

# (Agile Management Tool (AMT)) - Agile Management Tool (AMT)

## Contact information

### Address: Main researchers:

- PEDRO PABLO ALARCON CAVERO

**pedropablo.alarcon@upm.es**

### Other UPM researchers:

- Gema Rueda Montenegro, Arturo Gómez del Castillo

## Technological Offers type

Software

## Research and innovation areas

- Tecnologías digitales, Inteligencia Artificial, ciberseguridad, 5G, robótica

## Software description

1. Computer program description. The software is framed within a reality where the sole constant is change. The difficulty in adapting to this context of conventional focusses has given way to agile methodologies which, in spite of their fledgling nature, have been widely accepted on the market. Agile methodologies create value for the client, from the early stages of the project, giving it a competitive advantage, enabling changing requirements to be faced and constituting an injection of pragmatism to software engineering.

Agile Management Tool, hereafter called AMT, is a tool giving support to project management with agile methodologies. AMT supports the following functions, amongst others:

User History Management:

General information about User History

Attached files

Task breakdown

Introduction of acceptance criteria

Task Management

Assignment of manager

Task estimation

Status transition support

Automatic accounting for time worked

Iteration Management

Iteration planning

Backlog iteration creation

Project management

Backlog Product creation

Personnel diary Management

Shared use of files

Communication via instant messaging

System language set up

The AMT architecture is spread out over three layers and two levels. The AMTServer machine contains the data layer. The AMTClient machines contain the business and user layers. This solution means that several clients can work on the same project simultaneously regardless of where they are physically.

Communication between the AMT Client and AMT Server is done using RMI (Remote Method Invocation). RMI is a mechanism offered in

Java to invoke methods remotely.

The database is accessed using JDBC (Java Data Base Connectivity).

## 2. Programming language.

The AMT tool was implemented using Java programming language and, specifically, the JDK compiler, version 1.6.4., was used.

## 3. Operating environment.

The system consists of two clearly differentiated elements. On the one hand, there is AMTClient, which should be run on Windows XP or Windows Vista operating systems, and on the other there is AMT Server, which can be run on a UNIX-type, Windows or Solaris system.

The database manager used is MySQL v5.0.

## Reference

M-001184/2009