



Diligent

A Digital Library Infrastructure  
on Grid ENabled Technology

## ETICS Web Tools

Basel, 4 October 2006

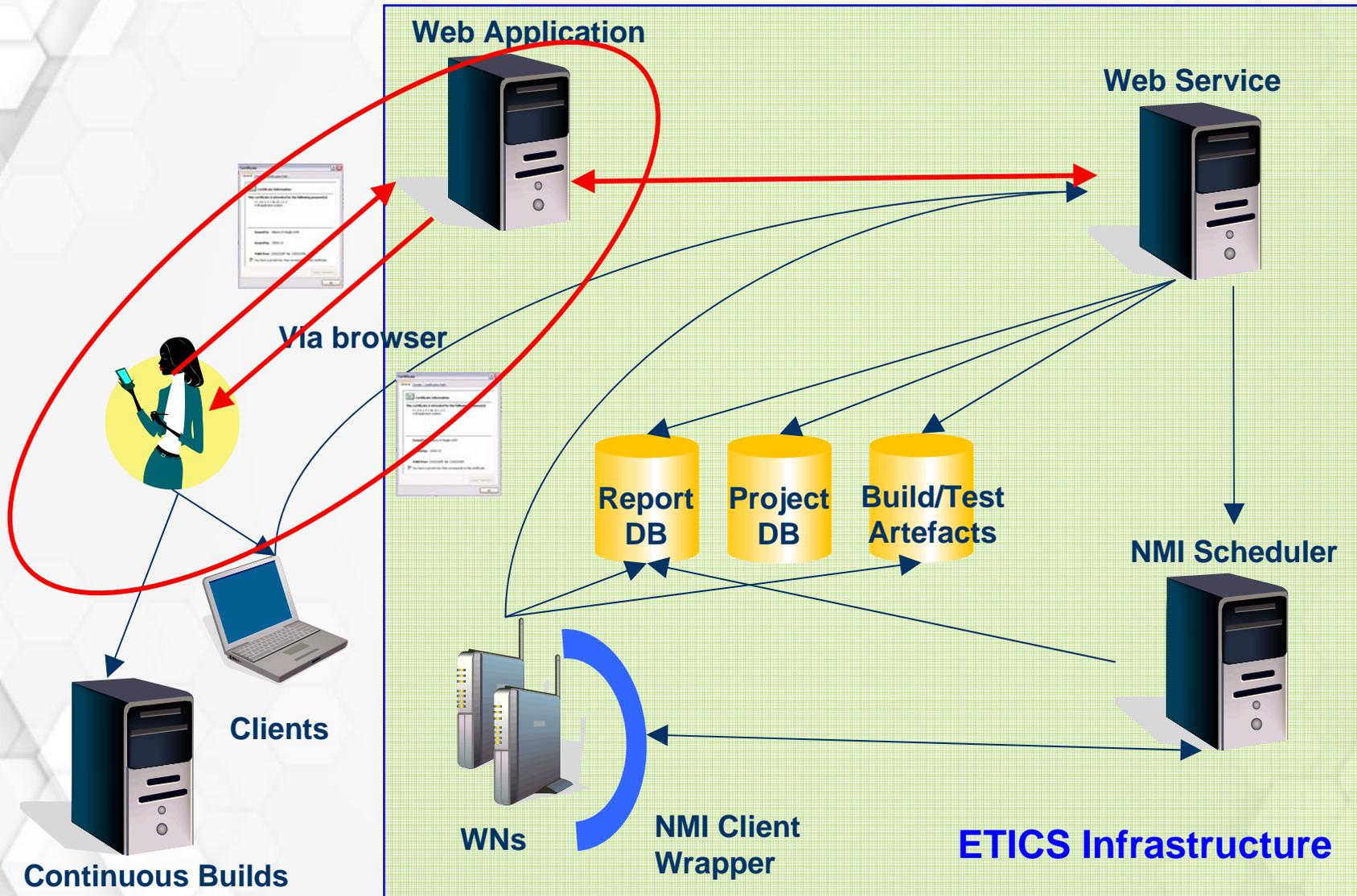
Paolo Fabriani - Engineering



Information Society  
Technologies

- Overview
- Technology
- Web Application Layout
- Browsing & Editing the ETICS datamodel
- Security (AuthN & AuthZ)
- References

# Service Overview



- Server-side technologies

- ◆ Java 1.5
- ◆ Apache Tomcat 5.0
- ◆ hsqldb
- ◆ JDuck-PAT

- Client-side technologies

- ◆ Javascript
- ◆ DHTML
- ◆ AJAX
- ◆ JDuck-WT

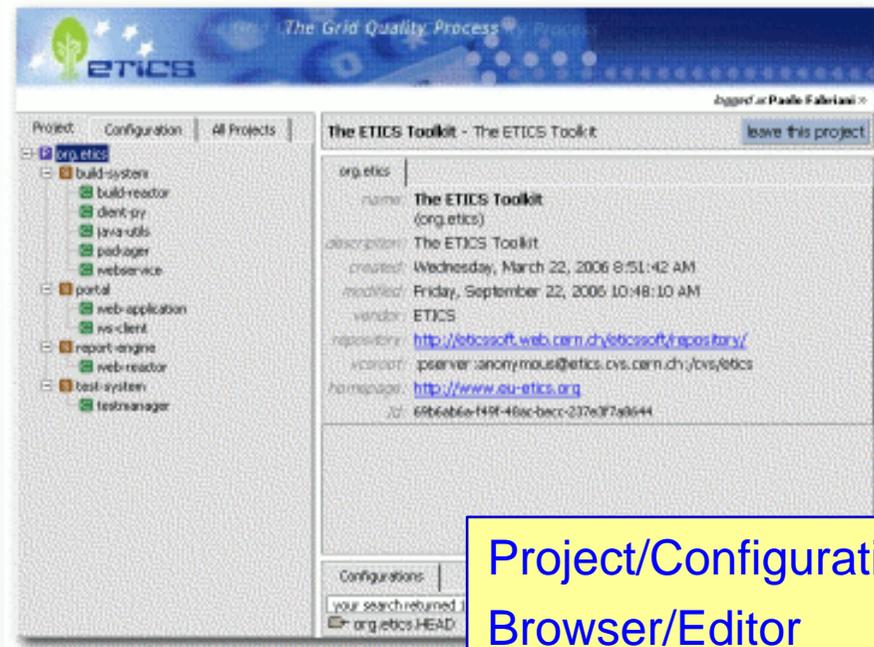
# Web Application Overview

- Browse & Edit the full ETICS Datamodel
  - ◆ Project & Configuration structures
  - ◆ Commands
  - ◆ Dependencies
- Security
  - ◆ AuthN supported via the application container
  - ◆ AuthZ based on a role-based approach implemented in the WS
- Identity-based UI customisation
  - ◆ According to the AuthZ level
  - ◆ According to the usual working context (planned)

# Web Application Map



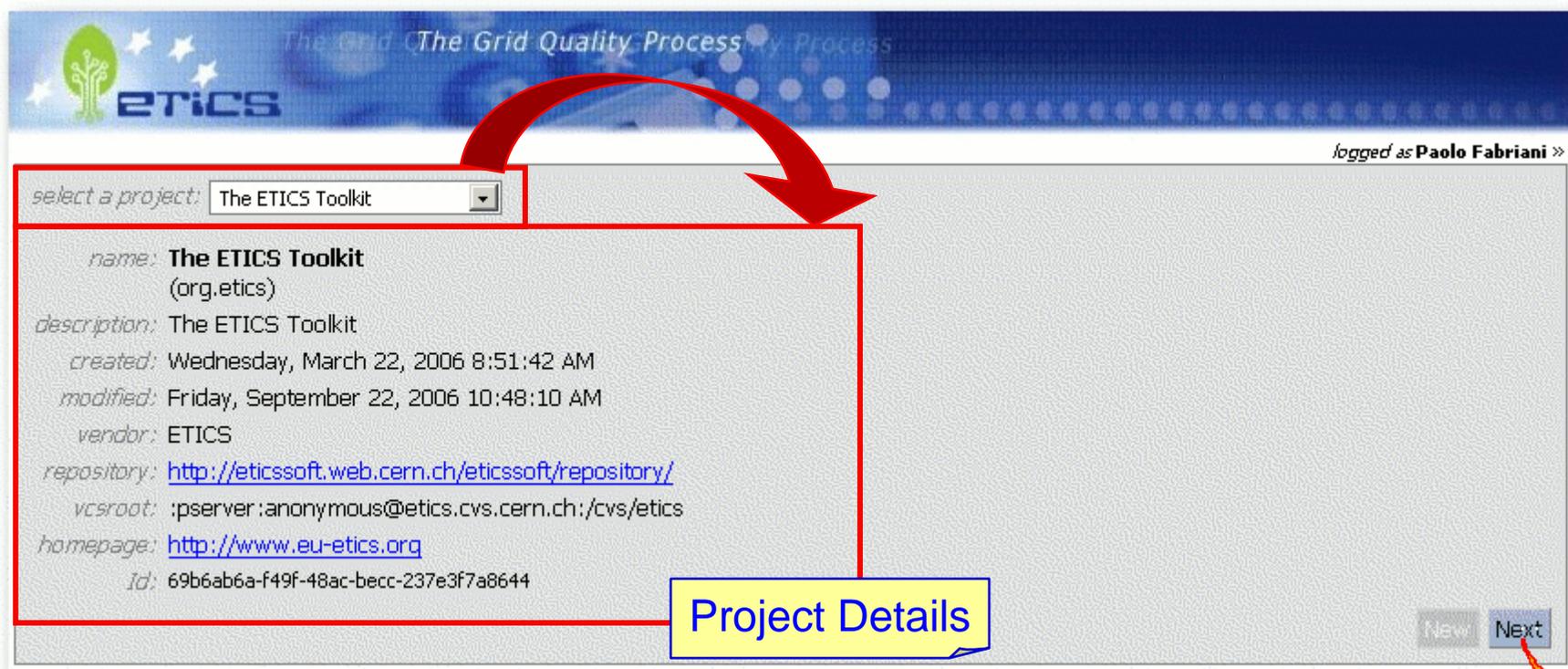
Project Selector  
(Home)



Project/Configuration  
Browser/Editor

## Project Selector

- Lists all projects hosted by the ETICS platform
- Project details are shown upon selection in a drop-down list



The Grid Quality Process

ETICS

logged as **Paolo Fabriani** >>

select a project: The ETICS Toolkit

*name:* **The ETICS Toolkit**  
(org.etics)

*description:* The ETICS Toolkit

*created:* Wednesday, March 22, 2006 8:51:42 AM

*modified:* Friday, September 22, 2006 10:48:10 AM

*vendor:* ETICS

*repository:* <http://eticssoft.web.cern.ch/eticssoft/repository/>

*vcsroot:* :pserver:anonymous@etics.cvs.cern.ch:/cvs/etics

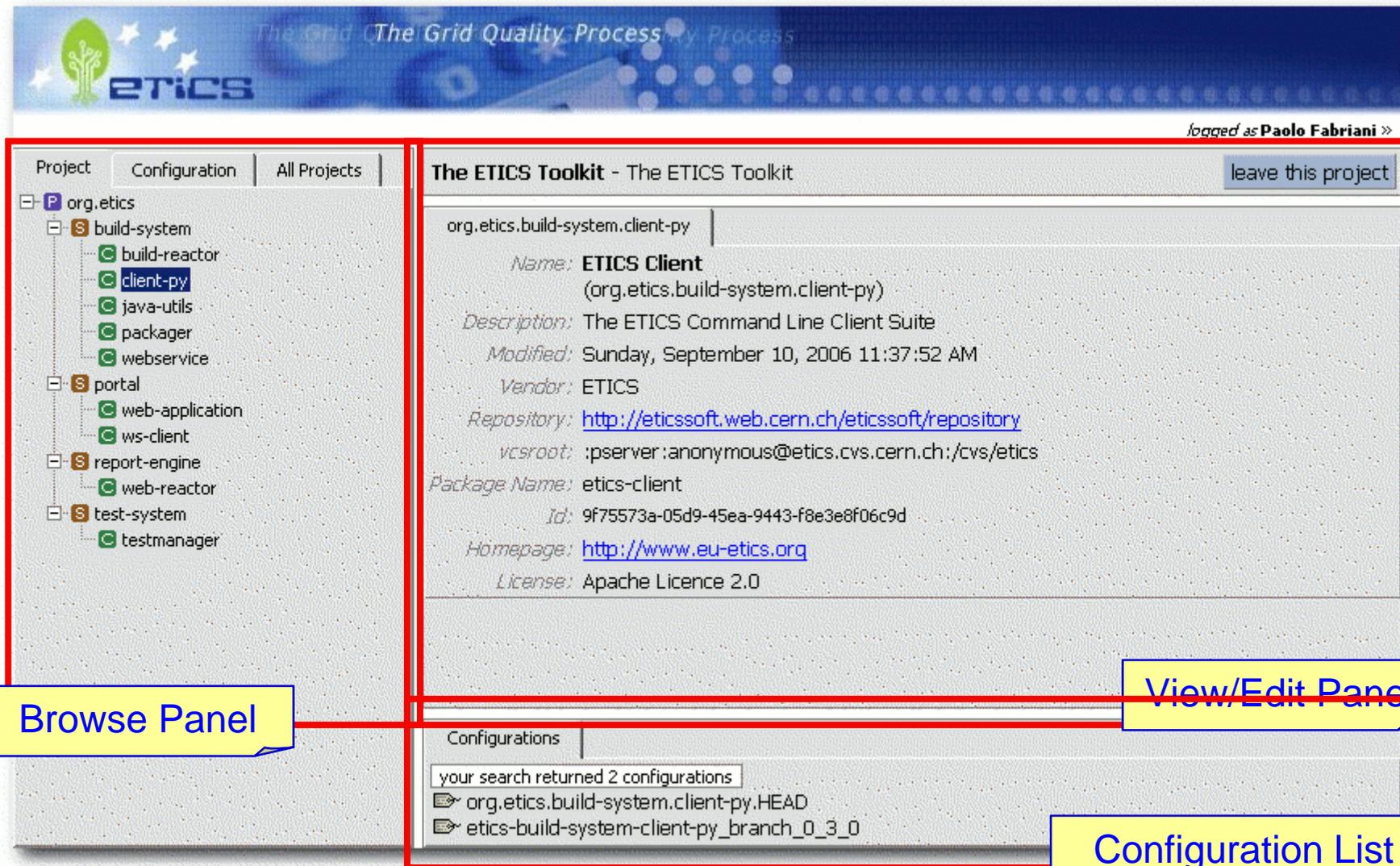
*homepage:* <http://www.eu-etics.org>

*id:* 69b6ab6a-f49f-48ac-becc-237e3f7a8644

Project Details

New Next

# Web Application Layout



The screenshot displays the ETICS web application interface. At the top, there is a banner with the ETICS logo and the text "The Grid (The Grid Quality Process) by Process". The user is logged in as "Paolo Fabriani". The main content area is divided into three sections:

- Browse Panel:** A tree view on the left showing the project structure under "org.etics". The "client-py" sub-project is selected.
- View/Edit Panel:** A central panel displaying details for the "ETICS Client" project, including its name, description, modified date, vendor, repository URL, package name, ID, homepage, and license.
- Configuration List:** A panel at the bottom showing a search result for configurations, listing "org.etics.build-system.client-py.HEAD" and "etics-build-system-client-py\_branch\_0\_3\_0".

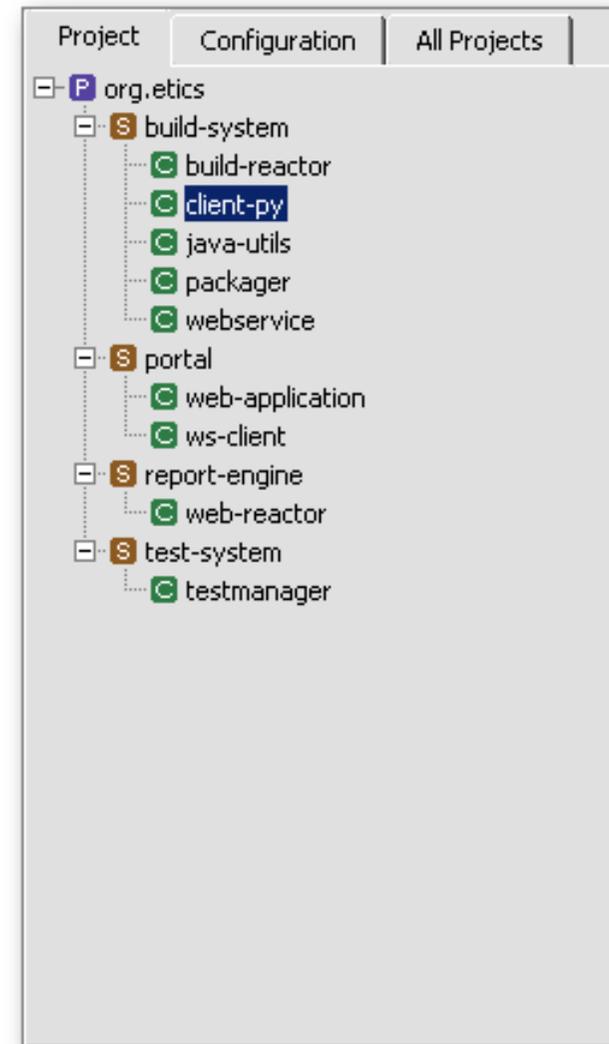
Browse Panel

View/Edit Panel

Configuration List

## The Browse Panel Project Explorer

- Three viewers in the Browse Panel:
  1. Project Explorer: enables project structure browsing; i.e. navigate through the current project, its subsystems and components
  2. Configuration Explorer
  3. Etics Explorer



# The Browse Panel Configuration Explorer

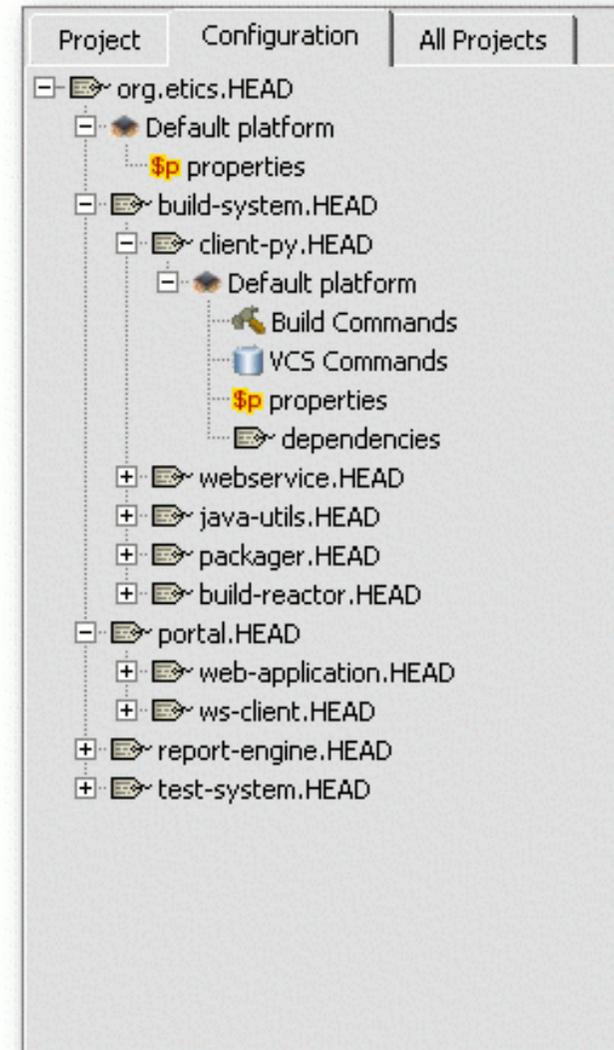
- Three viewers in the Browse Panel:

1. Project Explorer

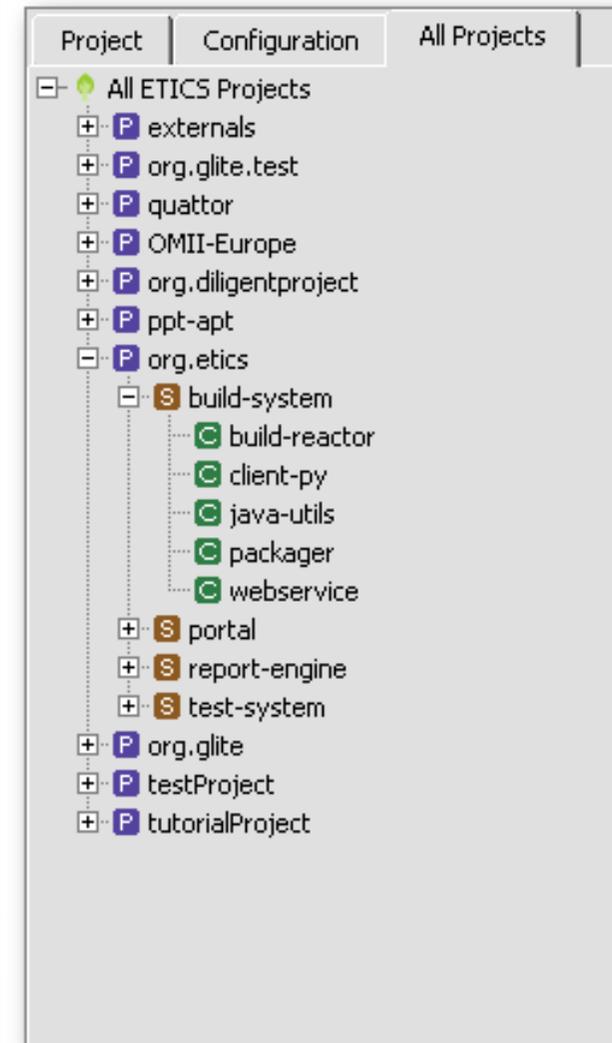
2. Configuration Explorer: enables the navigation within a the structure of a configuration (subconfigurations)  
Platform-dependant items are also shown:

- ▶ Subconfigurations
- ▶ Build | Vcs | Test Commands
- ▶ Properties
- ▶ Environment
- ▶ Dependencies

3. Etics Explorer

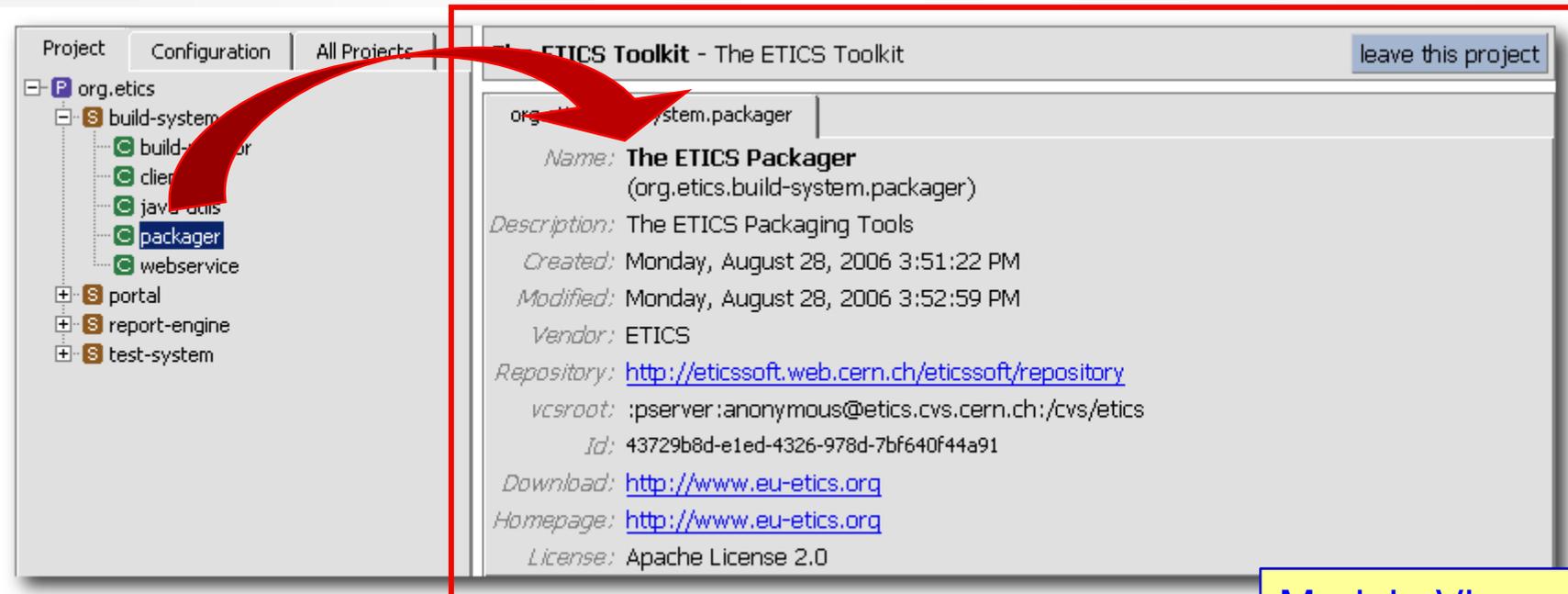


- Three viewers in the Browse Panel:
  1. Project Explorer
  2. Configuration Explorer
  3. ETICS Explorer: allows the navigation among all the projects hosted by the ETICS platform. Specifically useful for dependency setting



## The View/Edit Panel

- Enables the inspection and editing of every object of the Project datamodel (modules, confs, commands, properties, environment, subconfs, deps)
- The content of the Browse/Edit Panel changes according to selection in the browse panel



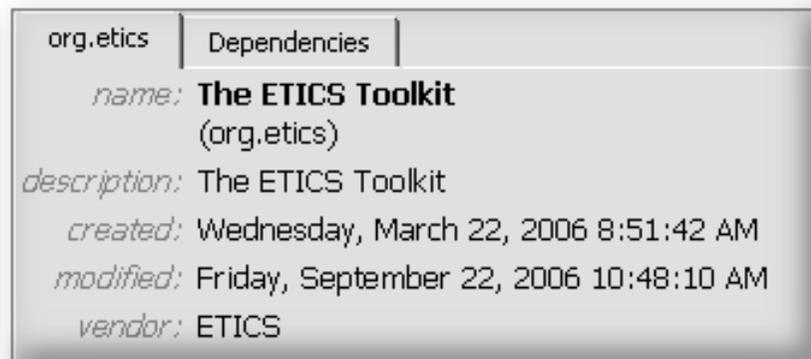
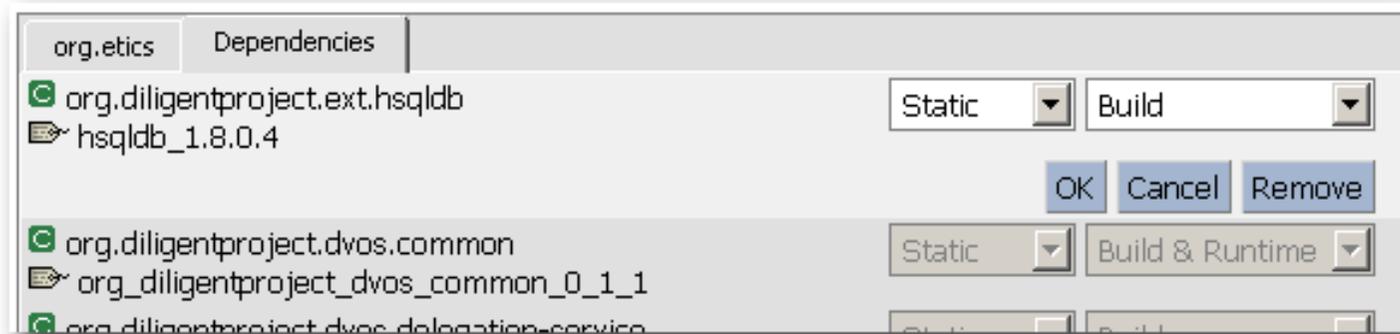
The screenshot shows the Diligent software interface. On the left, a project tree is visible under 'org.etics', with 'packager' selected. A red arrow points from this selection to the 'Module Viewer' panel on the right. The 'Module Viewer' panel displays the following information:

- Name:** The ETICS Packager (org.etics.build-system.packager)
- Description:** The ETICS Packaging Tools
- Created:** Monday, August 28, 2006 3:51:22 PM
- Modified:** Monday, August 28, 2006 3:52:59 PM
- Vendor:** ETICS
- Repository:** <http://eticssoft.web.cern.ch/eticssoft/repository>  
vcsroot: :pserver:anonymous@etics.cvs.cern.ch:/cvs/etics  
Id: 43729b8d-e1ed-4326-978d-7bf640f44a91
- Download:** <http://www.eu-etics.org>
- Homepage:** <http://www.eu-etics.org>
- License:** Apache License 2.0

Module Viewer

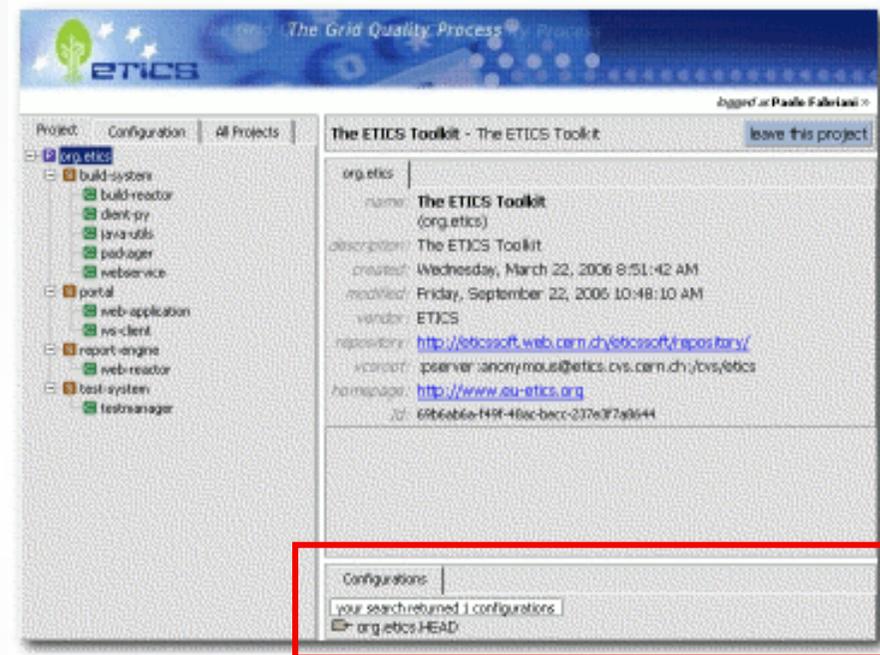
## The View/Edit Panel

- Organized around a tabbed panel allowing separate viewer while editing



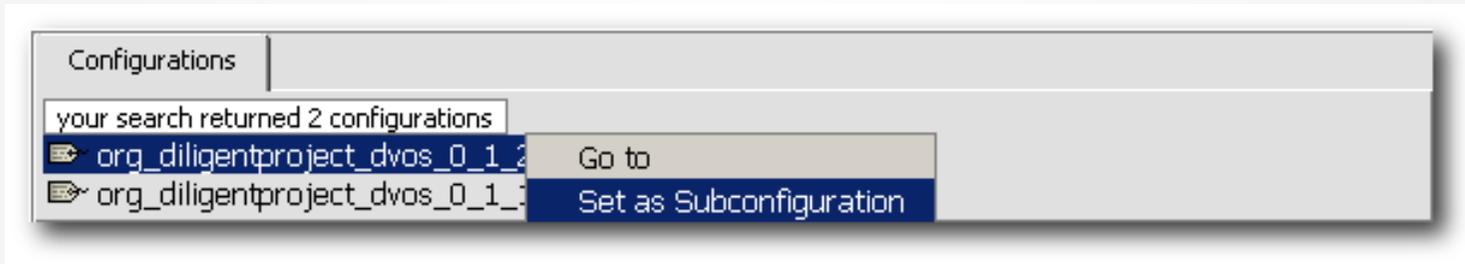
## The Configuration List Panel

- Lists configurations
- Populated from different sources according to the operation being performed:
  - ◆ Project browsing: shows module configurations. You can go to them through a context-menu



## The Configuration List Panel

- ◆ Subconfiguration editing: shows available configurations for sub-modules. You can set them as subconfiguration through a context-menu

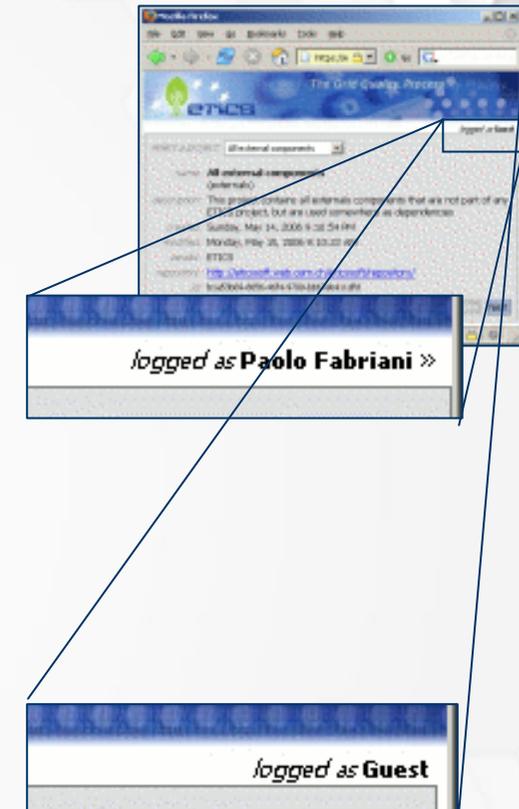


- ◆ Dependency editing: shows configurations for the module to put a dependency on. You can set them as (static or dynamic) dependency through a context-menu

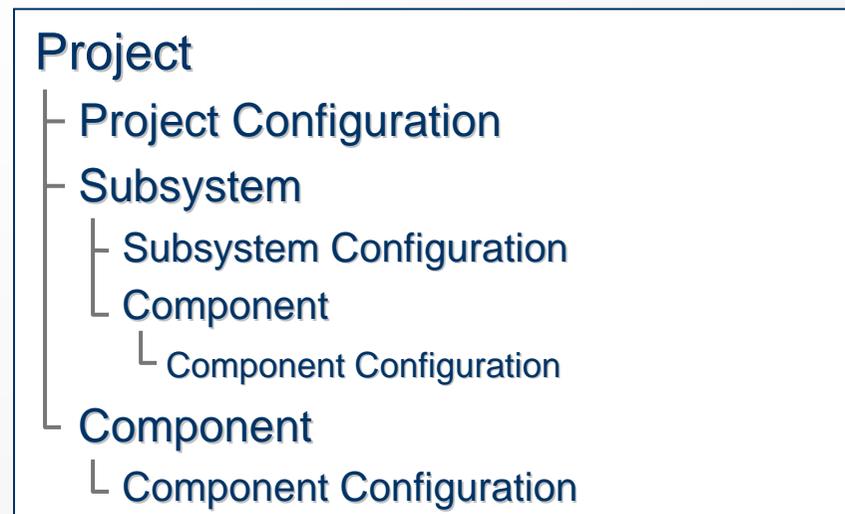


## Security Authentication

- AuthN is based on X.509 certificates
  - ◆ You'll have the rights granted to you by the Administrator of each project
- However, access without certificate is still allowed
  - ◆ You'll be mapped to a 'Guest' user, with minimal privileges (most likely just read access) in most areas

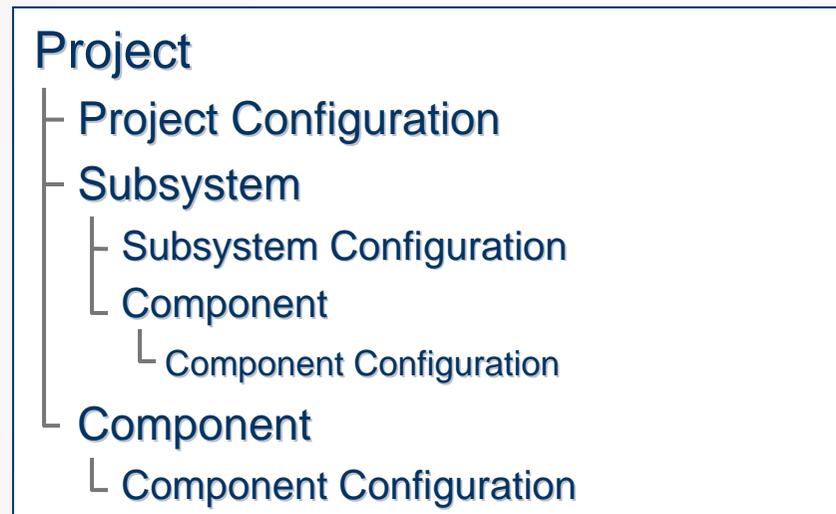


- ETICS adopts a role-based approach to AuthZ
- ETICS AuthZ Model
  - ◆ Roles are assigned to users within a *context*
  - ◆ A *context* is either a module (projects, subsystems, components) or a configuration
  - ◆ *Contexts* are hierarchal according to the project/configuration structure



## Security Authorization (cont'd)

- ◆ Roles assigned to users in higher context are inherited in lower ones



- ◆ Example: if you have a role at **Subsystem** level, you also have that role on **Subsystem Configurations**, **Components** and **Component Configurations**

- Project Home page:
  - ◆ <http://www.eu-etics.org>
- ETICS Web Application:
  - ◆ <https://grids17.eng.it:8443/etics>
- Bug and requirements tracking (Savannah)
  - ◆ <http://savannah.cern.ch/projects/etics/>
- Twiki
  - ◆ <https://uimon.cern.ch/twiki/bin/view/ETICS/WebHome>
- Mailing-lists
  - ◆ [etics-discuss@cern.ch](mailto:etics-discuss@cern.ch)
  - ◆ [etics-bugs@cern.ch](mailto:etics-bugs@cern.ch)