
regoUniversity
NASHVILLE · 2022
Manage Schedules Externally
Your Guides:
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Agenda

- Introduction to scheduling
- Why use an external scheduler?
- Who uses what?
- Scheduler-Specific Decision Factors
- Discussion: Scheduler Challenges
- Tips to help user adoption
- Is it time to just use Clarity?
- Microsoft Project OOTB or The Rego Connector?
- Demo of the Rego MSP Connector

Why Use a Scheduler?

Why Use a Scheduling Tool

- Most project managers are familiar with using a scheduling tool
  - Helps user adoption if they can bring this knowledge to Clarity
  - Full bidirectional connection between Clarity and Scheduler
- Stop relying on multiple spreadsheets and applications for project data
  - Clarity will be the source of truth as you sync data from the scheduling tool back to Clarity
- Real-time progress updates on project schedule when using timesheets
  - See the impact of actuals hours against your project schedule
- Repeatable processes and centralized data are essential in providing accurate reports and actionable metrics
  - A scheduling tool helps provide consistency across your more complex project plans

Typical Activities Done in a Scheduling tool

- Build out your Project Tasks; Multiple Work Breakdown Structures Levels
- Task Dependencies
- Identify Critical Paths
- Key Tasks and Milestones
- Manage Project Baseline Settings
- Project Process Tracked by Actuals, ETC and Task Status
- Resource Assignments

Bonus! Project Schedules can be Worked On or Off-Line

Why Not to Use a Scheduling Tool

- A Scheduling tool's job is to SCHEDULE your project plan EVERY TIME you export it from Clarity
- DO NOT USE IT JUST FOR EASY EDITING
- If you are looking for an easy editor, consider using the CSV task Importer (Coming Soon!) or just the Modern User Experience

Pros and Cons with Using a Scheduler

Pros

- ✓ Extremely flexible
- ✓ Able to create a complex WBS
- ✓ Insight into your critical path
- ✓ Sharable with 3rd Parties

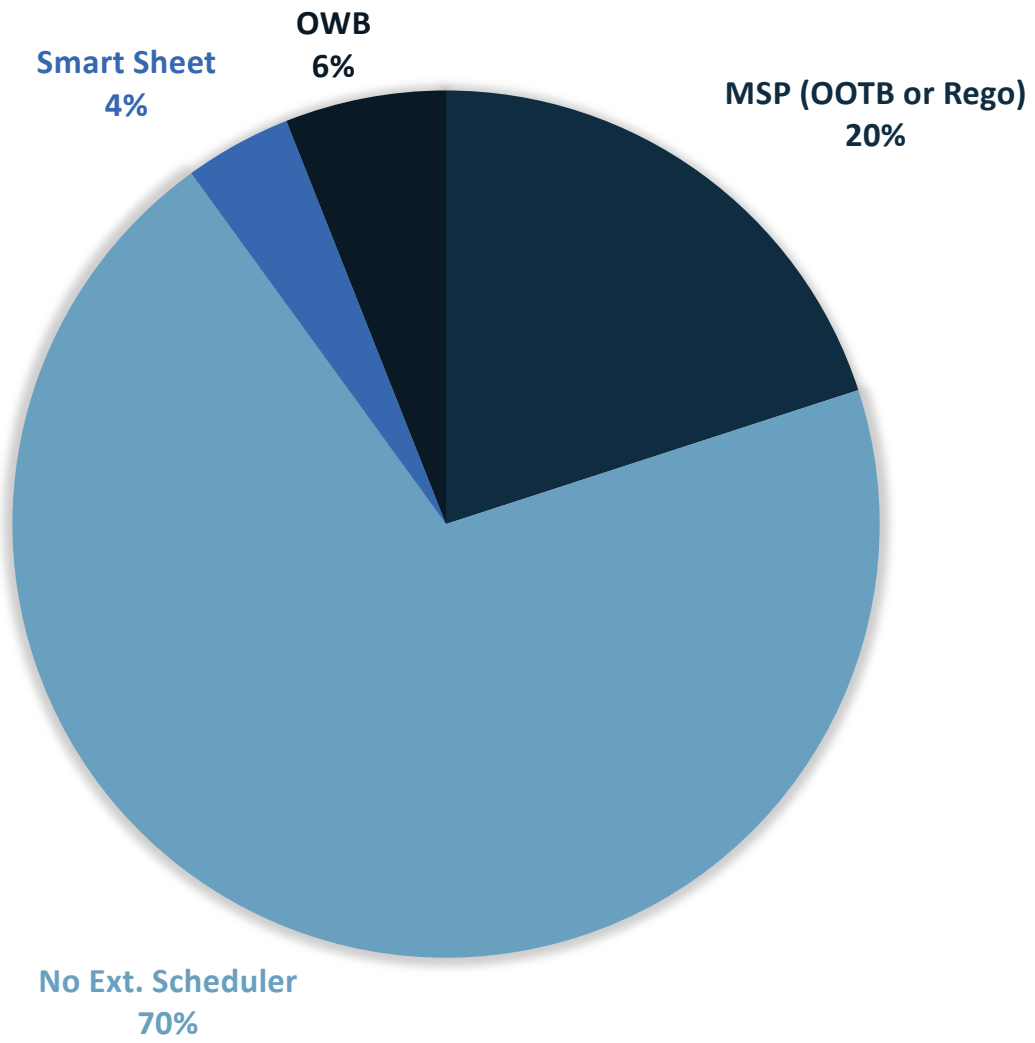
Cons

- ✓ Expensive (licenses)
- ✓ Challenging to Train end users and to enforce common business methodology
- ✓ Can be hard to support end users (Scheduling issues/Errors)
- ✓ Workstation Software – another tool to maintain

Open Mic

- What scheduling tools are prevalent in your organization?

Who Uses What



Clarity PPM Scheduling Options

1. Clarity PPM > Autoschedule
2. Microsoft Project
3. Open Workbench
4. Smartsheet

- Organizations should select ONE Clarity PPM scheduling option or at the very least, ONE scheduling option per project.

- Each option uses a different scheduling algorithm, so if a project schedule is opened in one and then another, it will calculate on top of a calculation.

Open Workbench

Open Workbench will update the project schedule based on the number of hours each resource will work per week to cover the total number of hours on the task.

1. Algorithm is same as Clarity PPM

2. Fully integrated with Clarity PPM

3. Training may be required

Microsoft Project

Microsoft Project will update the project schedule based on task duration.

1. Algorithm is date driven
2. Custom fields need to be mapped through the Clarity PPM User Interface
3. MSP license required for each user
4. Additional Clarity / MSP training may be necessary

SmartSheet

Smartsheet will update the project schedule based on task duration.

1. Algorithm is date driven

2. Use the power of all of Smartsheets' features and only sync back the data you need

3. Map Risk and/or Issue logs from Smartsheet back into Clarity

4. Can export schedules as MSP files

Decision Factors

- If MSP is widely used and accepted within the organization
- If project plans need to be externally communicated via MSP
- If project assignments are task driven

Microsoft Office Project

smartsheet

- If Smartsheet already exists within the PM organization
- If project assignments are task driven
- If there is a desire for a flexible, lightweight scheduling tool

- Modern UX widely used and accepted
- Project plans have less than 200 tasks
- Project Management Lite or
- Familiarity with Clarity AutoSchedule

Clarity PPM

OPEN WORKBENCH

- If there's minimal MSP experience in the organization
- If project plans do NOT need to be externally communicated via MSP
- If project assignments are effort driven

No Matter the Tool, Set Your Project Settings!

- Each Organization should have the Project Settings identically set on each workstation.
  - It is difficult to troubleshoot an issue if the settings are different on every workstation
  - Users should be playing on the same field—not doing their own thing
- Use established best practice guidelines for project settings for each tool
- Explain to your Project Managers what each option does so they understand how it affects their project schedule

Discussion

What are your challenges when using an external scheduler?

Tips to help user adoption

Crawl

- Basic Task Management
  - Key Tasks and Milestones
  - Dependencies
  - No assignments

Walk

- Detailed Task Management
  - Summary & Detail tasks with Key Tasks and Milestones
  - Dependencies
  - Selective assignments—only assign tasks for time tracking, use custom field to capture planned resources

Run

- Complex Task Management
  - Summary & Detail tasks with Key Tasks and Milestones
  - Dependencies with Leads & Lags
  - Full assignments – detail tasks will track time

Tips to help user adoption

- Training!
  - Offer training that includes how your organization uses Clarity with the scheduler and best practices
  - Offer refresher classes

- Office Hours
  - Establish set office hours for users to seek help/advice

- Buddy/Mentoring
  - Subject Matter Experts can serve as mentors and assist other users as they learn using the External Scheduler. This will also reduce the number of help desk calls!

Is it time to just use Clarity?

With version-by-version improvements to the embedded scheduling tools, we're seeing more and more clients stay in Clarity and abandon external schedulers.

Recent Enhancements

- Flyout Expansion
- Field-Level Security
- Duration Management
- Subproject Views
- Baseline Comparison
- Autoschedule in Timeline
- Expanded Work Management

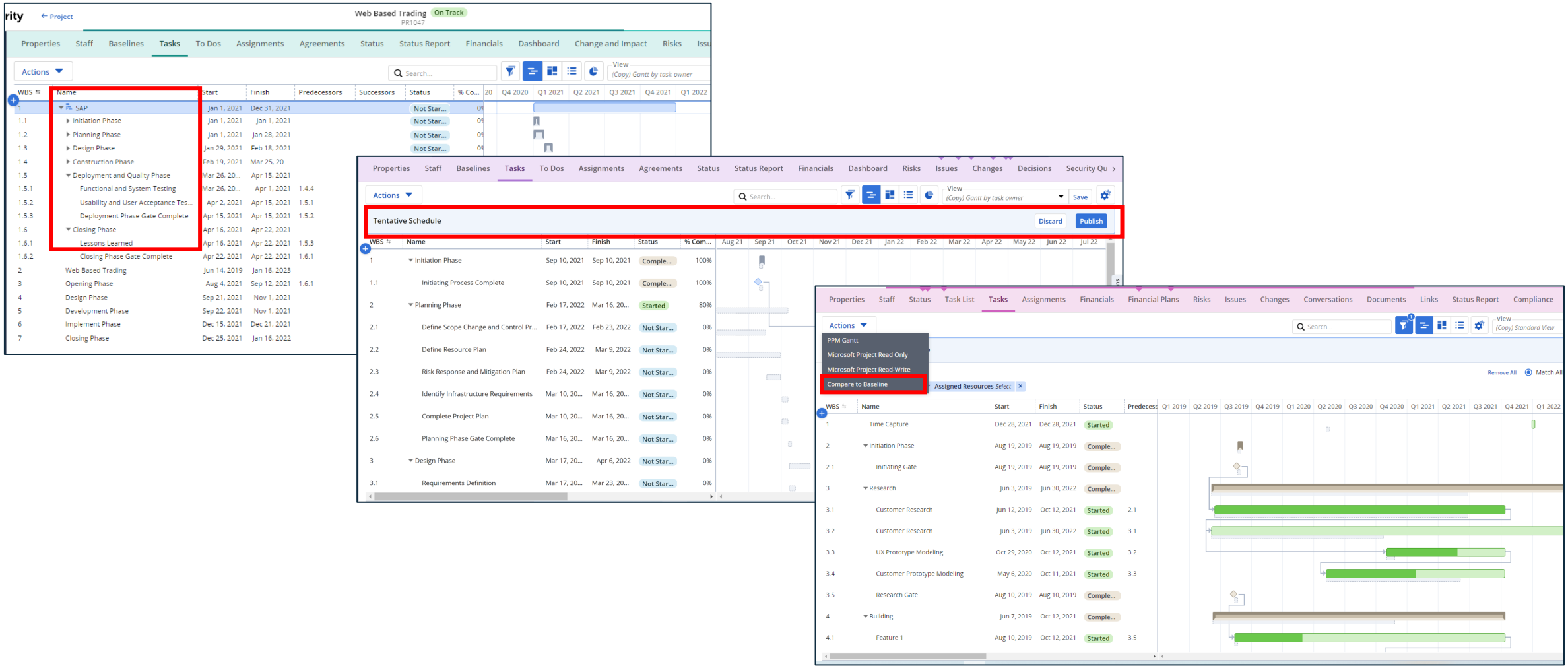
Reduced Complexity

- No Client-Side Installs or Packages
- Independent of Scheduler Versions
- Eliminates #1 Support Request Topic
- Upgrade Proof

Gaps and Considerations

- Autoschedule is Manual
- Critical Path Calculation Slightly Different than MSP
- Leads/Lags Only in PPM Gantt
- Critical Path View only in PPM Gantt
- Auto Expand / Collapse
- All likely coming soon!

Timeline Enhancements



MSP OOTB or Rego Connector?

MSP OOTB vs Rego Connector

Feature	OOTB	Rego
Schedule Connect & Add-in install Application required	✓	
Server Side Data Processing/Validation—Light client		✓
Support for Click-to-Run, O365, Project 2019		✓
Enhanced Error and Validation Client Messages		✓
Bi-Directional sync of project/task/assignments	✓	✓
Mapping of custom fields and Static lookups	✓	✓
Support of dynamic lookups		✓
Support of Mapped Field Labels to MSP		✓
Resource Calendar Management in MSP		✓
Ability to Save As a New project to Clarity	✓	
Baseline Support	✓	✓
Master/Subproject	✓	
Partial project import to Clarity		✓
Targeted fields bi-directional Sync (Planned		✓

Demo

External Scheduler – MS Project Integration

Questions?

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Instructions for PMI credits

- Access your account at pmi.org
- Click on **Certifications**
- Click on **Maintain My Certification**
- Click on **Visit CCR's** button under the **Report PDU's**
- Click on **Report PDU's**
- Click on **Course or Training**
- Class Provider = **Rego Consulting**
- Class Name = **regoUniversity**
- Course **Description**
- Date Started = **Today's Date**
- Date Completed = **Today's Date**
- Hours Completed = **1 PDU per hour of class time**
- Training classes = **Technical**
- Click on **I agree** and **Submit**

Let us know how we can improve!
Don't forget to fill out the class survey.

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- Click on **Course or Training**
- Class Name = **regoUniversity**
- Course Number = **Session Number**
- Date Started = **Today's Date**
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Let us know how we can improve!
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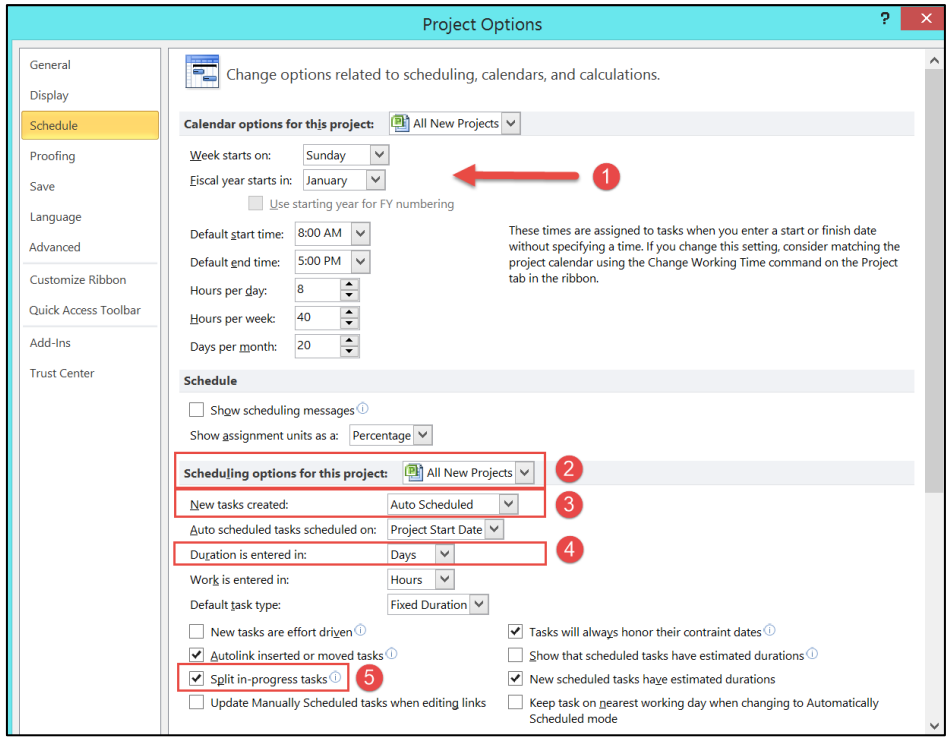
Appendix

Appendix A: Microsoft Project Option Settings

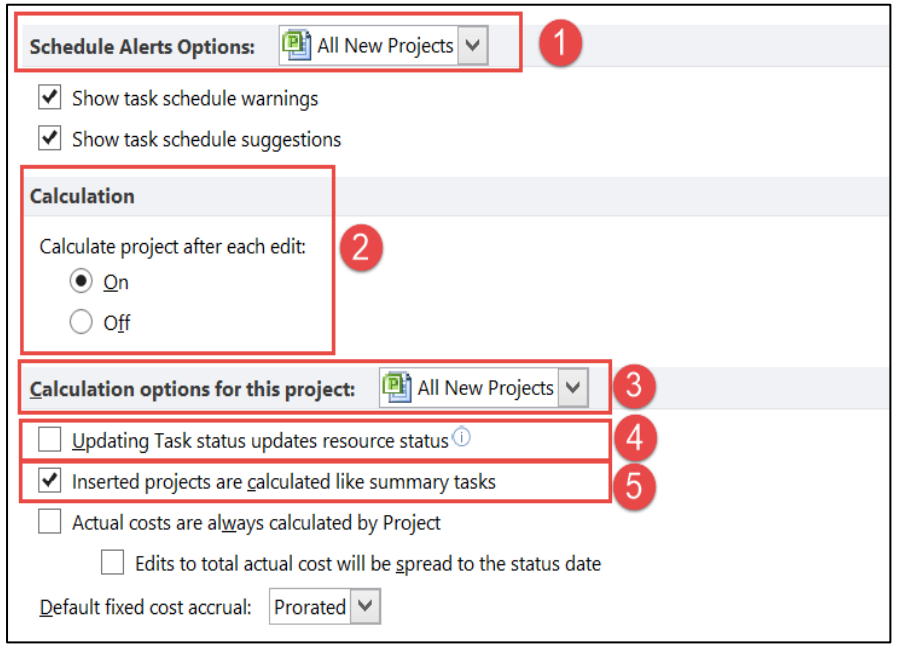
MSP Options – Schedule Tab

1. **Calendar Options:** The “Week starts on” and “Fiscal year starts in” calendar fields should match your calendar settings in Clarity. The other MSP calendar fields will map through the integration
2. **Scheduling Options for this Project**: This should be set to “All New Projects” in order for the settings to be effective for all new projects and not just the one that is open
3. **New Tasks Created**: Automatic calculation is the preferred setting, but it is not required. If you select Manual Calculation, you must manually calculate the project before saving it to Clarity (more info on next slide)
4. **Duration is entered in:** Duration should be tracked in days since this is the lowest level that Clarity is able to track
5. **Split in-progress Tasks:** Helps fill in the work gaps while using Resource Leveling



MSP Options – Schedule Tab (Con't)

1. **Schedule Alerts Options**: This should be set to "All New Projects" in order for the settings to be effective for all new projects and not just the one that is open.
2. **Calculate Project after each Edit:** If "On" is selected, the project will automatically calculate after each edit. If set to "Off", task scheduling that occurs as a result of task dependencies (predecessors) will be turned off within MSP as well as when a project schedule is re-opened from Clarity to MSP (more info on next slides).
3. **Calculation Options for this Project**: This should be set to "All New Projects" in order for the settings to be effective for all new projects and not just the one that is open.
4. **Updating Task status updates Resource Status:** If checked, resource actuals, remaining work (ETC), and costs are automatically updated when percent complete, actual duration, or remaining duration is updated. This open should ONLY be checked when Actual hours are NOT being tracked through Clarity timesheets. (more info on next slides).
5. **Inserted Projects are calculated like Summary Tasks**: If checked, on a master project, project will display a single critical path for the Master Project and all of its sub-projects.



MSP Updating Task Status Updates Resource Status

If the Clarity **Track Mode** is set to **“Clarity”** or **“Clarity”**, this option should be UNCHECKED in MSP > File > Options > Schedule:

The “Updating Task status updates resource status” feature in MSP automatically updates the status of projects when the “% Complete” field is updated

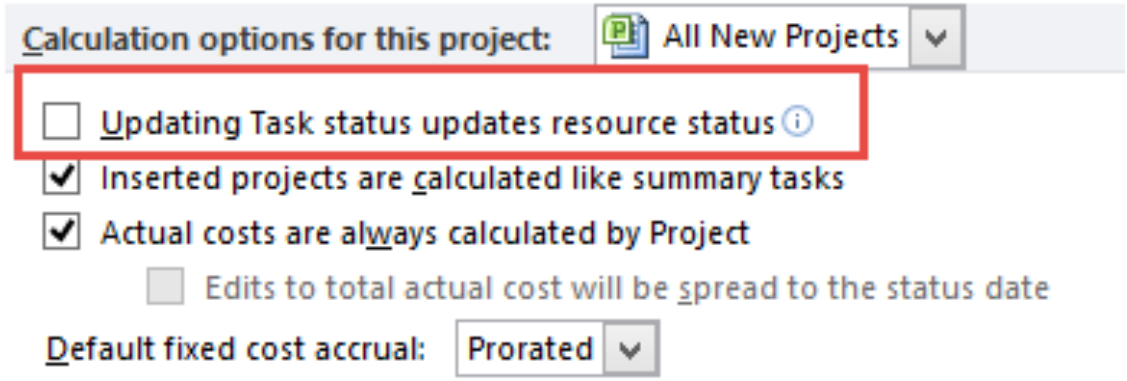
For Example:

If 25% is entered as the “% Complete” on a 40 hour task, MSP will automatically update Actuals with 10 hours and change Remaining Work to 30 hours

When the project schedule is saved back to Clarity, those Actuals will get dropped (not saved to Clarity) without an error message, so the PM will be unaware

When the schedule is re-opened from Clarity to MSP, the following may happen:

- Actual Hours disappeared
- The Remaining Work field shows the reduced value, and therefore Work will be reduced
- Task Dates may be rescheduled



MSP: A Word About Calculation Mode Mode: Off

❖DON’T USE IT!

- Even with it set to off (manually scheduled) there are scenarios where MSP WILL schedule your plan:
  - Clarity Timesheet Actuals can shift Task Dates
  - Resource Leveling will still recalculate the project schedule
  - Task Constraints may shift Task Dates
  - Dependencies will further change your schedule

❖Instead Do This!

✓ Educate your users on how Microsoft Schedules your project plans (Rego can help!)

✓Create Job Aids for common scheduling scenarios.

- Clarity PPM Documentation has LOTS of information on scheduling, use this information to create your job aids.

https://docops.ca.com/ca-ppm/15-6/en/using/getting-started-with-classic-ppm/project-management/msp-manage-projects-with-microsoft-project/msp-synchronize-microsoft-project-with-ca-clarity-ppm

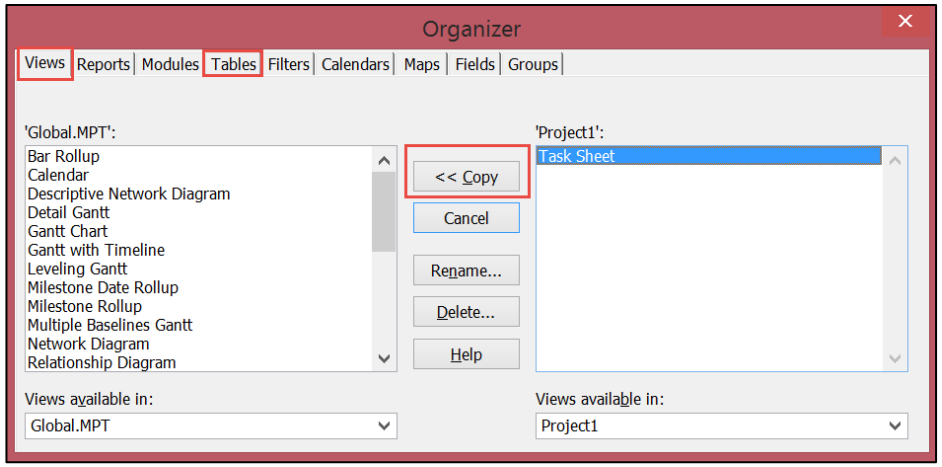
Appendix B: Managing Your Views

MSP Organizer

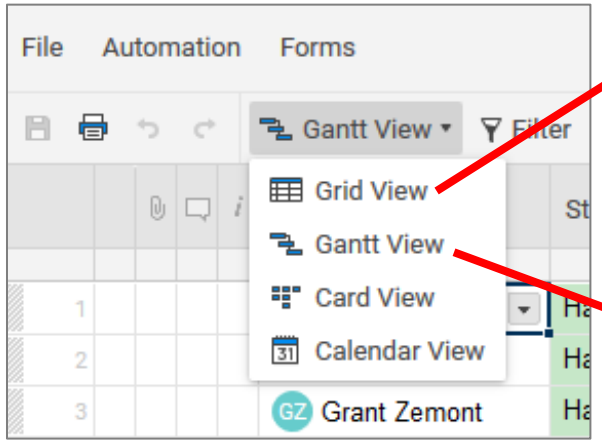
- When customizing views in MSP by rearranging columns or adding and removing fields, the changes are only visible in the project you're currently working on
- You can copy your customization to the Global Template so all the changes are available in future projects, as well as projects that were created in the past
- To create a global template, open an empty project or the project that has the customization directly from MSP, go to File > Info > Organizer
- Global templates are useful to share so that all users are working in the same view (and easier to support!)

MSP Organizer

- Once the changes are made, you can see the active project's customizations on the right-side panel of the Organizer
  - From the "Views" tab, highlight all of the views from the right-side panel and then click "<<Copy"
  - Do the same for the "Tables" tab

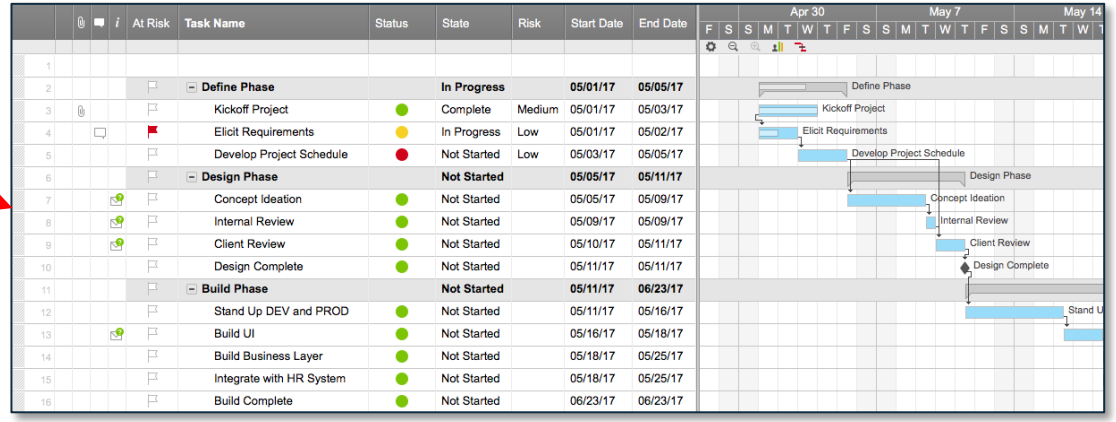


Smartsheet Views (1)



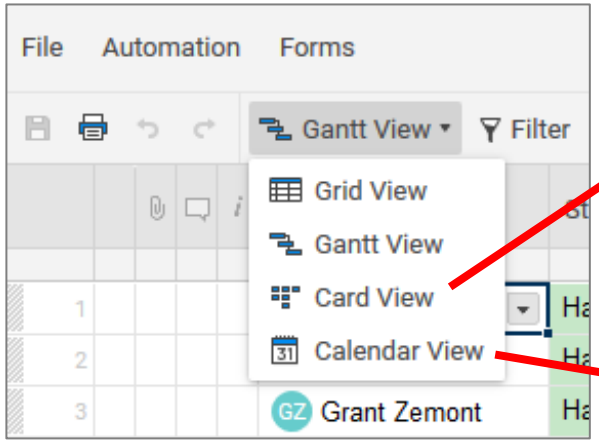
At Risk	Task Name	Status	State	Risk	Start Date	End Date	Assigned To	Duration	HOURS	Allocation %	% Complete
	Define Phase		**In Progress**		**05/01/17**	**05/05/17**		**4.5d**			**53%**
	Kickoff Project		Complete	Medium	05/01/17	05/03/17	Chato Santana	3d	0.5	100%	100%
	Elicit Requirements		In Progress	Low	05/01/17	05/02/17	Tony Stark	2d	1	50%	50%
	Develop Project Schedule		Not Started	Low	05/03/17	05/05/17	Grant Zemont	2.5d	1	90%	0%
	Design Phase		**Not Started**		**05/05/17**	**05/11/17**		**4d**			
	Concept Ideation		Not Started		05/05/17	05/09/17	Tony Stark	2d	1	100%	
	Internal Review		Not Started		05/09/17	05/09/17	Tony Stark	4h	1	100%	
	Client Review		Not Started		05/10/17	05/11/17	Grant Zemont	1.5d	1	100%	
	Design Complete		Not Started		05/11/17	05/11/17		0			
	Build Phase		**Not Started**		**05/11/17**	**06/23/17**		**30.5d**			
	Stand Up DEV and PROD		Not Started		05/11/17	05/16/17	Doug Greer	3d	1	100%	
	Build UI		Not Started		05/16/17	05/18/17	Doug Greer	2d	1	100%	
	Build Business Layer		Not Started		05/18/17	05/25/17	Doug Greer	5d	1	100%	
	Integrate with HR System		Not Started		05/18/17	05/25/17	Doug Greer	5d	1	100%	
	Build Complete		Not Started		06/23/17	06/23/17		0			

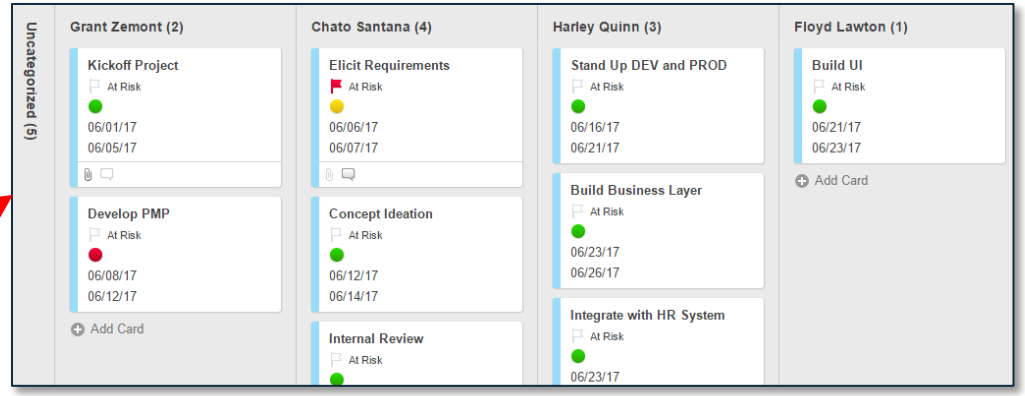
Grid View



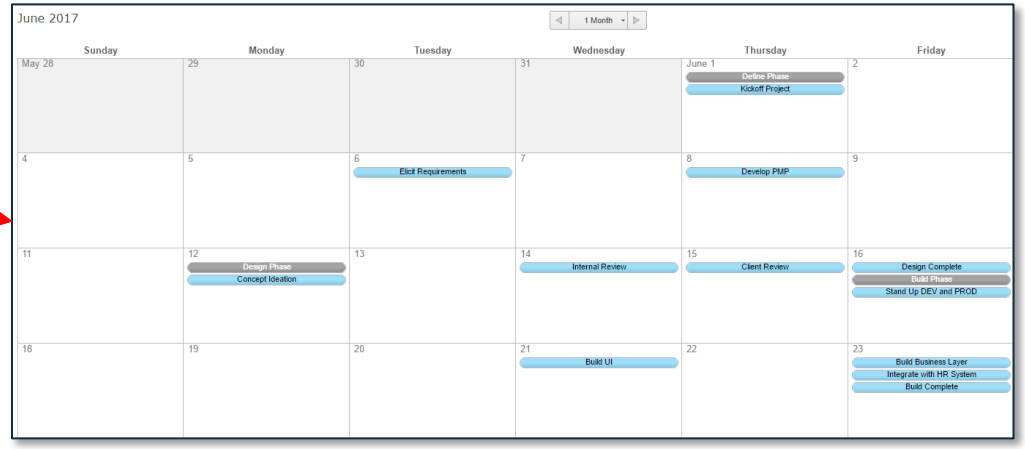
Gantt View

Smartsheet Views (2)





Card View



Calendar View

Appendix C: Timeline & PPM Gantt Scheduling Rules

Task Scheduling Rules

- If you change only the Start Date of a task, it is assumed that you want to keep the duration of the task and the Finish Date will move accordingly
- If you change only the Finish Date of a task, it is assumed that you are changing the duration of the task and the Start Date will NOT change
- When the Start date or Finish date of a child task is changed that falls outside of the parent, Summary Task, that Summary Task's dates will change accordingly
- When any Task's Start date or Finish date falls outside of the Project/Investment's dates, the dates for the investment will be extended accordingly
- If you 'shrink' or 'bring in' the minimum/maximum Start and Finish Dates on ALL child tasks, the parent, Summary Task will reflect the new min/max dates of all the children tasks
- 'Shrinking' all Task dates does not 'shrink' the investment dates - investment dates are only changed when the task or allocation dates are adjusted to extend beyond the set dates
- Summary tasks inherit the dates from their children. In order to change the summary task dates, the children's dates must be changed first.
- Milestones are one day tasks, you can only change the finish date, not the start date. The start date will change when the finish date changes.

Assignment Scheduling Rules

- For Assignments, changing either the Start or Finish date assumes the assignment duration is being changed.
- When Assignment dates are changed, the Assignment ETC remains the same (assuming the Staff Allocation and Availability is the same for the new date range) and redistributed within the new date range regardless of shrinking or expanding the duration of the assignment
- You can change the Assignment Start date forward only. You cannot change it to a date prior to the Task Start Date. If you change only the Start Date of an assignment, the assignment Finish Date does not change; the duration of the assignment is changed accordingly (reduced)
- If you change only the Finish Date of an assignment, the Start Date does not change; the duration of the assignment is changed accordingly
- When the Assignment Finish date is changed that falls outside of the Task's dates, the Task Dates are extended and all following Task date rules to impact parent summary task dates and investment dates are rolled up
- If you 'shrink' or 'bring in' the minimum/maximum Start and Finish Dates on ALL assignments for a Task, the Task Dates 'shrink'