



abas**ACADEMY**

LEGAL DISCLAIMER

© 2018 abas Software AG. All rights reserved.

The names and data used in this manual are entirely fictitious. Please note that the abas ERP version of this manual may differ from your abas ERP version.

The content of this document has been compiled with the utmost care. However, should you notice any errors, please do not hesitate to contact us. Please note that abas Software AG cannot be held liable for the accuracy of the content of this manual.

This manual is protected by copyright. Any reproduction and distribution, in whatever form or by whatever media, is prohibited without the prior written consent of abas Software AG.

Revision 1

TABLE OF CONTENTS

1	Introduction	9
1.1	Documentation and help	10
2	Installation	11
2.1	Requirements	11
2.2	Licensing	12
2.3	Database keys	13
2.3.1	Reservations	13
2.3.2	Master files	13
2.4	Connection to abas infosystems	14
3	Graphical user interface	15
3.1	Header Panel	16
3.1.1	Changing the logo	18
3.2	Actions toolbar	19
3.3	Table region	20
3.3.1	Column widths	20
3.3.2	Add and remove columns	21
3.3.3	Re-sort columns	22
3.4	Chart region	23
3.4.1	Zoom	24
3.4.2	Coloring	25
3.5	Filters	26
3.5.1	Quick search	28
3.6	Coloring by object properties	29
3.7	Reports	30
3.8	Data panel	35
3.9	Documents	36
3.10	Split screen and selection mode	37
3.11	Custom fields	40
4	Working with the planning objects	42
4.1	Accessing abas screens	42
4.2	Move operations horizontally	42
4.3	Move operations vertically	43
4.4	Fixing operation times	44
4.5	Edit notes/priorities	44
4.6	Simulation	45
4.7	Release work order suggestions	46
4.8	Write back to abas	49
4.8.1	Parameters	49
4.8.2	Data	52
5	Other useful functions	56
5.1	Printing	56
5.2	Critical processes	57
5.3	Target value comparism	60
5.4	Business Apps and DMS	61
5.5	Infosystems	63
6	Index	67





HOW TO USE THIS MANUAL

The most important information for using this manual effectively can be found below.

STRUCTURE

- At the start of each chapter, there is an introduction to the topic which is covered in the respective chapter
- Most of the chapters contain guidelines in addition to useful information
- An index can be found at the end of the manual

SYMBOLS

	Further information
	Warnings which can lead to errors
	Information for administrators
	Information on how to open the screen from the process overview

TYPOGRAPHY

Highlight	Meaning
Bold	Functions, folders and commands, fields
CAPITAL LETTERS	Search words
1., 2., 3.	Instructions
Reference	References to other chapters and links to the Online Help



1 INTRODUCTION

This document contains instructions on how to use APS for abas ERP:

- Visualize and manipulate production processes
- Assign resources
- Detect and eliminate critical processes
- Filter and export data
- Create a production plan

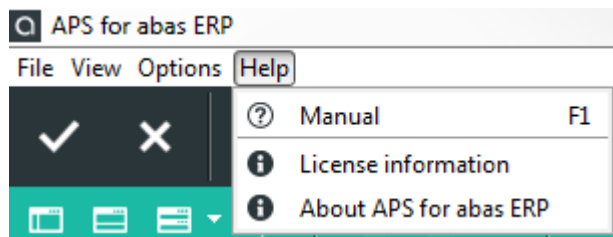
Planning and controlling production processes is a demanding task. In general, production processes are extensive processes, in which a large number of objects interact with each other. Companies are forced to optimize their processes continuously. Adhering to confirmed due dates and an optimal utilization of all resources are constant challenges, as well as short cycle times and economic warehouse stocks. Right from the quotation or order confirmation stage, realistic delivery dates must be calculated and implemented in the production schedule.

APS for abas ERP is a modern control center for visualizing and manipulating production processes. It can be used as a main tool for creating and editing orders, operations and resource allocations, such as work centers and means of production.

APS for abas ERP gives you a clear overview of sales order and production timelines. The allocation of resources, current information on confirmations, order cycles and the requirements for production or procurement are available at a click. It also provides access to the screens of all related data.

1.1 DOCUMENTATION AND HELP

You can open this document from APS for abas ERP. Go to the help menu and select the manual or click F1.



APS for abas ERP is available in the following editions:

- APS Basic
 - Visualize scheduling results with write back to abas
- APS Advanced
 - Visualize scheduling results and integrated simulation for limited capacities with write back to abas
- APS Professional
 - Visualize scheduling results and integrated simulation for limited capacities with write back to abas
 - Simulation based rules for alternative resources, setup optimization, pendulum operation mode and multi resource handling
 - Plan employees
 - Manage simulation scenarios

This manual describes *APS Professional* edition, the highest edition. The functions that are not available in lower editions are noted.



2 INSTALLATION

This chapter explains:

- The system requirements for APS for abas ERP
- How to license the product
- How to accelerate the loading process by the use of database keys
- How to install the infosystem FPVIEW

2.1 REQUIREMENTS

The application requires the following system specifications:

- abas client with the version 2101r8n08 or higher
- accurate infrastructure-settings in the file mandant.ini in the subdirectory win of the client
- installed awk package on the abas server
- at least 2-4GB free RAM in the client pc (depends on the data amount)
- multicore processor in the client pc
- 64bit system in the client pc

The user requires the following rights from the permissions:

- Type command 8: Scheduling
 - Type command 12: System
 - Type command 38: Infosystem
 - Database commands *View* and *Select* for the databases
 - 0 – Customer
 - 1 – Vendor
 - 2 – Part
 - 3 – Sales
 - 4 – Purchasing
 - 5 – Account
 - 7 – Operation
 - 8 – Capacity
 - 9 – Workorder
 - 11 – Employee
 - 12 – Company
 - 28 – Mallocation
 - 39 – Warehouse
 - 86 – Transaction
 - 87 – DataExport
 - 106 – PackingInstructions
 - 137 – Calendar
- If the abas service module is used:
- 115 – Service_Assignment
 - 116 – Service_Product
 - 117 – Service_Employees
 - 118 – Service_Reservation
- If the abas project management (ProjectSuite) is used:
- 149 – ProjectSuitePlanning
 - 150 – ProjectSuiteMasterData
 - 154 – ProjectSuiteValueData

2.2 LICENSING

Please contact your abas partner for licensing APS.



2.3 DATABASE KEYS

It is recommended to set up database keys with the following parameters. This increases performance while loading the data.

2.3.1 RESERVATIONS

Header section		
	File name	Purchasing
	Group	Reservations
	Filing mode	Active
Table section		
	Partial key	status
	Partial key	vor

2.3.2 MASTER FILES

Header section		
	File name	see below
	Group	see below
	Filing mode	Active
Table section		
	Partial key	versionn

File name and group can be taken from the list:

0:1 Customer/Customer
0:2 Customer/Customer contact
1:1 Vendor/Vendor
1:2 Vendor/Vendor contact
2:1 Part/Product
2:2 Part/Mean of production
7:0 Operation/Operation
8:1 Capacity/Department
8:2 Capacity/Work center
11:1 Employee/Employee

2.4 CONNECTION TO ABAS INFOSYSTEMS

In order to open individually configured infosystems and objects from APS for abas ERP, the FPVIEW infosystem must be installed. This infosystem is stored in the directory

\\<host>\<mandant>\productionplanner\Install\is.ALLSPP.FPVIEW.tgz

The workspace allspp is required to execute this infosystem. Connect to infosystems and screens using [call parameters \(see page 63\)](#) referenced to the FPVIEW infosystem. If you are using abas in English, you can upgrade the dictionary with the msg.ma file, stored in the following directory

\\<host>\<mandant>\productionplanner\Install\msg.ma

This file extends the dictionary to include English language settings for the FPVIEW infosystem.

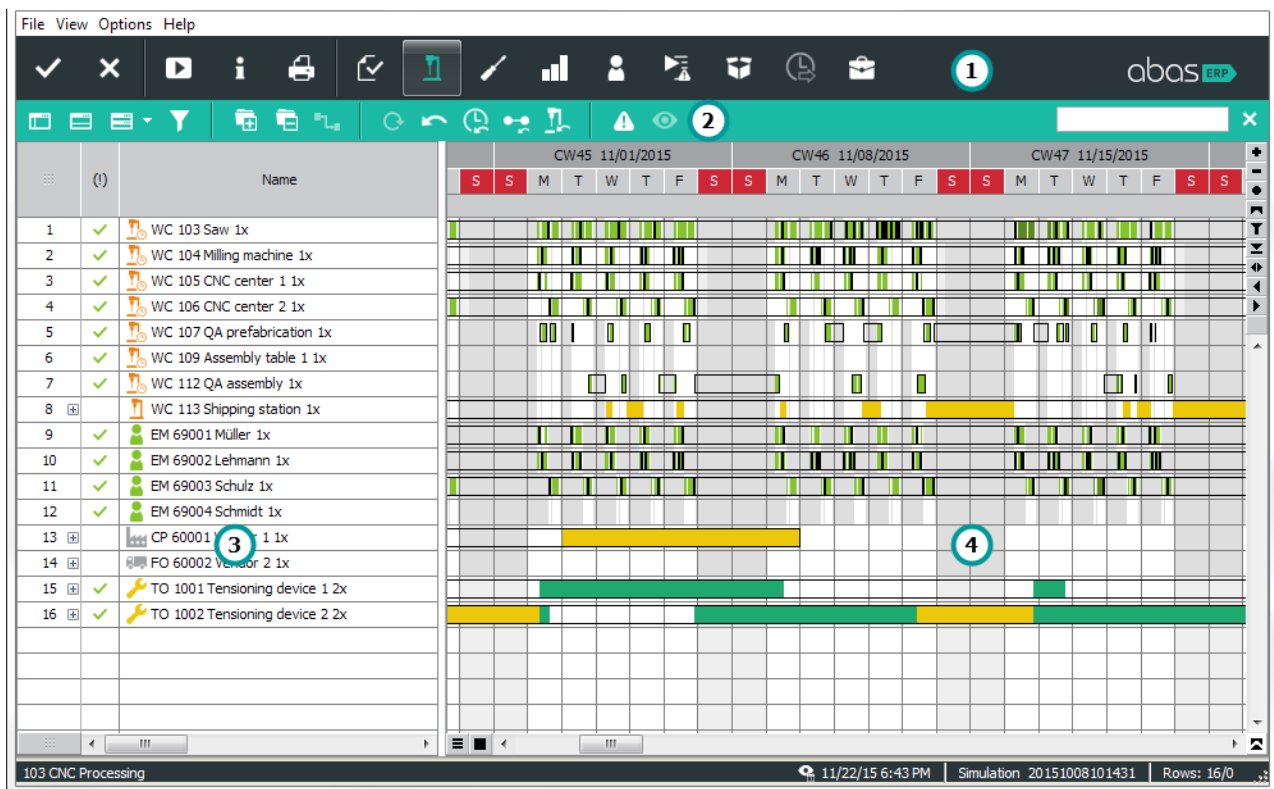
The infosystem FPVIEW is pre-installed in the edition *Professional*.

3 GRAPHICAL USER INTERFACE

This chapter explains:

- The structure of the user interface
- How the filter function works
- How to print reports
- How split screens and selection modes are structured











The graphical user interface consists of 4 main components:







1. Header panel
2. Actions toolbar
3. Table region
4. Chart region

3.1 HEADER PANEL

The planning results can be analyzed using different views. To activate a view, click the appropriate button in the header panel. The current view button will be highlighted.

Functions in the header panel	
	Activate the next view.
	Close APS for abas ERP.
	Reload the data.
	Open the FPVIEW Infosystem.
	Open the print dialog.
	Activate the orders view. The orders view shows the chronological allocation of the production orders. These can be work orders, work order suggestions, subcontracting suggestions and relocation suggestions. Expanded lines display the allocated resources and the materials required.
	Activate the resources view. The resources view shows the chronological allocation of resources according to operations. Resource types are work centers, means of production, suppliers and vendors (as well as employees in <i>Professional</i>). If a resource is allocated twice at any time, only the capacitive load will be displayed. In this case, the reservations are displayed in expanded lines.
	Activate the operations view (only in <i>Advanced/Professional</i>). The objects and presentation are the same as the resources view. Here the expanded lines show the operations in chronological order, each in separate lines.
	Activate the utilization view. The utilization view shows the utilization rate of the resources. The discretization interval can be parameterized. If you expand a line, the utilization rates will be shown in the next finer discretization.
	Activate the staff view (only in <i>Advanced/Professional</i>). The staff view shows the number of workers which are required per department over time. The expanded lines show the respective number for each work center.



	Functions in the header panel
	<p>Activate the bottlenecks view (only in <i>Advanced/Professional</i>).</p> <p>The bottlenecks view shows how many orders are waiting for processing by a resource at one time. The waiting times are considered if they are caused by capacity restrictions of the resource. The bottlenecks view is accessible only in the simulation dataset. Expanded lines show the waiting work load in hours as well as the operations waiting and their waiting times.</p>
	<p>Activate the materials view.</p> <p>The materials view shows materials required for operations, e.g. purchase order suggestions, purchase orders and stock withdrawals. The expanded lines show the respective operations.</p>
	<p>Activate the project and service view.</p> <p>The project and service view shows resource reservations from abas project management and service planning. These can be reductions in the available capacity of work centers (created by work center related project tasks from project management), reservations of employees by project management assignment times (if the respective staff is used for production processes too, only in <i>Professional</i>) and reservations of employees by service reservations (if the respective engineer is assigned to production processes too, only in <i>Professional</i>).</p>
	<p>Activate the customers view (only in <i>Advanced/Professional</i>).</p> <p>The customers view shows the sales orders for each customer. Expand the lines to view the orders and order items. Sales items can be expanded according to their parts list structure.</p>

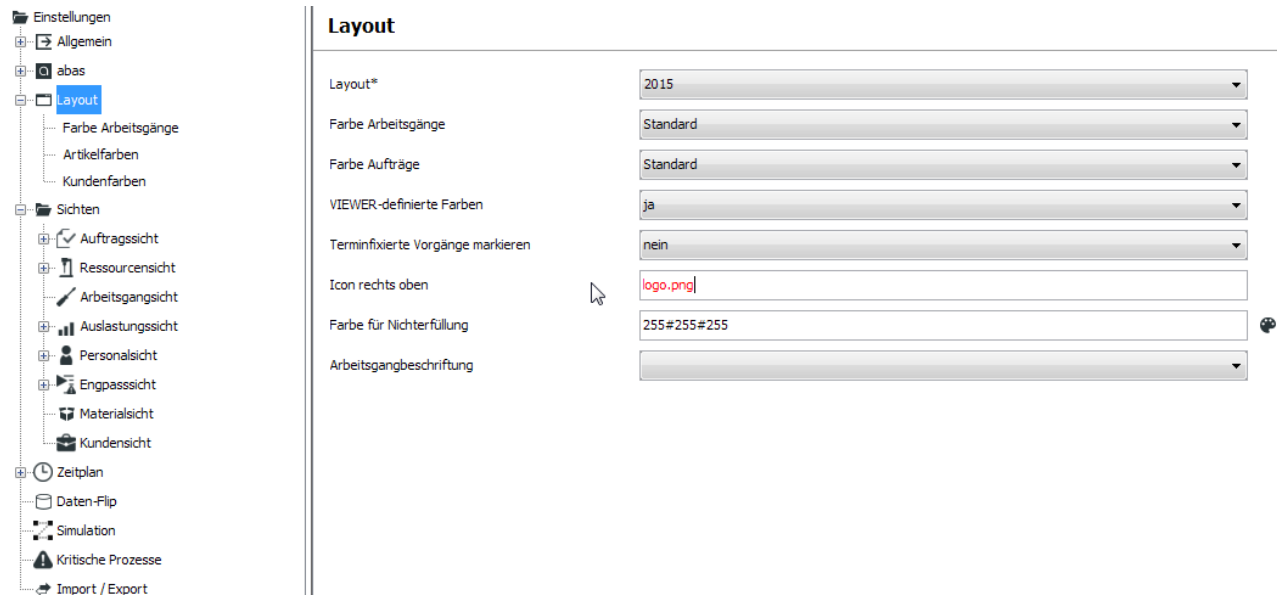
3.1.1 CHANGING THE LOGO

You can change the logo on the right of the header panel. To do so, save a picture file in this directory:

\\<host>\<mandant>\productionplanner\Planner\customized (in *Basic/Advanced*).

\\<host>\<mandant>\simcron\Planner\customized (in *Professional*).

Then register it in the preferences (Menu > Options > Preferences > Layout).

















The entry in the preferences does not have a path structure but a file extension. Valid file formats are gif, png, jpg and bmp.



3.2 ACTIONS TOOLBAR

The actions toolbar below the header panel provides useful functions within APS for abas ERP.



Functions in the actions toolbar	
	Open/close the left panel showing filter summary, color and report functions.
	Open/close the lower panel showing filter handling, documents, write back, data panel and simulation panel.
	Open/close the split screen and selection mode.
	Open/close the filter-related panels (filter summary in left panel, filter handling in lower panel).
	Expand all lines in the table region. This function is disabled in views in which a long waiting time is expected when expanding all lines at the same time.
	Collapse all lines in the table region.
	Activate/deactivate the visibility of order links in the orders view.
	This symbol blinks, if a newer dataset has been generated in the background. Click to upload this dataset directly to APS for abas ERP. Manual changes to the current data set are lost if they are not written back beforehand.
	Undoes all manual time shifts. If these have already been written back, write the data back again to save the undo.
	Undoes all manual time fixing. If these have already been written back, write the data back again to save the undo (only in <i>Professional</i>).
	Undoes all manual alternative shifts. If these have already been written back, write the data back again to save the undo (only in <i>Professional</i>).
	Undoes all manual resource fixing. If these have already been written back, write the data back again to save the undo (only in <i>Professional</i>).
	Opens a separate window with critical processes (only in <i>Advanced/Professional</i>).
	Opens a separate window to the target value comparism (only in <i>Advanced/Professional</i>).

3.3 TABLE REGION

The table region lists dataset objects and their properties. Depending on the current view, different dataset object types are listed. You can expand/collapse rows of the table to show the related objects.

View	Primary objects	Expand to
Orders view	Work orders, work order suggestions, subcontracting suggestions, relocation suggestions	Operations, allocated resources, required materials
Resources view	Work centers, means of production, suppliers, vendors, employees	Assigned resource capacities if multiple allocation exists
Operations view	Work centers, means of production, suppliers, vendors, employees	Operations
Utilization view	Work centers, means of production, suppliers, vendors, employees	Detailed utilization rates
Bottlenecks view	Work centers, means of production, suppliers, vendors, employees	Waiting work load, operation waiting times
Materials view	Purchase orders, purchase order suggestions, stock withdrawals	Operations
Customers view	Customers	Sales orders, sales items, parts list structure

3.3.1 COLUMN WIDTHS

The width of a table column can be changed by dragging the column splitter with the mouse (LMB). The context menu (RMB) contains a function to auto resize column widths to fit their contents.

Auto resize all columns Auto resize current columns	<div>Format All Columns</div> <div>Format Column</div>
--	--



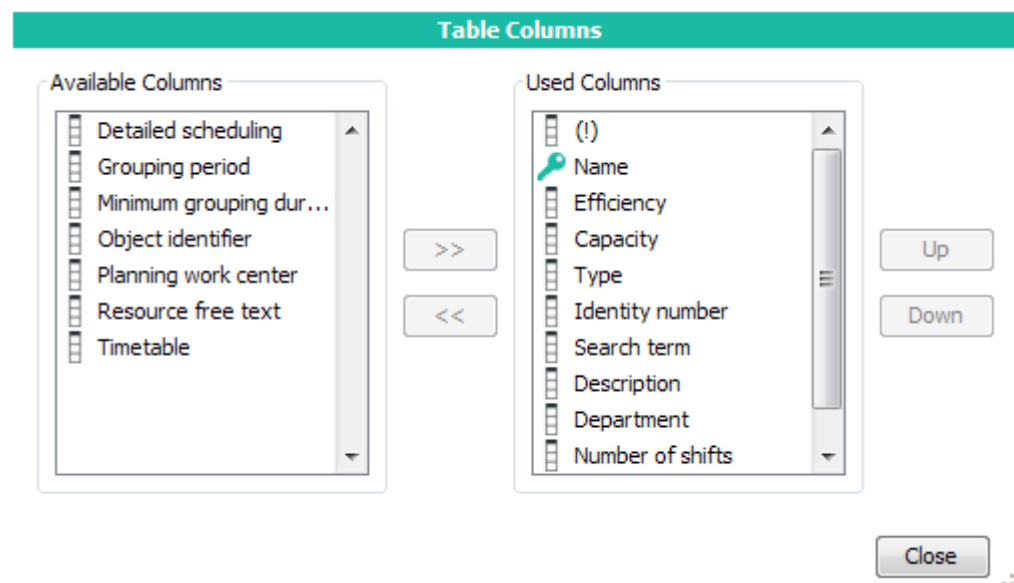
3.3.2 ADD AND REMOVE COLUMNS

Columns can be added or removed using the context menu (RMB) on the column header. They are added at the end of the current column list.

		(!)	Name	Efficiency	Capacity	Type	Sat	Sun
1	✓	🔧	WC 103 Saw 1x			(!)		
2	✓	🔧	WC 104 Milling machine 1x			Capacity		
3	✓	🔧	WC 105 CNC center 1 1x			Department		
4	✓	🔧	WC 106 CNC center 2 1x			Description		
5	✓	🔧	WC 107 QA prefabrication 1x	100.0		Detailed scheduling		
6	✓	🔧	WC 109 Assembly table 1 1x	100.0		Efficiency		
7	✓	🔧	WC 112 QA assembly 1x	100.0		Grouping period		
8	+	🔧	WC 113 Shipping station 1x	100.0		Identity number		
9	✓	👤	EM 69001 Müller 1x	0.0		Is planning		
10	✓	👤	EM 69002 Lehmann 1x	0.0		Minimum grouping duration		

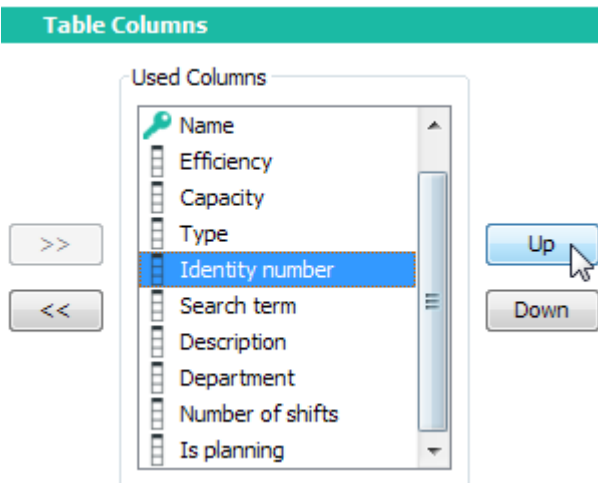
Another method of adding or removing columns is to click the upper left corner of the table header (Column controls). This opens the the panel "Table Columns".

Swap the columns between the left and right to view or hide columns.



3.3.3 RE-SORT COLUMNS

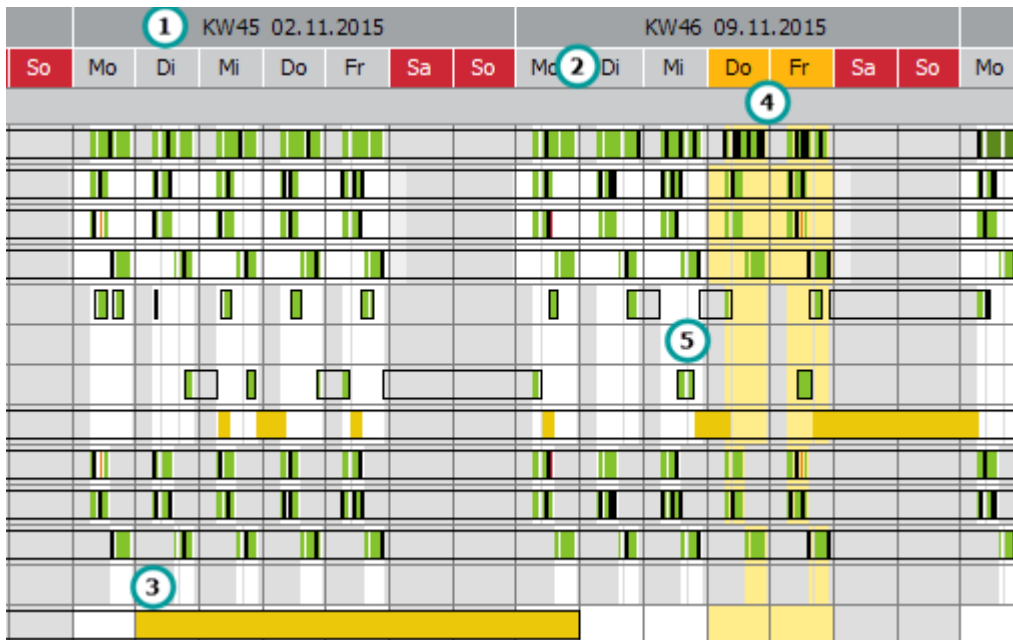
Sort the columns using the "Up" and "Down" buttons.





3.4 CHART REGION

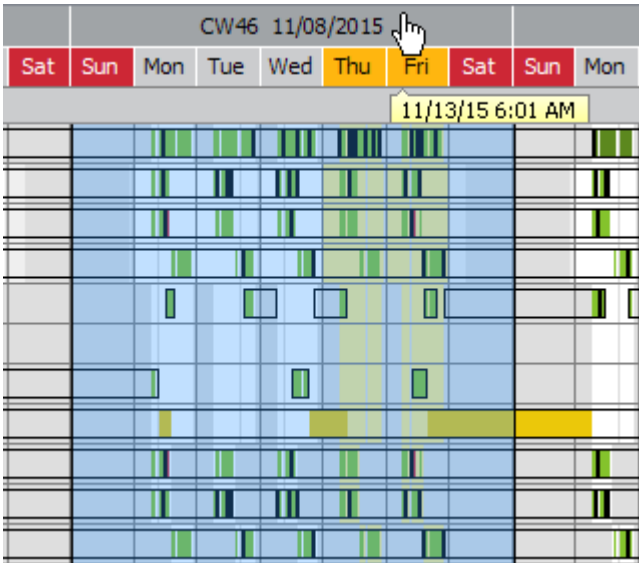
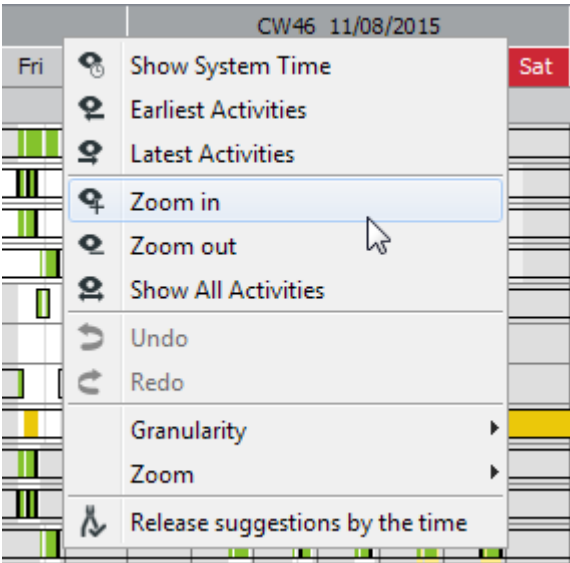
The chart region shows planning objects and their chronological allocations in the form of Gantt chart bars. The planning objects relating to the current view selected are displayed ([table region \(see page 20\)](#)).














1. Calendar week
2. Week days
3. Shift schedule (grey)
4. Kolidays (yellow)
5. Planning objects

3.4.1 ZOOM

Zoom functions are available using the column headings as well as the context menu (RMB). You can perform a quick zoom by clicking the heading.





Left mouse button: Zooms into the highlighted interval	Right mouse button: Opens the context menu
	

Functions in the chart tool bar	
	Zoom in
	Zoom out
	Change granularity of the calendar
	Change start and end date of the calendar
	Scroll to the current system time
	Scroll to a specific time stamp
	Change granularity and scroll the chart, so that the entire data is visible (good function for zooming out completely).
	Scroll to the earliest activities
	Scroll to the latest activities
	Open a radar to navigate in the chart
	Open the layer settings



3.4.2 COLORING

The default color scheme for operation parts (depending on the types) can be changed in the preferences (Menu > Options > Preferences > Layout > Color operations).

Coloring of operation parts: default values	
	Extra setup time (only with setup optimization in <i>Professional</i>)
	Setup time
	Working time
	Transport and waiting time

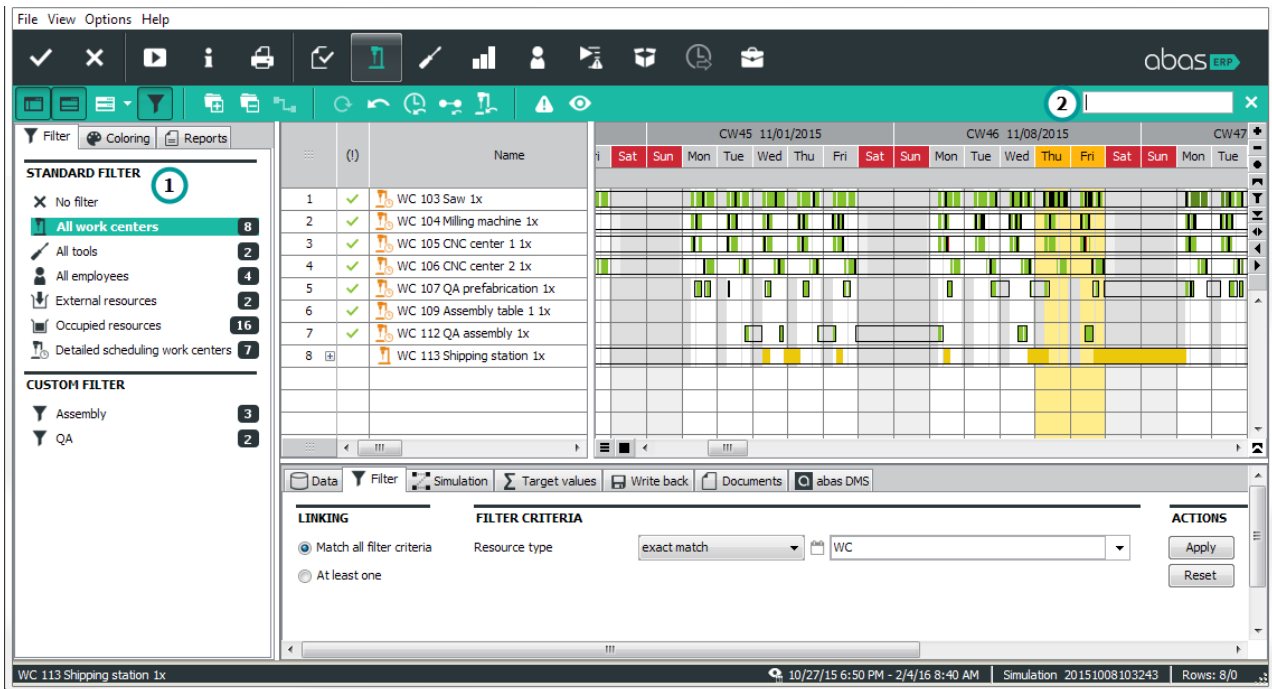
If the operation belongs to a work order, all of its parts are drawn in the next darker shade. Thus, operations that belong to work orders, can be identified quickly.

3.5 FILTERS

You can hide/unhide planning objects using the filter function. The standard scope of supply includes some pre-defined filter objects.

The filter summary section in the left panel shows standard and custom filters. The number besides the filter names specifies the hit count. Filters can be activated/deactivated by clicking on the filter name in the summary panel. Filters are context-sensitive. The filter summary shows the filters related to the current view.

In addition to filter objects, you can refine your selection of data using the quick search. The quick search requires a search string and acts in addition to the filtering.



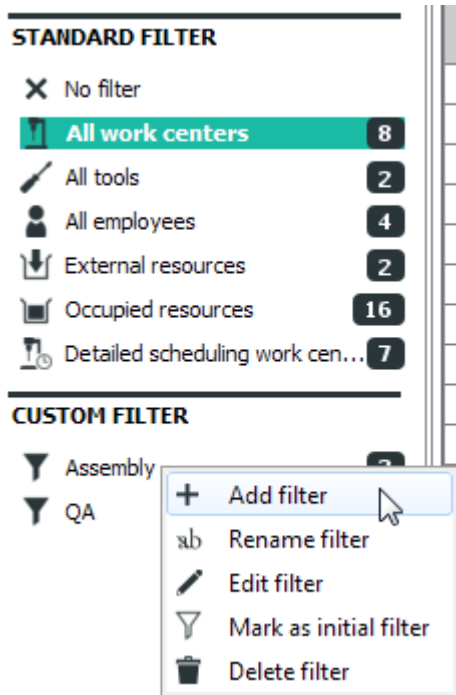
The screenshot shows the abas ERP interface. On the left, the 'Filter' panel is active, showing a list of standard filters (e.g., 'All work centers', 'All tools') and custom filters (e.g., 'Assembly', 'QA'). The main area displays a Gantt chart with resources and their availability over time. The bottom panel shows the 'LINKING' and 'FILTER CRITERIA' section, where a filter is applied to 'Resource type' with the criteria 'exact match' and 'WC'. The status bar at the bottom indicates the current simulation date and time, and the number of rows displayed.

1. Filter
2. Quick search

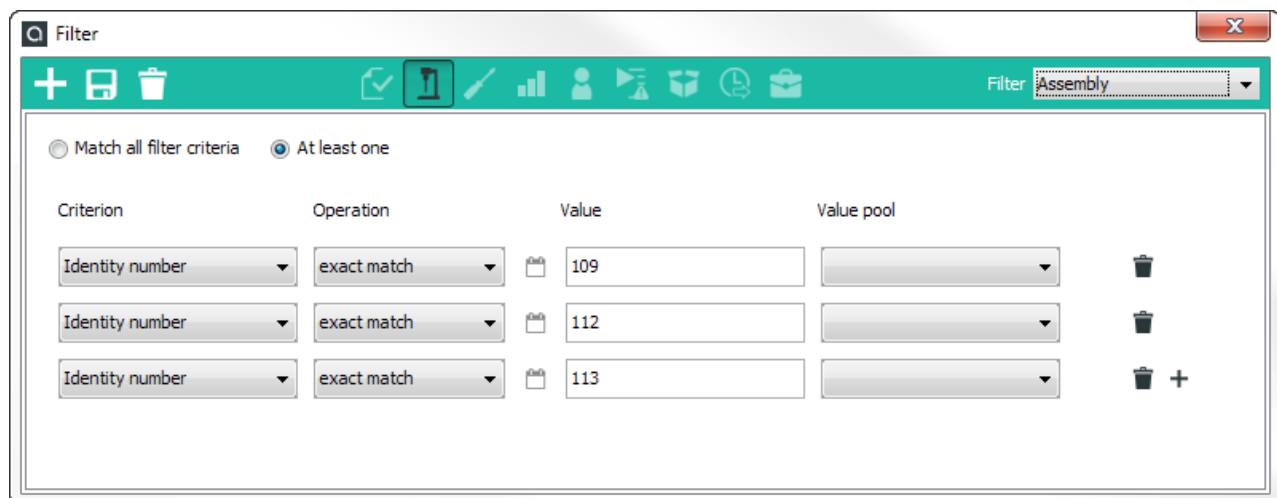
The lower panel shows the filter definitions and criteria, if a filter is activated. Filter criteria can be changed in this panel. These changes are not saved permanently in the corresponding filter object.




You can create a new filter by clicking "Add filter" in the context menu of the filter summary. Right click an existing custom filter to edit, rename or delete it. One custom filter can be defined as the initial filter per view. This initial filter will be activated automatically each time you start APS for abas ERP.



The following dialog box appears when you add or edit filter objects:



The filter criteria always refer to the planning objects of the corresponding view. The entries "Match all filter criteria"/"At least one" define whether all filter criteria must be fulfilled by a planning object, or whether one fulfilled criterion is enough. When defining filter criteria, you can choose from many standardized object properties. The choice of valid operation types depends on the property type. Filter criteria can be added or removed using the +/- buttons. Save the filter after editing by clicking . We recommend you use appropriate filter names.

3.5.1 QUICK SEARCH

The quick search text field filters the data directly without a filter definition. You can type any text and press <ENTER>. The quick search searches all dataset objects (and their dependencies) for ID number, search word, name etc. All data objects not found in the quick search will be removed from the results (i.e. search string not found in any object properties).

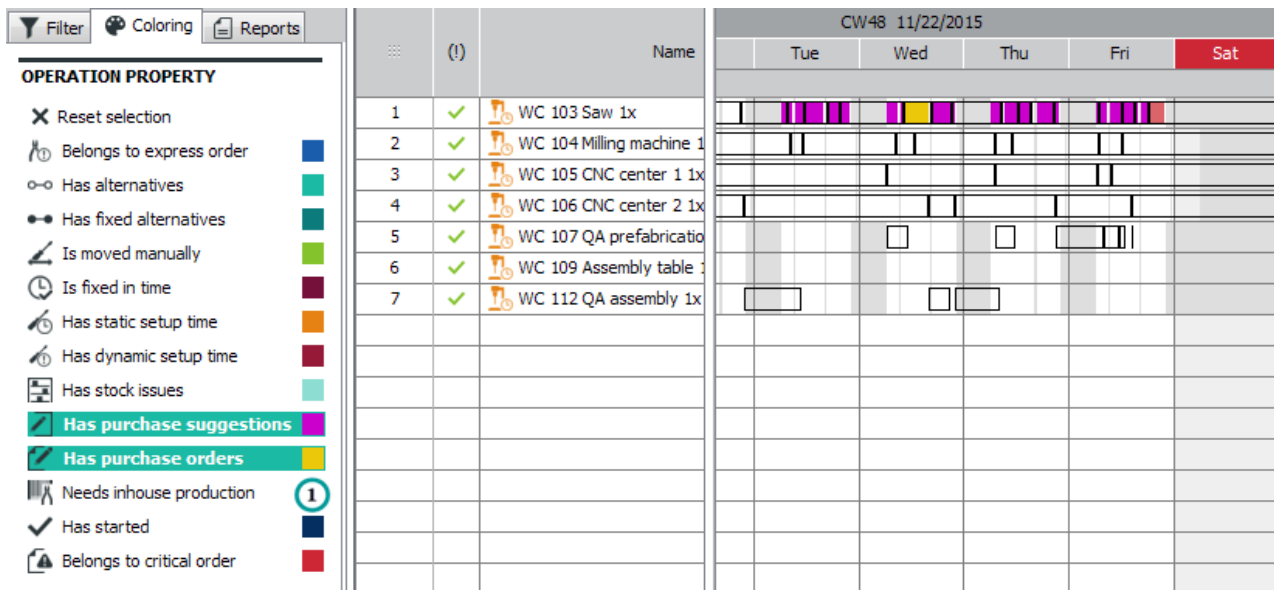
The quick search is less precise than the filter objects, and you cannot use comparative operators such as greater than /less than, i.e. only substrings are searched, not quantity or date/time fields. The quick search can be used in combination with a filter object.

The quick search text changes to red if the user changes the text, activates a filter object or changes the current view. Repeating <ENTER> refreshes the quick search.



3.6 COLORING BY OBJECT PROPERTIES

APS for abas ERP lets you color operations based on the operation properties.



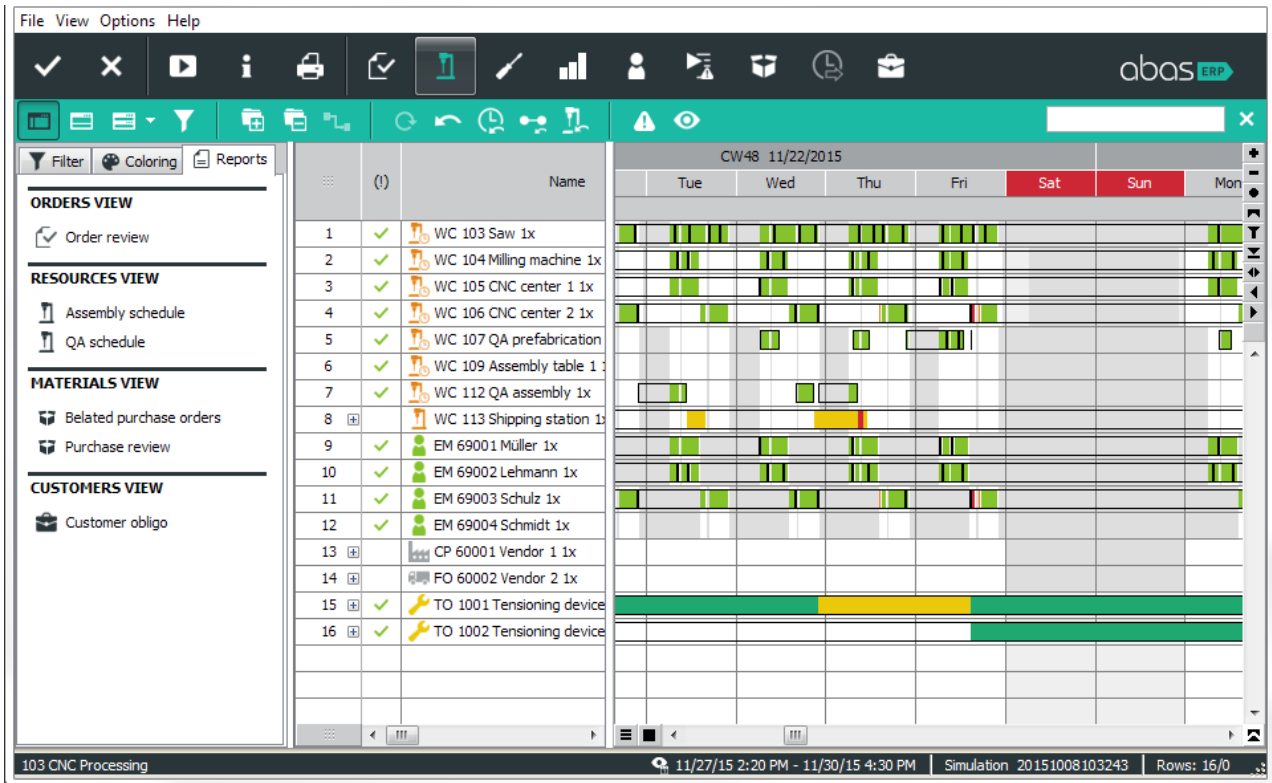
1 Color code

By clicking the reservation property text, you can switch the colors of the data objects in the chart on or off. If enabled, all operations with the corresponding property are displayed in the color selected. The other operations will be shown white. The user can change the assigned colors by clicking on the color field next to the property description.

You can activate more than one property. An operation that fulfills multiple properties, is displayed in the mixed color.

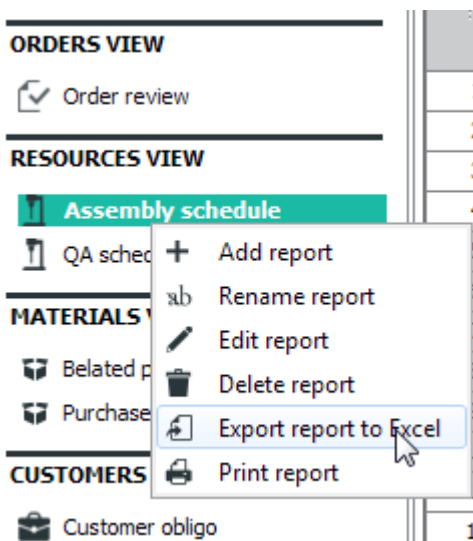
3.7 REPORTS

The report function allows you to print planning objects and their properties and dependencies as a table. You can also export the table to Excel.



Each report is based on a view, and is listed in the report summary panel under the corresponding heading.

You can create a new report by clicking "Add report" in the context menu of the report summary panel. Right click an existing report to edit, rename or delete it. Reports can be exported to Excel or printed directly to a printer.



The following dialog box appears when you add or edit reports:

Print report

Report: Assembly schedule

Filter: Assembly (2) Time constraints: Operation start actual (3) +2

Head of report
Text blocks: <Date> + 1

Assembly schedule
ab ↑↓ ← →

Begin of page
Text blocks: <Date> + 1

Table
Columns: (4) + 5 6

WC ab ↑↓ ← →	Resource number ab ↑↓ ← →	Search word ab ↑↓ ← →	Work slip ab ↑↓ ← → (7) (8)	Article number ab ↑↓ ← →	Operation start ab ↑↓ ← →	Operation item text ab ↑↓ ← →
-----------------	------------------------------	--------------------------	--------------------------------	-----------------------------	------------------------------	----------------------------------

End of page
Text blocks: <Date> + 1

End of report
Text blocks: <Date> + 1

Datum
ab ↑↓ ← →

Scale (in % for xls): 100 (9)
Linebreak after (No. of chars for xls): 50 (9)

- 1 The view that the report will be assigned to
- 2 Filter for selecting data from the particular view
- 3 Date/time fields for refining data selection
- 4 Columns to be displayed in the corresponding report section
- 5 Add a column
- 6 Change the formatting for the report section
- 7 Rename columns
- 8 Sort / shift / remove columns
- 9 Set parameters for export to Excel

When you create a new report, the view the report is based on must be defined first (1). After clicking the view button, the report fields will be enabled for editing.


You can limit the selection of data objects before printing the report using a filter in the view (2). Additionally, you can further refine the selected data by entering time constraints (3).

A report consists of 5 sections:

- Report header (once at the beginning)
- Beginning of page (at the beginning of every printed page – only if printed directly)
- Table (the data)
- End of page (at the end of every printed page – only if printed directly)
- End of report (once at the end)

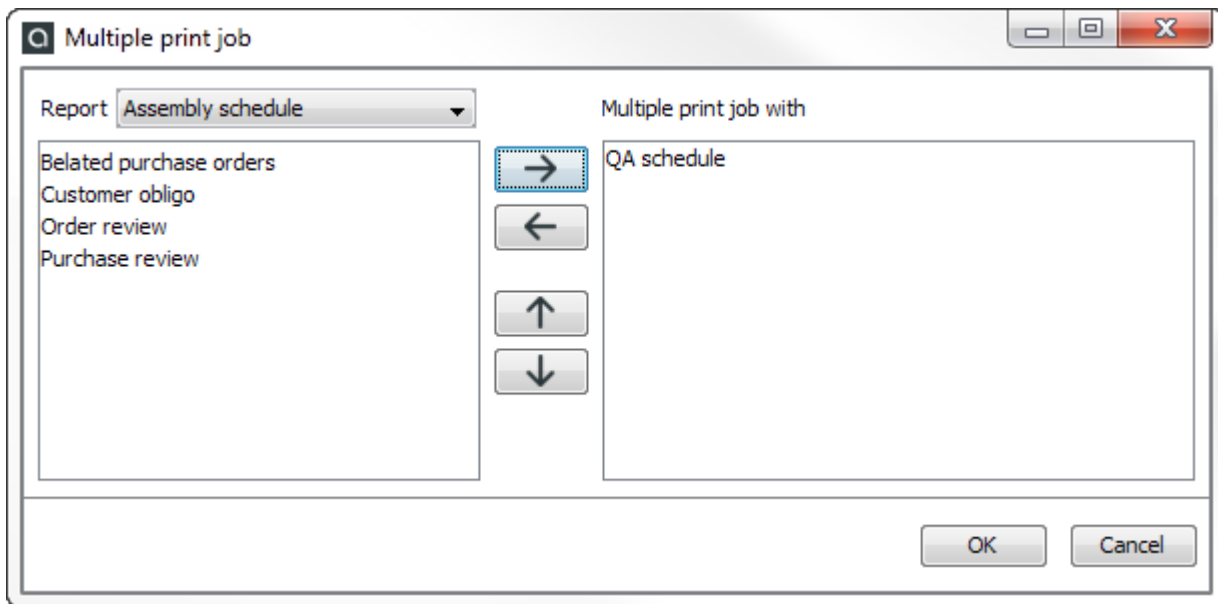
Select the columns to be printed in the report using the combo boxes (4). A combo box entry with dependencies is colored blue. When you select a column, a second combo box appears in which you can select a property of the dependent object. You can only add a column to the list of printed columns (5) if the element has no other dependencies (i.e. no further combo box opens).

You can change the character set of the report section by clicking (6). Added columns can be renamed (7), sorted, ordered and removed (8).

If you want to export the report to Excel, you can set the scale and line breaks (9) to simplify printing. After editing, click  to save the report. We recommend giving reports appropriate names.



Several reports can be printed in a set, i.e. when printing or exporting a report, all linked reports are printed / exported as well. Excel creates several sheets in this case. Click (1) to open the dialog box for setting up report links.



Firstly, select the root report that triggers the printing of the other reports. The reports that can be linked are displayed on the left. All reports that are linked with the root report are shown on the right.

Click → to add the selected report to the top of the linked list.

A linked report can be removed by clicking ←. The reports are printed in the order of the list on the right. Click ↑ or ↓ to sort the list.

If a report is a root report for a multiple print job, the report summary panel shows a number next to the report name. This is the total number of reports that will be printed/exported.

ORDERS VIEW

Order review

RESOURCES VIEW

Assembly schedule **2**

QA schedule

MATERIALS VIEW

Belated purchase orders

You can use the context menu (RMB) of the report summary panel to print or export a report to Excel.

A1		fx		Assembly schedule		
	A	B	C	D	E	F
1	Assembly schedule					
2						
3	Resource number	Search word	Article number	Operation start	Delivery date	
46	112	QMONTAGE	10006	12/29/2015 20:10:18	05/02/2016	
47	112	QMONTAGE	10012	12/31/2015 15:55:05	11/09/2015	
48	112	QMONTAGE	10006	01/04/2016 08:50:05	05/09/2016	
49	112	QMONTAGE	10012	01/06/2016 13:45:20	01/27/2016	
50	112	QMONTAGE	10006	01/06/2016 17:50:21	04/20/2016	
51	112	QMONTAGE	10006	01/07/2016 17:30:21	04/08/2016	
52	112	QMONTAGE	10006	01/07/2016 20:50:21	11/09/2015	
53	112	QMONTAGE	10012	01/11/2016 13:25:22	01/20/2016	
54	112	QMONTAGE	10012	01/14/2016 07:40:06	01/22/2016	
55	112	QMONTAGE	10012	01/15/2016 06:20:06	03/08/2016	
56	112	QMONTAGE	10006	01/19/2016 19:00:23	05/03/2016	
57	112	QMONTAGE	10006	01/20/2016 08:50:06	05/03/2016	
58	112	QMONTAGE	10012	01/20/2016 15:30:22	04/07/2016	
59	112	QMONTAGE	10006	01/21/2016 06:15:22	04/26/2016	
60	112	QMONTAGE	10012	01/22/2016 14:05:24	03/04/2016	

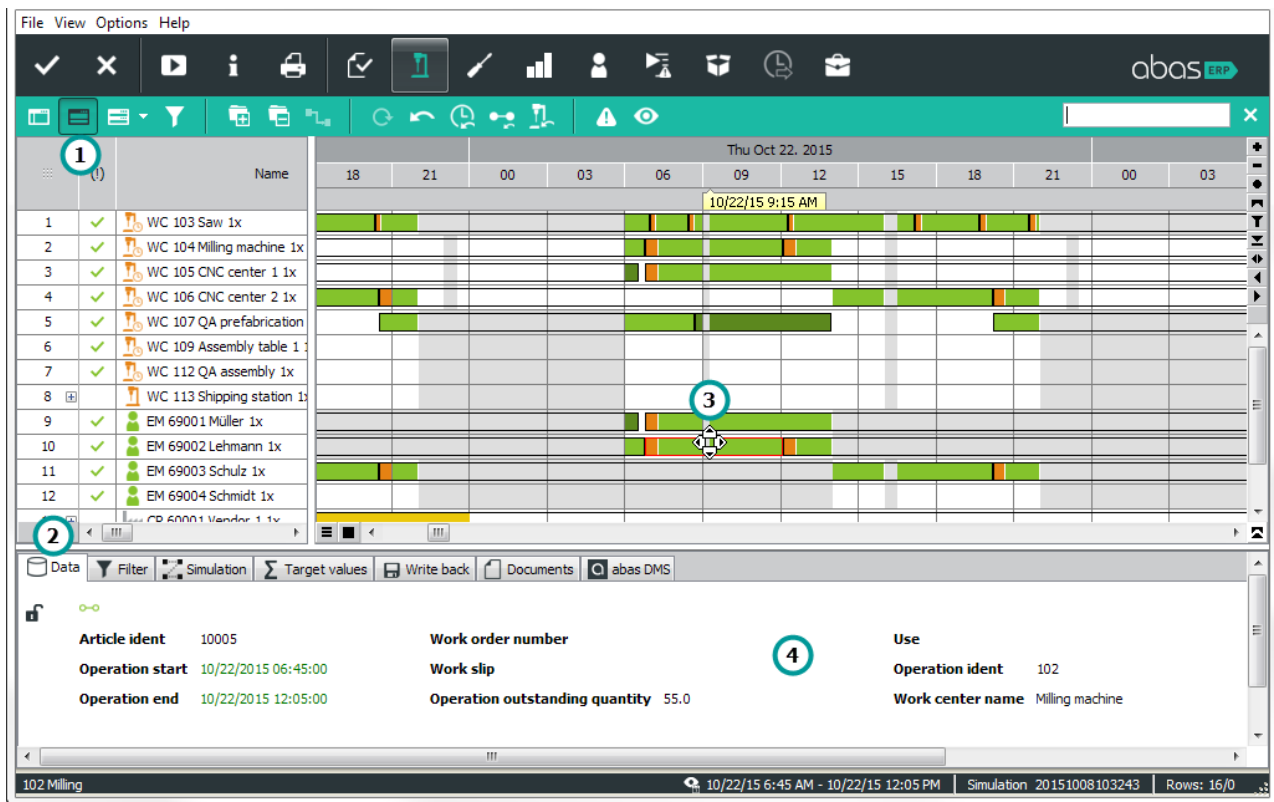
Assembly schedule

QA schedule

Bereit


3.8 DATA PANEL

APS for abas ERP displays the properties of planning objects that the mouse cursor moves over in a separate panel.



- 1 Lower panel enabled
- 2 Mouse position on planning object (operation)
- 3 Data flip
- 4 Properties of the planning object (operation)

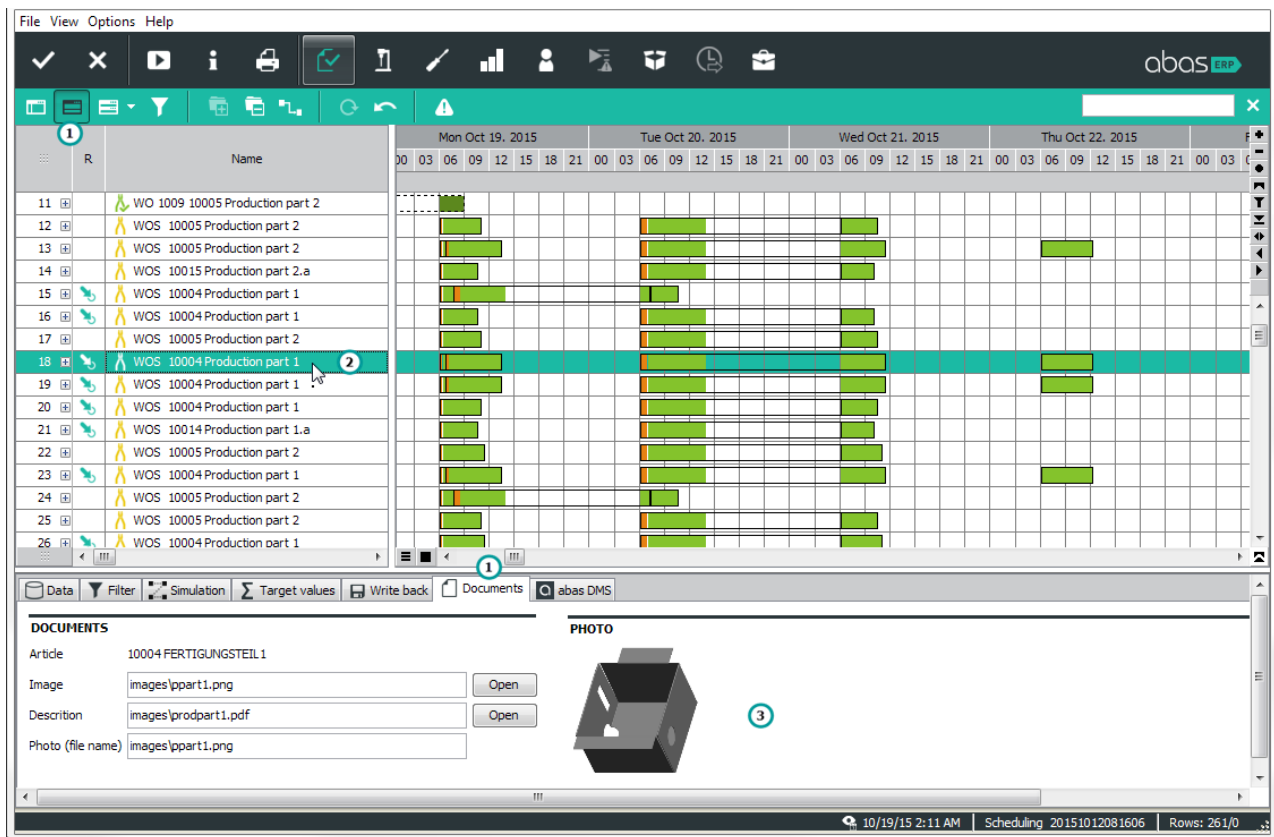
You can set which properties and descriptions are displayed in the data panel in the preferences.

If the  button is activated, the properties of the last planning object clicked are held in the data panel. These properties are displayed except when you move the mouse over another planning object.

Alternatively, you can switch on/off pop-up windows (Menu > View > Popups). The properties displayed in the pop-up windows cannot be changed.

3.9 DOCUMENTS

APS for abas ERP displays documents and pictures of planning objects.

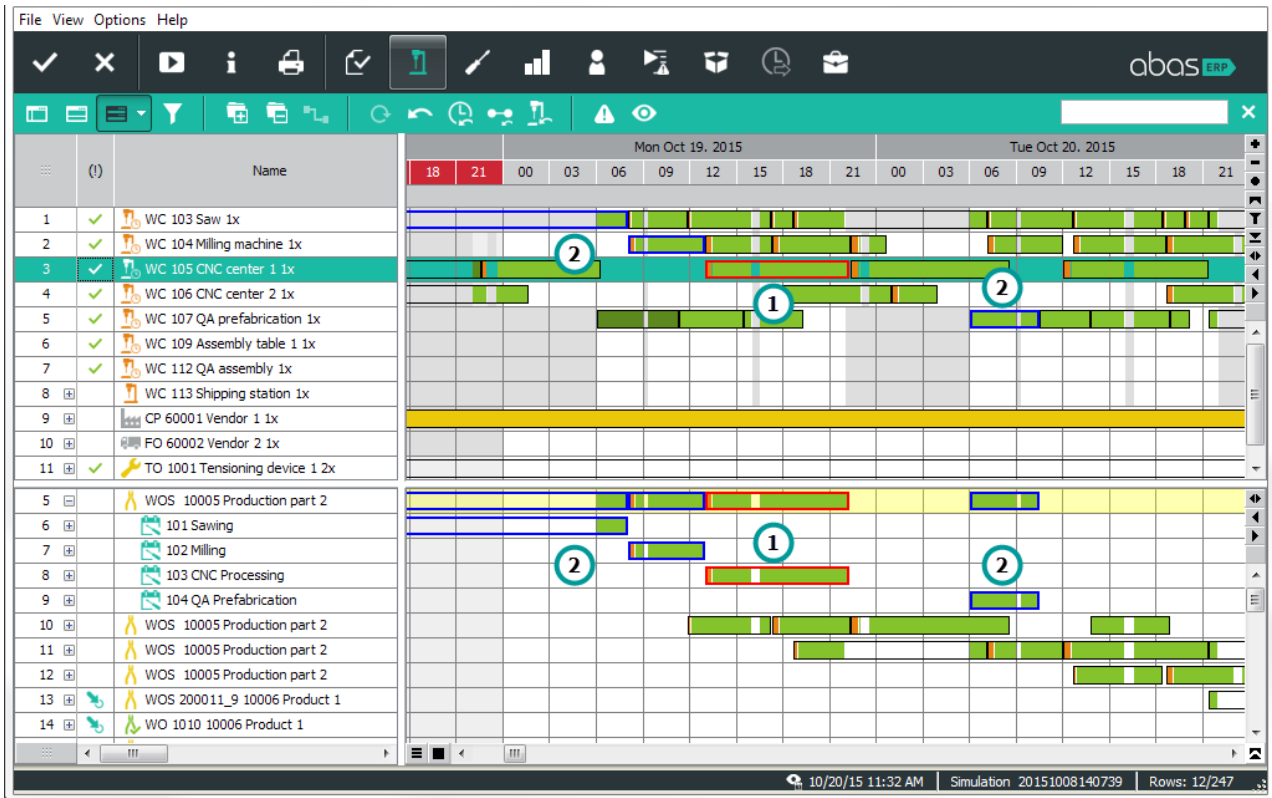


- 1 Enable document panel in the lower flip pane
- 2 Klick the mouse on a line of the table or bar of the chart
- 3 Documents and pictures are displayed

All documents and pictures come from the register *Documents* in product screen.

3.10 SPLIT SCREEN AND SELECTION MODE

If split screen and selection mode are activated, the table region and the chart region are separated horizontally into two parts, so that two views are displayed at the same time.

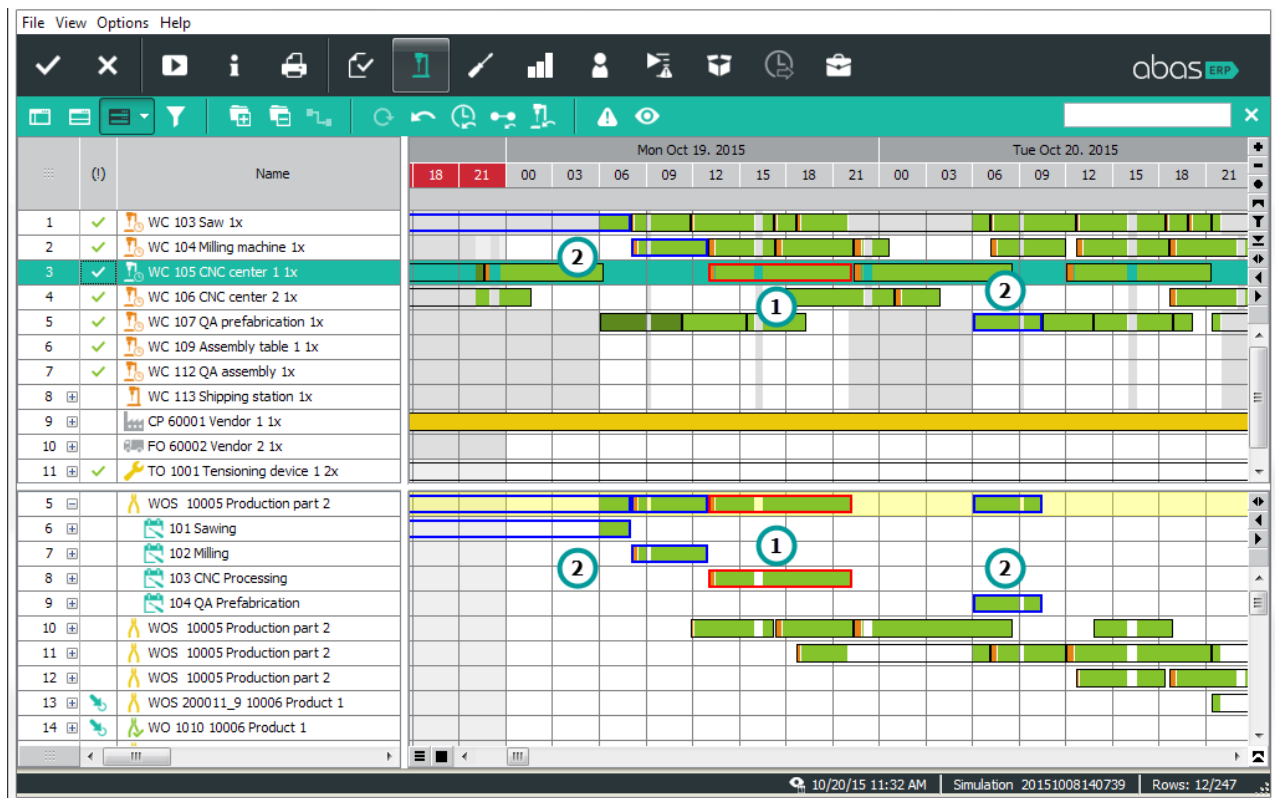


- 1 Split screen active
- 2 Resources view
- 3 Orders view

The upper (primary) section always displays the current view selected in the header panel. Which corresponding lower (secondary) view should be displayed can be chosen from the drop down menu of (1).

Default values: corresponding views in split screen	
Primary view	Corresponding view
Orders view	Resources view
Resources view	Orders view
Operations view	Orders view
Utilization view	Resources view
Staff view	Resources view
Bottlenecks view	Resources view
Materials view	Orders view
Project an service view	Resources view
Customers view	Orders view

If the split screen is turned on and you click on an operation in the primary view, then the selected operation will be highlighted with a red frame, and all the operations of the same production order will be highlighted with a blue frame. The secondary view will automatically scroll to display the corresponding operation if required.



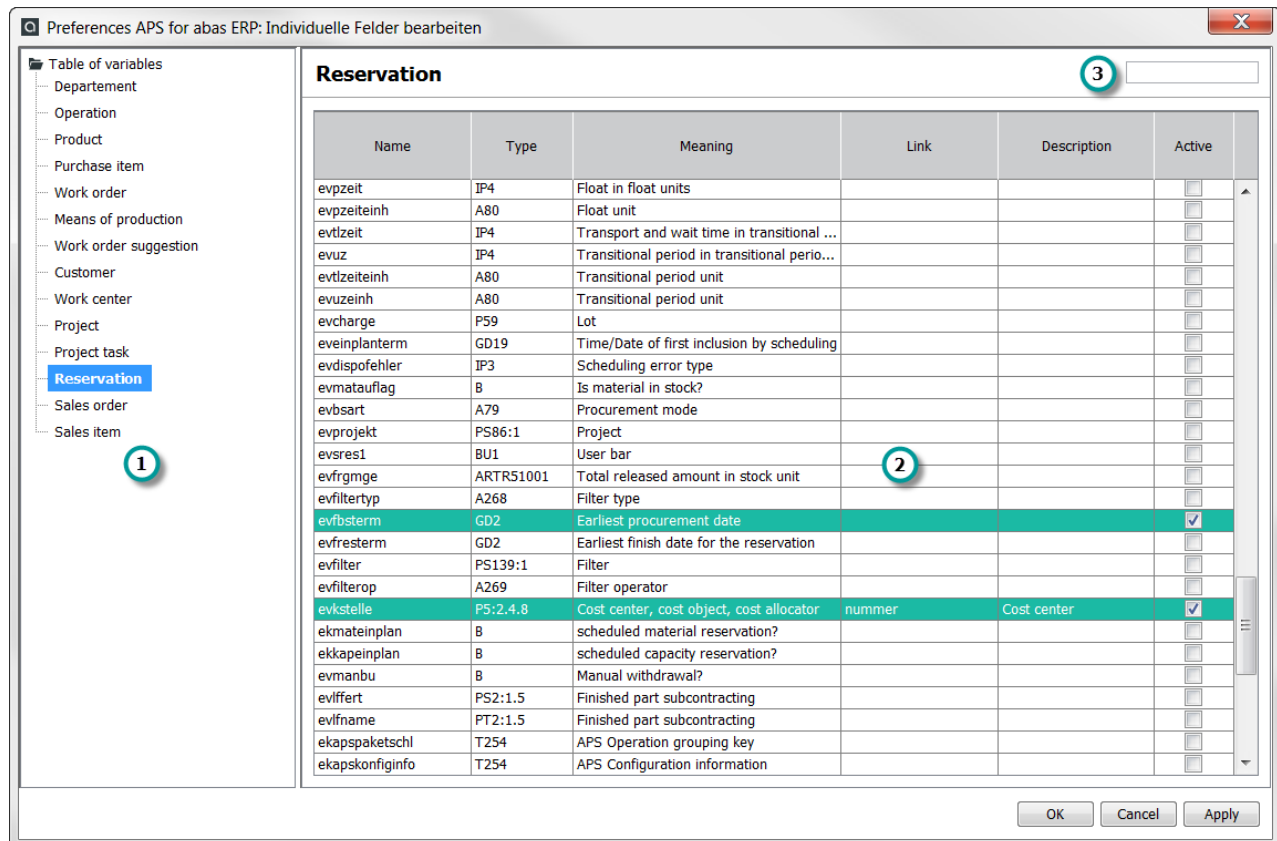
- 1 Selected operation
- 2 Other operations of the same order

Additionally, the data displayed in the secondary view will be limited, depending on the operation selected.

Examples	
1	The primary view is the orders view and the secondary view is the resources view. If an operation is selected, the secondary view shows only the resources that are either used in the selected operations (red and blue), or that are valid alternatives to these resources.
2	The primary view is the resources view and the corresponding view is the orders view. If an operation is selected, the corresponding view shows only the production orders that have at least one operation which uses the selected resource from the primary view.

3.11 CUSTOM FIELDS

By the use of custom fields, it is possible to integrate any objects from particular abas tables of variables in the Service Planner. Open the preferences (Menu > Options > Preferences > abas > Data Interface > Edit custom fields) to add or remove custom fields. The following Dialog box appears to manage the use of custom fields.



Preferences APS for abas ERP: Individuelle Felder bearbeiten

Reservation

Name	Type	Meaning	Link	Description	Active
evpzeit	IP4	Float in float units			<input type="checkbox"/>
evpzeiteinh	A80	Float unit			<input type="checkbox"/>
evtzeit	IP4	Transport and wait time in transitional ...			<input type="checkbox"/>
evuz	IP4	Transitional period in transitional perio...			<input type="checkbox"/>
evtzeiteinh	A80	Transitional period unit			<input type="checkbox"/>
evuzeinh	A80	Transitional period unit			<input type="checkbox"/>
evcharge	P59	Lot			<input type="checkbox"/>
eveinplanterm	GD19	Time/Date of first inclusion by scheduling			<input type="checkbox"/>
evdispofehler	IP3	Scheduling error type			<input type="checkbox"/>
evmatauftrag	8	Is material in stock?			<input type="checkbox"/>
evbsart	A79	Procurement mode			<input type="checkbox"/>
evprojekt	PS86:1	Project			<input type="checkbox"/>
evsres1	BU1	User bar			<input type="checkbox"/>
evfrgmge	ARTR51001	Total released amount in stock unit			<input type="checkbox"/>
evfiltertyp	A268	Filter type			<input type="checkbox"/>
evfbsterm	GD2	Earliest procurement date			<input checked="" type="checkbox"/>
evfresterm	GD2	Earliest finish date for the reservation			<input type="checkbox"/>
evfilter	PS139:1	Filter			<input type="checkbox"/>
evfilterop	A269	Filter operator			<input type="checkbox"/>
evkstelle	P5:2.4.8	Cost center, cost object, cost allocator	nummer	Cost center	<input checked="" type="checkbox"/>
ekmateinplan	8	scheduled material reservation?			<input type="checkbox"/>
ekkapeinplan	8	scheduled capacity reservation?			<input type="checkbox"/>
evmanbu	8	Manual withdrawal?			<input type="checkbox"/>
evlffert	PS2:1.5	Finished part subcontracting			<input type="checkbox"/>
evlfname	PT2:1.5	Finished part subcontracting			<input type="checkbox"/>
ekapspaketschl	T254	APS Operation grouping key			<input type="checkbox"/>
ekapskonfiginfo	T254	APS Configuration information			<input type="checkbox"/>

OK Cancel Apply

1. Choose a table of variables from the list.
2. Manage the fields from the corresponding table of variables.
3. Quick search for the table content.



Functions in the table	
Name	Variable name of the field
Type	Variable type of the field
Meaning	Variable meaning of the field.
Link	If the variable type is a reference type, the user can link to a subfield of the referenced table of variables by entering its variable name.
Description	You can enter a variable description in this column. If the description is empty, APS for abas ERP uses the variable meaning.
Active	APS for abas ERP provides the corresponding field, if the checkmark is activated.

Any changes take effect after re-loading the data into the application. Several functions are available for any activated custom field. Depending on their table of variables, they are used in certain views.

- The field can be added to the table region.
- The field can be mounted in the data panel.
- You can use the field in the bar labeling.
- A filter criterion is generated automatically, so that you can use the field in your custom filters and the field contents get indexed in the quick search.
- The field is available in the reports.

The use of custom fields is available only in the *Basic* and *Advanced* edition of APS for abas ERP. If you want to use custom fields in *Professional*, please contact your supporting abas partner.

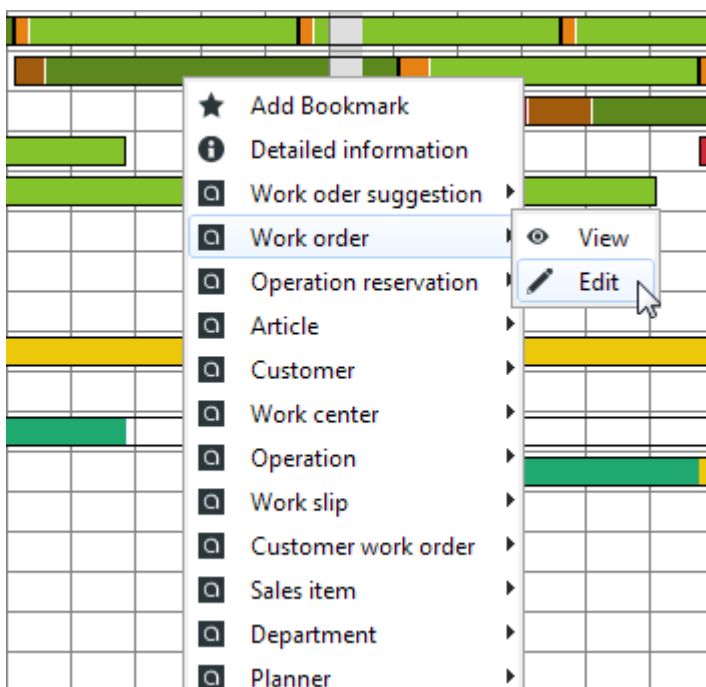
4 WORKING WITH THE PLANNING OBJECTS

This chapter explains how to:


- Access the abas screens
- Shift operations
- Assign notes
- Modify priorities
- Perform a simulation of your production process
- Release work order suggestions
- Write changes back to abas

4.1 ACCESSING ABAS SCREENS

The context menu (RMB) in the table region and the chart region contains functions for accessing information on objects and their dependencies.




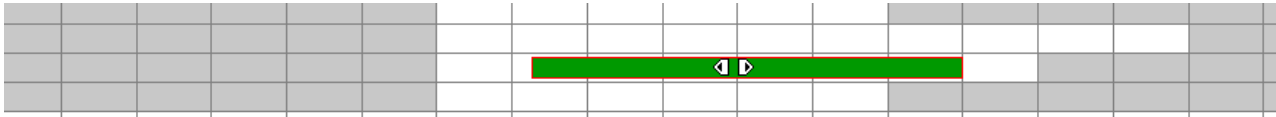
This means you can open these abas objects directly in view or edit mode.

Some data changes in abas require you to reload the data set. This can be done by clicking the  button in the header panel of the application (not in *Professional*). The data is not automatically reloaded.

4.2 MOVE OPERATIONS HORIZONTALLY

Operations can be shifted horizontally (i.e. chronologically) via Drag&Drop in the chart region. To do so, move the

mouse cursor above the operation. The mouse cursor will change to  .



The behavior to fit in movements can be activated in the preferences. If it is activated and an operation is moved to a position where another operation already exists, the moved operation will automatically be shifted to the end of the existing operation.


Interactions

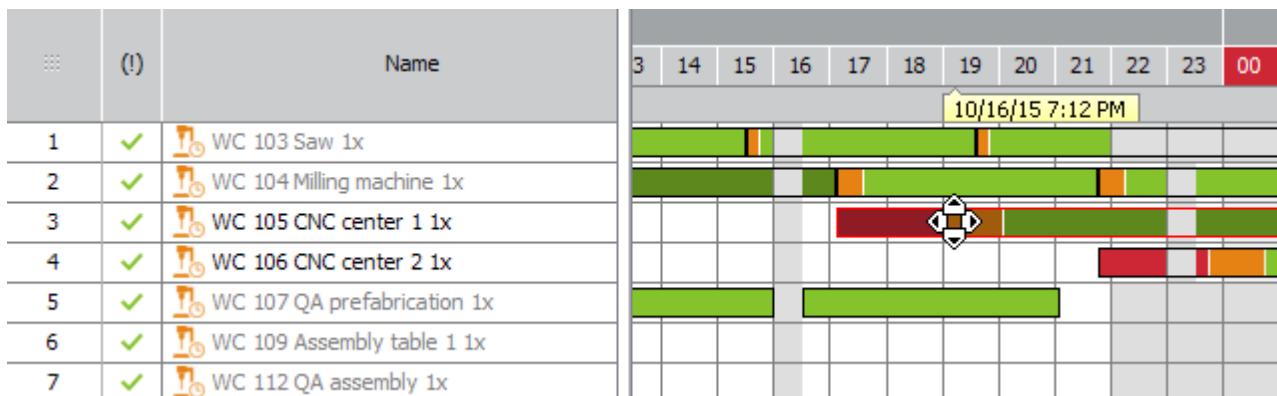
Consider material supply date	yes
Fit in movements	yes
Fit in unscheduled resources too	no
Move complete batches (e.g. in bake processes)	no

Subsequent simulations will consider the movement of an operation. They will try to place the moved operation at the target date without blocking other operations.

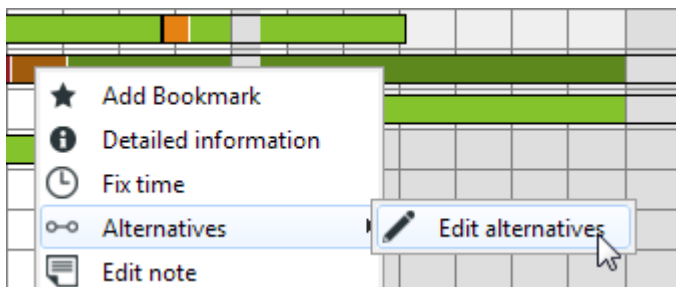
4.3 MOVE OPERATIONS VERTICALLY

Operations can be moved vertically (i.e. to other resources) via Drag&Drop in the chart region. To do so, activate the

resources view and move the mouse position above the operation. The mouse cursor will change to  if vertical movement for the operation is allowed, i.e. alternative resources exist.



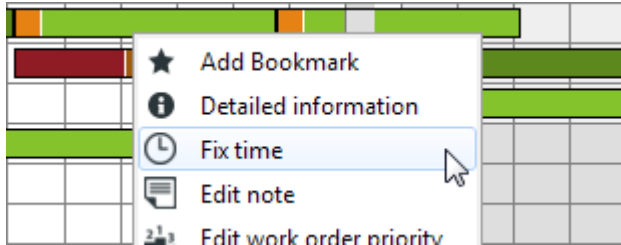
While the mouse button is depressed, all invalid resources for the drag operation are colored grey in the table region. Another way of assigning another resource to an operation is the alternatives editor. You can open it from the context menu of the operation.



The alternatives editor is a separate window, in which all valid resources can be reassigned. Subsequent simulations will take the movement of an operation into account. They will book the resource that the operation was moved to.

4.4 FIXING OPERATION TIMES

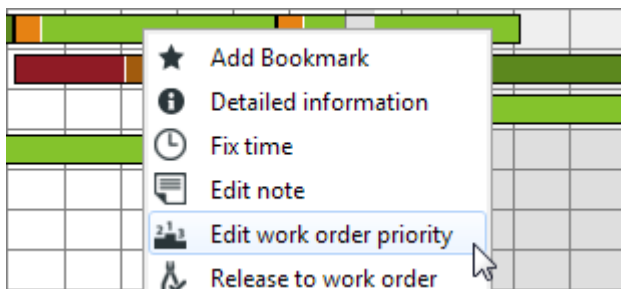
Operation times can be fixed from the context menu in the chart region (only in *Professional*).



The chart bars of fixed operations are drawn hatched. Subsequent simulations will consider fixed operations. They will place the moved operation to the target date, even if this means that other operations are blocked. We therefore recommend moving an operation to the desired date. Fixing an operation should be the exception.

4.5 EDIT NOTES/PRIORITIES

APS for abas ERP lets you save notes and priorities for work orders, work order suggestions and their operations (only in *Professional*). You can access these from the respective context menu.



Changes in work order priorities can influence subsequent simulations. Notes can be added freely and have no other effect.

4.6 SIMULATION

APS for abas ERP provides an integrated simulation system (only in *Advanced/Professional*). It lets you perform automatic planning for limited capacities. The simulation panel provides different options depending on the simulation horizon and priority rules.

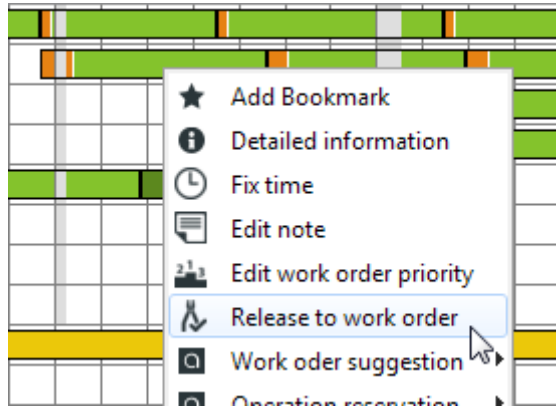
1. Enable simulation panel
2. Simulation panel
3. Start of a simulation run

When a simulation is started, there is no automatic synchronizing with the abas database. If abas data has been changed (e.g. by a new sales order), the data in APS for abas ERP must be updated manually, unless the changes are performed in APS for abas ERP itself, such as manual movement of operations.

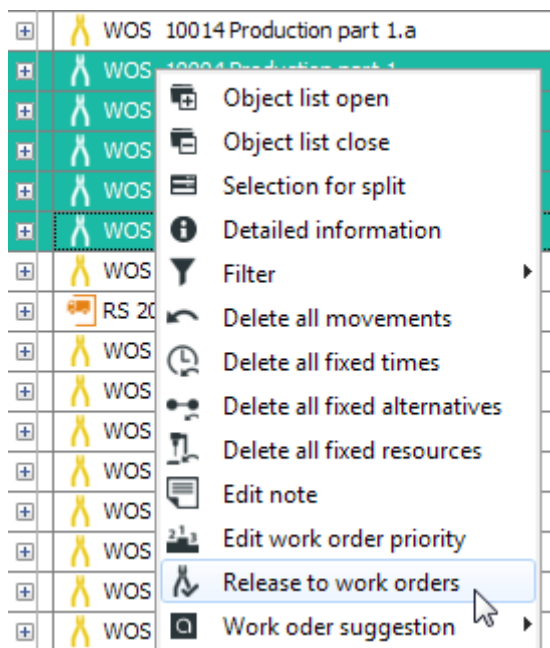
4.7 RELEASE WORK ORDER SUGGESTIONS

You can release work order suggestions to work orders. APS for abas ERP provides the following functions for this purpose:

- 1 Release an individual work order suggestion via the operation context menu

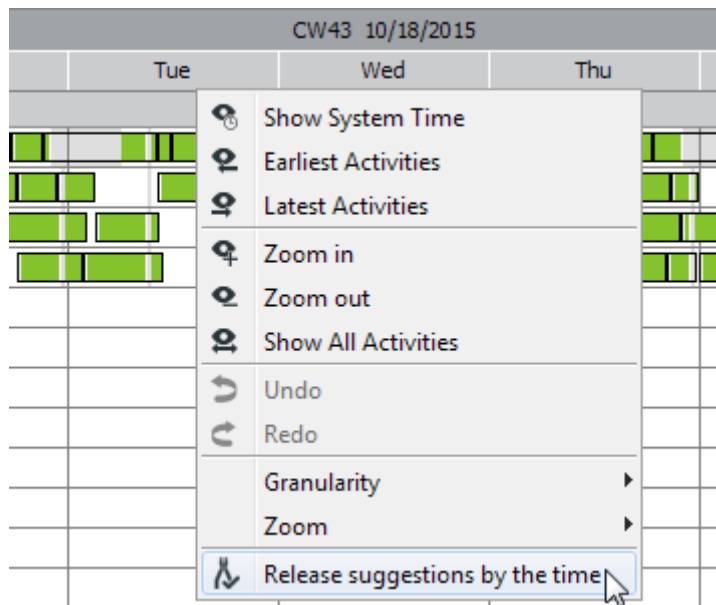


- 2 Select one or more rows in the table to release them via the context menu.



This function is available in the orders view, the operations view (expanded to operations), the customers view (expanded to sales items) and the "work order releases" section in the [critical processes view](#) (see page 57).

- 3 Release work order suggestions from the dateline context menu.



All work order suggestions currently displayed, with at least one operation that has a planned start date before the date selected, will be released. This means you can narrow the selection of work order suggestions using filters, e.g. for a specific machine or specific product.

This function is available in the orders view, the resources view and the operations view.

Selecting the release function opens an abas window. The work order suggestions selected for release are entered in the table. Confirm the release by clicking the release button.

Production center [sim@sim2016r2n00dev]

File Edit Execute Table Command Window Info Help

Selection using fields Selection using selection bar

Work order Product Department Warehouse group INTLGRUPPE Planner Start date from - to - Finish date from - to -

Work orders, Work order suggestions Capacity, Availability Legend

WORK ORDERS Only work orders ☐ Only fixed processes ☐ Only critical processes ☐ Details ☐

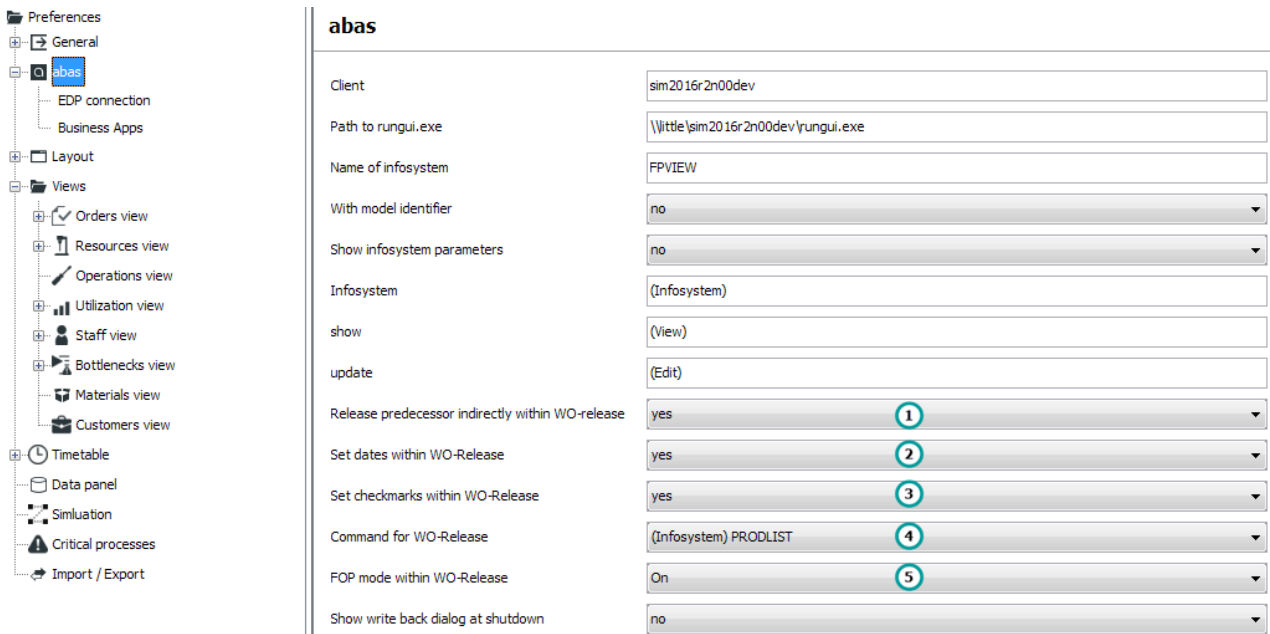
WORK ORDER SUGGESTIONS Only work order suggestions ☐ With release code ☐ Tolerance Calendar days

Work order release

	+/-	R	R	C	M	E	pr	PC	Wor Wor	rin	witt	Status	Product	Product descript	Use	Dep	Qua	Rel	Com avail in w	MatBN	Com avail thro	Unit	Start date	Finish date
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		FERTIGUNGSTEIL2	Production part 2			40	40	0		40	Stück	19.10.2015	20.10.2015
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		FERTIGUNGSTEIL2	Production part 2			50	50	0		50	Stück	19.10.2015	20.10.2015
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		FERTIGUNGSTEIL2	Production part 2			40	40	0		40	Stück	19.10.2015	20.10.2015
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		FERTIGUNGSTEIL2	Production part 2			55	55	0		55	Stück	19.10.2015	21.10.2015
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		FERTIGUNGSTEIL2	Production part 2			15	15	0		15	Stück	20.10.2015	21.10.2015

5 Lines | sim | sim2016r2n00dev | 25

The behavior of the release of work order suggestions can be defined in the preferences
(Menu > Options > Preferences > abas):



abas	
Client	sim2016r2n00dev
Path to rungui.exe	\\little\sim2016r2n00dev\rungui.exe
Name of infosystem	FPVIEW
With model identifier	no
Show infosystem parameters	no
Infosystem	(Infosystem)
show	(View)
update	(Edit)
Release predecessor indirectly within WO-release	yes 1
Set dates within WO-Release	yes 2
Set checkmarks within WO-Release	yes 3
Command for WO-Release	((Infosystem) PRODLIST 4
FOP mode within WO-Release	On 5
Show write back dialog at shutdown	no

1. *Release predecessor indirectly within WO-Release.*

If you are working with a parts list structure, and the work order suggestion for release has preceding work order suggestions, they will be included in the release.

2. *Set dates within WO-Release.*

The abas start and end dates of the work order suggestion for release are updated from APS for abas ERP (start date: planned start date of the first operation, end date: planned end date of the last operation), and the operation dates entered in the order parts list.

3. *Set checkmarks within WO-Release.*

Activates the release checkbox (mfreig) automatically before the abas window opens. Otherwise the selection must be made manually.

4. *Command for WO-Release.*

You can decide whether you use the infosystem PRODLIST or the screen "Work order suggestions" when releasing.

5. *FOP mode within WO-Release*

The FOP mode is activated/deactivated for all steps, which are performed in background tasks (setting dates / setting checkmarks).



4.8 WRITE BACK TO ABAS

4.8.1 PARAMETERS

In order for your changes to take effect in following simulations, they must be written back to parameters in abas. This function is only available in the *Professional* edition, and must be activated in the preferences (Menu > Options > Preferences > abas > EDP connection).

EDP connection

Determine connection automatically ☒ On ☐ Off ➡ Connected

Automation is only suitable for abas Version 2012r4n07 or higher!

EDP - Password

EDP - Server

EDP - Client

EDP - Port

Share name

Client name

DDE server name

WRITE BACK TO ABAS

	1	2	3	4
Parameters				
Alternatives (Resource link)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Extra times (Available capacity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Movements (Reservation)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fixations (Reservation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priorities (Work order suggestion)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Notes (Word order suggestion/Reservation)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Data

Production plan ☒

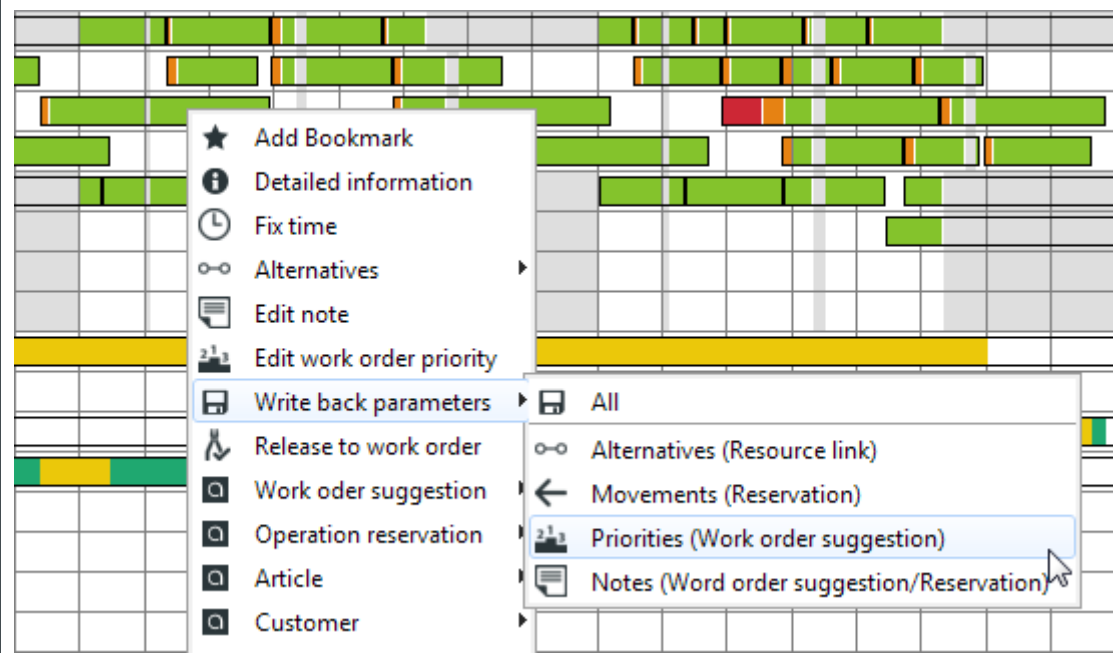
Delivery dates ☒

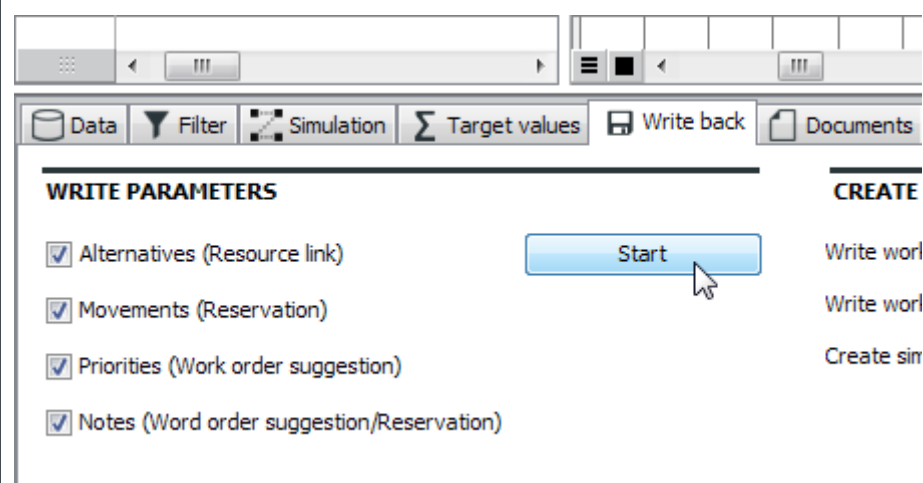
1. Write back activated
2. Immediate write back
3. FOP mode
4. Database/group (for additional files)

Only checked actions are written back. If the parameters are written in additional files, you have to specify the database and group numbers ().

If "Immediate write back" is enabled (), all changes will be automatically written back directly after they are performed. In this case, you do not need to trigger the write back. The FOP mode can be activated/deactivated for each action ().

If "Immediate write back" is disabled, there are various options for triggering the write back:

- 1 For each element in the context menu of the object that was changed.
 

Only parameters from this object will be written back.
- 2 In the "Write back" tab in the lower panel.
 
- 3 When you close the application. This function must be enabled in the preferences (Menu > Options > Preferences > abas).

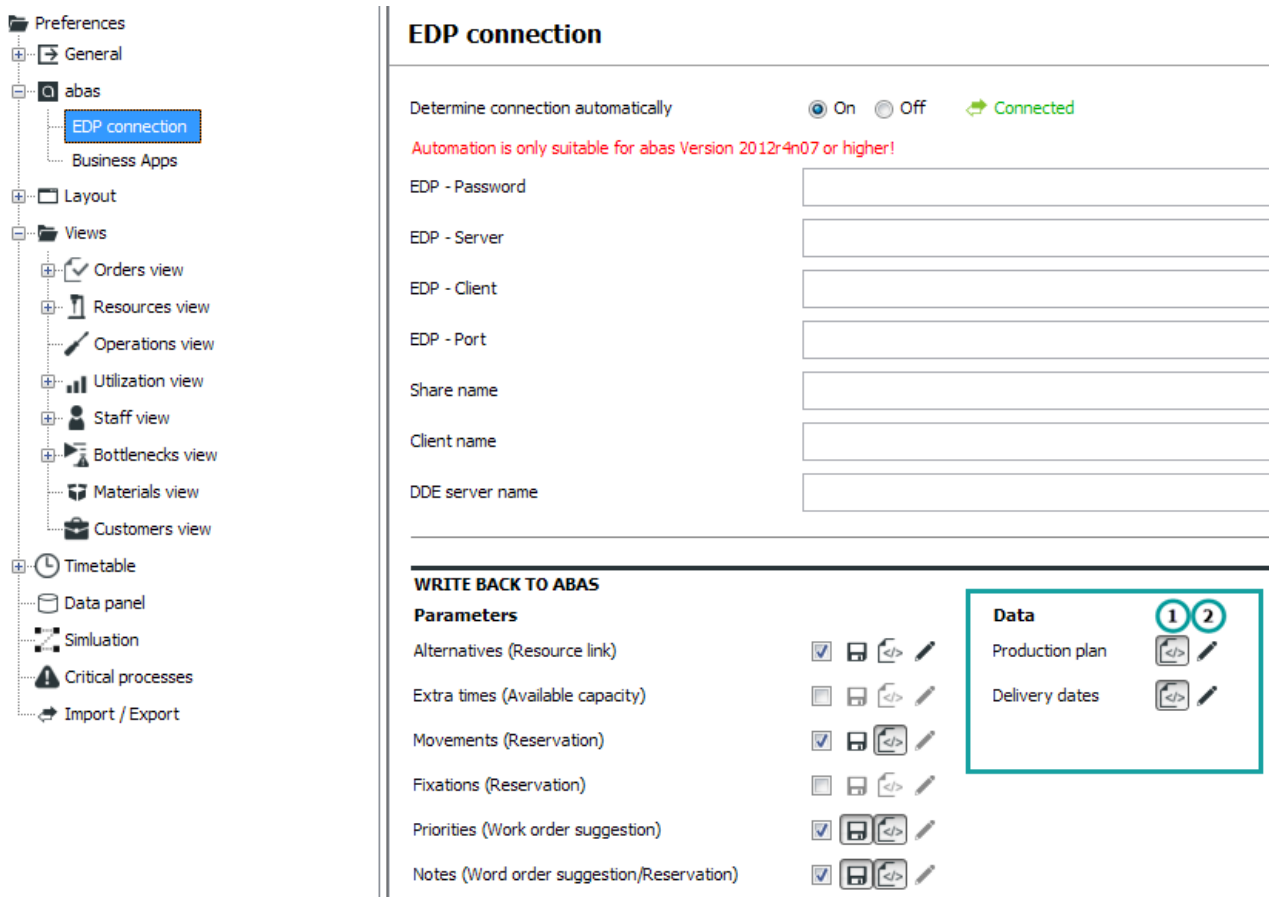


Write back actions	
Alternatives Additional file	<p>The alternatives are written back to the "ResAlternativen" additional file, "ResLokal" group (standard: V-72-01).</p> <p>You can move operations to other resources (see page 43) or directly assign the preferred resources by the editor of alternatives.</p> <p>This preference must be written back by this action if further simulations should consider your demands. If the additional file is installed in a different table of variables, you can change the default settings in the parameters.</p>
Capacity increase/decrease Available capacity	<p>The capacity increase/decrease is written back to the available capacity in the respective work center (V-137-02). Enter additional availability or down times via the work center context menu in the table region of the resources view. These changes are saved permanently in abas after they are written back.</p>
Movements Reservation	<p>Operation movements (see page 42) are written back to the yfeintxt field in the corresponding reservation (V-04-04).</p> <p>If you delete a movement, the write back action is triggered.</p>
Fixations Reservation	<p>Fixed operations (see page 44) are written back to the yfeintxt field in the corresponding reservation (V-04-04).</p> <p>If you delete a fixing, the write back action is triggered.</p>
Priorities Work order suggestion	<p>Changes in order priorities (see page 44) are written back to the fprio field in the corresponding work order suggestion (V-04-05).</p>
Notes Work order suggestion Reservation	<p>Changes to notes (see page 44) are written back to the ysimnotiz field in the corresponding work order suggestion (V-04-05) or reservation (V-04-04).</p>

4.8.2 DATA

Writing the data back to abas saves the planning results. There are two scenarios to choose from:

1. Create a production plan for operating current production
2. Writing back delivery dates to inform other business units (i.e. sales).



The screenshot displays the 'EDP connection' settings in the APS for ABAS ERP. On the left, a sidebar shows the 'Preferences' menu with 'General', 'abas', and 'Business Apps' (where 'EDP connection' is highlighted). The main panel is titled 'EDP connection' and includes a status indicator 'Connected' and a warning: 'Automation is only suitable for abas Version 2012r4n07 or higher!'. Below this, several fields are listed for configuration: EDP - Password, EDP - Server, EDP - Client, EDP - Port, Share name, Client name, and DDE server name. A section titled 'WRITE BACK TO ABAS' contains a table of parameters with checkboxes and icons for enabling/disabling and editing. A callout box labeled 'Data' highlights the 'Production plan' and 'Delivery dates' rows, with circled numbers 1 and 2 indicating the specific actions to be taken.

WRITE BACK TO ABAS	
Parameters	
Alternatives (Resource link)	<input checked="" type="checkbox"/>
Extra times (Available capacity)	<input type="checkbox"/>
Movements (Reservation)	<input checked="" type="checkbox"/>
Fixations (Reservation)	<input type="checkbox"/>
Priorities (Work order suggestion)	<input checked="" type="checkbox"/>
Notes (Word order suggestion/Reservation)	<input checked="" type="checkbox"/>

Data	
Production plan	1 2
Delivery dates	

1. Activate/deactivate FOP mode
2. Edit files

You can change which abas fields are written back in the preferences. Separate multiple entries for each category by a comma. APS for abas ERP is delivered with predefined write back fields.

Production plan – Edit fields

Production plan: Edit fields

OPERATION/WORK ORDER SUGGESTION		SIMULATION MODEL	SALES ITEM		
Operation start	yfpstart	Work order start	yfpstart	Operations	End date
Operation end	yfpend	Work order end	yfpend	Orders	
Work center	yfpmgr	Fix dates	<input type="checkbox"/>	1	
Setup time		Fix process	<input type="checkbox"/>		
Unit time					

1. Database/group

■ Operation/Work order suggestion

Operation start and end, work center, setup time and unit time are written in the respective operation reservation (V-04-04). Work order start (start of the first operation) and work order end (end of the last operation) are written in the respective work order suggestion (V-04-05), subcontracting suggestion (V-04-02) or relocation suggestion (V-04-02). If a work order suggestion has already been released to a work order, and completion confirmations exist, the write back skips the work order start. You can define whether the fields "Fix dates" (fixterm field in the work order suggestion) and "Fix process" (fix field in the work order suggestion) are set to true or not.

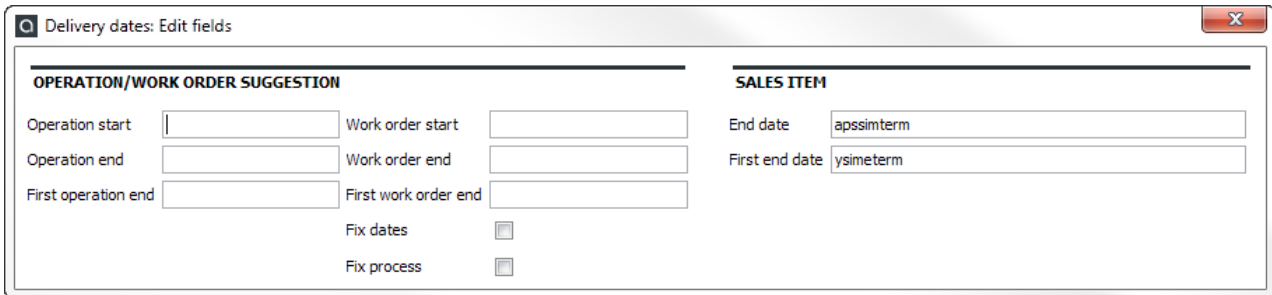
■ Simulation model (only in *Professional*)

The write back to the simulation model is saved in the "Feinplanung" additional file, "Modell" group (for operations, standard: V-71-01) or "ModellTermine" group (for orders, standard: V-71-02). If a database entry for the current dataset already exists, it will be updated, otherwise a new entry is generated. The fields that are written back are fixed and cannot be changed here.

■ Sales item

The entries from end date write abas fields in the sales items (V-03-02) with the planned end date of the latest requirement (primary demand).

Delivery dates – Edit fields



OPERATION/WORK ORDER SUGGESTION			SALES ITEM	
Operation start	<input type="text"/>	Work order start	<input type="text"/>	End date
Operation end	<input type="text"/>	Work order end	<input type="text"/>	First end date
First operation end	<input type="text"/>	First work order end	<input type="text"/>	
Fix dates			<input type="checkbox"/>	
Fix process			<input type="checkbox"/>	

■ Operation/Work order suggestion

Operation start, operation end and first operation end are written in the respective operation reservation (V-04-04). Work order start (start of the first operation), work order end (end of the last operation) and first work order end are written in the respective work order suggestion (V-04-05). If a work order suggestion has already been released to a work order and completion confirmations exist, the write back skips the work order start.

You can define whether the "Fix dates" fields (fixterm field in the work order suggestion)

and "Fix process" (fix field in the work order suggestion) are set to true or not.

First operation end and first work order end are written back only if the target fields are empty.

■ Sales item

The entries from end date and first end date write abas fields in the sales items (V-03-02) with the planned end date of the latest requirement (primary demand).

First end date is written back only if the target field is empty.



The creation of a production plan and the write back of delivery dates can be started from the lower panel.

The screenshot shows the abas DMS software interface. At the top, there is a menu bar with options: Data, Filter, Simulation, Target values, Write back, Documents, and abas DMS. Below the menu bar, there are two main panels. The left panel is titled 'CREATE PRODUCTION PLAN' and contains several checkboxes and dropdown menus. The right panel is titled 'WRITE DELIVERY DATES' and contains a single 'Start' button. The 'CREATE PRODUCTION PLAN' panel has the following options: 'Write work orders' (checked), 'Write subcontractings' (checked), 'Horizon (days)' (set to 'All'), 'Write work order suggestions' (checked), 'Write relocations' (checked), 'Create simulation model' (unchecked), 'Activate production plan' (unchecked), and 'Plan valid until' (set to '+2'). There is a 'Start' button next to the 'Horizon (days)' dropdown.

When you create a production plan, you can limit the data using the selection criteria. The selection criteria do not affect the write back to sales items.

1. Order types:
Limit the data to specific order types (work orders, work order suggestions, subcontracting suggestions, relocation suggestions).
2. Horizon:
Limit the data to a defined horizon. Only the orders and operations with at least one operation planned within the horizon are written back. If the value is set to an integer value, the horizon is rounded up to the following date limit.
3. Create simulation model (only in *Professional*):
Activate or deactivate the creation of a simulation model (additional file).
4. Activate production plan / validity (only in *Professional*):
Define, whether the created simulation model should be declared as a production plan or not, and which validity the production plan should have.

You can configure a dialog box to appear when you close the application, with the selection criteria for writing back the production plan and delivery dates.


This function must be enabled in the preferences (Menu > Options > Preferences > abas).

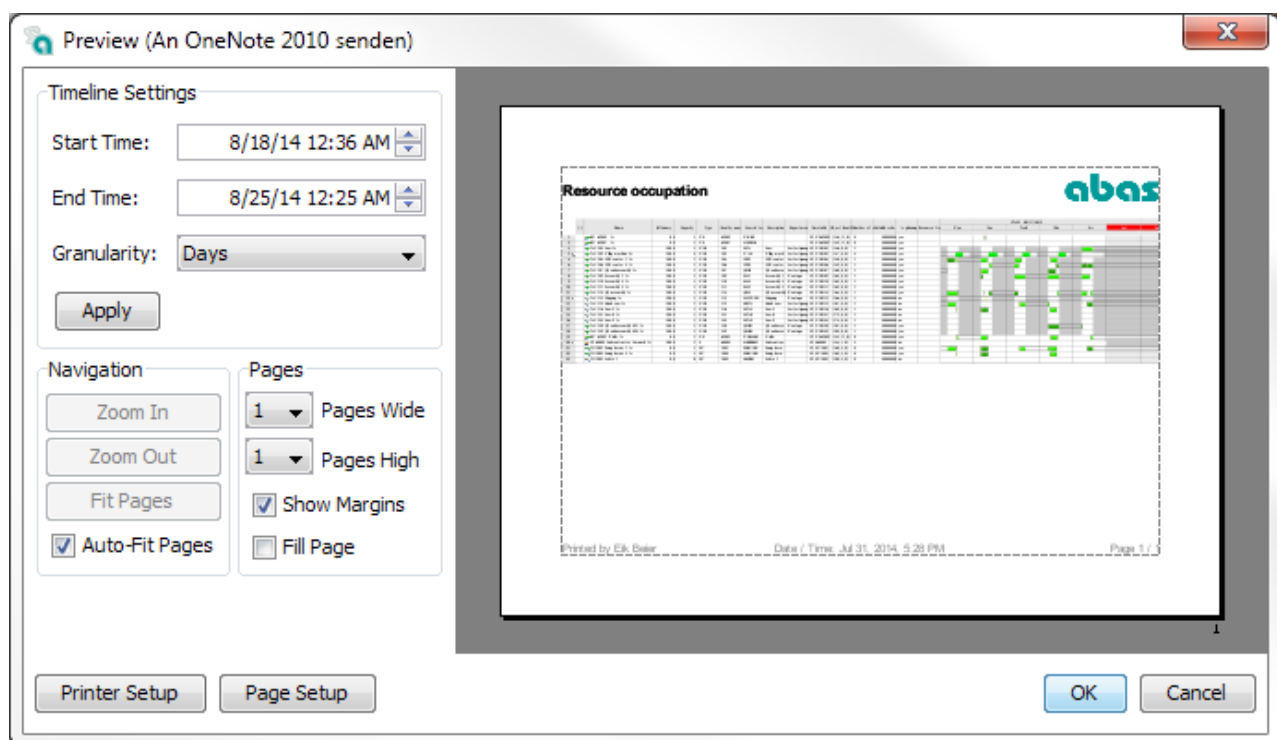
5 OTHER USEFUL FUNCTIONS

This chapter explains how to:

- Print the current view
- Identify critical processes
- Access Business Apps
- Connect infosystems

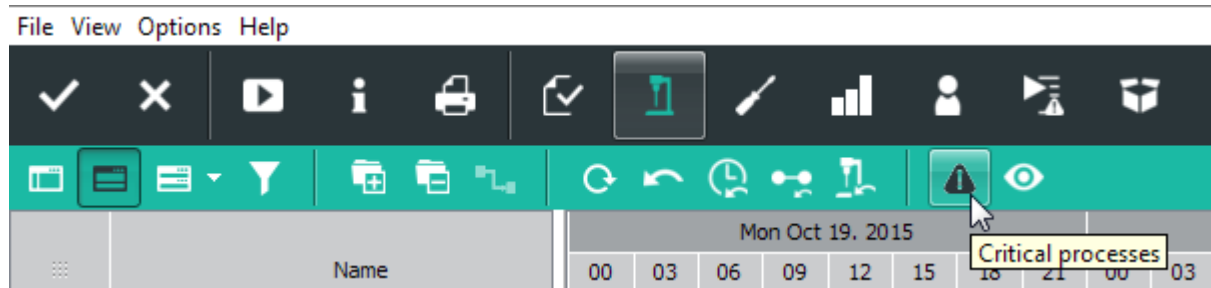
5.1 PRINTING



In order to print the Gantt chart, click the  button in the header panel. You can change a variety of settings in the following dialog box.



5.2 CRITICAL PROCESSES

Click the "Critical processes" button in the actions toolbar to open the critical processes window. This window provides an overview of production orders, purchases and machine states that are classified as critical (only in *Advanced* /*Professional*).



Sections, in which all planning objects are classified as non-critical, are marked with . A section is marked with , if there is at least one planning object in it with a critical status.

Critical processes











Production orders

Customer orders

Purchase orders

Release of purchases

Release of orders

	Name	Overall qua...	Start	End	Finish date	Buffer
1	 WOS 10004 Production part 1	50.0	10/09/2015	10/13/2015	10/21/2015	15:49:55
2	 WOS 10004 Production part 1	55.0	10/16/2015	10/19/2015	10/28/2015	7 07:24:55
3	 WOS 10015 Production part 2.a	50.0	10/16/2015	10/20/2015	10/20/2015	7 18:14:55
4	 WOS 10005 Production part 2	40.0	10/19/2015	10/20/2015	10/20/2015	10 06:39:55
5	 WOS 10005 Production part 2	50.0	10/19/2015	10/20/2015	10/20/2015	10 10:29:55
6	 WOS 10005 Production part 2	40.0	10/19/2015	10/20/2015	10/19/2015	10 15:24:55
7	 WOS 10005 Production part 2	55.0	10/19/2015	10/21/2015	10/21/2015	10 18:59:55
8	 WOS 10005 Production part 2	15.0	10/20/2015	10/21/2015	10/19/2015	11 08:04:55
9	 WOS 10005 Production part 2	50.0	10/20/2015	10/21/2015	10/20/2015	11 09:34:55
10	 WOS 10005 Production part 2	60.0	10/20/2015	10/21/2015	10/21/2015	11 13:59:55

Utilization

Bottlenecks

57 of 68

This document is protected by copyright. Reproduction and distribution prohibited.

You can expand every section to get detailed information on the planning objects and their classification as non-critical /critical. The following sections are available:

- **Work orders:**

This section lists work orders and work order suggestions in descending order by their delays. The reference date that the planned production completion is compared to, can be changed in the preferences section of the orders view.

- **Customer orders:**

This section lists sales items sorted in descending order by their delays. The reference date that the planned production completion is compared to, can be changed in the preferences section of the customers view.

- **Purchase orders:**

This section lists purchase order items sorted in descending order by their delays. The delay of an item is the difference between the current system time and the delivery date of the item. If the delivery date is in the past, the delay is positive and thus the purchase item is late. The section only lists purchase orders that are linked to an operation in the current dataset.

- **Purchase releases:**

This section lists purchase order suggestions, for release as purchase orders, sorted in ascending order by their buffer. The buffer is the difference between

- the start date from scheduling and current system time, if the parameter "Buffer according to demand date" is set to "no" in the preferences section.
- the demand date minus delivery time and current system time, if the parameter "Buffer according to demand date" is set to "yes" in the preferences section. The demand date is the planned start date of the earliest operation for which the purchase order suggestion is required.

The section only lists purchase order suggestions, that are linked to an operation in the current dataset.

- **Work order releases:**

This section lists work order suggestions for release as work orders, sorted in ascending order by their buffer. The buffer is the difference between planned production start and current system time.

- **Utilizations:**

This section lists work centers, sorted in descending order by the overall duration, in which a threshold in the utilization rate is exceeded.

- **Bottlenecks:**

This section lists work centers, sorted in descending order by the overall duration, in which a threshold in the bottleneck ratio is exceeded, i.e. the number of work orders waiting for processing is higher than the threshold.



An expanded section lists the corresponding planning object in descending order by their level of importance. Each section can be customized in the preferences. You can change the number of objects listed or hide a section completely. The user can change the thresholds which define the classification as non-critical/critical.

Preferences

General

abas

Layout

Views

Orders view

Resources view

Operations view

Utilization view

Staff view

Bottlenecks view

Materials view

Customers view

Timetable

Data panel

Simulation

Critical processes

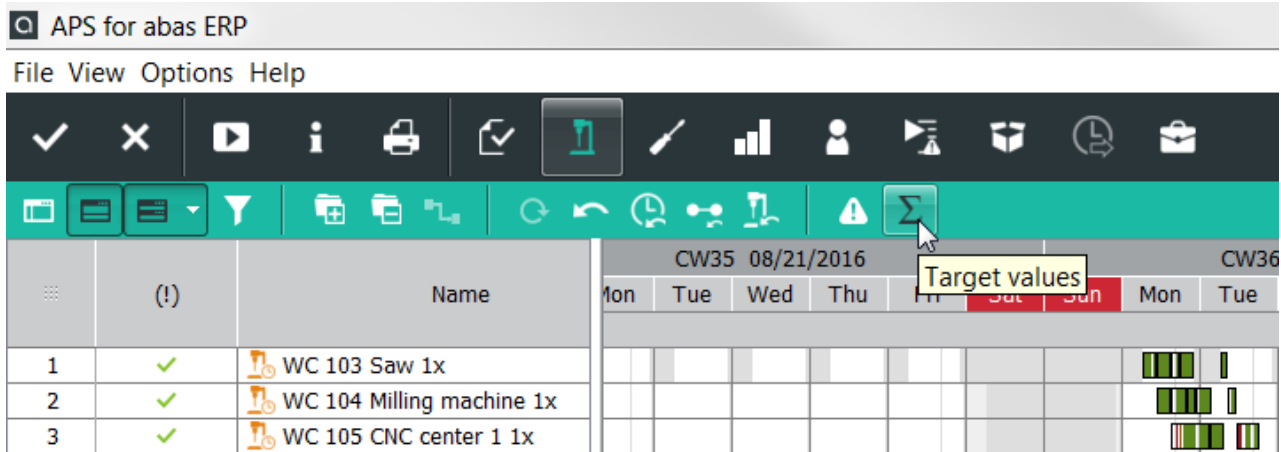
Import / Export

Critical processes

Production orders	<input checked="" type="radio"/> On <input type="radio"/> Off
only work orders	<div>yes</div>
Count of displayed objects	<div>10</div>
Critical if lateness greater than (days)	<div>3</div>
Customer orders	<input checked="" type="radio"/> On <input type="radio"/> Off
Count of displayed objects	<div>10</div>
Critical if lateness greater than (days)	<div>53</div>
Purchase orders	<input checked="" type="radio"/> On <input type="radio"/> Off
Count of displayed objects	<div>10</div>
Critical if lateness greater than (days)	<div>10</div>
Release of purchases	<input checked="" type="radio"/> On <input type="radio"/> Off
Show demand date	<div>no</div>
Buffer according demand date	<div>no</div>

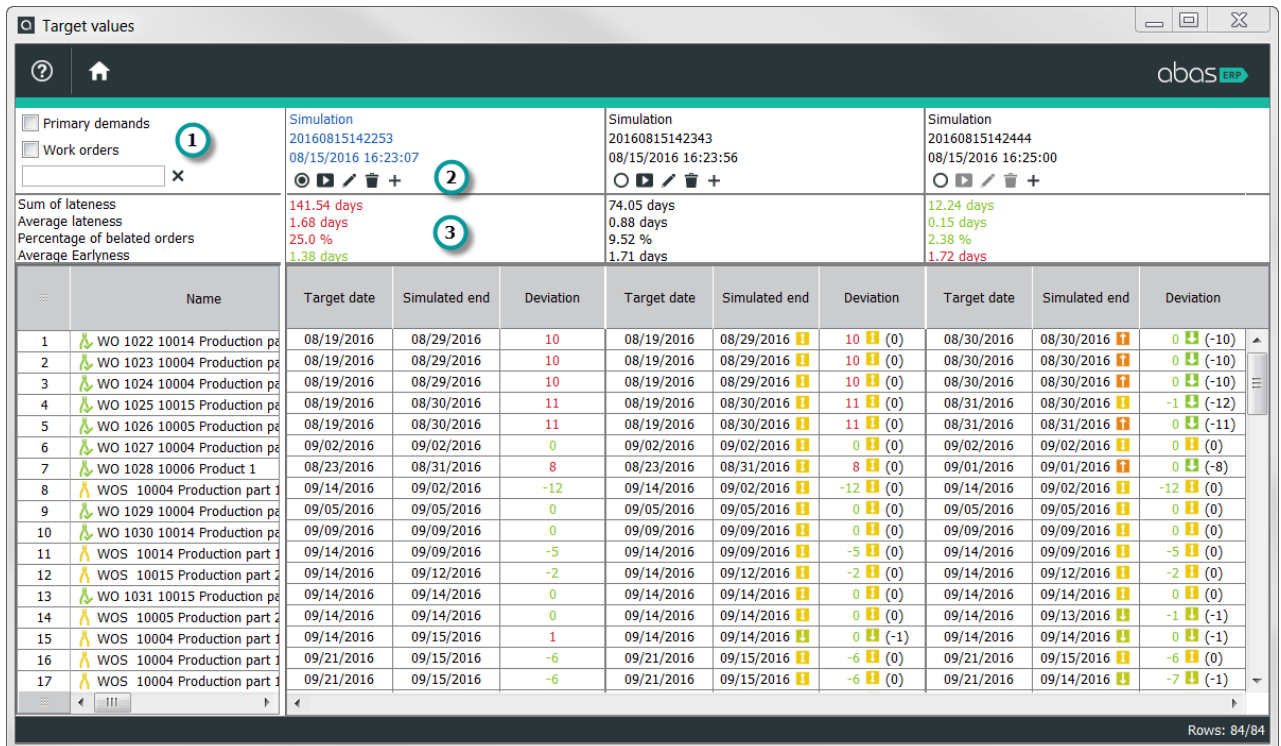
5.3 TARGET VALUE COMPARISM

Click the "Target values" button in the actions toolbar to open the target value comparison window. This window provides an overview of the simulated target values in table form (only in Advanced /Professional).



The screenshot shows the APS for abas ERP interface. The top menu bar includes 'File View Options Help'. Below it is a toolbar with various icons. The 'Target values' button, represented by a sigma symbol (Σ), is highlighted with a mouse cursor and a tooltip. The main area displays a table with columns for 'Name', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat', 'Sun', and 'Mon', 'Tue'. The table lists three work orders: 'WC 103 Saw 1x', 'WC 104 Milling machine 1x', and 'WC 105 CNC center 1 1x'.

The left part of the table lists all simulated work orders and work order suggestions. The right part of the table shows the simulated end dates, lateness and a trend function for each order and simulation.



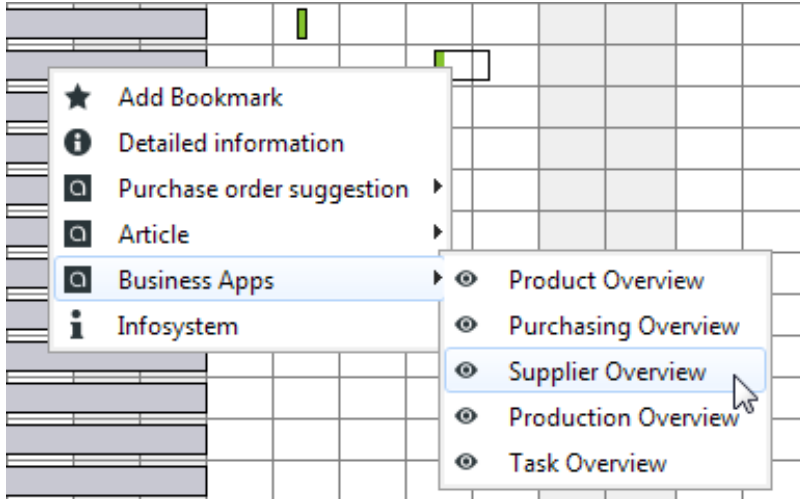
The screenshot shows the 'Target values' window. It features a sidebar with filters for 'Primary demands' and 'Work orders'. The main area displays a table with columns for 'Name', 'Target date', 'Simulated end', 'Deviation', and 'Target date', 'Simulated end', 'Deviation', 'Target date', 'Simulated end', 'Deviation'. The table lists 17 work orders, including 'WO 1022 10014 Production part 1', 'WO 1023 10004 Production part 1', 'WO 1024 10004 Production part 1', 'WO 1025 10015 Production part 1', 'WO 1026 10005 Production part 1', 'WO 1027 10004 Production part 1', 'WO 1028 10006 Product 1', 'WOS 10004 Production part 1', 'WO 1029 10004 Production part 1', 'WO 1030 10014 Production part 1', 'WOS 10014 Production part 1', 'WOS 10015 Production part 1', 'WO 1031 10015 Production part 1', 'WOS 10005 Production part 1', 'WOS 10004 Production part 1', 'WOS 10004 Production part 1', and 'WOS 10004 Production part 1'. The table also includes summary statistics for each simulation, such as 'Sum of lateness', 'Average lateness', 'Percentage of belated orders', and 'Average Earlyness'.

1. Filter and quick search to limit the orders listed
2. Add/remove a simulation from the window, load a simulation into APS for abas ERP, mark a simulation as reference (regarding the trend functions)
3. Accumulated overall target values based on all selected orders

If the target values window is opened and you perform a simulation and load it into APS for abas ERP, the simulation is added to the window automatically.

5.4 BUSINESS APPS AND DMS

You can access the Business Apps using the context menu. There is a selection of Business Apps available, depending on the context object.



Business Apps are opened in a separate browser.

PRODUCT OVERVIEW

10029 - BLEIPL - Plausel

PROCUREMENT

	Number	Quantity	Unit
Bestand	0	150	Stück
Fertigung	1	30	Stück
Bestellungen	0	0	Stück

DETAILS

Warehouse group	Warehouse	Location	Quantity	Unit	Lot
Interne Lagergruppe	Internes Lager	INTLPLATZ	30	Stück	
Interne Lagergruppe	Internes Lager	INTLPLATZ	120	Stück	

SHIPPING

From: 9/22/15 To: 10/17/15 Filter customer Units in Stock

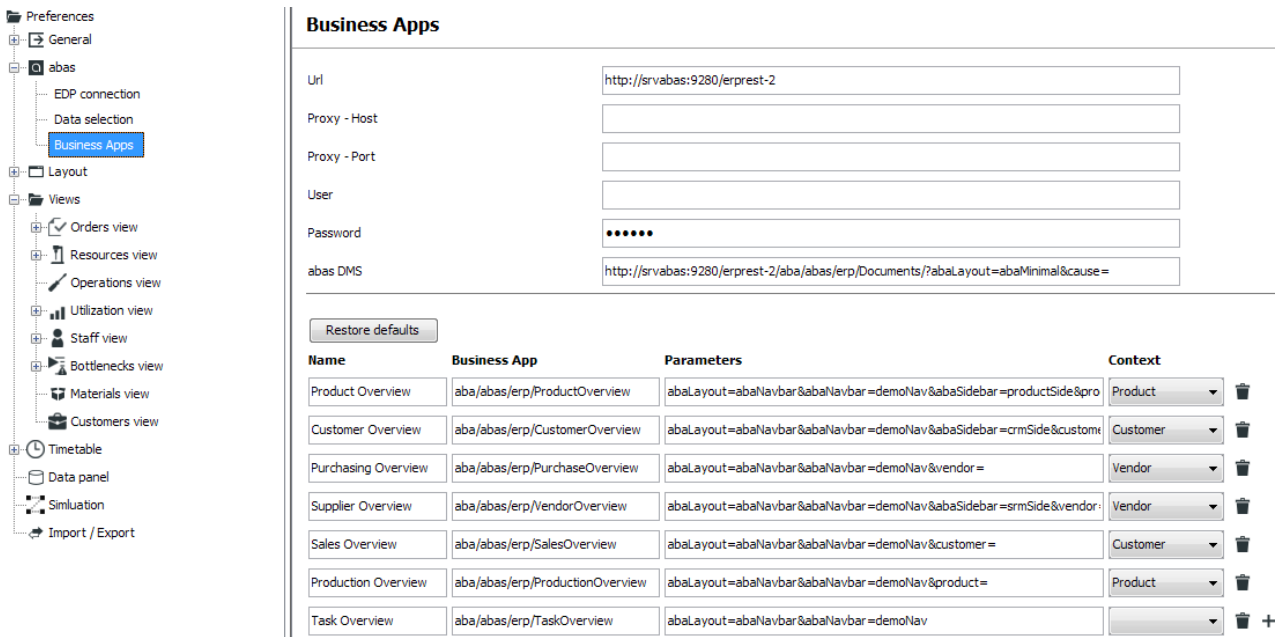
	Number	Quantity	Due
Offene Auftragspositionen	4	2,650	Bis 17.10.2015
Ungebuchte Lieferscheinpositionen	5	3,700	Alle
Gelieferte Positionen	0	0	Seit 22.09.2015

DETAILS

Due	Process	Customer	Plant	Unloading point	Shipping planning number	Quantity
9/15/15		Werk 3	Werk 3	Tor 1		150
10/1/15		Werk 3	Werk 3	Tor 1		700
10/8/15		Werk 3	Werk 3	Tor 1		1,000
10/15/15		Werk 3	Werk 3	Tor 1		800

abas Business Apps (2.2.1-20) © abas Software AG

The connection to Business Apps can be configured in the preferences.



Business Apps

Url:

Proxy - Host:

Proxy - Port:

User:

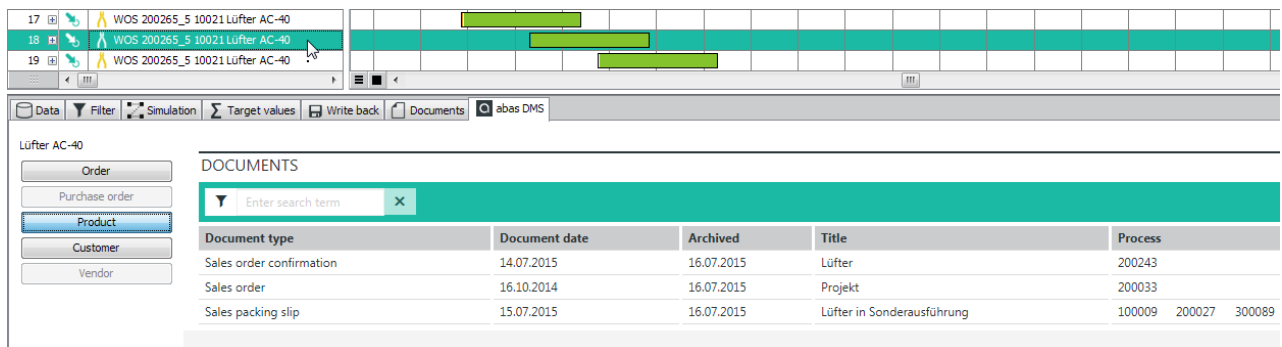
Password:

abas DMS:

Name	Business App	Parameters	Context
Product Overview	aba/abas/erp/ProductOverview	abaLayout=abaNavbar&abaNavbar=demoNav&abaSidebar=productSide&pro	Product
Customer Overview	aba/abas/erp/CustomerOverview	abaLayout=abaNavbar&abaNavbar=demoNav&abaSidebar=crmSide&custom	Customer
Purchasing Overview	aba/abas/erp/PurchaseOverview	abaLayout=abaNavbar&abaNavbar=demoNav&vendor=	Vendor
Supplier Overview	aba/abas/erp/VendorOverview	abaLayout=abaNavbar&abaNavbar=demoNav&abaSidebar=srmSide&vendor:	Vendor
Sales Overview	aba/abas/erp/SalesOverview	abaLayout=abaNavbar&abaNavbar=demoNav&customer=	Customer
Production Overview	aba/abas/erp/ProductionOverview	abaLayout=abaNavbar&abaNavbar=demoNav&product=	Product
Task Overview	aba/abas/erp/TaskOverview	abaLayout=abaNavbar&abaNavbar=demoNav	

Configure the proxy settings here if required. The password entry is mandatory. If the login works with username and password, then specify a user too. You can add and remove Business Apps in the lower section. Each Business App connection consists of *Url*, *Business App* and *Parameters*. If a value is selected in the context field, then the context menu will only be offered if the reference object context is accessible. The context object ID will be added to the parameter list.

The entry abas DMS stores the url for the Business App *Documents*. This Business App is displayed in the lower flip of the main frame and is updated every time you click on a planning object.



17 WOS 200265_5 10021 Lüfter AC-40

18 WOS 200265_5 10021 Lüfter AC-40

19 WOS 200265_5 10021 Lüfter AC-40

Data Filter Simulation Target values Write back Documents abas DMS

Lüfter AC-40

Order

Purchase order

Product

Customer

Vendor

DOCUMENTS

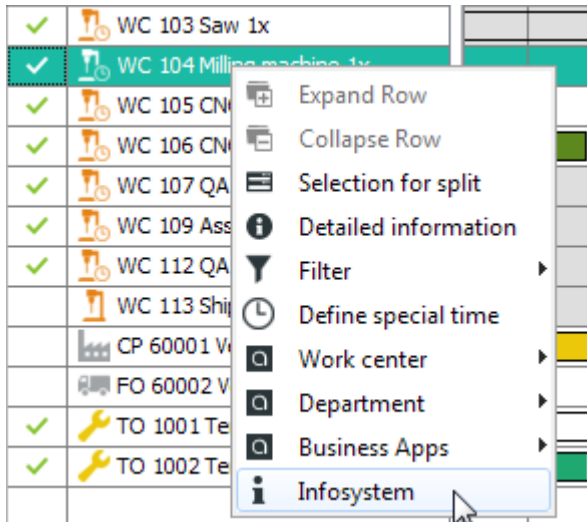
Enter search term

Document type	Document date	Archived	Title	Process
Sales order confirmation	14.07.2015	16.07.2015	Lüfter	200243
Sales order	16.10.2014	16.07.2015	Projekt	200033
Sales packing slip	15.07.2015	16.07.2015	Lüfter in Sonderausführung	100009 200027 300089

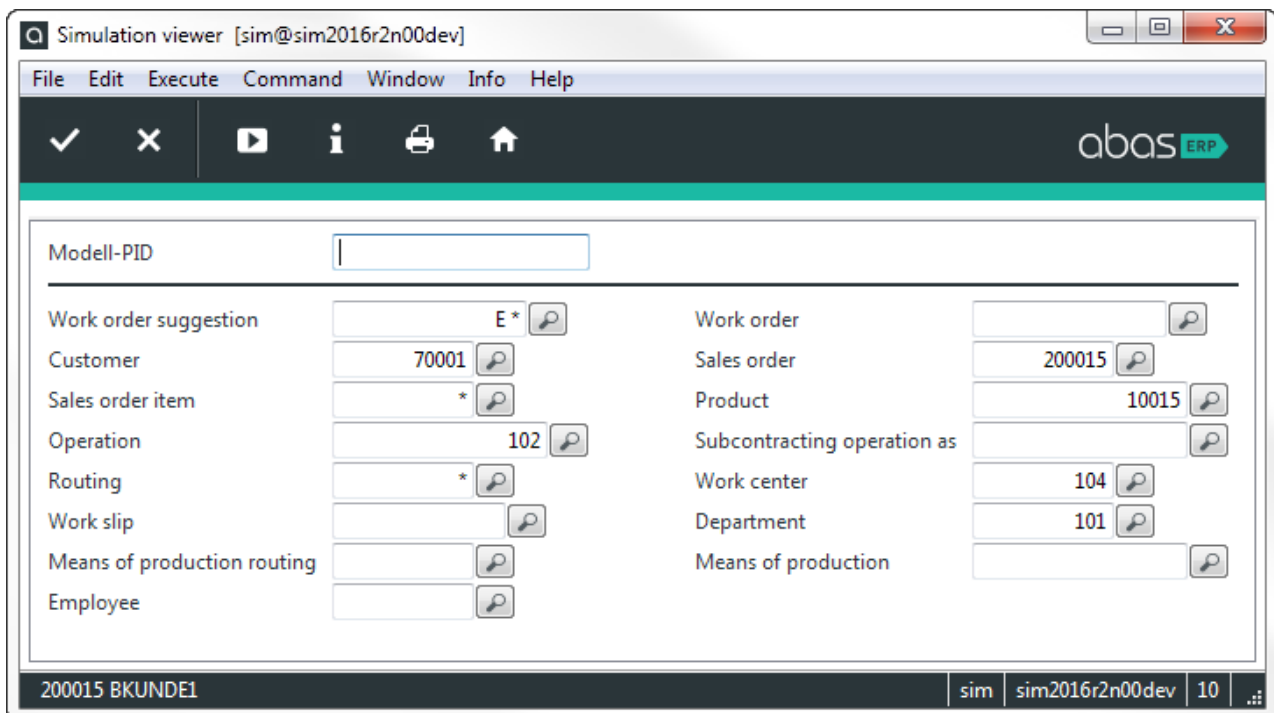


5.5 INFOSYSTEMS

The standard scope of supply includes the infosystem FPVIEW. You can open this infosystem from the context menu of the planning objects. FPVIEW serves as a link to any infosystem the user assigns to it using call parameters.



Which fields are filled in the infosystem FPVIEW depends on the current object selected. The infosystem is not visible, but is run in the background.



Example: The following call parameter connects to the infosystem "Planchart" (PLANKARTE):

Call parameter - View [sim@sim2016r2n00dev] [100003 PLANCHART Plan chart]

File Edit Execute Table Command Window Info Help

Load parameter fields Check rows

Identity number 100003 Search word PLANCHART Text

TARGET

Context IPLANKARTE Data also in table

SOURCE

Type Single infosystem Value IFPVIEW Data also from table

General Values

TARGET

Action Call

SOURCE

Condition Type Value/Field

Data record selection

Target: Action	Target: Field	Target: Type	Target: Row selection type	Target: Row selection value	Source: Type	Source: Value/Field	M
Set header field	kart	PS2:1			Header field	artikel^id	<input checked="" type="checkbox"/>
Set header field	bstart	BU3			Constant	1	<input type="checkbox"/>

Command does not allow any modifications 2 Lines sim sim2016r2n00dev 10

Call parameter sublist - View [sim@sim2016r2n00dev] [(31098,87,0)]

File Edit Execute Table Command Window Info Help

Expand/Collapse tree Check entries in all rows

Description

Package List is part of the release version

Type Customized sublist List with editable table

SOURCE

Call context Single infosystem IFPVIEW Data also from table

FIELD

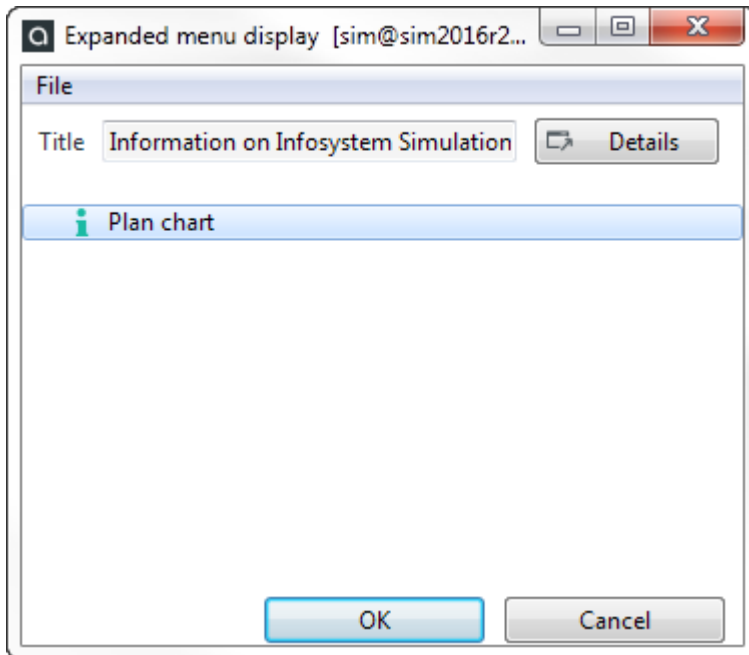
List attached to button buinfosys

Level	Active	Row type	Call parameter or call parameter list	Description	Call parameter target object
1 =	<input checked="" type="checkbox"/>	Menu option	PLANCHART	Plan chart	IPLANKARTE

1 Line sim sim2016r2n00dev 41



If the call parameter is installed and registered in the infosystem FPVIEW you can open the infosystem "Planchart" directly from APS for abas ERP. This is why you need to start the infosystem entry from the context menu of a planning object. This planning object must be linked with a product, since this is a mandatory field in the call parameter.



By using call parameter technology, you can link any infosystem and screen (including user-defined).





INDEX



abas **ACADEMY**

© 2018 abas Software AG