# caworld 10 hands-on lab: using Microsoft Project with CA Clarity TM PPM

**Session # PP504LN** 

Focus Area Project & Portfolio Management



#### abstract

The CA Clarity PPM Microsoft Project (MSP) Integration is a powerful tool that allows CA Clarity PPM users to manage and schedule their projects using Microsoft Project. Using Microsoft Project with CA Clarity PPM presents many challenges. This lab will focus on one of the biggest challenges; anticipating scheduling changes. We will go through some common scenarios where the changes you make to your projects in CA Clarity PPM, will have an direct impact on your project plan schedule in Microsoft Project

#### – You will learn:

- What can cause scheduling changes upon opening a project in Microsoft Project
- How to train your project managers to anticipate these changes
- How to help minimize Microsoft Project Integration calls to your service desk
- This lab is designed for current users of CA Clarity PPM using, or planning to use, Microsoft Project.





## agenda

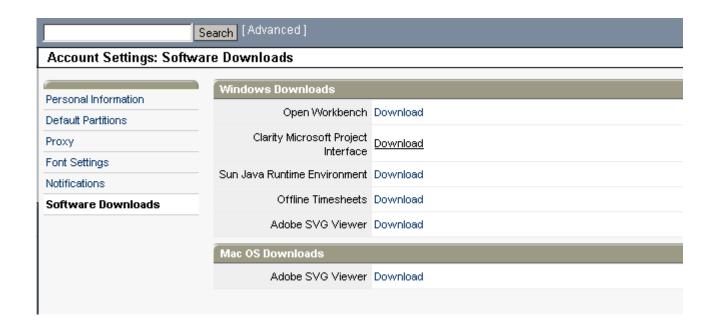
- How the CA Clarity PPM MSP Interface works.
- Scheduling and project changes; what to expect!
- Q & A
- Performance; how to speed import/export (time permitting).





#### **CA Clarity PPM MSP interface basics**

 The CA Clarity PPM MSP Interface install is located in the Account Settings>Software Download section in CA Clarity PPM.







# CA Clarity PPM MSP interface basics continued

- The mspsetup.exe contains both the CA Clarity PPM MSP Interface install and the Schedule Connect component which will allow you to launch projects from CA Clarity PPM into Microsoft Project.
- After you install the CA Clarity PPM MSP Interface & Schedule Connect you must enable the macro by double-clicking the MSPAdd2k.mpp file.
- This file is located in the Program Files\CA\Clarity\CA Clarity PPM
   MSP Interface\data Directory.

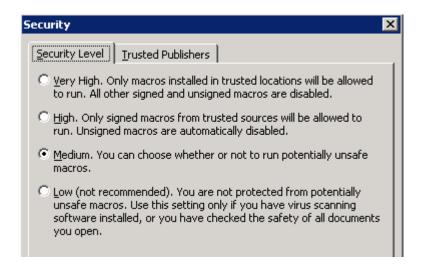




# CA Clarity PPM MSP interface basics continued

 TIP! Make sure your MSP Macro Security setting is set to Medium or Low prior to Enabling the macro. Also make sure MSP is closed.

Tools>Macro>Security







# **CA Clarity PPM MSP interface basics continued**

- FACT: Your version of the CA Clarity PPM application can be different than the version of the CA Clarity PPM MSP Interface client. The modified date of the mspapi.dll is the only sure way to know what version of the MSP client you are running.
- The location of the mspapi.dll is located in the Program
   Files\CA\Clarity\CA Clarity PPM MSP Interface\ bin Directory.
- This file will be updated for every Service Pack release.

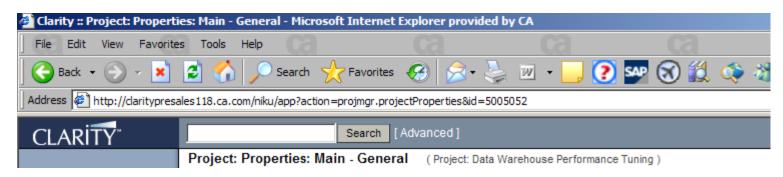




#### exporting a project to Microsoft Project

- Order of Execution
- Export of the MPP file from the prdocument table. Not only do
  we store the data in the relational tables, but we store a copy of
  the mpp file as well.
- 2. Tip! Prdocument.prrecordid = Project ID of the project.

You can find the Project ID in the Project Properties URL:







# exporting a project to Microsoft Project continued

- Order of Execution (continued)
- 2. Data from the Clarity; Relational tables are exported
  - a. Resource Information; Team, Calendars & Shifts
  - b. Task Information; Work Breakdown Structure & Constraints, etc
  - c. Assignment Information; Work, Loading pattern, etc
  - d. Baseline Information; Project, Task Baselines
  - e. Dependencies

Tip! Review the app-niku.log for any "getproject" errors





## importing a project to CA Clarity PPM from MSP

- Order of Execution
- 1. Data imported to the Clarity Relational tables:
  - a. Dependencies/constraints
  - b. Baselines
  - c. Assignment information
  - d. Task
  - e. Resource Information
- 2. MPP written to the prdocument table





## importing a project to CA Clarity PPM from MSP

- At the end of the import to CA Clarity PPM, the Server will send a message back to the MSP interface that the save was successful. If a user doesn't see the "Project Successfully Saved" message at the end of the import, something may have gone wrong.
- To check for problems, review the app-niku.log files for any "postproject" errors.





#### exercise 1

- 1. Export "CAW Development MSP" Project to Microsoft Project.
- 2. Carefully watch the export.
- 3. Review the exported project and describe what happened!





## scheduling & project changes

- Microsoft Project is a scheduling tool. Its job is to schedule the project <u>EVERY</u> time the project is exported from CA Clarity PPM.
- Factors that will affect the project schedule include:
  - 1. Timesheet posting
  - 2. Assignment changes, such as modifying work (ETC), adding team members to tasks
    - 3. Resource Calendar changes
    - 4. Assignment Loading patterns





#### exercise 2 part I – loading patterns

- 1. In CA Clarity PPM Navigate to the "CAW MSP Exercise 2" Project
- From the Tasks>Work break down Structure Tab, create a new task
- 3. Start date = 6/7/2010, Finish Date = 6/11/2010 (duration 5 days)
- 4. Assign Team Member "Cheryl Amos" to the task
- 5. Export project to MSP
- 6. Note the duration!





#### exercise 2 part 2 – loading patterns

- 1. In MSP, Change the Loading pattern for the Assignment to "Flat". Note the duration change.
- 2. In CA Clarity PPM, in the Assignments section for the task, change the Loading pattern to "Uniform", and export the project to MSP. Note the duration change.
- 3. Change the default loading pattern in the Admin Tool in CA Clarity PPM to "Uniform".





## work contour mapping

When opening from CA Clarity PPM

Fixed (Clarity) becomes Contour (MSP)

Uniform (Clarity) becomes Flat (MSP)

Front (Clarity) becomes Front (MSP)

Back (Clarity) becomes Back (MSP)

Contour (Clarity) will map to whatever the Work contour was in MSP when the project was saved (ie. Turtle, Bell)





# work contour mapping continued

When saving to CA Clarity PPM

Back (MSP) becomes Back (Clarity)

Front (MSP) becomes Front (Clarity)

Flat (MSP) becomes Uniform (Clarity)

Contour (MSP) becomes Fixed (Clarity)

Any other Work Contour becomes Contour (Clarity)





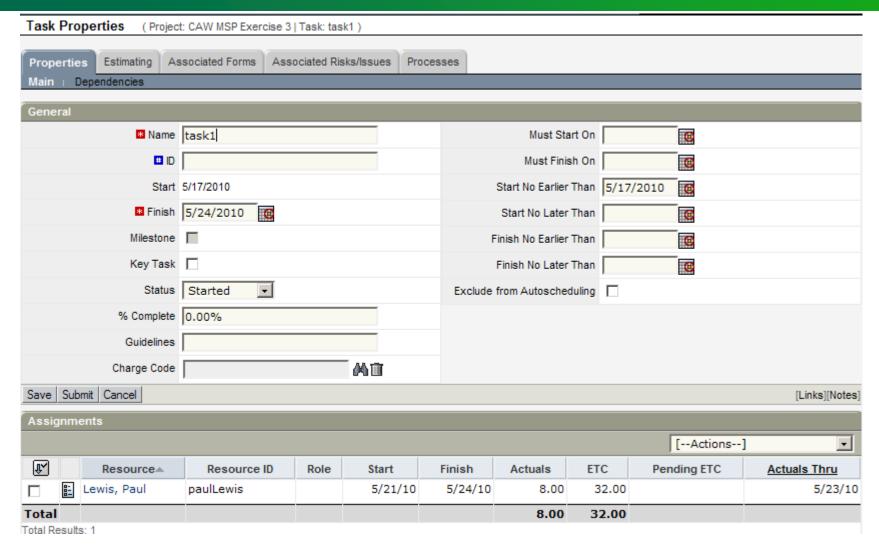
#### exercise 3 – project posting

- Review Project "CAW MSP Exercise 3" in CA Clarity PPM
- Review Paul Lewis timesheet against this project.
- Review the Actual Thru Date for the task assignment.
  - 1. From the project properties tab, Click on the "Tasks" tab.
  - 2. Click on the "Assignments" link.
  - 3. Click on the "[Configure]" link.
  - 4. Add the "Actuals Thru" field to the Selected Columns section and click on "Submit".





## exercise 3 - project posting continued



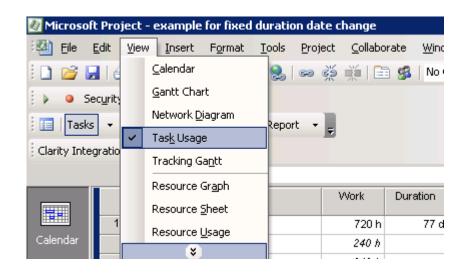




# exercise 3 - project posting part 2

- 1. Export the Project "CAW MSP exercise 3" to MSP.
- 2. Review the project schedule and how timesheet posting has changed the project schedule.

TIP! For a more comprehensive look, use the Task Usage view.







## unanticipated scheduling & project changes

- When you encounter a scheduling change when you export a plan to MSP, try to recreate the issue in MSP standalone in scratch before reporting the issue to CA Clarity PPM Support.
- When you do report a scheduling anomaly to CA Clarity PPM Support, please send in screenshots of the plan in CA Clarity PPM, the .mpp file, and what you expect to see. This information will allow CA Clarity PPM Support to be able to diagnose and resolve the issue faster.





#### work = units x duration

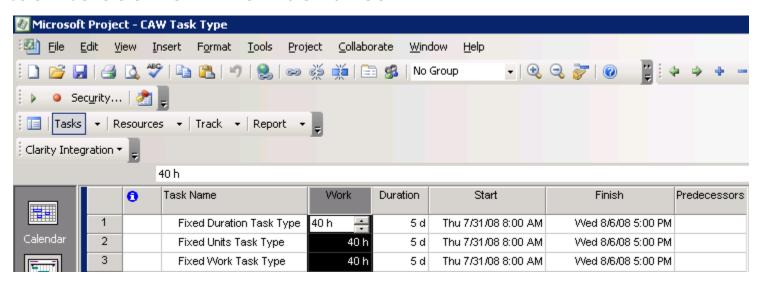
If the Task Type is>	Fixed Units	Fixed Duration	Fixed Work
And, you change the value of one of the fields below:			
Change Duration	MSP calculates work	MSP calculates work	MSP calculates units
Change Work	MSP calculates duration	MSP calculates units	MSP calculates duration
Change Units	MSP calculates duration	MSP calculates work	MSP calculates duration





#### exercise 4 – task types

- Export "CAW MSP Exercise 4" project from CA Clarity PPM to MSP.
- 2. The 3 tasks represent each task type. Change the Work on each task to see how MSP behaves.







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- Check your workstation hardware!
- Minimum Hardware requirements according to the CA Clarity PPM Product Architecture Stack = Minimum Performance!
- Review Task Finish Dates!
- The longer the task duration, the longer it will take to export the project.
- Review each task and set realistic start and finish dates.





- Review Task Assignments!
- 1. If possible, refrain from using too many "bucket" tasks
- 2. Review the Resource sheet for Over-allocated team members

	0	Resource Name	Туре	Material Label	Initials	Group	Max. Units	Std. Rate	Ovt. Rate	Cost/Use
1	<b>(</b>	Financial Analyst	Work		Financial An	Product D€	100%	\$150.00/h	\$150.00/h	\$0.00
2	<b>♦</b> 🕵	Marketing Analyst	Work		Marketing /	Product D€	100%	\$140.00/h	\$140.00/h	\$0.00
3	<b>(</b> ) 🕵	Project Manager	Work		Project Man	Product D€	100%	\$170.00/h	\$170.00/h	\$0.00
4	<b>(</b> ) 🕵	Product Manager	Work		Product Ma	Product D€	100%	\$190.00/h	\$190.00/h	\$0.00
5	<b>(</b> ) 🕵	Manufacturing	Work		Manufacturi	Product D€	100%	\$180.00/h	\$180.00/h	\$0.00
6	<b>(</b>	Research Scientist	Work		Research S	Product D€	100%	\$170.00/h	\$170.00/h	\$0.00
7	<b>(</b>	Market Research	Work		Market Res	Product D€	100%	\$160.00/h	\$160.00/h	\$0.00
8	<b>(</b>	Marketing Manage	Work		Marketing I	Product D€	100%	\$180.00/h	\$180.00/h	\$0.00





- Check Loading Pattern
   Use Flat Work Contour on Tasks in MSP.
- Use Uniform Loading Pattern as the Default in CA Clarity PPM.
   Admin Tool>Project Management>Settings

	0	Task Name	Work Contour	Work	Duration	Start	Finish
1		☐ Fixed Duration Task Type	~	40 h	5 d	Thu 7/31/08 8:00 AM	VVed 8/6/08 5:00 PM
		Coleman Joyce	Flat	40 h		Thu 7/31/08 8:00 AM	Wed 8/6/08 5:00 PM
2		☐ Fixed Units Task Type		40 h	5 d	Thu 7/31/08 8:00 AM	VVed 8/6/08 5:00 PM
		Carmen Ed	Flat	40 h		Thu 7/31/08 8:00 AM	Wed 8/6/08 5:00 PM
3		☐ Fixed Work Task Type		40 h	5 d	Thu 7/31/08 8:00 AM	VVed 8/6/08 5:00 PM
		Lewis Paul	Flat	40 h		Thu 7/31/08 8:00 AM	Wed 8/6/08 5:00 PM







Baselines

Remove Unnecessary baselines
Or
Download Current Baseline only to MSP
Admin Tool>Project Management>Settings







## related sessions

SESSION #	TITLE	Date / Time
PP214SN	Integrating Microsoft Project: CareFirst Blue Cross Blue Shield Reveals Secrets to Success	Thursday 10:15 a.m. – 11:15 a.m.





# exhibition center related CA and partner technology

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- Booth 435— CA Clarity™ PPM
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