



DOCUMENTATION

Visual Production Scheduler (VPS)

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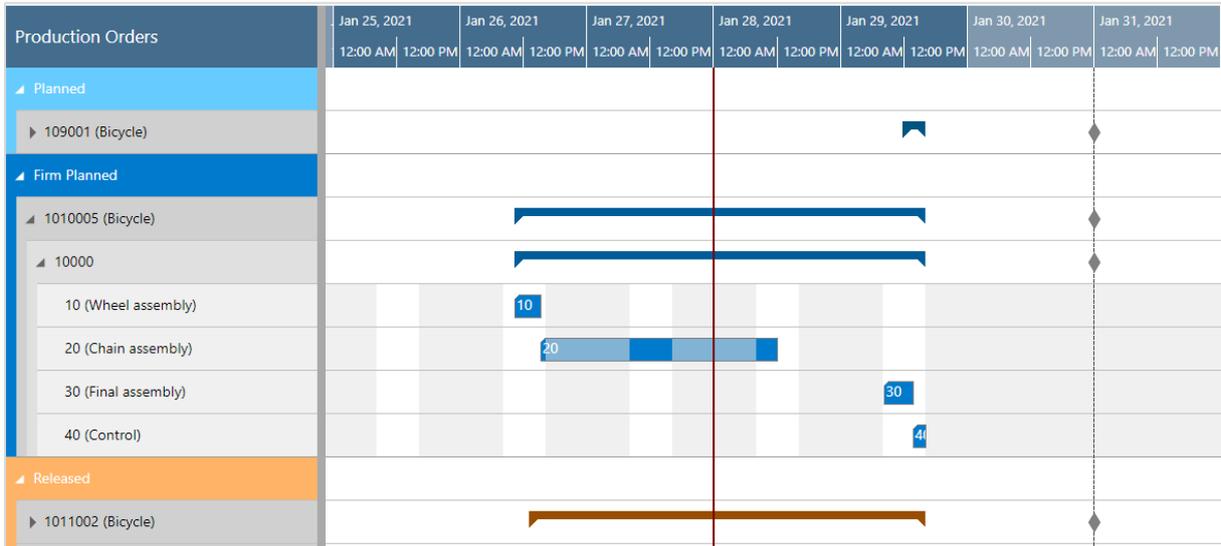
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1. Technical requirements

Microsoft Dynamics 365 Business Central

2. Understanding the VPS

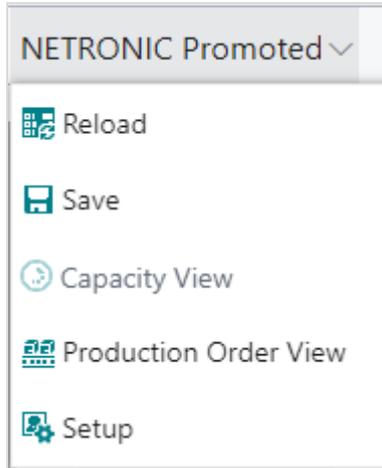
Since the VPS is a Gantt chart, it naturally has all its characteristics:



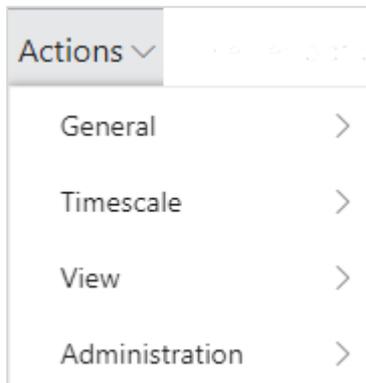
- A **timescale** at the top.
- A **table** at the left, production orders (in the Production Order View) or work and machine centers in the Resource View
- On the right below the time scale, a **chart** displaying the job schedule with a **calendar** in the background indicating work free periods in grey while working times appear in white.
- A menu ribbon allowing to make basic settings that will be explained in detail in the following.



Please note, that the item “Netronic Promoted” contains options that we think the most frequently used ones:



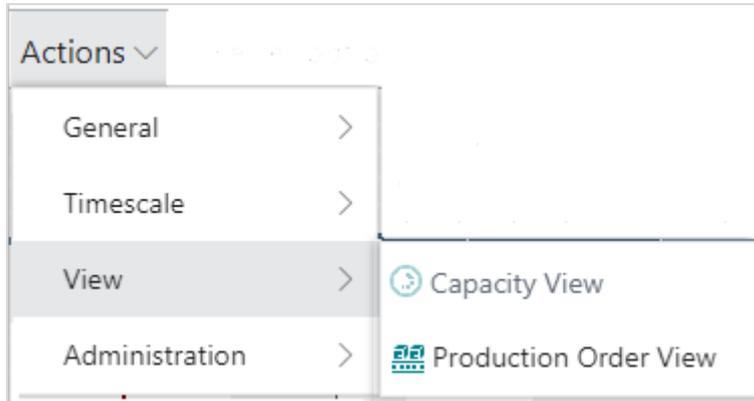
All options of the VPS are summarized under “Actions”:



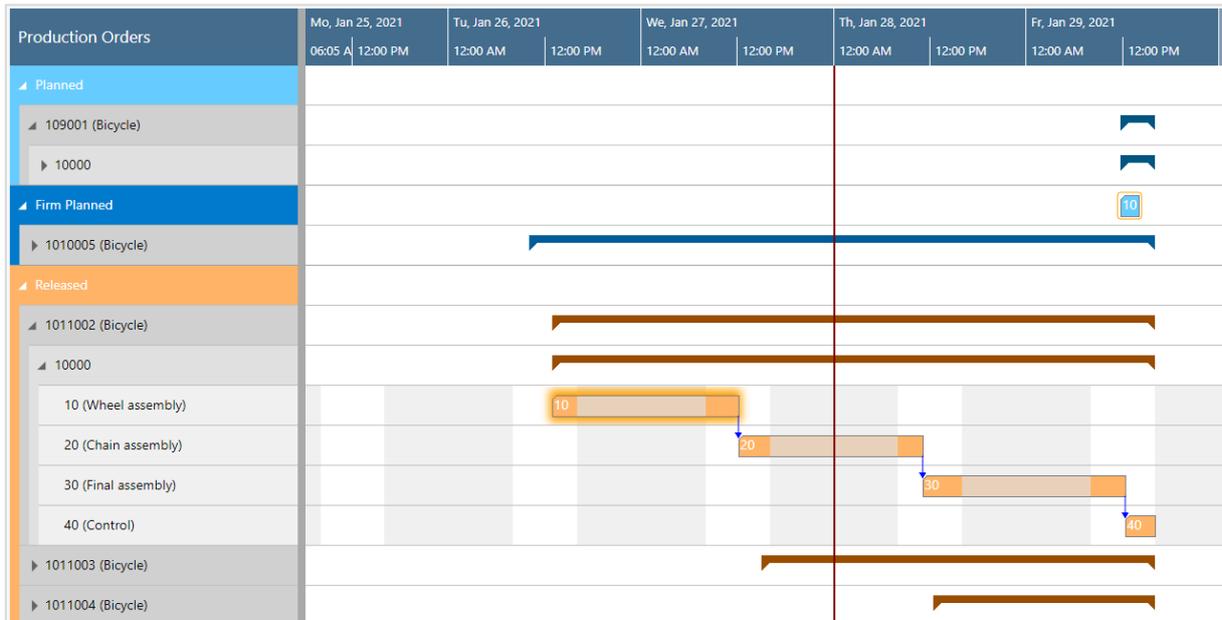
In case the “Actions” item is not visible in the menu ribbon, click “More options” and to hide it again, click “Fewer options”.

3. Two different views

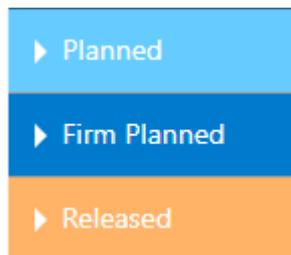
There are two different views in the VPS: the Production Order View, and the Capacity View. You can switch between them by using the corresponding menu items:



3.1. The Production Order View



- The Production Order View shows production orders categorized by status, the categories being indicated by different colors:

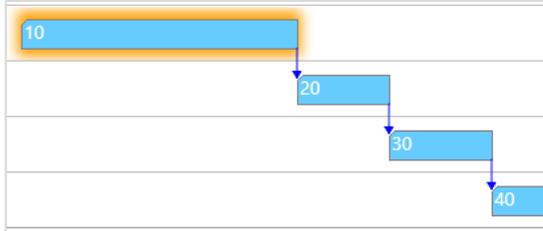


- Production orders, their production order lines and production order routing lines are sorted in ascending numerical order.

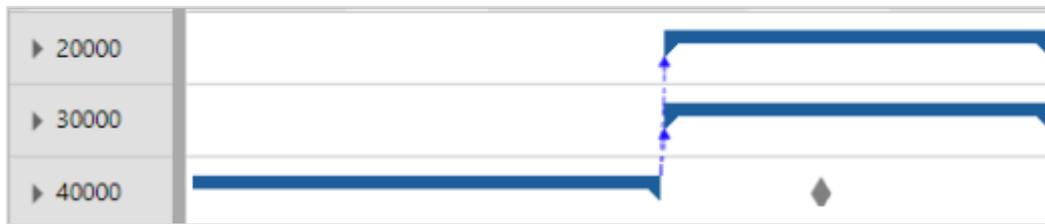
DOCUMENTATION VISUAL PRODUCTION SCHEDULER

- Within each production order, the relating production order lines with their production order routing lines are listed.
- Links are shown as described below:

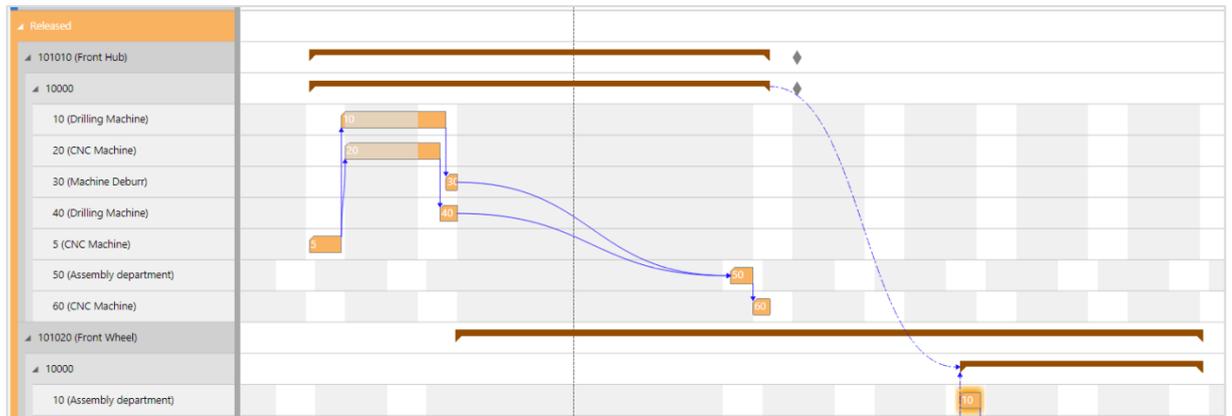
- between operations of one production order line



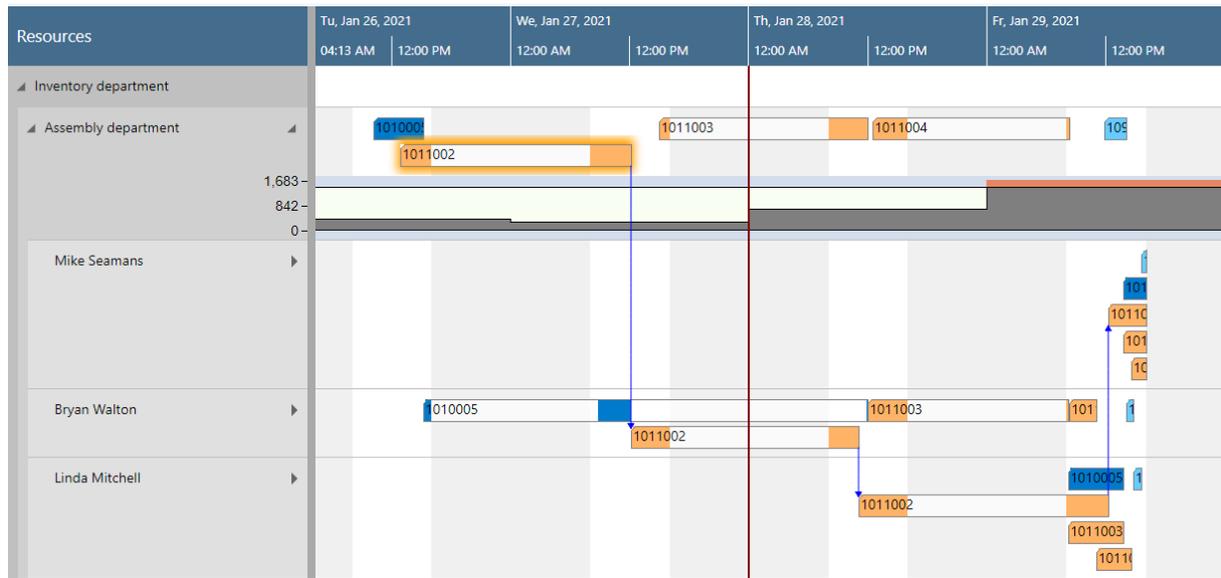
- Between production order lines (make-to order)



- Between Production orders



3.2. The Capacity View

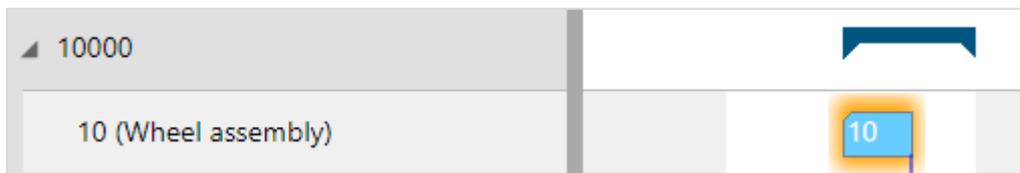


- Shows capacity loads of work centers and machine centers, grouped by work center groups.
- Capacity bottlenecks and conflicts concerning delivery dates can be visualized.
- The bars get different colors according to the different categories of the Production Order View.

4. Open Microsoft Dynamics 365 Business Central dialogs

The VPS fully integrates with Microsoft Dynamics 365 Business Central. This means that by double-clicking the according element (production order, production order line, production order routing line, work center etc.) either in the table area or in the Gantt area, you'll directly switch to the according Dynamics 365 Business Central dialogs where you can navigate and make changes as usual:

Double-clicking a production order routing line...



...will call the according dialog:

Manage Process Order Show Attached Page More options

EDIT - FIRM PLANNED PROD. ORDER - 1010005 - BICYCLE

General

No. 1010005 Search Description BICYCLE

Description Bicycle Quantity 16

Description 2 Due Date 30.01.2021

Source Type Item Assigned User ID

Source No. 1000 Last Date Modified

Lines Manage More options

ITEM NO.	DUE DATE	DESCRIPTION	STARTING DATE-TIME	ENDING DATE-TIME	QUANTITY	UNIT OF MEASURE CODE
1000	30.01.2021	Bicycle	26.01.2021 10:04	29.01.2021 16:00	16	PCS

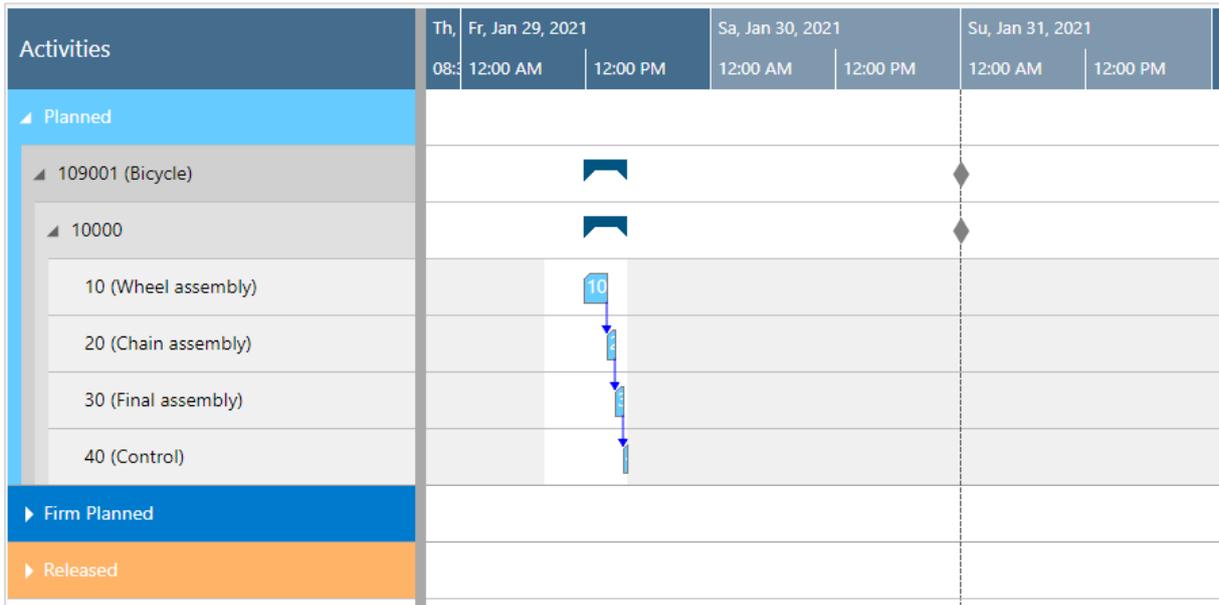
5. Collapsing and expanding

The VPS allows to view your data from different angles easily and quickly. The symbols  in the table allow to collapse and expand production orders, work center groups, work and machine centers, thus hiding details or rendering them visible.

All order categories **collapsed**:

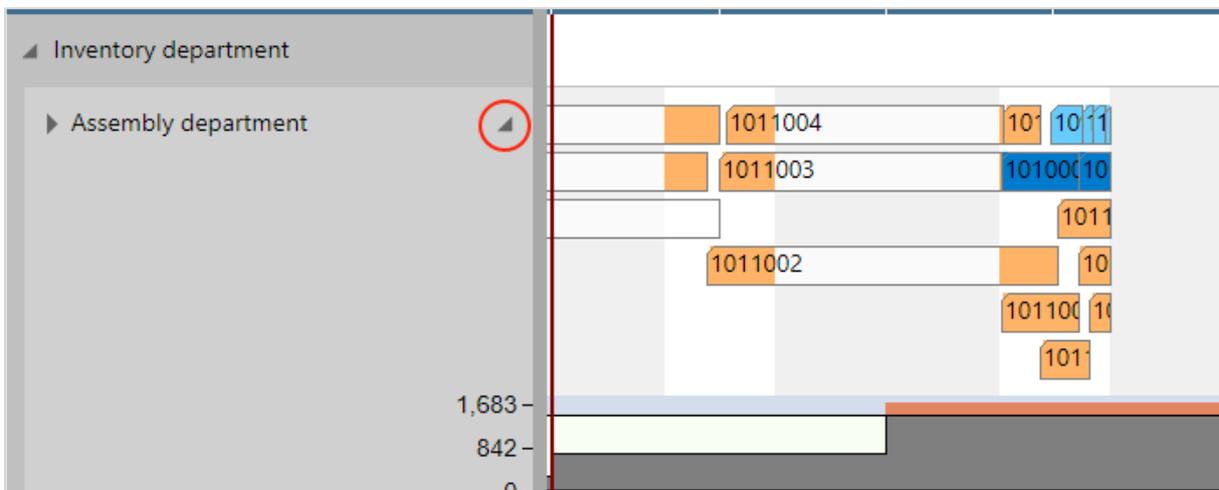
Activities	January 2021					February 2021	
	Wk 53	Wk 02	Wk 03	Wk 04	Wk 05	Wk 06	Wk 07
▶ Planned							
▶ Firm Planned							
▶ Released							

After having expanded the “Planned” category with order 109001 and all its sub-operations:



6. Capacity information

In the VPS, you can show a capacity curve in the Resource View, to see free and exceeded capacities, a red box indicating an overload:



7. Navigation in the VPS

Navigating in the VRV largely comprises setting the time range for which parts of your plan are shown, modifying the timescale solution and quickly scrolling to certain parts of your plan.

7.1. Setting the timeframe

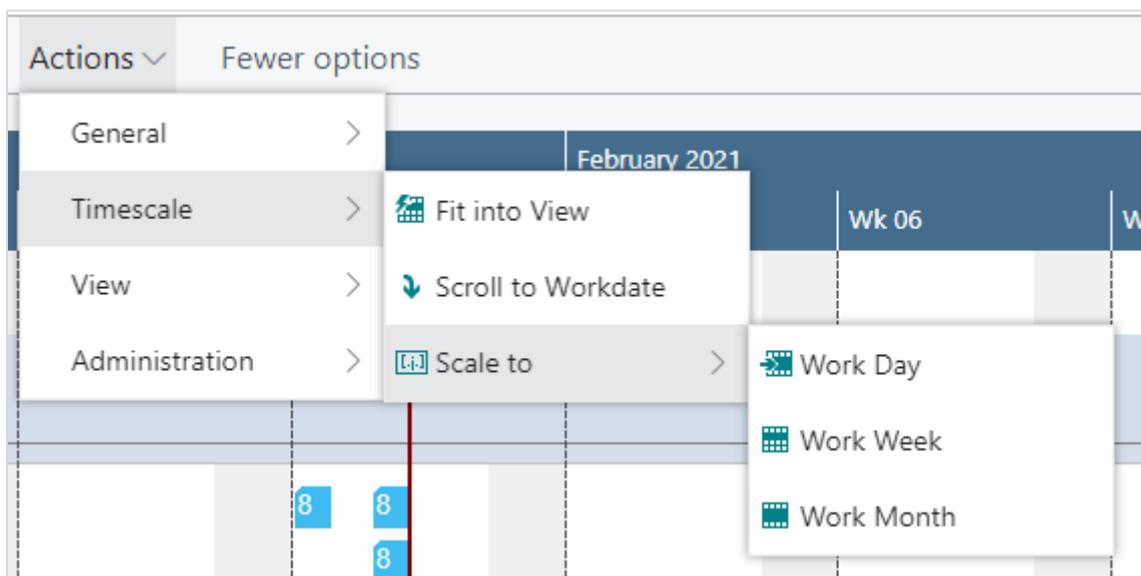
The timeframe specifies the time range covered by the timescale, either fixed by absolute values or relative to the workday. This is done in the “Setup” dialog, to be reached by clicking the “General” item in the “Actions” ribbon.

Timeframe Type			
Starting/Ending Date Input Type	Relative		
Timespan			
ABSOLUTE VALUES		RELATIVE VALUES	
Starting Date	31.12.2020	Starting Date	-4W
Ending Date	28.04.2021	Ending Date	+3M

7.2. Change the timescale resolution

For zooming in a certain area of your plan or to zoom out for a better overview, you can change the timescale resolution either by

- scrolling the mouse wheel in the timescale area
- or, more specifically, by the corresponding items of the “Actions” menu, based on the work date as having been specified in the settings of Dynamics 365 Business Central.

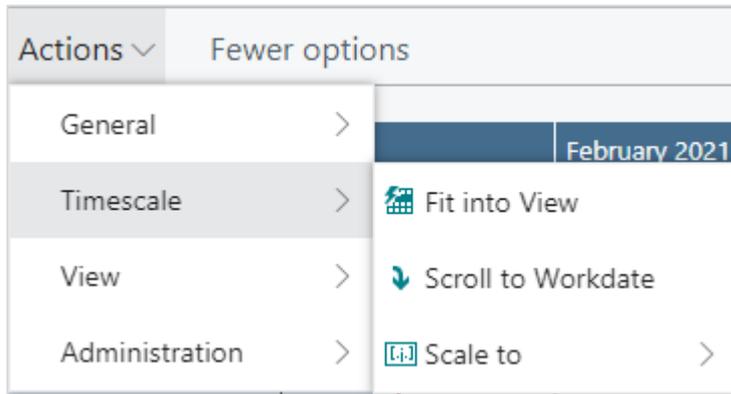


7.3. Scrolling

The VPS offers the following options for quickly navigating to certain positions in the diagram:

- the common scrolling options by vertical and/or horizontal scrollbar

- dragging the timescale either right or left
- scroll directly to the Dynamics 365 Business Central work date by selecting the corresponding item from the “Actions” menu.



7.4. Fit into view

Select this item from the “Timescale” item in the “Actions” menu to switch directly to the timescale as defined in the “Setup” dialog.

7.5. Adjust the width ratio between table and diagram

For adjusting the width ration between table and diagram, put the mouse cursor on the sash between the two parts and drag the double arrow appearing then.

Production Orders	Th, Jan 28, 2021		Fr, Jan 29, 2021	
	01:14 AM	12:00 PM	12:00 AM	12:00 PM
Planned				
109001 (Bicycle)				
10000				

8. Move operations

You can move operations by mouse either horizontally or vertically, either way having a different impact.

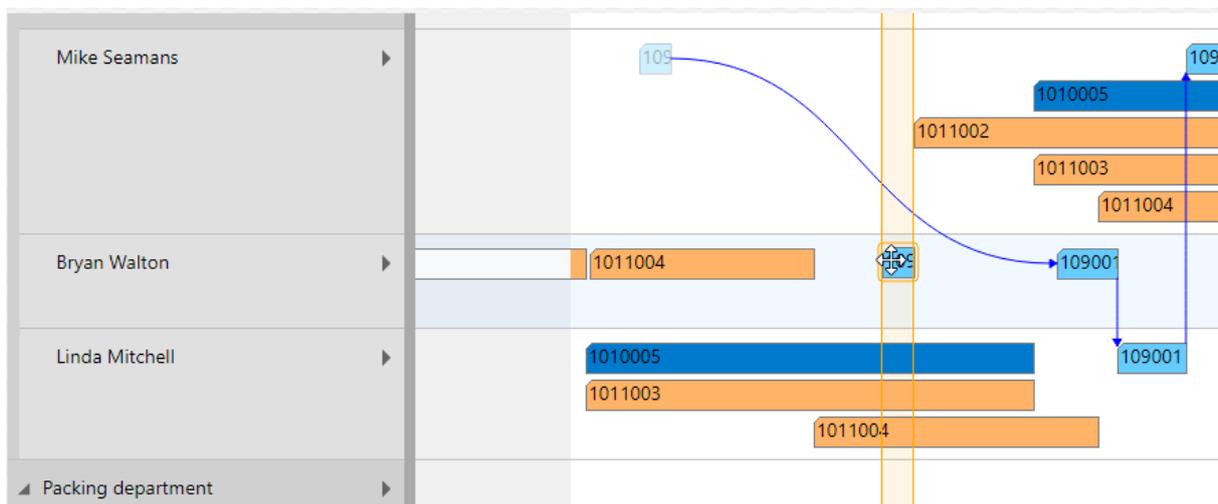
8.1. Move operations horizontally by drag & drop

To schedule an operation, you can move it horizontally along the time scale both in the Production Order View as in the Resource View: As a consequence, the operation will be worked off at a different time.



8.2. Assign an Operation to another Resource

In the Capacities View, an operation can also be moved vertically when scheduled – to a different work or machine center. As a consequence, the operation will be worked off by the work or machine center it was moved to. While moving the operation, a “phantom” bar will remain at the original place until the mouse will be released.



9. The “Setup” dialog



The “Setup” dialog allows to customize basic settings of the Visual Production Scheduler. You reach it via “Actions” -> “Administration”.

Here you can make the basic settings for:

- **Timeframe:**
 - Specify the timeframe that sets the time range covered by the timescale, either fixed by absolute values or relative to the workday (see also 7.1., “Setting the timeframe”).
- **Scheduling**

- Determine whether or not predecessor operations should automatically be re-scheduled when an operation is modified.
- Determine whether or not successor operations should automatically be re-scheduled when an operation is modified.
- Determine whether dependencies between several production order lines of a manufacturing order are to be taken into account for the automatic planning.

EDIT - VXS TEMPLATE SETUP - ADMIN ↗

Timeframe Type

Starting/Ending Date Input Type Relative ▼

Timespan

ABSOLUTE VALUES	RELATIVE VALUES
Starting Date 31.12.2020	Starting Date -4W
Ending Date 28.04.2021	Ending Date +3M

Scheduling

AUTOSCHEDULE WITH ZERO BUFFER TIME

Predecessors

Successors

Schedule Across Prod. Order Lines

Close

10. Reload and save data

In case you wish to discard your changes after modifying the diagram (provided you didn't save them) you can simply reload the data of the diagram. The "General" items allow to reload the former values or, alternatively, to store your modifications.

