

## PROJECT PARTNERS USER INTERFACE APPLICATIONS

*THE SOLUTION OF CHOICE FOR THE ENGINEERING AND CONSTRUCTION INDUSTRY*

### CASE STUDY

#### The Situation

Engineering and Construction companies worldwide are project driven organizations that rely heavily on a robust project management solution like Oracle Projects Applications to manage their global projects on time and on budget. Oracle Project Applications, with its vast functionality is the project management tool of choice for project managers in any industry. Project managers need the ability to create and maintain their projects, accurately plan their project with up to date budgets and forecasts, execute their project by tracking percent complete and progress information as well as report on various metrics for the projects they are responsible for. The ability to perform these project management tasks often comes secondary to a project manager's day job which is be "in the field" physically managing their projects. Project managers need quick access to the most important daily project management functions available throughout the Oracle Projects Applications modules. Project managers require an easy solution to manage complex projects.

PBS&J is an employee-owned company that provides infrastructure planning, engineering, environmental science & engineering, construction management, architecture, and program management services to public and private clients. With 4,000 employees and 75 offices nationwide, the company is ranked by Engineering News-Record as 25th among the nation's top consulting firms. PBS&J selected Oracle E-Business Suite Projects Applications to streamline its project-based business. In addition to the core suite of Oracle Financials, PBS&J chose to deploy Oracle Project Costing, Oracle Project Billing and Oracle Project Management from the Oracle Projects suite. Project Partners LLC was selected as the Implementation Partner for this work.



an **Atkins** company

#### Why Project Partners User Interface Applications™?

With so much functionality and so many options to choose from in Oracle Projects, how can a casual user such as a project manager simply create a project, report progress, complete a budget or a forecast quickly, or report on some simple project metrics easily and most importantly "on the go"?

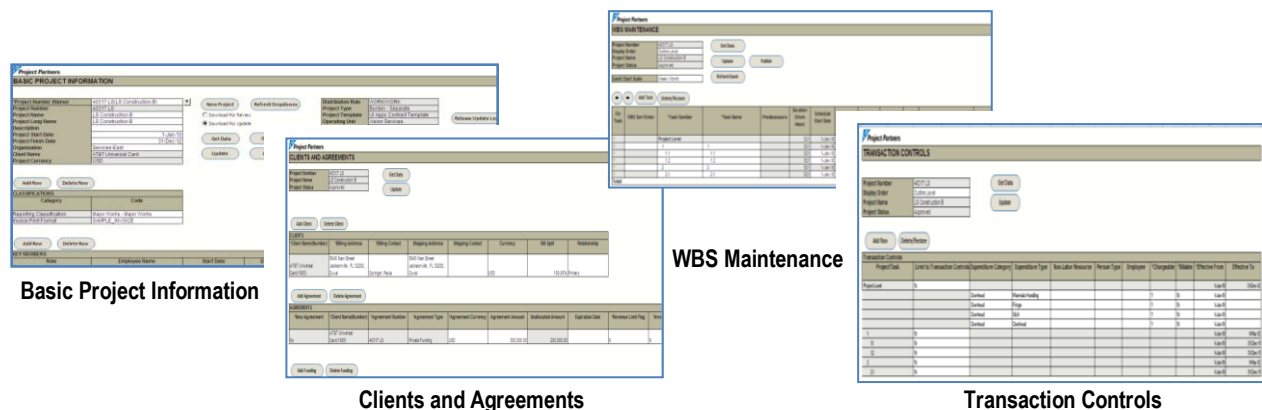
The answer is Project Partners User Interface Applications™ (UI-Apps); a Microsoft® Excel based interface with two-way interactivity to Oracle Projects Applications, providing the ability to work disconnected from a client site, on-site, project site, or wherever you need to be. Whether in the office or working remotely, UI-Apps provide complete access to key Oracle data, such as lists of values and lookups, and performs data validations and various calculations, such as spread curves, all within an easy-to-use workbook. An Excel based workbook adds a user interface layer to Oracle Project Applications and provides easy, quick custom access to the exact fields you need for all your project, resource, budget and forecast management, progress updating, as well as project reporting needs.

At any given time, project managers use UI-Apps to:

- Create and Maintain Contract and Indirect Projects
- Create and Maintain Clients, Agreements and Funding
- Manage Transaction Controls
- Create, Define and Maintain Work Breakdown Structures (WBS); including indent and outdent capabilities and task modification once saved
- Create, Define and Maintain Project Workplans and Schedules
- Create, Define and Maintain Budgets
- Collect Project Schedule Progress
- Review Project Costs/Actuals and Complete Project Financial Forecasts
- Report on Various Project Management Metrics

## Project Creation and Maintenance

Creating and maintaining basic project information is quick and simple using UI-Apps. Project managers and administrators can create projects (based on the project quick entry templates maintained in Oracle), update key project information such as project name and number, dates, key members, classifications, and attachments using one simple worksheet. Available to users, both online and offline, is the project workplan and WBS structure, providing task creation and maintenance capabilities as well as the ability to perform basic scheduling (project date manipulation and task dependencies) and viewing of the project schedule in a Gantt Chart view. Project managers can also add and maintain client information, project agreements and their corresponding funding, as well as manage project and task level transaction controls from one simple workbook.



The image displays four screenshots of the Project Partners software interface, each representing a different functional area:

- Basic Project Information:** A form with fields for Project Number, Project Name, Project Start Date, Project End Date, and Project Manager. It includes buttons for 'New Project', 'Edit and Attachments', and 'Release Update'.
- Clients and Agreements:** A table with columns for Client Name, Agreement Number, Agreement Type, Agreement Amount, and Agreement Date. It includes buttons for 'Add New' and 'Delete'.
- WBS Maintenance:** A table with columns for WBS Task, Task Name, Task Start, Task End, and Task Status. It includes buttons for 'Add New' and 'Delete'.
- Transaction Controls:** A table with columns for Project/Task, Unit & Transaction Control, Exception Category, Exception Type, Bill Labor Resource, Person Type, Employee, Chargeable, Status, Effective From, and Effective To. It includes buttons for 'Add New' and 'Delete'.

## Task and Budget Management

Creating and maintaining your project budget and financial tasks is simple and easy using the UI-Apps Task and Budget worksheet:

**Project Partners**  
**TASK AND BUDGET**

*Project Number (Name)	4037 LSLS Construction B	Refresh Dropdowns	Status	Working	Save Working
Display Order	Outline Number	Download For Review	Currency	USD	Submit for Baseline
Project Number	4037 LS	Download For Update	Revenue	-	
Project Name	LS Construction B	Get Working	Total (BAC) Cost	-	
Project Type	Burden - Separate	Get Baseline	Net	0.00	
Cost Plan Type	Approved Cost Budget	Get Forecast	Target Margin	0.00%	
Revenue Plan Type	Approved Revenue Budget	Release Update Lock	Calculated Margin	0.00%	
Version Name	Performance Budget		Default Labor Multiplier	1.0%	
			Default Non-Labor Multiplier	15	
Last Submission Date	10/28/2010		Change Reason		
Baselined Date	10/28/2010		Comments		
Operating Unit	Vision Services				

[View Resource Summary](#)

*Task Number	*Task Name	Manager	Organization	Task Type	Service Type	Chargeable	Billable	Start Date
Project Level		Marin, Ms. Amy(34)	Services-East					
1	1		Services-East	Upgraded Task Type	Consulting	N	Y	
1.1	1.1		Services-East	Upgraded Task Type	Consulting	Y	Y	

### Lump Sum Task and Budget Worksheet – Task and Resource Management

This worksheet allows project managers to download information for their project; quickly create or maintain tasks, and specify budgeted quantity, cost and revenue amounts for their project resources. Project Managers can build up raw costs using break-even multipliers and plan revenue by margin; planning by margin can be done at the task level as well. These updates can be made while connected or disconnected from the network, allowing for updates to be made to the budget from anywhere.

Once the Project Manager is satisfied, the data can be submitted, wherein UI-Apps automatically perform the following actions using Oracle's public APIs for Oracle Project Management:

- Create, define or maintain tasks for the project
- Create, define or maintain the budget
- Able to budget by separate line burden amounts
- Create workplan tasks and assign resources to the workplan if workplan integration is being used and using fully shared structures
- Submit the budget for approval (save as working or submit for baseline, using your business rules and workflows)

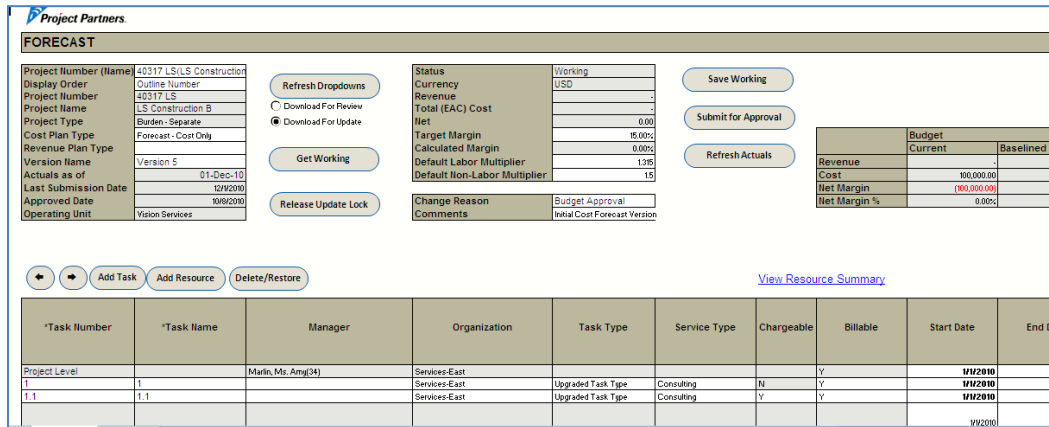
If the budget needs to be updated, the project manager (PM) can simply make the changes to the workbooks stored on their local desktop/laptop and resubmit the data, which updates and submits the current working version of the budget to establish a new baseline. Alternatively, if the PM has not retained the original workbook, a new Excel file can be started and the project, WBS, and budget information can be downloaded once again to make changes as needed. UI-Apps allows users to download their project budget or forecast for review or update. If the project has already been downloaded for update, UI-Apps will lock the worksheet and prevent updates to the worksheet while in use by other users. The project budget or forecast is always available to download for review. Project Managers can also save their budget (and/or forecast) and attach to their project in Oracle as a project attachment.

### Estimate to Complete Forecast Management

The Lump Sum Forecasting worksheet below provides project managers the ability to easily manage their estimates to complete (ETC), including the ability to collect progress data such as physical percent complete. ETC amounts are calculated by default from the displayed budget amounts but can easily be

overridden if desired. To keep an eye on total burden costs, the actual multiplier is calculated for actual costs and can also be overridden. To aid in making more accurate forecasts, percent spent, forecast amounts for quantities, and cost and revenue amounts are also displayed along with variances and margin percentages.

The worksheet below provides PBS&J the ability to easily manage their Estimates to Complete (ETC), including the ability to Collect Progress data such as Physical Percent Complete.



**Project Partners FORECAST**

Project Number (Name): 40317 LS/LS Construction  
 Display Order: Outline Number  
 Project Number: 40317 LS  
 Project Name: LS Construction B  
 Project Type: Burden - Separate  
 Cost Plan Type: Forecast - Cost Only  
 Revenue Plan Type: Version 5  
 Version Name: Version 5  
 Actuals as of: 01-Dec-10  
 Last Submission Date: 12/9/2010  
 Approved Date: 10/9/2010  
 Operating Unit: Vision Services

Refresh Dropdowns  
 Download For Review  
 Download For Update  
 Get Working  
 Release Update Lock

Status: Working  
 Currency: USD  
 Revenue: -  
 Total (EAC) Cost: -  
 Net: 0.00  
 Target Margin: 0.00%  
 Calculated Margin: 1.3%  
 Default Labor Multiplier: 15  
 Default Non-Labor Multiplier: 15

Save Working  
 Submit for Approval  
 Refresh Actuals

	Budget Current	Baselined
Revenue		
Cost	100,000.00	
Net Margin	(100,000.00)	
Net Margin %	0.00%	

Change Reason: Budget Approval  
 Comments: Initial Cost Forecast Version

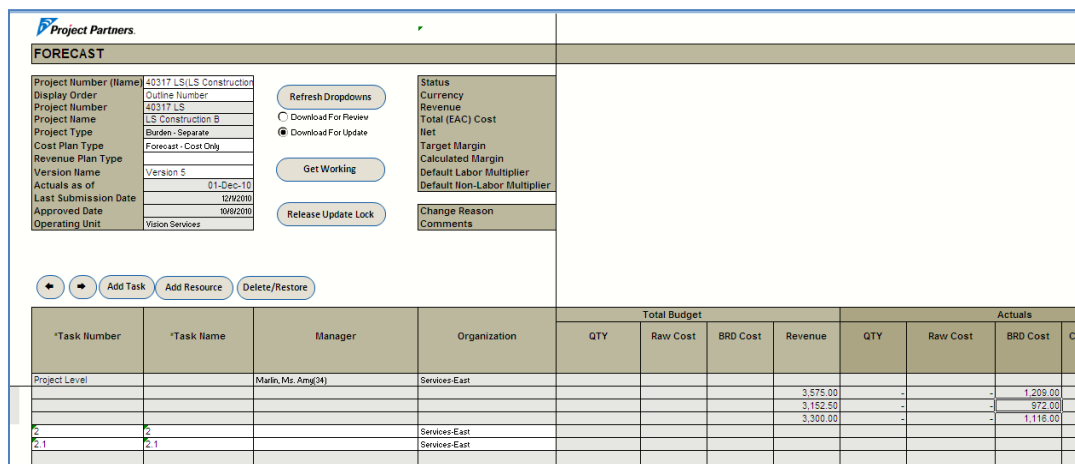
← → Add Task Add Resource Delete/Restore [View Resource Summary](#)

*Task Number	*Task Name	Manager	Organization	Task Type	Service Type	Chargeable	Billable	Start Date	End Date
Project Level		Marin, Ms. Amy(34)	Services-East				Y	11/2/2010	12/31/2010
1			Services-East	Upgraded Task Type	Consulting	N	Y	11/2/2010	12/31/2010
1.1	1.1		Services-East	Upgraded Task Type	Consulting	Y	Y	11/2/2010	12/31/2010

Lump Sum Forecast Basic Task Information

For every forecasting period, the PM downloads the latest information about his or her project, including the latest baseline budget and actual cost information from Oracle into the Forecast worksheet. Then the project manager can update the Estimate to Complete (ETC) columns and submit the forecast. The forecast can also be saved as a working version and finished at a later date. UI-Apps will take the submitted information and perform the following functions:

- Update the workplan with the physical percent complete
- Update Percent Complete and ETC information by task
- Generate a new Forecast
- Submit the Forecast for approval



**Project Partners FORECAST**

Project Number (Name): 40317 LS/LS Construction  
 Display Order: Outline Number  
 Project Number: 40317 LS  
 Project Name: LS Construction B  
 Project Type: Burden - Separate  
 Cost Plan Type: Forecast - Cost Only  
 Revenue Plan Type: Version 5  
 Version Name: Version 5  
 Actuals as of: 01-Dec-10  
 Last Submission Date: 12/9/2010  
 Approved Date: 10/9/2010  
 Operating Unit: Vision Services

Refresh Dropdowns  
 Download For Review  
 Download For Update  
 Get Working  
 Release Update Lock

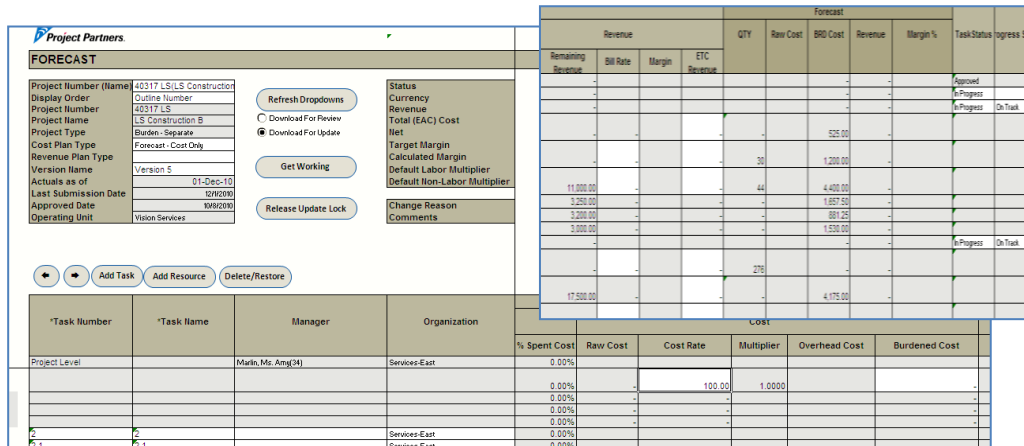
Status: Working  
 Currency: USD  
 Revenue: -  
 Total (EAC) Cost: -  
 Net: 0.00  
 Target Margin: 0.00%  
 Calculated Margin: 1.3%  
 Default Labor Multiplier: 15  
 Default Non-Labor Multiplier: 15

Save Working  
 Submit for Approval  
 Refresh Actuals

*Task Number	*Task Name	Manager	Organization	Total Budget				Actuals					
				QTY	Raw Cost	BRD Cost	Revenue	QTY	Raw Cost	BRD Cost	Revenue		
Project Level		Marin, Ms. Amy(34)	Services-East										
							3,575.00					1,209.00	
							3,152.50					972.00	
2			Services-East				3,300.00					1,116.00	
2.1	2.1		Services-East										

Lump Sum Forecast - Budget and Actuals

UI-Apps worksheets are the primary interface used by project managers for interacting with Oracle Project Management. These worksheets provide an out-of-the-box solution completely configured to your business processes. For example, if PM's budget and forecast using multipliers and margins or would prefer to budget or forecast using rates, the UI-Apps worksheets can be easily configured to meet those specific needs. Adapting to IT change is often difficult in any business; however the familiar and easy to use UI-Apps worksheets make user and system acceptance from the project management community a much more positive experience. UI-Apps are configured to the way YOU do business and provide project managers with an interface they are already comfortable with, complete with the added conveniences of being able to work remotely from client sites without worrying about network connectivity.



**FORECAST**

Project Number (Name): 40317 LS/LS Construction  
 Display Order: 40317 LS  
 Project Name: LS Construction B  
 Project Type: Bidder - Separate  
 Cost Plan Type: Forecast - Cost Only  
 Revenue Plan Type: Version 5  
 Actuals as of: 01-Dec-10  
 Last Submission Date: 02/02/00  
 Approved Date: MM/00/00  
 Operating Unit: Vision Services

Refresh Dropdowns  
 Download For Review  
 Download For Update  
 Get Working  
 Release Update Lock

Status: Approved  
 Currency: \$  
 Revenue: \$ Progress On Track  
 Total (EAC) Cost: \$ Progress On Track  
 Net: \$ Progress On Track  
 Target Margin: %  
 Calculated Margin: %  
 Default Labor Multiplier:   
 Default Non-Labor Multiplier:   
 Change Reason:   
 Comments:

Revenue				Forecast				Task Status	Progress Bar
Remaining Revenue	Bill Rate	Margin	ETC Revenue	QTY	Raw Cost	SHD Cost	Revenue		
-	-	-	-	-	-	-	-	-	Approved
-	-	-	-	-	-	-	-	-	\$ Progress
-	-	-	-	-	-	525.00	-	-	\$ Progress On Track
-	-	-	-	-	30	1,200.00	-	-	
11,000.00	-	-	-	44	4,400.00	-	-	-	
3,250.00	-	-	-	-	1,625.00	-	-	-	
3,200.00	-	-	-	-	801.25	-	-	-	
3,000.00	-	-	-	-	1,500.00	-	-	-	\$ Progress On Track
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	270	-	-	-	
17,500.00	-	-	-	-	-	4,175.00	-	-	

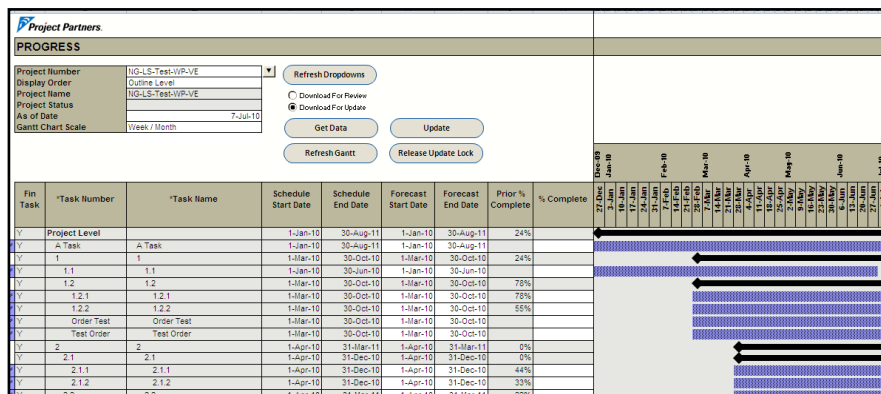
  

				Cost					
*Task Number	*Task Name	Manager	Organization	% Spent Cost	Raw Cost	Cost Rate	Multiplier	Overhead Cost	Burdened Cost
Project Level		Mark, Ms. Amy(S)	Services-East	0.00%					
				0.00%	-	100.00	1.0000		
				0.00%	-				
				0.00%	-				
				0.00%	-				
			Services-East	0.00%					
			Services-East	0.00%					

Lump Sum Forecast - Estimate-To-Complete and Forecast Details

### Tracking Progress and Percent Complete

Project managers can use the Project Execution workbook to update task progress information on their workplan (schedule), including updates to forecast start and end dates and physical percent complete values. This worksheet provides a quick view of the project schedule start and end dates as well as prior percent complete values, allowing project managers to easily update and view variances, including a Gantt view of their workplan (schedule) information. Leveraging the disconnected functionality of UI-Apps, project managers can additionally update task progress from jobsites or other areas where network connectivity is unavailable.



**PROGRESS**

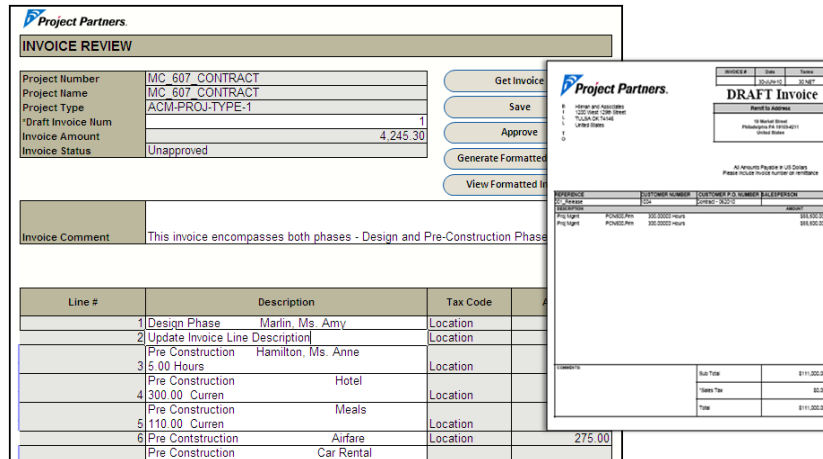
Project Number: 10G-LS-Test-WP-VE  
 Display Order: Outline Level  
 Project Name: 10G-LS-Test-WP-VE  
 Project Status: As of Date: 7-Jun-10  
 Gantt Chart Scale: Week / Month

Refresh Dropdowns  
 Download For Review  
 Download For Update  
 Get Data  
 Update  
 Refresh Gantt  
 Release Update Lock

Flt	*Task Number	*Task Name	Schedule Start Date	Schedule End Date	Forecast Start Date	Forecast End Date	Prior % Complete	% Complete
Y	Project Level		1-Jan-10	30-Aug-11	1-Jan-10	30-Aug-11	24%	
Y	A Task	A Task	1-Jan-10	30-Aug-11	1-Jan-10	30-Aug-11	24%	
Y	1.1	1.1	1-Jan-10	30-Jun-10	1-Jan-10	30-Jun-10		
Y	1.2	1.2	1-Mar-10	30-Oct-10	1-Mar-10	30-Oct-10	78%	
Y	1.2.1	1.2.1	1-Mar-10	30-Oct-10	1-Mar-10	30-Oct-10	78%	
Y	1.2.2	1.2.2	1-Mar-10	30-Oct-10	1-Mar-10	30-Oct-10	55%	
Y	Order Test	Order Test	1-Mar-10	30-Oct-10	1-Mar-10	30-Oct-10		
Y	Test Order	Test Order	1-Mar-10	30-Oct-10	1-Mar-10	30-Oct-10		
Y	2	2	1-Apr-10	31-Mar-11	1-Apr-10	31-Mar-11	0%	
Y	2.1	2.1	1-Apr-10	31-Dec-10	1-Apr-10	31-Dec-10	0%	
Y	2.1.1	2.1.1	1-Apr-10	31-Dec-10	1-Apr-10	31-Dec-10	44%	
Y	2.1.2	2.1.2	1-Apr-10	31-Dec-10	1-Apr-10	31-Dec-10	33%	
Y	2.2	2.2	1-Apr-10	31-Dec-10	1-Apr-10	31-Dec-10	33%	

Project Progress - Dates Percent Complete and Gantt View

Additionally, through the use of a shared license with Project Partners Invoicing, contract project users can use the Invoice Review worksheet in the Project Execution workbook to review and update draft project invoices online, add final project notes, comments or invoice line descriptions specific to their project needs, generate and review project invoices in their finalized format, and approve project invoices within the worksheet, thus providing quick, easy, online access to project invoicing.



**Project Partners**  
**INVOICE REVIEW**

Project Number: MC 607 CONTRACT  
 Project Name: MC 607 CONTRACT  
 Project Type: ACM-PROJ-TYPE-1  
 Draft Invoice Num: 1  
 Invoice Amount: 4,245.30  
 Invoice Status: Unapproved

Buttons: Get Invoice, Save, Approve, Generate Formatted Invoice, View Formatted Invoice

Invoice Comment: This invoice encompasses both phases - Design and Pre-Construction Phase

Line #	Description	Tax Code	Amount
1	Design Phase Marlin, Ms. Amy	Location	
2	Update Invoice Line Description	Location	
3	Pre Construction Hamilton, Ms. Anne	Location	
3	5.00 Hours		
4	300.00 Curren Hotel	Location	
5	Pre Construction Meals	Location	
5	110.00 Curren	Location	
6	Pre Construction Airfare	Location	
	Pre Construction Car Rental	Location	275.00

**DRAFT Invoice**

Customer Name: [Blank]  
 Invoice Number: [Blank]  
 Invoice Date: [Blank]  
 Invoice Period: [Blank]

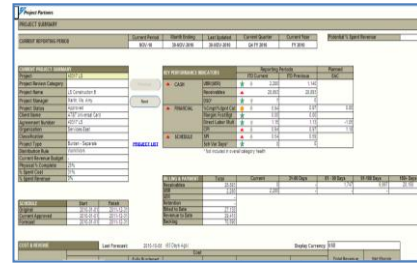
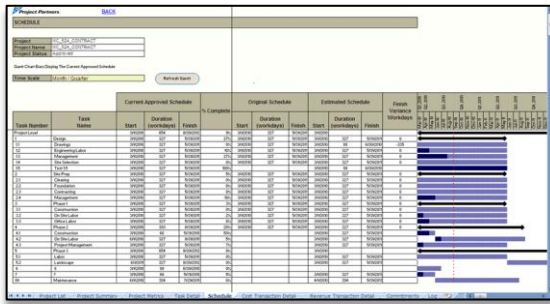
EXPENSE	CUSTOMER NUMBER	CUSTOMER P.O. NUMBER	EXPENSE
Pre-Construction	100.0000	100.0000	100.0000
Pre-Construction	100.0000	100.0000	100.0000

Sub Total: \$111,000.00  
 Sales Tax: \$0.00  
 Total: \$111,000.00

**Project Invoice Review**

## Reporting Project Information

By taking full advantage of the out-of-the-box Project Manager (PM) Reporting Workbook, project managers can view project financial and schedule performance for contract projects as well as indirect projects. Leveraging the power of Excel to access their summarized project “raw” data, they are able to configure these sheets to perform additional calculations on their project data and display all information in the format that suits their reporting needs. With the ability to download the projects they are responsible for into this one workbook and view overall project financial and schedule performance, valuable time is saved by reduced navigation for various pieces of information, it is all in this one workbook and displayed exactly how they require it. Project information for up to twenty projects at a time can be downloaded allowing them to scroll through their projects for pertinent information, such as project health, status and other key performance indicators defined during implementation. Detail project information is easily accessed with just a simple drilldown from the project level to the task level and then to the expenditure level, depending on the amount of detail necessary. The PM Reporting workbook includes various worksheets such as Project List, Project Summary, Revenue Details and Task Details which provide overall financial summary and breakdown based on their organization’s key metrics. Further detailed capital project information can be found on the Cost Detail and Commitment worksheets allowing easy review of costs and expenditures. The Schedule worksheet provides details for workplan, WBS, and date information, along with Gantt views of the project schedule. Additionally, graphical representation of various metrics such as earned value or actual to budget information can also be viewed utilizing the PM Reporting workbook.



Schedule and WBS Info

## About Project Partners User Interface Applications

Project Partners UI-Apps is a powerful application suite that delivers easy-to-use, easily tailored Oracle application User Interfaces for Microsoft Excel. Out of the box Engineering and Construction workbooks provide a user-friendly front-end that meets industry business needs while seamlessly integrating with Oracle security and business logic. It also provides business users an intuitive way to accomplish complex tasks using a familiar yet powerful tool: Microsoft Excel.

## About the Company

Project Partners, LLC is a privately held firm headquartered in Half Moon Bay, California, offering consulting services and software products. Project Partners is a single point solution provider for all requirements across Oracle® E-Business Suite™, Oracle Primavera™ and Oracle Fusion™ applications for project-driven organizations.

Our global team of professionals designed and delivered the Oracle E-Business Suite Projects Applications. We've developed integrated products that extend the Oracle Projects™ and Oracle Primavera™ solutions. With our Assessment program our Project Management Institute®-certified Project Management Professionals and Certified Public Accountants deliver management consulting services.

Project Partners is an Oracle Gold Partner, Oracle Certified Education provider, Primavera Reseller, and Microsoft Partner. We have locations worldwide to support multi-geographical operations and have executed global implementations for hundreds of clients who manage tens of thousands of projects, thousands of users, multiple languages and currencies. Project Partners is proud to be widely recognized as The Experts in Enterprise Project Portfolio Management™.

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