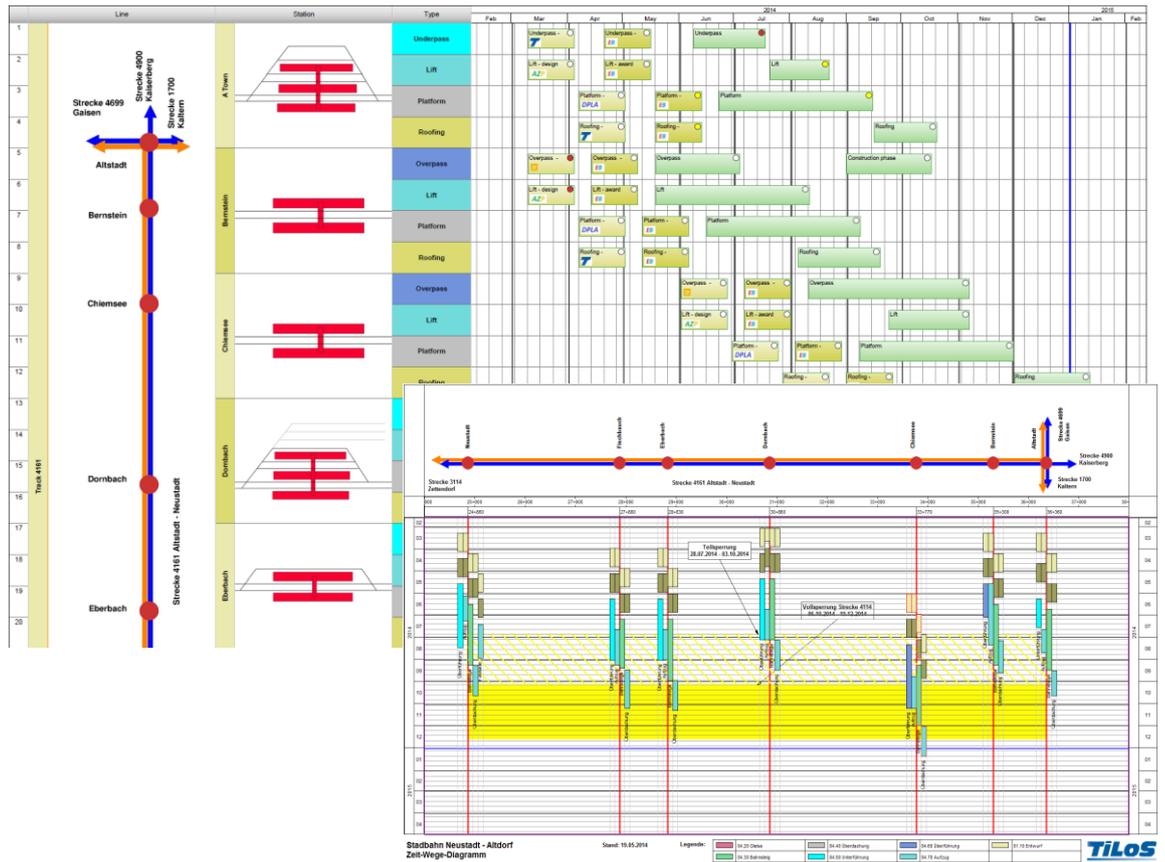


What is new in Trimble Tilos 9



Linear and Location based planning for a complete new view to your project with the exact information you need for decisions on site.

TILOS 9 improves on the structuring of projects and the ability to view them as Time-Distance-Diagram or as Grouped Gantt chart in a location based ribbon view along with graphics.

We have also made many evolutionary minor feature enhancements that are not specifically mentioned, but makes working in TILOS 9 a lot easier and comfortable.

Table editing

Expand/Collapse

In each grid containing hierarchies you may use right mouse to expand and collapse tree at any level. Also move and copy of whole trees is supported in same and between projects.

Autofill

B20	Platform	
10	Platform	
20	Roofing	
B30	Tracks	Fill in Following
10	Switch exchange	

In grids that support multi selection, you can copy information from one cell to another by using Alt and Drag to select some cell in one column and then copy the content of first to the others. To select single cell of a column: ALT-Click.

Editable Gantt

In single task per line mode the text panel of the Gantt chart is now fully editable. Read only fields like calculated cost data are marked with a little triangle.

2nd Click in table

On clicking in a table, the first click selects the cells. Now you can overwrite the text or press F2 to edit the existing content of the cell. Now you just need to perform a second click and the cursor is located directly at the character where you clicked to. This work similar now to MS Excel now.

Site plan meets Gantt charts

Structures

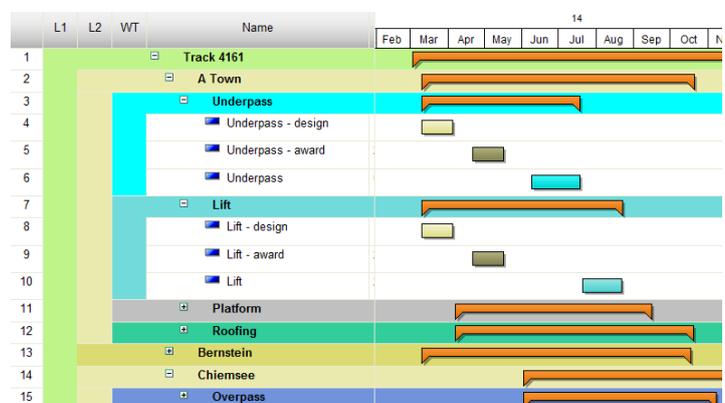
The WBS and category library has been enhanced. To each entry you can assign graphics that are stored in a TILOS file using features that were first available in TILOS 7.

Now when the Gantt chart is grouped not only one level is shown like in TILOS 8, you may expand the tree to any level. The tasks can be viewed in different ways:

Headline and Ribbon

In this mode additionally vertical ribbons are shown which are generated here from 2 categories: Location and Structures.

Path	Name	Description
4161	4161	Track 4161
4161.10	10	A Town
4161.10.10	10	Platform 2
4161.10.20	20	Track 1
4161.10.30	30	Track 2
4161.10.40	40	Track 3
4161.10.50	50	Track 3
4161.10.60	60	Track 4
4161.10.70	70	Platform 3
4161.10.80	80	Track 5
4161.20	20	Bernstein
4161.20.10	10	Platform 1
4161.20.20	20	Track 1
4161.20.30	30	Track 2
4161.20.40	40	Platform 2
4161.30	30	Chiemsee
4161.30.10	10	Platform 1
4161.30.20	20	Track 1
4161.30.30	30	Track 2



Ribbon

Path	Name	Description
B10	B10	Civil
B10.10	10	Bulkhead
B10.20	20	Underpass
B10.25	25	Overpass
B10.30	30	Lift
B20	B20	Platform
B20.10	10	Platform
B20.20	20	Roofing

The horizontal summaries are hidden and the text is shown directly in the ribbons while colors are taken from the definition of the structures.

	L1	L2	WT	Name	2014						
					Feb	Mar	Apr	May	Jun	Jul	
1	Track 4161	A Town		Underpass - design							
2				Underpass - award							
3				Underpass							
4				Lift - design							
5				Lift - award							
6				Lift							
7				Platform - design							
8				Platform - award							
9				Platform							
10				Roofing - design							
11				Roofing - award							
12				Roofing							
13				Overpass - design							
14				Overpass - award							
15				Overpass							
16				Construction phase							

Ribbon with Graphic

In this mode for any structure level a graphic can be displayed in the cell of each ribbon element. The sequenced tasks are shown on the same line like in a **planning board**.

Track	Station	Struc.	2014						
			Mar	Apr	May	Jun	Jul		
Track 4161	A Town	Underpass	Design [AZ]	Award [EB]			Build		
		Lift	Design [AZ]	Award [EB]					
		Platform		Design [DPLA]	Award [EB]		Build		
		Roofing		Design [AZ]	Award [EB]				
		Overpass	Design [AZ]	Award [EB]		Build			
		Lift	Design [AZ]	Award [EB]		Build			
		Platform		Design [DPLA]	Award [EB]		Build		
		Roofing		Design [AZ]	Award [EB]				
		Overpass							
		Platform							

Annotation of tasks:

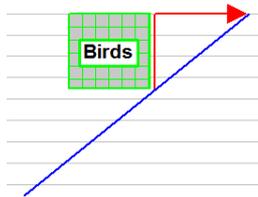
Color codes	
0,00	
1,00	
2,00	
3,00	

The tasks annotation is not restricted to text only. Like in the table graphics from WBS or categories can be shown like here the companies logos assigned from a 3rd category.

Traffic lights calculated from any value of the task combined with a color table can show any status information of a task. As many traffic light as wished are possible.

Reschedule

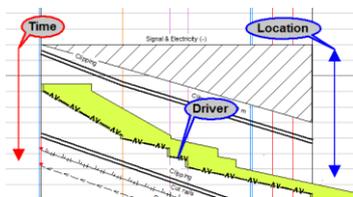
Exclude from reschedule:



All task of a **sub project** can be excluded from reschedule. Usage: Before execution make a copy of the original plan and compare data later with changed one during the execution.

If single **tasks** are excluded from reschedule they do not move at all also not by report date. But you call add outgoing links work like constraints to the successor. The advantage over constraints: Link distance options and clash avoiding can be applied. So it can be used ideally in combination with environmental restrictions shown as rectangle.

Pure distance links



A distance link works in the same way for distance as a normal link for time. They are used to set the distance coordinates for tasks. So there are 2 networks to reschedule: One for location and one for CPM.

If railway maintenance the track renewal machine is usually the driver for all other tasks. There are processes ahead and following. E.g. Clipping has to be done for the distance which the machine can work on over the night. The goal is to change the work field for the driver and all other tasks are adjusted based to the work that this machine can do over a shift.

Reschedule summary:

At the end of the reschedule a summary of the reschedule is optionally shown and added to a report file.

Driving link and slack:

For each link the slack is shown as well as the information if this is a driving link for the successor.

Planning tasks

How far can I go:

For shift planning you need to calculate how many meters you can do until the end of the shift. Just enter the end of the shift and TILOS calculates the end coordinate, the needed materials to coordinate the logistic for the next shift (e.g. ballast trains and their drive to the construction site).

WBS summary:

The WBS summary behaves in the same way like a TILOS hammock, intermediate or summary task. It calculates its distance and time data based on sub data. In this case the WBS. So coordinates are taken from all tasks that have the same or a sub entry of the WBS from this task assigned.

This is the only restriction that date and duration can't be set because they are calculated. They can't have links. Distance

is optional like we have on hammock and summary tasks. Beside this they have all options like other tasks.

Category summary

Works in the same way as the WBS summary, but multiple category entries can be assigned. So if 2 categories are assigned, it groups all planning tasks (Category Work type = Planning) in one location (Category location).

This feature can be used to produce overview plans in a separate sub project and from detailed data in the other without building a complex hierarchical summary structure.

Mass Haulage

Recalculate distance:

On creating the haulage lines and the activities the distance values are calculated based on the current situation.

Actual mass area quantity:

This value is currently calculated from TILOS tasks. This can also be imported if it has been calculated on site. So the progress on each mass area can be shown.

Filters:

Additional filters for mass types are added.

Other filter options are:

Schedule quantity <> Haulage quantity: This shows where activity planning is not yet completed.

Actual quantity from tasks <> Actual mass area quantity: This identifies which tasks need to be progressed in the TILOS schedule.

Annotation:

The annotation of mass areas has been improved. If space is too narrow, then only dots are printed. On mouse over the full text is visible. For next versions we plan to remodel this area and have the same flexibility as for task annotation in the time distance diagram. Meaning: You can move the text away from the area.

Other enhancements

Time profiles:

Time profiles are now used in the same way as distance profiles to be used in scales and grids.

This allows to build the date zone for any national calendar different than the January December ones.

Any phase or period in the project can be highlighted by using the sector colors that are assigned to the time profiles as well.

Text annotation

Task description can now be shown as call outs with an ellipse around instead of rectangle. The shape calculates automatically based on the proportions of the text.

File Open dialog

The latest windows file open dialog is used to give easier access to your file in favorites.

Filters applied

If a filter is applied in a time distance cell, the top left o the cell a little filter symbol is visible.

XML Enhancements

Changed structure:

The XML structure has been changed. Task data like resource assignments, code assignments are now no longer sub elements of a task they are stored a separate record under schedule data having the TASKID as one filed.

By this way it is much easier to read and write the data from databases.

Actions:

Based on parameters in the XML file several calls can be initiated based on parameters (Reschedule, Save and Close, ImportApplyProgress, Export filter list...)

The xml exchange can also be initiated by a command line call.

Primavera exchange:

This exchange has been completely rewritten. It works now based on the Primavera xml exchange format and can be directly imported using the file import or export option from Primavera.

On the TILOS side there are filters and mapping options to make the exchange as flexible as in the past.

This means there is no more need to install and use the API in future.

However if the API is installed, there is a batch based option to import the data that works much quicker than importing data through the program itself. "DemolImport.cmd".