

## Plugin Group Milestone 5 Plan

### Executive Summary

The Plugin Group was formed after the first sprint 5 meeting. This group consists of all MSE students as it was expected that the plugin system is a major tasks and all available resources are needed. The sub-tasks associated with creating the plugin system are:

- API library composition
- Earth daemon revamping
- Plugin deployment interface

The first 2 tasks are expected to be delivered by the end of the sprint. It will be a plus if the last task can be delivered. The tasks are not decomposed further as the group prefers to divide themselves into task-forces, and incrementally complete the tasks by following the XP strategy. Also, frequent meetings are held to showcase each task-force's progress.

### Resources and Timeline

- Resources:
  - Ken (Group Representative) [15 hours a week]
  - Jian Huang (Advisor) [30 hours a week]
  - Fillmoni [30 hours a week]
  - Mohammad [30 hours a week]
  - Ida Yang [30 hours a week]
  - Keane Zhou [30 hours a week]
  - Xiao Dong [30 hours a week]
  - Total hours a week: 195 hours
- Timeline:
  - Start Day: 18<sup>th</sup> August, 2008
  - End Day: 5<sup>th</sup> September, 2008
  - Duration: 15 days
- Accumulated hours: 585 hours

### Tasks and Task-forces

#### 1. API library composition

- **Task-force:** Jian Huang, Xiao Dong, Keane, Ken and Ida
- **Git repo:** `pamalite/earth`
- **Description:** This task will decompose the File Monitor into a more basic level of classes and methods, and have them classified to different publicly available classes to be used by plugins. The following are the activities to be conducted:
  - (a) Identify utility methods and functions.
  - (b) Classify the methods and functions into appropriate Ruby classes.

(c) Standardize the storage location of the APIs (in database or location disk?).

The goal is to decompose them to enable the plugin prototypes for now.

## 2. Earth daemon revamping

- **Task-force:** Ken, Mohammad, Jian Huang and Fillmoni
- **Git repo:** pamalite/earth
- **Description:** This task is an effort to redevelop the earthd daemon to support the new plugins written using the APIs. The following are the responsibilities of the new daemon:
  - (a) Dynamically loads plugins directly from the database.
  - (b) Loads plugins with higher priority first.
  - (c) Runs the plugins.
  - (d) Blocks malicious plugins and alert administrator.

The goal of this task is to have a revamped earthd running to the prototype plugins.

## 3. Plugin deployment interface

- **Task-force:** *Unassigned*
- **Git repo:** pamalite/earth
- **Description:** This task is to redevelop the plugin deployment scripts provided by RSP for the new plugins made. The following are the responsibilities of the new deployment scripts:
  - (a) Verify and sign off plugin codes.
  - (b) Install or update plugins into or in the database, respectively.
  - (c) Provides a one-stop Earth plugin management centre.

This task is currently unassigned as it was agreed the completion of this task is good to have for this sprint. However, it will be addressed once the API framework and earthd are beta/production worthy.

# Deliverables

- A demonstration of one or two plugins created using the API.
- Possibly of a live demonstration of creating a plugin using the API.
- Individual and subgroup reports.
- API specifications and developer's guides to Earth plugin creation.