.
- Subversion: This tool is used to manage the versioning of the source code.
- Maven and Artifactory: These tools are used to manage software dependencies among the different modules of which it is made up or which are required.
- Ant: This tool is used for the project build.
- CruiseControl: It is the continuous integration tool.
- JUnit and xUnit: These tools are used to implement and perform unit tests. These can be executed in the developer work environment or in the continuous integration environment.
- CA Wiley Interscope: This tool is used to perform the profiling of applications.
- Apache JMeter: This tool is used to perform the stress tests of applications and of underlying infrastructures.
- Code Meter: It is the software metrics tool used to ensure quality and compliance with development standards.

THE REPLY VALUE

Operating through a network of highly focused companies, Reply provides companies in the Telco & Media, Manufacturing, Finance and Public Sector industries with applications aimed at optimizing their business processes; moreover it delivers leading-edge technologies enabling them to communicate with customers, partners, suppliers and employees. Reply services include: Consulting, System Integration, Application Management and Business Process Outsourcing.



Technology Reply is the company of the Reply group specialized in ORACLE technology: besides being an Oracle Advantage Partner, it has been Beta Site Oracle DB, partner and competence center on Oracle Collaboration Suite for years.



The Technology Reply mission is to support customers in their technology innovation processes by designing, developing and managing systems based on Oracle Internet Platform Track and targeted to data dissemination and knowledge transfer.

Leveraging its in-depth competence and experience, Technology Reply boasts a team of professionals that support customers in each phase of a system design and deployment: from initial assessment to requirements analysis and architecture definition, including the drafting of functions and technology requirements as well as the development, deployment and evolution of systems.