

CLARITY PPM TIPS, TRICKS, and TERMINOLOGY

Clarity PPM Knowledge Sharing Series

*Helping the Clarity PPM Community Members
Benefit from Best Practice*



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1 CLARITY PPM KNOWLEDGE SHARE PROGRAM

The purpose of this document is to capture various Clarity PPM tips, tricks, and general terminologies that will be useful to anyone implementing or using Clarity PPM. This information is most often obtained or discovered during testing of modules or the actual use of the application. Though not all of the information will benefit every Clarity PPM Community member due to their user specific installations; however, much of the information is relatively generic and can be used by most Clarity PPM users.

2 OVERVIEW PAGE

2.1 Add the My Projects portlet.

If the **My Projects** portlet is not on your favorite's page, you can easily add it. Once there you can easily add your projects to this portlet by clicking the link **Add to My Projects** in the upper right corner of the Project Properties page. As a PM, this gives you quick access to all your projects right at your fingertips.

2.2 Add the Timesheets to Approve portlet.

3 TIMESHEETS

1. Use the quick access to your current timesheet from the Current Timesheet icon in the Navigation Bar at the top right corner of any Clarity PPM page.
2. It is a good practice to populate the timesheet and start saving time entries earlier in the-week so that it is easier to remember where you spent your time and easier/faster to submit your timesheet on Friday.

4 CLARITY PPM NAVIGATION

4.1 Buttons

1. Many input pages in Clarity PPM have a choice of **Save/Submit/Cancel** buttons at the bottom. The Save button saves the changes and keeps you on the same page; the Submit button saves the changes and takes you back one page, and Cancel, does not save any changes and takes you back one page.
2. Many input pages in Clarity PPM have a choice of **Add & Add and Select More** buttons. In parts of the application, data is presented in lists that span many pages. On these pages users will have the option to Add and Select More. Add and Select More means that you can add the data from the current page and then navigate to another page to continue to add further data elements. Add simply Adds the selects data from the screen that the user is currently on and exits the page.

4.2 Filters

1. Many of the screens in Clarity PPM are displayed in a list view. At the top of each list page is a filtering section which allows the user to narrow down the results to the data they wish to be displayed. The search criteria used, can then be saved and set as a default whenever that page is accessed.

5 REPORTS

5.1 Labor Hours for Reports

Clarity PPM Resource Management 'time' data is stored in 'Curves' to represent the information over time as all resource management data is dependent on time and changes in time. This fact impacts how the data can be sliced for reporting or for portlet views of information. The 'curves' are stored in Binary Large Object files (BLOBs) in Clarity PPM tables. Jobs in Clarity PPM called time slices allow the data in the BLOB files to be read and stored into summary or time-sliced buckets to be available for reporting.

5.2 Custom Reporting

A roll-up of project forecasts would require custom reporting development as Clarity PPM does not provide an out-of-the-box roll-up report of project forecasts since the roll-up elements are all configurable and vary from client to client.

6 PORTLETS

1. Create a saved version of a frequently used portlet filter with the **Save Filter** button.

7 PROJECTS/TASKS

1. The easiest way to assign the same set of one or many resources to many tasks, use the WBS link view and select (checkbox) the tasks to assign resources, then click the Assign button and select the resources (from the Project Team list) to assign.
2. The easiest way to edit the schedule dates on tasks is to use the WBS link view and change the portlet (select box) to Edit Mode, then make the changes to the list of tasks.
3. The easiest way to control the charging of time to the tasks in your project is to keep them NOT Open for Time until you will accept actual time. In the WBS link view, you can actually do this at the Phase (top) level and all tasks in the phase follow.
4. Reassign Tasks when replacing Role – this automatically replaces all assignments for a role when a resource is used to replace the role – be careful, if a role is not fully replaced by a resource, you may have mixed assignments of a named resource and a generic role.

8 PROJECTS/MICROSOFT PROJECT WITH CLARITY PPM PPM

Here are some tips and issues to look for when working with MSP and Clarity PPM together:

8.1 Tasks

- The easiest way to work with tasks, including assigning resources, scheduling, setting dependences, is through Microsoft Project (MSP). On the Project Properties page, click the Go button near the top and this launches your project in MSP. Make your changes and then save back to Clarity PPM.
- Clarity PPM assumes the length of work being done is equal to the length of the task.
- Clarity PPM does not mark a task “Complete” if the hours have been reached or the ETC becomes zero. The task % complete must be manually updated to 100%.
- Changes to Actual Work will be lost on save unless the assignment is not “tracked” in Clarity PPM.
- Setting a task duration to zero with no remaining work automatically converts it to a completed task.

8.2 Milestone

- Do not have milestones with a duration other than one day and don't assign resources to milestones
- Clarity PPM automatically sets the % complete to 1% for started tasks.
- Do not delete tasks that contain actuals. They return to your plan under a “Deleted Tasks” summary task.
- Don't add a work estimate until you are ready to assign a role or resource. Clarity PPM won't accept tasks with work but no role or resource.
- Start-No-Earlier constraints will often appear on tasks, for various reasons.
- Real constraints take precedence over implicit constraints. If a task has a SNE for Monday and you change its start in Clarity PPM to Tuesday, it will have a Monday constraint (and schedule)
- Tasks can become re-scheduled if the project start date changes (this can happen implicitly)
- Task % Complete is not always exported
- Unassigned work on tasks is not saved to Clarity PPM, but is retained in MSP, which can cause a work total mismatch
- Remaining work on non-workdays is not allowed in MSP – it will be lumped to the next working day
- Recurring tasks are not supported; they revert to an ordinary task in Clarity PPM

- Blank task names are not allowed

8.3 Summary Tasks

- Do not add Predecessors to Summary Tasks
- Do not use a Summary Task to add up the Work
- Summary Task % Complete is derived in MSP
- Do not assign resources to Summary Tasks

8.4 Timesheets

- Remaining Work / ETC due in a timesheet period will be pushed out to the next period.

8.5 General Tips

- For MSP power users, the easiest way to maintain the MSP schedule at a detail level is to use only the “Timekeeping” tasks for Time Entry and use all the detailed tasks (Not Open for Time) for schedule /task /work control.
- Plan at the level you intend to track work. Use project tasks that reflect real work
- Clarity PPM does not enforce constraints, dependencies or calendar/work-time definitions
- Do not cut + paste in MSP, use drag + drop. Cut + paste create orphan tasks and will duplicate tasks in Clarity PPM.
- The sum of labor effort in MSP will usually, but not always, match the sum in Clarity PPM.
- Changes to calendars & resources impact scheduling, but will not update Clarity PPM
- Resources are matched on Initials = ID
- Beware of “Updating Task Status Updates Resource Status” flag.
- You cannot delete assignments with actuals.
- MSP-specific costing options (pro-ration, overtime rate, cost rate tables, time-varying rates, task cost overrides) are retained. Using these options will cause costing mismatch between MSP and Clarity PPM and should be avoided.
- Multiple baselines are not supported.
- Clarity PPM supports minute-precision schedules, but only day-precision value is displayed when viewed in Clarity PPM. Edits in Clarity PPM will snap to full day.
- Don’t use Resource Leveling – it only slides tasks around
- Don’t use Front loaded, Back loaded, Turtle
- Excessive use of Contour loading patterns slows the system
- The MSP Interface is not auto-numbering aware
- Do NOT password-protect project plans

9 PROJECT/TEAM

9.1 Roles General Tips

First and foremost, as in many cases, you should be ruled by the “KISS” principle. Stay focused on the primary purposes for Roles in RPM. Some of these follow:

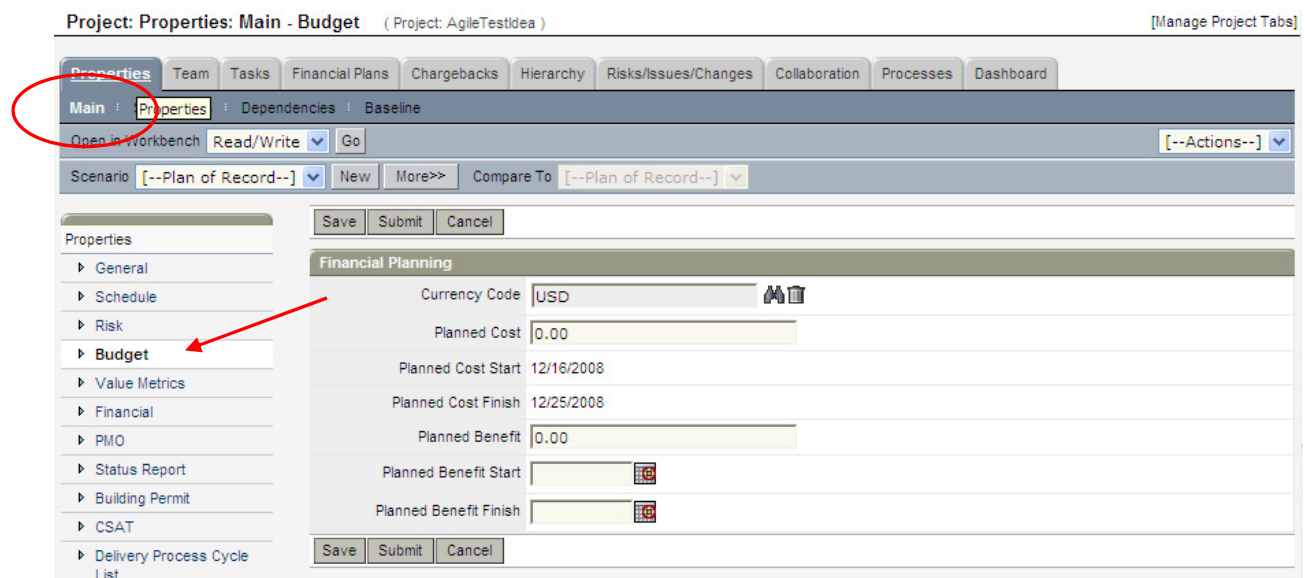
- Placeholders for named resources performing work against deliverables on a project.
- A means for searching for named resources who are available to participate on a project team.
- Provide categories of resources for purposes of capacity planning (supply vs demand), headcount analysis, and portfolio management.

Additional Tips:

- Don't replicate your HR system. There should NOT be a role for every pay level. Certainly senior resources are more experienced and can deliver faster, but this is an issue for estimating, and not defining Roles.
- Roles are not job titles. There should NOT be a role for every job title.
- Eliminate Roles for resources who do not track time.
- If different titles perform similar activities, then combine them into one role.
- It is critical to get the roles performing primary activities on projects right. But resources performing peripheral activities can be summarized. For example, managers, some technical/support areas, and business users.
- Don't confuse Roles with Skills. This can be a gray area, but distinctions between the two can help reduce the number of Roles.
- Don't create a hierarchy of Roles. Keep it flat. Hierarchies can create problems for reporting and analysis.

10 FORECAST/BUDGET

1. For Small Projects with “Simple” Budgets, it is faster to make sure the checkbox “Keep budget dates in Sync” to automatically populate the Budgeted Cost dates and Planned Costs dates using the Project Start and Finish dates.
2. For Medium/Large Projects with “Complex” Budgets, it is easier and faster to use the Allergan “Cost Plan Auto Sync” selection to automatically (monthly) adjust your Forecast (Cost Plan) based on previous month’s actual costs.
3. The purpose of this page is to capture the high level budget information on the project. Once a detail budget is created the Planned Cost and Planned Benefits fields are read only.



Project: Properties: Main - Budget (Project: AgileTestidea) [Manage Project Tabs]

Properties | Team | Tasks | Financial Plans | Chargebacks | Hierarchy | Risks/Issues/Changes | Collaboration | Processes | Dashboard

Main | Properties | Dependencies | Baseline

Open in Workbench Read/Write Go [--Actions--]

Scenario [--Plan of Record--] New More>> Compare To [--Plan of Record--]

Save Submit Cancel

Properties

- General
- Schedule
- Risk
- Budget**
- Value Metrics
- Financial
- PMO
- Status Report
- Building Permit
- CSAT
- Delivery Process Cycle List

Financial Planning

Currency Code USD

Planned Cost 0.00

Planned Cost Start 12/16/2008

Planned Cost Finish 12/25/2008

Planned Benefit 0.00

Planned Benefit Start

Planned Benefit Finish

Save Submit Cancel

4. A roll-up of project forecasts would require custom reporting development as Clarity PPM does not provide an out-of-the-box roll-up report of project forecasts since the roll-up elements are all configurable and vary from client to client.

5. To perform forecasting Project Managers MUST maintain the project schedule – this should be assumed as standard project management effort, but reality suggests this is not always the case.
6. Forecasting is highly dependent on regular maintenance of the project data. The following set of maintenance activities is defined by role and by day. This process requires discipline from all team members and the Project Manager on the project with strong enforcement and reinforcement from the organization. This process schedule is related to forecasting because if this schedule is followed with discipline, forecasting becomes a simple activity.

Recommended Weekly Maintenance Schedule and Status Reporting Process								
	Solution Role	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Resource		Submit Time for Previous Week	Enter Time in Clarity for Current Week	Enter Time in Clarity for Current Week	Enter Time in Clarity for Current Week	Enter Time in Clarity for Current Week	Enter Time in Clarity for Current Week	Enter Time in Clarity for Current Week
Project Manager		Review Pending Actuals – address issues	Weekly Project Maintenance (As Of Date = prior Sunday)	Review Earned Value Dashboard/ Status Report	Review Pending Actuals – address issues			This Date will be the As Of Date for next week status
		Project Managers Approve Timesheets	Review Live Earned Value/ Status Metrics	Generate Revised Forecast (every other week or monthly)		PM Holds Time Entry Meeting with Resources (Optional)		
Clarity		Clarity Timesheet Posting for prior week for status	Clarity Generates Earned Value Snapshot					

11 PROJECTS/MASTER PROJECTS/PROGRAMS

1. In Clarity PPM, Programs and Master Projects share many of the same traits. However, it may be easier and faster to deal with a Master Project in Clarity PPM because it has more features.
2. A Single Large Project that has distinct parts and distinct Project Managers may be better broken into a Master with Sub projects so that each Project Manager can manage their own Sub-Project (portion of the project) without locking out the others. This gives the entire team visibility to the sub-projects and allows Microsoft Project to schedule across the entire Master/Sub Project.
3. When a number of projects share the same resource group (team), they can be combined into a Master with Sub projects so that they can be scheduled together to minimize resource conflicts.
4. Even without the resource conflict consideration above, a group may want all their projects put into a Master with Sub projects so they can see them as a set in Microsoft Project.
5. Sometimes it is easier to manage a group of projects by grouping them together into a Master with Sub projects so that Microsoft Project views or Clarity PPM Portlets can be used for reporting.
6. The Project Manager of a sub-project can either work in their sub-project or open the Master and work there (as long as they have rights for the Master). Remember that any changes in the sub-project may affect the Master project.
7. Projects and Master Projects include a Hierarchy tab that allows you to create custom roll ups of data. These Hierarchies do not affect the associated projects and can be created and deleted as needed to view the aggregate data.
8. A Project or Master Project can be in two or more Master Projects. Whenever the Master Project is opened in Microsoft Project, it may affect that Master Project's schedule. This can create problems when the Project or Master Project is opened in Microsoft Project as it will be scheduled based on the Master Project.
9. Programs can be created and then rolled up into a higher-level program. This would give you the ability to view part of a program and then view the entire program.

12 CLARITY PPM CALCULATIONS

12.1 ROI Calculation

The general formula for Net Present Value (NPV) in a certain period is:

$$\text{NPV}(\text{period}) = \text{PV}(\text{benefits, period}) - \text{PV}(\text{costs, period})$$

where

$$\text{PV}(\text{value, period}) = \text{value} / ((1 + \text{interest rate})^{\text{period}})$$

The interest rate corresponds to your period (e.g., 12% annually implies a 1% interest rate if your periods are months).

Period should be zero for the current period and this assumes that the value is at the beginning of the period.

The formula for NPV of a stream of benefits and costs is just the above formula applied to all time periods.

The formula for ROI of a stream of benefits and costs is similar, where

$$\text{ROI} = \text{NPV} / \text{PV}(\text{costs, period})$$

Note: The calculations cannot be modified.

Cost of Capital is entered as a metric in the administration tool for each client.

12.1 Algorithm for ROI Calculations (Used in Budget and Cost Plan Information)

The general formula for Net Present Value (NPV) in a certain period is:

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$$\text{ROI} = \text{NPV} / \text{PV}(\text{costs, period})$$

Note: The calculations cannot be modified.

Cost of Capital is entered as a metric in the administration tool for each client.

13 GENERAL CLARITY PPM TERMINOLOGY

Availability Rate – The capacity of a resource to work on all projects as a default availability setting prior to exceptions identified in the resource calendar

Baseline Usage – Usage is defined as the total of the actuals and estimates to complete from the assignment level rolled up to the task, team, and/or project level. The baseline usage is the usage that is captured at the time of baseline for the current baseline of record. If measured for a resource, be cautious of the resource-level baseline values if individual tasks are updated. Individual task baseline data does not update team-level baseline information.

Demand - The number of hours or units required of a resource to complete work (within a specified time period)

ETC – The total of the planned remaining work from the assignment level rolled up to the task, team, and/or project level.

Resource Availability – The total availability of the resource based on the availability rate (including the resource calendar exceptions) across the allocation period to which the resource is allocated to the project.

Supply - the capacity or availability of resources to be scheduled to perform work (within a specified time period)

Total Usage – Usage is defined as the total of the actuals and estimates to complete from the assignment level rolled up to the task, team, and/or project level.

14 CLARITY PPM FINANCIAL TERMINOLOGY

Actual Cost - the actual cost is populated in planning if time transactions are posted to WIP. The transaction post to financial does the cost and rate calculation based on the matrix setup.

Budgeted Break-Even - The end of the day on which the accumulated present value-adjusted budgeted benefits equal the accumulated present value-adjusted budgeted costs; can be directly entered or system-calculated.

Budgeted NPV - The present value of the Budgeted Benefit distribution less the present value of the Budgeted Cost distribution; can be directly entered or system-calculated.

Budgeted ROI - The Budgeted NPV divided by the present value of the distribution of the Budgeted Cost; can be directly entered or system-calculated.

Calculate Capital Expressions - If checked, when form is submitted the ROI, NPV and Break-even values are calculated from the corresponding cost and benefit values using the configured Cost of Capital as the discount rate.

Charge Code - Charge Code is a required field for all transactions in order to be posted to the Financial module.

Company Class - Company classes allow for a logical categorization of clients (companies) within an organization. It is used for reporting purposes.

Department - Department is the third level, below Location, in the Financial Organizational Structure. Departments allow for further categorization of Locations.

Entity - In Clarity PPM, an entity is a distinct legal company or set of accounts within a company's financial system. Entity is the highest level within the Financial Organizational Structure.

Forecasted NPV - The present value of the Forecasted Benefit distribution less the present value of the Forecasted Cost distribution; can be directly entered or system-calculated.

Forecasted ROI - The Forecasted NPV divided by the present value of the distribution of the Forecasted Cost; can be directly entered or system-calculated.

Forecasted Break-Even - The end of the day on which the accumulated present value-adjusted forecasted benefits equal the accumulated present value-adjusted forecasted costs; can be directly entered or system-calculated.

Input Type Code - Input Type Code is a required field for all transactions in order to be posted to the Financial module. Therefore, each financial resource must be assigned a default Input Type Code.

Investment Class - Investment Class provides a way to group/categorize similar projects within an organization. Investment classes usually indicate the types of projects offered by an organization.

Location - Each Entity may be broken down into Locations. Location does not necessarily mean physical location. It is the second level below Entity, in the Financial Organizational Structure. One Location may only be assigned to one Entity.

Resource Class - Clarity PPM supports four types of Resources: Labor, Material, Equipment and Expense. Each resource created in Clarity PPM belongs to one of these Resource Types.

Transaction Class - There are four system-defined Transaction Types: Labor, Materials, Equipment and Expenses. Transaction Class provides a way to further categorize Transaction Types.

Unit of Measure - The Unit of Measure for Labor transactions is Hour. The Unit of Measure for Material, Equipment and Expense transactions is Unit.

WIP Class - WIP class provides another means of grouping like companies and projects. It provides another financial dimension to companies and projects.

15 EARNED VALUE TERMINOLOGY

Accounting Variance (AV)

Difference between Budgeted Cost of Work Scheduled and Budgeted Cost of Work Performed:

BCWS – ACWP

Actual Cost of Work Performed (ACWP)

Cost of the completed portion of tasks based on the total usage:

Cumulative actual usage from the start date through the Project As Of Date X Cost Rate of the Resource at time of baseline

As-of Date

Key date in Earned Value Calculations to separate the actual data from future data

Budget at Completion (BAC)

Total Baseline Budget of a Project: Total Usage X Cost Rate of the Resource at time of baseline where Total Usage = Actual + Estimate to Complete usage at Baseline

Budgeted Cost of Work Performed (BWCP)

Cost of the completed portion of tasks based on the baseline usage, Earned Value: BAC X % Complete (Manually Entered)

Budgeted Cost of Work Scheduled (BCWS)

The baseline cost of a project's defined portion of the Budget at Completion: Baseline Total Usage from start date through As Of Date X Cost Rate of the Resource at time of baseline.

Billing Rate

The Billing Rate set in the rate/cost matrix.

Cost Performance Index (CPI)

Value earned per unit of actual cost (ideally 1.0): BCWP/ACWP – if less than 1.0 then the project is over budget.

Cost Variance (CV)

Difference between Budgeted Cost of Work Performed (Earned Value) and Actual Cost of Work Performed (ideally a positive number): $BCWP - ACWP$

Earned Value Analysis (EVA)

Statistical method used to measure the performance of a project by comparing the actual cost to perform work versus the planned cost to perform work.

Estimate at Completion (EAC)

The expected total cost of the task/project based on the work completed to date and the expected remaining work based on the current status of the task (% complete). $EAC = ACWP + (BAC - BCWP) / CPI$

Schedule Performance Index (SPI)

Index of Budgeted Cost of Work Performed and Budgeted Cost of Work Scheduled (ideally 1.0): $BCWP/BCWS$. If less than 1.0, the project is behind in cost or schedule.

Schedule Variance (SV)

Difference between Budgeted Cost of Work Performed and Budgeted Cost of Work Scheduled (ideally a positive number): $BCWP - BCWS$

Clarity PPM Knowledge Share Series

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