

Using a holiday plan rather than calendar exceptions

Scenario – A single layout is required that shows not just the allocation of people to activities in projects, but their holidays, training and sickness days as well. Cumulative totals of all three are available. Total resource assignments for each resource that works a normal week, comes to 52*40 for the year because we do not need calendar exceptions.

Spin-off. This same technique can be used for “peg board” planning, but of course the data is in the same database as convectional schedules.

A separate project is required for non-working time.

The non-working Project setup:

General | Notebook | Budget Log | Spending Plan | Budget Summary | Dates | Funding | Codes | Defaults | Resources | Settings | Calculations

Schedule Dates

Project Planned Start: 01-Jan-16
Must Finish By: 31-Dec-16
Data Date: 19-May-16
Finish: [Empty]

Actual Start: [Empty] Actual Finish: [Empty]

Anticipated Dates

Anticipated Start: [Empty] Finish: [Empty]

Start and finish reflect holiday year

General | Notebook | Budget Log | Spending Plan | Budget Summary | Dates | Funding | Codes | Defaults | Resources | Settings | Calculations

Defaults for New Activities

Duration Type: Fixed Duration & Units
Percent Complete Type: Physical
Activity Type: Task Dependent

Cost Account: [Empty] Calendar: 5 Day Workweek - 7.5 hour days

Auto-numbering Defaults

Activity ID Prefix: A Activity ID Suffix: 1000 Increment: 10

Increment Activity ID based on selected activity

Must

Multiple resource calendars will create a wee bit extra work

General | Notebook | Budget Log | Spending Plan | Budget Summary | Dates | Funding | Codes | Defaults | Resources | Settings | Calculations

Assignment Defaults

Specify the default Rate Type for new assignments: Standard Rate

Drive activity dates by default

Must be off

Resource Assignments

Resources can be assigned to the same activity more than once

General Notebook Budget Log Spending Plan Budget Summary Dates Funding Codes Defaults Resources Settings Calculations

Activities

Default Price / Unit for activities without resource or role Price / Units

Activity percent complete based on activity steps

Link Budget and At Completion for not started activities

Reset Original Duration and Units to Remaining

Reset Remaining Duration and Units to Original

Resource Assignments

When updating Actual Units or Cost

Add Actual to Remaining

Subtract Actual from At Completion

Recalculate Actual Units and Cost when duration % complete changes

Update units when costs change on resource assignments

Link actual to date and actual this period units and costs

Activity setup:

In this example, we want separate sub-totals for Holiday, Sick Leave and Training – so we need three activities per employee:

Activities | Projects

Layout: Classic Schedule Layout Filter: All Activities

Activity ID	Auto Compute Actuals	Activity Name	Original Duration	Remaining Duration	Start	Finish	Qtr 2, 2016	Qtr 3, 2016	Qtr 4, 2016	Qtr 1, 2017	
All staff holidays and sick leave											
A1000	<input checked="" type="checkbox"/>	Cindy Lee Holidays	261.0d	261.0d	01-Jan-16	30-Dec-16	[Gantt bars]				Cindy Lee
A1010	<input checked="" type="checkbox"/>	Cindy Lee Sickness	261.0d	261.0d	01-Jan-16	30-Dec-16	[Gantt bars]				Cindy Lee
A1020	<input checked="" type="checkbox"/>	Cindy Lee Training	261.0d	261.0d	01-Jan-16	30-Dec-16	[Gantt bars]				Cindy Lee

Flag on

One activity for each resource * how many calendar exceptions we want to control

end of holiday year

General Status Resources Predecessors Successors

Activity: A1020 Cindy Lee Training Project: Holiday plan

Duration: Original 261.0d, Actual 0.0d, Remaining 261.0d, At Complete 261.0d

Status: Started 01-Jan-16, Finished 30-Dec-16, Exp Finish 30-Dec-16, Physical % 0%

Constraints: Primary <None>, Secondary <None>

Labor Units: Budgeted 0.00h, Actual 0.00h, Remaining 0.00h, At Complete 0.00h

Activities | Projects

Layout: Classic Schedule Layout Filter: All Activities

Activity ID	Auto Compute Actuals	Activity Name	Original Duration	Remaining Duration	Start	Finish	Qtr 1, 2016	Qtr 2, 2016	Qtr 3, 2016	Qtr 4, 2016	Qtr 1, 2017	
All staff holidays and sick leave												
A1000	<input checked="" type="checkbox"/>	Cindy Lee Holidays	261.0d	261.0d	01-Jan-16	30-Dec-16	[Gantt bars]					Cindy Lee
A1010	<input checked="" type="checkbox"/>	Cindy Lee Sickness	261.0d	261.0d	01-Jan-16	30-Dec-16	[Gantt bars]					Cindy Lee
A1020	<input checked="" type="checkbox"/>	Cindy Lee Training	261.0d	261.0d	01-Jan-16	30-Dec-16	[Gantt bars]					Cindy Lee

General Status Resources Predecessors Successors

Activity: A1010 Cindy Lee Sickness Project: Holiday plan

Resource ID Name	Budgeted Units	Actual Regular Units	Remaining Units
LeeC:Cindy Lee	0.00h	0.00h	0.00h

One resource for each activity, NO budget

The project has a start and finish date that reflect the holiday year

There is an activity for every combination of resource and exception type (e.g. Holiday, Sickness, Training)

Each activity lasts for the whole project (Expected Finish = Project Finish date is the easy way to do this)

When the resource assignment record is created in Activity Details we enter a budget quantity of zero.

Adding the holidays

The screenshot shows the 'Resource Assignments' window with a calendar view for 2016. The left pane lists activities for Cindy Lee: A1000 Cindy Lee Holidays, A1010 Cindy Lee Sickness, and A1020 Cindy Lee Training. The right pane shows a grid of budgeted units. A red arrow points to the cell for May 30th, which is currently empty, with a callout box labeled 'Budgeted hours'.

The above Resource Assignment view allows us to enter days just by typing into the cells. I shall edit the above to give Cindy w/c 30th May as a holiday:

The screenshot shows the same Resource Assignments window, but now the budgeted units for Cindy Lee are visible. The 'Total' row shows 0.94d for each day from May 16 to May 22, and 1.00d for each day from May 23 to May 29. The cell for May 30th now contains '1.00d', indicating a full day of budgeted hours.

Couple of things:

Why is the “roll-up” .94 not 1.00?

.... and almost inevitably “When I tried this the cells were greyed out”..

The screenshot shows the Resource Assignments window with the 'Resources' tab selected. The budgeted units for Cindy Lee are now 1.00d for each day from May 16 to May 29, and the cell for May 30th is greyed out, indicating that the resource is not available for that day.

That’s better. My activities in the first example were task dependent on a 37.5 hour calendar, and Cindy does a 40 hour week.... In my second example I put Cindy on a 37.5 hour week.

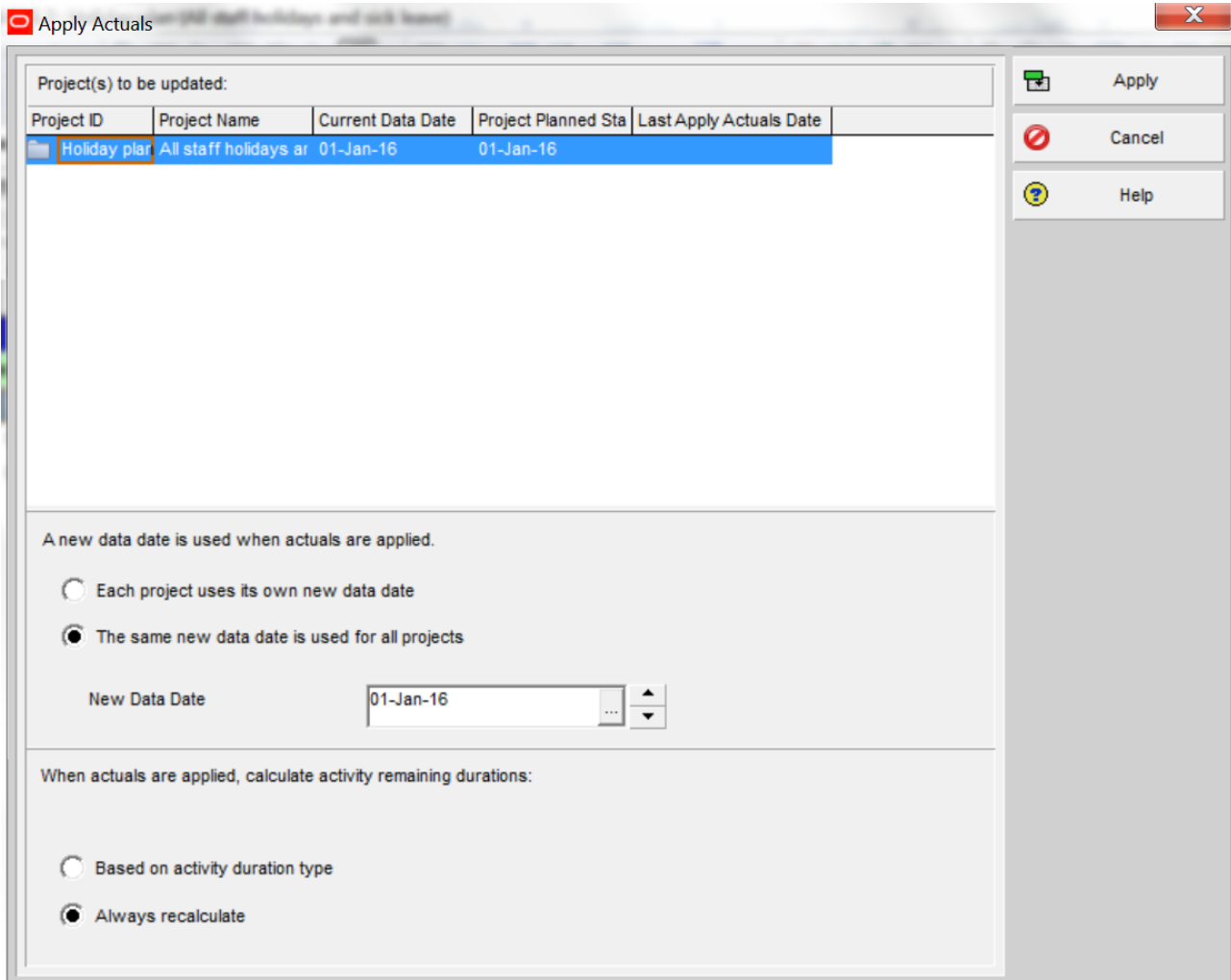
YOU WILL NEED THIS LIST A LOT!

Spreadsheet cells are grey/uneditable when any of the following are true:

- The activity associated with the assignment has a duration type of Fixed Units or Fixed Units/Time (you can only manually enter future period values for activities with a duration type of Fixed Duration & Units and Fixed Duration & Units/Time).
- The resource or role assigned to the activity does not have any valid worktime for the timeperiod. For resource assignments to task-dependent activities, and for all role assignments to activities, the module determines if there is valid worktime based on the activity calendar. For resource assignments to resource-dependent activities, the module determines if there is valid worktime based on the resource calendar.
- The displayed timescale unit in the spreadsheet is smaller than the minimum timescale unit used for time-distributed resource calculations. You can change this setting in the 'Interval for timedistributed resource calculations' field (User Preferences, Resource Analysis tab). For example, if this option is set to Week, you can only enter or edit data in weekly, monthly, or quarterly timescale buckets.
- The date of the timescale unit is prior to the Project Planned Start date (for the Budgeted or Planned Units field) or the Remaining Early Start date (for the Remaining Units field) of the activity.
- The activity associated with the assignment has an Actual Finish date.
- The timescale is set to Day/Shift or Day/Hour.
- The timescale is set to display only ordinal dates. You must display primary dates (with or without ordinal dates) to edit future period buckets.
- When the timescale is set to display financial period intervals, no financial period is defined for the timeperiod.
- You choose to display time-distributed Remaining Early units and costs according to forecast dates rather than remaining early dates in the User Preferences, Resource Analysis tab. This only applies to the Remaining Units field.
- You choose to calculate average values for the spreadsheet in the Spreadsheet Options dialog box.
- You have not been assigned the Edit Future Periods project privilege.
- In the Resource Usage Spreadsheet of the Activities window, you are displaying assignment data for all projects rather than for open projects only. If you are displaying data for all projects, the title of the Display Options bar in the Resource Usage Spreadsheet is "Display: All Projects." To display data for open projects only, click the Display Options bar, then choose Show All Projects to remove the checkmark; the title of the Display Options bar changes to "Display: Open Projects Only."

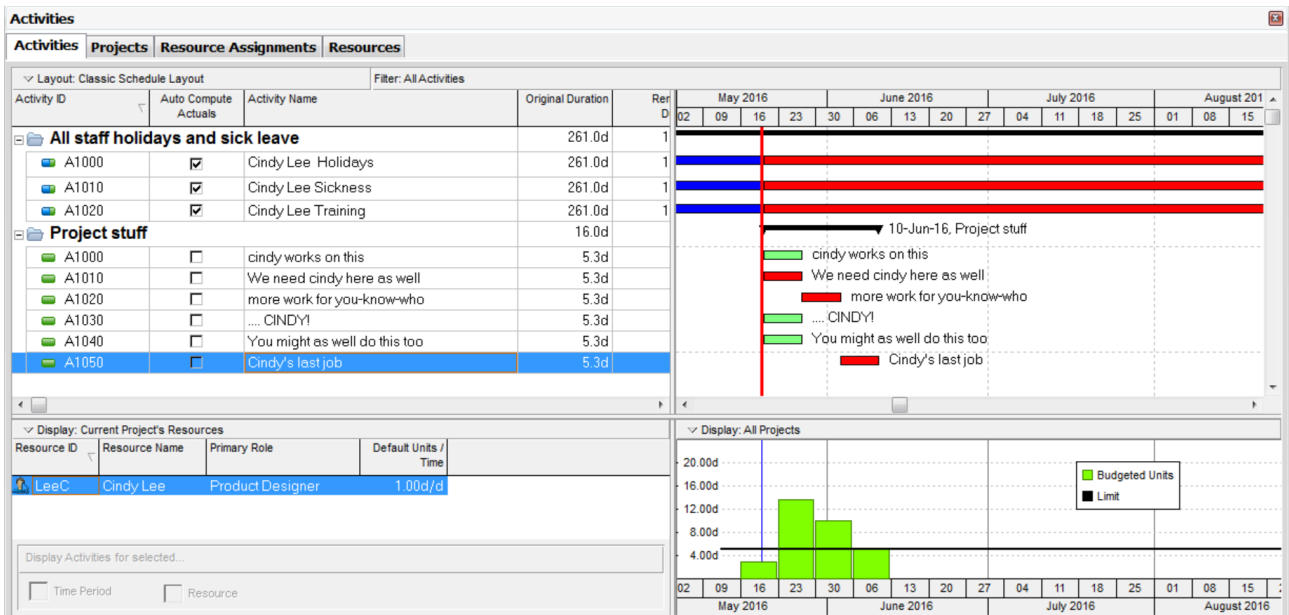
Before scheduling the project you should:

- Make sure it is the only open project
- Apply Actuals:



Apply Actuals is under the "Tools" menu. It creates perfect progress in our holiday schedule, because all activities are "Auto Compute Actuals" The remaining duration of each of the activities is back calculated from the project finish because each activity has an expected finish that is the end of the holiday year.

Now we can schedule and produce layouts with "real" projects.....



There are two projects open above. It looks better, I think, in the resource assignment screen:

Resource Assignments

Layout: Holiday input layout | Display: Budgeted Units

Activity ID	Activity Name	2016																									
		May 16					May 23					May 30															
		Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon						
Total				3.00d			3.00d	3.00d	3.00d	3.00d	1.67d											2.00d	2.00d	2.00d	2.00d	2.00d	1.00
Cindy Lee				3.00d			3.00d	3.00d	3.00d	3.00d	1.67d											2.00d	2.00d	2.00d	2.00d	2.00d	1.00
All staff holidays and sick leave																						1.00d	1.00d	1.00d	1.00d	1.00d	
Project stuff				3.00d			3.00d	3.00d	3.00d	3.00d	1.67d											1.00d	1.00d	1.00d	1.00d	1.00d	1.00
A1030	... CINDY!			1.00d			1.00d	1.00d	1.00d	1.00d	0.33d																
A1050	Cindy's last job																										
A1020	more work for you-know-who																					1.00d	1.00d	1.00d	1.00d	0.67d	1.00
A1010	We need cindy here as well			1.00d			1.00d	1.00d	1.00d	1.00d	0.33d																
A1040	You might as well do this too			1.00d			1.00d	1.00d	1.00d	1.00d	0.33d																

Cindy is going to be a busy woman.