ChiliProject - Feature # 330: Integrated cost tracking module

Status:	Open	**Priority:**	Normal
Author:	Neil McFarlane	**Category:**	Plugin Request
Created:	2011-04-12	**Assignee:**	
Updated:	2011-05-05	**Due date:**	

Remote issue URL:	
Affected version:	
Description:	h1. Overview

Being that ChiliProject is a project management web application, I believe that it could benefit significantly from including cost tracking. Along with scope and time, tracking project costs is often considered to be one of the "triple constraints" on a project (see "project management triangle":http://en.wikipedia.org/wiki/Project_management_triangle). I would argue for inclusion in the main trunk for the following reasons:

Tracking costs is so central to project management, it is likely to be utilized by enough individuals to warrant being provided out-of-the-box
Having a cost tracking as part of the core protects against the deprecation which all plug-ins are vulnerable to
Having good foundational cost tracking gives not only cost-related plug-in developers a strong base to build from, but something consistent for plug-ins that are not directly related to cost to use (for example, plug-ins which export to Project 2007 format etc.)

h1. Design proposal

Generally, cost tracking would be heavily based off of the existing "time tracking" module.

The aim of this proposal is not to provide an all-encompassing solution for costs within a project, but to cover the 80-20 rule and provide a strong common base for other plug-ins to enhance if needed.

h2. New fields / tabs

* A new enumeration set, "Expenditures (cost tracking)", is added
* A new project module "Cost tracking" is added; if the user chooses to enable cost tracking for their project then:
** The project settings gets a new tab: "Expenditures (cost tracking)" which pulls its applicable values from the new enumeration set
** The project settings members tab gets a new field for each user: "hourly rate"
** Each issue on the project gets two new fields: "estimated cost" and "spent cost"

h2. How estimated cost is determined

When an issue is being updated, there will be two relevant fields shown to the editor, a simple numerical text field for adding an estimated cost, and a check-box which asks if they want ChiliProject to add a calculated estimate based on the assignee's rate and the estimated time.

This allows the user to specify either a hard estimate, an estimate based of just the calculated work (by leaving the text field either 0 or blank and the check-box checked), or a combination of the two (for example, an estimate for an issue which includes labor and materials).

h2. How spent cost is determined

Spent cost has two components which it summarizes: work performed (requires time tracking) and logged costs.

If time tracking is enabled, whenever a new time spent entry is logged, the assignee's current assigned rate will be also be recorded and shown as the last column. The cost of work performed is then a simple matter of summarizing the hours * rate for each logged entry.

Logged costs are tracked almost identically to logged time. The only differences are that the "Hours" field is removed and the "Activity" enumeration is replaced with the "Expenditure" enumeration.

If values for both work performed and logged costs are present, spent cost will be a simple addition of the two.

Like spent time, spent cost propagates upwards through parent issues and a summary is displayed on the project overview page.

History

2011-04-12 02:11 am - Neil McFarlane

I should note that this proposal was originally made at Redmine (http://www.redmine.org/issues/7382), but I figured I'd try here as well.

2011-04-13 08:43 pm - Eric Davis

- Category changed from Issue tracking to Plugin Request

Cost tracking is a huge feature and everyone I've talked to about it has their own ways to doing it. I think this is best handled by a plugin, that way each site can pick which way(s) work best for them. I have a few plugins that have some of these features already:

* https://github.com/edavis10/redmine_rate
* https://github.com/edavis10/redmine_billing
* https://github.com/edavis10/redmine_contracts
* https://github.com/edavis10/redmine-budget-plugin

2011-05-05 02:52 pm - Neil McFarlane

Hi Eric.

While I agree that cost has multiple means of implementation, I believe that there are certain things which could be considered "common" to _any_ scheme.

It's my opinion that not having a base model to work from leads to a great deal of reinventing the wheel.