

# A-Plan<sup>®</sup> 2010

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# INSTALLATION

## GENERAL HINTS

### SYSTEM REQUIREMENTS

To install and run A-Plan, your computer must meet the following requirements:

- MS Windows 2000, XP, Vista (32/64 bit) or Win 7 (32/64 bit)
- approx. 60 MB free hard disk space
- administrator rights (required for installation only)

## SINGLE-USER INSTALLATION

### INSTALLATION

1. Insert the installation CD (if the starting screen does not appear automatically, double-click **start.exe** in the root directory of your CD).
2. Click on Install A-Plan 2010.
3. If **Windows Installer** is not yet available on your PC, the installation program will install it first.
4. During the installation of A-Plan you may change the default target folder. If possible, do not install A-Plan 2010 in a directory which contains a previous version of A-Plan.

Click on **Continue** and the installation will be completed automatically.

### LICENSING

After you have started A-Plan for the first time, it will prompt you to enter **Name 1** (and **Name 2**, if applicable) as well as your license **key**:

A-Plan 2010 - Licensing

Please enter the name and key (see the label affixed to the CD of the full version). Then click on 'License':

Name 1:

Name 2:

Key:  -  -  -

Testing time has expired. From now on, you can use the free version of A-Plan with a limited range of functions only. Just click 'Internet order' or 'Order form' to get the full version.

If you purchased the full version of A-Plan, you will find the required information on your CD cover. When entering license information, make sure that you enter it correctly (be aware of small and capital letters and of blanks). Then click the button **License**.

As long as you have not purchased a full version of A-Plan, you may test A-Plan for 30 days. To start A-Plan in the test mode, click the button **Evaluate**. Of course, you may continue using the files you created when testing the program after you have purchased the full version! This requires no new installation of the program. Just enter your name and your license key to get access to the full version. You will be given your license key as soon as you have purchased the full version.

### ***New licenses (additional modules)***

If you purchased a supplementary license for the synchronization module or the time tracking module, just open the license window by clicking **? / Licensing of A-Plan...** and enter the new license key.

## **INSTALLATION IN A NETWORK**

We urgently recommend you to install A-Plan on each client and not on a server. In the long run, this will result in a minimum of problems (caused, for example, by program library versions being different on clients and on the server, by wrong or missing references etc.). With A-Plan installed on each client, all users can nevertheless access a common database located on a server!

## **INSTALLATION**

### **INSTALLATION OF THE APPLICATION**

The network version of A-Plan is identical to the single-user version and is installed in the same way (see "Single-user installation" on page 9). The networking functions are not activated until the respective licensing data have been entered.

The CD directory of **APlan2010** includes the msi file for the Microsoft Installer enabling you to easily perform the installation in a network by using a software distribution program.

1. Using no software distribution program, you might be unwilling to take the installation CD to each client for installation of the program. To avoid this, just copy the installation directory APlan2010 (with all of its subdirectories) to a server and start the installation of the program at the clients by double-clicking setup.exe. This way of installing the program on the clients provides the additional advantage that the individual users no longer have to enter the licensing data after they have started A-Plan for the first time. To install the program in this way, proceed as follows:
2. Install A-Plan on a client.
3. Start A-Plan on this client and enter the licensing data (see "Licensing" on page 9).

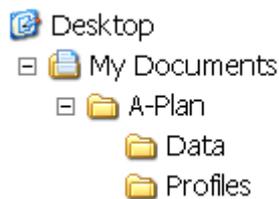
4. In the client directory "My Documents\A-Plan" you will find the file aplan2010.lic. Copy this file to the installation directory "...\APlan2010\program files\A-Plan2010" on the server (please be careful not to copy it by mistake to the highest server directory which is named similarly "...\APlan2010" – but has no hyphen!).

The licensing file will be included in the subsequent installations making further licensing unnecessary.

Please note that a license must have been granted for each user.

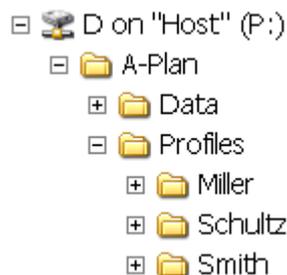
## DEFAULT DATA AND PROFILE FOLDERS

By default, A-Plan will save your data in the **data folder** "My Documents\A-Plan\Data" and your **settings** in "My Documents\A-Plan\Profiles":



In multi-user operation, however, both the **database(s)** and the **settings** (profiles) should be saved on a **server** with all users accessing the **same data folder** (see next chapter) but **different profile folders**. Different profile folders should be used to prevent users from mutually overwriting their program settings.

Example:

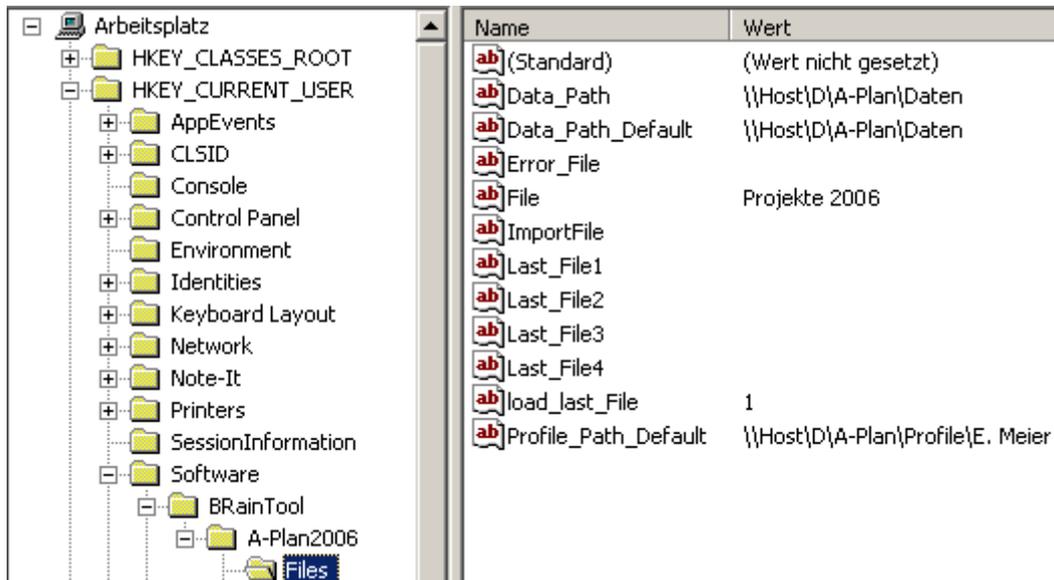


When **starting A-Plan for the first time** you will be prompted to either change the preset folders or to leave them as they are.

If you decide to change them, A-Plan will display the **options dialog box** to make the respective settings. With this done, you may either move the existing **exemplary files** to the new data folder or delete them or leave them in the original data folder.

When moving files, existing files will not be overwritten!

If the setting of folders is not to be done by users, these settings can be made in the respective **registries**:



Data_Path	last data folder used
Data_Path_Default	Default data folder
File	last database used (without file extension)
load_last_File	open last database used when starting A-Plan (if value = 1)
Profile_Path_Default	last data folder used

If values exist for **Data\_Path\_Default** and **Profile\_Path\_Default**, you will not be prompted to change the settings while starting A-Plan for the first time.

## CENTRAL DATABASE, USERS

**No installations must be made on the server** if a **central database** is to be used! Just create the database you want on one of the clients by choosing **File / New**. Then, use the command **File / Save as** to save the file in the data folder (see previous chapter) on the server.

**Users** will directly be entered in the database together with their **permissions** (see the ribbon tab **Tools / Users**). This will enable them to access the database as well by choosing **File / Open**. If required, several databases can be created as well, even with users and user permissions being different for each database.

### **Note:**

Due to the fact that "normal" files are involved in making these **settings**, they can also be created by **a single user** for the common database and can then be copied to the profile folders of the other users. Apart from having the file extensions .p00, .p01, .p02 etc., profiles have the same file name as the database to which they belong to.

---

## NEW LICENSING (ADDITIONAL LICENSES, ADDITIONAL MODULES)

If you increased the number of granted licenses by purchasing additional licenses or if you purchased licenses for the synchronization or the time tracking module afterwards, just choose? / **Licensing of A-Plan** to enter the new license key. If several clients are involved, copy the updated licensing file **aplan2010.lic** which you find in the directory "My documents\A-Plan" to the corresponding folder of the clients concerned.

## ADJUSTMENT OF PREVIOUS DATABASE VERSIONS

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### AUTOMATED TAKEOVER OF EXISTING DATABASES AND SETTINGS

When started for the first time, A-Plan 2010 will check whether a previous version of A-Plan exists. If a previous version exists, you are offered to have the **previous databases and settings** copied to the corresponding folders of A-Plan 2010.

If you refuse to do so, you should manually copy the files and settings which you still need to the corresponding subdirectories of A-Plan 2010 (by default, these are "My documents\A-Plan\Data" and "My Documents\A-Plan\Profiles" respectively).

---

### ADJUSTMENT OF PREVIOUS DATABASE VERSIONS

When opened by A-Plan 2010, previous database versions are automatically adjusted.

If requested, A-Plan will make a copy of the former database in the same folder prior to adjusting it. Despite that, you should save a copy of each of your current databases (extension .apl) in a separate folder – just to be on the safe side.

**Important:**

Once a database has been opened – and, as a consequence, automatically adjusted - by A-Plan 2010, it can no longer be opened using a **previous version of A-Plan!**

## UNINSTALLING A FORMER VERSION OF A-PLAN

Having successfully installed A-Plan 2010, you may uninstall an existing former version of A-Plan (**Start / Control Panel / Add or Remove Programs**).

**Important note:**

Uninstalling will not delete any files you created. Nevertheless, make sure that your former **data** and **profiles** have been copied to the new A-Plan folders (by default, these are "My documents\A-Plan\Data" and "My Documents\A-Plan\Profiles") before you start uninstalling.

## REPAIRING AN EXISTING INSTALLATION OF A-PLAN 2010

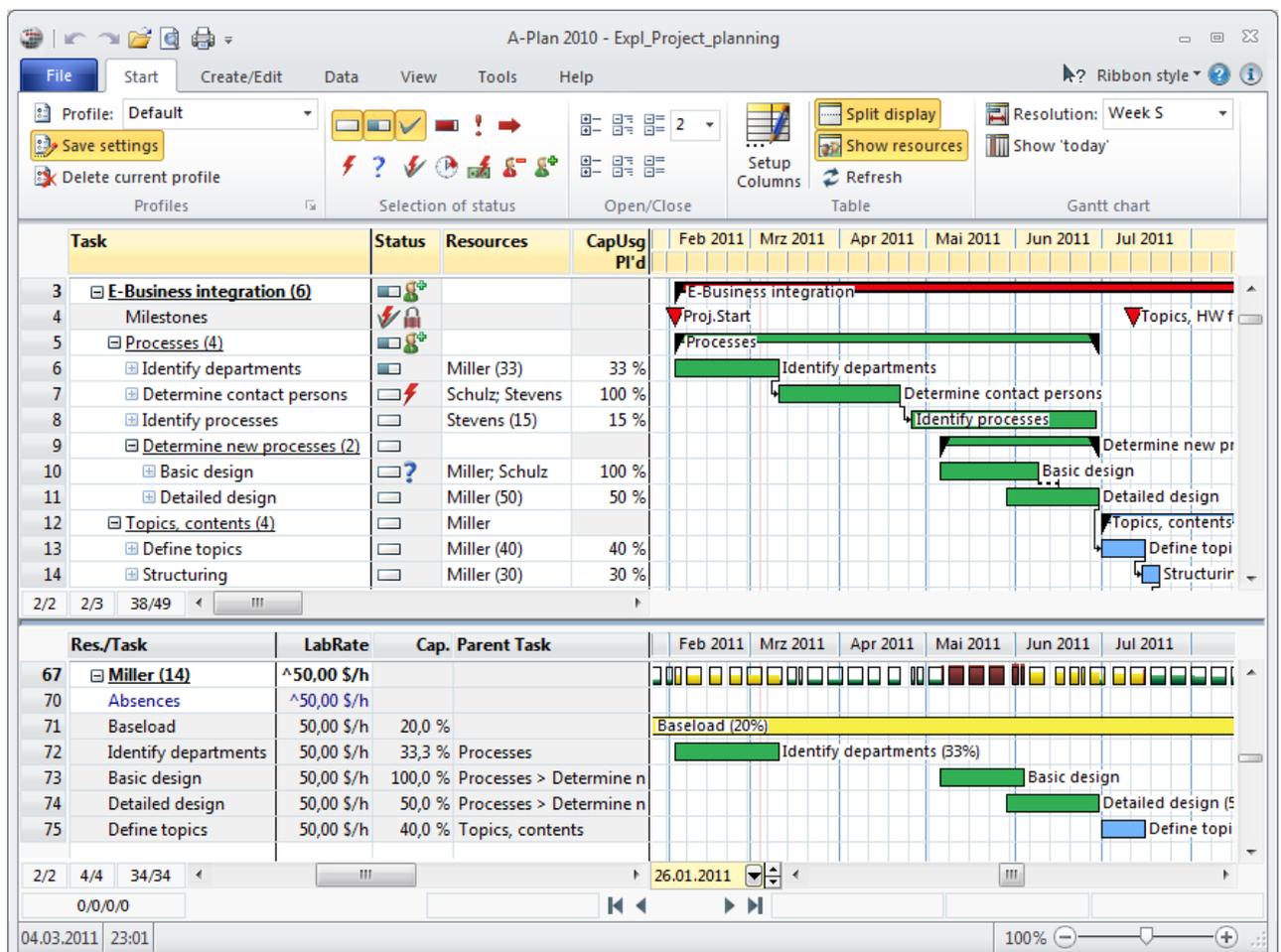
Should it happen that A-Plan can no longer be started due to corrupt, overwritten or missing program files resulting from the installation of other programs or if inexplicable errors occur after you have started the program, you may restore the original installation:

Select **Start / Control Panel / Add or Remove Programs / A-Plan 2010** and start the installation program by clicking the button **Add / Remove**. Then select the command **Repair**.

# ESSENTIAL NEW FEATURES OF A-PLAN 2010

## DESIGN

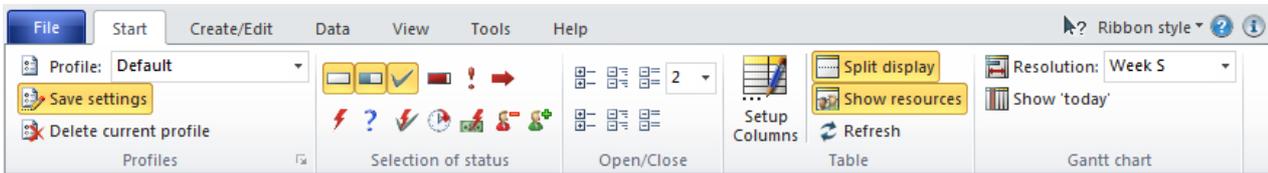
The user interface of A-Plan has been completely revised and modernised:



- Seamless integration into MS Windows Vista and into MS Windows 7
- With the look and feel being the same as with MS Office 2007 and MS Office 2010, intuitive handling is ensured and users do not have to adapt to different interfaces when changing between Windows programs.
- The modern user interface is clear and without frills. Of course, it is also available with former operating systems such as, for example, Windows XP!

## RIBBON BAR

The most important change is the introduction of the „Ribbon Bar“ which replaces the former menu bar and the button bars:



It provides major benefits over the former user interface:

- the logical grouping of functions results in better clarity
- the persistent use of graphical symbols helps you find functions more quickly
- simple configuration
- Quick Access Toolbar
- individual key shortcuts

For a detailed description of the Ribbon Bar see "The Ribbon Bar" on page 20.

## AUTOMATIC ADJUSTMENTS

In the past it was necessary to have the effects on the further course of the project calculated whenever resources were assigned or changes were made regarding required work, capacity usage of resources, actual duration etc. With version 2010 this could be automated but a minor drawback still remained as you had to define a certain overall procedure. In addition, changes in the course of the project sometimes remained unnoticed.

To increase the efficiency when creating new projects or entering changes, version 2010 and later versions enable you to specify already when entering data how A-Plan should react on the changes you enter.

Task	Status	Resources	CapUsg Pl'd	Feb 2011	Mrz 2011	Apr 2011
[-] Processes (4)	[+] [person icon]			Processes		
[+] Identify departments	[+] [person icon]	Miller (33)	33 %	Identify department		
[+] Determine contact persons	[+] [lightning bolt icon]	[+] Externe				
[+] Identify processes	[+] [person icon]	[+] Internal staff				
[-] Determine new processes (2)	[+] [person icon]	[x] Miller (33,3%)				
[+] Basic design	[+] [question mark icon]	[x] Schulz				
[+] Detailed design	[+] [person icon]	[x] Stevens				

Adjustment options for Miller (33,3%):

- Adjust end
- Adjust begin
- Adjust capacity usage
- No adjustment

For a description of the new procedure see "Work / automated calculations" on page 94.

## ASSIGNING RESOURCES TO SEVERAL TASKS

You may now assign resources to **all lower-level rows** of a „summary row“. Hence, you have to make just one entry if the same resource is responsible of the entire block.

As the new automated calculations can be used for this as well, the assignment of resources and the recalculation of the course of the project can be done in a fraction of the time previously spent on that!

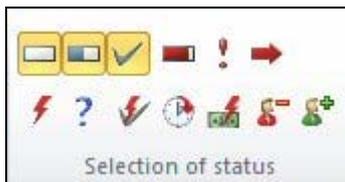
## OPTIONS

- Layout is the same as with MS Office 2007 and 2010
- Straightforward and quicker access to individual pages is achieved with the help of TabStrips
- Variable window size: allows you to present much more list items in one window if need be

## STATUS



Different symbols are used to show the status of a given row in an additional column (see "Status Column" on page 30).



The Ribbon Bar enables you to have projects and tasks displayed according to their status.

## ZOOM FUNCTION

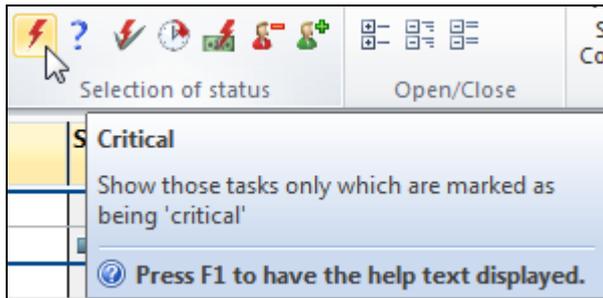
The constantly increasing resolution of screens helps to display more and more information while the size of characters permanently decreases. In line with that, the new version of A-Plan allows you to zoom the main window in a range from 20% to 180% with the enlarged presentation providing improved reading and the small zoom factor giving you an overview of a rather large area.

In addition, the main window uses a font that can be smoothed by Windows to further improve the readability.

# INTRODUCTION INTO THE PROGRAM

## HELP SYSTEMS

### TOOL TIPS



When you pause with the mouse pointer over a button of a toolbar for more than half a second, an explanation on the function of the button comes up.

### STATUS LINE

Depending on the position of the mouse pointer (e.g. when a task bar is selected), a message is displayed in the status line at the bottom of A-Plan giving information on available functions and commands or on the current program status:

06.01.2011 16:29 To shift: Use the mouse to drag (To copy: + CTRL, to change row: + ALT) | Fine adjustment (ON/OFF)

**Mainly in the learning phase, you should frequently have a look at the status line since this can save you, on many occasions, from using the online help!**

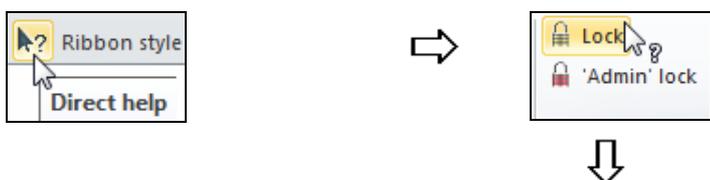
### ONLINE HELP

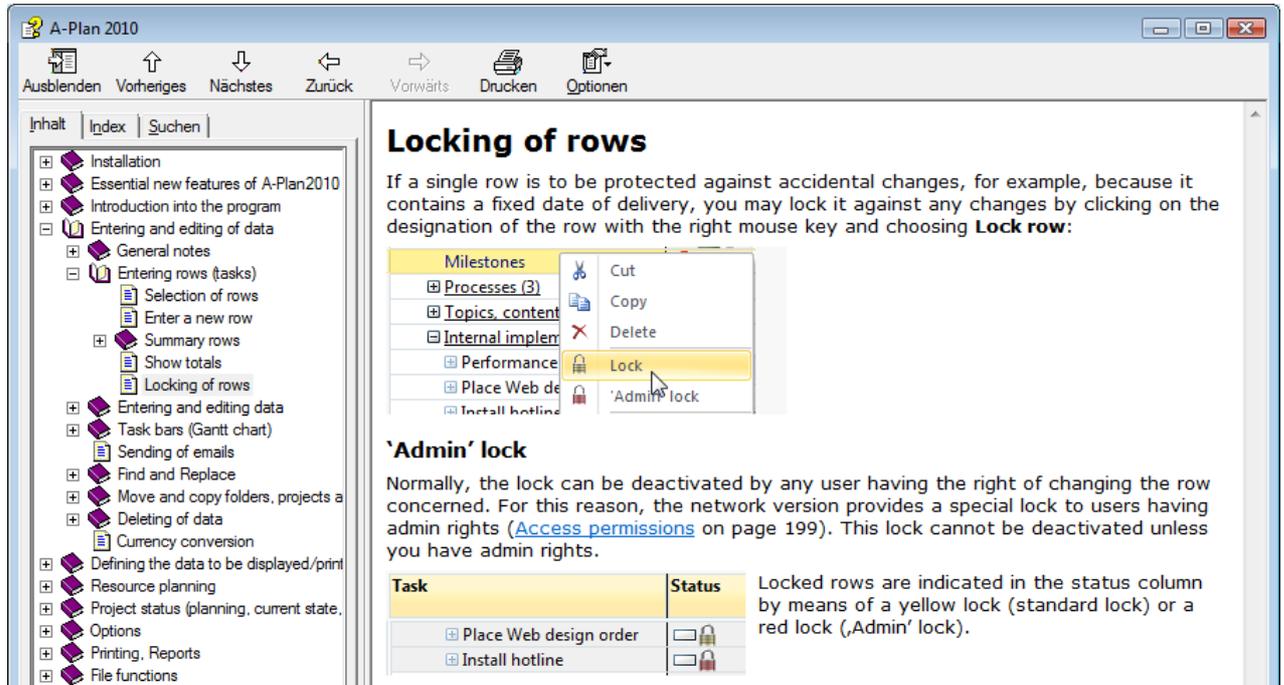
To open the online help file of A-Plan, choose ? / **Contents and Index** or **Find**: respectively.

#### CONTEXT-SENSITIVE HELP

Press F1 will also open the online help file but will take you immediately to the chapter in which the **currently active element is explained**.

In the main window of A-Plan, you are likewise taken to the **suitable chapter of the online help** file by clicking the arrow with the question mark and, next, the element to be explained:





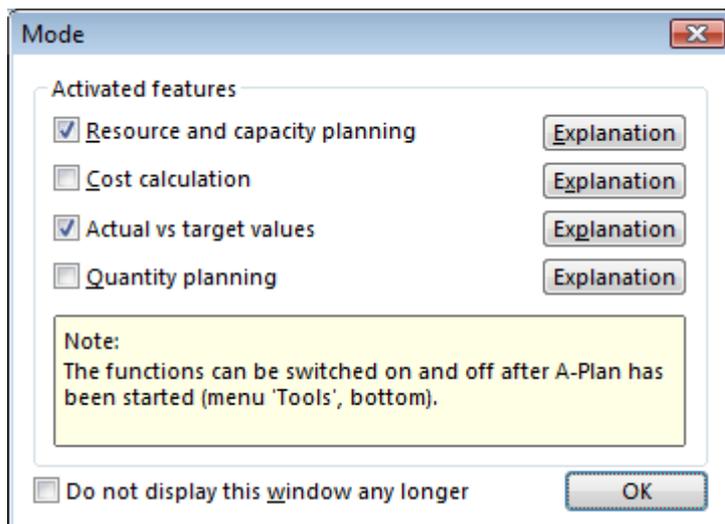
Clicking the above mentioned button again or pressing the ESC key will switch off the context-sensitive help.

**Attention:**

While the context-sensitive help is activated, no other function can be started.

## SPECIAL FEATURES

After you have started A-Plan, a dialog box appears enabling you to activate some special features:



If you work with A-Plan for the first time, we recommend you not to activate these features as all ribbon tab items, buttons and entry boxes related to these functions will remain hidden.

If you need these features at a later time, you may activate and deactivate them at any time with the program running by choosing the requested function directly from the ribbon tab **Tools** or by choosing **Options** and clicking the tab **General program settings**.

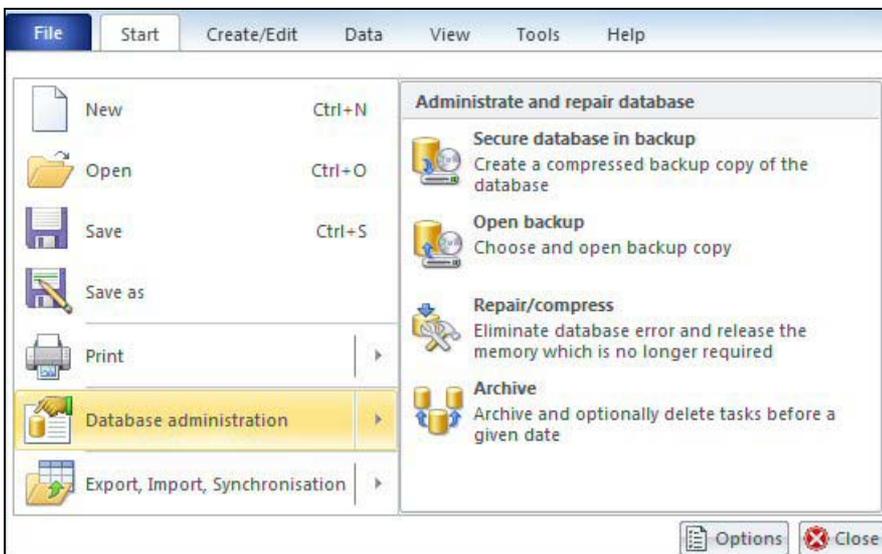
## THE USER INTERFACE OF A-PLAN

### THE RIBBON BAR

The Ribbon Bar gives you quick access to all functions of A-Plan. It is grouped in logical tabs which provide the functions of each group of tasks.

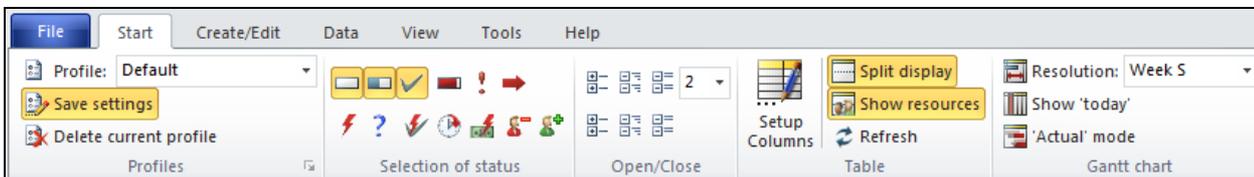
#### RIBBON TAB FILE

Use this tab to create and to open databases, to trigger printing and to carry out administrative and file functions.



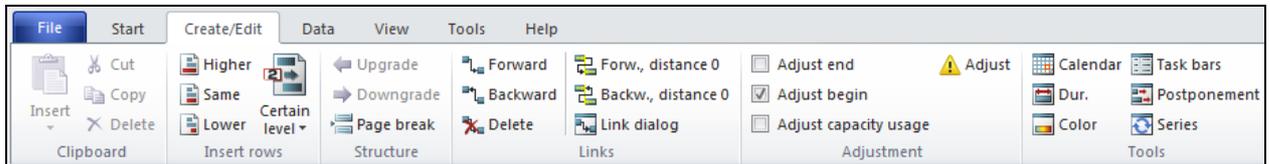
#### RIBBON TAB START

This tab includes all frequently used functions.



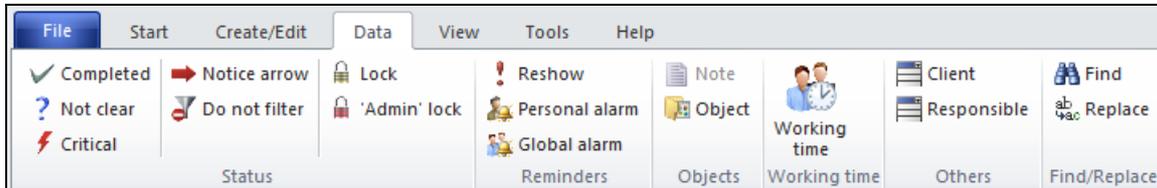
#### RIBBON TAB CREATE/EDIT

Here you can find all functions needed to create and change the structure and the course of projects (with users having read permission only, this group does not come up).



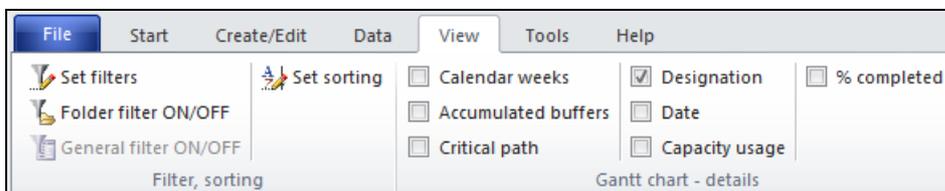
## RIBBON TAB DATA

This tab provides all functions needed to specify properties such as status, reminders, notes etc. (with users having read permission only, this group does not come up).



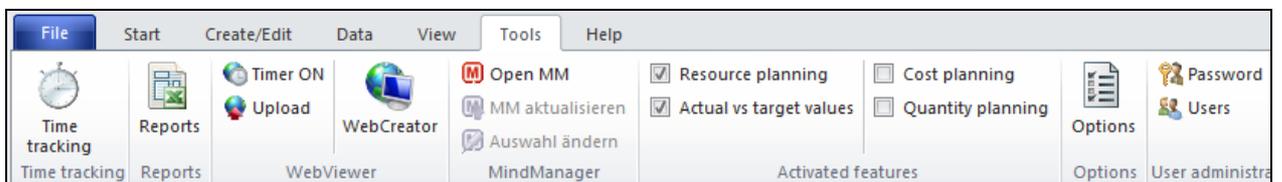
## RIBBON TAB VIEW

Here you can find less frequently used settings for adjusting the view.



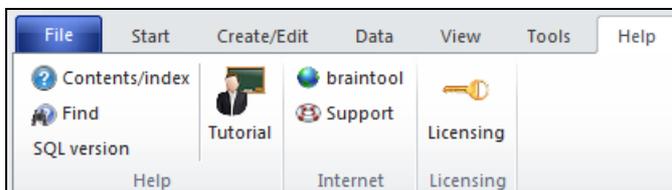
## RIBBON TAB TOOLS

Special functions such as time tracking, reports, WebViewer, MindManager, activated program functions, options and user administration are included in this tab.

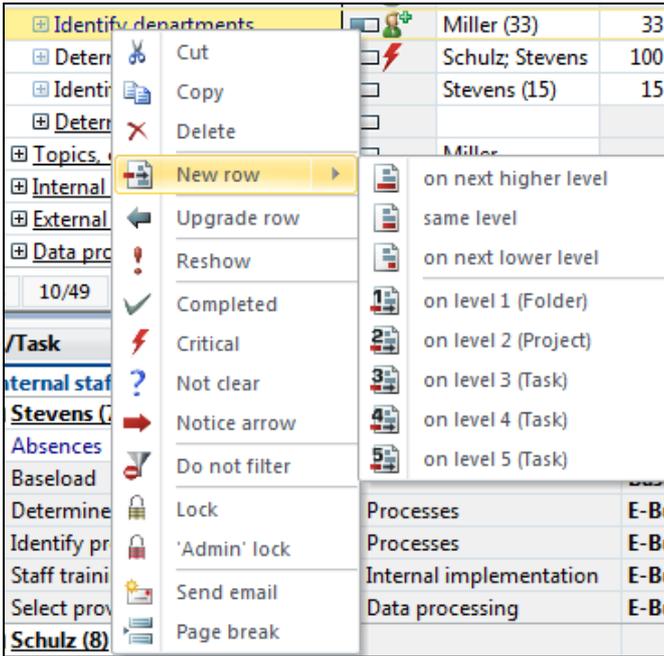


## RIBBON TAB HELP

Use this tab to find all support functions of A-Plan.



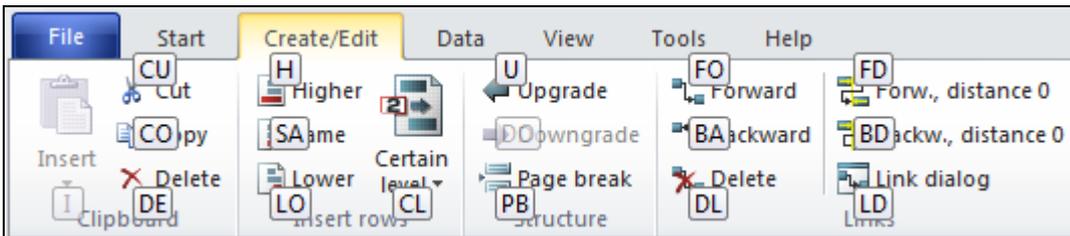
## CONTEXT-SENSITIVE MENU



Right-clicking a row in the main table of A-Plan will open the context-sensitive menu. It adjusts automatically and will present only those functions which are available for the given row.

## ALT KEY COMBINATIONS

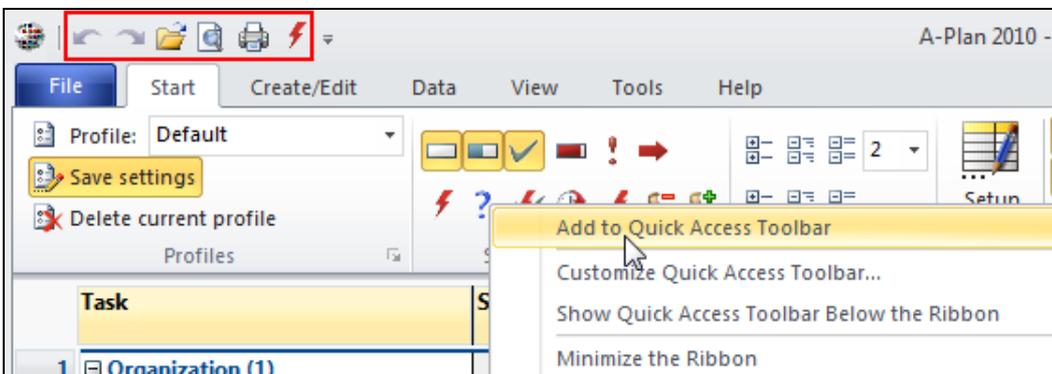
Clicking the Alt key will display for each function the key combination you have to press for starting the function:



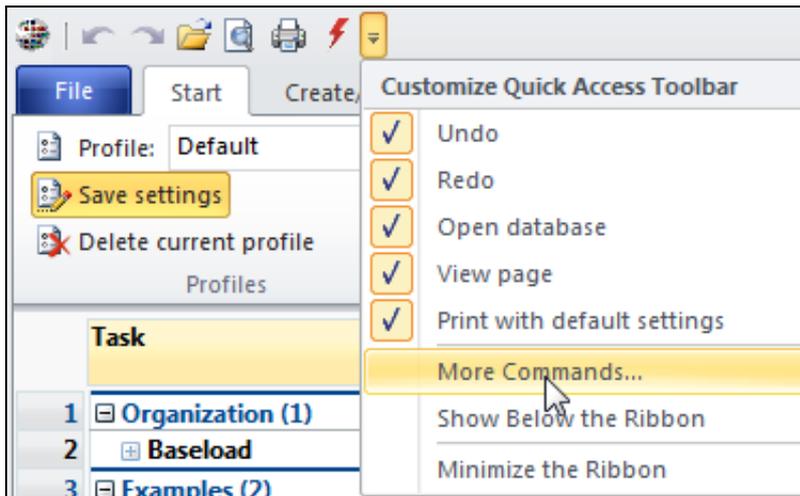
## QUICK ACCESS TOOLBAR

The default version of A-Plan provides some buttons in the title bar for frequently used functions such as Undo, Redo and Print.

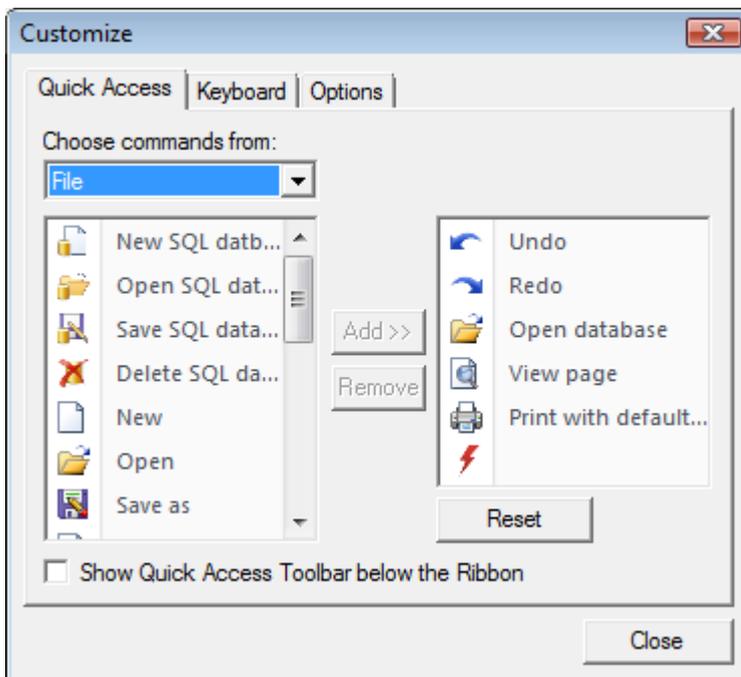
You may extend the list of quick access functions by clicking any function with the right mouse key and adding it to the list by selecting the respective command:



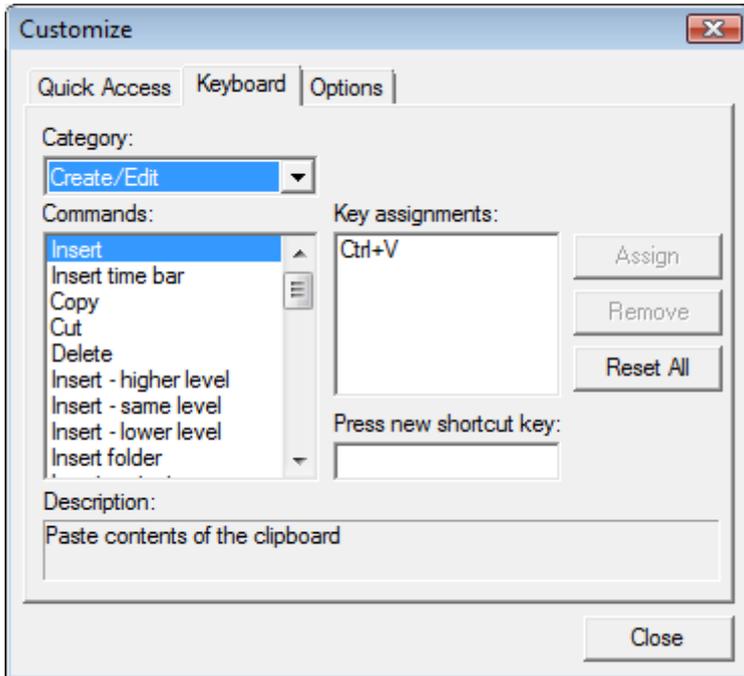
## CONFIGURATION OF THE RIBBON BAR



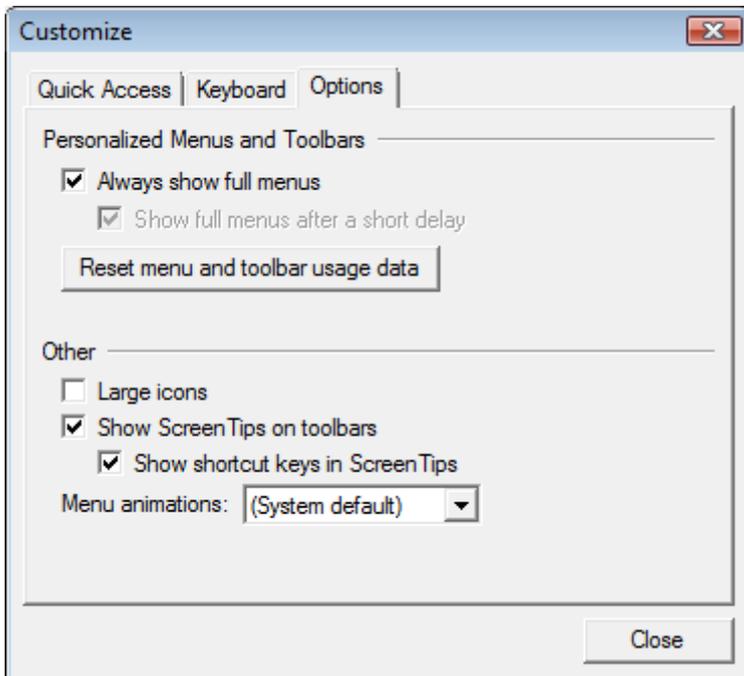
Clicking the scroll down arrow at the end of the Quick Access Toolbar or right-clicking any button will bring up the dialog box for adjusting the multi function bar.



Use the first tab to adjust the Quick Access Toolbar. You may add or remove functions just as you like.



The second tab serves to assign key combinations to functions.



Further options can be set in the third tab.

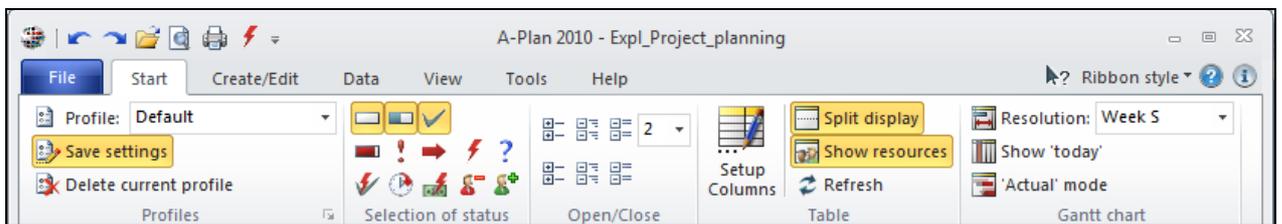
Especially if you are not yet familiar with A-Plan, please make sure to activate the option **Show Screen Tips** on toolbars in order to have explanations for the buttons displayed.

## STYLE OF THE RIBBON BAR

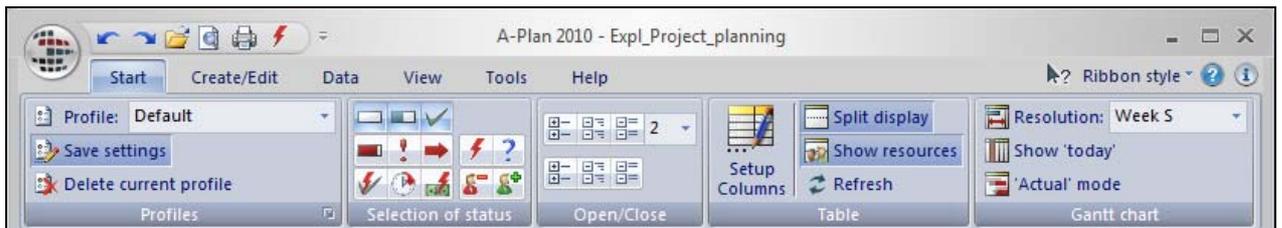
You may set the style of the Ribbon Bar, e.g. **Blue** (corresponds to Office 2007):



or **White** (as with Office 2010):



or **Aqua**:

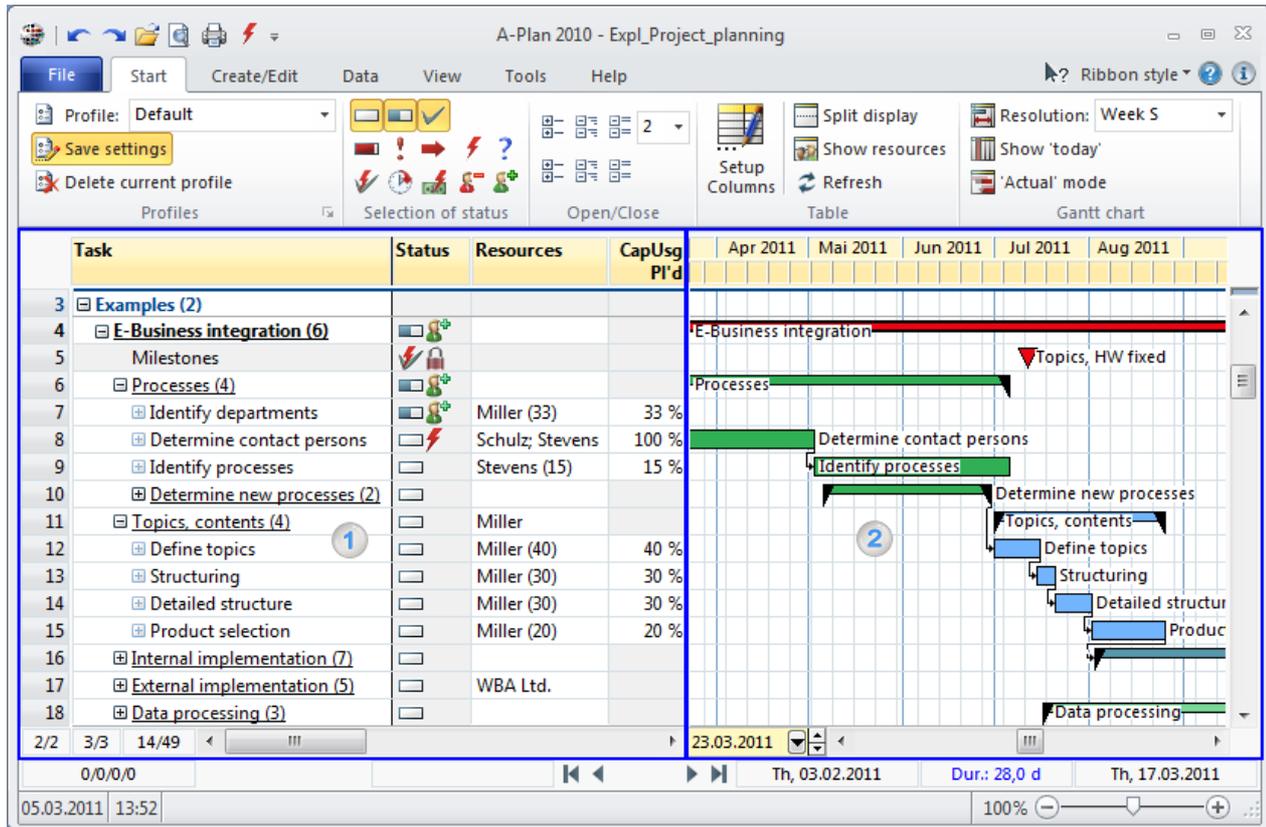


or **4 additional styles.**

## THE MAIN WINDOW OF A-PLAN

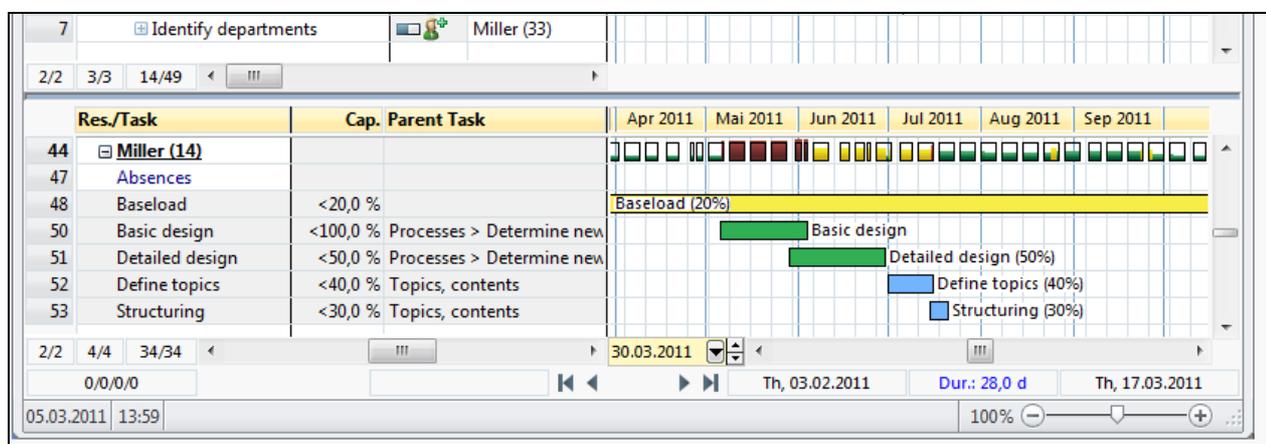
One of the major advantages of A-Plan is that you make almost all entries in the main window. This means that there is no need to change between various data entry windows and, as a consequence, you have quick access to all the data you need.

The central part of A-Plan is the **main table** featuring the **column area (1)** and the **Gantt chart (2)** in which all tasks contained in a database are visualized:

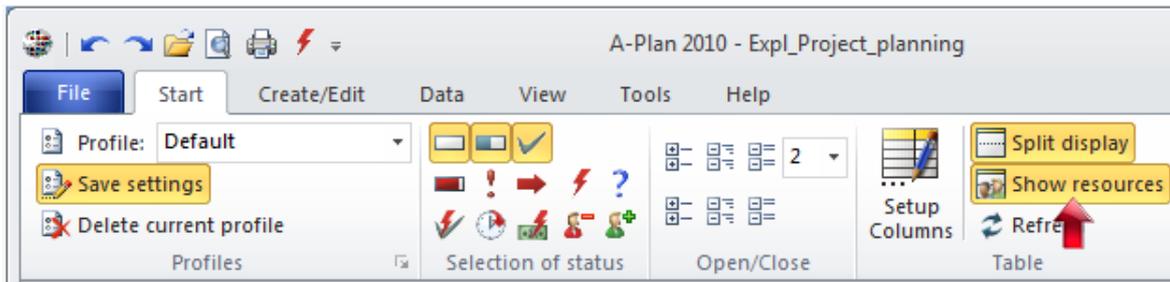


## RESOURCE VIEW

With resource planning activated (see the tab **Tools**), available resources can be displayed in the lower half of the window together with their calendars, absences, assigned tasks and their capacity usage:

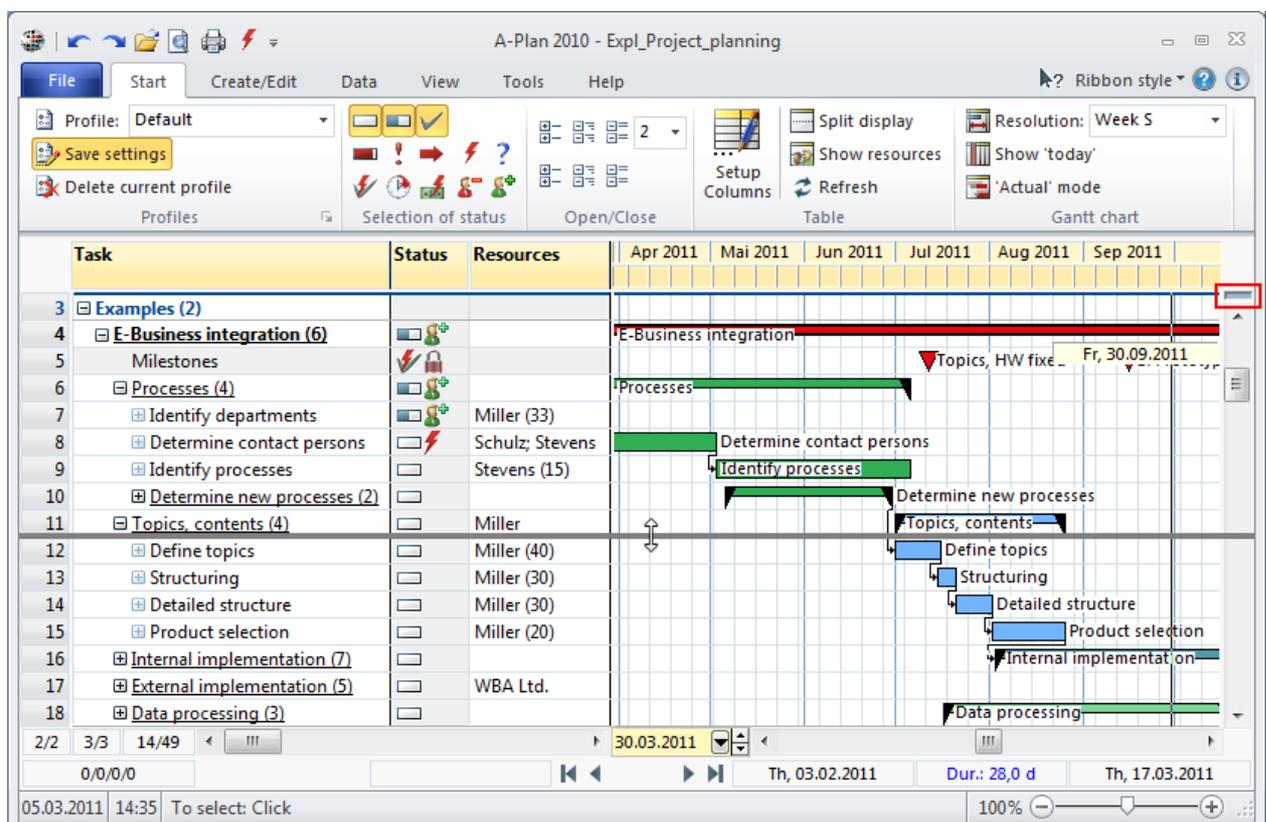


Resources will not be displayed unless the button **Show resources** has been activated:



## SPLIT PROJECT VIEW

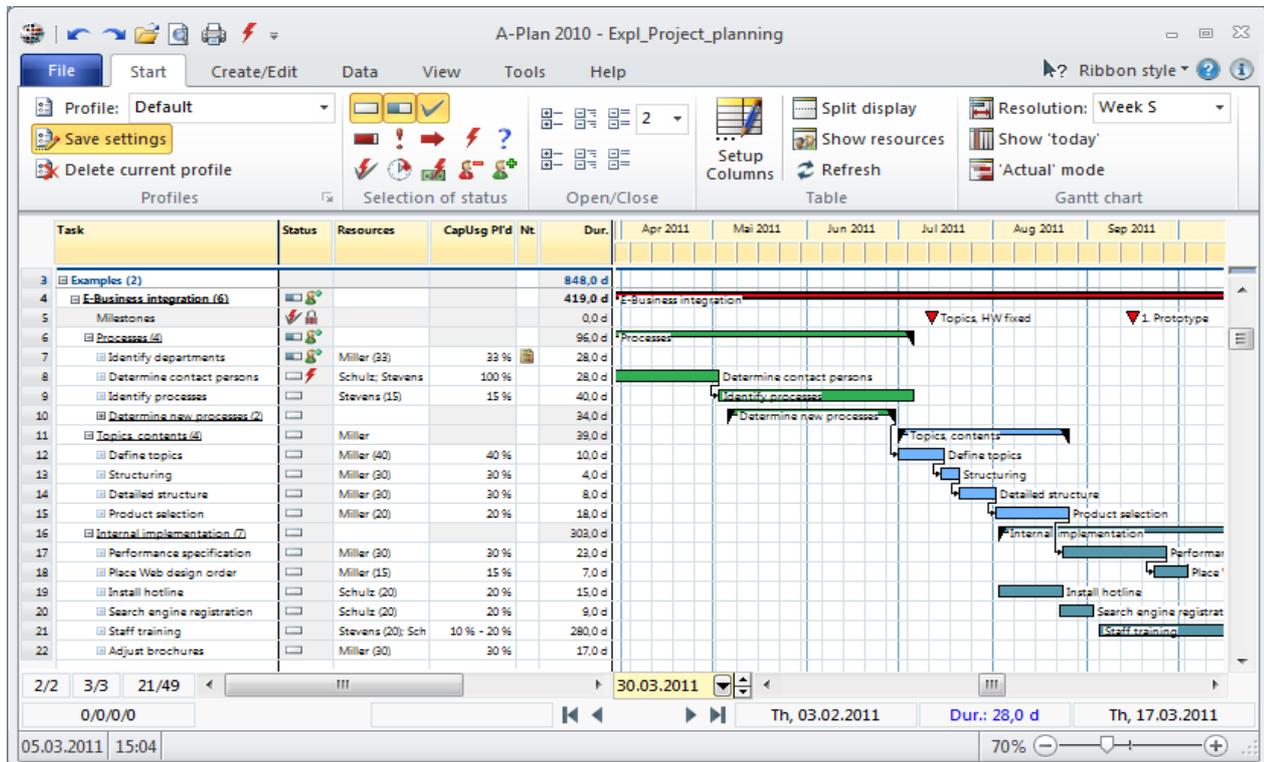
The lower part of the main table can also be used to split the display of the project view in order to have different projects displayed simultaneously. Splitting is triggered either by using the function **Split display** in the tab **Start** (see above) or by pulling down the splitting line (top right corner of the main table):



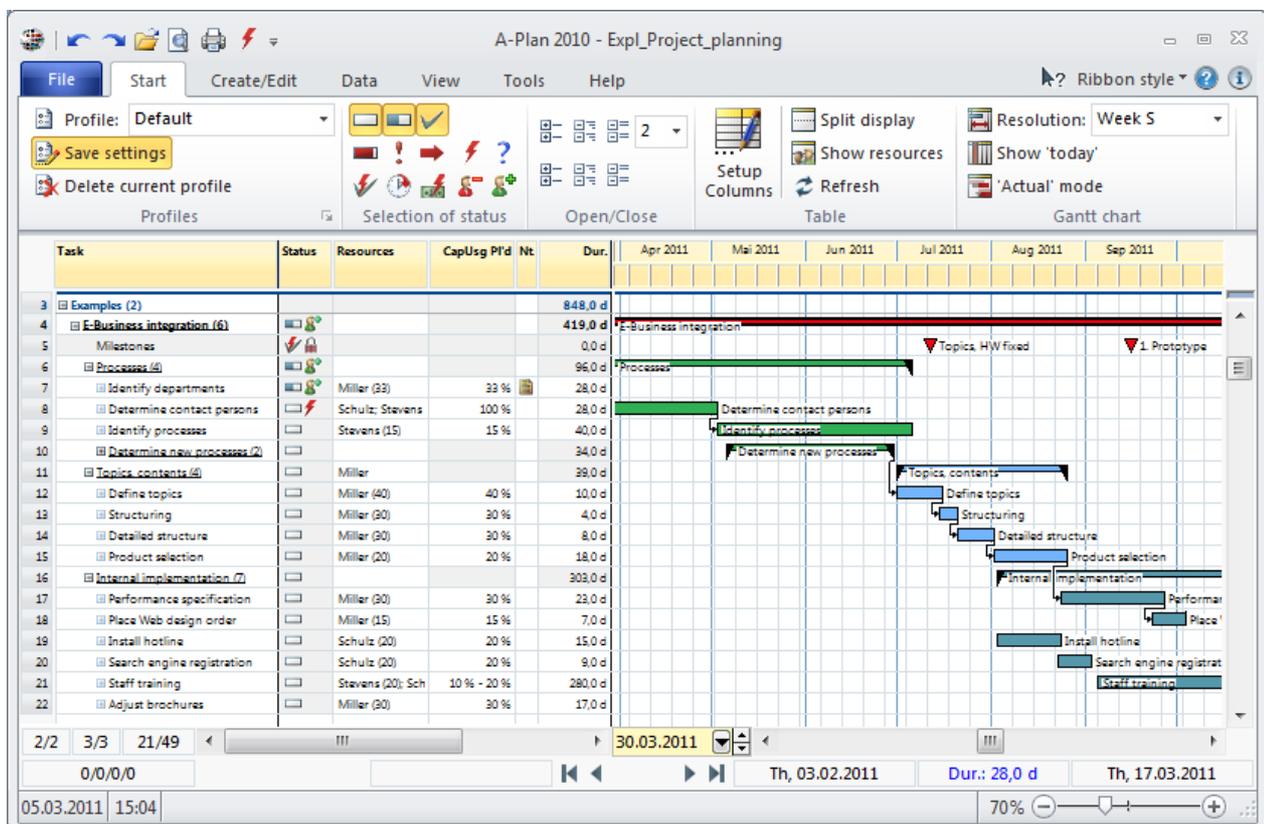
Splitting is cancelled by clicking the function **Split display** once again or by pulling the splitting line to the upper or lower edge of the main table.

## ZOOM FUNCTION

The view of the main table can be zoomed in the range from 20% to 180%. Enlarging the view provides better reading ...



... while small zoom factors give you a better overview:



## STRUCTURING (FOLDERS, PROJECTS, TASKS)

An A-Plan database allows you to create an almost unlimited number of projects which – for structuring reasons - may be saved in up to 32,000 different folders. For example, you might create one folder for all "development projects", one folder holding all "production orders", one in which all "press launches" are included and so on. Each folder may include as many as 32,000 projects with each project consisting of 32,000 tasks.

	Lev.	Task
3	1	Examples (2)
4	2	E-Business integration (6)
5	3	Milestones
6	3	Processes (4)
7	4	Identify departments
8	4	Determine contact persons
9	4	Identify processes

The tasks included in a project can be broken down to as many as 99 levels. **Folders** can be recognized from their blue color while **projects** are shown in bold type and **tasks** in standard type.

The numbers given in brackets behind designations indicate the number of items to be found on the next lower level.

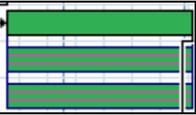
### Note:

With filters being applied (see "Filters" on page 76), it may happen that less lower-level items will be displayed in expanded state than indicated in brackets.

This structuring capability enables you quite easily to limit the number of used databases to just one single database for all current projects of a department or other organizational unit (see "Organization of data" on page 38).

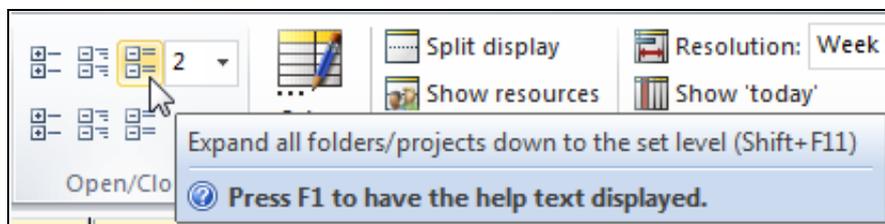
## EXPANDING AND COLLAPSING OF SUMMARIES

Folders, projects and tasks featuring further elements on lower levels can be expanded and collapsed by clicking the little square in front of their designations.

☐ Determine contact persons	Schulz; Stevens	
- Stevens	Stevens	
- Schulz	Schulz	

Likewise, you may expand tasks to which resources have been assigned.

Below the task row a separate row is displayed for each resource.



Furthermore, a larger area or all summaries can be expanded or collapsed.

You can find the respective buttons for doing this in the tab **Start** of the Ribbon Bar. Clicking these buttons will expand or collapse the currently selected area. If no selection was made, all summaries will be expanded or collapsed.

The meaning of the symbols is as shown below:

**Project view (symbols in upper row)**

**Resource view (symbols in lower row)**

☐ Completely collapse all levels

☐ Completely collapse groups/resources

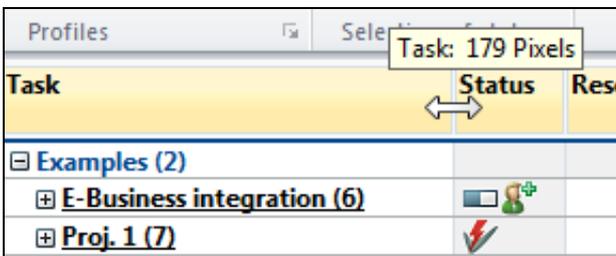
-  Completely expand all levels                      Completely expand groups/resources
-  Expand to the set level                              Expand groups only
- Level to which view will be expanded   -

## COLUMNS

The columns (which are equivalent to the fields in the database) can be shown or hidden as you like. Furthermore,

- o column headlines
- o the sequence of columns
- o the display of hours/minutes (if applicable)

can be selected individually.



The **width of a column** can be adjusted by first positioning the mouse pointer on the right border line of the column (in the headline area). After the form of the mouse pointer has changed as

shown in the above example (see "Duration"), drag the line to the desired position while keeping the left mouse button pressed.

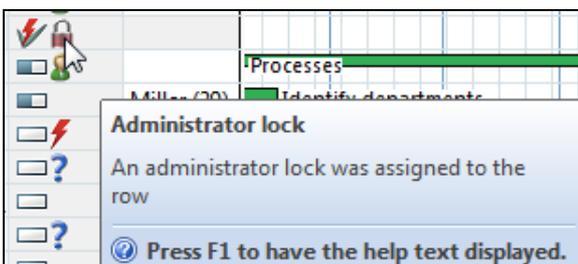
The scroll bar located at the bottom of the table is used to move the table in horizontal direction. This is particularly useful if the overall width of all displayed columns exceeds the size of the visible table area. To learn how columns are shown and hidden, see the chapter "Columns/Rows" on page 112.

## STATUS COLUMN

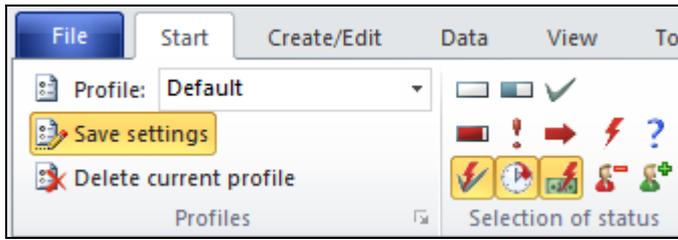
Task	Status
<input type="checkbox"/> E-Business integration (6)	
Milestones	
<input type="checkbox"/> Processes (4)	
<input type="checkbox"/> Identify departments	
<input type="checkbox"/> Determine contact pers	
<input type="checkbox"/> Identify processes	

The status column is of particular importance as you can see from it at a glance whether projects/tasks must be worked on, whether problems exist or will come up or whether special things must be taken into account.

In addition, the column provides information on particularities of projects/tasks, as for example whether they are locked, whether read permission exists only or whether a reshow date or alarm is assigned.



The meaning of the symbol is shown as soon as the mouse pointer hovers over the symbol.



If data of a specific status are to be displayed only, the suitable setting is made in the tab **Start**.

## SYMBOLS OF THE STATUS COLUMN

-  Planned (Starting date is in the future)
-  Started (Starting date is in the past)
-  Due today (End will be reached today)
-  Completed (see "Completed" on page 238)
-  Deadline was run over (and task was not marked as ,Completed')
-  Reshow date was reached or run over (see "Reshow date" on page 54)
-  An alarm has been set (see "Alarm" on page 56)
-  Marked with "Notice Arrow"\*
-  Marked with "Question mark"\*
-  Marked as "Critical"\*
-  For the folder / project change permission exists only (user is not allowed to insert or delete) (see "Assign access permissions" on page 183)
-  For the folder / project read permission exists only (see ""Assign access permissions" on page 183)
-  Row locked (see "Locking of rows" on page 43)
-  Row locked by administrator (see "Locking of rows" on page 43)
-  Deadline for planned end will probably be run over (see "Project status (planning, current state, prognosis)" on page 108)
-  Planned cost will probably be exceeded (see "Project status (planning, current state, prognosis)" on page 108)
-  Planned capacity insufficient by at least 10% (see "Automatic Adjustments" on page 95)
-  Planned capacity is in excess by at least 10% (see "Automatic Adjustments" on page 95)
-  Do not apply set filters to this row\*\*

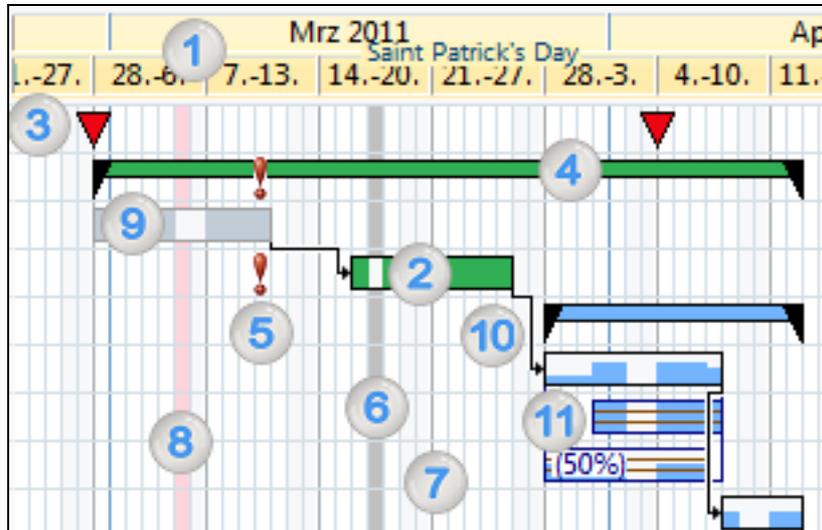
\* The marking can be switched ON and OFF in the tab Data or by selecting it from the context-sensitive menu after having right-clicked the respective row.

\*\* The function can be switched ON and OFF in the tab Data or by selecting it from the context-sensitive menu after having right-clicked the respective row. It has the effect that the selected row will be displayed at all times, even if the row does not comply with set filter criteria. (see "Setting of filters" on page 76).

## THE GANTT CHART

### ELEMENTS AND SYMBOL USED IN A GANTT CHART

The **Gantt chart** is a **calendar in landscape view** in which the date or the time is shown in the **headline (1)**:

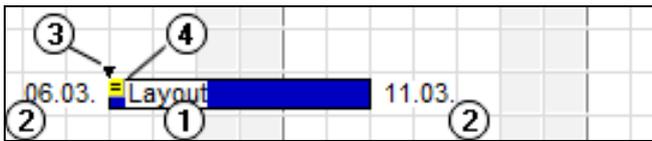


The following elements are used in a Gantt chart:

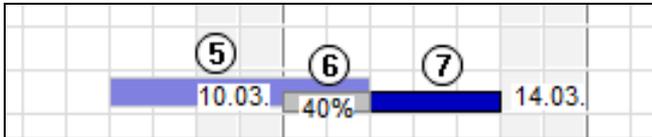
- The sequence of tasks in the execution of a project is shown over time in the form of **task bars (2)**. The duration of a given task (2) is represented by the length of the respective task bar. Bar areas with colored patterns are used to mark time periods spent on a task while light grey areas indicate non-working time periods such as, for example, weekends.
- **Milestones (3)** are task bars of no duration and are displayed as triangles. They can be used to indicate points of time such as a date of submission or a deadline.
- Task bars which serve as summaries (see "Summary rows" on page 41) are displayed in half height and with black triangles at each end (4).
- Exclamation points (5) indicate **reshow dates** (for their meaning see "Reshow date" on page 54).
- **By default, holidays** can be identified from their dark grey background (6) (see "Gantt chart/Colors" on page 116), **weekends** from light grey (7) and the **present day** from a light red background (8).
- By default, the **color** of a task bar in the Gantt chart depends on the priority of the row concerned (for example, priority 1 = red, 2 = yellow, 3 = green, etc.). **Completed tasks** are shown either as gray bars (9) or struck through (horizontal line). Individual colors and patterns are also possible (see "Bar patterns" on page 121).
- **Links (10)** are used to establish and show dependencies between task bars (see "Linking of task bars" on page 57).
- **Resource task bars (11)** are marked by 2 horizontal dotted lines and indicate the time spent on a task by the resources assigned to it (see "What does resource planning in A-Plan look like?" on page 84).

## Properties of task bars

The following additional information can be added to task bars:



Planning state

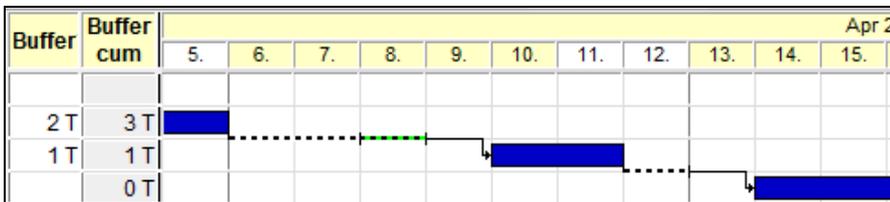


Actual state

- **Designation (1)** (see "Task bars" on page 119)
- **Begin and end** as numerical values **(2)** (see "Task bars" on page 119)
- **Alarm (3)** (see "Alarm" on page 56)
- **Note (4)** (see "Note" on page 57)
- **Planned course (5)**
- **Completed work (6)** (see "Project status (planning, current state, prognosis)" on page 108)
- **Missing work (7) (Prognosis)** (see "Project status (planning, current state, prognosis)" on page 108)

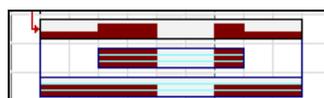
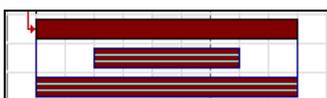
## Links

Links are shown as lines ending with an arrowhead with buffers being displayed as dotted lines (Details see "Buffers" on page 60):



## Display of working times /capacities

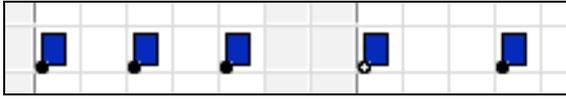
Optionally, task bars can be displayed with an interrupted filling pattern to indicate unassigned or non-working time periods. In addition, available capacity can be seen from the height of the filling pattern (see "Capacity usage of resources / Teams" on page 91):



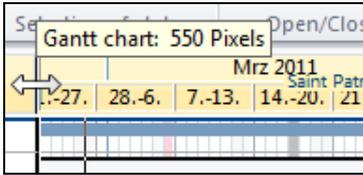
**without** indication of working times    **with** indication of working times

## Series

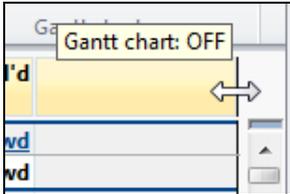
Task bars belonging to a **series** (see "Series (periodically recurring dates)" on page 63) are marked by a colored dot at the beginning of the task bar. Task bars modified manually at a later time are marked by a tiny white cross located inside of the colored dot (see third task bar starting at the left margin in the example given below):



## SETTING THE WIDTH OF THE GANTT CHART



Similarly to changing the width of table columns, you may set the **width of the Gantt chart** as you like by moving the left borderline of the headline with the left mouse button pressed.



If the width of the Gantt chart is reduced to less than ten pixels, it is **no longer displayed** at all. It will come up again if you move the right borderline of the headline towards the left hand side.

## INFORMATION BOXES BELOW THE GANTT CHART

The begin, duration, work and end of the currently selected task bar are shown in boxes (= fields) arranged below the Gantt chart:



### **Note:**

The "work" box appears only if resources have been allocated (see "Resource planning" on page 83).

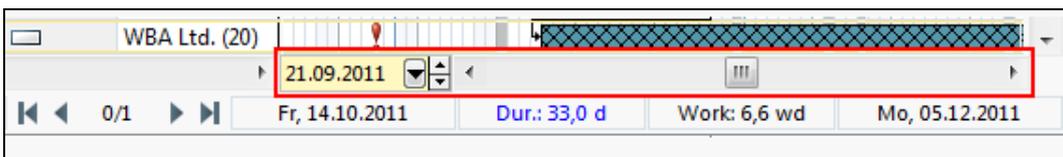
With no task bar selected in the current row, the information boxes below the Gantt chart show the total work and the total duration of all task bars in the row as well as the beginning of the first and the end of the last task bar.

If a reshow date (red exclamation mark) exists in the selected row (see "Reshow date" on page 54), it is displayed in the box on the left hand side:



## VISIBLE TIME PERIOD

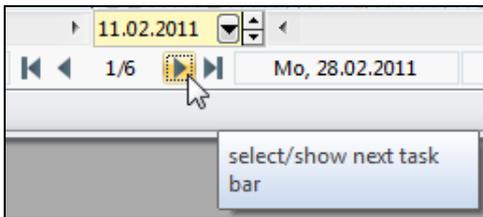
Use the scroll bar at the bottom of the Gantt chart to have the time period displayed as you need it:



The **box to the left** of the scroll bar displays the **date of the first day** shown in the Gantt chart. Use this box to enter the date you want to be shown in the Gantt chart.

Clicking the button  **Show 'today'** in ribbon tab **Start** will adjust the visible time period of the Gantt chart so that the current day is displayed.

## SCROLLING OF TASK BARS

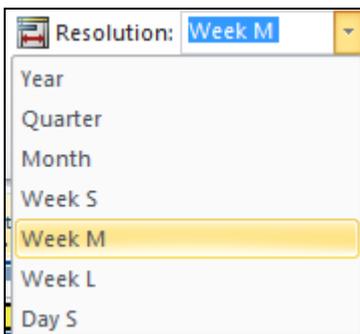


Click the inner arrow buttons below the scroll bar on the left side to scroll through the task bars of the currently selected row.

The box located between the two pairs of arrow buttons displays two numbers. The number to the left indicates the serial **number of the current task bar**, the number to the right indicates the **number of task bars contained** in the selected row.

This function is particularly useful if a great number of task bars exists in a row and you do not know precisely where to find a specific task bar or if a task bar is hidden behind another bar.

## RESOLUTION OF THE GANTT CHART



The resolution of the Gantt chart can be set in steps using the list to the right above the Gantt chart in ribbon tab **Start**. With the coarsest resolution selected, a period of several years can be seen while the finest resolution shows a period of a few hours only.

## WEEK NUMBERS

Choosing the option **Week Numbers** from ribbon tab **View** displays the week numbers in the headline of the Gantt chart (both on the screen and on the printed chart).

## APPLICATION EXAMPLES

### REMARKS REGARDING THE APPLICATION EXAMPLES

Starting A-Plan for the first time will automatically load the example database Bsp\_Projektablauf.apl.

Further examples are available in the data folder of A-Plan (by default this is "Eigene Dateien\A-Plan\Daten" and "Dokumente\A-Plan\Daten" with Windows Vista / Win 7). The names of all example databases start with "Bsp\_" enabling you to distinguish them easily from other databases.

The examples are intended to be ideas or suggestions how certain application cases can be presented with A-Plan. If you have not worked with A-Plan before, we recommend you to open some of the examples first to get an idea of the potential range of applications covered by A-Plan.

The following items will help you become familiar with A-Plan in a short time:

- Notes regarding help: "Help systems" on page 18.
- Description of the user interface: "The user interface of A-Plan" on page 20.
- Creating a database and entering data: "Entering and editing of data" on page 38.

### USING EXAMPLES AS TEMPLATES FOR YOUR OWN APPLICATIONS

Sie können die Beispiele auch als Vorlagen für eigene Anwendungen verwenden.

You may use the examples as a basis for your own applications.

To learn how to create and use your own template database, see the chapter "Template database" on page 39.

# ENTERING AND EDITING OF DATA

## GENERAL NOTES

This section describes all functions provided by A-Plan for entering, editing or deleting data.

For a detailed description of all data fields see the chapter "A. List of data fields" on page 233.

If you have not worked with A-Plan before, we recommend you to get familiar with A-Plan first by using the tutorial (see <http://www.braintool.com/praesentation.0.html?&L=2>).

## ORGANIZATION OF DATA

Contrary to many other programs, A-Plan is not based on conventional files but on **databases**. One of the main advantages of using databases is that a large number of projects can be saved in a **central database** enabling you to easily perform **resource planning across multiple projects**.

A-Plan allows you to define and apply filters which will help you not to "get lost" in a huge database. Furthermore, we recommend you to cut out finished projects and to save them in a separate archive database (see next chapter for details).

If possible, the database should be saved on a network server – in particular, if several users access the database simultaneously (see also "Central database, Users" on page 12). However, if accessed by a single user only, it may be saved on a local computer as well (by default, in "My Documents\A-Plan\Data").

In any case, make sure to include the A-Plan database(s) in your **data backup scheme!**

### **Note:**

In a database, **all entries are saved immediately** as this is the only way to ensure that several users can access it simultaneously without any trouble. For this reason, there is **no need to save your entries manually!**

For this reason, you should think about making comprehensive changes in a copy of the database (**File / Save as...**) and copying them to the current database afterwards (see "Save as" on page 160).

---

## TEMPLATE DATABASE, ARCHIVE DATABASE

### TEMPLATE DATABASE

One of the outstanding advantages of many PC programs is that the data you created once may be used again and again afterwards. This applies to A-Plan as well which is used most effectively if similar planning projects are not started from scratch each time but if existing projects are used as a basis for new planning work.

For this reason, it will certainly be useful to create a **template database** after you did some planning with A-Plan and to save typical applications in your template database.

This is done most easily by starting A-Plan a second time and creating a new database. Using copy and paste, you may then insert any areas of the current database into your template (see "Transferring tasks and resources to another A-Plan database" on page 73). To make use of one of the templates, just insert it into your current database by proceeding the other way round. Necessary adjustment of dates must not be made individually for each task but is done quite easily by using the function **Calculate / Postpone dates** (see "Postponing all dates of a folder, project or task by a given period of time" on page 74).

### ARCHIVE DATABASE

The procedure used for creating a template database is likewise suitable to transfer finished projects to an **archive database** (see "Archive database" on page 39). Just cut the finished projects instead of copying them and insert them in any other database.

---

## CREATING A NEW DATABASE

1. To create a new database, choose the command **New** from the ribbon tab **File**.
2. This creates a new database and displays an empty table.
3. Then, choose **File / Save as** and save the database either in the default directory of A-Plan ("My Documents\A-Plan\Data") or in any other folder.

---

## UNDO/REDO

In general, you can undo up to twenty entries or changes you made and subsequently redo (=restore) them again. This even applies to complex changes such as deleting, shifting or downgrading entire folders or changing dates in linked task bars etc.



To use one of these functions, choose **Undo** or **Redo** from the **Quick Access Toolbar**. Sometimes, you will find these buttons at the bottom of dialog boxes as well.

## ENTERING ROWS (TASKS)

### SELECTION OF ROWS

You may select any number of rows in the table simultaneously by clicking the number column. To extend your selection, proceed in the same way as for example in your Windows Explorer, i.e. press the keys CTRL, SHIFT or CTRL+SHIFT while clicking additional rows.

3	[-] Examples (2)		
4	[-] E-Business integration		
5	Milestones		
6	[+] Processes (3)		
7	[+] Identify departments		Miller

Row selected

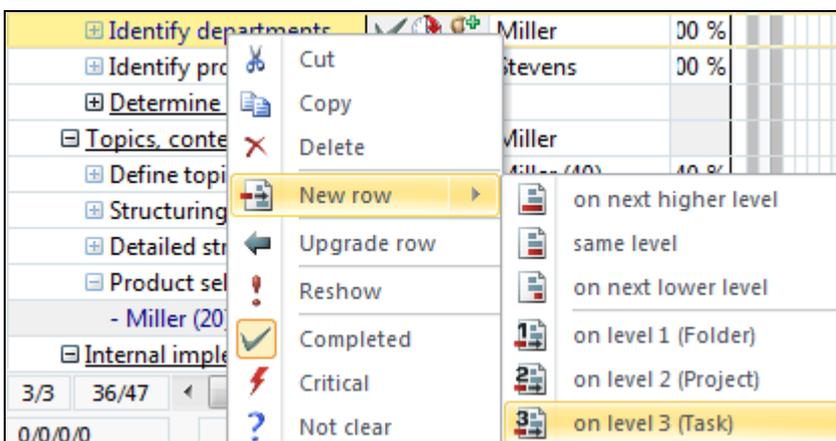
6	[+] Processes (3)		
7	[+] Identify departments		Miller
8	[+] Identify processes		Stevens
9	[+] Determine new process		
10	[+] Topics, contents (4)		Miller

Summary row selected (with lower-level rows)

### ENTER A NEW ROW

To insert a new row, either use the respective command from the ribbon tab **Create/Edit** or click an existing row with the right mouse key. This will insert the new row below the currently selected row or – if no row has been selected (or if the database is still empty) - it will be placed in the top position of the table.

A new row is either inserted in relation to the currently selected row – i.e. on the same or on a lower or a higher level – or absolutely by the user choosing the desired level. However, only those levels will be at your choice which makes sense in a given situation:



#### Note:

You are not allowed to omit one or several levels. For instance, a row on level 3 cannot be followed by a row on level 5!!

The quickest way of inserting new rows is to use one of the **key shortcuts** shown above and to click the **button**  afterwards. Using the button will insert the new row on the level of the currently selected row.

## SUMMARY ROWS

**Folder rows** (= highest level in the structure, see "Structuring (Folders, Projects, Tasks)" on page 29) always serve to summarize all projects or tasks contained in a folder. As a consequence, the task bar in this row extends from the **begin of the first** task bar in the folder up to the **end of the last** task bar:

Task	Status	Resources	I	II	III	IV	I	II	III	IV	I	II
			2011	2011	2011	2011	2012	2012	2012	2012	2013	2013
[-] <b>Examples (2)</b>												
[-] <b>E-Business integration (6)</b>												
[-] <b>Proj. 1 (7)</b>												

All other rows, i.e. on the second or on lower levels, are either shown as **summary rows** (see row "Processes") or as independent rows (see row "Milestones") depending on whether subtasks exist or not:

Task	Status	Resources	I	II	III	IV	I	II	III	IV	
			2011	2011	2011	2011	2012	2012	2012	2012	
[-] <b>E-Business integration (6)</b>											
Milestones											
[-] <b>Processes (3)</b>											
[-] <b>Topics, contents (4)</b>		Miller									
[-] <b>Internal implementation (7)</b>											
[-] Performance specification		Miller (30)									
[-] Place Web design order		Miller (15)									
[-] Install hotline		Schulz (20)									
[-] Search engine registration		Schulz (20)									
[-] Staff training		Stevens (20); Sci									

If subtasks are entered below an independent row, it is automatically converted to a summary row. It becomes an independent row again as soon as all of the subtasks have been deleted.

Parent rows are distinguished from independent rows by their **underlined designations**. The **task bars** of summary rows feature a black triangle both at the begin and at the end and are displayed in half height only.

In addition, the costs and expenditures (work) listed in the rows below are totaled in the summary row:

Task	Work Pl'd	LabCost Pl'd	III	IV	I	II	III	IV
			2011	2011	2012	2012	2012	2012
[-] <b>Internal implementation (7)</b>	<u>112,9 wd</u>	<u>67.710,00 \$</u>						
[-] Performance specification	6,9 wd	4.140,00 \$						
[-] Place Web design order	1,1 wd	630,00 \$						
[-] Install hotline	3,0 wd	1.800,00 \$						
[-] Search engine registration	1,8 wd	1.080,00 \$						
[-] Staff training	84,0 wd	50.400,00 \$						
[-] Adjust brochures	5,1 wd	3.060,00 \$						
[-] Marketing measures	11,0 wd	6.600,00 \$						
[-] <b>External implementation (5)</b>	<u>32,9 wd</u>	<u>19.740,00 \$</u>						

## HIDING SUMMARY TASK BARS

Optionally, task bars in summary rows can be removed from display by clicking on the designation of the row with the right mouse button and activating the option **No summary time bar**.

## UPGRADING AND DOWNGRADING

To upgrade or downgrade a row, selected the row concerned and either click the respective button or choose **Insert / Upgrade Row** or **Downgrade Row**. If need be, several rows may be upgraded or downgraded in one step:

Task	Work PI'd	Lab
8 Internal implementation (7)	112,9 wd	6
9 Performance specification	6,9 wd	
10 Place Web design order	1,1 wd	



Task	Work PI'd	LabCost PI'd	III 2011	IV 2011	I 2012	II 2012	III 2012	IV 2012
8 Internal implementation (6)	106,0 wd	63.570,00 \$						
9 Performance specification	1,1 wd	630,00 \$						
10 Place Web design order	1,1 wd	630,00 \$						

## SHOW TOTALS

Optionally, a row showing the totals of all folders of a database can be inserted anywhere in the table:

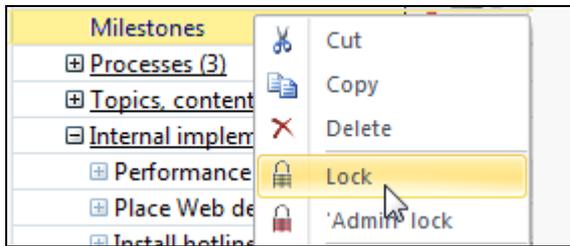
Task	Work PI'd	LabCost PI'd
<b>Total</b>	<b>725,6 wd</b>	<b>435.330,00 \$</b>
Organization (1)	524,6 wd	314.730,00 \$
Examples (2)	201,0 wd	120.600,00 \$

To activate this function, use the dialog box **Options** (see "Columns/Rows" on page 112).

In general, this row is handled as a folder, i.e. its position in the table and its designation can be changed at will. However, you are not allowed to make entries in any of its number fields and you cannot create any projects within this "folder".

## LOCKING OF ROWS

If a single row is to be protected against accidental changes, for example, because it contains a fixed date of delivery, you may lock it against any changes by clicking on the designation of the row with the right mouse key and choosing **Lock row**:



### 'Admin' lock

Normally, the lock can be deactivated by any user having the right of changing the row concerned. For this reason, the network version provides a special lock to users having admin rights ( "Access permissions" on page 180). This lock cannot be deactivated unless you have admin rights.

Task	Status
Place Web design order	<input type="checkbox"/>
Install hotline	<input type="checkbox"/>

Locked rows are indicated in the status column by means of a yellow lock (standard lock) or a red lock (,Admin' lock).

## ENTERING AND EDITING DATA

### EDITING DATA

#### **Note:**

A **list** of all existing A-Plan data fields is attached in the appendix ( "A. List of data fields" on page 233).

Task	Status	Resources	CapUsg PI'd	LabRate PI'd
Internal implementation (7)	<input type="checkbox"/>			^50,00 \$/h
Performance specification	<input type="checkbox"/>	Miller	100 %	50,00 \$/h
Place Web design order	<input type="checkbox"/>	Miller (15)	15 %	50,00 \$/h
Install hotline	<input type="checkbox"/>	Schulz (20)	20 %	50,00 \$/h
Search engine registration	<input type="checkbox"/>	Schulz (20)	20 %	50,00 \$/h
Staff training	<input type="checkbox"/>	Stevens (20); Sc	10 % - 20 %	100,00 \$/h
Adjust brochures	<input type="checkbox"/>	Miller (30)	30 %	50,00 \$/h

Depending on their contents, cells in the main table of A-Plant are displayed with different background colours.

- Cells are **white** if their contents can be changed.
- Cells are **grey** if their contents cannot be changed.
- Cells are **light blue** if their contents were taken over by the resource assigned to the respective cell. The cell is displayed in white colour if deviating values were entered.
- Selected cells are **yellow**.

Having selected a cell by clicking it with the mouse or by navigating with the arrow or tabulator keys, you may either overwrite the current value directly or you may change it with the help of additional entry tools. Entry tools are visible immediately (selection list, scroll arrows, dialog box etc.) or can be opened by right-clicking the entry field.

Pressing the ENTER key or selecting another cell will save the new value while pressing the ESC key will cancel the entry.

## TIME INCREMENT

Entering and changing of points in time is done in a **time increment** which is set **centrally for the entire database** (see "Time/Week numbers" on page 123). The increment specifies the distance between follow-up points in time as they are used for entry and display of time.

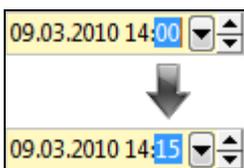
By default, the increment is set to 15 minutes. If required, a longer increment should be set, i.e. choose an interval which is close to the shortest time interval used in your planning but which can still be displayed. For example, if your planning is done mainly in hours or days, you should set the time increment to 1 hour or 1 day respectively.

Larger time increments result in faster internal calculations and allow you to make settings more easily as unwanted intermediate values cannot be set and will not be displayed. The latter is particularly useful when points in time are set in the Gantt chart with the help of the mouse.

## ENTERING POINTS IN TIME

Entry fields for points in time (date and time) show some peculiarities and are likewise opened up by double-clicking the existing value.

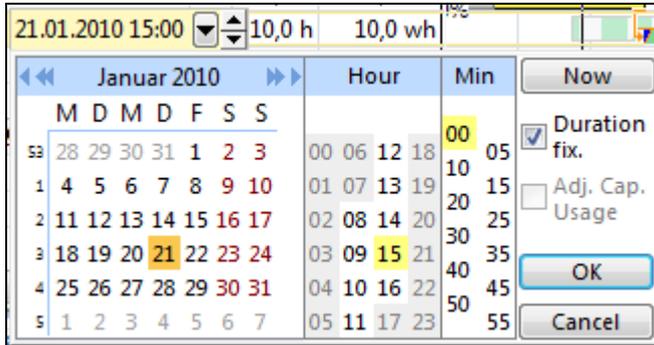
Values are changed along the set **time increment** (see "Time/Week numbers" on page 123):



Scrolling will count up or down **the next higher time unit** as well. For example, if the **set time increment** for the database is **15 minutes**, the time value "14:00" will be followed by "14:15".

To use the **keyboard** for changing a value, just double-click the value to be changed (e.g. the day) and overwrite it with the new value. To enter a completely different point in time, select the entire field and enter the date and time. Do not enter delimiters such as "." or ":". Again, values will not be accepted if they are not in line with the set **time increment**!

- Clicking on the current value in the table with the right mouse button or clicking the down arrow will open an **auxiliary window** for the input of date and time:



## ENTERING DURATION/BUFFER AND WORK

The duration as well as buffer and work can be displayed in years, months, weeks, days, hours or minutes. Time entries can be made in any format that can be interpreted as a period of time as they are converted to the set format later.

Entry examples with the work displayed in **workdays** (1 digit after the decimal point):

1d3h30m = 1.3 wd

2w 2d = 12.0 wd

2.5 weeks = 12.5 wd

Entry examples with the work displayed in **work hours** (1 digit after the decimal point):

1 day 3 hrs 30 min = 11.5 wh

1 3:30 = 11.5 wh

150 min = 2.5 wh

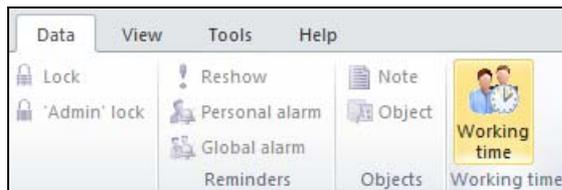
Hence it is of no importance whether you enter the time unit „day“ as d, D, day - or even not at all if you enter it together with hours:minutes.

## TASK BARS (GANTT CHART)

### CALCULATION OF THE DURATION OF TASKS, DEFAULT CALENDAR

#### Note:

With the time increment set to **1 day** (see "Time/Week numbers" on page 123), you **do not have to care about working time!**



The working time used for calculating the duration of tasks is defined in the **default calendar** which can be recognized from a special symbol in the status column. It is displayed after you have clicked the button **Working time** in the tab **Data**.

Calendar	Work Pl'd	Status	Holidays	Start	End	Dur.	00	08:00	10:00	12:00	14:00	16:00	18:00
[-] Calendar (2)													
[-] Default	w/ work		Holiday wor	08:00	16:00	35,00 h							
Monday				08:00	16:00	7,00 h		08:00	12:00	13:00	16:00		
Tuesday				08:00	16:00	7,00 h		08:00	12:00	13:00	16:00		
Wednesday				08:00	16:00	7,00 h		08:00	12:00	13:00	16:00		
Thursday				08:00	16:00	7,00 h		08:00	12:00	13:00	16:00		
Friday				08:00	16:00	7,00 h		08:00	12:00	13:00	16:00		
Saturday													
Sunday													

If necessary, working hours can be changed by shifting the begin or end of the time bar while keeping the left mouse button pressed down.

Click the button **Close working time** to return to the standard view of A-Plan.

**Note:**

All work days of the default calendar must have the **same duration!** For example, if resources work until 16:00 h from Monday to Thursday but until 14:00 h only on Friday, please enter 16:00 h on Friday in the default calendar.

For **work and cost calculations**, additional calendars can be used in which you can specify different working hours.

For more details see "Determine working hours (Resource calendar)" on page 85.

## ENTERING A NEW TASK BAR

Position the mouse pointer in the Gantt chart at the point where the new task bar is to start. Double-click with the left mouse button to insert a new task bar. The length of the task bar is determined by the set default value (see "Settings" on page 130):

Task	Begin Act	Aug 2011	Sep 2011	Okt 2011
[-] Internal implementation (7)	19.07.2011			
+ Performance specification	29.08.2011			
+ Place Web design order	19.07.2011			
+ Install hotline	03.08.2011			

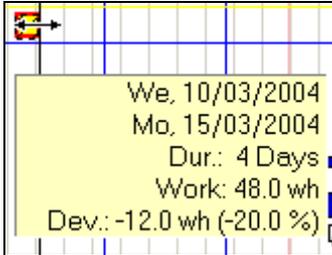
Below the Gantt chart the begin, duration, work (if resources are assigned to the task bar) and end of the task are displayed in separate boxes:

Mo, 29.08.2011	Dur.: 3,0 d	Work: 3,0 wd	We, 31.08.2011
----------------	-------------	--------------	----------------

## USING THE MOUSE TO DETERMINE THE BEGIN, END OR POSITION OF A TASK BAR

- You may change the begin, end or the position of a task bar by dragging while holding down the left mouse button. To do so, position the mouse pointer on the begin or end ( ) or the center of the task bar ( ), click the left mouse button and hold it down while you drag the mouse pointer to the target position.

- Pressing the ALT key while moving a task bar enables you to move the task bar to another row.
- The position field of the mouse pointer displays the current values of the begin, end and duration of the task bar. If resources were assigned, work spent on the task is shown as well and, with planned work entered (see "Required Work" on page 94), the divergence from planned work is shown as an absolute value and as a percentage:



- The new values become effective as soon as you release the left mouse button. To cancel the action, just press the ESC key.

**Note:**

When shifting a task bar, you might unintentionally move it **to another row**. To avoid this, you are required to hold down the **ALT key** additionally to move a task bar to another **row**.

**FINE ADJUSTMENT**

Apart from using the numpad arrow keys (to left/right) for fine adjustment, you may activate and deactivate **fine adjustment** at any time while dragging a task bar by pressing the SPACE BAR. With fine adjustment activated, the horizontal arrows of the mouse pointer show four arrowheads (↔) respectively. This allows you to make precise settings even if the resolution of the Gantt chart is quite coarse.

**USING THE MOUSE TO COPY A TASK BAR**

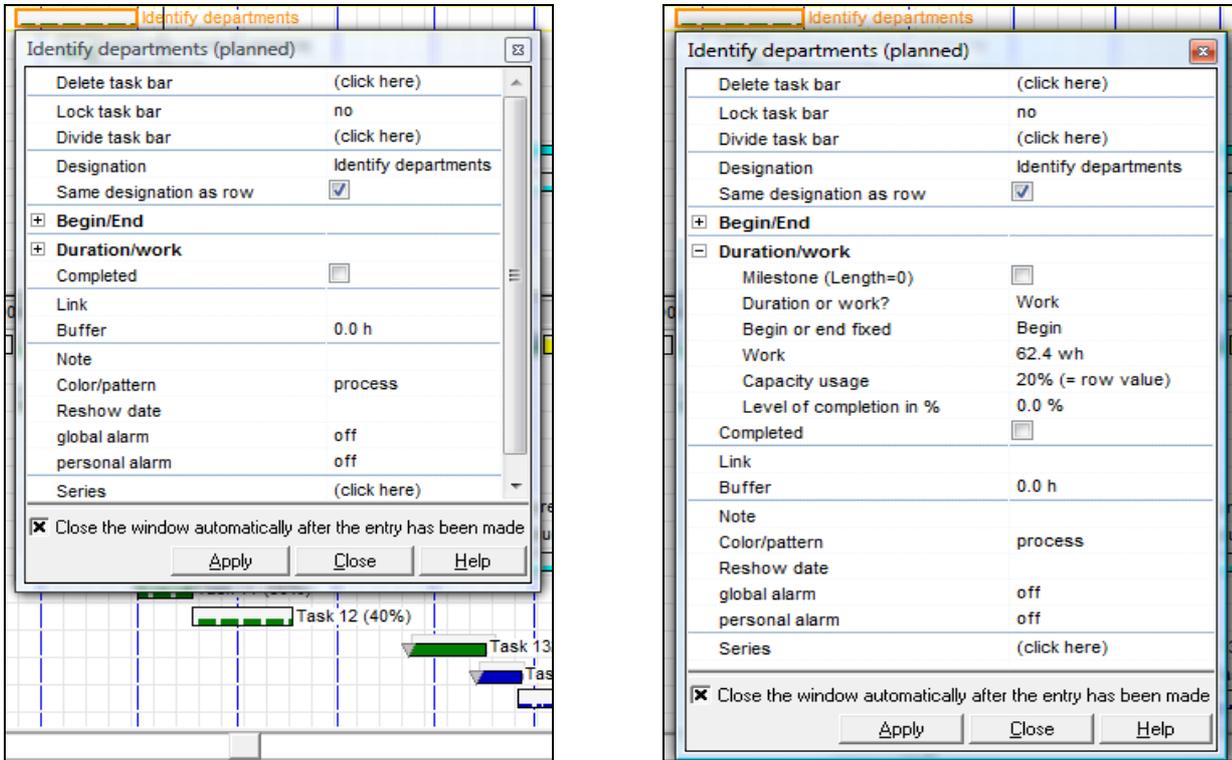
Holding down the CTRL key while you change the position of a task bar will drop a copy of the task bar at the position at which you release the mouse button.

**MILESTONE**

If the length of a task bar is "0", it is displayed as a **milestone** (▼).

## ENTERING MORE PROPERTIES OF TASK BARS

Right-clicking a task bar opens up a dialog window in which all properties of the selected task bar are displayed and can be changed directly:

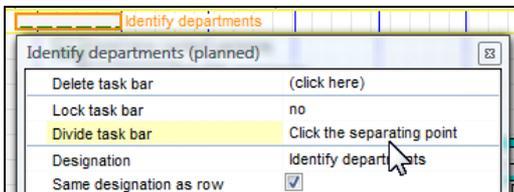


For better clarity, properties are clustered in groups most of which can be expanded and collapsed (e.g. the group "Duration/Work" is collapsed on the left above and expanded on the right).

The dialog box may remain open all the time (to show the properties of the currently selected task bar). Alternatively, the box is closed automatically after you have made an entry in it (make your choice by setting the option at the bottom of the dialog box).

## DIVIDING TASK BARS

The simplest way of dividing a task bar is to left-click it at the dividing spot while holding the CTRL key pressed down.

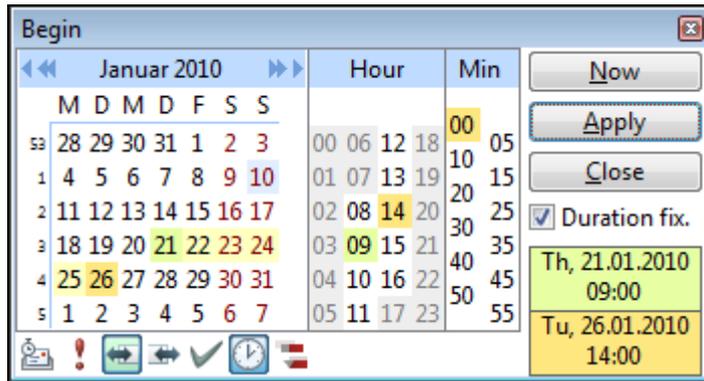


Alternatively, you may select the dividing command in the property box and then click the task bar at the spot where you want it to be divided.

## DIALOG BOX "CALENDAR"

All dates ("Entry date", "Reshow date", "Begin", "End" and "Completion date") can also be modified with the help of a dialog box which displays a calendar as well as the hours and minutes of the day.

Example: To modify a task bar, select it first and then open the calendar by clicking the button  **Calendar** at register **Create/Edit**:

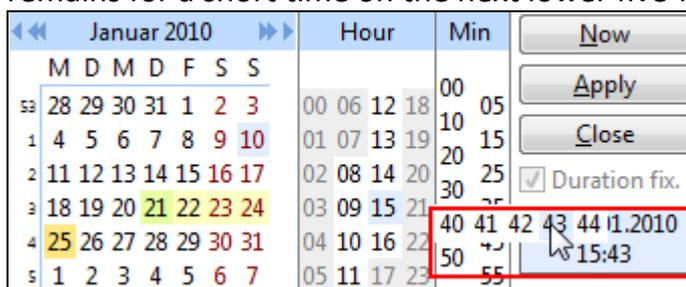


The calendar can remain permanently opened and can be placed anywhere on the screen.

To close the calendar, click the button  **Calendar** again or click the **Close** button in the calendar dialog box.

### **Entering a point in time**

1. If not yet displayed, select the date to be changed by clicking on one of the five buttons shown at the bottom of the calendar. You may have the meaning of the buttons displayed as Tooltips.
2. Use the last two buttons on the right hand side to toggle the display of hours/minutes and to activate or deactivate the mode "Change actual task bar" (see "Project status (planning, current state, prognosis)" on page 108).
3. Specify the year and month using the arrows located above the calendar.
4. Click on the desired day in the calendar.
5. Click the desired hour and minute. Minutes in between appear if the mouse pointer remains for a short time on the next lower five-minute or ten-minute increment:



6. The new date is saved and updated in the Gantt chart by clicking on the **Apply** button. Alternatively, double click on one of the number fields to trigger this action.

### **Colors**

The following **colors** are used in the calendar:

- Entry Date: blue
- Reshow Date: purple

- Begin: green
- End: orange
- Area between Begin and End: yellow
- Completion Date: dark-gray

### Select current time ("Now")

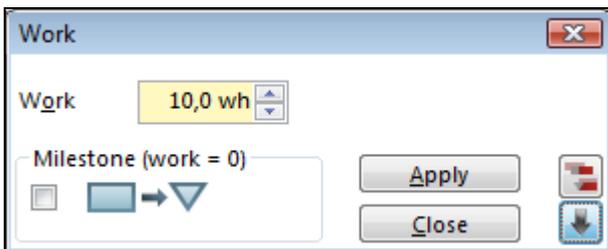
Click the button **Now**.

### Fixed duration / Fixed work:

With the option **Duration fixed** or (if resources are allocated) **Work fixed** being selected, a change of either the begin or the end will have the effect that the related date (end or begin) is adjusted in such a way that the duration of the task bar or the work to be done will remain unchanged.

## DIALOG BOX "DURATION" / "WORK"

A separate dialog box is available for changing the **planned** or the **actual duration** (see "Project status (planning, current state, prognosis)" on page 108) or the **work** of a selected task bar. Click on the button  in ribbon tab **Create/Edit** to open the dialog box:



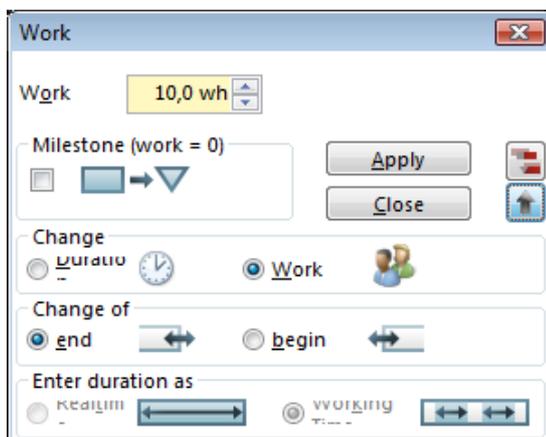
To change the **actual duration**, click the button  first.

Like the calendar, this dialog box can remain opened permanently and can be placed anywhere on the screen.

The **duration** of a selected task bar is changed by clicking on the arrow buttons and is saved immediately after the button is released. The values can also be edited by overwriting the current values.

The check boxes above the entry fields allow you to specify how the duration will be displayed.

Clicking the button () provides further options:



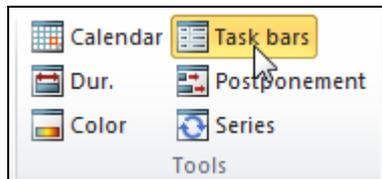
The length of the selected task bar can be entered either as **duration** or – with resources assigned – as **work** (see below).

In addition, you may determine whether the **begin** or the **end** of the selected task bar is to remain unchanged when the duration of the bar is changed.

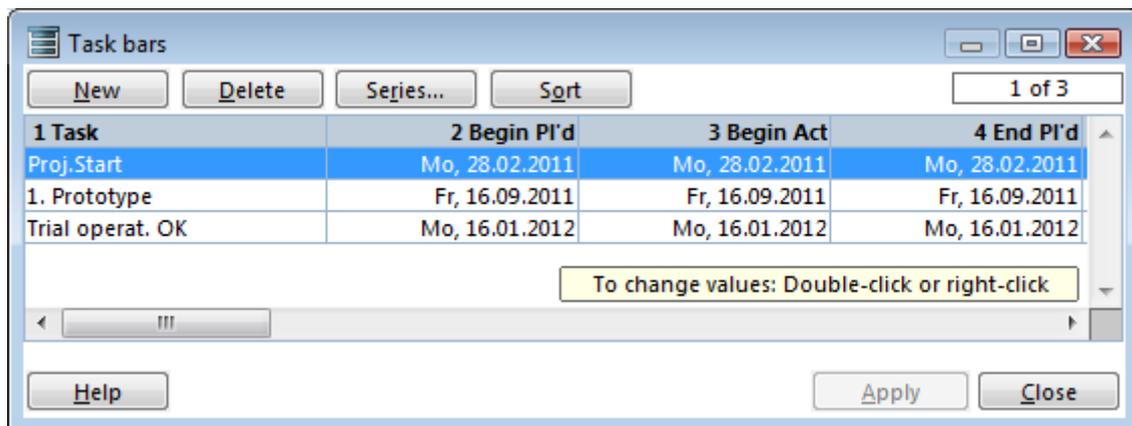
The duration can be entered either as **real time** which means that you enter the sheer difference between the begin and the end or as **working time** based on the working hours of the default calendar (see "Calculation of the duration of tasks, default calendar" on page 45).

## TASK BAR LIST

### OPENING THE TASK BAR LIST



Click the button **Task bars** in the ribbon tab **Create/Edit**.



The presentation of all task bars in a list enables you to see all task bars at a glance (this is particularly useful if one **row** contains many task bars distributed over a long period of time).

#### **Note:**

You may adjust the width of the columns – as well as the entire window – to any size by dragging the border lines.

### FUNCTIONS OF THE TASK BAR LIST

#### **Buttons**

- **Apply** closes open entry fields and refreshes the list
- **Series:** opens a dialog box for creating a series of recurring dates
- **Sort** allows you sort the list according to the set sequence
- **New** creates a new task bar
- **Delete** will delete a selected task bar

#### **Editing of data**

##### **- Begin, End, Completed on**

Double clicking on any field containing a date opens an entry field. Clicking on the down arrow will display an auxiliary window showing a calendar for entering the date.

**Tip:**

Instead of double clicking on a field you may also click on the column concerned with the right mouse button to open the calendar. The quickest way of closing the calendar is to double click on the day you want to select from the calendar.

**- Duration, Pattern, Alarm and Note**

Clicking with the right mouse button or double clicking on any of the columns "Duration", "Pattern", "Alarm" or "Note" opens the same entry windows as in the main window:

- "Dialog box "Duration" / "Work"" on page 50
- "Bar patterns" on page 121
- "Alarm" on page 56
- "Note" on page 57

**- Labour costs planned / Labour costs actual**

The columns "Labour costs planned" and "Labour costs actual" are displayed to inform you how your changes in the begin or end of a task bar will affect the costs involved. As a consequence, the values in these columns cannot be edited.

**- Series**

15 Serie	16 Nz.
+1	
1	
1	

If task bars belong to a series (see "Series (periodically recurring dates)" on page 63), the column "Series" shows the number of the series. A preceding "+" indicates that either the begin, end or the position of the task bar was modified manually after the series was created.

Clicking with the right mouse button or double clicking on a field in the column "Series" opens a dialog window entitled **Series** enabling you to create a new task bar series which uses the task bar of the current **row** as a starting point.

**Creating new task bars**

To insert an additional task bar, just click on the button **New**. If task bars exist already, the new task bar is inserted below the selected task bar.

The following rules are used to determine the begin and end of a new task bar:

**An existing task bar precedes** the new entry:

- Day of begin = the day following the day on which the predecessor ends
- Time of begin, Duration, Designation, Pattern and Alarm are identical to those of the predecessor

**No task bar precedes** the new entry:

- Begin = start of work of the current day
- Duration is taken from the default setting (see "Settings" on page 130)

---

## DESIGNATION OF A TASK BAR

After double-clicking on a task bar or by clicking it with the right mouse button and choosing **Enter Designation**, an entry field is opened in which you may enter up to 100 characters.

Pressing ENTER or clicking another element will show the text within the task bar or – if there is not enough space – after the task bar. If the designations of the task bars are to be hidden temporarily, unselect the option **Designation** at the register **View**.

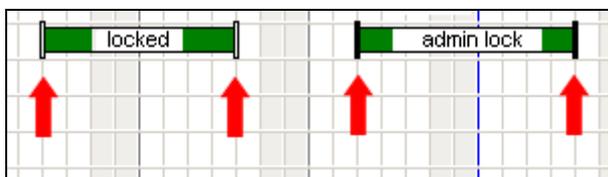
If you want to use the designation of the project or task for the related task bar as well, just click the task bar with the right mouse button and choose **Copy Designation**.

---

## LOCKING OF TASK BARS

In many projects there are deadlines which may not be run over, as, for example, the shipment of a product to the customer or the start of production. In A-Plan, dates of this kind can be entered as **locked task bars**. To lock a task bar, click on it with the right mouse button and choose the command **Lock Task Bar**.

To prevent "standard" users from unlocking a task bar, users having admin rights (see "Access permissions" on page 180) may assign an admin type of lock by pressing and holding down the SHIFT key when entering the lock. This **admin lock** can be deactivated by those users only who have admin rights. Locked bars can be recognized from twin vertical border lines at each end. If a task bar is locked by a user having admin rights, the space between each of the twin vertical borders lines is given a black background instead of a white background:



The chapter "Buffers" on page 60 describes how the execution of tasks can be shifted if task bars are locked.

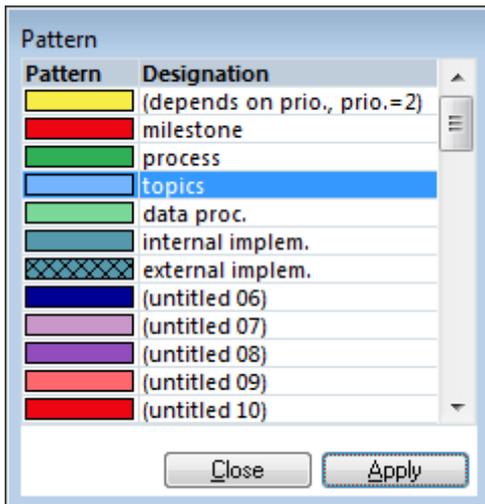
---

## COMPLETED TASK BARS

If a task has been completed, click the task bar with the right mouse button and choose **Completed** (or type CTRL+E). The current date/time is entered as the date of completion.

By default, completed task bars are shown in light-gray. Optionally, they can be "struck through" by means of a horizontal line (see "Bar patterns" on page 121).

## PATTERNS



Clicking on the button  opens a dialog box which allows you to assign different color patterns to task bars. Depending on the selection you made, the color pattern is assigned to a **single task bar** (one task bar selected), to **all task bars of a row** (one row selected) or to **several rows or blocks** (extended selection).

The first entry in the list always shows the default pattern for the selected task bar based on the priority assigned to it (see "Bar patterns" on page 121).

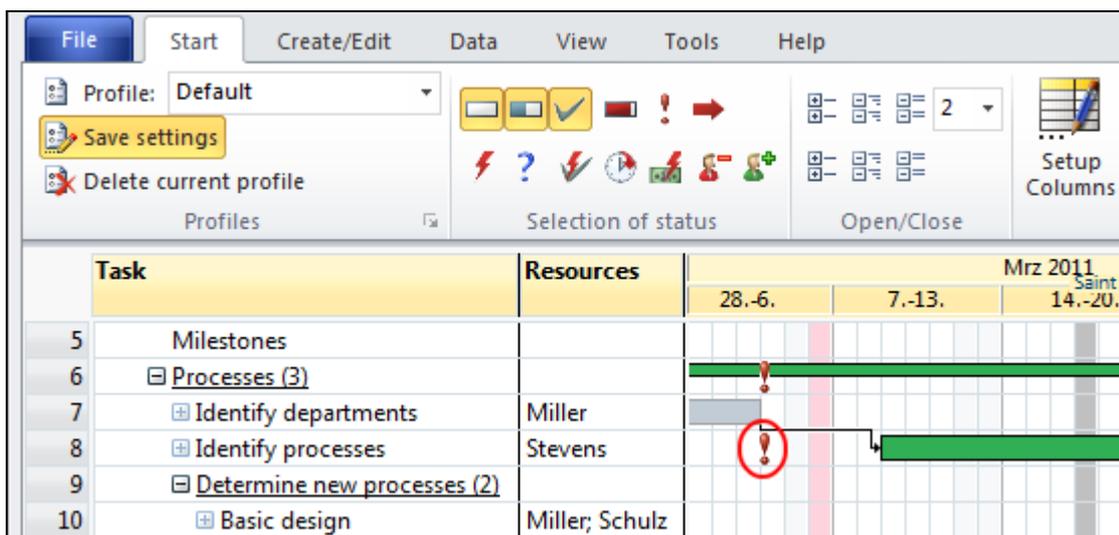
### Tip:

Below the task table you can print a **legend** of patterns and pattern designations (see "Task bars/Notes/Legend" on page 142).

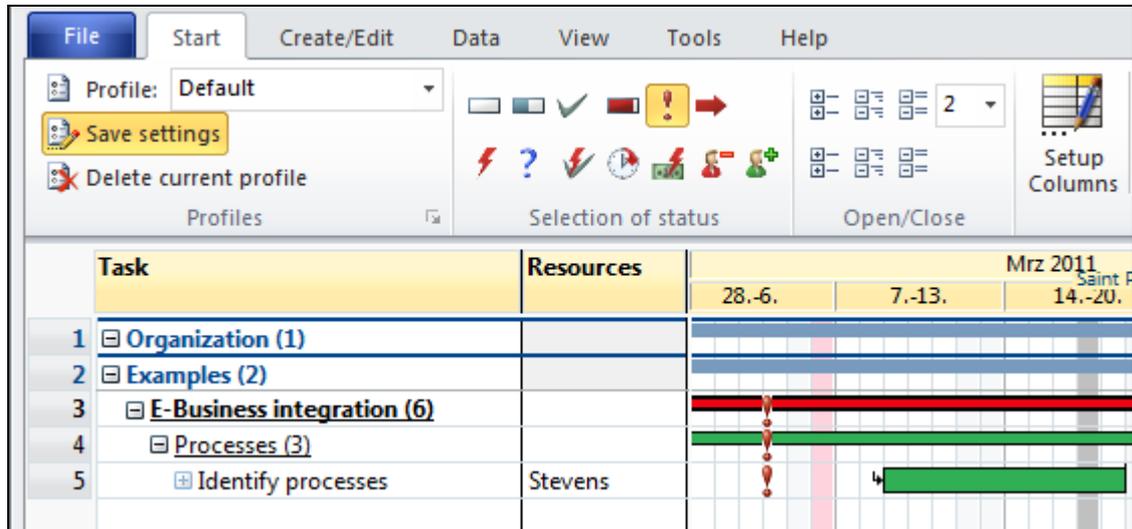
## RESHOW DATE

The **reshow date** function enables you to limit the display to due tasks and to those tasks which you want to be reminded of. Contrary to the **alarm function** (see "Alarm" on page 56) it provides the advantage that the tasks concerned remain permanently within your sight while the alarm function will display them only when the specified alarm time will be reached.

To set a reshow date, just double-click the requested point in time in the Gantt chart while keeping the SHIFT key pressed down. An exclamation mark is used to indicate the time of the reshow date:



With the exclamation mark button being activated in the **status selection**, only those tasks will be displayed which have their **reshow date** before or on the present day (indicated by the light red colour):



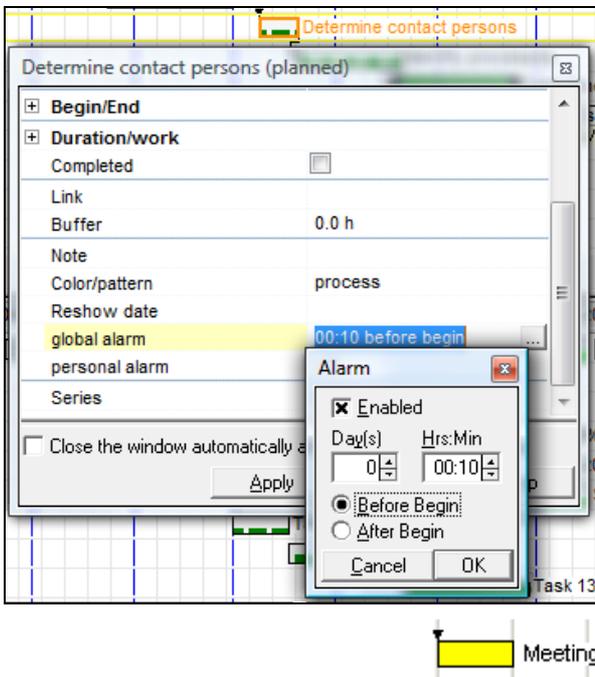
The reshow date in higher-level rows is the same as the **earliest reshow date** in the lower-level tasks.

Apart from setting a reshow date by double-clicking with the SHIFT key pressed down, you may also enter it directly in the **reshow date** column.

To delete a reshow date, select the **reshow date** in the **context-sensitive menu** (by right-clicking the designation of the row) and click **Delete**. Alternatively, select the exclamation mark and press the DEL key.

## ALARM

In addition to the reshow date (one per row only) an **alarm** can be set for each task bar. This will display a reminder window as soon as the alarm date has been reached.



Clicking on a task bar with the right mouse button enables you to set a **global** or a **personal alarm** in the **property box**. The alarm time is taken from the default setting used for this option (see "Settings" on page 130).

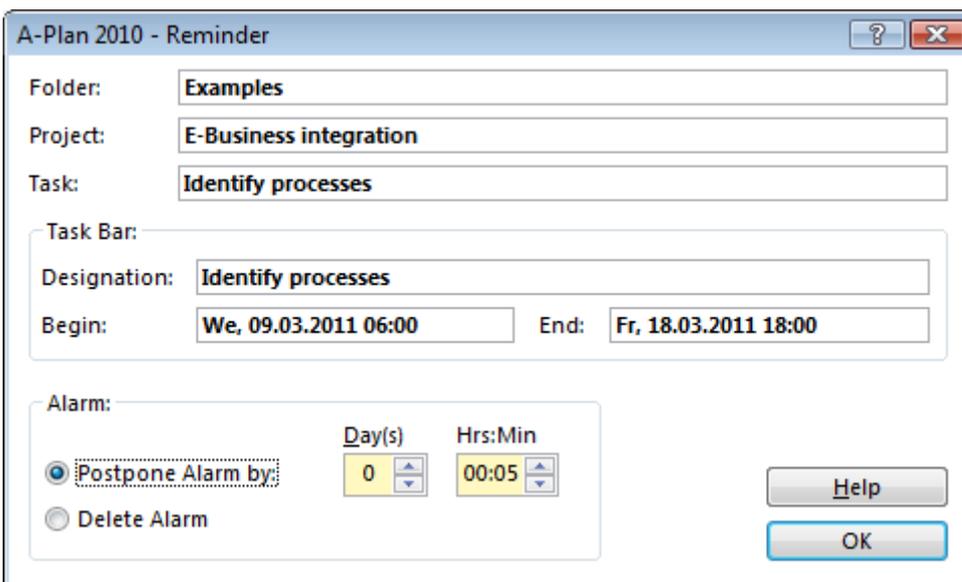
Choosing **Edit Alarm** opens a dialog box enabling you to set the alarm time as you need it.

Please note that an alarm will not be triggered unless you have clicked the check box **Enabled**.

A black triangle is displayed at the begin of the task bar concerned if an alarm has been set.

**Note:** The alarm symbol is not shown when task bars are printed or displayed in the resource table!

An acoustic signal sounds when the alarm date is reached and the following window appears on the screen:



The dialog box even appears if you are currently working with another program and A-Plan is either concealed behind this program window or minimized.

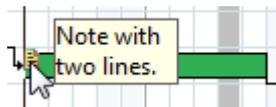
You may now delete the alarm or have it postponed by the period of time you specify. In the case of a global alarm, each user may take his/her own decision.

**Note:**

If the global alarm should **not be displayed** to certain users as a general rule, this setting can be made in the user settings (see "Access permissions" on page 180).

**NOTE**

A note or memo can be added to every task bar and every milestone. Hovering the mouse pointer over the corresponding symbol for a time longer than .5 seconds will display the note:



To enter or edit a note, click on the task bar concerned with the right mouse button and choose the command **Note** or click the symbol  in the first toolbar. This will open a dialog box where you can enter a new note or edit an existing note.

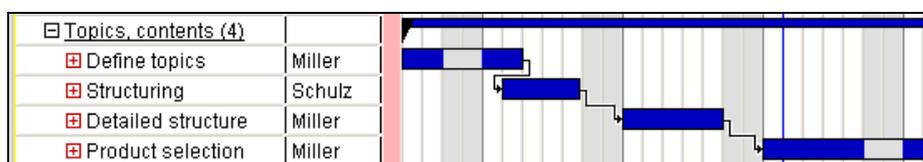
The note symbol is removed after the text of the note was deleted completely.

**LINKING OF TASK BARS**

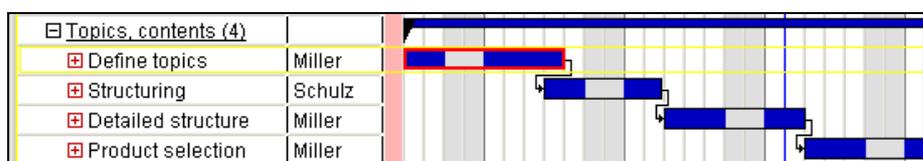
Task bars can be linked to each other to avoid the need of manually changing all task bars affected by a change made to a single task bar. If, for example, the third of ten linked tasks is postponed by two weeks, then the remaining seven tasks are automatically shifted by two weeks as well.

Links are shown as lines ending with an arrow. A task bar to which an arrow points ("successor") depends on the task bar from which the arrow originates ("predecessor"). This means that the distance between the two task bars will not change if the predecessor is shifted or if its duration is changed.

**EXAMPLE**



If the task "Get cardboard boxes" in the shown project takes longer than originally planned, all follow-up tasks will be postponed by the same amount of time:



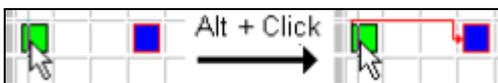
It seems as if the **lengths** of some task bars changed as a result of the shifting. In fact, the postponement was made in consideration of working times so that the lengths of the task bars has remained unchanged **in terms of working days!**

The distance between linked task bars remains the same if one of the predecessors is shifted or if its duration is changed. If a reduction of the distance is to be permitted to a certain extent, **buffers** can be inserted between task bars (see "Buffers" on page 60).

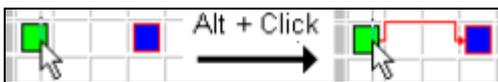
### ESTABLISHING A LINK BETWEEN TASK BARS

The simplest way of establishing a link is to select the **successor** first and to click the **predecessor** next while holding down the ALT key.

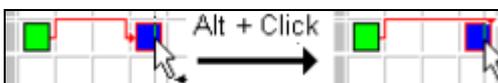
If the begin of the successor is to depend on the **begin** of the predecessor, click the predecessor on the left from the center:



If the successor is to depend on the **end** of the predecessor, click the predecessor on the right from the center:

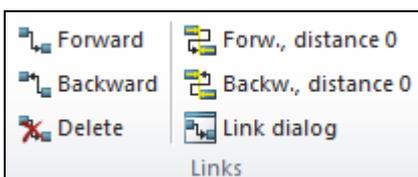


Next, you can change the linking point of the **successor** by clicking the right half of it (or the left half respectively). Do not forget to hold down the ALT key when doing so:



Clicking a link with the left mouse button will select it (the link turns red). To **delete** the selected link, just press the DEL key.

### ESTABLISHING SEVERAL LINKS SIMULTANEOUSLY, DISTANCE = "0"



The tab **Create/Edit** provides several functions for simultaneously linking all task bars of a selected area either forward or backward.

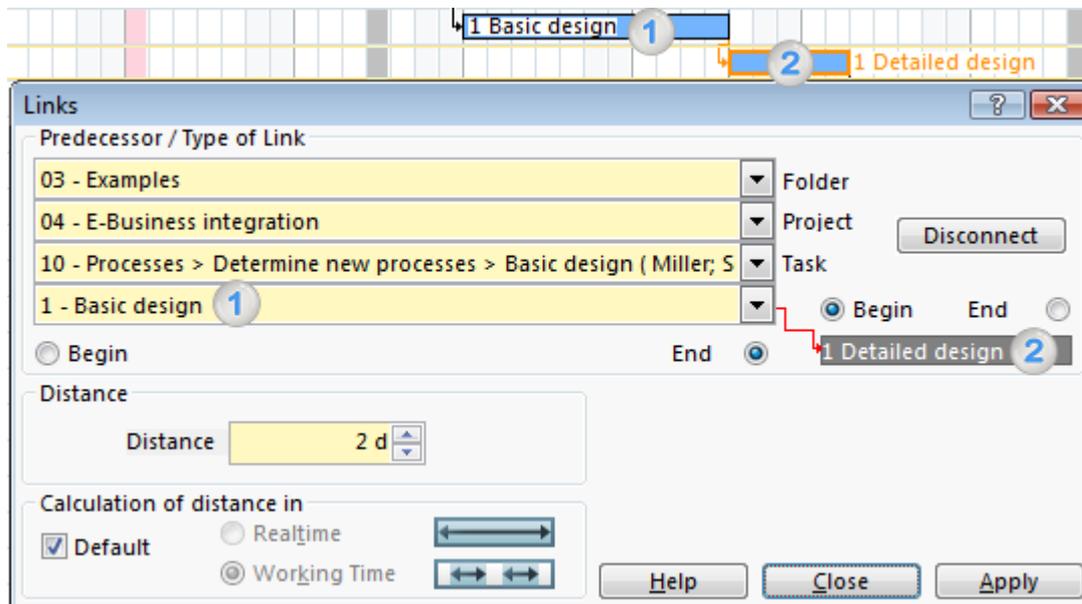
Using the functions with **distance 0** will set the distance between linked task bars to 0 which means that involved task bars follow up each other immediately.

Clicking the button **Delete** will **delete all** links within the selected area.

### DIALOG BOX "LINKS"

If the predecessor is outside of the visible area or if you want to fix the distance between the two task bars, you can adjust the link in a dialog box. Open it by clicking on the successor with the right mouse button and choose **Link** or press the button .

The gray bar in the dialog box (**1**) represents the selected bar in the Gantt chart which is to depend on another task bar:



The predecessor can be selected from the drop-down lists **(2)**. The last drop-down list contains all task bars that exist in the selected row (=task and/or project).

If the predecessor is included in another task, project or folder, select it from the first three fields by starting with the folder first, then the project and finally the task.

When the dialog box is opened, all task bars in the Gantt chart are given a number which is also displayed in the list of the task bars. The numbers enable you to link task bars which have no designation.

In addition, use this dialog box:

- to set the type of link ("end/begin", "end/end", "begin/begin" or "begin/end")
- to fix the distance between task bars
- to set how the distance will be calculated
- to disconnect linked bars.

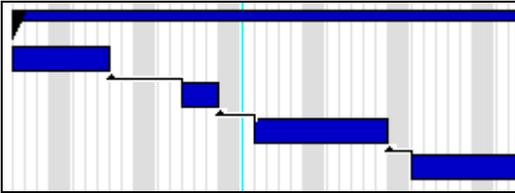
For details on entering and calculation of the distance see the explanations on the setting of the "duration" ("Time/Week numbers" on page 123).

## FLEXIBLE DISTANCES

Sometimes, a follow-up task is to be postponed only after a given **minimum distance** has been reached. This requirement can be met by including additional **buffers** (see "Buffers" on page 60).

## FIXED END (REVERSE LINKING)

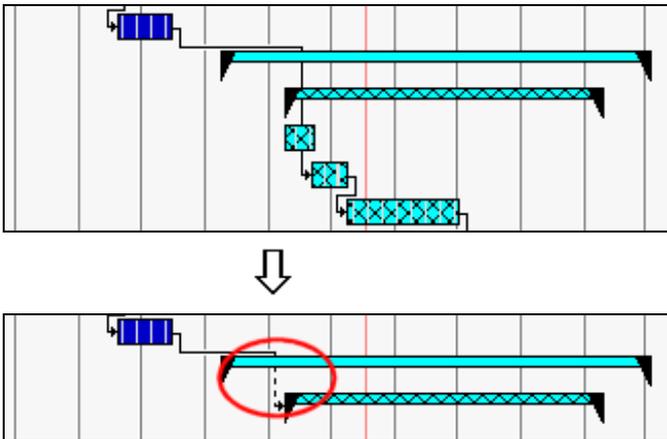
If projects have a fixed end (such as a delivery date) it may be reasonable to link the tasks by starting at the end and linking them towards the begin instead of starting at the begin. With reverse linking, the changes you make will propagate from the right to the left so that the fixed end will remain unchanged:



However, this way of proceeding is suitable only if you are planning a project and want to find out when to start the project. Using reverse linking, delays occurring after the project was started would merely result in the finding that the project was started too late!

## LINKS LEADING TO "COLLAPSED" SUMMARIES

Linking lines ending at task bars which are included in "collapsed" summaries are displayed as dotted lines in this area:



### **Note:**

Links cannot be selected and deleted if one of the task bars involved is included in a collapsed summary!

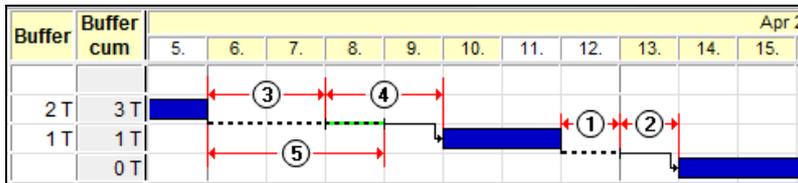
## LINKING IN CIRCLES

The linking of several task bars may result in a circle of links with every bar in fact being its own predecessor.

Since such a circle of links contradicts the laws of logic, a warning is displayed and links are not established.

## BUFFERS

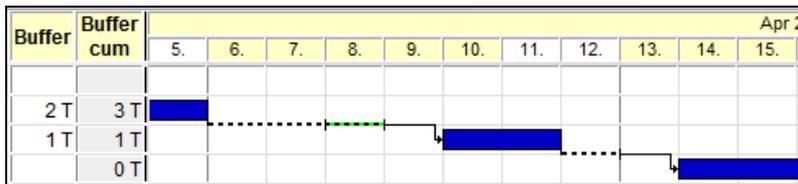
Buffer is the amount of time a task can be delayed before the delay affects the dates of follow-up tasks. Buffer is a reserve time which has the advantage that a delay in the execution of a task does not affect the successor tasks as long as the delay does not exceed the existing buffer.



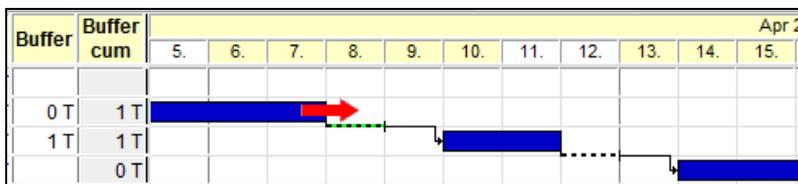
Buffers are indicated by dotted lines as shown on the left.

- The **second task** has a buffer of 1 day (**1**). This means that its end can be shifted to the right by 1 day without falling below the minimum distance (**2**) of 1 day to the next task and without creating the need of shifting the follow-up tasks.
- The **first task** has a buffer of 2 days (**3**) and its minimum distance to the next task is 2 days (**4**).
- If you take into account the effects on the entire chain, the 1-day-buffer of the second task can be added to the 2-day-buffer of the first task which will result in a **total (=accumulated) buffer** of 3 days (**5**). This means that the first task can be shifted to the right by 2 days without affecting the **next task** and by 3 days without affecting the **last task** in the series.

The screenshots below make the interdependence more clear as they show the effects resulting from an increasing delay of the first task.

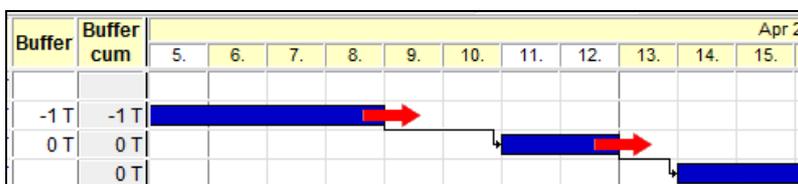


1. Initial situation



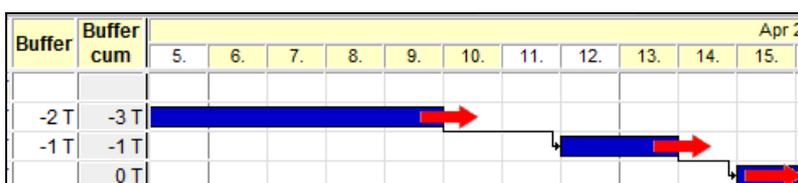
2. First task is delayed by 2 days

**Result:** There is no effect on the follow-up tasks but the buffer of the first task is used up; for the overall chain an (accumulated) buffer of 1 day still exists.



3. First task is delayed by a total of 3 days

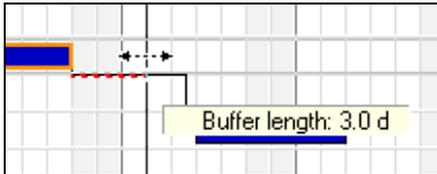
**Result:** The second task is shifted by one day; this uses up its remaining buffer; as a consequence, an accumulated buffer for the first task no longer exists.



4. First task is delayed by a total of 4 days

**Result:** The last task is shifted by 1 day as the initial overall (=accumulated) buffer of 3 days has been exceeded by 1 day.

## ENTERING BUFFERS



Buffer may either be entered in the corresponding column of the table or can be adjusted with the mouse while keeping the left mouse button pressed down. If no buffer exists, press the SHIFT KEY as well to avoid a change in the end of the task bar.

Another way of entering buffer is to right-click the task bar concerned. This will enable you to enter or change the value in the property window (see "Entering more properties of task bars" on page 48) of the task bar.

## NOTES

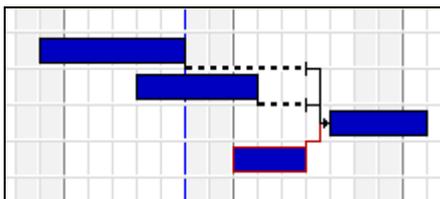
- Buffers can be created in **forward** direction only, i.e. from left to right.
- As a general rule, buffer lengths (incl. accumulated buffers) are calculated and displayed from the **default calendar** (see "Determine working hours (Resource calendar)" on page 85).
- In **Actual Mode** (see "Project status (planning, current state, prognosis)" on page 108) buffers cannot be created or changed.
- If the limits of a buffer are run over, a **negative buffer** will be displayed. This will enable A-Plan to display the original buffer again after a task has been shifted to the left. There are no other effects resulting from a negative buffer.

## SHIFTING WITHOUT CHANGING BUFFERS

Shifting several tasks without changing buffers can be done with the help of the dialog box "Postpone date" (see Ribbon tab "Create/Edit" / "Postponement").

## MULTIPLE LINKS

A task may have **several successors** or **several predecessors**.



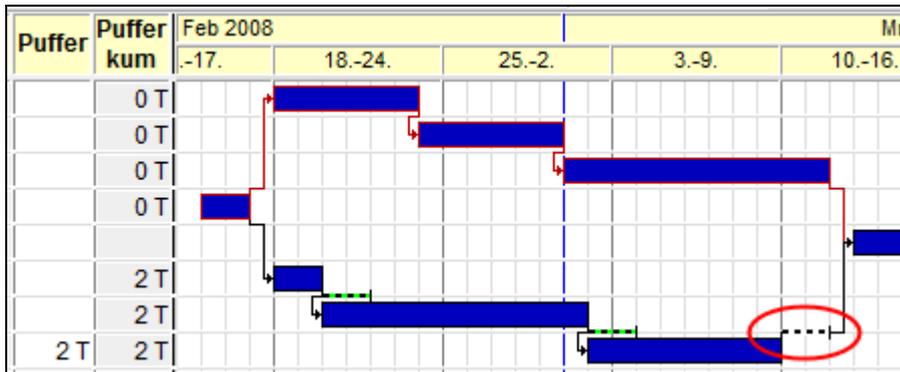
With a task having several predecessors, buffers should be inserted so that the task will not be shifted until one of the predecessors will run over the minimum distance.

### **Note:**

With several predecessors, you can no longer change the linking points at the successor (begin or end) by clicking it with the ALT key pressed down. In this case you have to use the dialog box to do the change.

## CRITICAL PATH

Optionally, the **critical path** can be marked. This is the path from the begin to the end of a project - or a subproject - **with the total of all buffers = 0**. As a consequence, a delay of a task on the critical path will always result in a delay of the final date of completion of the project.



This is true with the upper path in the example – for this reason it is marked red. The lower path is **not critical** as there is a buffer of 2 days for the last task.

**Mark critical path** is an option which can be activated and deactivated in the Gantt chart tab both for the display on screen and for the printout.

## SERIES (PERIODICALLY RECURRING DATES)

Many meetings, appointments and events recur periodically. To facilitate the entry of such dates, A-Plan provides you with a special dialog box:

It comes up if you either choose **Series** from the ribbon tab **Create/Edit** or if you click a task bar with the right mouse button and choose the same command.

### **Important:**

The dialog box cannot be opened unless you entered and selected the first task bar of the intended series before. The selected task bar determines not only the begin of the series but also the time of the begin and the duration of all task bars of the series you create! The only exception are series in which the distance between task bars is in mi-

minutes or hours (see below). In this case, the selected task bar determines the duration of the serial bars only.

A-Plan provides four different recurrence patterns enabling you to create as many variants or recurring dates as possible. The frequency of occurrences can be entered as a number or is calculated automatically if you specify the end date. In addition, existing single dates or series can be deleted before the new series is created.

## RECURRENCE PATTERN "EACH/EVERY"

Choose this recurrence pattern if the distance between recurring dates is always the same. You may specify the distance in terms of :

- minutes,
- hours,
- days or
- weeks

If you choose "minutes" or "hours", you may determine both the day(s) of the week as well as the range of hours to be used:

Recurrence pattern:  
 each/every  day(s) of the week  day of the month  day of the year  
each/every 2 Hour(s) between 08:00 and 16:00  
On  
 Monday  Friday  
 Tuesday  Saturday  
 Wednesday  Sunday  
 Thursday  
 link created dates  
Exclude:  
 Holidays If excluded,  
 omit dates conc.  
 postp. dates conc.

Exclude:  
 Holidays If excluded,  
 Saturdays  omit dates conc.  
 Sundays  postp. dates conc.

In addition, you are allowed to exclude public holidays (and weekends if you choose "days").

Excluded dates can be suppressed (= omitted) or postponed to the next day permitted. This is not true if you choose "minutes" or "hours" as frequency of occurrence. Then, excluded dates are always suppressed.

## RECURRENCE PATTERN "DAY(S) OF THE WEEK"

Use the pattern "day(s) of the week" if you want to create a series of dates which are to occur on the same day(s) of the week in intervals of one or several week(s). Of course, you may specify several days if they are within the same week, for example, every Monday and every Wednesday at an interval of two weeks:

Recurrence pattern:

each/every
  day(s) of the week
  day of the month
  day of the year

On

Monday
  Friday
 each/every  Week(s)

Tuesday
  Saturday

Wednesday
  Sunday

Thursday

link created dates

Exclude:

Holidays
 If excluded,

omit dates conc.
  postp. dates conc.

## RECURRENCE PATTERN "DAY OF THE MONTH"

This pattern provides two ways of defining a frequency of occurrence:

Either choose a day by entering a numerical value

Recurrence pattern:

each/every
  day(s) of the week
  day of the month
  day of the year

On  . day
 each/every  Month(s)

or specify one day of the week together with an ordinal number.

Recurrence pattern:

each/every
  day(s) of the week
  day of the month
  day of the year

On  . day
 each/every  Month(s)

On 

 each/every  Month(s)

With both alternatives, the distance between two dates may cover any number of months.

## RECURRENCE PATTERN "DAY OF THE YEAR"

This pattern is similar to the pattern "day of the month".

Either specify a calendar day

Recurrence pattern:

each/every
  day(s) of the week
  day of the month
  day of the year

On 

 each/every  Year(s)

or one day of the week together with an ordinal number and one of the months of the year:

Recurrence pattern:

each/every
  day(s) of the week
  day of the month
  day of the year

On 

 each/every  Year(s)

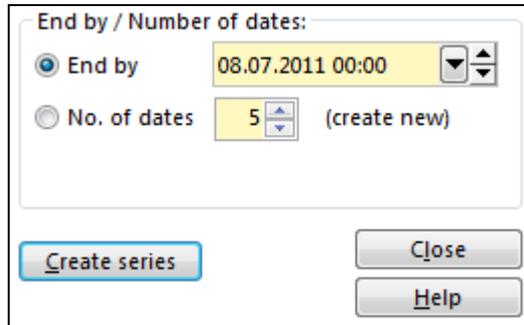
On 

 in 
 each/every  Year(s)

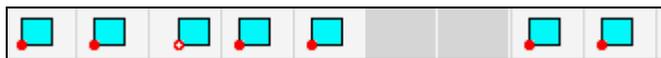
In both cases, the distance between two dates may cover one or several years.

## CREATING RECURRING DATES

Having selected the desired recurrence pattern, either specify a time range or the frequency of occurrences. Clicking the button **Create series** will create a series of task bars starting from the task bar you selected at the beginning:



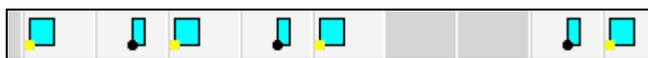
Dates of a series are marked by a colored dot at the beginning enabling you to distinguish them from dates which you entered manually. Recurring dates are not different from manually entered dates, i.e. you may delete or shift them as well. If task bars of a series are modified after you created them, this is indicated by means of a tiny white cross inside of the colored dot at the begin (for an example, see the third task bar from the left in the screenshot shown below:



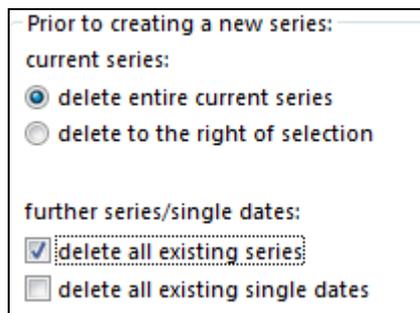
## SEVERAL SERIES IN ONE ROW

You can create several series in one row (for example, if a certain event is to take place on the first Monday and on the third Tuesday of the month). To create a new series, just enter the first task bar of the next series manually and then create the new series.

A different color is used to mark each of the series in a row:



## DELETING EXISTING DATES

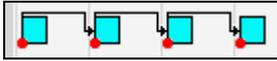


Prior to creating a new series you can delete existing single dates or existing series (for example, if you want to recreate a series using modified settings).

## LINKING OF RECURRING DATES

Activating the option **Link created dates** will enable you at a later time to shift the entire series by a given period of time. Linking created dates will automatically connect the task bars by linking the begin of each task bar to the begin of the next one (see "

Linking of task bars" on page 57):



## CONSTRAINTS

If the selected starting task bar is linked to other task bars, then the **linked task bars** will not be multiplied when a series is created!

For reasons of speed the program does **not check** whether the new task bars overlap with existing task bars. This is even true if the corresponding option was activated (see "Messages / Aids / EMail" on page 131).

A series can no longer be created from tasks with **assigned resources** as soon as the time spent by one of the resources was changed or if a series was created already. If this is needed, the series must be created first and time spent on tasks must be assigned afterwards.

## GENERAL

Object
C:\Users\B...
C:\APlan11
C:\APlan11

Any external file can be **linked** to a row or can be **embedded** in it.

With a file linked or embedded, the minimized icon of the related application as well as the name of the connected file is displayed (see rows 1 and 2 on the left).

Furthermore, the following symbols can be displayed:

- Embedded file (the name of the original {source file} is displayed in curled braces or – if a new file was created – the file type is displayed, see rows 3 and 4)
- File not available (was renamed, moved or deleted, see row 5)
- Application for editing or viewing the file does not exist (see row 6)
- Folder with files: double-clicking on the folder name will start the Windows Explorer and expand the folder
- Internet address (URL): double-clicking on the address will start the standard Internet browser with the respective website

## LINKING/EMBEDDING AN OBJECT

### LINKING BY DRAG AND DROP

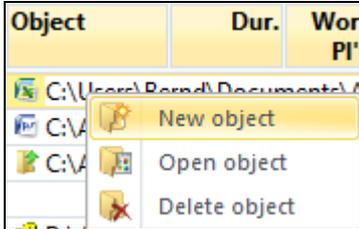
Using drag and drop is the easiest way of linking a file but does not enable you to embed (see above) the file:

To do so with A-Plan running, start the Windows Explorer, click on the file to be linked and drag it to the desired row in the A-Plan main table while holding down the left mouse button. After a few seconds the minimized icon of the related application appears in the column **Object** together with the name of the linked file (depending on the appli-

cation used for creating the linked file and on the power of the computer this process may take somewhat longer).

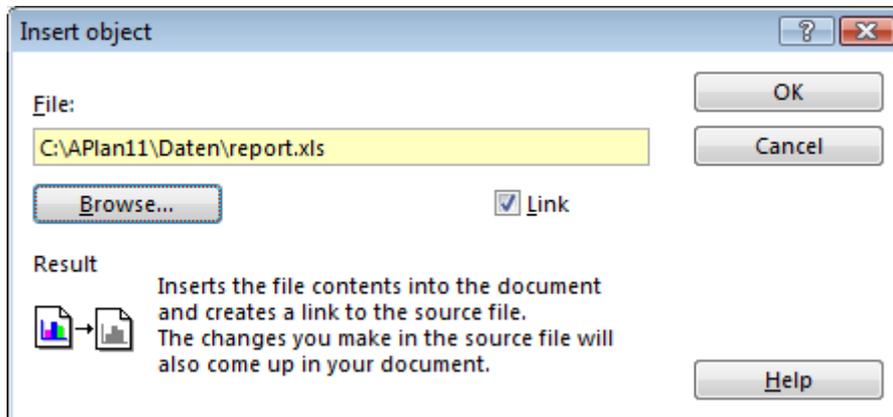
If a link already exists at the target position, the existing link is replaced with the new link, i.e. not more than one link is accepted in a row.

## LINKING BY USING A DIALOG BOX



You cannot make entries directly in this column. Clicking on the column with the right mouse button opens a popup menu enabling you to insert new objects and to open or delete existing objects.

Clicking on a row with the right mouse button and choosing the command **New Object** or double-clicking on the desired location in the main table opens the dialog box shown below:



To link the selected file (see above), activate the option **Link** by clicking on the check box. Otherwise, the file will be embedded.

---

## LINKING FOLDERS AS OBJECTS

Apart from files, folders may also be embedded in the **Object** column. Double-clicking on the folder name will start the Windows Explorer and will display the directory in the Explorer.

Only drag and drop can be used to link a folder to a row. For this reason, the Windows Explorer is started if a link is to be made. To establish the link, just click on the folder and drag it to the target location in the A-Plan table holding the left mouse button pressed down.

## SENDING OF EMAILS

Emails can be sent directly from A-Plan. To enable this, there is a column **(2)** for entering one or several email recipients. With resources assigned to tasks, the email address saved with the resource is used as the default email address.

To inform entered email recipients on the current status of a task, just right-click the email address of the recipient. This will open a **message window** which already includes essential details of the task concerned. Data which have been changed since the previous email are marked by an "\*". Of course, you can add additional remarks and notes to the text:

Task	Resources	E-Mail to
<input checked="" type="checkbox"/> Determine contact persons	Stevens (40)	stevens@braintool.com
<input checked="" type="checkbox"/> Identify processes	Stevens (50)	stevens@braintool.com
<input type="checkbox"/> Determine new processes (2)		
<input checked="" type="checkbox"/> Basic design	Miller, Schulz (30)	miller@braintool.com; schulz@braintool.com
<input checked="" type="checkbox"/> Detailed design	Miller (50)	
<input checked="" type="checkbox"/> Topics, contents (4)		

Res./Task	E-Mail Addr
<input type="checkbox"/> Internal staff (3)	
<input checked="" type="checkbox"/> Stevens (7)	stevens@braintool.com
<input checked="" type="checkbox"/> Schulz (8)	schulz@braintool.com
<input checked="" type="checkbox"/> Miller (19)	miller@braintool.com
<input checked="" type="checkbox"/> Externe (1)	

E-mail

Mail to: miller@braintool.com; schulz@braintool.com

Ref.: A-Plan: Basic design

\* = changed

Folder: Examples

Project: E-Business integration

Task: Processes > Determine new processes > Basic design

Begin: Tue, 08/18/2009, 06:00

End\*: Thu, 09/17/2009, 18:00

Remarks:  
End has changed because of missing documents!

Help Send Cancel

We have refrained from the temptation of implementing an **automated sending function for emails** as there is a high risk of sending emails although you would have preferred to send them later or not at all (for example because changes have not yet been completed or have been made on a trial basis only etc.). An automatic sending function was omitted to prevent A-Plan from increasing the existing flood of mails of which many might remain unnoticed for reasons of quantity.

The columns **Rem. time**, **Reshow date**, **Buffer actual accumulated** and **Last change** are helpful indicators when it comes to deciding whether to send a mail or not:

Task	E-Mail to	Rem. Time	Reshow Date	Buffer Act cum	Last Change
<input type="checkbox"/> Processes (4)		15.00 d	03/18/2009		03/16/09 09:23 PM, User 1
<input checked="" type="checkbox"/> Identify departments	miller@braintool.com	✓			03/16/09 09:23 PM, User 1
<input checked="" type="checkbox"/> Determine contact persons	stevens@braintool.com	✓		11 d	03/16/09 09:24 PM, User 1
<input checked="" type="checkbox"/> Identify processes	stevens@braintool.com	■ -15.00 d	03/18/2009	11 d	03/16/09 09:24 PM, User 1
<input type="checkbox"/> Determine new processes (2)		15.00 d			03/16/09 09:22 PM, User 1

- The **Remaining time** shows tasks which have not yet been finished although they have run over their date of completion (including buffer).
- The **Reshow date** reminds you of tasks which need to be revised.

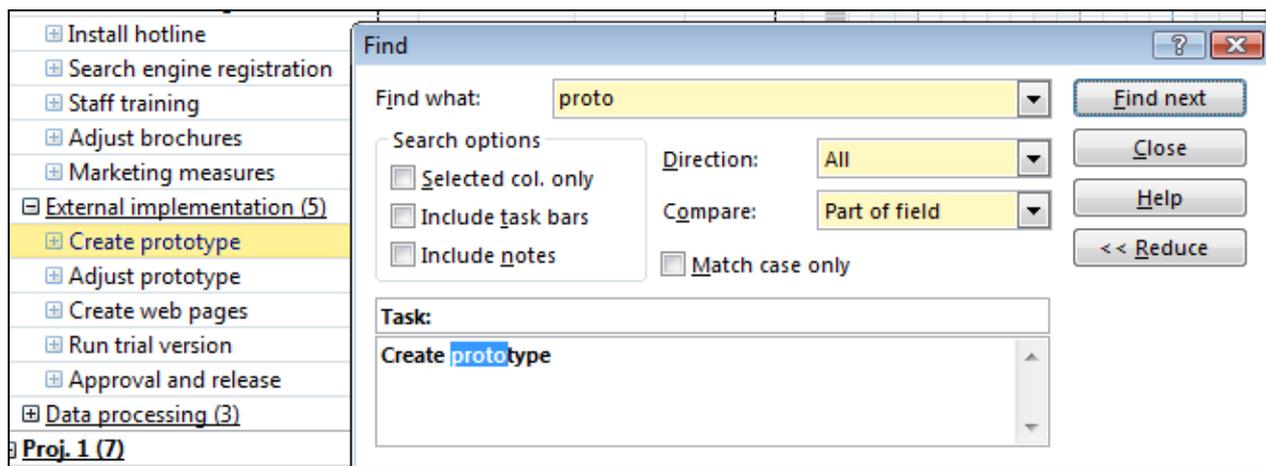
- A **negative accumulated buffer** is to warn you that the task will delay the date of completion of the entire chain of tasks.
- Use the column **Last change** to identify tasks which have been changed recently.

As all of the above-mentioned columns can be combined in a filter – the settings of which can be saved in a profile - it does not take more than a mouse click to have all tasks displayed which might cause problems or need to be revised.

## FIND AND REPLACE

### FIND

Clicking the command **Find** in the ribbon tab **Data** opens a dialog box which will help you to find any string of characters you wish to find in the task table. Start by typing the string you are looking for and click the button **Find next** on the right of the dialog box. The program will look through the table for the first instance of what you typed in and will indicate the row in which the string was found. In the lower part of the dialog box, the found string of characters is shown within its context:



If you do not want to see the context in the lower part of the dialog box, just click the button **Collapse** and the text will no longer appear.

The dialog box may remain open permanently. This allows you to continue the search after you edited a found string.

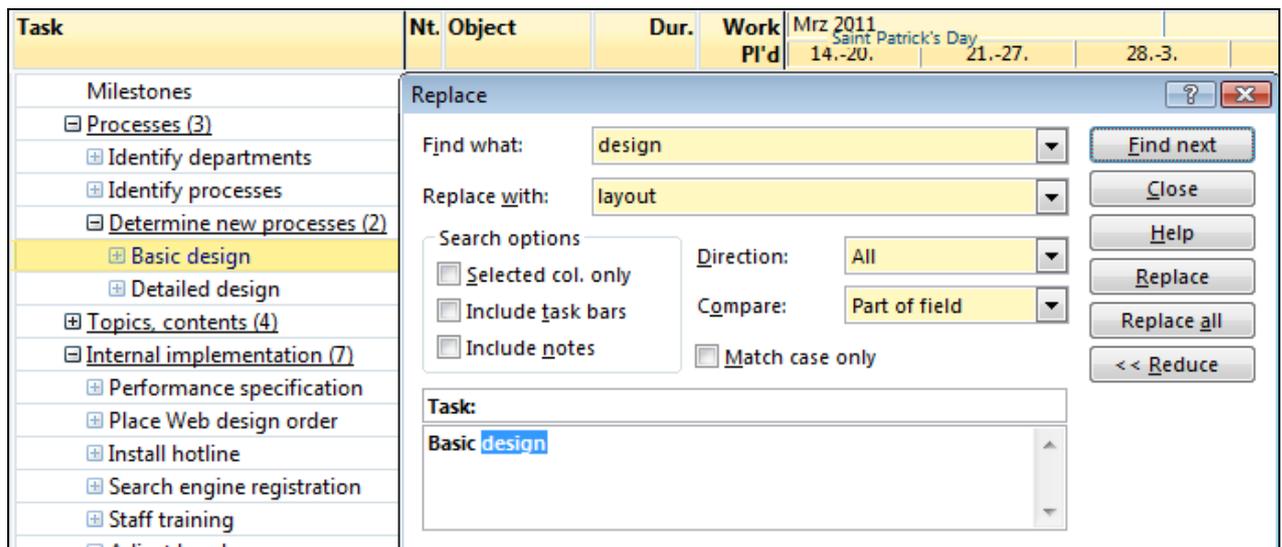
#### **Note:**

The function will look through all the rows which currently exist in the table irrespective of whether they are displayed or hidden in collapsed folders or projects. However, data not contained in the table will not be included in the search, for example, if a filter was set and some of the data do not meet the criteria specified in the filter settings!

## REPLACE

If a given text string in the task table is to be replaced by another string, a special dialog box is available which is opened by choosing the command **Replace** from the ribbon tab **Data**. Optionally, the found instance of text can be displayed in the lower part of the dialog box.

When the first instance of the specific text string is found, you may either replace this instance with the text string you entered in the field **Replace with** or you may replace all instances by pressing the respective button on the right. Especially when using **Replace all**, the replacement process is performed considerably faster if you choose not to have found instances displayed:



Contrary to the **Find** function, opening the dialog box **Replace** deactivates the main window of A-Plan. This means that no actions can be carried out in the main window as long as the dialog box **Replace** is open.

### **Note:**

The function will look through all the rows which currently exist in the table independently of whether they are displayed or hidden in closed folders or projects. However, data not contained in the table will not be included in the search, for example, if a filter was set and some of the data do not meet the requirements specified in the filter settings!

The **Replace** function will not be applied on data if you do not have sufficient access rights for the folders concerned.

You can undo all changes resulting from using the **Replace** function by choosing **Edit / Undo** once after the dialog box has been closed. When undone, they can immediately be restored by choosing **Edit / Redo**.

## MOVE AND COPY FOLDERS, PROJECTS AND TASKS

### SHIFTING OF ROWS (TO CHANGE THE SEQUENCE OF ROWS)

4	Milestones	
5	<input checked="" type="checkbox"/> Identify departments	Schulz
6	<input checked="" type="checkbox"/> Processes	Miller
7	<input type="checkbox"/> Determine contact persons	
8	<input type="checkbox"/> Determine new processe	

To change the order of rows, select the row or rows to be shifted and use the mouse to pull them to the new location. Pulling rows to a new location with the CTRL key held down will insert a copy of the selected row(s) at the new location. Copying is indicated by an additional "+" displayed next to the mouse pointer.

#### **Note:**

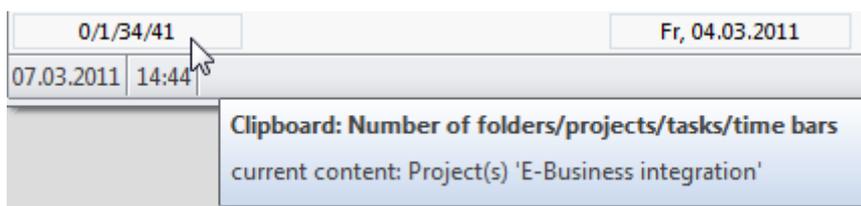
Please be aware that rows cannot be moved to another location if the check box **unsorted** has not been activated before in the dialog box "Sorting" (see "Sorting orders for viewing" on page 81)!

### COPY, CUT AND PASTE

Select the row(s) or the task bar you would like to copy or cut and either choose **Copy** or **Cut** from the ribbon tab **Create/Edit**.

Copying a selected folder or project will not only copy the respective "row" but the complete folder with all projects, tasks and task bars or the complete project with all tasks and task bars.

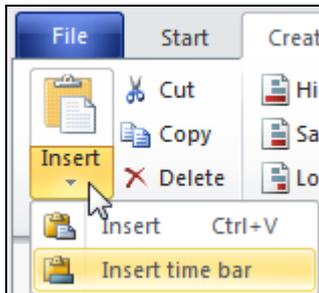
A box at bottom left of A-Plan indicates the number of copied or cut folders/projects/tasks/task bars:



Hovering the mouse pointer over the box indicates the object that is currently stored in the Clipboard.

### PASTING ALL TASK BARS OF A ROW

In addition to copying and pasting a single task bar, all task bars of a project or a task row can be copied or cut and pasted into another row.



To do so, use the command Insert time bar in the ribbon tab **Create/Edit**. The command will just insert those time bars of a project or task row into the selected row which are in the Clipboard.

## TRANSFERRING TASKS AND RESOURCES TO ANOTHER A-PLAN DATABASE

**Tasks** and **resources** can be transferred to other databases. Likewise, entire **projects** and **folders** can be transferred.

To do so, start A-Plan twice on the same computer and open the databases concerned. As both programs use the same Clipboard, data can be transferred by copying or cutting them from one database and pasting them into the other database.

When being transferred, tasks and resources are separated from each other. They are relinked automatically by means of the resource ID numbers stored together with the tasks. For this reason it is of no importance whether tasks or resources are transferred first. If tasks are transferred first and assigned resources are still missing, "n.a." (= not available) is displayed instead together with the resource ID number in parentheses:

Task	Resources
[-] Processes (4)	
[+] Determine contact persons	n.v. (70000300)
[+] Identify departments	n.v. (70000200) (10)

After missing resources have been pasted, their designation is displayed again:

Task	Resources
[-] Processes (4)	
[+] Determine contact persons	Stevens
[+] Identify departments	Miller (10)

With regard to the **resource calendars**, it is true that the entire folder **Working times** can neither be deleted nor cut or copied. However, as described above, you may paste one or several weeks into the respective folder of another database. The assignment of calendars to resources is made by means of designations. For this reason, the designation of the calendar must be unequivocal. If you paste a calendar into a target database in which a calendar of the same designation already exists, then a "2" is appended to the designation of the pasted calendar.

## POSTPONING ALL DATES OF A FOLDER, PROJECT OR TASK BY A GIVEN PERIOD OF TIME

The screenshot shows a dialog box titled "Postpone Dates". At the top, it identifies the "Project: E-Business integration". Under "Shift by:", there are spinners for Years (0), Months (0), Weeks (2), Days (0), Hours (0), and Minutes (0). To the right, under "Actual times:", there are radio buttons for "unchanged" (selected) and "Delete". A yellow box with the text "Important: Choosing 'Delete' will also delete the times entered in the time tracking module!" is present. At the bottom, "Reference date:" is set to "18.02.2011 06:00" and "New date:" is set to "04.03.2011 06:00". Buttons for "Help", "OK", and "Cancel" are at the bottom.

If you want to postpone not only a task but a larger area of a database by a given period of time, A-Plan provides a special function to perform such a postponement.

First, select the tasks, projects or folders to be moved and click the button **Postponement** in ribbon bar **Create/Edit**. This will open a dialog box where you can specify the period by which the selected items are to be postponed.

Then, choose the values to be moved. As you may activate or deactivate any of the displayed values, you might, for example, move all reminder dates only.

### **Important:**

Postponing a folder will also move all projects included in the folder! Likewise, postponing a project will also postpone all tasks included in the project!

If you made no selection prior to opening this dialog box, the postponement will apply to the **entire database!**

The postponement function takes into account existing dependencies between linked task bars: The distance between task bars and the length of task bars will remain unchanged even if these values were calculated from working hours. Task bars located outside of the moved folder or project will also be moved if they are linked to one of the moved task bars.

Instead of specifying a period of time you may enter a start and a target time for the postponement. This means that an existing point of reference (for example 18/02/2011) is postponed to a later point in time (04/03/2011 as shown in the screenshot above).

## DELETING OF DATA

### DELETING FOLDERS, PROJECTS, TASKS OR TASK BARS

One or several rows (folders, projects, tasks) or a task bar can be deleted by first selecting it/them and then either

- pressing the DEL key or
- clicking on the button  **Delete** in ribbon tab **Create/Edit**.

With a task bar selected, the delete command is applied to the task bar only. Otherwise, it applies to the selected rows.

#### **ATTENTION:**

Deleting a folder will delete all projects included in the folder as well. Likewise, deleting a project will also delete all tasks included in the project!

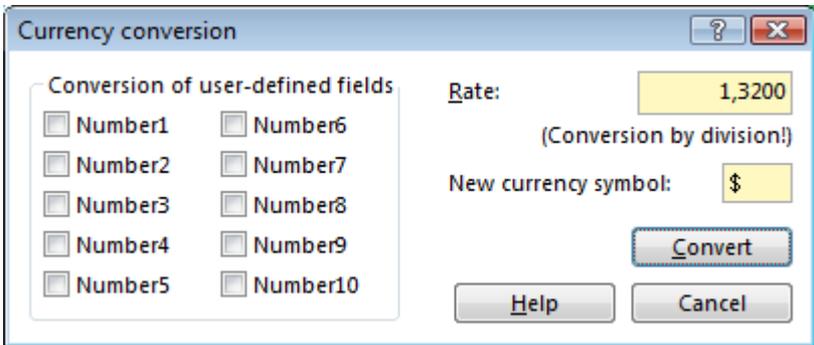
The setting of **Options** (see "Messages / Aids / EMail" on page 131) allows you to request that a delete command will not be executed unless you confirm it a second time.

### DELETING SEVERAL TASK BARS

To delete several or all task bars in a row, select a task bar first by clicking it with the right mouse button and choose the command **Delete several task bars** from the menu. This will display the following options:

- **all in current row**
- all without selected
- all to the left of selected
- all to the right of selected

## CURRENCY CONVERSION



All cost values in an A-Plan database can be converted to any other currency with conversion rates of all currencies of the European Monetary Union being provided by the program.

To start the currency conversion function, click the ribbon tab **Data** and choose the command **Currency conv.**

Furthermore, you may use this window to specify a new currency symbol and to select the user-defined number fields you want to be converted as well.

# DEFINING THE DATA TO BE DISPLAYED/PRINTED

## FILTERS

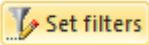
### FILTER

Apart from using the **Status selection** (see "Status Column" on page 30) you may limit the number of displayed/printed data with the help of **filters**.

Enabling a **filter** means that only those data are **retrieved from the database** which comply with specified criteria such as for example "Priority smaller than 3" or "Date of begin later than 01/06/2012".

This has the advantage that the database can hold a large amount of data without impairing the overview.

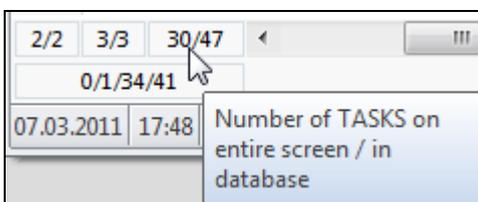
### SETTING OF FILTERS

Clicking on the button  in ribbon tab **View** opens up a dialog box in which various filters (search criteria) can be set.

With filters being set, only those records are retrieved from the database which comply with **all** specified criteria.

A prerequisite for the filters being effective is that you enable them either by clicking the button  or  in ribbon tab **View**.

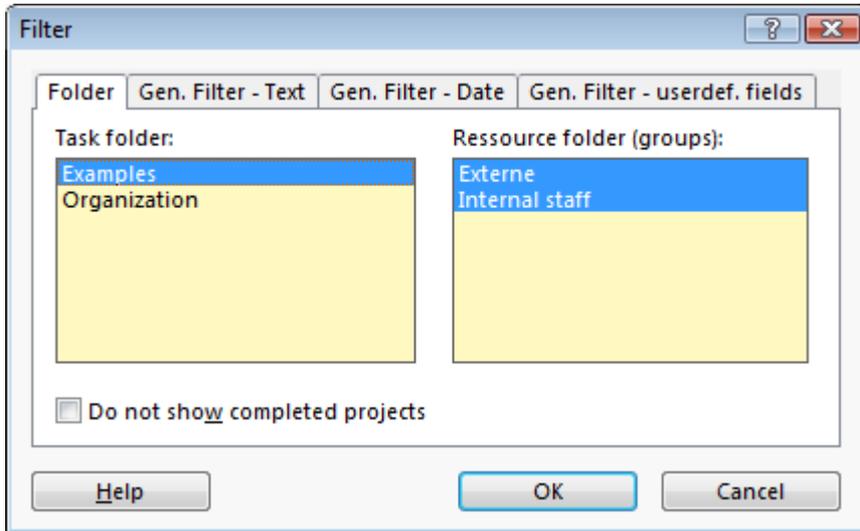
Below the task table there are three boxes which indicate how many of the folders, projects and tasks contained in total in the database were retrieved:



### FOLDER FILTER

The first tab of the dialog box presents two lists: The pane **Task folders** lists all folders which are contained in the database and which include tasks. The pane **Resource folders** lists all resource folders (=groups) contained in the database.

With the button  activated, the folders selected from the lists are the only folders visible in the table of the main window, i.e. the task folder "Examples" and all resource folders in the example shown below:



The selection of folders is identical to the selection of files in the Windows Explorer:

**Do this**

**Result**

Click on a folder

Folder is selected (all others are deselected)

CTRL+ click on a folder

Adds a folder to your selection or removes it if it was selected before

SHIFT+ CTRL+ click on a folder

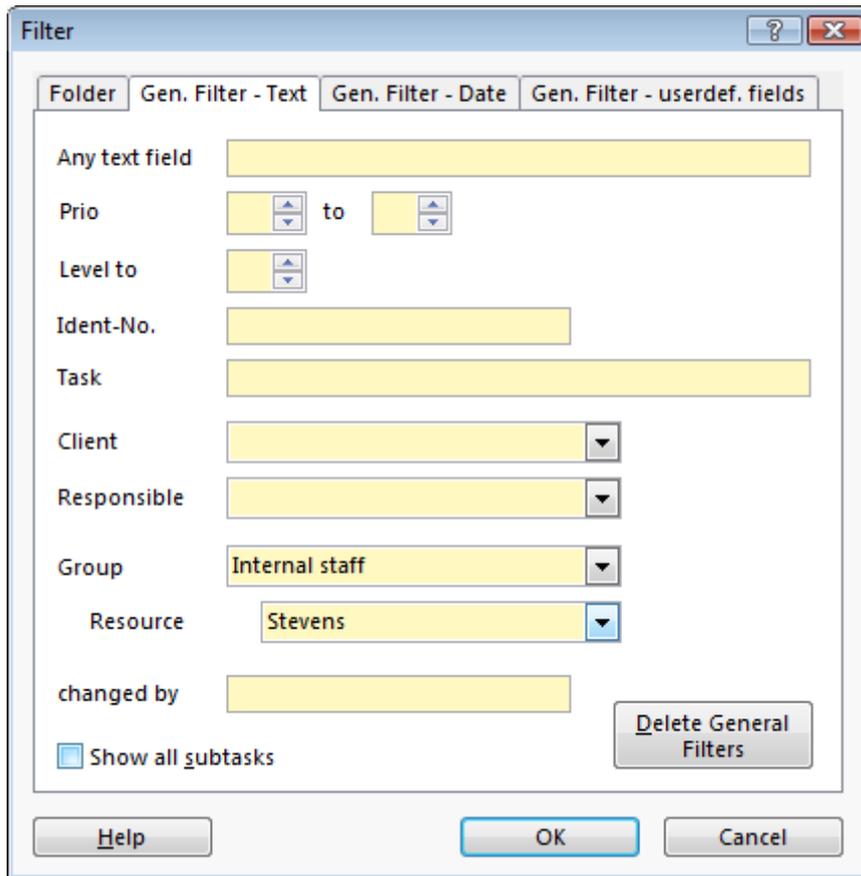
Extends your selection to the position of the mouse pointer

***Do not show completed projects***

With the check box **Do not show completed projects** activated, completed projects are not displayed as a general rule (this also applies to resources).

## GENERAL FILTER - TEXT

The second tab enables you to set filters for all text fields:



### **Important:**

All **General filters** are linked by the condition AND, i.e. if you specify several conditions the database search will find only those records (=rows) which meet all of the specified conditions.

If the text you are looking for may be contained in any database field, just type it in the field **any text field**. When searching the database, texts found in **note fields** or in **free text fields** (see below) will be included in the search.

The wildcards "\*" and "?" may be used in searching for text strings. Entering "Fra\*" will find all strings starting with "Fra" as for example "Franklin", "Fraser" and "Frazer". Entering "Ho??er" will find all strings starting with "Ho", having exactly two characters in between and ending with "er" such as, for example, "Hooker", "Hoover" and "Hopper" but not "Homer" or "Howard".

### **Show all subtasks**

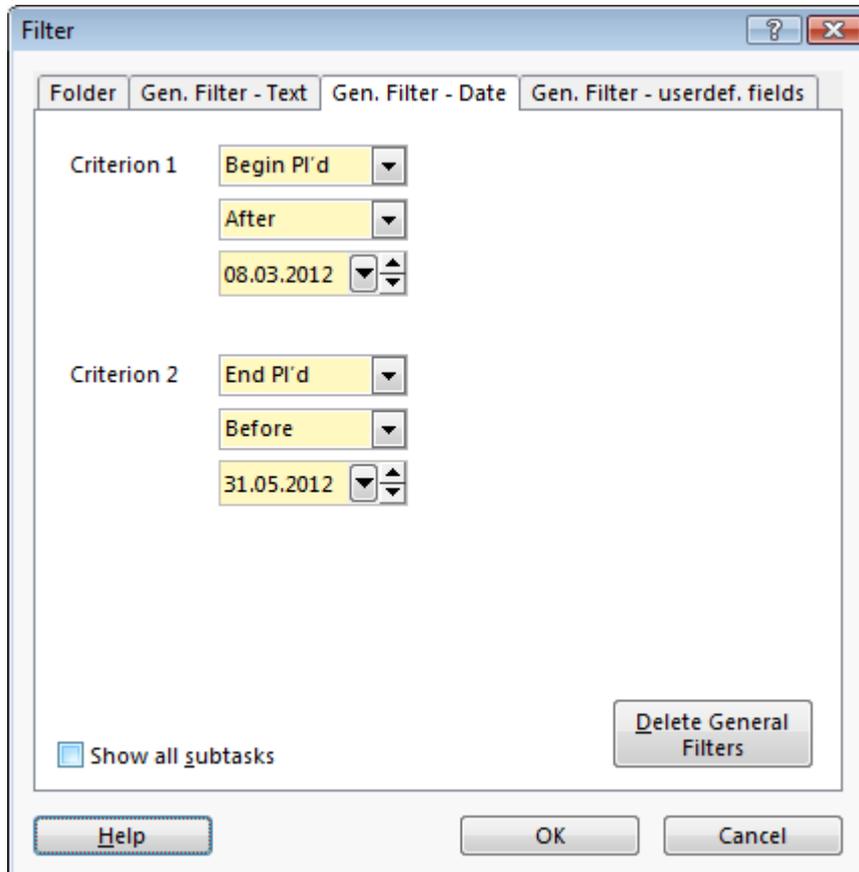
With the check box **show all subtasks** activated, all tasks meeting the specified conditions are displayed together with their subtasks even if the subtasks do not meet the conditions.

### **Delete General Filters**

Clicking on the button **Delete General Filters** will reset all **general filters**. This does not affect the option **Show all subtasks** (see above) as it is not effective with no filters being set.

## GENERAL FILTER - DATE

The third tab allows you to set a filter for two date fields. The list of fields to select from includes "Entry Date", "Begin", "Reshow Date", "End" and "Completed":



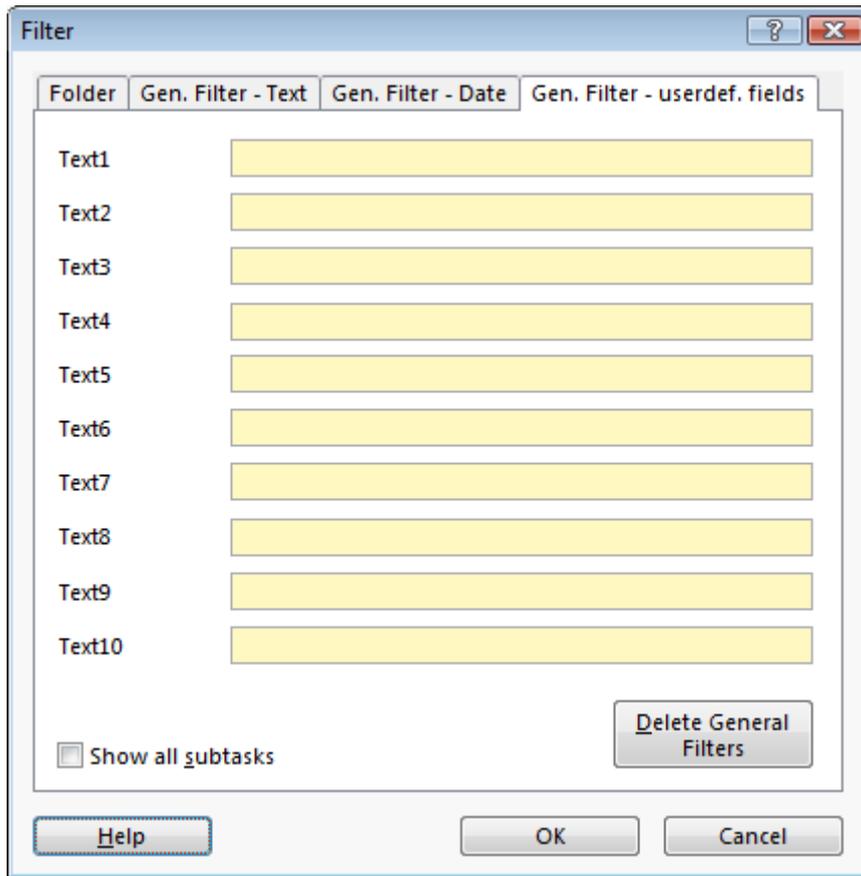
The following possibilities of specifying a period of time are at your choice:

- "Before"
- "After"
- "On"
- "Between" (upper and lower limits are included)
- "Relative".

With the last option – **Relative** - you may specify a period which, for example, starts 10 days before the current date and ends 20 days after the current date (enter **-10** and **+20**).

## GENERAL FILTER – USERDEF. FIELDS

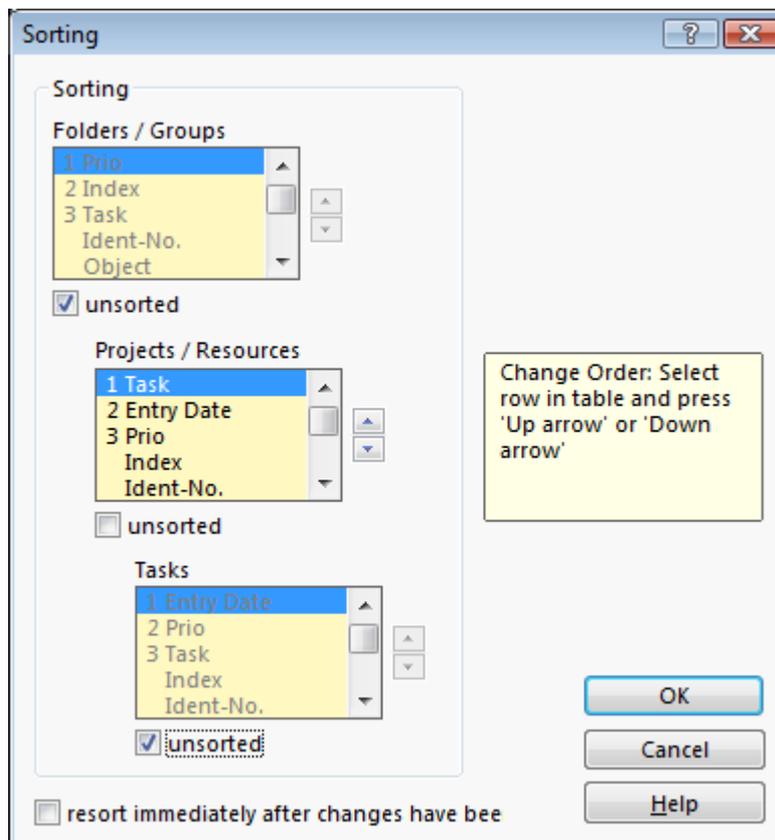
Use the fourth tab to set filters for user defined data fields:



## SORTING ORDERS FOR VIEWING

Rows may be displayed in the main table either unsorted or may be sorted according to various criteria and with different sorting order settings for folders, projects and tasks.

To set the sorting order used for viewing data, click the button  **Set sorting** in ribbon tab **View**. A dialog box opens in which you can specify any order according to which the folders, projects or tasks are to be displayed and printed:



### ***Unsorted (fixed) sequence of rows***

To activate this mode for either folders/groups, projects/resources or tasks, click the respective check box **unsorted** in the **Sorting** dialog box whenever it applies.

Use this setting if the sequence of rows is to remain as you entered them. New rows will always be inserted **beneath** the selected row. The sequence of rows can be changed by "cutting" and "pasting" or by "dragging" and "dropping" one or several rows (see "Shifting of rows (to change the sequence of rows)" on page 72).

### ***Sorted sequence of rows***

The order used for folders/groups, projects/resources and tasks can be set **independent** of each other. The element located at the top of each list in the dialog box **Sorting** is considered first in the sorting process. For example, if "Priority" (Pr.) is at the top of the sorting list related to projects and "Begin" is second, this will have the effect that projects having the highest priority will be displayed first while projects of the same priority are sorted according to their starting date.

In order to change the position of an element in the lists of the dialog box, select the element first and move it up or down using the arrow buttons arranged on the right side of each box.

Please note that only the **first three elements** of a list are considered by the sorting function.

**Note:**

Sorting based on the resource column is not possible (resources are not assigned by their designation but by their ident number. Hence, the internal sorting function of the database would end up in a sorting based on ident numbers).

## AUTOSORTING

Clicking on the check box **Resort Immediately** has the effect that the order of the records is recalculated and adjusted whenever data have been entered or changed.

You may deselect this option if you do not want to use the autosorting function (e.g. while editing dates in the Gantt chart). In addition, please be aware that many processes of A-Plan run more slowly with this option being activated since the complete display must be refreshed whenever a modification is made which might influence the order of the rows.

**Remark:**

After a name ("person responsible" or "client") has been entered, the program immediately resorts the data records even if the check box "Resort immediately" is deactivated.

(The special way in which names are stored in the database necessitates the refreshing of the table and, as a consequence, the resorting of the data records.

## REFRESH DISPLAY

If changes are made or new data are entered with the sorting set to "sorted sequence of rows" (see "Sorting orders for viewing viewing" on page 81), the sequence will be updated automatically if you activated the option **Resort immediately** (see "AutoSorting" on page 82).

If you deactivate this option because you might, for example, feel disturbed by the automated resorting, the order of the displayed tasks can still be refreshed either by clicking on the button  Refresh in the ribbon tab **Start**.

Once in a while it may occur that A-Plan does not build up the display completely. This problem is likewise solved by using the refresh function.

# RESOURCE PLANNING

## CONCEPT

The resource planning of A-Plan provides utmost flexibility in the allocation of resources (staff, machinery, tools etc.) to be used for the successful completion of tasks. At the same time, it has been carefully designed for ease of use and visual clarity!

## WHAT CAN RESOURCE PLANNING OF A-PLAN DO FOR YOU?

Use it to deal with **problems** such as:

- How does the duration of a task change if the number of assigned resources is changed?
- How many resources need to be assigned if a task is to be finished at a given time?
- What are the effects if certain resources are not available at a given time?
- Which resources can be assigned to a given task as they are not assigned to full capacity?
- Which resources are over allocated?
- What are the costs resulting from the use of different resources?
- What is the amount of overtime required to finish a task in due time and what are the effects on costs?

## WHAT INFORMATION IS SUPPLIED BY THE RESOURCE PLANNING OF A-PLAN?

From a single view, you can see the following **information**:

- What is the sequence of tasks?
- Which are the resources assigned to the various tasks, when do resources work on the tasks and what is the capacity used by each of the resources?
- What is the capacity usage of resources over time?
- What are the working hours of resources (incl. special times, overtime etc.)?
- Which resources are absent at what time (and why)?
- Which resources are still available at what time?
- Which resources are allocated to full capacity or even over allocated?

## HOW IS RESOURCE PLANNING OF A-PLAN HANDLED?

In spite of the high performance and the variety of information provided by A-Plan, you will be surprised by the **ease of use** of resource planning:

- All settings are easy to understand and to retrace.
- A-Plan assists you best in your planning without patronizing you.

- Only those values need to be entered which are actually required.
- If resource planning is not (or not yet) needed for some of your applications, it takes not more than a command to deactivate resource planning when using A-Plan.

## WHAT DOES RESOURCE PLANNING IN A-PLAN LOOK LIKE?

The main window of A-Plan is split horizontally if resources are to be displayed. Among others, the upper pane shows existing **tasks** with assigned resources **(1)**, the respective work **(2)** and the task bars **(3)**. The task bar pattern is used to indicate when resources work on tasks and what their capacity usage is:

Task	Resources	Work P'd	Lab. Cost P'd	Jan 2004				Feb 2004											
				28.	29.	30.	31.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	
[-] Construction proj. 1 (1)		70.0 wd	45,336.00 €																
[-] Kings Road (6)		70.0 wd	45,336.00 €																
[-] Demolition (2)		9.0 wd	11,652.00 €																
[-] Basement	Lorry 1; Barnes; Hawk	5.0 wd	5,256.00 €																
[-] Ground floor	Lorry 2; Miller	3.0 wd	6,396.00 €																
[-] Internal walls (3)		9.0 wd	12,492.00 €																
[-] Room Basem. 1	Lorry 1; Barnes; Hawk	6.0 wd	6,096.00 €																
[-] Room Basem. 3	Lorry 2; Miller	3.0 wd	6,396.00 €																
[-] Doors. windows	Wood, Fraser	8.0 wd	3,360.00 €																

Resource/Task	Project	Calendar	Lab. Cost P'd	28.	29.	30.	31.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
[-] Bricklayers (3)			36.00 €/h															
[-] Barnes (3)		Short (4)	36.00 €/h (5)	■	■	■												
[-] Hawkins (3)		Standard	40.00 €/h	■	■	■												
[-] Miller (3)		Standard	36.00 €/h	□	■	■												
Special times/Costs			^36.00 €/h															
Overtime			^36.00 €/h															
Absence																		
Ground floor	Kings Road																	
Room Basem. 3	Kings Road																	

### Note:

If task bar patterns are entirely filled with color instead of indicating the times when tasks are worked on, you have to change the setting of the respective option (see "Task bars" on page 119).

At the same time, the lower pane displays the **resources** together with used calendars **(4)**, labour rates **(5)**, working times and capacity usage **(6)**, absence times **(7)** and assigned tasks **(8)**. What the colours indicate in case of different capacity usage rates is explained in the chapter "Capacity usage of resources / Teams" on page 91.

In task table view, rows with resources assigned to them are **expanded** (or **collapsed** respectively) if you click the red square in front of the designation. With tasks expanded, **each resource is shown in a separate row**:

[-] Basic design	Miller (70); Schulz (50)	50 % - 70 %	
------------------	--------------------------	-------------	--



Basic design	Miller (70); Schulz (50)	50 % - 70 %	
- Schulz (50)	Schulz (50)	50 %	
- Miller (70)	Miller (70)	70 %	

## DETERMINE WORKING HOURS (RESOURCE CALENDAR)

Working times and the resulting availability of resources are determined by means of **resource calendars**. In A-Plan, you may create any number of resource calendars.



Click on the button Working time in the ribbon tab Create/Edit to have resource calendars displayed:

A-Plan 2010 - Expl\_Production\_planning

File Working time Help

Clipboard: Insert, Cut, Copy, Delete  
 Calendar: New calendar  
 Tools: Time, Color  
 Table: Setup Columns  
 Gantt chart: Resolution: 1 Hour  
 Find/Replace: Find, Replace  
 Close: Close working times

Calendar	Work	Status	Holidays	Dur.	00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
1 Calendar (4)															
2 Default	w/ work		Holiday free	40,00 h											
3 Monday				8,00 h				08:00							16:00
4 Tuesday				8,00 h				08:00							16:00
5 Wednesday				8,00 h				08:00							16:00
6 Thursday				8,00 h				08:00							16:00
7 Friday				8,00 h				08:00							16:00
8 Saturday															
9 Sunday															
10 Worktime	w/ work		Holiday free	37,00 h											
11 Monday				7,83 h		07:00	09:00	09:20		12:30	12:55		15:35		
12 Tuesday				7,83 h		07:00	09:00	09:20		12:30	12:55		15:35		
13 Wednesday				7,83 h		07:00	09:00	09:20		12:30	12:55		15:35		
14 Thursday				7,83 h		07:00	09:00	09:20		12:30	12:55		15:35		
15 Friday				5,67 h		07:00	09:00	09:20			13:00				
16 Saturday															
17 Sunday															

Choose **Insert / New Calendar** to create a new resource calendar. Choosing **View / Resource calendar** or clicking on the respective button will take you back to the table view of A-Plan.

## CREATING RESOURCE CALENDARS

As soon as you create a new database or adapt an existing database, a **default calendar** is automatically created in it as well:

Calendar	Work	Status	Holidays	Dur.	00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Calendar (4)															
Default	w/ work		Holiday free	40,00 h											
Monday				8,00 h			08:00								16:00
Tuesday				8,00 h			08:00								16:00
Wednesday				8,00 h			08:00								16:00
Thursday				8,00 h			08:00								16:00
Friday				8,00 h			08:00								16:00
Saturday															
Sunday															

The **default calendar** is marked by an "\*" behind designations and is of particular importance as it is used – among other things – to calculate the **duration** of tasks (see "Calculation of the duration of tasks, default calendar" on page 45). Furthermore, the default calendar applies to all resources to which no specific resource calendar is assigned.

If all **working days** in your database are of the **same length**, you may use the **default calendar** as the resource calendar as well.

If **working days are of different length**, you have to create at least one additional calendar which is to be assigned to the resources concerned (see "Allocation of working hours, absence times and holidays" on page 89):

Calendar	Holidays	Work	Duration	00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
Work Time (7)	Holiday free	w/ work	36:00											
Monday			07:30			08:00			12:00		12:45			16:15
Tuesday			07:30			08:00			12:00		12:45			16:15
Wednesday			07:30			08:00			12:00		12:45			16:15
Thursday			07:30			08:00			12:00		12:45			16:15
Friday			06:00			08:00			12:00		12:45		14:45	
Saturday														
Sunday														

If full days (i.e. **real time**) are to be used instead of fixed working hours, create a calendar covering 24 hours per day and 7 days per week:

Calendar	Holidays	Work	Duration	00	04:00	06:00	08:00	10:00	12:00	14:00	16:00	18:00	20:00	22:00
Real Time (7)	Holiday free	w/ work	168:00											
Monday			24:00	00:00										00:00
Tuesday			24:00	00:00										00:00
Wednesday			24:00	00:00										00:00
Thursday			24:00	00:00										00:00
Friday			24:00	00:00										00:00
Saturday			24:00	00:00										00:00
Sunday			24:00	00:00										00:00

## EXAMPLES OF THE CALCULATION OF DURATION

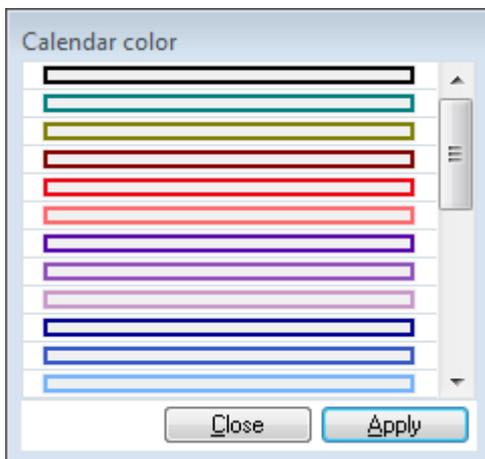
In the calendar shown below, the duration of the task starting on Monday at 8:00 a.m. and ending on Wednesday at 2:00 p.m. is 2 days 5 hours (2 x 7h:30min + 4h + 1h):

Calendar	Work	Duration	00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00
<input type="checkbox"/> Working time (5)															
<input type="checkbox"/> Default (7)*	w/ work	37:30													
Monday*		07:30			08:00			12:00		13:00			16:30		
Tuesday*		07:30			08:00			12:00		13:00			16:30		
Wednesday*		07:30			08:00			12:00		13:00			16:30		
Thursday*		07:30			08:00			12:00		13:00			16:30		
Friday*		07:30			08:00			12:00		13:00			16:30		
Saturday*															
Sunday*															

If the duration is to be calculated in real time, the working hours specified in the default calendar must cover the week completely. In this case, the duration of the example above (begin: Monday 8:00 a.m., end: Wednesday 2:00 p.m.) would be 2 days 6 hours (16h+24h+14h = 54h = 2 x 24h + 6h):

Calendar	Work	Duration	02:00	04:00	06:00	08:00	10:00	12:00	14:00	16:00	18:00	20:00	22:00
<input type="checkbox"/> Real time (7)	w/ work	168:00											
Monday		24:00	00:00										00:00
Tuesday		24:00	00:00										00:00
Wednesday		24:00	00:00										00:00
Thursday		24:00	00:00										00:00
Friday		24:00	00:00										00:00
Saturday		24:00	00:00										00:00
Sunday		24:00	00:00										00:00

## COLOR OF CALENDARS



You may choose any of the listed colors to be used for displaying the calendar. To open the dialog box for setting the color, click a time bar of the calendar and choose Pattern or click on the button .

Double-clicking on the color you like or selecting it and clicking on Apply will assign this color to all time bars of the current calendar.

In the resource rows (see "Show / Create resources" on page 89) the calendars will be displayed in the color you selected both in the row showing working times as well as in calendar rows:

Resource/Task	Calendar	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
<input type="checkbox"/> Stevens (5)	Default																	
Special times/Costs																		

## HOLIDAYS

Depending on the setting you make in the column **Holidays**, holidays are either non-working (**Holiday free**) or working days (**Holiday work**) if the respective resource calendar is used.

To change the setting **Holiday free** or **Holiday work** in the resource calendar, just double-click on the existing setting.

## CALCULATION OF WORK (W/ OR W/O WORK)

Usually, the calculation of work is related to personnel only and not to materials and equipment (for example, assigning one driver and one vehicle results in one workday and not in two days). Therefore, it is reasonable to use a special resource calendar for equipment in which you enter **w/o work** in the column **work**.

In the **calculation of costs**, these resources will be accounted for although no work calculation is made!

To change the setting in the column **Work**, just double-click the existing setting.

## IRREGULAR WORKING HOURS, OVERTIME ETC.

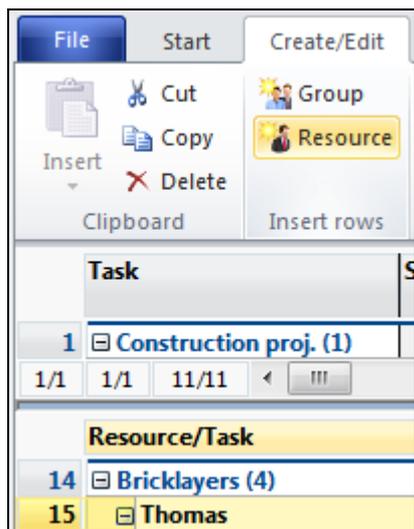
To learn how to proceed if irregular working hours, overtime etc. are used, see chapter "Special times/Costs" on page 105.

## CREATING RESOURCES

**Resources** may be of different type and nature such as, for example, persons, machinery, vehicles, rooms or even meetings and they can be grouped:

Resource/Task	Calendar	Lab. Rate Pl'd	26.-1.	2.-8.	9.-15.	16.-22.
[-] Bricklayers (3)		36,00 \$/h				
+ Miller (3)	Default	36,00 \$/h				
+ Barnes (2)	Default	36,00 \$/h				
+ Hawkins (3)	Default	40,00 \$/h				
[-] Carpenters (2)		^35,00 \$/h				
+ Wood (1)	Default	35,00 \$/h				
+ Fraser (1)	Default	^35,00 \$/h				
[-] Electricians (2)		38,00 \$/h				
+ Johnson (1)	Default	^38,00 \$/h				
+ Thornton (1)	Default	32,00 \$/h				
[-] Painters (2)		30,00 \$/h				
+ Clark (1)	Default	^30,00 \$/h				
+ Brown (1)	Default	28,00 \$/h				
[-] Vehicles (2)		70,00 \$/h				
+ Lorry 1 (2)	Tools	70,00 \$/h				
+ Lorry 2 (2)	Tools	85,00 \$/h				

## SHOW / CREATE RESOURCES



You cannot enter resources unless the button **Show resources** in the ribbon tab **Start** is activated with the effect that the table is split horizontally. Next, select the lower part of the table by clicking it with the mouse in order to activate this part of the table (see the yellow title bar below).

To create groups and resources, just use the functions **Group** and **Resource** in the Ribbon tab **Create/Edit**.

## ALLOCATION OF WORKING HOURS, ABSENCE TIMES AND HOLIDAYS

### WORKING HOURS

When a new resource is created, the **default calendar** is automatically allocated to it in the column **Calendar** (see "Calculation of the duration of tasks, default calendar" on page 45). This means that the working hours listed in the default calendar are applied to the new resource at first:

Resource/Task	Calendar
Bricklayers (4)	
Thomas	Default

The working hours resulting from this allocation are shown in the first resource row as time bars in the Gantt chart. As long as the full capacity of the resource is available, i.e. as long as it is not assigned to a task, the displayed time bars are empty.

If you want to allocate another resource calendar to the resource (e.g. if the resource is to work in another shift or has workdays of different lengths), just double-click on the current calendar and select another calendar from the displayed list of available calendars (see "Determine working hours (Resource calendar)" on page 85):

Resource/Task	Calendar	Ident-No.	-20.	21.-27.
Team 1 (1)		80000000		
Smith	Default		□□	□□□□□
Special times/Costs	(no calendar)			
Overtime	Default			
Absences	Overtime			
	Vehicles			
	Morning Shift			
	Tools			

The first three resource rows are created automatically. They are identical with all resources and cannot be deleted. They are used exclusively for the determination of working hours and feature dark red designations to be easily distinguished from other rows.



Task	Resources	CapUsg	Pl'd	Nt.	Dur.	Work req	Feb 2011
[-] Processes (3)	1				26,0 d	4,0 wd	14.-20. President's Day 21.-27.
[-] Identify departments	Miller (60)	60 %			7,0 d	4,0 wd	2
[-] Identify processes	Stevens	100 %			7,0 d	0,0 wd	
[-] Determine new processes (2)					9,0 d	0,0 wd	

Res./Task	Cap.	Parent Task	Project	No.	14.-20.	21.-27.
[-] Miller (14)						4
Absences						
Baseload	20,0 %		Baseload			
3 Identify departments	60,0 %	Processes	E-Business integrat			

If a **Message** should come up whenever a resource is **overburdened** due to the assignment of a task or the shifting of a task, this can be set as an option (see "Messages / Aids / EMail" on page 131).

[-] Internal implementation (7)	Miller
[-] Performance specification	Miller
[-] Place Web design order	Miller
[-] Install hotline	Miller
[-] Search engine registration	Miller
[-] Staff training	Miller

Resources can be assigned to **all lower-level rows** of a summary row **in one stroke**. If one resource will be in charge of an entire block, it takes just a single entry to assign it to the block.

## CAPACITY USAGE OF RESOURCES / TEAMS

A resource may be assigned to a task with a usage rate of more or less than 100 %. To specify a usage rate other than 100 %, click on the percentage given in parentheses behind the resource and enter the wanted percentage value :

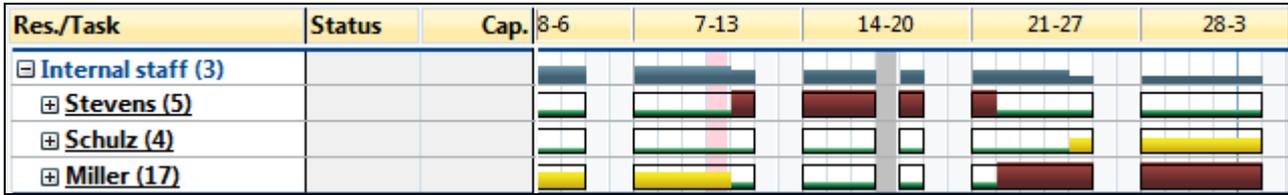
Task	Status	Resources	CapUsg	Pl'd	28-6	7-13
[-] Identify departments	⚡	Miller (57)	57 %			
[-] Identify processes	☐	Stevens	100 %			

Res./Task	Status	Cap.	Parent Task	28-6	7-13
[-] Miller (17)					
Baseload	☐	20.0 %			
Identify departments	⚡	57.1 %	Processes		
Basic design	☐?	70.0 %	Processes > Deter		

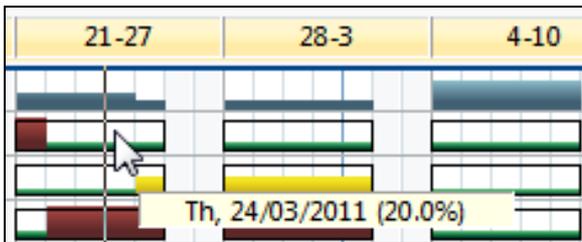
A capacity usage rate other than 100 % is indicated in the task table in parentheses behind the resource designation (but without the % sign to save space). In the resource table (lower pane), the time bar filling pattern reflects the usage rate during the time period concerned.

The time bars in the resource pane are designed to show you the capacity usage rate of each of your resources at any time:



Legend:

Time bar pattern	Color	Meaning
	-	Capacity usage rate is 0%
	green	Capacity usage rate is from 0 to 50%
	yellow	Capacity usage rate is from 51% to 80%
	red	Capacity usage rate is from 81% to 100%
	dark red	Capacity usage rate is more than 100%
	light yellow with pattern	Resource assigned but not available due to absence



Hovering the mouse pointer over the capacity usage rate time bar of a resource will display you the precise usage rate percentage in the mouse pointer info box.

**Important:**

A capacity usage rate of more than 100 % is also accounted for when work and costs are calculated. For example, assigning a usage rate of 120 % to a resource for a given time period will result in more work and higher costs being calculated for the period concerned!

After a task has been completed, no capacity usage rate is displayed any more. If actual work was entered already for a task, the actual or prognosticated capacity usage is displayed for this task (see "Project status (planning, current state, prognosis)" on page 108).

A special ini file enables you to change thresholds/limits and colours (see "C. Special settings" on page 245).

**TEAM CAPACITY USAGE**

The remaining capacity of the entire team is shown as a bar chart in the top row of each resource group (no bar = 0% remaining capacity, full-height bar = 100% remaining capacity). Hovering the mouse pointer over the bar chart displays the precise amount of remaining capacity available at a given time in the mouse pointer info box.

Res./Task	Status	Cap.	28-6	7-13	14-20	21-27
[-] Internal staff (3)						
+ Stevens (5)						
+ Schulz (4)						

Th, 03/03/2011 (62.6%)

## DEFAULT VALUES OF RESOURCES

After resources have been assigned to tasks, the calculation of resulting work and costs is based on the default values entered for the involved resource:

Task	Resource	Lab. Rate Pl'd	Qty/Time Pl'd	Fix. Cost Pl'd
+ Sawing	EDC 312 (50)	250,00 \$/h	100/h	100,00 \$
+ Turning	RDC 316 (80)	180,00 \$/h	50/h	150,00 \$

1/1 6/8 < ||| >

Resource/Task	Lab. Rate Pl'd	Qty/Time	Fix. Cost
+ EDC 312 (1)	250,00 \$/h	100/h	100,00 \$
+ RDC 316 (1)	180,00 \$/h	50/h	150,00 \$

It may happen that these values do not depend on the used resource but on the task. To cope with this situation, the default values of the resource may be overwritten:

Task	Resource	Lab. Rate Pl'd	Qty/Time Pl'd	Fix. Cost Pl'd
+ Sawing	EDC 312 (50)	250,00 \$/h	100/h	100,00 \$
+ Turning	RDC 316 (80)	200,00 \$/h	50/h	150,00 \$

1/1 6/8 < ||| >

Values entered manually (**1**) are displayed with a white background instead of a blue background colour to distinguish them from „resource values“.

## WORK / AUTOMATED CALCULATIONS

### DEFINITION OF WORK

Wikipedia® provides the following definition of work:

*“**Work or Work Package** in project management is the amount of effort applied to produce a deliverable or to accomplish a task or a group of related tasks ...”*

A **variety of names and units** is used to specify the work (or "effort" or "expenditure") required to perform a task, for example, "man days", "work days", "machine hours" or just a time unit such as "days" or "hours". A-Plan allows you to set this unit as you like (see "Costs/Work/Abbrev." on page 125). The documentation of A-Plan uses **wd** = "workdays" as the unit for work.

With A-Plan there is the general rule that work is the **duration of a task multiplied by the number of assigned resources**. Hence, with two persons working for 5 days on a task, the duration is 5 days whereas the **work** is 2 x 5 days which is 10 workdays!

### REQUIRED WORK

The completion of a task normally takes a certain amount of time which, depending on the properties of the assigned resource(s), determines the duration of the task. Hence, A-Plan allows you to take the following properties of resources into account:

- Number or factor
- Working hours
- Capacity usage
- Performance (quantity per time unit)
- Availability (presence or absence)

Project planning is usually based on rough estimates of the **work required** to perform the various tasks. These estimates may result from **earlier experiences** or may just be **anticipated values**. In production, the required work can be calculated if the number of units and the production duration per unit are known (see "Output values (production planning)" on page 104).

## AUTOMATIC ADJUSTMENTS

You may request A-Plan to calculate the effects of entries or resulting changes of the course of the project. Please have a look at the examples below:

### 1. Assigning a resource

Calculate the end (= duration ) of a task if a resource is assigned with **100% of its capacity** to a work of 100 hours (wh).

**Result:** Duration = 100h (which actually was not very difficult in this example)

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011		
						21-27	28-3	4-10
Folder 1 (1)				100.0 wh	40 h	[Gantt bar]		
Project 1 (1)				100.0 wh	40 h	[Gantt bar]		
Task 1				100.0 wh	40 h	[Gantt bar]		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Group 1</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Res 1 (100.0%)</li> <li><input type="checkbox"/> Res 2</li> <li><input type="checkbox"/> Res 3</li> </ul> </div> <div> <p>Adjust end (selected)</p> <p>Adjust begin</p> <p>Adjust capacity usage</p> <p>No adjustment</p> </div> </div>								
Folder 1 (1)		Res 1		100.0 wh	100 h	[Gantt bar]		
Project 1 (1)		Res 1		100.0 wh	100 h	[Gantt bar]		
Task 1		Res 1	100 %	100.0 wh	100 h	[Gantt bar]		

### 2. Reducing the capacity usage

Calculate the end (= duration ) of the task if the resource will spend **80% of its capacity** only.

**Result:** Duration = 125h

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	100 h	[Gantt bar]			
Project 1 (1)		Res 1		100.0 wh	100 h	[Gantt bar]			
Task 1		Res 1	80 %	100.0 wh	100 h	[Gantt bar]			
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Adjust end (selected)</p> <p>Adjust begin</p> </div> </div>									
Folder 1 (1)		Res 1		100.0 wh	125 h	[Gantt bar]			
Project 1 (1)		Res 1		100.0 wh	125 h	[Gantt bar]			
Task 1		Res 1 (80)	80 %	100.0 wh	125 h	[Gantt bar]			

### 3. Assigning more resources

Calculate the end (= duration ) of the task if a second resource spending also 80% of its capacity is added.

**Result:** Duration = 63h

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	125 h	[Gantt chart]			
Project 1 (1)		Res 1		100.0 wh	125 h	[Gantt chart]			
Task 1		Res 1 (80)	80 %	100.0 wh	125 h	[Gantt chart]			
Group 1 <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Res 1 (80.0%)</li> <li><input checked="" type="checkbox"/> Res 2 (80.0%)</li> <li><input type="checkbox"/> Res 3</li> </ul>						<input checked="" type="radio"/> Adjust end <input type="radio"/> Adjust begin <input type="radio"/> Adjust capacity usage <input type="radio"/> No adjustment			
Folder 1 (1)				100.0 wh	63 h	[Gantt chart]			
Project 1 (1)		Res 1; Res		100.0 wh	63 h	[Gantt chart]			
Task 1		Res 1 (80);	80 %	100.0 wh	63 h	[Gantt chart]			
- Res 2 (80)		Res 2 (80)	80 %	50.0 wh	63 h	[Gantt chart]			
- Res 1 (80)		Res 1 (80)	80 %	50.0 wh	63 h	[Gantt chart]			

### 4. Setting the capacity usage of ALL resources to a given value

Calculate the end (= duration ) of the task if both resources spend 50% of their capacity only.

**Result:** Duration = 100h

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	63 h	[Gantt chart]			
Project 1 (1)		Res 1; Res		100.0 wh	63 h	[Gantt chart]			
Task 1		Res 1 (80);	50	100.0 wh	63 h	[Gantt chart]			
- Res 2 (80)		Res 2 (80)				[Gantt chart]			
- Res 1 (80)		Res 1 (80)				[Gantt chart]			
<input checked="" type="radio"/> Adjust end <input type="radio"/> Adjust begin <input type="radio"/> Adjust capacity usage <input type="radio"/> No adjustment									
Folder 1 (1)				100.0 wh	100 h	[Gantt chart]			
Project 1 (1)		Res 1; Res		100.0 wh	100 h	[Gantt chart]			
Task 1		Res 1 (50);	50 %	100.0 wh	100 h	[Gantt chart]			
- Res 2 (50)		Res 2 (50)	50 %	50.0 wh	100 h	[Gantt chart]			
- Res 1 (50)		Res 1 (50)	50 %	50.0 wh	100 h	[Gantt chart]			

## 5. Changing the duration of the task

With the duration of the task reduced to 80h, calculate the new capacity usage of the resources.

**Result:** Capacity usage of both resources = 63%

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	100 h				
Project 1 (1)		Res 1; Res		100.0 wh	100 h				
Task 1		Res 1 (50);	50 %	100.0 wh	80				
- Res 2 (50)		Res 2 (50)	50 %	50.0 wh					
- Res 1 (50)		Res 1 (50)	50 %	50.0 wh					

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	80 h				
Project 1 (1)		Res 1; Res		100.0 wh	80 h				
Task 1		Res 1 (63);	63 %	100.0 wh	80 h				
- Res 2 (63)		Res 2 (63)	63 %	50.0 wh	80 h				
- Res 1 (63)		Res 1 (63)	63 %	50.0 wh	80 h				

## 6. Changing the capacity usage of ONE resource, adjusting the other one

With the capacity usage of the first resource increased to 80%, calculate the capacity usage of the second resource if the duration is to remain unchanged.

**Result:** Capacity usage of the second resource = 45%

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	80 h				
Project 1 (1)		Res 1; Res		100.0 wh	80 h				
Task 1		Res 1 (63);	63 %	100.0 wh	80 h				
- Res 2 (63)		Res 2 (63)	63 %	50.0 wh	80 h				
- Res 1 (63)		Res 1 (63)	80 %	50.0 wh	80 h				

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	80 h				
Project 1 (1)		Res 1; Res		100.0 wh	80 h				
Task 1		Res 1 (80);	% - 80 %	100.0 wh	80 h				
- Res 2 (45)		Res 2 (45)	45 %	35.7 wh	80 h				
- Res 1 (80)		Res 1 (80)	80 %	64.3 wh	80 h				

## 7. Changing the required work

With the required work increased to 120 wh, adjust the capacity usage in such a way that the duration will remain unchanged.

**Result:** Capacity usage of resource 1 = 96%, of resource 2 = 54 % (the capacity usage ratio remains the same)

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				100.0 wh	80 h				
Project 1 (1)		Res 1; Res		100.0 wh	80 h				
Task 1		Res 1 (80);	% - 80 %	120	80 h				
- Res 2 (45)		Res 2 (45)	45 %						
- Res 1 (80)		Res 1 (80)	80 %						

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				120.0 wh	80 h				
Project 1 (1)		Res 1; Res		120.0 wh	80 h				
Task 1		Res 1 (96);	% - 96 %	120.0 wh	80 h				
- Res 2 (54)		Res 2 (54)	54 %	42.8 wh	80 h				
- Res 1 (96)		Res 1 (96)	96 %	77.2 wh	80 h				

## 8. Using the mouse to make changes in the Gantt chart

Increase the duration to 100 h with the left mouse key pressed down and have the capacity usage adjusted accordingly.

**Result:** Capacity usage of resource 1 = 74%, of resource 2 = 41 % (the capacity usage ratio remains the same)

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				120.0 wh	80 h				
Project 1 (1)		Res 1; Res		120.0 wh	80 h				
Task 1		Res 1 (96);	% - 96 %	120.0 wh	80 h				
- Res 2 (54)		Res 2 (54)	54 %	42.8 wh	80 h				
- Res 1 (96)		Res 1 (96)	96 %	77.2 wh	80 h				

Task	Status	Resources	CapUsq Pl'd	Work req	Dur.	Mar 2011			Apr 2
						21-27	28-3	4-10	
Folder 1 (1)				120.0 wh	104 h				
Project 1 (1)		Res 1; Res		120.0 wh	104 h				
Task 1		Res 1 (74);	% - 74 %	120.0 wh	104 h				
- Res 2 (41)		Res 2 (41)	41 %	42.8 wh	104 h				
- Res 1 (74)		Res 1 (74)	74 %	77.2 wh	104 h				

### Note:

When changes are made in the Gantt chart, the presetting is made in the menu **Create/Edit** in the block **Adjustment**. With the button **Adjust** being activated, (click it with

the CTRL key pressed down to activate it) the adjustment is carried out immediately after you have made the change.

The examples show just a few of the many possibilities provided by A-Plan to enable you to react quickly and with a high flexibility to any situation and requirement.

## PLANNED WORK

Durch die automatische Anpassung wird der Projektablauf bei Änderungen von A-Plan entsprechend dem erforderlichen Aufwand angepasst.

If no automatic adjustment is carried out, for example because **Adjust** was deactivated in the tab **Create/Edit** or because the option „No adjustment“ was selected when entering a value, the course of the project is no longer in line with actual requirements. In other words, the currently planned work and the required work no longer match with each other.

A deactivation of the automatic adjustment can make sense if you want to prevent the course of the project from being adjusted immediately after you entered a value because you prefer to specify later how the adjustments should be made.

### Example:

Task	Status	Resources	Work req	Dur.	Work Pl'd	Work Pl'd/req
Identify departments		Miller (57)	4.0 wd	7.0 d	4.0 wd	0.0 %
Identify processes		Stevens	6.0 wd	6.0 d	6.0 wd	0.0 %
Identify departments		Miller (57)	4.0 wd	7.0 d	4.0 wd	0.0 %
Identify processes		Stevens	6.0 wd	4.0 d	4.0 wd	-33.3 %

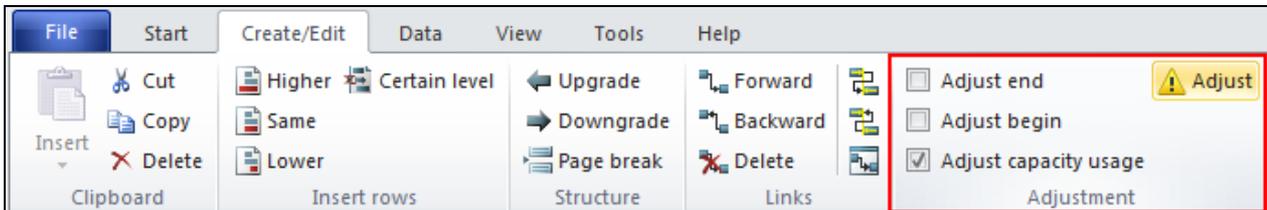
### Explanations:

A task bar **(1)** is shortened by means of ‚pulling‘ it with automatic adjustment being deactivated. With this done, the duration of the task is 4.0 days instead of the previous 6.0 days, i.e. the planned work is reduced from 6 wd **(2)** to 4 wd. As a result, there is a lack of capacity **(3)** amounting to 33% as indicated in the column **Status** by the corresponding symbol **(4)**.

As the required work is not changed by A-Plan you can see easily whether the current planning is OK or whether corrections have to be made. These can be made at any time by selecting one or several rows, choosing the preferred type of adjustment and finally clicking Adjust (see the top right corner of the screenshot).

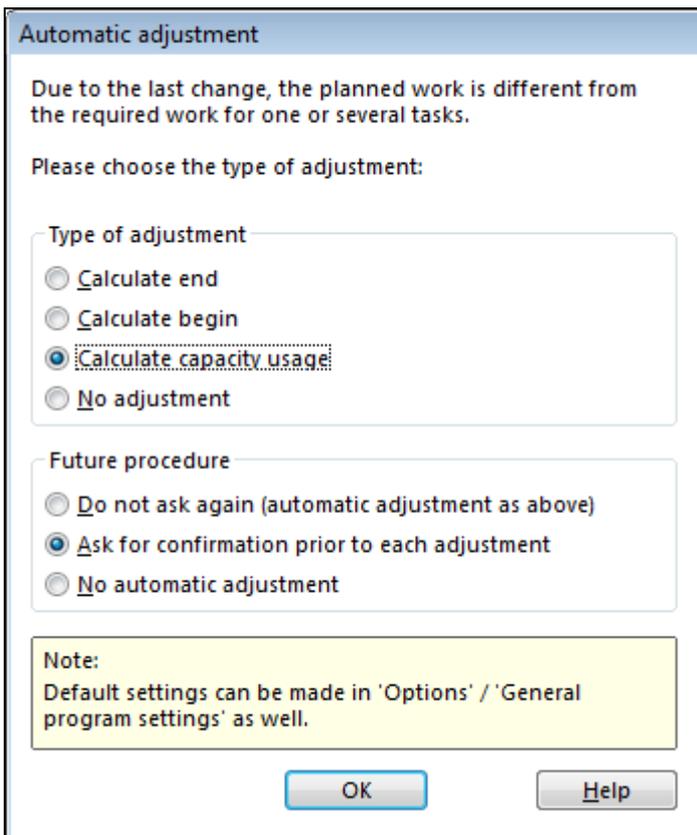
## FUNCTION GROUP „ADJUSTMENTS“

As the menu with the options for the adjustments of the course of the project as explained in "Automatic Adjustments" on page 95 cannot be displayed for all types of actions, you have the alternative of controlling the adjustment in the tab **Create/Edit**:



Examples of such actions are changes made on task bars in the Gantt chart with the help of the mouse or the specification of time periods during which resources are not available (see "Absences" on page 90).

The displayed block of commands allows you to determine whether an adjustment is to be made automatically (click the button **Adjustment** with the CTRL key pressed down) and, if yes, how the adjustment is to be made. With the button being activated, the adjustment is made immediately after a value was changed in such a way that the planned work is different from the required work.



Optionally, a dialog box comes up before the adjustment is made.

The basic settings for this are made in Options / General program settings (see "Settings" on page 130).

## PARTICULAR CASES (FLEXIBLE ASSIGNMENT OF RESOURCES)

### TIME TO BE SPENT ON A TASK IS SHORTER THAN THE DURATION OF THE TASK

With resource rows being expanded, you may assign a resource time shorter than the task duration: First, determine a **time frame** in the task row. Next, go to the resource row(s) concerned and specify the **time periods to be spent on the task**. The time periods you specify may be different from the time frame but must be within the time frame. However, when expanded for the first time, the time frame and the time to be spent on a task are identical:

Task	Resources	CapUsg Pl'd	Mar 2011	
			21-27	
Identify processes	Miller; Stevens	100 %		
- Miller	Miller	100 %		
- Stevens	Stevens	100 %		

Expanded resource rows can be dealt with just like normal task rows. This means that each resource may be assigned different times to spend on a task. If required, a resource may even be assigned several time periods to work on a task:

Task	Resources	CapUsg Pl'd	Mar 2011	
			21-27	
Identify processes	Miller; Stevens	100 %		
- Miller	Miller	100 %		
- Stevens	Stevens	100 %		

The times (or work) spent on a task resulting from the assignments you made is shown in the task row.

#### **Note:**

A series can **no longer** be created (see "Series (periodically recurring dates)" on page 63) after the time period to be spent by a resource was changed. If a series is required, create it first and determine the times to be spent on tasks afterwards.

### ASSIGN DIFFERENT CAPACITY USAGE RATES TO TASK STEPS

Double-clicking on a task bar enables you to specify a different capacity usage rate for each step of the task to which the resource is assigned:

Task	Resources	CapUsg Pl'd	Mar 2011	
			21-27	
Identify processes	Miller; Stevens	100 %		
- Miller	Miller	100 %		
- Stevens	Stevens	100 %		

#### **Note:**

The capacity usage entered with a time bar is of higher priority than the capacity usage

existing or entered in the resource column (see "Capacity usage of resources / Teams" on page 91).

## COSTS AND SPECIAL WORKING HOURS

A-Plan calculates the total of the project cost from all incurred fixed and labour costs.

The calculation of labour costs takes the following parameters into account:

- **Planned working times** assigned to each of the various tasks
- **Number** of assigned resources
- **Resource capacity** used for a task
- **Working hours** of resources
- **Labour rates** of resources

Work is calculated from the first four parameters from the top and is then multiplied by the labour rates of the resources assigned to the tasks. Different labour rates (as for overtime etc., see "Special times/Costs" on page 105) are taken into account in the calculation.

The costs resulting from the planning are shown in the task table. In detail, these are fixed costs **(1)**, total labour costs **(2)**, incurred labour costs due to overtime **(3)** and overall total costs (= fixed costs and labour costs added up) **(4)**

Task	Resources	Work P'd	Fix. Cost <sup>1</sup>	Lab. Cost P'd <sup>2</sup>	Ovt. Cost P'd <sup>3</sup>	Tot. Cost P'd <sup>4</sup>
<b>Total</b> <sup>8</sup>		<b>171 wd</b>	<b>€3,900</b>	<b>€113,688</b>	<b>€1,944</b>	<b>€117,588</b>
<input type="checkbox"/> <b>Construction proj. (2)</b> <sup>7</sup>		<b>124 wd</b>	<b>€3,750</b>	<b>€79,992</b>	<b>€1,296</b>	<b>€83,742</b>
<input type="checkbox"/> <b>Kings Road (7)</b> <sup>6</sup>		<b>77 wd</b>	<b>€3,600</b>	<b>€46,296</b>	<b>€648</b>	<b>€49,896</b>
<input type="checkbox"/> Demolition (2)		6 wd	€150	€9,468	€648	€9,618
<input checked="" type="checkbox"/> Basement <sup>5</sup>	Lorry 1; Barnes; Hawkins	4 wd		€3,504		€3,504
<input checked="" type="checkbox"/> Ground floor	Lorry 2; Miller (50)	2 wd	€150	€5,964	€648	€6,114
<input type="checkbox"/> Internal walls (2)		9 wd		€11,652		€11,652
<input checked="" type="checkbox"/> Room Basem. 1	Lorry 1; Barnes; Hawkins	6 wd		€5,256		€5,256
<input checked="" type="checkbox"/> Room Basem. 3	Lorry 2; Miller	3 wd		€6,396		€6,396

In the project summary row **(6)**, the listed costs of subtasks **(5)** are added up. The folder row **(7)** shows the costs of all projects contained in the folder while the row "Total" **(8)**, see "Tasks" on page 112) finally adds up the costs of all folders included in the database.

From the resource table you can see which amounts of the costs result from the assignment of resources. Fixed costs **(1)** and labour costs **(2)** are added up to total costs **(4)**. In addition, the resource costs resulting from overtime can be seen from a separate column **(3)**:

Resource/Task	Fix. Cost	Lab. Rate	Lab. Cost	Ovt. Cost	Tot. Cost
☐ <b>Brown (1)</b>	①	28 €/h	②	③	④
Painting			€3,024	€672	€3,024.00
☐ <b>Vehicles (2)</b>		70 €/h			
☐ <b>Lorry 1 (2)</b>	€130	70 €/h			
Basement	€130		€1,680		€1,810.00
Room Basem. 1	€130		€2,520		€2,650.00

**Note:**

In the example shown above, calendar and absence rows are hidden (see "Resources" on page 115).

## FIXED COSTS, LABOUR RATE OF RESOURCES

If the same labour rate is to be used for all resources of a group, enter the rate in the **group** row (blue letters). Labour rates different from the group rate can be entered in the rows of the resources concerned:

Resource/Task	Calendar	Lab. Rate	Mo, 26.01.	Tu, 27.01.
☐ <b>Smith</b>	Default	^35.00 €/h	<input type="text"/>	<input type="text"/>
☐ <b>Bricklayers (3)</b>		36.00 €/h		
☐ <b>Barnes (1)</b>	Morning Shift	36.00 €/h	<input type="text"/>	<input type="text"/>
Special times/Costs		44.00 €/h	<input type="checkbox"/>	Default value
Overtime		50.00 €/h		
Painting				

## MATERIALS, OTHER FIXED COSTS

Fixed costs can be entered directly in the task table as well without a special resource being created for this purpose. To do so, just insert an additional row and enter nothing more than the designation and the related sum in the column **Pl'd Fix. Cost**:

Task	Pl'd Fix. Cost	Pl'd Lab. Cost	Pl'd Tot. Cost
☐ Internal walls (3)	2,350.00 €	12,492.00 €	14,842.00 €
Materials	2,350.00 €		2,350.00 €
☐ Room Basem. 1		6,096.00 €	6,096.00 €
☐ Room Basem. 3		6,396.00 €	6,396.00 €

This way of entering fixed costs is particularly suitable if the costs involved are different with each order (as for example material costs).

In contrast, if costs are always of the same amount (e.g. fees etc.), you better create a resource (without **calendar** and **Lab. rate**) which you may select each time you need it:

Task	Resources	Pl'd Fix. Cost	Pl'd Lab. Cost	Pl'd Tot. Cost
<input type="checkbox"/> Topics, contents (5)		480.00 €	30,600.00 €	31,080.00 €
<input checked="" type="checkbox"/> Totals Topics	Documentation	480.00 €		480.00 €
<input checked="" type="checkbox"/> Define topics	Miller		3,000.00 €	3,000.00 €
<input checked="" type="checkbox"/> Structuring	Schulz		1,800.00 €	1,800.00 €

Resource/Task	Project	Pl'd Fix. Cost	Pl'd Lab. Rate	Calendar
<input type="checkbox"/> Totals (1)				
<input checked="" type="checkbox"/> Documentation (1)		480.00 €		(no calendar)
Totals Topics	E-Business	480.00 €		

## OUTPUT VALUES (PRODUCTION PLANNING)

When A-Plan is used in production planning, you may enter the quantities to be produced **(1)** and the output values of resources **(2)** – e. g. in units/hour. The required work **(3)** and the resulting duration **(4)** (see "Automatic Adjustments" on page 95) will be calculated automatically:

Task	Resource	Qty. Pl'd	Qty/Time Pl'd	Work Req.	Dur.					
						Mo, 07/06	Tu, 07/07	We, 07/08	Th, 07/09	Fr, 07/10
<input checked="" type="checkbox"/> Sawing	EDC 312	1,500	100/h	15 wh	15 h					
<input checked="" type="checkbox"/> Turning	RDC 316	1,500	50/h	30 wh	30 h					

## FACTOR (ASSIGNMENT OF SEVERAL IDENTICAL RESOURCES, BASELOAD)

Resources can be provided with a factor to be used for multiplying all resource values such as fixed and variable costs, output values etc.

### ASSIGNMENT OF SEVERAL IDENTICAL RESOURCES

This is particularly helpful if several identical resources are available but you do not want to create and assign each of them as a separate individual resource.

In the example below, there are 3 presses and 2 grinding machines available **(1)** which will be used simultaneously for the execution of the order. The factor increases the output value **(2)** and reduces the respective duration accordingly **(3)**:

Task	Resource	Factor	Qty. Pl'd	Qty/Time Pl'd	Work Req.	Dur.					
							Mo, 07/06	Tu, 07/07	We, 07/08	Th, 07/09	Fr, 07/10
<input checked="" type="checkbox"/> Sawing	EDC 312	2	1,500	200/h	15.0 wh	7.5 h					
<input checked="" type="checkbox"/> Turning	RDC 316	3	1,500	150/h	30.0 wh	10.0 h					

You cannot change the factor of the used resource in the task table – otherwise the overall capacity usage of the resource would not be shown correctly.

If available resources should not be used for an order to their full capacity, you have to lower their capacity usage **(1)**. Of course, this will increase the duration accordingly **(2)**:

Task	Resource	Cap. usage	Factor	Qty. Pl'd	Qty/Time Pl'd	Work Req.	Dur.	Mo, 07/06	Tu, 07/07	We, 07/08	Th
☒ Sawing	EDC 312	50 %	2	1,500	200/h	15.0 wh	15.0 h				
☒ Turning	RDC 316	80 %	3	1,500	150/h	30.0 wh	12.5 h				

**Important:**

When you create a resource with a factor, you may enter the **amounts for one resource** only with regard to costs etc! For example, if a resource represents 5 identical resources with each of them incurring costs of 50 €/h, you may not enter a labour rate of 250 €/h but of 50 €/h only as A-Plan will do the multiplication!

**BASELOAD**

Taking a baseload of resources into account (for routine work etc.) is another application which lends itself to the **use of a factor**. If a resource cannot spend more than 80% of its capacity on project work, just provide the capacity with the factor 0.8.

Another way of representing a baseload is to create a rather long **task bar named „Baseload“**. With this done, assign all resources to this task bar with a capacity usage equivalent to their baseload.

Task	Resources	CapUsq Pl'd	I	II	III	IV	I	II	III	IV
			2009	2009	2009	2009	2010	2010	2010	2010
☒ Baseload	Miller (20); Schulz	15 % - 20 %								
- Miller (20)	Miller (20)	20 %								
- Schulz (15)	Schulz (15)	15 %								
- Stevens (20)	Stevens (20)	20 %								

**SPECIAL TIMES/COSTS**

**Resources having different working hours**

Use the row **Special times/Costs** to assign other resource calendars to a resource for a given period of time. Any sequence and combination of resource calendars may be assigned in this row.

Resource/Task	Pl'd Lab. Rate	Calendar	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
☒ Stevens (2)	35.00 €/h	Default	<input type="checkbox"/>												
Special times/Costs	40.00 €/h		morning shift				evening shift								

Resource calendars are created like normal time bars by double-clicking at the wanted position. With this done, you can choose the requested calendar from a drop-down list after you have double-clicked on the created time bar:

Resource/Task	Pl'd Lab. Rate	Calendar	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	1.	2.	3.	4.	5.
☒ Stevens (2)	35.00 €/h	Default	<input type="checkbox"/>																	
Special times/Costs	40.00 €/h		morning shift				evening shift													
Overtime	^35.00 €/h		morning shift				evening shift													
Absence			morning shift				evening shift													
☒ Schulz (8)	^50.00 €/h	Default	<input type="checkbox"/>																	

**Resources having irregular working hours**

If a resource has occasional or very irregular working hours, you should better assign a calendar **without working hours** in the column **Calendar** and enter the working times in the row **Special times/Costs** as they occur. This is done best if you use a real-time calendar as a resource calendar to have the full range of working hours covered (see "Creating resource calendars" on page 86).

**Note:**

Choosing **(no calendar)** from the selection list when assigning a calendar is reasonable only for equipment and materials as no work is calculated with this assignment made (see "Calculation of work (w/ or w/o work)" on page 88).

**Assigning different labour rates to a resource**

By default, the **resource calendars** entered in the row **Special times/Costs** use the labour rate entered in the column **Pl'd Lab. Rate**. If different labour rates are to be used (e.g. because the resource works abroad or in different shifts), double-click the calendar time bar concerned to enter a labour rate other than the default value which will apply to this calendar only:

Resource/Task	Lab. Rate Pl'd	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Stevens (2)	35.00 €/h	Calendar																		
Special times/Costs	40.00 €/h	Planned Labour rate																		
Overtime	50.00 €/h	Actual Labour rate																		
Staff training																				

If a labour rate other than the default value is used, the labour rate is shown in parentheses behind the designation of the resource calendar:

Resource/Task	Lab. Rate Pl'd	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Stevens (2)	35.00 €/h																			
Special times/Costs	40.00 €/h	morning shift (€42.00/h)																		
Overtime	50.00 €/h																			

**Overtime**

Apart from the working hours specified in the calendar and in the row **Special times/ Costs**, you may assign additional **overtime** to each resource in the respective row.

An overtime calendar lists all the working hours which are not within the normal working hours and which are charged with an increased labour rate. An example of an overtime calendar is shown below:

Calendar	02:00	04:00	06:00	08:00	10:00	12:00	14:00	16:00	18:00	20:00
Overtime (7)										
Monday			06:00	08:00				16:00	20:00	
Tuesday			06:00	08:00				16:00	20:00	
Wednesday			06:00	08:00				16:00	20:00	
Thursday			06:00	08:00				16:00	20:00	
Friday			06:00	08:00				16:00	20:00	
Saturday				08:00			16:00			
Sunday				08:00	12:00					

An overtime calendar is created just like other calendars as a time bar by double-clicking at the requested position. With this done, you can choose it from a drop-down list after you have double-clicked on the created time bar:

Resource/Task	Lab. Rate	Calendar	4	5	6	7
☐ Stevens (2)	35.00 €/h	Default	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special times/Costs	40.00 €/h					
Overtime	50.00 €/h				Overtime	

Contrary to what happens in the row **Special times/Costs**, adding a calendar in the row **Overtime** will not disable the working hours specified in the calendars of the rows above but will add additional working hours to them. If this has the effect that working hours of calendars overlap, the overtime calendar is given a higher priority and will determine the labour rate used for overlapping hours (for example, if working hours of the **default calendar** end at 6:00 p.m. on a weekday while working hours specified in the **overtime calendar** for this day start at 5:00 p.m. already).

As a general rule, entries made in the row "Overtime" are applied to holidays as well. For this reason, these entries must be interrupted at weekends if no work is to be done at weekends!

Another general rule is that entries made in lower rows are assigned a higher priority than entries made in rows above them:

- Resource calendars assigned in the row **Special times/ Costs** will replace the calendar specified in the column **Calendar** over the entire the area covered by them.
- Working hours assigned in the row **Overtime** are added to the working hours specified in the calendars of the rows above (**Special times/Costs** and the **Default** calendar in the example below). The labour rate entered for the **Overtime** calendar is also for working hours covered by several calendars.
- **Absence** will cancel all working hours in time periods covered by absence bars:

Resource/Task	Lab. Rate	Calendar	9	10	11	12	13	14	15
☐ Stevens (2)	35.00 €/h	Default		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
Special times/Costs	40.00 €/h			morning shift					
Overtime	50.00 €/h					Overtime			
Absence								Absence	

# PROJECT STATUS (PLANNING, CURRENT STATE, PROGNOSIS)

## INTRODUCTION

Based on current data, the prognostic capability enables you make statements on the project status. It allows you to forecast the further course of the project, whether the project will meet the deadlines and cost targets and, if not, to what extent deadlines and cost targets will be missed.

All in all, you can make detailed statements on the project status, identify problems and, if necessary, take measures for solving the problems.

## PROGNOSIS OF THE FURTHER COURSE OF THE PROJECT

### EXAMPLE

Let's use a simple example to show how to use the prognostic capability.

#### 1. Planning

Note: Resource "Stevens" is to spend 50% of its capacity on "Task 2" and "Task 3".

Task	Resources	CapUsg Pl'd	CapUsg Progn	Finish. %	Work Pl'd	Work Act	Work Progn	Independence Day 2009				
								29-5	6-12	13-19	20-26	27-2
Proj. 1 (3)				0 %	15.5 wd	0.0 wd	15.5 wd					
Task 1	Miller	100 %	100.0 %	0 %	8.0 wd	0.0 wd	8.0 wd					
Task 2	Stevens (50)	50 %	50.0 %	0 %	3.5 wd	0.0 wd	3.5 wd					
Task 3	Stevens (50)	50 %	50.0 %	0 %	4.0 wd	0.0 wd	4.0 wd					

#### 2. Start of work

Note: Change the view in the ribbon tab **Start** by choosing **Actual mode**.

Task	Resources	CapUsg Pl'd	CapUsg Progn	Finish. %	Work Pl'd	Work Act	Work Progn	Independence Day 2009				
								29-5	6-12	13-19	20-26	27-2
Proj. 1 (3)				0 %	15.5 wd	0.0 wd	15.5 wd					
Task 1	Miller	100 %	100.0 %	0 %	8.0 wd	0.0 wd	8.0 wd					
Task 2	Stevens (50)	50 %	50.0 %	0 %	3.5 wd	0.0 wd	3.5 wd					
Task 3	Stevens (50)	50 %	50.0 %	0 %	4.0 wd	0.0 wd	4.0 wd					

#### 3. "Task 1" 50% completed as planned

Task	Resources	CapUsg PI'd	CapUsg Progn	Finish. %	Work PI'd	Work Act	Work Progn	Independence Day 2009				
								29-5	6-12	13-19	20-26	27-2
Proj. 1 (3)				26 %	15.5 wd	4.0 wd	15.5 wd					
Task 1	Miller	100 %	100.0 %	50 %	8.0 wd	4.0 wd	8.0 wd					
Task 2	Stevens (50)	50 %	50.0 %	0 %	3.5 wd	0.0 wd	3.5 wd					
Task 3	Stevens (50)	50 %	50.0 %	0 %	4.0 wd	0.0 wd	4.0 wd					

#### 4. "Task1" completed, 40% of "Task 2" completed

However, 2.0 workdays (wd) was spent to complete "task2" by 40 %. Hence, the prognosticated work will be 5.0 wd instead of 3.5 wd as planned. With a planned capacity usage of 40% of resource "Stevens", the prognosticated duration will be 10 days instead of 7 days as planned. As a consequence, the begin of "Task 3" will be delayed by 3 days:

Task	Resources	CapUsg PI'd	CapUsg Progn	Finish. %	Work PI'd	Work Act	Work Progn	Independence Day 2009				
								29-5	6-12	13-19	20-26	27-2
Proj. 1 (3)				59 %	15.5 wd	10.0 wd	17.0 wd					
Task 1	Miller	100 %	100.0 %	100 %	8.0 wd	8.0 wd	8.0 wd					
Task 2	Stevens (50)	50 %	50.0 %	40 %	3.5 wd	2.0 wd	5.0 wd					
Task 3	Stevens (50)	50 %	50.0 %	0 %	4.0 wd	0.0 wd	4.0 wd					

#### 5. Capacity increase for "Task 3"

To keep to the planned schedule, the capacity to be spent by "Stevens" on "Task 2" is to be increased from 50% to 75% and on "Task 3" from 50% to 60% so that "Task 3" will be completed as planned originally:

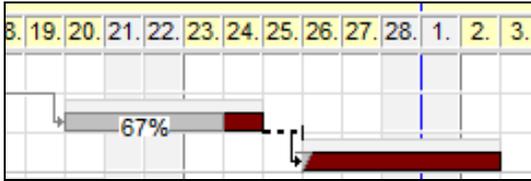
Task	Resources	CapUsg PI'd	CapUsg Progn	Finish. %	Work PI'd	Work Act	Work Progn	Independence Day 2009				
								29-5	6-12	13-19	20-26	27-2
Proj. 1 (3)				58 %	15.5 wd	10.0 wd	17.2 wd					
Task 1	Miller	100 %	100.0 %	100 %	8.0 wd	8.0 wd	8.0 wd					
Task 2	Stevens (50)	50 %	75.0 %	40 %	3.5 wd	2.0 wd	5.0 wd					
Task 3	Stevens (50)	50 %	60.0 %	0 %	4.0 wd	0.0 wd	4.2 wd					

#### 6. Project completed

Task	Resources	CapUsg PI'd	CapUsg Progn	Finish. %	Work PI'd	Work Act	Work Progn	Independence Day 2009				
								29-5	6-12	13-19	20-26	27-2
Proj. 1 (3)				100 %	15.5 wd	17.4 wd	17.4 wd					
Task 1	Miller	100 %	100.0 %	100 %	8.0 wd	8.0 wd	8.0 wd					
Task 2	Stevens (50)	50 %	75.0 %	100 %	3.5 wd	5.2 wd	5.2 wd					
Task 3	Stevens (50)	50 %	60.0 %	100 %	4.0 wd	4.2 wd	4.2 wd					

The **measure** described under point 5 is just one out of many measures that might be taken to prevent the deadline from being missed. Alternatively, an additional resource might be used, overtime hours might be worked or a partial delivery might be agreed upon with the contractor.

## BUFFERS



If there is no need of making a tight schedule without reserve times, you should allow for **buffers** (see "Buffers" on page 60) which have the effect that a delay of a task will not immediately affect the final date of completion of the project.

## INFORMATION ON PROJECT STATUS

A-Plan provides a variety of information on the **current project status**. This information can be displayed and/or printed according to your requirements.

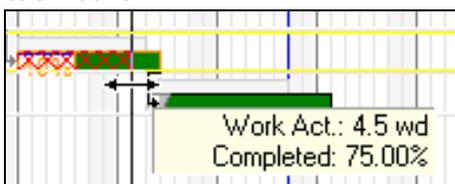
**Important information** on the project status:

End progn-pl'd	Prognosticated period by which deadline will be missed
Remtime	Time left to finish the task in due time or note of completion respectively
Finished %	Finished work in %
Work progn-pl'd	Prognosticated work in excess of planned work
Tot.Cost Pl'd	Planned total cost
Tot.Cost Act.	Total actual cost incurred until now
Tot.Cost progn	Prognosticated total cost
Tot.Cost progn-pl'd	Prognosticated total cost in excess of planned total cost (absolute)
Tot.Cost progn/pl'd	Prognosticated total cost (in %)

You can find a list of all available columns in "Data fields for resource planning/cost calculation" on page 240.

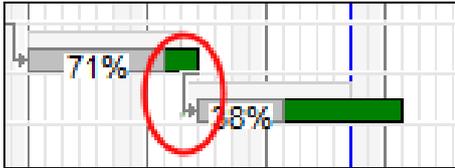
## NOTES, HANDLING

- After you have switched into actual mode (choose **Actual Mode** at the ribbon tab **Start**, actual and prognosis task bars can be changed in **the same way as planning task bars**:



- As soon as work has started on a task, the task will **no longer** be shifted due to existing links. If the level of completion of a task is > 0, linking lines are displayed in grey

color instead of black color:



However, you may still shift such a bar with the help of the mouse or by changing its begin or end in the table.

- The **locking of planning task bars has no effect** on the related actual/prognosis task bars.
- Making the appropriate setting in the user administration (see "Access permissions" on page 180) allows you to **prevent** those users from changing **planning data** which have access to actual data only.
- As long as no actual time has been specified (actual work = 0), **the actual task bar is shifted together with the associated planning task bar**, i.e. in this case its position is always identical to the begin of the planning task bar.
- You cannot enter **an actual task bar with a planning task bar NOT existing**: To enter actual times which had not been included in the original planning, you must create a planning task bar first, for example with its length being "0".

**Note:**

The level of completion cannot assume all possible values – this is particularly true for short task bars - as the begin and end of a task bar always must match the set time increment (see "Time/Week numbers" on page 123).

# OPTIONS

## VIEWING OF OPTIONS

Click the button **Options** in the tab **Tools** to open the dialog box for the setting of options.

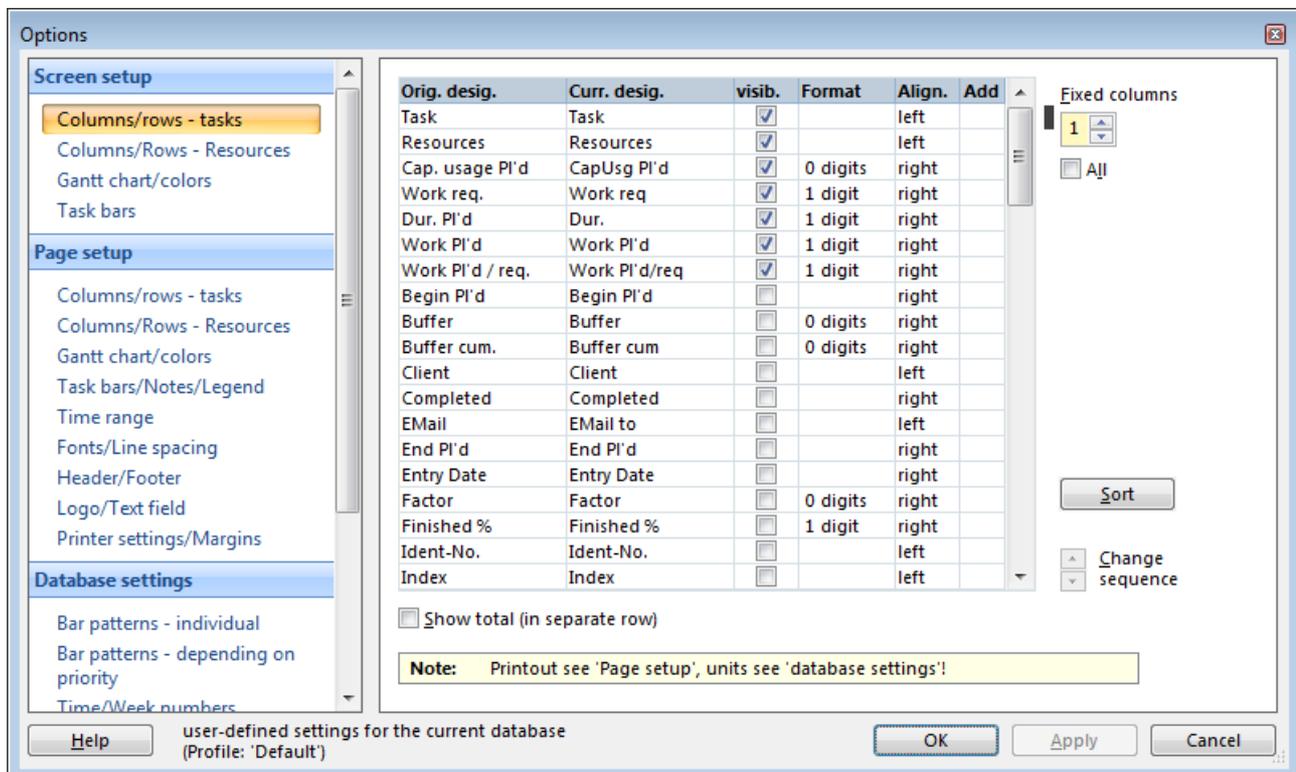
**Note:** In the Office 2007 programs, Microsoft „hid” the command for accessing options in the bottom right corner in the tab **File**. Of course, you may start them from there as well when working with A-Plan.

## SCREEN SETUP

### COLUMNS/ROWS

#### TASKS

The option tab **Columns/Rows** provides a list of all the columns that may be displayed in the main table of A-Plan:



**Note:**

Double-clicking or right clicking the title of the main table will also open the dialog box for setting columns.

**Column designation (Curr. desig.)**

You may use your own column designations. Just click on a designation listed in the column **Curr. desig.** to edit it.

**Show column (visib.)**

Activating a check box will have the effect that the column concerned becomes visible in the main window.

**Format of displayed values (Format)**

The **format** settings you can make depend on the type of column concerned:

Text columns: no settings can be made

Date columns: Show time (yes/no)

Cost columns: Click on a value to specify the number of digits after the decimal point. Entering a negative number has the effect that values in the column concerned are rounded (e. g. "-3 digits": 346,456.03 will be 346,000).

User defined number columns: Click the field to choose your own format of the form "x 0,00 x" with x standing for any string of characters and the number of zeros after the decimal point indicating the requested precision. No rounding's are made, the comma (",") is always used to group sets of thousand  
Example: 23532.34 with format "\$0,000" results in \$23,532.340.

**Alignment (Align.)**

Clicking on a field enables you to choose either "left", "right" or "center" for the alignment.

**Addition (Add.)**

Clicking on a checkbox in the column **Add.** will have the effect that user-defined number columns are added up (see "User-defined number columns (Number1 - Number10)" on page 239)

**Change sequence**

To change the sequence of the listed rows, select the row to be moved by clicking on it in the column "Orig. desig.". Then, click on the arrow buttons **Change sequence** to move the selected row to the position you want.

## Fixed columns

One or several columns can be fixed on the left side of the main window. If fixed, they are always within view because they are not moved if the main window is scrolled by means of the scroll bar. In the table of the dialog box, **fixed columns** are marked by a thick dark grey line next to the right side of the table:

Orig. desig.	Curr. desig.	visib.	Format	Align.	Add		Fixed columns
Task	Task	<input checked="" type="checkbox"/>		left			<input checked="" type="checkbox"/> 3 <input type="checkbox"/> All
Resources	Resources	<input checked="" type="checkbox"/>		left			
Cap. usage PI'd	CapUsg PI'd	<input checked="" type="checkbox"/>	0 digits	right			
Work req.	Work req	<input checked="" type="checkbox"/>	1 digit	right			
Dur. PI'd	Dur.	<input checked="" type="checkbox"/>	1 digit	right			

### Note:

The **width of a column** can be changed in the headline of the main table by dragging the border line while holding down the left mouse key. To do so, position the mouse pointer on the border line first until it looks like that:  .

## Show total (in separate row)

With this option activated, a row comes up in which the total is displayed for each column supposed that numerical values are contained in it:

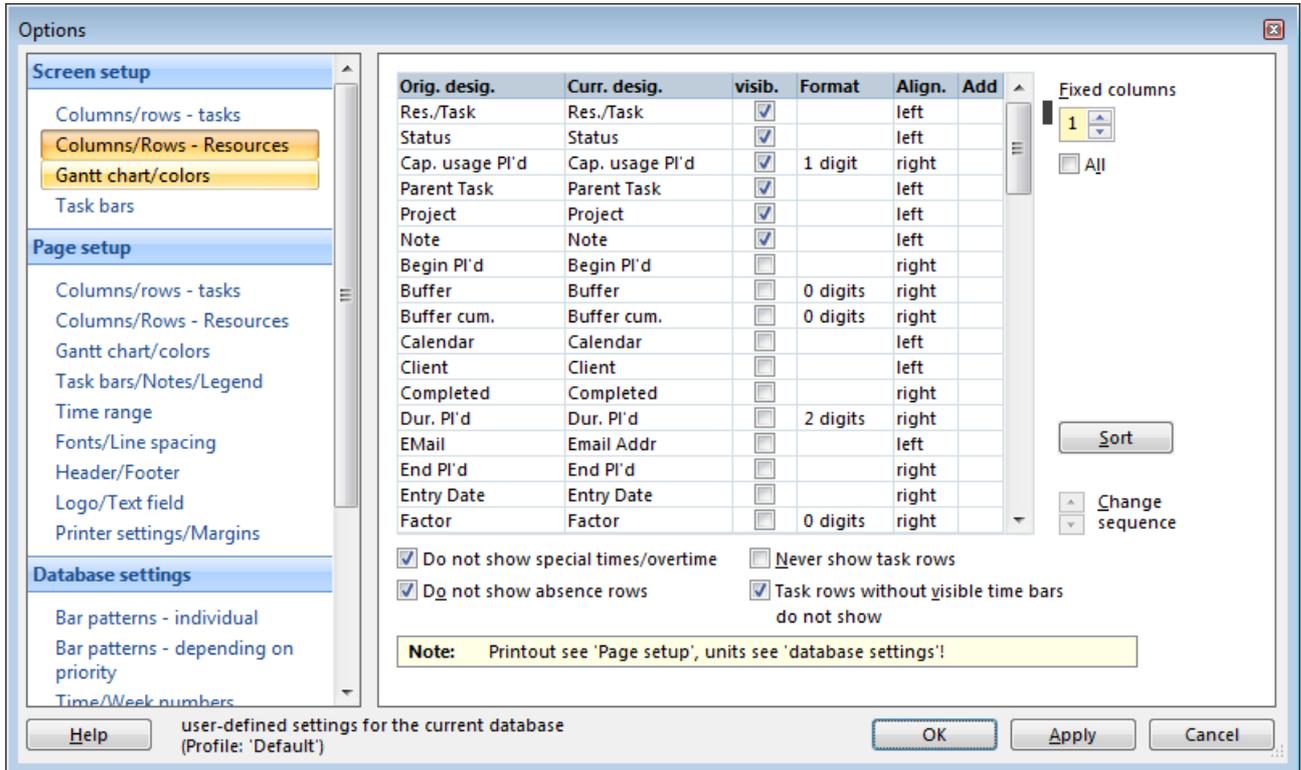
Task	Work PI'd	LabCost PI'd
<b>Total</b>	<b>725,6 wd</b>	<b>435.330,00 \$</b>
⊕ Organization (1)	524,6 wd	314.730,00 \$
⊕ Examples (2)	201,0 wd	120.600,00 \$

### Note:

Totals of user-defined columns are not shown unless the option **Addition** has been activated (see above).

## RESOURCES

With resources being displayed in the lower pane of the A-Plan main window, a second tab becomes available for setting the resource columns:



### ***Do not show.../Never show...***

Calendar, absence and task rows of resources can be hidden independently of each other.

**Complete display** (with none of the check boxes activated):

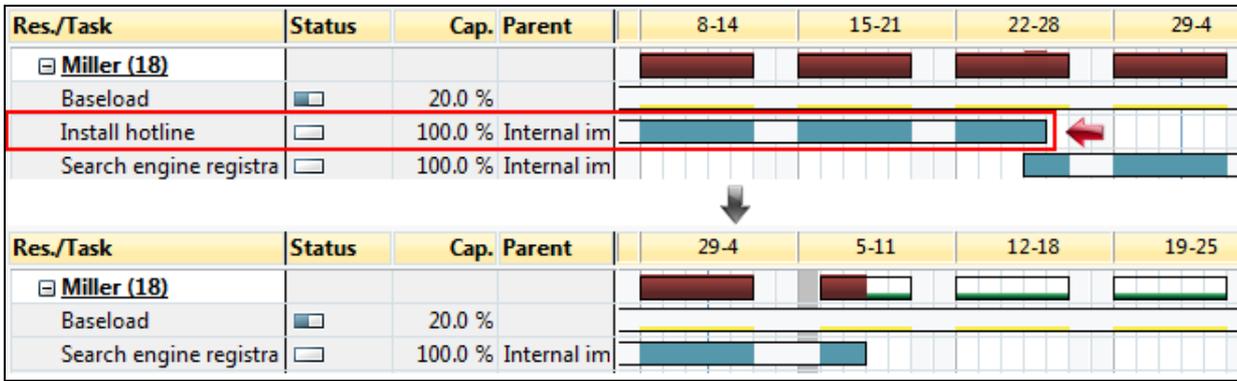
Res./Task	Status	Cap.	Parent
☐ Miller (18)			
Special times/Costs			
Overtime			
Absences			
Baseload	☐	20.0 %	

**Do not show calendar rows and absence rows**

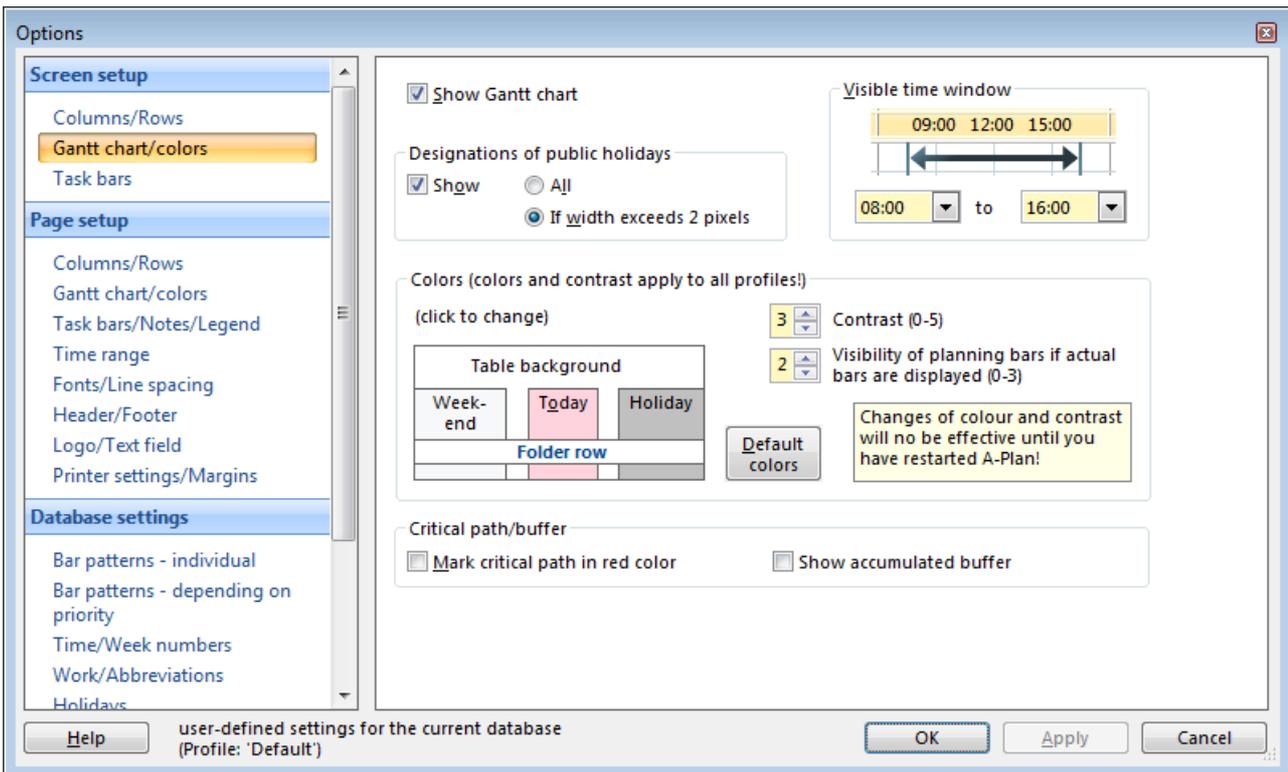
Res./Task	Status	Cap.	Parent
☐ Miller (18)			
Baseload	☐	20.0 %	

**Do not show task rows**

Task rows can be hidden entirely (**Never show task rows**) or partly (**Do not show task rows having no visible task bars**). With the second option activated, task rows are displayed only if they feature task bars in the visible area of the Gantt chart. The lines concerned are removed from display as soon as the task bar(s) is/are no longer visible due to the Gantt chart being scrolled:



## GANTT CHART/COLORS



### Show Gantt chart

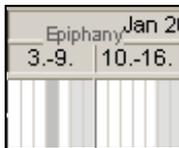
Activating this option enables you to have the table displayed only with the Gantt chart being omitted.

## Designations of public holidays

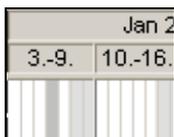
The designations of **public holidays** (see "Public holidays" on page 126) can likewise be shown on screen or hidden:



Show designations of **all public holidays**



Show only designations of public holidays **if width exceeds 2 pixels**



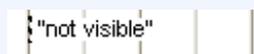
All designations **hidden**

## Visible time window

Use the **visible time window** to set the time of the day by which a day is to start and to end in the Gantt chart. When setting the visible time window, be aware that the mouse cannot be used for setting the times of activities which are outside of the visible time window.

### Note:

If a task bar is **outside of the visible time window** (e. g. from 8:00 to 10:00 p.m. with the visible time window set from 6:00 a.m. to 6:00 p.m.), it is shown as a narrow dotted rectangle at the borderline to the next day:



## Colors

Clicking on one of the elements will open a dialog box to choose a color from. Clicking on **OK** will assign the color to the selected element. To assign the default colors again, click on the respective button.

### Note:

Changes in the setting will not become effective until A-Plan has been restarted!

You may set the background color and choose from 5 levels of contrast between fields and separating lines to adjust the display to different screens or to meet your personal preferences:

<b>Contrast = 1</b>		11.02.2009		^75 €/h
		20.02.2009		^75 €/h
		11.02.2009		^75 €/h
	Schulz (80)	23.02.2009	80 %	75 €/h
	Sailer (60)	11.02.2009	60 %	65 €/h

<b>Contrast = 3</b>		11.02.2009		^75 €/h
		20.02.2009		^75 €/h
		11.02.2009		^75 €/h
	Schulz (80)	23.02.2009	80 %	75 €/h
	Sailer (60)	11.02.2009	60 %	65 €/h
<b>Contrast = 5</b>		11.02.2009		^75 €/h
		20.02.2009		^75 €/h
		11.02.2009		^75 €/h
	Schulz (80)	23.02.2009	80 %	75 €/h
	Sailer (60)	11.02.2009	60 %	65 €/h

Likewise, there are four levels for setting the visibility of planning task bars if actual/prognosis bars are on display (from 0 = invisible to 3 = full visibility):

<b>Visibility = 0</b>	
<b>Visibility = 1</b>	
<b>Visibility = 2</b>	

### ***Critical path / Accumulated buffer***

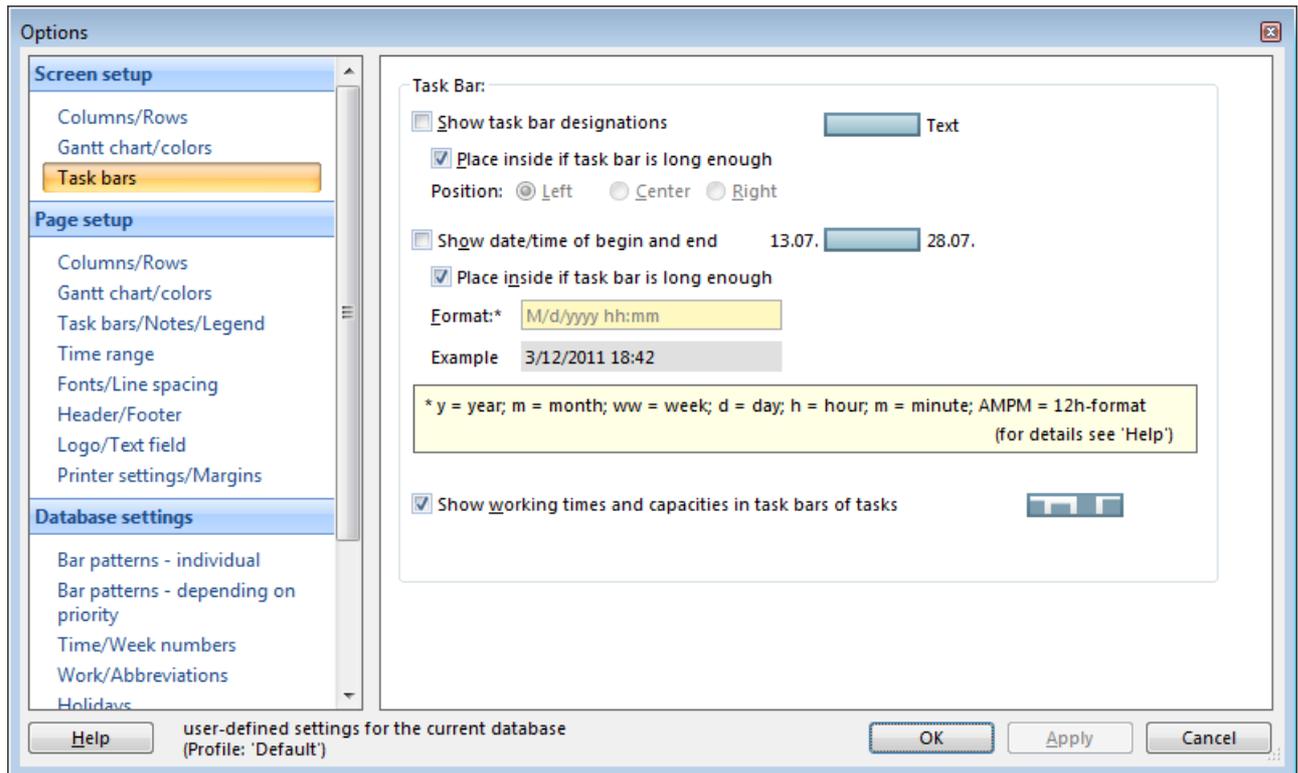
#### **Critical path**

Task bar frames and linking lines representing the critical path are marked with the help of red color.

#### **Accumulated buffer**

Accumulated buffer is marked with the help of black/green dotted lines.

## TASK BARS

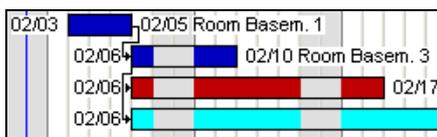


### **Show task bar designations**

Activate the option **Show task bar designations** to have the task bar designations displayed and printed (if applicable).

The next option **Place inside...** allows you to specify whether designations are placed on the **left** or **right** or in the **center** of the task bar. If a task bar is too short with this option activated, the designation will be displayed/printed behind the task bar.

### **Show date/time of begin and end**



The start and end date of a task bar can be shown as a numerical value in various formats in front of the task bar and behind it respectively.

The start and end date of milestones being the same, only one date is displayed for milestones.

The most important characters to determine how date and /or time will be displayed/ printed are as follows:

d	day	h	hour
ww	week	m	minute
m	month	AMPM	12-hour-format
y	year		

Examples (point in time is 03.04.2005, 13:45 o'clock):

"d.m."	3.4.
"dd.mm.yy"	03.04.98
"hh:mm"	13:45
"mm/dd/yyyy h:mm AMPM"	04/03/1998 1:45 PM

For a complete list of all available formats see the appendix ("E. User-defined date/time formats" on page 246).

### Show working times and capacities in task bars of tasks

Optionally, task bars related to tasks can be set to show when resources work on a task and what capacity they use. With the option activated, a pattern is displayed only during the time periods when resources work on the task while the pattern height represents the resource capacity spent on the task:



A full pattern height means that all assigned resources spend their full capacity on the task.

If a **given number of resources must be assigned** as a general rule (e.g. for machine operation, stand-by personnel etc.), it can be entered in the column **Ress. Req.** This entry will then determine the number of resources required to have the pattern displayed at full height:

Task	Resources	Ress. Req.	Aug 2004			
			-22	23-29	30-5	6-12
Basic design	Schulz; Stevens	3 rs	[Pattern bar]			

In the example above, only two resources were assigned although three resources are required. As a consequence, the pattern is shown filled to two thirds of its full height only throughout the entire task bar.

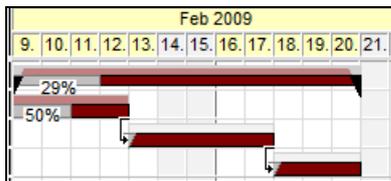
The unit used to enter the number of required resources in the table (rs = resources is used here as an example) can be set in the dialog box **Options** by clicking the tabs **Database settings / Costs/Work / Resource**.

In **rows without resources** the filling of the pattern is controlled by the working hours of the default calendar (see "Calculation of the duration of tasks, default calendar" on page 45):



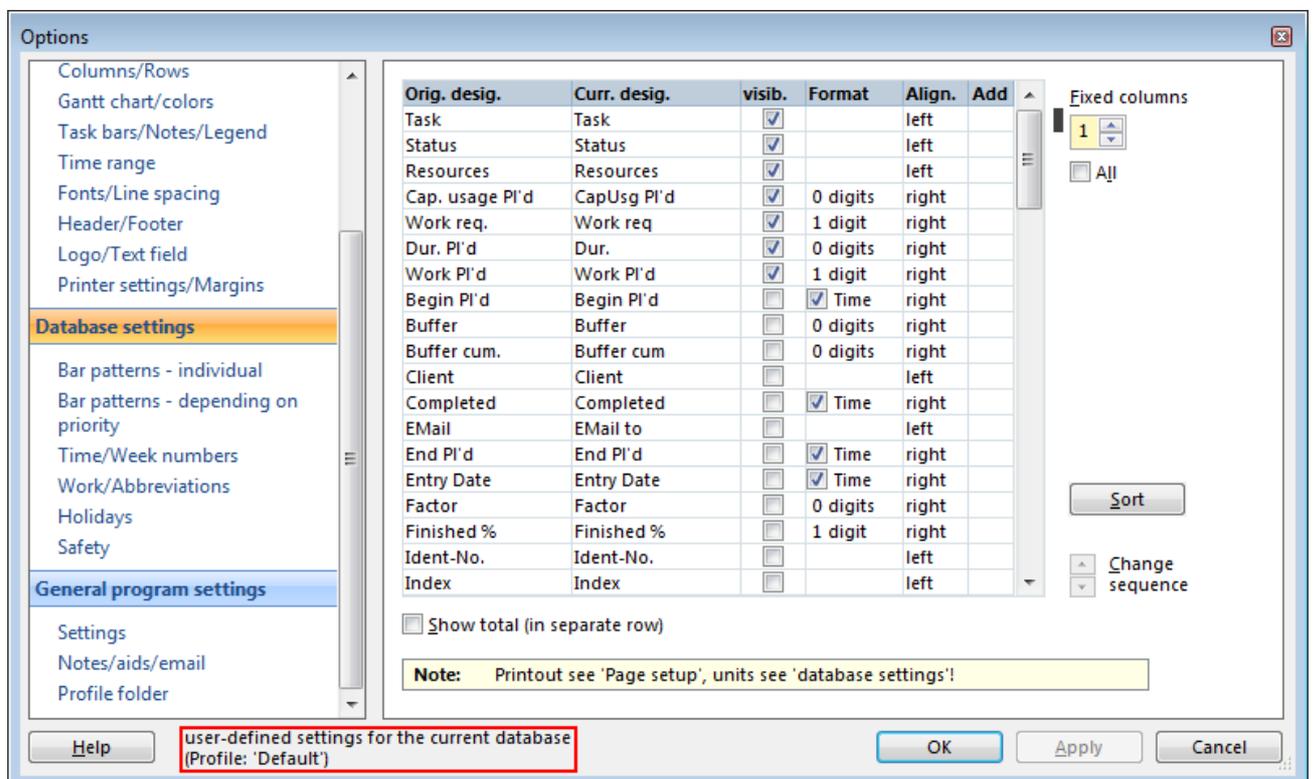
### Actual work as %

Anzeige der Ist-Zeitbalken mit dem Erledigungsumfang in %.



## DATABASE SETTINGS

**Database settings** are mainly settings which refer to the results that will be obtained when the duration, costs and work are calculated. For this reason, these settings may be changed with administrative rights only if A-Plan is used in a network:

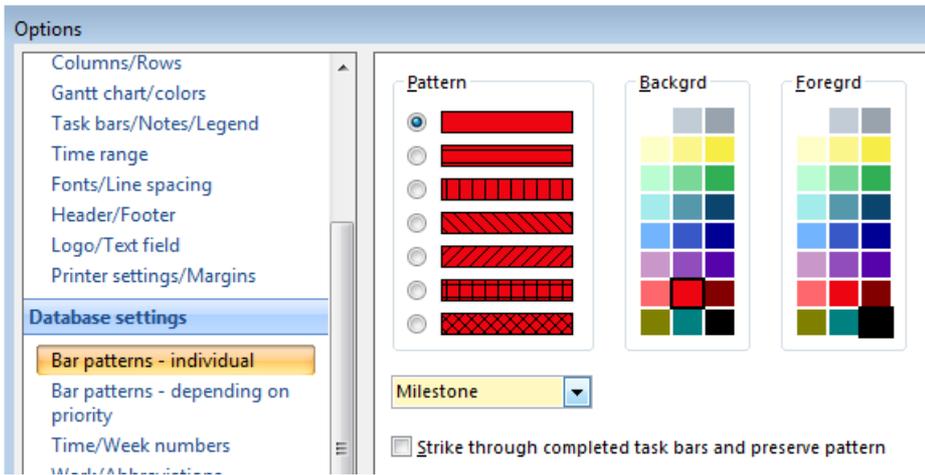


## BAR PATTERNS

Basically, the patterns (and colors) assigned to task bars either **depend on the priority** of the task concerned or are referred to as **individual patterns** (and colors respectively).

### Individual patterns

You may assign an **individual pattern** to each task bar. Use the dialog box shown below to determine the range of available individual patterns:



## Determination of patterns

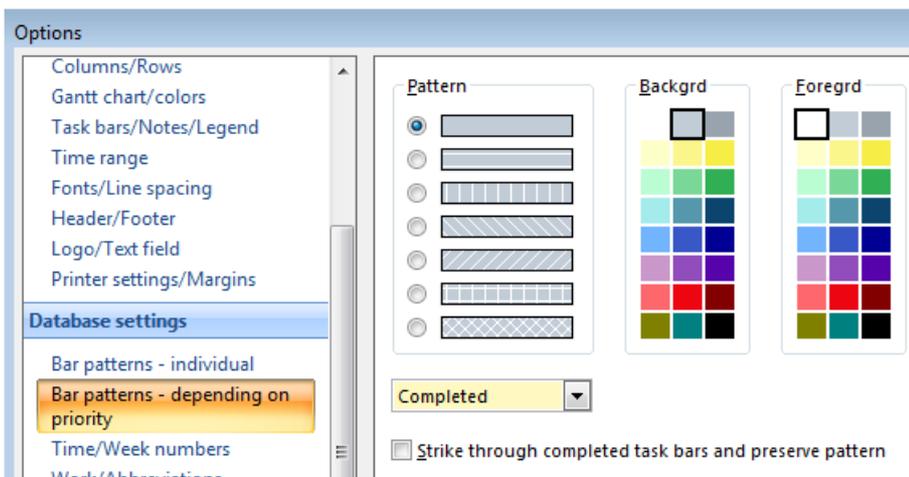
Having clicked on the respective option field, select the entry to be changed from the drop-down list on the lower left. If you are willing to assign **individual patterns**, you may replace the designations in the list (limited to 50 patterns) by renaming them as you like. These names will be used in the dialog box "Pattern" (see "Bar patterns" on page 121) as well as when the legend is printed (see "Task bars/Notes/Legend" on page 142).

Subsequently, you can make the desired allocations by clicking a **pattern** as well as a **background** and a **foreground** color.

## Priority dependent patterns

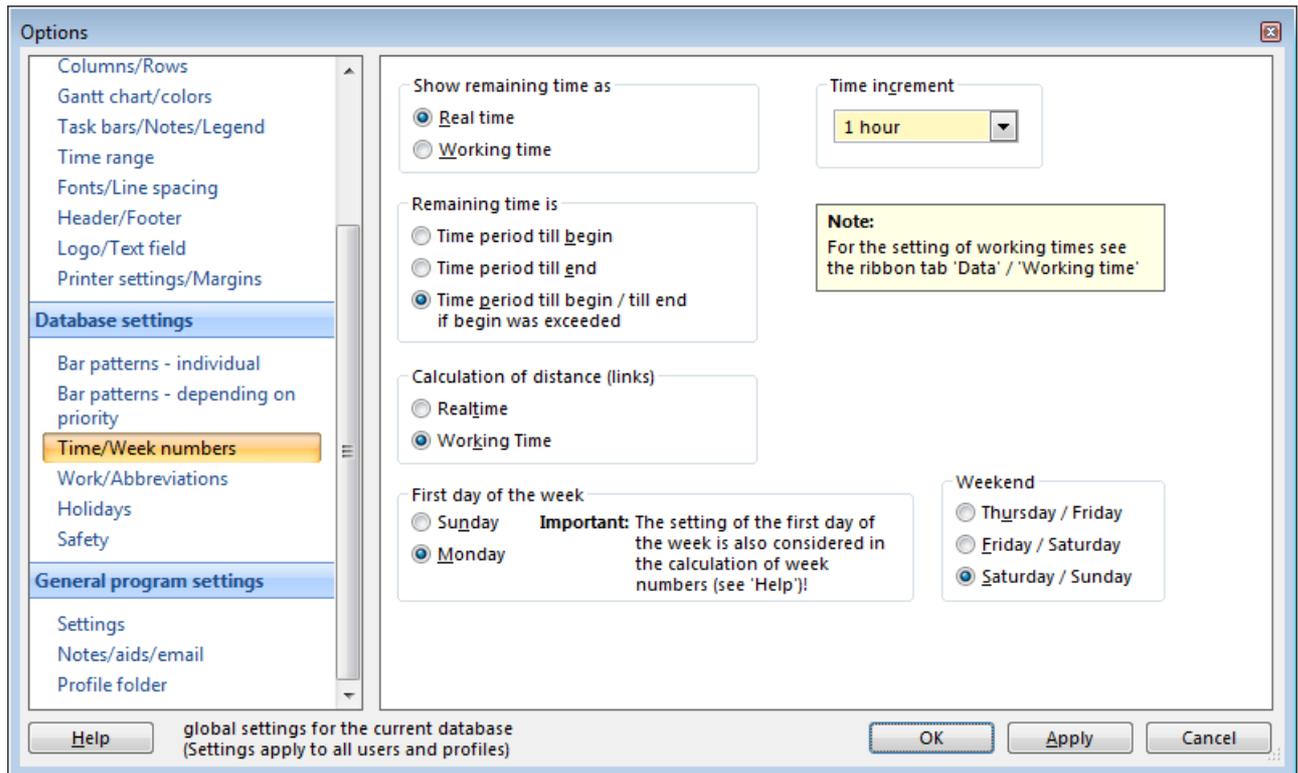
If you did not assign an individual pattern to a task bar, it is shown with a pattern based on the priority of the task bar concerned (see "General data fields" on page 233). For example, if a red color was assigned to priority 2, all bars belonging to a project or task of priority 2 are shown in a red color.

You may assign a specific pattern to **each priority** and to all **completed task bars**. In addition, you may specify the color of the **reshow date symbol**:



By default, completed task bars are shown with a grey pattern. If you want completed task bars to be shown in their original color, they may be struck through by checking the option at bottom (**Strike through ...**).

## TIME/WEEK NUMBERS



### **Show remaining time as**

In general, the **remaining time** left till completion (see "Remaining time" on page 236) can either be shown or printed as the sheer distance between two points in time (= real time) or may be calculated from the working hours based on the default calendar (see "Calculation of the duration of tasks, default calendar" on page 45).

### **Remaining time is**

These options allow you to specify whether the **begin** or **end** of the first pending task bar is used in the calculation of the remaining time. With the first option the remaining time is the time period from the current time till the begin of the first pending task. With the second option, the time period till the end of the first pending task is calculated.

With the third option – **Time period till begin / till end if begin was exceeded** – the time period till the begin of the first pending task bar is shown as remaining time as long as the task concerned has not been started. As soon as the begin of the first pending task bar has been exceeded, the time period till the end is shown as remaining time. The time period till the end is indicated by the sign ">" and the period till the begin by the sign "<".

Task	Rem. Time	May 2004			
		-16	17-23	24-30	31-6
Define topics	> 4 d	[Gantt chart showing task bar from May 17 to May 21]			
Structuring	< 5 d	[Gantt chart showing task bar from May 17 to May 21]			

### **Calculation of distance (links)**

The **distance** between two linked task bars can be displayed/printed in the same way as the remaining time of a task bar (see above).

### ***First day of the week***

To meet the requirements of different standards, either **Monday** or **Sunday** can be specified as the first day of the week.

The week lines in the Gantt chart will be adjusted to your setting both on screen and on the printout. Furthermore, the **calculation of calendar weeks** changes accordingly:

#### **Day 1 of the week is    Week 1 of the year is**

Sunday                      the week that contains 1<sup>st</sup> January (e. g. USA)

Monday                     the week that contains at least 4 days of the new year (e. g. Central Europe)

#### **Important:**

Please note that the different calculations of week 1 will result in a **wrong calculation of calendar weeks** as well if you **do not select the first day of the year correctly!**

### ***Time increment***

The time increment set in this field is to specify the intervals in which points in time can be entered and displayed and in which calculations are made. You may choose from the following values:

- 1, 5, 10, 15 or 30 minute(s),
- 1, 2, 3, 4 or 6 hour(s) or
- 1 day.

When making this setting, be careful to choose an interval which is close to the shortest time interval used in your planning. For example, if your planning is done mainly in hours or days, you should set the time increment to **1 hour** or **1 day**.

The coarser the time increment you set, the faster internal calculations will be made (for example, choosing **1 hour** instead of **1 minute** will result in a 30% increase in speed). Furthermore, settings can be made faster and more easily because unwanted intermediate values can neither be set nor displayed. The latter is particularly useful when points in time are set in the Gantt chart using the mouse.

#### **Notes:**

**Changing the time increment** of an existing database will have the effect that those points in time will be shifted which are not in line with the new time increment. For example, if you choose **1 hour** as the new time increment, the begin of a task starting at 7:45 will be shifted to 8:00. As these adjustments cannot be undone, save a copy of the database (**File/Save as**) first if you are not absolutely sure whether you agree with the adjustments. For calculation reasons, a day will always start at 6:00 and end at 18:00 if you choose **1 day** as the time increment.

## COSTS/WORK/ABBREV.

### Note:

For a currency conversion see "Currency conversion" on page 75.

The screenshot shows the 'Options' dialog box with the 'Costs/Abbreviations' tab selected. The 'Labour rate' section has 'Time unit\*' set to 'hour (h)' and 'Labour rate\*' set to '50.00 €/h'. The 'Duration/work' section has 'Unit of duration\*' set to 'hour (h)' and 'Unit of work\*' set to 'hour (h)'. The 'Cost calc. method\*' section has three radio buttons: 'Use precise working time' (selected), 'Round to entire hours (up or off)', and 'Round to entire hours (up)'. The 'Abbreviations' section has 'Currency' set to '€'. Below this is a table of abbreviations: Minute: min, Week: w, Hour: h, Month: m, Day: d, Year: y. At the bottom, there is a note: '\* Default values which are used if no other values were entered in the table of the main window'. The dialog also has 'Help', 'OK', 'Apply', and 'Cancel' buttons.

### **Labour rate (Time unit, labour rate)**

The values entered here are used as **default values** if no specific value is entered for a **resource** in the main table (see "Costs and special working hours" on page 102).

Choose from the following time units when specifying the labour rate:

- minute
- hour
- day
- week
- month
- year

The time unit you selected will be displayed in short form as specified in the pane **Abbreviations** which you can see in the same dialog box on the right.

### **Work (Time unit)**

**Together** with the **short form** entered in the related field in the pane **Abbreviations**, the unit selected here will be used as the default **work unit** as long as no specific unit is assigned to a **task** in the main table (see "Time Unit of Work" on page 243).

## Method of cost calculation

By default, the option you select here is used for calculating resource costs. Other methods of cost calculation can be assigned to **resources** by entering the method to be used in the column entitled "Resources".

Activate the option **Use precise working time** if you want all calculations to be based on the exact time spent on tasks. Use the setting **Round to entire units (up or off)** if calculations are to be based on rounded units as specified in the field **Time unit** of the pane **Labour rate**. The same applies to **Round to entire units (up)** with values being rounded up to entire units only.

## Accuracy of calculation (internally)

The value specified here denotes the number of digits used after the decimal point if internal cost calculations are made in the database. Entering a negative value will have the effect that costs are rounded up.

### Examples:

Original value:		\$3,456,843.536
Accuracy =	2	\$3,456,843.54
Accuracy =	0	\$3,456,844
Accuracy =	-3	\$3,457,000

You are allowed to enter numbers of decimal digits ranging from 9 to -9.

In normal applications, we recommend you to use the value specified as format in cost columns (see "Tasks" on page 112) for the accuracy of internal calculations **as well**. When specifying different values, please be aware that internal rounding of results may have the effect that displayed values seem to be wrong. Example:

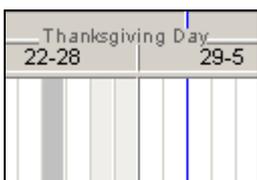
Calculation (accuracy = 2):  $5.43 + 4.30 = 9.73$

Calculation (accuracy = 0):  $5 + 4 = 10(!)$

---

## PUBLIC HOLIDAYS

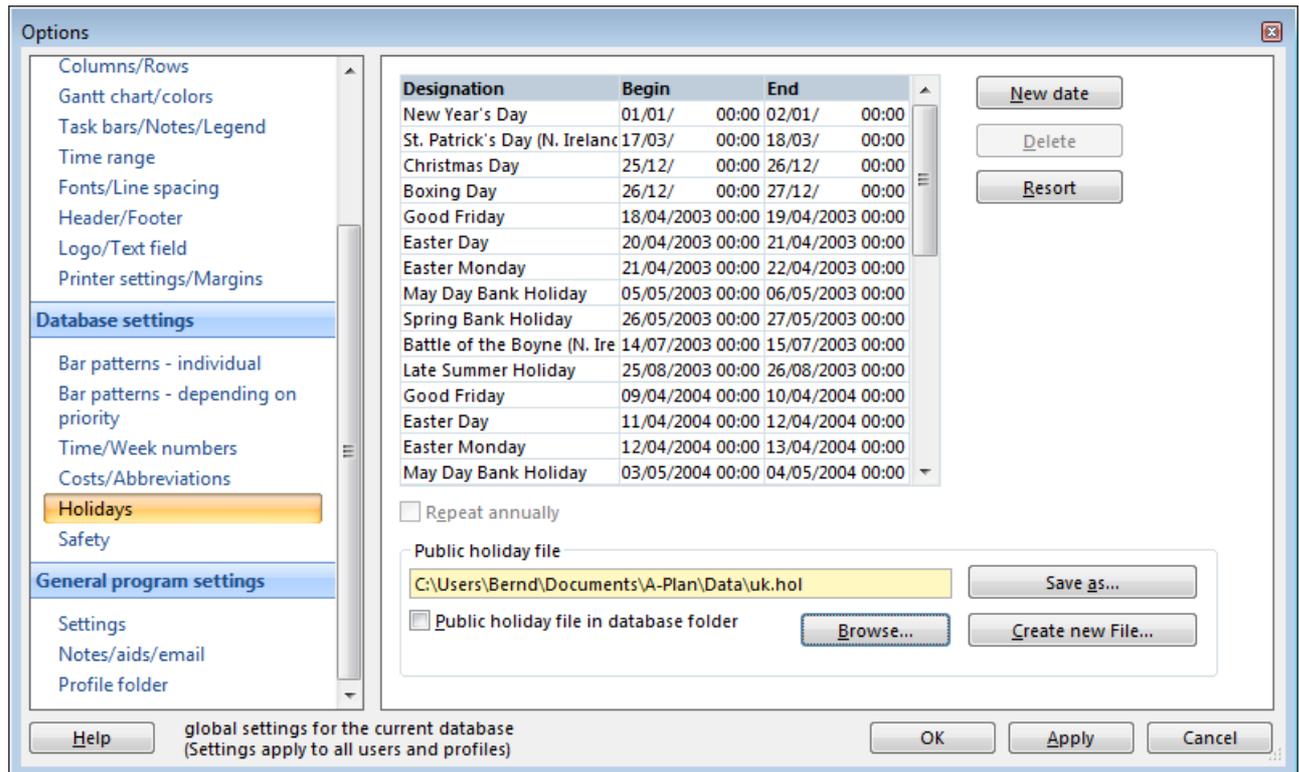
Apart from weekends, the calculation of times may take into account any interruptions such as public holidays or other breaks of any duration. By default, public holidays or other interruptions are shown in the Gantt chart in dark grey color:



### Note:

If you select "month" or a higher resolution (see "Resolution of the Gantt chart" on page 36), public holidays will no longer be displayed as they would be too close to each other.

Use the table provided in the tab **Holidays** to enter, edit or change public holidays and other interruptions:



### ***New date***

Clicking on the button **New date** will insert a new row into the table and will open an entry field for entering the designation of the new holiday.

To enter the date of the new holiday, double-click on the existing value in the column **Begin**. Of course, you can use the calendar and clock for entering the begin by clicking on the entry field with the right mouse key.

Use the same procedure to enter the end of the holiday or interruption respectively.

If the interruption will occur every year, click on the check box **Repeat annually**. Dates recurring annually can be recognized from the missing year.

Click on the button **Resort** to have the list sorted anew with dates recurring annually being listed at the top and one-time dates at the end of the list.

### ***Change date***

To change a date, double-click on the respective item and edit it as described above.

If the duration of the public holiday is to remain unchanged, activate the check box **Fixed duration**. With this done, you have to change one of the two values only.

### ***Delete date***

Select the row concerned by clicking on it and click on the button **Delete**.

## Public holiday file

All entries in the list are saved in a separate file which can be used by other A-Plan database as well.

On the other hand, you may use various public holiday files in an A-Plan database. To change to another file, click on the button **Browse** and select another file from the list which is displayed in a new window (holiday files have the extension "hol").

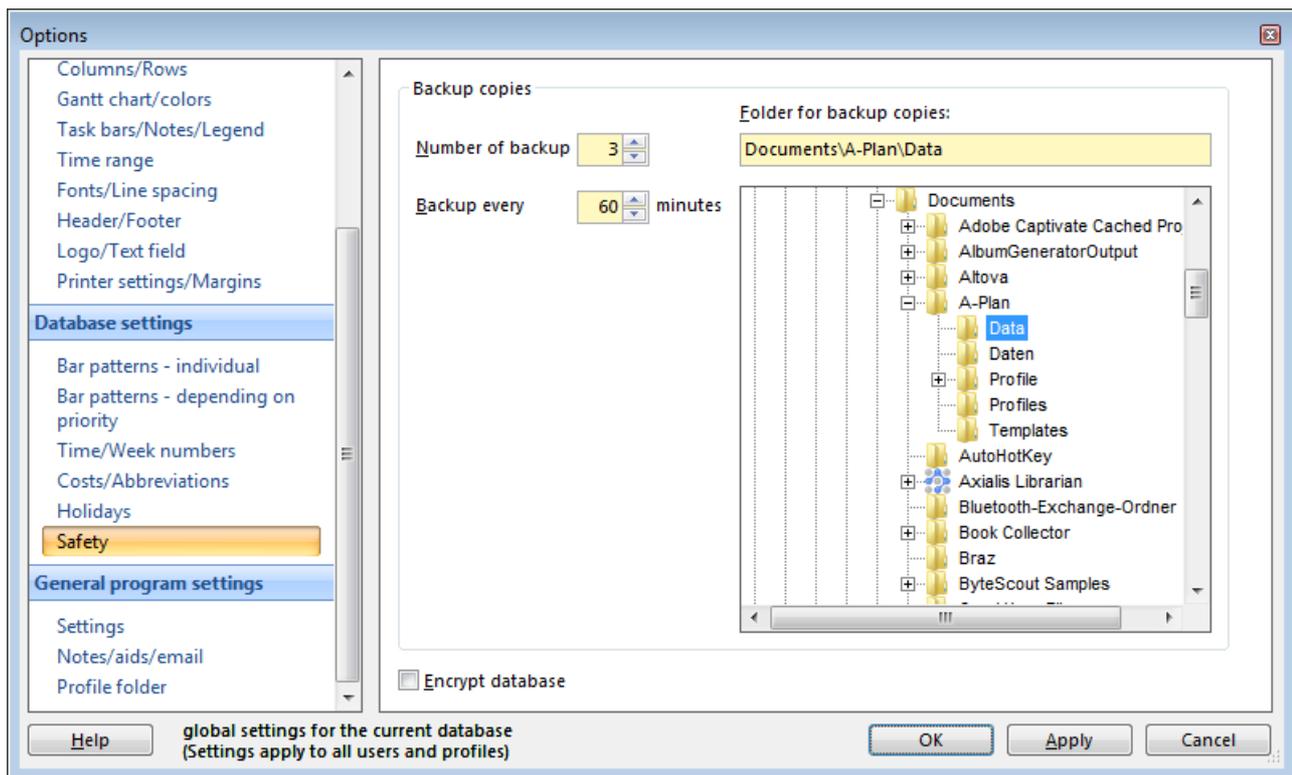
To create a new public holiday file, click on the button **Create new File**.

To save a copy of the opened file in order to create a variant of the existing file, click on the button **Save as** and enter the new file name.

### Note:

A-Plan is shipped with **Public holiday files** for **USA** and **United Kingdom** with public holidays listed until the year 2007. Public holiday files are saved in the data folder of A-Plan (by default, "My Documents\A-Plan\Data").

## SAFETY



## Backup copies

A compressed backup copy of the current database is made automatically at regular intervals as set in **Backup every ... minutes** if you enter a number > 0 in **Number of backup copies**. Backup copies are made even if the database has been opened by several users. If it is found that no data were changed since the last backup, the next backup will be de-

layed until a change is made. This is to prevent several identical backup copies from being made.

The number you enter in the field **Number of backup copies** will determine how many backup copies of a database will be kept alive before the oldest copy will be deleted. The backup copies are given the file extensions \*.bc1, \*.bc2, etc. with the highest number being the latest copy of the database.

When the set number of backup copies is reached, the file with the extension \*.bc1 is deleted and all of the other backup files are each reduced to the next lower number (i.e. \*.bc1 is deleted and the former \*.bc2 becomes \*.bc1 and so on).

**For creating and opening backup copies manually**, see "Database administration" on page 161.

**IMPORTANT:**

Creating backup copies **cannot replace your regular data backup scheme for data security**. Their main purpose is to have former versions of your data available!

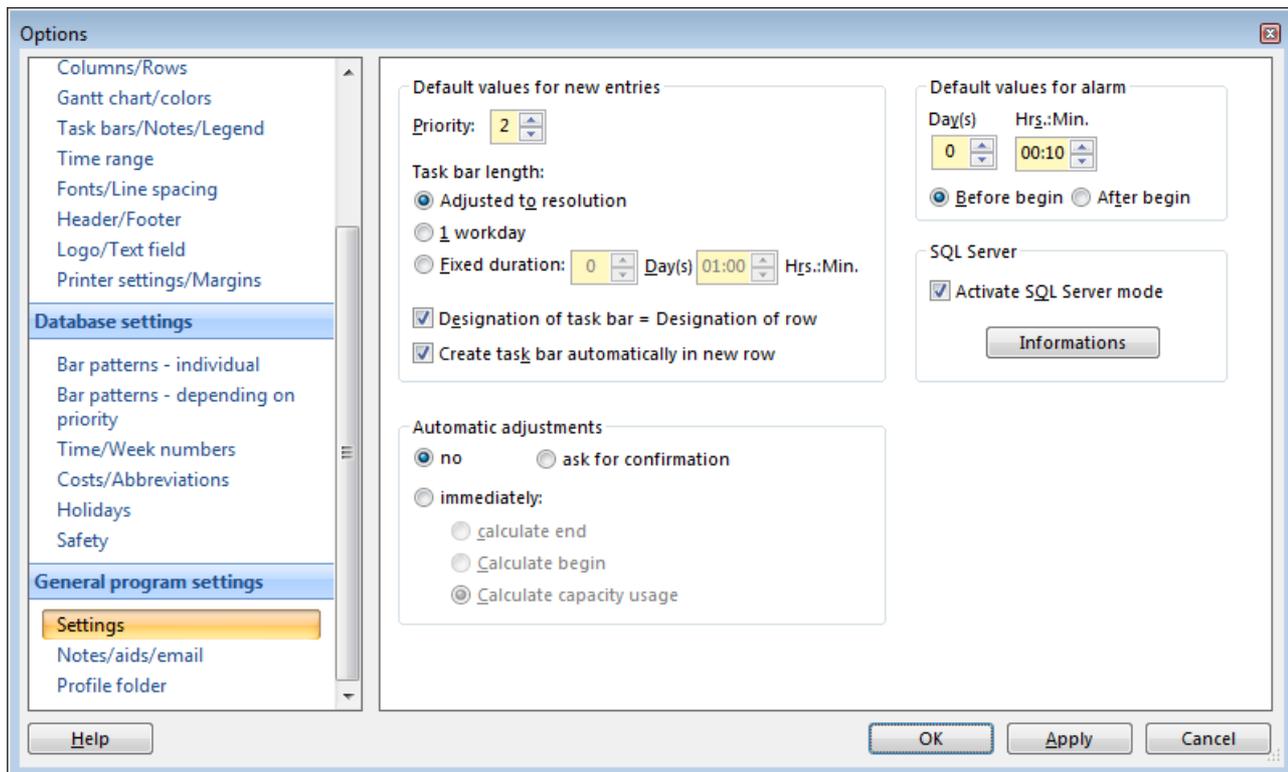
***Encrypt database***

Activating this option will have the effect that the database can be opened by no other program but A-Plan. Using Microsoft Access to open the database will request entry of a password known to no one else but braintool software. If another program such as, for example, a browser is used to open the database, binary digits will be displayed only.

Encryption of the database can be undone by unchecking the checkbox **Encrypt database**.

# GENERAL PROGRAM SETTINGS

## SETTINGS



### **Default values for new entries**

The values set in this window pane will be used when new tasks or task bars are entered.

### **Priority**

The value specified here will be assigned when you enter a new task row.

### **Task bar length**

Double-clicking in the Gantt chart will create a new task bar at the position of the mouse pointer. The length of the new task bar is controlled by the option activated here.

With the option **Adjusted to resolution** activated, the length of the new task is determined by the increment used to move the mouse pointer over the Gantt chart. For example, a new bar will have a length of 1 workday (see below) if the resolution is **year**. With the resolution being **short day**, the task bar length will be 2 hours while a resolution of **10 minutes** will result in a length of 1 minute.

If you activate the option **1 workday**, the begin and end of a new task bar will be determined by the corresponding times specified in the default calendar (see "Calculation of the duration of tasks, default calendar" on page 45).

Click on the option **Fixed duration** if you prefer to specify a standard length in terms of days, hours and minutes.

## Designation of task bar = Designation of row

With this option being activated, a new task bar will automatically be given the designation of the row, i.e. of the project or task respectively.

## Create new task bar automatically in new row

A task bar is created automatically in the center of the Gantt chart as soon as a new row is inserted. The length of the task bar is controlled by the option activated under **Task bar length**: (see above).

## Automatic calculations

The program will use the values set here whenever new tasks or task bars are entered.

## Default values for alarm

The values specified here will be used when you set an alarm by clicking on a task bar with the right mouse button and choosing **Alarm ON**.

## SQL Mode

With the SQL and the test version of A-Plan you have the possibility of activating and deactivating the SQL mode. When starting A-Plan, the dialog box for opening an SQL database does not come up unless you activated the SQL mode before.

For a detailed description of the SQL version see the tab **Help / SQL version** (available with the SQL version and the test version of A-Plan only).

## MESSAGES / AIDS / EMAIL

The screenshot shows the 'Options' dialog box with the 'Messages / AIDS / EMAIL' section selected. The dialog is divided into several sections:

- Safety / Messages:**
  - Request confirmation prior to deleting data
  - Show general hints
  - Show message if resources are overallocated / absent
  - Threshold: 100 %
- Visual guides:**
  - Vertical guideline
  - Position of mouse pointer
- Email settings:**
  - Outgoing mail server: p12345.server.info
  - Port: 25
  - Email address: info@braintool.com
  - User name: p23553p14
  - Password: \*\*\*\*\*
  - Check button
- Others:**
  - Reload last file automatically

At the bottom of the dialog are buttons for 'Help', 'OK', 'Apply', and 'Cancel'.

## ***Safety / Messages***

### **Request confirmation prior to deleting data**

With this option activated, a message is displayed asking you to confirm the deletion of the selected data. This is intended to prevent you from deleting data inadvertently.

### **Display a message if task bars overlap**

With this option being activated, a warning message pops up if two or several task bars overlap after you created a new bar or moved an existing bar.

In general, you should work with this option activated as it may happen that the lower bar of overlapping task bars can no longer be seen.

#### **Note:**

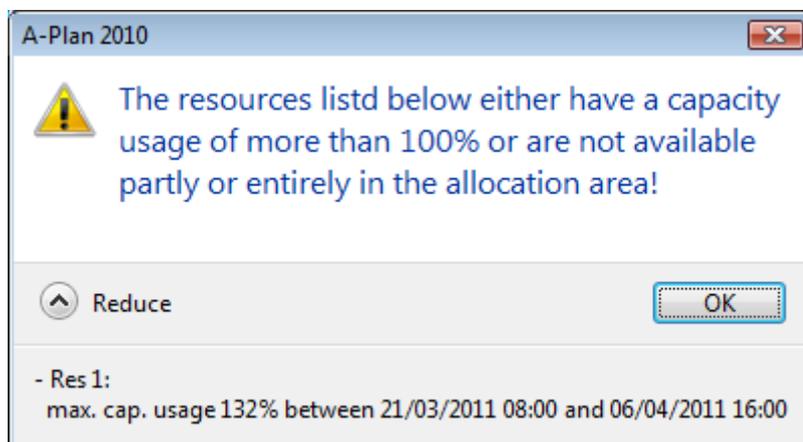
If you cannot find a task bar any more, just scroll the task bars (see "Scrolling of task bars" on page 36) since this will reveal bars which were hidden behind other bars.

### **Display a message if task bars are shifted to past**

A message pops up if a task bar is shifted to an earlier date with the new starting date being earlier than the current date.

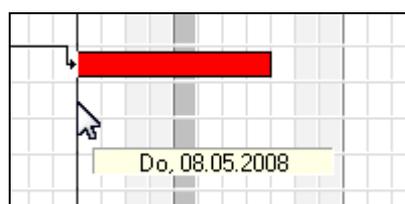
### **Display a message if resources are over allocated / absent**

A message appears if the allocation of a resource or changed dates have the effect that a resource is over allocated because it is allocated to other tasks already:



Likewise, a message is displayed if a resource is allocated although it is not available in the time range concerned (e.g. due to sickness or holidays).

### ***Visual guides***



A vertical line is displayed at the front end of the mouse pointer to facilitate the positioning of task bars.

If you are not comfortable with these lines, just remove them from display.

Likewise, the field indicating the current position of the mouse pointer can be hidden. With this done, it will just come up when you change (the begin, end or position of) a task bar.

### **Email settings**

To send emails directly out of A-Plan (see "Sending of emails" on page 69) you must make the settings requested here. Normally you can find them in your email program, for example with MS-Outlook under **Extras / Account Settings**. If you are not sure about the settings to be made or if problems occur, please contact your system administrator.

### **Others**

#### **Show status line**

Use this option to either show or hide the bottom line of the main window.

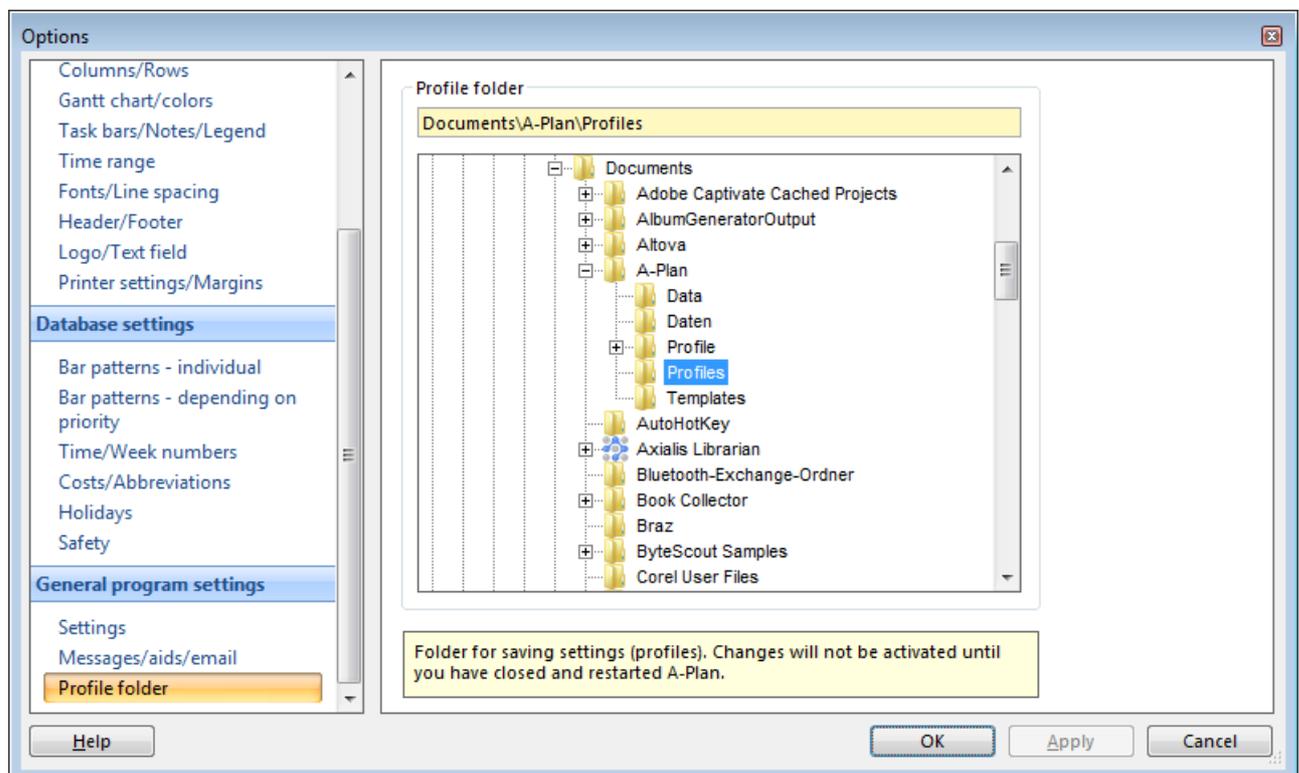
Hiding the status line will somewhat increase the display area. However, you will have to do without the hints assisting you on the handling of A-Plan

#### **Reload last file automatically**

If you start A-Plan with this option being activated, the program will automatically load the database that had been opened last before A-Plan was closed. If this file is not found, a new, empty database is created.

Deactivate this option if the loading of A-Plan takes a long time in a network environment (e.g. because the whole network is browsed in search of the database).

## **PROFILE FOLDER**



## Default profile folder

By default, **profiles** (see "Profile folder" on page 133) are saved in the folder set in this window pane.

The profile folder can also be specified by appending it as a parameter when starting A-Plan (see "B. Starting A-Plan with parameters" on page 248).

## SAVING OPTIONS IN PROFILES

To save you the work of entering a combination of settings again each time you need it, you may save **up to 99** different combinations as **profiles**. Apart from the settings of the main window and of the options, the print setup is saved in a profile as well (see "Page Setup (Tools/Options/Page Setup)" on page 137).

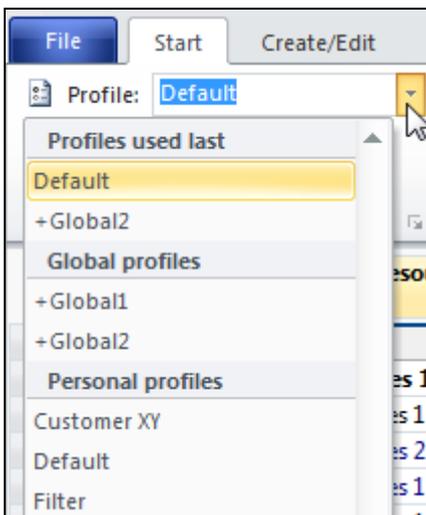
### **Important:**

Profiles are intended to save settings only but no data. As a consequence, entering or deleting data in a profile will affect all other profiles as well!

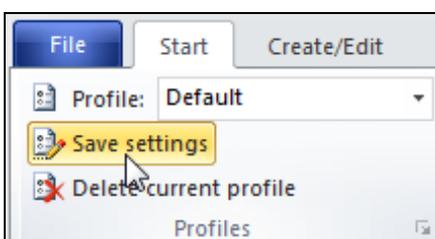
Profiles are saved as individual files in the profile folder (see "Profile folder" on page 133). As a prefix, the profiles are given the name of the database, their extension is ".pnn" with nn being a consecutive number such as e.g. "test.p01".

If a database is used by several users in a network environment, each user must have a profile folder of his own to prevent users from mutually overwriting their settings.

## WORKING WITH PROFILES



Profiles existing for a database are displayed in the tab **Start** and can be selected there with the help of a mouse click.



Changes of the settings are taken over to the current profile by clicking the function **Save settings**.

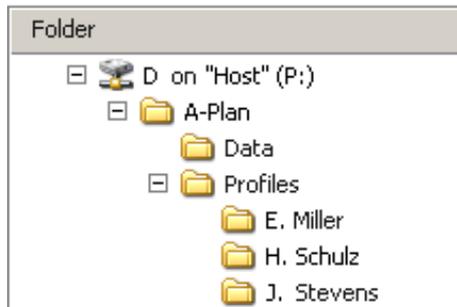
To have all changes taken over automatically, the button can be locked (= activated permanently) by clicking the function with the CTRL key pressed down.

To create a new profile as a variant of the current profile, just type the new name in the list field and press the ENTER key.

---

## GLOBAL PROFILES

Superior profiles can be used for all files and users to make sure that certain default settings are always available independent of the database you have opened. To prevent them from unauthorized or accidental changes, global profiles can be created and/or changed only by users having administrator rights. Their designation is preceded by a "+" allowing you distinguish them from normal profiles.



To make global profiles available, a common superior folder must exist and, on the next lower level, a personal **profile folder** for the individual profiles of each user.

The personal profile folder is specified under **Options** in **General Program Settings / Default Profile Folder** (see "Profile folder" on page 133).

If a user has **administrator rights**, he can create a superior profile by entering a designation with a preceding "+".

Should a user choose a global profile **although he has no administrator rights**, he may change the settings. However, his changes will not be saved when he selects another profile or closes A-Plan. As a result, the original settings will be available whenever the concerned profile is selected again.

---

## SETTINGS NOT SAVED IN PROFILES

### ***Settings stored together with the database***

There are some settings of which no separate version is stored for each user but which are saved only once in the database. These are all the settings related to the database, i.e. the settings you can find when you click on the tab **Database settings** in the dialog box **Options**.

### ***General settings***

All settings which do not refer to a specific database are saved for each user in his individual registration database of Windows! Such settings are, for example,

- User name
- Last file loaded
- Default folders
- Size and position of dialog boxes
- Last values entered when using "Find" and/or "Replace"
- Option settings made in the tab **General program settings**

# PRINTING, REPORTS

## GENERAL HINTS ON PRINTING

### LAYOUT OF PRINTOUT

Data is printed as a table with integrated Gantt chart and looks quite similar to what you can see on screen. However, some different settings are used for printing as the requirements for editing data in the computer and for viewing them on a printout are different, especially when it comes to giving presentations or creating documentation. For this reason, most of the settings used for printing are made in a separate tab entitled **Page setup** of the dialog box **Options** and have no influence on what you can see on your screen.

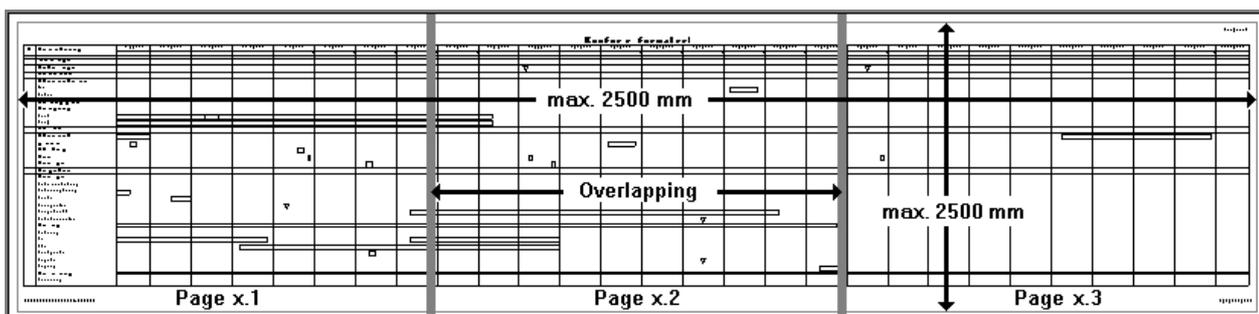
One exception from this rule is that the settings made on **filters** and **sorting** are used for both the screen display and the printout. Should you require a different setting for the printout, save it as a separate profile and reload it when you are going to print (see "Working with profiles" on page 134).

#### **Important:**

Collapsed folders and/or projects (see "Structuring (Folders, Projects, Tasks)" on page 29) remain collapsed on the printout as well. If you want them to be expanded, choose **Expand All** from the ribbon tab **Start**. To restore the former view when printing is finished, just deactivate this function.

### SIZE OF THE PRINTING AREA

A-Plan is capable of making full use of almost all formats supported by Windows printers or plotters (theoretically, the maximum size is 2500 x 2500 mm with Win NT, 2000 or XP and 1400 x 1400 mm with Win 98/ME). If your printer does not support this size, you can obtain a wider printing area if you split the printouts in horizontal direction into several pages:



The necessary assembly of the pages is facilitated by optional cutting guides. However, even in this case the total width may not exceed 2500 mm. The total height is not limited since as many pages can be printed in this direction as are necessary to print all rows of the main table. For example, the entire printout might look like that:

Page 1.1	Page 1.2	Page 1.3
Page 2.1	Page 2.2	Page 2.3
Page 3.1	Page 3.2	Page 3.3
Page 4 (Notes)		

The print preview of A-Plan allows you to display the complete number of sheets in horizontal direction (see "Print Preview" on page 153) enabling you to preview the result of the printout on screen.

In the printout, all dimensions of the table are adjusted to the used **font size** (see "Fonts/Line spacing" on page 147). This is to ensure that the visual impression of the table and of the Gantt chart will match mostly with what you see on screen even if very small or very large fonts are used.

## INSERT A PAGE BREAK MANUALLY

<input checked="" type="checkbox"/> Product selection
<input type="checkbox"/> Internal implementation (7)
<input checked="" type="checkbox"/> Performance specification
<input checked="" type="checkbox"/> Place Web design order

If a given row is to appear at the top of a new page in the printout, insert a page break manually above this row. With this done, a dashed line indicates the page break in the screen display:

To activate this option, click on the row concerned with the right mouse button first. Then, choose the command **Insert Page Break** from the pop-up menu.

## PAGE SETUP (TOOLS/OPTIONS/PAGE SETUP)

A variety of options are available to adjust the printed output to your requirements.

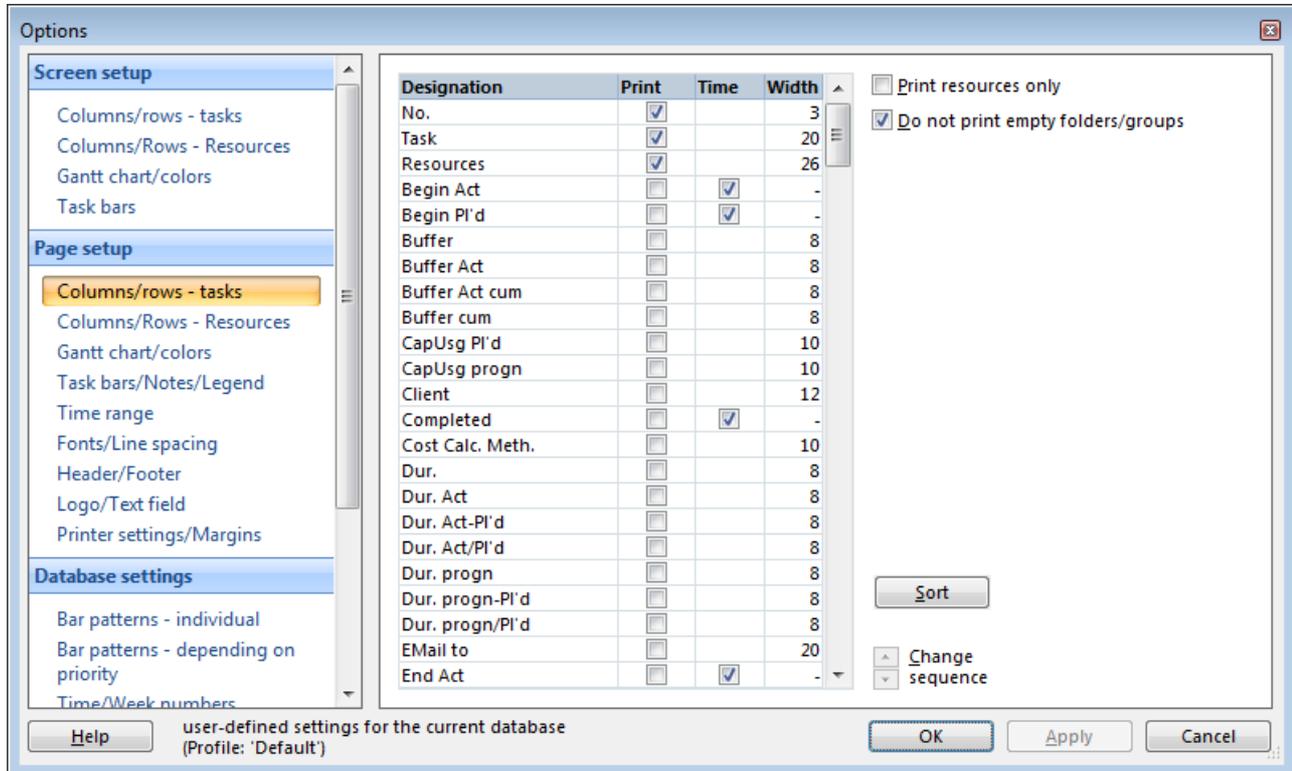
All settings are made in the dialog box **Options** in the tab **Page Setup**.

Clicking on the button page **Setup** on the upper left in the print preview will take you to the respective dialog box enabling you to preview the effects resulting from the changes you made to the settings (see "Print Preview" on page 153).

## COLUMNS/ROWS

### TASKS

The tab **Columns/Rows** (which is available in a similar form for the Screen Setup) displays a table listing all existing columns that can be printed. A row in the table shown below corresponds to a column in the task table:



The **Designation** of the columns is equivalent to the designations specified in the corresponding Screen Setup tab (see "Tasks" on page 112).

In the columns **Print** and **Time of**, click on the respective check box in the row concerned if you want the corresponding column and/or the time to appear on the printout. If a check box is activated, clicking on it will deactivate it.

The **width of the columns** can be changed by clicking on the current value in the row concerned. However, the width of a column can be changed only if it cannot be calculated automatically from the values displayed in the column. The values listed in the column "Width" indicate the approximate width of a column in terms of characters.

To **change the sequence**, select the database row to be moved by clicking on it and use the arrow buttons to move it up or down

### ***Print resources only***

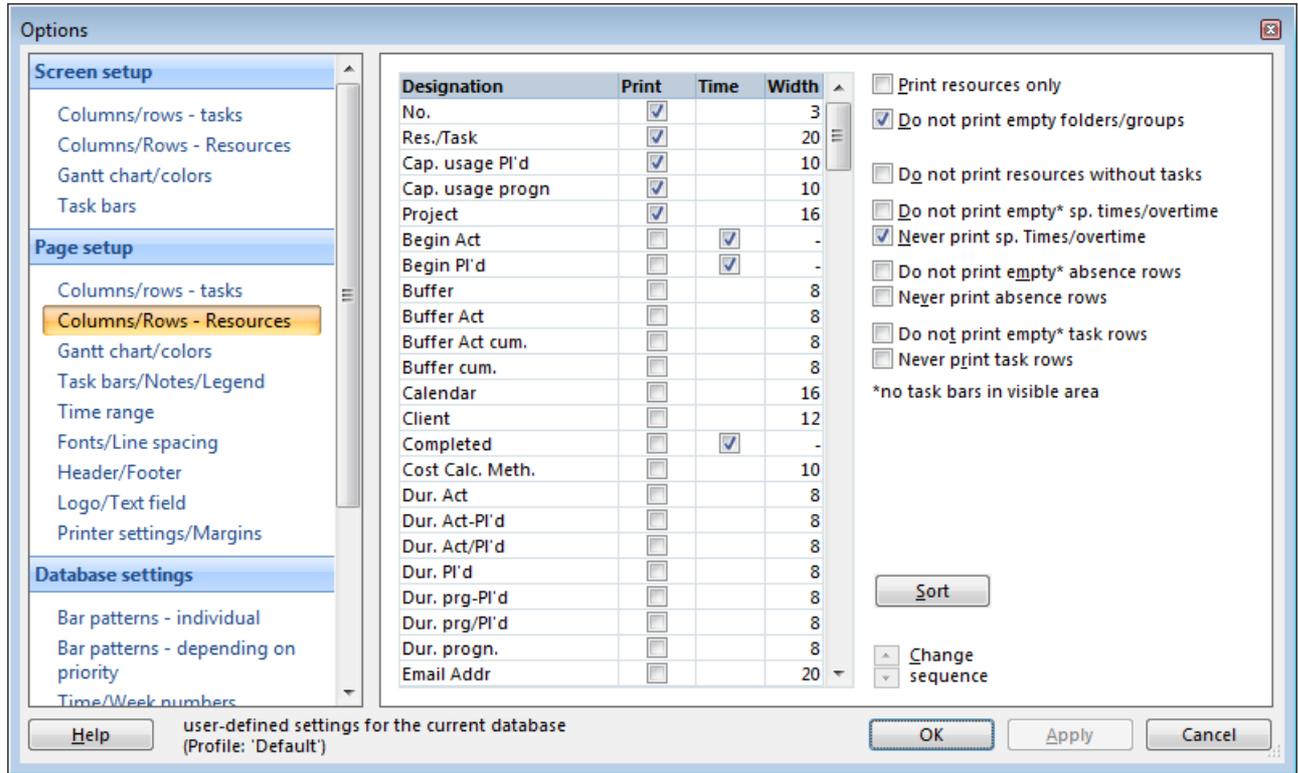
With this option activated, the lower pane of the main window is printed only.

### ***Do not print empty folders/groups***

Activating this option will have the effect that folder rows (and group rows of resources) will be printed only if at least one row exists on a lower in the folder or row concerned.

Likewise, collapsed folders/groups (see "Structuring (Folders, Projects, Tasks)" on page 29) will not be printed.

## RESOURCES



Resources are printed below the task table just as shown on screen:

Task	Resources	Jan 2004									
		27	28	29	30	31	01	02	03	04	05
<b>Construction proj.</b>											
<b>Kings Road</b>											
Demolition											Demolition
Ground floor	Lorry 2; Miller (50)										Ground floor
Internal walls											
Plasterwork.	Hawkins; Miller										
<b>Resource/Task</b>											
		Jan 2004									
		27	28	29	30	31	01	02	03	04	05
<b>Bricklayers</b>											
<b>Miller</b>											
Ground floor	<b>Kings Road</b>										Ground floor

To have resources printed at the top of a new page, select the first resource row in the main table, click on it with the right mouse button and choose **Insert Page**.

The dialog box for selecting the resources to be printed provides a number of options shown on the right enabling you to reduce the amount of printed data for the sake of clearness:

### ***Do not print resources without tasks***

Resources which have not (yet) been assigned to a task will not be printed

### ***Do not print empty calendar rows***

Calendar rows (**Special times/Costs, Overtime**) will not be printed unless task bars exist in the time range to be printed

### ***Never print calendar rows***

Calendar rows (**Special times/Costs, Overtime**) will not be printed

### ***Do not print empty absence rows***

Absence rows will not be printed unless task bars exist within the time range to be printed

### ***Never print absence rows***

Absence rows will not be printed

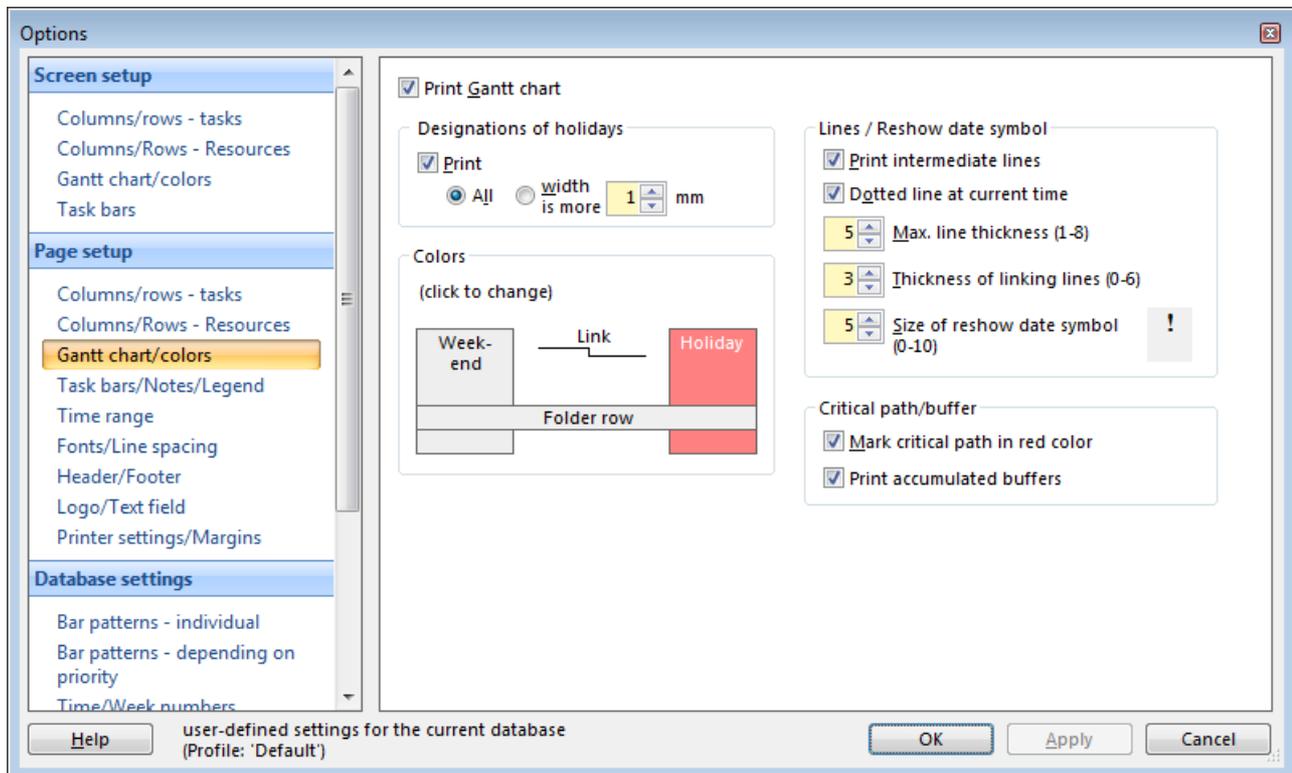
### ***Do not print empty task rows***

Task rows will not be printed unless task bars exist within the time range to be printed

### ***Never print task rows***

Task rows will not be printed

## **GANTT CHART/COLORS**



## Print Gantt chart

To print (both the main table as well as) the Gantt chart, click on the check box **Print Gantt chart** to activate it.

### Designations of holidays

The settings you make in this pane have the same function as those made in the Screen Setup (see "Gantt chart/Colors" on page 116).

Contrary to the setting made for the Screen Setup, you are allowed to specify any value regarding the width a holiday must have in order to be printed.

### Colors

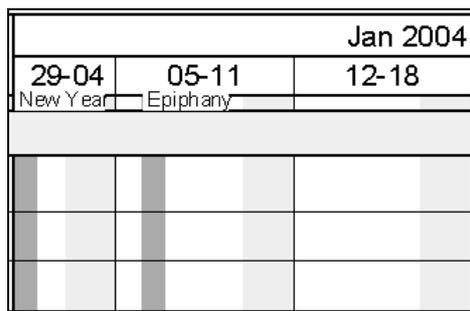
Clicking on one of the shown elements opens a dialog box in which you may assign a color to the element concerned. Click on **OK** to apply the color to the element.

### Lines/Reshow date symbol

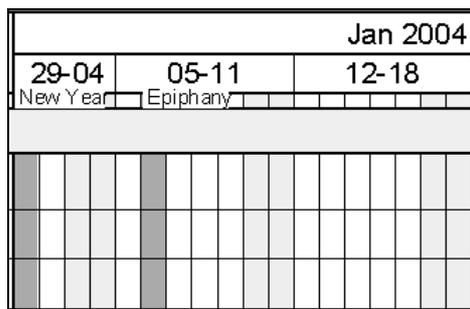
#### Intermediate lines

Additional intermediate lines are inserted if the resolution is in the range of hours or if the date of each day cannot be displayed because weeks are too narrow.

**without** intermediate lines:

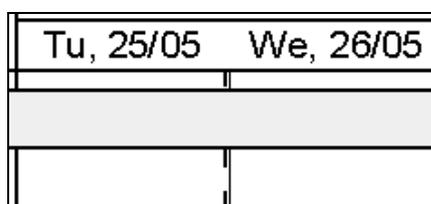


**with** intermediate lines:



#### Dotted line at current time

With this option activated, a dotted line is shown in the Gantt chart at the point which represents the time or date when the printout is made.



## Max. line thickness, thickness of linking lines

The thickness of all lines in the printout is multiplied by the value specified here. If, for example, a value is reduced from 6 to 3, all lines will be printed with half of their original thickness.

The thickness of the links between tasks can be set separately.

## Size of reshew date symbol

To set the size of the reshew date symbol (see "Elements and symbol used in a Gantt chart" on page 33) a range from 0 to 10 is provided with "5" being approximately equivalent to the font size set in the table. Specifying "0" will have the effect that the reshew date symbol will not be displayed.

## Critical path / Accumulated buffer

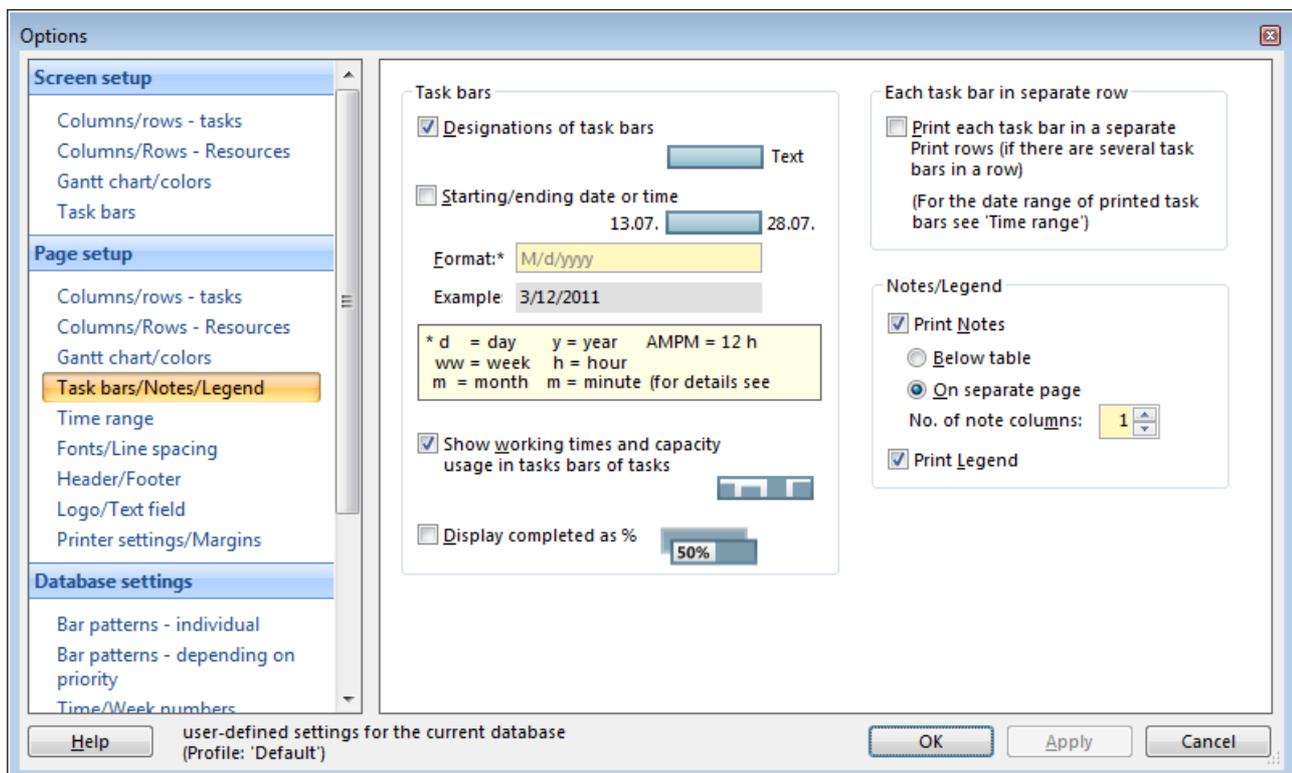
### Critical path

Frames of task bars and linking lines representing the critical path are marked by red color.

### Accumulated buffer

Accumulated buffer is marked by black/green dotted lines.

## TASK BARS/NOTES/LEGEND



### Tasks bars

The settings made in this window pane have the same function as those made in the corresponding pane of the screen setup dialog box (see "Task bars" on page 119).

### ***Each task bar in separate row***

Use this option to have each task bar printed in a separate row if several task bars exist in one row.

This option is of particular benefit if the task bars in a row follow each other at a short distance with designations overlapping so that they can hardly be read any more:

#### **Task bars (milestones) in one row:**

<b><u>E-Business integration</u></b>	E-Business integration				
Milestones	▼ Proj.Start	▼ Topics, HW fixed	▼ 1. Prototype		

#### **Task bars (milestones) in separate rows:**

<b><u>E-Business integration</u></b>	E-Business integration				
Milestones					
Proj.Start	▼ Proj.Start				
Topics, HW fixed		▼ Topics, HW fixed			
1. Prototype			▼ 1. Prototype		
Trial operat. OK					

In addition, this option can be used to create a continuous list of task bars:

No.	Task	Resources	Begin	End
<b>01</b>	<b><u>Examples</u></b>		<b>20/02/04</b>	<b>02/02/05</b>
<b>02</b>	<b><u>E-Business integration</u></b>		<b>20/02/04</b>	<b>02/02/05</b>
03	Milestones		20/02/04	20/02/04
03-1	Proj.Start		20/02/04	20/02/04
03-2	Topics, HW fixed		29/07/04	29/07/04
03-3	1. Prototype		03/10/04	03/10/04
03-4	Trial operat. OK		06/01/05	06/01/05
<b>04</b>	<b><u>Processes</u></b>		<b>20/02/04</b>	<b>17/05/04</b>
05*	Identify departments	Miller (10)	20/02/04	25/02/04
06	Determine contact pers...	Stevens(5)	25/02/04	09/03/04
07	Identify processes	Stevens(10)	10/03/04	08/04/04

Hence, task bars are shown in the same way as in the **task bar list** (see "Task bar list" on page 51). As an additional advantage, the columns to be shown can be composed at will.

Depending on the setting made in the tab **Gantt chart**, you can have the Gantt chart shown or omitted in the printout. Furthermore, you can specify the time range of the printed task bars in the tab **Time range**, as, for example, "Start-of-print date: 01.01.2002" and "End-of-print-date: 31.12.2002" if you want a list of all task bars within the year 2002 to be printed.

### ***Print notes***

With printing of notes activated, choose from the additional options to determine whether notes will be printed on each page **below the table** or on a **separate page** at the end of the table. Especially if several pages are printed one below the other it is reasonable to have the notes printed on a separate page.

You may specify any **number of note columns** to make the best use possible of the space below the table.

No.	Task	Resources	Jan 2004												
			27	28	29	30	31	01	02	03	04	05	06	07	08
01	Construction proj.														
02	Kings Road		[Summary bar]												
03*	Demolition		[Demolition bar]												
04*	Basement	Lorry 1; Barnes; ...	[Basement bar]												
05*	Ground floor	Lorry 2; Miller (50)	[Ground floor bar]												
06	Internal walls		[Internal walls bar]												
07	Doors, windows	Fraser	[Doors, windows bar]												
<span style="color:blue">■</span> bricklayers <span style="color:red">■</span> windows, doors <span style="color:cyan">■</span> electricians <span style="color:black">■</span> summary															
03 Notes for demolition 2nd line 3rd line			05 Notes for ground floor 2nd line 3rd line 4th line 5th line												
04 Notes for Basement															

To facilitate the **assignment of rows to notes**, column numbers (**No.**) are printed together with the related notes. If a note exists in a row, the number of the row concerned is marked by an asterisk and is printed again in front of the note.

**Notes of task bars** are marked by the number of the row and by a consecutive number, as, for example, 04-1 = first task bar note in the fourth row. However, notes of task bars are printed only for those task bars which are visible in the printout of the Gantt chart.

### Print legend

Optionally, a legend can be printed at the lower edge of the table. The legend shows all bar patterns and designations as they are used on the printed page:

18	Room Basem. 1	Kings Road																Room Basem. 1
19	Hawkins																	
20*	Basement	Kings Road																Basement
<span style="color:blue">■</span> bricklayers <span style="color:red">■</span> windows, doors <span style="color:cyan">■</span> electricians <span style="color:black">■</span> summary <span style="color:green">■</span> Usage 0%-50% <span style="color:yellow">■</span> Usage 51%-80% <span style="color:orange">■</span> Usage 81%-100% <span style="color:darkred">■</span> Usage > 100% <span style="border:1px dashed black; display:inline-block; width:10px; height:10px;"></span> assigned/absent																		
03 Notes for demolition 2nd line 3rd line			13 Notes for ground floor 2nd line 3rd line															

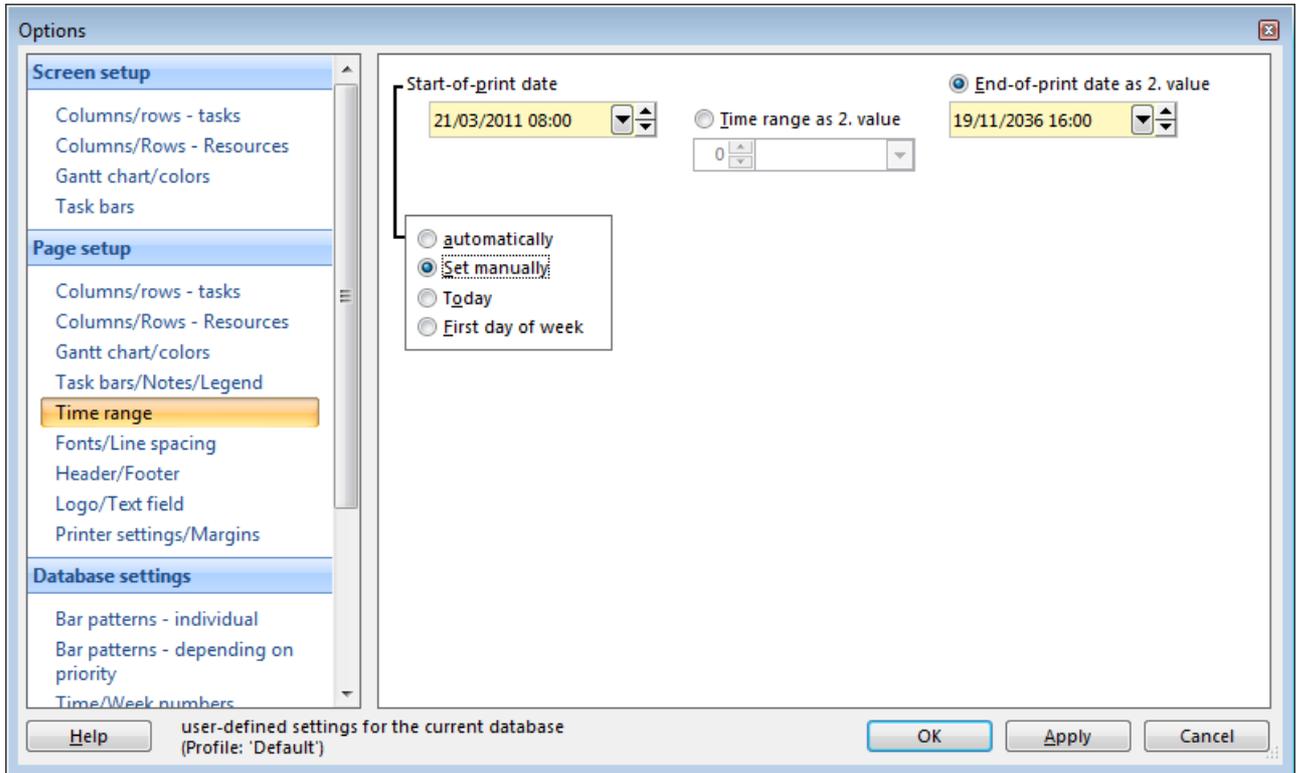
If resources are printed, the colors used to indicate the capacity usage are printed as well in the legend!

## TIME RANGE

A different number of settings is provided depending on whether you want the **Gantt chart** to be printed or not (see "Gantt chart/Colors" on page 140).

### GANTT CHART IS NOT TO BE PRINTED

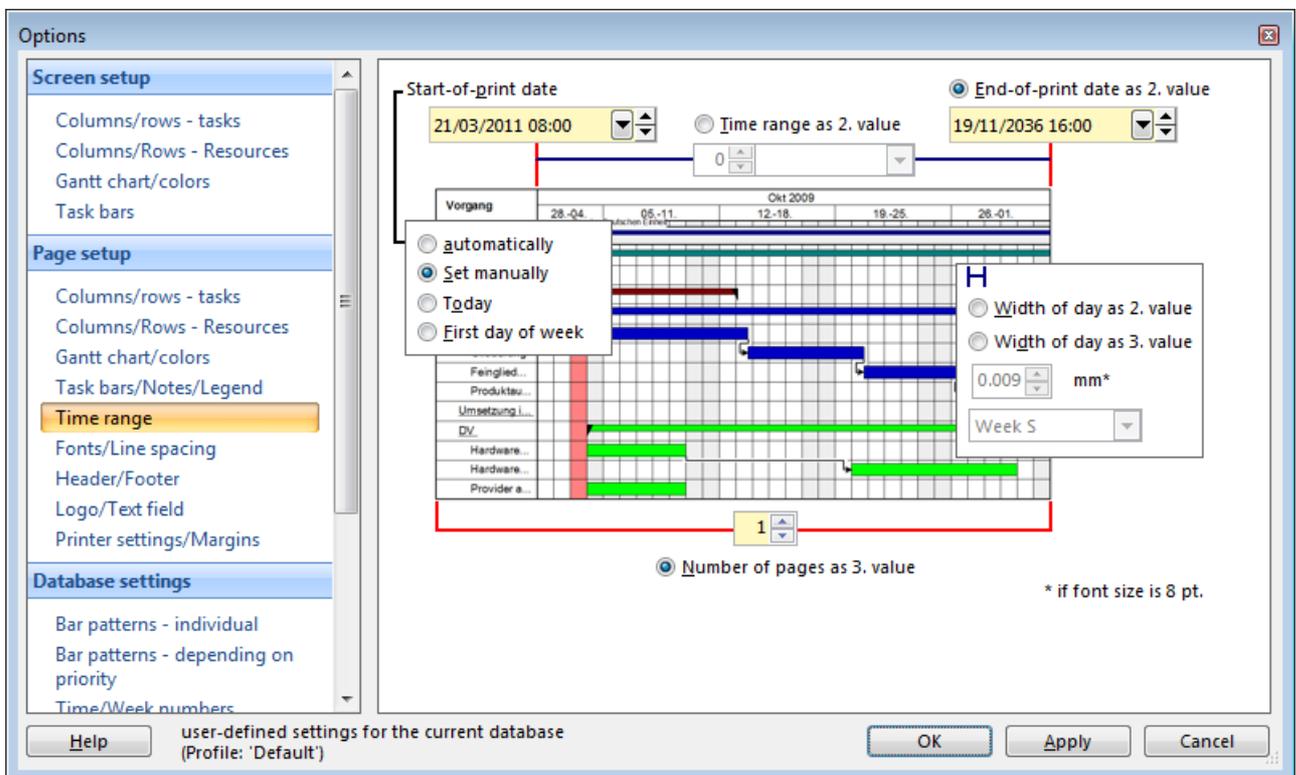
If the **Gantt chart** is not to be printed, you have to specify the **Start-of-print date** and either the **Time range** or the **End-of-print date** only:



These settings are required only if you activated the option **Print each task bar in a separate row** in the tab **Task bars** (see "Task bars/Notes/Legend" on page 142).

## GANTT CHART IS TO BE PRINTED

If you want the **Gantt chart** to be printed, you have to enter a total of **3 values** to determine the time range to be used in the printout:



### ***Setting the first value (Start-of-print date)***

Choose from one of the following options to set the start-of-print date:

- **Set manually**  
Enter the **start-of-print date** in the entry box.
- **Today**  
With this option activated, the program will use the current date as the **start-of-print date** whenever you print.
- **First day of week**  
Activating this option will have the effect that the first day of the current week is set as the **start-of-print date** whenever you print.

### ***Setting the second value***

As required, either the **time range**, the **end-of-print date** or the **width of day** may be used to determine the end of the printed time range:

- **Time range** (prints the specified period as, for example 2 weeks or three months)
- **End-of-print date** (prints all tasks bars up to the specified date)
- **Width of day** (creates the Gantt chart resolution you specify)

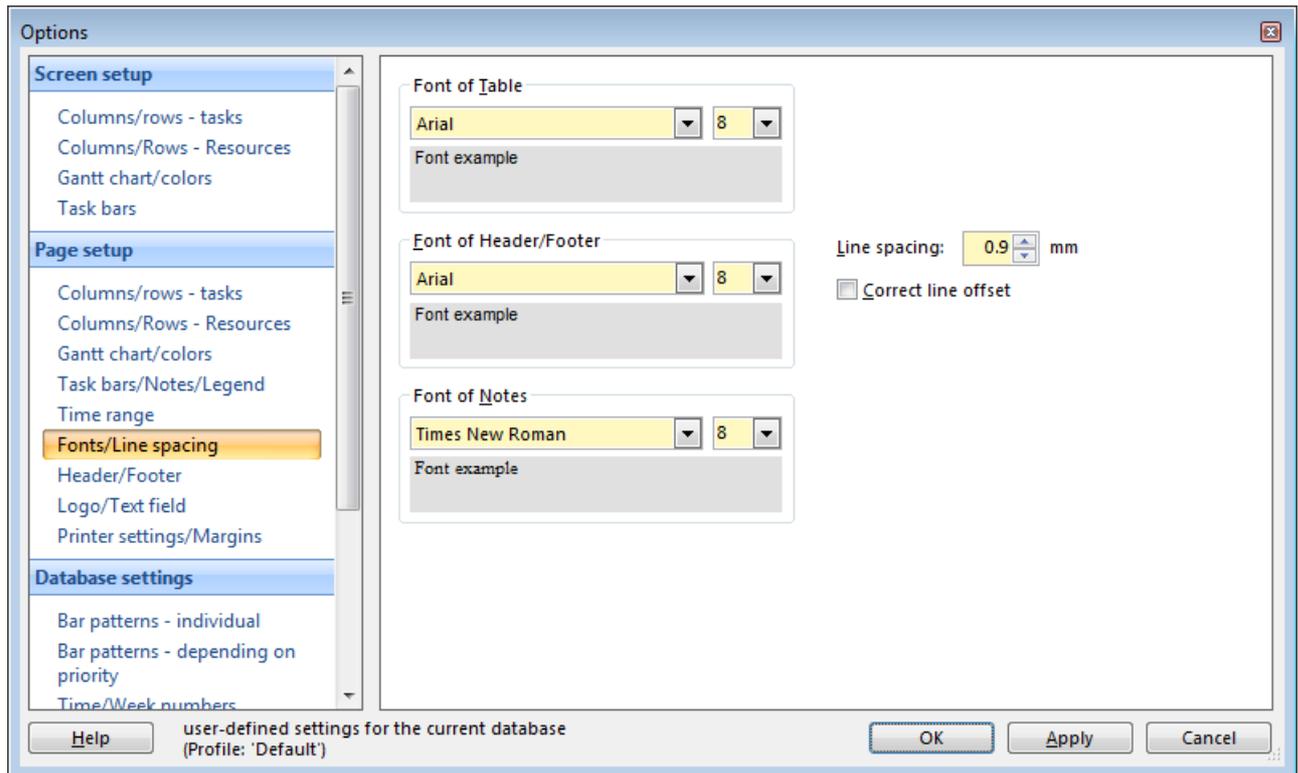
If the Gantt chart is to be printed with the same resolution as shown on screen, you may choose the corresponding default value from the drop-down list. To specify a width of day in mm, choose (user-defined) from the drop-down list and enter the value you want.

### ***Setting the third value***

Depending on the settings made before, you may either set the **number of pages** or the **width of day** as the 3. value:

- **Width of day**
- Use this setting if you want to obtain a specific resolution of the Gantt chart after you specified either a **time range** or an **end-of-print date** to be used as the 2. value. A-Plan will then calculate the **number of pages**.
- **Number of pages**
- Specify this value if you want to limit the **number of pages** printed in horizontal direction. With the **time range** or the **end-of-print date** set as 2. value, A-Plan will calculate the width of day whereas A-plan will calculate the **end-of-print date** if the **width of day** was set as 2. value.

## FONTS/LINE SPACING



### **Fonts**

Choose the **fonts** you like from the drop-down lists. You may use different fonts for the **table**, **header/footer** and **notes**. The **font size** of the header and footer is used as a default value if no other value is specified when entering the respective texts (see "Header/Footer" on page 148).

### **Line spacing**

You may set any value from 0 mm to 20 mm for the line spacing.

### **Correct line offset**

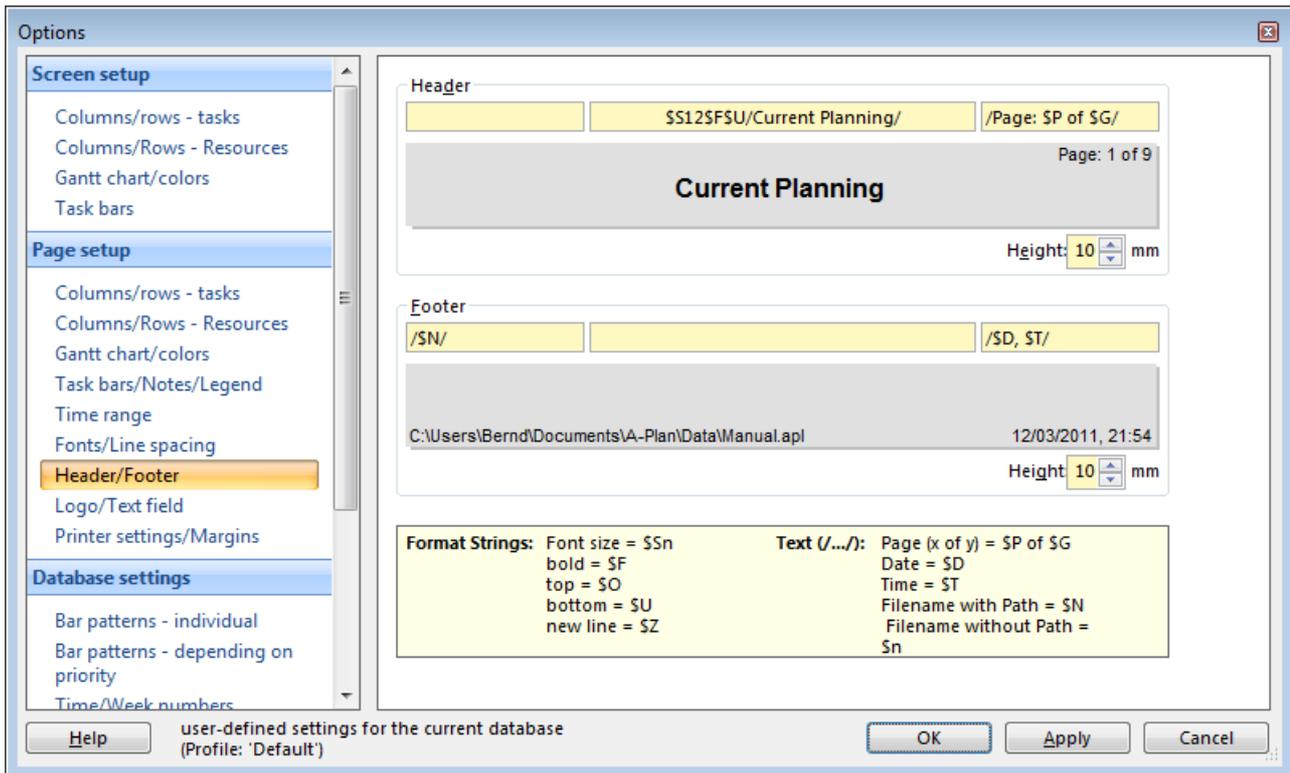
Depending on the printer driver used and/or the printer setup it may occur that the words are not printed exactly in the center of the line but shifted upwards by approx. 1 mm.

Activate the check box **Correct line offset** to prevent this from happening any longer.

### **Remark:**

This problem is not a bug of A-Plan but is caused by the printer driver used and also occurs in many other graphics programs which use graphics routines for printing texts.

## HEADER/FOOTER



Both header and footer are each split in three areas with different paragraph formats: the left area is left-aligned, the middle area is center-aligned and the right area is right-aligned.

Use the fields shown above the exemplary header and footer to make your entries. As a general rule, the **begin and end of text must be indicated by slashes (/)**. Since only the last slash is interpreted as "end of text" in an area, slashes can also be used within entered texts.

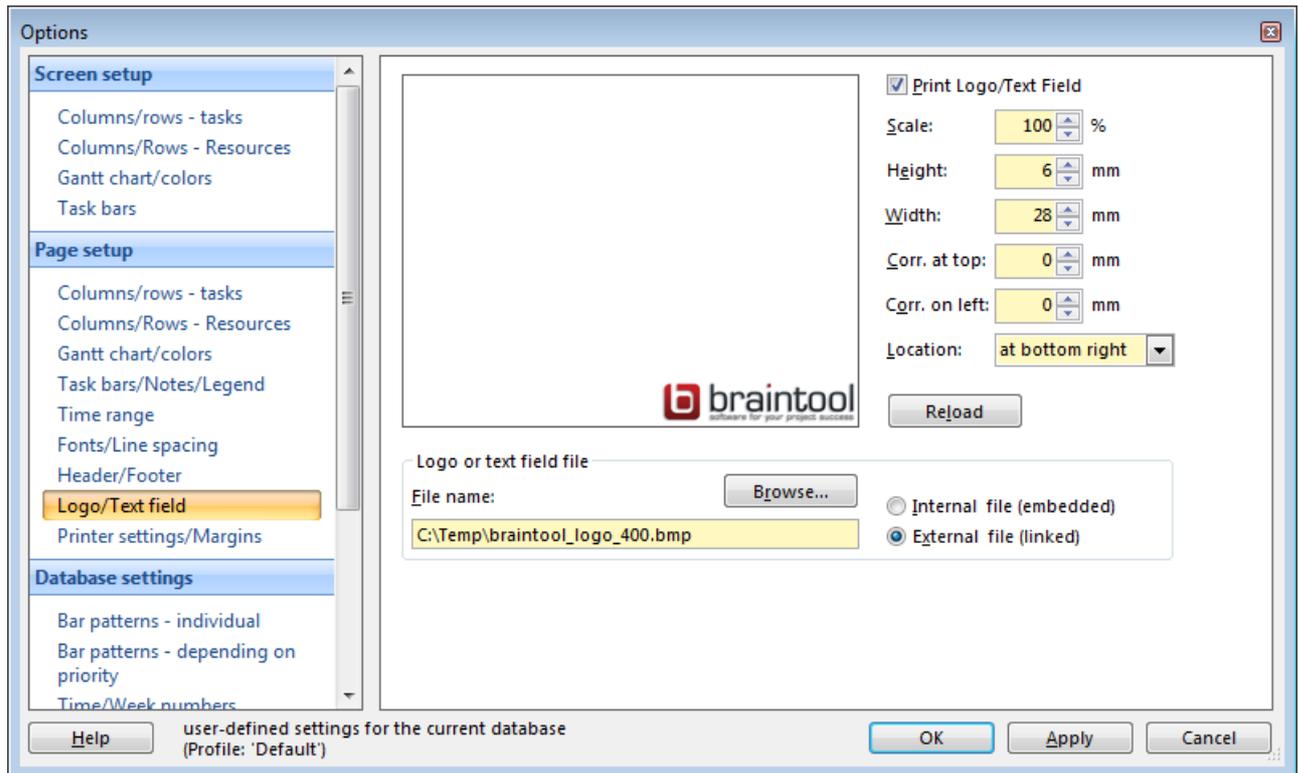
To enter formatting and other information such as page numbering, current date etc, use the **Format Strings** explained in the dialog box below the exemplary footer. Please note that format strings always have to start with the character "\$".

The **font** and the default font size are set in the tab **Fonts/Line spacing**. Font sizes differing from this setting can still be assigned to individual elements of text using the format string "\$Sn" (e.g. "\$S14" for a font size of 14 points).

In addition, you may specify the **Height** for each of the three areas of the header and footer. However, this has no influence on the current font size but refers to text elements placed at the upper edge using "\$O" or at the lower edge using "\$U".



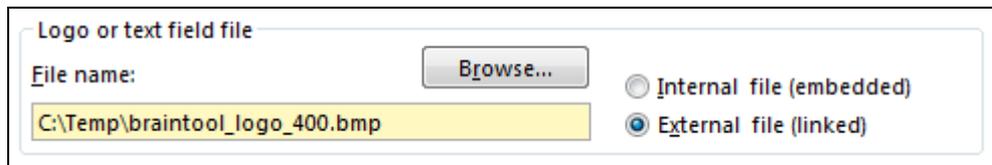
## LOGO/TEXT FIELD



A **logo** or **text field** can be printed at any location on the printout. You may use graphics or photos as well as **objects** such as a MS WinWord or MS Excel file.

### **Logo or text field file**

The logo or text field file may either be embedded in the current A-Plan database (**internal file**) or linked to the A-Plan database (**external file**):



You may either enter the path and name of the logo or text field file in the field **File name** or click on **Browse** to select it from the respective folder. With **internal file** activated, the entered file is saved as a graphics in the A-Plan database - with **external file** activated, the name of the file is saved in the current profile (see "Saving options in profiles" on page 134).

As only one **internal file** may be saved in an A-Plan database, an existing embedded file will be replaced by the new file if a second file is embedded. This means that all profiles in which the **internal file** is used as a logo or text field will be affected by such a replacement.

### **Note:**

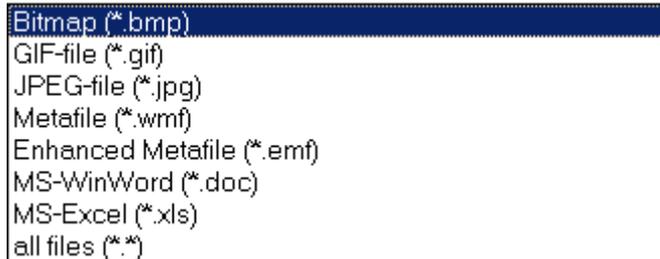
In the **network version** of A-Plan, the internal logo/text field file can be changed by the administrator (user 'admin') only as any changes will affect all printouts which use the internal file as logo/text file!

**Summary of characteristics of the two alternatives:**

	<b>Advantages</b>	<b>Disadvantages</b>
<b>internal file (embedded)</b>	<p><b>Faster</b> printing as the finished graphics is included in the A-Plan database</p> <p>Graphics is <b>always available</b>, even if the A-Plan database is copied to another computer</p>	<p>Graphics must be embedded again (button <b>Reload</b>) after it was changed</p> <p>Volume of A-Plan database is <b>increased</b></p> <p>Only one file can be embedded in each A-Plan database</p>
<b>external file (linked)</b>	<p>Graphics is <b>updated</b> prior to being printed (even, for example, the date field in a WinWord document)</p> <p>A different file can be used for <b>each profile</b></p> <p>Volume of A-Plan database is <b>not increased</b></p>	<p>Printing may be <b>slower</b> as the graphics must be reloaded first</p> <p>If <b>objects</b> are used (e. g. MS WinWord document), the related <b>application program is started</b> when you print in A-Plan</p>

**File formats**

The following file formats may be used to create a logo or text field:



All **other Windows application programs** may be used as well supposed that they support **OLE** and are capable of creating the format **.emf**. If you are not sure, just create a simple graphics with the program you want to use, save the file and select it in the dialog box shown above (click on **all files (\*.\*)** first). Please be aware that it may take quite a long time until the graphics is displayed because the related application program must be started first!

If the application program is not suitable, a symbol will be displayed only together with the file name.

**Note:**

We **do not assume any liability** for any program being not suitable of creating a logo or text field. If this cannot be done (or not the way you want it), it is not within the responsibility of A-Plan as the graphics created with other programs are taken over by A-Plan without any changes made to them.

## Settings

Print Logo/Text Field

Scale: 100 %

Height: 6 mm

Width: 28 mm

Corr. at top: 0 mm

Corr. on left: 0 mm

Location: at bottom right

Reload

Whenever you do not want the logo/text field to be printed, just click on the respective check box to deactivate this option.

The size of the logo/text field may be specified as a percentage in terms of scale or by entering the **height** and **width** you want.

The **location** of the logo/text field is set by choosing one of the corners of the printed page or one of the centers of the four sides from the drop-down list. Use the additional fields **Correct at top** and **Correct on left** to adjust the setting.

For example, adjustment of the setting may be required if you use a table created in MS WinWord as the graphics created from it is usually bigger than the table.

Clicking on **Reload** will create the graphics again from the specified file or will embed it again into the current A-Plan database if you activated the option **internal file**.

## PRINTER SETTINGS/MARGINS

Options

Columns/Rows - Resources  
Gantt chart/colors  
Task bars/Notes/Legend  
Time range  
Fonts/Line spacing  
Header/Footer  
Logo/Text field  
**Printer settings/Margins**

Database settings  
Bar patterns - individual  
Bar patterns - depending on priority  
Time/Week numbers  
Costs/Abbreviations  
Holidays  
Safety

General program settings  
Settings  
Messages/aids/email  
Profile folder

Margins (mm)

Top Margin: 10 (4.0)

Left Margin: 10 (5.0)

Right Margin: 10 (5.0)

Bottom: 10 (4.0)

(minimum permitted by printer)

Portrait  
Landscape

Setup printer

Cutting Guides  
 Print Cutting Guides  
Distance (mm): 3

Help user-defined settings for the current database (Profile: 'Default') OK Apply Cancel

### Margins, Portrait/Landscape

This tab allows you to set the distance between the edges of the sheet of paper and the printed area on the sheet.

Your printout will be cut off if you set the margins smaller than the values given in brackets (= minimum value supported by the printer and/or printer driver).

Use the buttons in the top right of the pane to determine whether the printout will be in landscape or portrait view.

### ***Cutting guides***

Activate this option (especially when using plotters) to have cutting guides printed on each page. Cutting guides limit the printed area in the form of a rectangle.

Furthermore, the **distance (mm)** of cutting guides from the edge of the printed area can be set in a separate entry box.

### ***Printer setup***

To set up another printer or change the current printer settings, click on the button



. This will take you to the Windows printer setup dialog box.

The printer settings you made (printer name, portrait or landscape, paper size etc.) are saved in the currently active profile. This means that you may assign another printer with different settings to each profile (for an explanation of profiles see "Working with profiles" on page 134).

## **PRINTING**

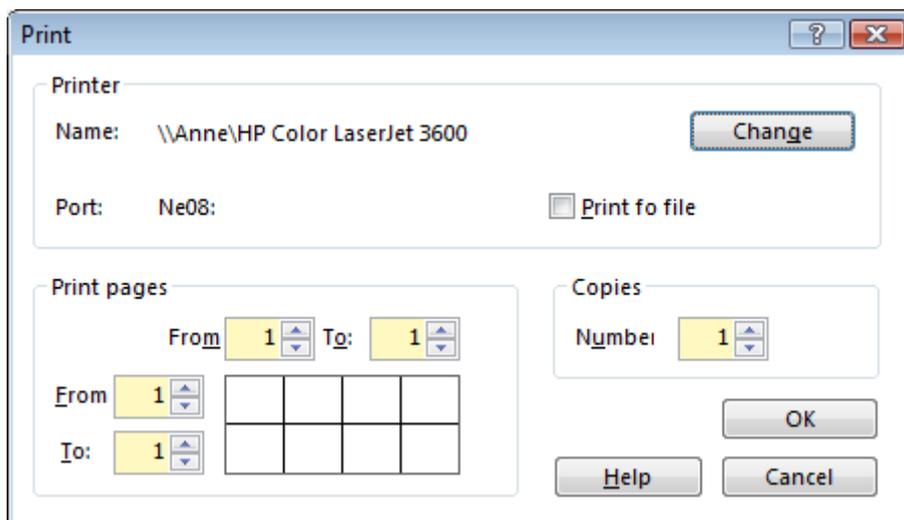
### **START THE PRINTING PROCESS**

#### ***Print immediately***

Choose **Print / Quickprint** from ribbon tab **File** to have your data **printed immediately** with the current print settings.

#### ***Print pages***

To specify the number of printed pages or copies or to choose another printer prior to printing, choose **Print / Print** from the ribbon tab **File** to start the process of printing:



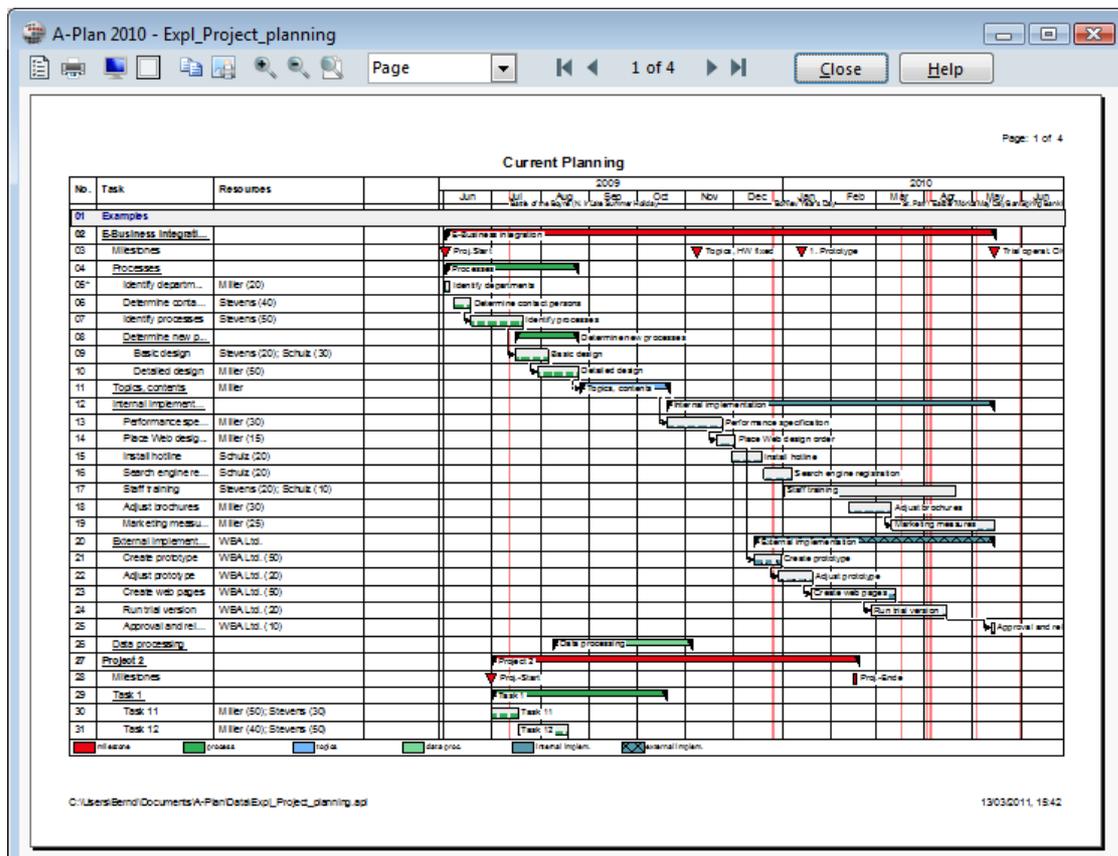
The pages to be printed in horizontal direction are specified in the upper boxes while printed pages in vertical direction are specified in the boxes on the left. The setting shown above would have the following result (printed pages are shown in grey):

Page 1.1	Page 1.2	Page 1.3	Page 1.4	Page 1.5
Page 2.1	Page 2.2	Page 2.3	Page 2.4	Page 2.5
Page 3.1	Page 3.2	Page 3.3	Page 3.4	Page 3.5
Page 4 (Notes)				

Suppose you want to have nothing else but your notes printed on a separate page (see "Task bars/Notes/Legend" on page 142). To achieve this, you would have to enter **From:** 4 **To:** 4 on the left for the **vertical direction** while the setting made for the horizontal direction would be irrelevant as there is only one page in horizontal direction.

## PRINT PREVIEW

To check whether the printout will look the way you want, choose **Print / View page** from the ribbon tab **File**:



The print preview provides the following functions assigned to buttons:



### **Page Setup**

This will take you to the printing options (see "Page Setup (Tools/Options/Page Setup)" on page 137) allowing you to see the effects of the changes you make with the dialog box remaining opened. Just click on **Apply** in the dialog box to see the effects.



### **Print**

Will print your data but opens a dialog box first where you can enter the pages to be printed and make further settings (see "Start the printing process" on page 152).



### **Full screen view**

If not in full screen mode, this button will change the view to full screen mode and vice versa.



### **Show printed area**

Displays the border lines beyond which printing is not possible.



### **Copy preview to clipboard**

This function will copy the contents of the preview into the Windows clipboard.



### **Copy view to graphics file**

Will copy the preview to a graphics file.



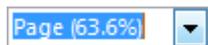
### **Enlarge view**



### **Reduce view**



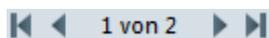
### **Adjust view**



### **Set Zoom Factor**

Use this function to set the zoom factor used to display the preview

Apart from choosing the values from the list, you may type any values in between (from 5% to 400%).



### **Page up/Page down**

Allows you to scroll in vertical direction within the pages to be printed

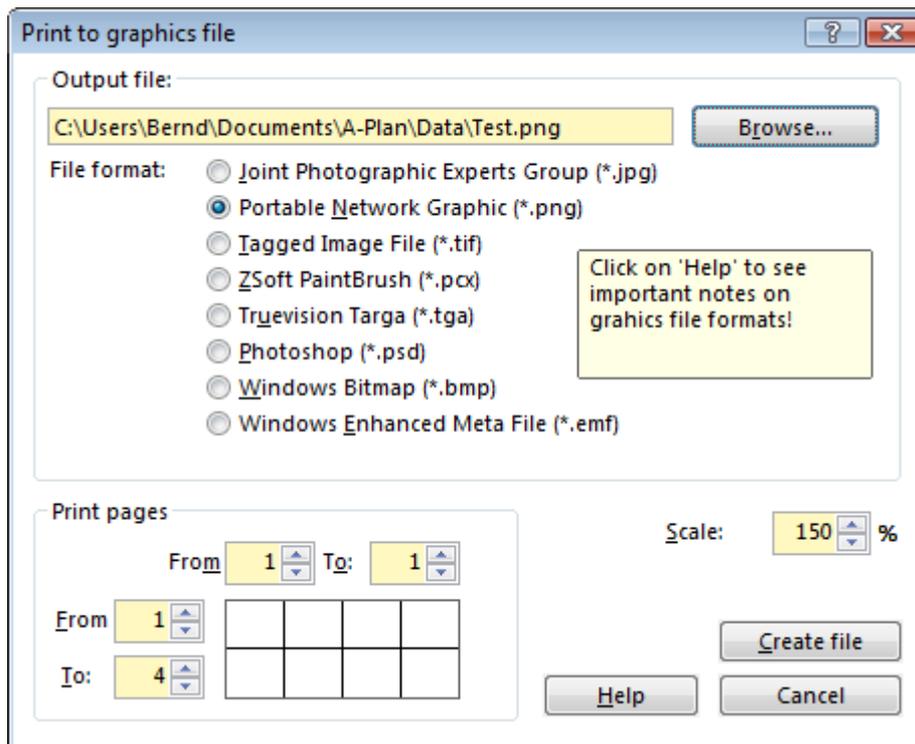
---

## **CREATING GRAPHICS FILES**

Current planning data can be copied to any graphics files which may, for example, be attached to emails for being viewed and/or printed by addressees.

The setup and the layout of the graphics files can be adjusted easily and with great flexibility as the graphics files are created with the current print settings. Use the print preview of A-Plan to check how the page will look like.

The dialog box for creating graphics files can either be opened from the page view by clicking the button **Graphics file** or by choosing **Print / Print into graphics file** in the ribbon tab **File**:



### **Output file**

A variety of file formats is provided for creating graphics files. Both **jpg** and **png** will produce graphics of very good quality with **png** providing a higher compression and **jpg** requiring less time for creating the graphics file.

Most of the existing graphics programs can be used to open and print the created files.

### **EMF format**

The **emf** format is somewhat different from the other formats as no finished graphics is created in the respective file. Instead, the components of the graphics (texts, lines etc.) are saved as objects in the file.

This gives you many advantages such as optimum quality at any size, very quick creation and very small file sizes. However, you should not use a graphics program to open these files as it takes very long to convert them to a pixel graphics and will also use up a lot of memory (up to several hundreds of MB!). Instead, use MS Excel which is ideal for viewing and printing **emf** files or ACDSee (see <http://www.acdsystems.com>) which is very good as well. When it comes to printing, MS Excel is superior to ACDSee because it is capable of printing the graphics on several pages if it is enlarged. To have an **emf** file displayed in Excel, select the cell where you want the graphics to appear and choose **Insert / Picture / From File** .

#### **Note:**

The print preview can also be inserted directly into another program such as MS Excel by using the **Windows clipboard**. To do so, copy the print preview to the Windows clip-

board by clicking on the button  and choose the command **Insert** when you are in the target program.

### **Print pages**

The pages to be copied are selected in the same way as in printing (see "Start the printing process" on page 152) in both the vertical and horizontal direction. A separate file is created for each page with consecutive numbers assigned to the files (*Name\_001.xyz*, *Name\_002.xyz*, ...)

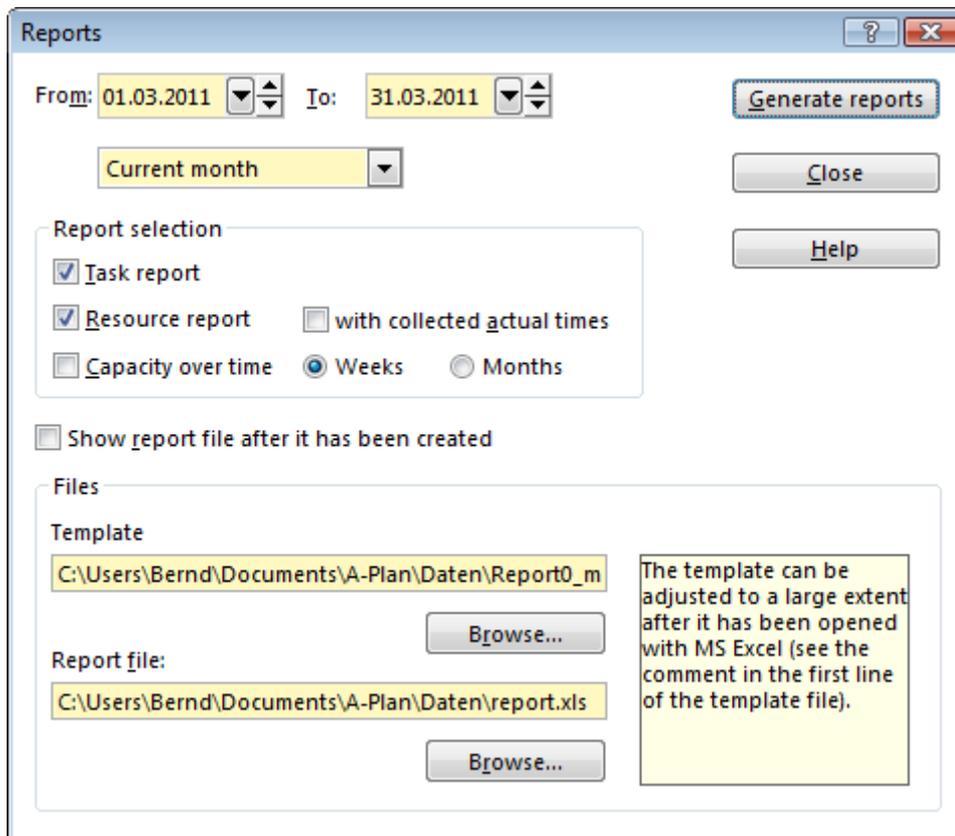
### **Scale**

You may set any scale to be used in creating the graphics file. The higher the scale the better the quality you get. However, the time it takes to create the graphics as well as the size of the graphics file will increase as well.

This setting is not available if you specify the **emf** format. With this format, you can set the size at will while you are viewing the graphics.

## **REPORTS**

Reports can be generated for charging spent times and incurred costs over any time period you specify. Choose **Reports** from the ribbon tab **Tools** to specify the time period and the type of report and click on the button **Generate reports** to output them to an MS Excel file:



Filter settings are taken into account when reports are generated. This enables you to confine the database search on parts of the database only in order to create specific re-

ports. For example, with cost center numbers entered in one of the user-defined columns (see "General filter – userdef. fields" on page 80) you might have the work and the costs of a specific cost center output to a report by setting the corresponding filter.

## TASK REPORT

The file created by clicking on **Generate reports** is opened in Excel automatically. The first worksheet in this file will show the **Task Report**:

	A	B	C	D	E	F	G	H
2		<b>Task Report (incl. fixed costs)</b>						
3								
4			Time period 01/01/2004 - 31/01/2004					
5			Date of report 30/05/2004, 22:48 Uhr					
6								
7		<b>Folders</b>						
8		<b>Projects</b>						
9		Lv. ▾	- Tasks	work planned	work actual	costs planned	costs actual	cost %
10	+	0	<b>Total</b>	<b>97.0 wh</b>	<b>38.1 wh</b>	<b>4,284.00 €</b>	<b>1,683.00 €</b>	<b>-60.7%</b>
11	+	1	<b>Orders</b>	<b>97.0 wh</b>	<b>38.1 wh</b>	<b>4,284.00 €</b>	<b>1,683.00 €</b>	<b>-60.7%</b>
12	+	2	<b>Repairs</b>	<b>70.0 wh</b>	<b>27.1 wh</b>	<b>3,150.00 €</b>	<b>1,221.00 €</b>	<b>-61.2%</b>
13		3	- EC 345	20.0 wh	11.2 wh	900.00 €	502.50 €	-44.2%
14		3	- SR 345	10.0 wh	0.0 wh	450.00 €	0.00 €	
15		3	- EC 356	15.0 wh	16.0 wh	675.00 €	718.50 €	6.4%
16		3	- EC 356	25.0 wh	0.0 wh	1,125.00 €	0.00 €	
17	+	2	<b>Maintenance</b>	<b>27.0 wh</b>	<b>11.0 wh</b>	<b>1,134.00 €</b>	<b>462.00 €</b>	<b>-59.3%</b>
18		3	- RF 564	12.0 wh	11.0 wh	504.00 €	462.00 €	-8.3%
19		3	- RF 745	15.0 wh	0.0 wh	630.00 €	0.00 €	

Rows which have a "+" sign in the first column are summary rows showing the totals of rows on the next lower level. Clicking on the down arrow at **Lv** (=Level) and selecting **Custom AutoFilter** will enable you to compress the **task report** to the level you want:

The screenshot shows the 'Task Report (incl. fixed costs)' spreadsheet with a 'Custom AutoFilter' dialog box open. The dialog box is titled 'Custom AutoFilter' and has a close button (X). It contains the following text and controls:

- Show rows where:
- Lv.
- is less than or equal to
- And  Or
- Use ? to represent any single character
- Use \* to represent any series of characters
- OK button
- Cancel button

A red arrow points to the 'Lv.' dropdown menu in the spreadsheet, which is currently set to '2'. The spreadsheet data is partially visible behind the dialog box, showing the 'Total' row and the 'Orders' and 'Repairs' rows.

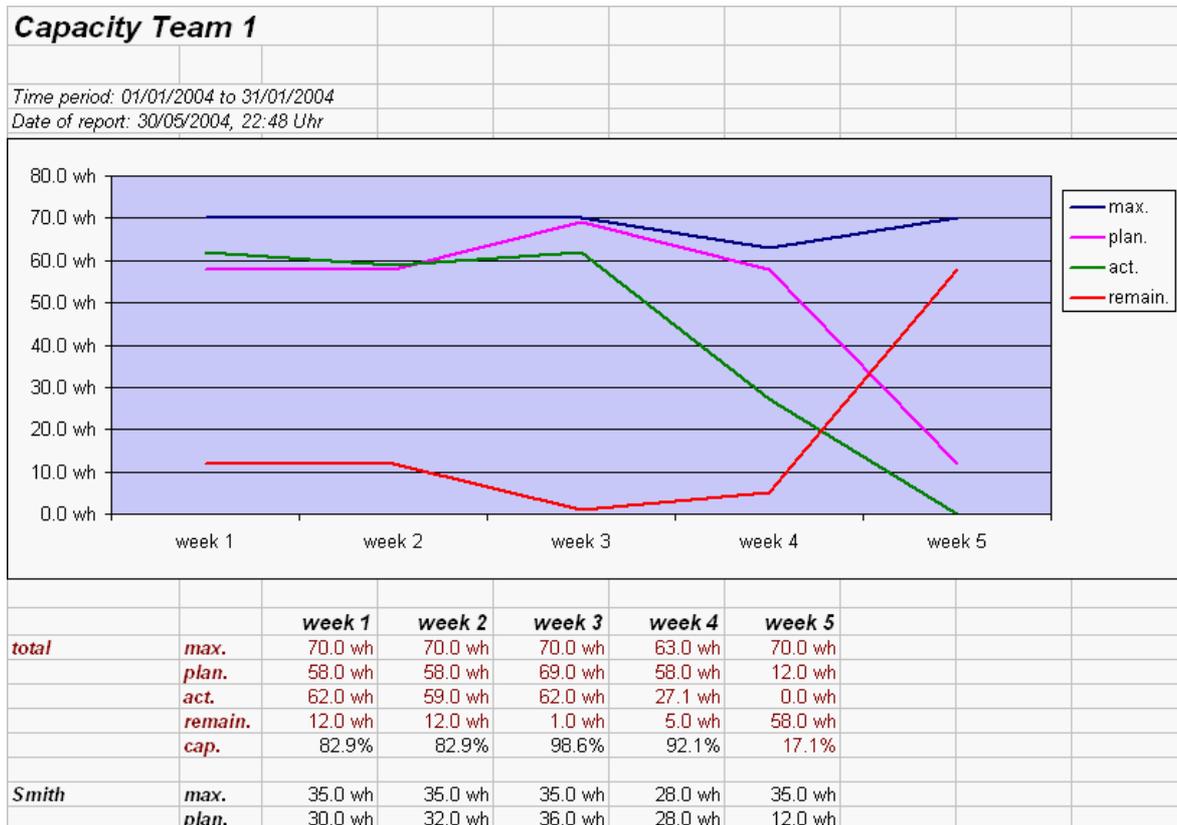
## RESOURCE REPORT

The second worksheet displays the **Resource Report**:

<b>Resource Report (incl. fixed costs)</b>									
3 Time period 01/01/2004 - 31/01/2004									
3 Date of report 30/05/2004, 22:48									
<b>Groups</b>									
<b>Resources</b>									
Lv.	- Tasks	folder	project	parent task	cap. usage	work planned	work actual	costs planned	costs actual
<b>0</b>	<b>Total</b>				<b>7.9%</b>	<b>97.0 wh</b>	<b>38.1 wh</b>	<b>4,284.00 €</b>	<b>1,683.00 €</b>
<b>1</b>	<b>Team 1</b>				<b>8.8%</b>	<b>70.0 wh</b>	<b>27.1 wh</b>	<b>3,150.00 €</b>	<b>1,221.00 €</b>
<b>2</b>	<b>Hall</b>				<b>7.2%</b>	<b>30.0 wh</b>	<b>11.2 wh</b>	<b>1,350.00 €</b>	<b>502.50 €</b>
3	- EC 345	Orders	Repairs			20.0 wh	11.2 wh	900.00 €	502.50 €
3	- SR 345	Orders	Repairs			10.0 wh	0.0 wh	450.00 €	0.00 €
<b>2</b>	<b>Smith</b>				<b>10.3%</b>	<b>40.0 wh</b>	<b>16.0 wh</b>	<b>1,800.00 €</b>	<b>718.50 €</b>
3	- EC 356	Orders	Repairs			15.0 wh	16.0 wh	675.00 €	718.50 €
3	- EC 356	Orders	Repairs			25.0 wh	0.0 wh	1,125.00 €	0.00 €
<b>1</b>	<b>Team 2</b>				<b>7.1%</b>	<b>27.0 wh</b>	<b>11.0 wh</b>	<b>1,134.00 €</b>	<b>462.00 €</b>
<b>2</b>	<b>Willis</b>				<b>7.1%</b>	<b>27.0 wh</b>	<b>11.0 wh</b>	<b>1,134.00 €</b>	<b>462.00 €</b>
3	- RF 564	Orders	Maintenance			12.0 wh	11.0 wh	504.00 €	462.00 €
3	- RF 745	Orders	Maintenance			15.0 wh	0.0 wh	630.00 €	0.00 €

## CAPACITY OVER TIME

The report on the capacity over time will create a separate worksheet in the Excel file for each resource group. Each of these reports is composed of a table listing the values of the entire group and of each single resource and of a diagram above the table showing graphs which represent the **maximum** available capacity (in consideration of working hours, absence times etc.), the **planned** capacity, the **actual** capacity and the **remaining** capacity of the group over time.



## LAYOUT OF THE EXCEL OUTPUT FILE

The reporting function uses the Excel file "**Report0.xls**" as a template. The template file is copied to the data folder of A-Plan ("My Documents\A-Plan\Data") when is being installed:

1	A	B	C	D	E	F	G	H	
2		<b>Task Report</b>							
3									
4			<i>Time period:</i>						
5			<i>Date of report:</i>						
6									
7			<b>Folders</b>						
8			<b>Projects</b>						
9		Lv. ▾	- Tasks	<i>work planned</i>	<i>work actual</i>	<i>costs planned</i>	<i>costs actual</i>	<i>cost %</i>	
10			<b>0 Total</b>						
11			<b>1 Folder 1</b>						
12		2	<b>Project 1</b>	<b>3423.4 wh</b>	<b>3423.4 wh</b>	<b>2,783.00 €</b>	<b>2,783.00 €</b>		
13		3	- Task 1	123.4 wh	123.4 wh	23.00 €	23.00 €	4.5%	20/0
14									

If the current database is stored in another folder you have to copy the above mentioned template file to the other folder as well.

To a large extent, the layout of the template file and of the created report respectively can be **adjusted** to your requirements. To do so, you may **change** the following elements and properties:

- Font type and font size,
- cell formats (e. g. number of digits after decimal point),
- width of columns,
- height of rows,
- hide/unhide columns by reducing their width to "0",
- texts,
- lines, frames

**You are not allowed** to change

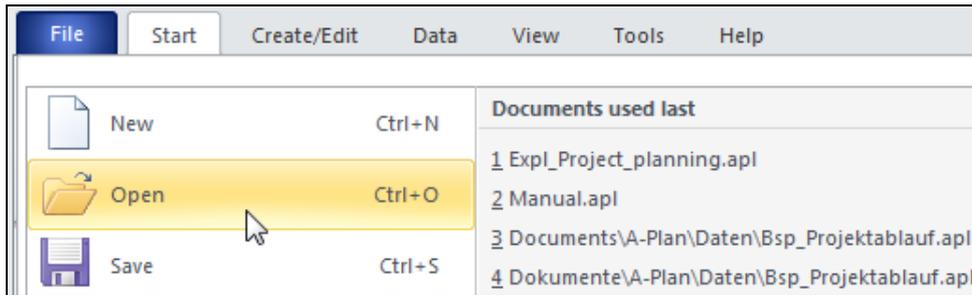
- the positions of columns and rows (new rows or columns may not be added and existing rows and columns may not be deleted),
- the sequence of worksheets,
- the text "Team 1" in the designation of the third worksheet (this text is replaced by the current designations of the teams concerned when the report is created).

# FILE FUNCTIONS

## OPEN



To open a database, just click the button **Open** in the **Quick Access Toolbar** or click **Open** in the tab **File**:



Furthermore, A-Plan can be started with a file name **appended as a parameter**. This will not only start A-Plan but will also open the file (see "B. Starting A-Plan with parameters" on page 248).

### **Note:**

In fact, A-Plan does not allow you to have two files open at the same time. If this is necessary, just start A-Plan for a second time to open a second file.

If A-Plan is used in a **network** you are prompted to enter a user name and a password. For further notes on this see the chapter "Access permissions" on page 180.

## SAVE AS

Choosing **File / Save as** and entering a new file name enables you to save all data of the current file in a new database. When this is done the current file continues to exist.

As you work, all the entries and changes you make are immediately saved in A-Plan. For this reason, the command **Save** has no function in A-Plan. Another consequence is that you will not be asked whether you want to save your data when you close the program or a database. There is also no need to save your work at intervals during sessions!

## FILE EXTENSION

Although A-Plan is based on files of "Microsoft Access" format it does not use the common file extension **\*.mdb** but the extension **\*.apl**. This extension provides the advantage that A-Plan can be started by clicking on an A-Plan file.

If necessary, the original extension ".mdb" can still be used; however, double-clicking a file with this extension will start "MS Access" if it is installed. Because of this we strongly

recommend you not to use both file extensions for A-Plan databases within one environment since this would result in the frequent confusion of files.

## DATABASE ADMINISTRATION

### CREATE/UPDATE BACKUP COPY

A-Plan automatically creates backup copies (see "Safety" on page 128). Regardless of that, you may create a backup copy of the current database at any time, for example when you are planning to make major changes. To do so, choose the command **Database administration / Secure database in backup** from the ribbon tab **File**.

If the set number of backup copies already exists (see "Safety" on page 128), the oldest copy is deleted, the numbers of all other backup files are each reduced to the next lower number and the new copy is given the highest number.

### OPEN BACKUP COPY

Choose the command **Database administration / Open backup** from the ribbon tab **File** to open a backup copy created by A-Plan (see "Safety" on page 128). Please note that the backup copy versions are numbered with the latest version having the highest number (\*.bc3 is a later version than \*.bc2).

You may rename the file prior to loading it to prevent the original backup copy from being overwritten.

**Note:**

Due to the fact that backup copies are compressed when being created, using the above-mentioned command is the only way to open a backup copy. You cannot open them directly (by renaming them first)!

### REPAIR AND COMPRESS DATABASE

In case of inexplicable errors such as records not being found, wrong number of records displayed, messages saying "Invalid use of null" or "No current record", the problem can usually be solved using the command **Database administration / Repair/compress**.

If you try twice to start A-Plan together with a defective database, the program will automatically propose you to have this function executed.

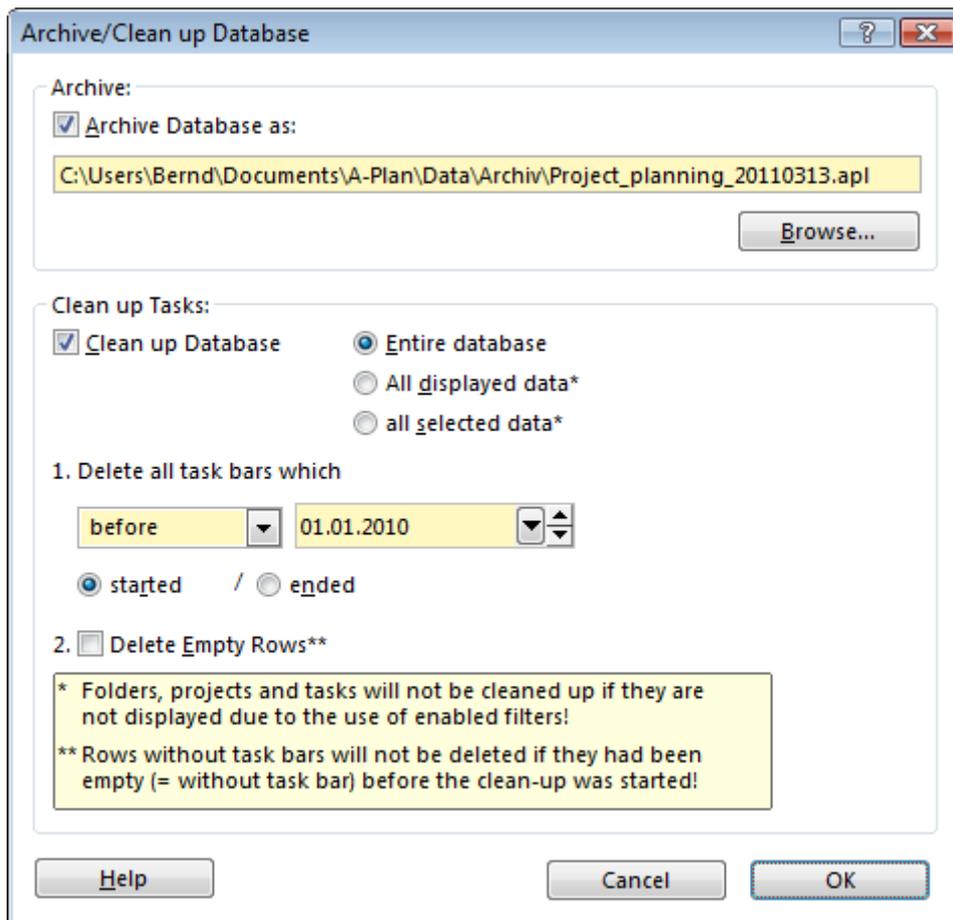
The repair function will compress the database even if you did not start this function manually. Whenever the size of the database has increased considerably, compressing is carried out automatically by A-Plan after the last user has closed the database.

## ARCHIVE DATABASE

In the course of time the increasing size of the database will impair both the handling and the overview and clarity of the database. Therefore, we recommend you to remove finished projects from the current database and to save them in an **archive database**. This is done most easily by using the commands **Cut** and **Paste** (see "Copy, Cut and Paste" on page 72).

In certain cases, however, it is not possible to cut a block from the database for archiving it. For example, you cannot use the command **Cut** if you want to remove only a few task bars from rows containing many task bars. Instead, A-Plan provides a function enabling you to save a copy of the current database in an archive folder first and to delete all those data from the current database which are **within a period you determine**.

You may choose any folder for saving the archive file. The designation of the archive file consists of the original file name followed by the archiving date in the format "\_YYYYMMDD" (e.g. "Example\_20110509.apl"). If possible, the designation proposed by the program should remain unchanged. Otherwise, the existing settings (profiles) of the original file will not be used when the archive file is opened at a later time because a new profile based on default settings was created due to the changed designation.



With the check box **Clean up Database** activated, archiving will have the effect that all task bars within the selected database area or within the entire database are deleted from the current database if they meet the conditions you specify with regard to their starting or ending date. The following conditions are at your choice: Delete all task bars which either started or ended

- before the specified date (**before**),
- a specified number of days ago (**ago**),
- after the specified date (**after**) or
- between specified dates (**between**).

If activated, the option **Delete Empty Rows** will subsequently delete all rows which are empty due to the deletion of task bars. Likewise, projects with all their tasks deleted and folders with all their projects deleted will be deleted as well. However, empty folders, projects or tasks will not be deleted if they had been empty before the clean-up was started!

**Note:**

If a database is being archived, it may be opened by **one user only!** Otherwise, a message is displayed and the archiving/clean-up process will not be performed. In contrast, a clean-up without archiving (see the tip below) can be performed even if the database has been opened by several users.

**Tip:**

You may also use this function to delete a **large number of task bars**. However, deactivate the check boxes **Archive Database as** and **Delete Empty Rows** before you use the function in that way.

## EXPORTING DATA

### ACCESSING DATA USING MICROSOFT ACCESS

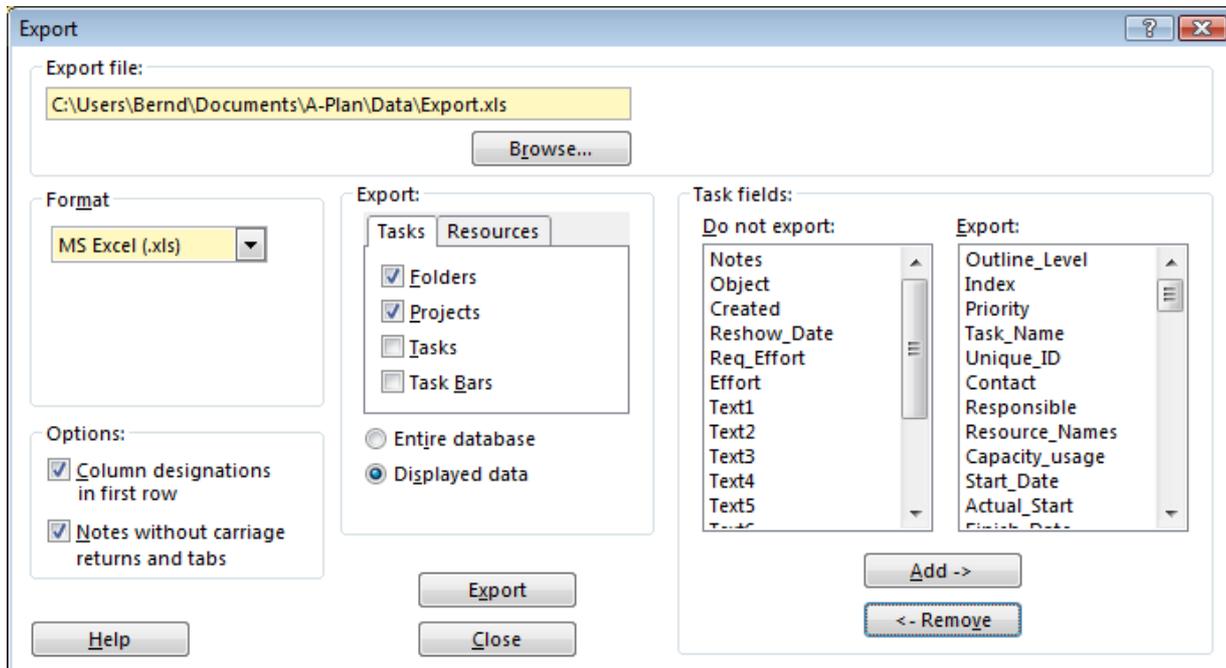
Apart from creating export files as described below, you can also open an A-Plan database with **Microsoft Access 2000 or a higher version** to directly access the data contained in the database. When doing so, you can create **additional objects** (tables, reports, modules) as well but you should make a backup copy of the database first. The **structure** of existing tables **cannot be changed** as this might have the effect that the database cannot be opened correctly by A-Plan any longer!

For a detailed **description of the structure of an A-Plan database** see the file "**structure.rtf**" in the program folder of A-Plan (almost all word processing programs can be used to open the file).

The **file format** used by A-Plan is Access 2003. However, converting A-Plan databases in Access to a higher version is no problem as converted databases can be opened and edited in A-Plan as well.

## CREATING AN EXPORT FILE

Choosing the command **Export** from the ribbon tab **File** will open a dialog box where you can make all the settings required:



### **Export file**

The export file is the file that will receive the data to be exported.

If an export file does not yet exist, a new file is created. If an existing text or MS Excel format file (see below) is used, you can choose whether the existing file is to be overwritten or whether the new data are to be appended to existing data.

### **Format**

Choose from the following file formats:

- **Text** (.txt)
- **MS Excel** (.xls)
- **MS Project** (.xls)

### **Separator**

With the **text** format selected, you may enter the separator to be inserted to separate the contents of the record fields.

### **Notes on the MS Project format**

Using the **MS Project** format will create an MS Excel file as well but in a form which can be opened directly by MS Project. This solution was chosen to be independent of the MS Project data format. Due to this, the created file can be read by all 3.0 or higher versions of MS Project.

- **Working hours** (resource calendar), **absence times** and **actual data** will not be transferred

- only the **first** (pending) **task bar** of a row is transferred
- **Costs** are recalculated by MS Project
- in MS Project a new calculation is performed automatically which, however, can be deactivated in MS Project by choosing **Options / Calculate** (then, summaries will not be updated)

To open the created Excel table using **MS Project**, a suitable import format must be created once in MS Project. This import format is identical to the export format required for A-Plan and is described in the paragraph "Creating an export file" on page 164.

### **Options**

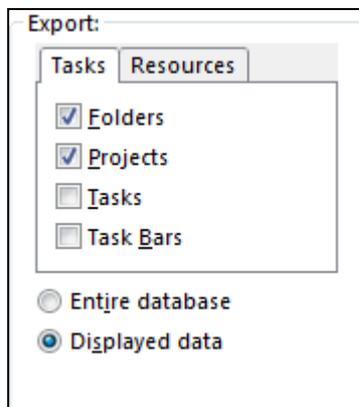
Use the first check box to determine whether you want a **headline** to appear in the first row of the output file with designations of columns displayed in the headline.

Activate the second check box to have the text of **notes** exported **without carriage returns and tabs**. This is to avoid carriage returns within a data record.

With the format **MS Project** selected, these options are not available as the required settings will be made automatically.

### **Export**

**Tasks** and **resources** can be exported independently of each other. In addition, you may select folders, projects, tasks and task bars separately **for tasks** and, analogous to it, groups, resources, tasks and task bars separately for resources:



You may use the many possibilities of filtering for data export as well by enabling the filter you want to use and exporting the **displayed data** (second option). If you are going to export certain data records frequently, you may save a specific profile which will enable you to reload these records whenever you need them.

When exporting **selected rows only**, selected folders will be exported with all visible projects and selected projects with all visible tasks.

#### **Note:**

The option **Selected rows only** will not be visible unless you selected at least one row prior to opening the dialog box.

### ***Task fields***

All fields which are not to be exported are listed on the left while the fields to be exported are shown in the list on the right. To determine the fields to be exported, select the field designations and click on either **Add** or **Remove**.

The field **Index** shown in one of the lists includes 4 digits (folder no., project no., task no. and task bar no.) used for the internal numbering of data records.

With the format **MS Project** selected, the lists are not visible as the required fields are determined automatically.

# IMPORTING

## GENERAL

As a general rule, the MS Excel format is used for importing data from other applications as many Windows programs are capable of providing data in this format. An additional advantage of using this format is that you have the possibility of modifying the data prior to importing them.

The structure of the Excel file was designed to enable A-Plan of directly loading data created in MS Project.

When data are imported from other programs, the required column designations must be inserted into the Excel file. If columns are missing in the Excel file, they must be inserted as well.

If you want to import data from applications which are not capable of creating an Excel file, you may create a text file as well and load it into Excel.

Of course, A-Plan can import only those contents of fields which are used in A-Plan. Furthermore, we have to point out that the import function is designed primarily for taking over existing data and not for the permanent exchange or reconciliation of data with other programs.

## FORMAT OF THE IMPORT FILE

### **Note:**

If you use **MS Project** to create the import file, you may ignore the following chapters. For details on MS Project see the chapter "Exchange of data with MS Project" on page 173.

## GENERAL

- The MS Excel file must consist of two worksheets named **Task\_Table1** and **Resource\_Table1**.
- It does not matter what the sequence of columns is in the two worksheets.
- Columns having a designation marked by an "\*" must always be available
- Columns having an underlined designation will be created automatically by MS Project when they are saved in Excel format (see "Exchange of data with MS Project" on page 173).
- For an example see the file "Import.xls" in the main folder of A-Plan.

## WORKSHEET "TASK\_TABLE1"

Designation	Type	Value range	Contents	Desig. in A-Plan
<b>ID*</b>	Number	1 – approx. 2 milliard	unique numbering of rows in import file	-
<b>Task Name</b>	Text	max. 100 characters	Designation	Task
<b>Unique_ID</b>	Text	max. 64 characters	Ident-Number	Ident-No.
<b>Outline Level*</b>	Number	1 - 99	1: Level 1 ("Folder" in A-Plan) 2: Level 2 ("Project" in A-Plan) 3 - 99: Levels 3 - 99 ("Task" in A-Plan)	-
<b>Priority</b>	Number or text	0 – 99 or text (see explanat. below)	Priority if empty: 2 is used	Priority
<b>Resource Names</b>	Text	(see explanat. below)	Name/capacity usage of resources	Resources
<b>Created</b>	Date/Time	Date (with time)	Entry date	Entry Date
<b>Reshow Date</b>	Date/Time	Date (with time)	Reshow date	Reshow Date
<b>Start Date</b>	Date/Time	Date (with time)	Planned begin	Begin Pl'd
<b>Finish Date</b>	Date/Time	Date (with time)	Planned end	End Pl'd
<b>Duration</b>	Date/Time	Number	Duration in days (as decimal fraction) (is used if no planned end exists)	(End Pl'd)
<b>Actual_Start_Date</b>	Date/Time	Date (with time)	Actual begin if empty: planned begin is used	Begin Act.
<b>Actual_Finish_Date</b>	Date/Time	Date (with time)	Actual end if empty: planned begin is used or – if available – it is calculated from "Percent_complete" or from "Duration_actual"	End Act.
<b>Percent Complete</b>	Number	0 % - 32000 %	State of completion as % (is used if no actual end exists)	(End Act.)
<b>Actual_Duration</b>	Date/Time	Number	Actual duration in days (as decimal fraction) (is used if no planned end and no state of completion exist)	(End Act.)
<b>Completed</b>	Date/Time	Date (with time)	Date of completion (when task is finished)	Completed
<b>Object</b>	Text	128 characters	Name (incl. folder) of file to be linked	Object
<b>Pattern</b>	Number	0 – 49	Number of pattern used for task bar	Pattern
<b>Notes</b>	Text	any text (max. approx. 2 milliard characters)	Note text of row (w/o formatting!)	Note
<b>Notes_Bar</b>	Text	any text (max. approx. 2 milliard characters)	Note text of task bar (w/o formatting!)	Note

<b>Successors</b>	Text	(see explanations below)	Number of successors and type of link	-
<b>Text1 – Text10</b>	Text	max. 100 characters	Any text	Text1 – Text10
<b>Number1 – Number10</b>	Number	-	Any number	Number1 – Number10
<b>Time_Unit_Work</b>	Number	1 - 6 (see explanations below)	Time unit of work	Time unit of Work

If resources were assigned (column **Resources**), the following values will not be taken into account because the values entered for the resources are used in this case (see "Worksheet "Resource\_Table1"" on page 171):

Designation	Type	Value range	Contents	Desig. in A-Plan
<b>Standard_Rate</b>	Number	-	Planned costs per unit of time	Lab. Rate Pl'd
<b>Act_Standard_Rate</b>	Number	-	Actual costs per unit of time if empty: planned value is used -999999: default value is used	Lab. Rate Act.
<b>Fixed_Cost</b>	Number	-	Planned fixed costs	Fixed Costs Pl'd
<b>Actual_Fixed_Cost</b>	Number	-	Actual fixed costs if empty: planned value is used	Fixed costs Act.
<b>Time_Unit_Cost</b>	Number	1 - 6 (see explanations below)	Time unit of costs	Time unit of Cost
<b>Calc_Method_Cost</b>	Number	0 - 2 (see explanations below)	Calculation method for labour costs	Cost Calc. Meth..

## Explanations

### Priority

Designations in "MS Project"	correspond to these values in A-Plan
"Do not reconcile"	0
"Highest"	1
"Very high"	2
"Higher"	3
"High"	4
"Medium"	5
"Low"	6
"Lower"	7
"Very low"	8
"Lowest"	9

## Resources

Designations of assigned resources and their capacity usage (in square brackets) if the usage is not 100%. Several resources must be separated by a semicolon(;). The designations of resources must exist in the column "Name" of the worksheet "Resource table1" (see "Format of the import file" on page 167).

Example:

"Miller;Johnson[80%];Lorry 1" or

"Miller;Johnson[0,8];Lorry 1"

## Successor

The values are composed of one or several number(s) of the successor(s) (as entered in the column No.) and of the type of link:

**Format:** n[VA][x][;n[VA][x]][;n[VA][x]] ...

<b>n</b>	Number of successor (see column "No.")
<b>VA</b>	Type of link
	"FS" (or empty)      End/Begin
	"SS"                      Begin/ Begin
	"SF"                      Begin /End
	"FF"                      End/End
<b>x</b>	Text (if added by MS Project) is ignored by A-Plan

### Examples:

Value	Meaning in A-Plan
"3"	one successor, End/Begin link
"3;5"	two successors, End/Begin link each
"3AA;5AE"	two successors, first with Begin/Begin link, second with Begin/End link

## Time units of costs and work

Value	Time unit
"1"	Minute
"2"	Hour
"3"	Day
"4"	Week
"5"	Month
"6"	Year

(empty)	Default value is used
---------	-----------------------

### Calculation methods for labour costs

Value	Meaning in A-Plan
"0"	precisely
"1"	round up/off
"2"	round up
(empty)	Default value is used

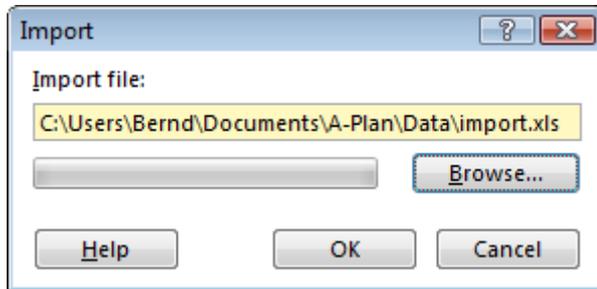
### WORKSHEET "RESOURCE\_TABLE1"

Designation	Type	Value range	Contents	Desig. in A-Plan
<b>Resource Name *</b>	Text	max. 50 charact.	Resource designation	Resource
<b>Group Name</b>	Text	max. 50 charact.	Resource group	Group
<b>Code</b>	Text	max. 64 charact.	Resource Ident-number	Ident-No.
<b>Cost Per Use</b>	Number	-	Planned fixed costs	Fix. Cost Pl'd
<b>Actual Cost Per Use</b>	Number	-	Actual fixed costs if empty: planned value is used	Fix. Cost Act..
<b>Standard Rate</b>	Number	-	Planned costs per time unit if empty: default value is used	Lab. Rate Pl'd
<b>Actual Rate</b>	Number	-	Actual costs per time unit if empty: planned value is used -999999: default value is used	Lab. Rate Act.
<b>Overtime Rate</b>	Number	-	Overtime labour rate (is entered in A-Plan in the row "Overtime" as labour rate)	-
<b>Object</b>	Text	128 characters	Name (incl. folder) of a file to be linked	Object
<b>Notes</b>	Text	any text (max. approx. 2milliard characters)	Note text of resource (w/o formatting!)	Note
<b>Text1 – Text10</b>	Text	max. 100 characters	Any text	Text1 – Text10
<b>Number1 – Number 10</b>	Number	-	Any number	Number1 – Number10
<b>Time_unit_costs</b>	Number	1 - 6 (see explanations on "Task table1")	Time unit of costs	Time unit of Cost
<b>Calc_method_costs</b>	Number	0 - 2 (see explanations on "Task table1")	Calculation method for labour costs	Cost Calc. Meth.

## LOADING THE IMPORT FILE IN A-PLAN

To start the import function in A-Plan choose **Import** from the ribbon tab **File**. If a file has been opened in A-Plan, it is closed first.

Next, in the **Import file** box enter the name of the MS Excel file containing the data to be imported:



Clicking on **OK** will read the data from the Excel file and will display them in the main table of A-Plan.

As the file is still unnamed in A-Plan, you should finally choose **File / Save as** to save it by name.

### **Note:**

If you want the data to be inserted into an existing A-Plan database, copy (or cut) them to the A-Plan clipboard first. Then, start A-Plan a second time with the database you want and paste the data from the clipboard.

## EXCHANGE OF DATA WITH MS PROJECT

A special **MS Excel format** is used for the exchange of data between A-Plan and MS Project as this special format is supported by both programs. This ensures the compatibility with all versions of MS Project since version 95.

Using the MS Excel format is not subject to any limitations whatsoever as all data supported by both programs will be transferred, even dependencies, resources with their assignments and their capacity usage, amounts of completed work, notes etc.

A manual revision of the MS Excel file is not necessary but might be done if need be.

A-Plan can read and write the involved MS Excel format directly while MS Project uses a special schema for this which can be imported since MS Project 2000 and is then available whenever it is needed.

**External partners who use** MS Project and want to take over projects from A-Plan or want to make projects available to A-Plan should have a look at <http://www.braintool.com/ms-project?&L=2> where the procedure is described and the schema is available for download.

## CREATING A SCHEMA

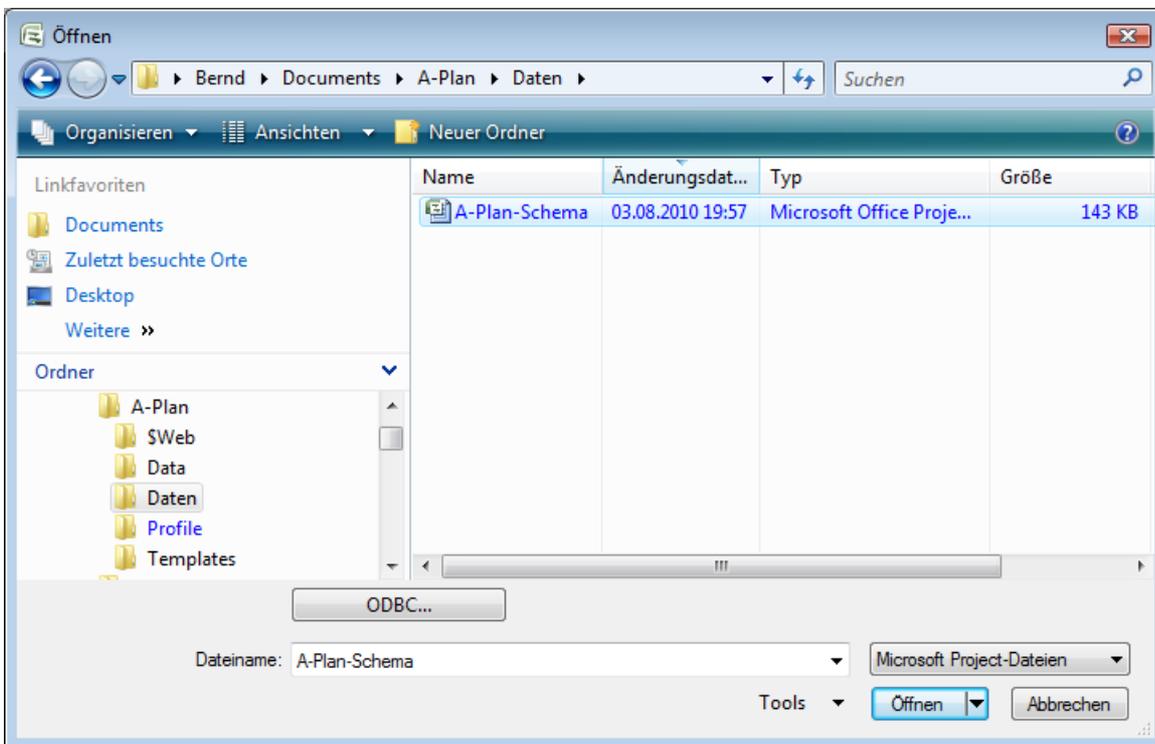
To exchange data quickly and easily with MS Project in both directions, a special mpp file must be opened once in MS Project and a schema must be taken from it. With MS Project 98 and former versions, this schema must be created manually but this will not take a lot of time.

### MS PROJECT VERSION 2000 AND LATER VERSIONS

The following screenshots were taken from MS Project 2007. They should also be quite true for all the other versions since MS Project 2000.

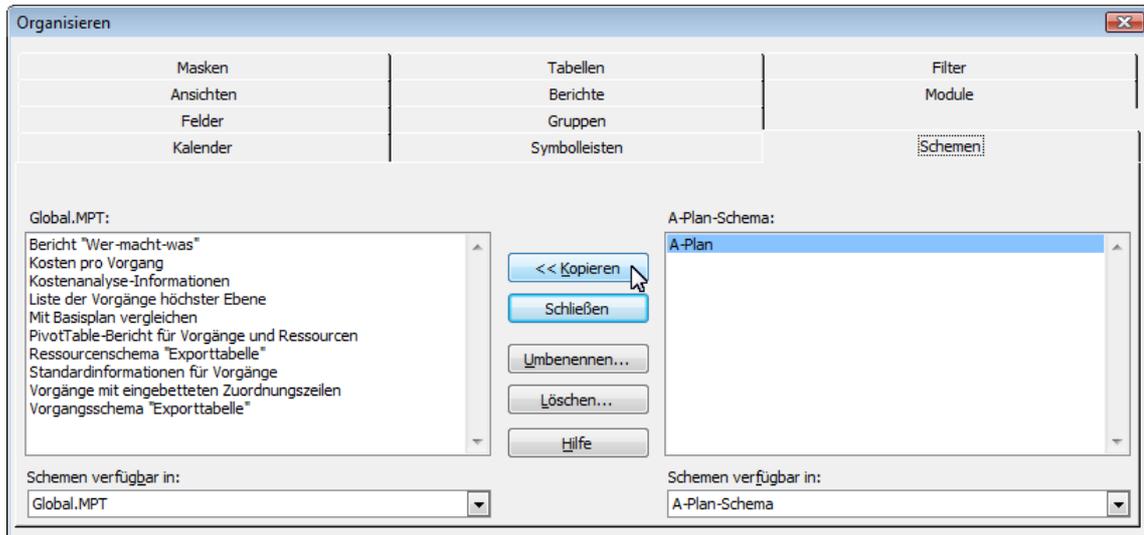
#### 1. Open file

The file to be opened is named **A-Plan-Schema.mpp** and can be found both in the data folder of A-Plan („Documents\A-Plan\Data“) and in the program folder (by default, this is „c:\programs\A-Plan2010“):



#### 2. Take over Schema

Click the command **Organize** from the menu **Tools**, select the tab **Schema**:



Select A-Plan in the list on the right, click **Copy** and finally **Close**.

3. From the menu **File** select the command **Close**

**Finished!**

## MS PROJECT 98

1. Menu **File**, click **Save as...**

- File type: "Excel Folder "
- Click Save

2. Dialog box: **Export schema**

- New Schema...
- Import/Export Schema: "A-Plan"

3. Tab: **Options**

- Import/Export Data: "Tasks, Resources"
- Microsoft Excel options: "Export with field names ..."

4. Tab: **Task schema**

- Target table worksheet name: "Task table 1"
- Click **Add all**

5. Tab: **Resource schema**

- Target table worksheet name:: "Ressource table1"
- Click **Add all**
- Click **OK**

6. Dialog box: **Export format**

- Click **Save**

## DATA TRANSFER FROM MS PROJECT TO A-PLAN

### EXPORT FROM MS PROJECT

#### **Annotations**

**Labour rates must be available in the unit "Currency/h"** (as for ex. "€/h").

The duration of tasks must be specified in the unit **"h"** (hours).

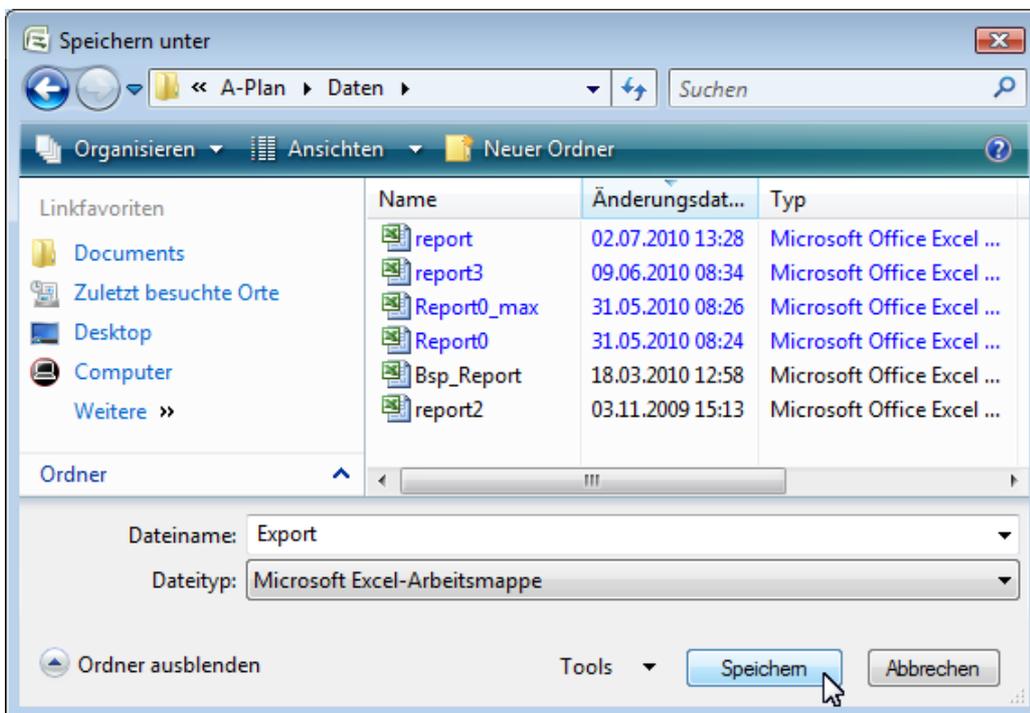
Working time will not be transferred.

1. Open the file you want to transfer

2. Menu **File**, click **Save as...**

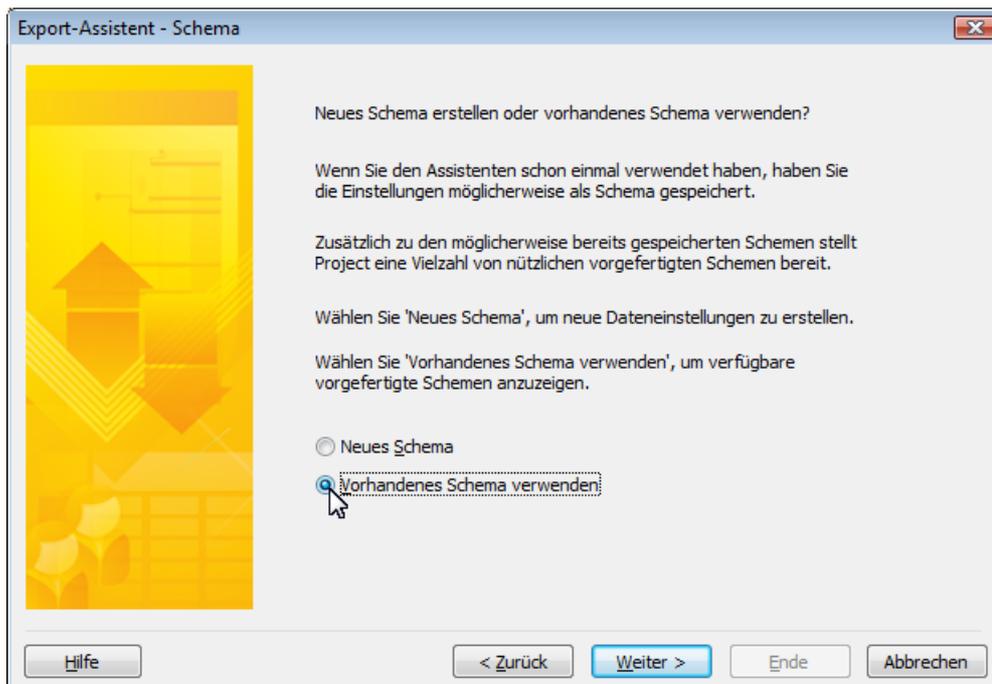
Select the file type **Microsoft Excel work folder**

Click **Save**



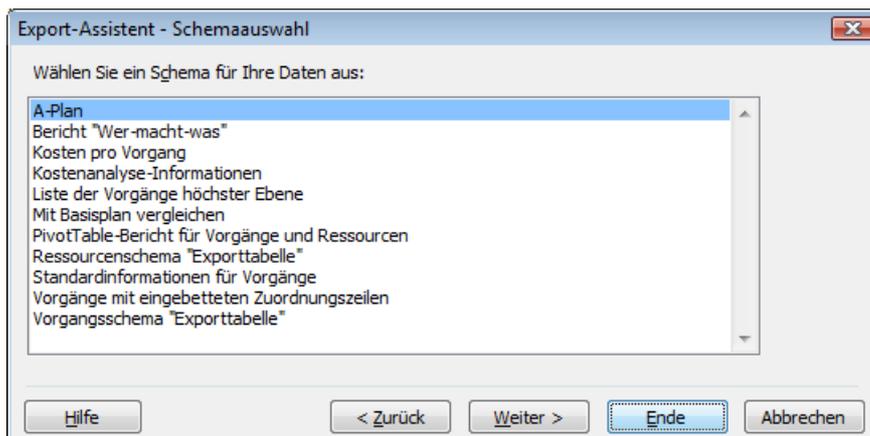
3. In the **Export Assistent**, click **Continue** twice

Select **Use available schema**



**Click Continue**

**Select A-Plan:**



**Click Finished**

## IMPORT INTO A-PLAN

see "Loading the import file in A-Plan" on page 172

## DATA TRANSFER FROM A-PLAN TO MS PROJECT

### EXPORT FROM A-PLAN

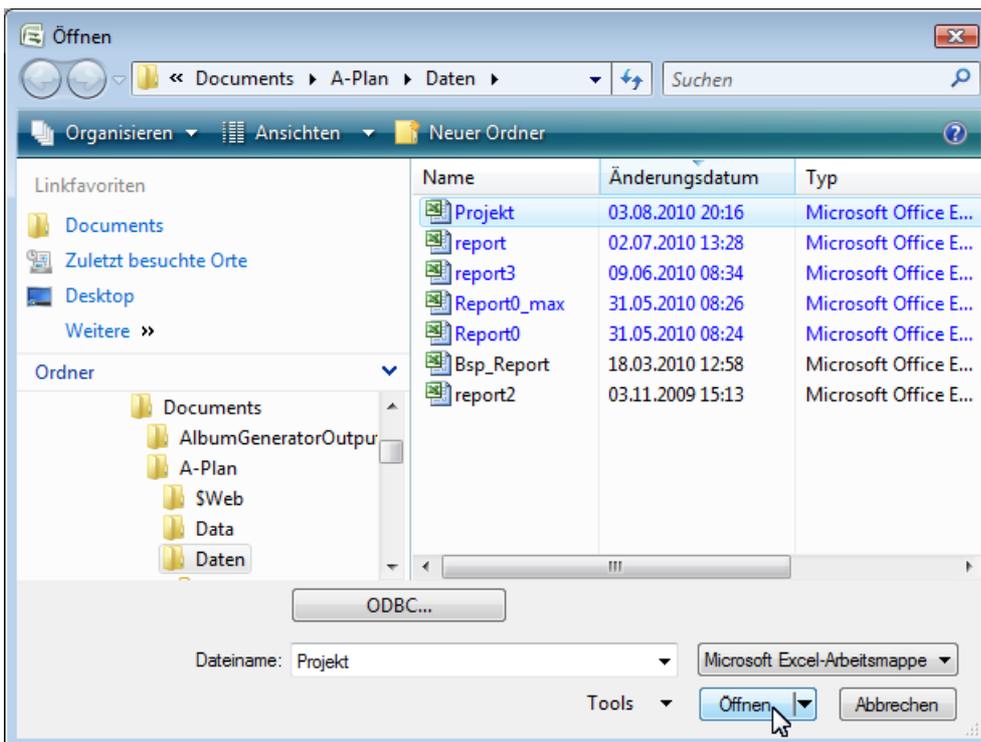
see "Creating an export file" on page 164

### IMPORT INTO MS PROJECT

1. In MS Project, use the menu **File**, click **Open**

Select the file type **Microsoft Excel work folder**

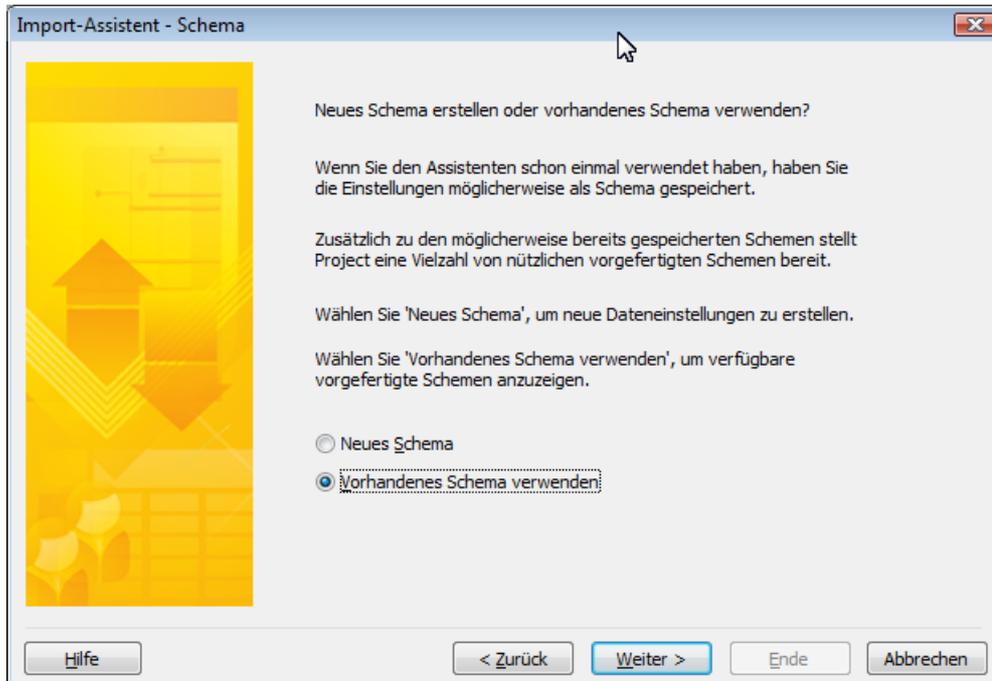
Select the file exported from A-Plan



Click **Open**

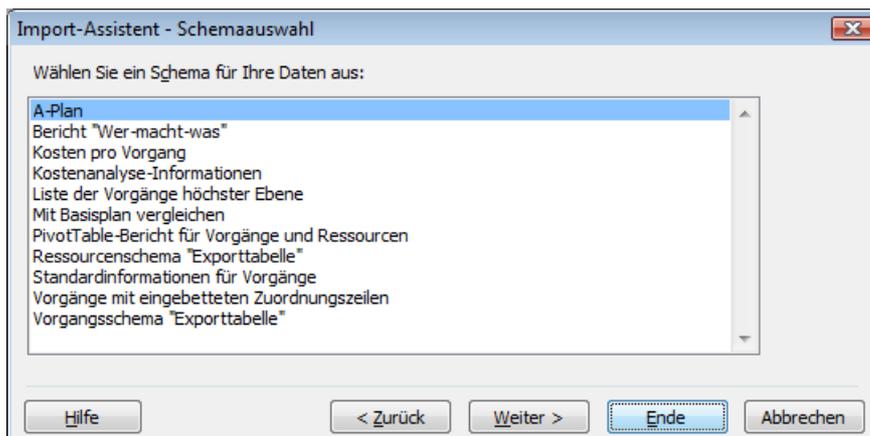
2. In the **Export Assistent**, click **Continue**

Select Use available schema



Click **Continue**

Select **A-Plan**:



Click **End**

**Finished!**

# NETWORK OPERATION

## GENERAL NOTES ON USING A-PLAN IN A NETWORK

With A-Plan licensed for network operation, several users can access a database simultaneously and modifications will be available to all users within one minute in maximum.

To prevent several users from making changes to the same record, individual records or database areas respectively can be changed by one user only at a given time. If two or several users are trying to change the same data at the same time, a message will pop up indicating that the record or area has been locked and that the operation can be executed later.

**For each folder** of a database individual **access permissions** can be assigned to each user.

The database can be installed either on a server or on a client PC connected to the server. In slow or often overloaded networks we would recommend you to store the database on the PC which will access the database most frequently.

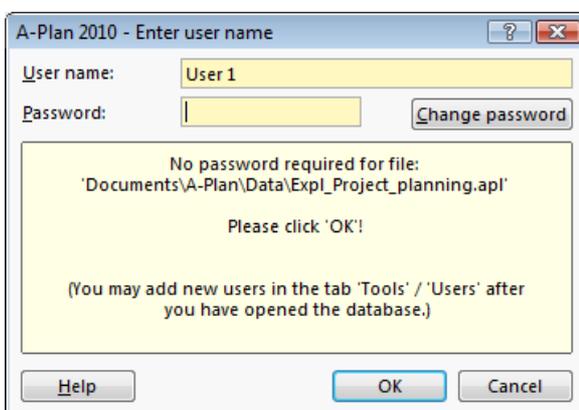
### **Important:**

A prerequisite for operating A-Plan in a network is that you purchased a **network license** and that every user has a license. This also applies if A-Plan was installed or is to be installed on a central server (see "Installation i" on page 10)!

If licensed for single users, A-Plan will always open files **exclusively** with no multiple access being possible.

## ACCESS PERMISSIONS

### ENTERING USERS (IN ADMINISTRATOR MODE ONLY)

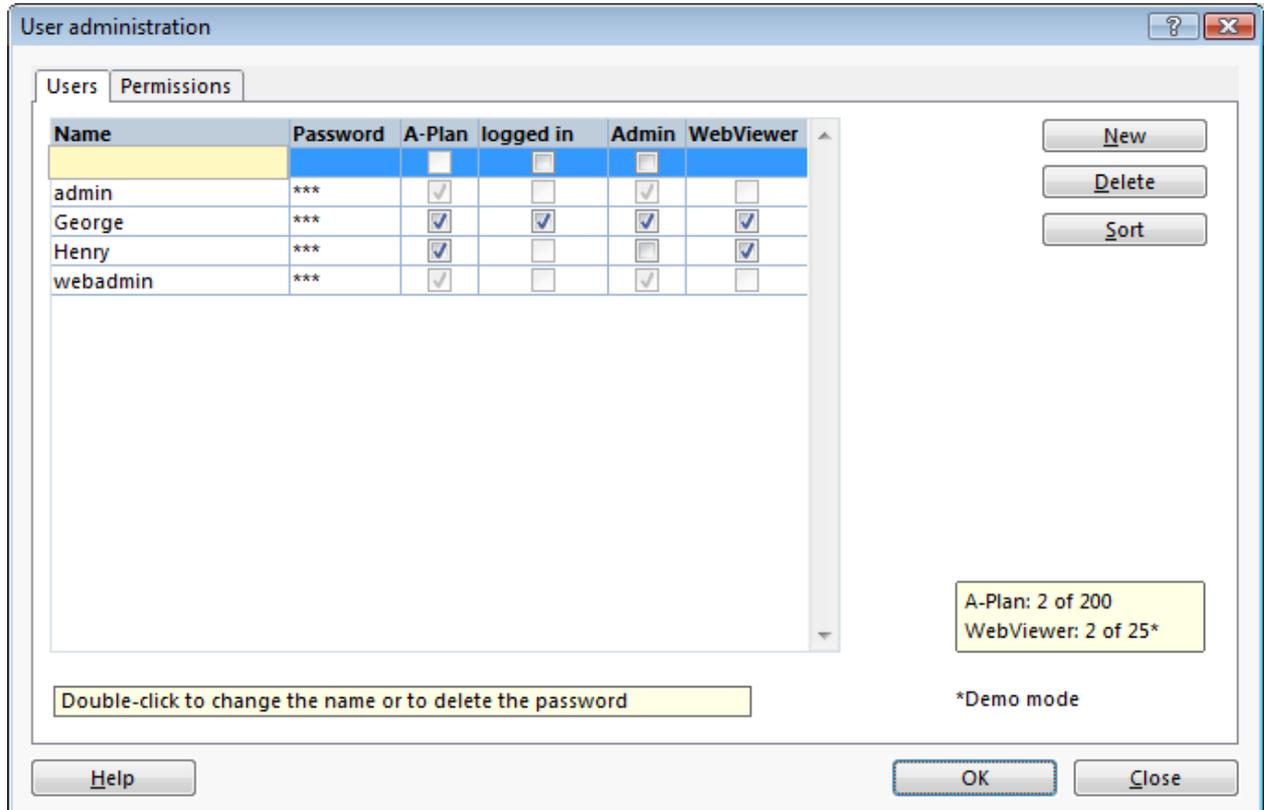


When a new database is opened for the first time, the user name will always be "User 1" with no password assigned.

You should enter a password immediately (click on **Change password**) to prevent unauthorized users from opening the database.

"User 1" is given administrator rights as a default to enable him to create more users and/or to delete existing users. Only those users are allowed to access a database who are entered in the user administration of the database concerned.

To enter and edit user data, choose **Users** from ribbon tab **Tools**:



Next, enter the user name. You may also assign a password which can be changed by the respective user at any time (ribbon tab **Tools / Password**). Passwords can be read by the administrator when they are entered for the first time. When the administrator opens the user administration again, three asterisks will be displayed in the respective row of the password column. If no password is assigned, the user concerned will be able to open the database **without entering a password**. For this reason, users should assign a password to their user name as soon as possible.

The number of entered users may not exceed the number of purchased licenses. For the user "admin" (see below), a license is **not** required.

From the column "logged in" you can see the users that have logged in to the database. If the log in status of a user was not reset to "no" due to a system crash, you may reset it by clicking on "yes".

Use the column "Admin" to specify whether a user is to be given administrator rights or not. You need administrator rights to perform one of the functions listed below:

- Creating or deleting of users
- Resetting of passwords
- Setting of user permissions
- Making changes in database settings (see "Database settings" on page 121)
- Assigning and deleting admin locks (see "Locking of rows" on page 43)

- Entering data of **any** resources for time tracking

A user name cannot be deleted (click on **Delete**) unless he logged off from the database.

To enable a user who **forgot his password** to access the database again, the administrator must delete the three asterisks representing the password of the user concerned. This will reset the password and will allow the user to enter a new password when he opens the database again.

### USER "ADMIN" AND "WEBADMIN"

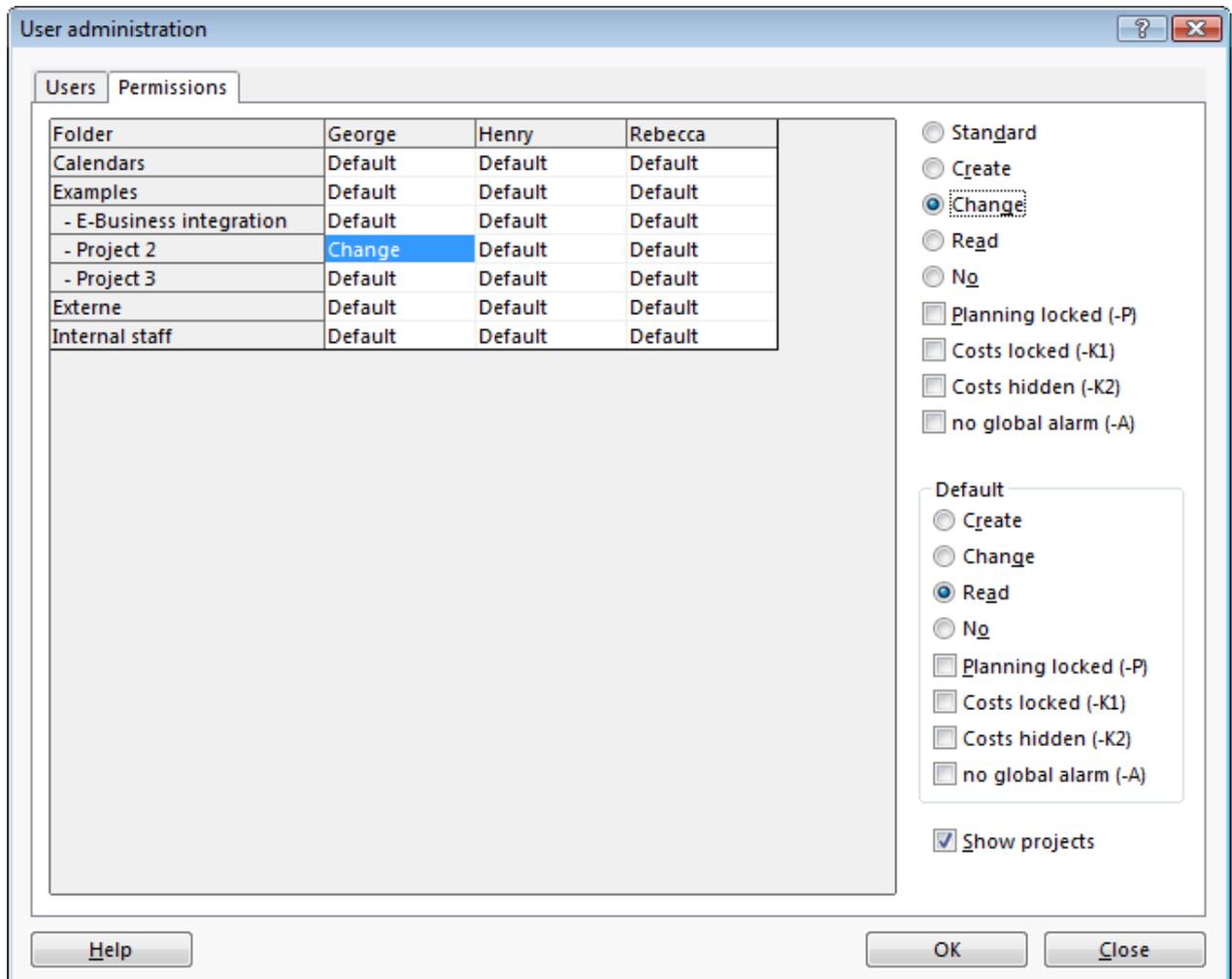
In all A-Plan databases there are "normal users" and users who cannot be deleted, namely the users "admin" and "webadmin". The user "admin" can be used for **administrative tasks only**, such as creating users, assigning user rights and setting of database options. As he cannot view or change data, he is disregarded when the number of used licenses is compared to the number of users.

The user „webadmin“ is required for the **WebViewer** of A-Plan which is described in the chapter "

WebViewer (optional)" on page 186.

## ASSIGN ACCESS PERMISSIONS

Each user entered in the user administration can be assigned different access permissions for the folders and (additionally) for the projects (level 2) of the current database:



As long as no specific setting is made for a user, the **default setting** made on the lower right will automatically be applied to him.

Note: When a **new folder/project is created**, the user creating it is by default given the highest permission (= "Create").

Permission	Create / Delete data <sup>1</sup>	Change data	Read data <sup>2</sup>	Indicator <sup>3</sup>
"Create"	yes	yes	yes	-
"Change"	no	yes	yes	
"Read"	no	no	yes	
"None"	no	no	no	-

- <sup>1</sup> Create /Delete data refers to projects, tasks and task bars
- <sup>2</sup> In the main window, folders for which no read permission exists are not visible to the user concerned. In the task list, an empty tab pane is displayed.
- <sup>3</sup> The corresponding indicator is displayed in the column Status (see "Status Column" on page 30) of the main window or the property window.

In addition, settings can be made for each folder and each user to determine whether the **alarms** set in a folder will be displayed when the set date and time is reached.

With a folder and a user selected, permissions are changed by clicking on the option fields to the right of the table or by clicking on the right mouse button to have a pop-up menu displayed (see screenshot).

Clicking on a folder, project or user name will allow you to select entire rows or columns as well. You may also select a square area by keeping the left mouse button pressed down.

With the option **Show total** activated (see "Tasks" on page 112), the "folder" **Total** will be displayed in the list as well. However, the permissions "Read" or "No" will be available for this "folder" only because the contents of this row are calculated automatically by A-Plan.

### ***Preventing planning data from being changed***

You may prevent any user from changing planning data. This means that such users can just view planning data in the concerned folder/project but they can enter and/or change actual data only.

### ***Hiding of costs***

Any user may be excluded from the display and printout of fields containing costs.

### ***Permission is required for assigning resources***

Only users having at least write permission for a resource group may assign resources of this group.

---

## **CHANGE PASSWORD**



The password (any characters, not more than 20 characters) can be changed for the administrator as well as for all other users. To do so, click on the button **Change password** when you log in or by choose **Tools / Password** afterwards. You have to type the password a second time to confirm it.

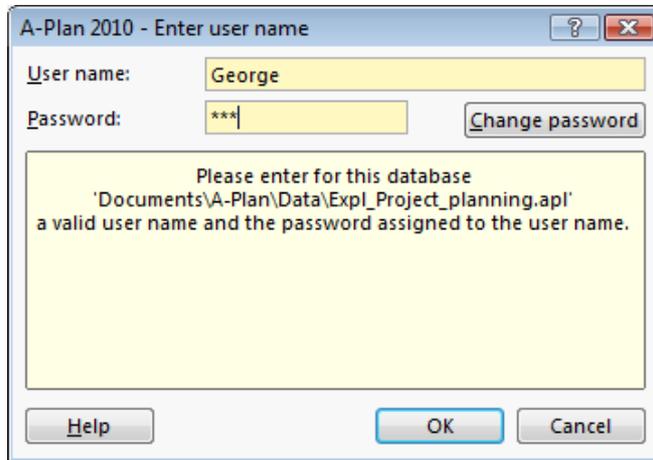
No password will be required to open the database if you leave the entry boxes empty.

Please note that the entry of the password is **case-sensitive**. The password you enter is valid for the current database only!

**Note:**

If you forgot your password, it can be reset in administrator mode (see "Entering users (in administrator mode only)" on page 180).

## LOGIN WHEN OPENING A DATABASE



Working with a network version of A-Plan will always prompt you to enter your user name and your password if you try to open a database.

If there is no risk of other persons using your PC, you might be unwilling to enter the user name and password each time you open a database. In this case, you may append the name and password as **a parameter to the starting command of A-Plan** (e. g. "...\A-Plan2010\A-Plan2010.exe /u:Millerr:secret", see "B. Starting A-Plan with parameters" on page 248). However, if you use several databases, this will work only if you use the same name and password for each database!

## PROFILES

Normally, the individual settings (= profiles, see "Saving options in profiles" on page 134) of each user are saved in the folder "My Documents\A-Plan\profiles". The profile folder can be stored on a network server as well. However, if this is done, each user should have **his or her own profile folder** which can be specified either in the dialog box **Options** (see "Profile folder" on page 133) or by appending it as a parameter when A-Plan is started (see "B. Starting A-Plan with parameters" on page 248).

Moreover, users have the possibility of using certain profiles together (see "Global Profiles" on page 135), supposed that a **superior profile folder** exists in which each user has his **own profile folder** holding his personal settings.

# WEBVIEWER (OPTIONAL)

## OVERVIEW

### CURRENT PLANNING AVAILABLE AT ANY TIME AND PLACE

The optionally available **A-Plan WebViewer** allows you to access current planning data and schedules with all sorts of devices supposed that they are connected to the Internet through a browser.

As no additional installation is required on the involved device, all required data are available even on smartphones, as for example on the iPhone, or on tablet computers:



Due to the fact that any type of operating system can be used, the A-Plan WebViewer is able to display the data even on Linux or Apple computers etc.

Data are updated by the **A-Plan WebCreator** on standard webpages at regular intervals as set by the operator. This enables you to provide all the information needed for the smooth execution of the project to all involved persons, ranging from superiors, project partners, staff in the field, assembly workers to suppliers and customers.

Of course, the WebViewer allows you to preset both the amount of data and the displayed period for each user. As a result, each user will view just the data you specified for him. As all web pages of the WebViewers can be opened with a valid user name and an assigned password only, there is no risk of unauthorized persons getting access to your data.

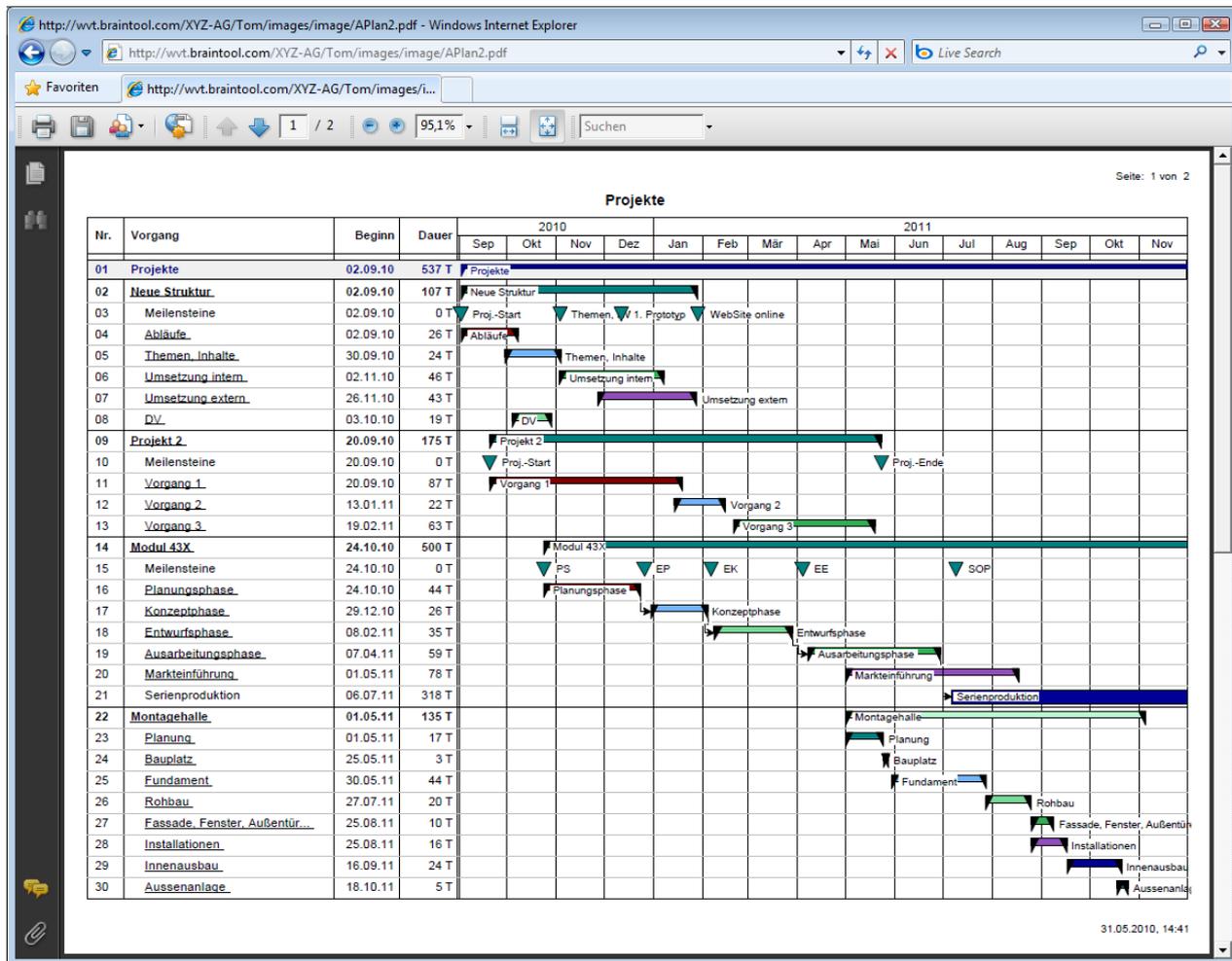
Output quality is very good either as all views can be made available as PDF files which can be downloaded and printed.

Compared to a completely webbased project management software, this solution provides the following advantages and benefits:

- You can create and manage your data in your familiar Windows environment (with all the functions you are used to, such as permanent operation with the mouse etc.).
- No loss of performance during the planning stage due to slow Internet connections
- Original data remain on your internal corporate server.



Clicking the graphics will display them in PDF format so that they can be printed in high quality if need be:



The preparation of the views and the automated updating of the Internet pages is done by the **A-Plan WebCreator**. It is also used for managing the users of the **WebViewer** and for making the settings of all views. In addition, the update interval for each user can be set here.

If A-Plan is used in multiuser operation, a license for the **WebCreator** is necessary as well as a license for each user of the **WebViewer**.

For the single user version of A-Plan an integrated solution exists. It differs in some respect from the multiuser operation as described in "WebCreator – Single user" on page 201.

## WEBCREATOR – MULTIUSER OPERATION

### ADMINISTRATOR MODE

The **WebCreator** can be used by standard A-Plan users as well (see "User mode" on page 198) but the following functions are available in administrator mode only:

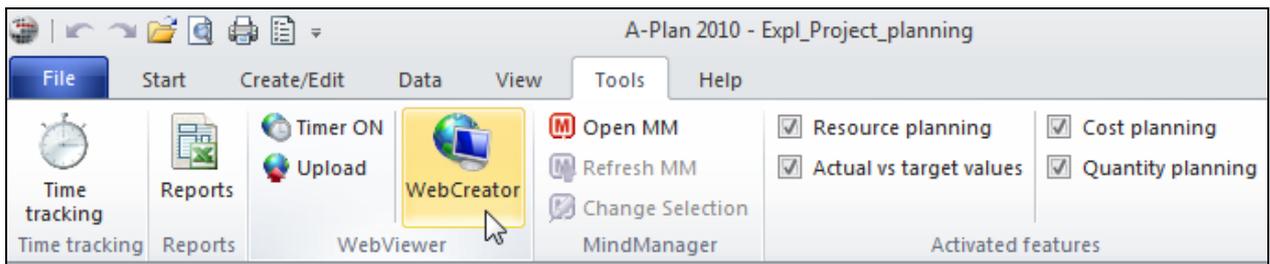
- Making file upload settings

- Administration of all users of the WebViewer
- Timer-controlled upload of views

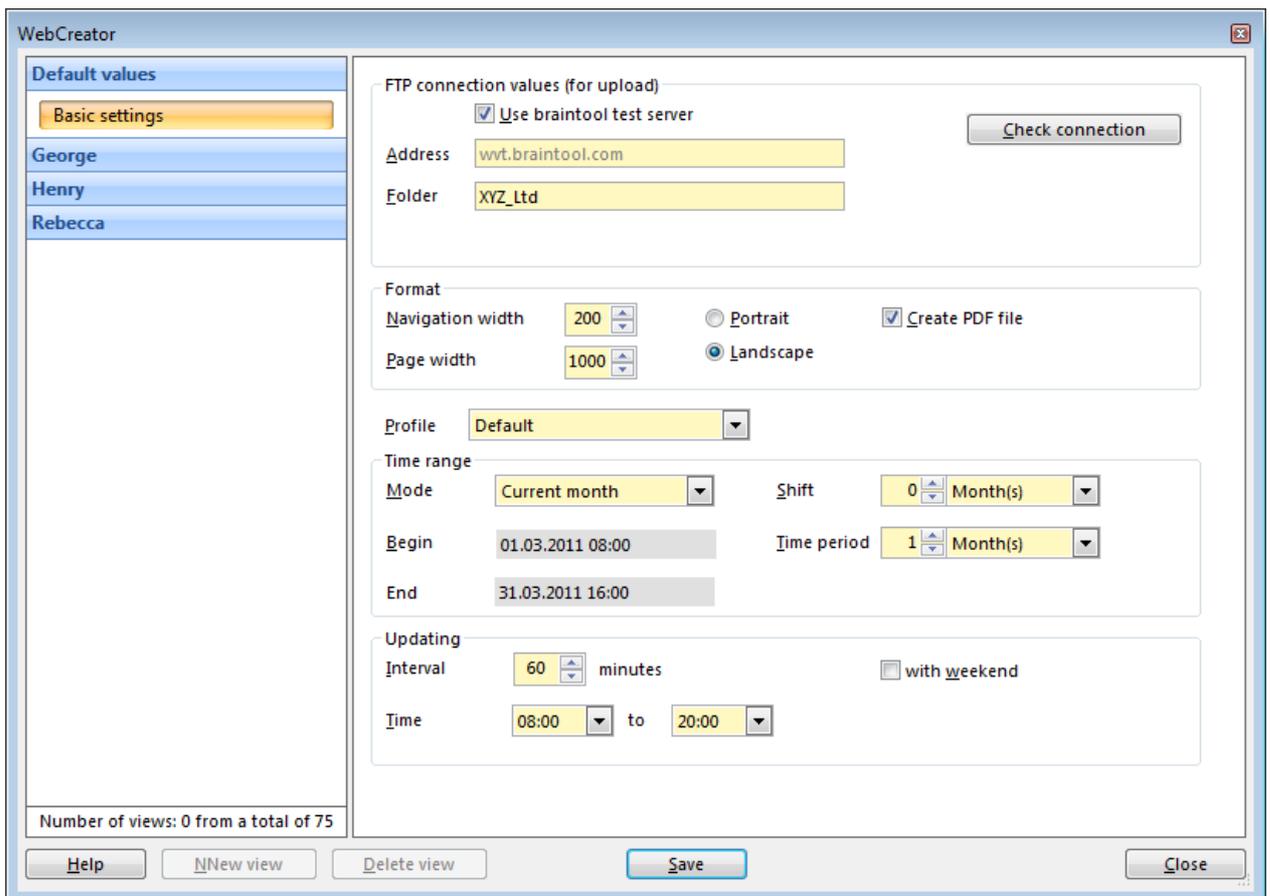
The WebCreator is available in administrator mode if A-Plan is opened with the user name „webadmin“. Like the user „admin“ (see User "admin" and "webadmin" on page 182), he has administrator rights but, contrary to the „admin“, he can just view all data (but not change them).

**Note regarding the SQL version of A-Plan:** Prior to (automatically) creating the user „webadmin“, the database must have been opened at least once with the user „admin“.

The WebCreator is started from the command group **Tools**:



## BASIC SETTINGS



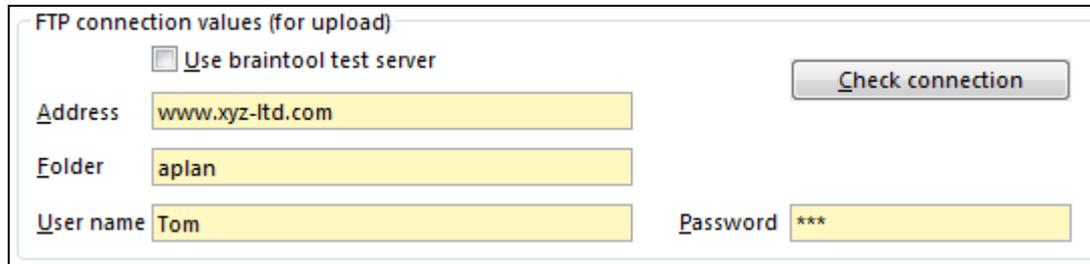
### FTP connection data for upload

The views for the WebViewer can be uploaded either to a special server of braintool software or – if available - to any other WebServer.

The FTP connection data (FTP = File Transfer Protocol) required for this are set in the upper part of the dialog box.

### **Your own Webserver**

If you have your own **Webserver**, you may use it together with the test version of the WebViewer as well as with the licensed version. If you have your own WebServer, please deactivate the option Use braintool test server and enter the URL of your server in the address field:



The screenshot shows a dialog box titled "FTP connection values (for upload)". It contains a checkbox labeled "Use braintool test server" which is unchecked. To the right of the checkbox is a "Check connection" button. Below the checkbox are four input fields: "Address" with the value "www.xyz-ltd.com", "Folder" with the value "aplan", "User name" with the value "Tom", and "Password" with the value "\*\*\*".

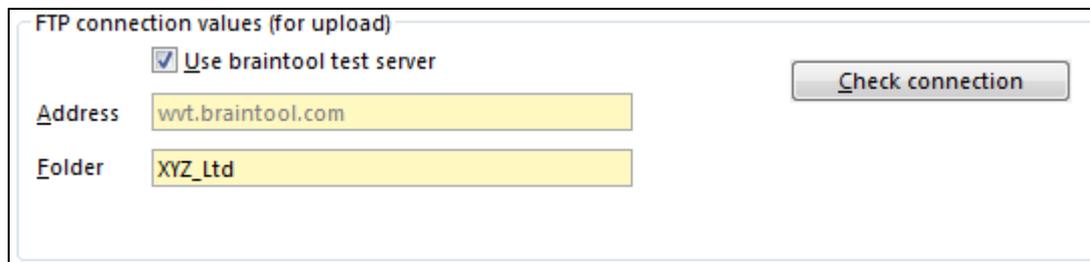
Use the field named Folder to enter the folder in which the subfolders of the WebViewer users are to be created. You may break down the structure even more, as for example to „planning/section1/aplan“ or leave it blank if the user folders are to be created directly in the root.

Use the other fields to enter the connection data to your server. If you have any questions or if you need detailed information, please contact your provider.

### **braintool Test server**

During the 30 day trial phase of A-Plan you may use the test server **wvt.braintool.com**

To do so, please activate the option Use **braintool test server** :



The screenshot shows a dialog box titled "FTP connection values (for upload)". It contains a checkbox labeled "Use braintool test server" which is checked. To the right of the checkbox is a "Check connection" button. Below the checkbox are two input fields: "Address" with the value "wvt.braintool.com" and "Folder" with the value "XYZ\_Ltd".

You may enter any name in the folder field.

**Important:** Please be aware that views uploaded to the test server will not be saved permanently!

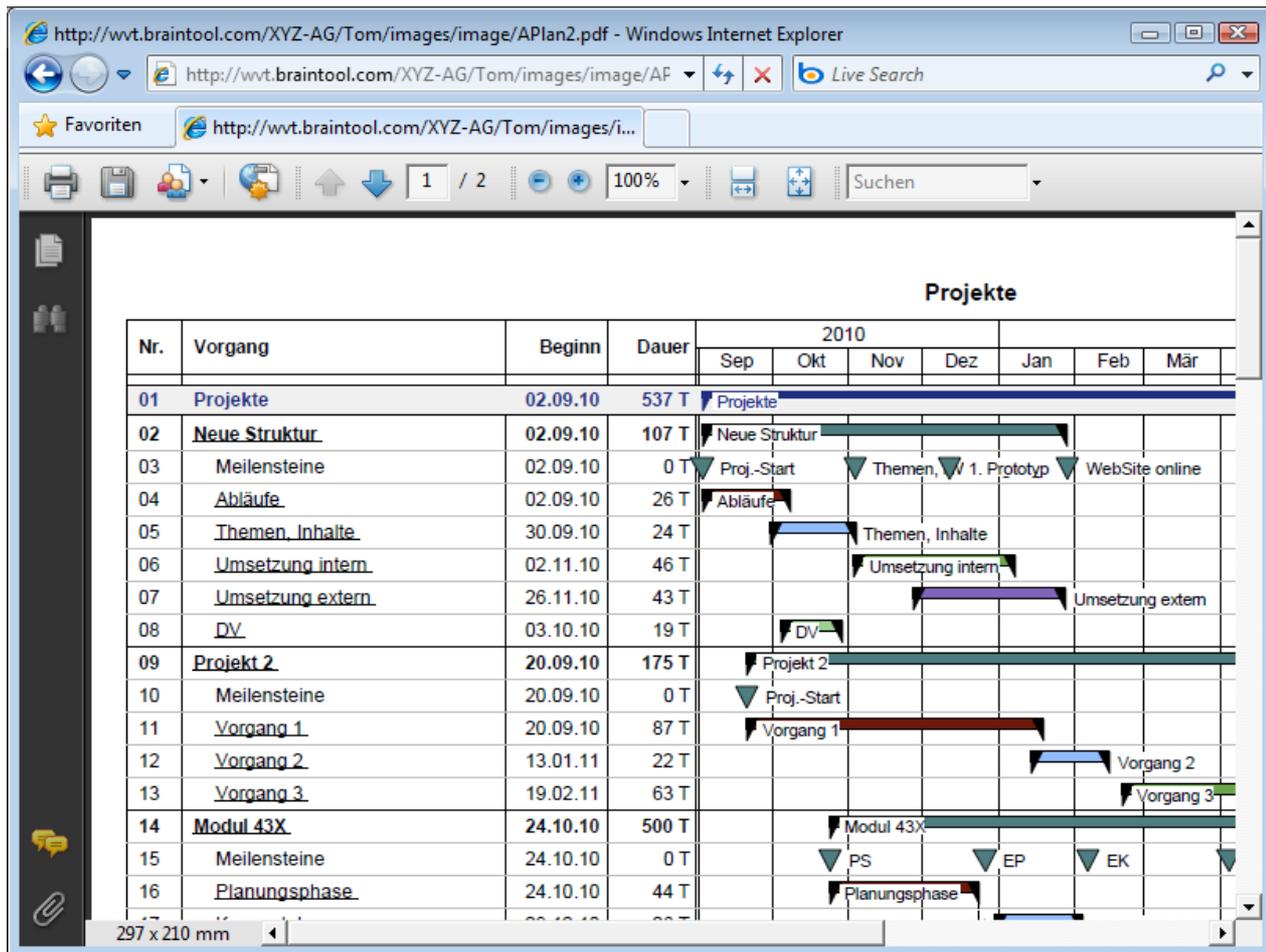
### **braintool License server**

With the licensed version of the WebViewer you may use the braintool server **webviewer.braintool.com** for a small charge (see <http://www.braintool.com/preisliste.0.html?&L=2> ). A fixed name will be set by braintool software for the subfolder in agreement with the involved customer. Of course, this folder is protected against unauthorized access!

### **Format**



With the box **Create PDF file** being activated, the WebViewer will display the views as PDF files in a separate window after you have clicked on a view:



Depending on the speed of your Internet connection, uploading files may take some time. Hence, the resolution you set should not be too high and you should not activate the box **Create PDF file** unless you really need it.

### Profile, Time range

The WebCreator uses existing profiles (see "Saving options in profiles" on page 134) as a basis for the creation of views. Regarding the displayed time range and the filter settings (see below), the profiles can be modified:

Profile	Default		
Time range			
Mode	Current month	Shift	0 Month(s)
Begin	01.03.2011 08:00	Time period	1 Month(s)
End	31.03.2011 16:00		

Only global profiles (see "Global Profiles" on page 135) can be selected for the basic settings whereas individual profiles can be added for the individual users.

The specification of a time range ensures that the regular updates of the views (see next paragraph) will always display the actually required time period, as for example from the begin of the current week till the end of next week.

The list box named Mode provides the basis for the calculation of the current time period:

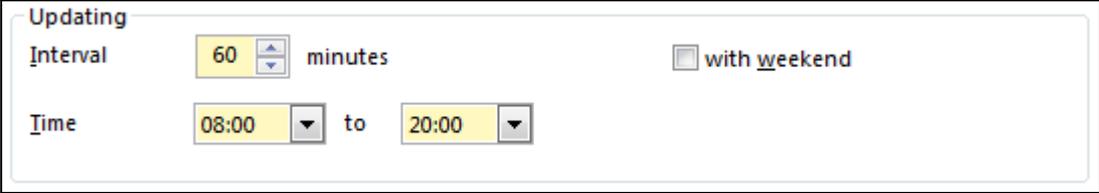
- **As in profile** (takes the setting from the selected profile without changing it)
- **automatically** (selects the time range to have all task bars displayed)
- **fixed date** (begin of time range is set manually)
- **today** (begin of time range = current day)
- **current week** (begin of time range = begin of the current week)
- **current month** (begin of time range = begin of the current month)
- **current quarter** (begin of time range = begin of the current quarter)
- **current year** (begin of time range = begin of the current year)

The box named **Shift** allows you to shift the time range by a fixed amount of time into the past or into the future. For example, with the mode being **,current week', Shift = - 1 week** will have the effect that the time range starts on the Monday of the week before.

The value entered in Time period defines the length of the time period.

### Updating

Any interval can be used for updating the views in the WebViewer. Likewise, there are no limitations regarding the time of the day and the inclusion of weekends:



Updating

Interval 60 minutes  with weekend

Time 08:00 to 20:00

If a large number of users specifies a relatively short interval, it may happen that the system does not comply with the set interval depending on the amount of uploaded data and the speed of the Internet connection. In this case the system will form a queue to ensure that all users will be considered in the same way.

Changes of the settings will be saved automatically as soon as you change to another tab or close the WebCreator. Of course, clicking the button Save will do as well.

## USERS

A tab exists for all users who have permission of using the WebViewer (see "User administration" on page 197). This tab allows you to make all the necessary settings:

The screenshot shows the WebCreator application window. On the left, there is a sidebar with a tree view containing 'Default values', 'Basic settings', 'George', 'Henry', and 'Rebecca'. The 'George' user is selected, and its 'Basic setting' sub-item is highlighted. The main area displays the configuration for the selected user. It includes fields for 'Address' (wvt.braintool.com/XYZ\_Ltd), 'Folder' (XYZ\_Ltd/George), 'User name' (George), and 'Password' (\*\*\*\*\*). There are also settings for 'Format' (Navigation width: 200, Page width: 1000, Orientation: Landscape selected, Create PDF file checked), 'Profile' (Default), 'Time range' (Mode: automatically), and 'Updating' (Interval: 60 minutes, with weekend unchecked, Time: 08:00 to 20:00). At the bottom, there are buttons for 'Preview all views', 'Apply default values', 'Help', 'New view', 'Delete view', 'Save', 'Upload views of current user', and 'Close'. A status bar at the bottom left indicates 'Number of views: 3 from a total of 75'.

WebViewer users having a standard A-Plan license as well may make their settings themselves (see "User mode" on page 198).

To do so, an individual user folder must be specified in the folder field. This individual user folder must be one level below the default folder (displayed in the field Address). **Any user name and password can be entered if a braintool server is used as these are needed to start the WebViewer with an Internet browser.** If you use your own server, the user name and password must be defined directly on your server.

All further basic settings are taken from the tab Default values.

Accordingly, the meaning of the settings is identical with the settings of the tab Basic settings (see the previous paragraph). Of course, you may tailor the values to your personal needs.

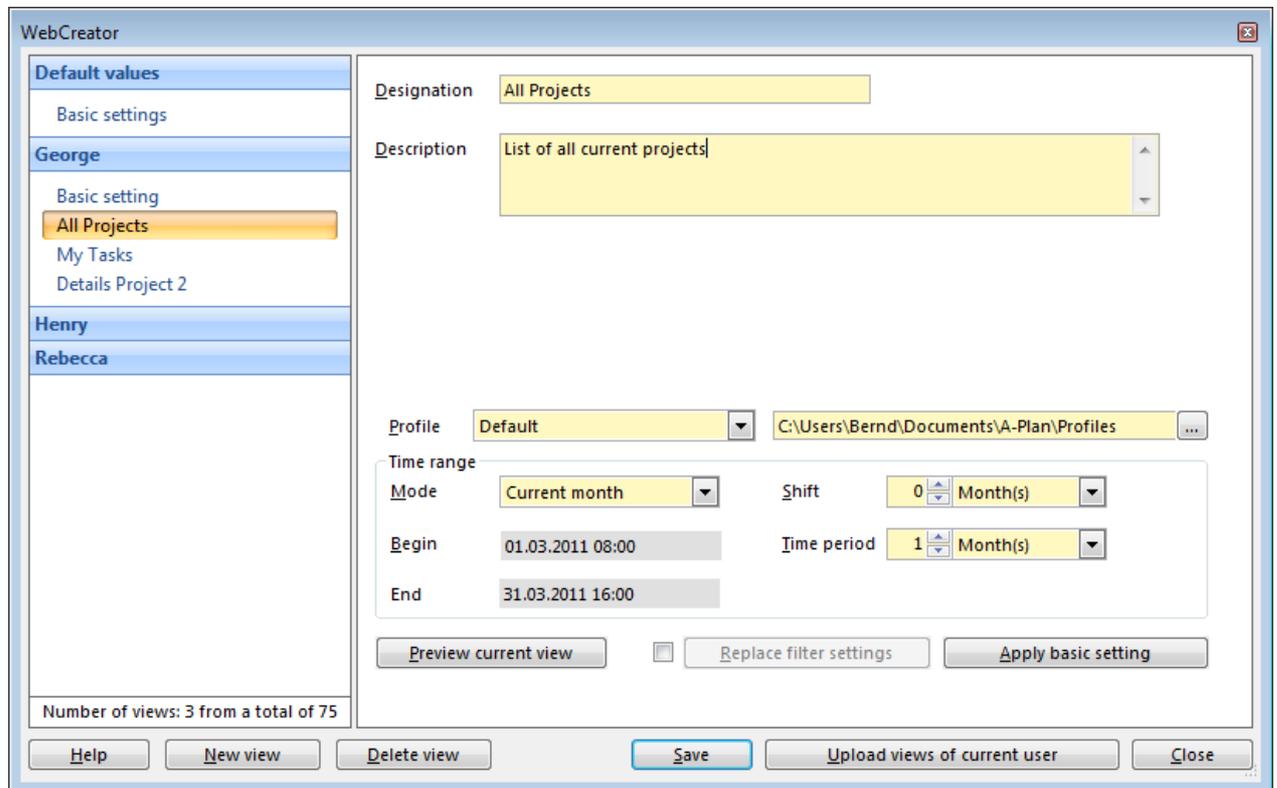
The folder field to the right of the field Profile allows you to set any profile folder (see "Profile folder" on page 133) you like. In addition to global profiles, all profiles included in this folder will then be added to the list of available profiles. Due to the fact that the WebCreator does not modify profiles you may even set the profile folder of another user without the risk of conflicts arising from this.

The button Apply default values enables you to restore the basic settings.

Clicking the button Preview all views will create the views of the current user and will display them in the standard Internet browser. To have the preview displayed as fast as possible, the views are created locally and are not uploaded to the set web server.

## VIEWS

Below the basic settings the settings for the views are displayed for the users:



A **designation** (name) and a **description** can be given to the views so that they can be identified in the navigation bar of the WebViewer.

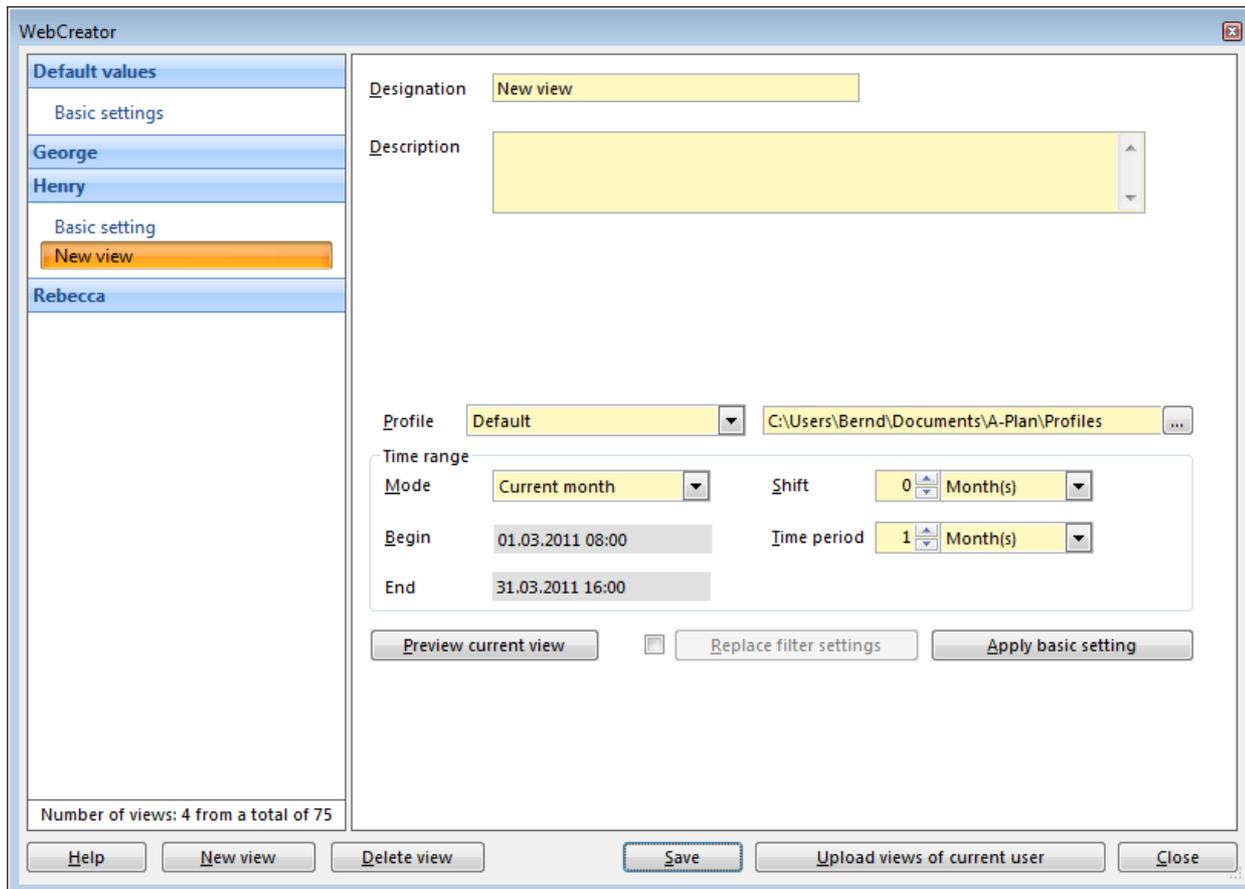
For each view a **profile** and a **time range** can be set which differ from the basic settings of the user.

Furthermore you have the possibility of replacing the **filter settings** of the selected profile by specific settings for each view. Clicking the button **Replace filter settings** will open the same dialog box as the one described in "Setting of filters" on page 76. However, the new settings do not overwrite the original settings of the selected profile but are saved separately together with all the other settings for the WebCreator (see "Administration of settings" on page 198).

The settings can either be made centrally by the user „webadmin“ or can be made by the users themselves supposed that they have permission for the WebViewer (see "User mode" on page 198).

## Creating new views

A view is created when a user tab is opened for the first time:

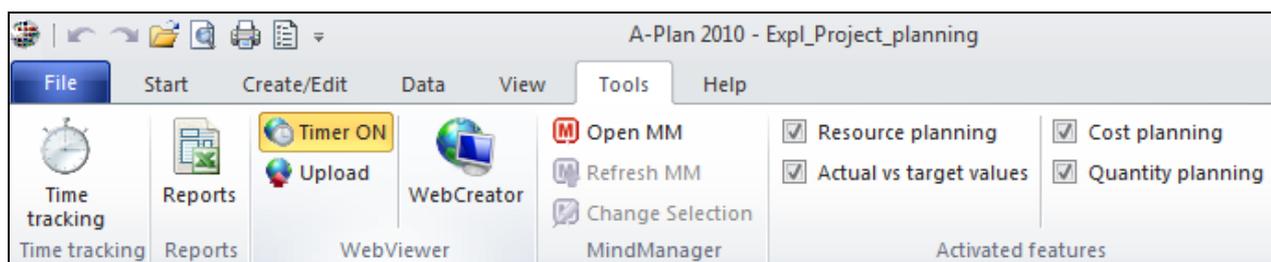


To create more views just click the button **New view**.

The **maximum number of possible views** depends on the number of licenses. By default, a user may have 3 views which, however, can be distributed to all users as needed. Hence, in case of 2 licenses one user may have 2 views while the other one uses 4 views.

## UPLOADING VIEWS TO THE WEBSERVER

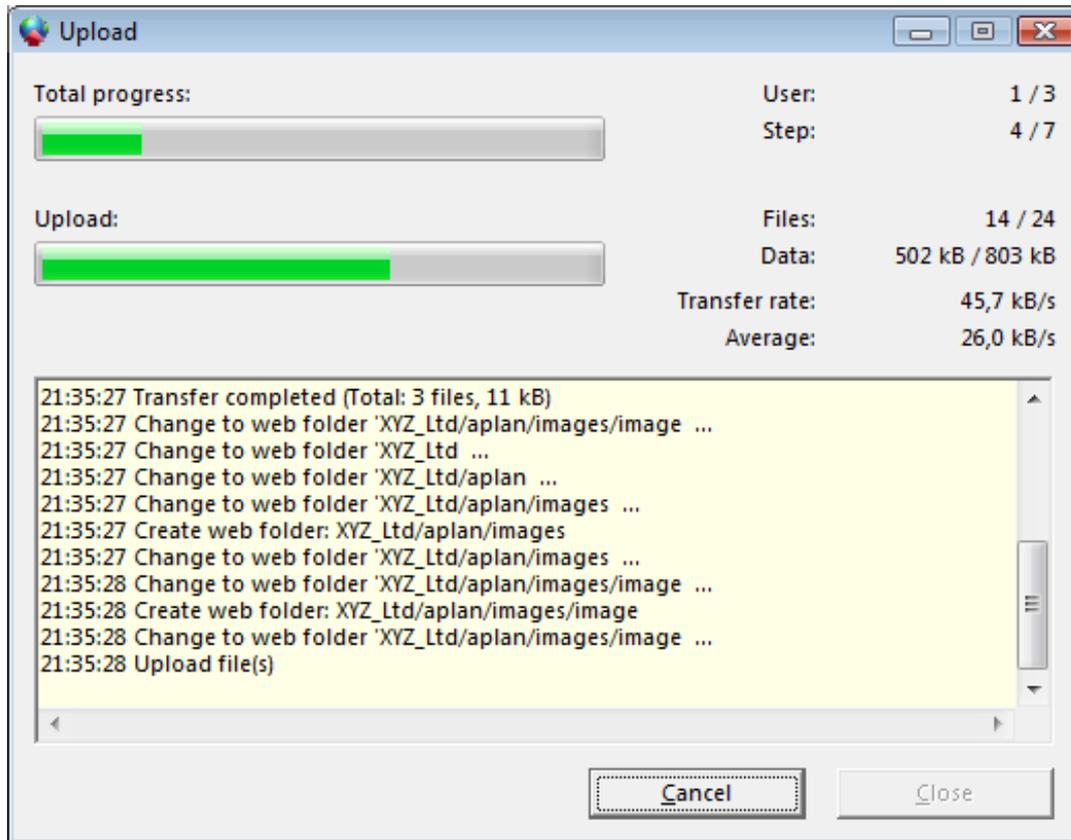
With the **timer** being activated, the views are **uploaded automatically** according to the intervals set for the users:



**Important:** In the case of multiuser applications the timer-controlled upload is carried out only if the login was made with the user „webadmin“!

The **manual upload** can be triggered by clicking the button **Upload** in the tab **Tools** or by clicking **Upload views** in the dialog box of the WebCreator.

During the upload a dialog box indicating the progress of the upload is displayed:



Furthermore, a log file named **WebCreator.log** is created in which all actions are recorded. This log file can be found in the folder **\$Web** which is located one level below the folder holding the global profiles (see "Global Profiles" on page 135).

The time needed for the upload depends exclusively on the speed of your Internet access. For this reason you should not specify a high resolution if your Internet connection is rather slow and you should not activate the creation of PDF files unless you really need them (see "Views" on page 195).

## USER ADMINISTRATION

Beim Einsatz des WebViewers kann im Rahmen der vorhandenen Lizenzen in der Benutzerverwaltung von A-Plan (Register **Extras**) festgelegt werden, wer A-Plan und wer den WebViewer nutzen kann:

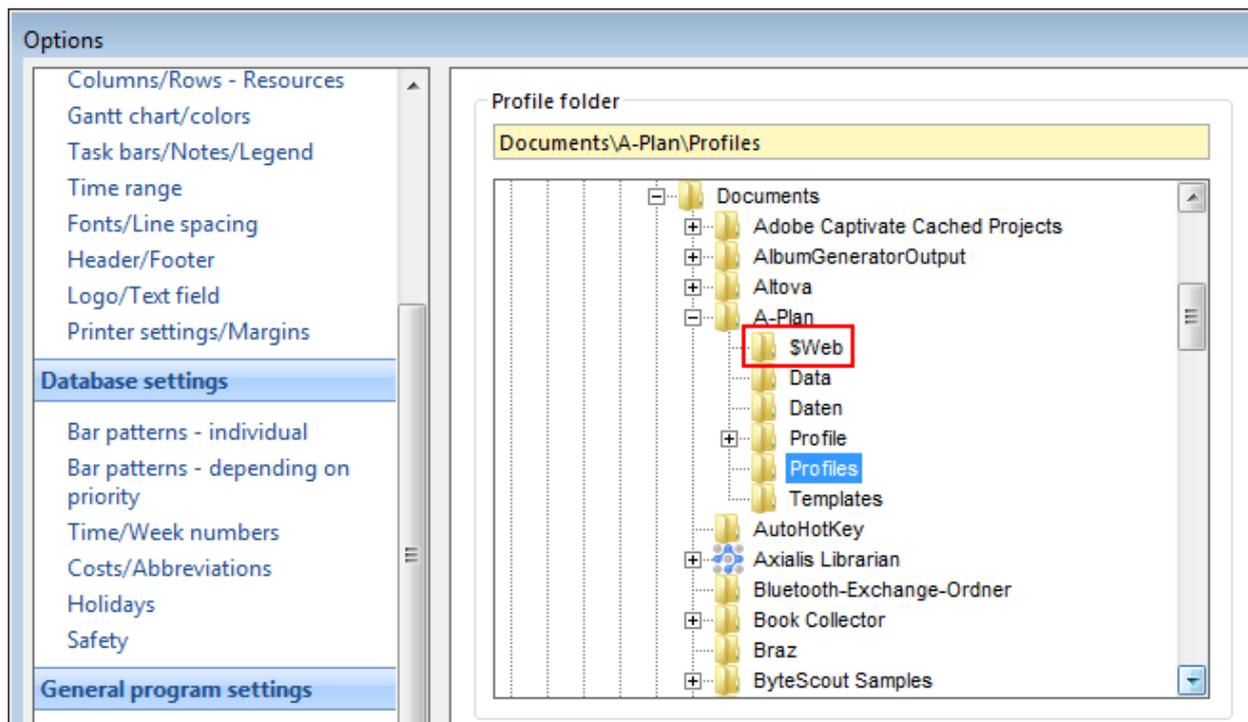
The screenshot shows the "User administration" dialog box with the "Users" tab selected. The table below lists the users and their permissions:

Name	Password	A-Plan	logged in	Admin	WebViewer
admin	***	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
George		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Henry	***	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rebecca		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
webadmin		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The users activated for the WebViewer are listed in the WebCreator for the configuration of views etc. The maximum number of views can be specified in the WebCreator (see "Views" on page 195). It is 3 times the number of licenses for the WebViewer and is independent of the number of users having permission in the user administration.

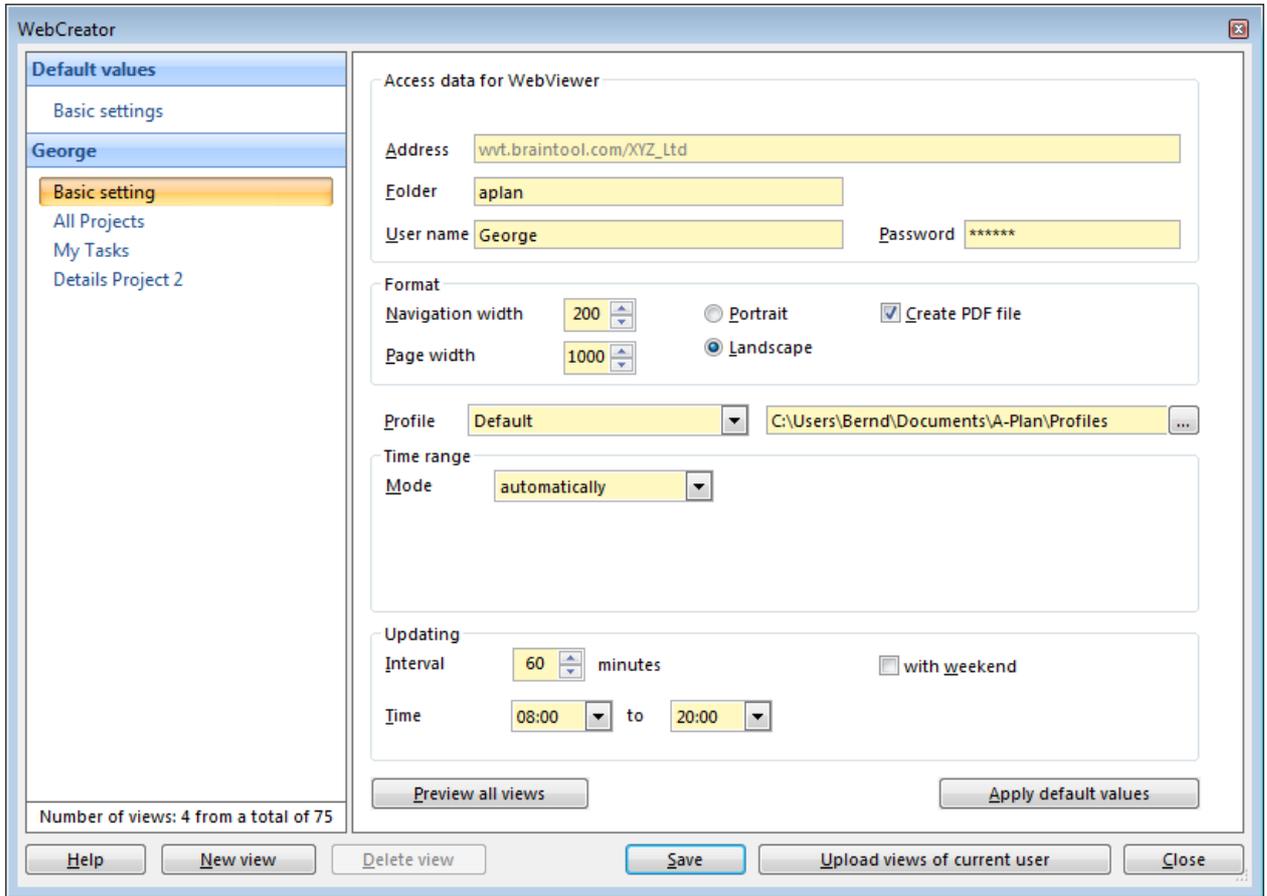
## ADMINISTRATION OF SETTINGS

The settings made in the WebCreator are saved in the folder **\$Web**, one level below the global profile folder (see "Global Profiles" on page 135). To make sure that the WebCreator will find this folder, a profile folder must be created below the global profile folder for the user "webadmin" as well. This folder must be set as the profile folder in options:



## USER MODE

Users having permission for both A-Plan and for the WebViewer may also start the WebCreator from the tab **Tools**. In this case the basic settings cannot be changed and the list of WebViewer users will display the logged-in user only. As a result, changes of the settings and manual uploads of views can be made for this user only:



Likewise, the timer-controlled upload is not possible as A-Plan is locked during the upload. The WebCreator license is available for this purpose (see "Uploading views to the Webserver" on page 196).

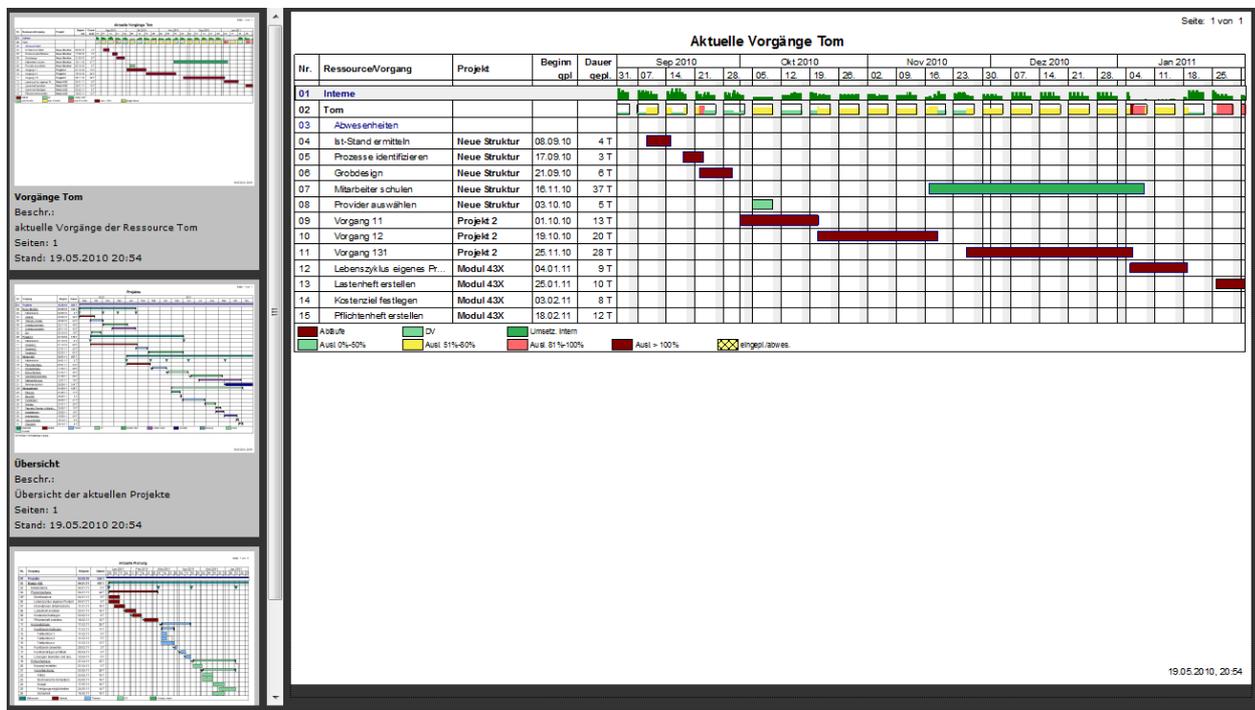
# WEBVIEWER

Using the WebViewer requires nothing else but a browser and access to the Internet. It does not matter which browser you use. Likewise, you do not need a specific appliance or operating system or any particular components (such as, for example, a flash player) as the WebViewer is made up of normal HTML pages. The only exception is a PDF reader which is needed for displaying PDF files (see "Views" on page 195). If it is not installed on your computer you may download it, for example, from

<http://get.adobe.com/uk/reader/>

The WebViewer is started from the Internet address specified in the WebCreator (see "Users" on page 194). In addition, you have to enter the user name and password which are specified in the WebCreator as well.

The requested views can be selected by clicking the minimized graphics in the navigation bar on the left:





Basically, the settings and the handling are the same as with a multiuser license (see "WebCreator – MultiUser operation" on page 188) but there is no need of administrating several users and no settings need to be made in the user administration of A-Plan.

# TIME TRACKING

## INTRODUCTION

The optional time tracking module for A-Plan allows you to collect and present in detail the work spent on the execution of tasks and the costs resulting from the execution. To do so, resources may either use a special dialogue box of A-Plan for entering actual work or a universal interface to take entered times from other programs over to A-Plan.

This will provide the following benefits:

- exact charging of the work actually done and of incurred costs to the respective tasks
- documentation of incurred times and costs for both clients and contractors
- comparison of planned with actual values
- reporting of capacity usage over time
- prognoses of the future course of the project and of expected costs

## TIME TRACKING WITH A-PLAN

To open the **Time tracking** dialog box, click on **Time tracking** at ribbon tab **Tools**. The group and the name of the currently logged-on user are displayed in the upper half of the dialog box:

Time tracking

Group: Team 1

Resource: Smith

Task: Orders > Repairs > EC 356

show:  pending  completed tasks

Times: 'Orders > Repairs > EC 356'

No	Begin	End	Work	Note
1	12/03/2011 11:20	12/03/2011 13:40	2.3 wh	
2	13/03/2011 14:20	13/03/2011 16:40	2.3 wh	
3	15/03/2011 14:19	15/03/2011 16:19	2.0 wh	
4				

Buttons: Delete selected row, Delete Note, Finished

Totals:

	Begin	End	Work	Finished
Pl'd.	19/01/10 08:00	21/01/10 09:00	15.0 wh	
act.	12/03/11 11:20	15/03/11 16:19	6.7 wh	40.0 %
prognost.		17/03/11 11:00	17 wh	

Daily totals (all tasks)

Date	Dur.
Tu, 15/03/11	02:00
Su, 13/03/11	02:20
Sa, 12/03/11	02:20

Buttons: Show individual values, Help, Apply, Close

### Note:

The name entered by a user to log on to the database must be identical to the name of the resource!

All resource names used in the database must be unique. i.e. they must not be used twice or several times, not even in different resource groups!

Users having administrator rights are allowed to access all resources existing in the opened database.

The list field below the resource field shows **all pending tasks** of the user or – as an alternative – all completed tasks (for corrections etc.):

Having selected a task you may use the table below the selection list for entering the times that are to be charged to the selected task:

Times: 'Orders > Repairs > EC 356'

No	Begin	End	Work	Note
1	12/03/2011 11:20	12/03/2011 13:40	2.3 wh	
2	13/03/2011 14:20	13/03/2011 16:40	2.3 wh	
3	15/03/2011 14:19	15/03/2011 16:19	2.0 wh	
4				

Clicking the field **Begin** when you start work will enter the present time. The same applies if you click the field **End** when you interrupt or finish your work.

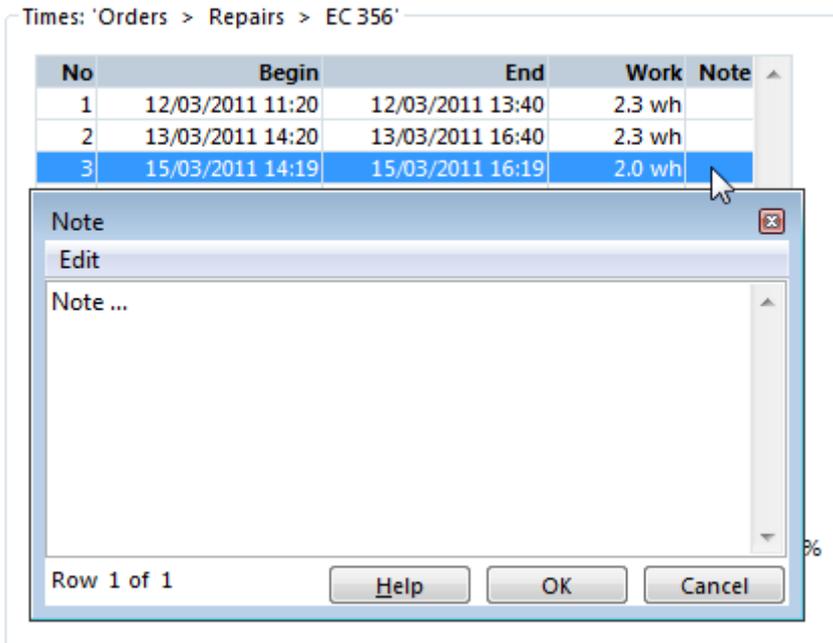
If you enter the **performed work** instead of the **end**, A-Plan will calculate the end for you.

If spent worktime is to be entered without specifying the begin and/or end, it is sufficient to enter the spent time in the column **Work**. A-Plan will then calculate the end assuming that work was started at 6:00.

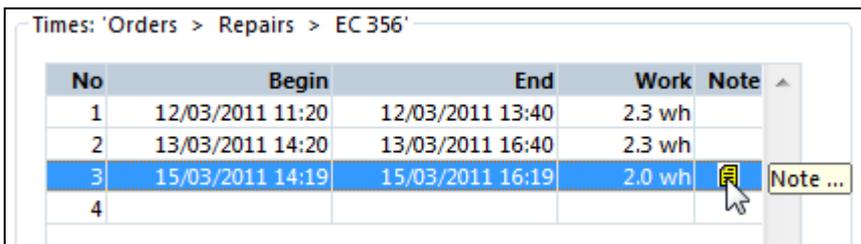
**Important:**

Entered time periods will always be charged as genuine real time, i.e. **Working time = End - Begin**. For example, with a working time of 8 hours per day, this means that entering 8:00 a.m. as the begin and 4:00 p.m. **on the next day** as the end, the work will **not be 2 x 8 h = 16 h but 32 h** because times outside of the set working hours are taken into account as well (otherwise, times that are not within the regular working hours could not be taken into account).

Click the column Note to enter a **note of any length** on each of your time entries:



A symbol appears in the column Note as soon as you have closed the edit window. Hovering the mouse pointer over the symbol will display the note:



## TOTALS, LEVEL OF COMPLETION

The lower part of the dialog box provides a summary of your **planning**, of currently **collected times** and of **prognosticated values**:

Totals of resource 'Hall':					Finished
	Begin	End	Work	Finished	
Pl'd.	19/01/10 08:00	21/01/10 15:00	20.0 wh		
act.	19/01/10 08:30	20/01/10 11:50	11.3 wh	56.3	%
prognost.		21/01/10 14:35	20 wh		
Totals of all resources:					
	Begin	End	Work	Compl.	
Pl'd.	19/01/10 08:00	21/01/10 15:00	40.0 wh		
act.	19/01/10 08:30	20/01/10 11:50	11.2 wh	39.1%	
prognost.		21/01/10 14:35	29 wh		

In the field **Finished**, A-Plan automatically shows the level of completion as a ratio of planned work vs. spent work. If this is not in line with the actual state of the task (e.g. 5 out of 10 wh were spent but only 40 % of the work was done), the value can be corrected manually.

If several resources are assigned to a task, the totals of the values of all resources are displayed below the totals of the involved user.

Times: 'Orders > Repairs > EC 356'

No	Begin	End	Work	Note
1	12/03/2011 11:20	12/03/2011 13:40	2.3 wh	
2	13/03/2011 14:20	13/03/2011 16:40	2.3 wh	
3	15/03/2011 14:19	15/03/2011 16:19	2.0 wh	
4	16/03/2011 16:13	16/03/2011 22:13	6.0 wh	
5				

Buttons: Delete selected row, Delete Note, Finished

Totals:

	Begin	End	Work	Finished
Pl'd.	19/01/10 08:00	21/01/10 09:00	15.0 wh	
act.	12/03/11 11:20	16/03/11 22:13	12.7 wh	76.0 %
prognost.		17/03/11 12:00	17 wh	

When a task is finished, click the button **Finished** to change the status of the task to **Finished**. This will set the level of completion to **100 %**. As a result, the user can no longer enter time (= work) for this task.

**Note:** If need be, the status can be reset in the main window of A-Plan (to do so, right-click the designation of the task and deselect **,completed'**).

## CHECKS, CORRECTIONS

Daily totals (all tasks)

Date	Dur.
We, 16/03/11	06:00
Tu, 15/03/11	02:00
Su, 13/03/11	02:20
Sa, 12/03/11	02:20

Show individual values

A list on the right of the dialog box displays **all times** entered until now by the current user for **all tasks**. Values can be displayed in two different ways.

The presentation of **totals** will sum up the values of individual days allowing you to check whether entered times are in line with the respective working times.

Click the button below the list to have all the individual values displayed.

Clicking on one of the individual values will display related entries in the edit table on the left where you may correct them if necessary:

Times: 'Orders > Repairs > EC 356'

No	Begin	End	Work	Note
1	12/03/2011 11:20	12/03/2011 13:40	2.3 wh	
2	13/03/2011 14:20	13/03/2011 16:40	2.3 wh	
3	15/03/2011 14:19	15/03/2011 16:19	2.0 wh	
4	16/03/2011 16:13	16/03/2011 22:13	6.0 wh	
5				

Individual values (all tasks)

Date / Time	Dur.
We, 16/03/11 16:13	06:00
Tu, 15/03/11 14:19	02:00
Su, 13/03/11 14:20	02:20
Sa, 12/03/11 11:20	02:20

Show daily totals

## INTERFACE FOR THE IMPORT OF ACTUAL TIMES, ABSENCES

### FILE FORMATS

Actual times can either be imported from a text file or from an **MS Excel file**. The format is described in a special file so that it can be adjusted to a variety of applications.

For example, an MS-Excel file might look like that:

	A	B	C	D	E	F	G	H
1	No	Date	TimeIn	Duration	Completed%	TaskIdentNo	ResourceDesignation	Read
2	1	1/19/2009	8:00:00 AM	4h	30%	xyz4711	Name 1	
3	2	1/28/2009	12:00:00 PM	2h	50%	xyz4712	Name 2	

In a text file, the same information would look like that:

1;01/19/2010;08:00 AM;4h;30;xyz4711;Name 1;

2;01/28/2010;12:00 PM;4h;50;xyz4712;Name 2;

## SETTINGS

The formats to be used and the setting of some parameters is described in the file **lstzeiten.ini**.

Data will not be imported unless this file exists in one of the following folders:

- „My Documents\A-Plan“ or
- in the **Folder of the currently opened file** or
- in the **Folder one level above the currently set profile folder**

A sample of the file **Timetracking.ini** can be found in the program folder of A-Plan („c:\Programs\A-Plan2010“ by default). It specifies the following parameters for the import of actual times:

### *Paragraph [Options]*

Parameter	Values	Explanation
<b>Import_File=</b>	Name of import file(s) incl. path	Import file(s) for collected actual times ("*" can be used as a wildcard, e.g. "...\times*.xls" for "...\times1.xls", "...\times2.xls" etc.)
<b>Interval=</b>	0 - 99999	Interval (in seconds) used for checking whether actual times exist which have not yet been imported. With this set to „0“, no automated import will take place.
<b>CancelAfterError=</b>	0 or 1	Setting "1" will stop the further reading of actual times after an error has occurred. The import file will not be deleted, even if the option DeleteAfterImport has been activated by setting it to „1“.
<b>DeleteAfterImport=</b>	0 or 1	Choosing „1“ will delete import files after they have been read successfully.
<b>Separator=</b>	Any character or „tab“	Separator between fields if a text file is used (tabulator = tab)
<b>FactorCompleted%=</b>	Number	If „Completed%“ (see [Columns]) is handed over as a decimal fraction (e. g. 0.3 = 30%) „100“ must be set as the factor, default value is „1“ (30 = 30%)
<b>FactorUsage%=</b>	Number	If „Usage%“ (see [Columns]) is handed over as a decimal fraction (e. g. 0.3 = 30%) „100“ must be set as the factor, default value is „1“ (30 = 30%)

## Paragraph [Columns]

Positions of columns of data to be read.

Fields which are not used can either be deleted or set to „0“.

To ease the use of MS Excel files, letters may also be used as identifiers for columns.

Explanations of the fields are provided below the table.

Parameter	Values	Content of the column concerned
<b>No=</b>	0 - 32 / A - AE	Number of line (if no columns exist, lines are numbered internally by A-Plan)
<b>Date=</b>	0 - 32 / A - AE	Date of collected time
<b>TimeIn=</b>	0 - 32 / A - AE	Date and/or time of begin
<b>TimeOut=</b>	0 - 32 / A - AE	Date and/or time of end
<b>Duration=</b>	0 - 32 / A - AE	Duration (any format)
<b>Mo=</b>	0 - 32 / A - AE	Duration on Monday (any format)
<b>Tu=</b>	0 - 32 / A - AE	Duration on Tuesday (any format)
<b>We=</b>	0 - 32 / A - AE	Duration on Wednesday (any format)
<b>Th=</b>	0 - 32 / A - AE	Duration on Thursday (any format)
<b>Fr=</b>	0 - 32 / A - AE	Duration on Friday (any format)
<b>Sa=</b>	0 - 32 / A - AE	Duration on Saturday (any format)
<b>Su=</b>	0 - 32 / A - AE	Duration on Sunday (any format)
<b>Completed%=</b>	0 - 32 / A - AE	Scope of completion (see also „FactorCompleted%“ in [Options])
<b>Usage%=</b>	0 - 32 / A - AE	Usage (see also „FactorUsage%“ in [Options])
<b>FolderIdentNo=</b>	0 - 32 / A - AE	Ident no of the folder in A-Plan
<b>ProjectIdentNo=</b>	0 - 32 / A - AE	Ident no of the project in A-Plan
<b>TaskIdentNo=</b>	0 - 32 / A - AE	Ident no of the task in A-Plan
<b>FolderDesignation=</b>	0 - 32 / A - AE	Designation of the folder in A-Plan
<b>ProjectDesignation=</b>	0 - 32 / A - AE	Designation of the project in A-Plan
<b>TaskDesignation=</b>	0 - 32 / A - AE	Designation of the task in A-Plan
<b>FolderIndex=</b>	0 - 32 / A - AE	Index of the folder in A-Plan
<b>ProjectIndex=</b>	0 - 32 / A - AE	Index of the project in A-Plan
<b>TaskIndex=</b>	0 - 32 / A - AE	Index of the task in A-Plan
<b>GroupIdentNo=</b>	0 - 32 / A - AE	Ident no of the resource group in A-Plan

<b>ResourceIdentNo=</b>	0 - 32 / A - AE	Ident no of the resource in A-Plan
<b>GroupDesignation=</b>	0 - 32 / A - AE	Designation of the resource group in A-Plan
<b>ResourceDesignation=</b>	0 - 32 / A - AE	Designation of the resource in A-Plan
<b>GroupIndex=</b>	0 - 32 / A - AE	Index of the resource group in A-Plan
<b>ResourceIndex=</b>	0 - 32 / A - AE	Index of the resource in A-Plan
<b>Absence=</b>	0 - 32 / A - AE	Kind of absence
<b>Remark=</b>	0 - 32 / A - AE	Any text
<b>Read=</b>	0 - 32 / A - AE	Column into which A-Plan enters „ok“ after a successful import or enters messages if errors or problems occurred

### ***Format of actual times***

#### **Number**

- If the column does not exist, lines are numbered internally by A-Plan.
- If the number column exists, any lines may exist at the beginning of the file as A-Plan will read only those lines which have a valid number in this column.

There are several possibilities of handing over actual times to A-Plan. Some examples are shown below.

#### **Handing over the actual time by specifying begin and duration**

<b>Begin</b>	<b>Duration</b>
23.06.2010 08:00	3.5 h

or

<b>Date</b>	<b>Begin</b>	<b>Duration</b>
23.06.2010	08:00	3.5 h
	13:00	2.0 h

The duration can be handed over in any format that may be interpreted as a period of time. Afterwards, it is automatically converted into the format set in A-Plan.

Examples of handing over **3.5 h**: „3.5 h“ / „3.5h“ / „3 hrs 30 min“ / „3:30“ / „210 min“

If several successive lines refer to the same day, the date must be entered in the first line only.

#### **Handing over the actual time by specifying begin and end**

<b>Begin</b>	<b>End</b>
23.06.2010 08:00	23.06.2010 11:30

or

Date	Begin	End
23.06.2010	08:00	11:30
	13:00	15:00

If several successive lines refer to the same day, the date must be entered in the first line only.

#### Handing over the actual time by specifying week and duration on each day of the week

Date	Mo	Tu	We	Th	Fr	Sa	Su
22.06.2010 08:00	5.0 h						
		3.5 h					
				4.0 h			

In the column **Date**, any date within the week concerned can be entered in the first line. For reasons of clearness we recommend you to use the date of the Monday of the week concerned. The time of the day entered together with the **Date** is interpreted as the begin.

#### **Completed%, Usage%**

In the column **Completed%**, the current level of completion can be specified. This enables A-Plan to forecast the probable end of the task (see the chapter **Project status** in the manual or in the online help). If no value is specified, A-Plan calculates the level of completion with the help of the planned work (e. g. planned = 10 h, actual= 5 h results in a level of completion of 50%).

If the task concerned was dealt with a capacity other than 100% during the specified time, this may be entered in the column **Capacity%**. The specified duration will then be shortened accordingly.

#### **Identification of tasks which have been worked upon**

Actual times to be imported can either be assigned to individual tasks or to all tasks included in a summary, a project or a folder.

With regard to identification, there are several possibilities as well:

#### **Identification of the task(s) by specifying an Ident number**

FolderIdentNo	ProjectIdentNo	TaskIdentNo
03	03-02	03-02-0145

We recommend you to use a unique number for the identification of the task concerned (Column **IdentNo** in A-Plan) as the risk of mistakes resulting from different ways of writing is lower with numbers than with designations (see below).

If the ident no of the task is unambiguous, i.e. if it has not been assigned to any other task, you need not assign ident numbers to the involved project or folder.

If the involved task is a summary row with more tasks below it, the actual time is distributed to the lower-level tasks with the ratio being equivalent to the planned work of each task.

The same applies if nothing else but the ident no of a project or folder has been specified. In such cases the actual time is distributed to the entire folder or the entire project with the ratio being equivalent to the planned work.

#### Identification of the task(s) by specifying the designation

FolderDesignation	ProjectDesignation	TaskDesignation
Development projects	Project 4711	List of requirements

As long as the designation of the task or project is unambiguous in such a way that it does not exist somewhere else in the A-Plan database, you need not specify the project and/or the folder designation.

If the involved task is a summary row with further tasks below it, the actual time is distributed to the lower-level tasks with the ratio being equivalent to the planned work of each task.

The same applies if no task or project is specified. In such cases the actual time is distributed to the entire folder or the entire project with the ratio being equivalent to the planned work.

#### Identification of the task(s) by specifying the database index

FolderIndex	ProjectIndex	TaskIndex
1	3	4

Within an A-Plan database, each folder, project and task is given an index which can be found in the **Index** column. Like ident numbers and designations, these indices can be used for the identification of tasks. However, the specification of all three indices is required (of folder, project and task). This way of identifying tasks should be used in exceptional cases only as the index of a task may change, for example, when a task is moved into another project.

#### *Identification of resources*

Read actual times can be assigned to a specific resource or to all resources working on a task in A-Plan.

Basically, the possibilities of identification are the same as with tasks:

#### Identification of the resource(s) by specifying the Ident number

GroupIdentNo	ResourceIdentNo
	2000100
2000000	

We recommend you to use the ident number for the identification of a resource (Column **IdentNo** in A-Plan) as the risk of mistakes resulting from different ways of writing is lower with numbers than with designations.

To assign the actual time to a specific resource requires nothing else but the ident number of the resource, i.e. you need not specify the ident number of the resource group.

To distribute the actual time to all resources of the group working on the task, just enter the ident number of the group. The distribution ratio will be equivalent to the planned work of each resource.

With no resource or group specified, the actual time is distributed to all resources assigned to the task concerned. The distribution ratio will be equivalent to the planned work of each resource.

### Identification of the resource(s) by specifying the designation

GroupDesignation	ResourceDesignation
	Gordon Moore
Team 1	

To identify a resource with the help of its designation, the writing of the name must be exactly the same as in A-Plan. If a resource name exists several times in different groups, the group designation must be specified as well.

To distribute the actual time to all resources of the group assigned to the task, nothing else but the designation of the group must be specified. The distribution ratio will be equivalent to the planned work of each resource.

With no resource or group specified, the actual time is distributed to all resources assigned to the task concerned. The distribution ratio will be equivalent to the planned work of each resource.

### Identification of the resource(s) by specifying the database index

GroupIndex	ResourceIndex
3	4

Within an A-Plan database, each group and each resource is given an index which can be found in the **Index** column. Like ident numbers and designations, these indices can be used for the identification of tasks. For resources, however, the specification of both indices is required (of group and of resource). This way of identifying resources should be used in exceptional cases only as the index of a resource may change, for example when it is moved into another group.

### Identification of the resource at a random field in the import file

	A	B	C	D
1				
2			Gordon Moore	
3				
4	No	Date	TimeIn	TimeOut
5	1	01/19/2009	8:00:00 AM	4:00:00 PM
6	2	01/28/2009	12:00:00 PM	3:00:00 PM

If all data of an import file refer to a single resource, the identification of the resource can be made by specifying the field(s) which hold the designation, the ident number or the index of the resource.

In this case, the specification of the field(s) consists of two numerals or of a numeral and a letter separated by a semicolon. For the example above, the entry in the file „TimeTracking.ini“ would look like that:

```
...  
No=A  
...  
Resource designation=C;2  
...
```

With this way of specifying, the number column is necessary to make A-Plan start the reading of data not earlier than in line no. „5“ .

### **Remark**

<b>Remark</b>
Text of any length

A text of any length can be entered into this column.

### **Absence**

<b>Absence</b>
Designation of the absence

If an entry exists in this column, the period found in this column will be interpreted as absence when data are imported. The period will be entered in A-Plan in the row **Absences of the resource** and the time bar is given the designation of the absence.

Supposed that a **Pattern** with the designation of the time bar exists in A-Plan (see the Online help or the manual of A-Plan, chapter „Options“ / „Database settings“ / „Bar patterns“), the time bar is displayed with this pattern.

### **Read**

<b>Read</b>
„ok“ or error message (entered by A-Plan)

If this column exists, A-Plan will enter „ok“ after data has been read successfully. Otherwise, if errors occur such as data missing, tasks or resources not identified properly, invalid formats, an error message is entered.

When the file is imported a second time (e.g. after detected errors have been corrected), lines having „ok“ in the **Read** column will be jumped over. All other entries in this column will be ignored when data are imported.

---

## STARTING THE IMPORT OF ACTUAL TIMES

The import is either carried out regularly according to the interval set in the file **Time-Tracking.ini** (see the chapter **Settings**) or is triggered by selecting **Read actual times** from the ribbon tab **Files / Export, Import ...**

---

## LOGFILE

A logfile of the import is created in the import file folder in the file **Importlst.log**:

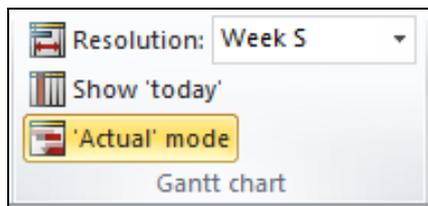
Examples of entries made in the logfile:

```
*****  
*  
13.01.2010 11:09:14: Import of actual times started!  
13.01.2010 11:09:14: Reading the file '\\Server2\A-Plan\Timetracking\Times2.xls'  
13.01.2010 11:09:27: Line2: invalid date or invalid number!  
13.01.2010 11:09:34: 1 file(s) with a total of 23 lines read!  
13.01.2010 11:09:35: Import of actual times finished!
```

## PRESENTATION OF ACTUAL TIMES IN A-PLAN

Actual time periods spent on a task are displayed in A-Plan as **actual task bars** and their effects on the further course of the project are calculated (see the chapter *Project status* in the manual of A-Plan as well).

### EXAMPLE



To have actual times displayed, activate '**Actual**' mode at the ribbon tab **Start**. If this button is not visible, please activate the option Actual vs target values in the ribbon tab Tools.

#### Display without existing actual times

As no work has been spent, the columns **Work actual** and **Completed%** are still empty. **Actual task bars** in the Gantt chart are identical to **planned task bars** (in the background) and the **grey triangles** at the begin of the planned task bars likewise indicate that no work has yet been spent on that task:

Task	Ident-No.	Resources	Work Pl'd	Work Act	Finished %	Work progn	End progn-Pl'd	Jan 2010			
								Tu, 01/19	We, 01/20	Th, 01/21	Fr, 01/22
▢ Repairs (4)			70 wh	0 wh	0 %	70 wh	0 h				
▣ EC 345	R02345	Hall	20 wh	0 wh	0 %	20 wh	0 h				
▣ SR 630	R02346	Hall	10 wh	0 wh	0 %	10 wh	0 h				

Res./Task	Ident-No.	Project	Work Pl'd	Work Act	Finished %	Tu, 01/19	We, 01/20	Th, 01/21	Fr, 01/22
▢ Hall (2)	30000200					■	■	■	■
EC 345	R02345	Repairs	20 wh	0 wh	0 %				
SR 630	R02346	Repairs	10 wh	0 wh	0 %				

#### Display with existing actual times

For task EC 345 (Ident-No R02345) two time periods have been imported. The level of completion after the second time period amounts to 40%:

	A	B	C	D	E	F	G	H
1	No	Date	TimeIn	Duration	Completed%	TaskIdentNo	ResourceIdentNo	Read
2	1	1/19/2010	10:00:00 AM	4h	15%	R02345	30000200	ok
3	2	1/20/2010	12:00:00 PM	6h	40%	R02345	30000200	ok

The total of imported times is shown in the column **Work actual**. Both the prognosticated work as well as the prognosticated end are calculated with the help of the current level of completion (**Compl%**). The grey color indicates the part of the actual task bar that has been worked upon. Even the level of completion in % is shown if the respective setting was made (see **Options / Screen Setup / Task bars**).

Task	Ident-No.	Resources	Work Pl'd	Work Act	Finished %	Work progn	End progn-Pl'd	Jan 2010						
								Tu, 01/19	We, 01/20	Th, 01/21	Fr, 01/22	Sa		
[-] Repairs (4)			70 wh	10 wh	13 %	75 wh	0 h							
[-] EC 345	R02345	Hall	20 wh	10 wh	40 %	25 wh	7 h							
[-] SR 630	R02346	Hall	10 wh	0 wh	0 %	10 wh	7 h							
2/2   8/8														
Res./Task	Ident-No.	Project	Work Pl'd	Work Act	Finished %	Tu, 01/19	We, 01/20	Th, 01/21	Fr, 01/22	Sa				
[-] Hall (2)	30000200													
EC 345	R02345	Repairs	20 wh	10 wh	40 %									
SR 630	R02346	Repairs	10 wh	0 wh	0 %									

# SYNCHRONIZATION MODULE (OPTIONAL)

## INTRODUCTION

The optional add-on synchronization module for A-Plan enables the synchronization of **two A-Plan databases**, between **A-Plan and MS Outlook** as well as between **A-Plan and MindManager** .

### *Synchronisation of two A-Plan databases*

The synchronization of **two A-Plan databases** allows you to reconcile data created, changed or deleted outside of the usual working environment with a central A-Plan database – and vice versa.

### *Synchronisation with MS Outlook*

The synchronization with **MS Outlook** (version 97 or higher, not **MS Outlook Express**) will save you the work of entering data twice, for example, if you use A-Plan to manage tasks or projects and want them to be visible in MS Outlook as well or if dates entered in MS Outlook are to appear in A-Plan also. Likewise, absence times can be synchronized and must be entered only once.

### *Synchronization with MindManager*

The **MindManager** of the company Mindjet (see <http://www.mindjet.com>) is very useful when it comes to developing the project structure in an interactive way at the beginning of the project.

As an interface exists between A-Plan and MindManager, the created structure with all its descriptions, dates, appendices etc. can be transferred easily to an A-Plan database where the detailed scheduling and the assignment of resources can be done.

The interface may also be used to display existing A-Plan projects in MindManager as a **Mindmap** or as a work breakdown structure.

## SYNCHRONIZATION WITH ANOTHER A-PLAN DATABASE

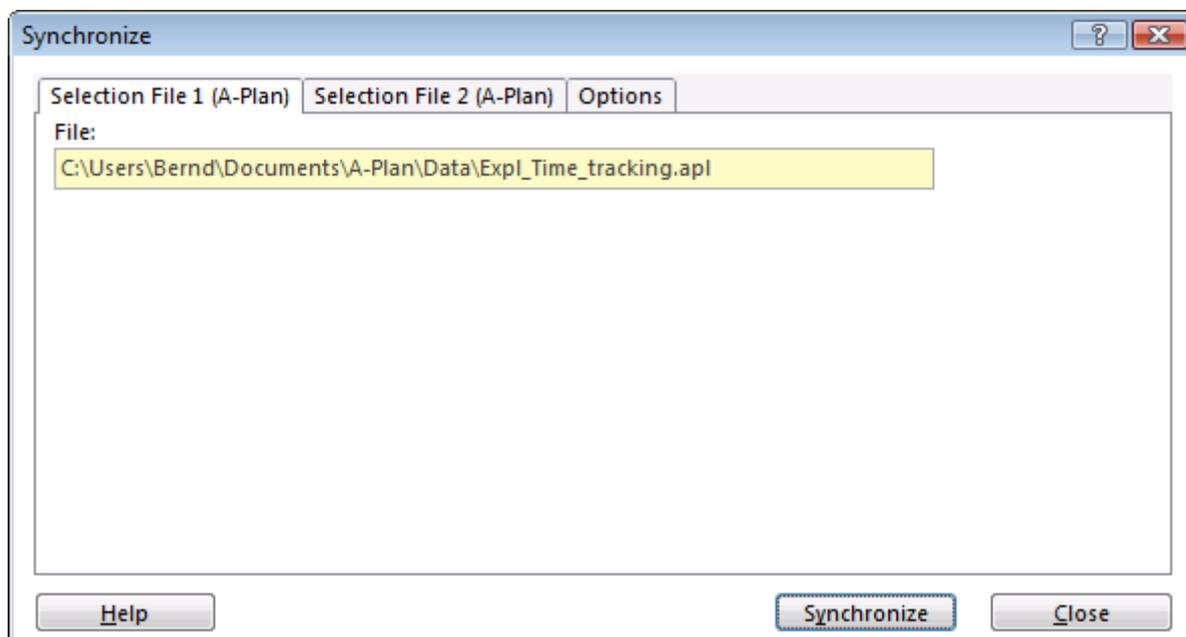
### STARTING THE SYNCHRONIZATION

To open the dialog box for setting and starting the synchronization either click **Synchronize** in the tab **File** or use the key combination **SHIFT+F6**.

### SELECTION OF DATA TO BE SYNCHRONIZED

#### SELECTION FILE 1

As a general rule, the first file is the A-Plan database which is opened at the current time. For this reason, no setting is to be made in the first tab when two A-Plan databases are to be synchronized:



Normally, the synchronization can be started from the **central database** only. The file from which the synchronization is started automatically becomes the **central database**. Starting the synchronization from another database is not possible unless you have administrator rights. If this is done, another database will become the central database.

#### **Note:**

As a general rule, **database settings** and **users** will not be synchronized. Instead, the entries existing in the central database will be used.

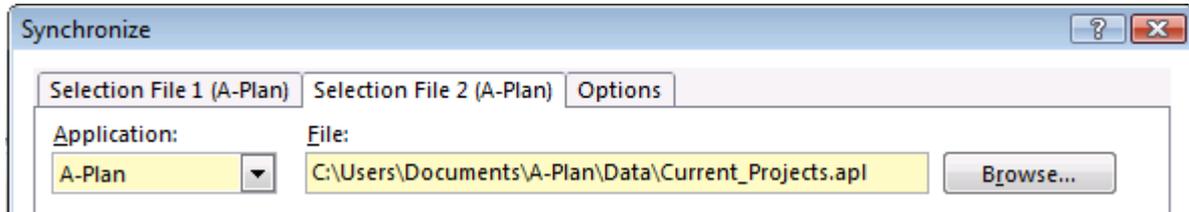
As the synchronization might change a large amount of data within a rather short time, **no other users should have opened the central file** while the synchronization is being run. Otherwise, a message listing the users concerned will come up before the synchronization is started.

As long as other users have opened the database to be synchronized, the synchronization should be run as an exception only, for example, if rather few data were changed in the second file only.

## SELECTION FILE 2

In the second tab, select the **application** "A-Plan" from the box in the top left.

Type the name of the second A-Plan database in the entry field **File** or click on **Browse** to select the file from a folder:

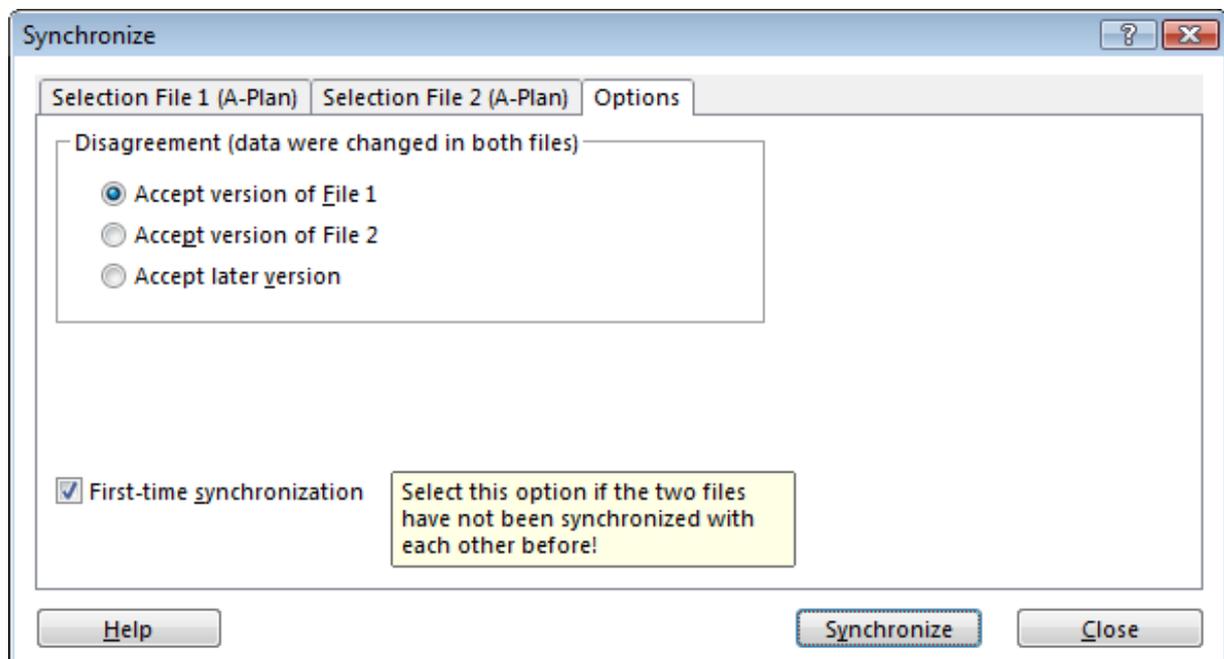


In the network version of A-Plan, both the current **user** and the **password** entered in the **second** database must be the same as those entered in the currently opened database. Furthermore, **make sure that no other user has opened this database** or will open it while the synchronization is run.

## OPTIONS WHEN SYNCHRONIZING TWO A-PLAN DATABASES

### **Note:**

In the network version, **you must have administrator rights** to change these options.



### **Disagreement**

If there is disagreement, i.e. some of the data to be synchronized were changed in both file 1 and file 2, the decision will be made on the basis of this setting.

### **First-time synchronization**

If two A-Plan databases are to be **synchronized for the first time**, this option must be check-marked. This will have the effect that the selected contents of both files will be reconciliated.

In the case of a first-time synchronization, **make sure that identical data do not exist in both files**. Otherwise, identical data will exist twice after the synchronization has is finished. **If identical entries exist**, delete them from the second file prior to running the synchronization.

---

## BACK-UP COPIES WHEN SYNCHRONIZING TWO A-PLAN DATABASES

Prior to being synchronized, both A-Plan files are **automatically saved in a backup copy** (see "Safety" on page 128).

A backup copy of the second A-Plan database can be made only if it has not been opened by any other users at the time of backup. If no backup can be made, a warning message is displayed. The synchronization can nevertheless be started if you confirm this in the warning message but we urgently advice you not to do so..

## SYNCHRONIZATION WITH MS OUTLOOK

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### PARTICULARITIES IN THE SYNCHRONIZATION WITH MS OUTLOOK

#### SEVERAL TASK BARS IN ONE ROW

If several task bars exist in A-Plan in one row, MS Outlook will create a separate task or a separate date from each task bar. To distinguish them, in MS Outlook they are given either the designation "*Name Row | Name Task bar*" or – if the task bars have no designations of their own - "*Name Row | consecutive no.*".

Notes entered in A-Plan for a task bar are marked in Outlook at their begin with "TB:" to distinguish them from notes entered in the notes column.

#### SERIES OF DATES IN MS OUTLOOK

In MS Outlook, series of dates are not organized in the same way as in A-Plan. For this reason, only the first date of a series can be transferred from MS Outlook to A-Plan and if the date concerned is changed in A-Plan, the change cannot be transferred to MS Outlook. Therefore, it is recommended to create series of dates in A-Plan as one entry is created in MS Outlook for each date when data are synchronized. This way of proceeding ensures that the synchronization is not subject to any restrictions.

#### SHOWING "FOLDERS", "PROJECTS" AND "TASKS" IN MS OUTLOOK

Two different possibilities are provided enabling you to see the assignment of dates to A-Plan "Folders", "Projects" and "Tasks" in MS Outlook as well:

##### ***Assignment in the subject designation***

Optionally, you may make "Folders" and "Projects" precede the subject designation (see "Options for synchronization with MS Outlook" on page 226):

Calendar		
Subject	Start	
Click here to add a new Appointment		
Categories: Business (28 items)		
E-Business\Identify departments	Fri 20/02/2004 06:00	
E-Business\Milestones\Proj.Start	Fri 20/02/2004 06:00	
E-Business\Determine contact persons	Wed 25/02/2004 06:00	
E-Business\Identify processes	Wed 10/03/2004 06:00	

With the options activated, assignments are always visible but designations may become rather long.

**Note:**

Changing the "Folder" or "Project" designation in the reference of MS Outlook will not result in the assignment being changed in A-Plan! As a general rule, assignments can be changed in A-Plan only.

**Assignment in user-defined fields**

When data are transferred from A-Plan, MS Outlook will always create the user-defined fields "Folder", "Project" and "Task" and will transfer the corresponding designations. In the list view of MS Outlook, e. g. **Events** in the calendar (menu View / Current View / Events), you can have these fields displayed:

Calendar				
Subject	Project	Task	Start	End
Click here to add a new Appointment				
Categories: Business (28 items)				
E-Business\Identify departments	E-Business integ		Wed	
E-Business\Milestones\Proj.Start	E-Business integ		Fri 20	
E-Business\Determine contact persons	E-Business integ		Tue 10	
E-Business\Identify processes	E-Business integ		Mon	

If you want the **user-defined folder fields** to be shown, click on one of the column headings with the right mouse button first. Then, click on **Field Chooser** in the displayed dialog box and finally choose **User-defined fields in folder** from the field at the top of the dialog box..

Use the mouse to drag the fields to the requested position at the column headings.

**Note:**

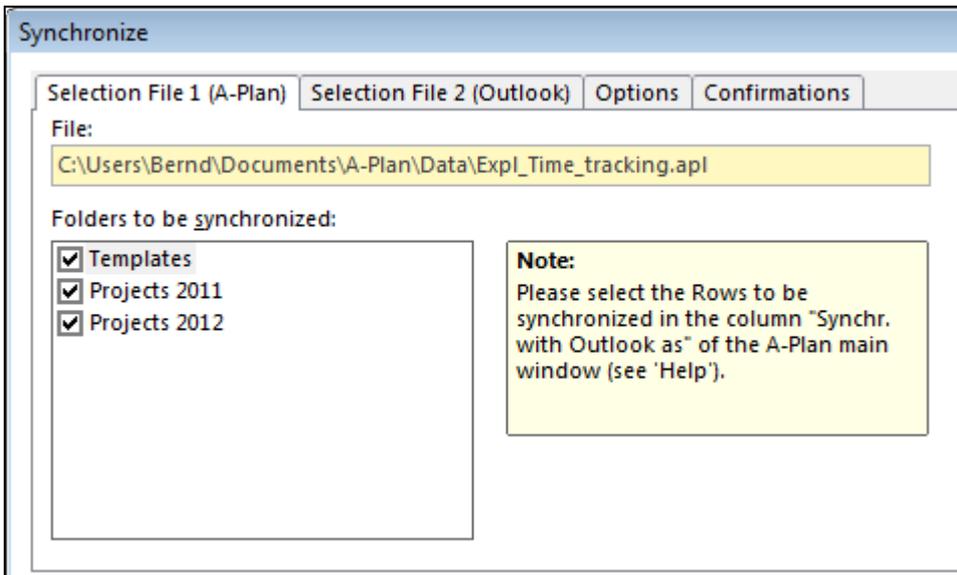
The field **APlanID** is also created during the synchronization to enable a distinct assignment of data records in MS Outlook to data records in A-Plan.

## SELECTION OF DATA TO BE SYNCHRONIZED

### SELECTION FILE 1 (A-PLAN)

To make additional settings in a dialog box or to start the synchronization, either click **Synchronize** in the tab **File** or use the key combination **SHIFT+F6**.

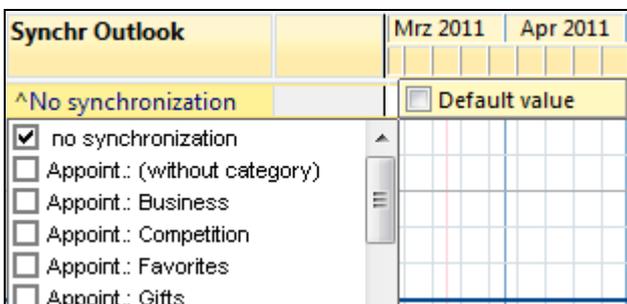
File 1 is the currently opened A-Plan database. Select the **folders** to be synchronized from the list to have the data of the folders reconciliated with the respective data in MS Outlook:



#### **Note:**

**Working hours** and **resources** (= groups) cannot be synchronized with MS Outlook as the respective data fields do not exist in MS Outlook.

For the selected **folders**, you can specify the rows to be synchronized and whether they are to be synchronized as **tasks** or **appointments** together with the **category** to be used. To make these settings, a new column named **Synchr. with Outlook as** is provided in the main window of A-Plan (see **Tools / Options** in A-Plan). Double-click on a value in this column to make the respective assignment:



You are allowed to assign several categories to a task. However, transferring a task to MS Outlook both as a **task** and an **appointment** is not possible. If the synchronization is to be suppressed, choose the first entry **No synchronization** from the list.

With **Default value** selected (top right), A-Plan will use the value selected on the next higher level.

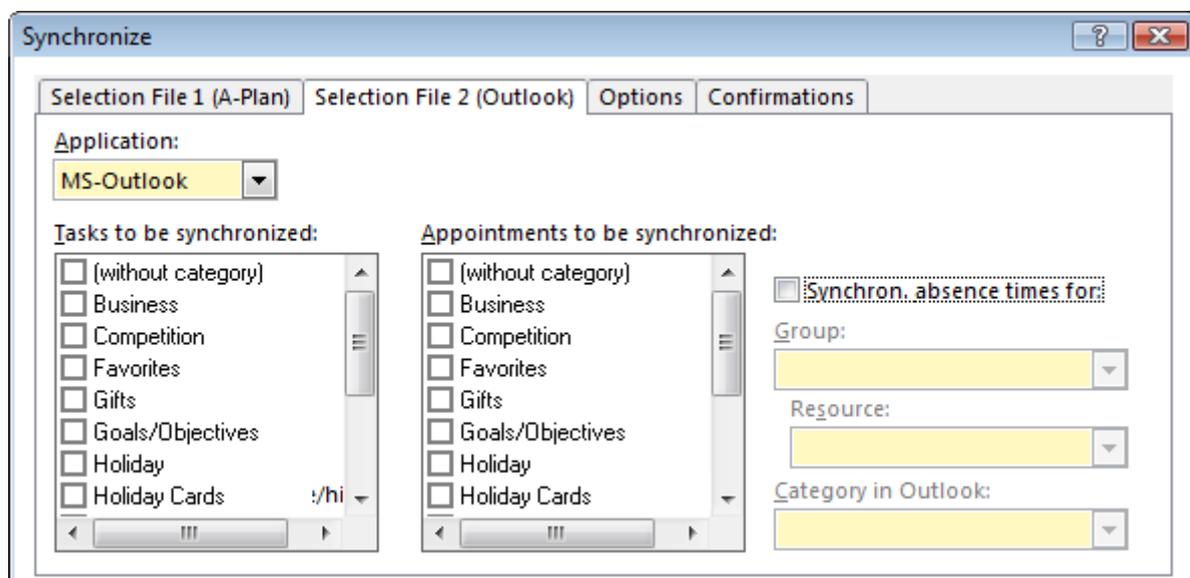
As a general rule, project rows serving as **summaries** (which include one or several tasks) and **folders** are not synchronized. As a consequence, the value entered in the column **Synchr. with Outlook as** of these rows is of no importance apart from being used as a **default value** for the rows on lower levels.

In the **network version** of A-Plan, these settings are saved separately for each user. This means that each user entered in the user administration to make his own settings regarding the synchronization of data.

## SELECTION FILE 2 (OUTLOOK)

In the second tab choose the **application** "MS Outlook" from the box at the top left. In the box to the right of it, this will display the **active Outlook file** in which tasks, appointments, emails etc. are saved in Outlook (this is not true if MS Outlook is used with MS Exchange Server).

From the two lists you can choose the categories of the **tasks** and **appointments** (= calendar in MS Outlook) that are to be synchronized with A-Plan:

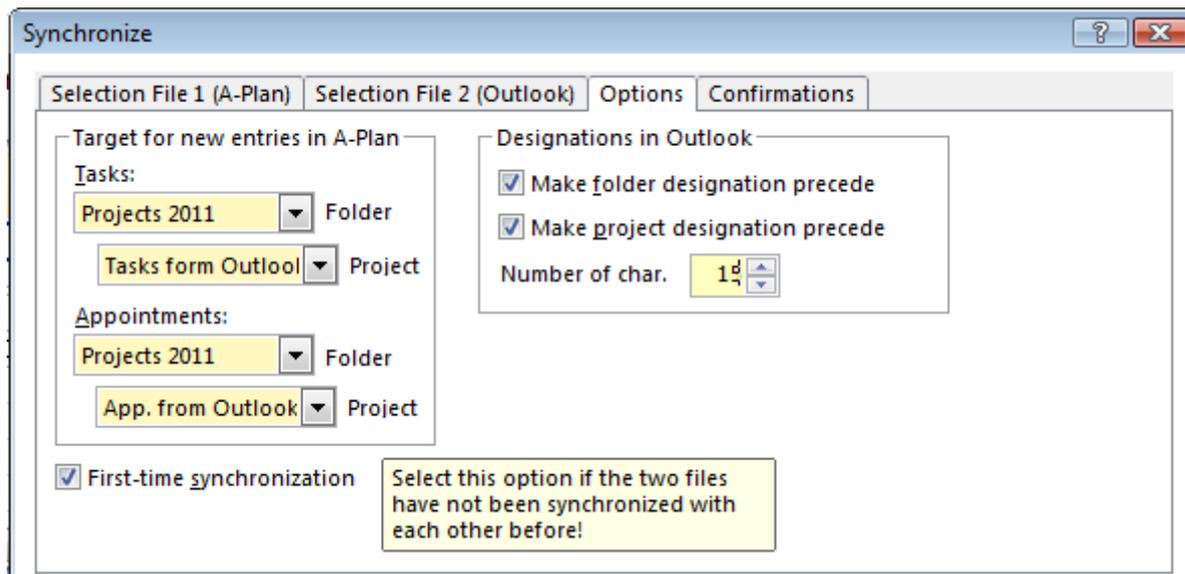


**Absences** (see "Absences" on page 90) can be synchronized as well. This is done by selecting from the displayed dialog box the resource to which the absences entered in MS Outlook refer. Absences must be assigned in MS Outlook to the same category or are assigned to the same category if they were entered in A-Plan.

### **Notes:**

Tasks and/or appointments assigned to several categories in MS Outlook are synchronized only once.

## OPTIONS FOR SYNCHRONIZATION WITH MS OUTLOOK



### **Target for new entries in A-Plan**

When synchronizing with MS Outlook use the options to determine the **folders** and/or **projects** to which new **tasks** and/or **appointments** are to be assigned. This assignment cannot be made in MS Outlook. When the synchronization is finished, the new entries can be moved to another position in A-Plan. With this done, the new position will be preserved when follow-up synchronizations are performed. For this reason it may be more favorable to make new entries in A-Plan.

### **Data backup**

The A-Plan file is saved in a backup copy automatically before a synchronization is started.

With the option **Backup Outlook data** activated, the MS Outlook file is also backed up prior to being synchronized (no backup copy is made if the MS Exchange Server is used, see below).

Clicking on the button **Restore Outlook data** will restore the MS Outlook file in the version saved last.

Nevertheless, make sure to include the Outlook file in the backup scheme of your computer or server. The name and folder of the Outlook file can be seen from the tab "Selection File 2 (Outlook)". The backup copy created by A-Plan is saved in this folder as well. It can be identified from the extension .bak (instead of .pst).

### **MS Outlook with MS Exchange Server**

As the described backup routine cannot be performed if MS Outlook is used with the **MS Exchange Server**, you should make sure that the Exchanger Server database is saved at regular intervals.

## Designations in Outlook

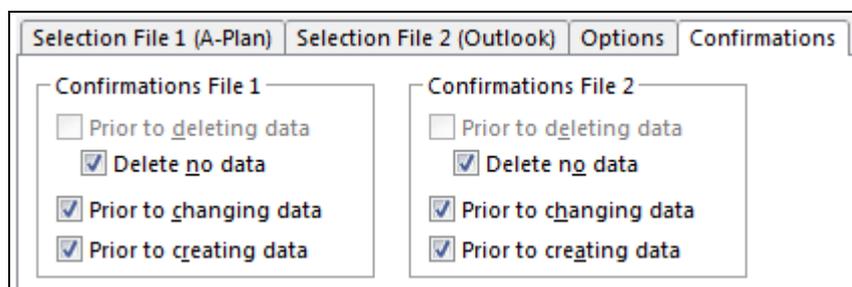
With these options activated, the designations of folders and projects are shown in the reference of MS Outlook (for an example see "Showing "Folders", "Projects" and "Tasks" in MS Outlook" on page 222). To prevent the reference from being too long, the number of used characters can be limited.

## First-time synchronization

If an A-Plan database is synchronized with MS Outlook for the first time, the respective check box must be activated. In this case, the selected contents of both files are joined.

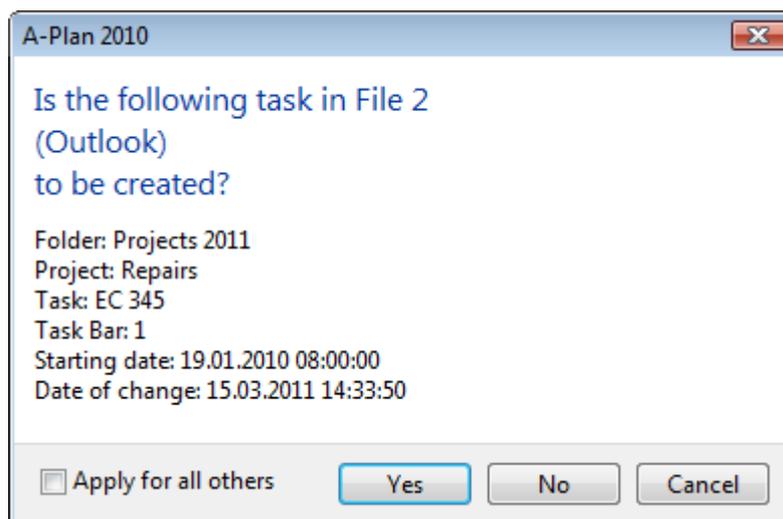
In the case of first-time synchronization, make sure that **data selected for synchronization do not exist in both files already**. Otherwise, these data will exist twice in both files afterwards. Therefore, **delete identical entries** from one of the files prior to starting the synchronization.

## CONFIRMATIONS



Use the last tab to determine those activities which must be confirmed before they are executed. Apart from that you can prevent data from being deleted in one of the files or in both files.

Example of an activity requiring confirmation:



**When doing the first synchronizations, you should have activated all confirmations. This will enable you to check whether the synchronization is executed the way you want it to be executed!**

Clicking on **use for all follow-up prompts of this type** will have the effect that all follow-up changes of the same type ("Creation of data in File 2 "in the above example) will be executed without the user being asked to confirm them..

### Disagreement

In case of a disagreement (i.e. a task was changed both in file 1 and in file 2) the user will be prompted to determine what to do if the respective check box has been activated. Otherwise, the version used depends on the setting you made by clicking on one of the last three buttons.

## STARTING THE SYNCHRONIZATION, LOGFILE

Click on the button **Synchronize** to trigger the synchronization.

A logfile is displayed in the lower half of the dialog box during synchronization:

Operation	Folder/Group	Project/Resource	Task	Begin
New in file 1:	Construction proj.	Kings Road	Room Basem. 1	03/02/04 06:00:00
New in file 1:	Construction proj.	Kings Road	Room Basem. 3	06/02/04 06:00:00
New in file 1:	Construction proj.	Kings Road	Doors, windows	06/02/04 06:00:00
New in file 1:	Construction proj.	Kings Road	Electrical installation	06/02/04 06:00:00
New in file 1:	Construction proj.	Kings Road	Plasterwork.	25/02/04 06:00:00
New in file 1:	Construction proj.	Kings Road	Painting	25/02/04 06:00:00
Stop: 15:12:53				
Summary:				
New in File 1:	28 Objects			
New in File 2:	40 Objects			

The logfile is saved with the file name **synchron.log** in the current profile folder of A-Plan ("My Documents\A-Plan\Profiles"):

```

*****
Synchronization with A-Plan
File 1: D:\Aufg80\Data\Exp_Project_planning.apl
File 2: D:\Aufg80\Data\Exp_Construction_Scheduling.apl
last synchronisation: 30/12/1899 00:00:00
Transfer options from: 2
In case of disagreement: 0
New entries: 5, 1, 5, 1
Folder 1: Examples 1, Examples 2, Internal staff, External staff
Folder 2: Construction proj., Carpenters, Bricklayers, Electricians, Painters, Vehicles
-----
Start: 28/05/2004 15:11:59
- New in file 2: Internal staff | - | -
- New in file 2: Internal staff | Schulz | -
- New in file 2: Internal staff | Miller | -
- New in file 2: Internal staff | Stevens | -
- New in file 2: External staff | - | -
- New in file 2: External staff | WBA Ltd. | -
- New in file 2: Examples 2 | - | -
- New in file 2: Examples 1 | - | -
- New in file 2: Examples 1 | E-Business integration | - | 20
- New in file 2: Examples 1 | E-Business integration | Milestones | 20
- New in file 2: Examples 1 | E-Business integration | Processes | 20
- New in file 2: Examples 1 | E-Business integration | Identify departments | 20
- New in file 2: Examples 1 | E-Business integration | Determine content | 20

```

# SYNCHRONIZATION WITH MINDMANAGER

## GENERAL NOTES

The **MindManager** of the company Mindjet (siehe <http://www.mindjet.com>) is very useful when it comes to developing the project structure in an interactive way at the beginning of the project.

As an interface exists between A-Plan and MindManager, the created structure with all its descriptions, dates, appendices etc. can be transferred easily to an A-Plan database where the detailed scheduling and the assignment of resources can be done.

As soon as the first synchronization was carried out, changes can be updated easily in both programs with the click of a button.

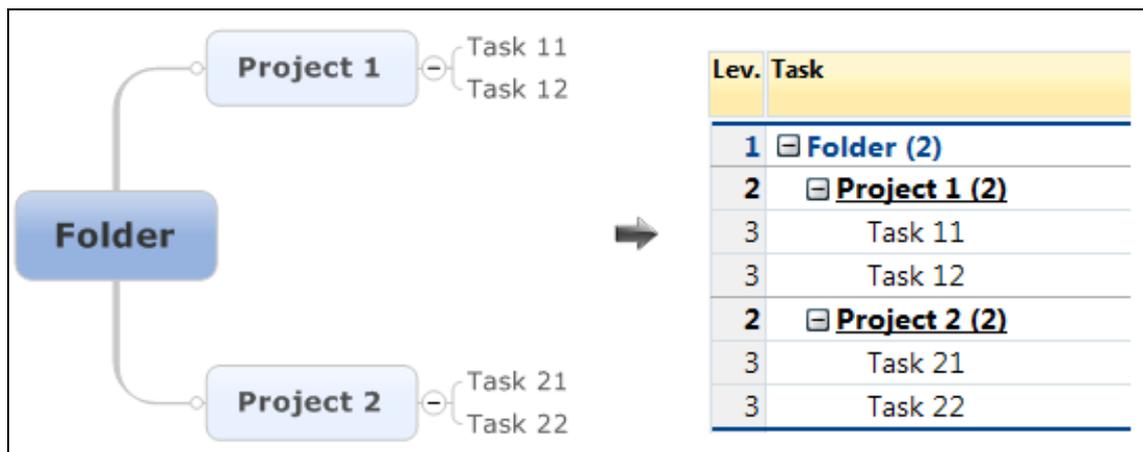
The interface may also be used to display existing A-Plan projects in MindManager as a **Mindmap** or as a work breakdown structure (siehe "Presentation of A-Plan Projects as Mindmap or WBS" on page 231). With this done, data can be edited on both sides.

The interface cooperates with all versions of the MindManager which support the format "xmmap" (this is true since version 5). Creating or reading an xmmap file can be done without installing the MindManager on your computer.

### Synchronizing a MindManager file with A-Plan

Data created with the MindManager can be inserted into an existing A-Plan database or - if the currently opened A-Plan database is still empty - can be used as the basis for a new A-Plan database.

The highest level („root“) of a MindManager file corresponds to the folder level of A-Plan while the next lower levels in MindManager will be projects in A-Plan:



If a folder in A-Plan has the designation of the MindManager root, the synchronization will insert the project(s) from the MindManager file into the folder of the A-Plan database that has the same name. Otherwise, a new folder will be created.

After projects have been transferred to A-Plan, the MindManager projects and the corresponding A-Plan projects are linked to each other. If changes are made in such projects

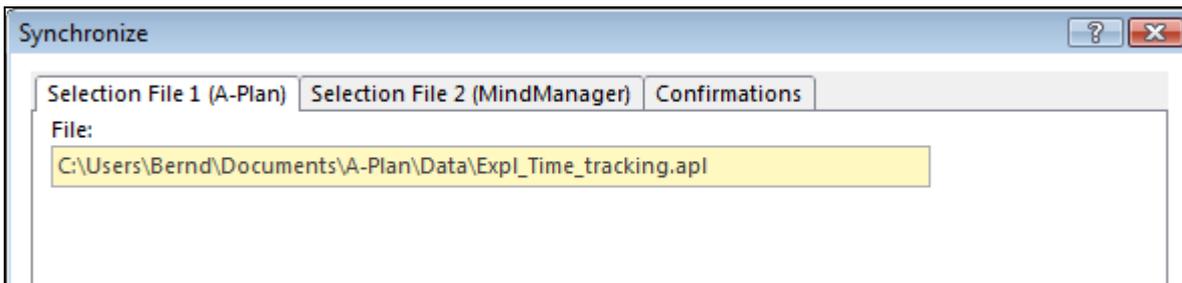
(designations, dates, structure etc.) in one of the two applications, they can be transferred easily to the other application by synchronizing the projects once again.

The function described above just allows you to transfer new projects from **MindManager to A-Plan**. To transfer new A-Plan projects to MindManager, please use the function described in "Presentation of A-Plan Projects as Mindmap or WBS " on page 231.

## SELECTION OF DATA TO BE SYNCHRONIZED

### **Selection File 1 (A-Plan)**

As a general rule, the first file is the currently opened A-Plan database. Hence you do not have to make any entries in the first tab when synchronizing with MindManager:

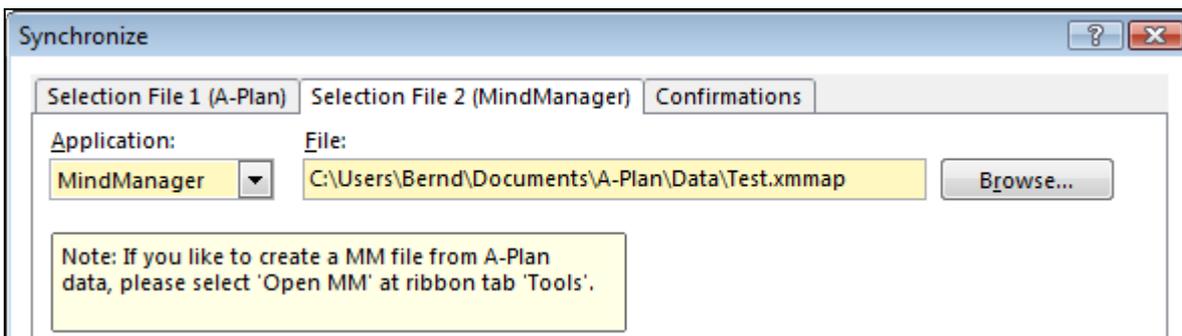


As a relatively large amount of data is changed during the synchronization, the central file should not be opened by other users during this process. A window listing the names of involved users is displayed if the central database is opened by other users.

Under these circumstances a synchronization should be carried out as an exception only, for example, an exception may be that only a small amount of data was changed in the MindManager file.

### **Selection File 2 (MindManager)**

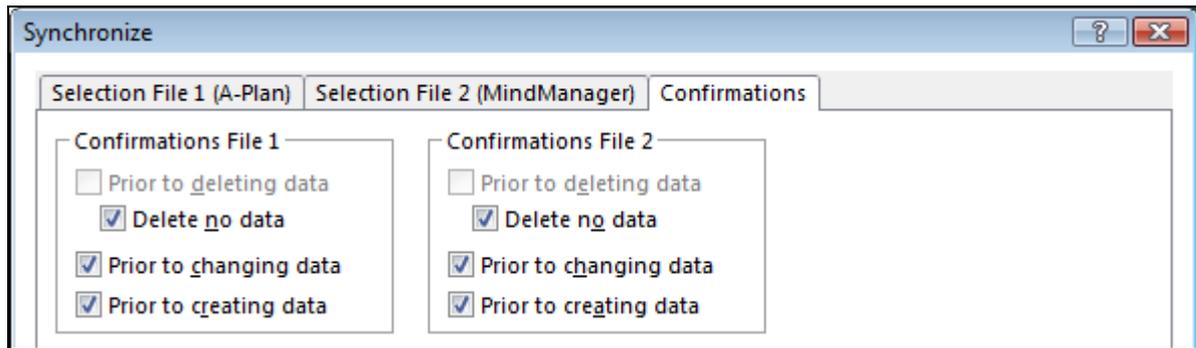
In the second tab you have to select "MindManager" as an **Application** in the field in the top left corner. Next to it on the right you can specify the MindManager file that will be used for the synchronization:



### **Important:**

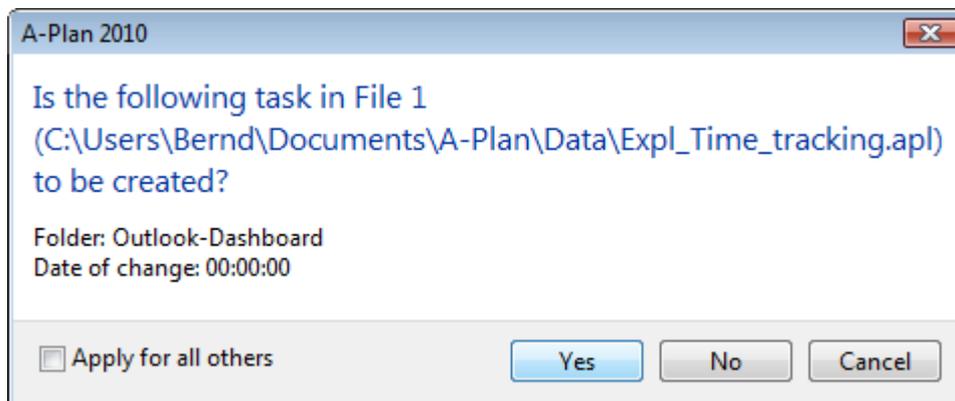
The MindManager file must be saved in **xmmap format**. This can be done with the MindManager version 5 or later versions!

## CONFIRMATIONS



Use the third tab to determine those activities which must be confirmed before they are executed. Apart from that you can prevent data from being deleted in one of the files or in both files.

Example of a confirmation:



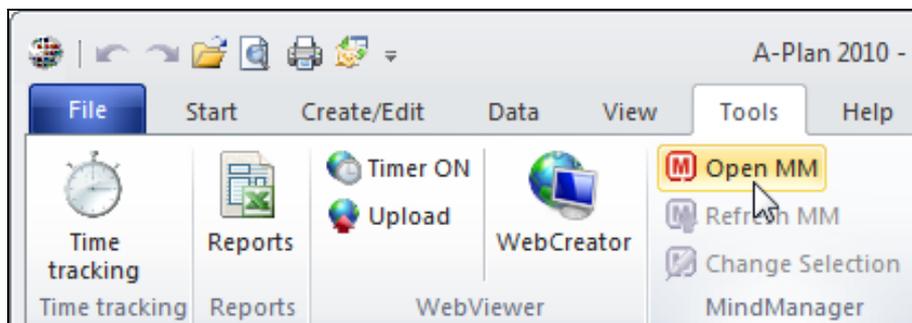
Clicking **Apply for all others** will have the effect that all further changes of this type will be executed without asking for confirmation.

---

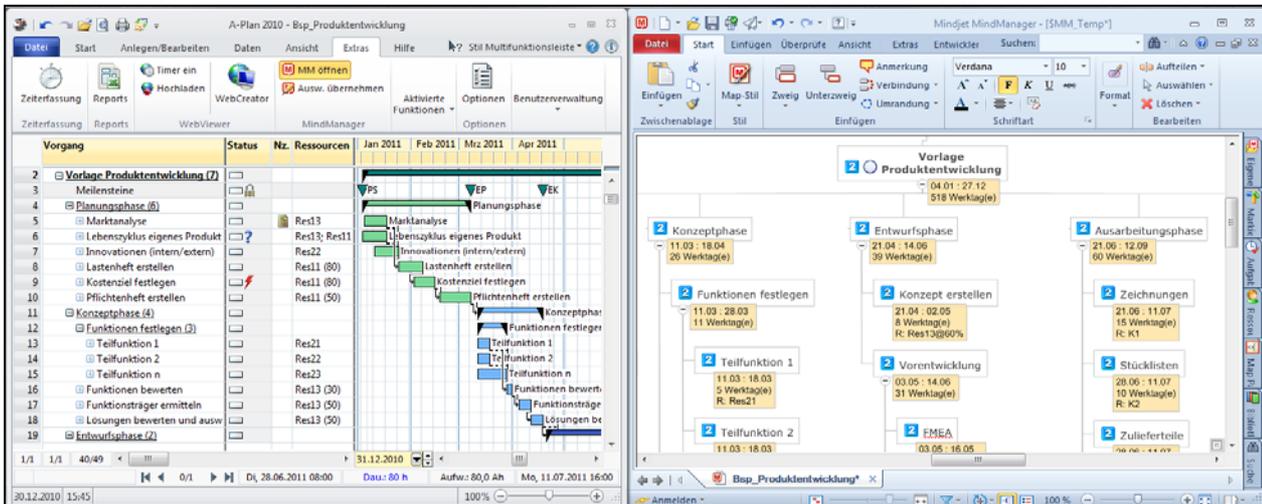
## PRESENTATION OF A-PLAN PROJECTS AS MINDMAP OR WBS

Apart from synchronizing MindManager files with A-Plan, the interface can also be used as an extension of A-Plan enabling you to present projects or parts of projects existing in A-Plan as a Mindmap or as a work breakdown structure (WBS).

This is done quite easily by selecting the involved area in A-Plan and clicking the function **Open MM** in the tab **Tools**:



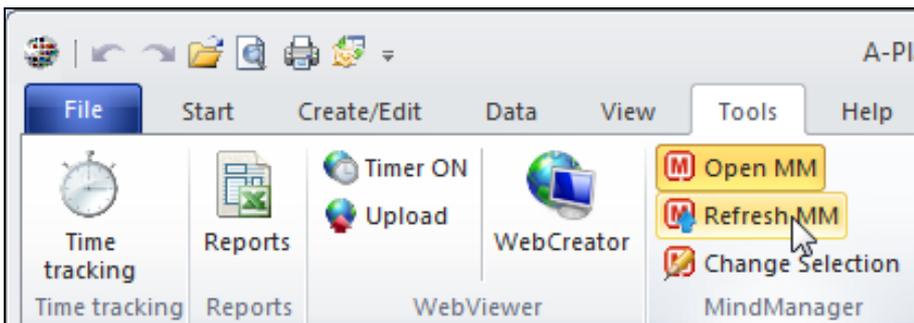
When they are opened for the first time, A-Plan and MindManager are displayed side by side covering the entire screen:



The position and the size of the windows can be changed, the changed configuration will then be used when they are opened again. Closing the MindManager by clicking **Open MM** again will restore the original size and position of A-Plan.

As long as the MindManager is opened, changes of data can be synchronized directly into the other application. In the case of changes made in the MindManager, the **Mind-Manager file must be saved** prior to the transfer of data to A-Plan.

The synchronization is triggered by clicking **Refresh MM**:



Clicking the button with the **CTRL key** pressed down has the effect that the function remains activated and, as a result, changes will be synchronized immediately (but the MindManager file must still be saved before it is synchronized).

To have another project or another area of A-Plan displayed in the MindManager, just select the new area and click the function **Change selection**.

## ADJUSTING THE LAYOUTS OF THE MINDMANAGER

The template used for the presentation of the structure in the MindManager is the file „Body.xmmap“ which is copied to your profile folder (see "Profile folder" on page 133) when it is started for the first time.

If you prefer a different standard layout you may adjust the file according to your wishes after you have opened it with the MindManager.

### Important:

Do not **change the structure existing in this file!**

The original file of „Body.xmmap“ is saved in the program folder of A-Plan (by default, this is „c:\Programs\A-Plan2010“).

# APPENDIX

## A. LIST OF DATA FIELDS

### GENERAL DATA FIELDS

#### PRIORITY

<b>Prio</b>	With the respective settings made (see "Sorting orders for viewing" on page 81), the priority (0 - 99) determines the <b>sequence</b> according to which the projects/tasks are displayed. Apart from that, the set value influences the color used to visualize the corresponding bar (except when an individual color was assigned to a bar (see "Bar patterns" on page 121).
2	
2	
3	
4	

Double-click the current value to either overwrite the **priority** directly or to change it by clicking on the arrow buttons.

#### LEVEL

	Lev.	Task
2	1	<input type="checkbox"/> Examples (3)
3	2	<input type="checkbox"/> E-Business integration (6)
4	3	Milestones
5	3	<input type="checkbox"/> Processes (4)
6	4	<input checked="" type="checkbox"/> Identify departments

Level of the row concerned (Folder = 1, Project = 2, Tasks = 3 ... 99)

#### DESIGNATIONS OF TASKS

Task
<input type="checkbox"/> Examples (3)
<input type="checkbox"/> E-Business integration (6)
Milestones
<input type="checkbox"/> Processes (4)
<input checked="" type="checkbox"/> Identify departments

The length of a designation may not exceed **100 characters**.

Clicking on the square in front of the designation will expand a collapsed folder or project or collapse it if it was expanded (see "Structuring (Folders, Projects, Tasks)" on page 29).

The number of projects included in a folder (and of tasks included in a project) is given in brackets behind the designations of folders and projects.

A locked row can be recognized from its designation being enclosed in curly braces (see "Locking of rows" on page 43).

## IDENT-NO.

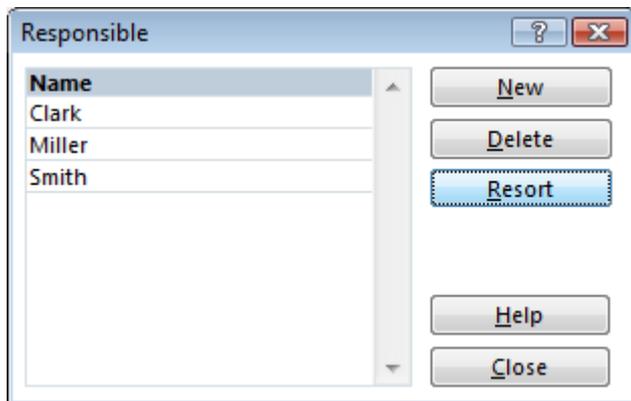
<b>Ident-No.</b>	The ident number can be used to mark each record (=row) by assigning a specific number or string of characters to it.
435.45	An ident number must be assigned to resources as this number is required by the database to make the internal connection of resources to tasks.
454.65	

For this reason, the ident number is created automatically for resources but may be overwritten if you want to use your own ident numbers. However, ident numbers must be unique within a database!

## CLIENT/RESPONSIBLE

	<p>The name of a client or a responsible person may not exceed <b>30 characters</b> in length.</p> <p>Double-click the existing value to change it either by overwriting it or by clicking on the down arrow and selecting an existing name from the pop-up list.</p> <p>New names will be taken over to the list automatically after you entered them. However, please note that changing a name in the list by editing it will create a new entry in the list.</p>
---	--

A separate dialog box is provided for editing or deleting existing names. It will appear if you choose **Tools / Client** or **Tools / Responsible** respectively:



### **Edit name**

Double-click the name concerned, overwrite it and press ENTER.

### **Enter new name(s)**

Click on the button **New**, enter the name in the new line and press ENTER.

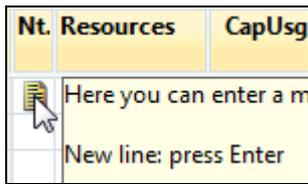
### **Delete name(s)**

Select the name(s) to be deleted from the list and click on **Delete**.

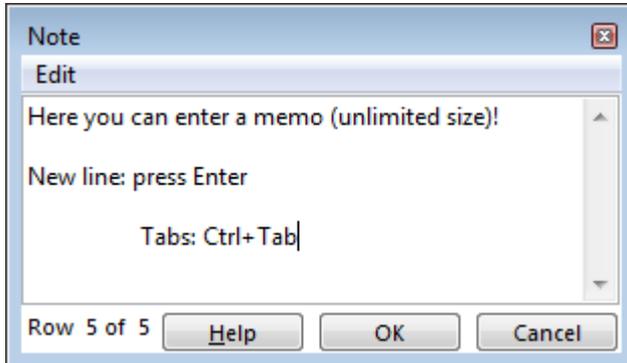
### **Note:**

If you delete the name of a person responsible or of a client which is still assigned to one or several tasks, A-Plan will display a message saying that the name cannot be deleted.

## NOTE



Double-clicking in the note column will open a dialog box in which you can edit an existing note or memo or enter a new one.



Use the **Windows clipboard** to paste texts from other applications or to move or copy texts within the notes window. To force a new line, press **ENTER**. Line breaks shown on screen due to the limited length of the memo window do not exist in the printout!

Tabulators can be set by pressing CTRL+TAB.

You may enlarge or reduce the memo window as you like. Both the size and the last location of the window (in relation to the main window) will be saved in the current profile.

To **delete** the note either delete all of the text or click on the symbol and press the DEL key.

## REMAINING TIME

Rem. Time	
	- 3 d
	1 d
	6 d
	15 d

The **remaining time** indicates the time left till the begin or end (as set, see "Time/Week numbers" on page 123) of the first pending task bar in the current row. Passed deadlines are shown in red as "negative remaining time".

Depending on the option set for the **duration**, the remaining time is calculated as **real time** or in consideration of **working hours** (see "Time/Week numbers" on page 123). Likewise, the selected option regarding weekends and holidays is applied here.

Rem. Time	
	
	1 d
	6 d
	15 d

If the column is wide enough, the remaining time is also shown in the left half of the column as a symbol which grows towards the right as the remaining time decreases. Furthermore, the color changes accordingly, passing from green through yellow to red.

When all task bars in the current row are **completed**, this is indicated by a check mark in the remaining time column (blue for tasks and red for projects).

Values shown in the column **Rem. Time** cannot be edited as they are calculated by A-Plan from the position of the first pending task bar in the row concerned.

## ENTRY DATE

Entry Date
04/12/2006
04/12/2006

The **entry date** is automatically set to the current date at the moment a new row is entered. If required, you may change it afterwards.

## RESHOW DATE

Reshow Date
26/05/2004
05/06/2004

With the respective option activated (see "Reshow date" on page 54), **tasks** will not be displayed any more until the set reshow date has been reached or run over.

In the Gantt chart, the reshow date is indicated by means of an exclamation mark (see "The Gantt chart" on page 33).

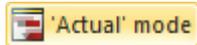
## BEGIN (PLANNED/ACTUAL), END (PLANNED/ACTUAL)

Begin	End
25/05/2004	01/06/2004
29/05/2004	04/06/2004
08/06/2004	17/06/2004

The dates displayed for the begin (planned and actual) and end (planned and actual) always refer to the **first pending** task bar in the row concerned.

If all task bars are completed in a row, all displayed dates refer to the **first** task bar.

The begin and end of task bars are changed most easily by making the changes directly in the Gantt chart (see "Using the mouse to determine the begin, end or position of a task bar" on page 46).

After you have switched to the **'Actual' mode** (click on the button  at ribbon bar **Start**) you can change actual task bars in just the same way as you change planned task bars.

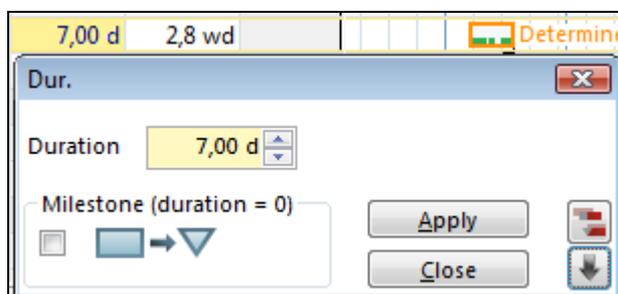
You may perform the changes in the column area of the table as well. In this area, however, the begin and end of the **first pending task bar** are displayed only (see above) so that the values of this task bar can be changed only.

## DURATION (PLANNED/ACTUAL)

Dur. Pl'd	Dur. Act.
4 05:20	1 01:00
0 02:00	0 02:00
0 03:00	0 02:00
3 02:15	0 05:40

This column shows the **total duration** (planned /actual) of all task bars in a row. The first number of the displayed value stands for days, the second number for hours and the third number for minutes.

As a general rule, the duration is calculated from the times entered in the default calendar (see "Calculation of the duration of tasks, default calendar" on page 45)!



Double-clicking or right-clicking a value in this column will open an auxiliary window which allows you to change the duration (see "Dialog box "Duration" / "Work"" on page 50).

If several task bars exist in a row, the value displayed in the auxiliary window always refers to the **first pending task bar** of the current row while the **total duration of all task bars** is shown in the column **Duration**.

To change the duration of other task bars in a row, select the task bar to be changed by clicking on it first. The auxiliary window will remain opened unless you click on the button **Close**.

## DURATION ACTUAL - PLANNED, DURATION %

Durat. Act. - Pl'd	Duration %
-3 04:20	24,2 %
0 00:00	100,0 %
-0 01:00	66,7 %
-2 05:15	20,1 %

The column entitled **Durat. Act. – Pl'd** displays the absolute divergence of the actual total duration of all task bars in a row from the planned total duration of all task bars in the row.

The first number of the displayed value stands for days, the second number for hours and the third number for minutes.

The column **Duration %** is used to indicate the percentage of the current total duration of all task bars in a row in relation to the planned total duration of these task bars:

$$\text{Duration \%} = (\text{Duration Actual} / \text{Duration Planned}) * 100$$

These values cannot be changed manually as they are calculated by A-Plan!

## BUFFER, BUFFER ACCUMULATED, BUFFER ACTUAL, BUFFER ACTUAL ACCUMULATED

Buffer	Buffer Act	Buffer cum	Buffer Act cum
2 h			
4 h	4 h	6 h	6 h
2 h	2 h	2 h	2 h

Buffer available in the row concerned.

Details see "Buffers" on page 60.

## FINISHED %

Finished %
20 %
25 %
18 %

Current percentage of completion of a task. This value is used by the prognosis feature (see "Project status (planning, current state, prognosis)" on page 108) for calculating the forecast date of completion of a task.

## COMPLETED

Rem. Time	Completed
	28/05/2004
 1 d	
 6 d	

After all task bars of a row have been finished, the status of the row is set to "completed" and the date of completion of the last task bar is entered in the column **Completed**.

With this done, a checkmark is displayed in the column **Rem. Time**.

Projects used to summarize tasks on lower levels (see "Structuring (Folders, Projects, Tasks)" on page 29) are completed after all tasks contained in it have been completed.

There are several other ways of activating the status "completed" (or deactivating it if it was activated):

- Click on the column **Rem. Time** while holding down the SHIFT key or
- choose **Completed** from the pop-up menu after you clicked on the designation with the right mouse button or
- choose **Completed** from the ribbon tab **Data**.

### **Attention:**

If there are **several task bars** in a row, **all** of them will be marked as "completed"/"pending". For this reason, a message is displayed prior to the execution of the command.

The date of completion can be changed at a later time.

## OBJECT

Object
 C:\Users\Be
 C:\APlan11
 C:\APlan11

One external file of any type can either be **linked to** or **embedded** in each row .

For details see "Linking/embedding an object" on page 67

## EMAIL

E-Mail to
service@braintool.com

Email addresses to which an email can be sent in the context of the execution of the task concerned (see "Sending of emails" on page 69). With resources allocated to the task concerned, A-Plan will, by default, use the email addresses saved together with the details of the resource

## USER-DEFINED TEXT COLUMNS (TEXT1 - TEXT10)

No.	State
2	compl.
5	pending
7	

10 columns are provided for entering any information up to a length of **100 characters** (e. g. processing numbers, remarks, notes etc.).

As the user-defined columns can be considered by the sorting function as well (see "Sorting orders for viewing" on page 81), they can be used to determine a sorting sequence which cannot be achieved using the default settings.

## USER-DEFINED NUMBER COLUMNS (NUMBER1 - NUMBER10)

Parts	Add. Costs
35	9,114.00 €
10	5,434.00 €
25	3,680.00 €
3	435.00 €
7	3,245.00 €

10 columns are provided for entering any numbers.

You may adjust the format of the number columns to your requirements (see "Tasks" on page 112) by setting a prefix (leading string of characters), a suffix (appended string of characters) and the number of digits after the decimal point (e. g. "0.00 €" for amounts in € with 2 digits after the decimal point).

If required, the values in the number columns can be **added up** as well (see "Tasks" on page 112 on how to activate this), i.e. e. project rows will show the total of the task values of a project and folder rows the total of the project rows contained in the folder.

### **Note:**

You cannot enter date or time values in these columns. If these are required, you might use the column **Entry date** instead which is often not needed in its original sense.

## INDEX

Index
005
005.001
005.001.001
005.001.002

Use this column to have the internal numbering of records displayed. The following formats are used:

Folder	OO
Project	OO.PP
Task	OO.PP.VV

"O", "P" and "V" are each equivalent to one numeral.

### **Note:**

The amount of numerals depends on the number of existing records. For example, if

more than 99 tasks exist in the database, the number of numerals is increased to 3 – not only for tasks but for folder and project numbering as well.

## SYNCHRONIZATION WITH MS OUTLOOK

Synchr. with Outlook as	Text1
^No synchronization	83
Task: Business	85
<input type="checkbox"/> Appoint.: Time & Expenses <input type="checkbox"/> Appoint.: VIP <input type="checkbox"/> Task: (without category) <input checked="" type="checkbox"/> Task: Business <input type="checkbox"/> Task: Competitio	

MS Outlook category to be used when synchronizing the current row with MS Outlook (see "Selection of data to be synchronized" on page 224).

## DATA FIELDS FOR RESOURCE PLANNING/COST CALCULATION

### RESOURCES

Resources
Stevens (20); Schulz (30)
Miller (40)

Designations and – if other than 100% - capacity usage of resources assigned to a task.

For details see "Particular cases (flexible assignment of resources)" on page 101

### RESOURCES REQUIRED

Res. Req.	Mai 2004	
	0.-16.	17.-23.
3,0 rs		

Number of resources required to perform a task.

### FACTOR

Factor
2
2
1
1

Multiplication factor used for all values of a resource in the context of calculations.

Details see "Factor (assignment of several identical resources, baseload)" on page 104.

### WORK REQUIRED, PLANNED, PLANNED - REQUIRED, PLANNED / REQUIRED

Work Req.	Work Pl'd	Work Pl'd. -	Work Pl'd. / Req.
7,0 wd	6,0 wd	-1,0 wd	 -14 %
4,0 wd	4,0 wd	0,0 wd	 0 %
3,0 wd	2,0 wd	-1,0 wd	 -33 %

**Work required:** The work required to execute a task.

**Work planned:** The amount of work scheduled for the execution of a task.

**Work planned - required:** Difference between required and planned work.

**Work planned / required:** Deviation of planned work from required work given as a percentage

For details see "Definition of work" on page 94

### WORK ACTUAL, ACTUAL - PLANNED, %

Work Pl'd	Work Act.	Work Act. - Pl'd.	Work %
6,0 wd	5,5 wd	-0,5 wd	91,7 %
4,0 wd	4,0 wd	0,0 wd	100,0 %
2,0 wd	1,5 wd	-0,5 wd	75,0 %

**Work actual:** The amount of work actually spent on the execution of a task.

**Work actual - planned:** Difference between work actually spent and work planned.

**Work %:** Deviation of work actually spent on a task from planned work given as a percentage.

For details see "Project status (planning, current state, prognosis)" on page 108

### OVERTIME WORK (PLANNED/ACTUAL)

Ovt. Work Pl'd
1,5 wd

Planned or actual work done within overtime periods.

For details see "Special times/Costs" on page 105

### FIXED COST (PLANNED/ACTUAL)

Fix. Cost Pl'd	Fix. Cost Act.
2.495€	1.985,00€
150€	<150,00€
2.345€	1.835,00€

Fixed costs (or lump sums) planned or actually incurred in the execution of a task.

If no value is entered for actual fixed costs, A-Plan automatically uses planned values. In this case, a preceding "<" is displayed to indicate that planned values are being used.

If resources have been assigned, the fixed costs specified for the resources concerned are used. Otherwise, enter fixed costs manually.

For details see "Fixed costs, Labour rate of resources" on page 103.

### LABOUR RATE (PLANNED/ACTUAL)

Lab. Rate Pl'd	Lab. Rate Act.	Lab. Cost	Ovt.
36	38 €		
		864€	8€

These fields show planned and actual labour rates respectively. The rates can be entered separately either as standard value, special value or overtime value.

For details see "Fixed costs, Labour rate of resources" on page 103.

#### **Note:**

If no resource is assigned to a task, the labour rate can be entered directly in the task row as well. This was preserved to keep later versions compatible to A-Plan 2000. For

reasons of clarity, however, we recommend you not to use this way of entering labour rates when creating new projects.

## LABOUR COST (PLANNED/ACTUAL)

Lab. Cost Pl'd	Lab. Cost Act.
9.468€	8.232€
3.504€	3.504€
5.964€	4.728€

Planned and actual costs respectively which result from the duration of tasks and from the assignment of resources to tasks.

For reasons of clarity, no value is displayed as long as the cost of labour is "0"!

For details see "Fixed costs, Labour rate of resources" on page 103.

## OVERTIME COST (PLANNED/ACTUAL)

Ovt. Cost Pl'd	Ovt. Cost Act.
648€	432€
648€	432€

Planned and actual costs respectively which result from the duration of tasks and from the assignment of resources working overtime.

For reasons of clarity, no value is displayed as long as the cost of labour is "0"!

For details see "Special times/Costs" on page 105.

## TOTAL COST PLANNED, ACTUAL, ACTUAL - PLANNED, %

Tot. Cost Pl'd	Tot. Cost Act.	Tot. Cost Act. - Pl'd	Tot. Cost %
11.963€	8.301€	-3.662€	69,4 %
3.504€	3.504€	0€	100,0 %
6.114€	2.962€	-3.152€	48,4 %
2.345€	1.835€	-510€	78,3 %

**Total Cost Planned/Actual:** Planned and actual total respectively of fixed cost and labour cost incurred for the execution of tasks.

**Total Cost Actual - Planned:** Difference between total costs actually incurred and total costs planned.

**Total Cost %:** Deviation of total cost incurred from total cost planned given as a percentage.

For details see "Fixed costs, Labour rate of resources" on page 103.

## QUANTITY/TIME PLANNED/ACTUAL

Qty/Time Pl'd	Qty/Time Act
50/h	45/h
50/h	45/h

Output values of resources used to calculate the work required for producing a given quantity.

Details see "Output values (production planning)" on page 103.

## QUANTITY PLANNED/ACTUAL

Qty. Pl'd	Qty. Act
400	300
500	100

Values showing the quantity to be produced (planned) and the quantity that has been produced already (actual). In combination with the output value of the used resource, the work and the duration required to produce the planned quantity can be calculated.

Details see "Output values (production planning)" on page 103.

## TIME UNIT OF COST

Time Unit of Cost	Time Unit of Work	Text1
Hours (h)	<input checked="" type="checkbox"/> Default value	
Minutes (min)	^Days (d)	
Hours (h)	^Days (d)	
Days (d)	^Days (d)	
Weeks (w)	^Days (d)	
Months (m)	^Days (d)	
Years (y)	^Days (d)	

Time unit to which the labour rate (see "Fixed costs, Labour rate of resources" on page 103) refers to.

This value can be selected separately for each resource. If no value has been selected, the value set in the dialog box **Options** will be used (see "Costs/Work/Abbrev." on page 125).

## TIME UNIT OF WORK

Time Unit of Work	Text1	Text2	Jan
Days (d)	<input checked="" type="checkbox"/> Default value		
Minutes (min)			
Hours (h)			
Days (d)			
Weeks (w)			
Months (m)			
Years (y)			

Time unit to which the work (see "Fixed costs, Labour rate of resources" on page 103) refers to..

This value can be selected separately for each task / resource. If no value has been selected, the value set in the dialog box **Options** will be used (see "Costs/Work/Abbrev." on page 123).

## COST CALCULATION METHOD

Cost Calc. Meth.	Time Unit of Cost	Time Unit of Work
exactly	<input checked="" type="checkbox"/> Default value	
exactly		^Days (d)
round off/up		^Days (d)
round up	(h)	^Days (d)

Method used by A-Plan for the calculation of labour costs.

This value can be selected separately for each resource. If no value has been selected, the value set in the dialog box **Options** will be used (see "Costs/Work/Abbrev." on page 125).

## CALENDAR

Calendar
Tool
(no calendar)
Default
Overtime
Tool
Realtime

Standard calendar to be used for a resource .

During any time periods, the standard calendar can be replaced or supplemented by another calendar such as, for example, an overtime calendar (see "Determine working hours (Resource calendar)" on page 85).

## CAPACITY USAGE

Cap.
5,0 %
50,0 %
100,0 %

Capacity spent by a resource on the task shown in the current row, given as a percentage.

These values are identical to the values specified when assigning resources to tasks (see "Capacity usage of resources / Teams" on page 91).

## FOLDER, PROJECT, PARENT TASK

Folder, project and parent task of a task.

Folder	Project	Parent Task
Construction proj.	Kings Road	Demolition
Construction proj.	Kings Road	Internal walls

## LAST CHANGE

Last change
30.05.04 18:50, admin
30.05.04 18:50, admin
28.05.04 15:12, admin

Date and time when a row was changed last as well as the name of the user who made the change

If the changes you make have effects on several rows, the date and time of the last change are entered in all of the rows concerned.

## PROGNOSIS DATA

For an explanation of prognosis see "Project status (planning, current state, prognosis)" on page 108.

## USAGE PROGNOSTICATED

CapUsg Pl'd	CapUsg progn
10 %	8 %
10 %	8 %
5 %	<5 %

Capacity usage of a resource serving as the basis for the further execution (= prognosticated period) of a task. By default, the planned usage is taken.

## END PROGNOSTICATED, END PROGNOSTICATED - PLANNED

End progn	End progn-Pl'd
14.02.2007	60 h
21.02.2007	0 h

Prognosticated date of completion and failure of meeting the planned date of completion.

## DURATION PROGNOSTICATED, PROGNOSTICATED - PLANNED, PROGNOSTICATED/PLANNED

Dur. progn	Dur. progn-Pl'd	Dur. progn/Pl'd
708 h	-36 h	95,2 %
48 h	0 h	100,0 %

Prognosticated duration and failure of meeting the planned duration expressed as an absolute value and as a percentage (100% = planned value).

## WORK PROGNOSTICATED, PROGNOSTICATED - PLANNED, PROGNOSTICATED/PLANNED

Work progn	Work progn-Pl'd	Work progn/Pl'd
275 wh	-25 wh	91,5 %
8 wh	-1 wh	85,0 %

Prognosticated work and failure of meeting the planned work expressed as an absolute value and as a percentage (100% = planned value).

## TOTAL COST PROGNOSTICATED, PROGNOSTICATED - PLANNED, PROGNOSTICATED/PLANNED

Tot. Cost progn	Tot. Cost progn-Pl'd	Tot. Cost progn/Pl'd
14.994,0 \$	-36,0 \$	99,8 %
384,0 \$	-96,0 \$	80,0 %

Prognosticated total cost and failure of meeting the planned total cost expressed as an absolute value and as a percentage (100% = planned value).

## B. STARTING A-PLAN WITH PARAMETERS

A-Plan can be started with the following parameters appended

<i>File name</i>	The specified file will be opened automatically when A-Plan is started.
<i>/excl</i>	The file loaded with A-Plan is opened "exclusively".
<i>/read</i>	The file loaded with A-Plan is opened "read only".
<i>/u:user:password</i>	All files are opened with the user name "user" and the password "password" (see "General notes on using A-Plan in a network" on page 180). If no password was assigned, the second colon must nevertheless be entered (e.g. "/u:Miller:")
<i>/p:folder name</i>	The specified folder is used as profile folder.

To enter the parameters, proceed as follows:

Click on the A-Plan icon with the right mouse button. Then click on "Properties" and on "Link" afterwards. In the field "Target", enter the parameters you want behind "...A-Plan2010.exe".

### Example:

```
...A-Plan2010.exe d:\daten\test.apl /p:c:\profiles
```

(Starting A-Plan will automatically load the database "d:\daten\test.apl" and the profile folder used will be "c:\profiles").

## C. SPECIAL SETTINGS

In the folder "My Documents\A-Plan" there is a file named "options.ini". Use this file to make special settings which will overwrite the default values of A-Plan.

A documentation of the possible settings is included in the file.

As soon as this file has been copied to the global profile folder (see "Global Profiles" on page 135) the special settings will be available to all those users who have saved their personal profile folder below the global profile folder.

## D. QUESTIONS, PROBLEMS, ERRORS

A collection of answers to typical questions and assistance for problems, errors etc. can be found at the following link:

<http://www.braintool.com/index.php?id=96&L=2>

Patches are located at:

<http://www.braintool.com/patches.0.html?&L=2>

## E. USER-DEFINED DATE/TIME FORMATS

The characters listed below serve to determine the format used for displaying and printing the begin and end of task bars (see "Tasks" on page 112).

Character	Description
:	Time separator: The time separator is used to separate hours from minutes when entering a point in time. The time separator actually used in the formatted output depends on system settings.
/	Date separator: The date separator is used to separate days from months and months from years when entering a date. The date separator actually used in the formatted output depends on system settings
d	Displays the day as a number without a preceding zero.
dd	Displays the day as a number with a preceding zero.
ddd	Displays the day of the week in an abbreviated form (Mon-Sun).
dddd	Displays the day of the week in full length (Monday-Sunday).
dddddd	Displays the complete date (including the day, month and year) in the short date format as set in the system settings. The presetting for the short date format is dd.mm.yyyy.
dddddd	Displays the complete date (including the day, month and year) in the long date format as set in the system settings. The presetting for the long date format is d.mmmm yyyy.
w	Displays the day of the week as a number (1 for Sunday to 7 for Saturday).
ww	Displays the week number as a number.
m	Displays the month as a number without a preceding zero. If h or hh is immediately followed by m, it does not display the month but the minute.
mm	Displays the month as a number with a preceding zero. If h or hh is imme-

	diately followed by mm, it does not display the month but the minute.
mmm	Displays the month in an abbreviated form (Jan - Dec).
mmmm	Displays the month in full length (January - December).
q	Displays the quarter of the year as a number.
y	Displays the day of the calendar as a number.
yy	Displays the year as a two-digit number.
yyyy	Displays the year as a four-digit number.
h	Displays the hour as a number without a preceding zero.
hh	Displays the hour as a number with a preceding zero.
n	Displays the minute as a number without a preceding zero.
nn	Displays the minute as a number with a preceding zero.
t t t t t	Displays complete date and time (including hours, minutes and seconds) formatted with the separator as set for the time format in the system setting. A preceding zero is displayed if the respective option is activated and the displayed time is earlier than 10:00. The presetting for the time format is hh:mm:ss.
AM/PM	12 hour format displaying AM (in capital letters) before twelve o'clock in the daytime and PM (in capital letters) after twelve o'clock in the daytime and before 12 o'clock in the nighttime.
am/pm	12 hour format displaying am (in small letters) before twelve o'clock in the daytime and pm (in small letters) after twelve o'clock in the daytime and before 12 o'clock in the nighttime.
A/P	12 hour format displaying A (in capital letters) before twelve o'clock in the daytime and P (in capital letters) after twelve o'clock in the daytime and before 12 o'clock in the nighttime.
a/p	12 hour format displaying a (in small letters) before twelve o'clock in the daytime and p (in small letters) after twelve o'clock in the daytime and before 12 o'clock in the nighttime.
AMPM	12 hour format displaying the AM or PM string of characters as specified by your system. Before twelve o'clock in the daytime the AM string is displayed, after twelve o'clock in the daytime and before 12 o'clock in the nighttime the PM string of characters is displayed. AMPM can be written in either small or capital letters; the writing actually used depends on your system settings. The presetting is AM/PM.

## F. A-PLAN FILES

### FILES IN THE A-PLAN FOLDER ("MY DOCUMENTS\A-PLAN")

aplan2010.lic      Licensing file

### FILES IN THE DATA FOLDER ("MY DOCUMENTS\A-PLAN\DATA")

Import.xls          Exemplary import file in MS Excel format  
\*.apl                A-Plan database  
\*.\$\$\$                temporary backup copy  
\*.hol                Public holiday file  
\*.bcn                Backup copy (if an MS-Access database is used)  
\*.bsn                Backup copy (if an SQL server is used)

**Remark:**

Files with the extension \*.ldb are created for the database management and need not be copied or saved.

### FILES IN THE PROFILE FOLDER ("MY DOCUMENTS\A-PLAN\PROFILES")

error.log            Logfile which is created automatically when an internal program error occurs  
*Name.p00*            Basic profile file of the database *name*  
*Name.pnn*            Profile file no. *nn* of the database *name*  
Calendar\_Profile    Current settings for view "Resource Calendar"

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