

TECH TIP

TEMPLATED QUICK RISK PRIMAVERA RISK ANALYSIS

When applying three point estimates to duration on activities in a Risk model, don't you wish there was a fast way to apopulate groups of activities with similar ranges simultaneously? Other than Duration Quick Risk, which assigns the same percentages to the minimum, most likely and maximum durations for all activities in the schedule, there is another function in the tool that allows for a bit more sophistication.

Contained within the Primavera Risk tool is a function called Templated Quick Risk (see Figure 1). The function allows for applying minimum, most likely and maximum durations as a percentage of the remaining durations, to groups of activities based on code fields assigned to those groups of activities. It uses templates to apply different levels of uncertainty to tasks in the schedule. These templates can be saved and reused on other schedules as needed.

This tech tip will describe step by step creating codes, adding to specific activities and building out the Template in order for those desired range of values to populate.

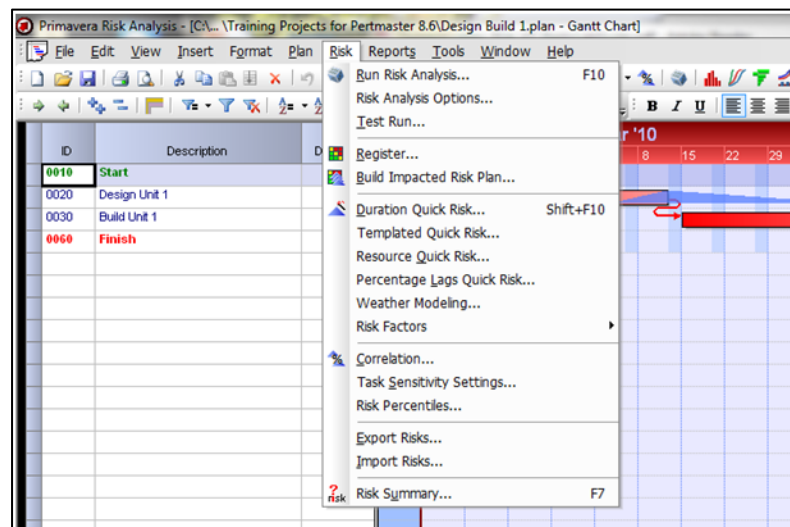


Figure 1—PRA Risk tab

TEMPLATED QUICK RISK

At the start, the scheduler must decide how to filter/segregate tasks to apply the template values. These values could be an activity code used on the project from P6, discipline code for example. In the case of this example, a Risk Level code is to be created, assigned and applied to activities.

To create this code, first select Task User Field under the Plan pulldown (see Figure 2).

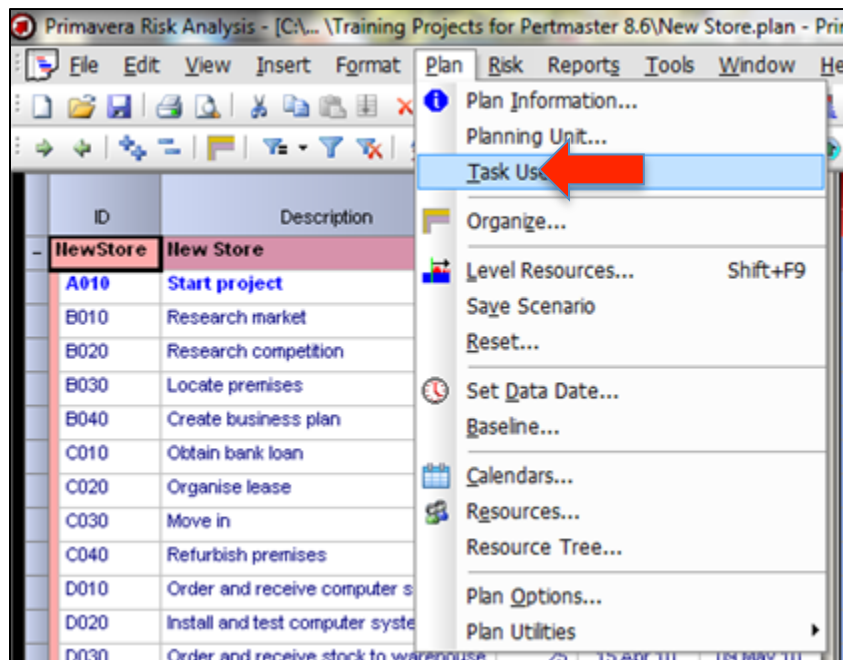


Figure 2—PRA Plan tab

TEMPLATED QUICK RISK

At opening of Task User Fields, select the first open field name (blank) to create a RISK LEVEL code.

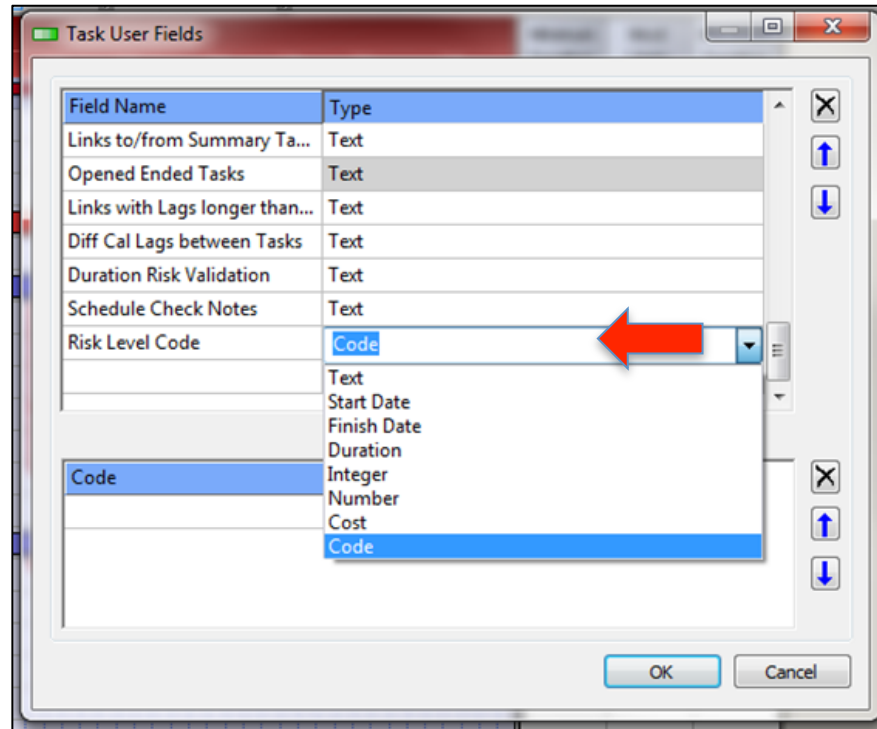
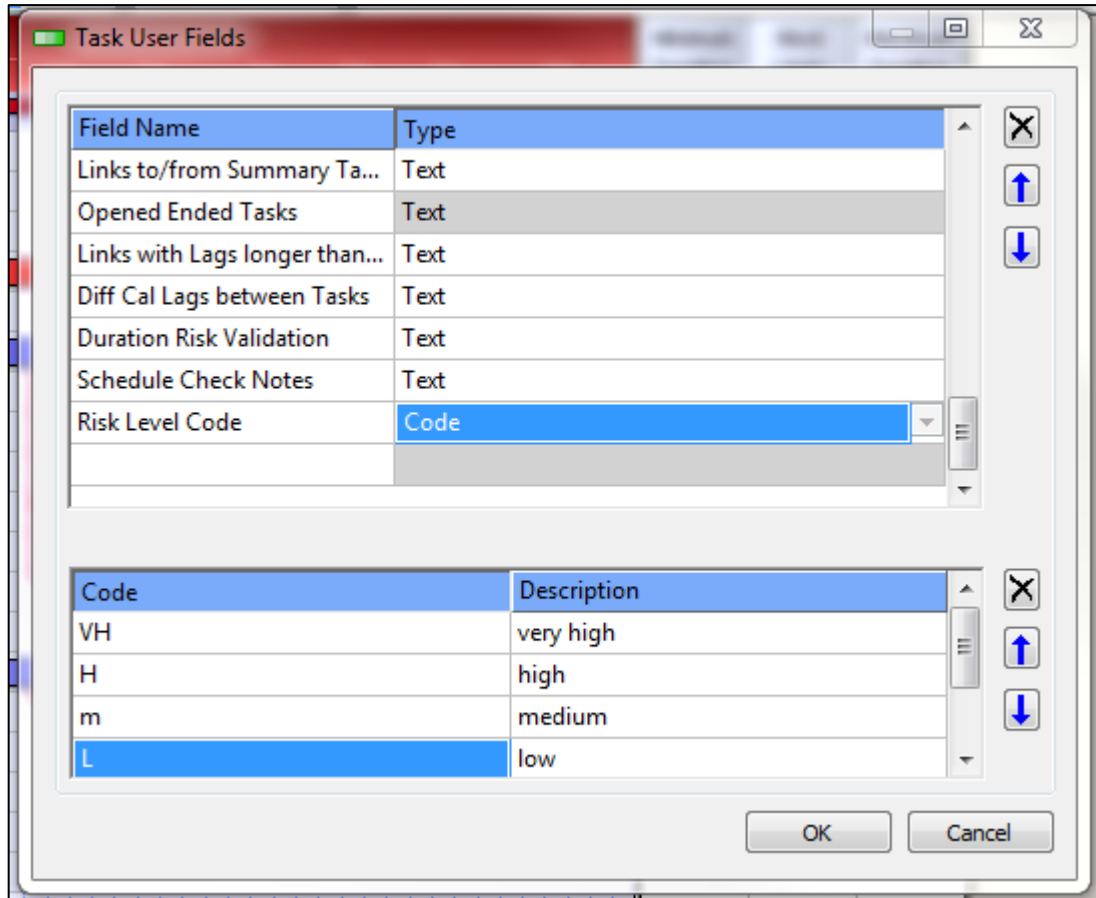


Figure 3—PRA Task User Fields

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For Type, select Code in the pulldown. This defines and places Risk Level Code in the dictionary. Next you must define each of the values to assign activities for the different qualitative input – very high, high, medium, and low (see Figure 4).



The screenshot shows the 'Task User Fields' dialog box. It contains two tables. The first table lists fields and their types, with 'Risk Level Code' set to 'Code'. The second table defines the risk level codes: VH (very high), H (high), m (medium), and L (low).

Field Name	Type
Links to/from Summary Ta...	Text
Opened Ended Tasks	Text
Links with Lags longer than...	Text
Diff Cal Lags between Tasks	Text
Duration Risk Validation	Text
Schedule Check Notes	Text
Risk Level Code	Code

Code	Description
VH	very high
H	high
m	medium
L	low

Figure 4—PRA Task User Fields defined

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Next step is adding a column to the Gantt chart, so that you can add the newly created codes to the activities in the schedule. To do so, hover over the column headings and right-click. Select Format Columns and this box appears (see Figure 5). Under User Fields, the Risk Level Code recently created, is there. Select it and click on the Right arrow key, moving the Risk Level Code to the right-hand side under the Left Columns tab.

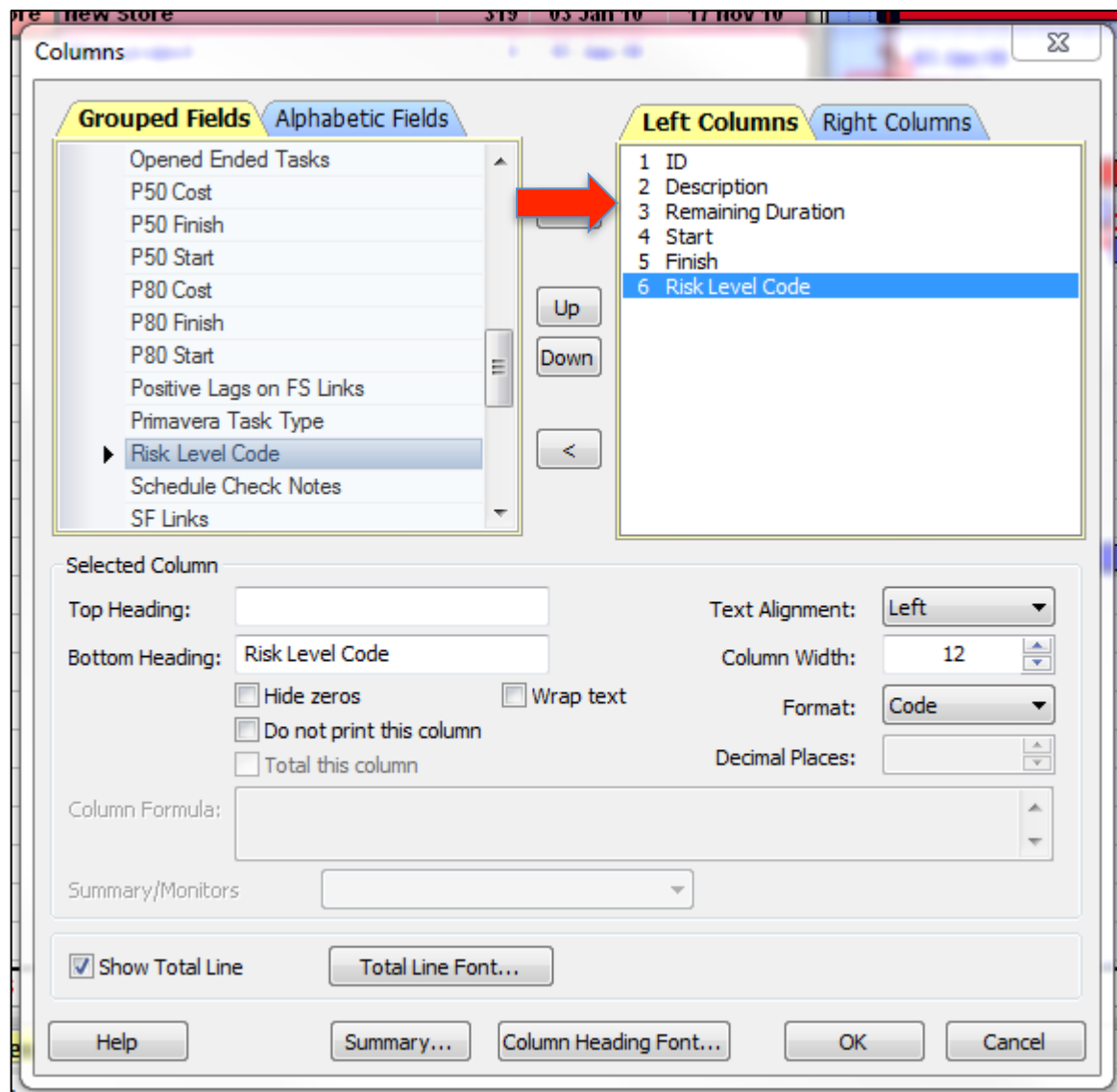
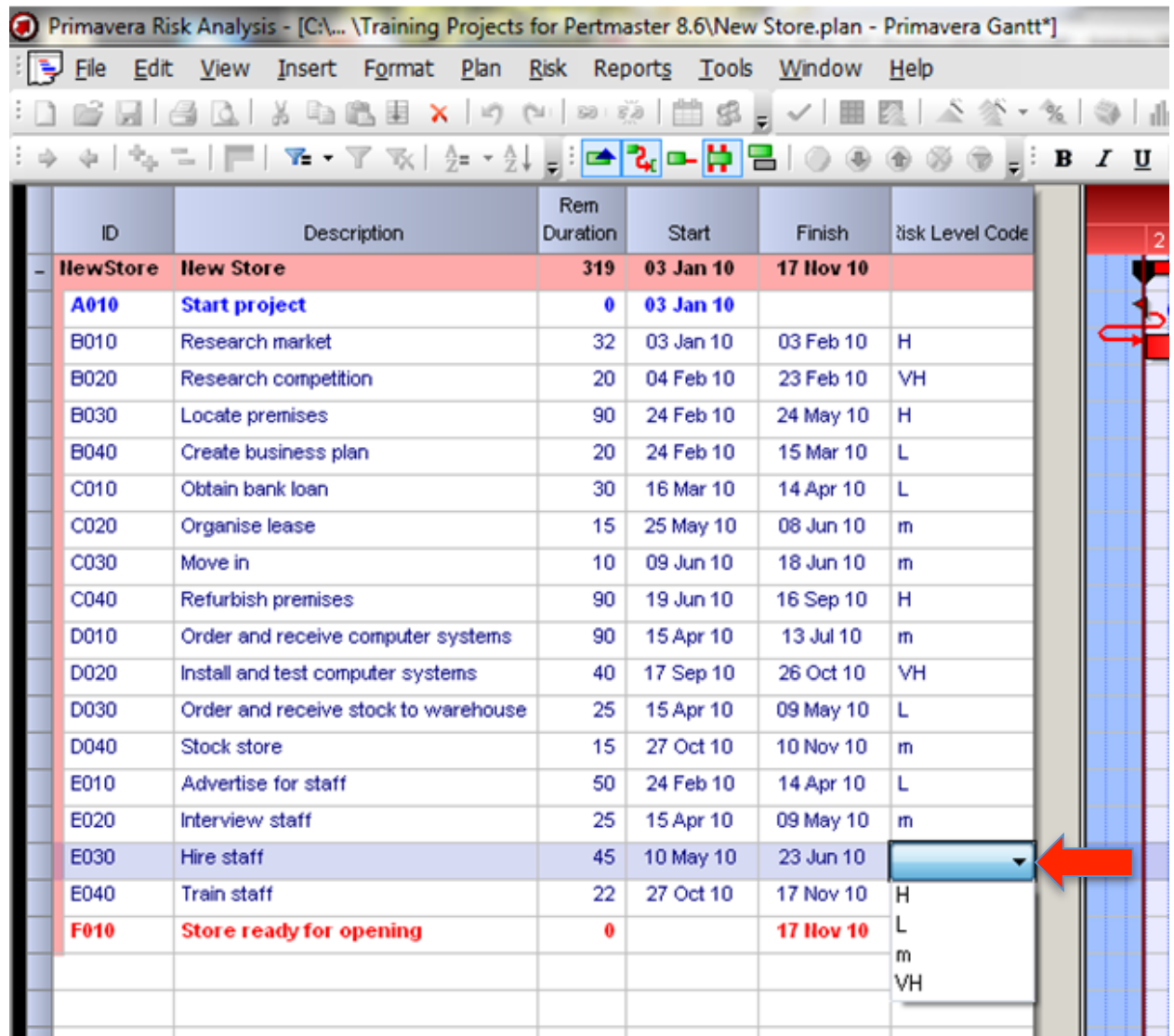


Figure 5—PRA Columns

TEMPLATED QUICK RISK

With the column added to the Gantt chart, the values defined in the dictionary can be added to the activities as desired (see Figure 6).



ID	Description	Rem Duration	Start	Finish	Risk Level Code
NewStore	New Store	319	03 Jan 10	17 Nov 10	
A010	Start project	0	03 Jan 10		
B010	Research market	32	03 Jan 10	03 Feb 10	H
B020	Research competition	20	04 Feb 10	23 Feb 10	VH
B030	Locate premises	90	24 Feb 10	24 May 10	H
B040	Create business plan	20	24 Feb 10	15 Mar 10	L
C010	Obtain bank loan	30	16 Mar 10	14 Apr 10	L
C020	Organise lease	15	25 May 10	08 Jun 10	m
C030	Move in	10	09 Jun 10	18 Jun 10	m
C040	Refurbish premises	90	19 Jun 10	16 Sep 10	H
D010	Order and receive computer systems	90	15 Apr 10	13 Jul 10	m
D020	Install and test computer systems	40	17 Sep 10	26 Oct 10	VH
D030	Order and receive stock to warehouse	25	15 Apr 10	09 May 10	L
D040	Stock store	15	27 Oct 10	10 Nov 10	m
E010	Advertise for staff	50	24 Feb 10	14 Apr 10	L
E020	Interview staff	25	15 Apr 10	09 May 10	m
E030	Hire staff	45	10 May 10	23 Jun 10	
E040	Train staff	22	27 Oct 10	17 Nov 10	H
F010	Store ready for opening	0		17 Nov 10	L
					m
					VH

Figure 6—PRA adding code values to activities

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Configure the template to specify the minimum, most likely and maximum duration percentages for the code values defined in the code dictionary and assigned to activities prior (see Figure 7).

Field	Value	Tasks	Distributi...	Min	Likely	Max	Correlati...	Description
Risk Level Code	= VH	2	Triangle	60%	100%	180%	none	
Risk Level Code	= H	4	Triangle	75%	100%	140%	none	
Risk Level Code	= m	5	Triangle	80%	100%	125%	none	
Risk Level Code	= L	4	Triangle	95%	100%	110%	none	

Figure 7—PRA Templated Quick Risk code definitions

Next step, click on the Apply Template box. Clicking this box populates the min, most likely, and maximum values for the activities respectively.

TEMPLATED QUICK RISK

Once complete, a dialog box appears to describe the number of activities the template has been applied to (see Figure 8). Also, the values on the right columns have populated as part of the exercise.

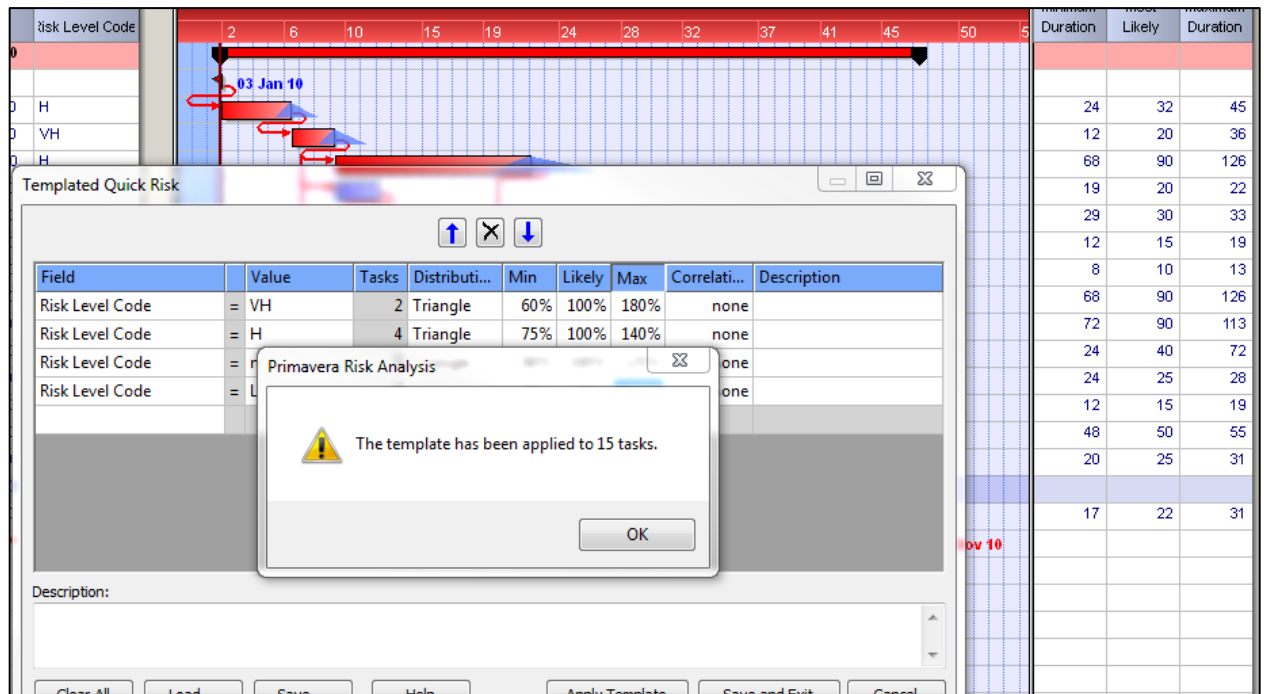


Figure 8—PRA Templated Quick Risk complete

As you can imagine, the possibilities for applying such a template is quite powerful and extremely quick, especially when hundreds or thousands of activities need values applied. The codes used could be discipline, WBS, project phase, or maybe even a calendar. The possibilities are really left to the end user to decide. These templates can also be saved for future use on other projects as well, so the effort isn't wasted on just one project or even one risk review cycle.