



*rego*University 2019

SAN DIEGO

Manage Schedules Externally — MSP/Smartsheet | OOTB and Rego Connectors

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Introductions

- Take 5 Minutes
- Turn to a Person Near You
- Introduce Yourself
- Business Cards



Agenda

- Why use an External Scheduler and Who Uses What?
- Options, Settings, and Scheduling Modes
- Managing Views
- Rego Connector Partial Project Sync
- MSP OOTB or The Rego Connector?

Why Use a Scheduler?



Let Rego be your guide.

Why use a Scheduler

- Most project managers are familiar with using a scheduler
- Full bidirectional connection between CA PPM and Scheduler
- Stop relying on multiple spreadsheets and applications for data
- Real-time progress updates on project schedule when using timesheets
- Repeatable processes and centralized data are essential in providing accurate reports and actionable metrics

Why you Shouldn't Use A Scheduling tool

A Scheduling tool's job is to SCHEDULE your project plan EVERY TIME you export it!

❖ DO NOT USE IT JUST FOR EASY EDITING

❖ Rego has other easy to use options such as an excel based data editor

Pros and Cons with Using a Scheduler

Pros

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

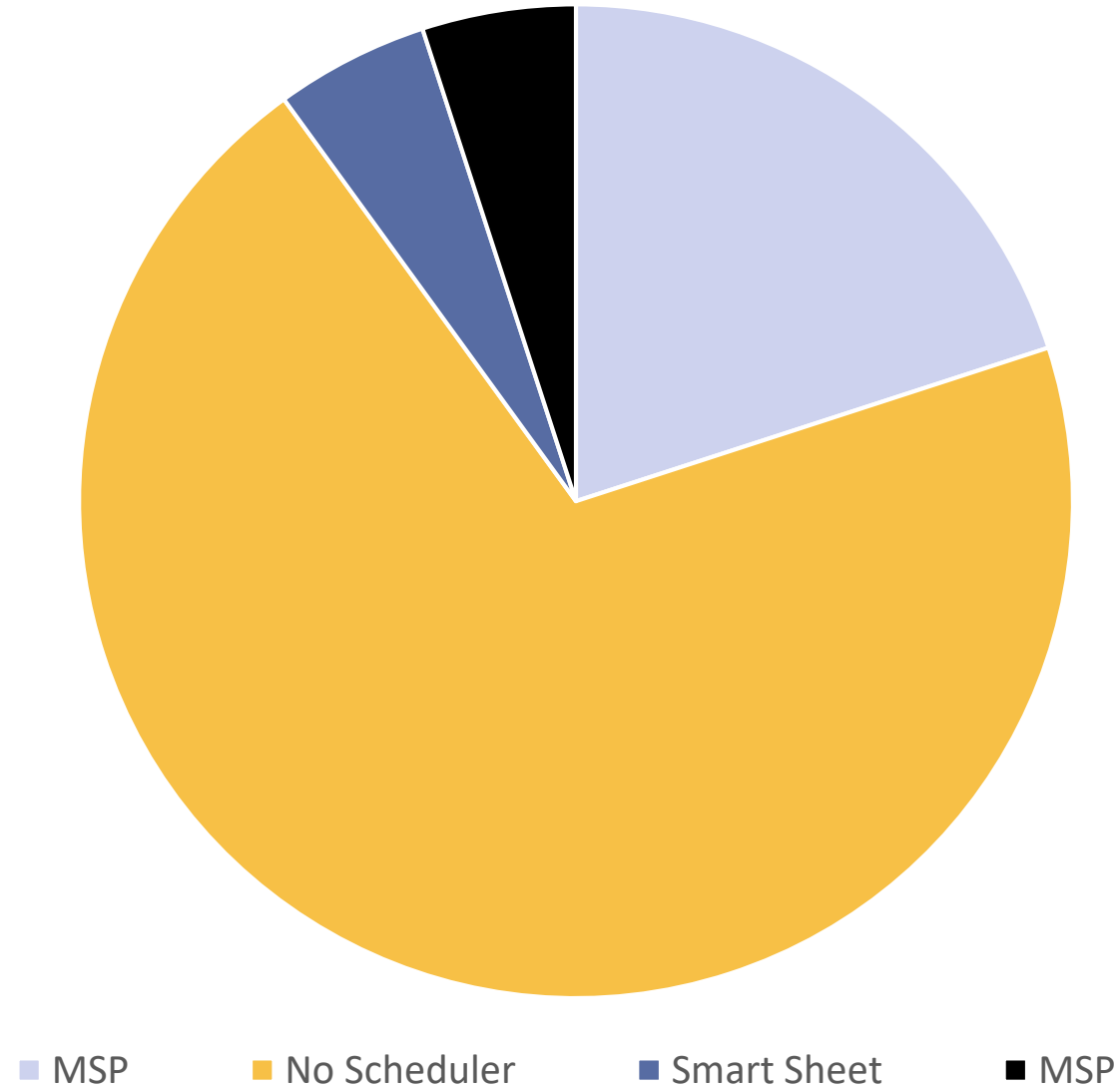
Cons

- ✓ 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

Typical Activities Done in a Scheduling tool

- 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
- Project Schedules can be Worked On or Off-Line
- Resource Assignments

Who Uses What



Clarity PPM Scheduling Options

1. Clarity PPM – Job or via Gantt on Project – Autoschedule
 2. Microsoft Project 2013/2016/2019/O365
 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 PPM / 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 OWB vs. MSP vs. Smartsheet?

- 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



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

- 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



Options, Settings, & Scheduling modes



Let Rego be your guide.

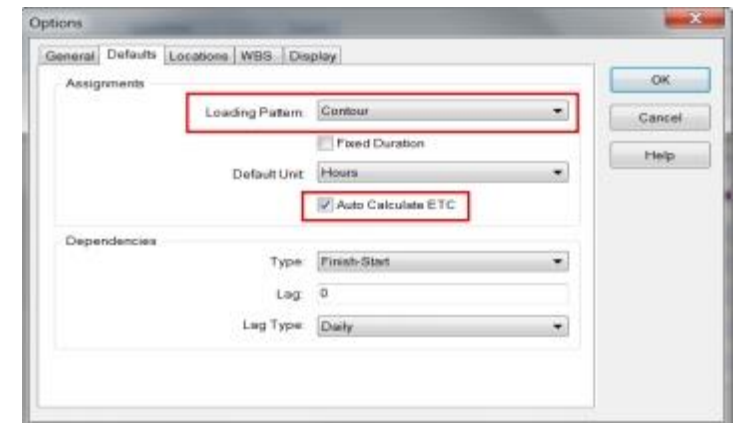
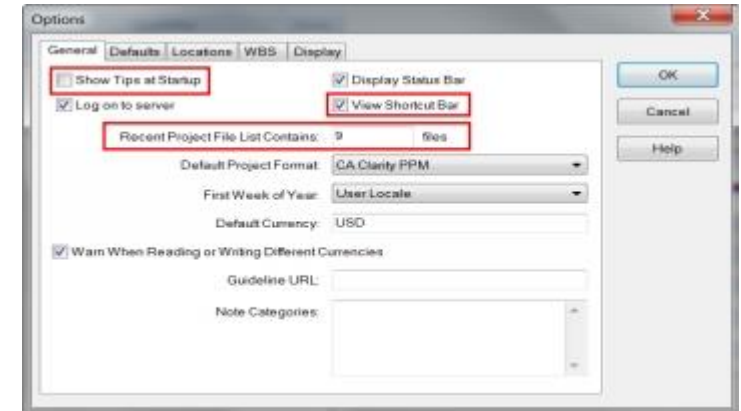
No Matter the Tool, Set Your Project Settings!

- 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

OWB Preferences (Options): Most Applied

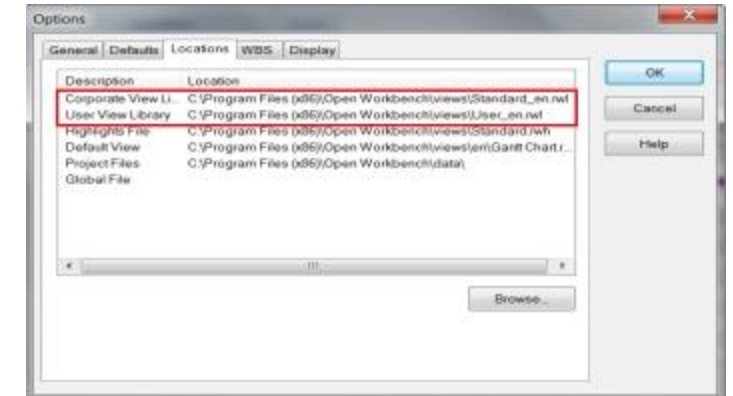
Use Preferences> Options to apply the '*global*' settings to be retained when OWB is opened.

- General Tab
 - '**Show Tips at Startup**' can be disabled and enabled.
 - '**Recent Project File List Contains**' default is set to 4 files, can be set to up to 9.
 - '**View Shortcut Bar**' is used to add/remove the views displays to the left. Check the box to add back the views, if they have been Removed.
- Defaults Tab
 - '**Loading Pattern**' is the spread of hours against assignments, setting the most typically required type here, saves time setting every time an assignment is applied.
 - '**Auto Calculate ETC**' adds assignment ETC based upon the resource's project availability.

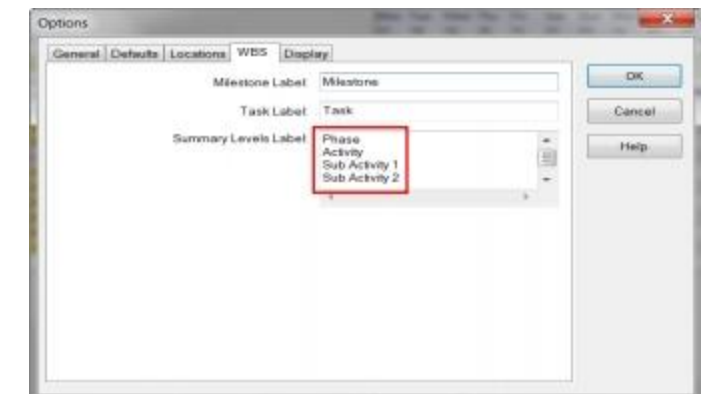


OWB Preferences (Options): Most Applied

- Locations Tab
 - The set of default views can be made 'Corporate' which renders them read-only.
 - This protects the original views from being overwritten when additional views are created.
 - Apply the below location mapping to protect:
 - **Corporate View Library** – C:\Program Files (x86)\Open Workbench\Views\Standard_en.rwl.
 - **User View Library** - C:\Program Files (x86)\Open Workbench\Views\User_en.rwl.
- WBS Tab
 - **'Summary Levels Label'** supports the ability to label the available summary level hierarchy.
 - As the WBS is built within the plan, the 'Type' field will list the label names defined here.
 - When labelling, make sure to insert/add the name while respecting the top-down relationship.



Corporate views display a building graphic against the view icon.



MSP Options – Schedule Tab

- Calendar Options:** The “Week starts on” and “Fiscal year starts in” calendar fields should match your calendar settings in CA PPM. The other MSP calendar fields will map through the integration
- 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
- 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 CA PPM (more info on next slide)
- Duration is entered in:** Duration should be tracked in days since this is the lowest level that CA PPM is able to track
- Split in-progress Tasks:** Helps fill in the work gaps while using Resource Leveling

Project Options

Change options related to scheduling, calendars, and calculations.

Calendar options for this project: All New Projects

Week starts on: Sunday
Fiscal year starts in: January

☐ Use starting year for FY numbering

Default start time: 8:00 AM
Default end time: 5:00 PM
Hours per day: 8
Hours per week: 40
Days per month: 20

These times are assigned to tasks when you enter a start or finish date without specifying a time. If you change this setting, consider matching the project calendar using the Change Working Time command on the Project tab in the ribbon.

Schedule

☐ Show scheduling messages

Show assignment units as: Percentage

Scheduling options for this project: All New Projects

New tasks created: Auto Scheduled

Auto scheduled tasks scheduled on: Project Start Date

Duration is entered in: Days

Work is entered in: Hours

Default task type: Fixed Duration

☐ New tasks are effort driven

☒ Autolink inserted or moved tasks

☒ Split in-progress tasks

☐ Update Manually Scheduled tasks when editing links

☒ Tasks will always honor their constraint dates

☐ Show that scheduled tasks have estimated durations

☒ New scheduled tasks have estimated durations

☐ Keep task on nearest working day when changing to Automatically Scheduled mode

MSP Updating Task Status Updates Resource Status

If the CA PPM **Track Mode** is set to “**Clarity**” or “**CA PPM**”, 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 CA PPM, those Actuals will get dropped (not saved to CA PPM) without an error message, so the PM will be unaware

When the schedule is re-opened from CA PPM 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

Calculation options for this project:  All New Projects ▼

☐ Updating Task status updates resource status ⓘ

☒ Inserted projects are calculated like summary tasks

☒ Actual costs are always calculated by Project

☐ Edits to total actual cost will be spread to the status date

Default fixed cost accrual: Prorated ▼

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 CA PPM 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 CA PPM 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.

The screenshot shows the 'Schedule Alerts Options' and 'Calculation' sections of the MSP interface. Red boxes and numbered callouts (1-5) highlight the following settings:

- 1:** 'Schedule Alerts Options' dropdown menu set to 'All New Projects'.
- 2:** 'Calculate project after each edit' radio button set to 'On'.
- 3:** 'Calculation options for this project' dropdown menu set to 'All New Projects'.
- 4:** 'Updating Task status updates resource status' checkbox (unchecked).
- 5:** 'Inserted projects are calculated like summary tasks' checkbox (checked).

Other visible settings include:

- 'Show task schedule warnings' (checked)
- 'Show task schedule suggestions' (checked)
- 'Actual costs are always calculated by Project' (unchecked)
- 'Edits to total actual cost will be spread to the status date' (unchecked)
- 'Default fixed cost accrual' dropdown set to 'Prorated'.

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:
 - CA PPM 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>

OWB Autoschedule: Magic Button?

- Autoschedule is a great way to
 - Resolve task and resource over-commitments
 - Resolve dependency violations
 - Calculate critical path
- However it may not always be the answer to all your scheduling requirements. If the plan has not been set up correctly, it may not calculate to the most optimized results.
- In many cases, Autoschedule is used to achieve a preliminary 'first cut', to then manually fine-tune thereafter.
- When used at a high-level, can be used to see for example resource 'bottle-necks' or violations. This helps with understanding who and when more resource may be required.

-
- The screenshot displays the 'Autoschedule' dialog box in Microsoft Project. The 'Resource Constraints' checkbox is selected, and red arrows indicate its relationship to the 'Resource Constraints' column in the resource usage table. The Gantt chart shows task bars for 'Design user interface' and 'Design forms'. The resource usage table shows resource allocation over time.
- | Resource | 2/04/2016 | 3/05/2016 | 4/05/2016 | 5/05/2016 | 6/05/2016 | 7/05/2016 | 8/05/2016 | 9/05/2016 | 10/05/2016 | 11/05/2016 | 12/05/2016 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| BA Business Analyst | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SA Systems Analyst | 4.00 | 4.00 | 0.00 | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TE Test Engineer | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LT Lead Test Engineer | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LP Lead Programmer | 0.00 | 0.00 | 0.00 | 4.00 | 0.00 | 4.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| JP Junior Programmer | 0.00 | 0.00 | 0.00 | 4.00 | 0.00 | 4.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Smartsheet: Project Initiation

Properties ▾ Team Tasks Financial Plans Risks/Issues/Changes Chargebacks

Project: SmartSheet Demo Project - Properties - Main - Project Summary

Project Summary

Project Name SmartSheet Demo Project

Project ID INV002950

Project Type [--Select--]

Project Category [--Select--]

Description

Active ☒

Scheduler Workbench


Stakeholders

Project Manager Leone, Joshua

Business Owner

- ✓ Start a project in CA PPM.
- ✓ Set the project to be a Smartsheet Project.
- ✓ The project is created in Smartsheet in real time,
- ✓ importing all tasks that were setup in Clarity.

Properties ▾ Team Tasks Financial Plans Risks/Issues/Changes Chargebacks Processes

Project: SmartSheet Demo Project - Properties - Ma  Open in Scheduler ▾ Scenario: [--Select--]

Integration Details


Smartsheet Project ☒ Last Sync Date 2016-10-06 10:23:16

Smartsheet Sheet Id 2599111842129796 Last Sync Status Success

Smartsheet Link <https://app.smartsheet.com/b/home?lx=CAiXgOuk733McJ6lOrkDKw> Last Sync By Niku Administrator

Import Sheet to CA PPM ☐ Do Not Sync ☐

Save Save And Return Return

 = Locked by Process

Direct link to Smartsheet

Link Risk and Issues Sheets To Projects

Enter Risk-Smartsheet ID, Check Establish Link/Synch checkbox and click on save. Process will read Risks from Sheet and create in Clarity

Enter Issue-Smartsheet ID, Check Establish Link/Synch checkbox and click on save. Process will read Risks from Sheet and create in Clarity

Dashboard Properties Tasks Financial Plans Risks/Issues/Changes Processes

Project: Smartsheet Integration Testing-1Create - Properties - Main - Smartsheet Integration

Risk

Risk - Smartsheet ID	7165532429412228	Risk-Smartsheet Integrated By	Tom Anderson
Risk - Establish Link/Synch	<input type="checkbox"/>	Risk- Smartsheet Inetgration Status	Success
Risk- Smartsheet Link	https://app.smartsheet.com/sheets/vxvnxRc3Cjr39Rpmv2CpGHVwV4rpWxgm6XmMx981	Risk-Smartsheet Integration/Import Date	2019-04-18 09:44:51
Risk-Smartsheet Integration Logs		Risk - Smartsheet Integration/Import Status	Success

Issue

Issue - Smartsheet ID	7511728268306308	Issue-Smartsheet Integrated By	Tom Anderson
Issue - Smartsheet Establish Link/Synch	<input type="checkbox"/>	Issue- Smartsheet Integration Status	Success
Issue- Smartsheet Link	https://app.smartsheet.com/sheets/9RHGg9G4h3V98rJ5M2gGvRp7XGPwVQHwJJJCRCv1	Issue-Smartsheet Integration/Import Date	2019-04-19 04:22:25
Issue-Smartsheet Integration Logs	Synch Initiated By:Tom Anderson;	Issue - Smartsheet Import Status	Success

Direct link to Risk Smartsheet

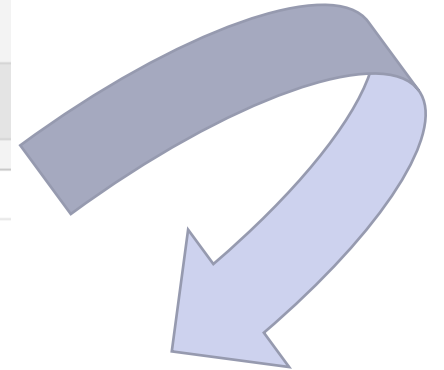
Direct link to Issue Smartsheet

Risks and Issues in Smartsheet

File Alerts & Actions Forms ☆ MK Risk Sample

Grid View Filter Arial 10 B I U S A

	ID#	Description	Risk/Issue Type	Status	Owner	Target Resolution Date	Probability	Impact	Risk Response	Show In Report	Mitigation Steps/Resolution	Comments
1	Risk234	Risk234	Human Interface	Open		04/19/19	Low	Low	Accept	■	Migration Steps	Comments
2												



Dashboard Properties Tasks Financial Plans Risks/Issues/Changes Processes

Project: Smartsheet Integration Testing-1Create - Risks/Issues/Changes - Risks

Filter: System Default

	Risk	Category	Priority	Probability	Impact	Calculated Risk	Above Threshold	Status	Owner	Target Resolution Date
<input type="checkbox"/>	Risk234	Human Interface	◆	◆	◆	◆	✓	Open	Administrator, PPM	4/19/19

Save New Delete

Managing Your Views



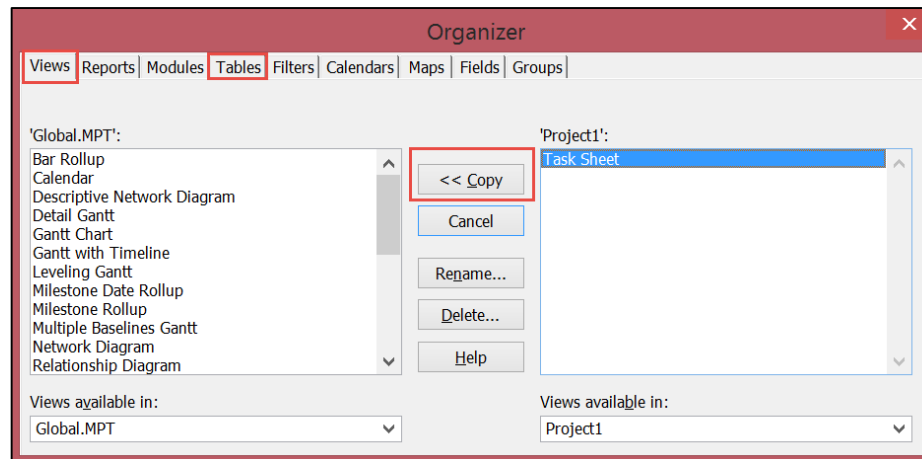
Let Rego be your guide.

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!)

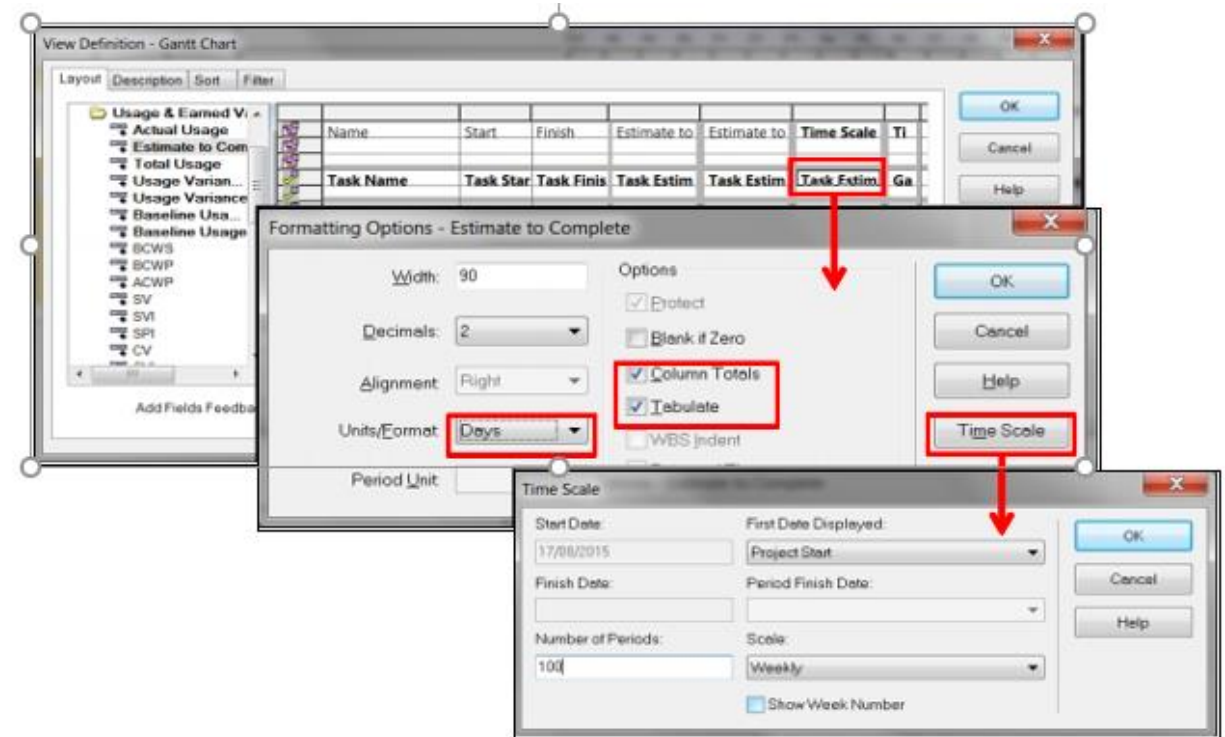
MSP Organizer

- 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

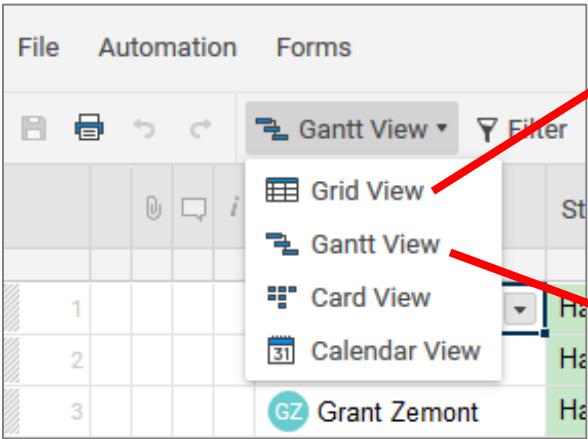


OWB Views

- You can use '**F3**' as the shortcut to display the '**View Definition**' dialog box, used to edit views.
- The same value, for example ETCs or Actuals, can be added multiple times to include column totals, formatting and time-scales to display hours and or days of effort.
- Formatting Fields enables additional dimensions to displaying data. For Example, resource budgeting scenarios can be applied in days instead of hours.

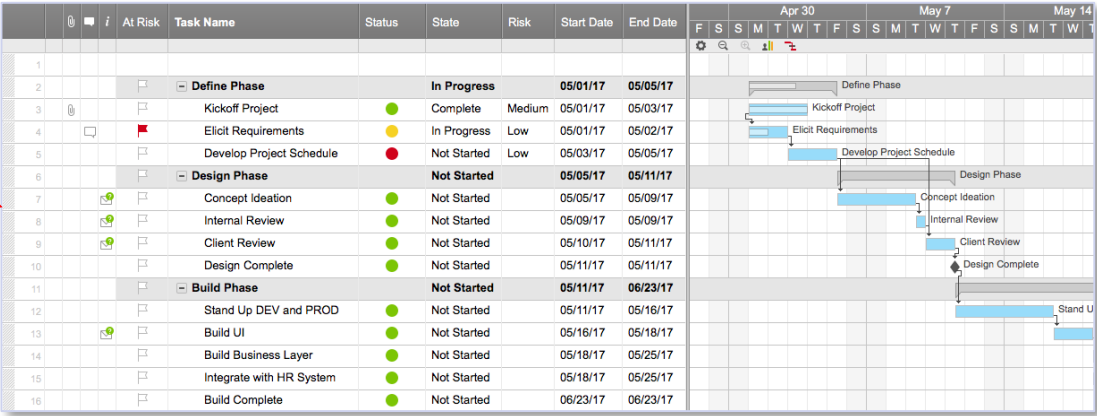


Smartsheet Views (1)



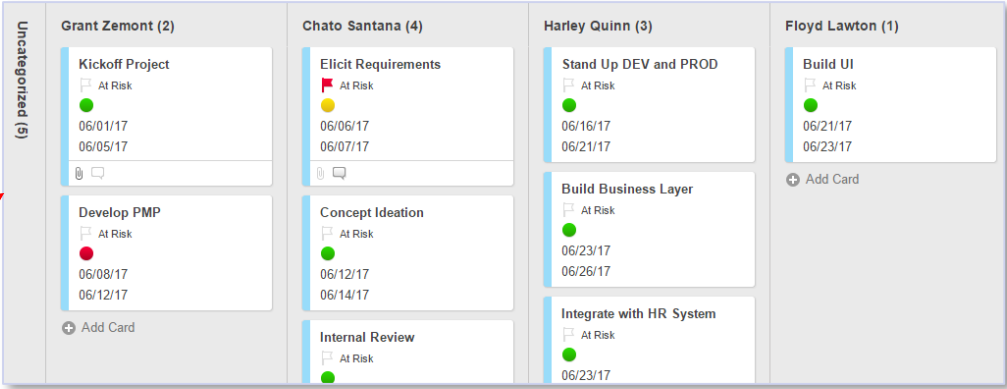
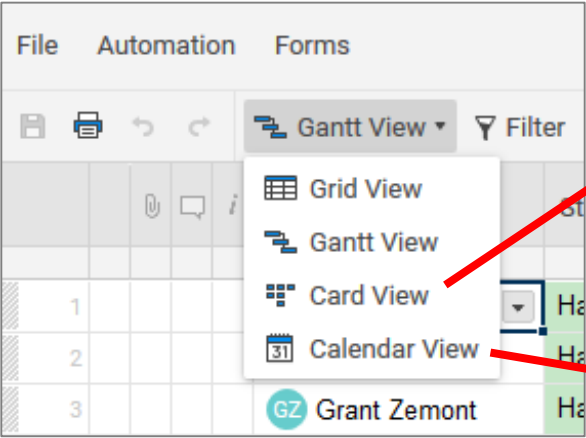
	At Risk	Task Name	Status	State	Risk	Start Date	End Date	Assigned To	Duration	HOURS	Allocation %	% Complete
1												
2		Define Phase	In Progress			05/01/17	05/05/17		4.5d			53%
3		Kickoff Project	Complete	Medium		05/01/17	05/03/17	Chato Santana	3d	0.5	100%	100%
4		Elicit Requirements	In Progress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

Grid View

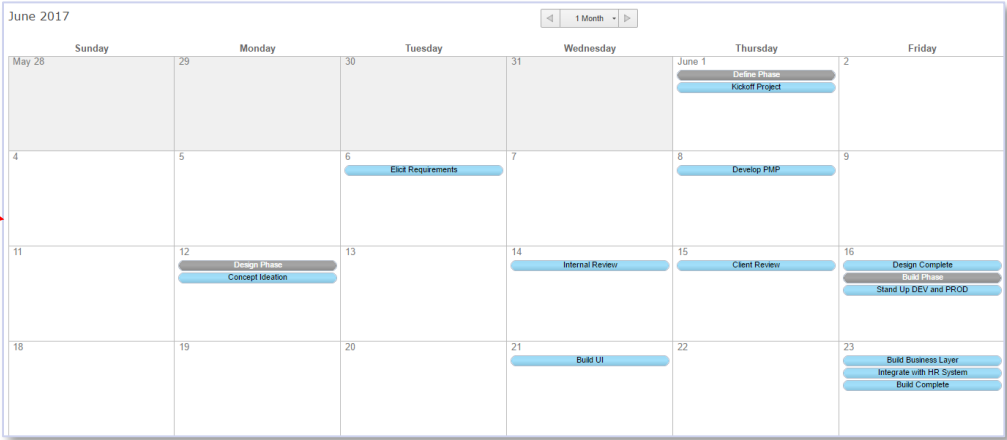


Gantt View

Smartsheet Views (2)



Card View



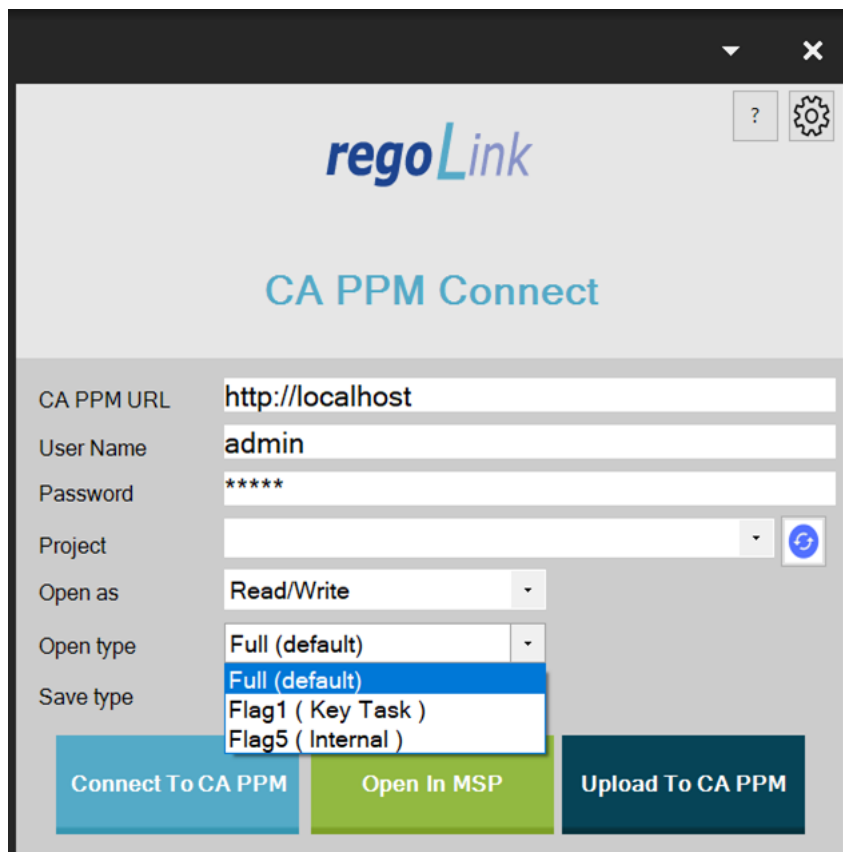
Calendar View

Rego MSP Connector – Partial Sync



Let Rego be your guide.

Partial Export & Import—Coming Soon!

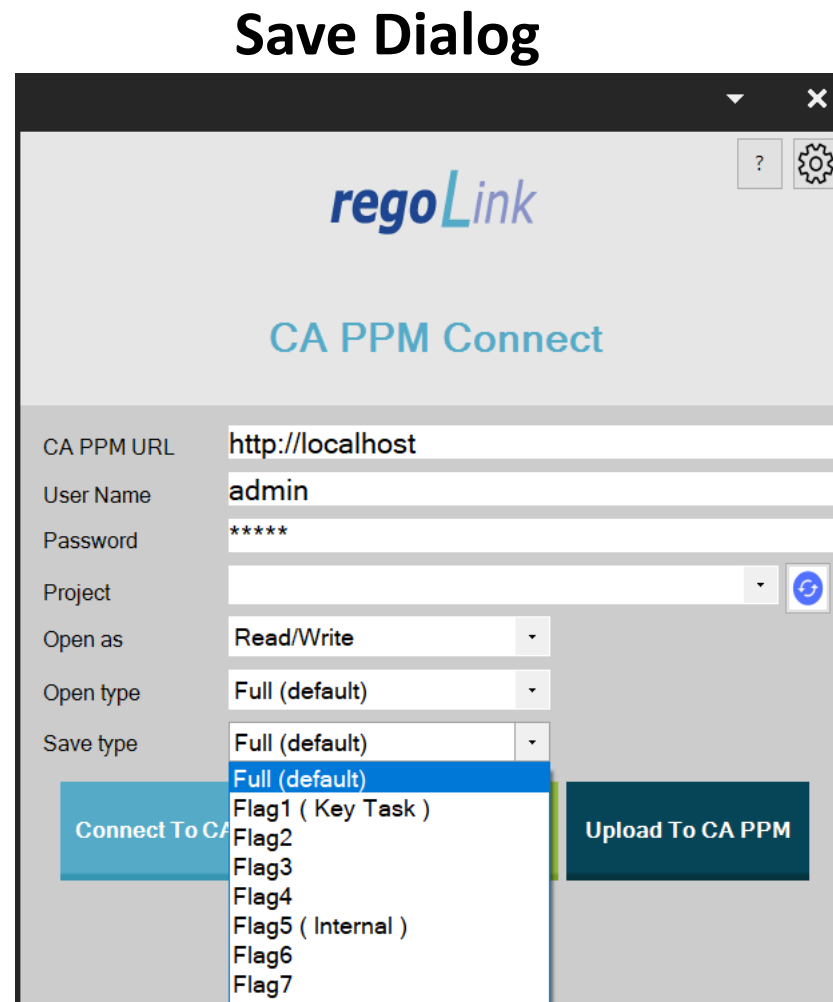


The dialog box is titled "regoLink" and "CA PPM Connect". It contains the following fields and controls:

- CA PPM URL:
- User Name:
- Password:
- Project:
- Open as:
- Open type:
- Save type:

Buttons at the bottom: **Connect To CA PPM**, **Open In MSP**, and **Upload To CA PPM**.

Open Dialog



The dialog box is titled "regoLink" and "CA PPM Connect". It contains the following fields and controls:

- CA PPM URL:
- User Name:
- Password:
- Project:
- Open as:
- Open type:
- Save type:

Buttons at the bottom: **Connect To CA PPM**, **Open In MSP**, and **Upload To CA PPM**.

A "Save Dialog" overlay is visible, showing a list of save types: **Full (default)**, Flag1 (Key Task), Flag2, Flag3, Flag4, Flag5 (Internal), Flag6, and Flag7.

MSP OOTB or Rego Connector?



Let Rego be your guide.

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 CA PPM	✓	
Baseline Support (Coming Soon)	✓	✓
Master/Subproject	✓	
Partial project import to CA PPM (Coming Soon)		✓
Partial project bi-directional Sync (Coming Soon)		✓
Targeted fields bi-directional Sync (Coming Soon)		✓

MSP OOTB vs Rego Connector

Project Type	Action	OOTB	Rego	% improved
1200 task project, 1745 assignments, 1531 day duration, 1,823,930 hours of work	Open	44	17	61%
1200 task project, 1745 assignments, 1531 day duration, 1,823,930 hours of work	Save to Clarity	34	19	44%
2400 task project, 3574 assignments, 1531 day duration, 3,689,700 hours of work	Open	57	24	58%
2400 task project, 3574 assignments, 1531 day duration, 3,689,700 hours of work	Save to Clarity	72	26	63%
5000 task project, with 6000 assignments, 160 day duration, 538,000 hours	Open	62	32	48%
5000 task project, with 6000 assignments, 160 day duration, 538,000 hours	Save to Clarity	115	42	63%
10,000 task project, no assignments	Open	56	38	32%
10,000 task project, no assignments	Save to Clarity	165	54	67%

Questions?



Let Rego be your guide.

Thank You For Attending regoUniversity

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 Name = **regoUniversity**
- Course Number = **Session Number**
- 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.



Phone

888.813.0444



Email

info@regouniversity.com



Website

www.regouniversity.com