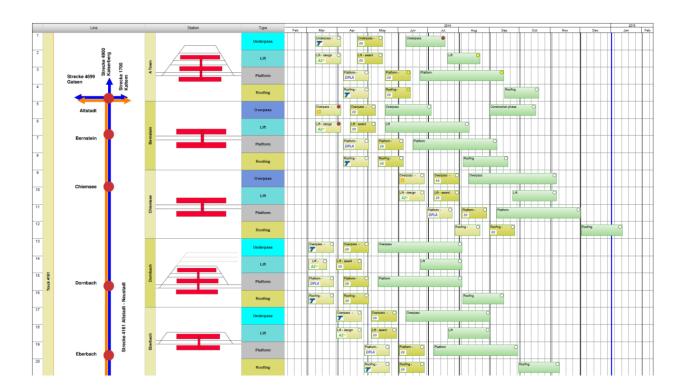


# What is new in TILOS 9?



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 the context menu to expand and collapse trees at any level

### 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. Then use the context menu

#### **Editable Gantt Text Panel**

In Ungrouped or "Single task per line" mode the cells in Gantt text panel are editable. Read only fields (like calculated cost data) are marked with a little triangle at the top right edge of the cell

#### 2nd Click in table to edit

The first click in a table cell selects the cells. To edit you can use F2 Key. New: Perform a second click in the cell to go to edit mode. The cursor is located at the click position.

# Site plan meets Gantt charts

#### **Grouping Structures**

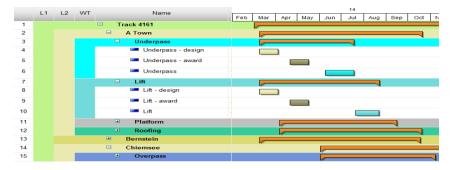
The WBS and category library has been enhanced. To each entry you can assign graphics that are stored in a TILOS file using features that were first available in TILOS 7.

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**

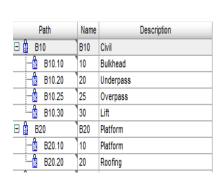
Path	Name	Description
⊞ 🛱 4161	4161	Track 4161
	10	A Town
1 4161.10.10	10	Platform 2
···· 10 4161.10.20	20	Track 1
4161.10.30	30	Track 2
B 4161.10.40	40	Track 3
4161.10.50	50	Track 3
···· 161.10.60	60	Track 4
<u>8</u> 4161.10.70	70	Platform 3
4161.10.80	80	Track 5
	20	Bernstein
3 4161.20.10	10	Platform 1
···· 4161.20.20	20	Track 1
···· 4161.20.30	30	Track 2
4161.20.40	40	Platform 2
	30	Chiemsee
4161.30.10	10	Platform 1
4161.30.20	20	Track 1
···· 1 4161.30.30	30	Track 2

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



#### Ribbon

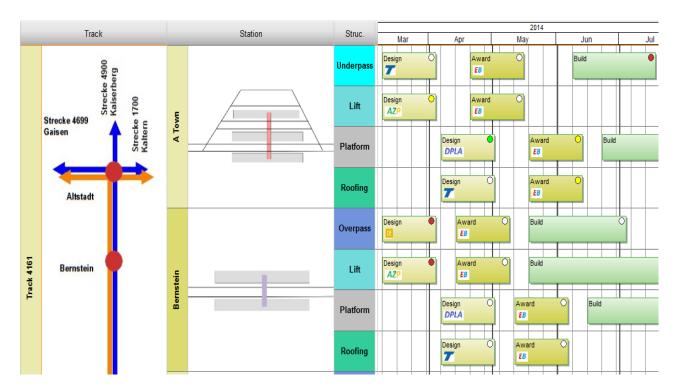
The horizontal summaries are hidden and the text is shown directly in the ribbons while colors are taken from the definition of the structures.



	L1	L2	WT	Name	Г							14
		LZ	VVI	Ivame		Feb	Mar		Apr	May	Jun	Jul
1			SSI	Underpass - design								
2			Underpass	Underpass - award								
3			5	Underpass								
4				Lift - design								
5			5	Lift - award								
6		A Town		Lift								
7		A To	Ε	Platform - design						]		
8			Platform	Platform - award								
9			≖	Platform								
10			6	Roofing - design				Ę		]		
11	1161		Roofing	Roofing - award								
12	Track 4161		æ	Roofing								
13	F			Overpass - design								
14		pass	Overpass - award									
15			Overpass	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**.



#### **Annotation of tasks:**

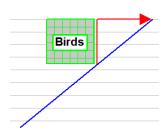
Color codes		
0,00		
1,00		
2,00		
3,00		

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.

# Rescheduling

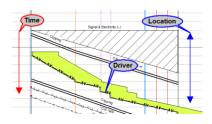
#### **Exclude from reschedule:**



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

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 in 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 and Category 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.

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 to 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 Exchange**

**Actions:** 

**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.

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. "DemoImport.cmd".