

# Project & Test Engineering System

The fully integrated solution for Systems Engineering and Project Lifecycle Management



## WHAT IS PTESY

PTESY is a suite of tools for the management of the project life cycle, based on relational database.

PTESY enables users to manage the entire project life cycle, iteratively, via a relational database. PTESY is the world's only such tool-set which is fully integrated, and allows management, via a single common database, of the following Key Process Areas (KPA's):

- 1) capture and management of requirements (import documents from MSWord or MSEXcel),
- 2) management of the project risks,
- 3) management of configuration items,
- 4) supports architectural design,
- 5) management of the test procedures,
- 6) execution of the tests,
- 7) generation of the test reports,
- 8) management of the detected problems,
- 9) management of the interfaces and I/O signals,
- 10) generation of the project documentation, in MSWord or MSEXcel,
- 11) traceability of all the methodological objects (requirement, tests cases, problems and solutions, etc...), along the whole project life cycle.

Thanks to the power of the relational database, the application allows to analyze and to manage the changes in easy and quick way, keeping the project documentation and the traceability matrices up-to-date, with great efficiency and time saving, until the end of the project.

## STRENGTH POINTS

- PTESY enables Systems Engineering, according to the Iterative Project Life Cycle.
- PTESY automatically produces the Quality Documents, already formatted in MSWord.
- PTESY is a full Client Server System, to be used in office, in laboratory, and also, offline, in field.
- PTESY gives Quality in the hands of Designers and Project Managers.

PTESY offers tools for rapid and robust tracking of design activities, to quickly produce and retrieve quality information. A complete suite of tools to deal the project according to quality standard **and** improve the efficiency of the design activities. An integrated system, fully open both the Microsoft applications world and Open Source ones, including modern object oriented real-time SCADA platforms.

PTESY automatically produces the following documents, in MSOffice formats:

- + Requirements - Requirements Documents, Children vs. Fathers Requirements Traceability Matrixes, Configuration Items.
- + Risks - Risks Report, Risks Traceability Matrixes, Risk Events, Vulnerabilities, Mitigation Actions.
- + Test Procedures - complete Test Procedures documents, Test Cases vs. covered Requirements Traceability Matrixes, uncovered Requirements, Test Reports.
- + Problems - Events and Notes Report; Problems Report; Problems traceability vs. Test cases and violated Requirements.
- + Documents - Documents coding, Documentation Tree, Table of the Applicable Documents, Table of the Referred Documents.
- + I/O Signals - I/O Lists and Terminal Lists.

PTESY manages the access & roles of the users, warranting the data security.

## BENEFITS

- Advancement up the CMM scale,
- Time saving,
- Project Costs reduction,
- Quality improvement,
- Better Client-Supplier relationship.

PTESY helps software producers to pass from level 2 to level 3 of the Capability Maturity Mode, and all technological firms to pass from the old "waterfall" models to the modern iterative models.

PTESY allows to save huge amounts of time in: Requirements engineering; Test engineering and test execution; Valuation Meetings of ongoing test campaigns and related Reports; Problems Tracing and Solving, Error Corrections vs. Change Proposals; Product Quality measurement; System Maintenance and Problems Solving, during the normal systems' operative life.

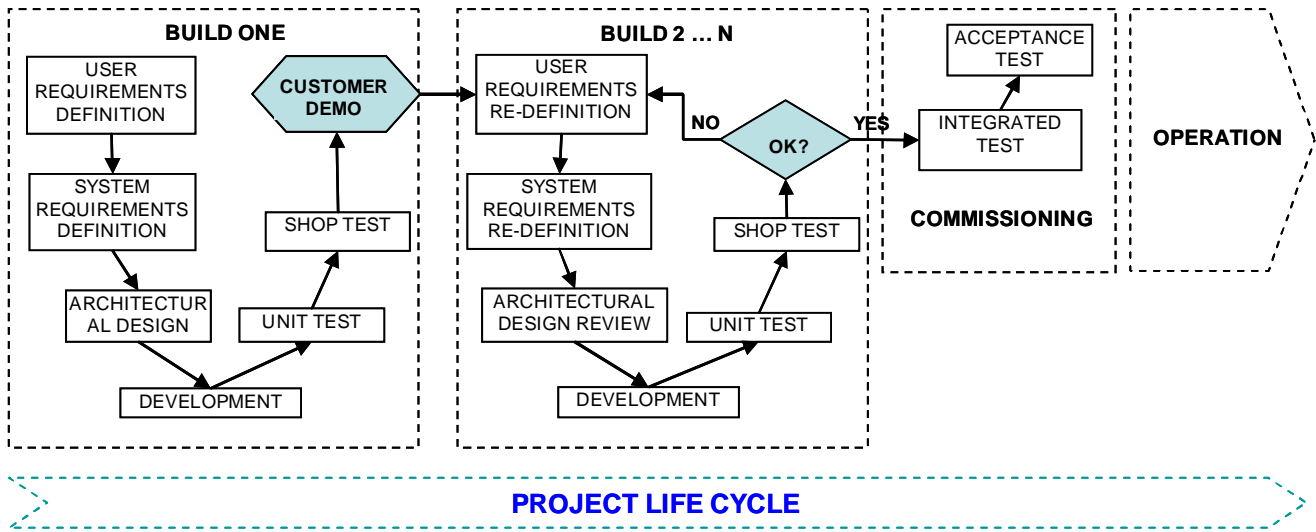
PTESY was fully designed and developed in the "fire" of complex aerospace projects, where the respect of the schedule and the respect of the quality methodologies had the same relevance: PTESY showed that it is possible to harmonize *project* management and *process* management in an harmonic, and conflict free, manner. PTESY was conceived in the context of automation software projects, but it is usable in any technologic context: all the productive industry, and all the technological research.

PTESY is designed and developed to support the project manager and the systemis analyst, particularly for tedious and repetitive tasks inherent in the quality methodology and robust project activities control.

Standard quality (paper) methodologies were born in the public context, are very expensive and the private enterprises can hardly afford them. PTESY makes possible to start using methodologies, even when the budgets are reduced!

**PTESY GIVES QUALITY IN THE HANDS OF DESIGNERS!**

## The Iterative Project Life Cycle



### METHODOLOGY

- The Iterative Project Life Cycle explicitly recurses from the design prototyping phase, up to the full satisfaction of the Customer.
- Our own experience, and the most advanced methodologies (e.g., CMMi, SCRUM, Agile, RUP™), show that implementing iterative models is possible only using advanced software tools..

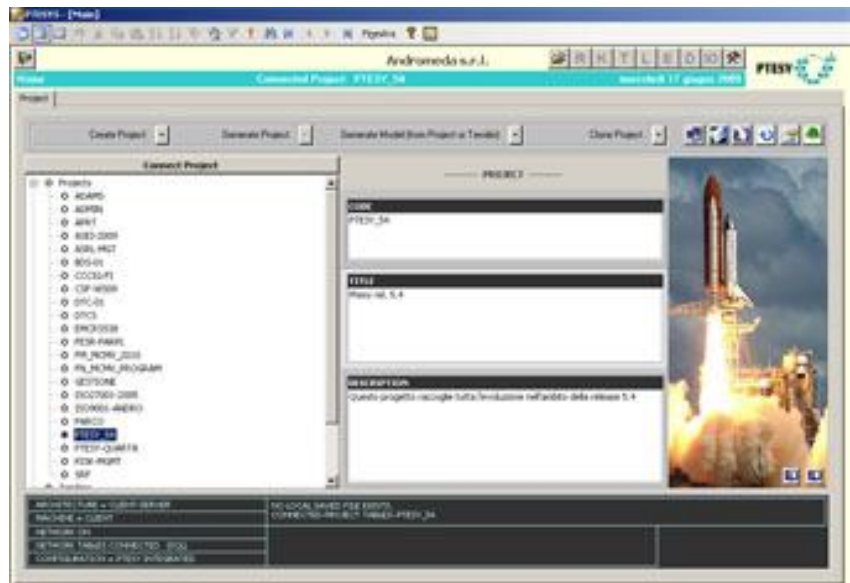
The classical Project Life Cycle, though theoretically correct, is seldom fully applied: in typical projects, the requirements and system design documentation quickly become cumbersome to follow the project at the required speed.

Needs to change the user requirements occur after each project milestone (design review, shop test in simulation, integrated tests, acceptance tests). The proper change management required a review of documentation each time. But the delivery/invoicing milestones often cause delay in updating the documentation. The result is that documentation often remains backward, wrt the developed project: it cost plenty, but is useless for for product maintenance. Many corporations never really passed from waterfall to iterative life cycle.

PTESY allows the full application of the Project Life Cycle model, with iterativity required by customers, thus fully working according to the Iterative Project Life Cycle, recommended by modern methodologies, including Lean and Six Sigma.

### FUNCTIONS

- Creation, editing and traceability of methodological objects (requirements, risks, test, problems, documents, events, I/O)
- Tree structure with various views
- Import from external files
- Documents Management
- Change management



### CONTACTS

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