



*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

- Introduction
- Why use an External Scheduler and Who Uses What?
- Pro's and Con's of using the Schedulers
- Decision Factors
- Options, Settings, & Scheduling Modes
- Managing Views
- ServiceNow OOTB MSP Connector vs. Rego MSP Connector
- Opening and Saving Projects
- Mapping fields with the Rego Connector
- Smartsheet Use Cases

What Scheduler Do You Primarily Use?

- ✓ Microsoft Excel
- ✓ Microsoft Project
- ✓ Smartsheet
- ✓ ServiceNow Planning Console
- ✓ Other?

Tool Differences and Decision Factors



Let Rego be your guide.

ServiceNow Scheduling Options

1. Planning Console
 2. Microsoft Project 2013/2016/2019/Office 365
 3. Smartsheet
- Organizations should select ONE ServiceNow 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.

Planning Console

ServiceNow's Planning Console will update the project schedule based on task duration.

- Comes with ServiceNow
- Integrates with Live Feed so users can collaborate on projects
- Simple “no frills” way to develop and manage a WBS

Microsoft Project

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

- Algorithm is date driven
- Custom fields need to be mapped into ServiceNow
- MSP license required for each user
- Additional ServiceNow/ 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. Can integrate with schedules, or **any other table** within ServiceNow (e.g. Risks, Incidents, Changes, etc.)
4. Can export schedules as MSP files

Decision Factors PC 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 or Smartsheet experience in the organization
- If there is a desire for PM's to completely stay within the ServiceNow ecosystem



Microsoft Project



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

MSP Options – Schedule Tab (1)

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

The screenshot shows the 'Project Options' dialog box with the 'Schedule' tab selected. The left sidebar contains options: General, Display, Schedule (highlighted), Proofing, Save, Language, Advanced, Customize Ribbon, Quick Access Toolbar, Add-Ins, and Trust Center.

Calendar options for this project: All New Projects (dropdown)

Calendar settings:

- Week starts on: Sunday (dropdown) — **1**
- Fiscal year starts in: January (dropdown)
- ☐ Use starting year for FY numbering
- Default start time: 8:00 AM (dropdown)
- Default end time: 5:00 PM (dropdown)
- Hours per day: 8 (spin box)
- Hours per week: 40 (spin box)
- Days per month: 20 (spin box)

Schedule section:

- ☐ Show scheduling messages ⓘ
- Show assignment units as: Percentage (dropdown)
- Scheduling options for this project:** All New Projects (dropdown) — **2**
- New tasks created: Auto Scheduled (dropdown) — **3**
- Auto scheduled tasks scheduled on: Project Start Date (dropdown)
- Duration is entered in: Days (dropdown) — **4**
- Work is entered in: Hours (dropdown)
- Default task type: Fixed Duration (dropdown)
- ☐ New tasks are effort driven ⓘ
- ☒ Autolink inserted or moved tasks ⓘ
- ☒ Split in-progress tasks ⓘ — **5**
- ☐ 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

A red arrow points from callout **1** to the 'Week starts on' dropdown. A red box highlights the 'Scheduling options for this project' dropdown and the 'New tasks created' dropdown. Another red box highlights the 'Duration is entered in' dropdown and the 'Split in-progress tasks' checkbox.

MSP Options – Schedule Tab (2)

6. **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.
7. **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 ServiceNow to MSP (more info on next slides).
8. **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.
9. **Updating Task status updates Resource Status:** If checked, resource actuals, remaining work 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 ServiceNow timesheets. (more info on next slides).

The screenshot displays the 'Schedule Alerts Options' and 'Calculation' settings in the MSP interface. Red boxes and numbers 1 through 5 highlight specific configuration points:

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

Other visible options include 'Show task schedule warnings' (checked), 'Show task schedule suggestions' (checked), 'Actual costs are always calculated by Project' (unchecked), and 'Default fixed cost accrual' set to 'Prorated'.

MSP: A Word About Calculation Mode: Off

- DON'T USE IT!
- Even with it set to off (manually scheduled) there are scenarios where MSP WILL schedule your plan:
 - ServiceNow 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.

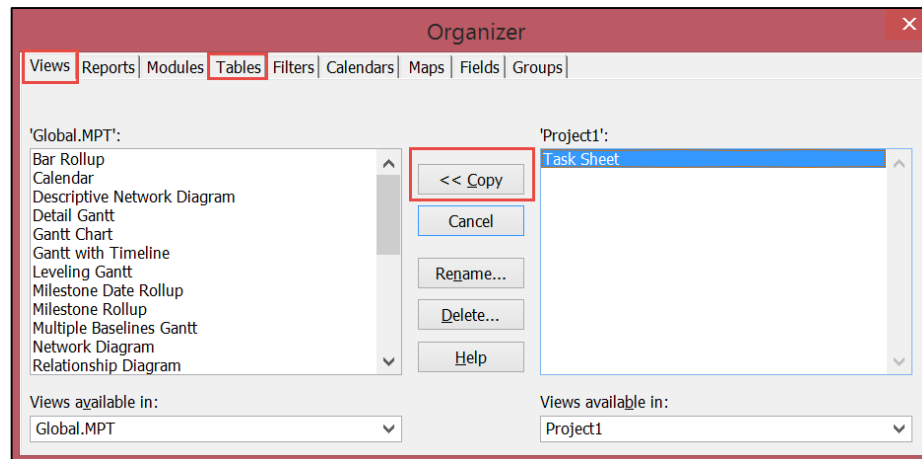
MSP Organizer – Use Your Views! (1)

- 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 – Use Your Views! (2)

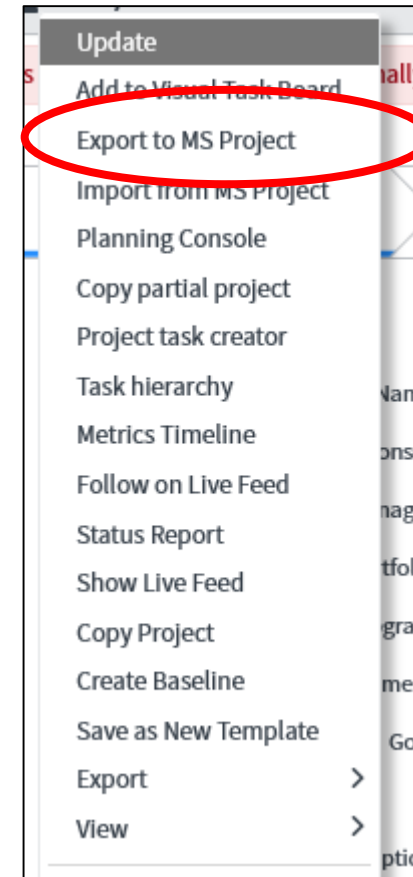
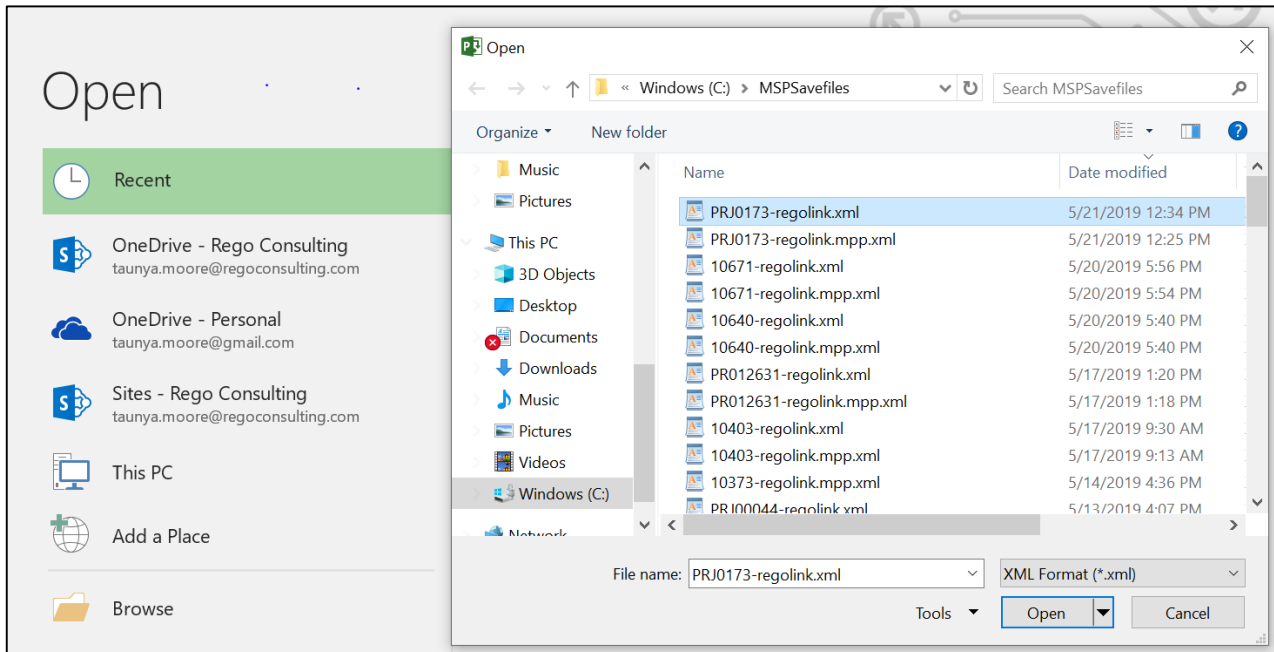
Once the changes are made, you can see the active project's customizations on the right-side panel of the Organizer

- 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



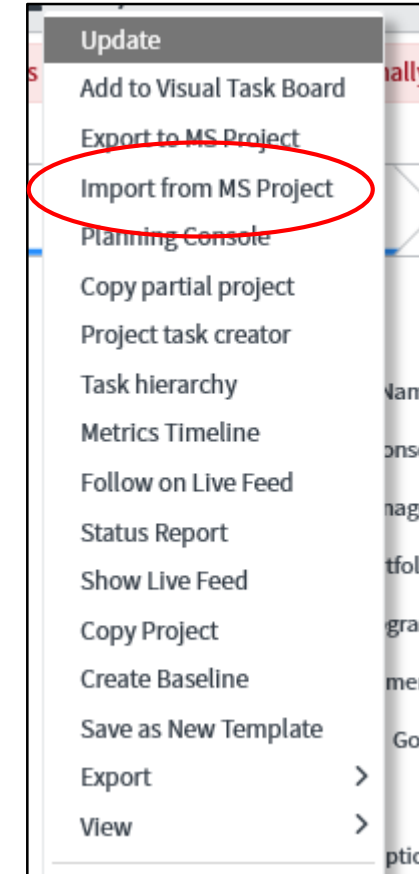
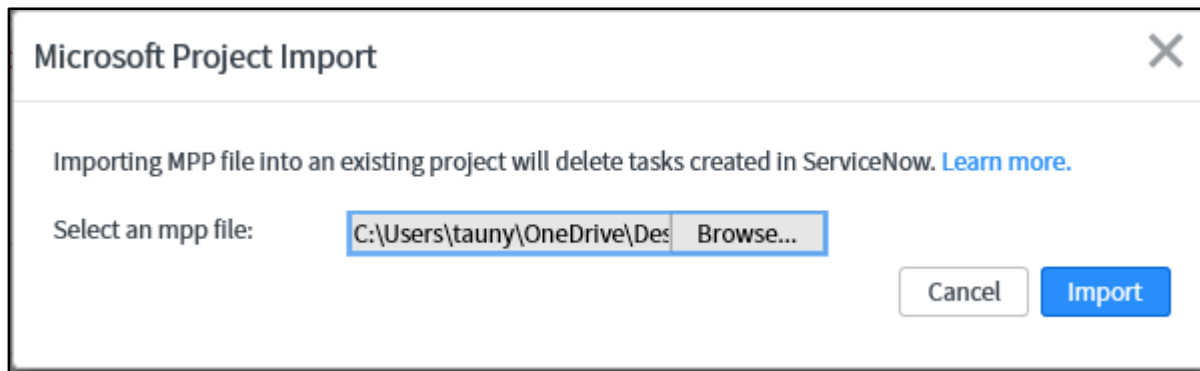
OOTB Connector – Exporting to MSP

1. Use Option to export to .xml.
2. In MSP—Select Open Project and choose the .xml that was saved from step 1.



OOTB Connector – Import from MSP

1. Save your project plan to .mpp file.
2. In ServiceNow select “Import from MS Project”.
3. From the pop-up choose the project you just saved.



Microsoft Project OOTB Import and Export

- You can import Projects created in Microsoft Project 2003, 2007, 2010, 2013, or 2016 into the Project Management application.
- If you import a Microsoft Project into the instance as a new Project, a new Project is created, and tasks associated with the Project are added as Project Tasks. Only the fields that are common or mapped between the applications are imported.
- If you import a Microsoft Project file to an existing project, it will fail if any of the following conditions are true:
 - If the project has tasks that were created in ServiceNow prior to import.
 - If you create new tasks in ServiceNow in a project which was imported from Microsoft Project earlier, and then reimport. Note: If you want to retain the project tasks that were created in the ServiceNow project, then you must export the ServiceNow project into a Microsoft Project file. Then, reimport the file into ServiceNow.
 - If the values for lag or lead time dependencies are not in supported format. Positive lag time dependency values for days, hours and minutes are allowed. Negative lag time dependencies are allowed only for days.
 - All other elapsed duration types from MS Project such as edays, emins, eweeks, and lead or lag in percentage are not allowed for import.
- Recalculation does not happen on project tasks when they are imported from the Microsoft Project file. Once the project is in the ServiceNow system, it would be treated as a manual project.
- The WBS order of imported tasks is regenerated after import.

Microsoft Project OOTB Field Mapping

Microsoft Project fields	Project Management fields
Task Name	Short description
Note	Description
Start	Planned start date
Finish	Planned end date
Duration	Planned duration
Actual Start	Actual start date
Actual Finish	Actual end date
Actual Duration	Actual duration
% Complete	Percent complete (personalize the form to add this field)
Predecessor Lag	Lag time between predecessor and successor
WBS	WBS
Critical	Critical path
Rollup	Rollup
Text10 (Field used for syncing purposes)	Task Sys_Id
Project Header Title	Project name
Project Header Subject (Field used for syncing purposes)	Top Task Sys_Id
Resource	Assigned to [assigned_to]
Resource Group	Assignment Group

Rego Connector

The Microsoft Project Rego Connector is an Add-In inside MSP that allows Project Managers to log into ServiceNow, “check out” their project schedules, work with them in MSP, then save right back to ServiceNow without ever needing to go into ServiceNow itself.

The screenshot displays the Microsoft Project interface with the Rego Connector add-in. The main workspace shows a Gantt chart with tasks organized into phases. The right-hand pane is the 'regolink ServiceNow Connect' dialog, which includes fields for ServiceNow URL, User Name, Password, and Project. It also lists 'Recently Opened Projects' and has buttons for 'Connect To ServiceNow', 'Open In MSP', 'Save To Disk', 'Upload To ServiceNow', and 'Close and Exit'.

Task ID	Task Name	Duration	Start	Finish
1	Phase1	3 days	Thu 1/4/18	Mon 1/8/18
2	Task1.1	1 day	Thu 1/4/18	Thu 1/4/18
3	Task1.2	1 day	Mon 1/8/18	Mon 1/8/18
4	Task1.3	1 day	Thu 1/4/18	Thu 1/4/18
5	Phase2	5 days	Thu 1/4/18	Wed 1/10/18
6	task2.1	1 day	Thu 1/4/18	Thu 1/4/18
7	Task2.2	1 day	Thu 1/4/18	Thu 1/4/18
8	Task2.3	1 day	Mon 1/8/18	Mon 1/8/18
9	Task2.4	1 day	Wed 1/10/18	Wed 1/10/18
10	Phase3	2 days	Thu 1/11/18	Fri 1/12/18
11	Task3.1	1 day	Thu 1/11/18	Thu 1/11/18
12	Task3.2	1 day	Fri 1/12/18	Fri 1/12/18
13	Phase4	1 day	Mon 1/8/18	Mon 1/8/18
14	Task4.1	1 day	Mon 1/8/18	Mon 1/8/18
15	Phase5	3 days	Thu 1/4/18	Mon 1/8/18
16	Task5.1	1 day	Thu 1/4/18	Thu 1/4/18
17	Task5.2	1 day	Mon 1/8/18	Mon 1/8/18

Rego Connector – Lock Alert Message

- The Rego Connector provides an alert when the project is opened in MSP

⊗ This project is being managed externally in MSP by taunya.moore It was last opened on 2019-03-15 17:54:15 and saved on . Any change you make may be overwritten.

- It DOES NOT prevent the user from making updates, as no fields are locked
- The alert is removed once the project is imported back to ServiceNow

MSP OOTB vs Rego Connector

Operation	Rego	OOTB
Import/export plans	✓	✓
MSP 2010 Support		✓
MSP Plugin	✓	
Resource Pool	✓	
Group Assignments	✓	
Custom Mappings	✓	
Notification that a plan is being managed	✓	

Smartsheet



Let Rego be your guide.

Smartsheet: Two Distinct Use Cases

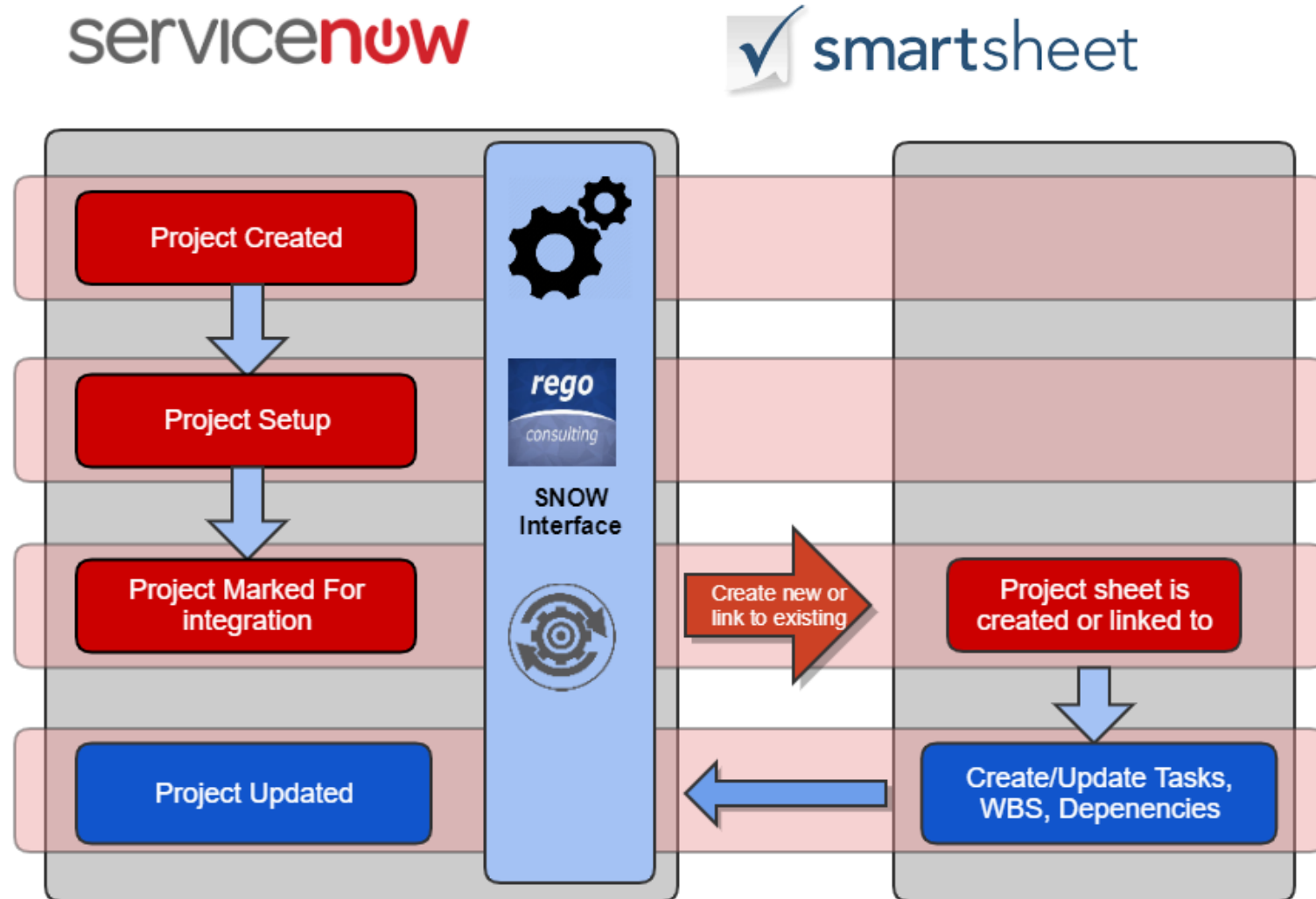
Project Management Execution

- Initiate projects in ServiceNow, manage in Smartsheet
 - All tasks initiated in ServiceNow will show up in Smartsheet
 - Utilize templates in Smartsheet
 - All updates saved back in near real time
- ServiceNow acts as the repository for all Smartsheet
 - Govern and report on data in ServiceNow
- Custom field mapping
 - Map custom fields from ServiceNow to Smartsheet
 - Fields will get updated on save

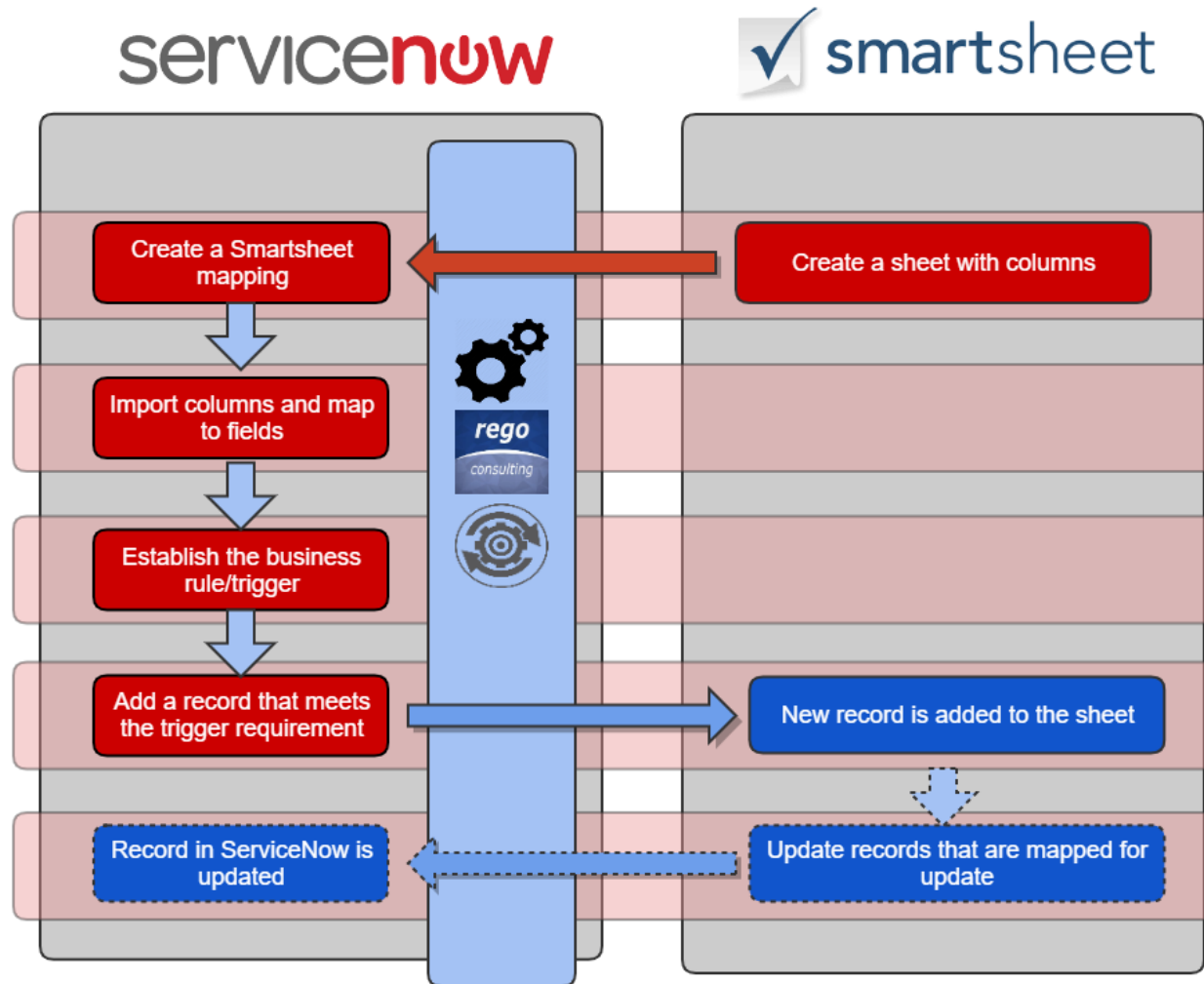
Generic Mapping

- Map any ServiceNow table to a sheet
 - Select as many or as few objects that you want to map to sheets
- Data is updated in near real time
- Auto imports Smartsheet columns for easy setup
- Select columns for write back
 - Data will be updated back in ServiceNow based off changes in Smartsheet

Smartsheet: Project Management Execution

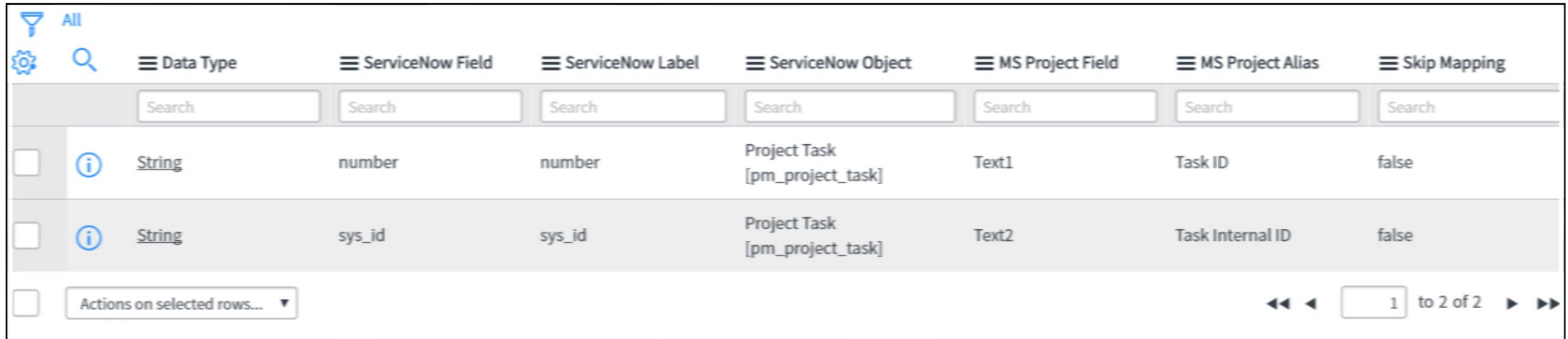




Smartsheet: Generic Mapping



Rego Connector – Mapping Custom Fields

- Custom Mapping controlled from ServiceNow
- Globally set for users

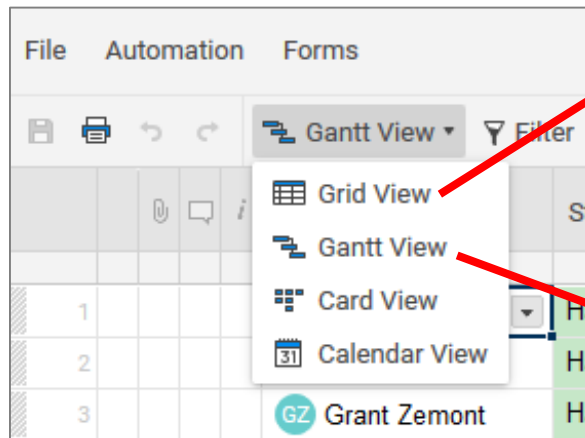


		≡ Data Type	≡ ServiceNow Field	≡ ServiceNow Label	≡ ServiceNow Object	≡ MS Project Field	≡ MS Project Alias	≡ Skip Mapping
		<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
<input type="checkbox"/>		String	number	number	Project Task [pm_project_task]	Text1	Task ID	false
<input type="checkbox"/>		String	sys_id	sys_id	Project Task [pm_project_task]	Text2	Task Internal ID	false

☐ Actions on selected rows... ▼

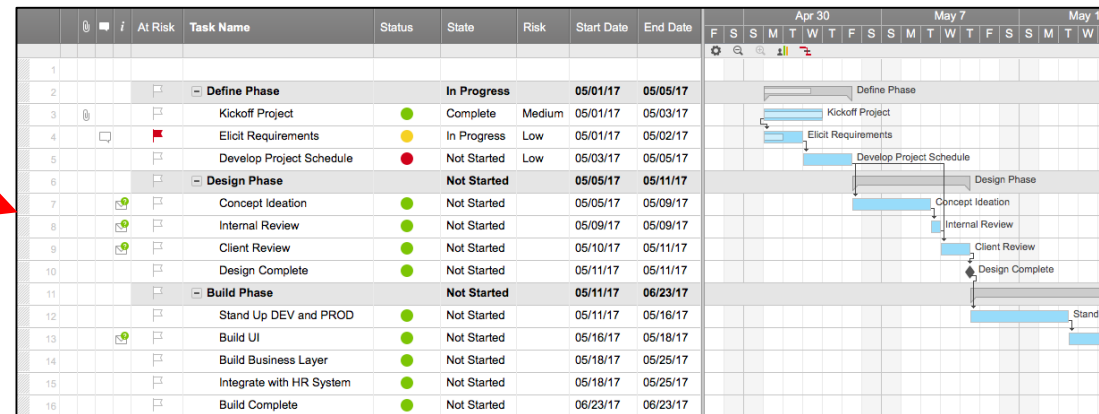
 << < 1 to 2 of 2 > >>

Smartsheet Views (1)



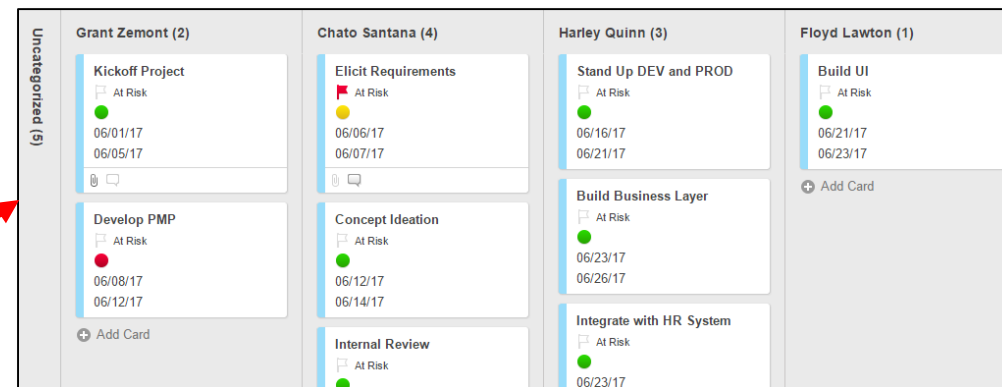
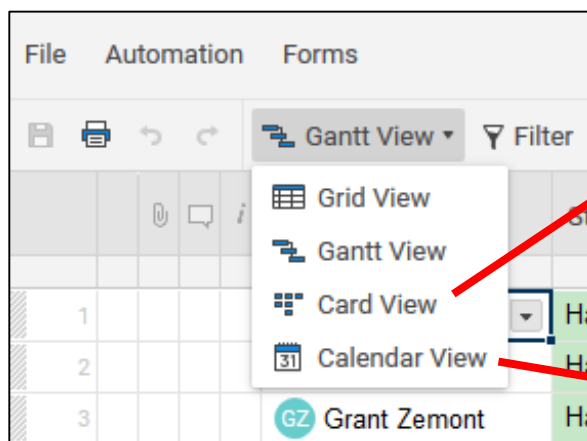
	At Risk	Task Name	Status	State	Risk	Start Date	End Date	Assigned To	Duration	HOURS	Allocation %	% Complete
1												
2		Define Phase	In Progress			05/01/17	05/05/17		4.5d			53%
3		Kickoff Project	Complete	Medium		05/01/17	05/03/17	Chato Santana	3d	0.5	100%	100%
4		Elicit Requirements	In Progress	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

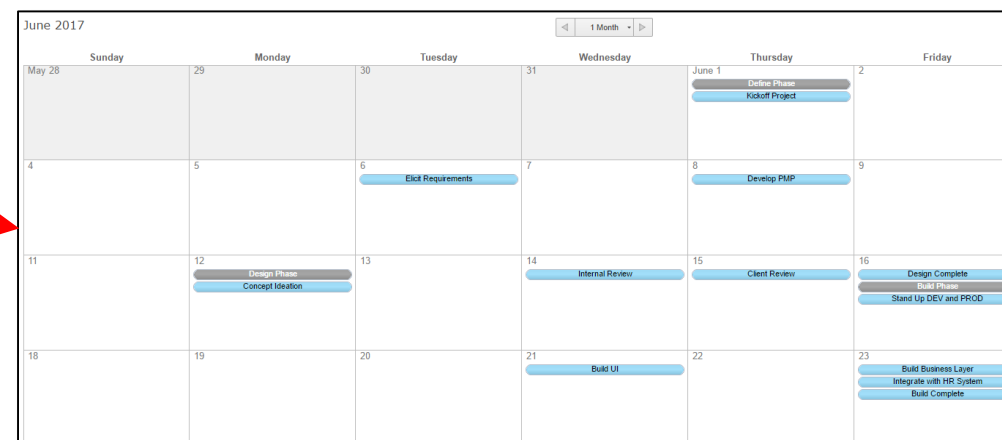


Gantt View

Smartsheet Views (2)



Card View



Calendar View

Smartsheet Rego Connector – Opening a Project

Project: Our Demo Demand

Project Name: Our Demo Demand

Description:

Number: PRJ0016746

Project manager: Joshua Leone

Status(status): Green

Calculation: Automatic

Percent complete: 0

Active: ☒

SmartSheet Integration

SmartSheet Project: ☒

Integration Type: Create Sheet

SmartSheet ID: 4011583375468420

SmartSheet Link: <https://app.smartsheet.com/b/home?lx=e40B0cEFklqLWRTf8bbC9w>

Baseline Project Start: 2017-08-22 01:00:00

Baseline Project End: 2017-08-22 17:00:00

Status: Success

Last Synced On: 2017-08-31 07:22:10

Last Synced By: Joshua Leone

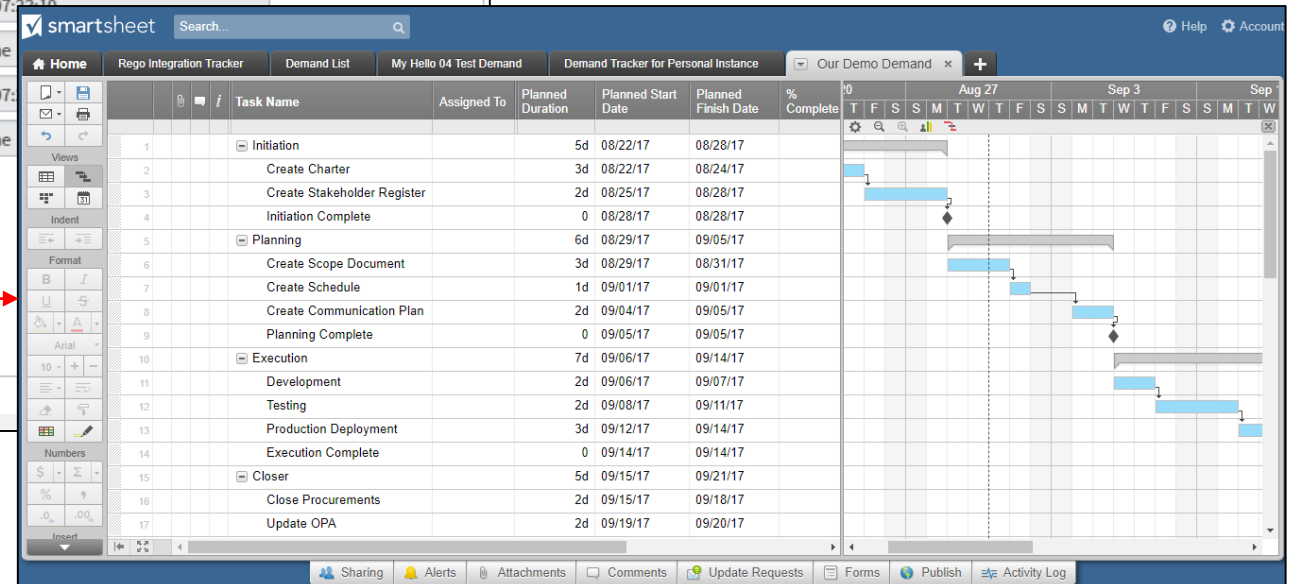
Integrated On: 2017-08-31 07:22:10

Integrated By: Joshua Leone

Reset Integration: ☐

Update Start project Delete

- Project initiation done in ServiceNow
- Open Smartsheet right from ServiceNow
- Custom mapping tool allows field exchange flexibility



Smartsheet Rego Connector – Import to ServiceNow

The Smartsheet interface displays a project plan for 'Our Demo Demand'. The table lists tasks with their durations, start and finish dates, and completion status. The tasks are organized into phases: Initiation, Planning, Execution, and Closer.

Task ID	Task Name	Assigned To	Planned Duration	Planned Start Date	Planned Finish Date	% Complete
1	Initiation		5d	08/22/17	08/28/17	
2	Create Charter		3d	08/22/17	08/24/17	
3	Create Stakeholder Register		2d	08/25/17	08/28/17	
4	Initiation Complete		0	08/28/17	08/28/17	
5	Planning		6d	08/29/17	09/05/17	
6	Create Scope Document		3d	08/29/17	08/31/17	
7	Create Schedule		1d	09/01/17	09/01/17	
8	Create Communication Plan		2d	09/04/17	09/05/17	
9	Planning Complete		0	09/05/17	09/05/17	
10	Execution		7d	09/06/17	09/14/17	
11	Development		2d	09/06/17	09/07/17	
12	Testing		2d	09/08/17	09/11/17	
13	Production Deployment		3d	09/12/17	09/14/17	
14	Execution Complete		0	09/14/17	09/14/17	
15	Closer		5d	09/15/17	09/21/17	
16	Close Procurements		2d	09/15/17	09/18/17	
17	Update OPA		2d	09/19/17	09/20/17	

- All task management for the project is done in Smartsheet.
- When complete, click **Save** in Smartsheet. Data saved back to ServiceNow.

Project Tasks (4) | Sub Projects | Resource Plan | Stories | Baselines | Time Cards | Requirements | Risks | Issues | Expense Lines | Resource Allocations

Project Tasks | New | Edit... | Go to | WBS | Search | 1 to 4 of 4

Parent = PRJ0016746

WBS	Task	Dependency	Scheduled Start	Scheduled End	Assigned to	Planned duration	S
1	Initiation PRJTASK0022846		2017-08-22 01:00:00	2017-08-22 17:00:00		1 Day	Penc
2	Planning PRJTASK0022850		2017-08-22 01:00:00	2017-08-22 17:00:00		1 Day	Penc
3	Execution PRJTASK0022855		2017-08-22 01:00:00	2017-08-22 17:00:00		1 Day	Penc
4	Closer/Complete PRJTASK0022860		2017-08-22 01:00:00	2017-08-22 17:00:00		1 Day	Penc

Insert a new row...

Actions on selected rows...

1 to 4 of 4

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