



Deltek.

Acumen Fuse Boot Camp Series: Analysis and Metrics

Activity Guide

Copyright Information

While Deltek has attempted to make the information in this document accurate and complete, some typographical or technical errors may exist. Deltek, Inc. is not responsible for any kind of loss resulting from the use of this publication.

This page shows the original publication date. The information contained in this publication is subject to change without notice. Any improvements or changes to either the product or the book will be documented in subsequent updates.

This publication contains proprietary information which is protected by copyright. All rights are reserved. No part of this document may be electronically reproduced or transmitted in any form or by any means, electronic or mechanical, or translated into another language, without the prior written consent of Deltek, Inc.

This edition published November 2021.

©Copyright 2021. Deltek, Inc. All rights reserved.

Unpublished-rights reserved under the copyright laws of the United States.

Unauthorized reproduction or distribution of this program or any portion thereof could result in severe civil or criminal penalties.

All other trademarks are the property of their respective owners.



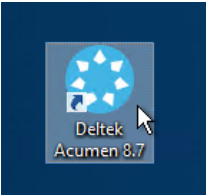
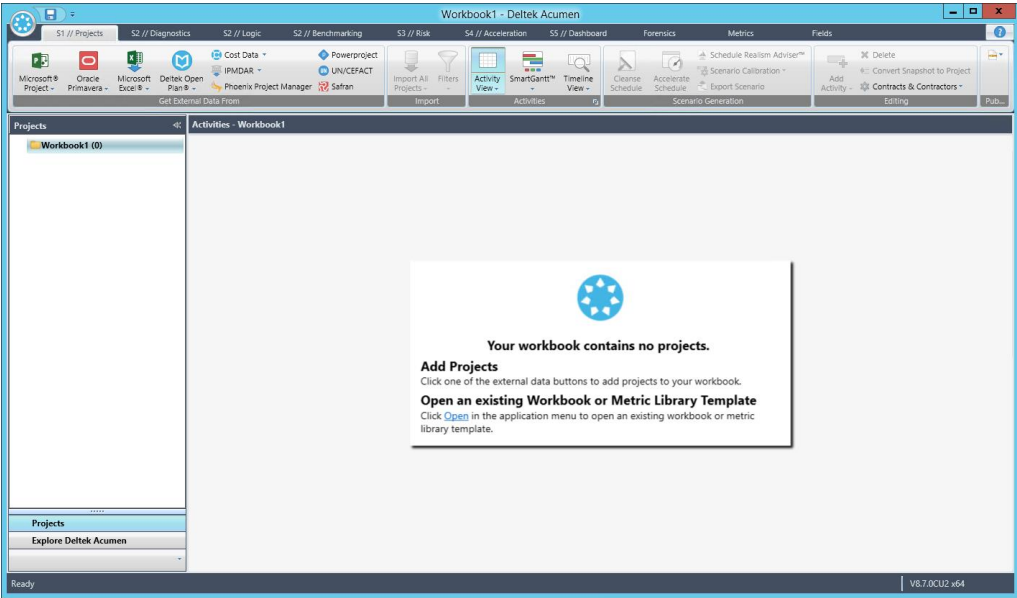
Table of Contents

- Activity 1.1: Loading a Schedule into Acumen 4
 - Activity 1.1.1: Loading the Schedule for Analysis 4
- Activity 1.2: Snapshots and Scenarios 10
 - Activity 1.2.1: Importing a Snapshot 10
 - Activity 1.2.2: Creating a Scenario 13
 - Activity 1.2.3: Explore the Diagnostics View 14
- Activity 1.3: Working with the Phase Analyzer 20
 - Activity 1.3.1: Working with the Phase Analyzer 20
- Activity 1.4: Grouping and Sorting 24
 - Activity 1.4.1: Organizing Project Data using the Fields Tool 24
- Activity 1.5: Trend Analysis 32
 - Activity 1.5.1: Using Trend Analysis 32
- Activity 1.6: Intersection Analyzer 40
 - Activity 1.6.1: Adding Metrics to the Intersection Analyzer 40
- Activity 1.7: Modifying Metrics 43
 - Activity 1.7.1: Modifying a Standard Metric 43
- Activity 1.8: Sharing Metrics 50
 - Activity 1.8.1: Saving a Metric Library Template 50

Activity 1.1: Loading a Schedule into Acumen

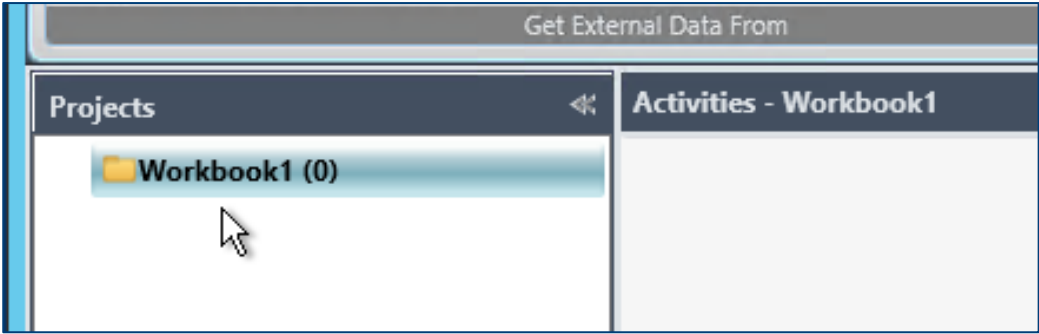
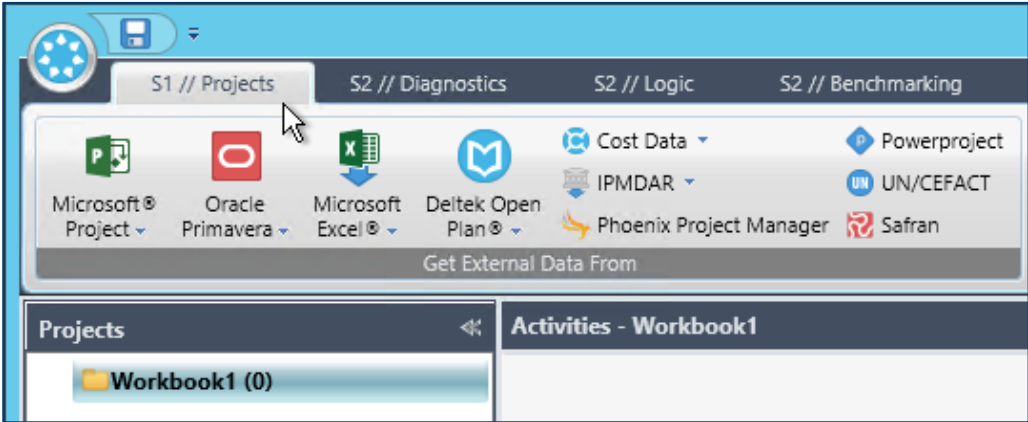
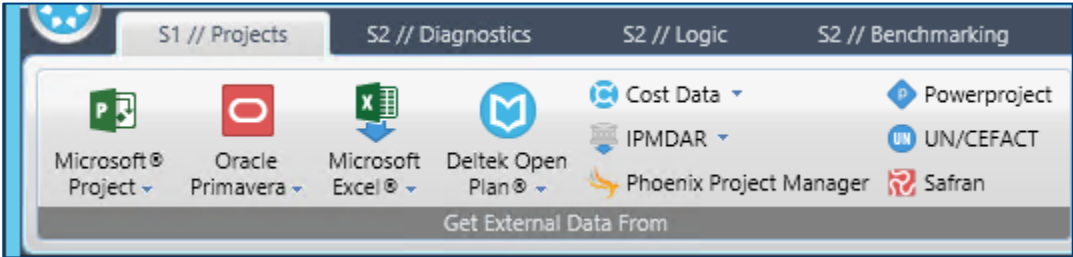
Activity 1.1.1: Loading the Schedule for Analysis

If you did not start with the Acumen Boot Camp Series: Quick Start training, then please perform these steps in your learning lab sandbox, or in your own copy of Deltek Acumen.

Step	Action
1	Double-click on the Acumen icon to run the program. 
2	Upon opening, Acumen appears as follows: 

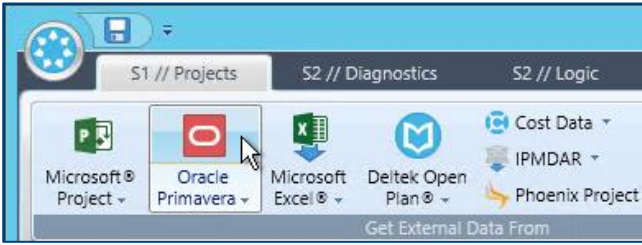
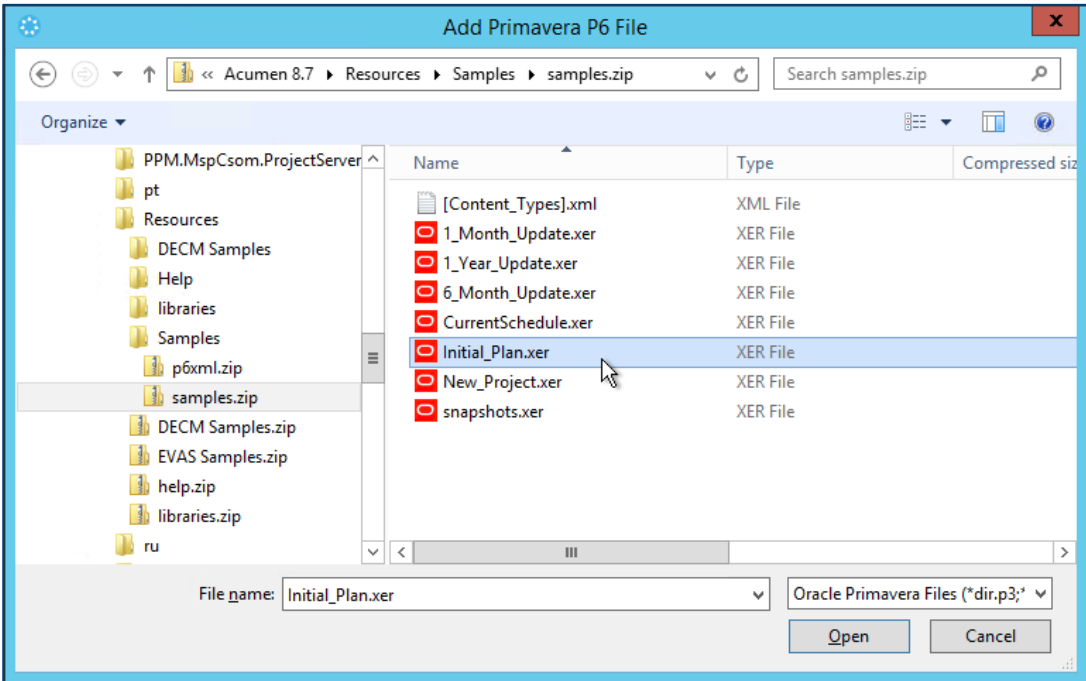
Continued on next page

Activity 1.1.1: Loading the Schedule for Analysis, continued

Step	Action
3	<p>In the Projects area to the left, note there is a default Workbook1 listed with a folder icon. This Workbook is where you will be loading and analyzing your project.</p> 
4	<p>Look at the ribbon above the Projects area and note the S1 // Projects tab is selected. This is default when you first open Acumen.</p> 
5	<p>Note also the various buttons arranged in the “Get External Data From” tool group. We will be using these shortly to import project schedules to Acumen.</p> 

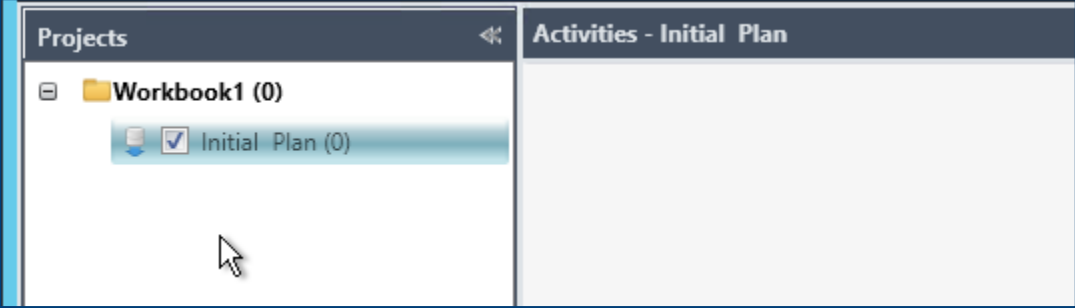
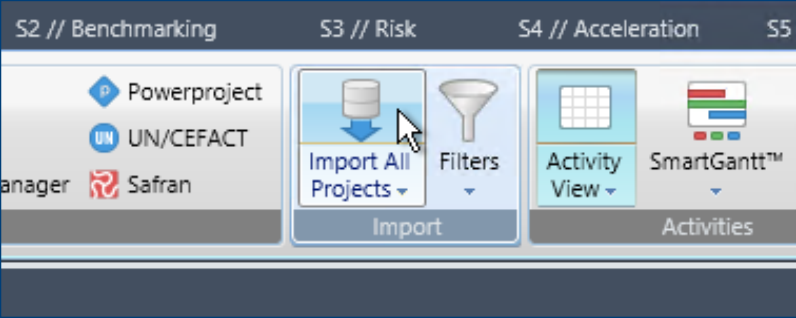
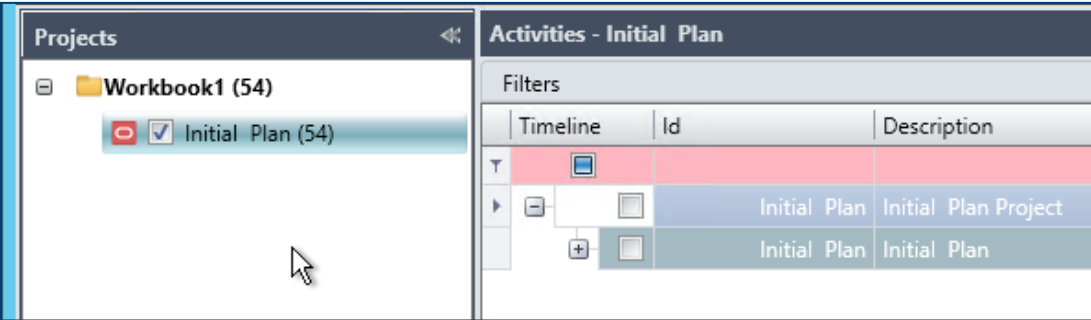
Continued on next page

Activity 1.1.1: Loading the Schedule for Analysis, continued

Step	Action
6	In the center of the Activities area is a prompt that will help guide you through your first steps in Acumen. Our first step is to Add a Project.
7	Click on the Oracle Primavera button in the 'Get External Data From' section of the S1 // Projects ribbon.
	
8	In the Open dialog, locate the Samples.zip file below the Acumen installation folder under the Resources / Samples folders.
	C:\Program Files (x86)\Deltek\Acumen 8.7\Resources\Samples\samples.zip
9	Select the Initial_Plan.xer file within the zip file and click Open.
	

Continued on next page

Activity 1.1.1: Loading the Schedule for Analysis, continued

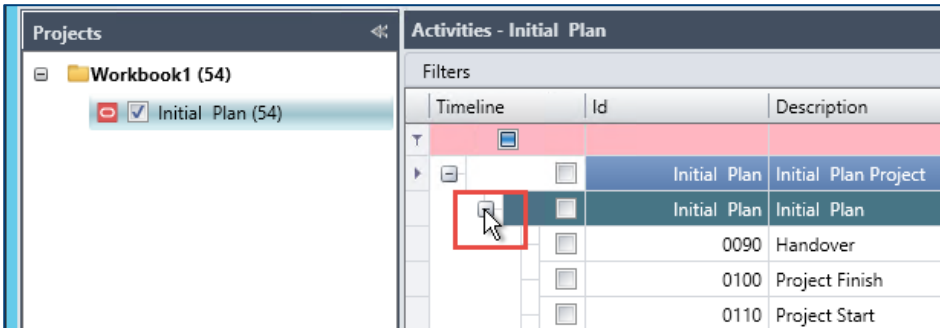
Step	Action															
10	<p>The Initial Plan file appears in the Projects list. There is one more step to fully load this file.</p> 															
11	<p>Click on the top part of the Import All Projects button.</p> 															
12	<p>After a few moments the Project content appears in the Activities window and the Oracle Icon appears beside the Initial Plan list item.</p>  <table border="1" data-bbox="704 1461 1313 1623"> <thead> <tr> <th colspan="3">Filters</th> </tr> <tr> <th>Timeline</th> <th>Id</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Initial Plan</td> <td>Initial Plan Project</td> </tr> <tr> <td></td> <td>Initial Plan</td> <td>Initial Plan</td> </tr> </tbody> </table>	Filters			Timeline	Id	Description					Initial Plan	Initial Plan Project		Initial Plan	Initial Plan
Filters																
Timeline	Id	Description														
	Initial Plan	Initial Plan Project														
	Initial Plan	Initial Plan														

Continued on next page

Activity 1.1.1: Loading the Schedule for Analysis, continued

Step **Action**

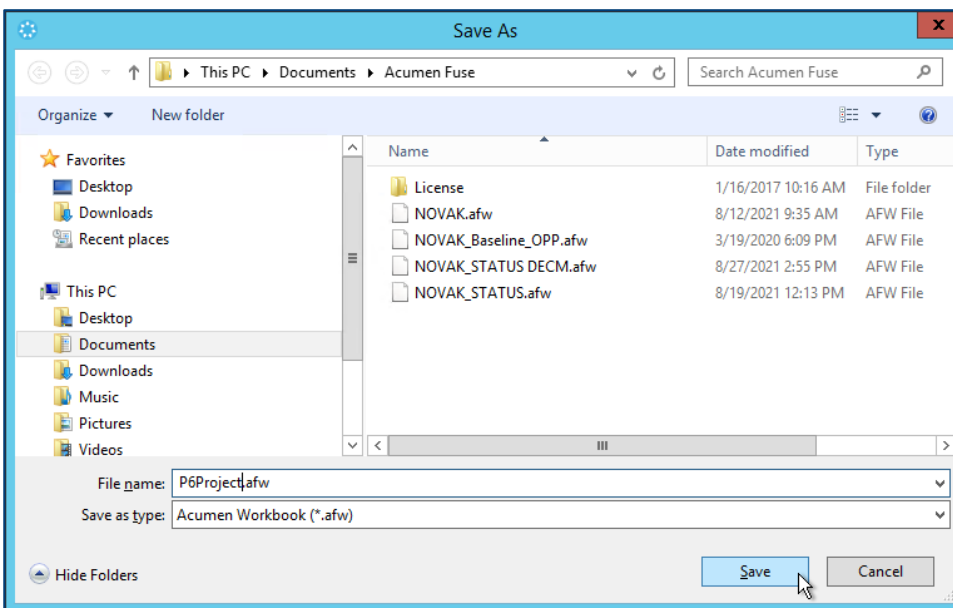
- 13 Expand some of the elements in the **Activities** window to the right of the **Projects** list.



- 14 Click on the **Save** button on the **Quick Access Tool bar** to save the workbook.



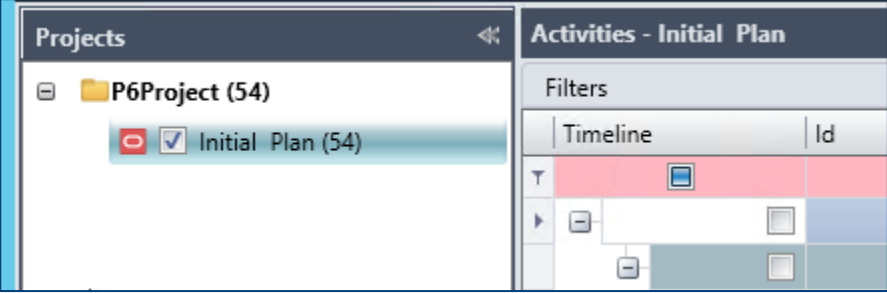
- 15 Save the workbook as **P6Project.afw**. (Where **AFW** is Acumen Fuse Workbook)



Continued on next page

Activity 1.1.1: Loading the Schedule for Analysis, continued

Step	Action
16	The project is now ready for analysis.




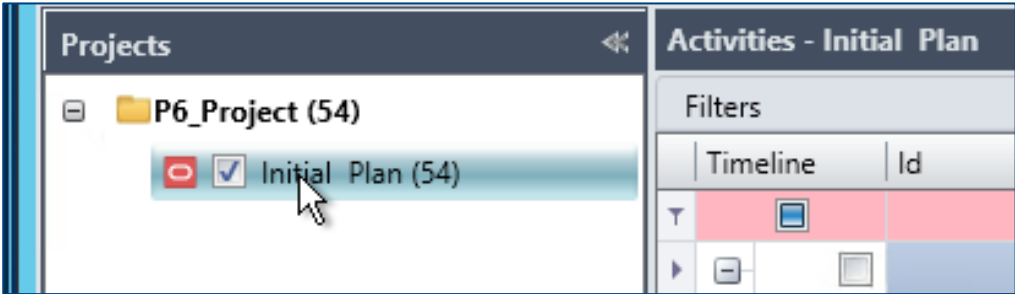
The screenshot displays a software interface with two main panels. The left panel, titled 'Projects', shows a tree view with a folder icon for 'P6Project (54)' and a sub-item 'Initial Plan (54)' which has a red play button icon and a checked checkbox. The right panel, titled 'Activities - Initial Plan', features a 'Filters' section with a 'Timeline' filter selected. Below the filters is a table with columns for 'Timeline' and 'Id'. The table contains three rows: a red row with a blue square icon, a white row with a grey square icon, and a grey row with a white square icon.

Activity 1.2: Snapshots and Scenarios

Activity 1.2.1: Importing a Snapshot

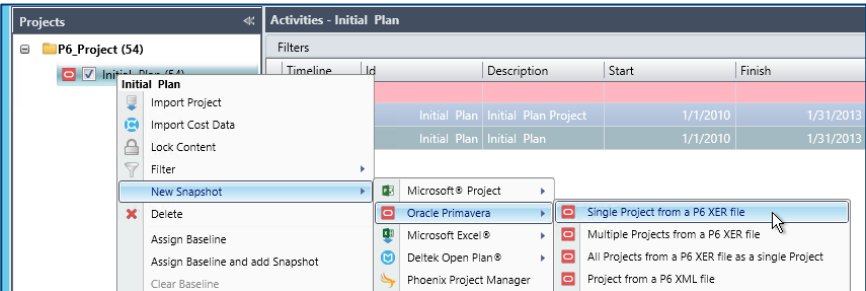
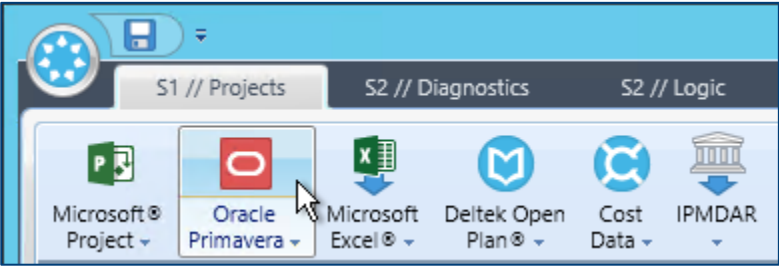
The heart of Deltek Acumen Fuse is the S2 // Diagnostics tab. During the Quick Start training module you loaded the Initial Plan P6 project, and then performed a Schedule Quality diagnostic. We did not spend much time learning about the S2 // Diagnostics view, so in this module, we will take a deeper dive into the various elements of this view.

Before we explore the S2 // Diagnostics tab, we need to do a little extra work in the S1 // Projects tab to bring in a project snapshot, and to create something called a scenario. A scenario is an editable version of a project file.

Step	Action
1	Click on the S1 // Projects tab.
	
2	Highlight the Initial Plan project.
	

Continued on next page

Activity 1.2.1: Importing a Snapshot, continued

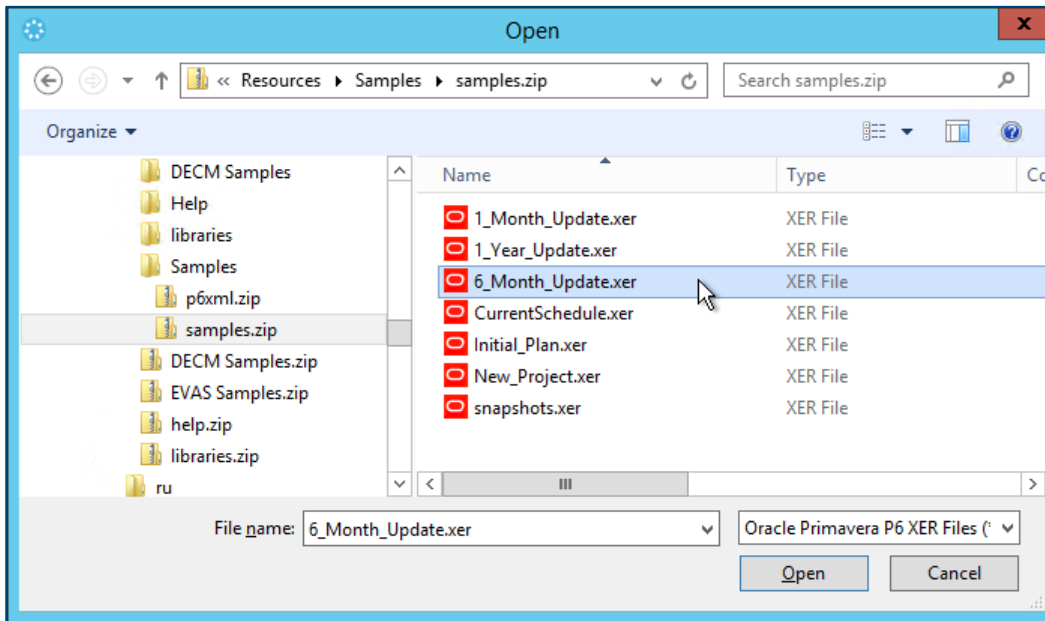
Step	Action
3	<p>From here you can load the snapshot in one of two ways.</p> <ol style="list-style-type: none"> Right-click on the project name and select New Snapshot Oracle Primavera Single Project from a P6 XER file option in the resulting list: 
	<ol style="list-style-type: none"> Or you can simply click the top portion of the Oracle Primavera button in the Get External Data From ribbon tool group. 

Continued on next page

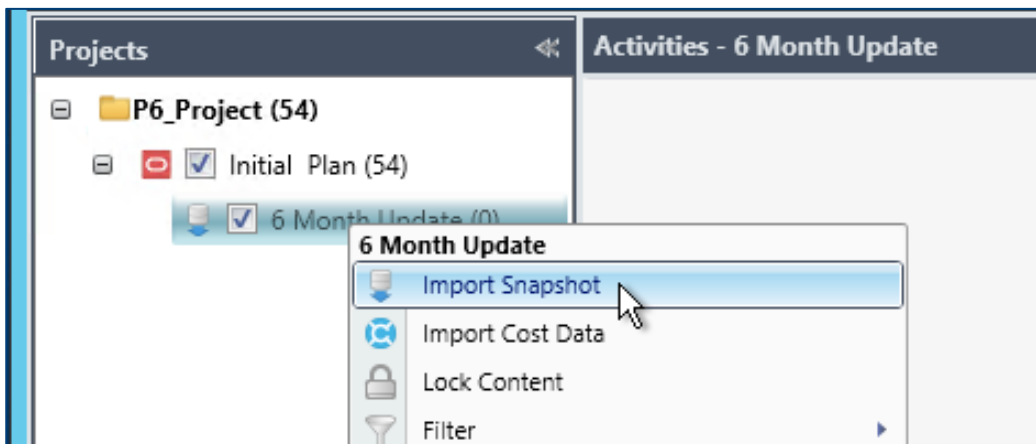
Activity 1.2.1: Importing a Snapshot, continued

Step	Action
------	--------

- | | |
|---|---|
| 4 | In the resulting Open dialog, select the 6_Month_Update.xer file from the Samples.zip file located below the Resources Samples folder in the Acumen installation folder. |
|---|---|



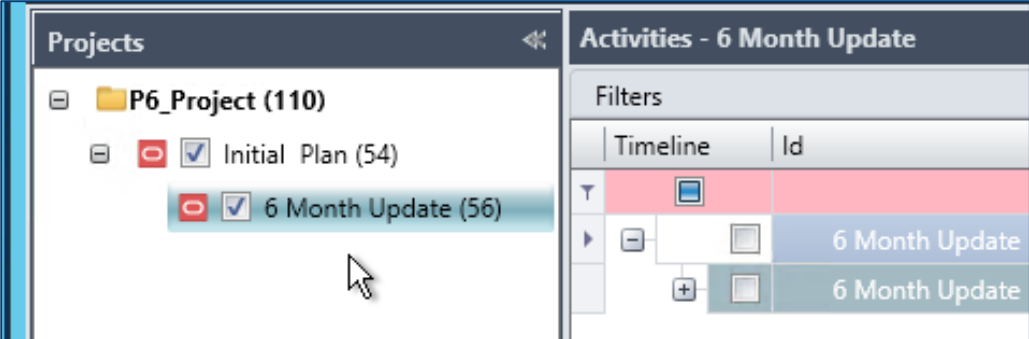
- | | |
|---|---|
| 5 | Now right-click on the 6 Month Update project in the Projects list. |
|---|---|



Continued on next page

Activity 1.2.1: Importing a Snapshot, continued

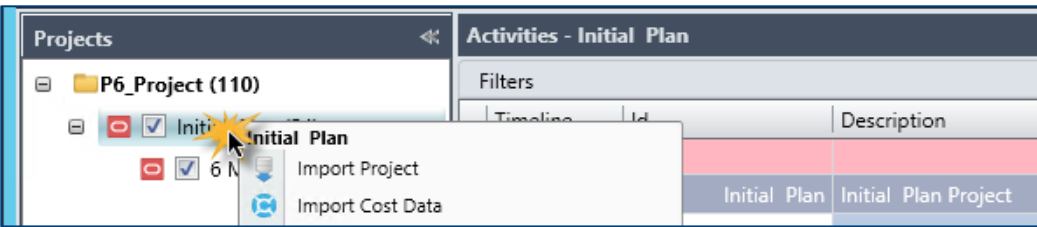
Step	Action
6	Select the Import Snapshot option.



Activity 1.2.2: Creating a Scenario

Having loaded a snapshot, let's learn how to create a scenario. It's very simple to do and there are a number of situations where a 'Scenario' is helpful in reporting and/or exporting projects that have been adjusted in some way by Acumen. It is necessary to use scenarios when project data needs to be changed, as Acumen protects the original files loaded by disallowing all but the most minor and insignificant changes to be made to that original data, namely the description.

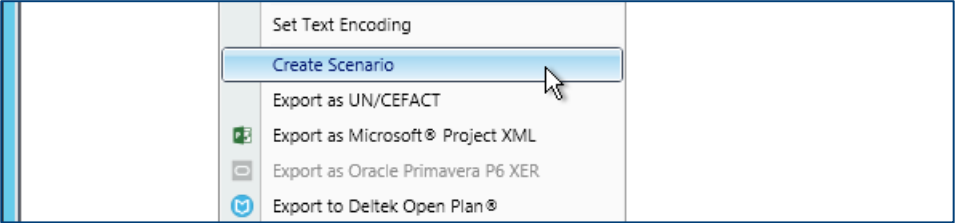
Step	Action
1	Right-click on the Initial Plan project.



Continued on next page

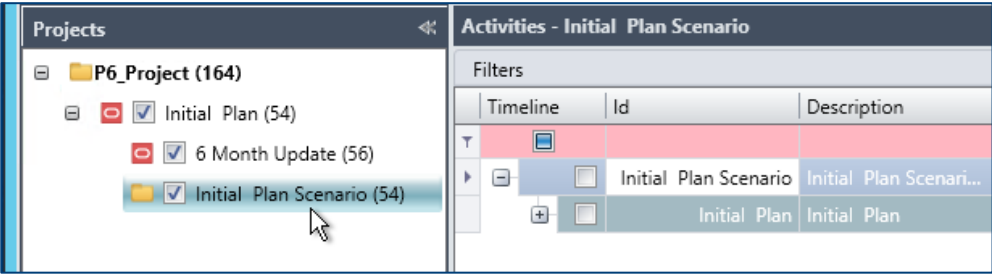
Activity 1.2.2: Creating a Scenario, continued

Step	Action
2	Select the 'Create Scenario' option from the resulting menu.



A screenshot of a context menu with the following items: Set Text Encoding, Create Scenario (highlighted), Export as UN/CEFACT, Export as Microsoft® Project XML, Export as Oracle Primavera P6 XER, and Export to Deltek Open Plan®.

3	The new Scenario will appear in the Projects list, suffixed with the word Scenario .
---	---

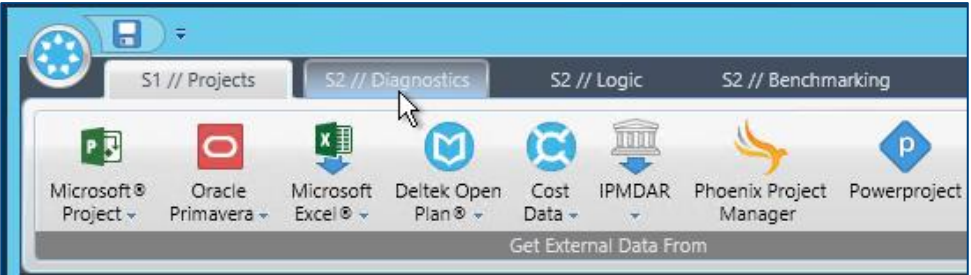


The screenshot shows the software interface. On the left, the 'Projects' pane shows a tree view under 'P6_Project (164)' with items: 'Initial Plan (54)', '6 Month Update (56)', and 'Initial Plan Scenario (54)' (highlighted). On the right, the 'Activities - Initial Plan Scenario' pane shows a table with columns 'Timeline', 'Id', and 'Description'. The table contains two rows: one for 'Initial Plan Scenario' and one for 'Initial Plan'.

Activity 1.2.3: Explore the Diagnostics View

Now that we have one of each project type loaded into our workbook, let's take a closer look at the **S2 // Diagnostics** view.

Step	Action
1	Click on the S2 // Diagnostics tab.

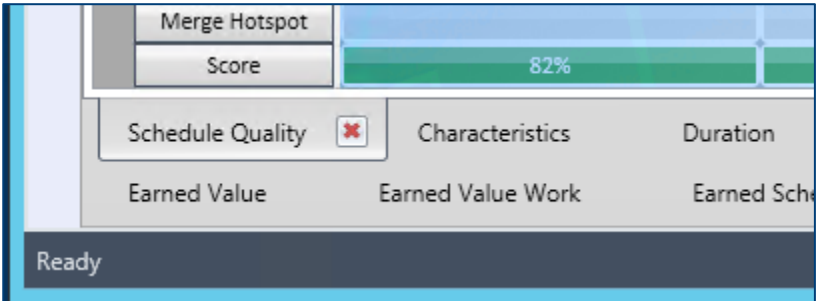
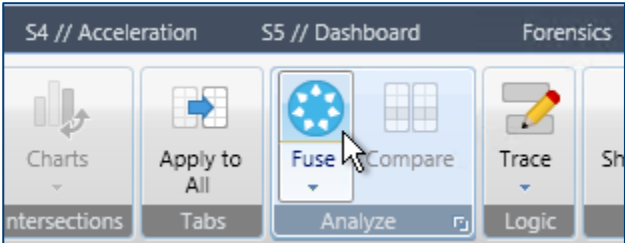
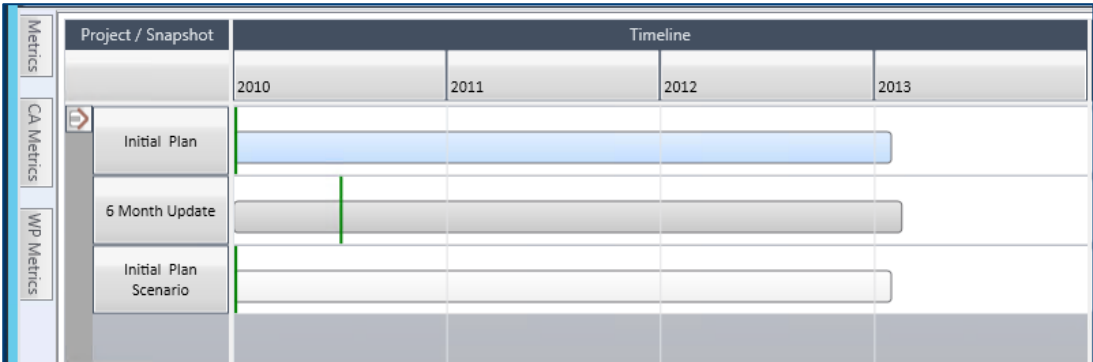


The screenshot shows the software interface with the 'S2 // Diagnostics' tab selected. Below the tabs, there is a row of icons for various data sources: Microsoft® Project, Oracle Primavera, Microsoft Excel®, Deltek Open Plan®, Cost Data, IPMDAR, Phoenix Project Manager, and Powerproject. Below these icons is the text 'Get External Data From'.

Continued on next page

Acumen Fuse Boot Camp Series: Analysis and Metrics – Activity Guide

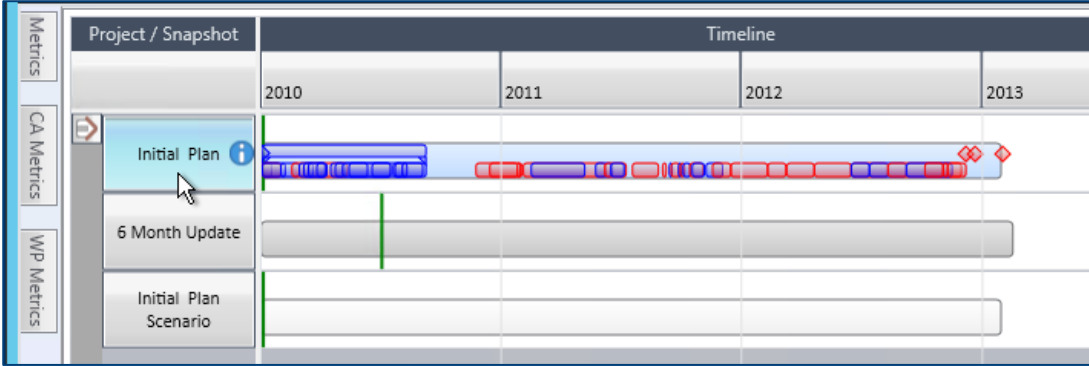
Activity 1.2.3: Explore the Diagnostics View, continued

Step	Action
2	Verify that the Schedule Quality ribbon view is selected at the bottom of the window.
	 <p>A screenshot of a software ribbon interface. The 'Schedule Quality' tab is selected and highlighted in blue. Other tabs visible include 'Merge Hotspot', 'Score', 'Characteristics', 'Duration', 'Earned Value', 'Earned Value Work', and 'Earned Schedule'. A 'Score' field shows '82%'. The status bar at the bottom indicates 'Ready'.</p>
3	Now click on the top portion of the Fuse button.
	 <p>A screenshot of a software ribbon interface. The 'Fuse' button is highlighted with a mouse cursor. Other buttons visible include 'Charts', 'Apply to All', 'Compare', 'Trace', and 'Logic'. The ribbon is divided into sections labeled 'S4 // Acceleration', 'S5 // Dashboard', and 'Forensics'.</p>
4	Top-right is the Ribbon Viewer .
	 <p>A screenshot of a project timeline view. The view shows a grid with columns for years (2010, 2011, 2012, 2013) and rows for project milestones. The milestones are: 'Initial Plan', '6 Month Update', and 'Initial Plan Scenario'. The 'Initial Plan' bar spans from 2010 to 2013. The '6 Month Update' bar spans from 2010 to 2011. The 'Initial Plan Scenario' bar spans from 2010 to 2013. A vertical green line is positioned at the start of 2011.</p>

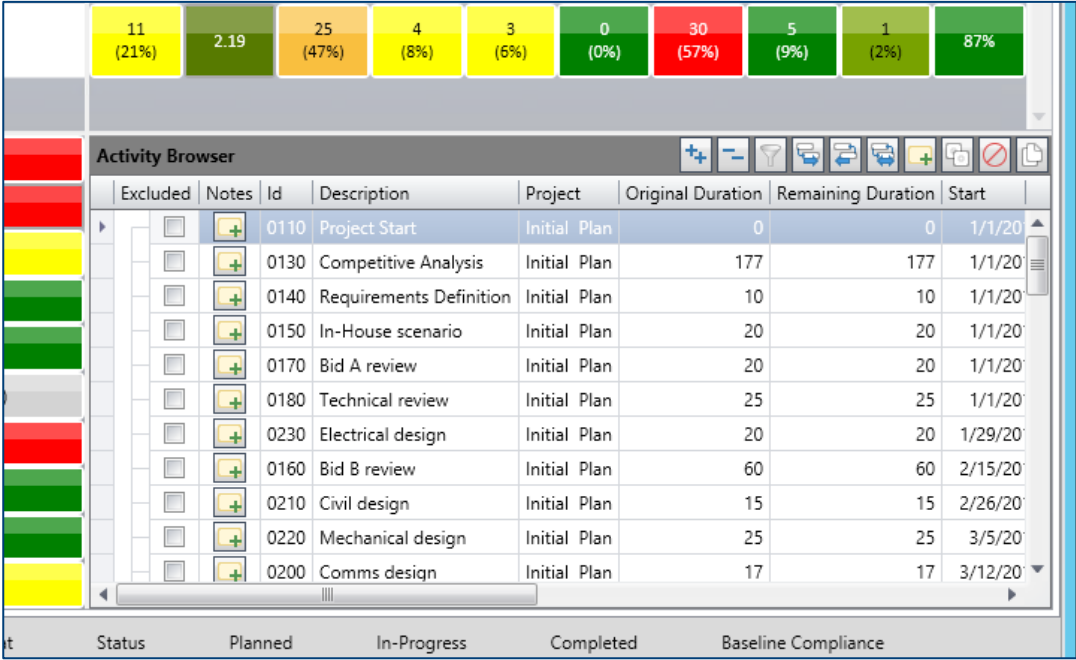
Continued on next page

Activity 1.2.3: Explore the Diagnostics View, continued

Step	Action
5	Click on the Initial Plan header in the Ribbon Viewer .



6	Look to the bottom-right of the view to see the Project's activities listed in the Activity Browser .
---	--



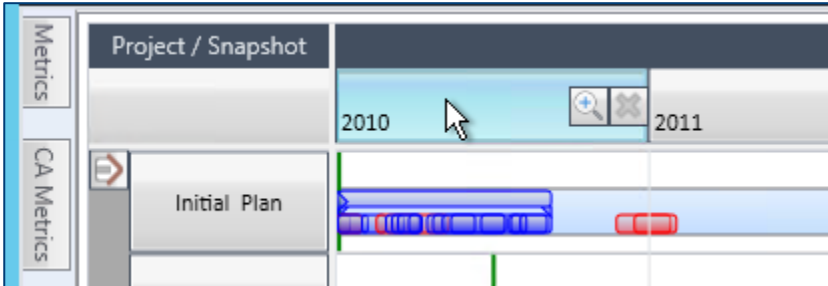
Excluded	Notes	Id	Description	Project	Original Duration	Remaining Duration	Start
<input type="checkbox"/>	<input type="checkbox"/>	0110	Project Start	Initial Plan	0	0	1/1/20
<input type="checkbox"/>	<input type="checkbox"/>	0130	Competitive Analysis	Initial Plan	177	177	1/1/20
<input type="checkbox"/>	<input type="checkbox"/>	0140	Requirements Definition	Initial Plan	10	10	1/1/20
<input type="checkbox"/>	<input type="checkbox"/>	0150	In-House scenario	Initial Plan	20	20	1/1/20
<input type="checkbox"/>	<input type="checkbox"/>	0170	Bid A review	Initial Plan	20	20	1/1/20
<input type="checkbox"/>	<input type="checkbox"/>	0180	Technical review	Initial Plan	25	25	1/1/20
<input type="checkbox"/>	<input type="checkbox"/>	0230	Electrical design	Initial Plan	20	20	1/29/20
<input type="checkbox"/>	<input type="checkbox"/>	0160	Bid B review	Initial Plan	60	60	2/15/20
<input type="checkbox"/>	<input type="checkbox"/>	0210	Civil design	Initial Plan	15	15	2/26/20
<input type="checkbox"/>	<input type="checkbox"/>	0220	Mechanical design	Initial Plan	25	25	3/5/20
<input type="checkbox"/>	<input type="checkbox"/>	0200	Comms design	Initial Plan	17	17	3/12/20

Continued on next page

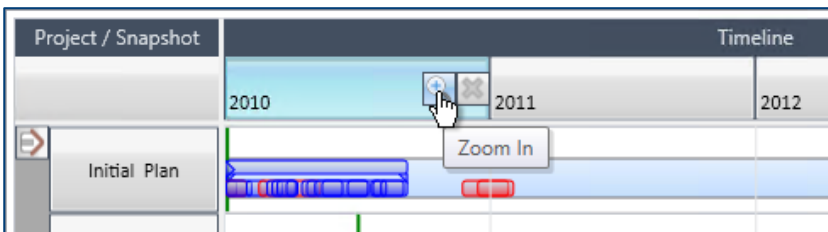
Activity 1.2.3: Explore the Diagnostics View, continued

Step	Action
------	--------

- 7 To zoom in to a particular period, click on its header – in this example click on the **2010** period.



- 8 Click on the **Magnifying** glass icon in the header.



- 9 Look at the **Ribbon Analyzer** to the right of the Timeline.

Ribbon Analyzer									
Missing Logic	Logic Density™	Critical	Hard Constraints	Negative Float	Insufficient Detail™	Number of Lags	Number of Leads	Merge Hotspot	Score
8 (33%)	2.21	6 (25%)	3 (13%)	3 (13%)	0 (0%)	16 (67%)	5 (21%)	0 (0%)	81%
8 (30%)	2.19	13 (68%)	3 (11%)	11 (58%)	0 (0%)	17 (63%)	0 (0%)	0 (0%)	80%
8 (33%)	2.21	6 (25%)	3 (13%)	3 (13%)	0 (0%)	16 (67%)	5 (21%)	0 (0%)	81%

Continued on next page

Activity 1.2.3: Explore the Diagnostics View, continued

Step	Action
------	--------

- 10 Click on the first **Missing Logic** metric on the top row.

Q1 2011	Missing Logic	Logic Density™	Critical	Hard Constraints
	8 (33%)	2.21	6 (25%)	3 (13%)
	8 (30%)	2.19	13 (68%)	3 (11%)

- 11 Now look below the Ribbon Analyzer. The activity browser is displaying a list of the activities that are demonstrating missing logic: i.e. a predecessor, a successor, or both are not present on the listed activities.

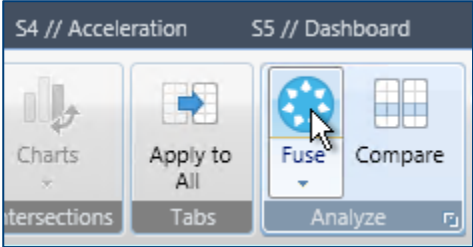
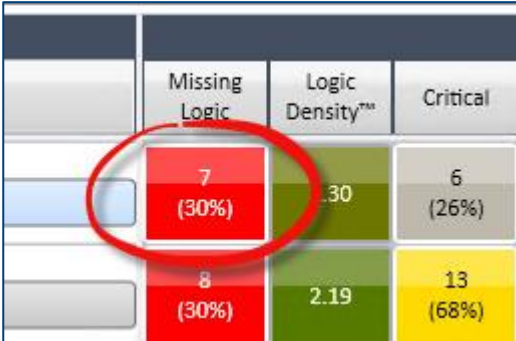
Missing Logic in Project Initial Plan (8 of 24)							
Excluded	Notes	Id	Description	Project	Original Duration	Number of Predecessors	Num
<input type="checkbox"/>		0110	Project Start	Initial Plan	0	0	
<input type="checkbox"/>		0140	Requirements Definition	Initial Plan	10	0	
<input type="checkbox"/>		0150	In-House scenario	Initial Plan	20	1	
<input type="checkbox"/>		0170	Bid A review	Initial Plan	20	0	
<input type="checkbox"/>		0180	Technical review	Initial Plan	25	0	
<input type="checkbox"/>		0200	Comms design	Initial Plan	17	1	
<input type="checkbox"/>		0190	Commerical review	Initial Plan	91	2	
<input type="checkbox"/>		0240	FEED handover	Initial Plan	5	1	

- 12 Now click on the **Excluded** check box beside the **Project Start** activity.

Missing Logic in Project Initial Plan (8 of 24)							
Excluded	Notes	Id	Description	Project	Original Duration	Number of Predecessors	Num
<input checked="" type="checkbox"/>		0110	Project Start	Initial Plan	0	0	
<input type="checkbox"/>		0140	Requirements Definition	Initial Plan	10	0	
<input type="checkbox"/>		0150	In-House scenario	Initial Plan	20	1	
<input type="checkbox"/>		0170	Bid A review	Initial Plan	20	0	

Continued on next page

Activity 1.2.3: Explore the Diagnostics View, continued

Step	Action												
13	<p>Click the Fuse button.</p> 												
14	<p>Note the slightly improved score.</p>  <table border="1"> <thead> <tr> <th></th> <th>Missing Logic</th> <th>Logic Density™</th> <th>Critical</th> </tr> </thead> <tbody> <tr> <td></td> <td>7 (30%)</td> <td>.30</td> <td>6 (26%)</td> </tr> <tr> <td></td> <td>8 (30%)</td> <td>2.19</td> <td>13 (68%)</td> </tr> </tbody> </table>		Missing Logic	Logic Density™	Critical		7 (30%)	.30	6 (26%)		8 (30%)	2.19	13 (68%)
	Missing Logic	Logic Density™	Critical										
	7 (30%)	.30	6 (26%)										
	8 (30%)	2.19	13 (68%)										

Activity 1.3: Working with the Phase Analyzer

Activity 1.3.1: Working with the Phase Analyzer

So far we've largely focused on the Ribbon analyzer, which gives a horizontal view of summary metrics for whatever element is displayed. However the phase-analyzer divides the project in the vertical, placing the results of the analysis into period buckets. This opens the door for many more analytical processes.

Step Action

- 1 Take a look at the **Phase Analyzer**.

Phase Analyzer	Missing Logic	4 (40%)	1 (11%)	2 (33%)	0 (0%)	0 (0%)
	Logic Density™	1.90	2.56	2.00	3.00	2.80
	Critical	2 (20%)	1 (11%)	0 (0%)	2 (100%)	4 (80%)
	Hard Constraints	1 (10%)	0 (0%)	0 (0%)	1 (50%)	1 (33%)
	Negative Float	1 (17%)	0 (0%)	0 (0%)	0 (N/A)	1 (33%)
	Insufficient Detail™	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Number of Lags	4 (40%)	4 (80%)	3 (100%)	2 (100%)	3 (100%)
	Number of Leads	3 (30%)	1 (20%)	0 (0%)	1 (50%)	0 (0%)
	Merge Hotspot	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Score	82%	93%	91%	73%	87%
Schedule Quality ✖ Characteristics Duration Logic Lags Constraints Float						

The phase analyzer shows a time-phased version of the metric results. It allows us to see not just that an activity has achieved a certain score, but also when the activity score is appearing on the project timeline.

- 2 Click on the **Q1 2010 Number of Lags** cell.

Phase Analyzer	Hard Constraints	1 (10%)	0 (0%)	0 (0%)
	Negative Float	1 (17%)	0 (0%)	0 (0%)
	Insufficient Detail™	0 (0%)	0 (0%)	0 (0%)
	Number of Lags	4 (40%)	4 (80%)	3 (100%)
	Number of Leads	3 (30%)	1 (20%)	0 (0%)
	Merge Hotspot	0 (0%)	0 (0%)	0 (0%)
	Score	82%	93%	91%

Continued on next page

Activity 1.3.1: Working with the Phase Analyzer, continued

Step	Action
------	--------

- 3 Look at the activity browser.

Excluded	Notes	Id	Description	Project	Original Duration	Remaining Duration	Start	Finish
	+	0160	Bid B review	Initial Plan	60	60	2/15/2010	5/1
	+	0220	Mechanical design	Initial Plan	25	25	3/5/2010	4/
	+	0200	Comms design	Initial Plan	17	17	3/12/2010	4/
	+	0280	Platform FEED	Initial Plan	10	10	3/25/2010	4/

- 4 Make a note of the 4 activities and 40% score for the **Number of Lags** in Q1 2010.

Insufficient Detail™	0 (0%)	0 (0%)	0 (0%)
Number of Lags	4 (40%)	4 (80%)	3 (100%)
Number of Leads	3 (30%)	1 (20%)	0 (0%)

- 5 Click on the **Q2 2010 Number of Lags**, and again note the activities that appear in the **Activity Browser**.

Insufficient Detail™	0 (0%)	0 (0%)	0 (0%)
Number of Lags	4 (40%)	4 (80%)	3 (100%)
Number of Leads	3 (30%)	1 (20%)	0 (0%)

- 6 Double-click on the **6 Month Update** project row header.

Project / Snapshot	Timeline		
	Q1 2010	Q2 2010	Q3 2010
Initial Plan	Bar		
6 Month Update	Bar	Bar	Bar
Initial Plan Scenario			

Continued on next page

Activity 1.3.1: Working with the Phase Analyzer, continued

Step	Action
------	--------

- 7 Review the results.

Project / Snapshot		Q1 2010	Q2 2010
6 Month Update			

- 8 Click on the **Missing Logic** cell and then look at the **Activity Browser**.

Missing Logic	4 (67%)	2 (33%)
Logic Density™	1.33	2.00
Critical	0 (0%)	3 (75%)

- 9 You can tell what project is now being displayed by the values in the **Project** column of the **Activity Browser**.

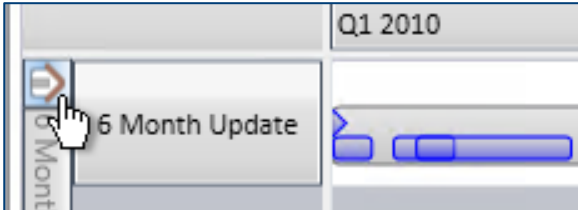
Excluded	Notes	Id	Description	Project	Original D
<input type="checkbox"/>		0110	Project Start	6 Month Update	
<input type="checkbox"/>		0140	Requirements Definition	6 Month Update	
<input type="checkbox"/>		0170	Bid A review	6 Month Update	
<input type="checkbox"/>		0150	In-House scenario	6 Month Update	

Continued on next page

Activity 1.3.1: Working with the Phase Analyzer, continued

Step	Action
------	--------

- 10 To return to seeing all three projects, click on the **Home** button.



- 11 Note the return of the **Ribbons** in the **Timeline**.

Metrics	Project / Snapshot	Timeline					Missing Logic
		Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011	
CA Metrics	Initial Plan	[Blue bar]					8 (33%)
	6 Month Update	[Blue bar]					8 (30%)
	Initial Plan Scenario	[Grey bar]					8 (33%)

- 12 Now click on different metric cells and watch the ribbon display activities as little blue and/or red bars depending on criticality.

Project / Snapshot	Timeline					Missing Logic	Logic Densi...	Critical	Hard Constr...
	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011				
Initial Plan	[Red bar]	[Red bar]	[Red bar]	[Red bar]	[Red bar]	8 (33%)	2.21	6 (5%)	3 (13%)
6 Month Update	[Grey bar]	[Grey bar]	[Grey bar]	[Grey bar]	[Grey bar]	8 (30%)	2.19	13 (68%)	3 (11%)
Initial Plan Scenario	[Grey bar]	[Grey bar]	[Grey bar]	[Grey bar]	[Grey bar]	8 (33%)	2.21	6 (25%)	3 (13%)

Activity 1.4: Grouping and Sorting

Activity 1.4.1: Organizing Project Data using the Fields Tool

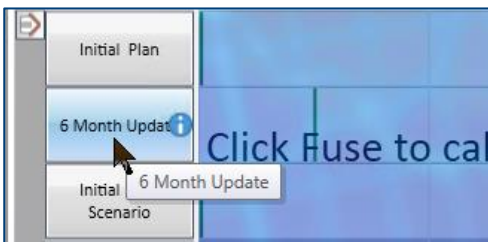
Having become familiar with the general areas of the **S2 // Diagnostics** view, I will now demonstrate some steps that will teach you how to organize data on the screen.

In this demonstration you will see how to use the tools in the Ribbons tool group to change the way we are viewing the project. Note that as well as projects – the default way data is organized in Diagnostics – we also see Fields, Resources, and Hierarchy. We can use these buttons to change the way the project is displayed.

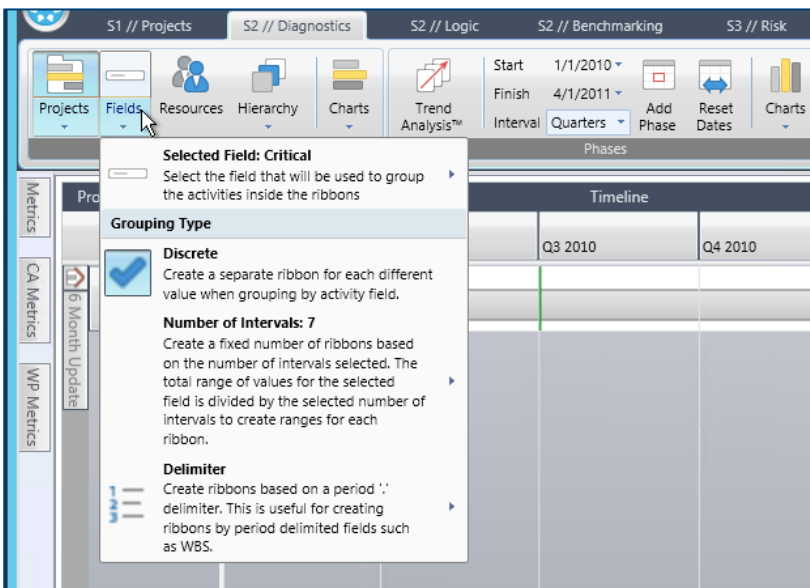
Let's say for example that I wish to organize the project in my ribbon analyzer by the 'contractor' user defined field. Here are the steps.

Step	Action
------	--------

- 1 To select just the **6 Month Update** project, double-click on it in the **Project / Snapshot** list.

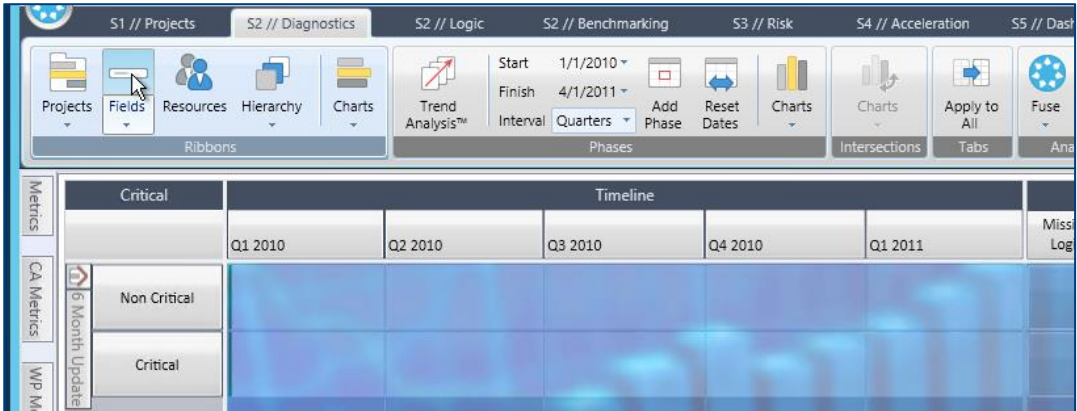
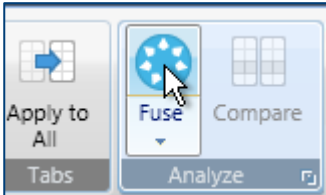
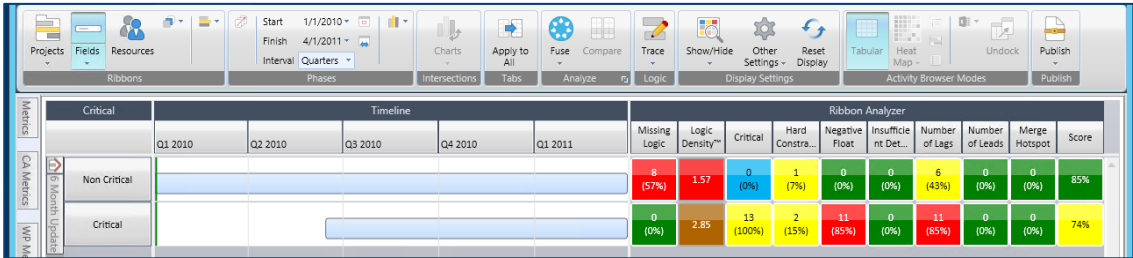


- 2 Click on the bottom of the **Fields** button.




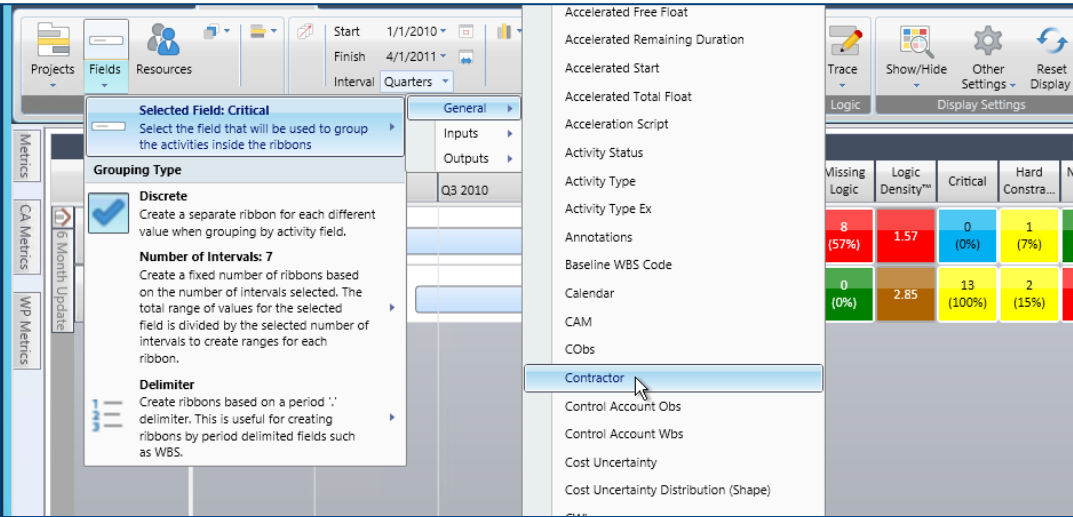
Continued on next page

Activity 1.4.1: Organizing Project Data using the Fields Tool, continued

Step	Action																																							
3	Click the top of the Fields button.																																							
																																								
4	Click the Fuse button.																																							
																																								
5	Note the results. It appears that the bulk of the critical activities are in the last three years of the project. More clues that logic needs work to keep that critical path throughout the project.																																							
 <table border="1"> <thead> <tr> <th colspan="6">Ribbon Analyzer</th> </tr> <tr> <th></th> <th>Missing Logic</th> <th>Logic Density™</th> <th>Critical</th> <th>Hard Constr...</th> <th>Negative Float</th> <th>Insufficie nt Det...</th> <th>Number of Lags</th> <th>Number of Leads</th> <th>Merge Hotspot</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>Non Critical</td> <td>8 (57%)</td> <td>1.57</td> <td>0 (0%)</td> <td>1 (7%)</td> <td>0 (0%)</td> <td>0 (0%)</td> <td>6 (43%)</td> <td>0 (0%)</td> <td>0 (0%)</td> <td>85%</td> </tr> <tr> <td>Critical</td> <td>0 (0%)</td> <td>2.85</td> <td>13 (100%)</td> <td>2 (15%)</td> <td>11 (85%)</td> <td>0 (0%)</td> <td>11 (85%)</td> <td>0 (0%)</td> <td>0 (0%)</td> <td>74%</td> </tr> </tbody> </table>		Ribbon Analyzer							Missing Logic	Logic Density™	Critical	Hard Constr...	Negative Float	Insufficie nt Det...	Number of Lags	Number of Leads	Merge Hotspot	Score	Non Critical	8 (57%)	1.57	0 (0%)	1 (7%)	0 (0%)	0 (0%)	6 (43%)	0 (0%)	0 (0%)	85%	Critical	0 (0%)	2.85	13 (100%)	2 (15%)	11 (85%)	0 (0%)	11 (85%)	0 (0%)	0 (0%)	74%
Ribbon Analyzer																																								
	Missing Logic	Logic Density™	Critical	Hard Constr...	Negative Float	Insufficie nt Det...	Number of Lags	Number of Leads	Merge Hotspot	Score																														
Non Critical	8 (57%)	1.57	0 (0%)	1 (7%)	0 (0%)	0 (0%)	6 (43%)	0 (0%)	0 (0%)	85%																														
Critical	0 (0%)	2.85	13 (100%)	2 (15%)	11 (85%)	0 (0%)	11 (85%)	0 (0%)	0 (0%)	74%																														

Continued on next page

Activity 1.4.1: Organizing Project Data using the Fields Tool, continued

Step	Action												
6	Click on the bottom of the Fields button once again.												
													
7	Select Contractor from the Selected Field: General submenu.												
	 <table border="1" data-bbox="1047 997 1295 1155"> <thead> <tr> <th>Missing Logic</th> <th>Logic Density™</th> <th>Critical</th> <th>Hard Constr...</th> </tr> </thead> <tbody> <tr> <td>8 (57%)</td> <td>1.57</td> <td>0 (0%)</td> <td>1 (7%)</td> </tr> <tr> <td>0 (0%)</td> <td>2.85</td> <td>13 (100%)</td> <td>2 (15%)</td> </tr> </tbody> </table>	Missing Logic	Logic Density™	Critical	Hard Constr...	8 (57%)	1.57	0 (0%)	1 (7%)	0 (0%)	2.85	13 (100%)	2 (15%)
Missing Logic	Logic Density™	Critical	Hard Constr...										
8 (57%)	1.57	0 (0%)	1 (7%)										
0 (0%)	2.85	13 (100%)	2 (15%)										

Continued on next page

Activity 1.4.1: Organizing Project Data using the Fields Tool, continued

Step Action

8 The results show **ACom**, **BCom**, **CCom**, and **Inhouse**.

Contractor	Timeline					Missing Logic	Logic Density™
	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011		
ACom							
BCom							
CCom							
Inhouse							

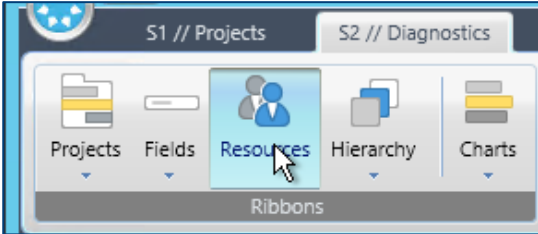
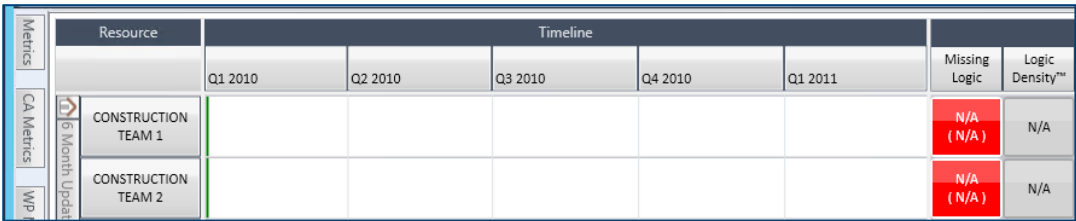
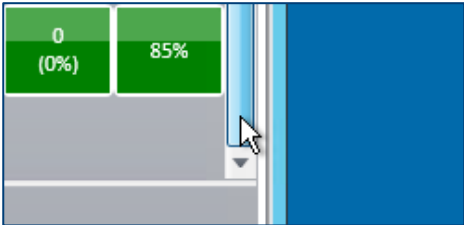
9 Click the **Fuse** button.

10 We now see an entirely different arrangement and results in the **Ribbon Analyzers**.

Contractor	Timeline					Missing Logic	Logic Density™
	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011		
ACom						2 (33%)	2.17
BCom						1 (9%)	2.64
CCom						N/A (N/A)	N/A
Inhouse						5 (50%)	1.70

Continued on next page

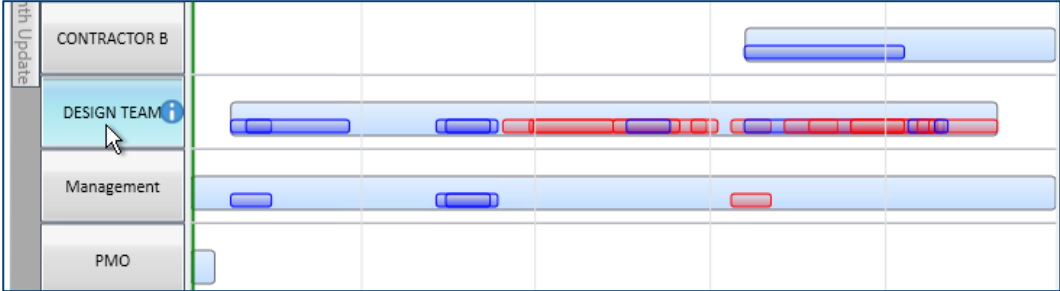
Activity 1.4.1: Organizing Project Data using the Fields Tool, continued

Step	Action																													
11	<p>Now click on the Resources button.</p> 																													
12	Note the Resource names now listed on the far left of the screen.																													
13	<p>Click on the Fuse button.</p>  <table border="1"> <thead> <tr> <th rowspan="2">Resource</th> <th colspan="5">Timeline</th> <th rowspan="2">Missing Logic</th> <th rowspan="2">Logic Density™</th> </tr> <tr> <th>Q1 2010</th> <th>Q2 2010</th> <th>Q3 2010</th> <th>Q4 2010</th> <th>Q1 2011</th> </tr> </thead> <tbody> <tr> <td>CONSTRUCTION TEAM 1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>N/A (N/A)</td> <td>N/A</td> </tr> <tr> <td>CONSTRUCTION TEAM 2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>N/A (N/A)</td> <td>N/A</td> </tr> </tbody> </table>	Resource	Timeline					Missing Logic	Logic Density™	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011	CONSTRUCTION TEAM 1						N/A (N/A)	N/A	CONSTRUCTION TEAM 2						N/A (N/A)	N/A
Resource	Timeline					Missing Logic	Logic Density™																							
	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011																									
CONSTRUCTION TEAM 1						N/A (N/A)	N/A																							
CONSTRUCTION TEAM 2						N/A (N/A)	N/A																							
14	<p>Scroll down to see the last resources in the list.</p> 																													

Continued on next page

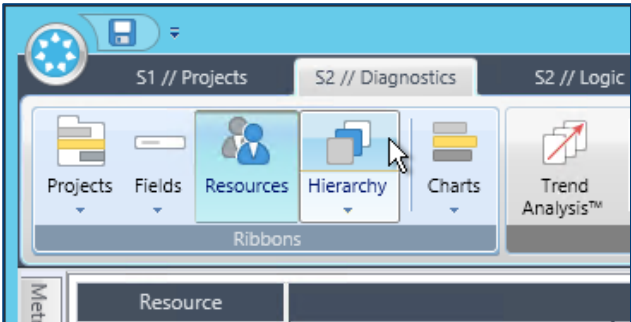
Activity 1.4.1: Organizing Project Data using the Fields Tool, continued

Step	Action
15	Click on Design Team resource row header.



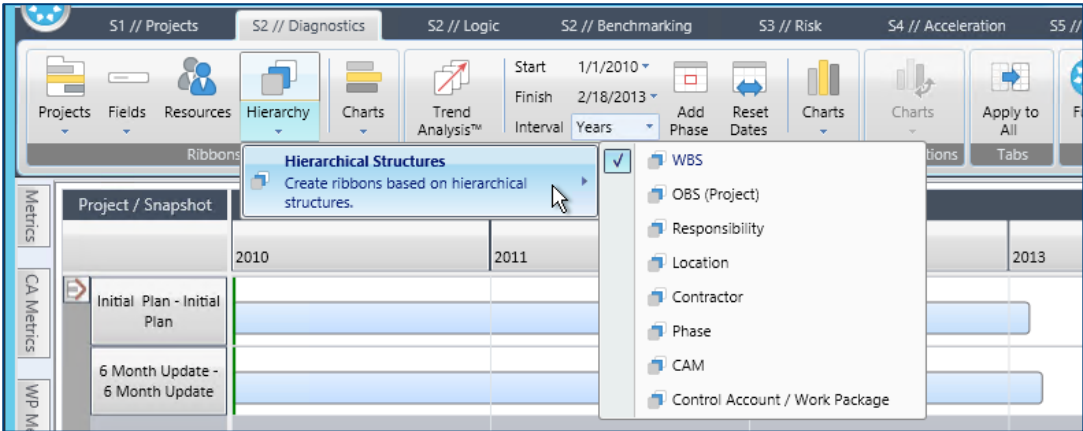
The screenshot shows a resource grid with a vertical column on the left containing resource names: 'CONTRACTOR B', 'DESIGN TEAM', 'Management', and 'PMO'. The 'DESIGN TEAM' row is highlighted in blue, and a mouse cursor is pointing at its header. To the right, a Gantt chart displays various colored bars representing project tasks and their durations across a timeline.

16	Now click on the Hierarchy button.
----	---



The screenshot shows the software's ribbon interface. The 'Resources' tab is active, and the 'Hierarchy' button, which features a hierarchical tree icon, is highlighted with a mouse cursor. Other buttons visible include 'Projects', 'Fields', 'Charts', and 'Trend Analysis™'. The background shows a 'Resource' table.

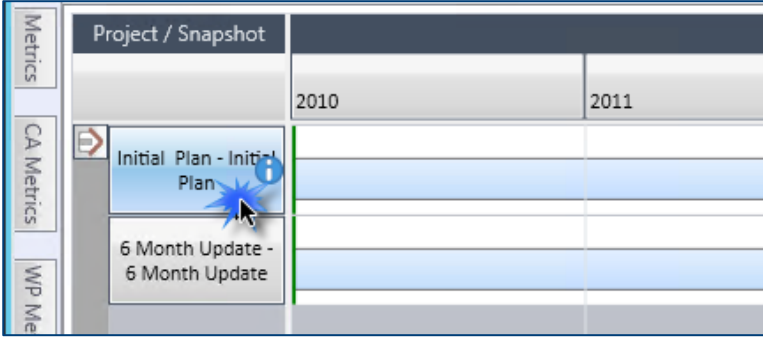
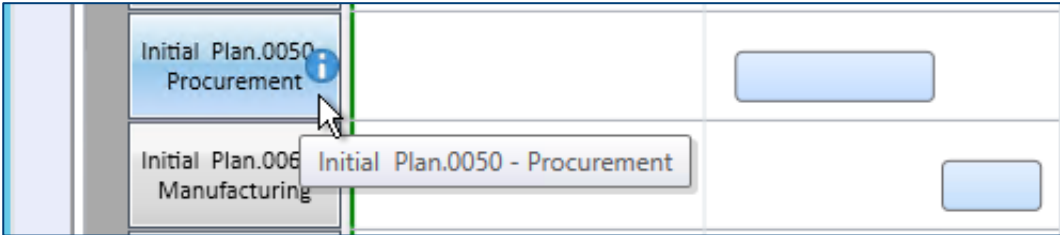
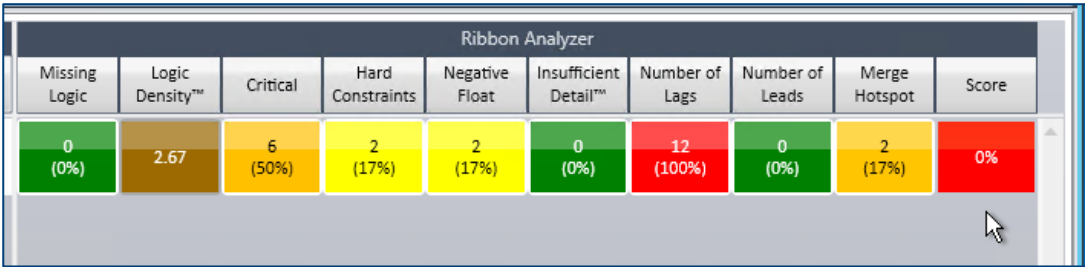
17	Click the bottom half of the Hierarchy button and then click on the menu.
----	--



The screenshot shows the 'Hierarchical Structures' menu open over the 'Hierarchy' button. The menu title is 'Hierarchical Structures' with a sub-header 'Create ribbons based on hierarchical structures.' Below this, a list of hierarchical levels is displayed, each with a checkbox: 'WBS' (checked), 'OBS (Project)', 'Responsibility', 'Location', 'Contractor', 'Phase', 'CAM', and 'Control Account / Work Package'. The background shows a project Gantt chart and a table with columns for years 2010, 2011, and 2013.

Continued on next page

Activity 1.4.1: Organizing Project Data using the Fields Tool, continued

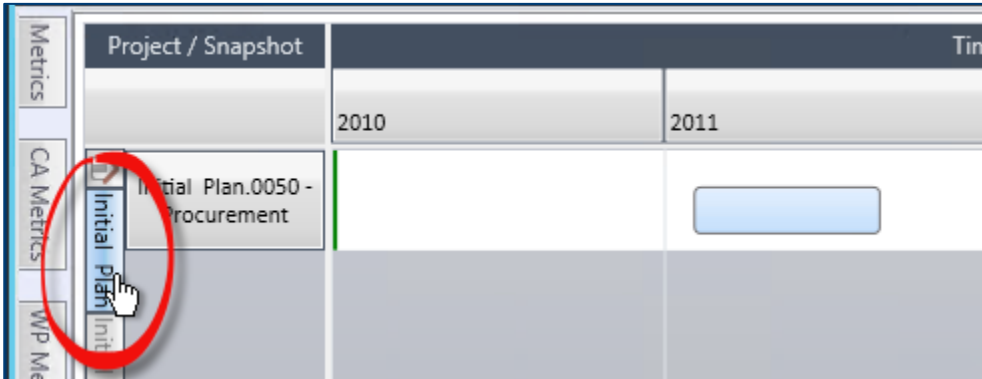
Step	Action																														
18	<p>Double-click on the Initial Plan row header in the Project / Snapshot column.</p> 																														
19	<p>Double-click on the 0050 – Procurement row header.</p> 																														
20	<p>Look at the Score for the WBS element.</p>  <table border="1"> <thead> <tr> <th colspan="10">Ribbon Analyzer</th> </tr> <tr> <th>Missing Logic</th> <th>Logic Density™</th> <th>Critical</th> <th>Hard Constraints</th> <th>Negative Float</th> <th>Insufficient Detail™</th> <th>Number of Lags</th> <th>Number of Leads</th> <th>Merge Hotspot</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>0 (0%)</td> <td>2.67</td> <td>6 (50%)</td> <td>2 (17%)</td> <td>2 (17%)</td> <td>0 (0%)</td> <td>12 (100%)</td> <td>0 (0%)</td> <td>2 (17%)</td> <td>0%</td> </tr> </tbody> </table>	Ribbon Analyzer										Missing Logic	Logic Density™	Critical	Hard Constraints	Negative Float	Insufficient Detail™	Number of Lags	Number of Leads	Merge Hotspot	Score	0 (0%)	2.67	6 (50%)	2 (17%)	2 (17%)	0 (0%)	12 (100%)	0 (0%)	2 (17%)	0%
Ribbon Analyzer																															
Missing Logic	Logic Density™	Critical	Hard Constraints	Negative Float	Insufficient Detail™	Number of Lags	Number of Leads	Merge Hotspot	Score																						
0 (0%)	2.67	6 (50%)	2 (17%)	2 (17%)	0 (0%)	12 (100%)	0 (0%)	2 (17%)	0%																						

Continued on next page

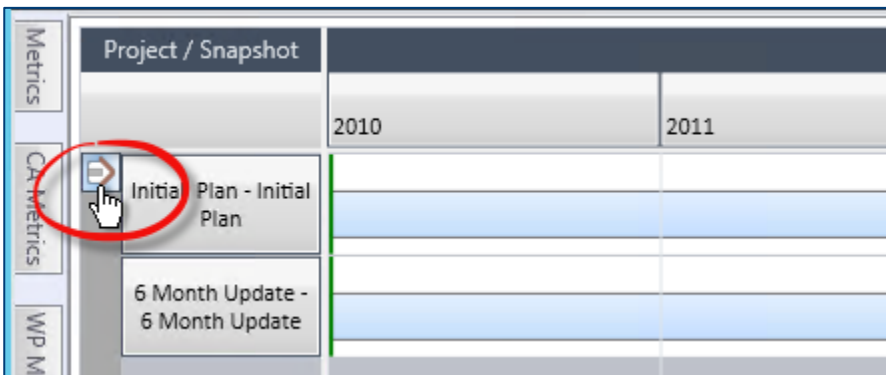
Activity 1.4.1: Organizing Project Data using the Fields Tool, continued

Step **Action**

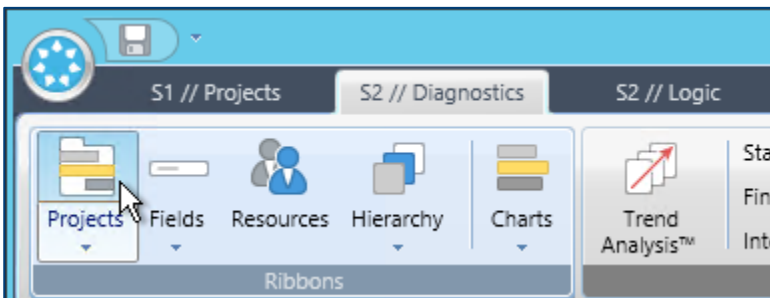
- 21 Now click on the **Initial Plan** label that is stacked below the **Home** button in the **Project / Snapshot** area.



- 22 Now click on the **Home** button to return to the program view that is showing the project and the snapshot.



- 23 Click the **Projects** button in the **Ribbons** tool group.

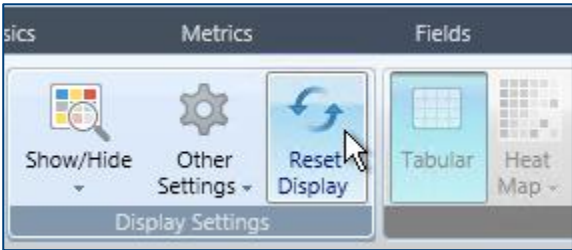
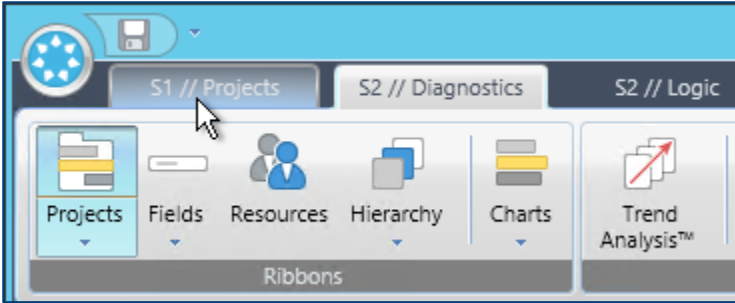


- 24 Click **Fuse** to recalculate the metrics at the project level of all projects and snapshots.

Activity 1.5: Trend Analysis

Activity 1.5.1: Using Trend Analysis

Trend Analysis lets you see trends over time when you have two or more projects. This is helpful when you have a baseline project, and multiple snapshots of the project as it progresses. Examples of this might be tracking the burn-down of total float within a project, or perhaps keeping track of your Critical Activities to make sure their numbers are not increasing. Let's look at some examples of how to view trends.

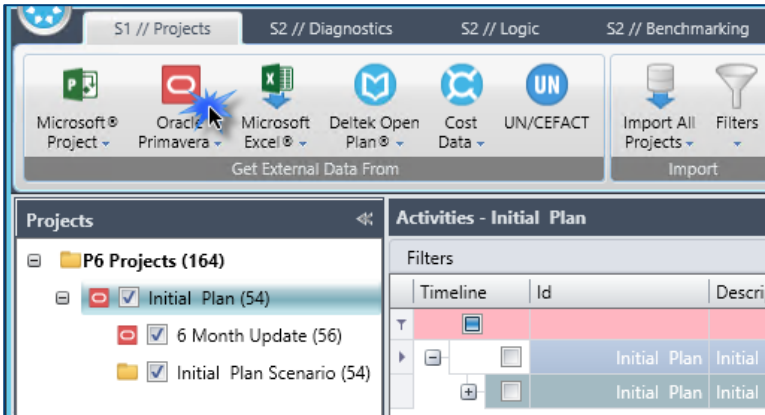
Step	Action
1	Click on the Reset Display button in the Display Settings tool group.
	
2	Now click on the S1 // Projects tab.
	

Continued on next page

Activity 1.5.1: Using Trend Analysis, continued

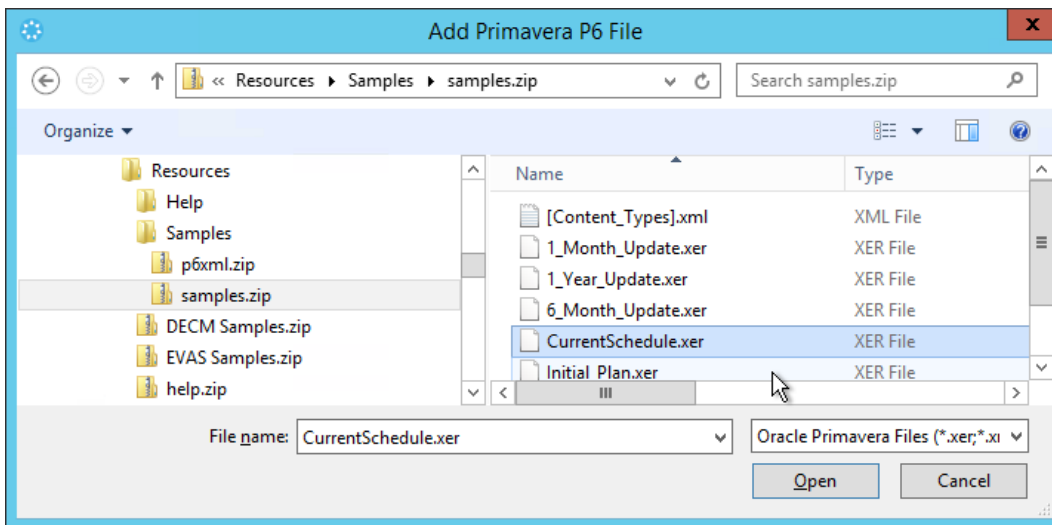
Step	Action
------	--------

- With the **Initial Plan** project highlighted in the **Projects** list, click on the **Oracle Primavera** button.



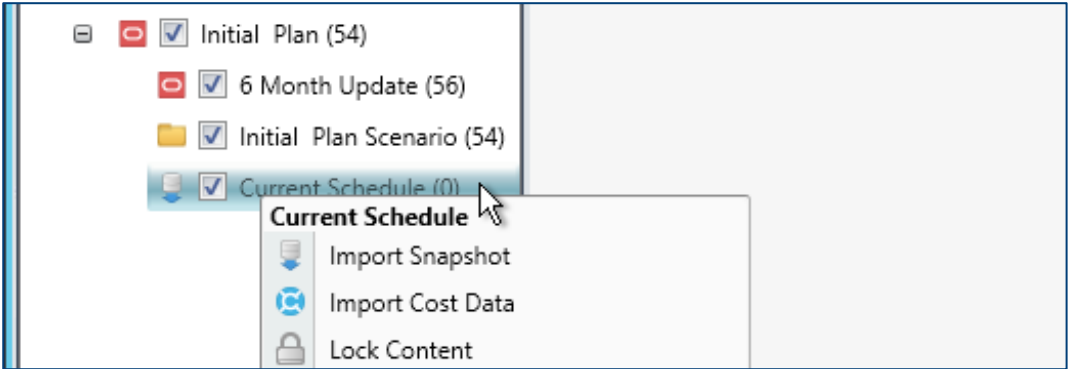
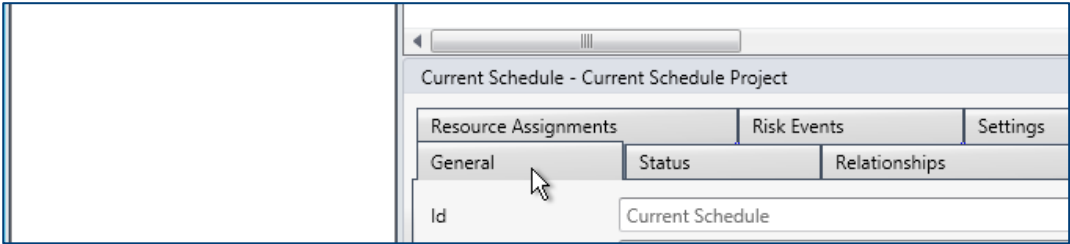
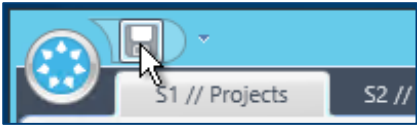
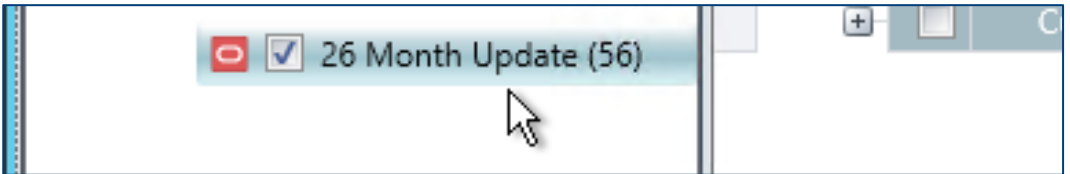
- In the Add Primavera P6 File dialog, locate the Samples.zip file in the **C:\Program Files (x86)\Deltek\Acumen 8.7\Resources\Samples\samples.zip**.

- Select the CurrentSchedule.xer file and click Open.



Continued on next page

Activity 1.5.1: Using Trend Analysis, continued

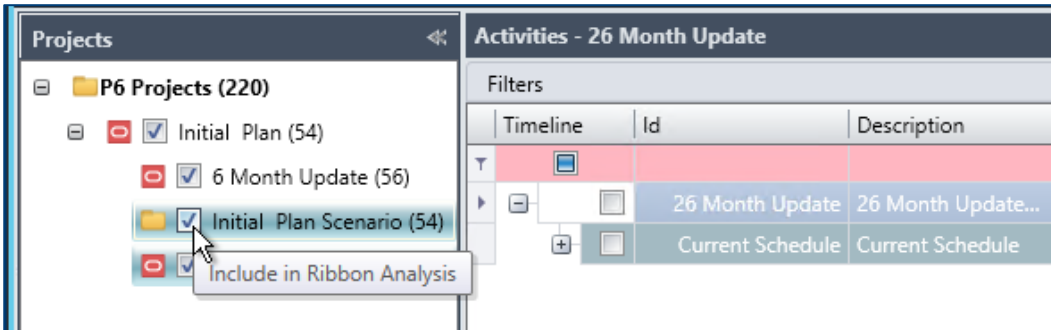
Step	Action
6	<p>Now right-click on the Current Schedule and click on Import Snapshot from the menu.</p> 
7	<p>With the Current Schedule selected, go to the Description field in the General tab at the bottom of the screen.</p> 
8	<p>Rename the description to 26 Month Update.</p>
9	<p>Click Save.</p> 
10	<p>Your renamed project should now appear as follows.</p> 

Continued on next page

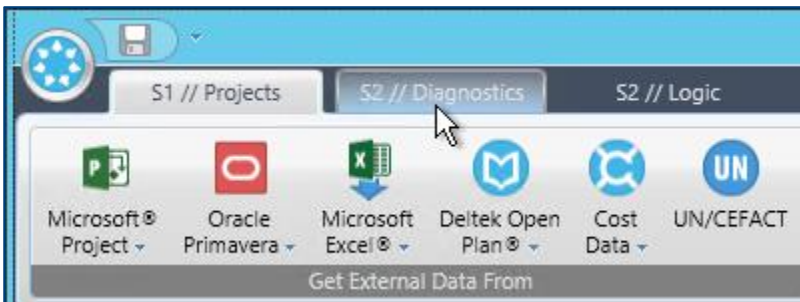
Activity 1.5.1: Using Trend Analysis, continued

Step **Action**

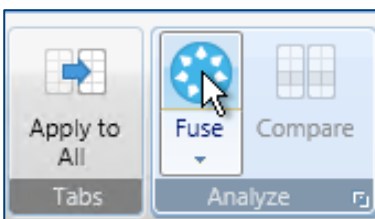
11 Now click to uncheck the 'Include in Ribbon Analysis' box on the **Initial Plan Scenario**.



12 Click on **S2 // Diagnostics**.



13 Click the **Fuse** button.

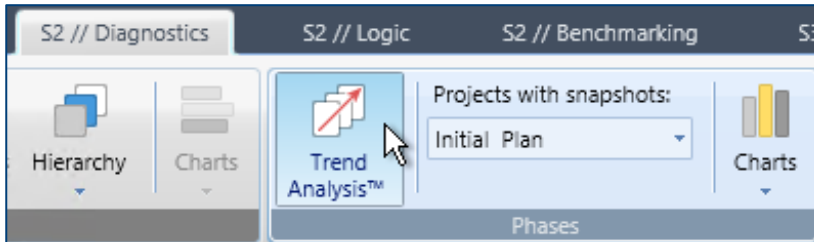


Continued on next page

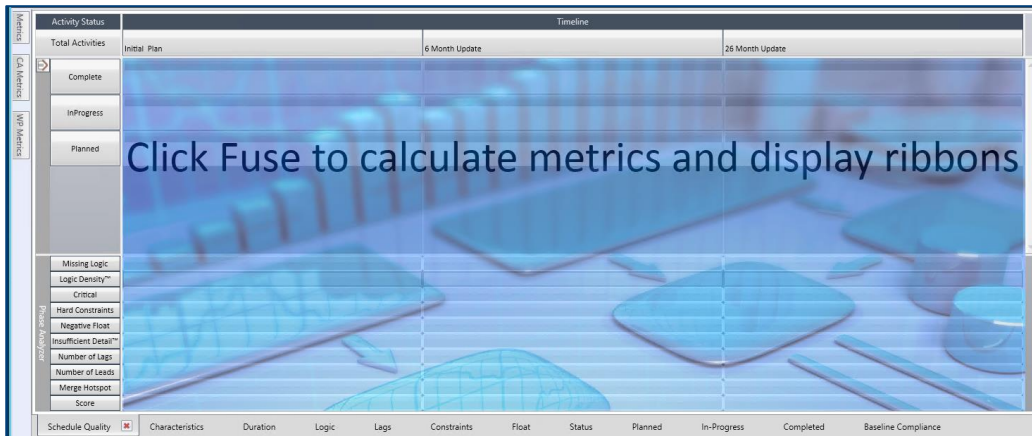
Activity 1.5.1: Using Trend Analysis, continued

Step Action

14 Click Trend Analysis.



15 Note how the layout has switched to the projects and snapshots being the columns.



16 Click Fuse.

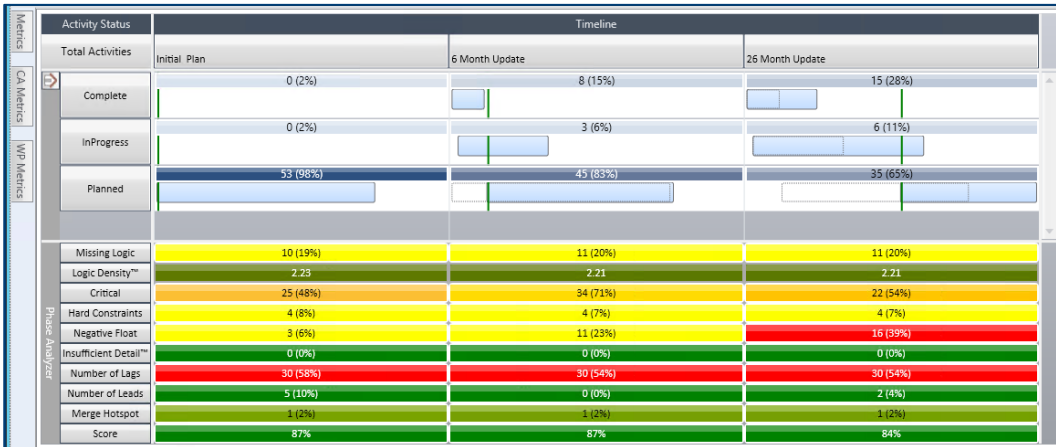
Activity Status	Timeline		
	Initial Plan	6 Month Update	26 Month Update
Total Activities			
Complete	0 (2%)	8 (15%)	15 (28%)
InProgress	0 (2%)	3 (6%)	6 (11%)
Planned	53 (98%)	45 (83%)	35 (65%)
Missing Logic	10 (19%)	11 (20%)	11 (20%)
Logic Density™	2.23	2.21	2.21
Critical	25 (48%)	34 (71%)	22 (54%)
Hard Constraints	4 (8%)	4 (7%)	4 (7%)
Negative Float	3 (6%)	11 (23%)	16 (33%)
Insufficient Detail™	0 (0%)	0 (0%)	0 (0%)
Number of Lags	30 (58%)	30 (54%)	30 (54%)
Number of Leads	5 (10%)	0 (0%)	2 (4%)
Merge Hotspot	1 (2%)	1 (2%)	1 (2%)
Score	87%	87%	84%

Continued on next page

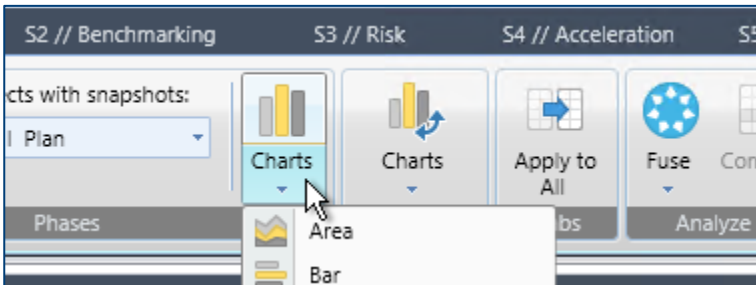
Activity 1.5.1: Using Trend Analysis, continued

Step	Action
------	--------

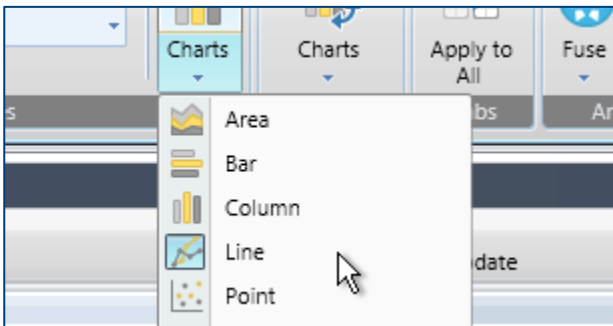
- 17 Look at the **Negative Float** metric and note how it goes from 3 activities in the **Initial Plan**, to 11 activities in the **6 Month Update**, and finally 16 activities in the **26 Month Update**.



- 18 Click on the bottom half of the **Charts** button in the **Phases** tool group.

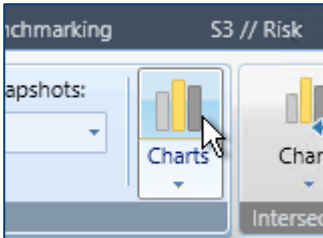
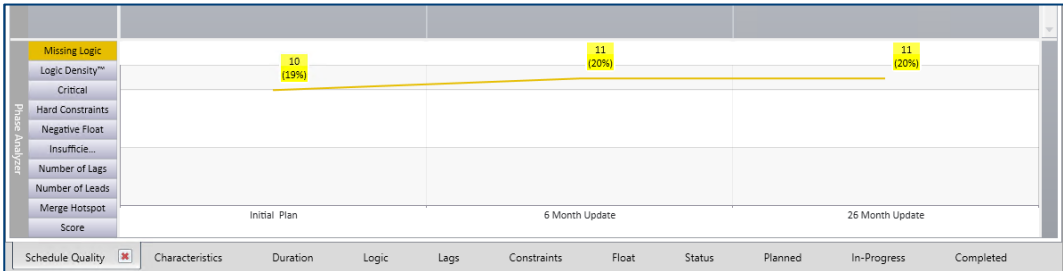
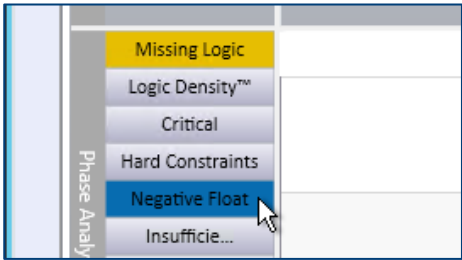
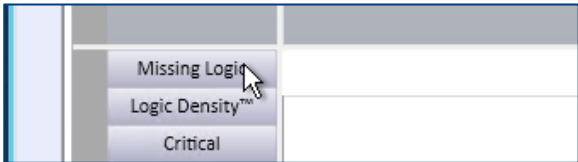


- 19 Select the **Line** graph from the list. This may already be selected as default.



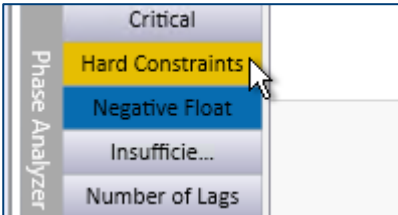
Continued on next page

Activity 1.5.1: Using Trend Analysis, continued

Step	Action								
20	<p>Click on the top of the Charts button.</p> 								
21	<p>The Phase Analyzer area is transformed to a graph that has defaulted to selecting the first metric – Missing Logic.</p>  <table border="1"> <caption>Phase Analyzer Data</caption> <thead> <tr> <th>Metric</th> <th>Initial Plan</th> <th>6 Month Update</th> <th>26 Month Update</th> </tr> </thead> <tbody> <tr> <td>Missing Logic</td> <td>10 (39%)</td> <td>11 (20%)</td> <td>11 (20%)</td> </tr> </tbody> </table>	Metric	Initial Plan	6 Month Update	26 Month Update	Missing Logic	10 (39%)	11 (20%)	11 (20%)
Metric	Initial Plan	6 Month Update	26 Month Update						
Missing Logic	10 (39%)	11 (20%)	11 (20%)						
22	<p>Click on the Negative Float metric.</p> 								
23	<p>Click on the Missing Logic metric to deselect it.</p> 								

Continued on next page

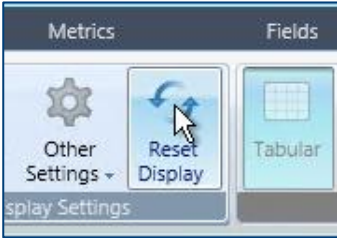
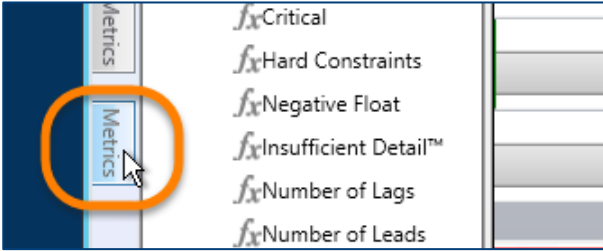
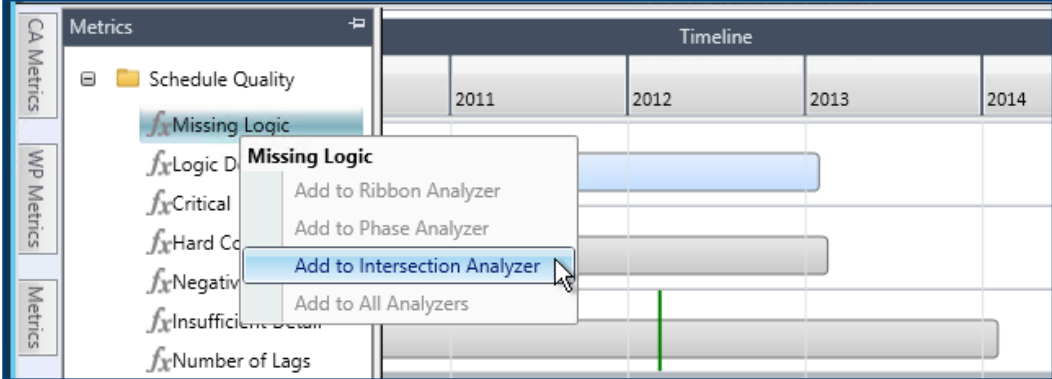
Activity 1.5.1: Using Trend Analysis, continued

Step	Action
24	Click on the Hard Constraints metric to overlay this on the graph.  A screenshot of a software interface titled 'Phase Analyzer'. It shows a vertical list of five menu items: 'Critical', 'Hard Constraints', 'Negative Float', 'Insufficie...', and 'Number of Lags'. The 'Hard Constraints' item is highlighted in yellow, and a mouse cursor is pointing at it.
25	On your own, select different metrics to see that graphs. Remember these are toggles to you click once to enable, and once again to disable a particular metric.
26	When you are done, turn off trend analysis by clicking the Trend Analysis button.
27	Click the Fuse button.

Activity 1.6: Intersection Analyzer

Activity 1.6.1: Adding Metrics to the Intersection Analyzer

Intersection Analysis blends Ribbon Analysis and Phase Analysis into the timeline table by allowing you to add just one metric – and that can be any metric – to the top left corner of each cell in the Timeline table.

Step	Action
1	<p>In the S2 // Diagnostics tab, click on the Reset Display option in the Display Settings tool group to return to the standard layout for the selected Ribbon view.</p> 
2	<p>Click on the Vertical Metrics button to the left for the Project / Snapshot area.</p> 
3	<p>Right-click on the Missing Logic metric in the list</p> 

Continued on next page

Activity 1.6.1: Adding Metrics to the Intersection Analyzer, continued

Step	Action
------	--------

4	Click on the Fuse button.
---	----------------------------------

5	View the results in the Timeline table.
---	--

CA Metrics	Project / Snapshot	Timeline					Missing Logic
		2010	2011	2012	2013	2014	
WP Metrics	Missing Logic						
	Initial Plan	7 (35%)	1 (5%)	1 (7%)	1 (100%)	N/A (N/A)	10 (19%)
	6 Month Update	7 (33%)	2 (8%)	1 (8%)	1 (50%)	N/A (N/A)	11 (20%)
Metrics	26 Month Update	7 (33%)	0 (N/A)	2 (8%)	1 (7%)	1 (100%)	11 (20%)

6	Click on the red bar in the 2010 – Initial Plan and look at the Activity Browser to see the 7 activities that make up the score in that period.
---	---

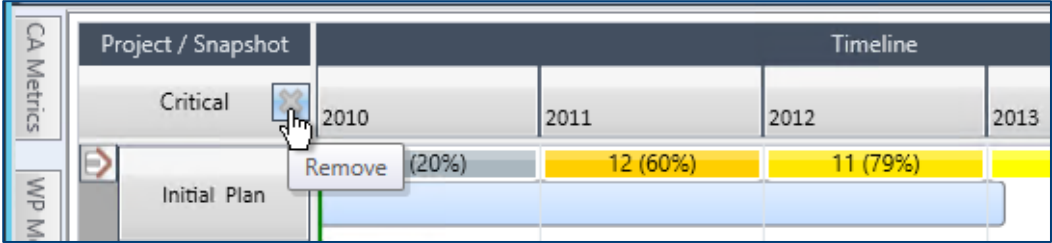
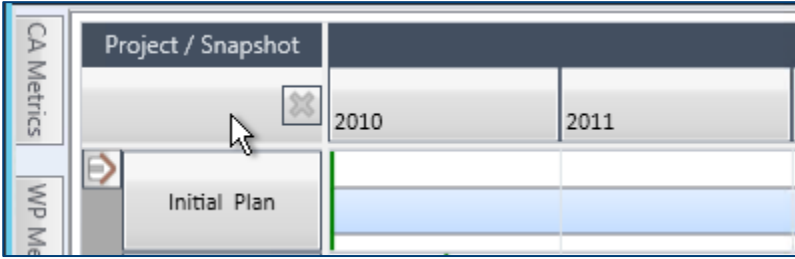
Project / Snapshot	Timeline			
	2010	2011	2012	2013
Initial Plan	7 (35%)	1 (5%)	1 (7%)	
6 Month Update	7 (33%)	2 (8%)	1 (8%)	

7	To change the metric in the Intersection Analyzer , simply repeat the previous steps and select the metric you would like to see displayed.
---	--

Metrics	<ul style="list-style-type: none"> <i>fx</i>Critical <i>fx</i>Hard <i>fx</i>Neg <i>fx</i>Insur <i>fx</i>Num <i>fx</i>Number of Leads
Metrics	<div style="border: 1px solid gray; padding: 5px;"> <p>Critical</p> <p>Add to Ribbon Analyzer</p> <p>Add to Phase Analyzer</p> <p>Add to Intersection Analyzer</p> <p>Add to All Analyzers</p> </div>

Continued on next page

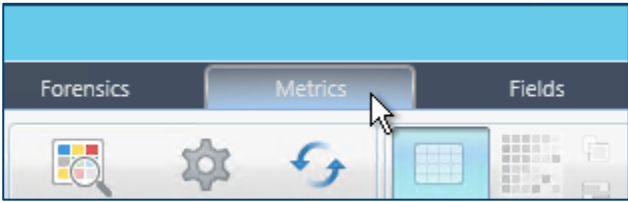
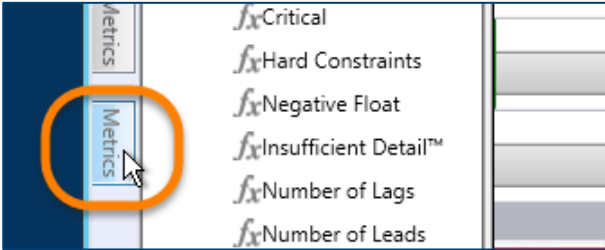
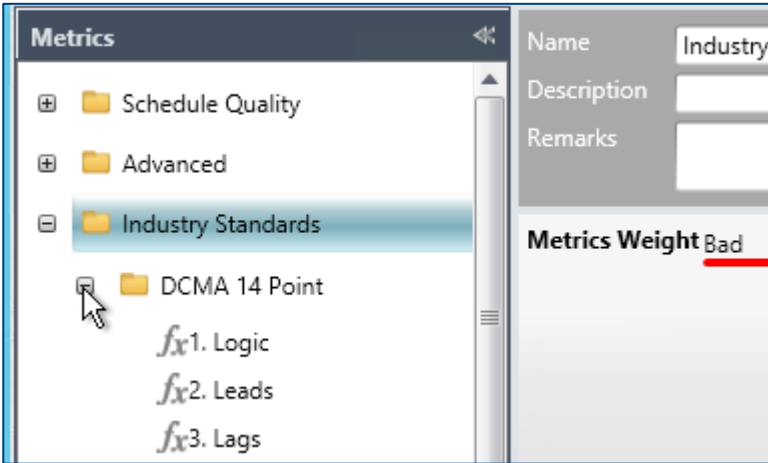
Activity 1.6.1: Adding Metrics to the Intersection Analyzer, continued

Step	Action															
8	Click Fuse to recalculate the new metric in the Intersection Analyzer . In this case the Critical metric has been selected.															
9	To remove a particular Intersection Analyzer , hover your mouse over the header in the top-left corner of the window – in this case you can see the Missing Logic header now has an “X”. Click that ‘X’ to remove the Metric .															
 <p>The screenshot shows a table with columns for years (2010, 2011, 2012, 2013) and rows for metrics. The 'Critical' metric is highlighted, and a tooltip 'Remove (20%)' is visible over the 'X' icon in the header.</p> <table border="1"> <thead> <tr> <th>Project / Snapshot</th> <th colspan="4">Timeline</th> </tr> <tr> <th>Critical</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> </tr> </thead> <tbody> <tr> <td>Initial Plan</td> <td>(20%)</td> <td>12 (60%)</td> <td>11 (79%)</td> <td></td> </tr> </tbody> </table>		Project / Snapshot	Timeline				Critical	2010	2011	2012	2013	Initial Plan	(20%)	12 (60%)	11 (79%)	
Project / Snapshot	Timeline															
Critical	2010	2011	2012	2013												
Initial Plan	(20%)	12 (60%)	11 (79%)													
10	The Intersection Metric header will appear blank once more.															
 <p>The screenshot shows the same table as above, but the 'Critical' metric header is now blank, and the 'X' icon is no longer present.</p> <table border="1"> <thead> <tr> <th>Project / Snapshot</th> <th>2010</th> <th>2011</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Initial Plan</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Project / Snapshot	2010	2011			Initial Plan									
Project / Snapshot	2010	2011														
Initial Plan																

Activity 1.7: Modifying Metrics

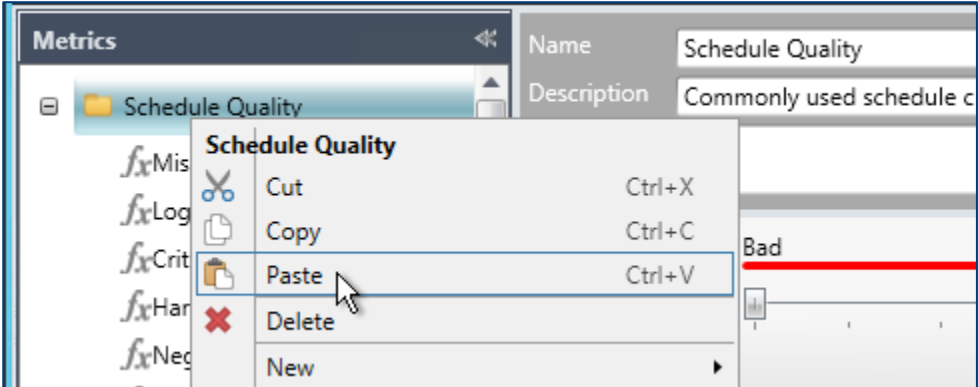
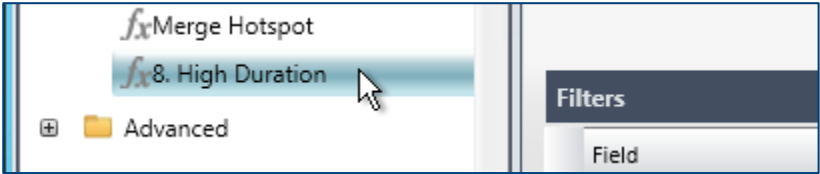
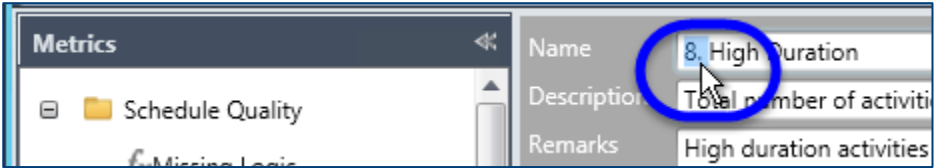
Activity 1.7.1: Modifying a Standard Metric

So far you have been using the standard metrics shipped with Acumen. In this section you will learn how to copy and modify a standard metric.

Step	Action
1	Click on the Metrics tab.
	
2	Click on the Vertical Metrics button to the left for the Project / Snapshot area.
	
3	In the Metrics column on the left, expand the Industry Standard DCMA 14 Point metric group in the list
	

Continued on next page

Activity 1.7.1: Modifying a Standard Metric, continued

Step	Action
4	Now right-click on the Schedule Quality metric group.
5	Click Paste . 
6	Click to select the newly added 8. High Duration metric in the Schedule Quality list. 
7	On the right of the list, remove the '8.' from the name in the Name field. 

Continued on next page

Activity 1.7.1: Modifying a Standard Metric, continued

Step	Action
------	--------

- 8 In the **Filters** area of the **Primary Formula**, select the value in the **Baseline Duration** field's **Field or Value**.

The screenshot shows the configuration window for the 'High Duration' metric. The 'Filters' section is expanded, showing a table with columns 'Field', 'Op', and 'Field or Value'. The 'Baseline Duration' row is selected, and the value '44' is highlighted in the 'Field or Value' column. A blue circle is drawn around the '44' value.

- 9 Edit the value from 44 to 22.


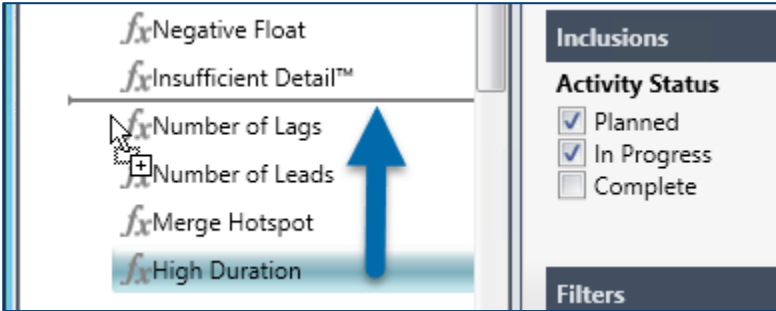
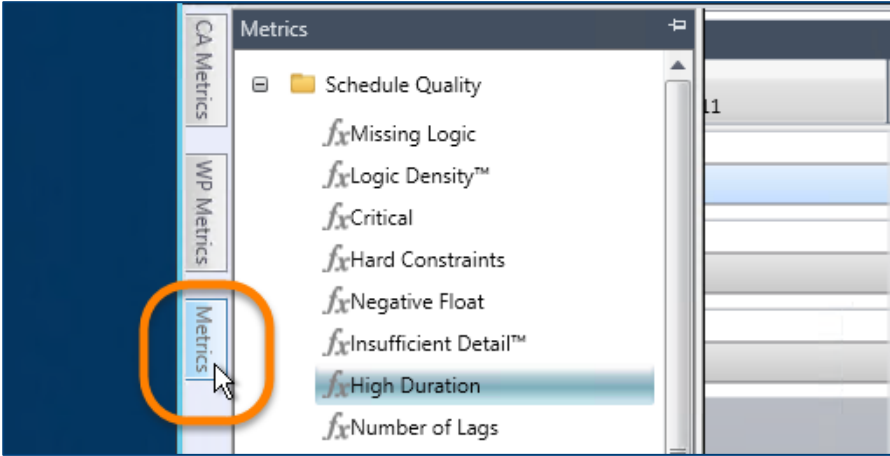
This close-up screenshot shows the 'Filters' section of the configuration window. The 'Baseline Duration' row is selected, and the value '22' has been entered in the 'Field or Value' field, replacing the previous value of '44'.

- 10 Update the **Description** of the **High Duration** metric to reflect the change from 2 Months, to **22 days**.

The screenshot shows the configuration window for the 'High Duration' metric. The 'Description' field has been updated to: 'Total number of activities that have a duration longer than 22 days. This number should not exceed 5%'. The 'Remarks' field also contains updated text: 'High duration activities are generally an indication that a plan is too high level for adequate planning and controls. Consider further the items with the highest amount of duration. Includes normal activities and milestones that are planned or in-progress.'

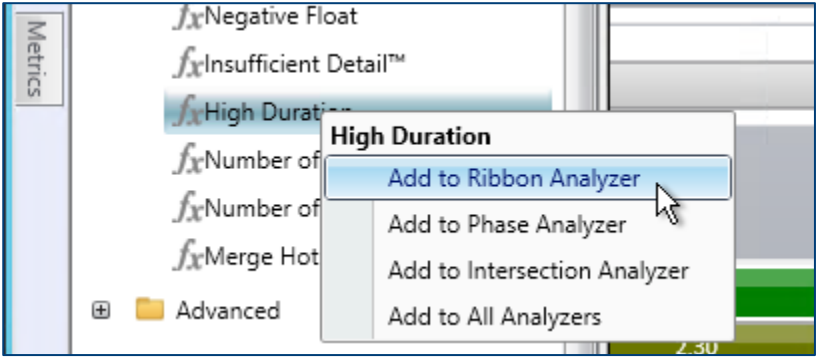
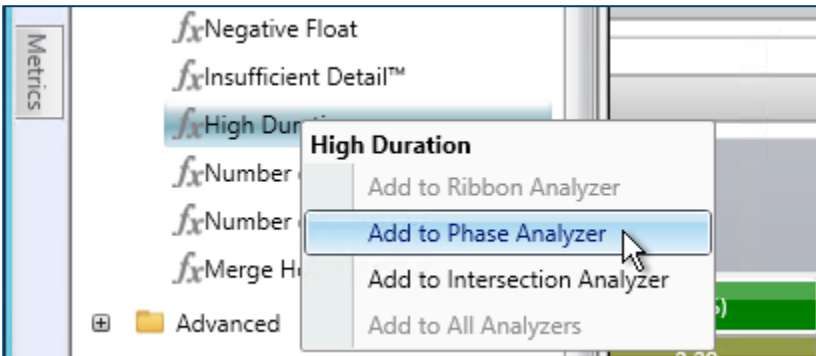
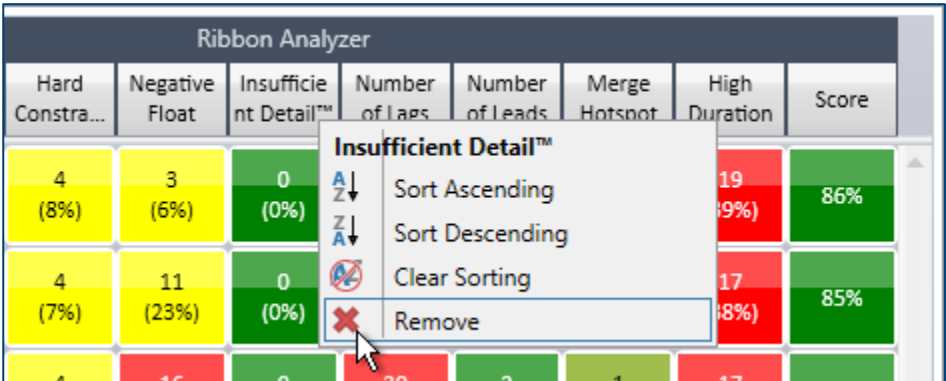
Continued on next page

Activity 1.7.1: Modifying a Standard Metric, continued

Step	Action
11	Click Save to save the change into the workbook.
	
12	Now click and drag the High Duration metric upwards so that it sits below the Insufficient Detail metric.
	
13	Click S2 // Diagnostics .
14	Click the vertical Metrics button to the left of the Project / Snapshot list.
	

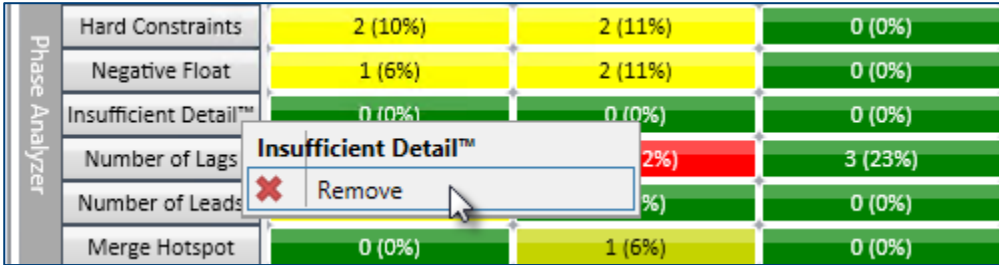
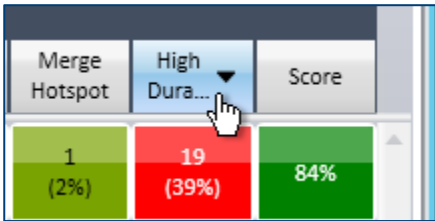
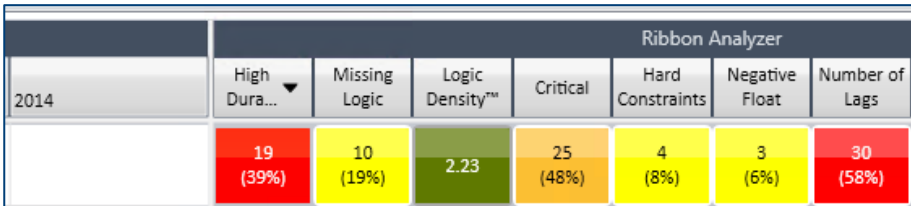
Continued on next page

Activity 1.7.1: Modifying a Standard Metric, continued

Step	Action																								
15	Right-click on the High Duration metric and select Add to Ribbon Analyzer .																								
																									
16	Right-click again and select Add to Phase Analyzer .																								
																									
17	Now right-click on the Insufficient Detail™ metric in the Ribbon Analyzer and select Remove from the list.																								
 <table border="1"> <caption>Ribbon Analyzer</caption> <thead> <tr> <th>Hard Constr...</th> <th>Negative Float</th> <th>Insufficie nt Detail™</th> <th>Number of Lags</th> <th>Number of Leads</th> <th>Merge Hotspot</th> <th>High Duration</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>4 (8%)</td> <td>3 (6%)</td> <td>0 (0%)</td> <td></td> <td></td> <td></td> <td>19 (9%)</td> <td>86%</td> </tr> <tr> <td>4 (7%)</td> <td>11 (23%)</td> <td>0 (0%)</td> <td></td> <td></td> <td></td> <td>17 (8%)</td> <td>85%</td> </tr> </tbody> </table>		Hard Constr...	Negative Float	Insufficie nt Detail™	Number of Lags	Number of Leads	Merge Hotspot	High Duration	Score	4 (8%)	3 (6%)	0 (0%)				19 (9%)	86%	4 (7%)	11 (23%)	0 (0%)				17 (8%)	85%
Hard Constr...	Negative Float	Insufficie nt Detail™	Number of Lags	Number of Leads	Merge Hotspot	High Duration	Score																		
4 (8%)	3 (6%)	0 (0%)				19 (9%)	86%																		
4 (7%)	11 (23%)	0 (0%)				17 (8%)	85%																		

Continued on next page

Activity 1.7.1: Modifying a Standard Metric, continued

Step	Action																												
18	Do the same in the Phase Analyzer .																												
	 <table border="1"> <thead> <tr> <th colspan="4">Phase Analyzer</th> </tr> </thead> <tbody> <tr> <td>Hard Constraints</td> <td>2 (10%)</td> <td>2 (11%)</td> <td>0 (0%)</td> </tr> <tr> <td>Negative Float</td> <td>1 (6%)</td> <td>2 (11%)</td> <td>0 (0%)</td> </tr> <tr> <td>Insufficient Detail™</td> <td>0 (0%)</td> <td>0 (0%)</td> <td>0 (0%)</td> </tr> <tr> <td>Number of Lags</td> <td>2 (2%)</td> <td>3 (23%)</td> <td>0 (0%)</td> </tr> <tr> <td>Number of Leads</td> <td>0 (0%)</td> <td>0 (0%)</td> <td>0 (0%)</td> </tr> <tr> <td>Merge Hotspot</td> <td>0 (0%)</td> <td>1 (6%)</td> <td>0 (0%)</td> </tr> </tbody> </table>	Phase Analyzer				Hard Constraints	2 (10%)	2 (11%)	0 (0%)	Negative Float	1 (6%)	2 (11%)	0 (0%)	Insufficient Detail™	0 (0%)	0 (0%)	0 (0%)	Number of Lags	2 (2%)	3 (23%)	0 (0%)	Number of Leads	0 (0%)	0 (0%)	0 (0%)	Merge Hotspot	0 (0%)	1 (6%)	0 (0%)
Phase Analyzer																													
Hard Constraints	2 (10%)	2 (11%)	0 (0%)																										
Negative Float	1 (6%)	2 (11%)	0 (0%)																										
Insufficient Detail™	0 (0%)	0 (0%)	0 (0%)																										
Number of Lags	2 (2%)	3 (23%)	0 (0%)																										
Number of Leads	0 (0%)	0 (0%)	0 (0%)																										
Merge Hotspot	0 (0%)	1 (6%)	0 (0%)																										
19	Click the Fuse button.																												
20	Click Save to update the workbook file.																												
21	Click once of the High Duration metric header to put focus on it.																												
	 <table border="1"> <thead> <tr> <th>Merge Hotspot</th> <th>High Dura...</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>1 (2%)</td> <td>19 (39%)</td> <td>84%</td> </tr> </tbody> </table>	Merge Hotspot	High Dura...	Score	1 (2%)	19 (39%)	84%																						
Merge Hotspot	High Dura...	Score																											
1 (2%)	19 (39%)	84%																											
22	Drag and drop the new High Duration metric to be the first metric in the Ribbon Analyzer .																												
	 <table border="1"> <thead> <tr> <th colspan="8">Ribbon Analyzer</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>High Dura...</td> <td>Missing Logic</td> <td>Logic Density™</td> <td>Critical</td> <td>Hard Constraints</td> <td>Negative Float</td> <td>Number of Lags</td> </tr> <tr> <td></td> <td>19 (39%)</td> <td>10 (19%)</td> <td>2.23</td> <td>25 (48%)</td> <td>4 (8%)</td> <td>3 (6%)</td> <td>30 (58%)</td> </tr> </tbody> </table>	Ribbon Analyzer								2014	High Dura...	Missing Logic	Logic Density™	Critical	Hard Constraints	Negative Float	Number of Lags		19 (39%)	10 (19%)	2.23	25 (48%)	4 (8%)	3 (6%)	30 (58%)				
Ribbon Analyzer																													
2014	High Dura...	Missing Logic	Logic Density™	Critical	Hard Constraints	Negative Float	Number of Lags																						
	19 (39%)	10 (19%)	2.23	25 (48%)	4 (8%)	3 (6%)	30 (58%)																						

Continued on next page

Activity 1.7.1: Modifying a Standard Metric, continued

Step	Action
------	--------

- 23 Click on the **High Duration** metric for **Initial Plan** and in the **Activity Browser**, take a look at the activities impacting the score.

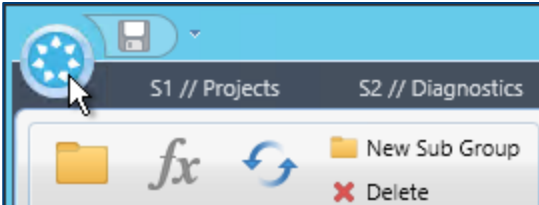
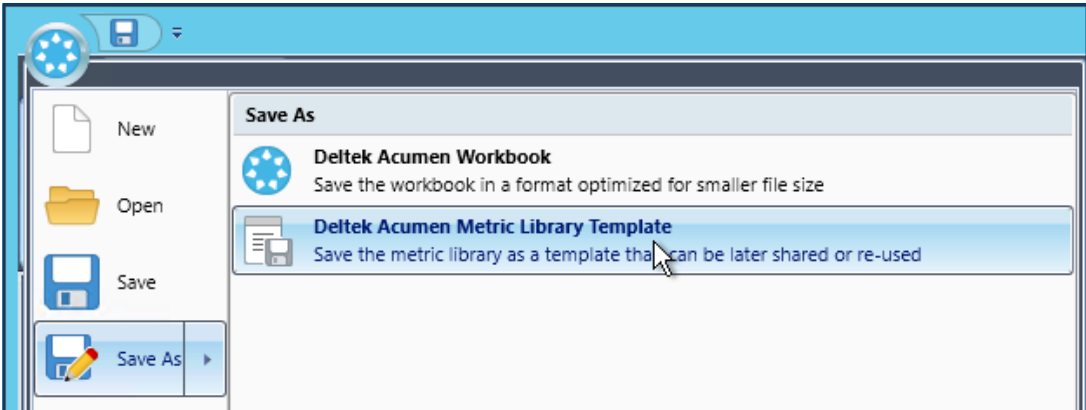
2014	High Dura...	Missing Logic	Logic Density™	Critical	Hard Constraints	Negative Float	Number Lags
	19 (39%)	10 (19%)	2.23	25 (48%)	4 (8%)	3 (6%)	30 (58%)
	17 (38%)	11 (20%)	2.21	34 (71%)	4 (7%)	11 (23%)	30 (54%)
	17 (45%)	11 (20%)	2.21	22 (54%)	4 (7%)	16 (39%)	30 (54%)
N/A (N/A)	High Duration in Project Initial Plan (19 of 19)						
N/A	Excluded	Notes	Id	Description	Project	Original Dur	
0 (N/A)	<input type="checkbox"/>	<input type="checkbox"/>	0180	Technical review	Initial Plan		
N/A (N/A)	<input type="checkbox"/>	<input type="checkbox"/>	0160	Bid B review	Initial Plan		
0 (N/A)	<input type="checkbox"/>	<input type="checkbox"/>	0220	Mechanical design	Initial Plan		
0 (N/A)	<input type="checkbox"/>	<input type="checkbox"/>	0260	EPC design	Initial Plan		
0 (N/A)	<input type="checkbox"/>	<input type="checkbox"/>	0190	Commerical review	Initial Plan		

Activity 1.8: Sharing Metrics

Activity 1.8.1: Saving a Metric Library Template

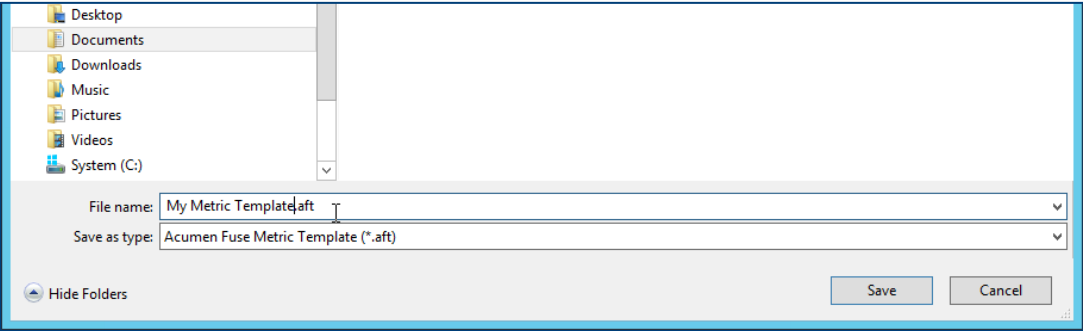
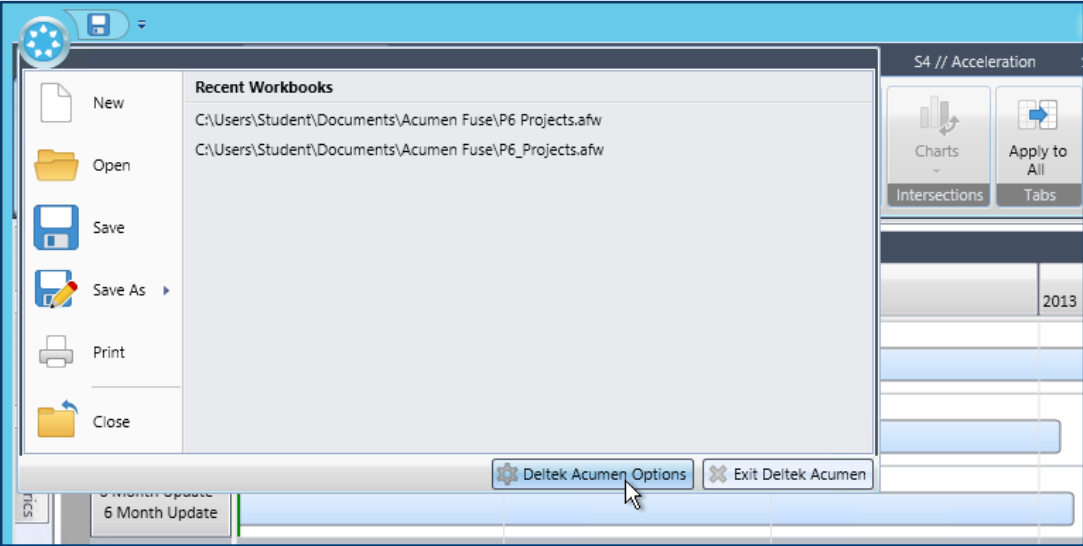
You have just created a new metric. That metric only exists in your current workbook. However you would like to share it with other Acumen users in the company. The question is, how do you share it with another user, or better still, make it available to you for your next project workbook?

The answer is, you save your workbook, along with its new High Duration metric as a Deltek Acumen Metric Template Library – or .AFT file.

Step	Action
1	Click on the Acumen File menu button.  A screenshot of the software's top toolbar. The 'Acumen File' menu button, represented by a blue circle with white stars, is highlighted with a mouse cursor. Other icons include a save icon, a folder icon, a refresh icon, and a delete icon. Below the icons, the text 'S1 // Projects' and 'S2 // Diagnostics' is visible.
2	In the Save As submenu select the Deltek Acumen Metric Library Template .  A screenshot of the 'Save As' submenu. The 'Deltek Acumen Metric Library Template' option is highlighted with a mouse cursor. The submenu also shows 'Deltek Acumen Workbook' and 'Save' options. The 'Deltek Acumen Metric Library Template' option has a description: 'Save the metric library as a template that can be later shared or re-used'.

Continued on next page

Activity 1.8.1: Saving a Metric Library Template, continued

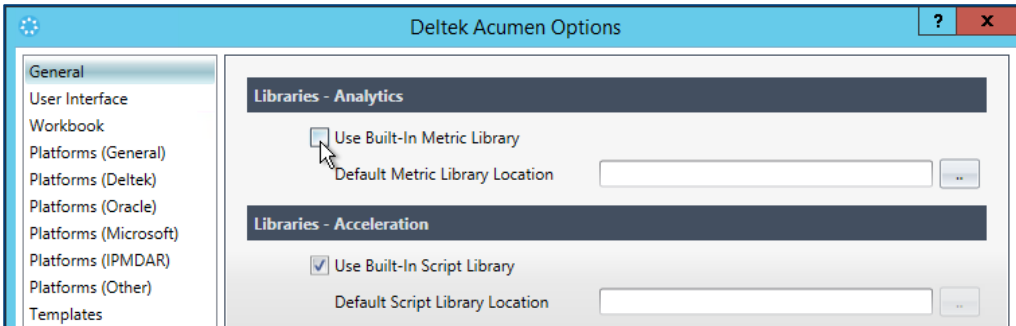
Step	Action
3	<p>In the Save As dialog, select the C:\Users\Student\Documents\Acumen Fuse folder and enter My Metric Template in the File Name field.</p> 
4	<p>Click Save.</p> <p>Having saved the template you can now share it with other Acumen users, or make it your default template. Let me show you how to do that.</p>
5	<p>Continuing with the activity, return to the File menu button and this time click on the Deltek Acumen Options button in the dialog.</p> 

Continued on next page

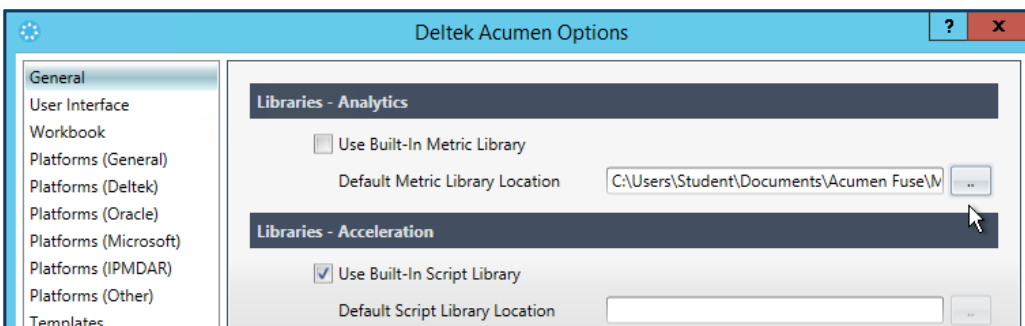
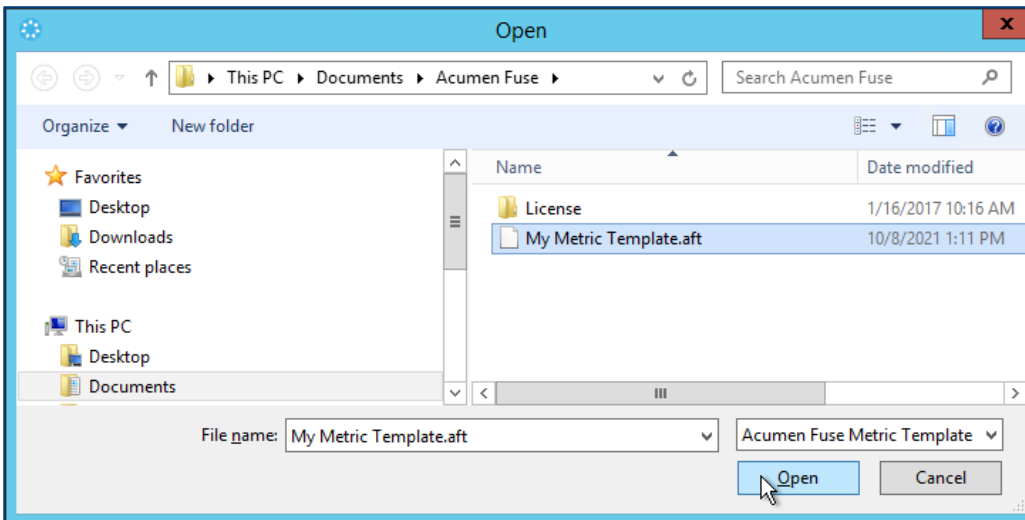
Activity 1.8.1: Saving a Metric Library Template, continued

Step Action

- 6 In the **General** tab of the **Options** dialog, uncheck the 'Use built-In Metric Library' option.

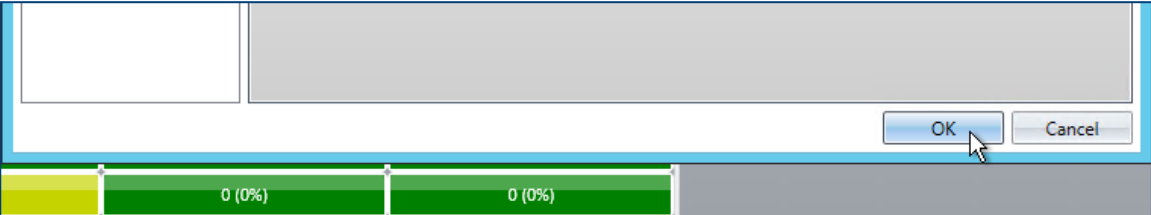
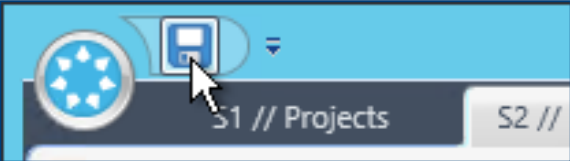
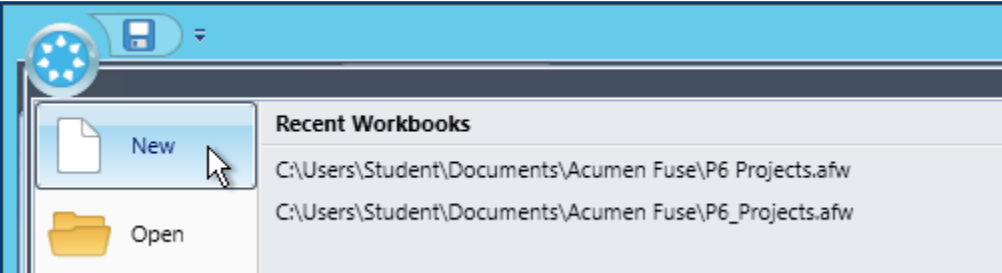


- 7 Now use the ellipse button to point the 'Default Metric Library Location' field at your new template.



Continued on next page

Activity 1.8.1: Saving a Metric Library Template, continued

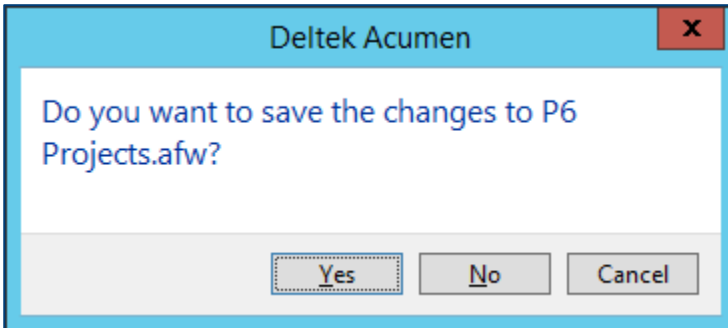
Step	Action
8	Click OK to save the change and close the Options dialog.
	 <p>A screenshot of a dialog box with a title bar. The main area is mostly empty. At the bottom right, there are two buttons: 'OK' and 'Cancel'. A mouse cursor is pointing at the 'OK' button. Below the dialog box, there are two progress bars, both showing 0 (0%).</p>
9	Click Save .
	 <p>A close-up screenshot of a software interface. A blue button with a floppy disk icon and a downward arrow is highlighted. Below it, the text 'S1 // Projects' and 'S2 //' is visible.</p>
10	Click on the File menu button.
11	Click the New option.
	 <p>A screenshot of a software interface showing a 'File' menu. The 'New' option is highlighted. Below the menu, there is a 'Recent Workbooks' section with two entries: 'C:\Users\Student\Documents\Acumen Fuse\P6 Projects.afw' and 'C:\Users\Student\Documents\Acumen Fuse\P6_Projects.afw'.</p>

Continued on next page

Activity 1.8.1: Saving a Metric Library Template, continued

Step	Action
------	--------

- 12 If prompted, select **Yes** to save your current workbook.



- 13 Click on the **Metrics** tab and note the presence of your newly modified **High Duration** metric in the **Schedule Quality** metric group.

