How To Integrate TimeVu with Microsoft Project (Part 1)

Overview

TimeVu integrates well with Microsoft Project, by importing and exporting information easily and automatically from MS Project 98 and 2000 files. TimeVu allows easy recording of actual worktime.

TimeVu Imports: Tasks, Estimated Work, Start and Finish Times, Resources*

TimeVu Exports: Actual hours worked against tasks as % Complete

Benefits: Let users and management interact with project independently, keeping project progress visible, and up to date. Improve estimation through analysis of actuals vs estimates. Understand competition for development team time.

How MS Project is often used:

1. Project manager develops project plan and time estimates in conjunction with team.
2. Project Plan is prepared in MS Project.
3. Project manager checks progress with team, estimates % work done, and updates project file.
4. Project manager marks off tasks and reports to management.
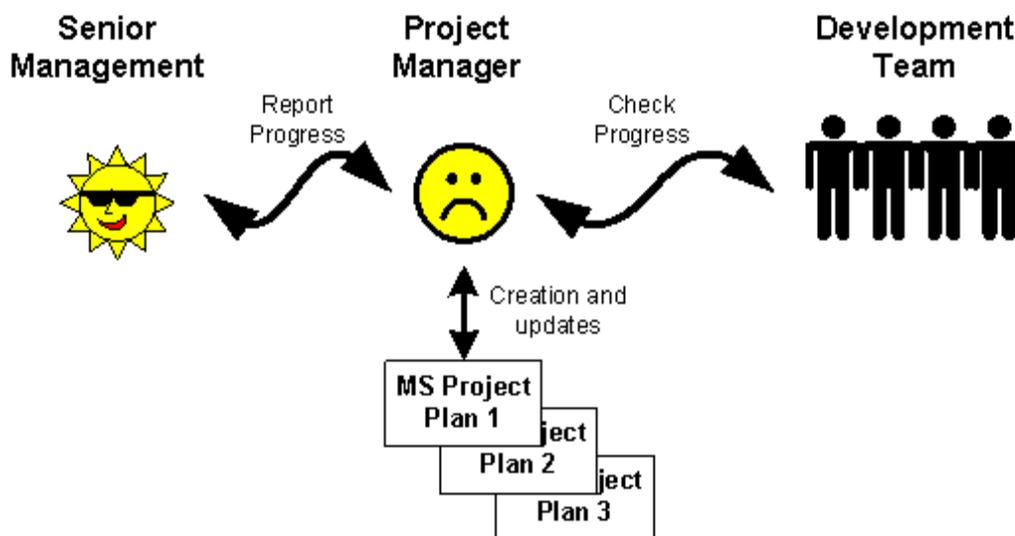

What is working well here?

- The team plan their work and check progress.
- The project manager reports progress to management or other interested parties.

What is not working well here?

- The estimates of times are based on "gut" feel, and it is not obvious how realistic these are after the event. There is no recording or learning component for estimation.
- Its not possible for the project manager to get updated project progress except by querying staff.
- Its time consuming for the project manager to report to other groups on project progress.

- It will be very difficult to summarise how the project went in a post project report other than ahead or behind schedule
- It will be very difficult to quantify the effect of other (unallocated) project demands on the team during the duration of the project
- It can be quite time consuming to bring together multiple project files for full management reporting of progress and effort expended.

How TimeVu enhances MS Project:
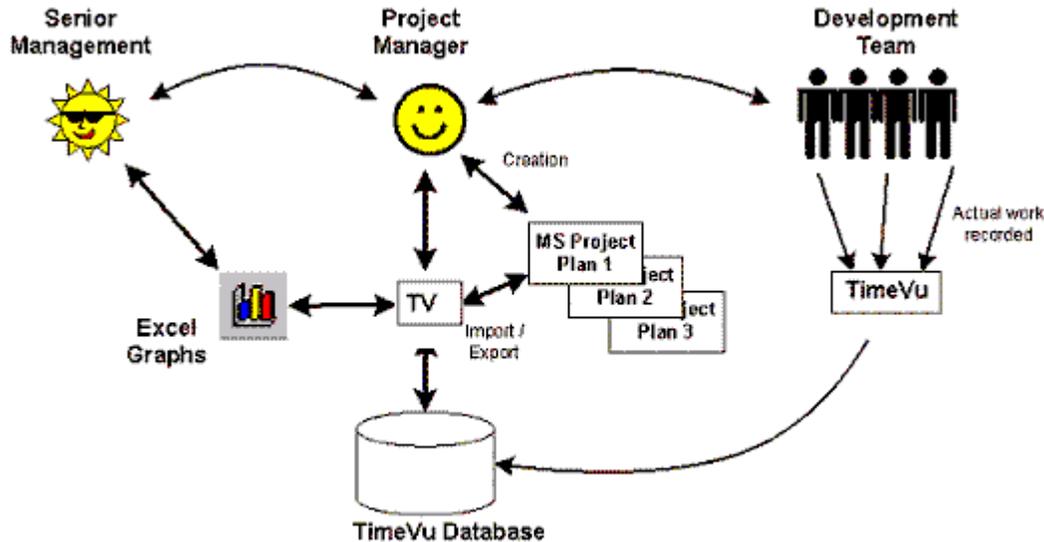
1. Project manager develops project plan and time estimates in conjunction with team.
   Benefit: The team can also look at previous projects and see actual time taken and actuals vs estimates.
2. Project Plan is prepared in MS Project
3. Project Is imported into TimeVu through TimeVu Project Wizard.
4. Chosen team members can then allocate time against the project and its tasks in TimeVu
   Team members also record time spent on other competing projects, and other unallocated work
   Benefit: Work is recorded as it occurs. Interruptions are noted. Comments can be recorded
5. MS Project File is regularly updated with actual % work complete
   Benefit: Automated process or manually done to get "instant" picture.
6. At any stage:
   a) project progress is visible to all in MS Project or TimeVu
   b) actuals vs estimates graphing, or timesheet analysis can be generated from TimeVu
   c) project manager may add tasks - these are imported easily into TimeVu and are then available for team members to book time against
   d) effect of other project or unallocated demands can be shown
   Benefit: Data is accurate, up to date, and easy to get to in a number of different forms
7. Cross organisation reporting is easily generated, split by project or product groupings
   Benefit: Senior management reporting is simple, project visibility is assured

By feeding "actual" time taken (recorded through TimeVu) back into MS Project, the project plan shows progress automatically. There is also the opportunity to do a post project review of actuals vs estimates with the team and discuss where overruns occurred.
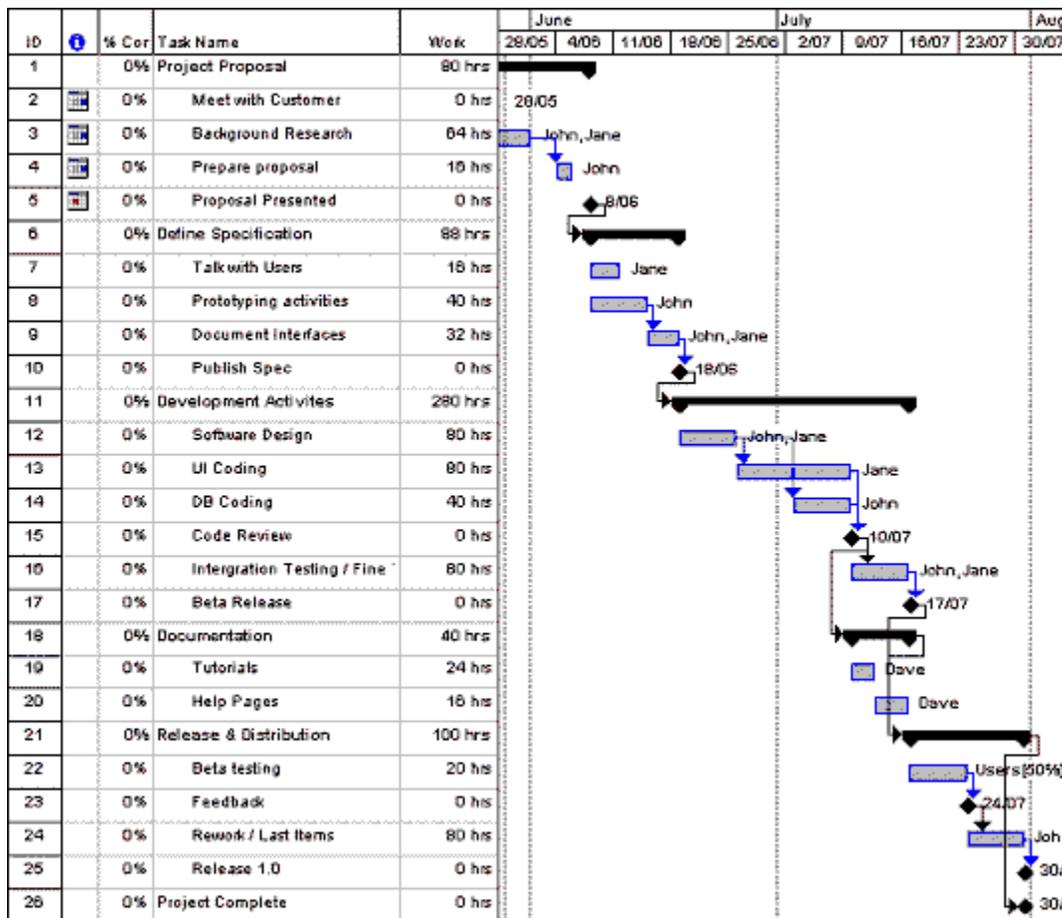
A Simple Worked Example

Its always easier to explain by doing, so here is a worked example to step through the processes:

- Creating a project in MS Project
- Import to TimeVu. Book time in TimeVu on a daily basis
- Export actuals back to MS Project
- Management Reporting using Excel / Project / Access Reports

An in-house development group scenario:

John (project lead)and Jane are intranet application developers for ABC Corporation. They are part of the IT group and develop database backed web applications for other employees of ABC. John is the project lead. For this project they must do some research, and present a proposal for the project development to the management meeting. If the project gets the go ahead, they will go through their standard project life cycle that they have found works well within their company (beta testers first, and then general release later).

Project Plan v1.0

ID	①	% Cor	Task Name	Work
1		0%	Project Proposal	80 hrs
2		0%	Meet with Customer	0 hrs
3		0%	Background Research	64 hrs
4		0%	Prepare proposal	16 hrs
5		0%	Proposal Presented	0 hrs
6		0%	Define Specification	88 hrs
7		0%	Talk with Users	16 hrs
8		0%	Prototyping activities	40 hrs
9		0%	Document Interfaces	32 hrs
10		0%	Publish Spec	0 hrs
11		0%	Development Activites	280 hrs
12		0%	Software Design	80 hrs
13		0%	UI Coding	80 hrs
14		0%	DB Coding	40 hrs
15		0%	Code Review	0 hrs
16		0%	Intergration Testing / Fine	80 hrs
17		0%	Beta Release	0 hrs
18		0%	Documentation	40 hrs
19		0%	Tutorials	24 hrs
20		0%	Help Pages	16 hrs
21		0%	Release & Distribution	100 hrs
22		0%	Beta testing	20 hrs
23		0%	Feedback	0 hrs
24		0%	Rework / Last Items	80 hrs
25		0%	Release 1.0	0 hrs
26		0%	Project Complete	0 hrs

John quickly sketches out a project plan in Microsoft Project, with the following thoughts:

- Review how previous projects turned out. He found that:
  a) Dave (documentation) likes to have the code finished before he starts, but works straight through
  b) Users can never focus more than half their time on beta testing, because of their other commitments
- Don't split the work too finely (because these are broad but realistic estimates)
- Focus on milestones from a planning and reporting point of view (target dates)
- Focus on work hours rather than duration for effort driven tasks (Design / Coding / Testing)

He ends up with 26 task items:

- 5 summary tasks
- 13 tasks with work hours (smallest effort 16 hours)
- 8 milestones

Resource View of "Intranet Project"

The assignment totals can be seen in the Resource View

| ID | | Resource Name | Work | Details | June | | | | | July | | | | | Augu |
					28/05	4/06	11/06	18/06	25/06	2/07	9/07	16/07	23/07	30/07
		Unassigned	0 hrs	Work										
1		John	244 hrs	Work	40h	16h	40h	40h	8h	32h	40h	8h	32h	8h
2		Jane	244 hrs	Work	32h	8h	16h	40h	40h	40h	40h	8h	32h	8h
3		Dave	40 hrs	Work							32h	6h		
4		Users	20 hrs	Work								16h	4h	

Importing the Project into TimeVu

John adds a project from the project right-hand menu
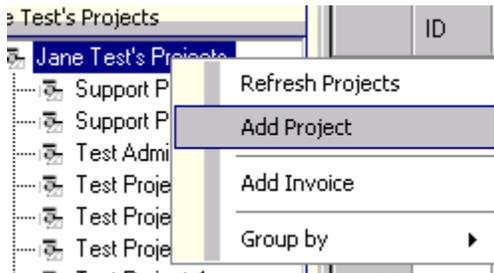
.. and fills in the simple choices :
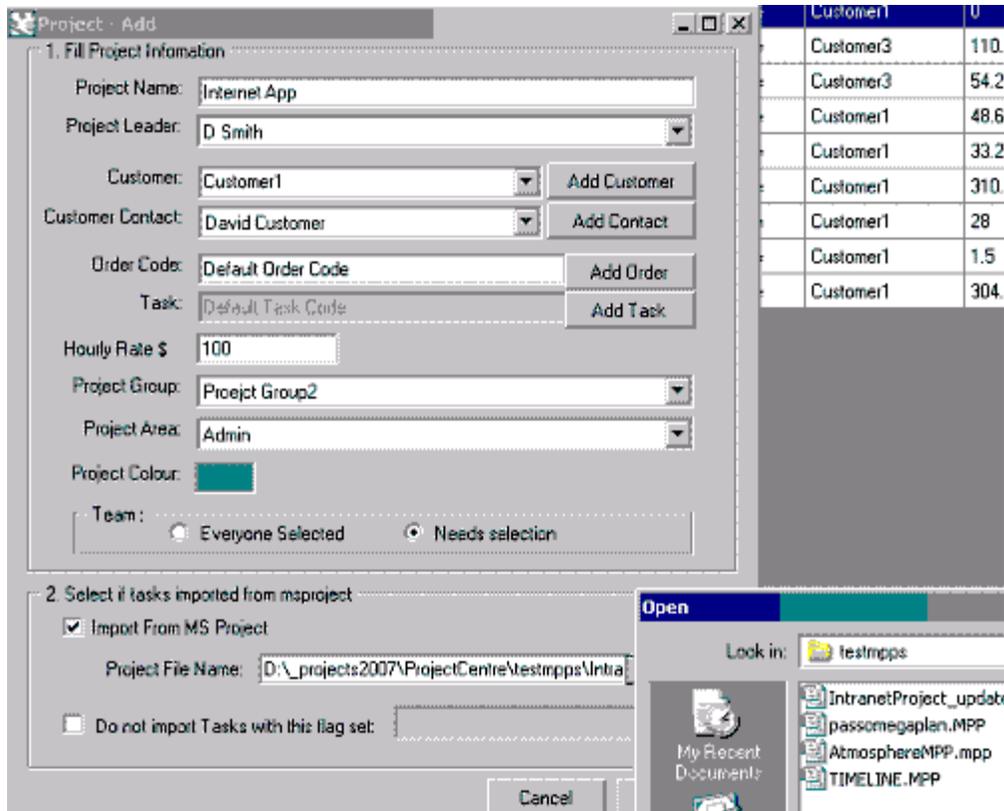
[You can press the builder button to bring up a file selection dialog, so you can select your MS Project file]
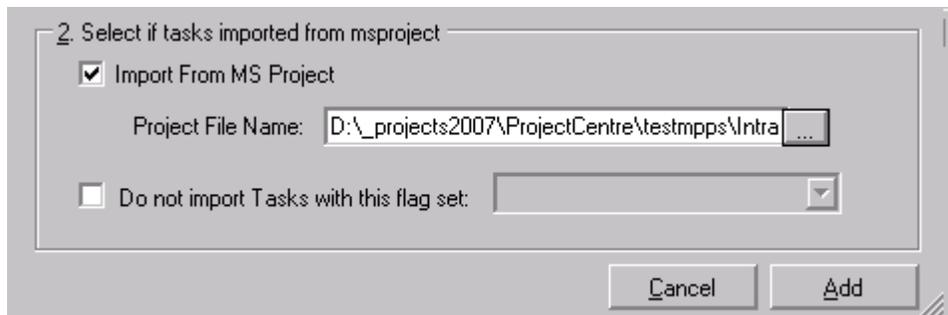
Editing Project Information in TimeVu

When the Create Project button is pressed, the task and project information is imported into TimeVu. The project summary opens on the project details tab, so that John can view the imported data.

Reviewing Task Information in TimeVu

This is the view from the Tasks Tab:

| Overview | Summary | Team | Orders | Tasks | Comments | Expenses | Change Requests | TimeSheets | Locations | Searc |

Id...	S..	Task	Order	For	Def...	Est Hours	Act Hou...	Percent
16...	1...	Meet with Customer	-	All		0	0.00	00.00%
16...	1...	Background Research	-	All		48	0.00	00.00%
16...	1...	Prepare proposal and print	-	All		16	0.00	00.00%
16...	2...	Talk with Users	-	All		24	0.00	00.00%
16...	2...	Prototyping activities	-	All		40	0.00	00.00%
16...	2...	Document Interfaces	-	All		32	0.00	00.00%
16...	3...	Software Design	-	All		80	0.00	00.00%
16...	3...	UI Coding	-	All		80	0.00	00.00%
16...	3...	DB Coding	-	All		56	0.00	00.00%
16...	3...	Intergration Testing / Fine ...	-	All		80	0.00	00.00%
16...	4...	Tutorials	-	All		24	0.00	00.00%
16...	4...	Help Pages	-	All		16	0.00	00.00%
16...	5...	Beta testing	-	All		20	0.00	00.00%
16...	5...	Rework / Last Items	-	All		80	0.00	00.00%

Tasks for Internet App

Name	Act Hours	Est Hours	State	Comment
Meet with Customer	0	0	Active	
Background Research	0	48	Active	
Prepare proposal and print	0	16	Active	
Talk with Users	0	24	Active	

As you can see the 14 work tasks have been imported with their name, effort, and timing information. It only remains to edit the default work type for each task to a meaningful entry, which will aid in cross project analysis (see cross project analysis topic).

Reviewing Team Member Information in TimeVu

Of the three resources, two are identified automatically as being in the development group. The placeholder resource "users" isn't. These people operate in a different group and do not use TimeVu, so their progress must be monitored in the traditional way.

Whenever the MS project file is updated, the information can be reimported back into TimeVu and present the new allocations immediately.

Broad brush view of Resource loadings in the future

An Excel report provides a view of resource loading both past (actuals) and future (estimates). So in this example we can say that John and Jane are going to be 60% loaded due to the Intranet App project.

Obviously other project/maintenance/admin loadings would generally be projected as well, resulting in an average 100%. [The red dotted line represents this week (boundary between actuals and estimates]

Staff Resource Plan 29-May-2001

John's Chart for 2001

| Key: | IntranetApp |

|		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
		1 2 3 4 5 6 7 8 9	10 11 12 13 14 15 16 17 18 19	20 21 22 23 24 25 26 27 28 29	30 31 32 33 34 35 36

John	10
	20
	30
	40
	50
	60
	70
	80
	90
	100

Jane's Chart for 2001

| Key: | Admin | IntranetApp |

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
		1 2 3 4 5 6 7 8 9	10 11 12 13 14 15 16 17 18 19	20 21 22 23 24 25 26 27 28 29	30 31 32 33 34 35 36

Jane	10
	20
	30
	40
	50
	60
	70
	80
	90
	100

Dave's Chart for 2001

| Key: | IntranetApp |

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se
		1 2 3 4 5 6 7 8 9	10 11 12 13 14 15 16 17 18 19	20 21 22 23 24 25 26 27 28 29	30 31 32 33 34 35 36

Dave	10
	20
	30
	40
	50
	60
	70
	80
	90
	100

How does this look in TimeVu?

When Jane opens TimeVu next time or refreshes the projects list (View | Refresh), she will find the IntranetApp project available for booking time. Here is her timesheet for a typical day working on the Intranet project with interruptions for admin type activities (8:30-9:30,13:30-14:30).

John and Dave also see the new project appear in their project list when they use TimeVu. Nobody else in the IT group does, so they are not able to book time to the project by mistake. You can see Jane's options when selecting the chosen task for a timesheet entry are the MS Project task names:
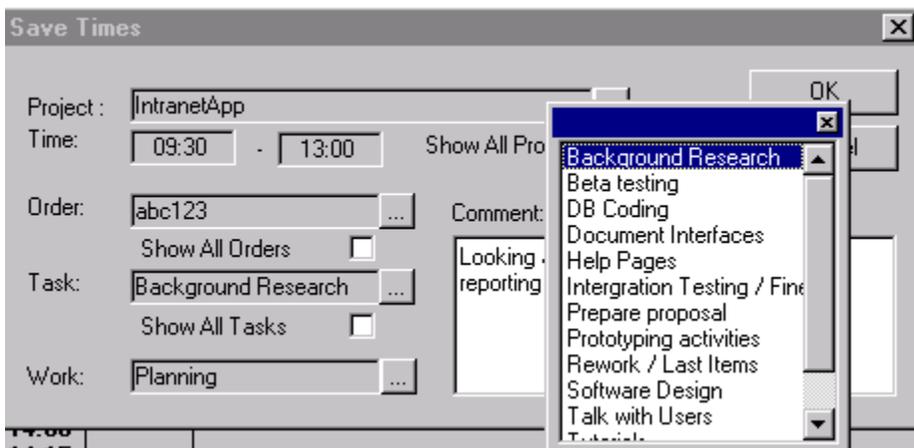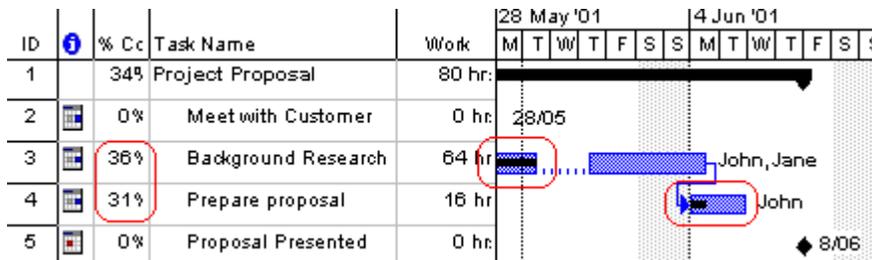

Reporting Options

After a couple of days of booking time against the new project, what sort of view can management see?

TimeVu ouputs a variety of management reports into Excel, such as this:
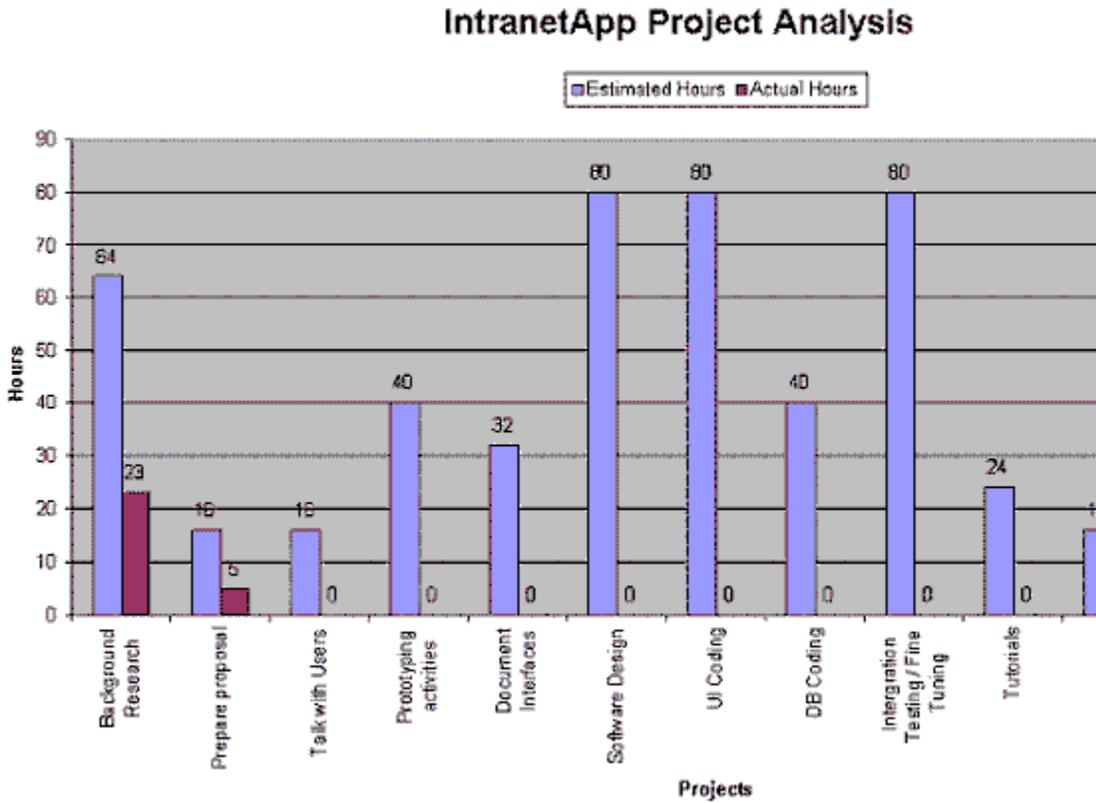
It can also export the actual hours worked back to MS Project, and update the project plan in a single step

Ad-Hoc query tools for Project and Developers

There are a variety of options within TimeVu and TimeVu for querying work against a project or projects

TimWise has a Review window where the developer sees a cross tab view of project work by date. They can choose dates and project to filter their results and export to Excel if they want.

TimeVu has a Timesheet Analysis form allowing all variations of lists, groups, and cross tabs of timesheets meeting a set of criteria. This resultset can also be exported to Excel for further analysis.