

MSP | Installation Tips & Tricks

Your Guides: Rob Greca and Jenn Rinella

Part I: Introduction

regoUniversity 2018

Let Rego be your guide.

Agenda

- Installing the Interface
- Options and Settings
- Organizer
- Improving Settings

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



- Full bidirectional connection between CA PPM and MSP
- Stop relying on multiple spreadsheets and applications for data
- Real-time progress updates on MSP project schedule through CA PPM Timesheets
- Repeatable processes and centralized data are essential in providing accurate reports and actionable metrics
- MSP is an industry standard and widely used by most Project Managers

CA PPM Scheduling Options

- 1. CA PPM Job or via Gantt on Project Autoschedule
- 2. Microsoft Project 2010/2013/2016 (15.1)
- 3. Open Workbench
- Organizations should select ONE CA 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

 \bigcirc

regoUniversity 2018

8

Simple Project Schedules can be updated in CA PPM from the Project > Tasks > Gantt view

Autoschedule can be used to updated the project schedule after making changes. You can also review your changes before publishing them as the Plan of Record (POR)

Autoschedule will:

- Use availability as early in the project as possible
- Set start and finish dates based on task constraints
- Minimize the duration of the critical path, which will determine the earlies finish date for the project



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

- Algorithm is same as CA PPM
- Fully integrated with CA PPM
- Training may be required



Microsoft Project will update the project schedule based on task duration

- Algorithm is date driven
- Custom fields need to be mapped through the CA PPM User Interface
- MSP license required for each user
- Additional CA PPM / MSP training may be necessary



XML vs. Legacy Driver

- Before CA PPM Release 14.1, there was one MSP Interface driver which was OLE-based
- In CA PPM Release 14.1, a new XML-based driver option was introduced to improve performance by opening the project schedule in one large block.
- During the installation process, you can choose to install the Legacy "OLEbased" driver or the New "XML-based" driver
- Both options are available for 32-bit and 64-bit MSP versions.

New XML Driver vs. Legacy OLE Driver

- Resource Pools are no longer available for Master Projects; all Resources will be on the Master Resource Sheet
- If a Task is created in CA PPM and NOT pinned through a dependency and does NOT start on the Project Start Date, MSP will NOT automatically put a Constraint on the Task
- "Number1" and "Number2" fields are no longer mapped to the "Proposed ETC" and "Pending Actuals" Fields
- Custom Views are no longer saved in the MPP file and should be saved in the Global.mpt file*
- "Save As" is not available when trying to save a schedule to an EXISTING CA PPM Project
- Elapsed Duration values are now preserved between CA PPM and MSP

Installing the MSP Interface

The following third-party software must be installed on the workstation:

- MSP 2010 or MSP 2013 or MSP 2016 (15.1)
- Microsoft .NET Framework 4*

http://www.microsoft.com/downloads/en/details.aspx?FamilyID=0a391abd-25c1-4fc0-919fb21f31ab88b7&displaylang=en

Microsoft Visual Studio 2010 Tools for Office Runtime*

https://www.microsoft.com/en-us/download/details.aspx?id=48217

Java JRE is now included in the CA PPM download and is copied to the MSP Interface Installation directory on the workstation's hard drive, eliminating all of the prior issues related to the JRE version incompatibility



To determine if you should install **Microsoft Project Interface (x86)** or **Microsoft Project Interface (x64)**, you need to determine if MSP was installed as 32-bit or 64-bit, REGARDLESS of the workstation

In Office 2013:	In Office 2010:
1. Open MSP	1. Open MSP
 Click File > Account > About > Program Name 	2. Click File > Help
You should see the version and whether you are running 32-bit or 64-bit	You should see the version and whether you are running 32-bit or 64-bit under "About Microsoft Project"

Options and Settings

MSP Related Settings In CA PPM: Admin



regoUniversity 2018

CA PPM > Administration > Project Management > Settings:

Settings		
General		
Default Load Pattern	Uniform 🖌	1
Guidelines URL		
First Month of Financial Quarter	Jan 🗸	
First Day of Work Week	Sun 💌	
Default Display Unit for Work Effort	Hours V	
Enable Investment- specific Charge Codes		
Allow posting of future timesheets		
Notify on Delete of Risk/lssue/Change Requests	•	
Only Export Current Baselines When Opening Investments in a Scheduler	•	2
MSP Assignment Units Mapping with PPM Assignment 'Max % Load'	•	3

- **Default Load Pattern:** This should be set to "Uniform" which will be the default and map to the MSP "Work Contour" field
- Only Export Current Baselines When Opening Investments in a Scheduler: This should be checked to improve performance*
- **OVER UNITED ASSIGNMENT UNITS Mapping with PPM Assignment "Max % Load":** This should be checked to ensure that the MSP Assignment Unit % does not get overwritten by the Resource's Allocation % on the project





CA PPM: Project > Properties > Settings:

Project: LJO Test Pro	oject - Properties - Main - Settings
General	
Dashboard View	Project Default Layout
Methodology Scheduler	[Select]
% Complete Calculation Method	Manual V 2
Time and Staff	
Assignment Pool	Team Only
Track Mode	Clarity V 3
Open for Time Entry	\checkmark
Prevent Unassigned Timesheet Tasks	

Scheduler: This must be set to "Microsoft Project"

Complete Calculation Method: This should be set to "Manual" if MSP is being used with CA PPM or if you are using an external job to calculate % Complete. The % Complete field appears on the task properties page

Track Mode: This should be set to "Clarity" if CA PPM Timesheets are being used to record time



From the MSP Tools menu, select File > Options and refer to the following guidelines so MSP and CA PPM will effectively work together

General Tab	
General	General options for working with Project.
Display	
Schedule	User Interface options
Proofing	<u>C</u> olor scheme: Silver
Save	ScreenTip style: Show feature descriptions in ScreenTips
Language	Project view
Advanced	Default view: Task Sheet
Customize Ribbon	Date format: Wed 1/28/09
Ouick Access Toolbar	Personalize your copy of Microsoft Office
Add-Ins	User name: Lisa Olsen
	Initials: LO
Trust Center	· · · · · · · · · · · · · · · · · · ·
	Do not choose a Date Format with a
	Timestamp

Date Format: The storage of dates and timestamps are not consistent between tables in CA PPM. Some dates, like Task Start and Finish Dates, are recorded with specific timestamps. Some dates are recorded as the correct date with a timestamp of midnight. Some dates are recorded as a "plus 1" date, which means that the date stored in the table is one day later with a midnight timestamp. To avoid discrepancies, it is NOT recommended to use a date format with a timestamp





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

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 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

5 Split in-progress Tasks: Helps fill in the work gaps while using Resource Leveling

Schedule Tab:



Manually Scheduled Tasks

Tasks can be set to "Manually Scheduled" from MSP Options. This allows you to enter data like you would in Excel where tasks are not calculated.

	0	Task Mode	Task Name	Start	Finish	Predecessors	Duration -	Work 🗸	Remaining _ Work	Actual Work	Resource Names	Туре
0		3	□ LIO Rego University	Mon 3/2/15	Mon 3/2/15		0d	0h	0h	0h		Fixed Duration
1	ŧ	3	Task A - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15		5d	40h	40h	0h	Olsen Lisa	Fixed Duration
2	ŧ	3	Task B - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	1	5d	40h	40h	0h	Olsen Lisa	Fixed Duration
3	+	3	Task C - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	2	5d	40h	40h	0h	Olsen Lisa	Fixed Duration
4		*	Task D - Calc Off - Manually Sched	Mon 3/2/15	Fri 3/6/15		5d	0h	0h	0h		Fixed Duration
5		*?	Task E - Calc Off - Manually Sched	Wed 4/1/15				0h	0h	0h		Fixed Duration
6		*	Task F - Calc Off - Manually Sched		Fri 5/1/15			8h	8h	0h	Olsen Lisa	Fixed Duration

	Name	ID	Start	Finish	Status	% Comp	Time	Act	Dur	ETC
	Task A - Calc Off - Auto Sched		3/2/15	3/6/15	Not Started	0%	~	0.00	5.000	40.00
Save to	Task B - Calc Off - Auto Sched		3/2/15	3/6/15	Not Started	0%	\checkmark	0.00	5.000	40.00
	Task C - Calc Off - Auto Sched		3/2/15	3/6/15	Not Started	0%	\checkmark	0.00	5.000	40.00
CA PPM:	Task D - Calc Off - Manually Sched		3/2/15	3/6/15	Not Started	0%	\checkmark	0.00	5.000	0.00
•	Task E - Calc Off - Manually Sched		4/1/15	4/1/15	Not Started	0%	\checkmark	0.00	1.000	0.00
	Task F - Calc Off - Manually Sched		5/1/15	5/1/15	Not Started	0%	\checkmark	0.00	1.000	8.00

Open		0	Task Mode	Task Name	Start 🗸	Finish	Predecessors 🗸	Duration 💡	Work 📮	Remaining _ Work	Actual Work	Resource Names	Туре 🗸
open	0		3	□ LIO Rego University	Mon 3/2/15	Mon 3/2/15		0d	0h	0h	0h		Fixed Duration
back up	1	ŧ	3	Task A - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15		5d	40h	40h	0h	Olsen Lisa	Fixed Duration
back up	2	ŧ	3	Task B - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	1	5d	40h	40h	0h	Olsen Lisa	Fixed Duration
in MSP:	3	•	3	Task C - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	2	5d	40h	40h	0h	Olsen Lisa	Fixed Duration
	4		3	Task D - Calc Off - Manually Sched	Mon 3/2/15	Fri 3/6/15		5d	0h	0h	0h		Fixed Duration
	5		3	Task E - Calc Off - Manually Sched	Wed 4/1/15	Wed 4/1/15		1d	0h	0h	0h		Fixed Duration
	6		3	Task F - Calc Off - Manually Sched	Fri 5/1/15	Fri 5/1/15		1d	8h	8h	0h	Olsen Lisa	Fixed Duration



Scroll Down on Schedule Tab.....

Schedule Alerts Options:	All New Projects 🗸 🚺									
 ✓ Show task schedule warnings ✓ Show task schedule suggestions 										
Calculation										
Calculate project after each edit:	2									
<u>Calculation options for this proje</u>	ect: 📳 All New Projects 🗸 3									
Updating Task status updates r	resource status 1									
✓ Inserted projects are <u>c</u> alculated	Inserted projects are <u>calculated like</u> summary tasks									
Actual costs are always calculated by Project										
Edits to total actual cost	Edits to total actual cost will be spread to the status date									
Default fixed cost accrual: Prorate	ted V									

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.

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). **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.

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.



Calculation Mode: Off (Manually Scheduled)



If the MSP Calculation Mode is set to "Off" (manual), tasks will NOT be adjusted based on their dependencies and the project schedule will stay as it was last saved in CA PPM, if you don't have any Actuals from Timesheets.

	0	Task Mode	Task Name	Start -	Finish 🗸	Predecessors	Duration 💡	Work 🗸	Remaining . Work	Actual Work	Resource Names	Туре
0		3	🗉 🛛 UO Rego University	Mon 3/2/15	Mon 3/2/15		0d	0h	0h	0h		Fixed Duration
1		3	Task A - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15		5d	40h	40h	0h	Olsen Lisa	Fixed Duration
2	+	3	Task B - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	1	5d	40h	40h	0h	Olsen Lisa	Fixed Duration
3	•	3	Task C - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	2	5d	40h	40h	0h	Olsen Lisa	Fixed Duration

Save the Project Schedule to CA PPM:

Name	ID	Start	Finish	Status	% Comp	Time	Act	Dur	ETC	% Exp	Fixed Duration
Task A - Calc Off - Auto Sched		3/2/15	3/6/15	Not Started	0%	\checkmark	0.00	5.000	40.00	0.00%	Yes
Task B - Calc Off - Auto Sched		3/2/15	3/6/15	Not Started	0%	\checkmark	0.00	5.000	40.00	0.00%	Yes
Task C - Calc Off - Auto Sched		3/2/15	3/6/15	Not Started	0%	\checkmark	0.00	5.000	40.00	0.00%	Yes

Open Project Schedule from CA PPM to MSP:

	0	Task Mode	Task Name	Start 🗸	Finish	Predecessors 🗸	Duration 💡	Work 🗸	Remaining _ Work	Actual Work	Resource Names	Туре
0		3	□ LIO Rego University	Mon 3/2/15	Mon 3/2/15		0d	0h		0h		Fixed Duration
1	٠	3	Task A - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15		5d	40h	40h	0h	Olsen Lisa	Fixed Duration
2	+	3	Task B - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	1	5d	40h	40h	0h	Olsen Lisa	Fixed Duration
3	ŧ	3	Task C - Calc Off - Auto Sched	Mon 3/2/15	Fri 3/6/15	2	5d	40h	40h	0h	Olsen Lisa	Fixed Duration
						1						



The following are exceptions that apply with Manual Calculation:

- CA PPM Timesheet Actuals can shift Task Dates
- Resource Leveling will still recalculate the project schedule
- Task Constraints may shift Task Dates

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

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

Let Rego be your guide.

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

regoUniversity 2018



Save Tab:

		Project Options	5 ×
Γ	General	Customize how projects are saved.	
	Display		
	Schedule	Save projects	
	Proofing	Save files in this format: Project (*.mpp)	
	Save	Default File location: C:\Users\Lisa\Desktop\MSP Test	<u>B</u> rowse
	Language	Auto save every 10 minutes	
	Advanced	When automatically saving: Save active project only 	
	Customize Ribbon	Save all <u>op</u> en projects	
	Quick Access Toolbar	Prompt before saving	
	Add-Ins	Save templates	
	Trust Center	Default user template location: C:\Users\Lisa\AppData\Roaming\Microsoft\Templates\	<u>B</u> rowse

1 Save Files in this Format: This option can be changed if you want to save the MPP file in a format that's compatible with an older version of MSP

2 Default File Location: When saving the MPP file outside of CA PPM, you can change the default location where the file gets saved*





Allow Cell Drag and Drop: If checked, you can move cells by using the "drag and drop" functionality, moving the task ids with the task. Don't use the "cut and paste" functionality to move tasks because MSP will change the task unique id which will affect the integration mapping

Automatically add new views, tables, filters, and groups to the global: (New in MSP 2010): If checked, any changes made to views, tables, filters and groups will automatically be available across your projects. In previous MSP versions, changes needed to be manually copied to the Global.mpt file through the Organizer*

Advanced Tab:





29

Show "Links between Projects" dialog box on open: This feature is incompatible with CA PPM external dependencies, and is ignored when selected.

Scroll Down on Advanced Tab...

ptions for this pr	oject: 🚇 Al	New Projects	~			
min	\checkmark	١	N <u>e</u> eks:	wk	~	
hr	\checkmark	Ν	Mo <u>n</u> ths:	mon	~	
day	\checkmark	Y	<u>(</u> ears:	yr	>	
pace before label						
project <u>s</u> ummary	task					
rline hyperlinks						
color: 🍐 🔻		E	ollowed	hyperlink color:	<u></u> –	
ect linking optic	ons for this pro	ject: 🖭 Proj	ect1 🗸			
external successo	rs		Show	'Links Between Pr	ojects' dialog box on ope	n 1
-				-	, ,	
		a				
lue options for t	his project:	💾 All New Proj	jects 🗸			
sk Earned <u>V</u> alue n	nethod: % (Complete	~	D		
or Earned Value ca	alcula <u>t</u> ion: Bas	seline 🗸	()			
n options for thi	s project:	All New Project	cts 🗸			
•						
				-		
				is date		
-						
to total task % con	nplete will be sp	read to the statu	ıs date 🛈			
late multiple critic	al paths 🕕					
critical if slack is le	ess than or equa	al to 0	days			
	min hr day pace before label project summary dine hyperlinks golor: ••••••••••••••••••••••••••••••••••••	min Image: Complete of the project summary task day Image: Complete of the project summary task project summary task dine hyperlinks golor: Image: Complete of the project summary task ect linking options for this project: external gredecessors lue options for this project: sk Earned Value calculation: Base or Earned Value calculation: Base an options for this project: end of completed parts after state d move start of remaining parts gtart of remaining parts before st ad move gend of completed parts f to total task % complete will be sp ate multiple critical paths ①	min Image: Sector S	min Weeks: hr Weeks: hr Wonths: day Years: pace before label project summary task project summary task fine hyperlinks golor: Image: Complete State ect linking options for this project: Project 1 external successors Show external predecessors Att lue options for this project: Show external predecessors Att lue options for this project: Show external gredecessors Att noptions for this project: Show end of completed parts after status date back to status date move start of remaining parts back to status date ad move gnd of completed parts forward to status date forward to status date to total task % complete will be spread to the status date forward to status date total task % complete will be spread to the status date forward to status date	min V Weeks: wk hr V Months: mon day V Years: yr pace before label project gummary task Time hyperlinks golor: Eollowed hyperlink color: ect linking options for this project: Project1 egternal successors Automatically acceptions external gredecessors All New Projects Image: Show 'Links Between Present acception of this project: All New Projects Image: Show 'Links Between Present acception of this project: lue options for this project: Mail New Projects Image: Show 'Links Between Present acception of this project: Image: Show 'Links Between Present acception of this project: lue options for this project: Mail New Projects Image: Show 'Links Between Present acception of this project: Image: Show 'Links Between Present acception of this project: or Earned Value calculation: Baseline Image: Show 'Links Between Present acception of this project: Image: Show 'Links Between Present acception of this project: end of completed parts for this project: Mail New Projects Image: Show 'Links Between Present acception of this project: Image: Show 'Links Between Present acception of this project: end of completed parts after status date back to status date Image	min W hr W day Years: yr Years: yr yr pace before label project gummary task project gummary task Time hyperlinks golor: Image: Complete State ect linking options for this project: Project Image: Complete State external predecessors All New Projects external gredecessors All New Projects sk Earned Value calculation: Baseline moptions for this project: All New Projects an options for this project: All New Projects et and of completed parts after status date back to status date ate move gnd of completed parts forward to status date at move gnd of completed parts forward to status date ate multiple critical paths ()

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



- 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

Organizer					
Views Reports Modules Tables Filters Calendar	rs Maps Fields Groups				
'Global.MPT':	'Project1':				
Bar Rollup , Calendar , Descriptive Network Diagram , Detail Gantt , Gantt Chart , Gantt with Timeline , Leveling Gantt , Milestone Rollup , Milestone Rollup , Milestone Rollup , Multiple Baselines Gantt , Network Diagram ,	 Cancel Rename Delete 	^			
	✓ <u>H</u> elp	\sim			
Views a <u>v</u> ailable in: Global.MPT	Views availa <u>b</u> le in: Views availa <u>b</u> le in:	~			





- In Microsoft Project 2010, the organizer behaves a bit differently
 - By default, new views are automatically saved to the global template file and are made available to future projects (as are new tables associated with the view)
 - To change this setting, on the File tab, click Options, and then click Advanced. Find the setting in the Display section
 - Changes to existing view elements are not automatically saved to the Global template with this setting. This only applies to NEW views, tables, filters and groups





Improving Settings

- How can you decrease the amount of time it takes to export a project schedule from CA PPM to MSP?
 - Set the CA PPM default loading pattern to "Uniform" which will map to a "Flat" work contour in MSP
 - Select Only Export Current Baselines When Opening Investments in a Scheduler in CA PPM Administration > Project Management > Settings – Only for Legacy Driver



- Remove unnecessary assignments
- Increase the memory on the workstation to at least 8GB

Questions?

regoUniversity 2018

Let Rego be your guide.

Thank You For Attending regoUniversity

Instructions for PMI credits

- Access your account at pmi.org
- Click on **Certifications** ٠
- Click on Maintain My Certification
- Click on Visit CCR's button under the Report PDU's ٠
- Click on Report PDU's •
- Click on **Course or Training** •
- Class Name = regoUniversity
- Course Number = Session Number
- Date Started = **Today's Date** ٠
- Date Completed = **Today's Date** ٠
- Hours Completed = 1 PDU per hour of class time ٠
- Training classes = **Technical** •
- Click on I agree and Submit





888.813.0444



Email info@regouniversity.com



Website www.regouniversity.com