braintool software gmbh

# A-Plan® 2016

# Contents

# INSTALLATION

## GENERAL HINTS

### SYSTEM REQUIREMENTS

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

- MS Windows XP, Vista (32/64 bit) or Win 7 (32/64 bit), Win 8/8.1 (32/64 bit) and Win 10 (32/64 bit)
- approx. 120 MB free hard disk space
- administrator rights (required for installation only)
- Microsoft SQL server (SQL version of A-Plan only, see "SQL-Version" on page 192)
- A-Plan can also be installed without any restrictions on a terminal server.

## SINGLE-USER INSTALLATION

### INSTALLATION

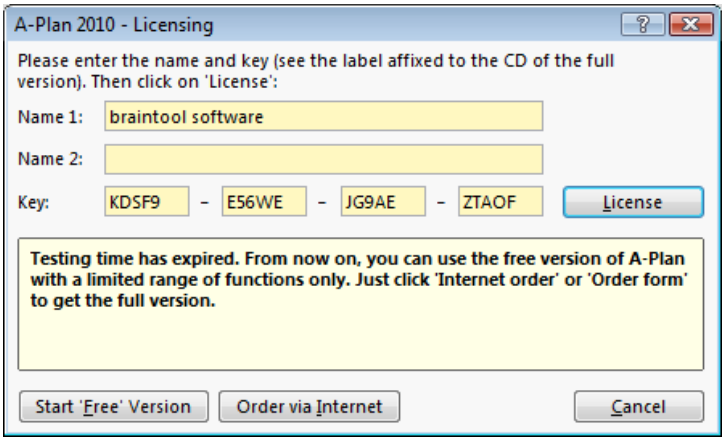
1. Unzip the downloaded installation file (see http://www.braintool.com/en/download-pm-software-trial/ ) and double-click file **Setup_APlan2016.exe**
   or
   Insert the installation CD (if the starting screen does not appear automatically, double-click start.exe in the root directory of your CD).
2. If Windows Installer is not yet available on your PC, the installation program will install it first.
3. During the installation of A-Plan you may change the default target folder. If possible, do not install A-Plan 2016 in a directory which contains a previous version of A-Plan.

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

**Note**: If there are problems during installation, please click on the installation program with the right mouse button and select **Run as Administrator**.

### 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**:




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 **? File / Help / 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 (except, it is a Terminal 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 **APlan2016** 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 APlan2016 (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 aplan2016.lic. Copy this file to the installation directory "...\APlan2016\program files\A-Plan2016" on the server (please be careful not to copy it by mistake to the highest server directory which is named similarly "...\APlan2016" – 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.

### 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 **File / Help / Licensing of A-Plan** to enter the new license key. If several clients are involved, copy the updated licensing file **aplan2016.lic** which you find in the directory "My documents\A-Plan" to the corresponding folder of the clients concerned.

## ADJUSTMENT OF PREVIOUS DATABASE VERSIONS

### AUTOMATED TAKEOVER OF EXISTING DATABASES AND SETTINGS

When started for the first time, A-Plan 2016 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 2016.

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 2016 (by default, these are "My documents\A-Plan\Data" and "My Documents\A-Plan\Profiles" respectively).

If the corresponding structure was already available with earlier versions of A-Plan (see "Folder structure of profiles" on page 143), no further changes are necessary to ensure the newly introduced synchronization as well as access from any computer.

Existing profiles of former versions are taken over. As an option, you may even keep the formerly used structure.

## ADJUSTMENT OF PREVIOUS DATABASE VERSIONS

Previous databases are automatically adjusted when they are opened by A-Plan 2016.

You should make a copy of your current A-Plan database(s) before the automatic adjustment is made.

**Important information**:
After a database was opened with A-Plan 2016 **it can no longer be opened with an earlier version of A-Plan**!

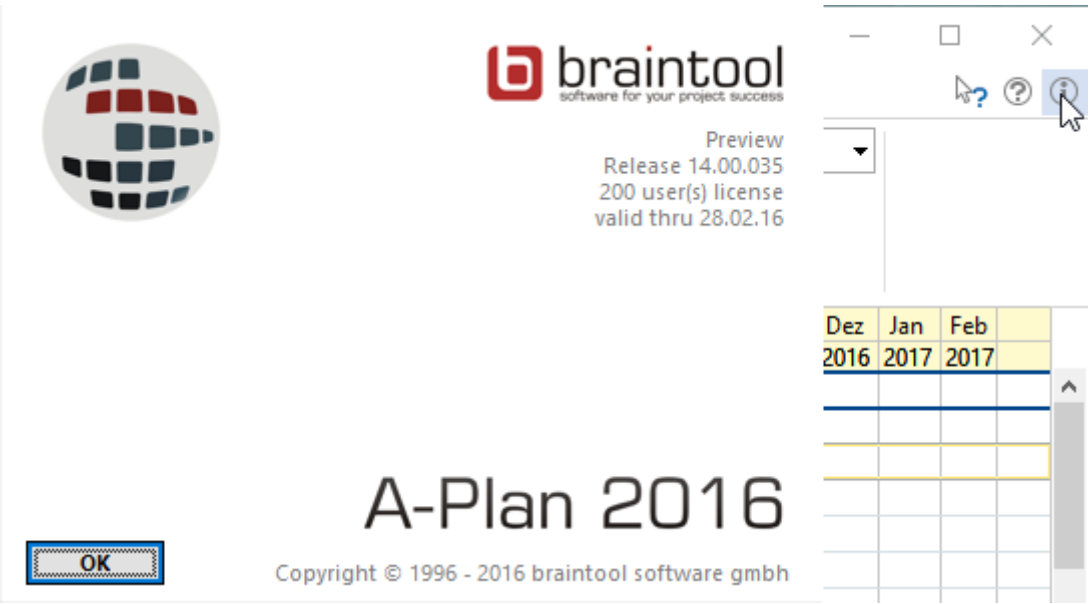
# UNINSTALLING A FORMER VERSION OF A-PLAN

Having successfully installed A-Plan 2016, 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.

# INFO ABOUT A-PLAN (LICENSES, RELEASE NUMBER)

Clicking the small "i" within the grey circle (in the top right of the A-Plan window) will bring up the A-Plan logo together with the currently used release number and the licensing data.



## INSTALLATION OF A-PLAN ON A NEW COMPUTER

Due to the fact that the licensing of A-Plan does not refer to computers but to users it can easily be installed and relicensed with the same key on a new computer.

Please make sure that no other persons will use the existing A-Plan version on your old computer. This will also be prevented by the fact that with multi-user licenses the number of users entered in the central database cannot exceed the number of licenses. In analogy, with single-user versions a database can be opened by one user only.

## REPAIRING AN EXISTING INSTALLATION OF A-PLAN 2016

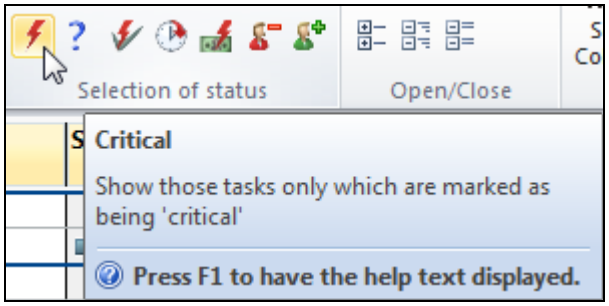
Should it happen that A-Plan can no longer be started due to corrupt, overwritten or missing program files resulting from the installation of other programs or if inexplicable errors occur after you have started the program, you may restore the original installation:

Select **Start / Control Panel / Add or Remove Programs / A-Plan 2016** and start the installation program by clicking the button **Add / Remove**. Then select the command **Repair**.

# 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:


**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!**

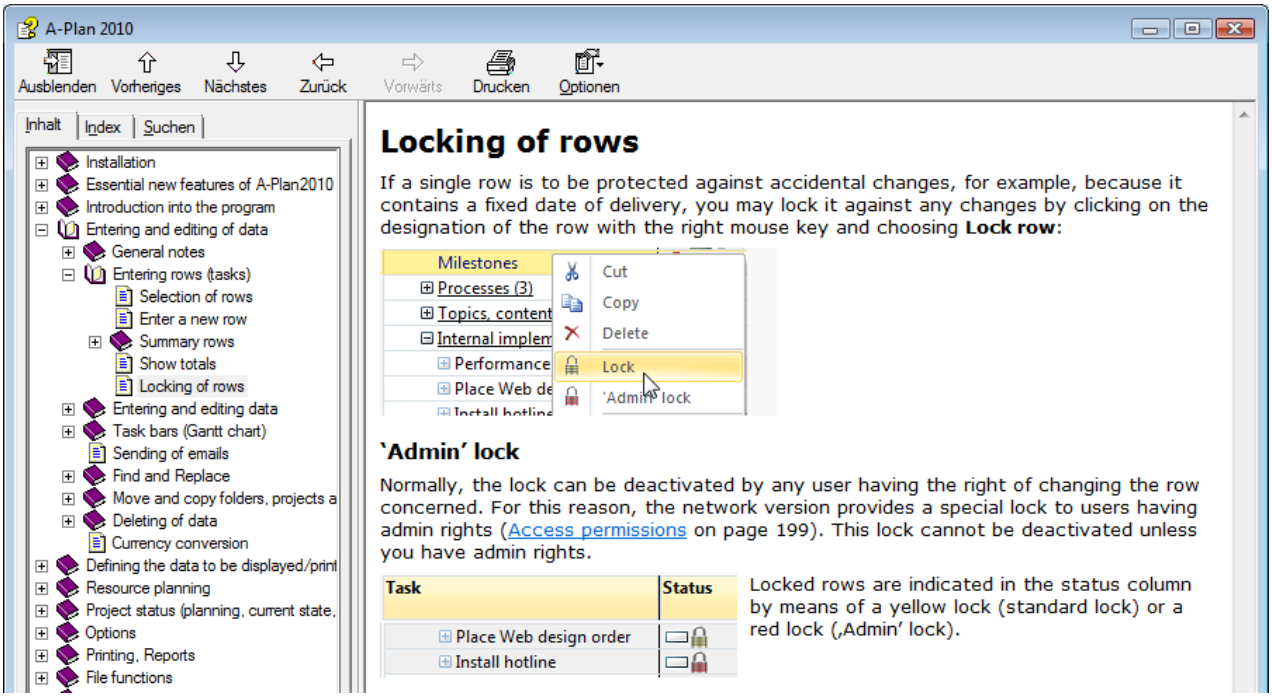
### ONLINE HELP

To open the online help file of A-Plan, choose **File / Help**.

#### 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.

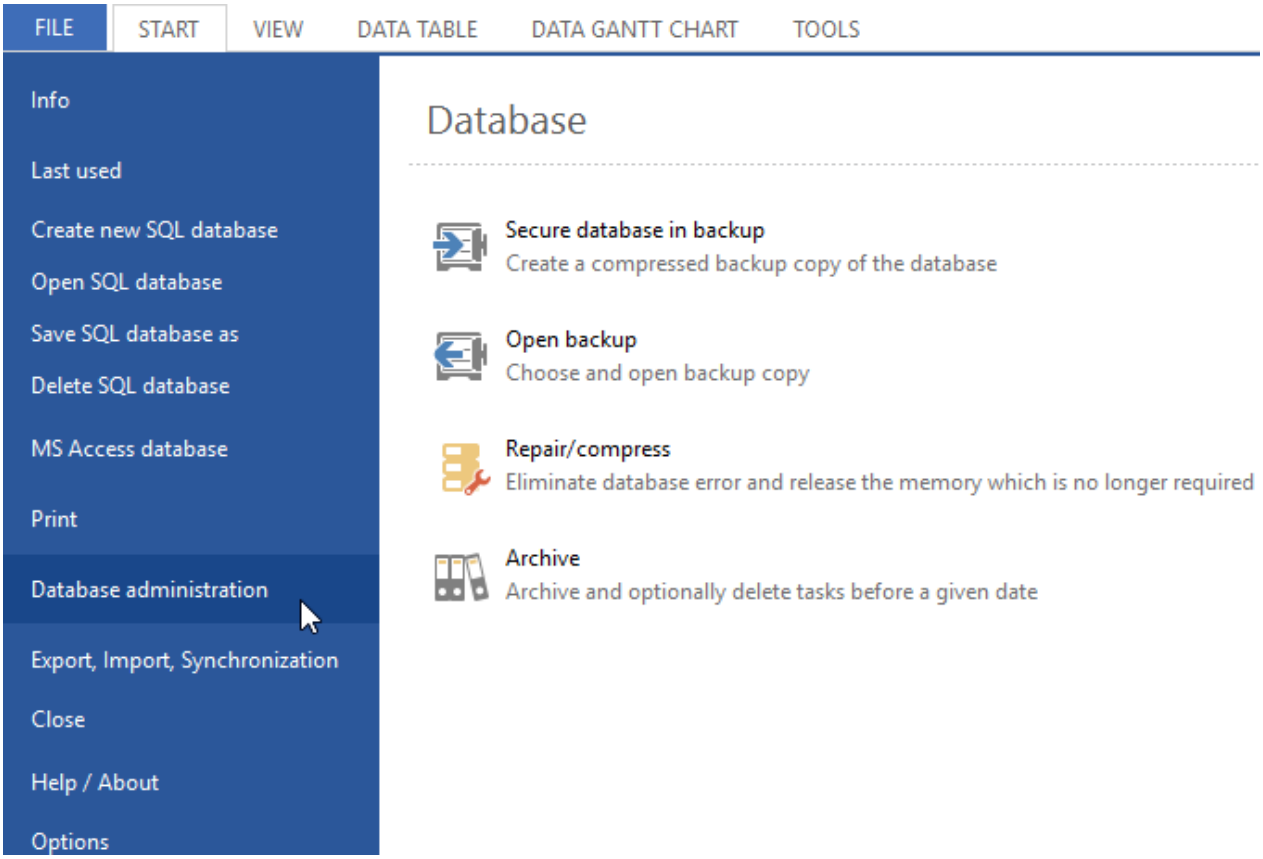
# THE USER INTERFACE OF A-PLAN

## 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.

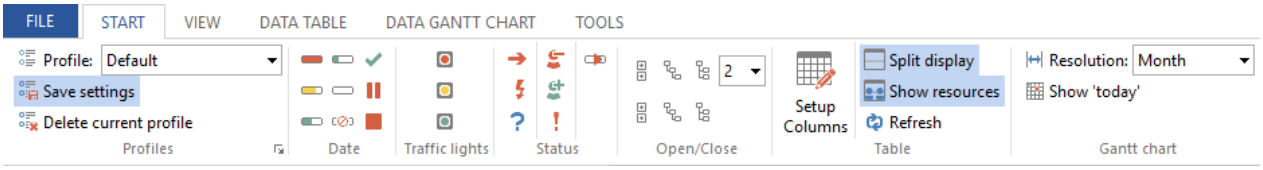
### RIBBON TAB FILE

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



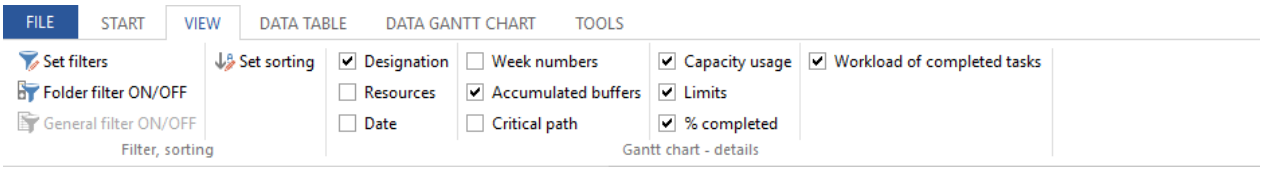

## RIBBON TAB START

This group includes all frequently used functions.



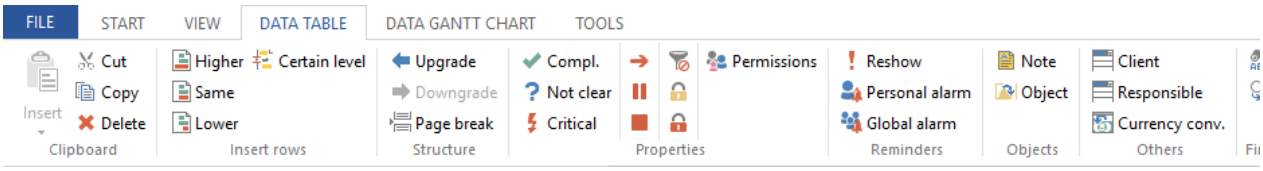

## RIBBON TAB VIEW

This tab provides rarely needed settings for adjusting the view.



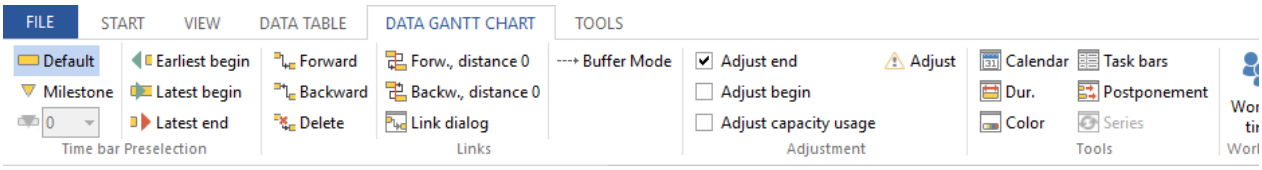

## RIBBON TAB DATA TABLE

Click this tab to find all functions needed to create and change the structure of projects in the table area of A-Plan.



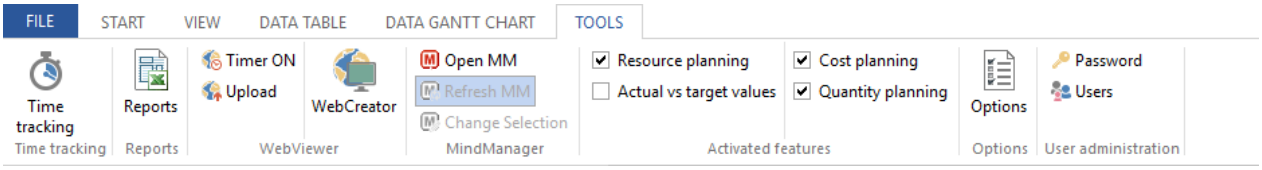
## RIBBON TAB DATA GANTT CHART

All functions provided within the Gantt chart of A-Plan, e.g. for the scheduling of tasks, can be found under this tab.

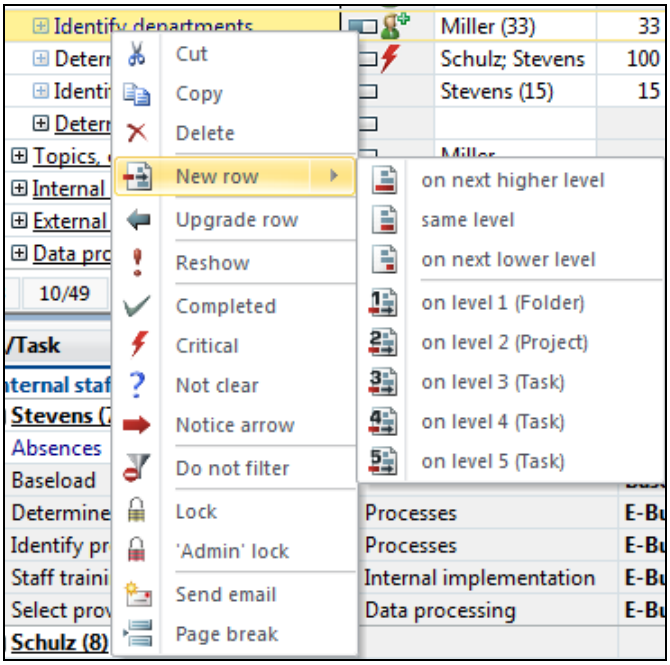



## RIBBON TAB TOOLS

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



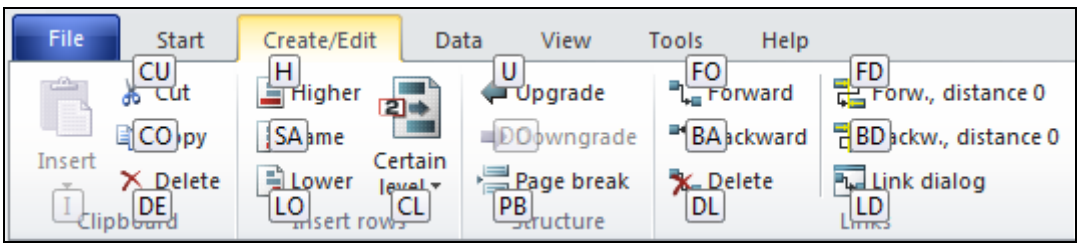

## CONTEXT-SENSITIVE MENU




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

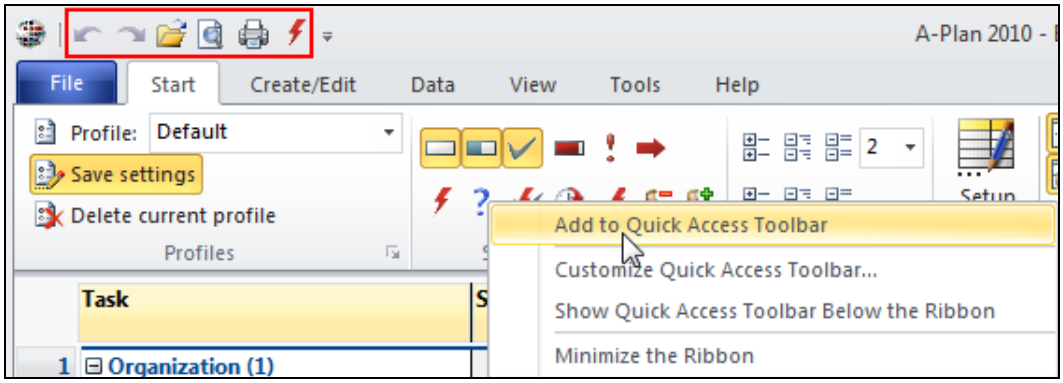
Clicking the Alt key will display for each function the key combination you have to press for starting the function:



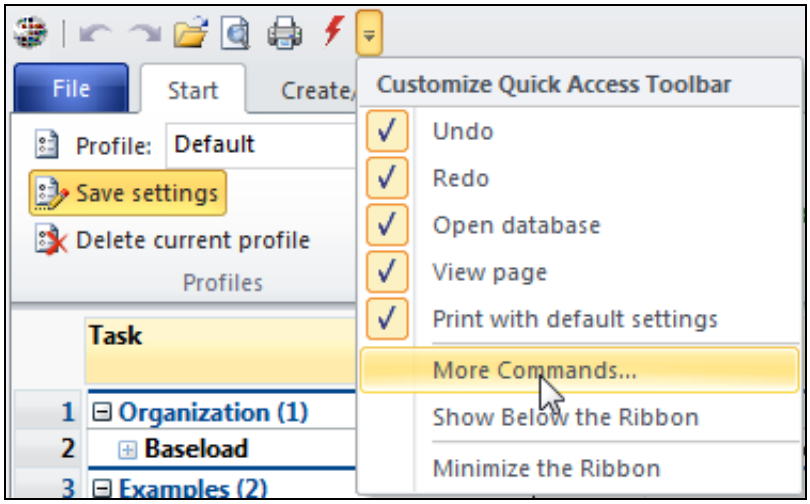
## QUICK ACCESS TOOLBAR

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

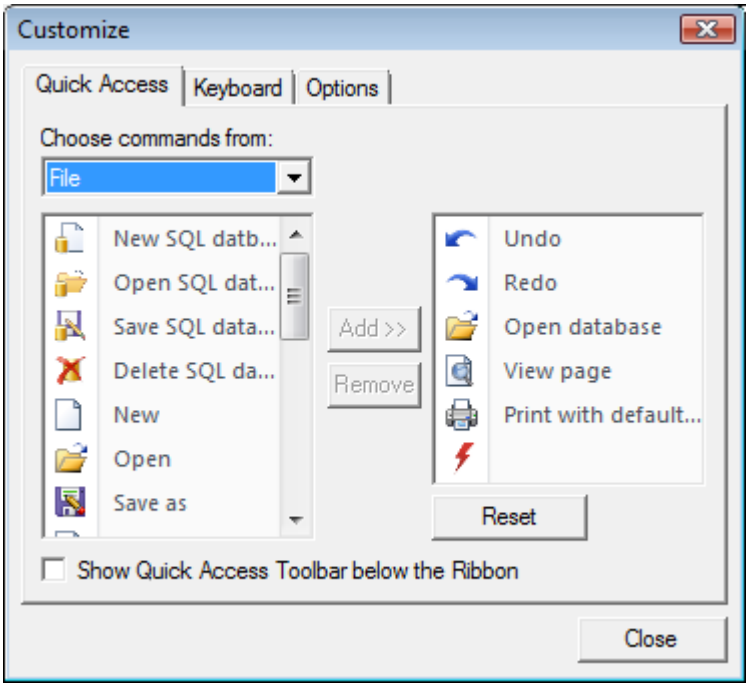
You may extend the list of quick access functions by clicking any function with the right mouse key and adding it to the list by selecting the respective command:



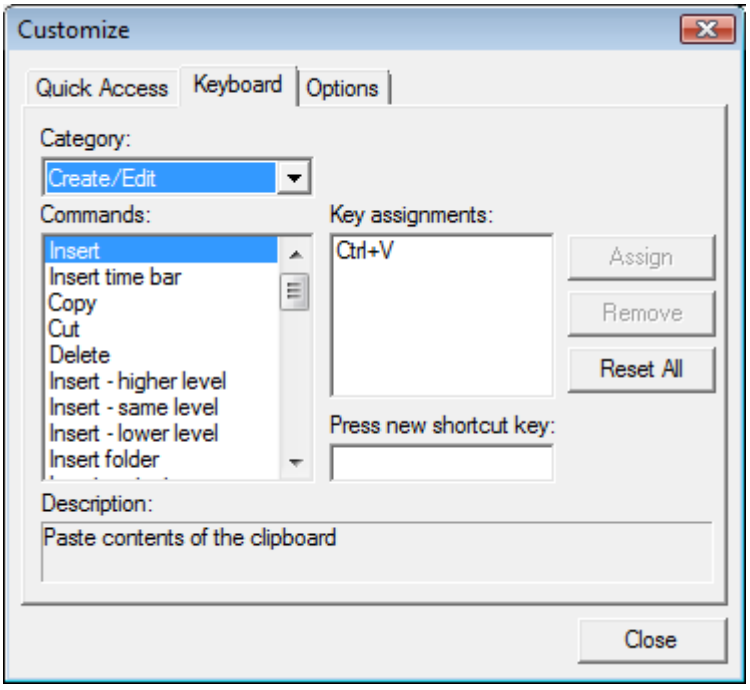

## CONFIGURATION OF THE RIBBON BAR



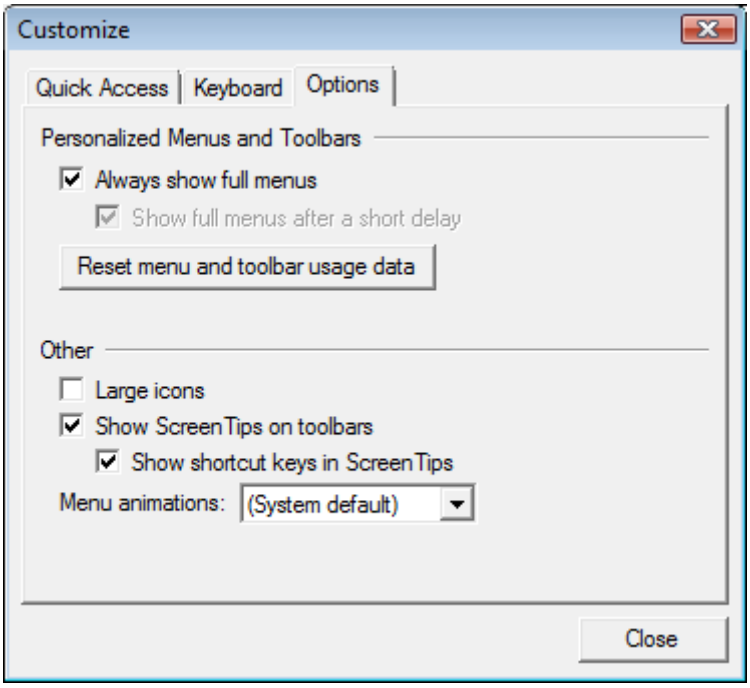

Clicking the scroll down arrow at the end of the Quick Access Toolbar or right-clicking any button will bring up the dialog box for adjusting the multi function bar.




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.



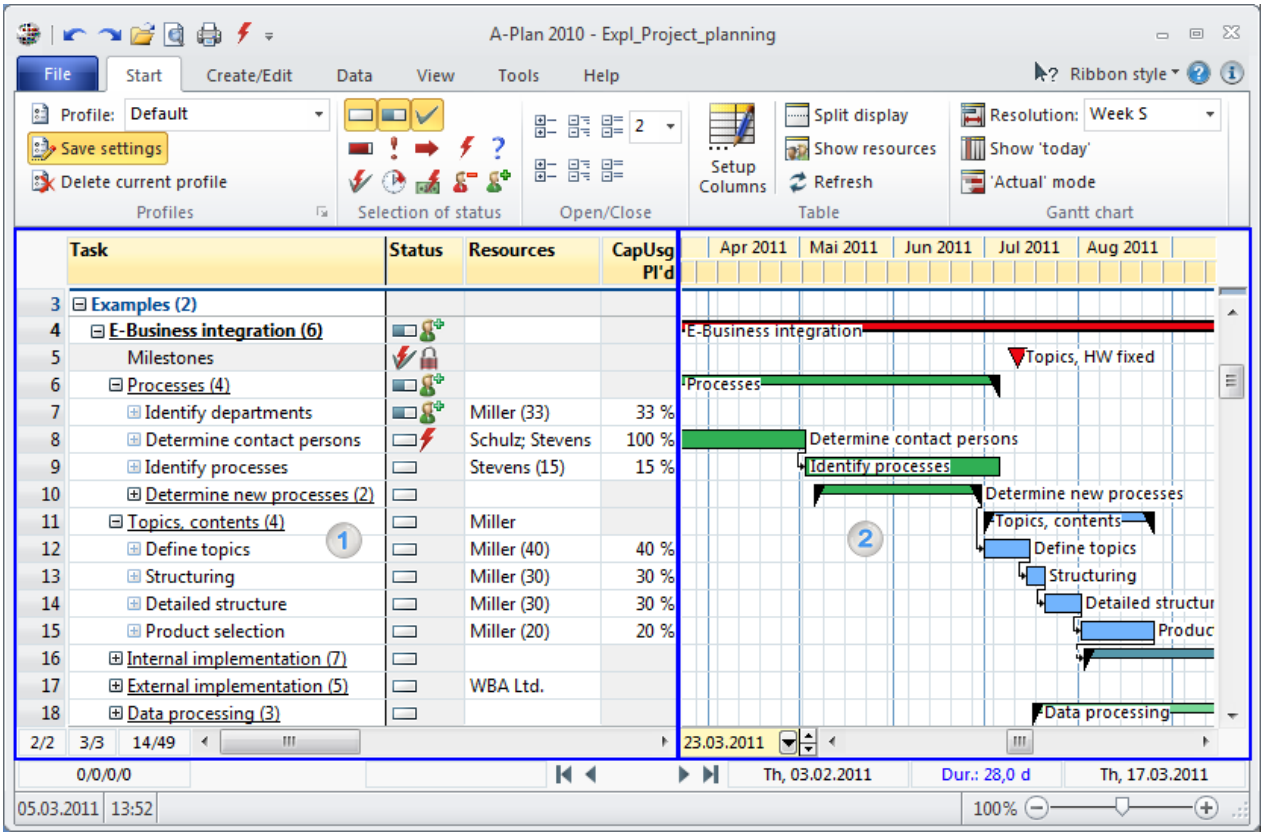

Further options can be set in the third tab.

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.

## THE MAIN WINDOW OF A-PLAN

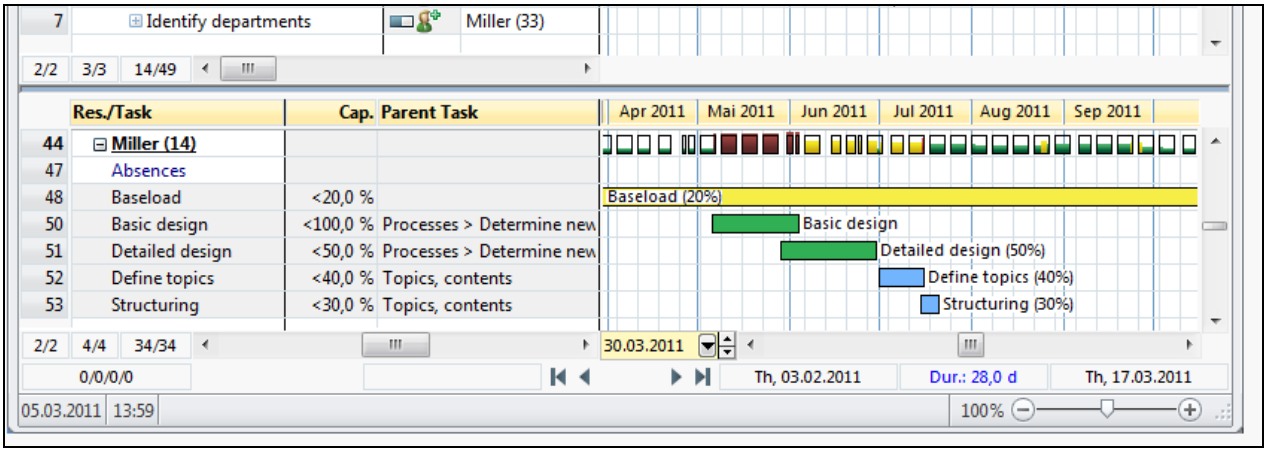
One of the major advantages of A-Plan is that you make almost all entries in the main window. This means that there is no need to change between various data entry windows and, as a consequence, you have quick access to all the data you need.

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:

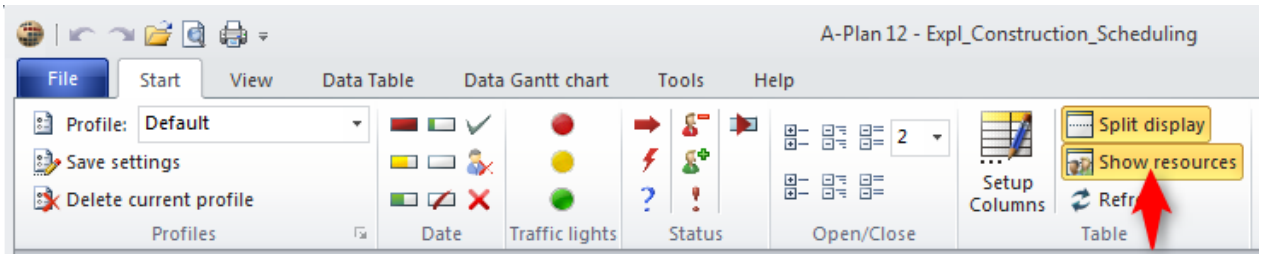



## RESOURCE VIEW

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

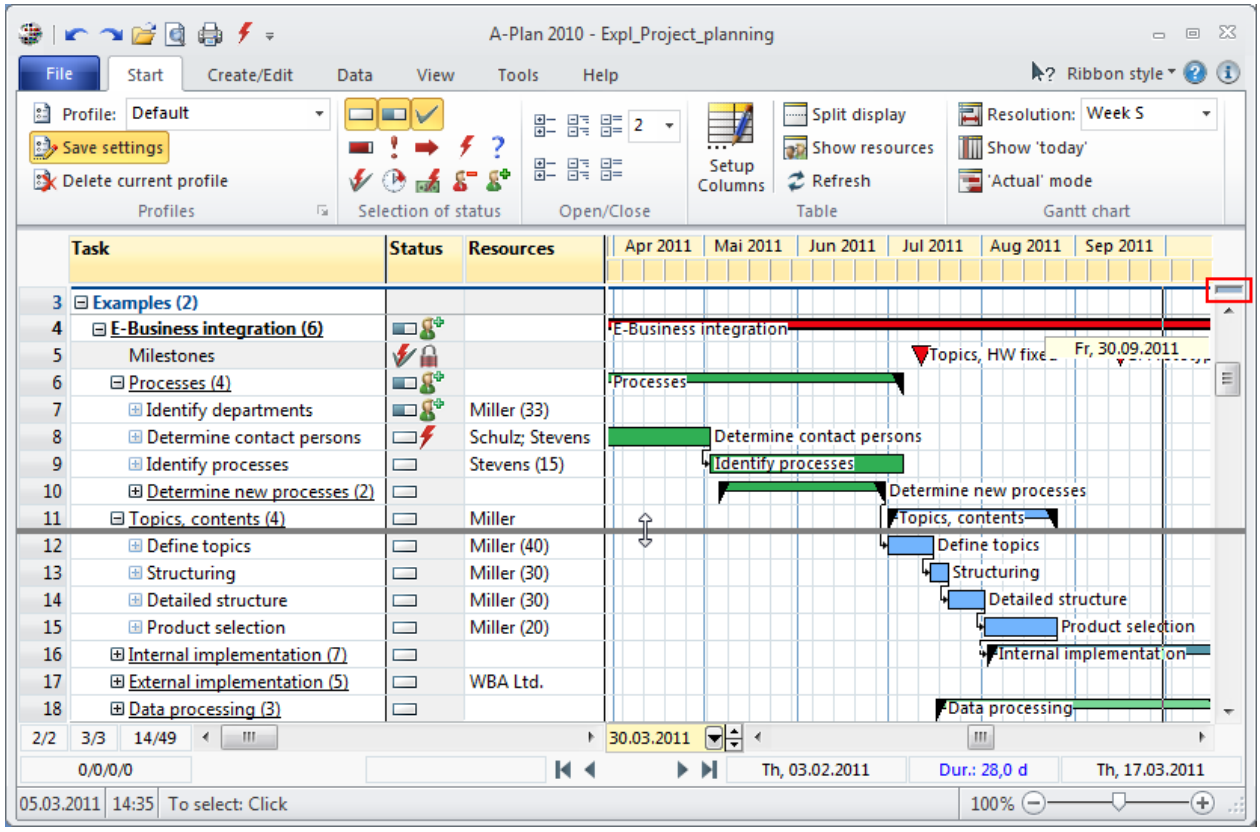


Resources will not be displayed unless the button **Show resources** has been activated:




## SPLIT PROJECT VIEW

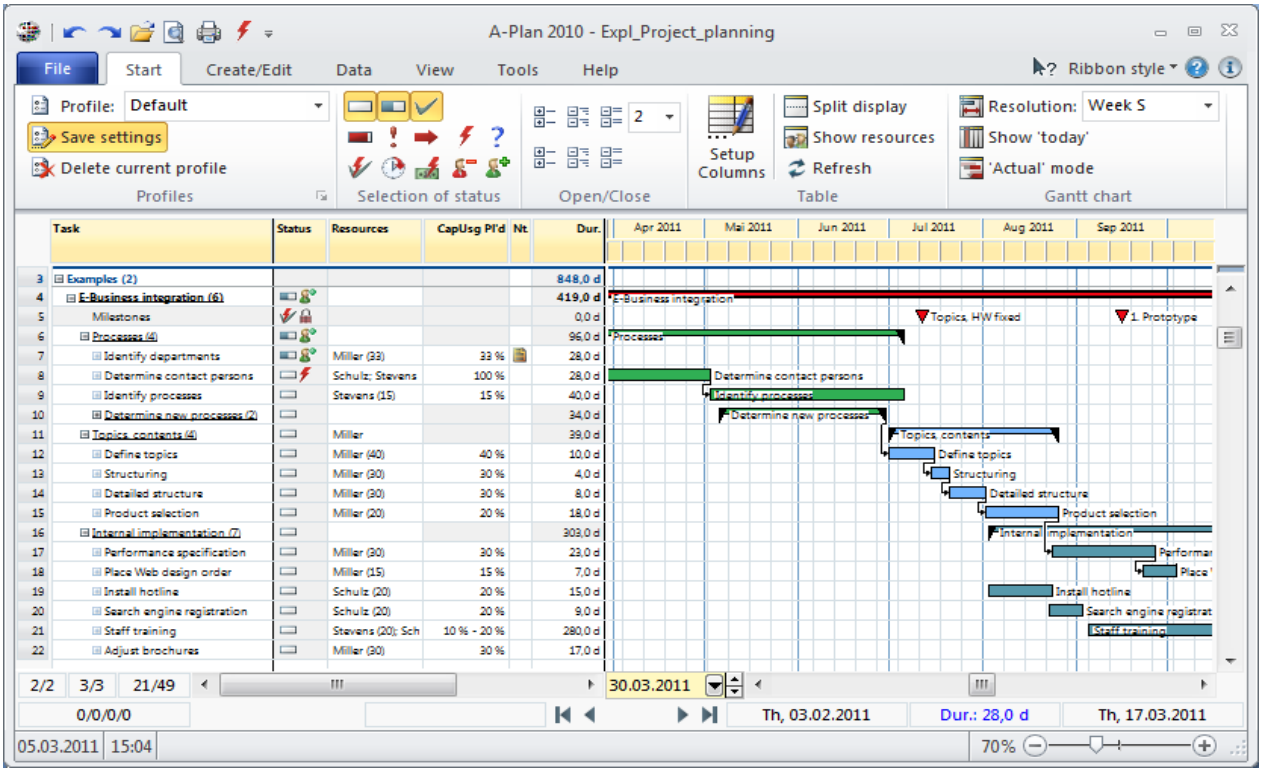
The lower part of the main table can also be used to split the display of the project view in order to have different projects displayed simultaneously. Splitting is triggered either by using the function **Split display** in the tab **Start** (see above) or by pulling down the splitting line (top right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



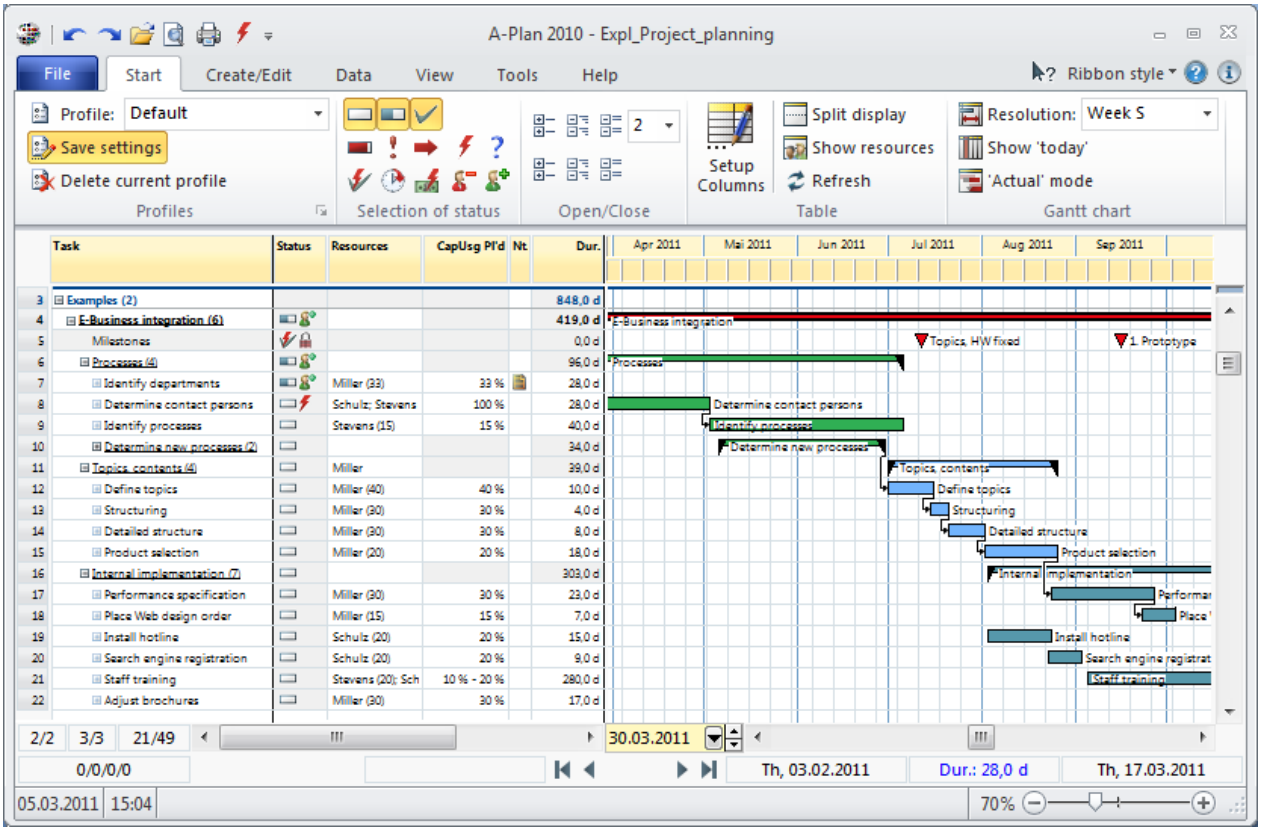

Splitting is cancelled by clicking the function **Split display** once again or by pulling the splitting line to the upper or lower edge of the main table.

## ZOOM FUNCTION

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

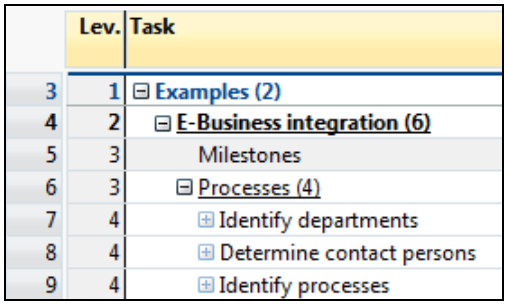



… while small zoom factors give you a better overview:



## 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.

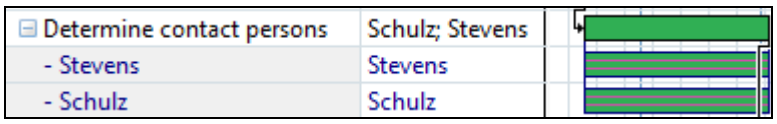
The numbers given in brackets behind designations indicate the number of items to be found on the next lower level.

**Note:**
With filters being applied (see "Filters" on page 78), 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 35).

### EXPANDING AND COLLAPSING OF SUMMARIES

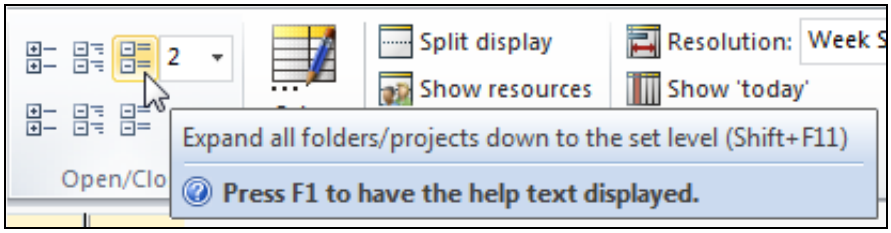
Folders, projects and tasks featuring further elements on lower levels can be expanded and collapsed by clicking the little square in front of their designations.



| | | |
|---|---|---|
| ⊟ 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 seperate row is displayed for each resource.




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

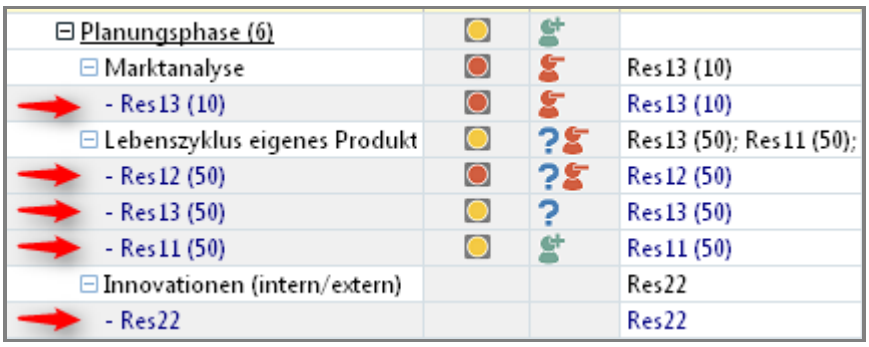
You can find the respective buttons for doing this in the tab **Start** of the Ribbon Bar. Clicking these buttons will expand or collapse the currently selected area. If no selection was made, all summaries will be expanded or collapsed.

**The meaning of the symols 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 |
| 2 | Level to which view will be expanded | - |

If the CTRL key is pressed when opening blocks, not only all the tasks, but also the resources rows will be opened:



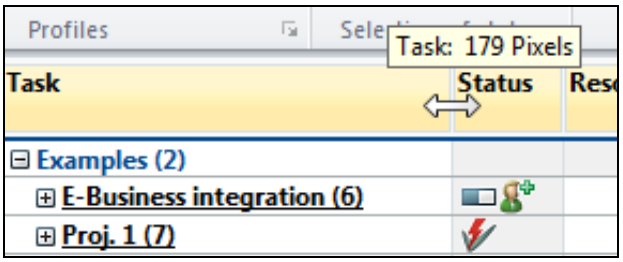

To close the resources rows please first fully close all levels (symbol button on the left).

## COLUMNS

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

- column headlines
- the sequence of columns
- 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 119.

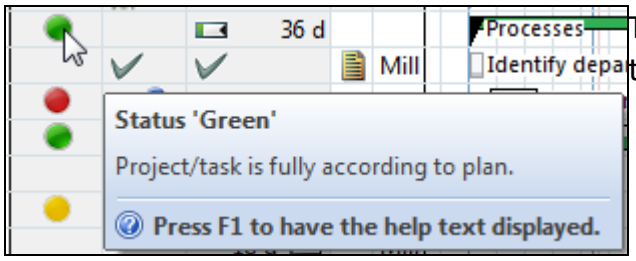
## TRAFFIC LIGHT, STATUS AND REM. TIME

The columns **Traffic Light**, **Status** and **Rem.Time** should enable you to identify at a glance those projects / tasks which need to be worked on or which will pose or entail problems or require special attention.

Furthermore, the column **Status** provides information on pecularities of projects / tasks, for example, whether they are locked or have read permission only or have a reminder date or alarm set for them.

| | Task | Traffic Light | Status | Rem. Time |
|---|---|---|---|---|
| 1 | more examples: File/Open... | | | |
| 2 | Examples (2) | | | |
| 3 | E-Business integration (6) | | | 222 d |
| 4 | Milestones | | | 90 d |
| 5 | Processes (4) | | | 36 d |
| 6 | Identify departments | | | |
| 7 | Determine contact persons | | | -12 d |
| 8 | Identify processes | | | 11 d |
| 9 | Determine new processes (2) | | | 8 d |
| 10 | Basic design | | | 8 d |

- The **Traffic Light** symbols summarize critical conditions allowing you to quickly identify those projects and tasks which require special attention.
- The columns **Status** and **Rem. Time** provide more details.




The meaning of a symbol is displayed when the mouse pointer hovers over it.

## STATUS FILTER

Selecting the **Status** filter in the tab **Start** allows you to determine which projects / tasks will be displayed:


**Note:**

- As long as **no button** has been activated, **all projects and tasks** are displayed with no limitation being made.
- **Date, Traffic Light and Status** are linked by **AND**. Hence, if 'Red' is activated as the **Traffic Light** and the question mark as the **Status**, only those tasks will be displayed which feature both the red traffic light symbol and the question mark.

## SYMBOLS OF THE STATUS COLUMN

 Completed (see "Completed" on page 251)

 Deadline was overrun (and task was not marked as ‚Completed')

 One of the limits was overrun (see "Limits" on page 63)

 Passive project / passive task (see "Passive and cancelled Projects" on page 40)

 Cancelled project / cancelled task (see "Passive and cancelled Projects" on page 40)

 Reshow date was reached or overrun (see "Reshow date" on page 54)

 An alarm has been set (see "Alarm" on page 55)

 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 187)

 For the folder / project read permission exists only (see ""Assign access permissions" on page 187)

 Row locked (see "Locking of rows" on page 41)

 Row locked by administrator (see "Locking of rows" on page 41)

 Deadline for planned end will probably be overrun (see "Project status (planning, current state, prognosis)" on page 115)

 Planned cost will probably be exceeded (see "Project status (planning, current state, prognosis)" on page 115)

 Planned capacity insufficient by at least 10% (see "Automatic Adjustments" on page 102)

 Planned capacity is in excess by at least 10% (see "Automatic Adjustments" on page 102)

 Do not apply set filters to this row**

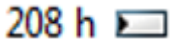
* The marking can be switched ON and OFF in the tab Data or by selecting it from the context-sensive menu after having right-clicked the respective row.

** The function can be switched ON and OFF in the tab Data or by selecting it from the context-sensive 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 78).

## SYMBOLS OF THE DATE COLUMN

The column **Date** shows how much time is left until the first pending time bar in the current row starts or ends (depending on your presetting, see "Show remaining time as" on page 128). Dates which were overrun are displayed as "negative remaining time" in red color.

The remaining time is calculated – depending on the setting made for **duration** – either in **real time** or in consideration of **working hours** (see "Show remaining time as" on page 128). Weekends and public holidays are taken into account in the same way as with the calculation of the duration.

| | |
|---|---|
|   | Planned (starting date lies ahead) |
|   | Work is underway, more than one week till the end |
|   | Work is underway, less than one week till the end |
|   | Work is underway, end date is today |
|   | End date was overrun |
|  | Completed |
|  | Passive (see "Passive and cancelled Projects" on page 40) |
|  | Cancelled (see "Passive and cancelled Projects" on page 40) |

Explanations:

- A duration on the left of the symbol refers to the begin whereas a duration on the right of the symbol refers to the end of the project/task.
- Depending on the setting made in Options (see "Show remaining time as" on page 128) the displayed duration either refers to the begin or to the end of the project/task. In case of planned tasks the duration till the begin is shown, if work is already underway the duration till the end is shown.
- If the column is too narrow due to the respective setting of the column width, the symbols will be displayed without specifying the duration.
- Values in the column **Date** cannot be changed as they are calculated by A-plan from the position of the first pending time bar in the row concerned.

## SYMBOLS OF THE TRAFFIC LIGHT COLUMN

Depending on the status either a green, yellow or red symbol or no symbol at all is shown in the traffic light column:

### *Green*

- Underway and none of the criteria mentioned under "Yellow" and "Red" exists.

### *Yellow*

- Critical (see "Symbols of the Status column" on page 27)
- Question mark (see "Symbols of the Status column" on page 27)

- Capacity in excess of more than 10 % (see "Work / automated calculations" on page 101)
- Capacity insufficient by more than 10 % and by less than 30% (see "Work / automated calculations" on page 101)
- End date will probably be overrun (see "Prognosis of the further course of the project" on page 115)
- Cost will probably be exceeded (see "Prognosis of the further course of the project" on page 115)

***Red***

- End date was overrun
- Limit was overrun (see "Limits" on page 63)
- Capacity insufficient by more then 30%  (see "Work / automated calculations" on page 101)

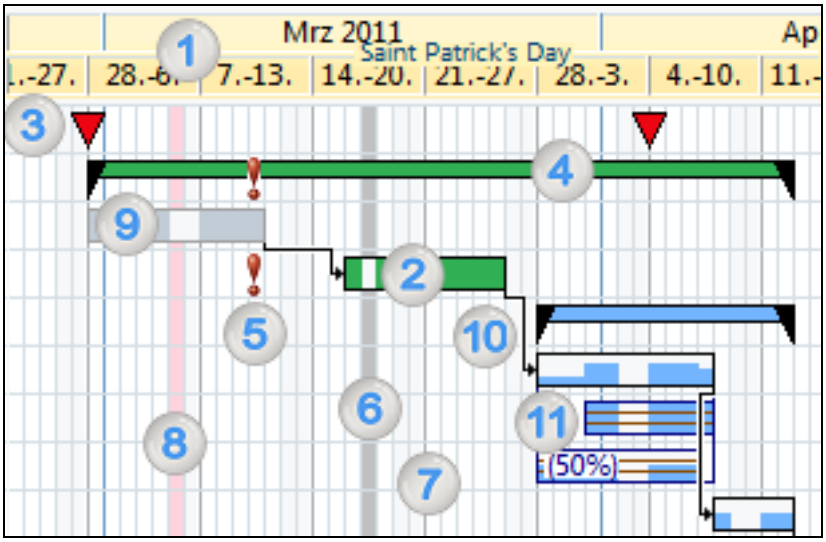
***No traffic light symbol***

- Task has not yet been started and none of the criteria mentioned under "Yellow" and "Red" exists.
- Completed
- Passive (see "Passive and cancelled Projects" on page 40)
- Cancelled (see "Passive and cancelled Projects" on page 40)

# 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)***:

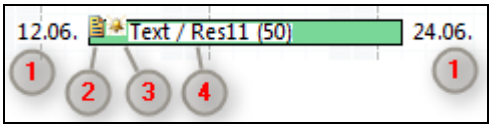



The following elements are used in a Gantt chart:

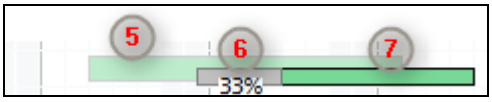
- The sequence of tasks in the execution of a project is shown over time in the form of **task bars**. The duration of a given task ***(2)*** is represented by the length of the respective task bar. Bar areas with colored patterns are used to mark time periods spent on a task while light grey areas indicate 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 38) 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 123), **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 128).
- **Links** ***(10)*** are used to establish and show dependencies between task bars (see "
- Linking of task bars" on page 56).
- **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 88).

### *Properties of task bars*

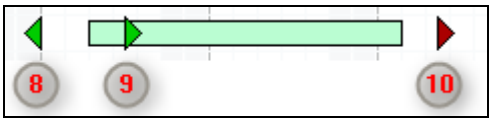
The following additional information can be added **to task bars**:




**Planning state**




**Actual state**

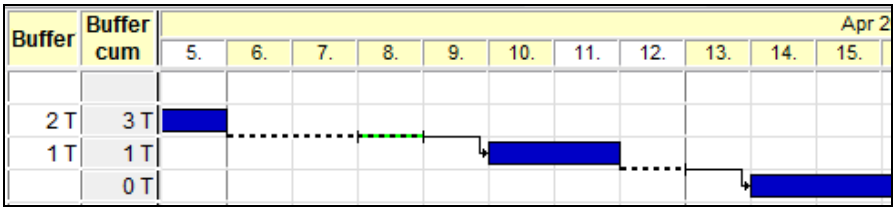



**Limits**

- **Designation *(1)*** (see "Task bars" on page 126)
- **Begin** and **end** as numerical values ***(2)*** (see "Task bars" on page 126)
- **Alarm *(3)*** (see "**Alarm**" on page 55)
- **Note *(4)*** (see "Note" on page 56)
- **Planned course** (5)
- **Completed work** (6) (see "Project status (planning, current state, prognosis)" on page 115)
- **Missing work (7) (Prognosis**) (see Project status (planning, current state, prognosis)" on page 115)
- **Earliest begin *(8)*** (see "Limits" on page 63)
- **Latest begin *(9)*** (see "Limits" on page 63)
- **Latest end *(10)*** (see "Limits" on page 63)

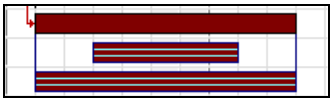
### *Links*

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

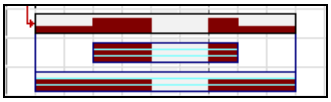



### *Display of working times /capacities*

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 97):



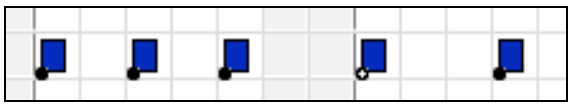
**without** indication of working times



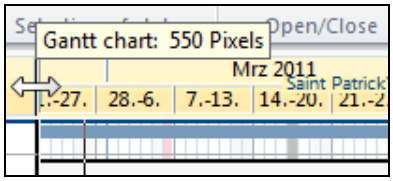
**with** indication of working times

### *Series*

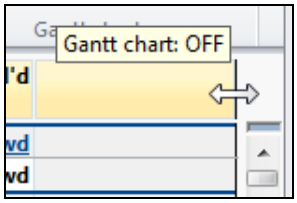
Task bars belonging to a **series** (see "Series (periodically recurring dates)" on page 65) are marked by a colored dot at the beginning of the task bar. Task bars modified manually at a later time are marked by a tiny white cross located inside of the colored dot (see third task bar starting at the left margin in the example given below):



## SETTING THE WIDTH OF THE GANTT CHART



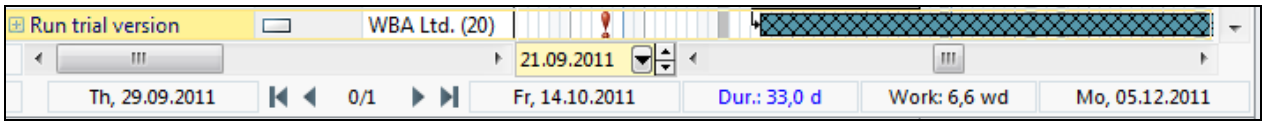

Similarly to changing the width of table columns, you may set the **width of the Gantt chart** as you like by moving the left borderline of the headline with the left mouse button pressed.




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

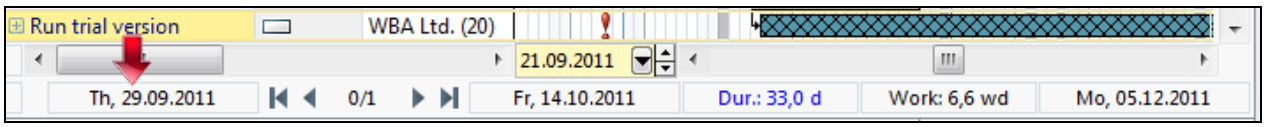
The begin, duration, work and end of the currently selected task bar are shown in boxes (= fields) arranged below the Gantt chart:




**Note**:
The "work" box appears only if resources have been allocated (see "Resource planning" on page 87).

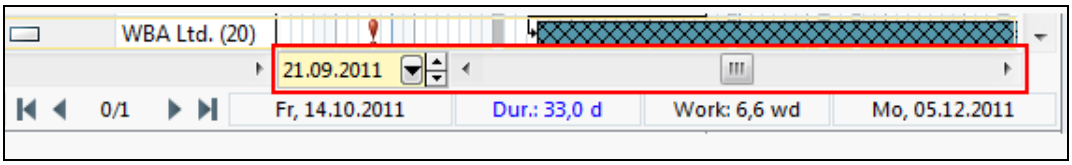
With no task bar selected in the current row, the information boxes below the Gantt chart show the total work and the total duration of all task bars in the row as well as the beginning of the first and the end of the last task bar.

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

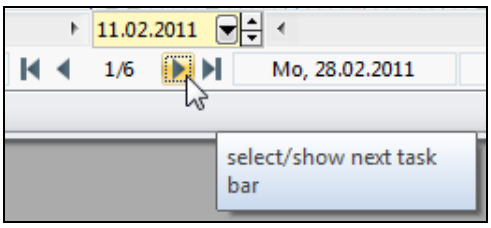
Use the scroll bar at the bottom of the Gantt chart to have the time period displayed as you need it:




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

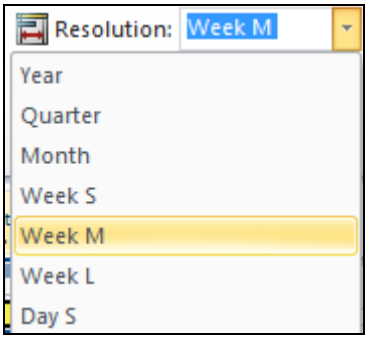



Click the inner arrow buttons below the scroll bar on the left side to scroll through the task bars of the currently selected row.

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 Expl_Project_planning.apl.

Further examples are available in the data folder of A-Plan (by default this is "Documents\A-Plan\Data"). The names of all example databases start with "Expl_" 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 14.
- Description of the user interface: "The user interface of A-Plan" on page 15.
- Creating a database and entering data: "Entering and editing of data" on page 35.

### USING EXAMPLES AS TEMPLATES FOR YOUR OWN APPLICATIONS

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 36.

# 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 247.

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. 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 171).

# 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 75). 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 76).

## 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 36). 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

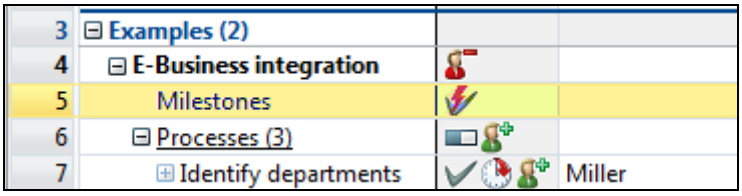
In general, you can undo up to twenty entries or changes you made and subsequently redo (=restore) them again. This even applies to complex changes such as deleting, shifting or downgrading entire folders or changing dates in linked task bars etc.


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.

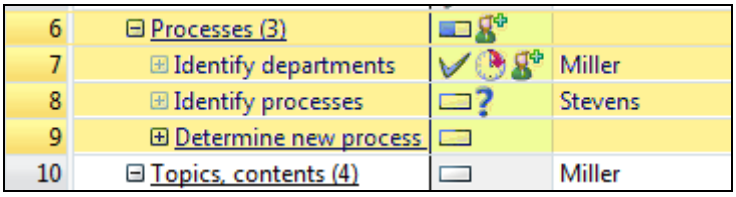
# ENTERING ROWS (TASKS)

## 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.




**Row selected**

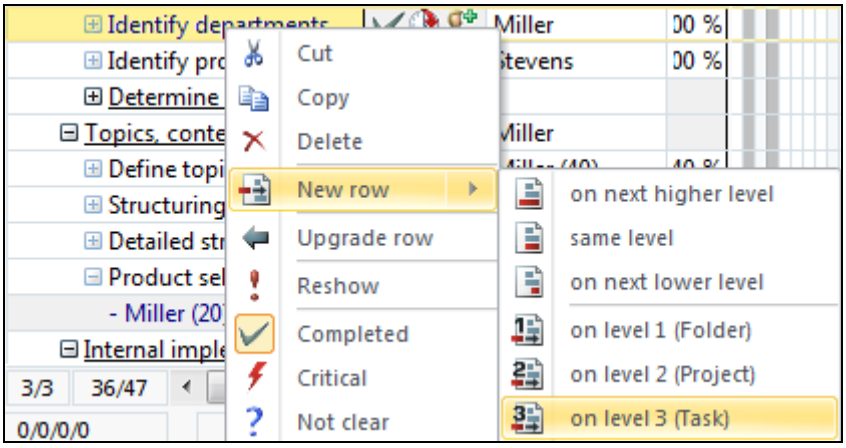



**Summary row selected** (with lower-level rows)

## ENTER A NEW ROW

To insert a new row, either use the respective command from the ribbon tab **Data Table** 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:

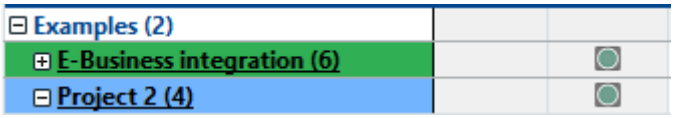



**Note:**
You are not allowed to omit one or several levels. For instance, a row on level 3 cannot be followed by a row on level 5!!

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.

### INDIVIDUAL COLORS FOR THE ROWS

One or several lines at a time can be fitted with an individual color:

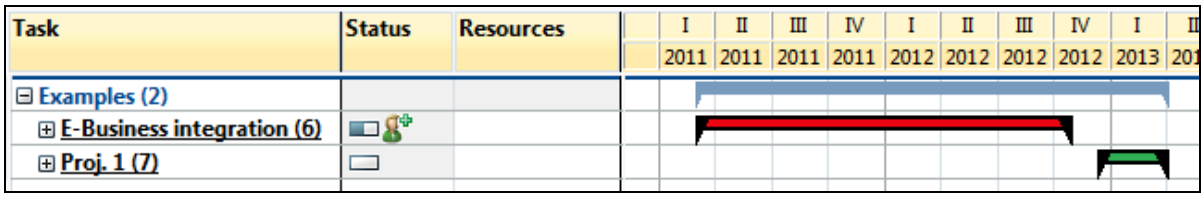



Alternatively, the time bar may be provided with the selected color also simultaneously.

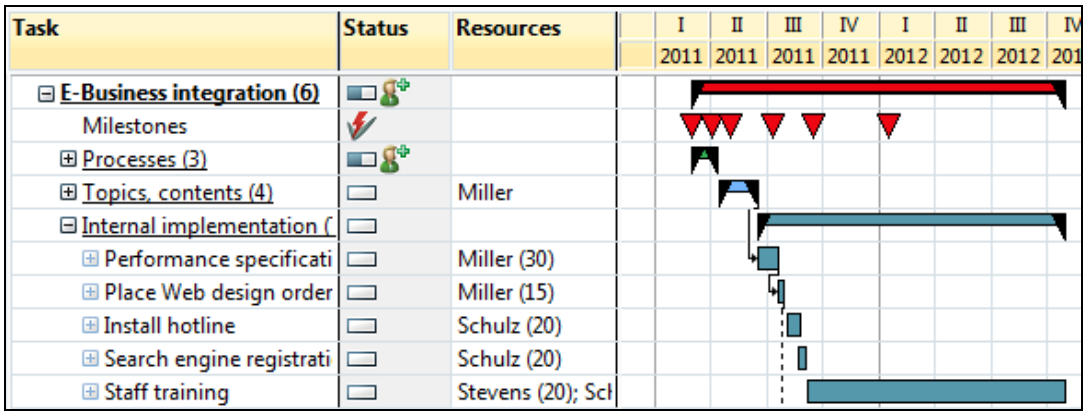
The corresponding dialog box can be used both by right click on a designation of a task, as well as in the menu **Data Gantt chart**.

## SUMMARY ROWS

**Folder rows** (= highest level in the structure, see "Structuring (Folders, Projects, Tasks)" on page 24) 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:



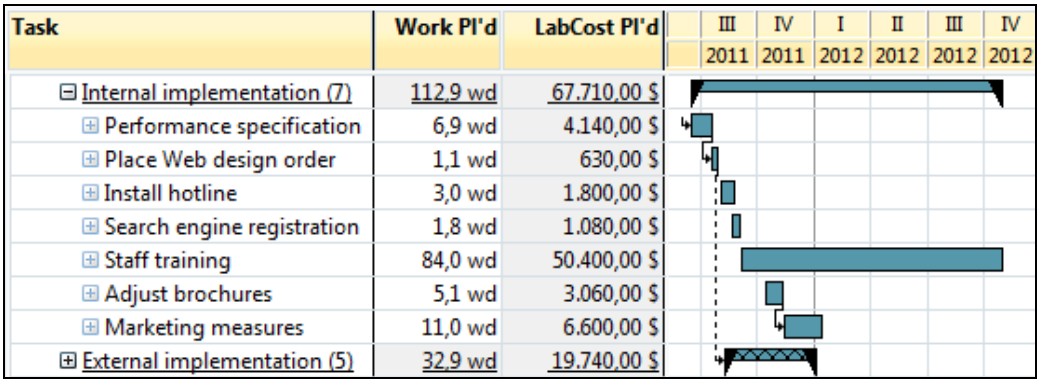

All other rows, i.e. on the second or on lower levels, are either shown as **summary rows** (see row "Processes") or as independent rows (see row "Milestones") depending on whether subtasks exist or not:




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:

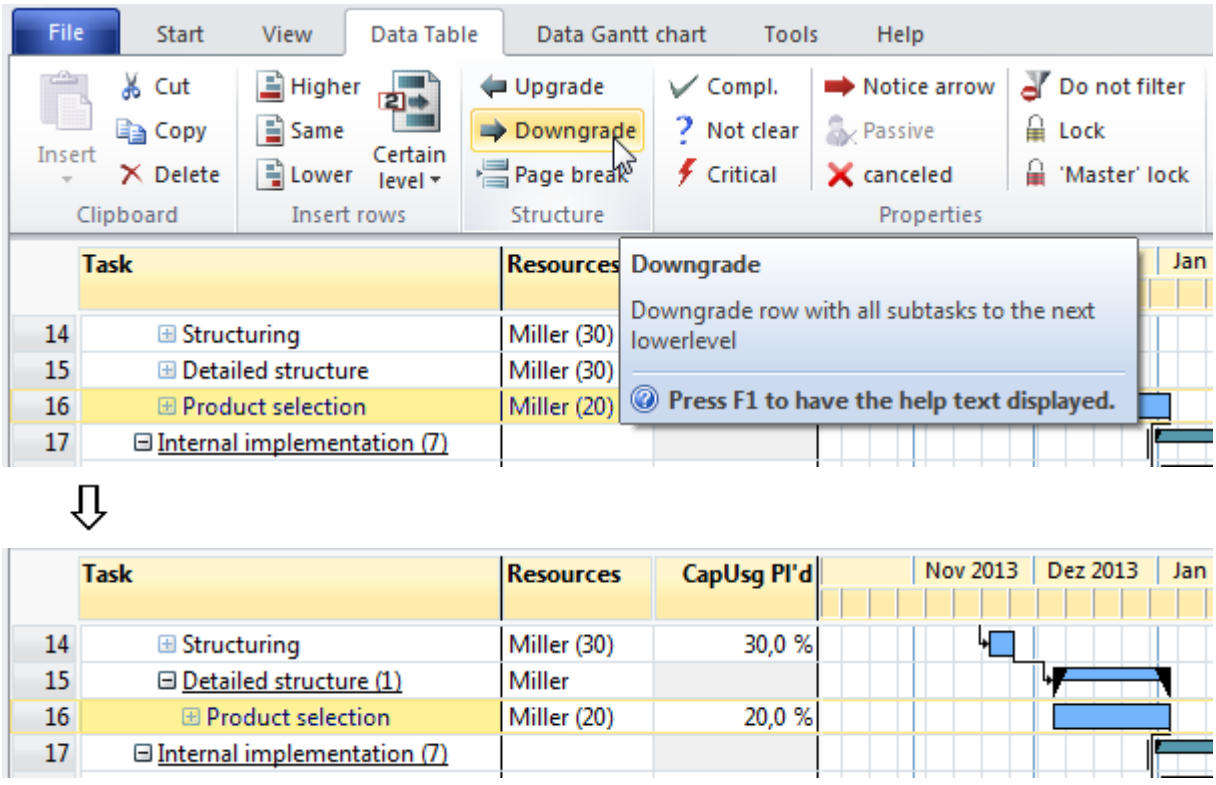



## HIDING SUMMARY TASK BARS

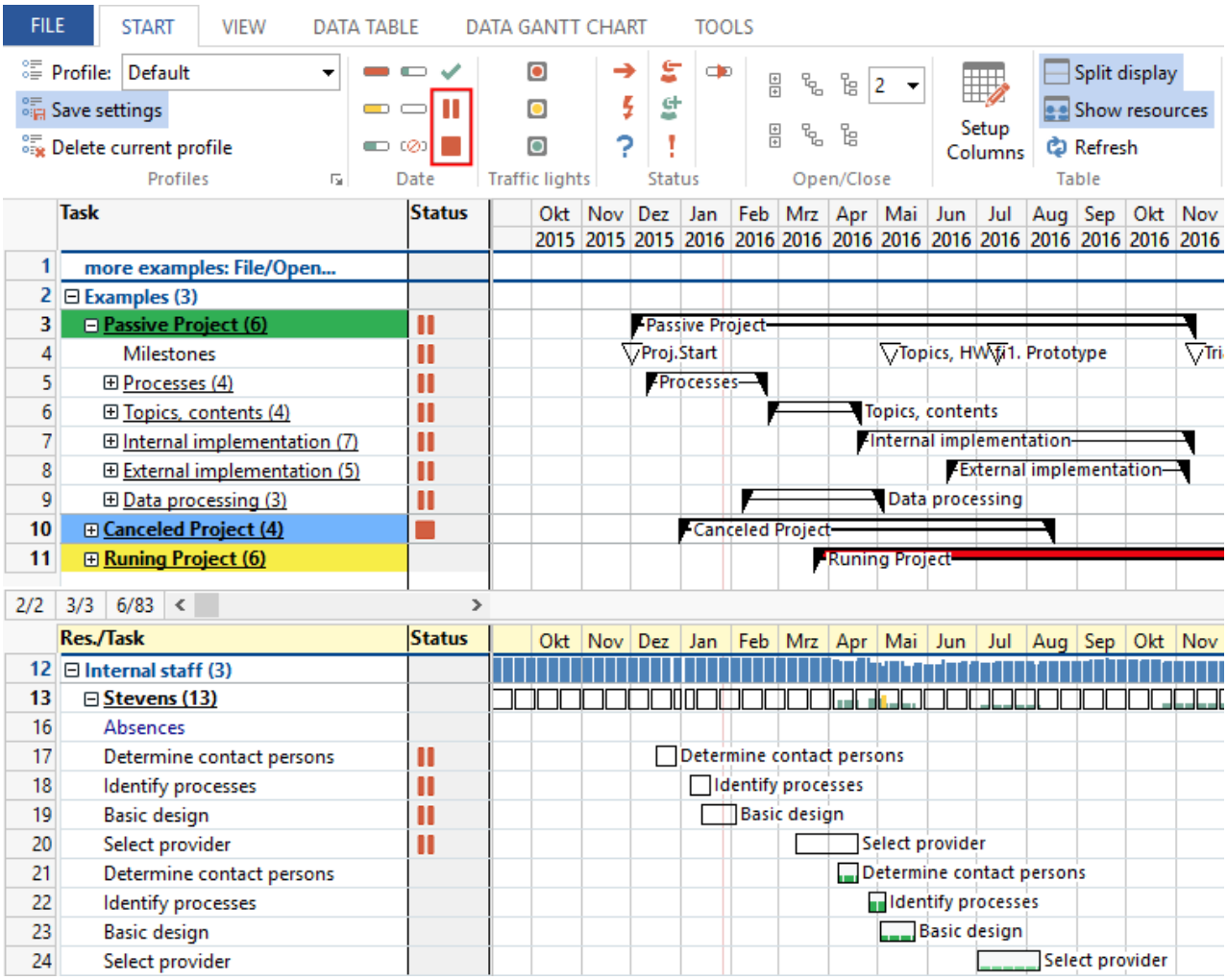
Optionally, task bars in summary rows can be removed from display by clicking on the designation of the row with the right mouse button and activating the option **No summery time bar.**

## 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:



# PASSIVE AND CANCELLED PROJECTS




**Projects** are **passive** if, for example, an order has not yet been placed or if the scheduling is still uncertain. Passive projects are sort of wildcards as they are not considered with regard to work and costs. Contrary to **cancelled projects** they are shown in resource view.

**Cancelled projects** are those projects which were not executed but which are to remain in the database for documentation reasons. Work and cost associated with them is not taken into account and they are not shown in resource view.

Individual tasks can likewise be set to **passive** or can be **cancelled**.

The **Date** filters (see screenshot above enable you to prevent passive or cancelled projects from being displayed or printed.

## SHOW TOTALS

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

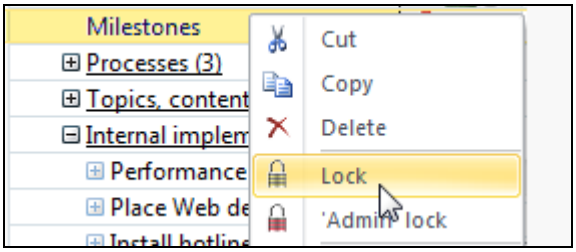
| Task | Work Pl'd | LabCost Pl'd |
|---|---|---|
| Total | 725,6 wd | 435.330,00 $ |
| ⊞ Organization (1) | 524,6 wd | 314.730,00 $ |
| ⊞ Examples (2) | 201,0 wd | 120.600,00 $ |

To activate this function, use the dialog box **Options** (see "Columns/Rows" on page 119).

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**:




### *'Master' 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 master rights ( "Access permissions" on page 184). This lock cannot be deactivated unless you have master rights.

| Task | Status |
|---|---|
| Place Web design order | |
| Install hotline | |

Locked rows are indicated in the status column by means of a yellow lock (standard lock) or a red lock (‚Master' 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 247).

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

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

- 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 color 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.

### MULTIPLE SELECTION WHEN ENTERING VALUES INTO FIELDS

With all columns a given value can be entered into several rows supposed that the cells concerned were selected before.

### 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 130). The increment specifies the distance between follow-up points in time as they are used for entry and display of time.

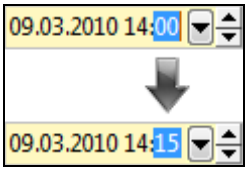
By default, the increment is set to 15 minutes. If required, a longer increment should be set, i.e. choose an interval which is close to the shortest time interval used in your planning but which can still be displayed. For example, if your planning is done mainly in hours or days, you should set the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

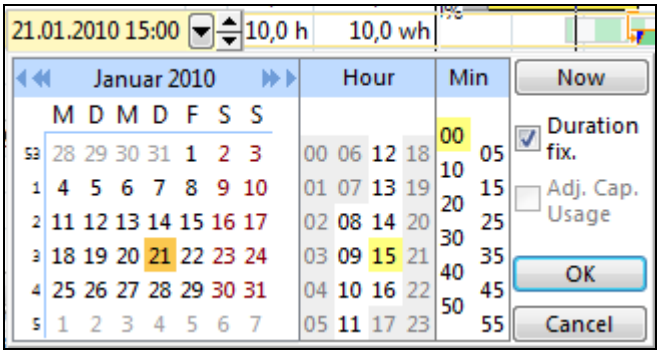
Values are changed along the set **time increment** (see "Time/Week numbers" on page 130):




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 |

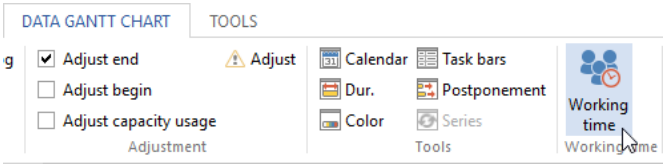
150 min = 2.5 wh

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 130), 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 89.

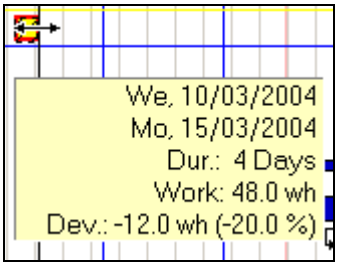
## ENTERING A NEW TASK BAR

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 137):


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:


## 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 101), 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.

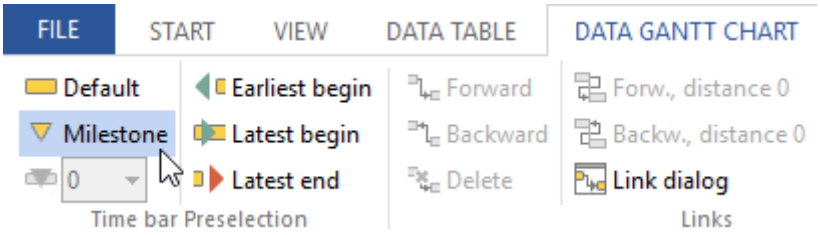
## USING THE MOUSE TO COPY A TASK BAR

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.

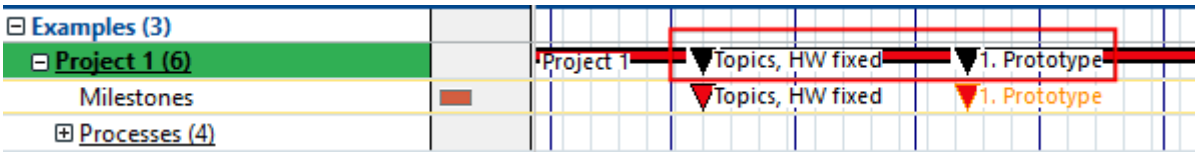
## MILESTONE

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

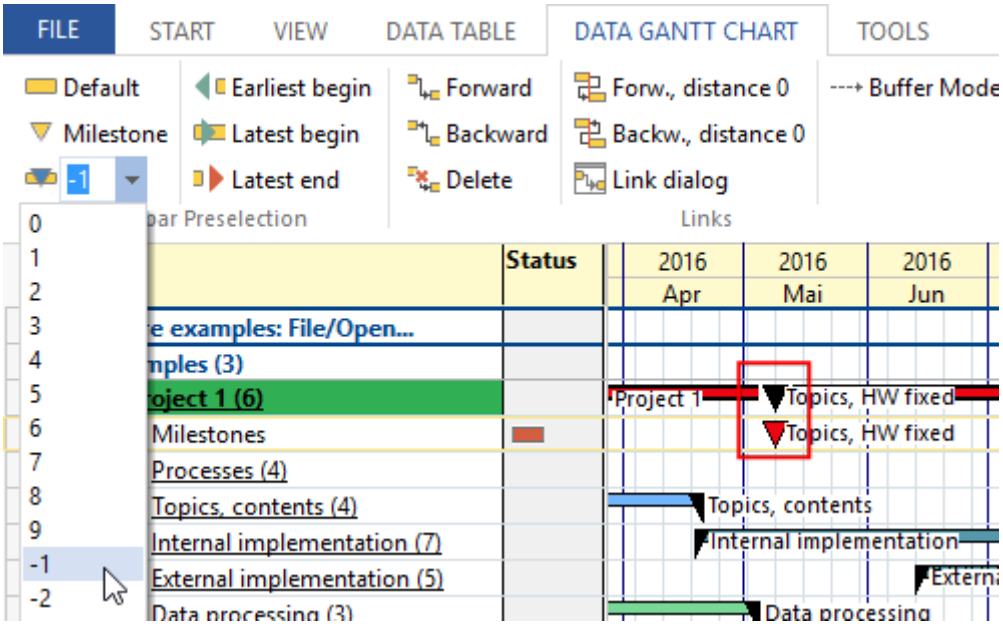
You can create a milestone directly by double clicking on the desired position in the Gantt chart, if the corresponding pre-selection has been set in advance:




Milestones that have been marked for display in the higher levels too, so that they are visible even in closed projects or blocks:




The identification of such milestones taking place in register **Data Gantt Chart**:



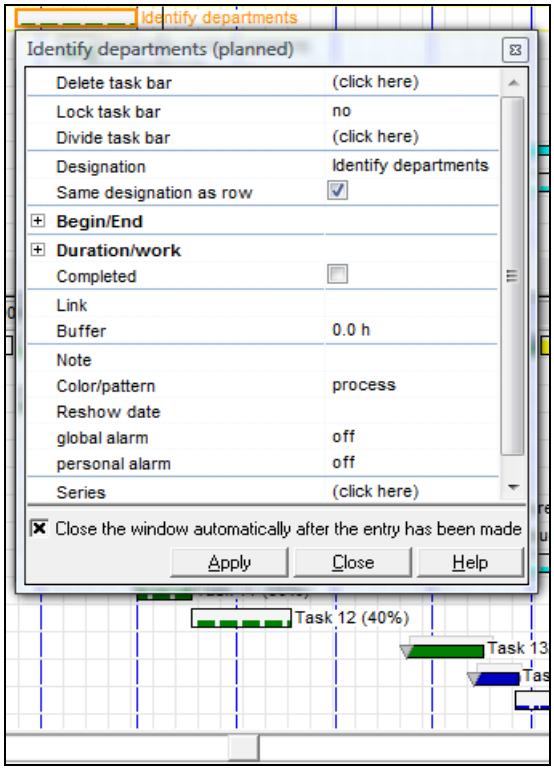
A number > 0 indicates the levels to view the milestone, from top to bottom. A "2" therefore means that the milestone should be displayed to the 2nd level, ie in levels 1 and 2.

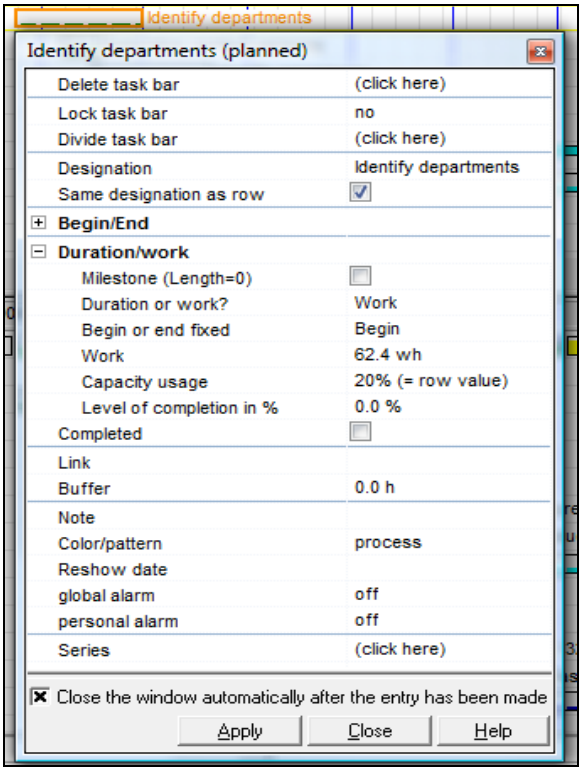
A number < 0 indicates the levels to view the milestone, from bottom to top. A "-2" in this case means that the milestone to be displayed on the next 2 levels above. So if the milestone is on the 4th level, it should be displayed on the levels 3 and 2.

A "0" indicates not to display the milestone on a higher level.

## 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:



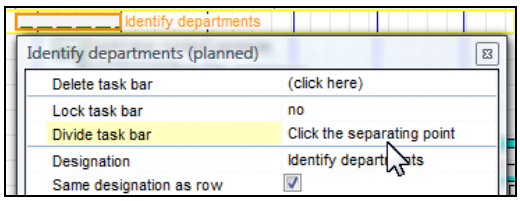




For better clarity, properties are clustered in groups most of which can be expanded and collapsed (e.g. the group "Duration/Work" is collapsed on the left above and expanded on the right).

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.

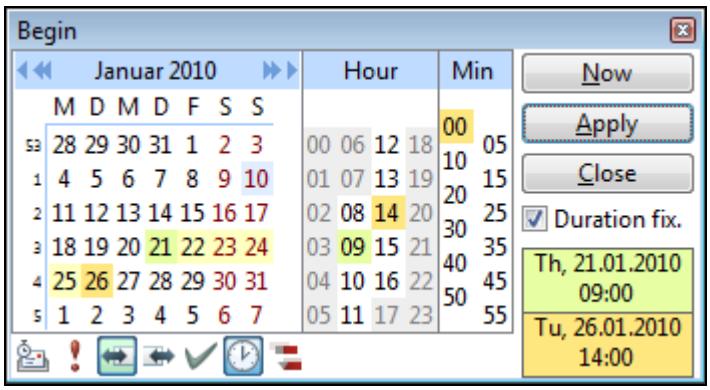



Alternatively, you may select the dividing command in the property box and then click the task bar at the spot where you want it to be divided.

# 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 **Data Gantt chart**:

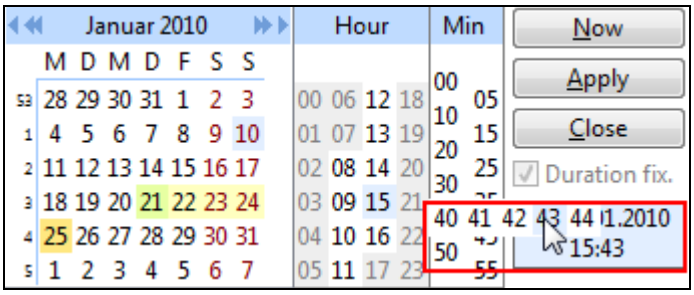



The calendar can remain permanently opened and can be placed anywhere on the screen.

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 115).
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")*

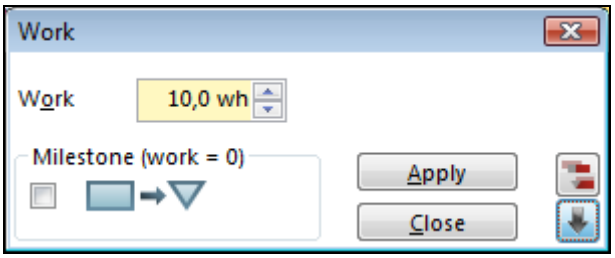
Click the button **Now**.

### *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 115) or the **work** of a selected task bar. Click on the button Dur. in ribbon tab **Data Gantt chart** to open the dialog box:



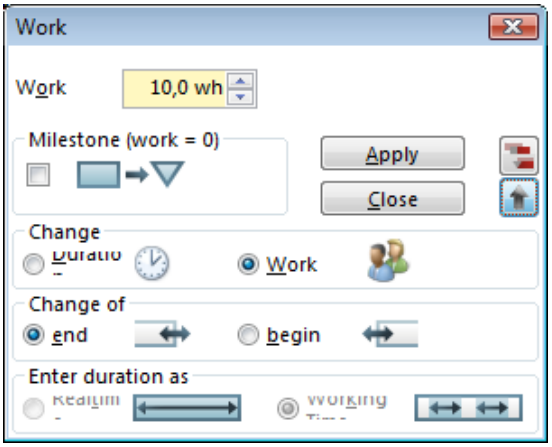

To change the **actual duration,** click the button first.

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:



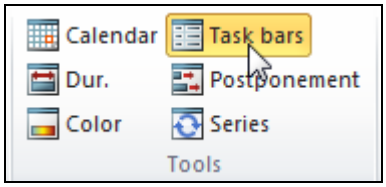

The length of the selected task bar can be entered either as **duration** or – with resources assigned – as **work** (see below).

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.

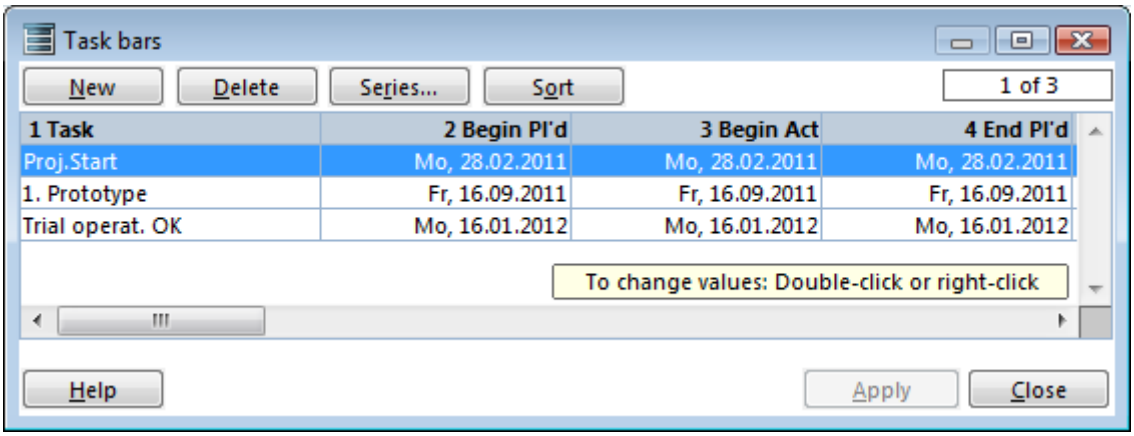
The duration can be entered either as **real time** which means that you enter the sheer difference between the begin and the end or as **working time** based on the working hours of the default calendar (see "Calculation of the duration of tasks, default calendar" on page 44).

## TASK BAR LIST

### OPENING THE TASK BAR LIST




Click the button **Task bars** in the ribbon tab **Data Gantt chart**.




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 49
- "Bar patterns" on page 128
- "Alarm" on page 55
- "Note" on page 56

**- 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 65), 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 137)

## 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.

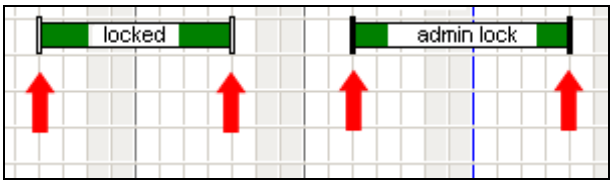
Pressing ENTER or clicking another element will show the text within the task bar or – if there is not enough space – after the task bar. If the designations of the task bars are to be hidden temporarily, unselect the option **Designation** at the register **View**.

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 overrun, 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 184) 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:



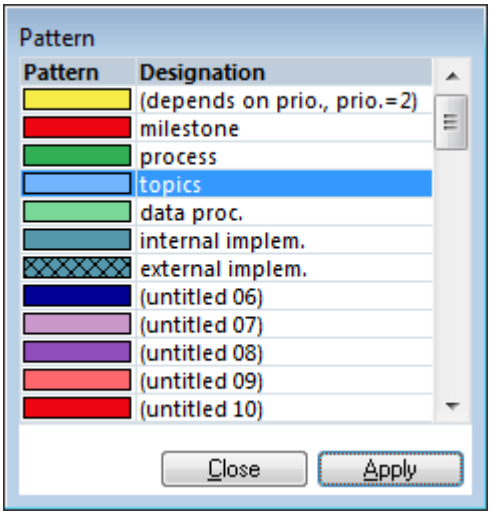

The chapter "Buffers" on page 60 describes how the execution of tasks can be shifted if task bars are locked.

## 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 128).

## 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).

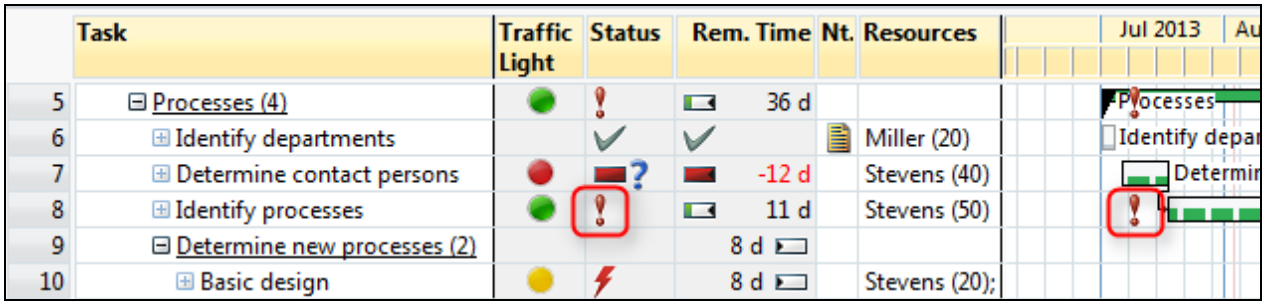
The first entry in the list always shows the default pattern for the selected task bar based on the priority assigned to it (see "Bar patterns" on page 128).

**Tip:**
Below the task table you can print a **legend** of patterns and pattern designations (see "Task bars/Notes/Legend" on page 152).

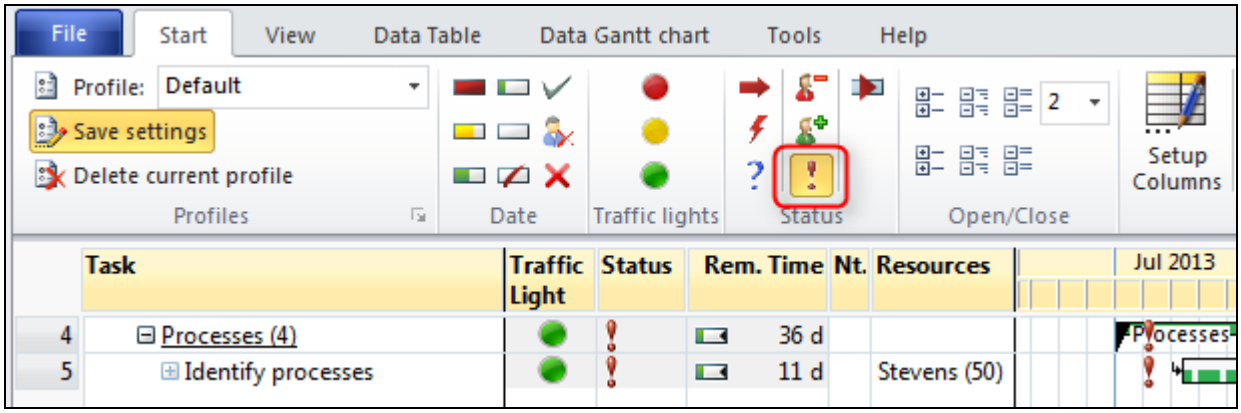
## RESHOW DATE

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 55) 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 color):



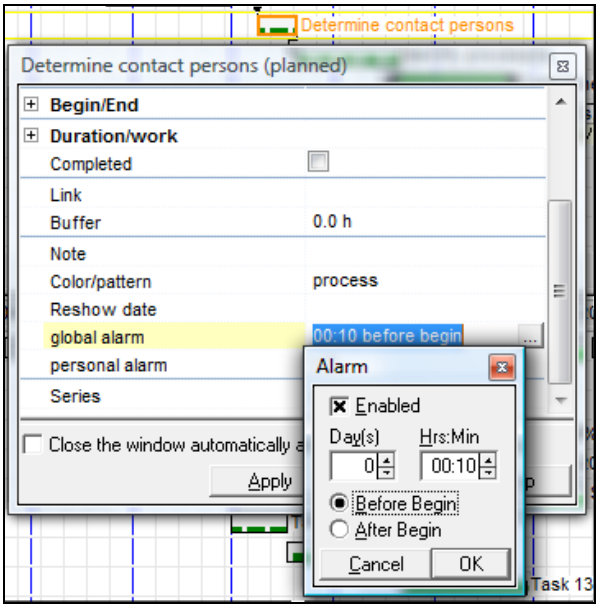

The reshow date in higher-level rows is the same as the **earliest reshow date** in the lower-level tasks.

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 137).

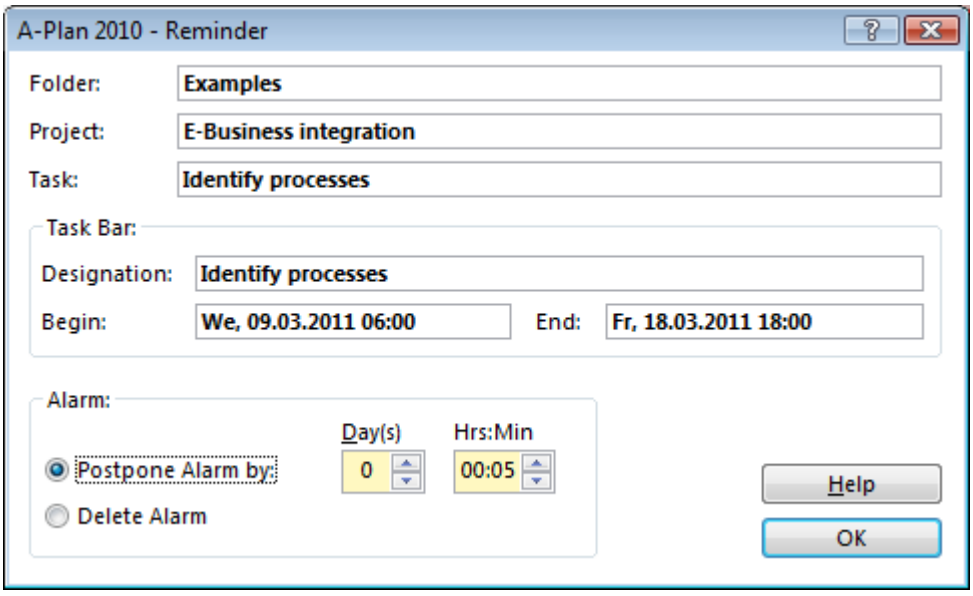
Choosing **Edit Alarm** opens a dialog box enabling you to set the alarm time as you need it.

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:



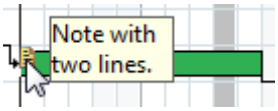

The dialog box even appears if you are currently working with another program and A-Plan is either concealed behind this program window or minimized.

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 184).

## 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.

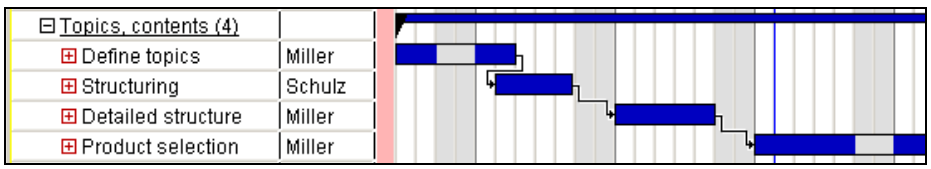
The note symbol is removed after the text of the note was deleted completely.

## LINKING OF TASK BARS

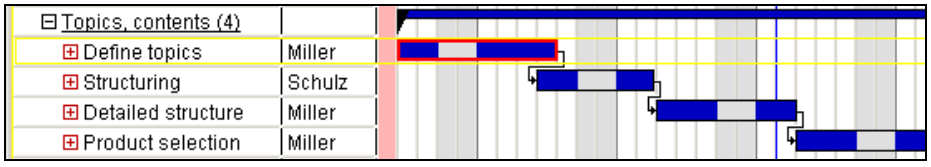
Task bars can be linked to each other to avoid the need of manually changing all task bars affected by a change made to a single task bar. If, for example, the third of ten linked tasks is postponed by two weeks, then the remaining seven tasks are automatically shifted by two weeks as well.

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**!

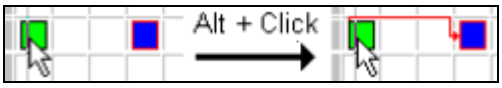
The distance between linked task bars remains the same if one of the predecessors is shifted or if its duration is changed. If a reduction of the distance is to be permitted to a certain extent, **buffers** can be inserted between task bars (see "Buffers" on page 60).

However, it is also possible to define all of the links as a temporary buffer, so that they can be pushed together to a distance of "0" (see "Distances temporarily as buffer" on page 62).

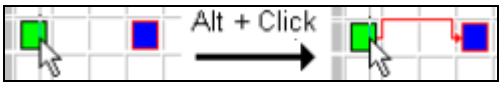
## ESTABLISHING A LINK BETWEEN TASK BARS

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.

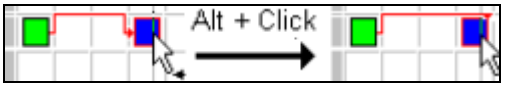
If the begin of the successor is to depend on the **begin** of the predecessor**,** click the predecessor on the left from the center:




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

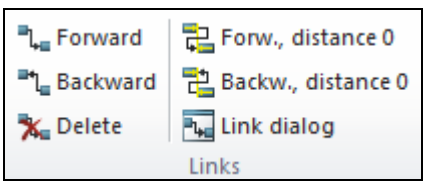



Next, you can change the linking point of the **successor** by clicking the right half of it (or the left half respectively). Do not forget to hold down the ALT key when doing so:




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 **Data Gantt chart** 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 <u>all</u> links** within the selected area.

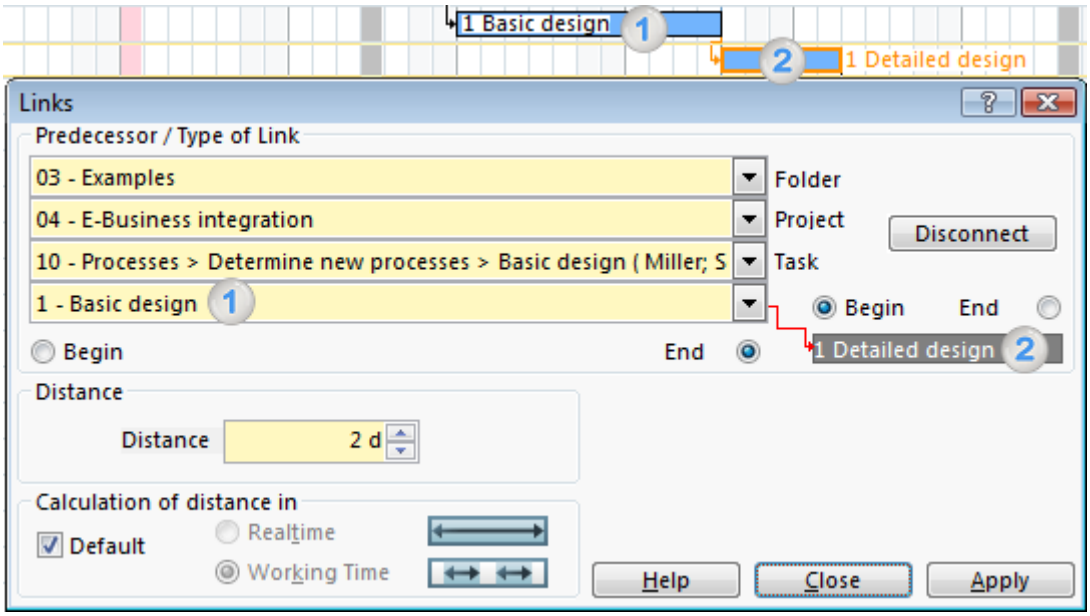
The column **Link** shows how a task depends on other tasks but it may also be used to change or enter the interdependencies directly in the column:

| Task | Traffic Light | Status | Link |
|---|---|---|---|
| Identify processes | | | 7EA |
| Determine new processes (2) | | | |
| Basic design | | | 8EA-3,00d |
| Detailed design | | | 10EA-5,00d |
| Topics, contents (4) | | | |
| Define topics | | | 11EA+1,00d |
| Structuring | | | 13EA-1,00d |

## 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.

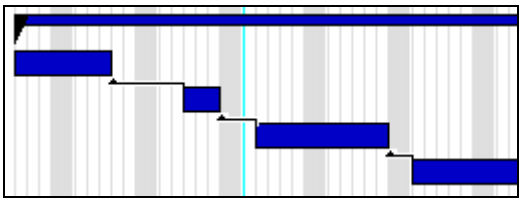
For details on entering and calculation of the distance see the explanations on the setting of the "duration" ("Time/Week numbers" on page 130).

### 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)

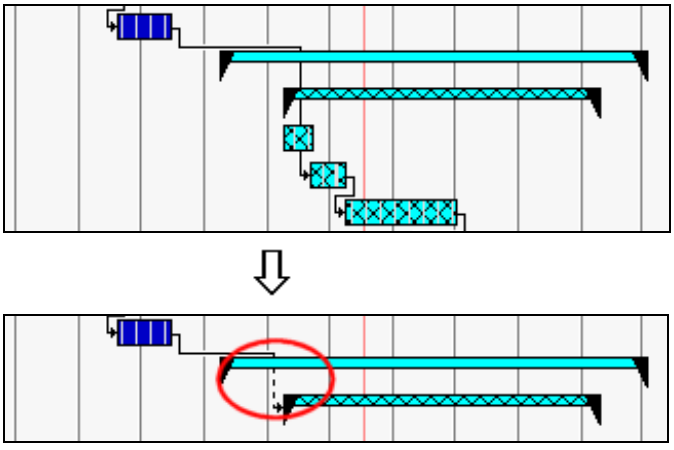
If projects have a fixed end (such as a delivery date) it may be reasonable to link the tasks by starting at the end and linking them towards the begin instead of starting at the begin. With reverse linking, the changes you make will propagate from the right to the left so that the fixed end will remain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

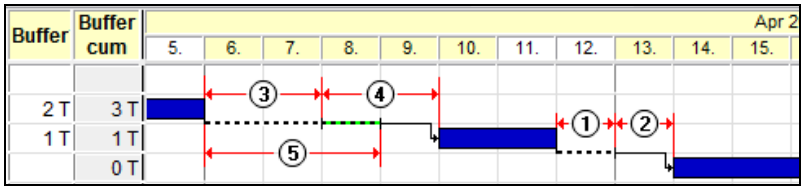
### LINKING IN CIRCLES

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

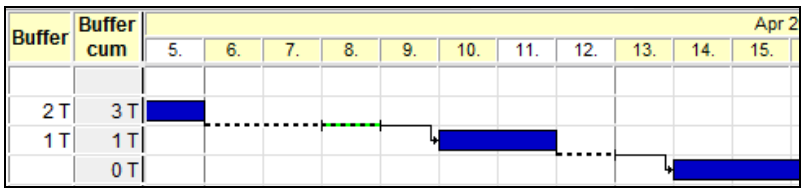
Buffer is the amount of time a task can be delayed before the delay affects the dates of follow-up tasks. Buffer is a reserve time which has the advantage that a delay in the execution of a task does not affect the successor tasks as long as the delay does not exceed the existing buffer.



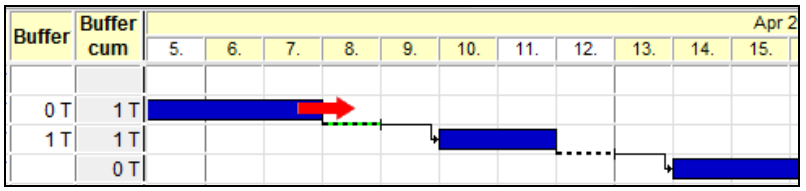

Buffers are indicated by dotted lines as shown on the left.

- 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.

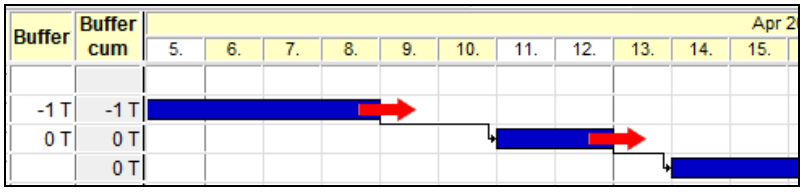



**1.** Initial situation



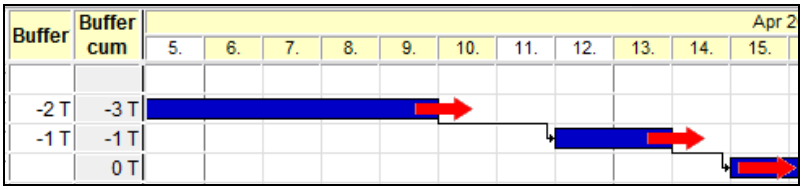

**2.** First task is delayed by **2 days**

**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**

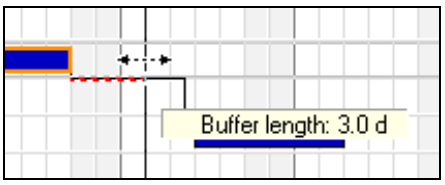
**Result:** The second task is shifted by one day; this uses up its remaining buffer; as a consequence, an accumulated buffer for the first task no longer exists.




**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



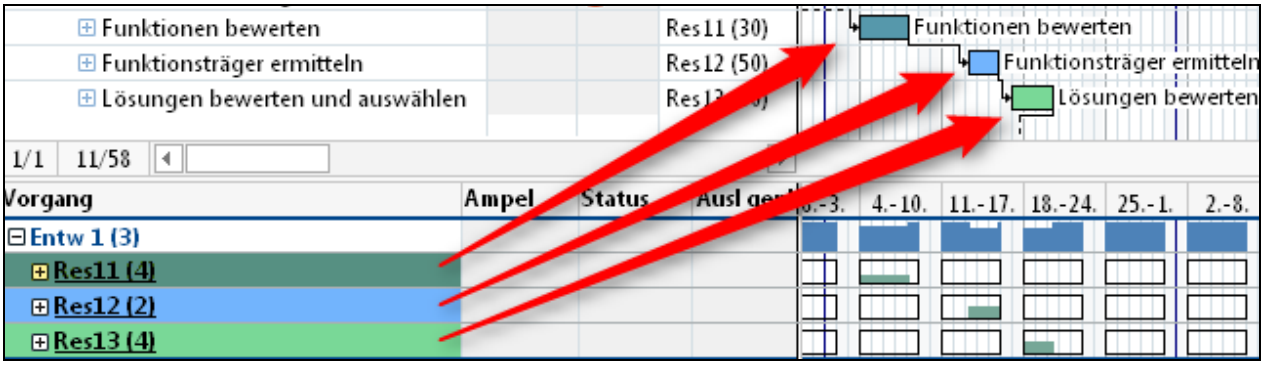

Buffer may either be entered in the corresponding column of the table or can be adjusted with the mouse while keeping the left mouse button pressed down. If no buffer exists, press the SHIFT KEY as well to avoid a change in the end of the task bar.

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 47) 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 "Individual colors for Resources

Resources can be provided with colors. The task bars of the tasks to which the resources have been allocated, are then displayed in the respective colors:




The corresponding dialog box can be opened by right clicking on a resource name.

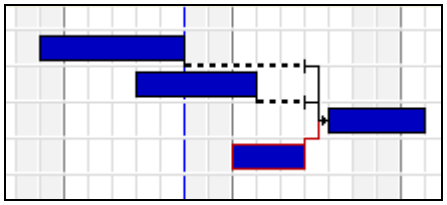
- Determine working hours (Resource calendar)" on page 89).
- In **Actual Mode** (see "Project status (planning, current state, prognosis)" on page 115) buffers cannot be created or changed.
- If the limits of a buffer are overrun, a **negative buffer** will be displayed. This will enable A-Plan to display 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 "Data Gantt chart" / "Postponement").

### MULTIPLE LINKS

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

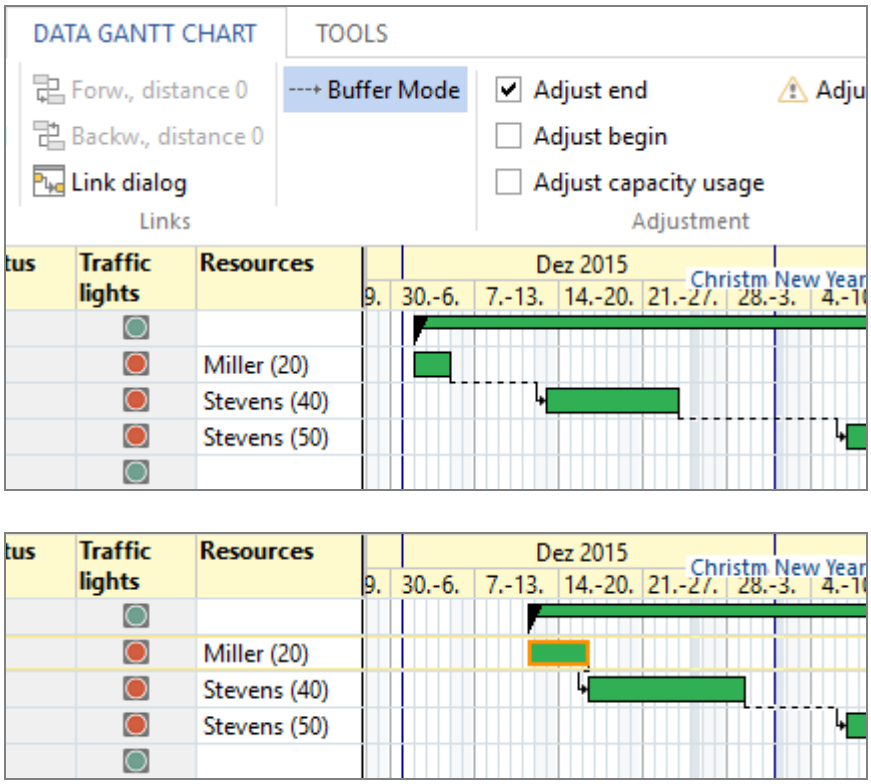


With a task having several predecessors, buffers should be inserted so that the task will not be shifted until one of the predecessors will overrun the minimum distance.

**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.

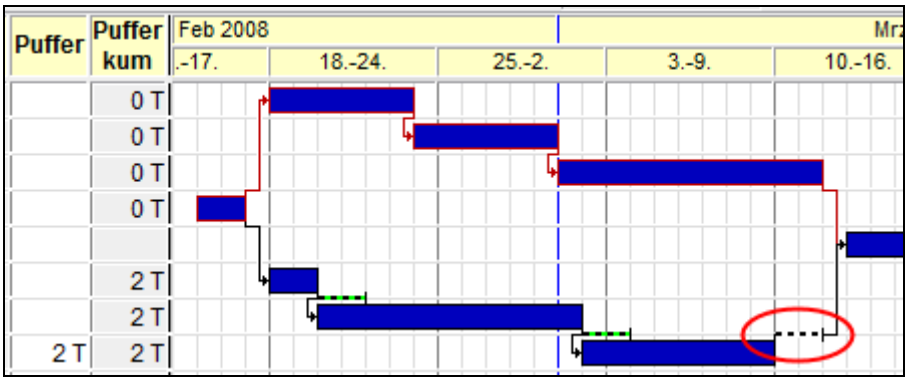
## DISTANCES TEMPORARILY AS BUFFER

It can be switched to **Buffer Mode** in which all the distances between task bars are treated as temporary buffer. Shifts are therefore made in this mode is always up to the beginning of the subsequent task bars before it is also moved:



## 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.



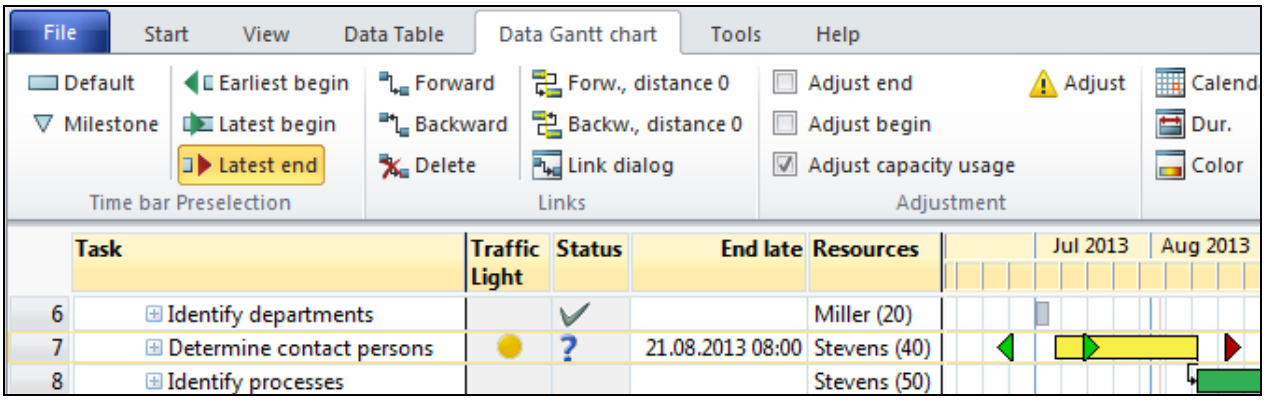

This is true with the upper path in the example – for this reason it is marked red. The lower path is **not critical** as there is a buffer of 2 days for the last task.

**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.

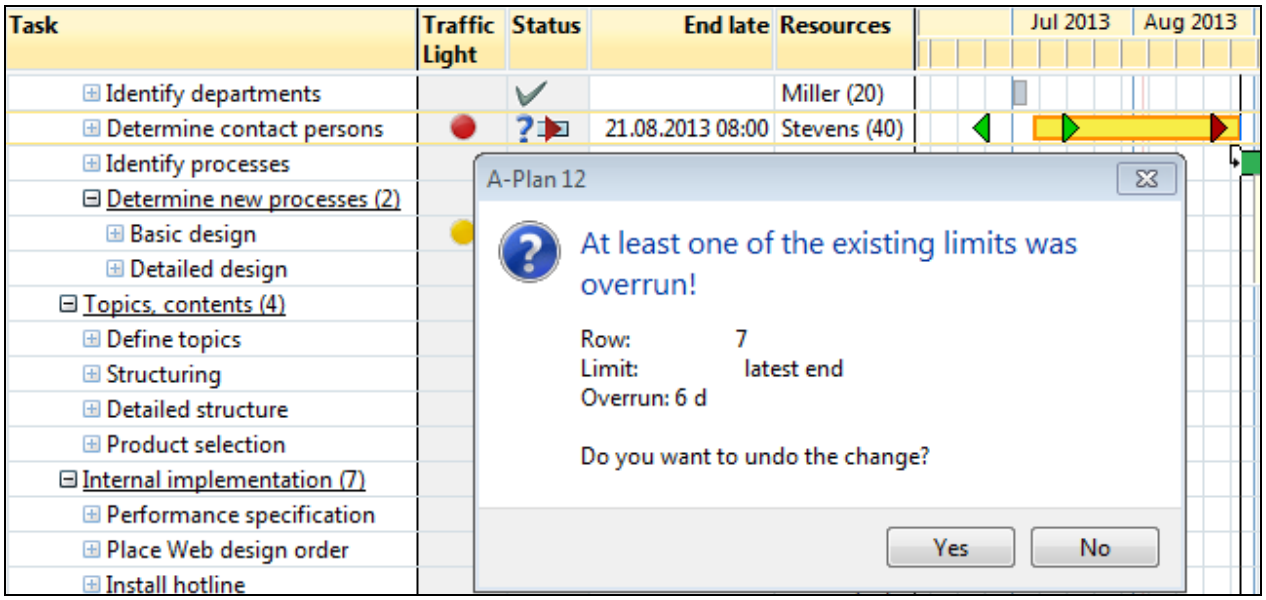
## LIMITS

Limits help you recognize immediately whenever a project or task has overrun a given limit. Limits are taken into account both in planning and in the actual execution of the project.

Limits can be set either by entering the date/time in the respective column or by clicking the requested position after you made the necessary preselection in the tab **Data Gantt chart**.



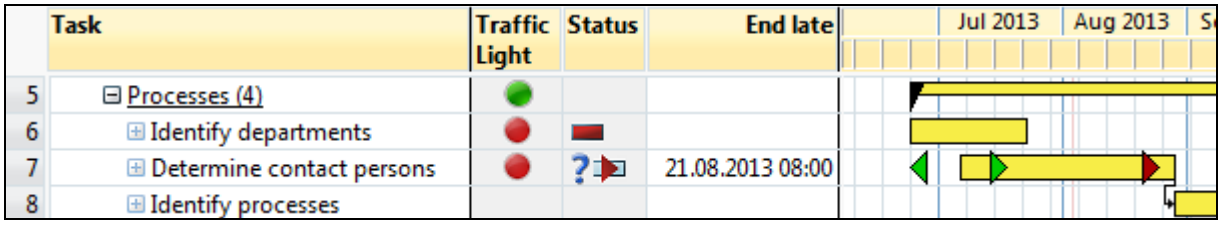

If a change has the effect that an existing limit is overrun, a message appears and the corresponding symbols come up in the columns **Traffic light** and **Status**:




The user administration allows you to specify which users may change limits and which users are not allowed to do so (see "Assign access permissions" on page 187). The limitation refers to the change of the limits themselves. If change permission exists, the limits may be overrun but as a result an indicator comes up in the status column.

## LIMITS IN HEADLINES (SUMMARIES)

If a headline does not have limits of its own, the most distant limit of the inferior rows is displayed. Limits of tasks which are not located at the begin or end of the block are not displayed in the headline:



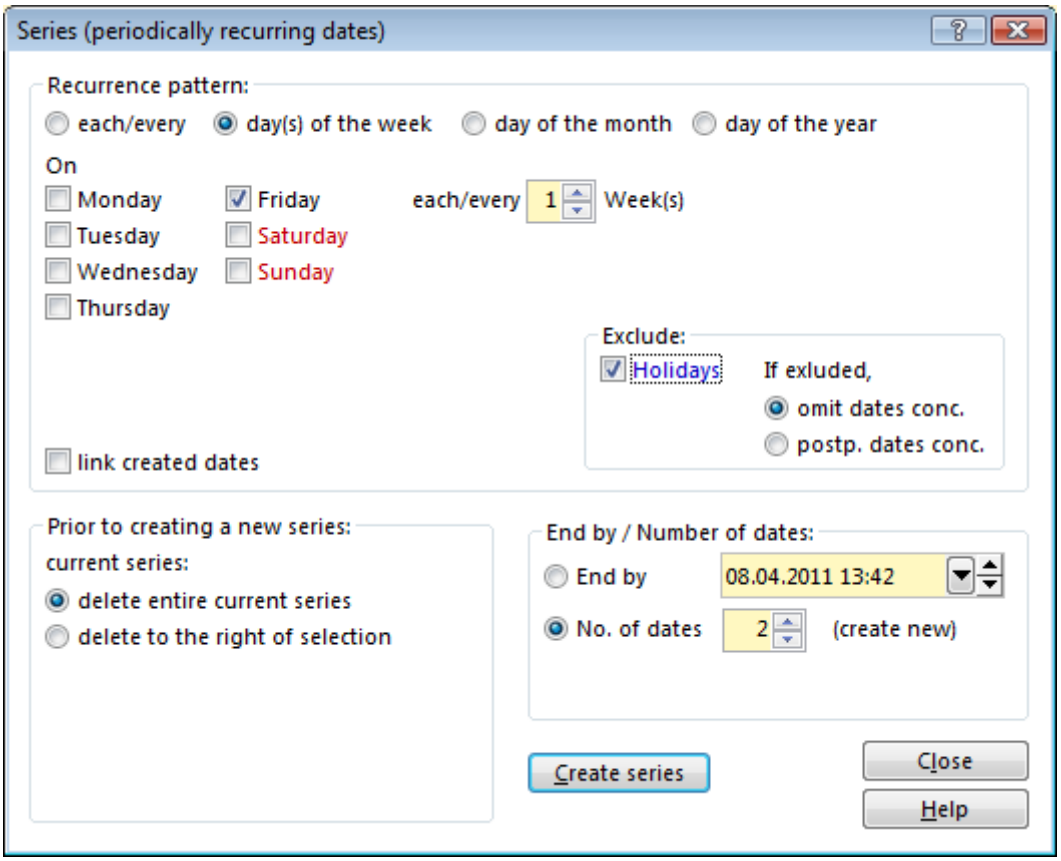

**Explanation:** If the limit in row 7 was taken into account in the summary row, the status „Red“ would be assigned to the entire block "Processes". However, this would not be correct as the overrun limit in row 7 does not yet have any effect on the superior end date.

A headline may also have its own limits which are created in the same way as the limits of the inferior rows (see above). However, if one of the inferior limits goes beyond the limit of the headline, this will have the effect that the limit of the headline is shifted.

If the corresponding limit in the summary row has been locked (this is done in the group „Limits“ after the involved limit was clicked with the right mouse key), no limit of an inferior row can be shifted beyond the corresponding limit of the summary row.

## 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 **Data Gantt chart** 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 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.

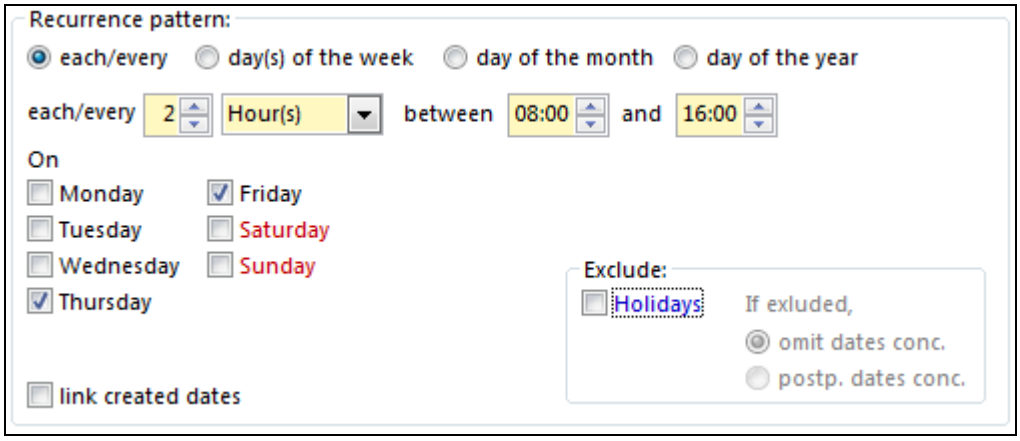
### RECURRENCE PATTERN "EACH/EVERY"

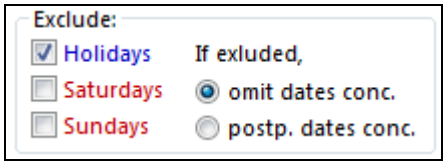
Choose this recurrence pattern if the distance between recurring dates is always the same. You may specify the distance in terms of :

- 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:



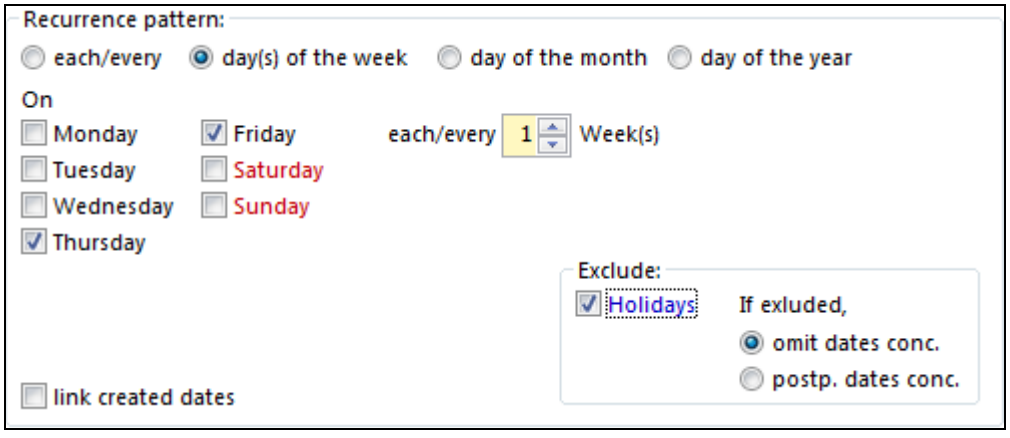




In addition, you are allowed to exclude public holidays (and weekends if you choose "days").

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"

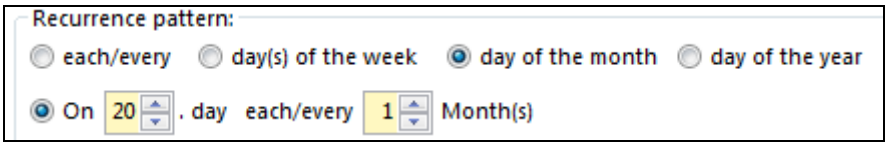
Use the pattern "day(s) of the week" if you want to create a series of dates which are to occur on the same day(s) of the week in intervals of one or several week(s). Of course, you may specify several days if they are within the same week, for example, every Monday and every Wednesday at an interval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



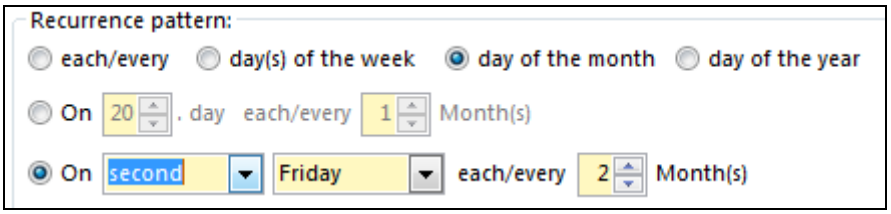

## RECURRENCE PATTERN "DAY OF THE MONTH"

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

Either choose a day by entering a numerical value




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

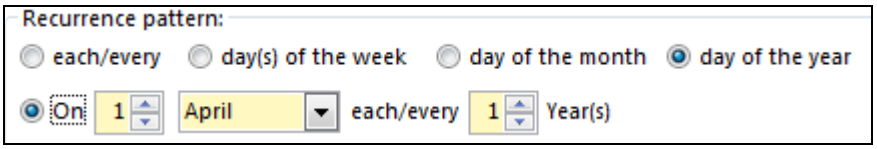



With both alternatives, the distance between two dates may cover any number of months.

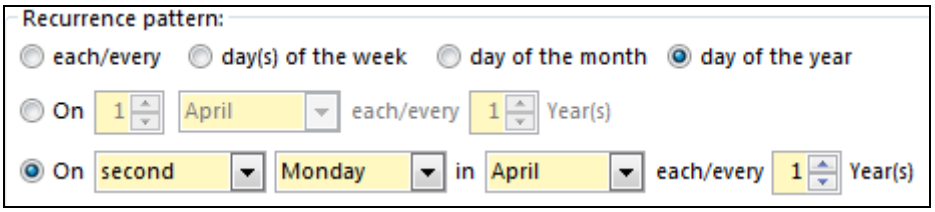
## RECURRENCE PATTERN "DAY OF THE YEAR"

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

Either specify a calendar day



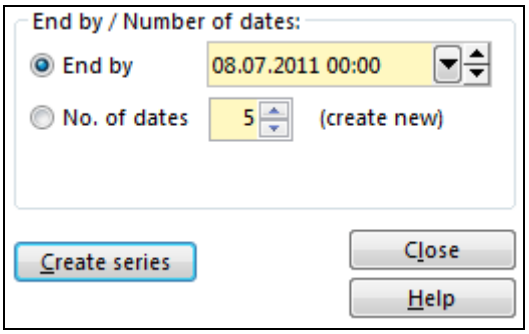

or one day of the week together with an ordinal number and one of the months of the year:




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

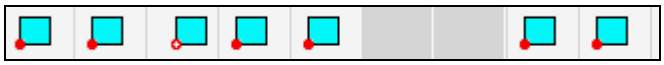
## CREATING RECURRING DATES

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:

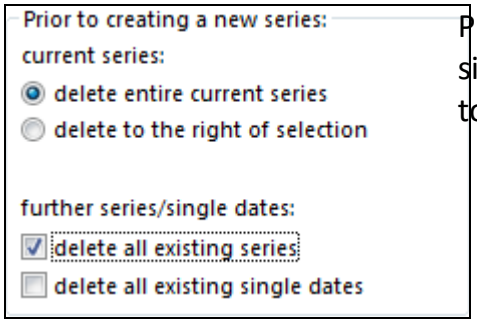


## SEVERAL SERIES IN ONE ROW

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

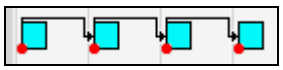



Prior to creating a new series you can delete existing single dates or existing series (for example, if you want to recreate a series using modified settings).

## 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 56):



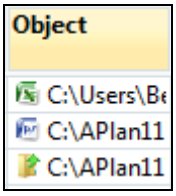
## CONSTRAINTS

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 138).

A series can no longer be created from tasks with **assigned resources** as soon as the time spent by of 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




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 adddress will start the standard Internet browser with the respective website

## LINKING/EMBEDDING AN OBJECT

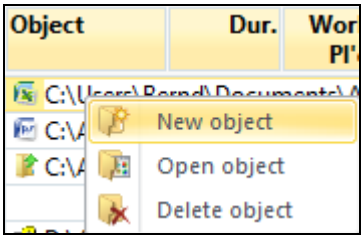
### LINKING BY DRAG AND DROP

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

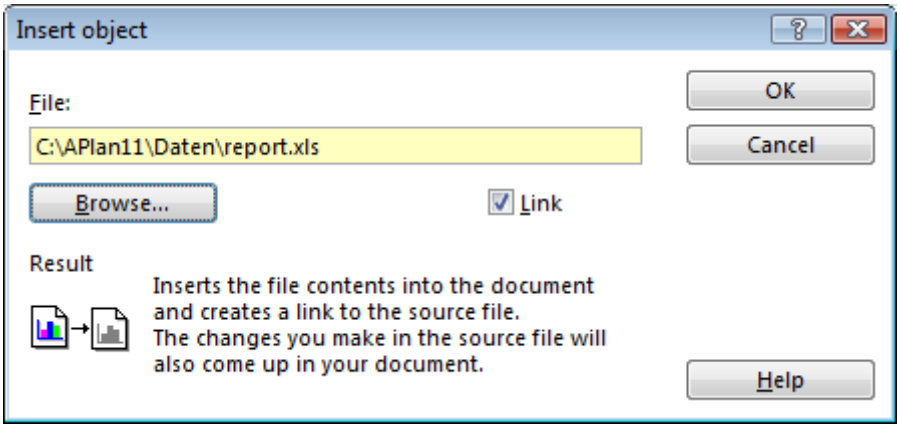
If a link already exists at the target position, the existing link is replaced with the new link, i.e. not more than one link is accepted in a row.

### 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

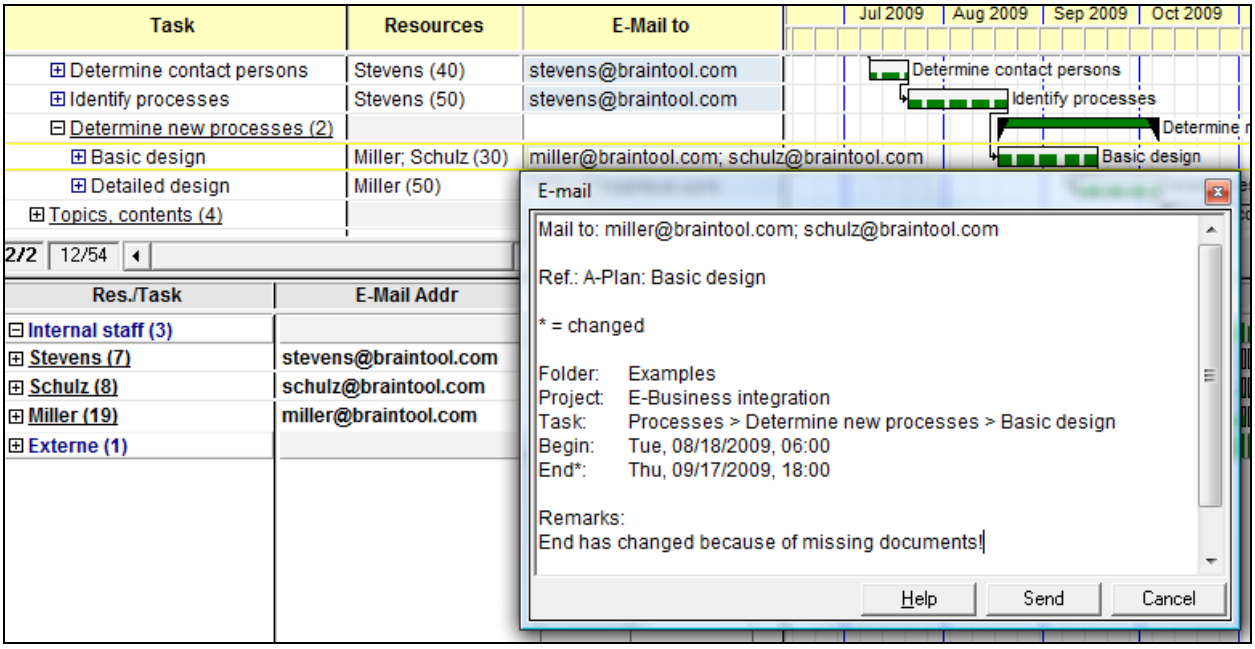
Apart from files, folders may also be embedded in the **Object** column. Double-clicking on the folder name will start the Windows Explorer and will display the directory in the Explorer.

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:




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 |
|---|---|---|---|---|---|
| Processes (4) | | 15.00 d | 03/18/2009 | | 03/16/09 09:23 PM, User 1 |
| Identify departments | miller@braintool.com | ✔ | | | 03/16/09 09:23 PM, User 1 |
| Determine contact persons | stevens@braintool.com | ✔ | | 11 d | 03/16/09 09:24 PM, User 1 |
| Identify processes | stevens@braintool.com | -15.00 d | 03/18/2009 | 11 d | 03/16/09 09:24 PM, User 1 |
| 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 overrun their date of completion (including buffer).
- The **Reshow date** reminds you of tasks which need to be revised.

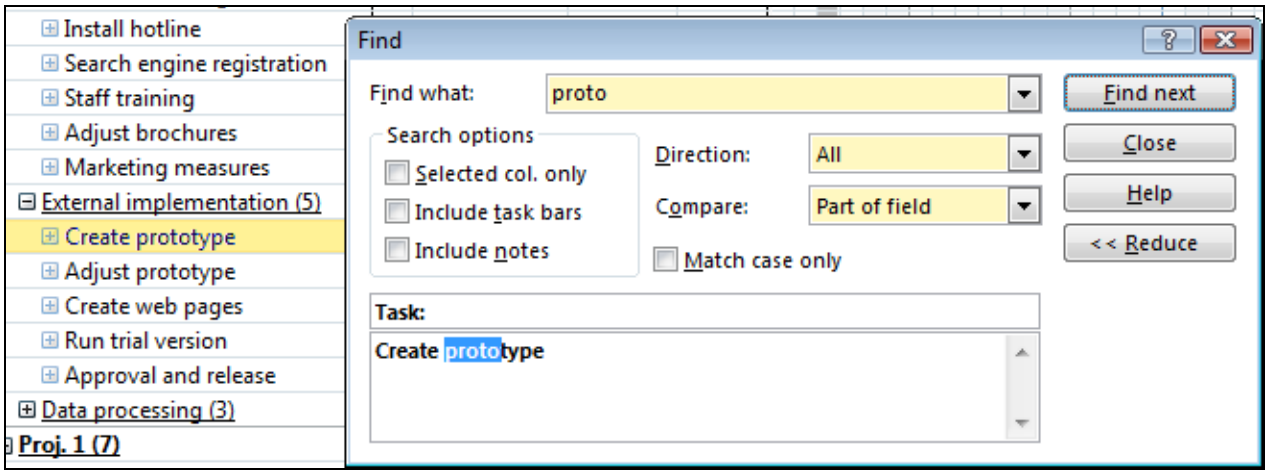
- A **negative accumulated buffer** is to warn you that the task will delay the date of completion of the entire chain of tasks.
- Use the column **Last change** to identify tasks which have been changed recently.

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 Table** 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:



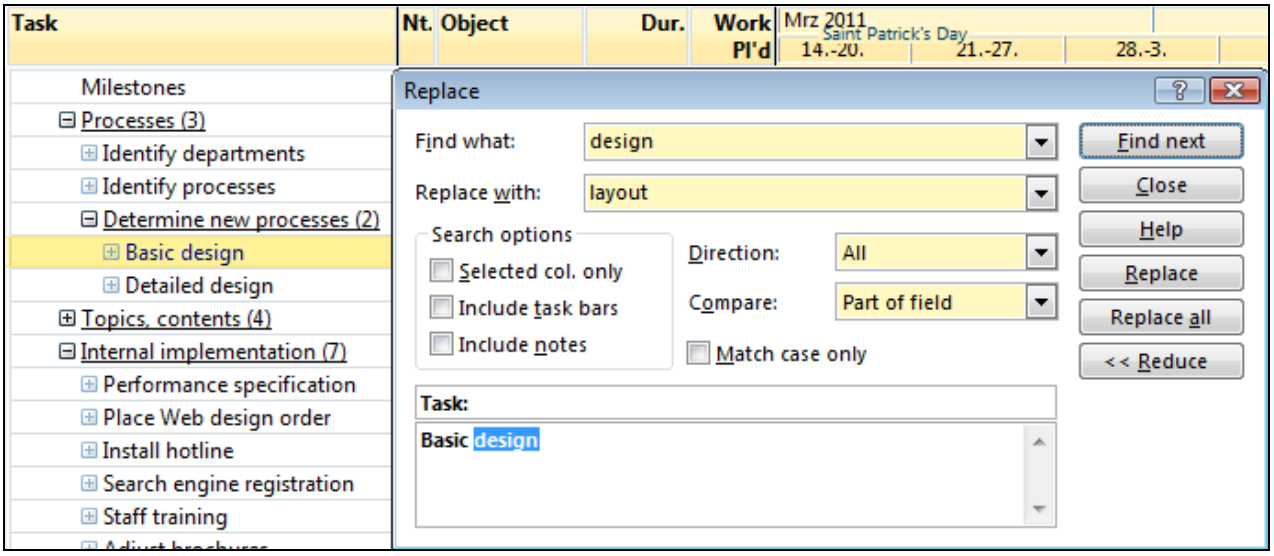

If you do not want to see the context in the lower part of the dialog box, just click the button **Collapse** and the text will no longer appear.

**Note:**
The function will look through all the rows which currently exist in the table irrespectively 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 Table**. 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:



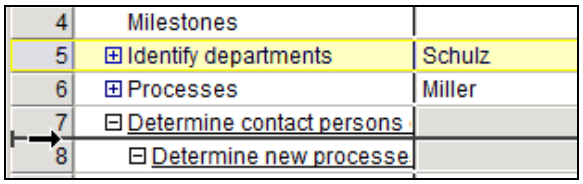

Contrary to the **Find** function, opening the dialog box **Replace** deactivates the main window of A-Plan. This means that no actions can be carried out in the main window as long as the dialog box **Replace** is open.

**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)




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.

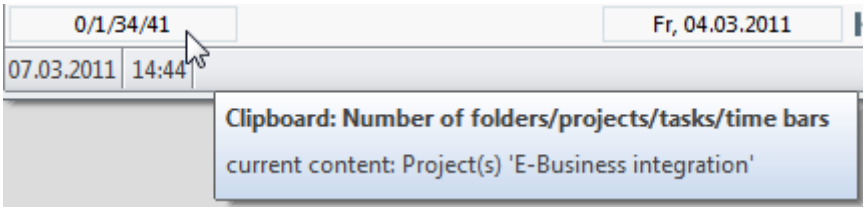
**Note:**
Please be aware that rows cannot be moved to another location if the check box **unsorted** has not been activated before in the dialog box "Sorting" (see "Sorting orders for viewing" on page 85)!

## 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 **Data Table.**

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.

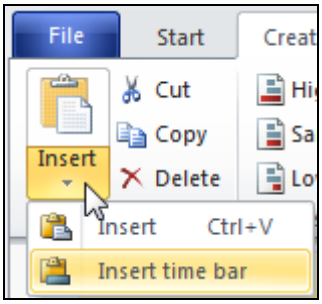
A box at bottom left of A-Plan indicates the number of copied or cut folders/projects/tasks/task bars:




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 **Data Table**. 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:

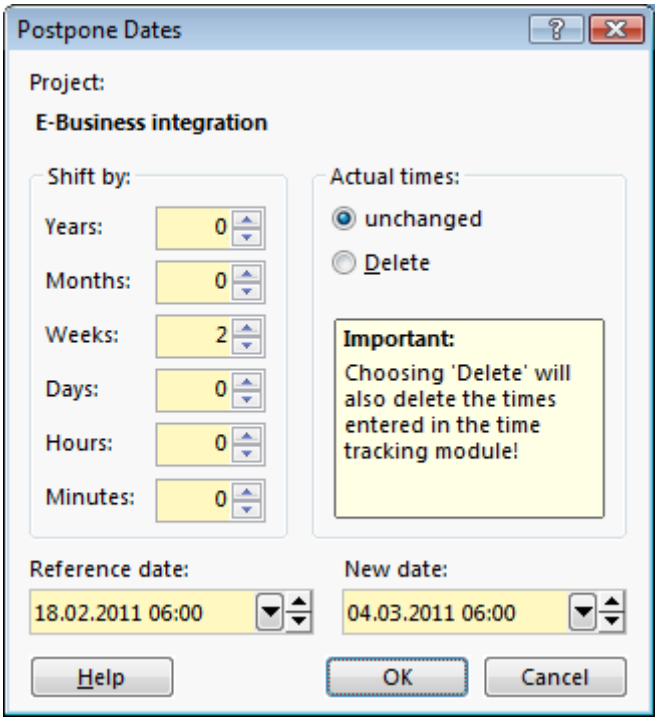
| Task | Resources |
|---|---|
| ⊟ Processes (4) | |
| ⊞ Determine contact persons | n.v. (70000300) |
| ⊞ Identify departments | n.v. (70000200) (10) |

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




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 **Data Gantt chart**. 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 **Data Table**.

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

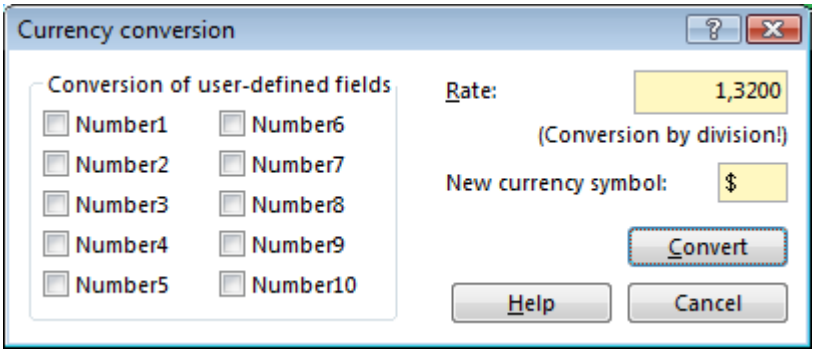
**ATTENTION:**
Deleting a folder will delete all projects included in the folder as well. Likewise, deleting a project will also delete all tasks included in the project!
The setting of **Options** (see "Messages / Aids / EMail" on page 138) allows you to request that a delete command will not be executed 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 "Traffic Light, Status and rem. Time" on page 25) 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.

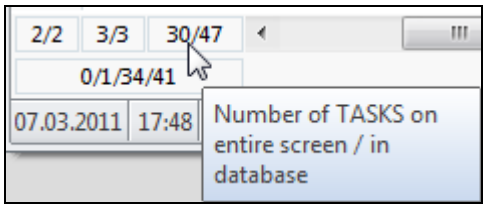
### SETTING OF FILTERS

Clicking on the button Set filters 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 Folder filter ON/OFF or General filter ON/OFF in ribbon tab **View**.

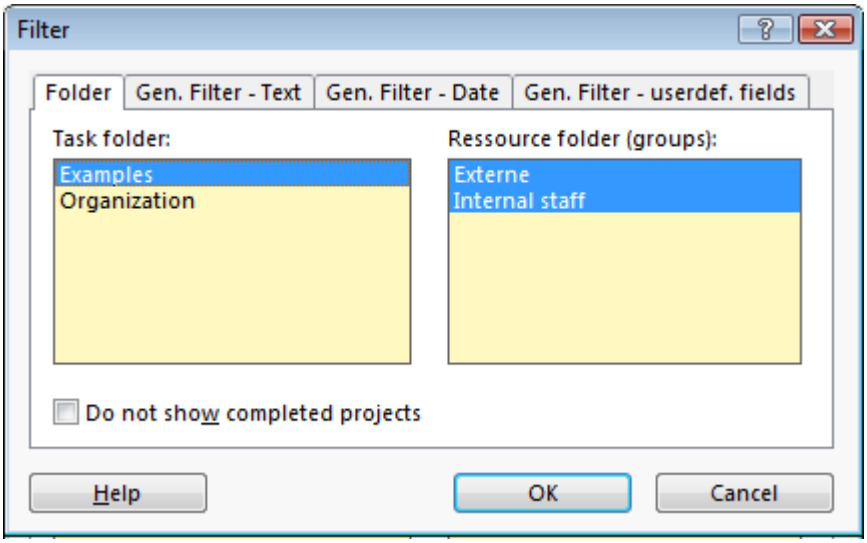
Below the task table there are three boxes which indicate how many of the folders, projects and tasks contained in total in the database were retrieved:




#### 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 Folder filter ON/OFF 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:

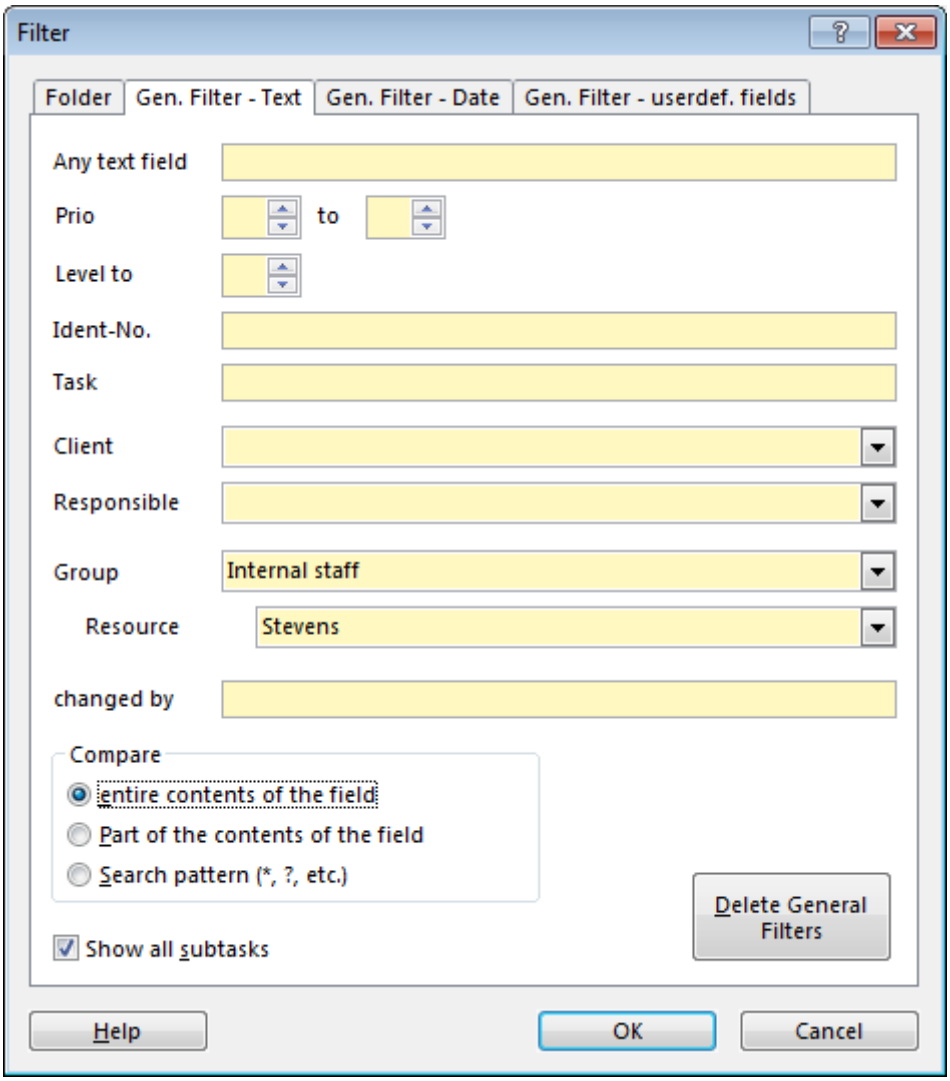
| **Do this** | **Result** |
|---|---|
| Click on a folder | Folder is selected (all others are deselected) |
| CTRL+ click on a folder | Adds a folder to your selection or removes it if it was selected before |
| SHIFT+ CTRL+ click on a folder | Extends your selection to the position of the mouse pointer |

### *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:




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.

**Compare** allows you to specify whether

- the **entire contents of the filed** or
- a **part of the contents of the field** is to be compared or whether
- a **search pattern**

is to be used.

The wildcards "*****" and "**?**" may be used in searching for text strings. Entering "**Fra***" will find all strings starting with "Fra" as for example "**Fra**nklin", "**Fra**ser" and " **Fra**zer". 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".

Within the text fields individual strings can be linked by OR and AND:

For example, typing "Mai* OR Mei*" in the field **Responsible** and selecting the option **Search pattern** will find all rows in which the name of the responsible person starts with "Mai" or with "Mei".

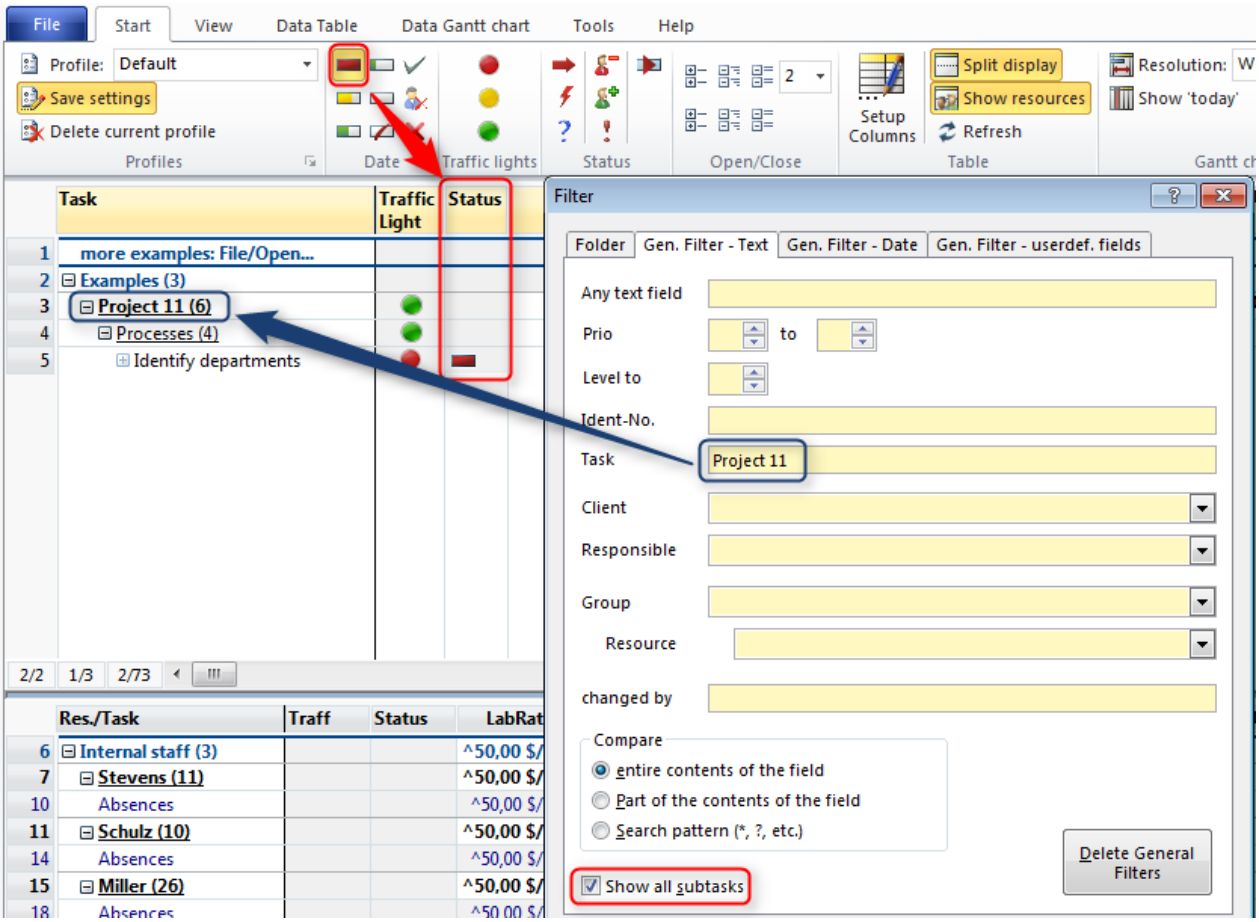
**Important:**
All fields of the **Gen. Filters** are linked by AND. With several conditions being specified, this means that only those records (rows) will be found which meet all of the specified conditions.

### *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.

**Note:**

If a **Status filter** is set in the tab **Start** of the main window (see "Traffic Light, Status and rem. Time" on page 25) together with the check box **show all subtasks** being activated, all those tasks of a given project can be displayed which, for example, have overrun their end date.




### *Show projects with all tasks*

If this option is not enabled, with a resource filter eg. only the tasks of a project are displayed, which are directly associated with the resource.

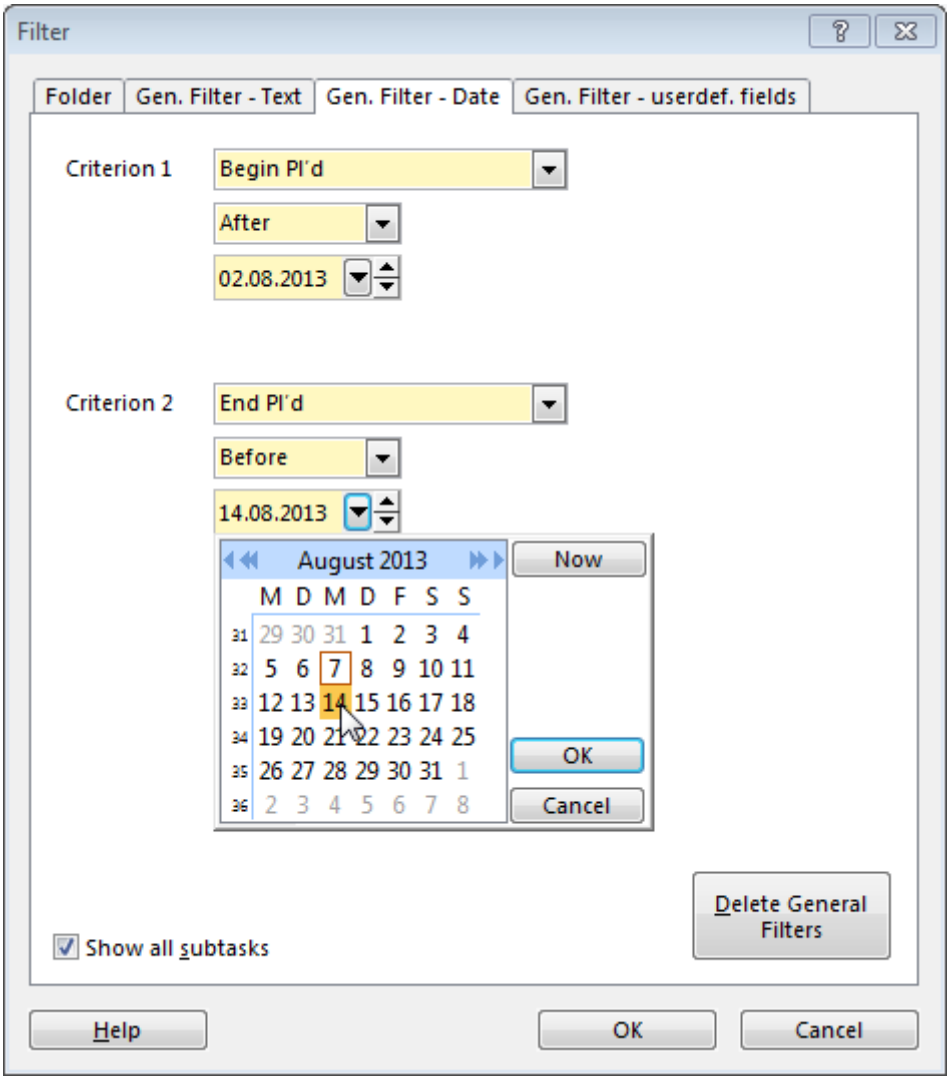
With the option **Show projects with all tasks** enabled all the tasks of the projects are displayed, even if the resource eg. is associated with only one task of each project.

### *Delete General Filters*

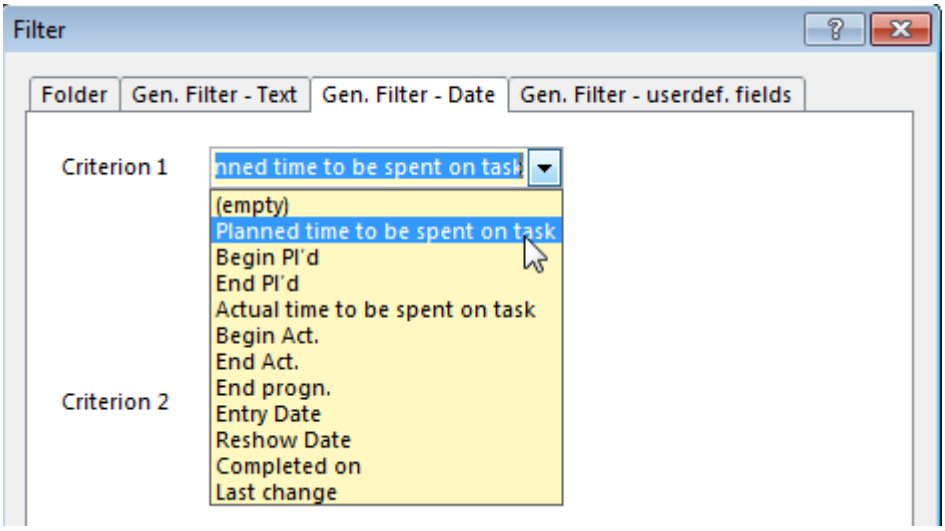
Clicking on the button **Delete General Filters** will reset all **general filters**. This does not affect the option **Show all subtasks** (see above) as it is not effective with no filters being set.

## GENERAL FILTER - DATE

The third tab allows you to set a filter for two date fields.



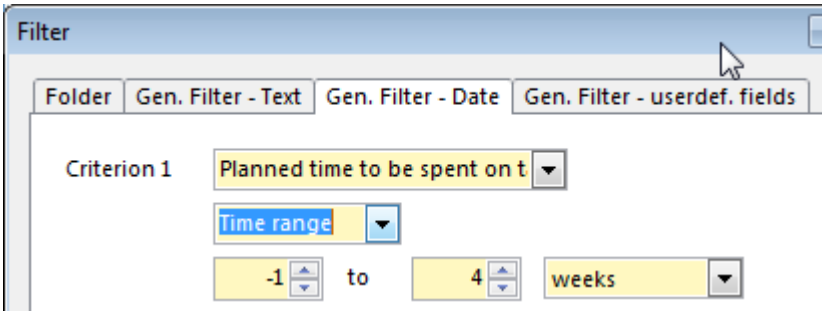

The date filter can be applied to all fields which feature a date:




The following possibilities exist for specifying a time period:

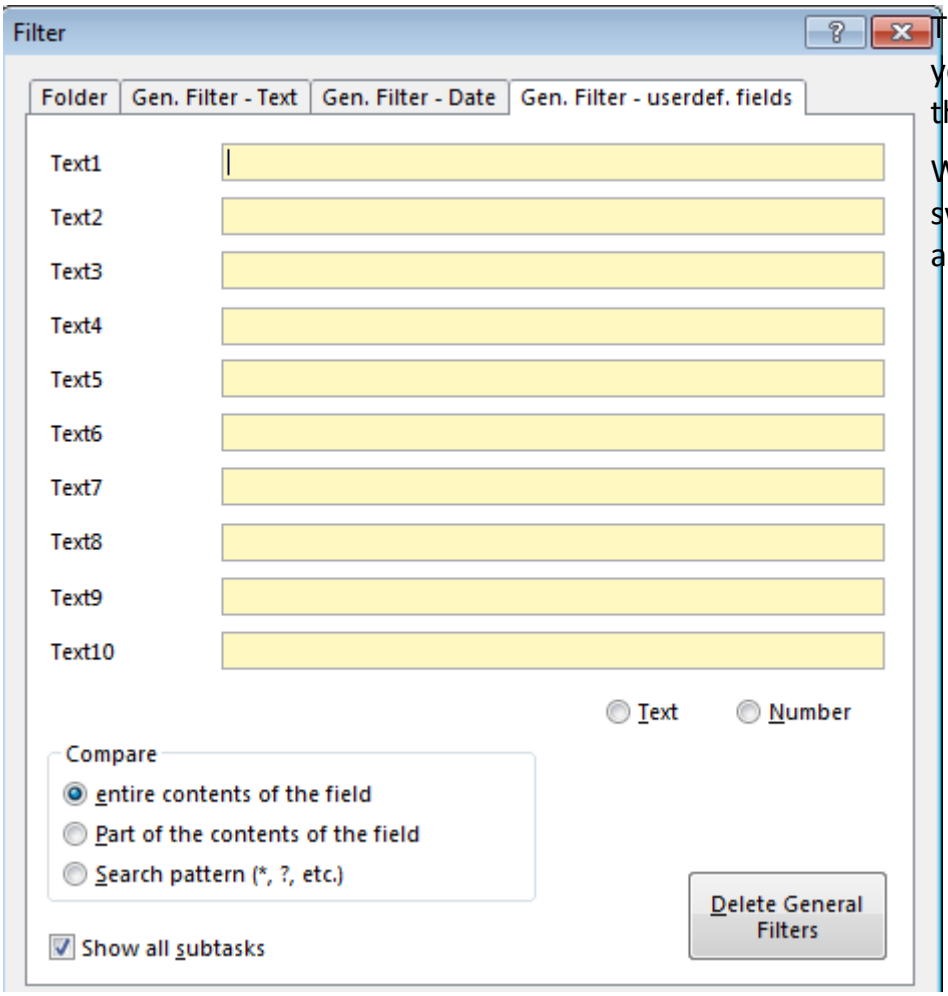
- **before**
- **on**
- **after**
- **between**
- **Time range**
- **current week**
- **current week + 1**
- **current week + 2**
- **current week + 4**
- **current month**
- **current month + 1**
- **current month + 2**
- **current month + 4**

**Time range** allows you to limit the search to a period of time. For example, you may want to have all those tasks displayed or printed which have a planned time to be spent on them (or a part of the planned time) within the period of one week in the past and four weeks in the future:




The variants **current week (+ n)** or **current month (+ n)** have similar functions. When set to **Planned time to be spent on task** and **current week + 2**, all tasks are displayed, which must be processed within the current and the next two weeks.

## GENERAL FILTER – USERDEF. FIELDS



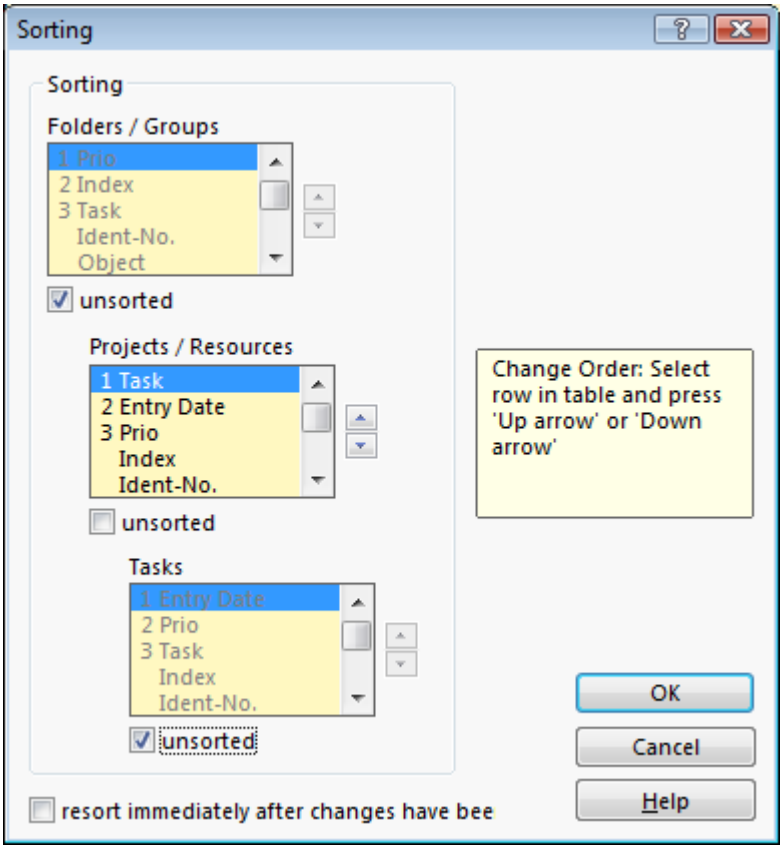

The fourth tab enables you to enter filters for the userdefined fields.

When doing so you may switch between text and number 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 74).

### *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

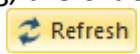
Clicking on the check box **Resort Immediately** has the effect that the order of the records is recalculated and adjusted whenever data have been entered or changed.

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 85), the sequence will be updated automatically if you activated the option **Resort immediately** (see "AutoSorting" on page 86).

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 

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?

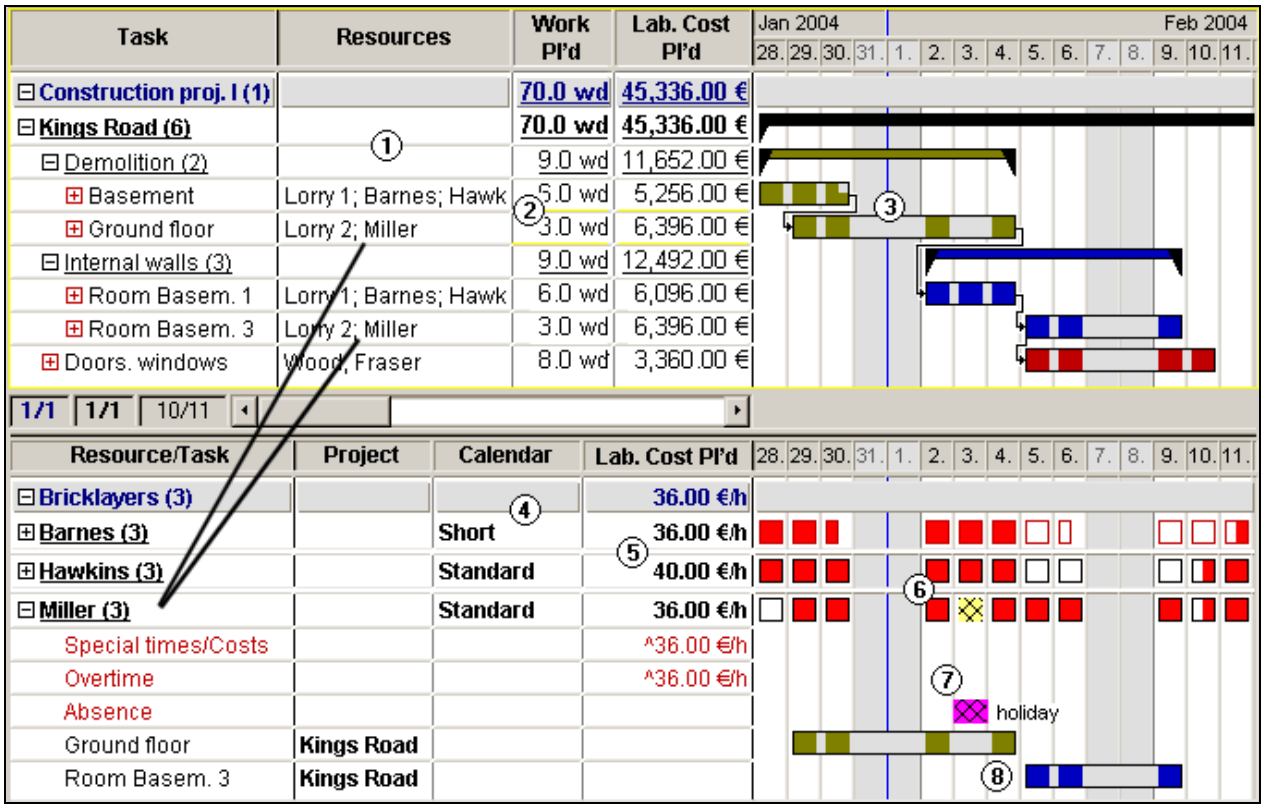
In spite of the high performance and the variety of information provided by A-Plan, you will be surprised by the **ease of use** of resource planning:

- 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?

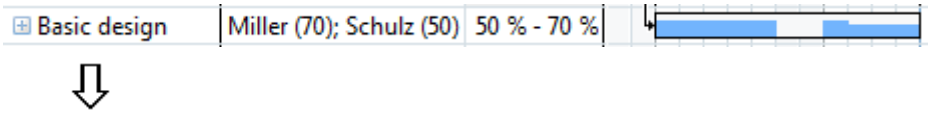
The main window of A-Plan is split horizontally if resources are to be displayed. Among others, the upper pane shows existing **tasks** with assigned resources **(1)**, the respective work **(2)** and the task bars **(3)**. The task bar pattern is used to indicate when resources work on tasks and what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

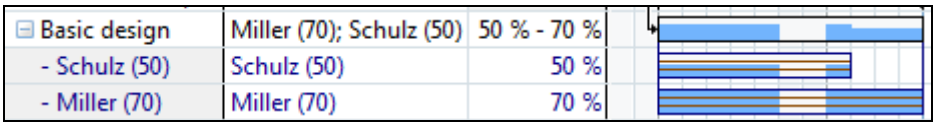



**Note:**
If task bar patterns are entirely filled with color instead of indicating the times when tasks are worked on, you have to change the setting of the respective option (see "Task bars" on page 126).

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 colors indicate in case of different capacity usage rates is explained in the chapter "Capacity usage of resources / Teams" on page 97.

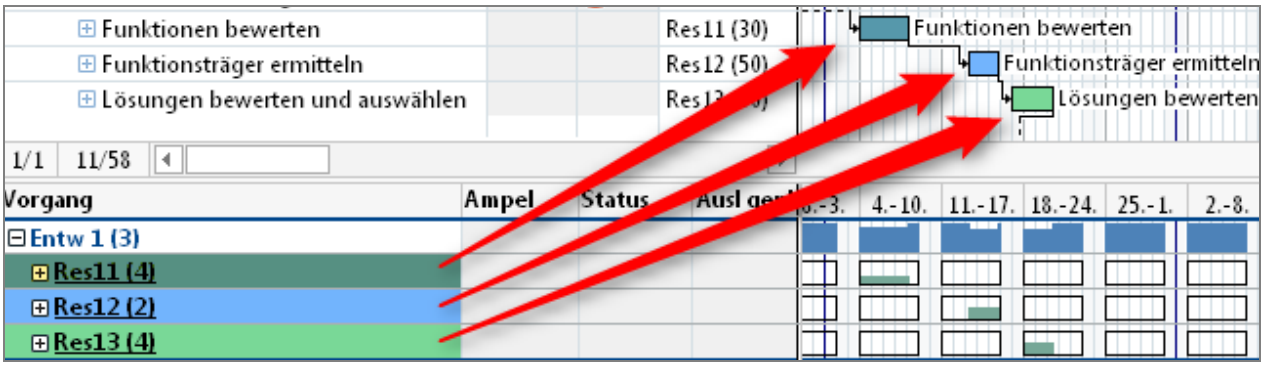
In task table view, rows with resources assigned to them are **expanded** (or **collapsed** respectively) if you click the red square in front of the designation. With tasks expanded, **each resource is shown in a separate row**:






## INDIVIDUAL COLORS FOR RESOURCES

Resources can be provided with colors. The task bars of the tasks to which the resources have been allocated, are then displayed in the respective colors:

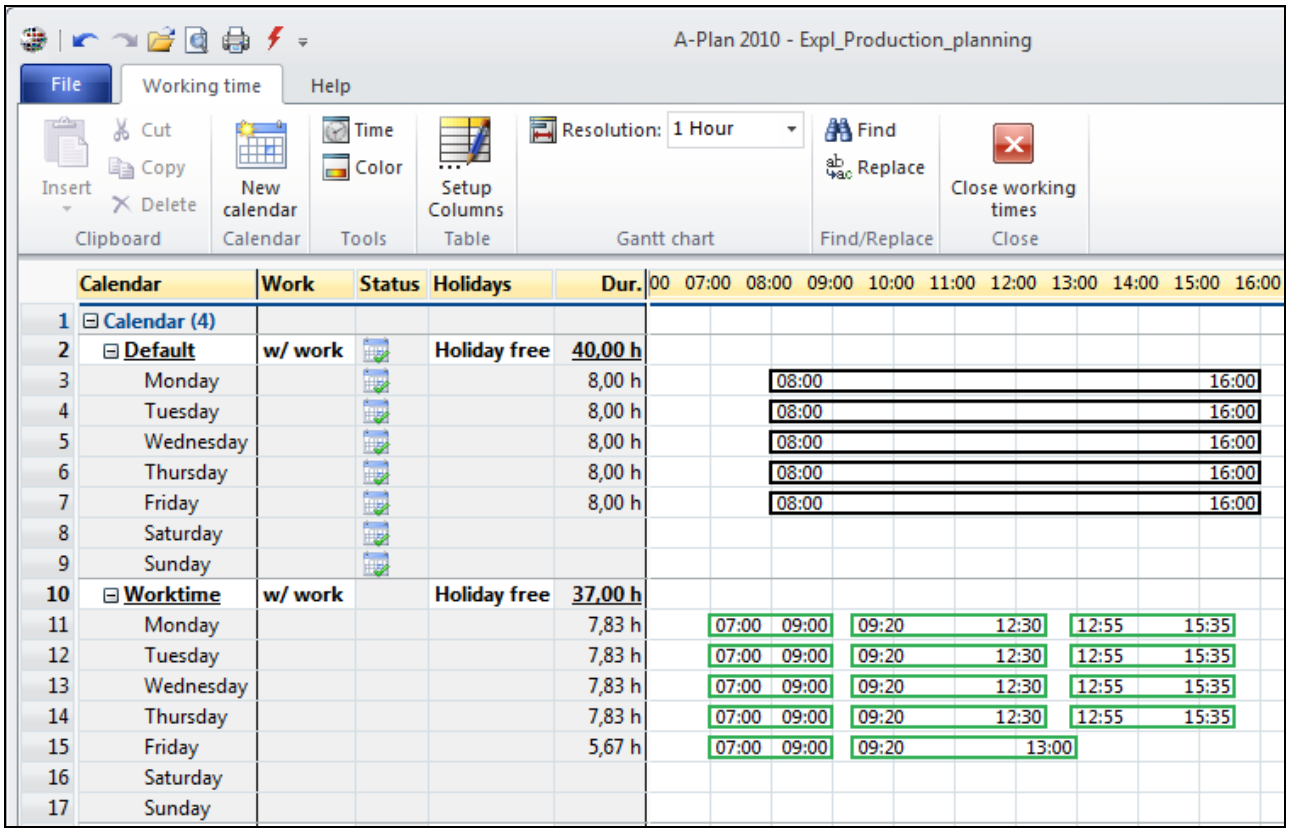



The corresponding dialog box can be opened by right clicking on a resource name.

# 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.

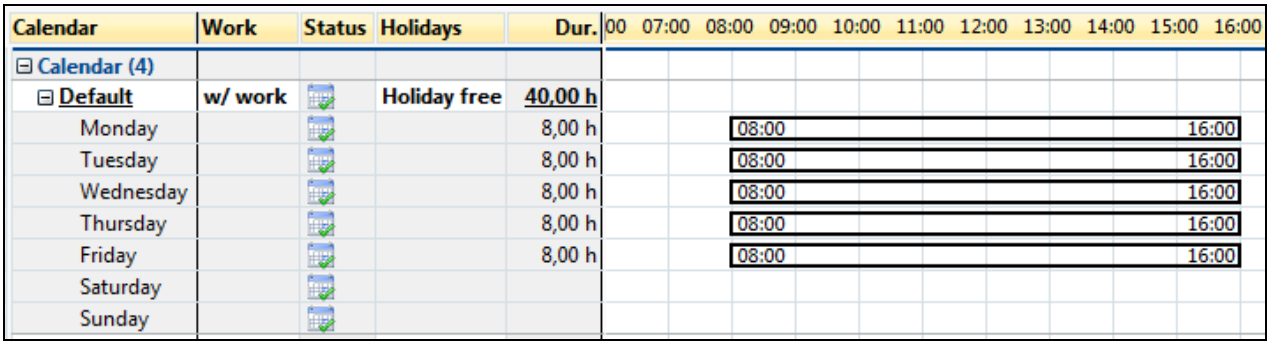

Click on the button Working time in the ribbon tab **Data Gantt Chart** to have resource calendars displayed:




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. |
|---|---|---|---|---|
| ⊟ Calendar (4) | | | | |
| ⊟ Default | w/ work | | Holiday free | 40,00 h |
| Monday | | | | 8,00 h |
| Tuesday | | | | 8,00 h |
| Wednesday | | | | 8,00 h |
| Thursday | | | | 8,00 h |
| Friday | | | | 8,00 h |
| Saturday | | | | |
| Sunday | | | | |

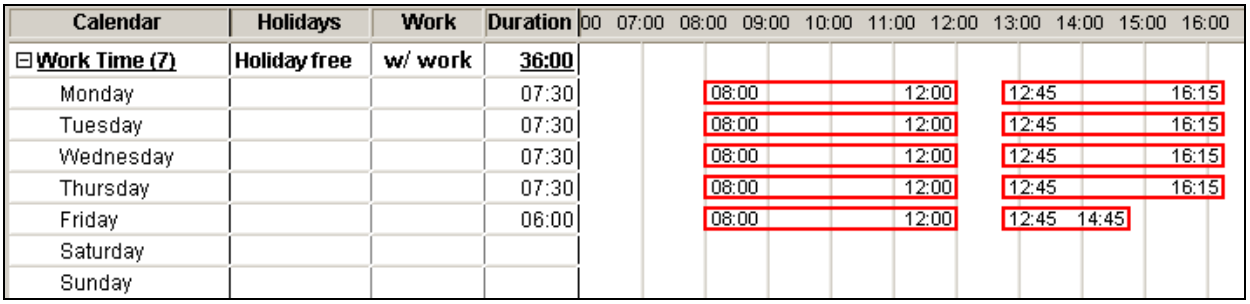
00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00

08:00 16:00 (Monday)
08:00 16:00 (Tuesday)
08:00 16:00 (Wednesday)
08:00 16:00 (Thursday)
08:00 16:00 (Friday)

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 44). 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 94):

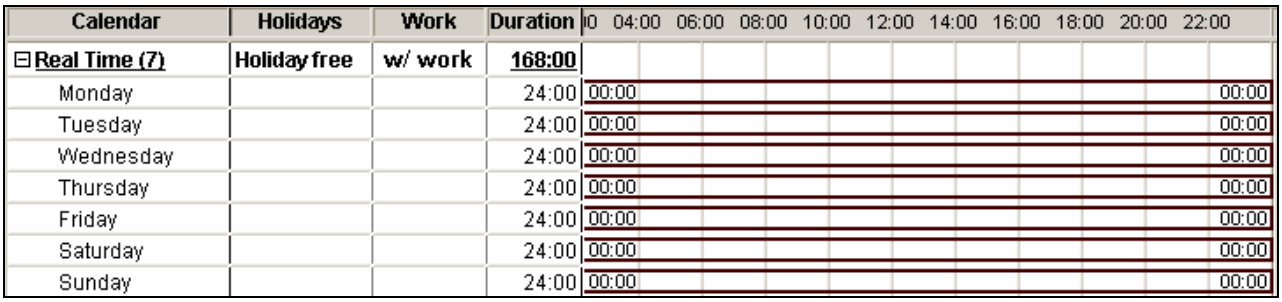


| Calendar | Holidays | Work | Duration |
|---|---|---|---|
| ⊟ Work Time (7) | Holiday free | w/ work | 36:00 |
| Monday | | | 07:30 |
| Tuesday | | | 07:30 |
| Wednesday | | | 07:30 |
| Thursday | | | 07:30 |
| Friday | | | 06:00 |
| Saturday | | | |
| Sunday | | | |

00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00

08:00 12:00 12:45 16:15 (Monday)
08:00 12:00 12:45 16:15 (Tuesday)
08:00 12:00 12:45 16:15 (Wednesday)
08:00 12:00 12:45 16:15 (Thursday)
08:00 12:00 12:45 14:45 (Friday)

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:



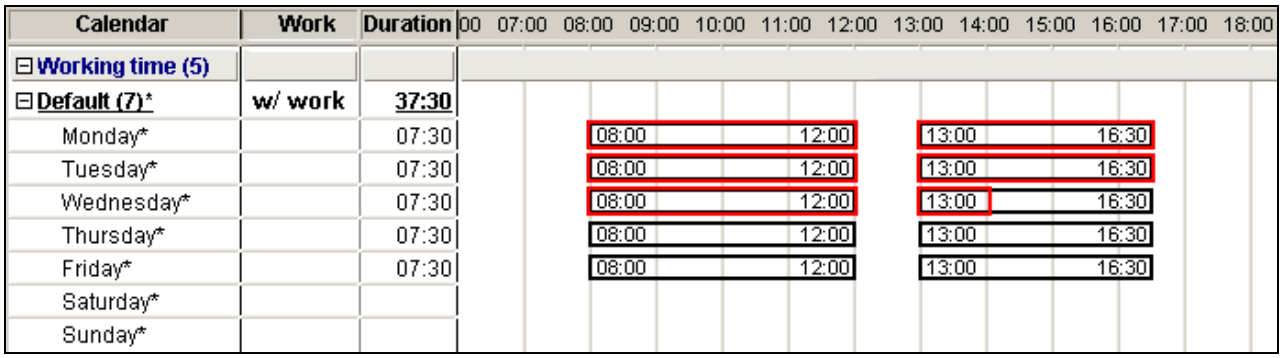
| Calendar | Holidays | Work | Duration |
|---|---|---|---|
| ⊟ Real Time (7) | Holiday free | w/ work | 168:00 |
| Monday | | | 24:00 |
| Tuesday | | | 24:00 |
| Wednesday | | | 24:00 |
| Thursday | | | 24:00 |
| Friday | | | 24:00 |
| Saturday | | | 24:00 |
| Sunday | | | 24:00 |

00 04:00 06:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 22:00

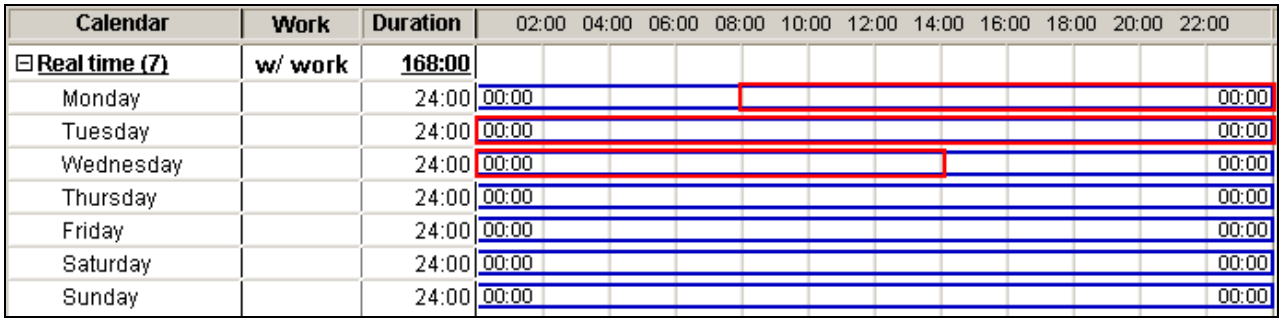
00:00 00:00 (Monday)
00:00 00:00 (Tuesday)
00:00 00:00 (Wednesday)
00:00 00:00 (Thursday)
00:00 00:00 (Friday)
00:00 00:00 (Saturday)
00:00 00:00 (Sunday)

### EXAMPLES OF THE CALCULATION OF DURATION

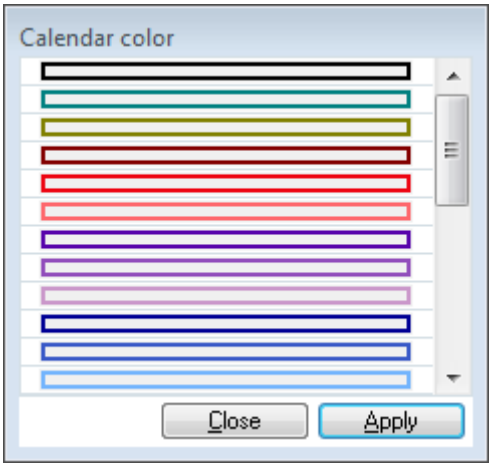
In the calendar shown below, the duration of the task starting on Monday at 8:00 a.m. and ending on Wednesday at 2:00 p.m. is 2 days 5 hours (2 x 7h:30min + 4h + 1h):




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):



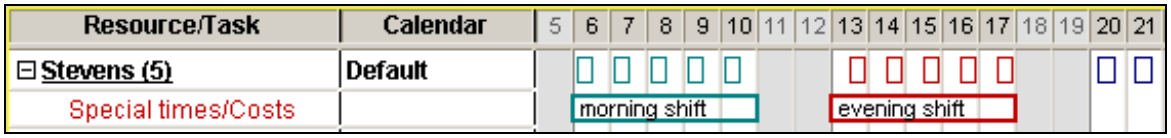

## COLOR OF CALENDARS




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 94) the calendars will be displayed in the color you selected both in the row showing working times as well as in calendar rows:



## 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!

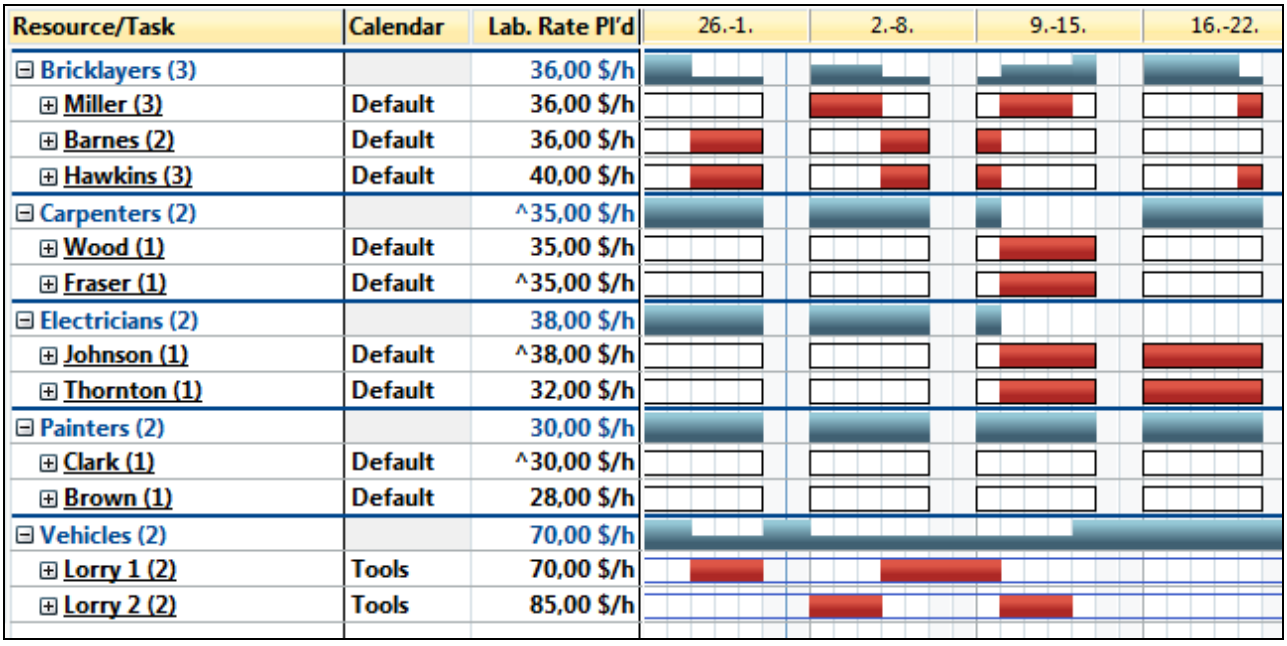
To change the setting in the column **Work**, just double-click the existing setting.

## 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 112.

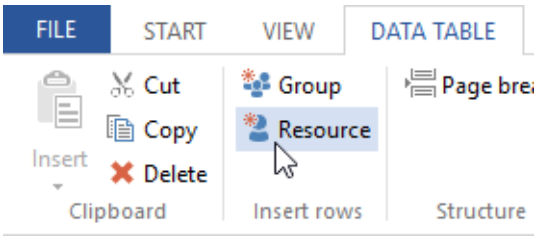
# CREATING RESOURCES

**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 |
|---|---|---|
| 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 **Data Table**.

## ALLOCATION OF WORKING HOURS, ABSENCE TIMES AND HOLIDAYS

### WORKING HOURS

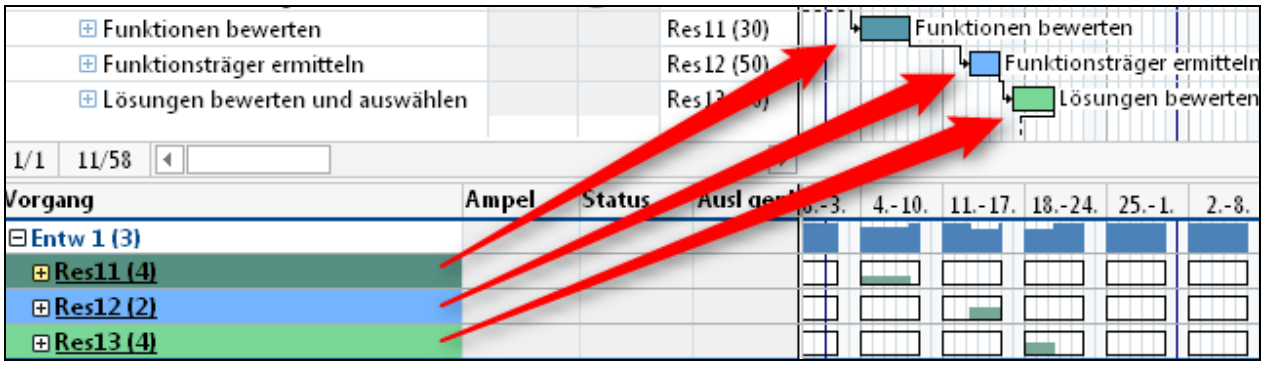
When a new resource is created, the **default calendar** is automatically allocated to it in the column **Calendar** (see "Calculation of the duration of tasks, default calendar" on page 44). This means that the working hours listed in the default calendar are applied to the new resource at first:

| 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.

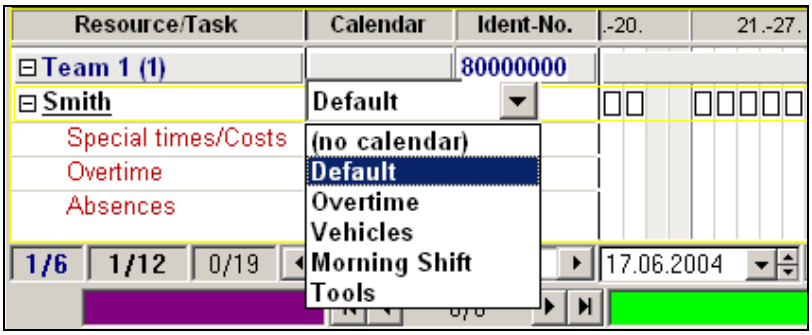
If you want to allocate another resource calendar to the resource (e.g. if the resource is to work in another shift or has workdays of different lengths), just double-click on the current calendar and select another calendar from the displayed list of available calendars (see "Individual colors for Resources

Resources can be provided with colors. The task bars of the tasks to which the resources have been allocated, are then displayed in the respective colors:




The corresponding dialog box can be opened by right clicking on a resource name.

Determine working hours (Resource calendar)" on page 89):



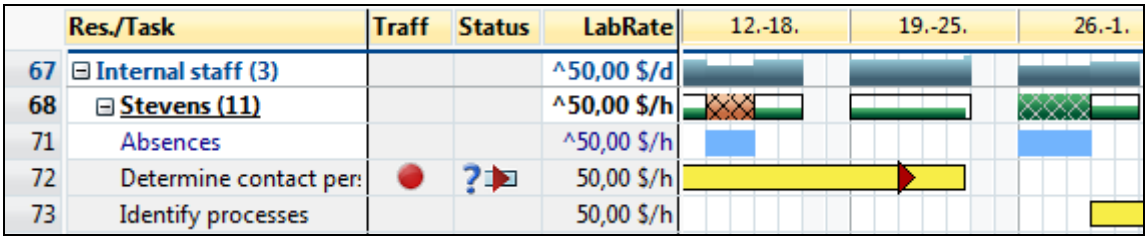

The first three resource rows are created automatically. They are identical with all resources and cannot be deleted. They are used exclusively for the determination of working hours and feature dark red designations to be easily distinguished from other rows.

For an explanation of the rows **Special times/Costs** and **Overtime** see the paragraph "Special times/Costs" on page 112.

### ABSENCES

Use the row **Absences** to enter those periods during which a resource is not available (e.g. when it is on holiday). Absences are entered as time bars by double-clicking in the Gantt chart. In the area covered by the time bars the working hours of the resource concerned are disabled.

If a resource is absent with no task allocated to it, this is displayed with the help of a crosshatched green bar. A crosshatched orange bar indicates that a task is allocated to an absent resource:



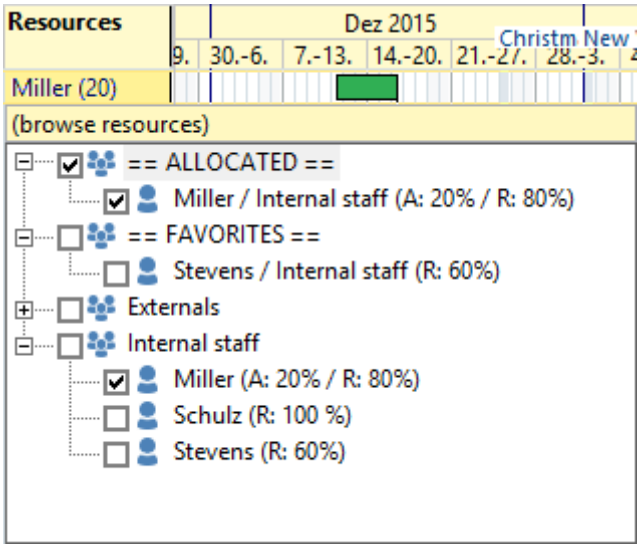

### PUBLIC HOLIDAYS

The setting made in the selected calendar **determines** whether public holidays are working days for the resource or whether they are free:

| Calendar | Holidays | Work |
|---|---|---|
| Calendars (5) | | |
| Default (7)* | Holiday free | w/ work |

If a holiday is to become an exceptional working day, use the row **Special times/Costs** to make this setting (see "Special times/Costs" on page 112).

## ASSIGNING RESOURCES TO TASKS



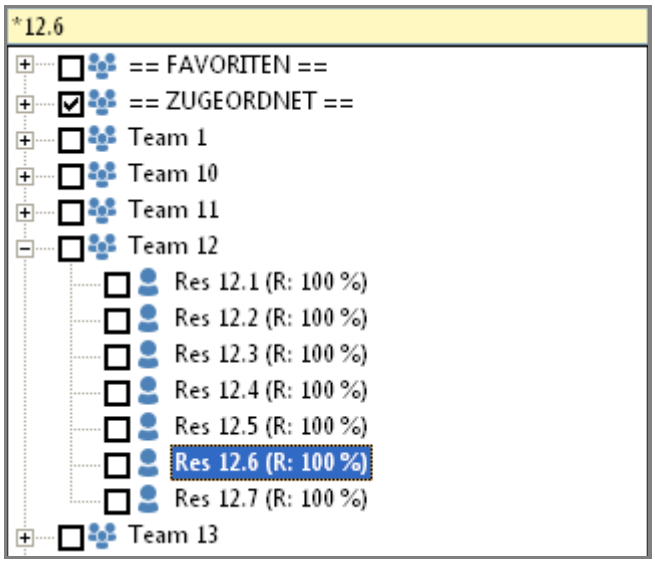

Double-click on the column **Resources** to assign resources to **tasks**.

The resource selection offers a first block of up to ten of the resources used last in order to save you from searching through the entire list if a large number of resources exist.

The second block displays the currently allocated resources.

In the resource selection, the average remaining capacity ("R: xx%") will be displayed with all resources in the period of the selected task. In addition the already allocated resources utilization by the current task ("A: xx%") is indicated.

When you enter a text in the search box on the resource selection, the first resource is selected which contains the entered text.
Here, for example, the first resource whose name ends with "12.6":



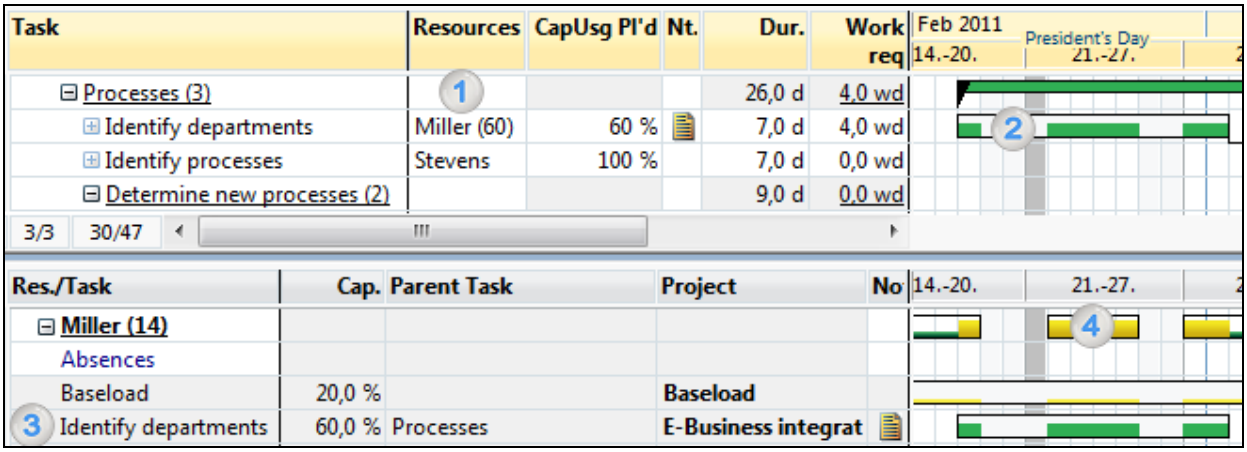

**Note:** Resources cannot be allocated unless you have at least „change permission“ for the resource group concerned!

In the resource view (lower pane of A-Plan) the involved resource or, if the allocation has already been made, the respective task is displayed.

Here, scrolling is also possible, for example, to check the capacity usage of different resources easily.

After the assignment has been made (press the ENTER key)
1. the **resource is assigned**,
2. if applicable, the **course of the project is adjusted**,
3. the task concerned comes up with the resource **in the lower part of A-Plan** and

4. the **period** concerned is **marked as reserved** according to the capacity usage:



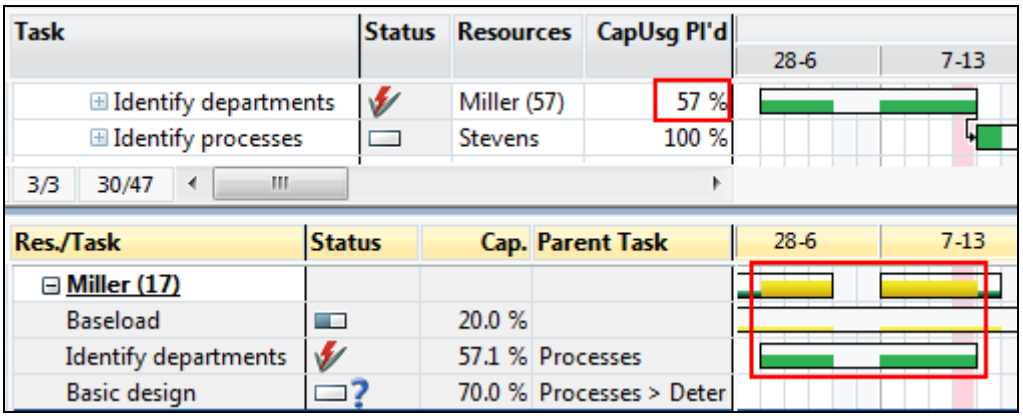

If a **Message** should come up whenever a resource is **overburdened** due to the assignment of a task or the shifting of a task, this can be set as an option (see "Messages / Aids / EMail" on page 138).

| | |
|---|---|
| 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.

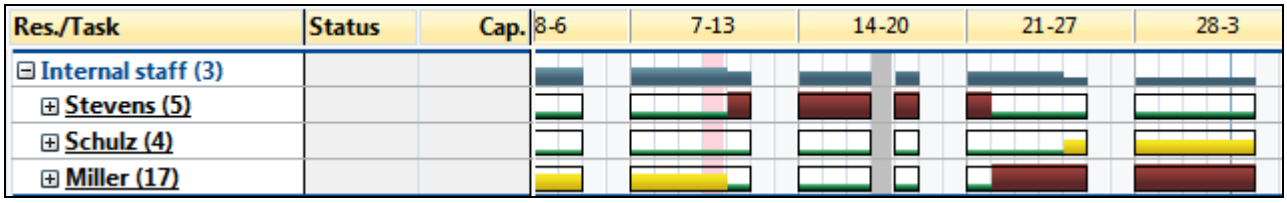
## CAPACITY USAGE OF RESOURCES / TEAMS

A resource may be assigned to a task with a usage rate of more or less than 100 %. When the allocation is made, the capacity usage setting is made according to the default value entered in options (see "Settings" on page 137). The capacity usage can afterwards be changed in the column **CapUsg Pl'd**. To specify a usage rate other than 100 %, click on the percentage given in parentheses behind the resource and enter the wanted percentage value:



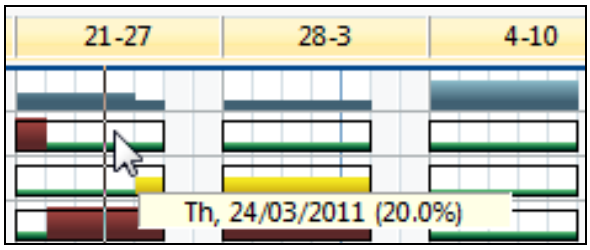

A capacity usage rate other than 100 % is indicated in the task table in parentheses behind the resource designation (but without the % sign to save space). In the resource table (lower pane), the time bar filling pattern reflects the usage rate during the time period concerned.

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.

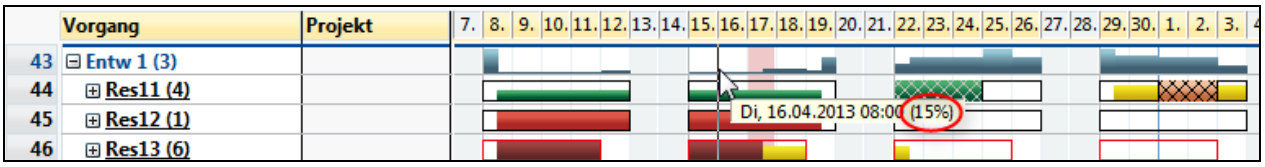
**Important:**
A capacity usage rate of more than 100 % is also accounted for when work and costs are calculated. For example, assigning a usage rate of 120 % to a resource for a given time period will result in more work and higher costs being calculated for the period concerned!

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 115).

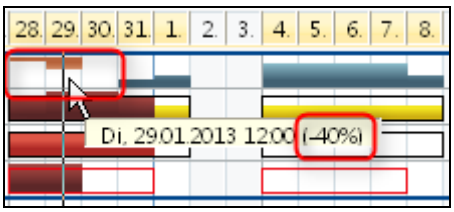
A special ini file enables you to change thresholds/limits and colors (see "C. Special settings" on page 260).

## 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.



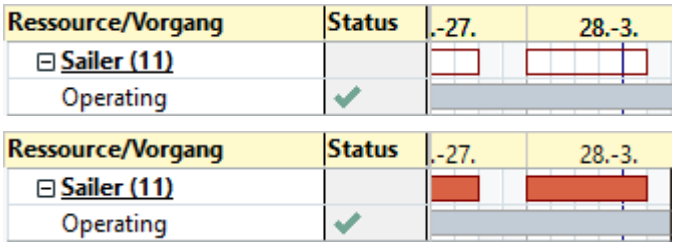

Negative remaining capacities of the teams are displayed as red bars. To clearly distinguish them from positive values, they are displayed in vertical direction from top to bottom:




## WORKLOAD THROUGH COMPLETED PROCESSES

Normally, tasks that have been marked as completed, no longer taken into account in the workload of resources.

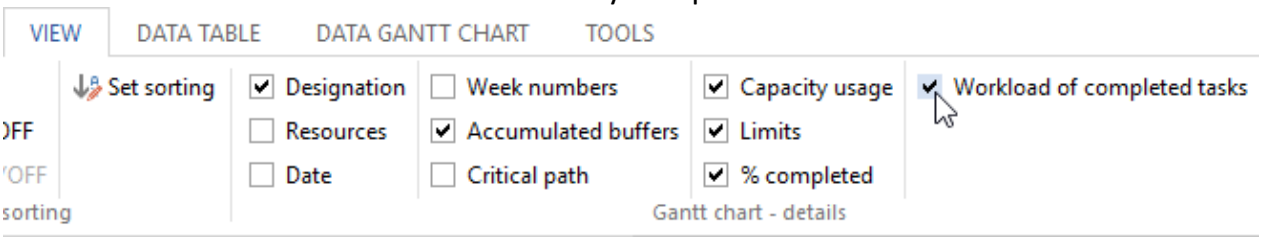
Occasionally, it is desirable to see in retrospect that workloads were present at the resources. For this purpose, it is possible to optionally take into account the workload of completed tasks:




Excluding the workload of completed operations

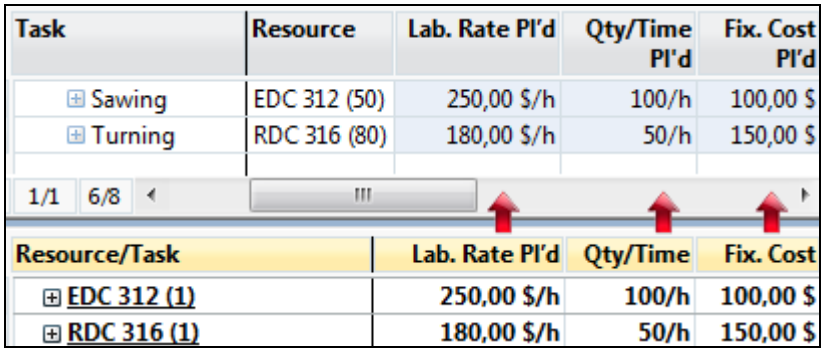
Including the workload of completed operations

You can enable and disable the workload by completed tasks in the **View** tab:

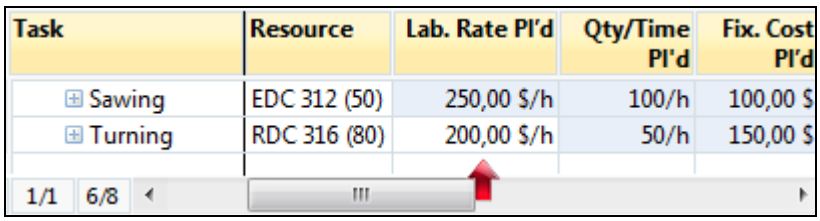



## DEFAULT VALUES OF RESOURCES

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:




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:




Values entered manually ***(1)*** are displayed with a white background instead of a blue background color 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 / Abbreviations / Timetracking" on page 132). 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 111).

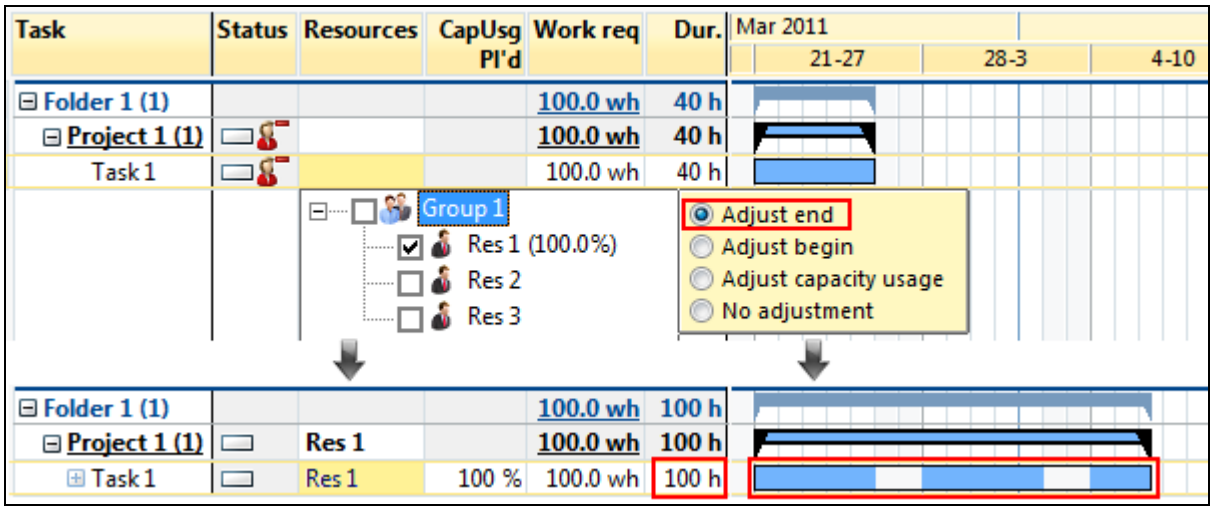
## AUTOMATIC ADJUSTMENTS

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).

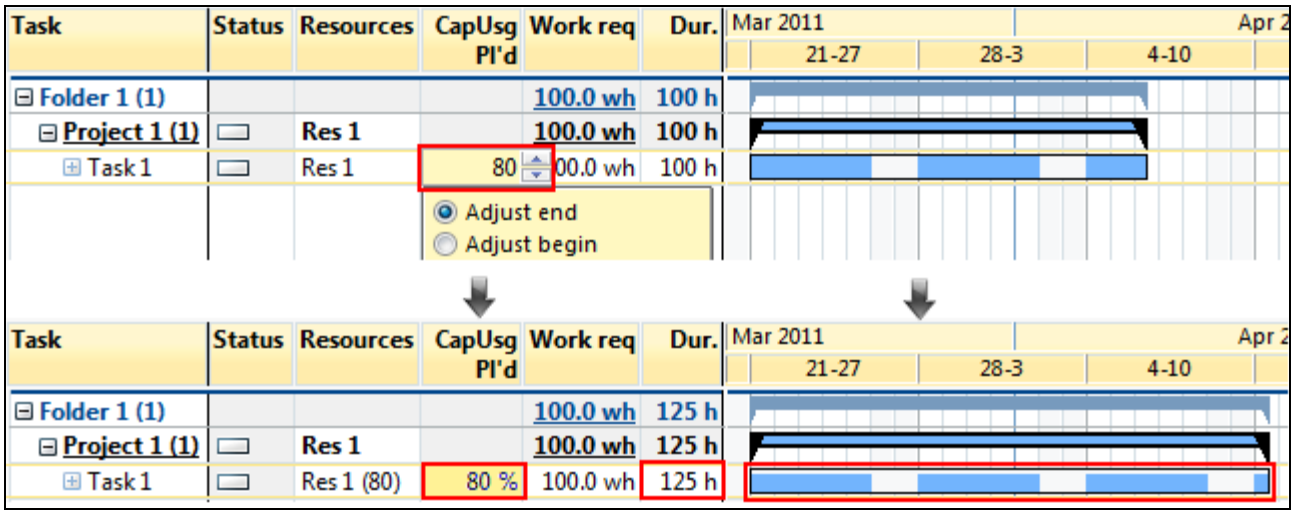
**Result:** Duration = 100h (which actually was not very difficult in this example)




**2. Reducing the capacity usage**

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

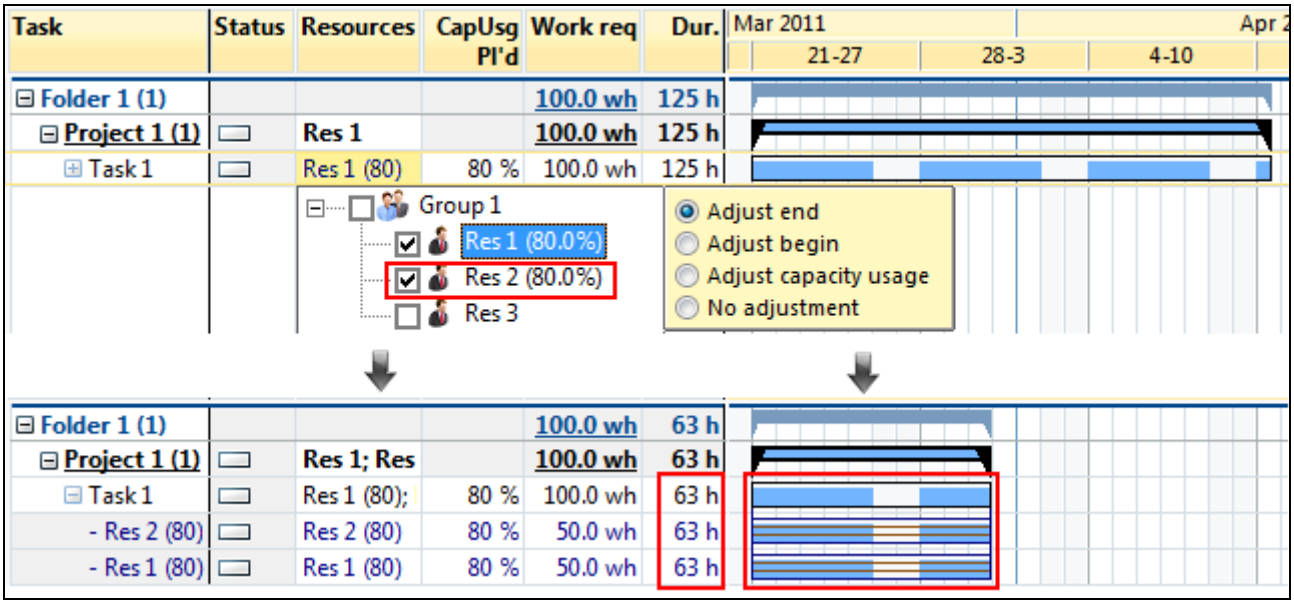
**Result:** Duration = 125h



### 3. Assigning more resources

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

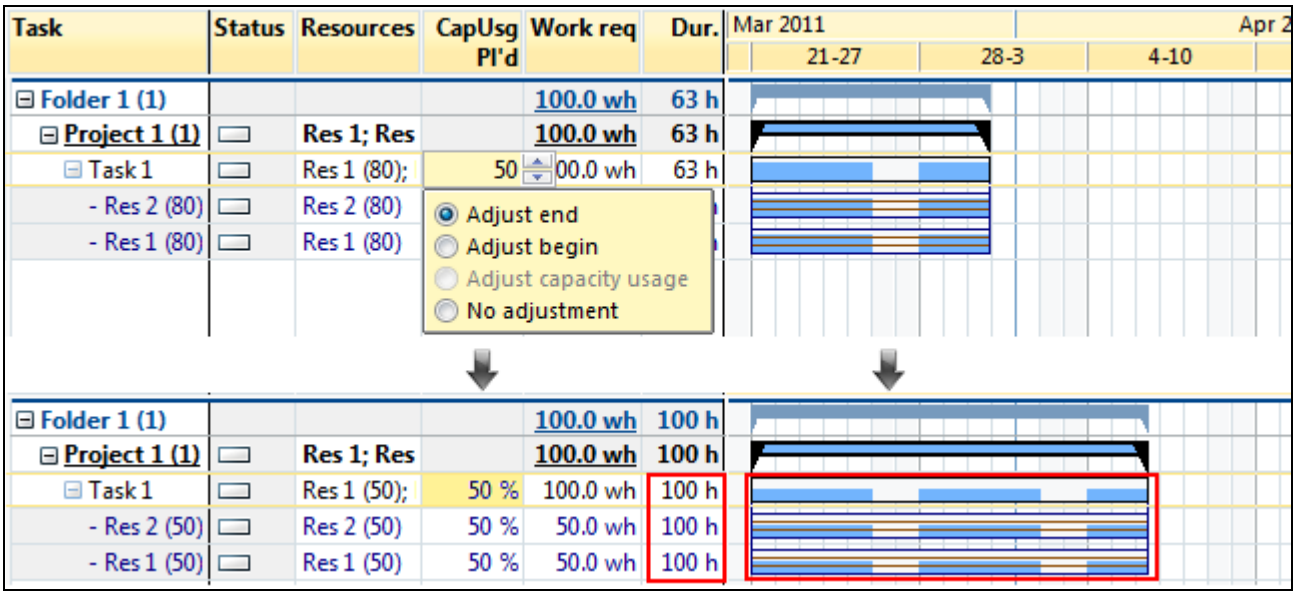
**Result:** Duration = 63h




### 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.

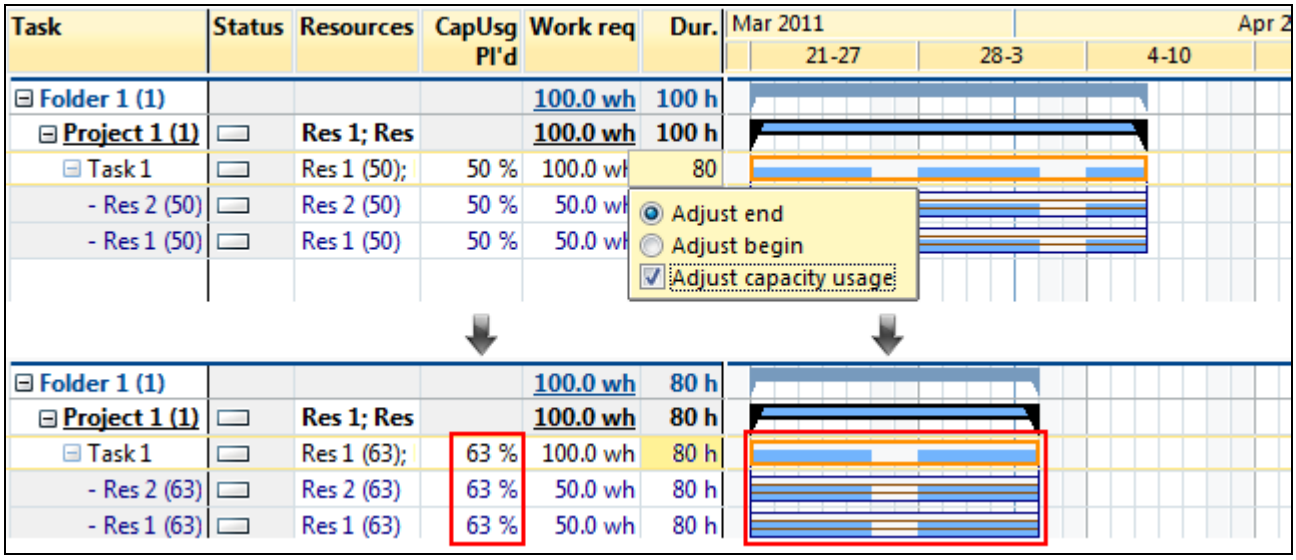
**Result:** Duration = 100h



### 5. Changing the duration of the task

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

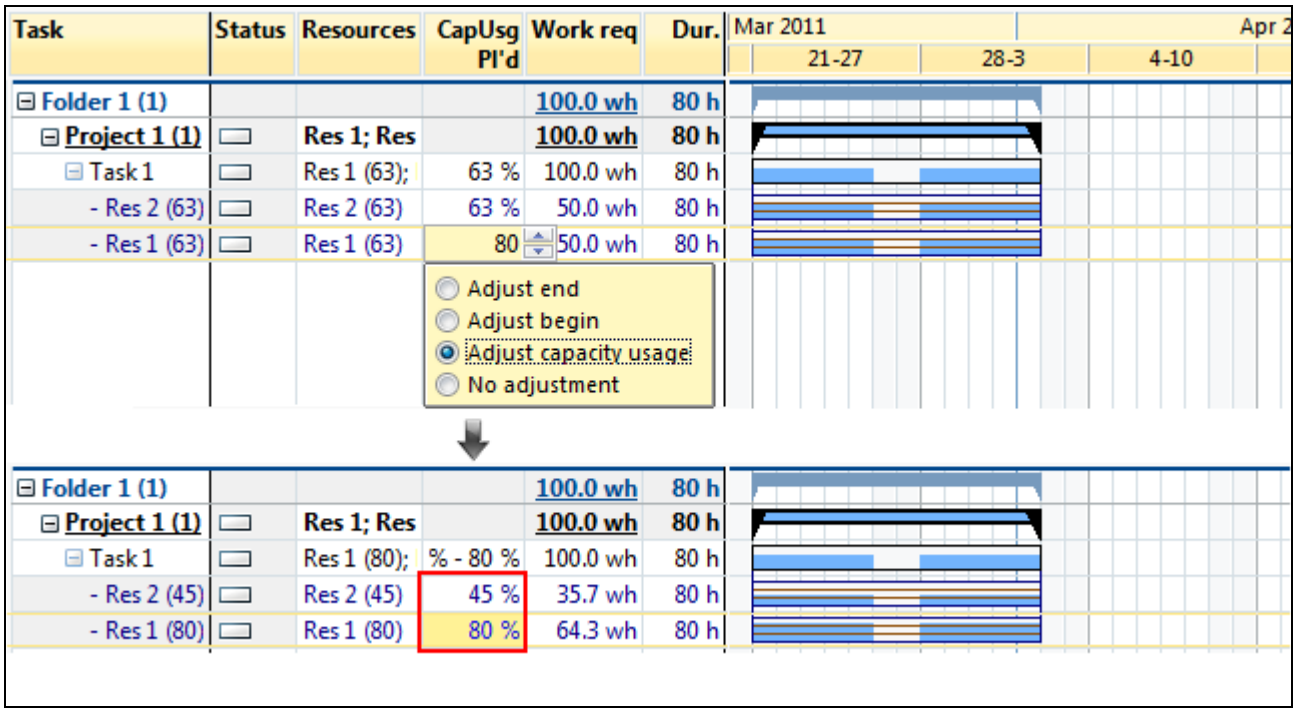
**Result:** Capacity usage of both resources = 63%




### 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.

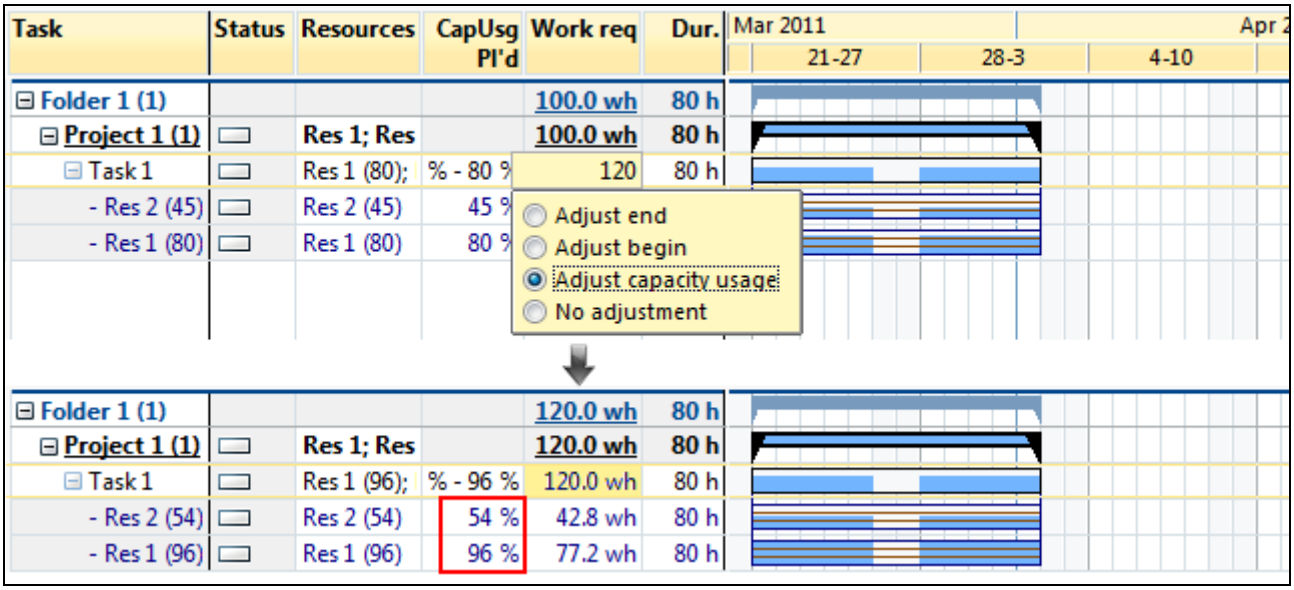
**Result:** Capacity usage of the second resource = 45%



**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.**

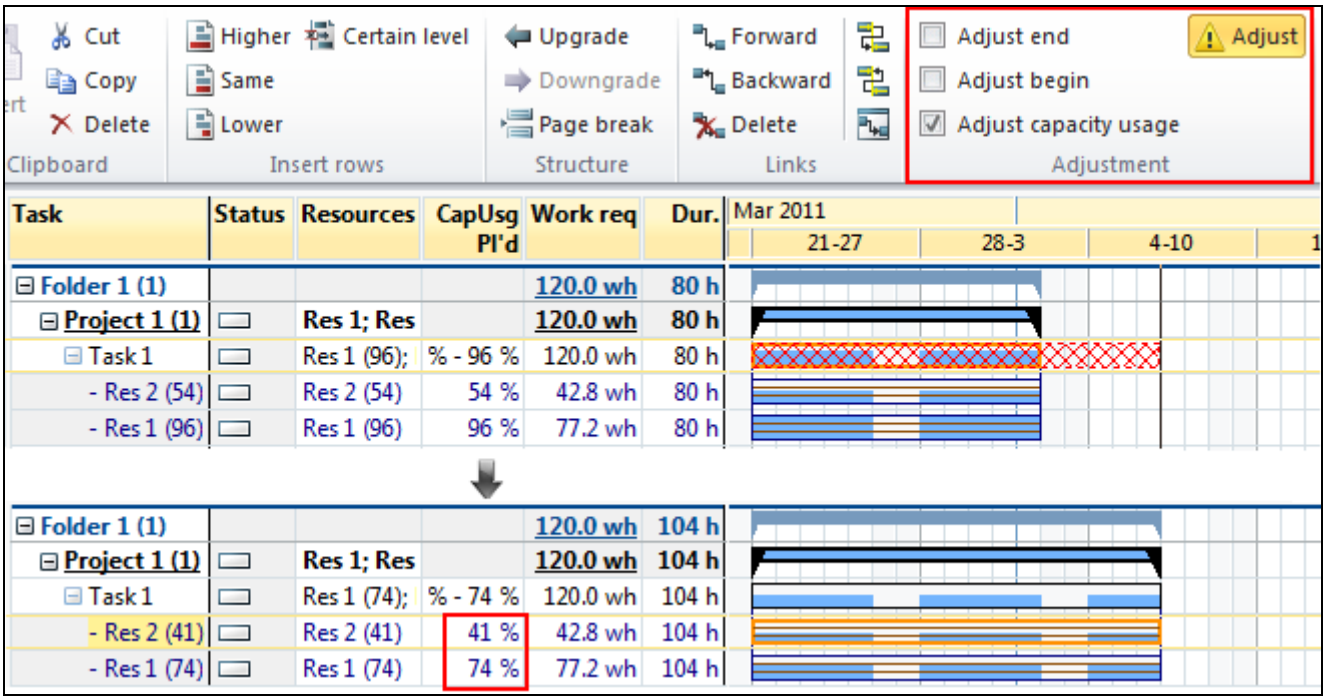
**Result:** Capacity usage of resource 1 = 96%, of resource 2 = 54 % (the capacity usage ratio remains the same)




**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)




**Note:**
When changes are made in the Gantt chart, the presetting is made in the menu **Data Gantt chart** 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.

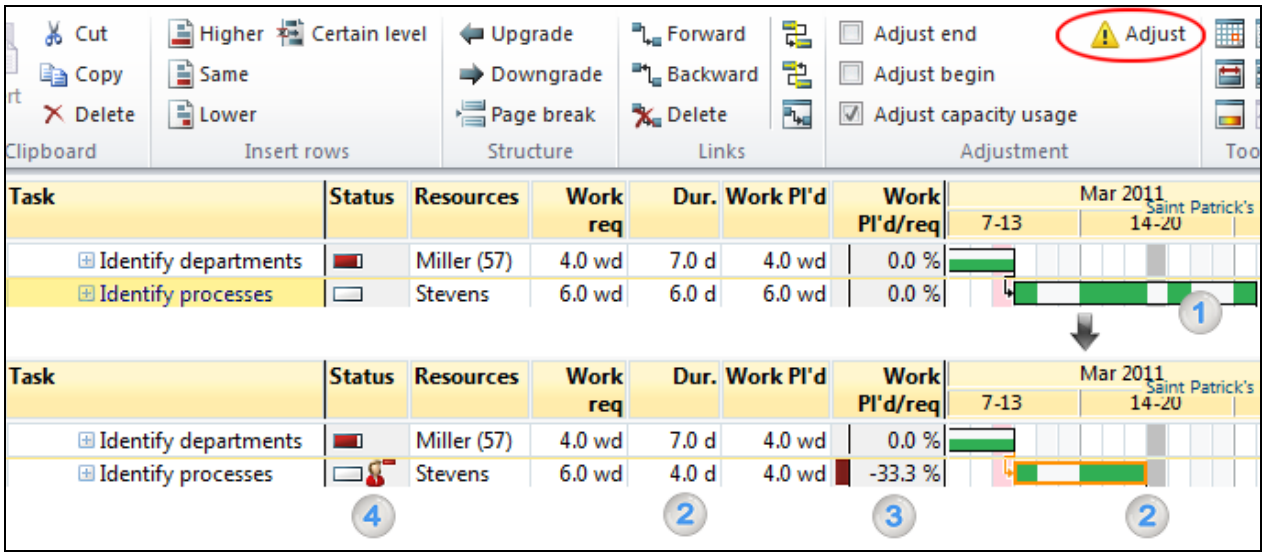
## PLANNED WORK

The automated adjustment has the effect that the course of the project is adjusted to the required work as soon as changes are made in A-Plan.

If no automtic adjustment is carried out, for example because **Adjust** was deactivated in the tab **Data Gantt chart** 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:**



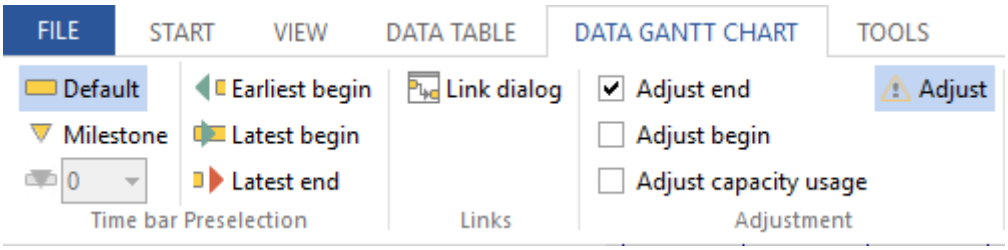

**Explanations:**

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 Staus 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 102 cannot be displayed for all types of actions, you have the alternative of controlling the adjustment in the tab **Data Gantt chart**:



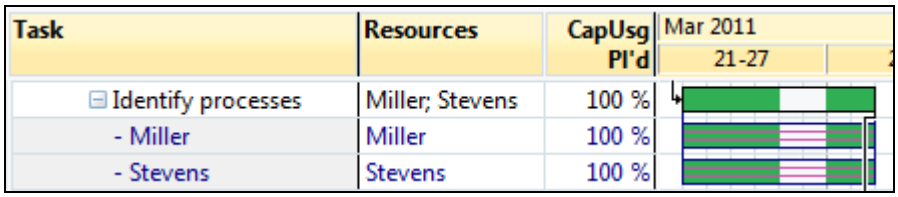

Examples of such actions are changes made on task bars in the Gantt chart with the help of the mouse or the specification of time periods during which resources are not available (see "Absences" on page 95).

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.

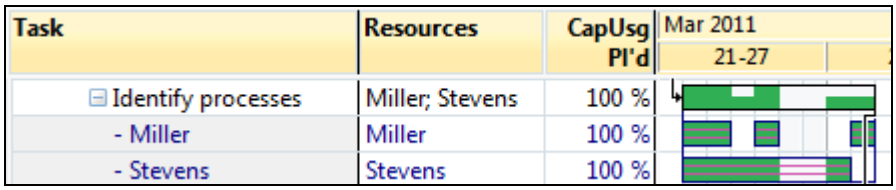
# PARTICULAR CASES (FLEXIBLE ASSIGNMENT OF RESOURCES)

## 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:




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:

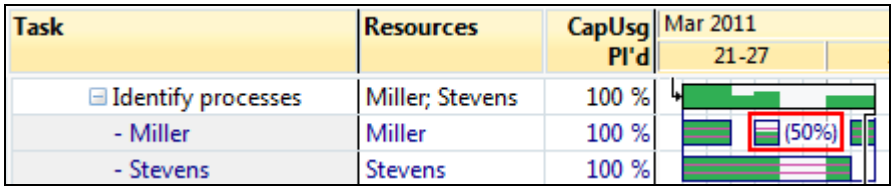



The times (or work) spent on a task resulting from the assignments you made is shown in the task row.

**Note:**
A series can **no longer** be created (see "Series (periodically recurring dates)" on page 65) 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:




**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 97).

## 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 112) 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 Pl'd | Fix. Cost (1) | Lab. Cost Pl'd (2) | Ovt. Cost Pl'd (3) | Tot. Cost Pl'd (4) |
|---|---|---|---|---|---|---|
| Total (8) | | 171 wd | €3,900 | €113,688 | €1,944 | €117,588 |
| ⊟ Construction proj. (2) (7) | | 124 wd | €3,750 | €79,992 | €1,296 | €83,742 |
| ⊟ Kings Road (7) (6) | | 77 wd | €3,600 | €46,296 | €648 | €49,896 |
| ⊟ Demolition (2) | | 6 wd | €150 | €9,468 | €648 | €9,618 |
| ⊞ Basement (5) | Lorry 1; Barnes; Hawkins | 4 wd | | €3,504 | | €3,504 |
| ⊞ Ground floor | Lorry 2; Miller (50) | 2 wd | €150 | €5,964 | €648 | €6,114 |
| ⊟ Internal walls (2) | | 9 wd | | €11,652 | | €11,652 |
| ⊞ Room Basem. 1 | Lorry 1; Barnes; Hawkins | 6 wd | | €5,256 | | €5,256 |
| ⊞ 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 119**)** 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 ① | Lab. Rate | Lab. Cost ② | Ovt. Cost ③ | Tot. Cost ④ |
|---|---|---|---|---|---|
| ⊟ Brown (1) | | 28 €/h | | | |
| Painting | | | €3,024 | €672 | €3,024.00 |
| ⊟ Vehicles (2) | | 70 €/h | | | |
| ⊟ Lorry 1 (2) | €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 "Do not show.../Never show..." on page 121).

## 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. |
|---|---|---|---|---|
| ⊞ Smith | Default | ^35.00 €/h | | |
| ⊟ Bricklayers (3) | | 36.00 €/h | | |
| ⊟ Barnes (1) | Morning Shift | 36.00 €/h | | |
| Special times/Costs | | 44.00 €/h | 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 |
|---|---|---|---|---|
| ⊟ Topics, contents (5) | | 480.00 € | 30,600.00 € | 31,080.00 € |
| ⊞ Totals Topics | Documentation | 480.00 € | | 480.00 € |
| ⊞ Define topics | Miller | | 3,000.00 € | 3,000.00 € |
| ⊞ Structuring | Schulz | | 1,800.00 € | 1,800.00 € |

2/2 | 1/1 | 23/36

| Resource/Task | Project | Pl'd Fix. Cost | Pl'd Lab. Rate | Calendar |
|---|---|---|---|---|
| ⊟ Totals (1) | | | | |
| ⊟ 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 102) will be calculated automatically:

| Task | Resource | Qty. Pl'd ① | Qty/Time Pl'd ② | Work Req. ③ | Dur. ④ | Mo, 07/06 | Tu, 07/07 | We, 07/08 | Th, 07/09 | Fr, 07/10 |
|---|---|---|---|---|---|---|---|---|---|---|
| ⊞ Sawing | EDC 312 | 1,500 | 100/h | 15 wh | 15 h | Sawing | | | | |
| ⊞ Turning | RDC 316 | 1,500 | 50/h | 30 wh | 30 h | | Turning | | | |

## FACTOR (ASSIGNMENT OF SEVERAL IDENTICAL RESOURCES, BASE-LOAD)

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 ① | Qty. Pl'd | Qty/Time Pl'd ② | Work Req. | Dur. ③ | Mo, 07/06 | Tu, 07/07 | We, 07/08 | Th, 07/09 |
|---|---|---|---|---|---|---|---|---|---|---|
| ⊞ Sawing | EDC 312 | 2 | 1,500 | 200/h | 15.0 wh | 7.5 h | Sawing | | | |
| ⊞ Turning | RDC 316 | 3 | 1,500 | 150/h | 30.0 wh | 10.0 h | | Turning | | |

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 |
|---|---|---|---|---|---|---|---|---|---|---|
| ⊞ Sawing | EDC 312 | 50 % | 2 | 1,500 | 200/h | 15.0 wh | 15.0 h | Sawing | | |
| ⊞ Turning | RDC 316 | 80 % | 3 | 1,500 | 150/h | 30.0 wh | 12.5 h | Turning | | |

**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 „Base-load".** With this done, assign all resources to this task bar with a capacity usage equivalent to their baseload.

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

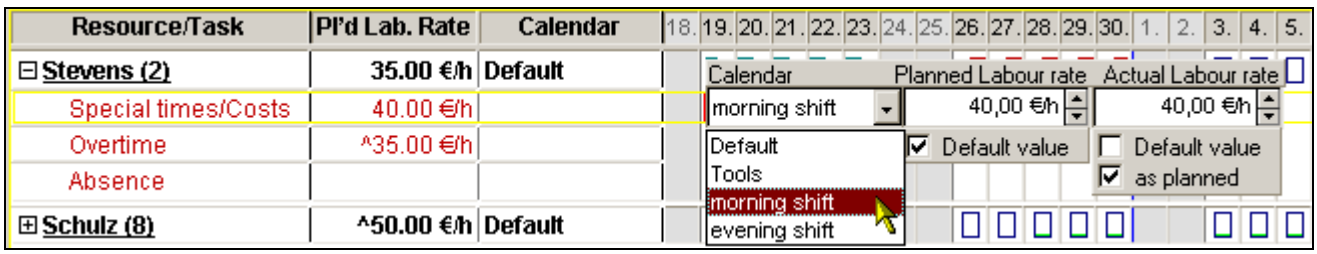
# SPECIAL TIMES/COSTS

### *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 | | | | | | | | | | | | | |
| 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:




### *Resources having irregular working hours*

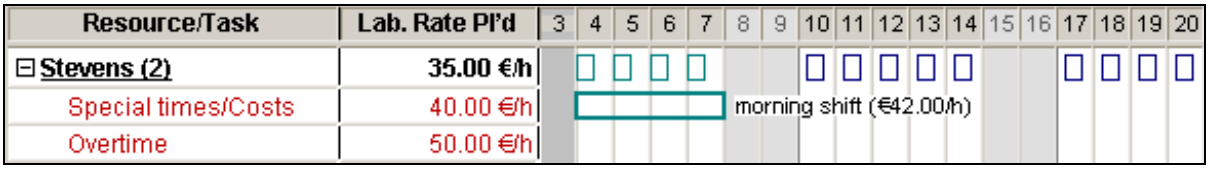
If a resource has occasional or very irregular working hours, you should better assign a calendar **without working hours** in the column **Calendar** and enter the working times in the row **Special times/Costs** as they occur. This is done best if you use a real-time calendar as a resource calendar to have the full range of working hours covered (see "Creating resource calendars" on page 91).

**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 93).

### *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:

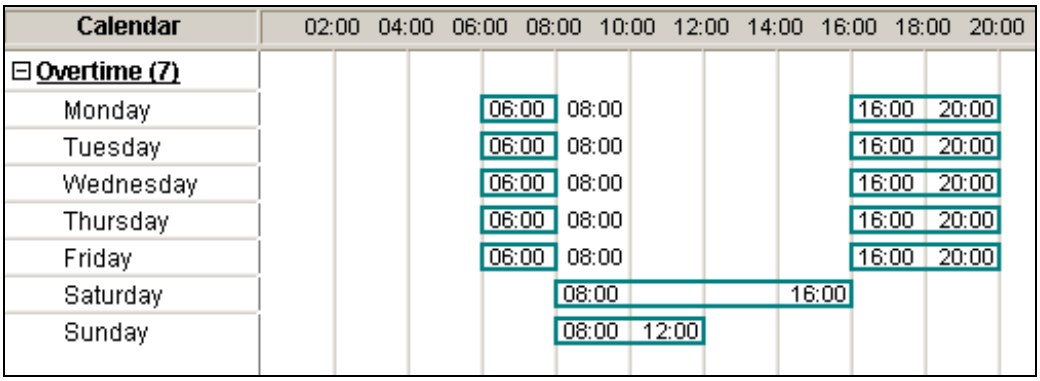

If a labour rate other than the default value is used, the labour rate is shown in parentheses behind the designation of the resource calendar:



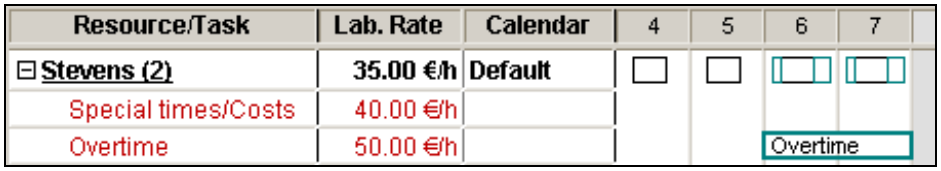

### *Overtime*

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:



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:

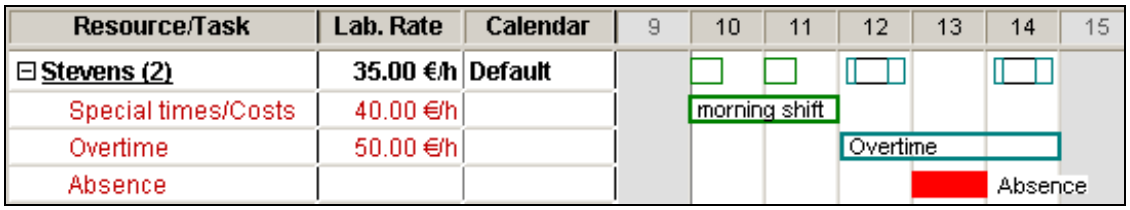



Contrary to what happens in the row **Special times/Costs,** adding a calendar in the row **Overtime** will not disable the working hours specified in the calendars of the rows above but will add additional working hours to them. If this has the effect that working hours of calendars overlap, the overtime 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 <u>added</u> to the working hours specified in the calendars of the rows above (S**pecial 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 <u>all</u> working hours in time periods covered by absence bars:



# 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

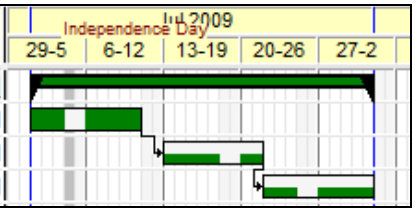
### EXAMPLE

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" und "Task 3".

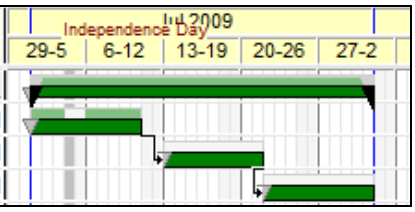
| Task | Resources | CapUsg Pl'd | CapUsg Progn | Finish. % | Work Pl'd | Work Act | Work Progn |
|---|---|---|---|---|---|---|---|
| Proj. 1 (3) | | | | 0 % | 15.5 wd | 0.0 wd | 15.5 wd |
| Task 1 | Miller | 100 % | 100.0 % | 0 % | 8.0 wd | 0.0 wd | 8.0 wd |
| Task 2 | Stevens (50) | 50 % | 50.0 % | 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**

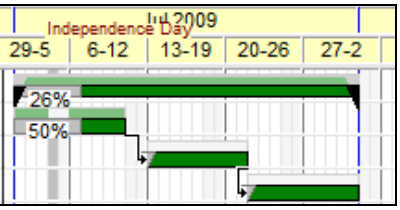
Note: Change the view in the ribbon tab **Start** by choosing **Actual mode**.

| Task | Resources | CapUsg Pl'd | CapUsg Progn | Finish. % | Work Pl'd | Work Act | Work Progn |
|---|---|---|---|---|---|---|---|
| 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**

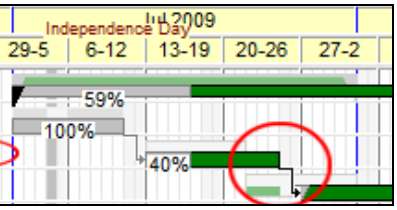
| Task | Resources | CapUsg Pl'd | CapUsg Progn | Finish. % | Work Pl'd | Work Act | Work Progn |
|---|---|---|---|---|---|---|---|
| Proj. 1 (3) | | | | 26 % | 15.5 wd | 4.0 wd | 15.5 wd |
| Task 1 | Miller | 100 % | 100.0 % | 50 % | 8.0 wd | 4.0 wd | 8.0 wd |
| Task 2 | Stevens (50) | 50 % | 50.0 % | 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:

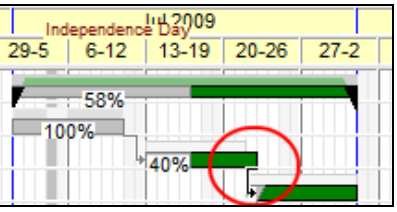
| Task | Resources | CapUsg Pl'd | CapUsg Progn | Finish. % | Work Pl'd | Work Act | Work Progn |
|---|---|---|---|---|---|---|---|
| Proj. 1 (3) | | | | 59 % | 15.5 wd | 10.0 wd | 17.0 wd |
| Task 1 | Miller | 100 % | 100.0 % | 100 % | 8.0 wd | 8.0 wd | 8.0 wd |
| Task 2 | Stevens (50) | 50 % | 50.0 % | 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"**

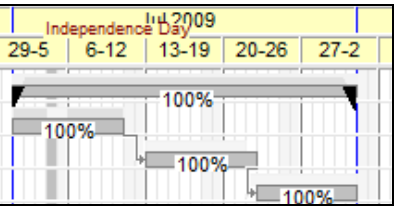
To keep to the planned schedule, the capacity to be spent by "Stevens" on "Task 2" is to be increased from 50% to 75% and on "Task 3" from 50% to 60% so that “Task 3” will be completed as planned originally:

| Task | Resources | CapUsg Pl'd | CapUsg Progn | Finish. % | Work Pl'd | Work Act | Work Progn |
|---|---|---|---|---|---|---|---|
| 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 |



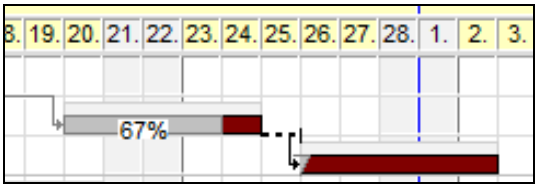

**6. Project completed**

| Task | Resources | CapUsg Pl'd | CapUsg Progn | Finish. % | Work Pl'd | Work Act | Work Progn |
|---|---|---|---|---|---|---|---|
| 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.

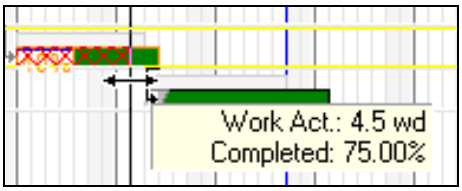
**Important information** on the project status:

| | |
|---|---|
| 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 253.

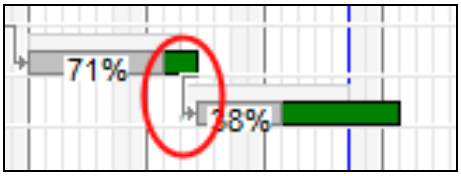
## NOTES, HANDLING

- 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 184) 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 130).

# OPTIONS

## VIEWING OF OPTIONS

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

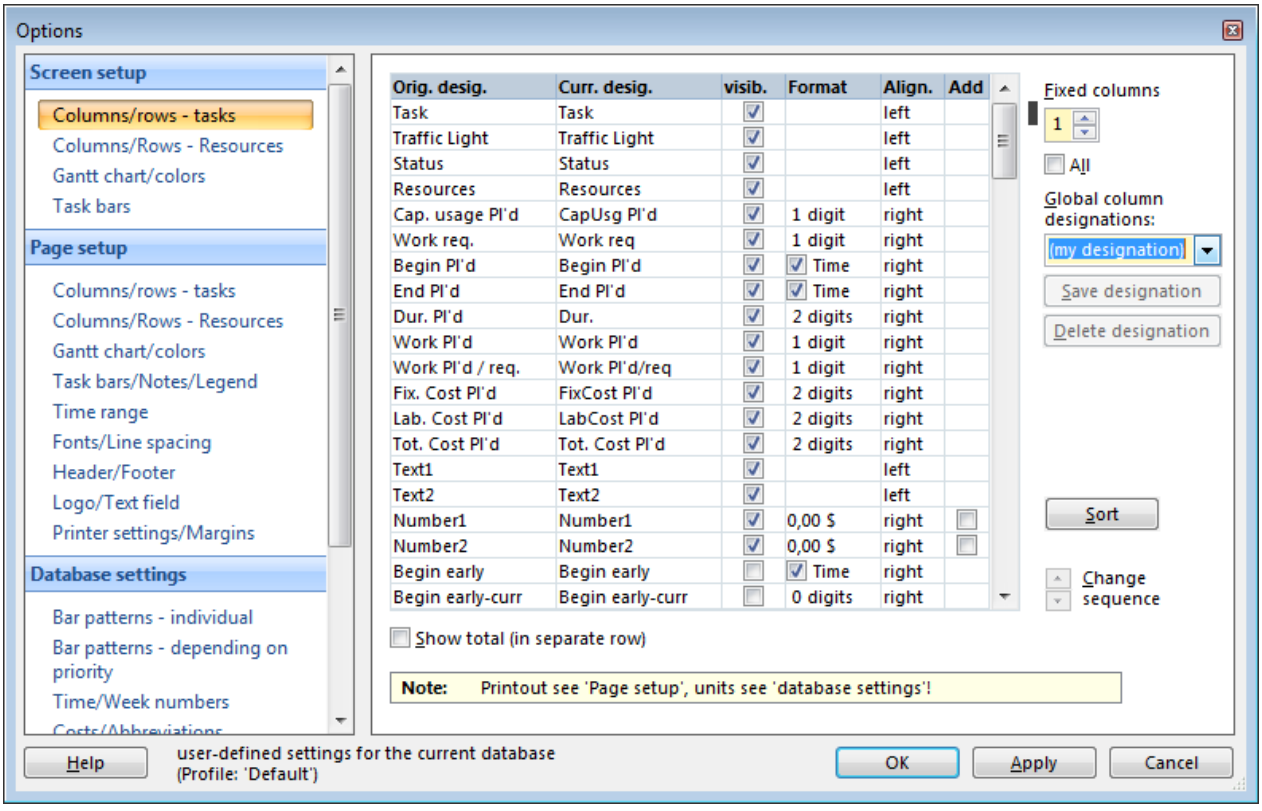
**Note:** In the Office 2007 programs, Microsoft „hid" the command for accessing options in the bottom right corner in the tab **File**. Of course, you may start them from there as well when working with A-Plan.

## 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<br>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.)*

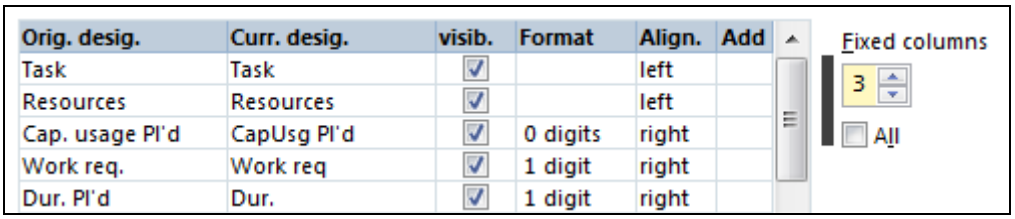
Clicking on a checkbox in the column **Add.** will have the effect that user-defined number columns are added up (see "User-defined number columns (Number1 - Number10)" on page 252)

### *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*

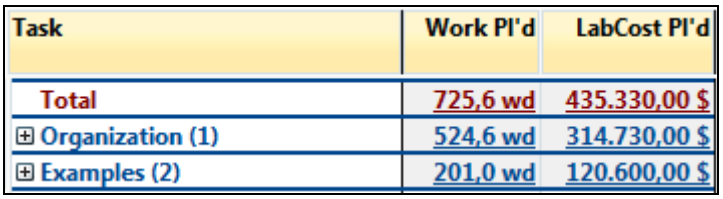
One or several columns can be fixed on the left side of the main window. If fixed, they are always within view because they are not moved if the main window is scrolled by means of the scroll bar. In the table of the dialog box, **fixed columns** are marked by a thick dark grey line next to the right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




**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)*

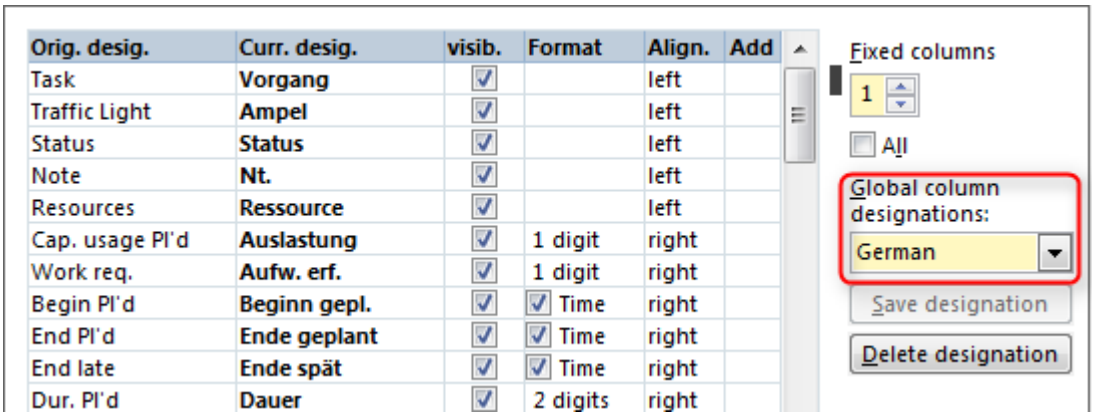
With this option activated, a row comes up in which the total is displayed for each column supposed that numerical values are contained in it:




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

## GLOBAL COLUMN DESIGNATIONS

The multi-user license of A-Plan offers the function of creating sets of column designations which can be provided to all other users. This enables the users to switch between designations within any profile, for example from German to English:

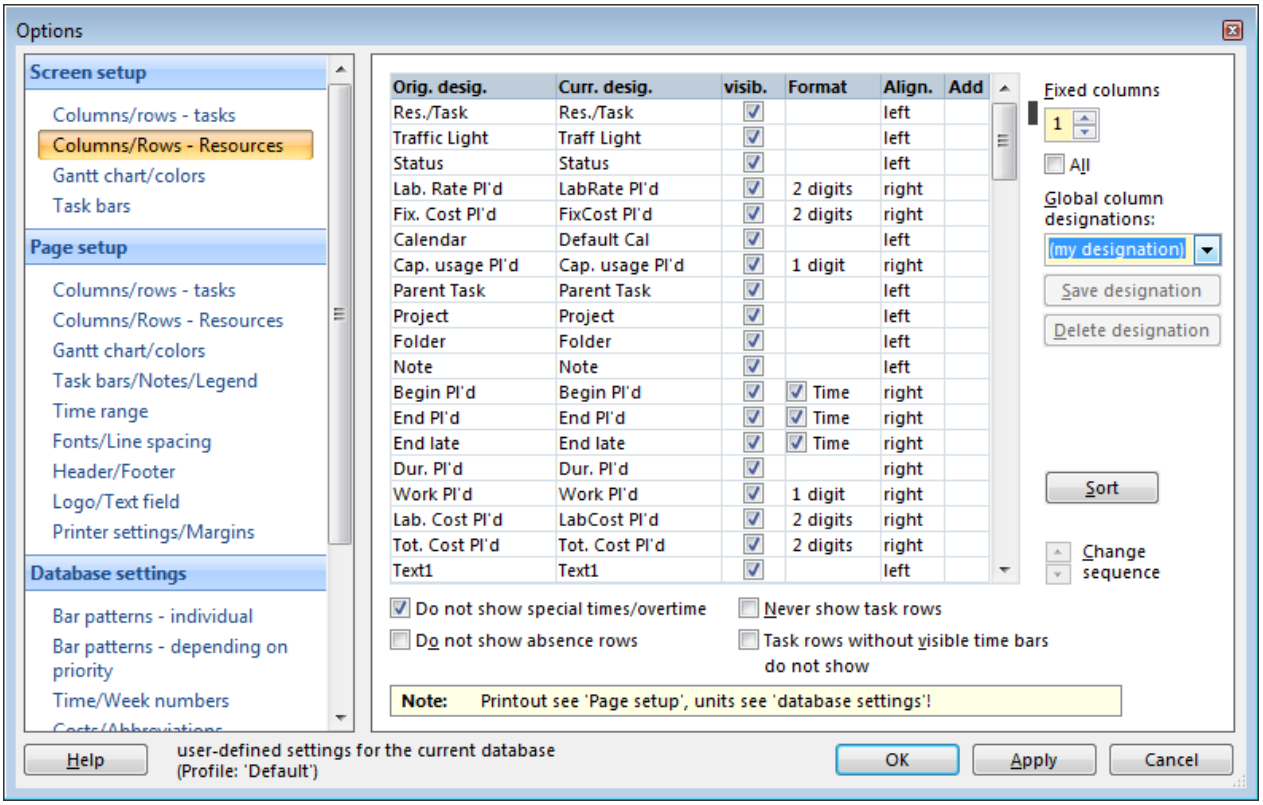


Global column designations can be created and changed with master rights only (see "Entering users (in administrator mode only)" on page 184). To do so, enter the name of the set into the select box on the right, then click **Save designation** and finally edit the designations in the column **Curr. desig**.

Global column designations are displayed in bold letters to make evident immediately that global designations are used.

## 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):

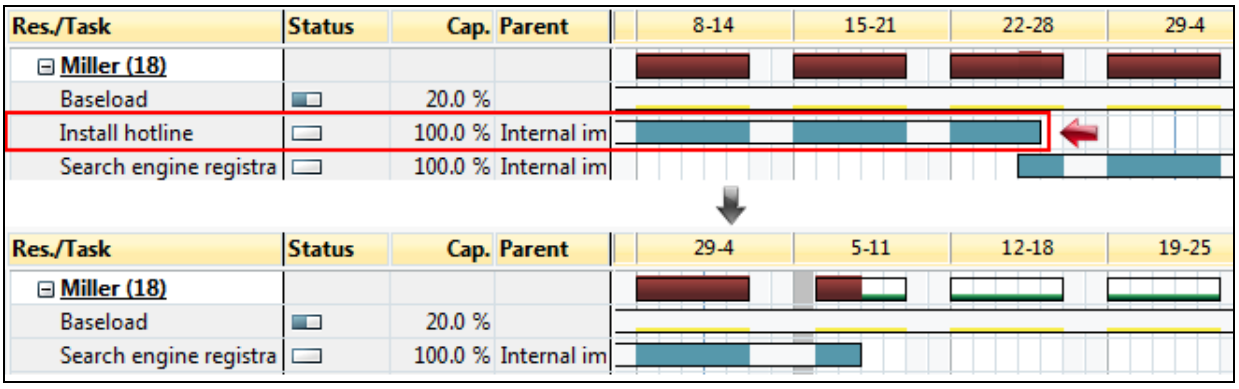
| Res./Task | Status | Cap. | Parent |
|---|---|---|---|
| Miller (18) | | | |
| Special times/Costs | | | |
| Overtime | | | |
| Absences | | | |
| Baseload | | 20.0 % | |

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

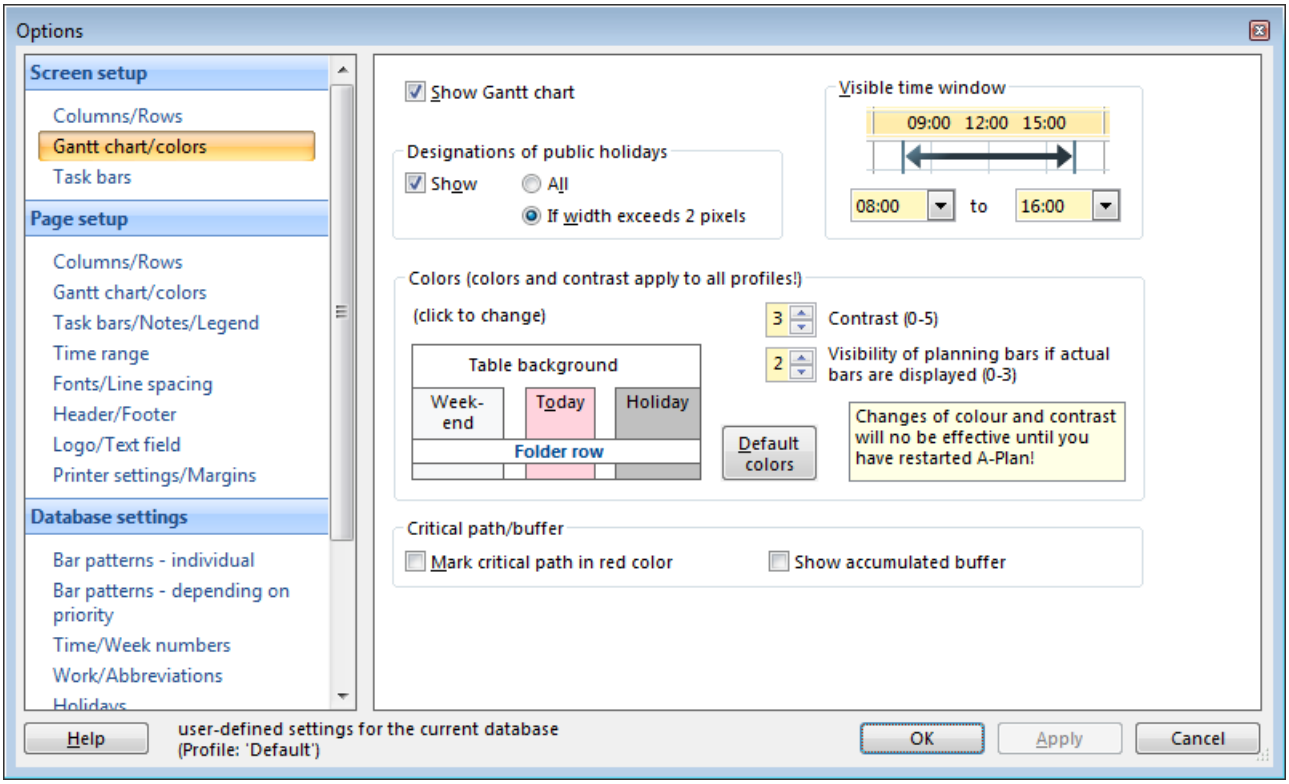
| Res./Task | Status | Cap. | Parent |
|---|---|---|---|
| Miller (18) | | | |
| Baseload | | 20.0 % | |

### 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

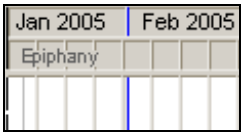



### *Show Gantt chart*

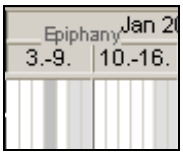
Activating this option enables you to have the table displayed only with the Gantt chart being omitted.

### *Designations of public holidays*

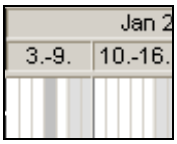
The designations of **public holidays** (see "Public holidays" on page 134) can likewise be shown on screen or hidden:




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*

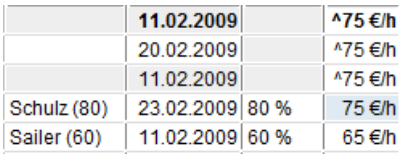
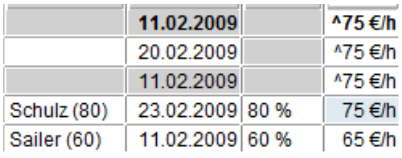
Clicking on one of the elements will open a dialog box to choose a color from. Clicking on **OK** will assign the color to the selected element. To assign the default colors again, click on the respective button.

**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:

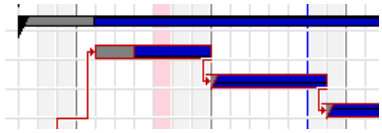
| | |
|---|---|
| **Contrast = 1** | |

| | | | |
|---|---|---|---|
| | **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 |

| | |
|---|---|
| **Contrast = 3** |  |
| **Contrast = 5** |  |

| | 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):

| | |
|---|---|
| **Visibility = 0** |  |
| **Visibility = 1** |  |
| **Visibility = 2** |  |

## *Critical path / Accumulated buffer*

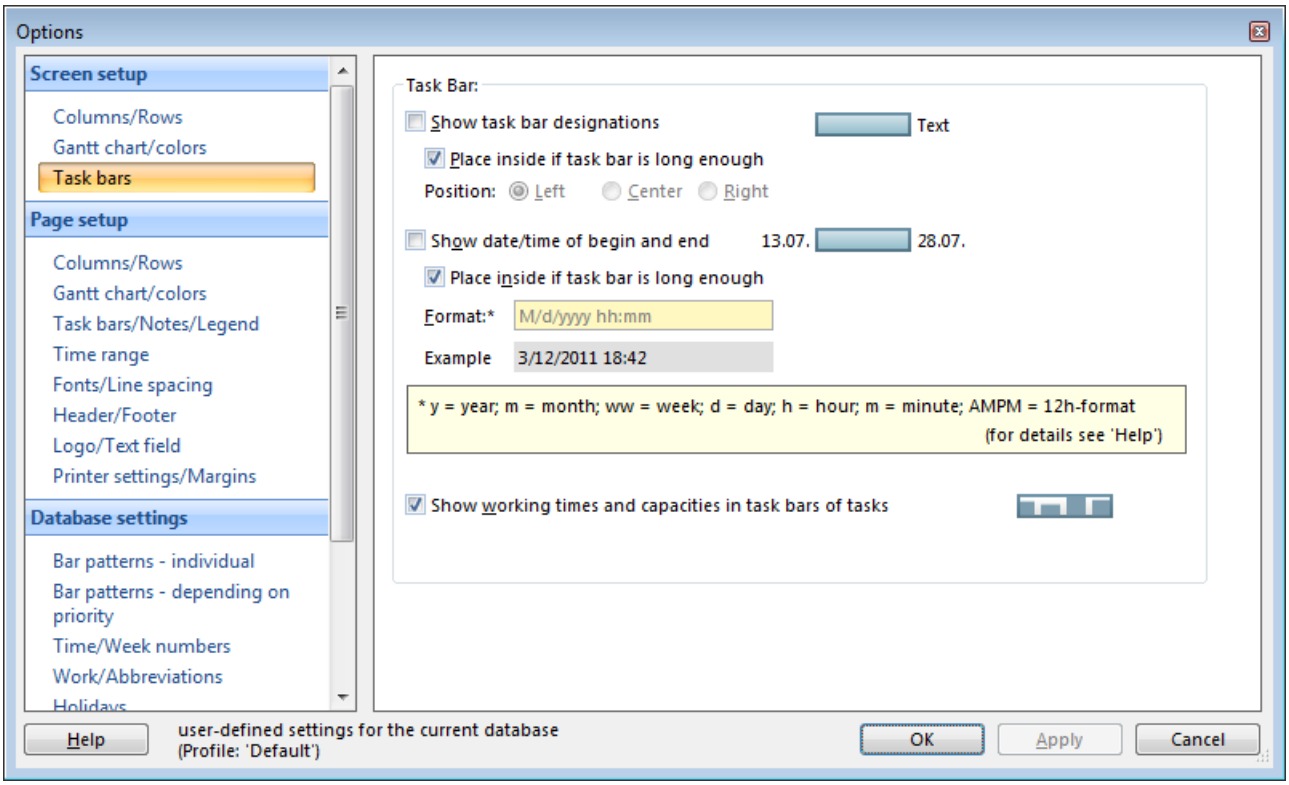
### Critical path

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

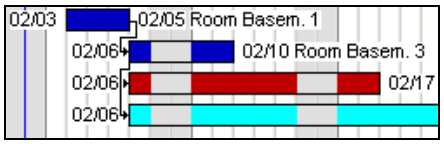



### *Show task bar designations*

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 |

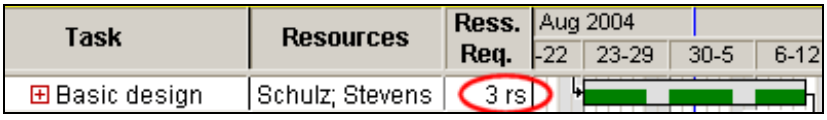
For a complete list of all available formats see the appendix ("E. User-defined date/time formats" on page 261).

### *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 the 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:



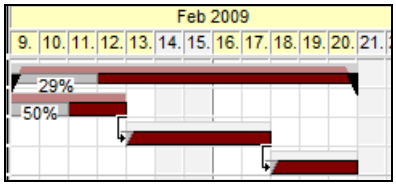

In the example above, only two resources were assigned although three resources are required. As a consequence, the pattern is shown filled to two thirds of its full height only throughout the entire task bar.

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 44):

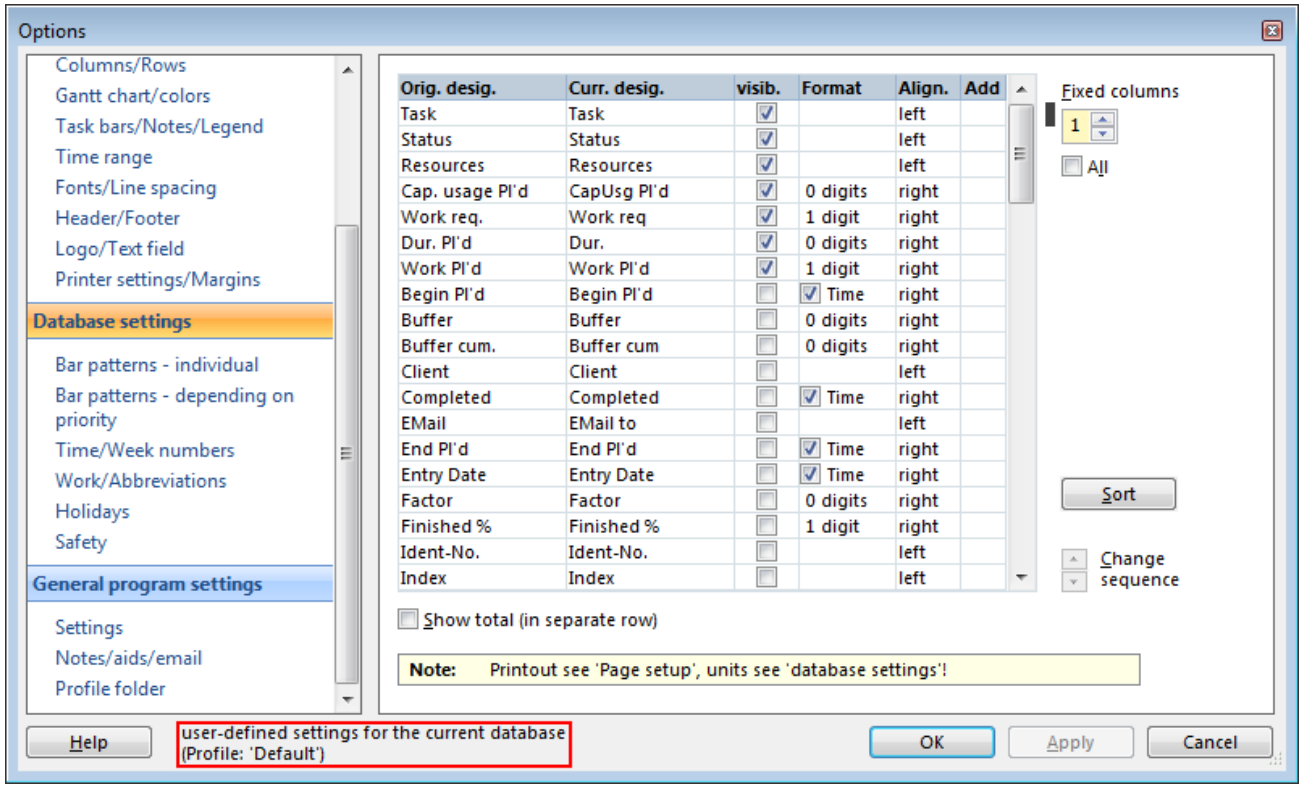

### *Actual work as %*

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:

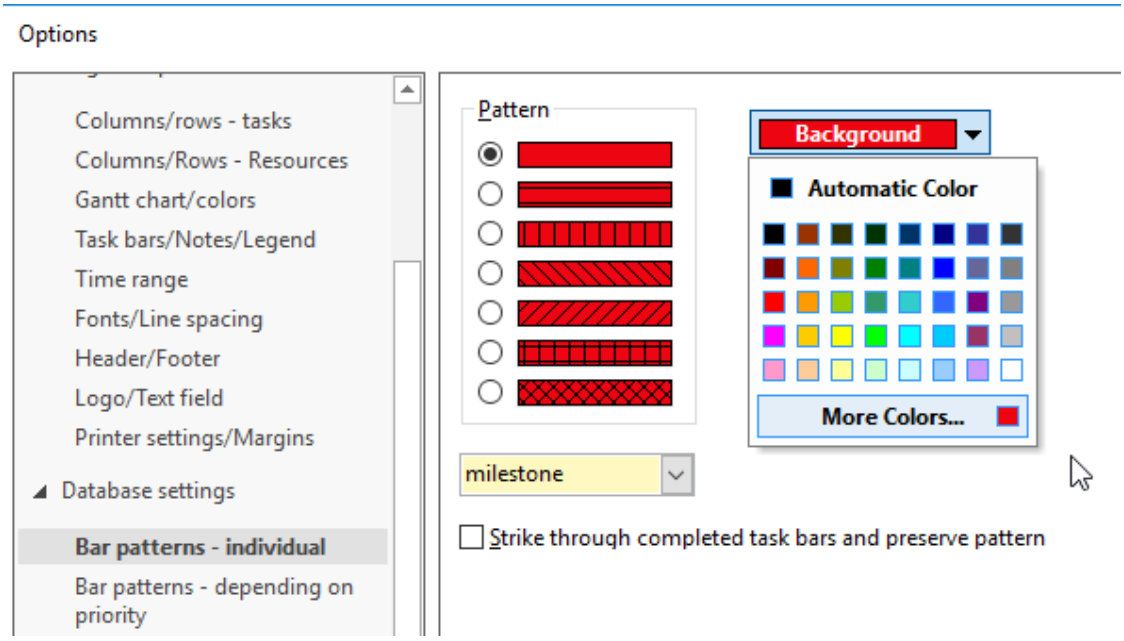



## BAR PATTERNS

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**

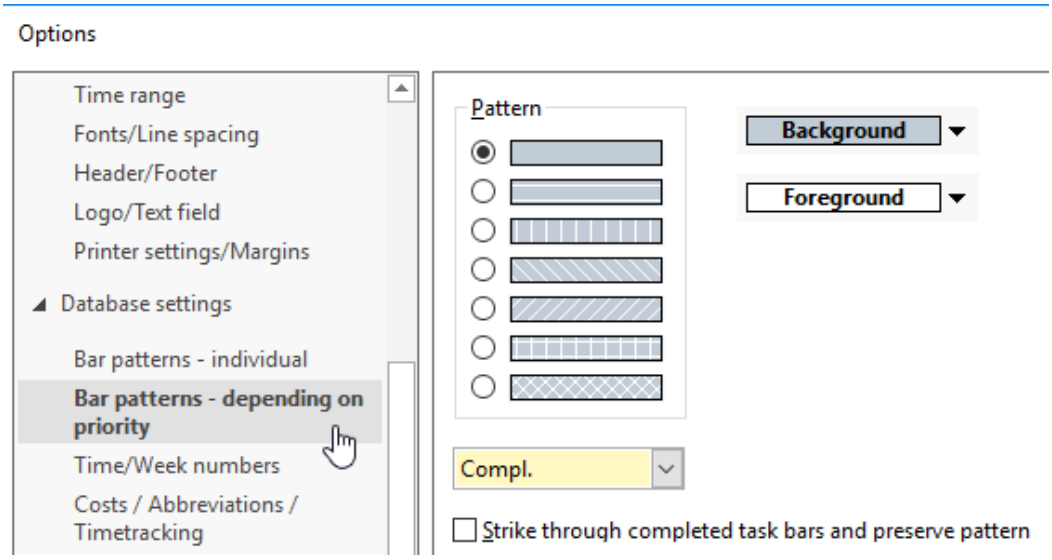
Having clicked on the respective option field, select the entry to be changed from the drop-down list on the lower left. If you are willing to assign **individual patterns,** you may replace the designations in the list (limited to 50 patterns) by renaming them as you like. These names will be used in the dialog box "Pattern" (see "Bar patterns" on page 128) as well as when the legend is printed (see "Task bars/Notes/Legend" on page 152).

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

### *Priority dependent patterns*

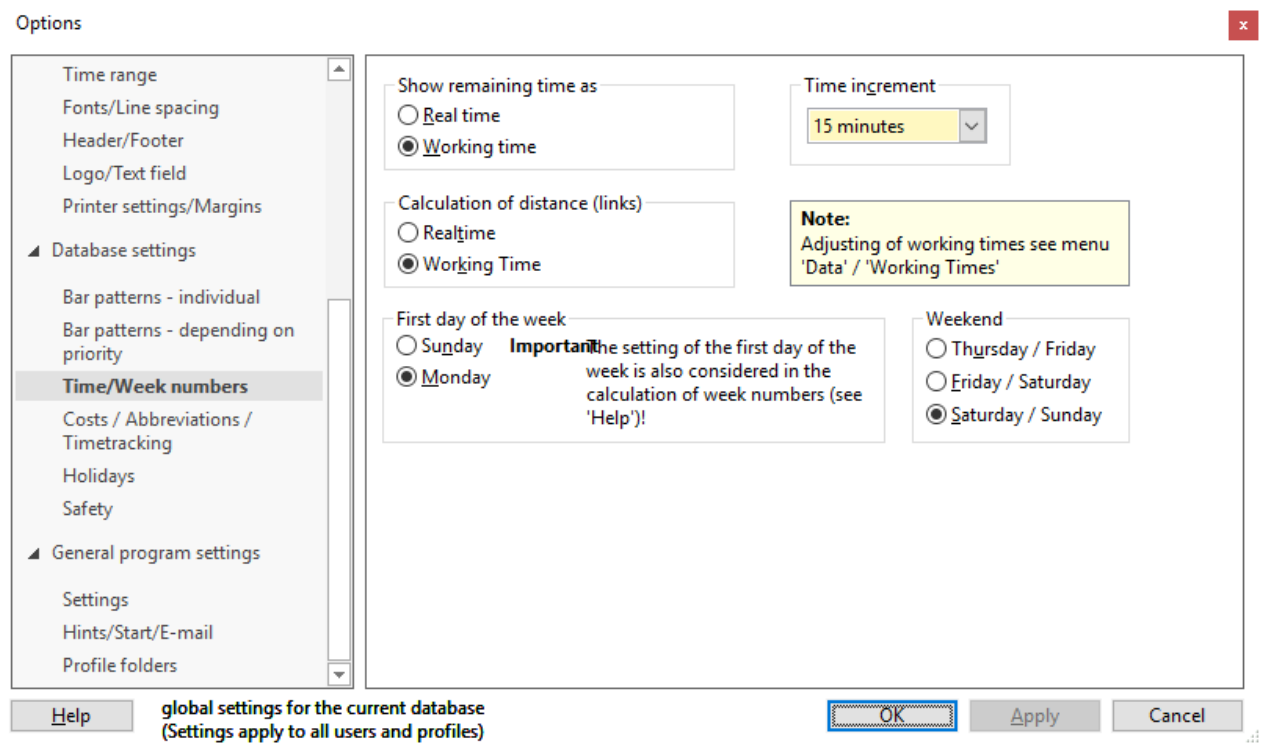
If you did not assign an individual pattern to a task bar, it is shown with a pattern based on the priority of the task bar concerned (see "General data fields" on page 247). For example, if a red color was assigned to priority 2, all bars belonging to a project or task of priority 2 are shown in a red 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 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 44).

### *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 1st 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.

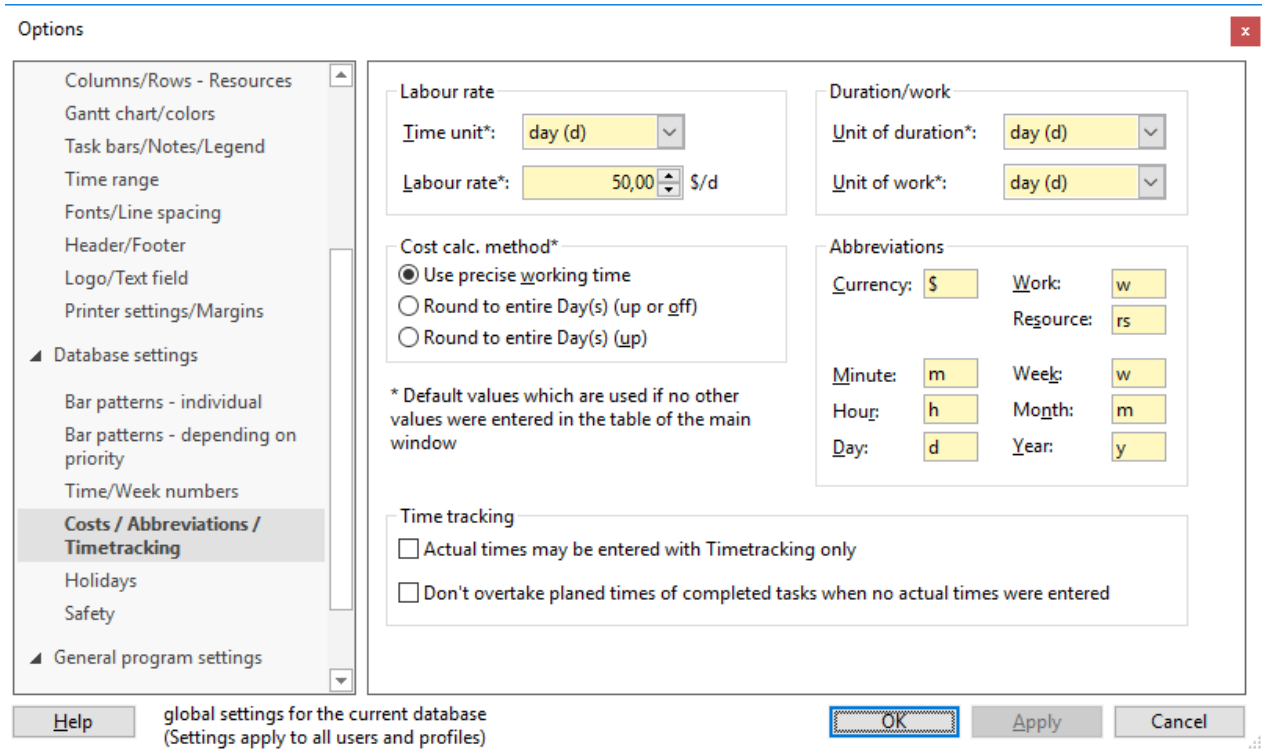
When making this setting, be careful to choose an interval which is close to the shortest time interval used in your planning. For example, if your planning is done mainly in hours or days, you should set the time increment to **1 hour** or **1 day**.

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 / ABBREVIATIONS / TIMETRACKING

**Note**:
For a currency conversion see "Currency conversion" on page 77.




### *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 109).

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 256).

### *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 119)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(!)

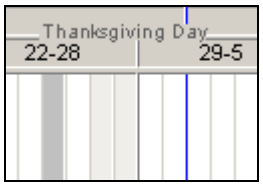
### *Timetracking*

**Actual times may be entered with Timetracking only**: It can be prevented from entering actual times directly in the main window of A-Plan if using the Time tracking module.

**Don't overtake planed times of completed tasks when no actual times were entered**: By default, the planned time is used when setting a task to finished and there is no actual time entered with the Timetracking. If the setting is enabled, "0" will be used as actual time when a task is marked as 'completed'.

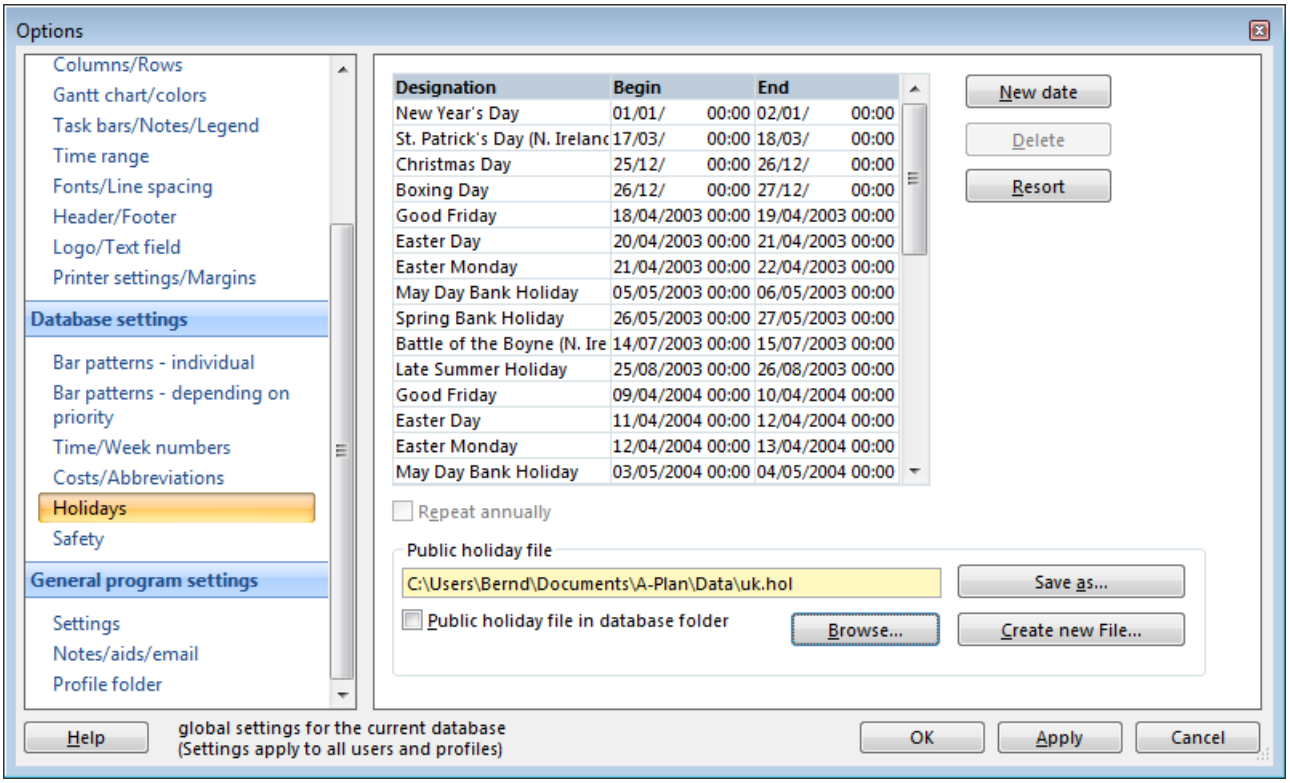
## PUBLIC HOLIDAYS

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 33), 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*

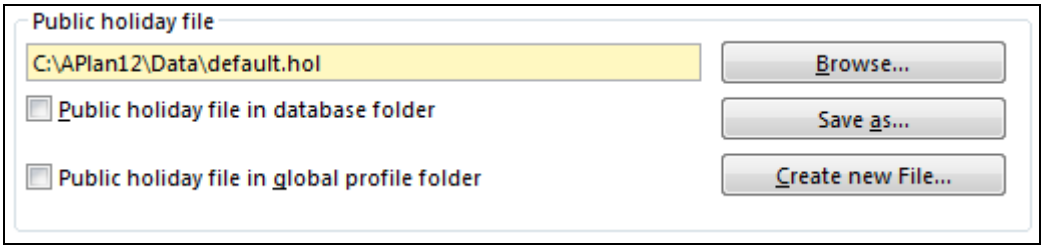
All entries in the list are saved in a separate file which can be used by other A-Plan databases as well.

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** .

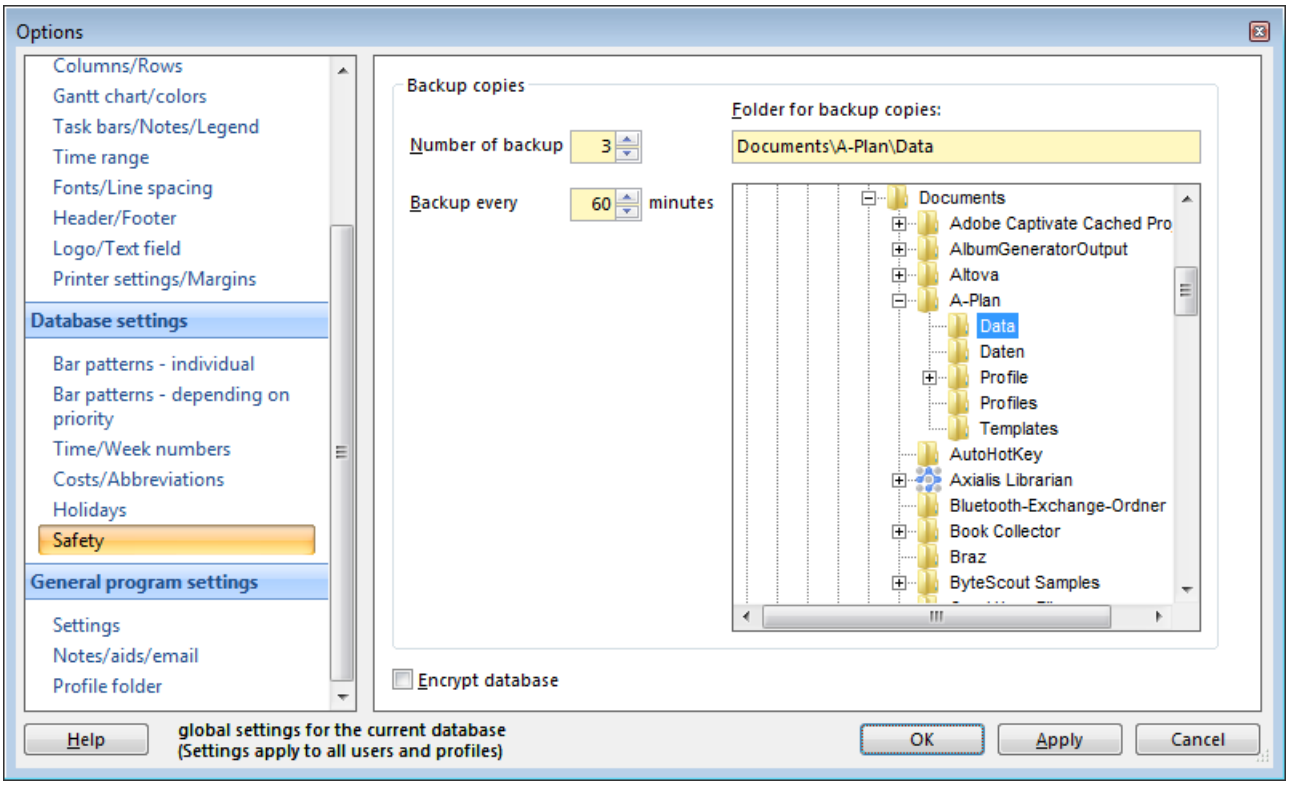
To save a copy of the opened file in order to create a variant of the existing file, click on the button **Save as** and enter the new file name.

The public holiday file can be saved in any folder you like but it is recommended to save it in the global profile file to make sure that all users can access it:




**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 delayed 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 (or * .bs1 in the SQL version of A-Plan) 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 172.

**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!

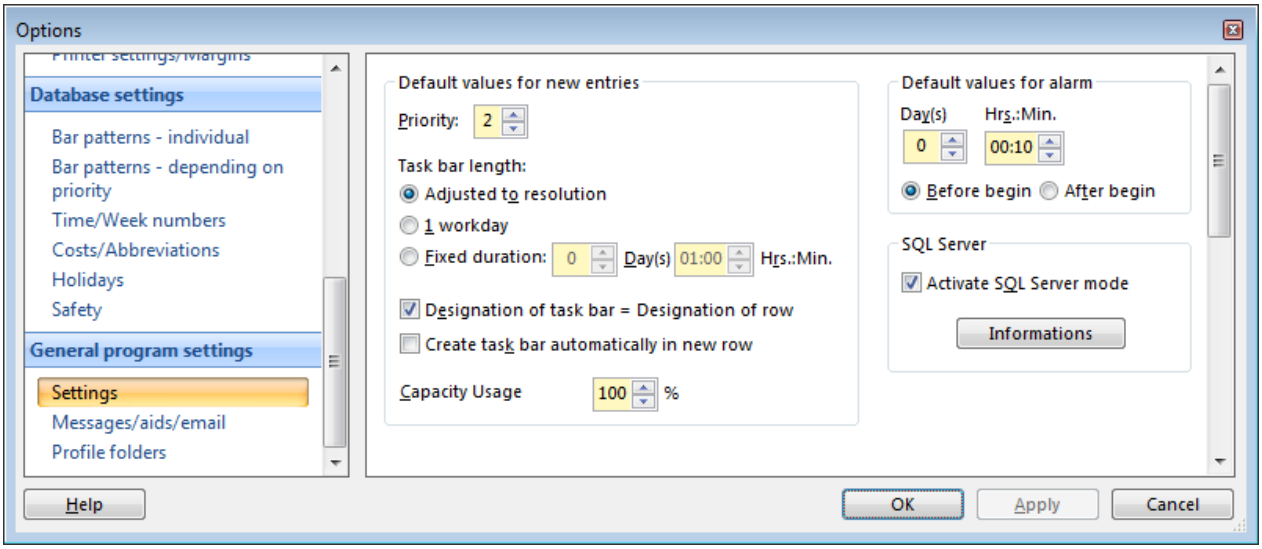
### *Encrypt database*

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 44).

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).

**Capacity usage**

When resources are allocated to a task, the value entered here is used as a default for the capacity usage.

### *Default values for alarm*

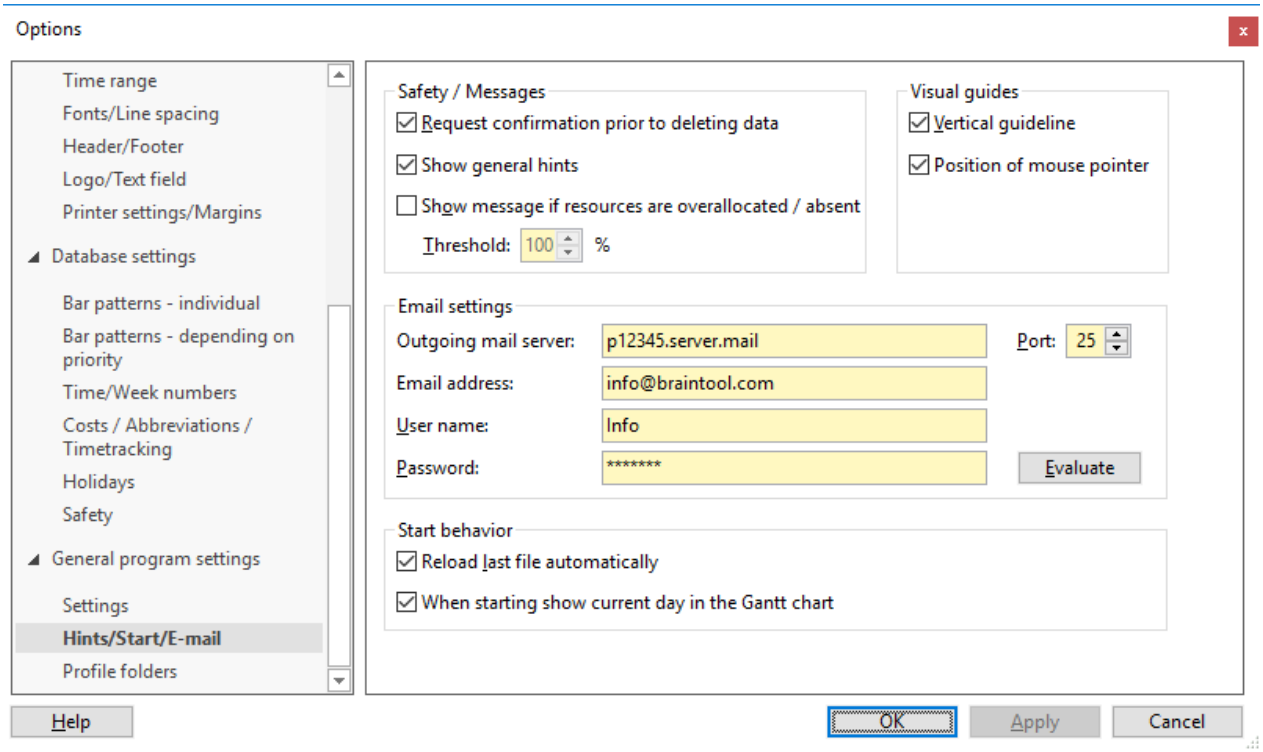
The values specified here will be used when you set an alarm by clicking on a task bar with the right mouse button and choosing **Alarm ON**.

### *SQL Mode*

With the SQL and the test version of A-Plan you have the possiblility 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



## *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.

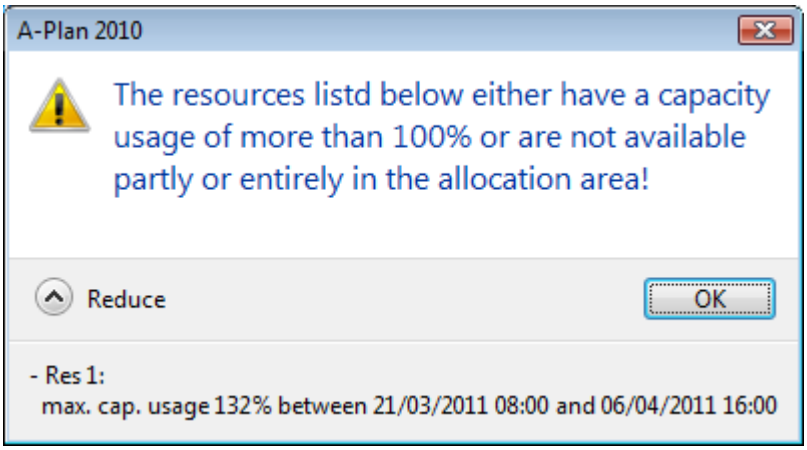
**Note:**
If you cannot find a task bar any more, just scroll the task bars (see "Scrolling of task bars" on page 33) since this will reveal bars which were hidden behind other bars.

### 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.

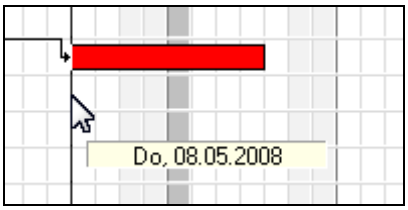
### Display a message if resources are over allocated / absent

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 71) 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**

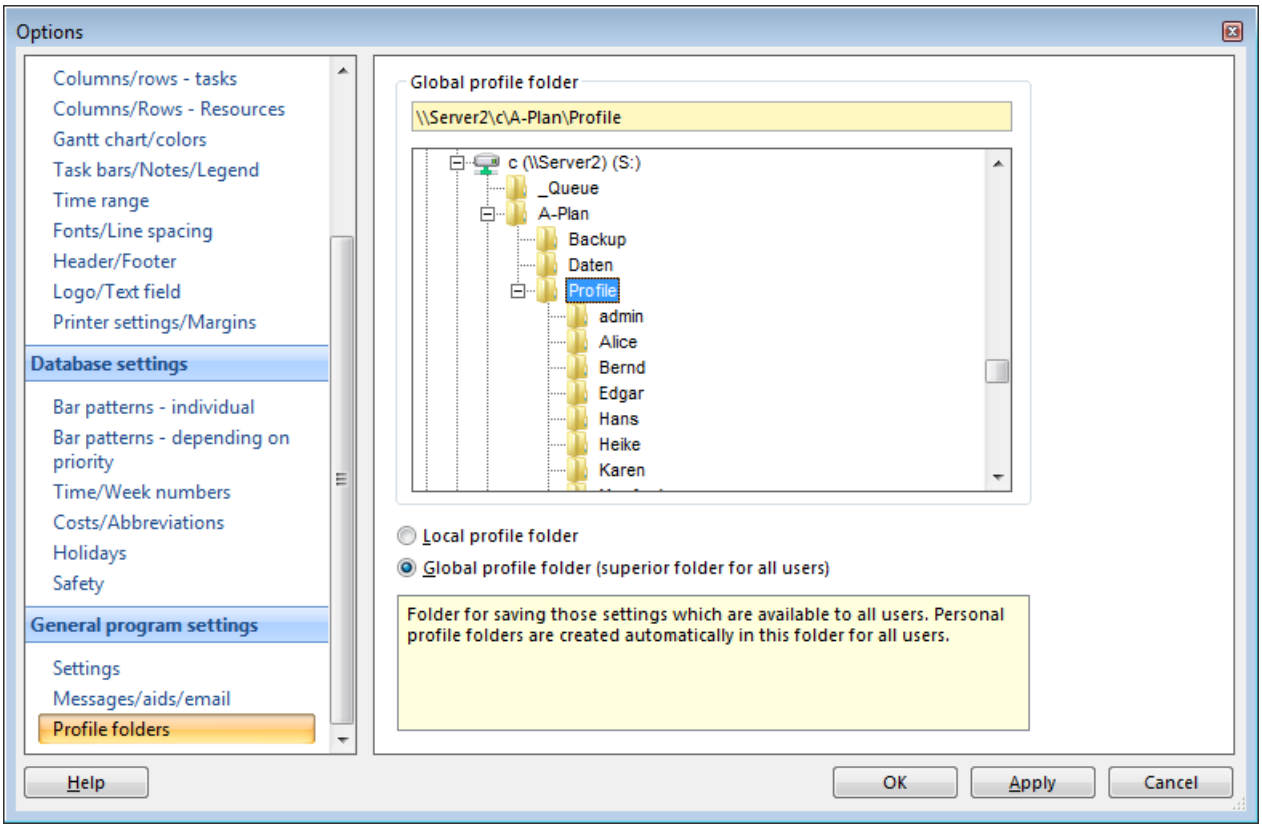
If you start A-Plan with this option being activated, the program will automatically load the database that had been opened last before A-Plan was closed. If this file is not found, a new, empty database is created.

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).

**When starting show current day in the Gantt chart**

If this option is enabled, the current day in the visible range of the Gantt Chart will be shown. When the option is disabled, the left boundary of the Gantt chart is set to the value of the last saved settings.

## PROFILE FOLDER




With the **single user version** the **profiles** are, as a default, saved in the folder "Documents\A-Plan\Profiles". If necessary, you may choose another folder for saving the profiles.

With the m**ulti-user version** the profiles are saved and synchronized both on the local computer and on a server.

For more details regarding profiles and profile folders see "Saving options in profiles" on page 141.

**Note:**
If you do not have good reason for acting differently, do not change the described default structure used by A-Plan in order to make sure that A-Plan will always find the saved profile settings, even if it is used on several computers or if there is no access to the server. For more details see "Saving options in profiles" on page 140.

# SAVING OPTIONS IN PROFILES

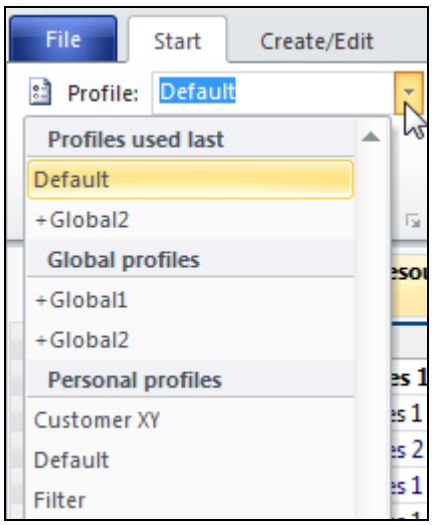
To save you the work of entering a combination of settings again each time you need it, you may save **up to 99** different combinations as **profiles**. Apart from the settings of the main window and of the options, the print setup is saved in a profile as well (see "Page Setup (Tools/Options/Page Setup)" on page 147).

**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!

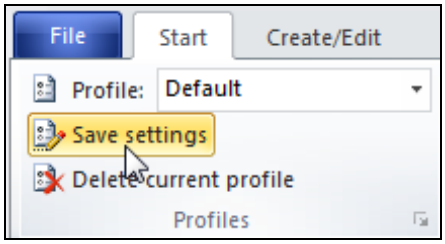
Profiles are saved as individual files in the profile folder (see "Profile folder" on page 141). As a prefix, the profiles are given the name of the database, their extension is ".*pnn*" with nn being a consecutive number such as e.g. "test.p01".

With a database of the multi-user version of A-Plan being used by several users, each user must use his/her own profile folder to prevent the users from mutually overwriting their settings. For more details see "Folder structure of profiles" on page **Fehler! Textmarke nicht definiert.**.

## 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

Apart from their personal profiles, users can also access global profiles which are created only once as they are independent of databases and of users. Global profiles are standard profiles which are available to all users. To prevent the global profiles from being changed by mistake or inadvertently, master or administrator rights are needed to create or change them.

Global profiles are created in the same way as personal profiles: just enter the name of the new profile into the list field and press the ENTER key. To distinguish them from personal profiles a "+" must precede their designation.

If a global profile is selected by a user having no master rights, he or she can temporarily change the settings of the global profile. However, as soon as another profile is selected or if A-Plan is closed, the settings are not saved so that the original settings of the profile will be available again when the involved profile is selected again.

## FOLDER STRUCTURE OF PROFILES

**Note:** You may skip this chapter if you use a single user version of A-Plan.

By default, profiles are organized in such a way that both personal and global profiles are available at all times on **several computers** even if **server access is not available**. This is achieved by **synchronizing** personal and global profiles between clients and the server.

As long as a connection exists to the server on which the profiles are saved, it does not matter on which PC a user will log in as A-Plan will find the corresponding profiles on the server with the help of the user name.

If the **recommended standard structure** for profile folders is used, this just requires that a superior profile folder is created on the server first. Next, the central A-Plan database must be opened on one of the clients and the created new folder must be set as the **global profile folder** (see "Global Profiles" on page 142). Doing this requires master rights (see "Entering users (in administrator mode only)" on page 184).

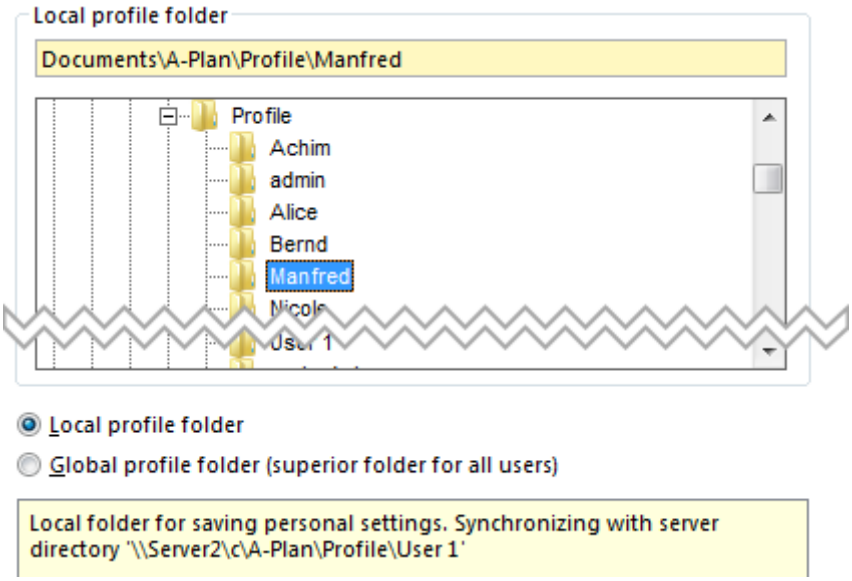
When the central database is opened afterwards by another user on one of the clients, the necessary folders will be created automatically supposed that they do not yet exist.

**Note:**
If the central database is created with the help of the **Assistent** you will be prompted to make the necessary settings there.

### DETAILS

You do not need the information provided in this chapter unless you intend to get a better understanding of how profiles are organized or if you think about using a different structure.

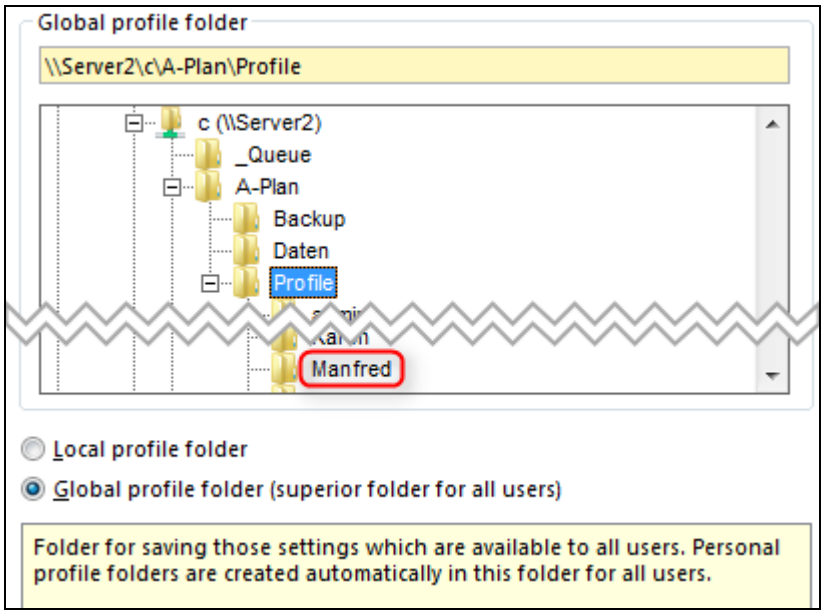
By default, the **Folder structure on the client** might look like that:



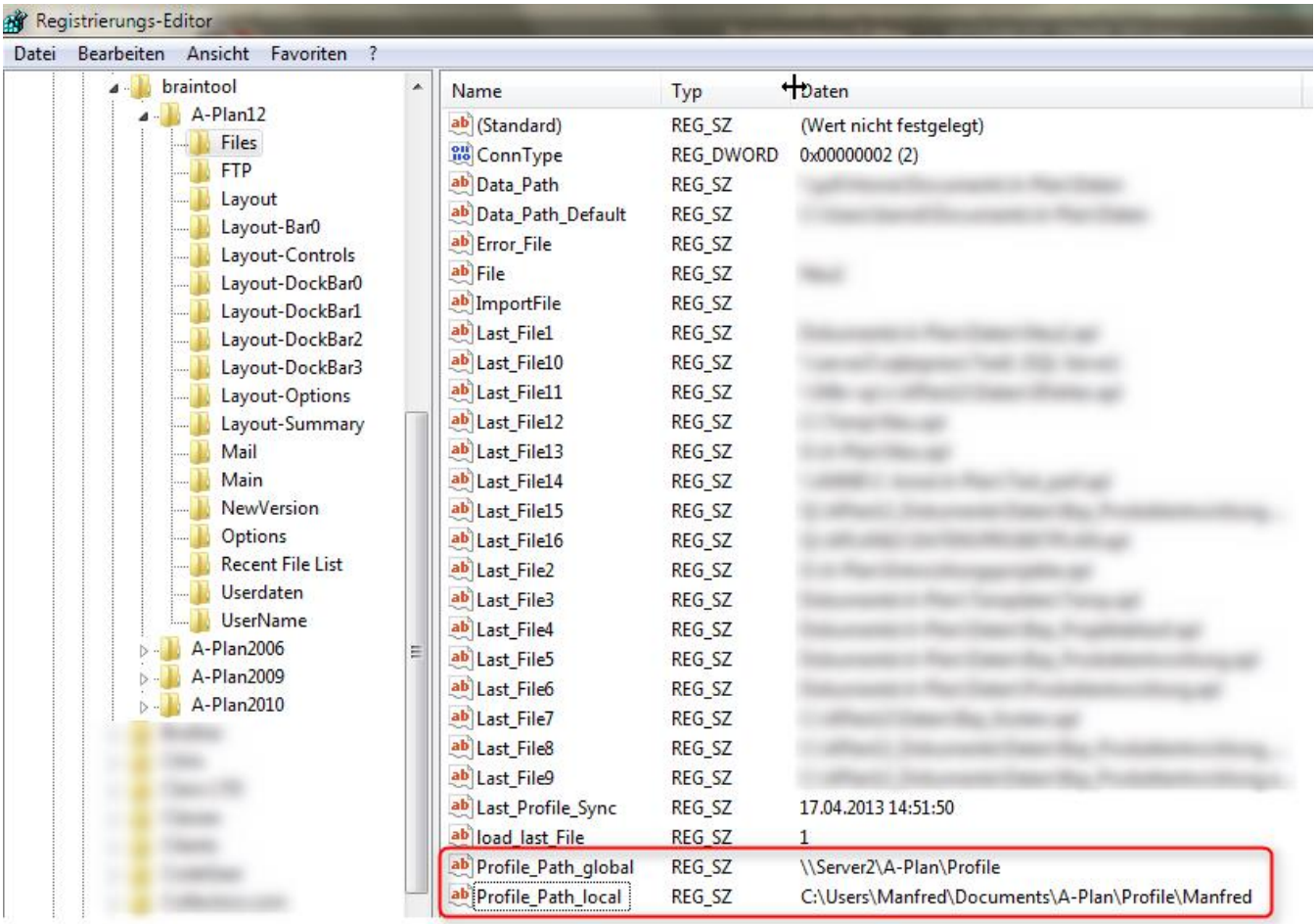

This means that global profiles are saved in the folder "Documents\A-Plan\Profile" and the personal profiles are saved in the folder "Documents\A-Plan\Profile\Manfred".

If necessary, another folder on the client can be chosen as the personal profile folder. However, the folder designation should always be identical to the user name as otherwise the synchronization with the server will (no longer) be carried out.

The corresponding **global profile folder** on the server might, for example, look like that:




If necessary, the profile folders can be entered directly into the respective **registry**:




## 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

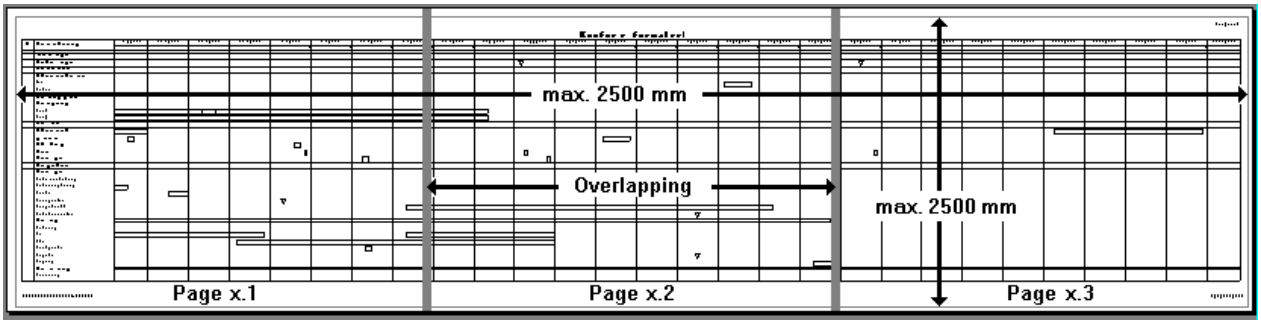
Data is printed as a table with integrated Gantt chart and looks quite similar to what you can see on screen. However, some different settings are used for printing as the requirements for editing data in the computer and for viewing them on a printout are different, especially when it comes to giving 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 "Saving options in profiles" on page 142).

**Important:**
Collapsed folders and/or projects (see "Structuring (Folders, Projects, Tasks)" on page 24) 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:



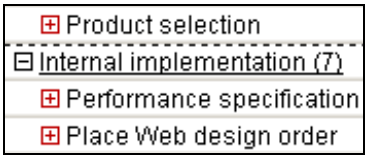
The necessary assembly of the pages is facilitated by optional cutting guides. However, even in this case the total width may not exceed 2500 mm. The total height is not limited since as many pages can be printed in this direction as are necessary to print all rows of the main table. For example, the 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 163) 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 157). 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




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.

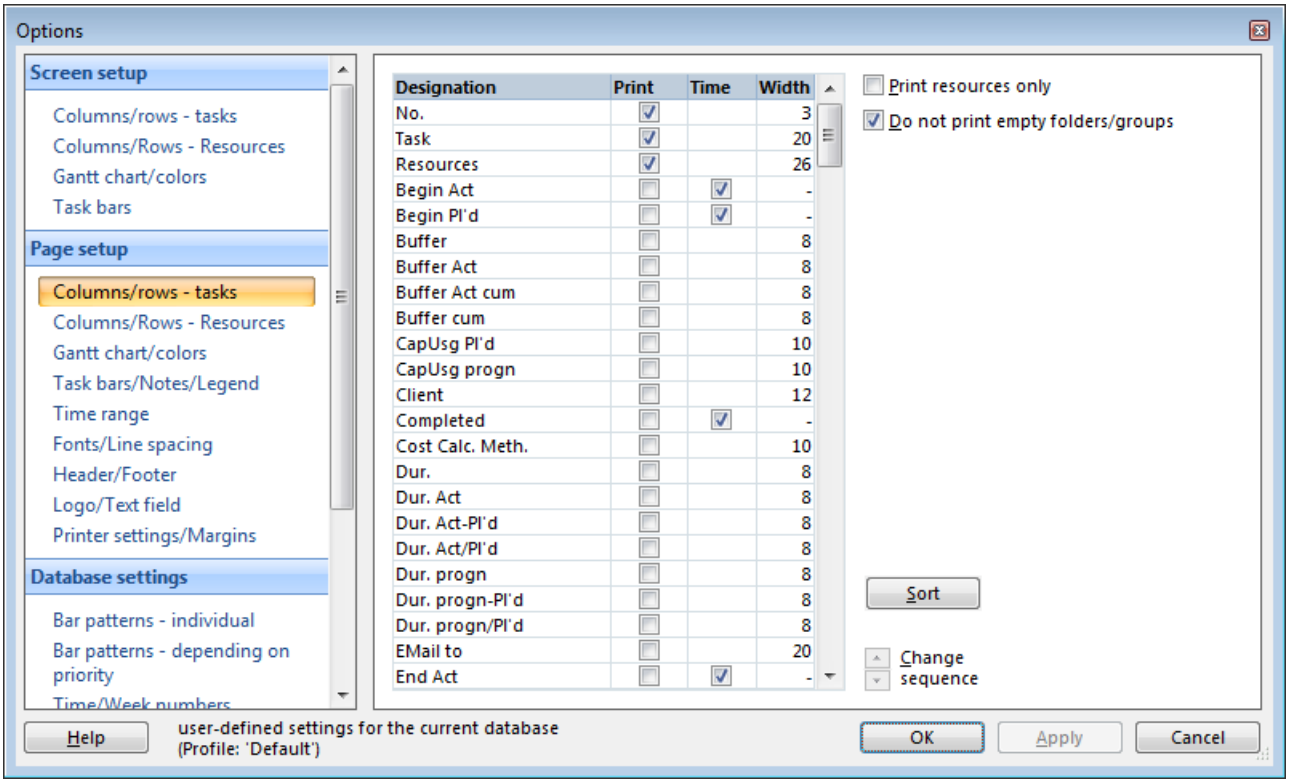
All settings are made in the dialog box **Options** in the tab **Page Setup**.

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 163).

# 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 119).

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 row to be moved by clicking on it and use the arrow buttons to move it up or down

### *Print resources only*

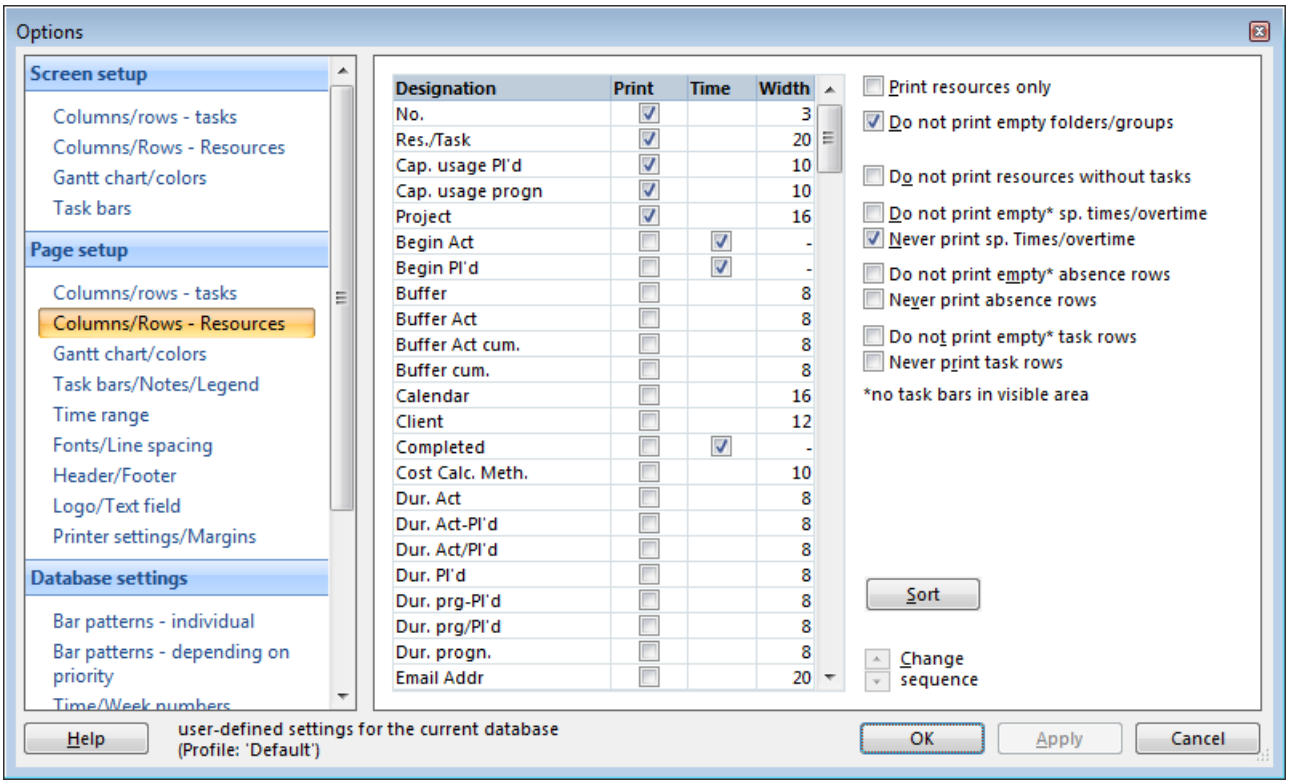
With this option activated, the lower pane of the main window is printed only.

### *Do not print empty folders/groups*

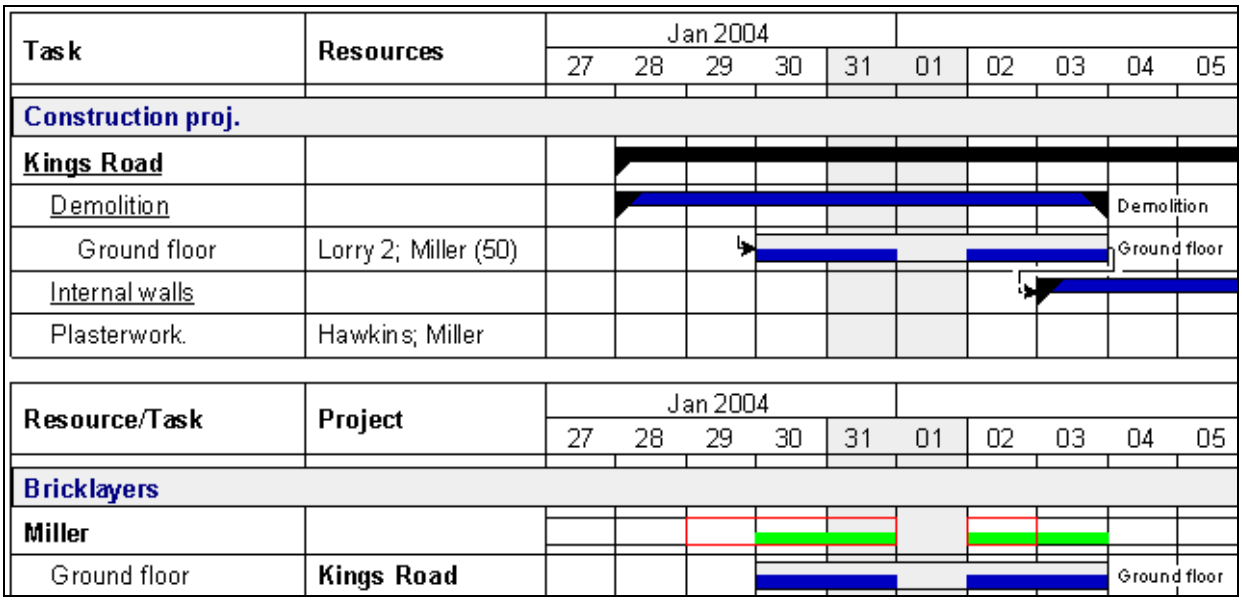
Activating this option will have the effect that folder rows (and group rows of resources) will be printed only if at least one row exists on a lower in the folder or row concerned.

Likewise, collapsed folders/groups (see "Structuring (Folders, Projects, Tasks)" on page 24) will not be printed.

## RESOURCES




Resources are printed below the task table just as shown on screen:




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 print-ed

### *Never print absence rows*

Absence rows will not be printed

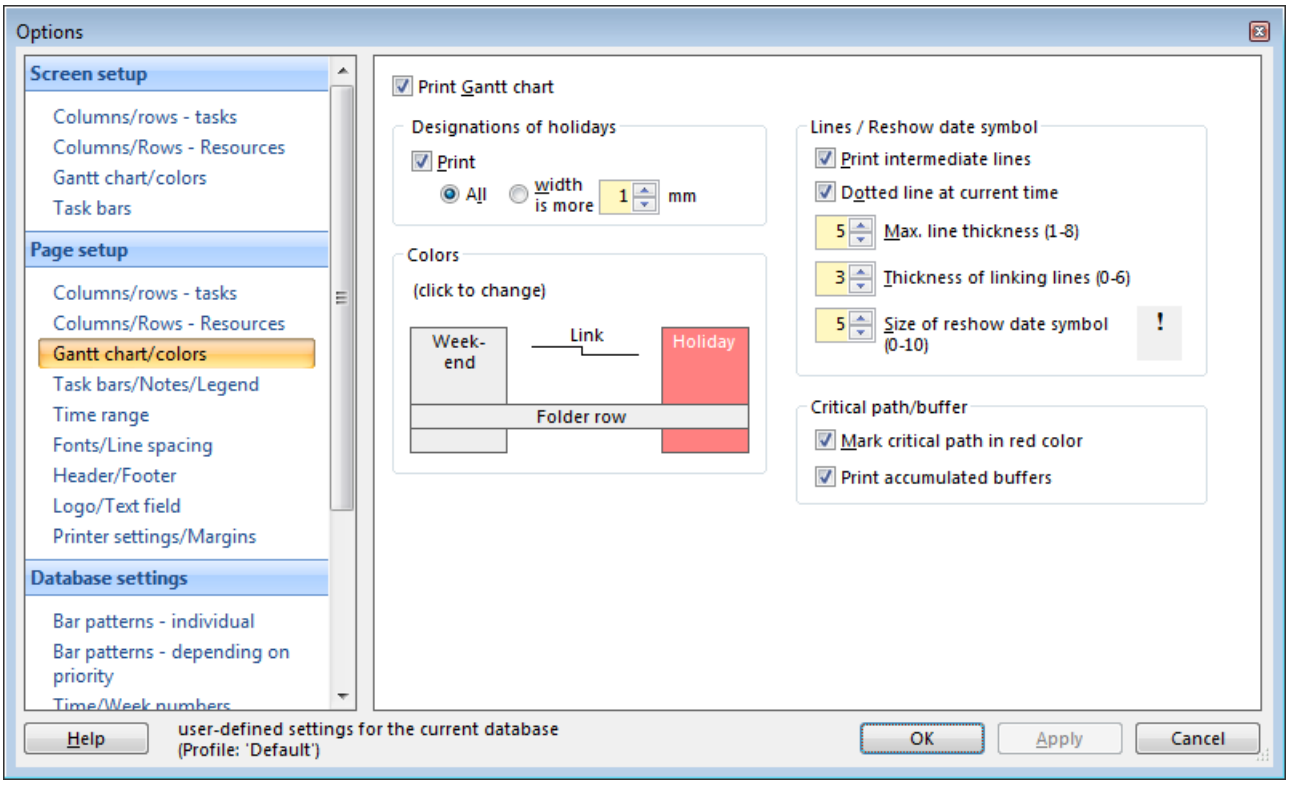
### *Do not print empty task rows*

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 123).

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*

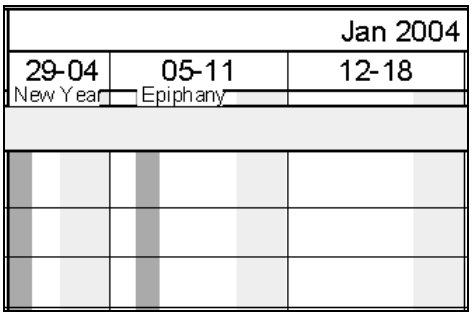
Clicking on one of the shown elements opens a dialog box in which you may assign a color to the element concerned. Click on **OK** to apply the color to the element.

### *Lines/Reshow date symbol*

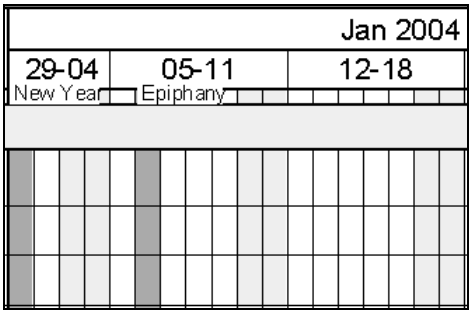
#### Intermediate lines

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:

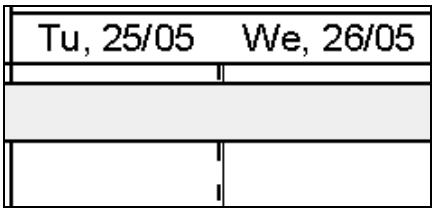



**with** intermediate lines:




#### 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 reshow date symbol

To set the size of the reshow date symbol (see "Elements and symbol used in a Gantt chart" on page 29) 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 reshow date symbol will not be displayed.

## *Critical path / Accumulated buffer*

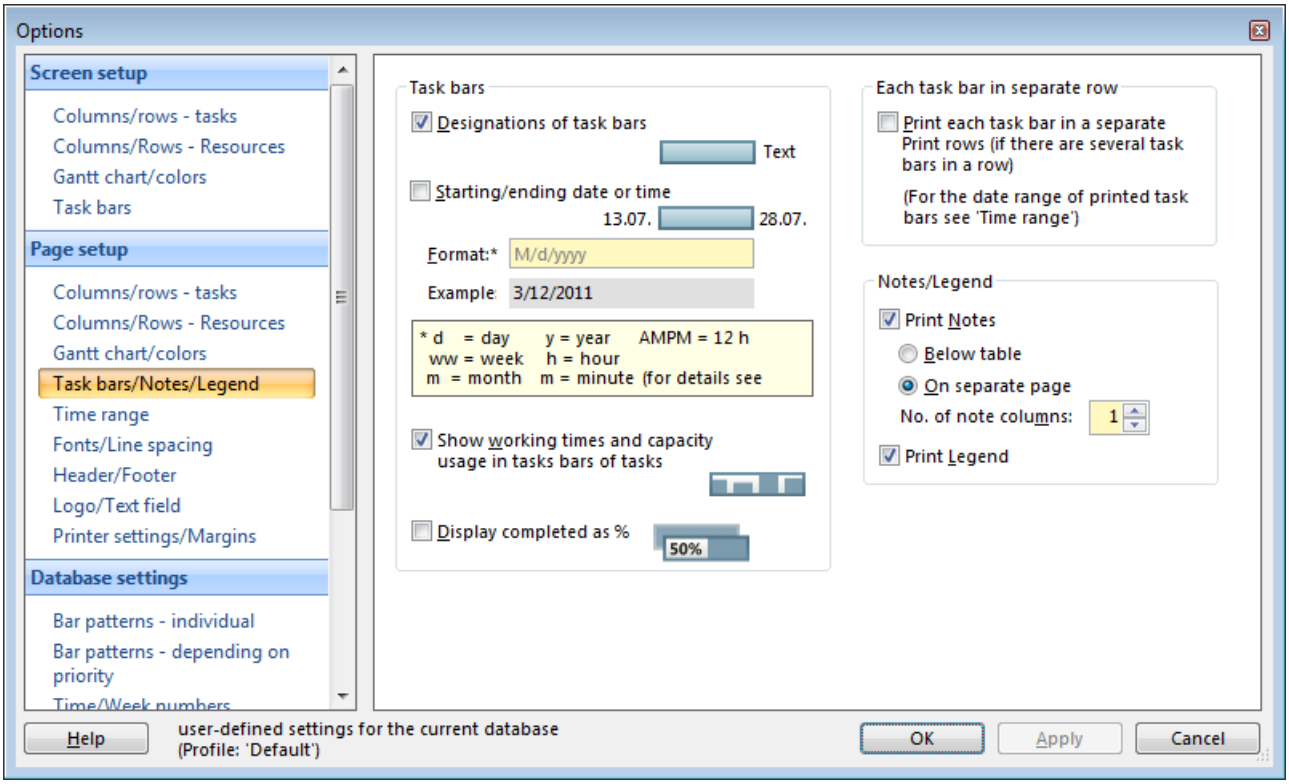
### Critical path

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




### *Task bars*

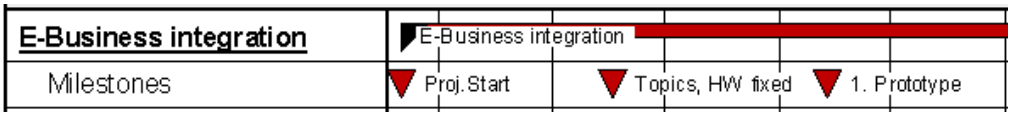
The settings made in this window pane have the same function as those made in the corresponding pane of the screen setup dialog box (see "Task bars" on page 126).

### *Each task bar in separate row*

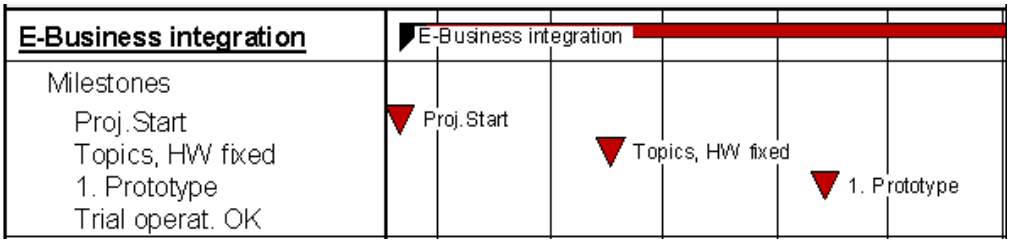
Use this option to have each task bar printed in a separate row if several task bars exist in one row.

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:**




**Task bars (milestones) in separate rows:**




In addition, this option can be used to create a continuous list of task bars:

| No. | Task | Resources | Begin | End |
|---|---|---|---|---|
| 01 | Examples | | 20/02/04 | 02/02/05 |
| 02 | E-Business integration | | 20/02/04 | 02/02/05 |
| 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 |
| 04 | Processes | | 20/02/04 | 17/05/04 |
| 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 |

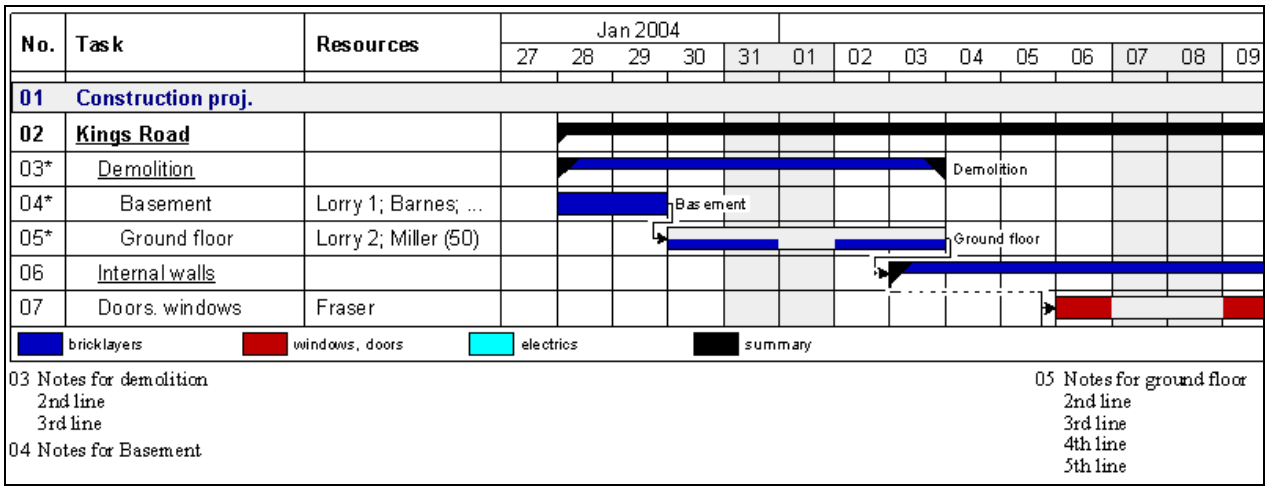
Hence, task bars are shown in the same way as in the **task bar list** (see "Task bar list" on page 50). As an additional advantage, the columns to be shown can be composed at will.

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.

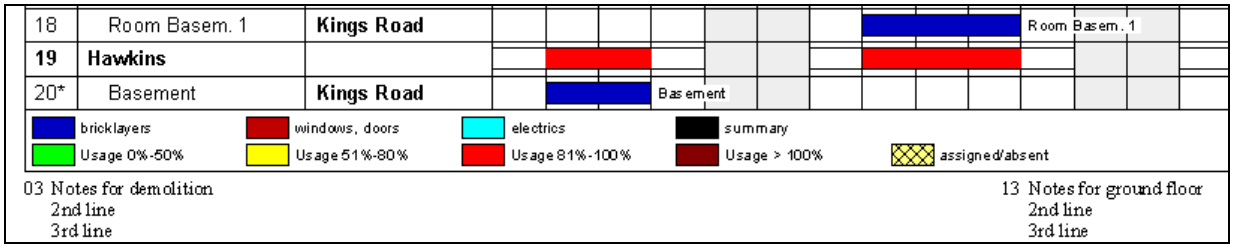



To facilitate the **assignment of rows to notes**, column numbers (**No.**) are printed together with the related notes. If a note exists in a row, the number of the row concerned is marked by an asterisk and is printed again in front of the note.

**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:



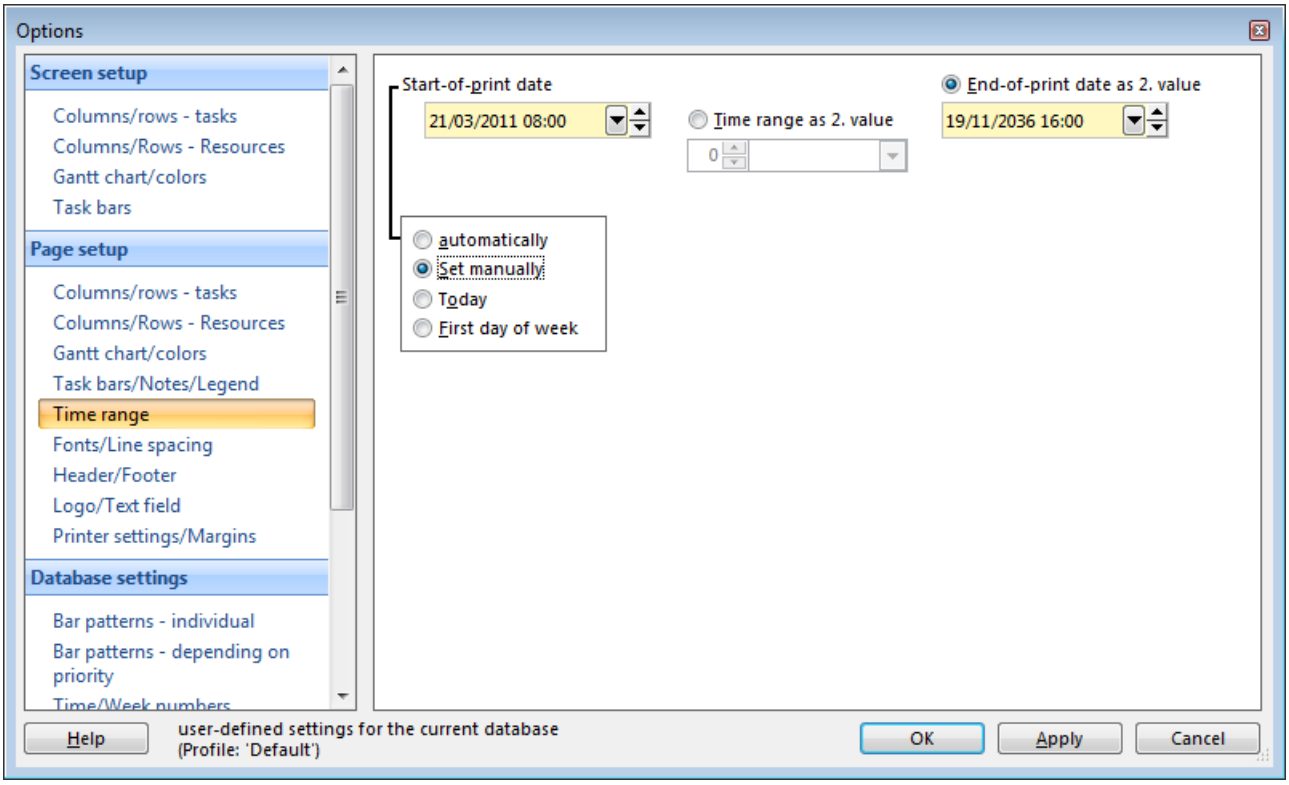

If resources are printed, the colors used to indicate the capacity usage are printed as well in the legend!

## 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 150).

### GANTT CHART IS NOT TO BE PRINTED

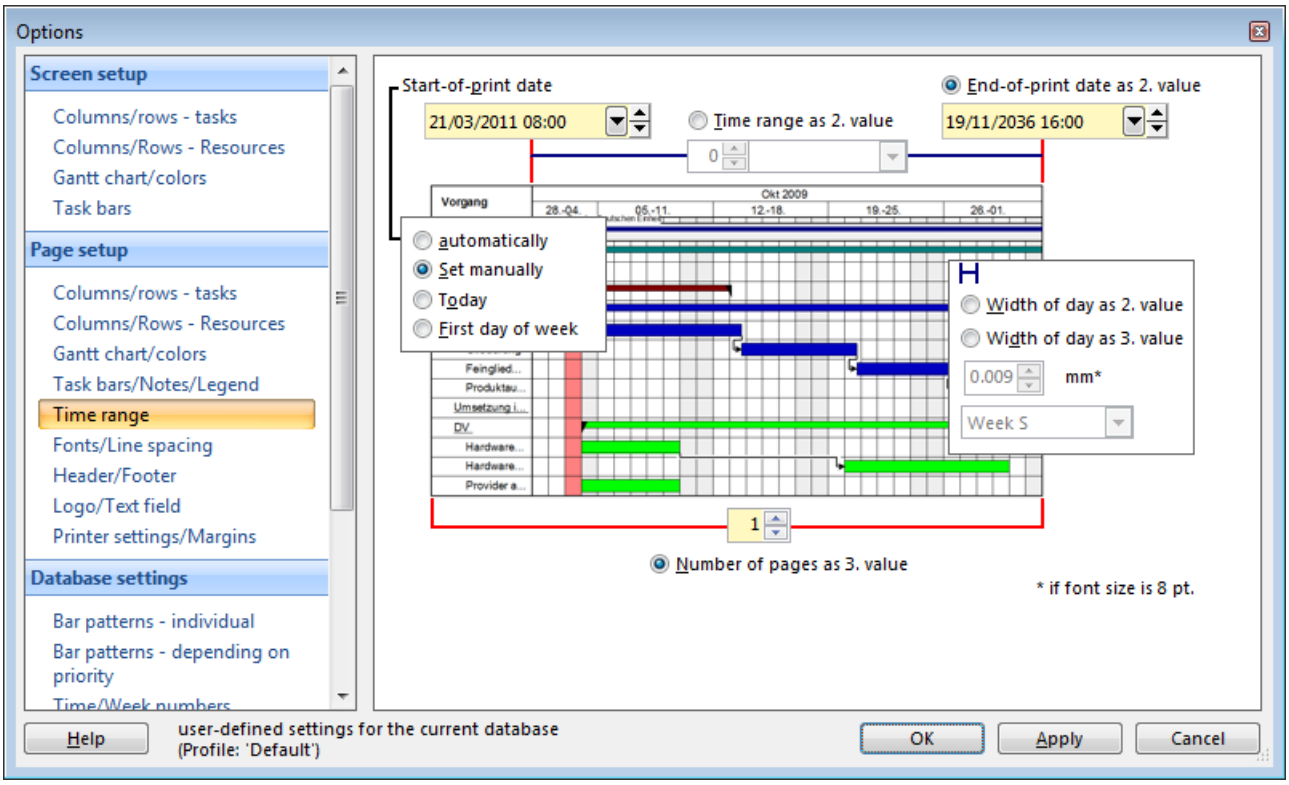
If the **Gantt chart** is not to be printed, you have to specify the **Start-of-print date** and either the **Time range** or the **End-of-print date** only:




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 152).

## 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)

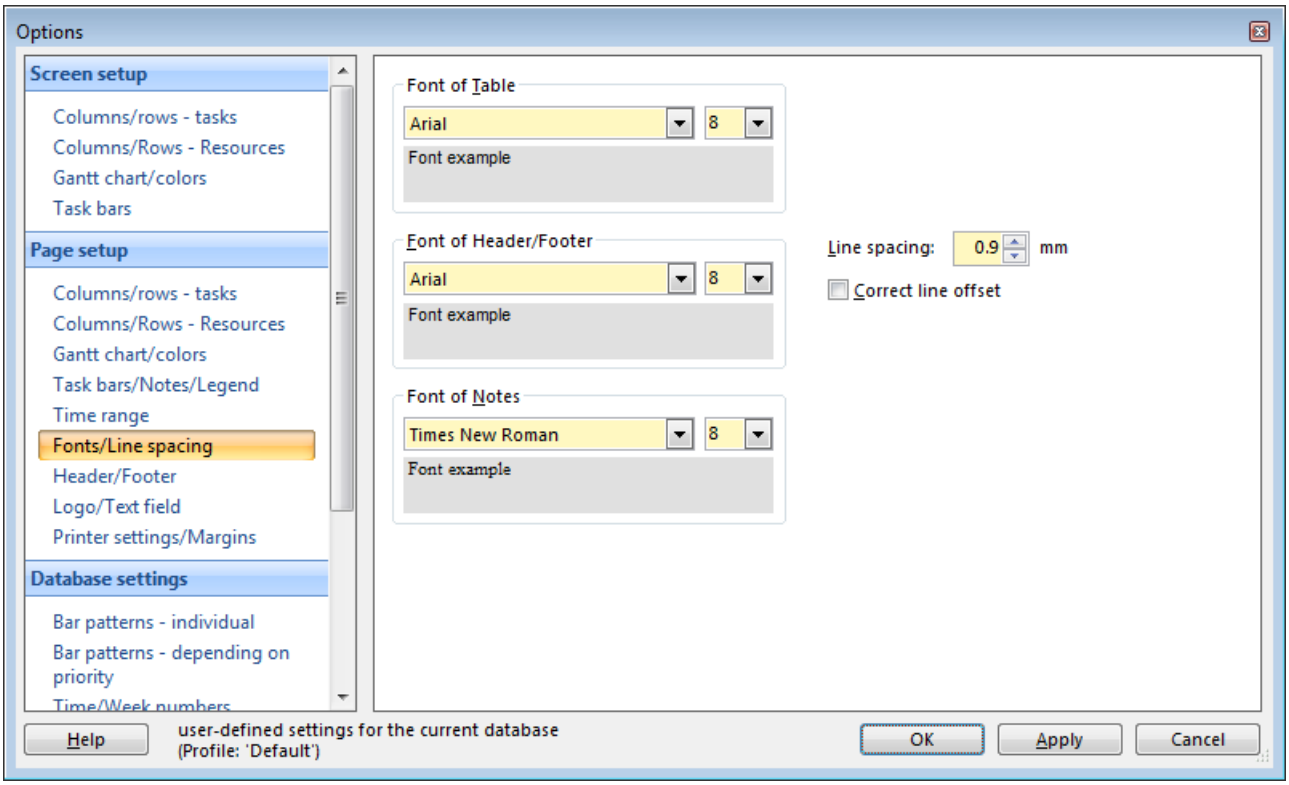
If the Gantt chart is to be printed with the same resolution as shown on screen, you may choose the corresponding default value from the drop-down list. To specify a width of day in mm, choose (user-defined) from the drop-down list and enter the value you want.

### *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 158).

### *Line spacing*

You may set any value from 0 mm to 20 mm for the line spacing.

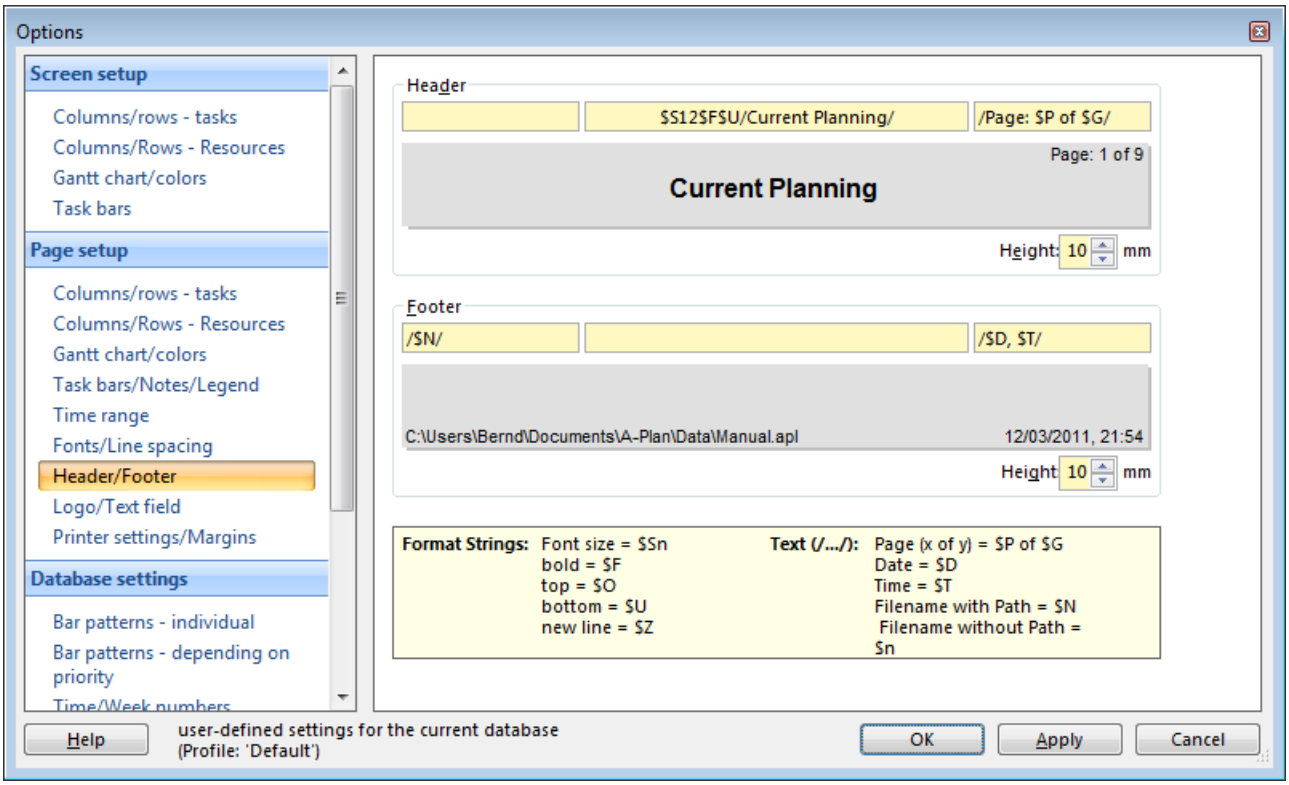
### *Correct line offset*

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



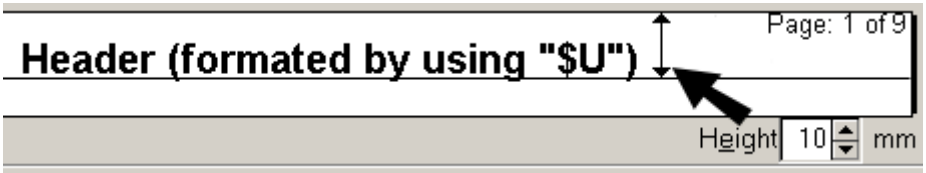

Both header and footer are each split in three areas with different paragraph formats: the left area is left-aligned, the middle area is center-aligned and the right area is right-aligned.

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.

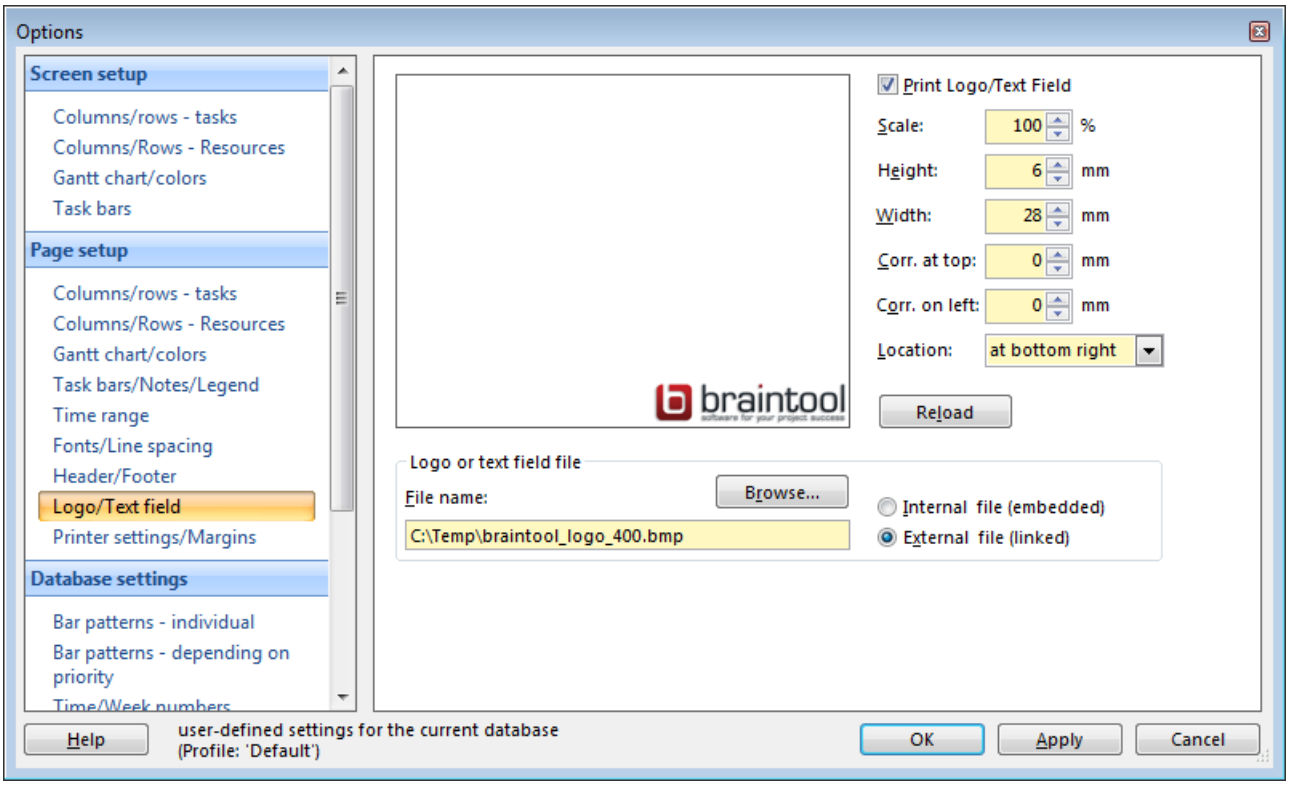
To enter formatting and other information such as page numbering, current date etc, use the **Format Strings** explained in the dialog box below the exemplary footer. Please note that format strings always have to start with the character "$".

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 "$S*n*" (e.g. "$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 141).

As only <u>one</u> **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 <u>all profiles</u> in which the **internal file** is used as a logo or text field will be affected by such a replacement.

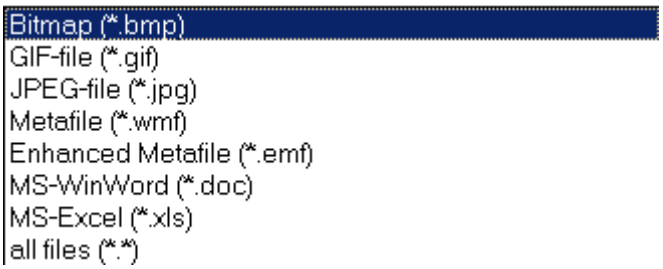
**<u>Note:</u>**
In the **network version** of A-Plan, the internal logo/text field file can be changed by the administrator (user 'admin') only as any changes will affect all printouts which use the internal file as logo/text file!

**Summary of characteristics of the two alternatives:**

| | **Advantages** | **Disadvantages** |
|---|---|---|
| **internal file (embedded)** | **Faster** printing as the finished graphics is included in the A-Plan database<br>Graphics is **always available**, even if the A-Plan database is copied to another computer | Graphics must be embedded again (button **Reload**) after it was changed<br>Volume of A-Plan database is **increased**<br>Only one file can be embedded in each A-Plan database |
| **external file (linked)** | Graphics is **updated** prior to being printed (even, for example, the date field in a WinWord document)<br>A different file can be used for **each profile**<br>Volume of A-Plan database is **not increased** | Printing may be **slower** as the graphics must be reloaded first<br>If **objects** are used (e. g. MS WinWord document), the related **application program is started** when you print in A-Plan |

### *File formats*

The following file formats may be used to create a logo or text field:

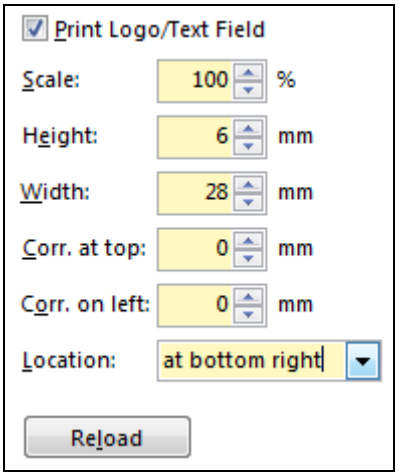



All **other Windows application programs** may be used as well supposed that they support **OLE** and are capable of creating the format **.emf**. If you are not sure, just create a simple graphics with the program you want to use, save the file and select it in the dialog box shown above (click on **all 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*




Whenever you do not want the logo/text field to be printed, just click on the respective check box to deactivate this option.

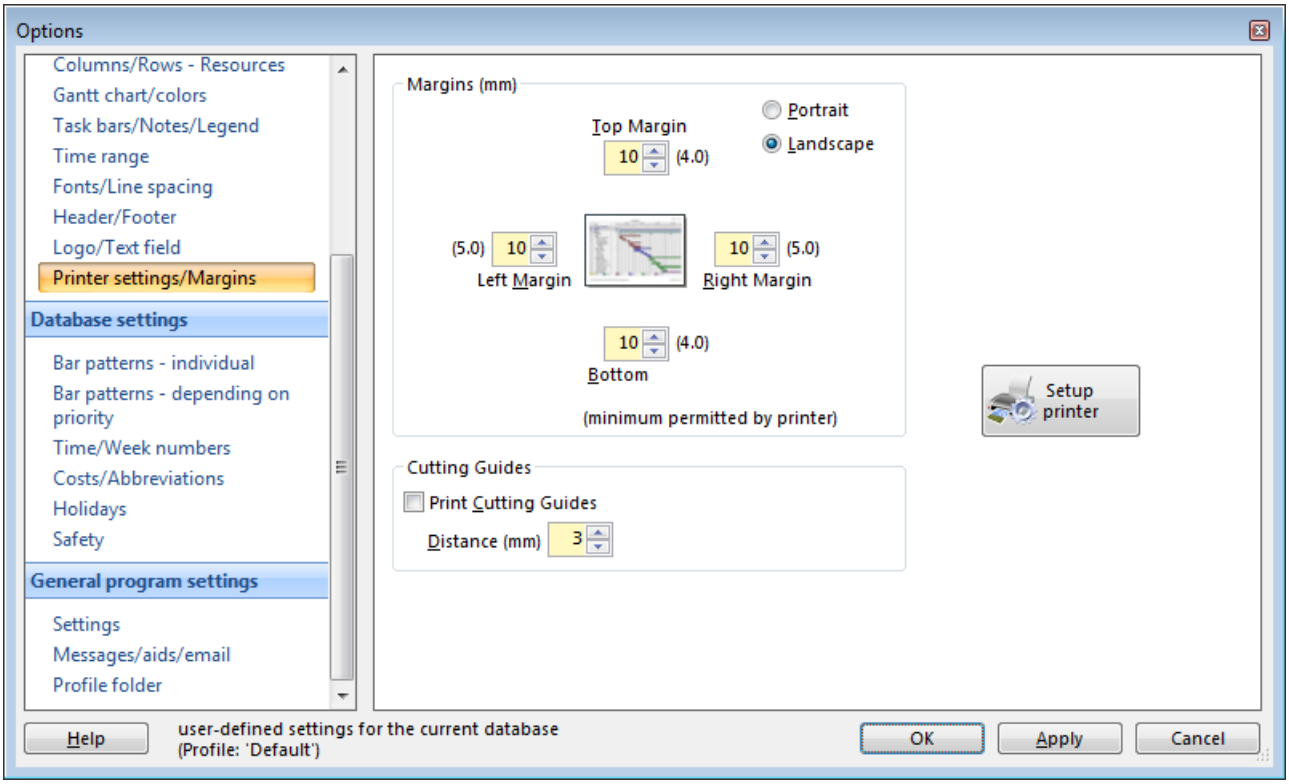
The size of the logo/text field may be specified as a percentage in terms of scale or by entering the **height** and **width** you want.

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




### *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).

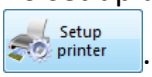
Use the buttons in the top right of the pane to determine whether the printout will be in landscape or portrait view.

### *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 "Saving options in profiles" on page 142).

# PRINTING

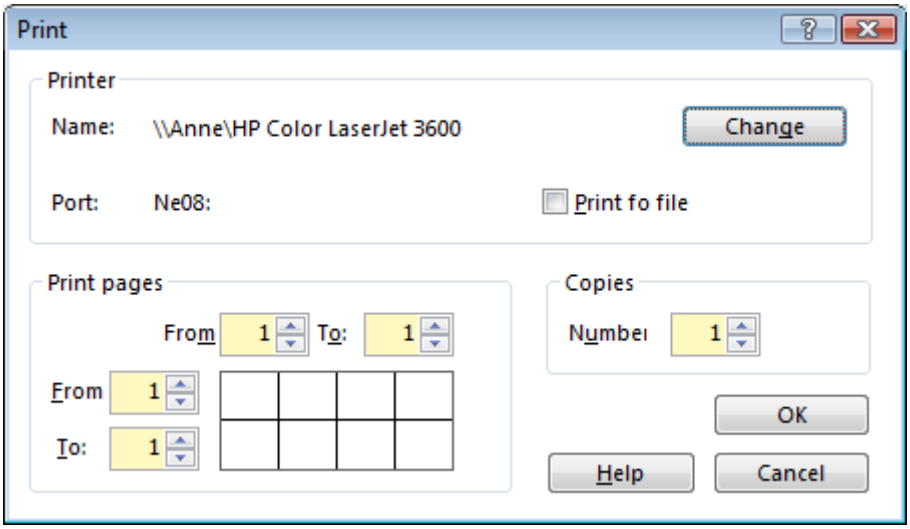
## START THE PRINTING PROCESS

### *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:



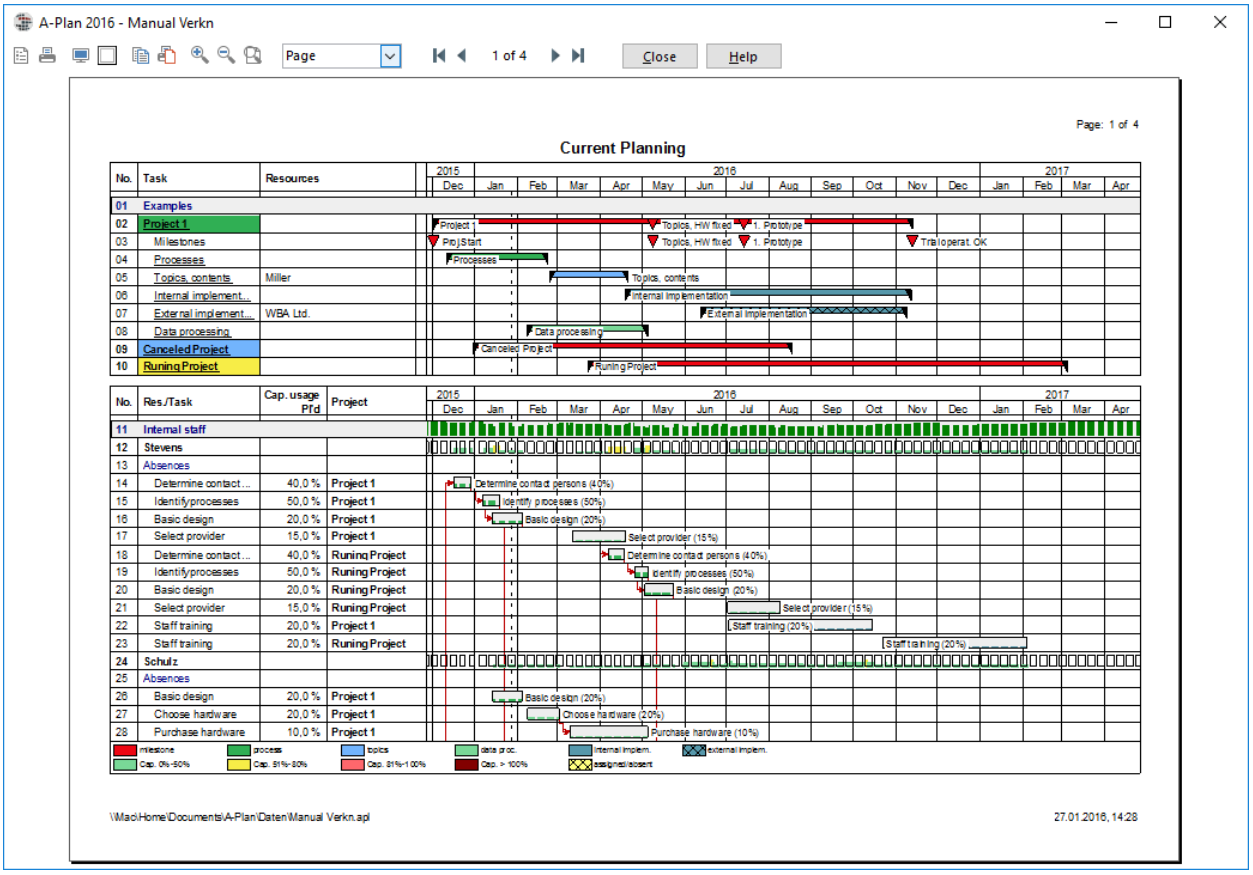
The pages to be printed in horizontal direction are specified in the upper boxes while printed pages in vertical direction are specified in the boxes on the left. The setting shown above would have the following result (printed pages are shown in grey):

| | | | | |
|---|---|---|---|---|
| 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 152). 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 147) 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 162).

**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.

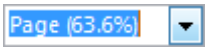
**Copy view to graphics file**

Will copy the preview to a graphics file.

**Enlarge view**

**Reduce view**

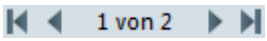
**Adjust view**




**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**

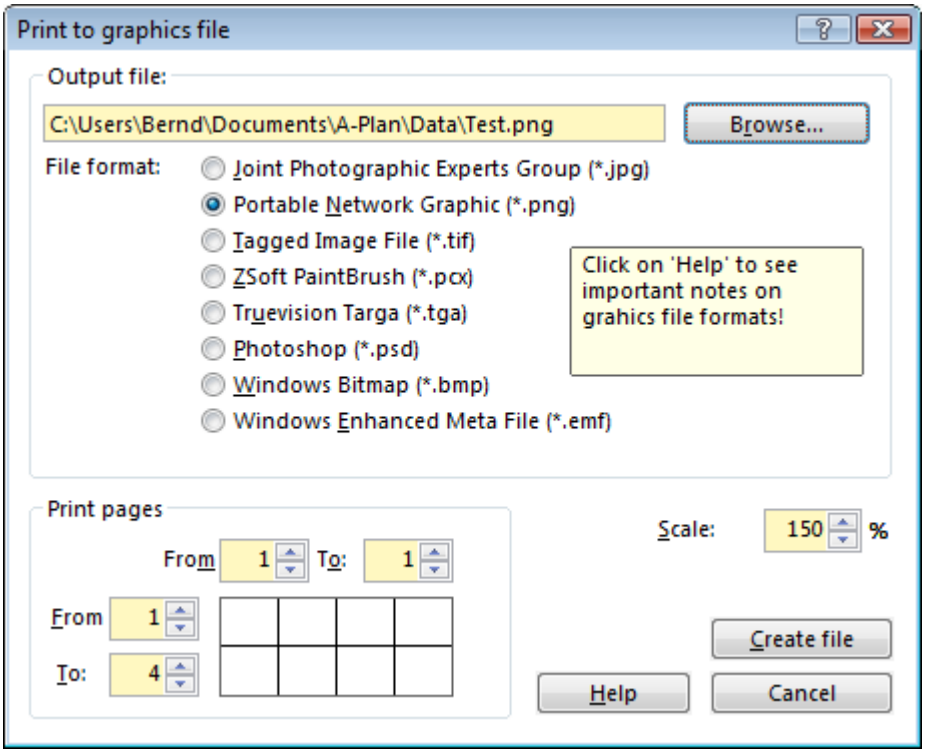
Allows you to scroll in vertical direction within the pages to be printed

## 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 grafics 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 clipboard 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 162) 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*, ...)

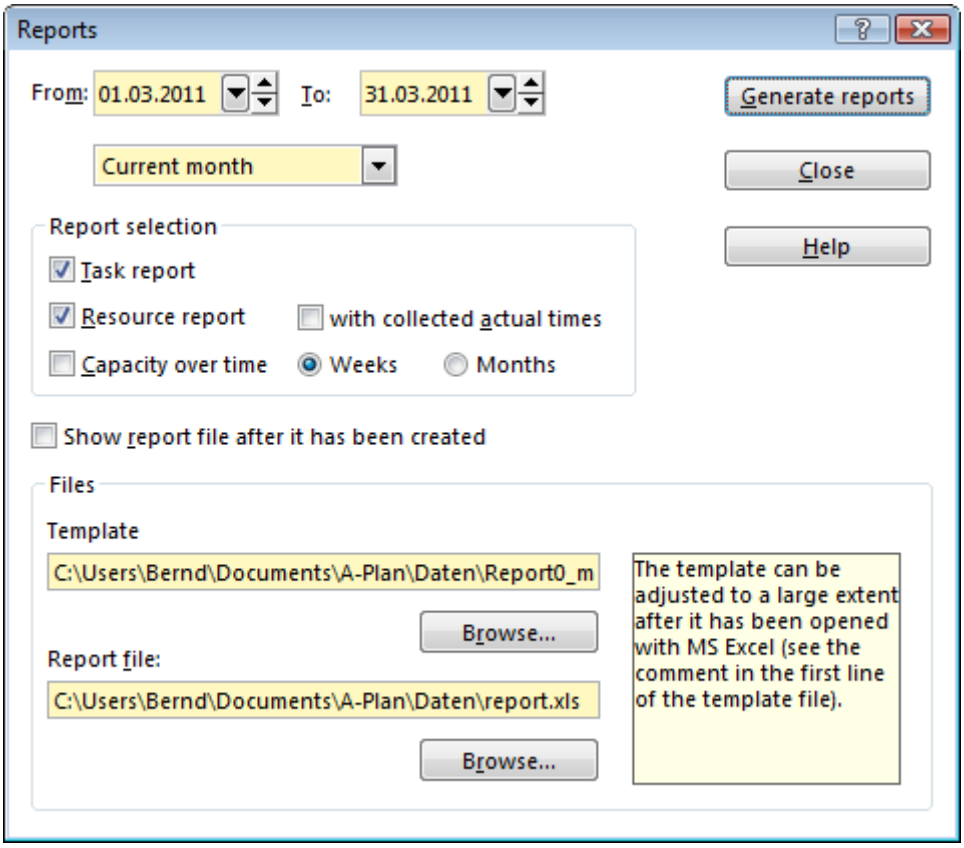
### *Scale*

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 reports. For example, with cost center numbers entered in one of the user-defined columns you might have the work and the costs of a specific cost center output to a report by setting the corresponding filter.

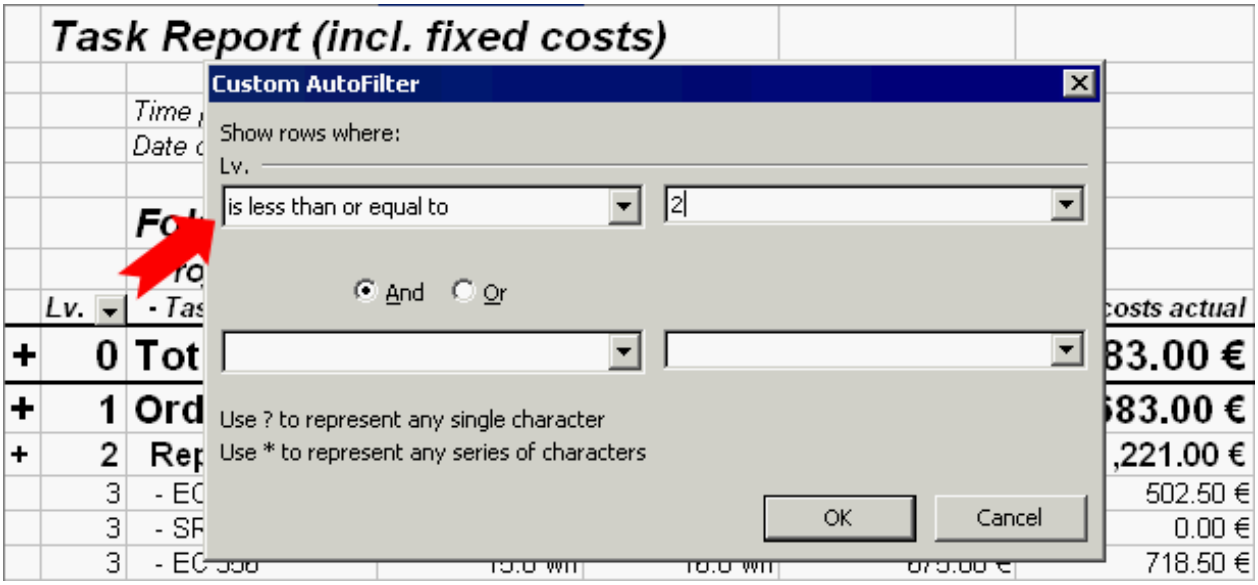
## TASK REPORT

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 | | | ***Task Report (incl. fixed costs)*** | | | | | |
| 3 | | | | | | | | |
| 4 | | | *Time period 01/01/2004 - 31/01/2004* | | | | | |
| 5 | | | *Date of report 30/05/2004, 22:48 Uhr* | | | | | |
| 6 | | | | | | | | |
| 7 | | | ***Folders*** | | | | | |
| 8 | | | *Projects* | | | | | |
| 9 | | *Lv.* | *- Tasks* | *work planned* | *work actual* | *costs planned* | *costs actual* | *cost %* |
| 10 | + | **0** | **Total** | **97.0 wh** | **38.1 wh** | **4,284.00 €** | **1,683.00 €** | **-60.7%** |
| 11 | + | **1** | **Orders** | **97.0 wh** | **38.1 wh** | **4,284.00 €** | **1,683.00 €** | **-60.7%** |
| 12 | + | 2 | Repairs | 70.0 wh | 27.1 wh | 3,150.00 € | 1,221.00 € | -61.2% |
| 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 | Maintenance | 27.0 wh | 11.0 wh | 1,134.00 € | 462.00 € | -59.3% |
| 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 € | |

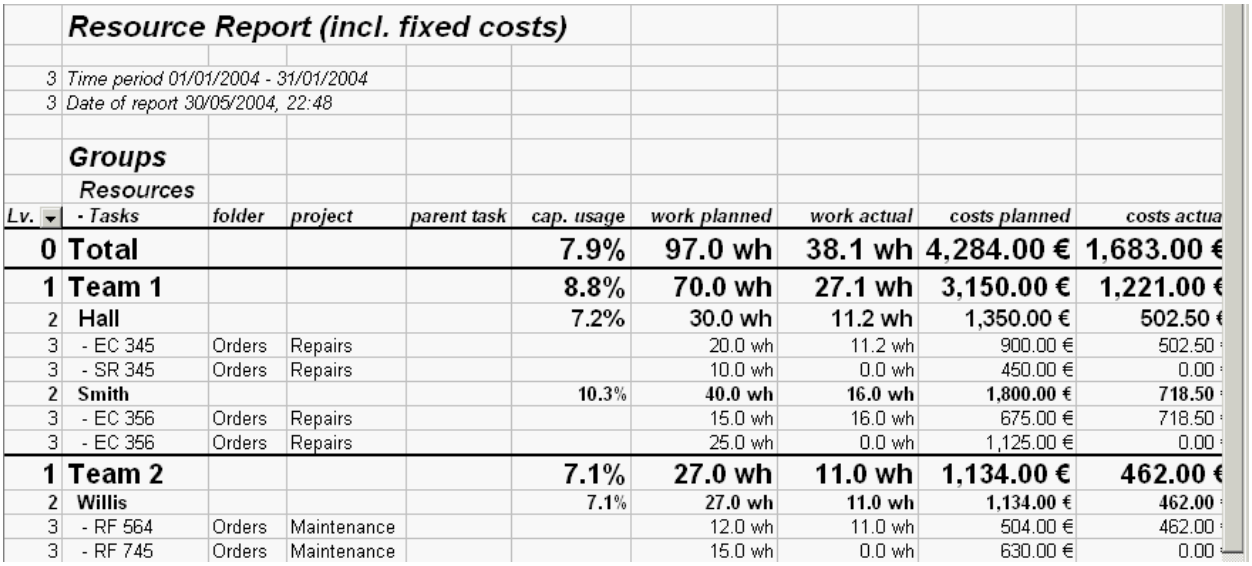
Task report | Resource report | Capacity Team 1 | Capacity Team 2

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:




## RESOURCE REPORT

The second worksheet displays the **Resource Report**:



Resource Report (incl. fixed costs)

3 Time period 01/01/2004 - 31/01/2004
3 Date of report 30/05/2004, 22:48

Groups
Resources

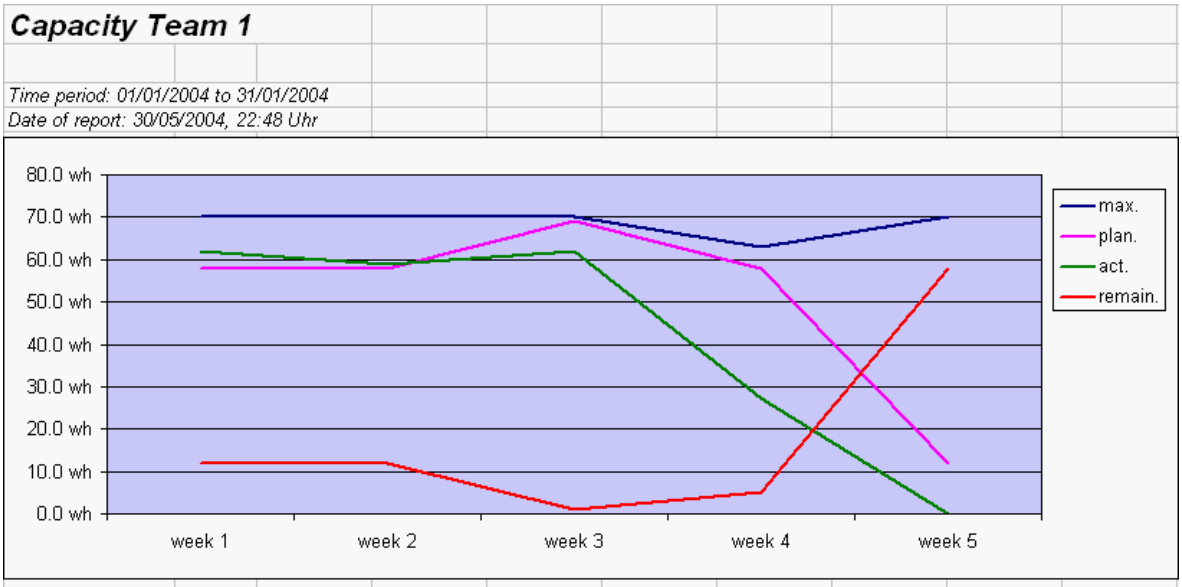
| Lv. | - Tasks | folder | project | parent task | cap. usage | work planned | work actual | costs planned | costs actua |
|---|---|---|---|---|---|---|---|---|---|
| 0 | Total | | | | 7.9% | 97.0 wh | 38.1 wh | 4,284.00 € | 1,683.00 € |
| 1 | Team 1 | | | | 8.8% | 70.0 wh | 27.1 wh | 3,150.00 € | 1,221.00 € |
| 2 | Hall | | | | 7.2% | 30.0 wh | 11.2 wh | 1,350.00 € | 502.50 € |
| 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 |
| 2 | Smith | | | | 10.3% | 40.0 wh | 16.0 wh | 1,800.00 € | 718.50 |
| 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 |
| 1 | Team 2 | | | | 7.1% | 27.0 wh | 11.0 wh | 1,134.00 € | 462.00 € |
| 2 | Willis | | | | 7.1% | 27.0 wh | 11.0 wh | 1,134.00 € | 462.00 |
| 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 |

**Hint:** Capacity usage in the Resource Report may differ from the usage in the A-Plan-resource view, since there completed tasks are by default excluded from the usage. The latter, however, can be changed optional (see "Workload through completed processes" on page 99).

## 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

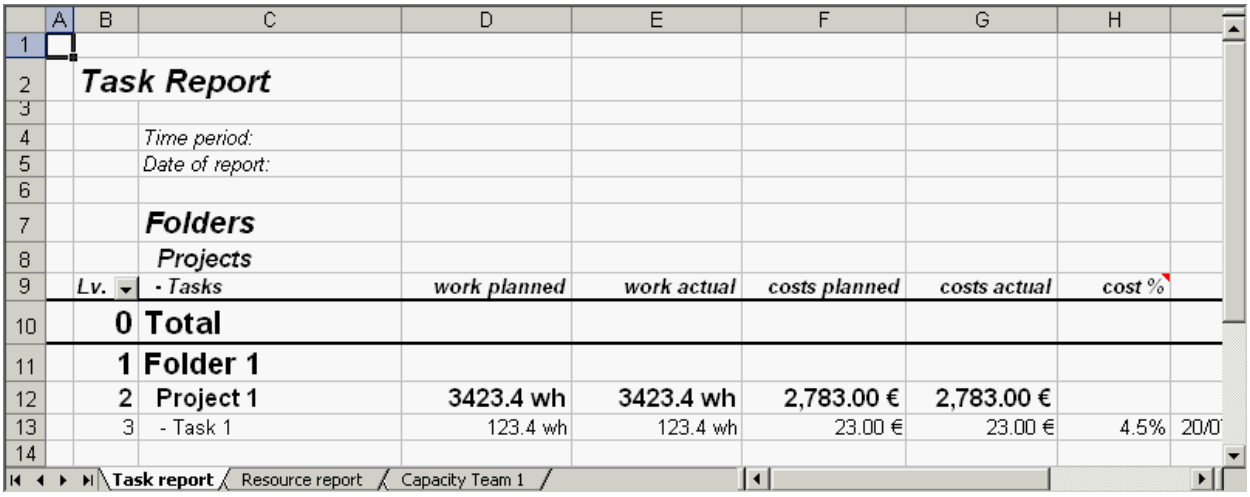
graphs which represent the **max**imum available capacity (in consideration of working hours, absence times etc.), the **plan**ned capacity, the **act**ual capacity and the **remain**ing capacity of the group over time.




| | | week 1 | week 2 | week 3 | week 4 | week 5 |
|---|---|---|---|---|---|---|
| total | max. | 70.0 wh | 70.0 wh | 70.0 wh | 63.0 wh | 70.0 wh |
| | plan. | 58.0 wh | 58.0 wh | 69.0 wh | 58.0 wh | 12.0 wh |
| | act. | 62.0 wh | 59.0 wh | 62.0 wh | 27.1 wh | 0.0 wh |
| | remain. | 12.0 wh | 12.0 wh | 1.0 wh | 5.0 wh | 58.0 wh |
| | cap. | 82.9% | 82.9% | 98.6% | 92.1% | 17.1% |
| Smith | max. | 35.0 wh | 35.0 wh | 35.0 wh | 28.0 wh | 35.0 wh |
| | plan. | 30.0 wh | 32.0 wh | 36.0 wh | 28.0 wh | 12.0 wh |

## LAYOUT OF THE EXCEL OUTPUT FILE

The reporting function uses the Excel file "**Report0.xlsx**" as a template. The template file is copied to the data folder of A-Plan ("My Documents\A-Plan\Data") when is being installed:




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:

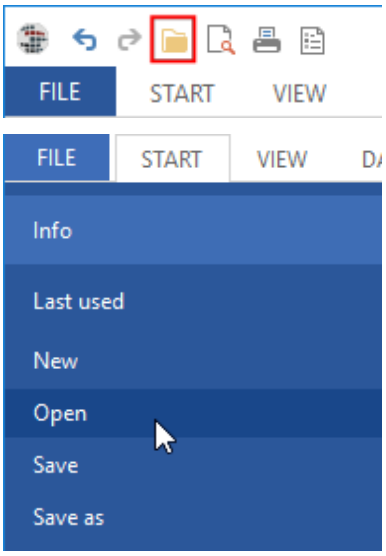
- Font type and font size,
- cell formats (e. g. number of digits after decimal point),
- width of columns,
- height of rows,
- hide/unhide columns by reducing their width to "0",
- texts,
- lines, frames

**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 263).

**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 184.

## 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 136). 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 136), 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 136). 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.

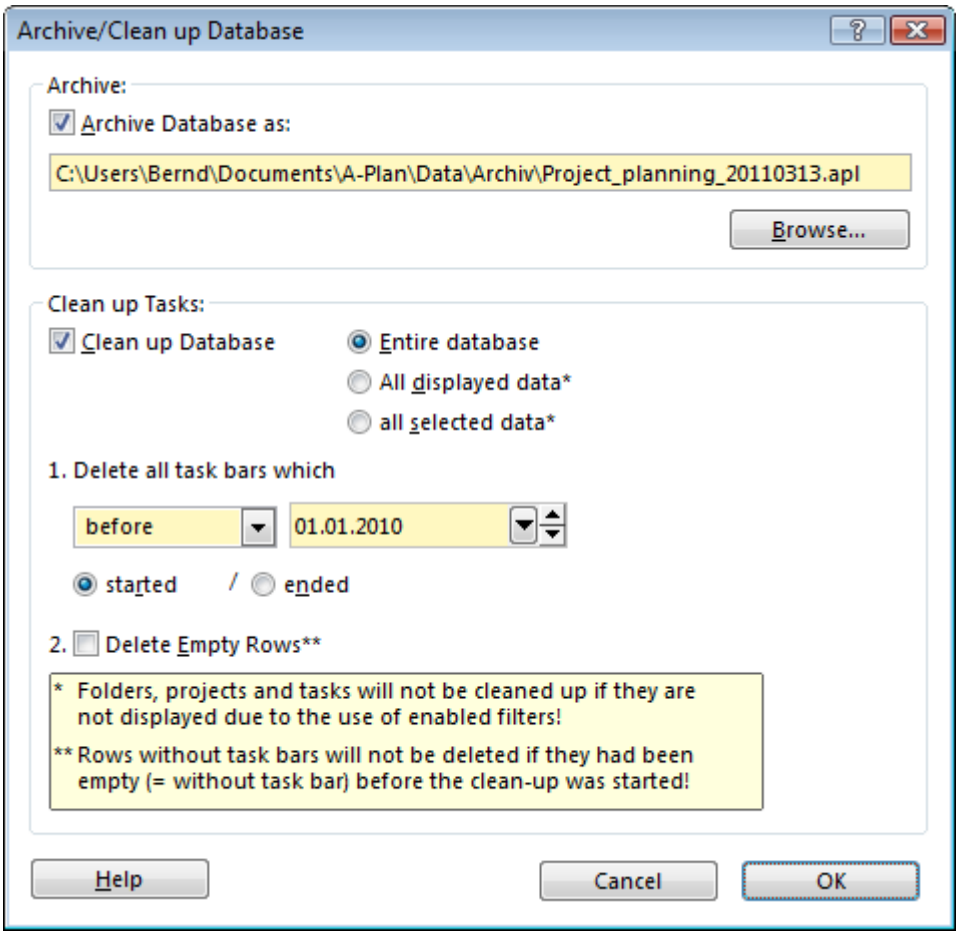
The repair function will compress the database even if you did not start this function manually. Whenever the size of the database has increased considerably, compressing is carried out automatically by A-Plan after the last user has closed the database.

## 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 74).

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

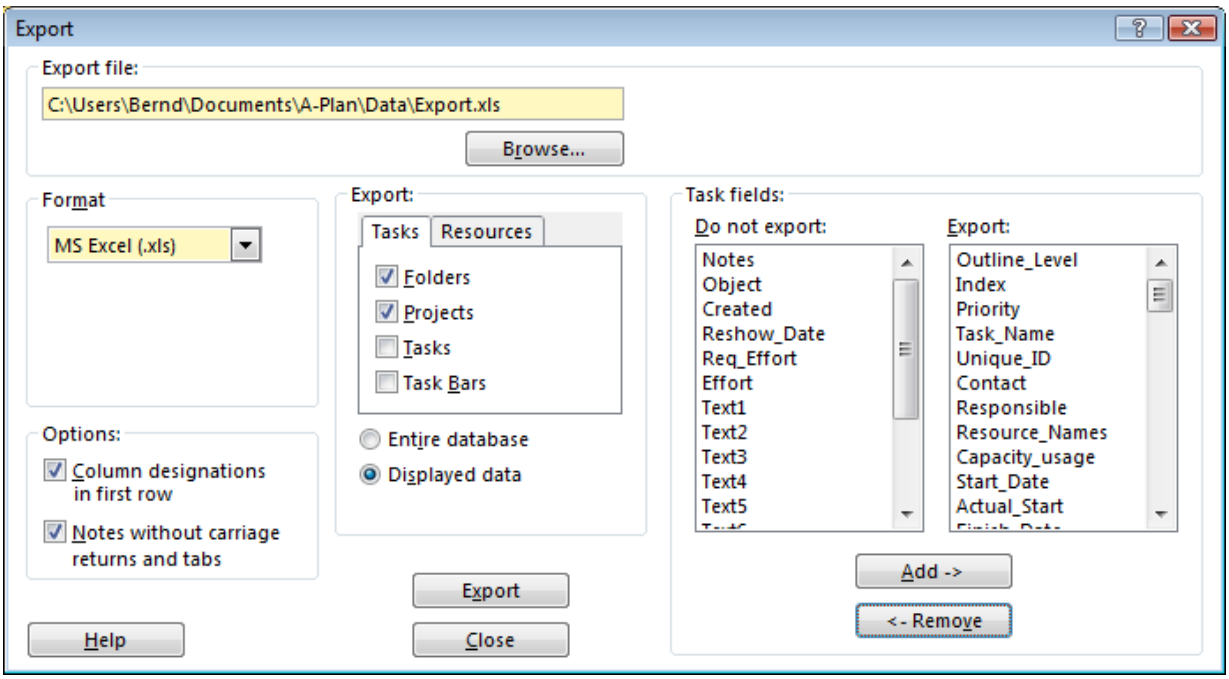
Apart from creating export files as described below, you can also open an A-Plan database with **Microsoft Access 2000 or a higher version** to directly access the data contained in the database. When doing so, you can create **additional objects** (tables, reports, modules) as well but you should make 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 over-written 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 175.

### *Options*

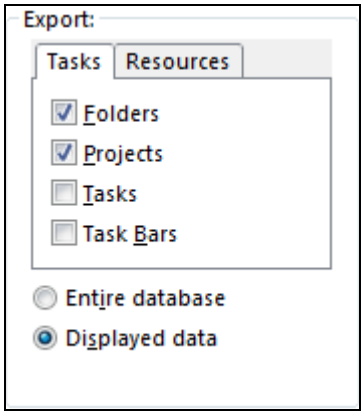
Use the first check box to determine whether you want a **headline** to appear in the first row of the output file with designations of columns displayed in the headline.

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

Data of other applications is imported either in **MS Excel format** or in **xml format** if a **MS project file** is to be read (see "xml Format (MS Project)" on page 182).

## MS EXCEL FORMAT

### 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.
- For an example see the file "Import.xlsx" in the main folder of A-Plan.

## WORKSHEET "TASK_TABLE1"

| Designation | Type | Value range | Contents | Desig. in A-Plan |
|---|---|---|---|---|
| **ID*** | Number | 1 – approx . 2 milliard | unique numbering of rows in import file | - |
| **Task_Name** | Text | max. 100 characters | Designation | Task |
| **Unique_ID** | Text | max. 64 characters | Ident-Number | Ident-No. |
| **Outline_Level*** | Number | 1 - 99 | 1: Level 1 ("Folder" in A-Plan)<br>2: Level 2 ("Project" in A-Plan)<br>3 - 99: Levels 3 - 99 ("Task" in A-Plan) | - |
| **Priority** | Number or text | 0 – 99 or text (see explanat. below) | Priority<br>if empty: 2 is used | Priority |
| **Resource_Names** | Text | (see explanat. below) | Name/capacity usage of resources | Resources |
| **Created** | Date/ Time | Date (with time) | Entry date | Entry Date |
| **Reshow_Date** | Date/ Time | Date (with time) | Reshow date | Reshow Date |
| **Start_Date** | Date/ Time | Date (with time) | Planned begin | Begin Pl´d |
| **Finish_Date** | Date/ Time | Date (with time) | Planned end | End Pl´d |
| **Duration** | Date/ Time | Number | Duration in days (as decimal fraction)<br>(is used if no planned end exists) | (End Pl´d) |
| **Actual_Start_Date** | Date/ Time | Date (with time) | Actual begin<br>if empty: planned begin is used | Begin Act. |
| **Actual_Finish_Date** | Date/ Time | Date (with time) | Actual end<br>if empty: planned begin is used or – if available – it is calculated from "Percent_complete" or from "Duration_actual" | End Act. |
| **Percent_Complete** | Number | 0 % - 32000 % | State of completion as %<br>(is used if no actual end exists) | (End Act.) |
| **Actual_Duration** | Date/ Time | Number | Actual duration in days (as decimal fraction)<br>(is used if no planned end and no state of completion exist) | (End Act.) |
| **Completed** | Date/ Time | Date (with time) | Date of completion<br>(when task is finished) | Completed |
| **Object** | Text | 128 characters | Name (incl. folder) of file to be linked | Object |
| **Pattern** | Number | 0 – 49 | Number of pattern used for task bar | Pattern |
| **Notes** | Text | any text (max. approx. 2 milliard characters) | Note text of row<br>(w/o formatting!) | Note |
| **Notes_Bar** | Text | any text (max. approx. 2 milliard char- | Note text of task bar<br>(w/o formatting!) | Note |

| | | | | |
|---|---|---|---|---|
| | | acters) | | |
| **Successors** | Text | (see explanations below) | Number of successors and type of link | - |
| **Text1 – Text10** | Text | max. 100 characters | Any text | Text1 – Text10 |
| **Number1 – Number10** | Number | - | Any number | Number1 – Number10 |
| **Time_Unit_Work** | 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 181):

| Designation | Type | Value range | Contents | Desig. in A-Plan |
|---|---|---|---|---|
| **Standard_Rate** | Number | - | Planned costs per unit of time | Lab. Rate Pl´d |
| **Act_Standard_Rate** | Number | - | Actual costs per unit of time<br>if empty: planned value isused<br>-999999: default value is used | Lab. Rate Act. |
| **Fixed_Cost** | Number | - | Planned fixed costs | Fixed Costs Pl´d |
| **Actual_Fixed_Cost** | Number | - | Actual fixed costs<br>if empty: planned value is used | Fixed costs Act. |
| **Time_Unit_Cost** | Number | 1 - 6 (see explanations below) | Time unit of costs | Time unit of Cost |
| **Calc_Method_Cost** | 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 reconciliate" | 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 "Worksheet "Resource_Table1"" on page 181).

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]] ...

| | | |
|---|---|---|
| **n** | Number of successor (see column "No.") | |
| **VA** | Type of link | |
| | "FS" (or empty) | End/Begin |
| | "SS" | Begin/ Begin |
| | "SF" | Begin /End |
| | "FF" | End/End |
| **x** | 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 |
|---|---|---|---|---|
| **Resource_Name *** | Text | max. 50 charact. | Resource designation | Resource |
| **Group_Name** | Text | max. 50 charact. | Resource group | Group |
| **Code** | Text | max. 64 charact. | Resource Ident-number | Ident-No. |
| **Cost_Per_Use** | Number | - | Planned fixed costs | Fix. Cost Pl´d |
| **Actual_Cost_Per_Use** | Number | - | Actual fixed costs<br>if empty: planned value is used | Fix. Cost Act.. |
| **Standard_Rate** | Number | - | Planned costs per time unit<br>if empty: default value is used | Lab. Rate Pl´d |
| **Actual_Rate** | Number | - | Actual costs per time unit<br>if empty: planned value is used<br>-999999: default value is used | Lab. Rate Act. |
| **Overtime_Rate** | Number | - | Overtime labour rate<br>(is entered in A-Plan in the row "Overtime" as labour rate) | - |
| **Object** | Text | 128 characters | Name (incl. folder) of a file to be linked | Object |
| **Notes** | Text | any text (max. approx. 2milliard characters) | Note text of resource<br>(w/o formatting!) | Note |
| **Text1 – Text10** | Text | max. 100 characters | Any text | Text1 – Text10 |
| **Number1 – Number 10** | Number | - | Any number | Number1 – Number10 |

| | | | | |
|---|---|---|---|---|
| **Time_unit_costs** | Number | 1 - 6 (see explanations on "Task table1") | Time unit of costs | Time unit of Cost |
| **Calc_method_costs** | Number | 0 - 2 (see explanations on "Task table1") | Calculation method for labour costs | Cost Calc. Meth. |

## XML FORMAT (MS PROJECT)

Data can be exchanged in **xml format** between A-Plan and MS Project in both directions. With this format all those data is transferred which is supported by both programs such as e.g. dependencies, resources with their allocations and capacity usage, calendars, notes, links etc.

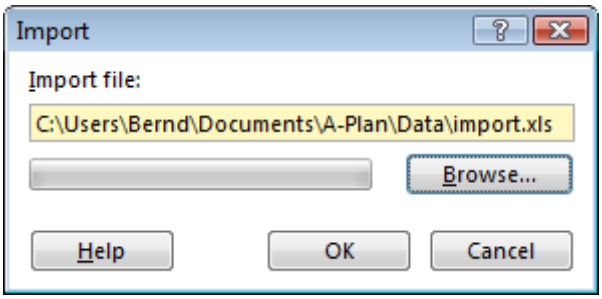
The data listed below cannot be transferred as it is handled differently in both programs:

- Buffers
- Interruptions
- Colors of time bars
- Actual times

## 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.

# USER ADMINISTRATION

## GENERAL HINTS ON THE MULTI-USER VERSION

With the multi-user version of A-Plan several users can access a database simultaneously (see "Organization of data" on page 35) and changes made in the database are available to all users a short time after they have been made.

**Users** are saved **in the database together with their permissions**. If necessary, several databases can be created and different users and permissions can be entered in each database.

To avoid a negative effect on the performance as a result of an update of the clients in the case of a large number of simultaneous users, at first only the data of visible and open projects (level 2) are updated at an interval of 10 seconds. If another project is opened, the update - if necessary- is carried out while it is opened. A complete update of all data is carried out every 10 minutes. Likewise, it is carried out before a printout is made and before a report is created.

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.

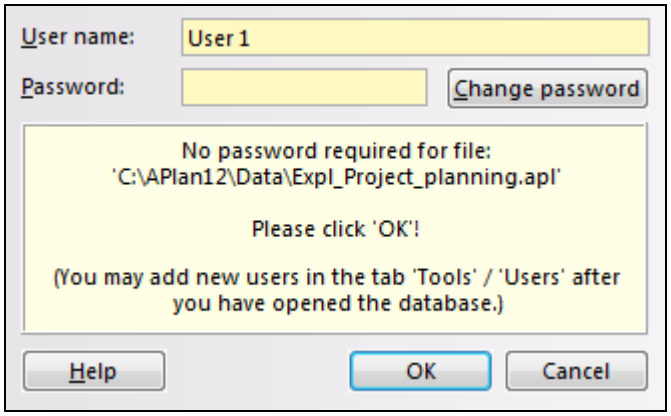
The database can be installed either on a server or on a client PC connected to the server. In slow or often overloaded networks we would recommend you to store the database on the PC which will access the database most frequently.

**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)

**Note:** As compared to the user administration in MS Access databases described in this chapter some differences to **SQL databases** exist with regard to users. These differences are described in the paragraph **SQL Version** (see "File functions of A-Plan 2016 SQL" on page 194).

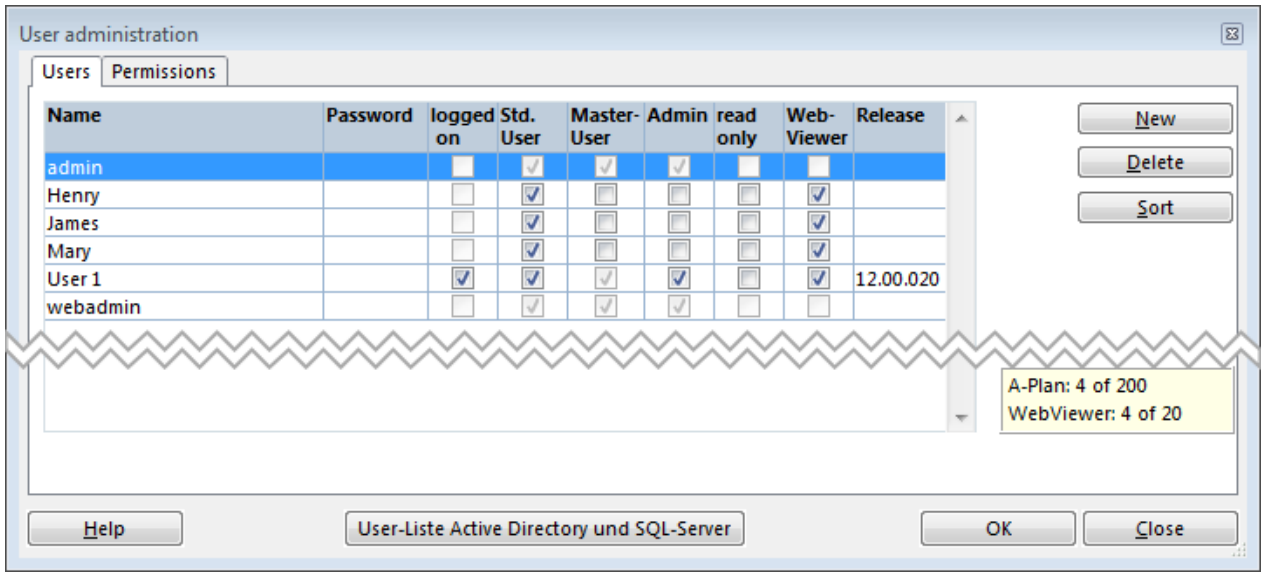



When a new database is opened for the first time, the user name will always be "User 1" with no password assigned.

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**:




Click **New** to create a new user. Use the column **A-Plan** to enable the new user for the current database.

The number of entered users cannot exceed the number of purchased licenses. The users "admin" and "webadmin" (see below) are not taken into account when the number of users is compared with the number of licenses.

A user name cannot be deleted (use the button **Delete**) as long as he or she is logged on.

If a user **forgot his/her password**, the administrator can reset the password by deleting the three asterisks. This will enable the involved user to enter a new password the next time he opens the database.

### *Name, Password*

Next you may enter the **user name**. You may also enter a **password** which can be changed by the involved user at any time (ribbon tab **Tools** / **Password**). If no password is entered, the user concerned can **open the database without entering a password**. However, he/she should enter a password as soon as possible.

### *Logged on*

The column **logged on** shows the users who are currently logged on to the database. If the logon status of a user was not set to "no" during a system crash it can be reset by clicking "yes".

### *Std. User*

Std. users can use A-Plan in compliance with the set permissions (see "Assign access permissions" on page 187). Users who just use the WebViewer (see "WebViewer (optional)" on page 200) must not be activated in this column as they should not be included in the counting of licenses.

### *Master-User, Admin*

All users can be assigned **master** or **administrator rights** by additionally clicking the respective field**.**

**Master rights** are required for the following functions:

- Setting of user permissions
- Changing of database settings (see "Database settings" on page 128)
- Entering and deleting master locks (see "Locking of rows" on page 41)
- Entering data of any resources in time tracking (see "Time tracking" on page 217)

**Administrator rights** allow you to make all of the above-mentiond master user settings. In addition, administrators are allowed to

- create databases on a SQL server
- create or delete users
- reset password
- overwrite an original database by a backup copy

Obviously, a user having administrator rights automatically has master rights as well.

### *Read only*

All users can be set to **read only.** Independent of the settings made in the tab **Permissions** such users cannot make any changes.

**Note:**
Even users having **master** or **administrator rights** can be set to **read only**. It is true that these users may reset this limitation but the intention of doing this is to prevent those

administrator and master users from making inadvertent changes who are supposed to carry out superior controlling tasks only.

### *WebViewer*

Users who are to be informed on the current state of affairs with the help of the Web-Viewer (see "WebViewer (optional)" on page 200) are activated in this column.

### *Release*

The column **Release** displays the A-Plan release the user is currently working with (see "Info about A-Plan (licenses, release number)" on page 12).

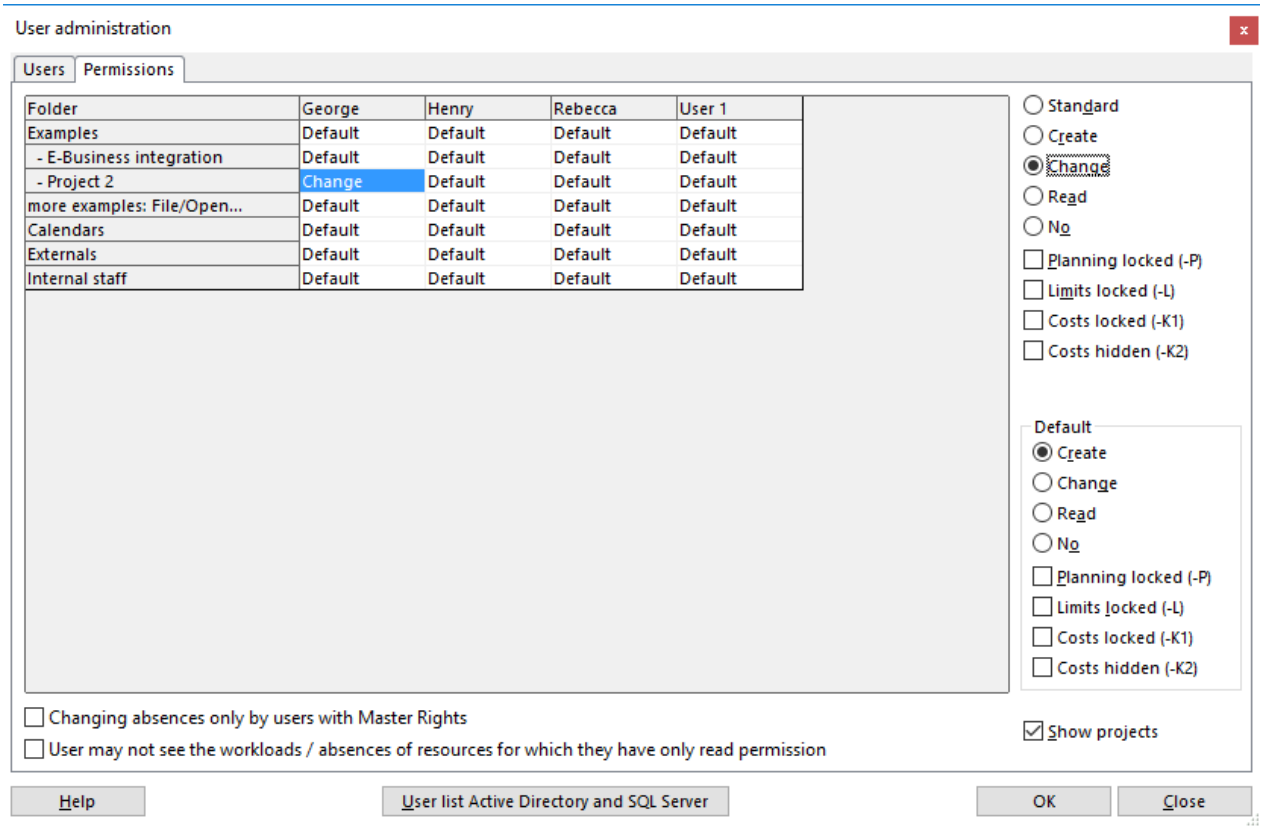
## USER "ADMIN" AND "WEBADMIN"

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 200.

## 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** [1] | **Change data** | **Read data**[2] | **Indicator**[3] |
|---|---|---|---|---|
| "Create" | yes | yes | yes | - |
| "Change" | no | yes | yes |  |
| "Read" | no | no | yes |  |
| "None" | no | no | no | - |

[1] Create /Delete data refers to projects, tasks and task bars

[2] 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.

[3] The corresponding indicator is displayed in the column Status (see "Symbols of the

Status column" on page 27) 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 119), 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.

### *Preventing limits from being changed*

Any user may be prevented from changing limits (see "Limits" on page 63).

### *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.

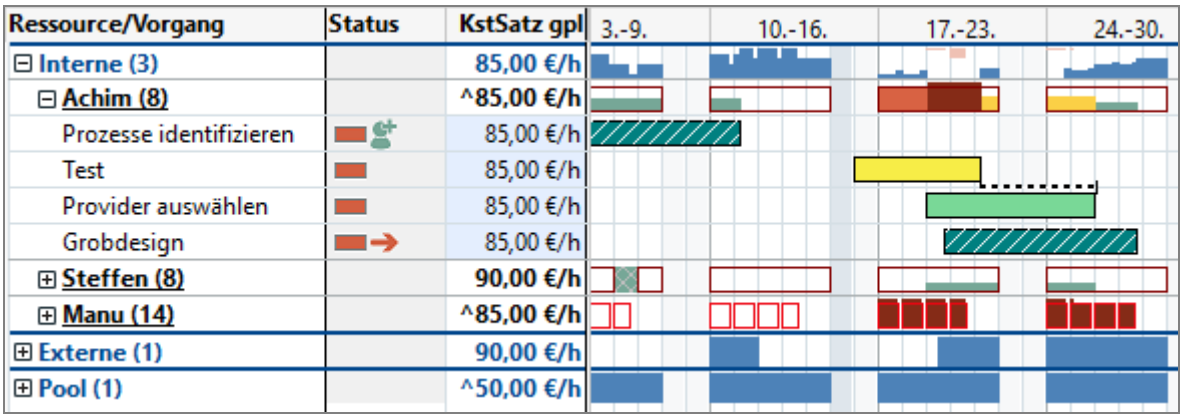
### *Changing absences only by users with Master Rights*

Optionally absences can be entered or modified only by users with Master Rights.

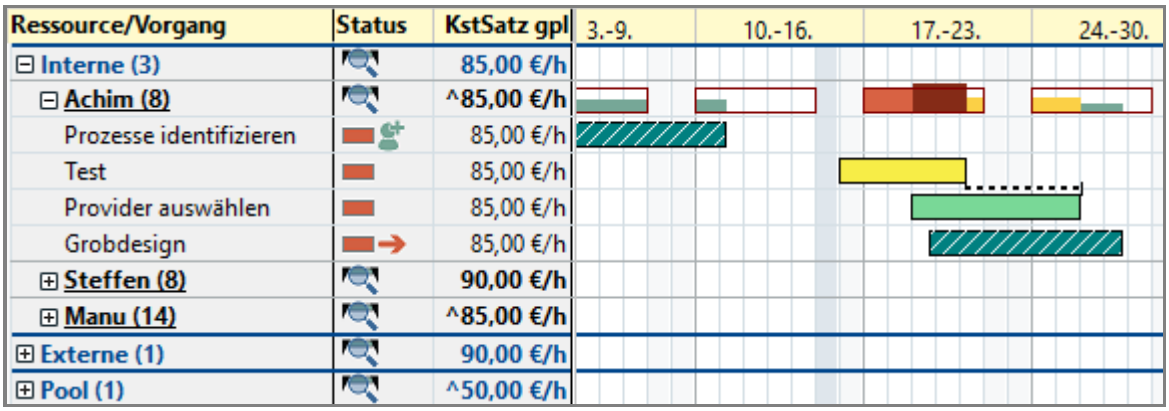
***User may not see the workloads / absences of resources for which they have only read permission***

It can be set whether users are allowed to see the workload of resources for which they have only read permission. The own workload can still be viewed.

no limitation:

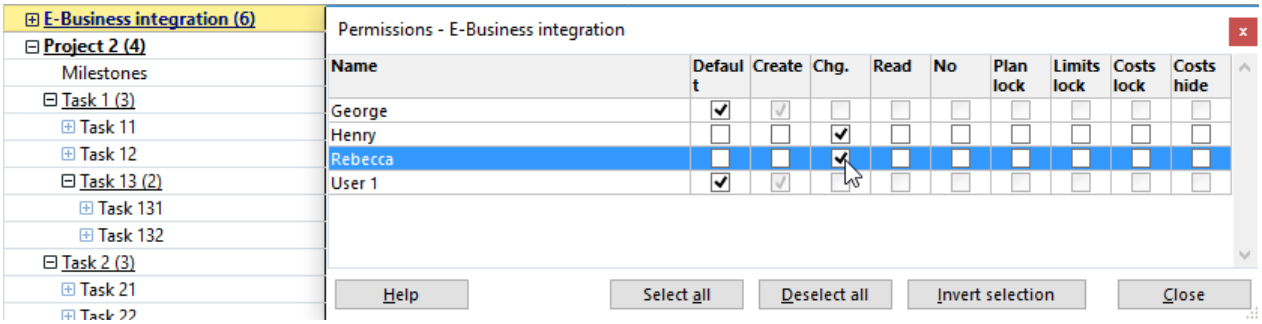



only workload of the logged user:

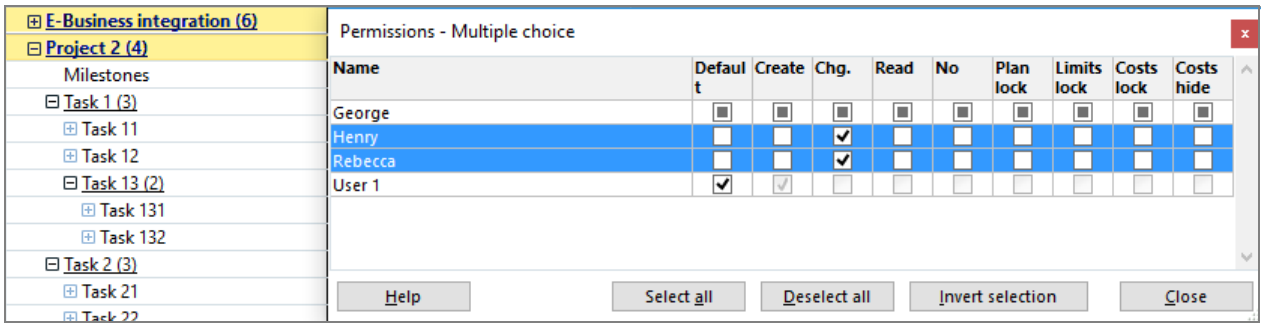



## SETTING PERMISSIONS IN THE MAIN TABLE OF A-PLAN

After clicking on a folder, project or a resource group with the right mouse button in the main table of A-Plan a list of all users and their permissions will also be displayed. In this list the permissions can be change too:

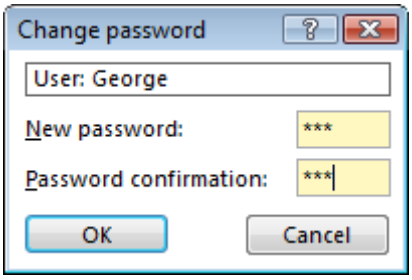



The permissions can be set for multiple folders or projects and multiple users:




**Hint**: Do multiple selection in the main table only after opening the permission list, since it will be resetted when you open the list.

## CHANGE PASSWORD



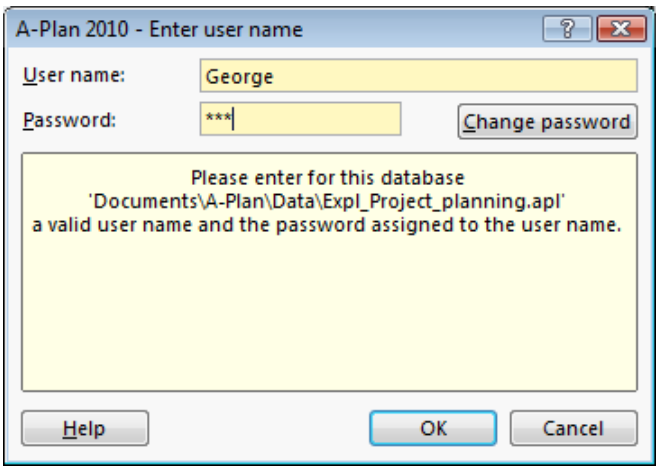

The password (any characters, not more than 20 characters) can be changed for the administrator as well as for all other users. To do so, click on the button **Change password** when you log in or by choose **Tools / Password** afterwards. You have to type the password a second time to confirm it.

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 184).

## 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-

Plan2016\A-Plan2016.exe /u:Millerr:secret", see "B. Starting A-Plan with parameters" on page 263). 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 141) 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 141) or by appending it as a parameter when A-Plan is started (see "B. Starting A-Plan with parameters" on page 263).

Moreover, users have the possibility of using certain profiles together (see "Global Profiles" on page 142), supposed that a **superior profile folder** exists in which each user has his **own profile folder** holding his personal settings.

## PERFORMANCE

The Performance of A-Plan will be influenced by the following points:

- Standard or SQL version of A-Plan (from about 5 concurrent users, the SQL version of A-Plan should be used, see next chapter)
- Bandwidth of the network connection between client and server (at least 50 to 100 Mbit/s)
- Number of folders shown (selection of folder to show see "Folder filter" on page 78).
- Display of workload see "Task bars" on page 126)
- Resolutions of Gantt chart (choose "quarter" or "year" only if actually needed)
- Resource View shown or hide
- Size of the database (delete or outsource unneeded projects, see "Transferring tasks and resources to another A-Plan database" on page 75)

# SQL-VERSION

## WHAT IS A-PLAN 2016 SQL?

**A-Plan 2016 SQL** is an additional variant of A-Plan 2016 which provides a **better performance** and a **higher data security** than the standard version of A-Plan by saving the data alternatively on a **Microsoft SQL Server**.

With several users working simultaneously, the SQL version of A-Plan is significantly faster than the standard version of A-Plan.

A changeover from the standard version to the SQL version is possible at any time and existing data can be transferred without any problems to the SQL server. Due to this fact it is no problem at all to start with the standard version of A-Plan and to change over to the SQL version later. No financial disadvantage will result as the price difference between the two versions will be charged only.

## SYSTEM

### USE OF A MICROSOFT SQL SERVER

**When used with a MS SQL server, A-Plan 2016 SQL** requires the additional installation of one of the following software packages on the network server you use:

- **Microsoft SQL Server** (version 2008 or higher) or
- **Microsoft SQL Server Express Edition** (version 2008 or higher)

The **Microsoft SQL Server Express Edition** is available free of charge. This free version has a lower performance compared to the official **Microsoft SQL Server** which is available for purchasing. For use with **A-Plan 2016 SQL** the free version is sufficient under normal circumstances.

If a **Microsoft SQL Server** is not yet available to you, it is the best solution to install the **Microsoft SQL Server 2012 Express Edition** which you can find in the internet on the Microsoft pages (http://www.microsoft.com/en-us/download/details.aspx?id=29062, as of 10/2013).

For the administration of the Express Edition we recommend you to install the variant with the **Microsoft SQL Server Management Studio Express**.

***Important note:***
*By default, no access from other computers to the SQL server is established when the* ***Express Edition*** *is installed. For an instruction regarding the remote access see:* http://blogs.msdn.com/b/sqlexpress/archive/2005/05/05/415084.aspx .

The best solution is if A-Plan has a SQL server of its own but this is not a prerequisite. However, it must be pointed out in this context that A-Plan users are created as regular users of the SQL server but they have permission only for the A-Plan database in which they were entered as users. Users who have administrator rights for A-Plan are automatically given „Sysadmin“ rights on the SQL server! For more details see "Create new SQL Database" on page 194).

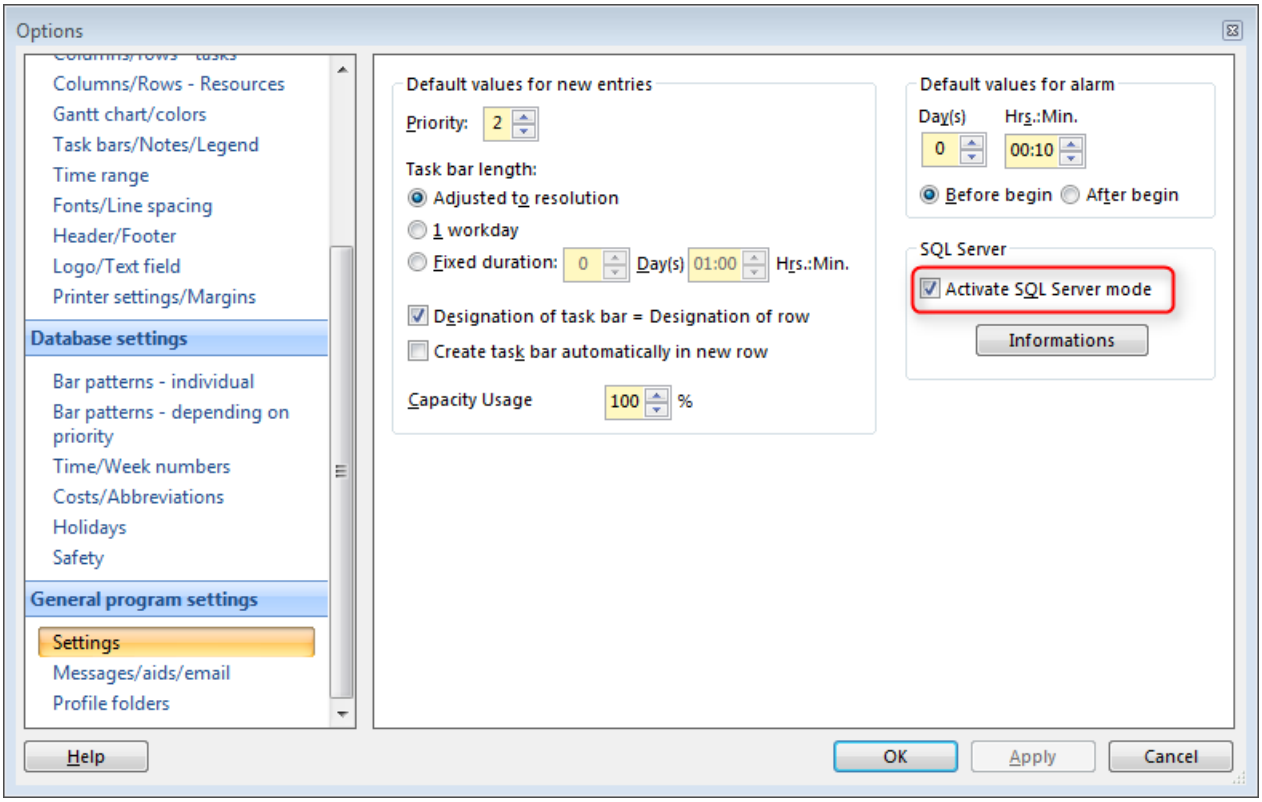
We hope you understand that we **cannot provide any support for the Microsoft SQL server**. For detailed information regarding the installation and administration of SQL servers please refer to the documentation provided by Microsoft and to books available on the market.

## USE OF A MYSQL SERVER

The use of a **MySQL Server** is officially no longer supported since version 2016 of A-Plan. But if the data of older versions of A-Plan has been saved on a MySQL server, this will be possible continue in A-Plan 2016 SQL for compatibility reasons.

# ENABLING THE SQL SERVER MODE

If you intend to use the SQL variant of A-Plan 2016 you have to activate the SQL server mode first in **Options** in **General program settings / Settings**.



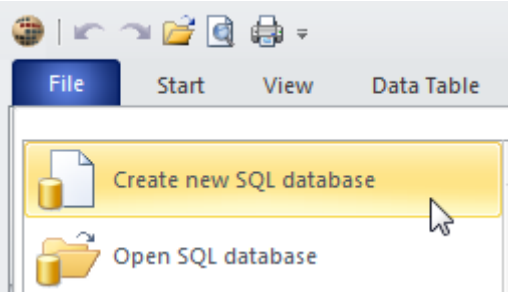
# FILE FUNCTIONS OF A-PLAN 2016 SQL

## CREATE NEW SQL DATABASE

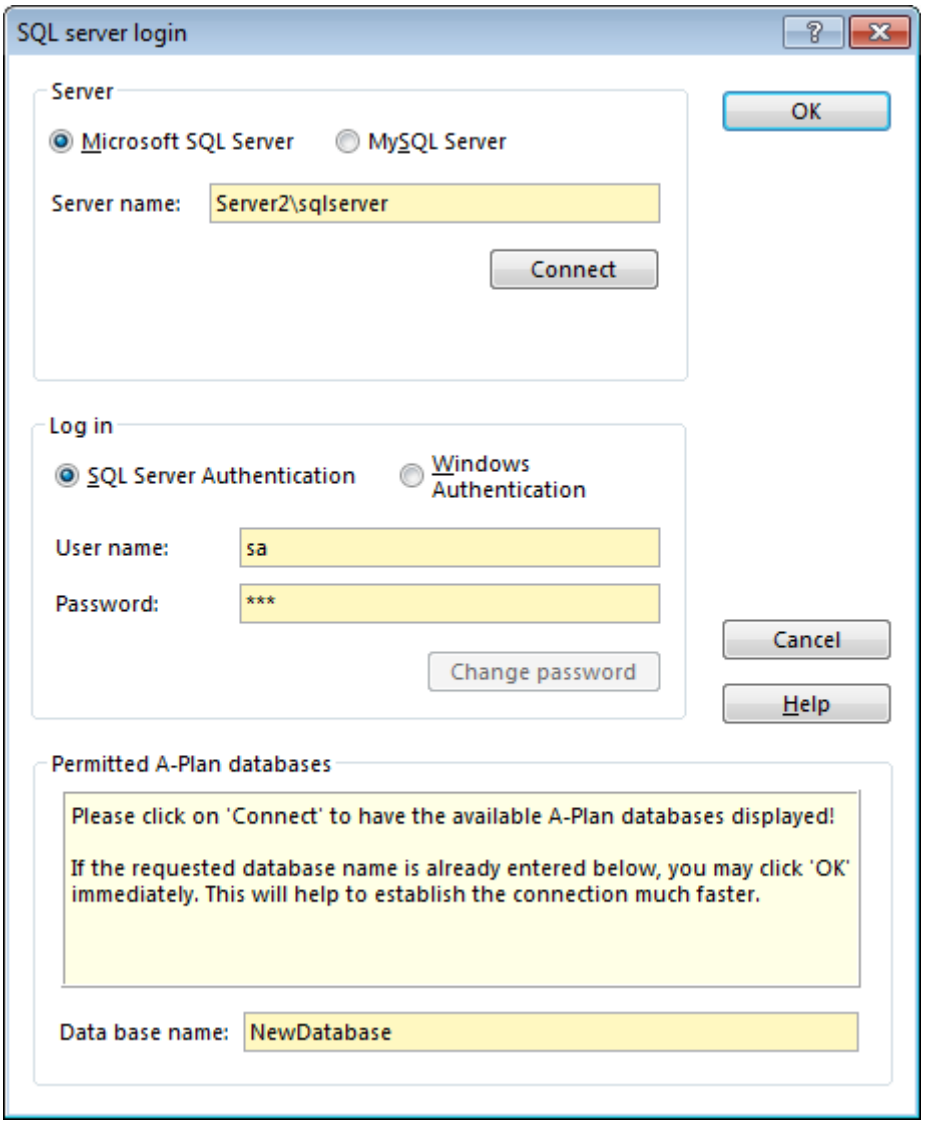
A new SQL database cannot be created unless the **SQL mode** has been activated (see "Enabling the SQL Server Mode" on page 193).

### *1. Choose function*

Choose the command „**Create new SQL database**“ from the tab „**File**“.




### *2. Save database*




First, type the name of your SQL server into the **Save database** dialogue box. Then enter a user who has the permission for creating databases and users (with MS SQL servers doing this requires „sysadmin“-permission).

If a new MS SQL server was installed, the corresponding user name is „sa“.

Finally click „**Connect**“ to log in to the SQL server.

If the connection cannot be made, please check the server name and your login details .

Next, enter a database name at the bottom of the dialogue box.

### *3. Create users*

After it has been saved, the name of the database is displayed in the title bar of A-Plan.

Next, start the user administration from the ribbon tab **Tools**.

By default, the program creates the users „admin“ and „User 1“. At this time, they have the same passwords as the user who created the database.

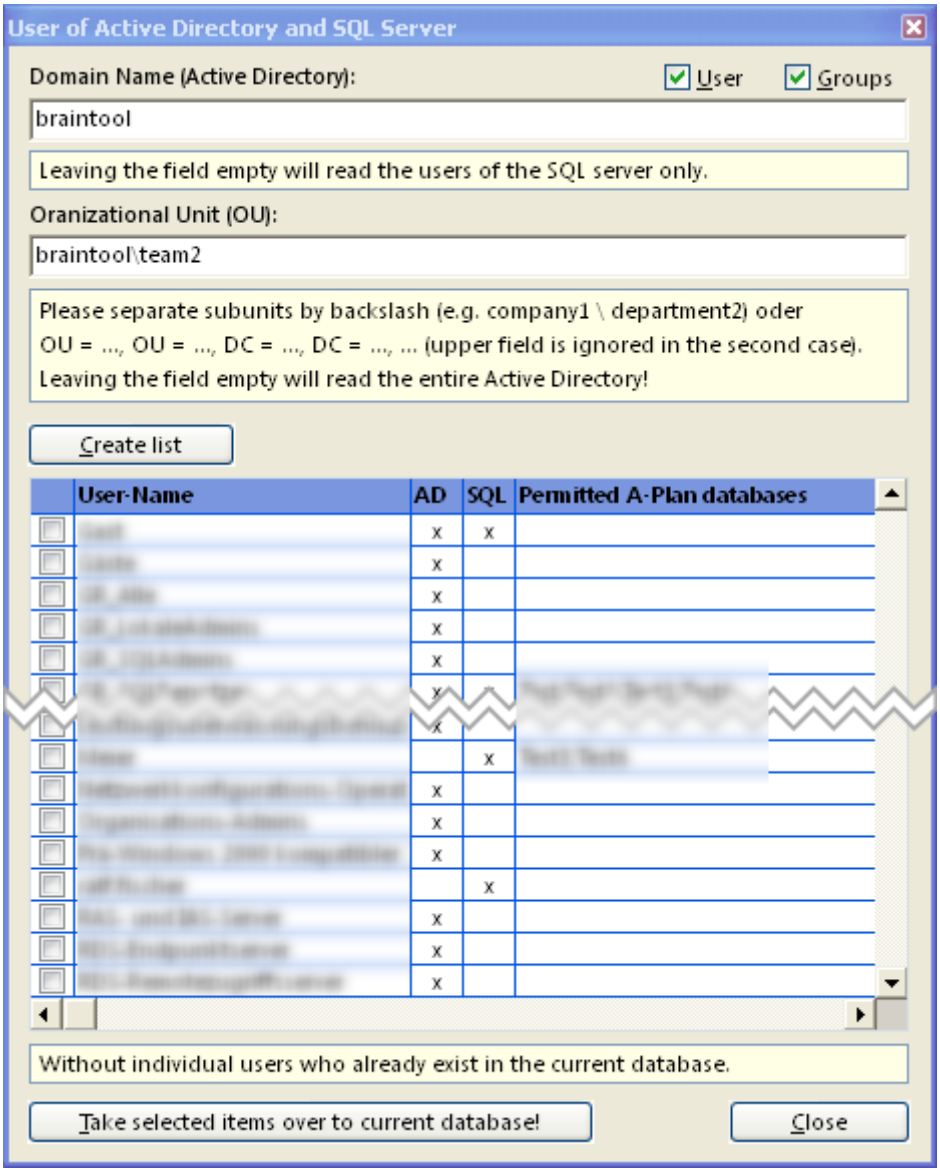
To add more users, just click **New**.

In contrast to the standard version of A-Plan, these are global users in the SQL version and can therefore exist only once on the server concerned. As a consequence, this means that

- all users who have access to at least one A-Plan database must be created as users on the SQL server (="login"),
- a user cannot have different passwords for different A-Plan databases (if necessary, passwords can be changed or reset directly on the SQL server),
- A-Plan users without administrator rights can access only those A-Plan databases for which they have permission - hence they have no other permissions (and are not assigned to a server role)
- Users with administrator rights for at least one A-Plan database have extended rights on the SQL server (server roles "dbcreator" and "sysadmin").

- **Note:**
  The name of the A-Plan administrator **- admin** – is very often in use already on a SQL server. For this reason, his/her name is **aplan_admin** within the SQL server. Nevertheless, the login to A-Plan can still be made as before with the name **admin** as this designation is automatically extended by A-plan to **aplan_admin** before it is **passed on to the SQL server.**

- Users can also be taken over directly from the **Active Directory** into an A-Plan-database.
- From the list of users of the Active Directory it can even be seen which of the users already exist on the SQL server, whether they have permission for A-Plan databases already and, if yes, for which databases they do have this permission:




The **Domain-Name** is entered automatically when the dialog box opens up. If need be, the name can be changed. In addition, you may specify whether to read **users** only, **groups** only or both of them.

To prevent the complete Active Directory from being read, we recommend to enter the **organizational unit** as well (subunits are separated by backslashs).

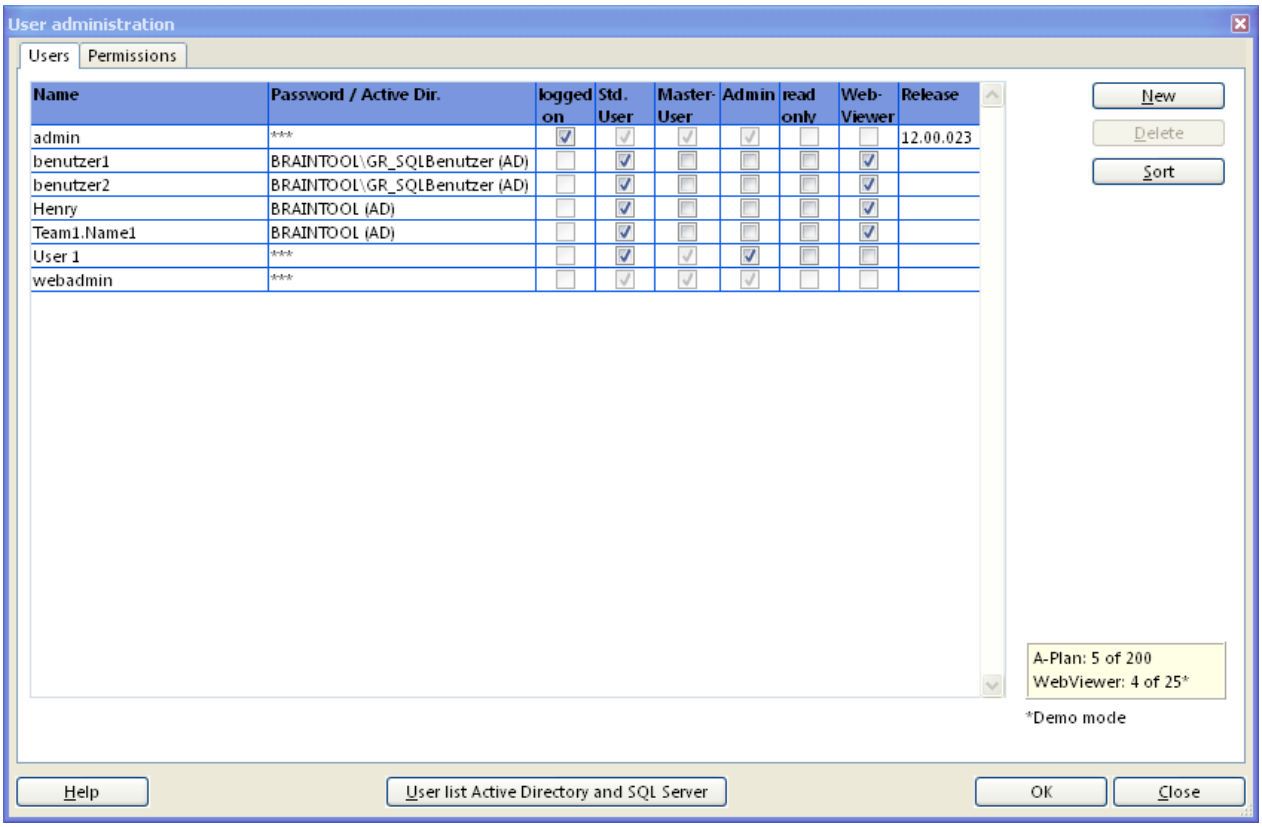
Next, click **Create list** to read available users and/or groups. If a large number of users is to be taken over, it is suitable to cluster them in a group on the **AD** first so that the entire group can then be allocated.

Selecting users in the first column and clicking **Take selected items over to current database** will take over all the selected users into the open database.

Users who already exist in the current database are not displayed, whereas **groups** are displayed. This is due to the fact that you may read groups frequently in order to include new group members into the A-Plan-database or to delete existing users if they are no longer members of the group.

If necessary, users or groups can **also be created as logins on the SQL server first** and can then be taken over into an A-Plan database with the help of the list without reading the AD (in this case leave the field for the domain name empty).

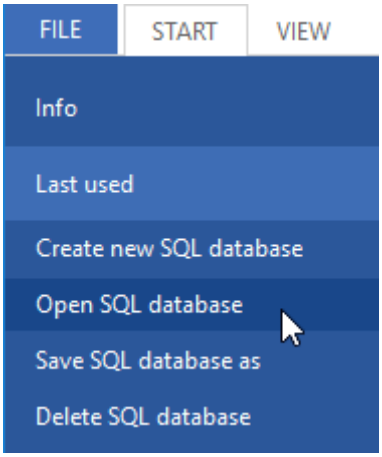
Closing the list will show the updated list of users in the user administration:



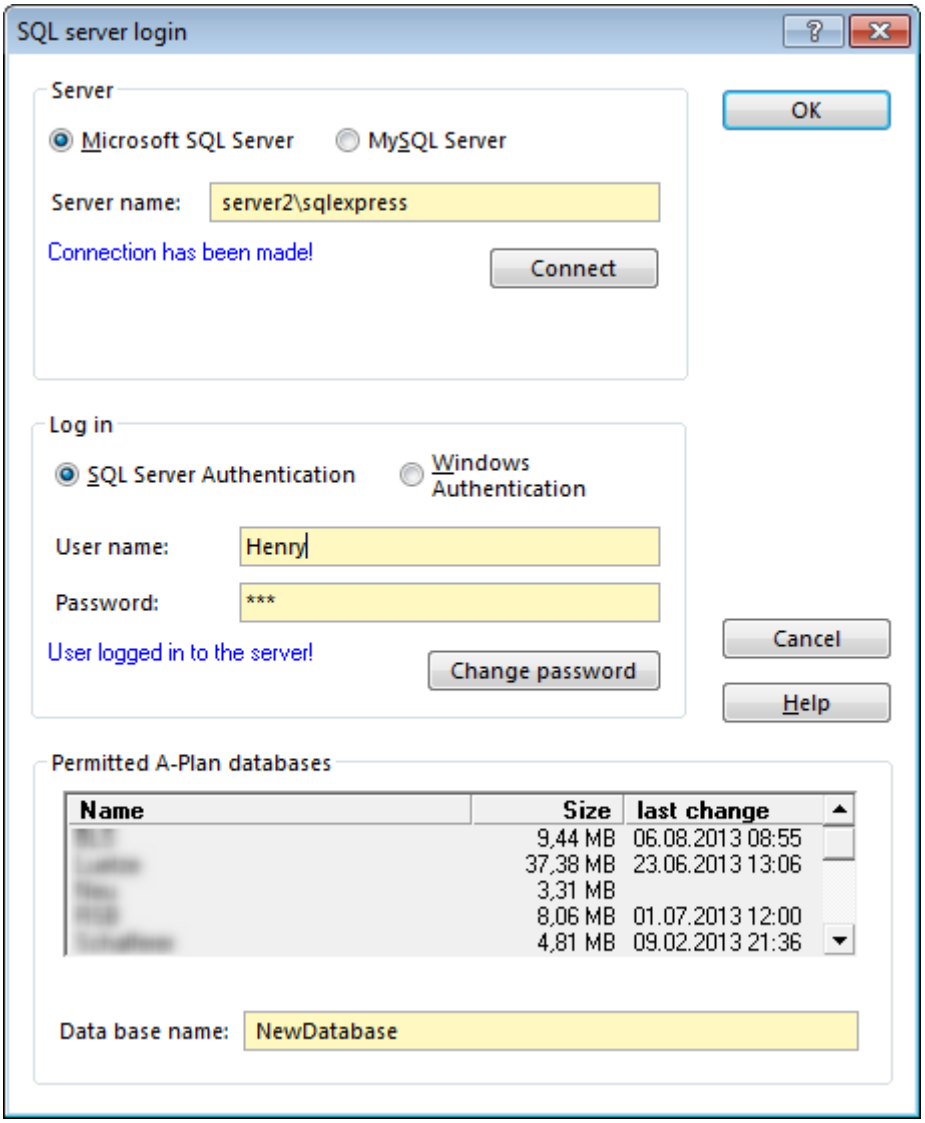

If users were taken over from the AD, their password cannot be changed or deleted in A-Plan. Instead of showing three asterisks, the column **Password / Active Directory** shows the name of the AD and – if existing – the group separated by a backslash.

**Note :** For safety reasons it is not possible within A-Plan to grant the admin right for the A-Plan database to a user who is a member of a group. On the SQL server this would require 'sysadmin' rights which would automatically be granted to all group members. This means that those users who are to be granted admin rights must be allocated as individual users and not as members of a group. If the group was already granted 'sysadmin' right on the SQL server, individual users of this group may be given admin rights for the A-Plan database.

## OPEN SQL DATABASE




Choose the command **Open SQL database** from the tab **File**.




If your user name was not entered from the Active Directory into the A-Plan database, just click **SQL Server Authentication**, type your user name and password and finally click **Connect**.

With the **Windows Authentication** you need not make any entries as it will use the current Windows user.

The list at the bottom of the window displays the A-Plan databases for which the current user does have permission.

Double-click the name of a database to open it.

To open the database in the future will not require you to connect it first because the name of the database that had been opened before will automatically appear in the bottom field and will be connected as soon as you will have clicked **OK**.

## SAVE SQL DATABASE AS

As soon as a database has been opened, a copy of it can be saved on the SQL server by choosing the command **Save SQL database as**. Of course, this also applies to an A-Plan database in **MS Access format.** However, the current user must have administrator rights ('sysadmin') on the SQL server to carry out the function.

The **copy of the SQL database** will also include all users with their permissions**.**

Copying a **MS Access database** to the SQL server will include all those users into the SQL copy who already exist as logins on the SQL server. Supposed that the users are written identically it is of no importance whether the users on the SQL server are users from the Active Directory (AD) or whether they are manually added users with SQL server authentication. Likewise, users of an AD group on the SQL server will be added.

In case of a large number of users it may be helpful to **cluster them in a group on the AD** and to create the group as a login on the SQL server prior to copying the Access database.

Optionally, even the users **who do not yet exist on the SQL server** may be taken over They are created with SQL server authentication and a password is assigned to them which is displayed when the copy is made (for safety reasons the password is not mentioned here in the documentation).

## DELETE SQL DATABASE

A-Plan databases saved on a SQL server can be deleted with A-Plan if the current user has administrator rights.

## MS ACCESS DATABASE

The menu items **New, Open** and **Copy** provided in the submenu **MS-Access database** enable you **to work** with MS-Access databases in the same way as you do in the standard version of A-Plan.

The command **Copy** allows you to make a copy of an MS Access database as well as of a SQL database. In both cases the target format will be MS-Access. Like the command **Save SQL database as** this requires administrator rights as well.

Users will be transferred completely with their permissions. Due to the fact that passwords of users of the Active Directory cannot be taken over, the password of the user 'admin' is inserted for them. Users concerned by this are displayed after copying so that the user 'admin' can then delete or change the passwords of these users in the user administration.

# 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 exmple 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:

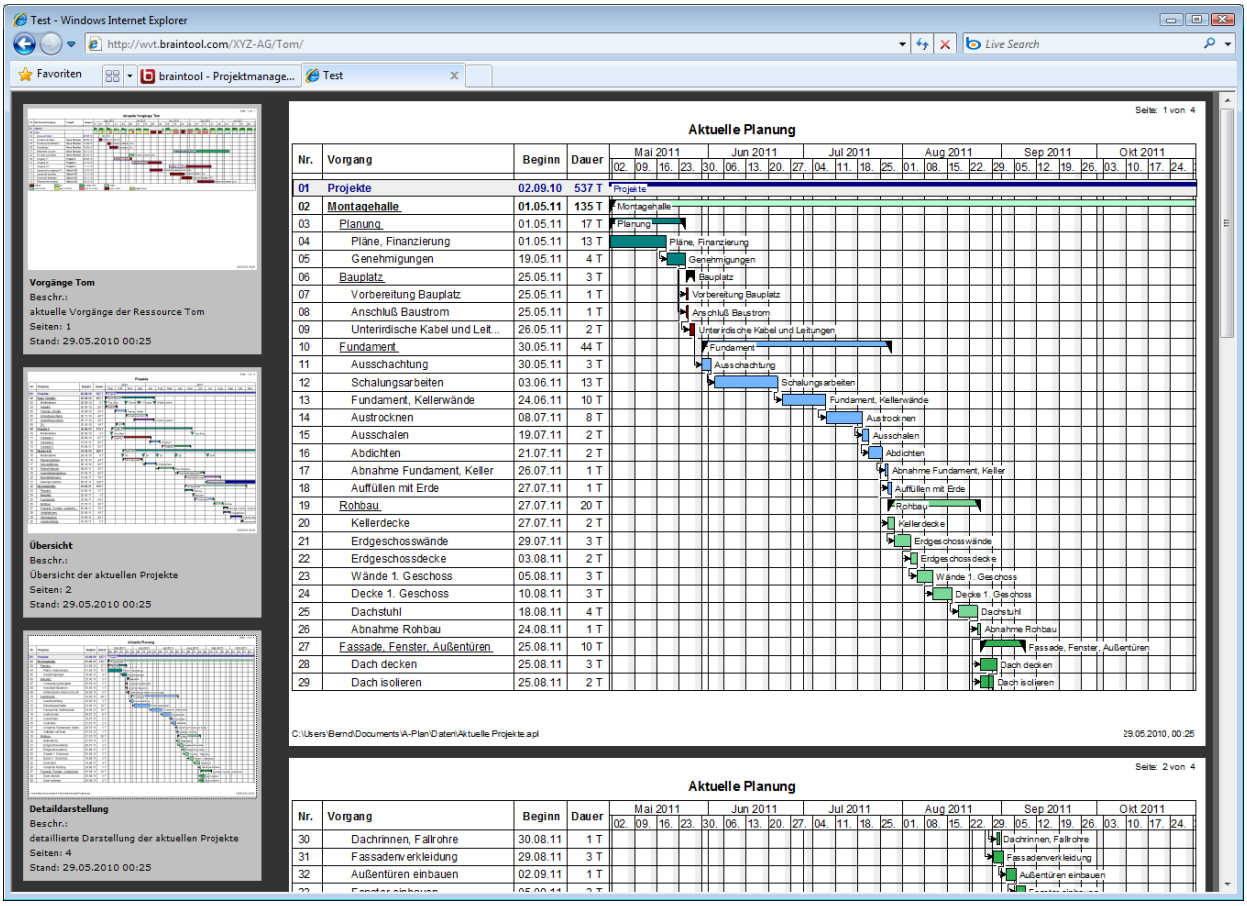
- You can create and manage your data in your familiar Windows environment (with all the functions you are used to, such as permanent operation with the mouse etc.).
- No loss of performance during the planning stage due to slow Internet connections
- Original data remain on your internal corporate server.

- Data backup is still carried out in your corporate network.
- Only authorized data is provided to WebViewer users.
- No installations are required on external devices.
- All types of devices and operating systems are supported.

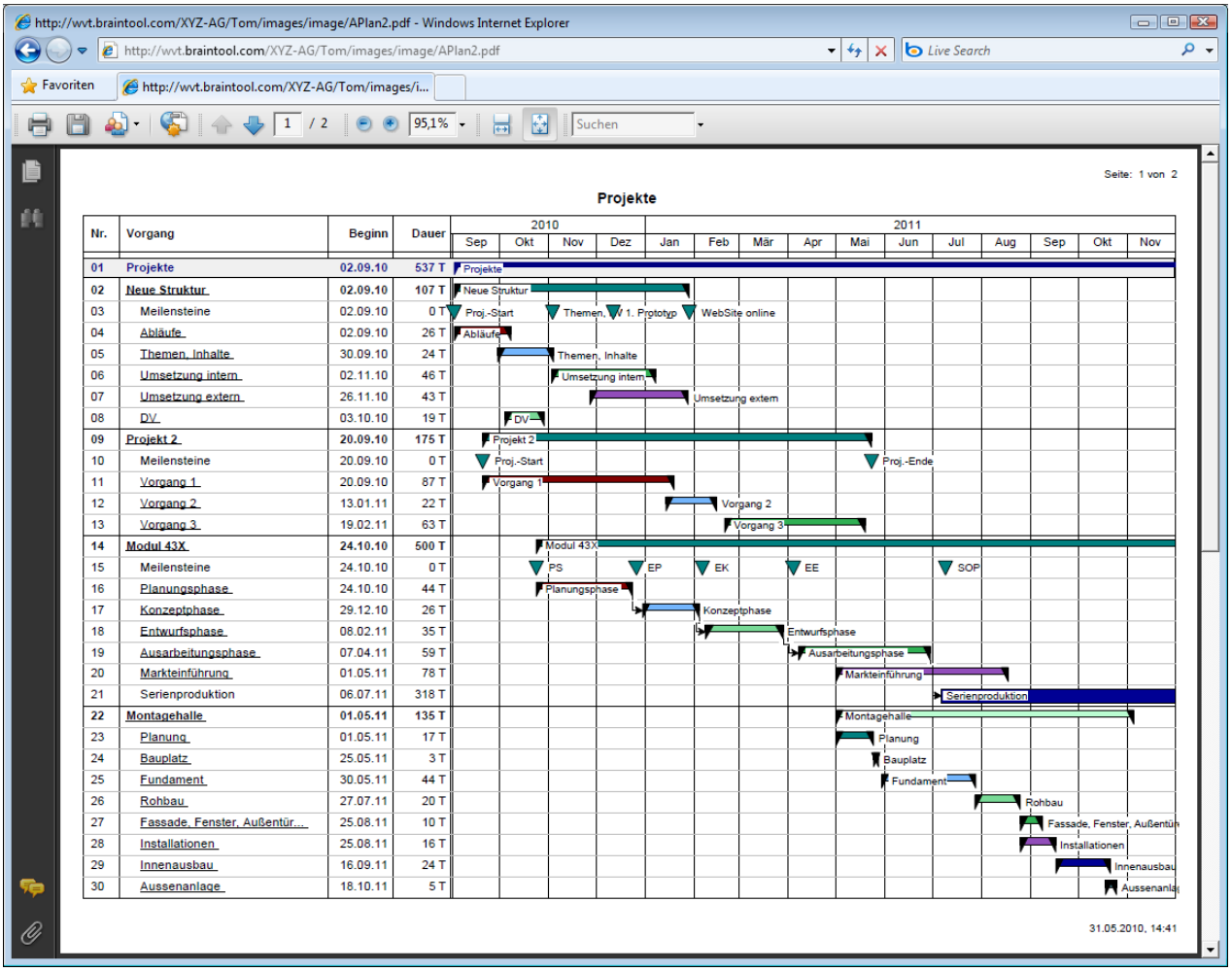
## HOW DOES THE WEBVIEWER WORK?

The **design of the A-Plan WebViewer is as simple as possible and refrains from using any functions (such as for example** Flash Player etc.) which are subject to the risk of not being supported by some of the used devices or operating systems.

The WebViewer pages are made up of quite normal graphics with a navigation bar on the left which displays short texts and minimized objects of the respective first page to give you quick orientation:



Clicking the grahics 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 W**ebViewer**.

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 216.

# WEBCREATOR – MULTIUSER OPERATION

## ADMINISTRATOR MODE

The WebCreator can be used by standard A-Plan users as well (see "User mode" on page 212) but the following functions are available in administrator mode only:

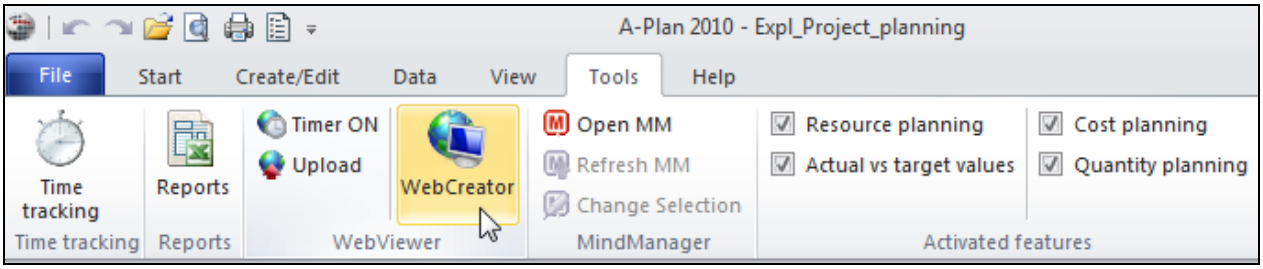
- Making file upload settings

- Administration of all users of the WebViewer
- Timer-controlled upload of views

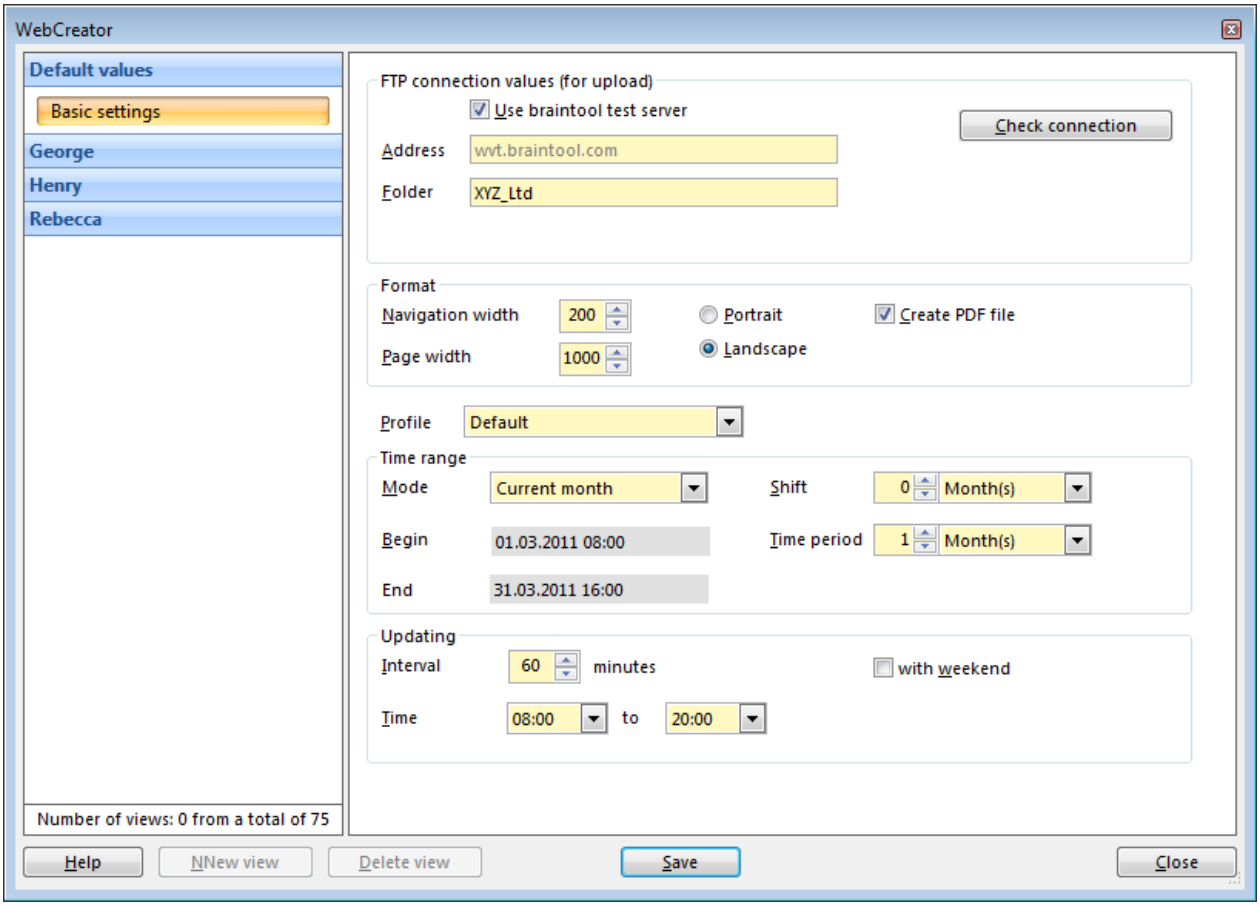
The WebCreator is available in administrator mode if A-Plan is opened with the user name „webadmin“. Like the user „admin“ (see Master-User, Admin on page 185), he has administrator rights but, contrary to the „admin“, he can just view all data (but not change them).

**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



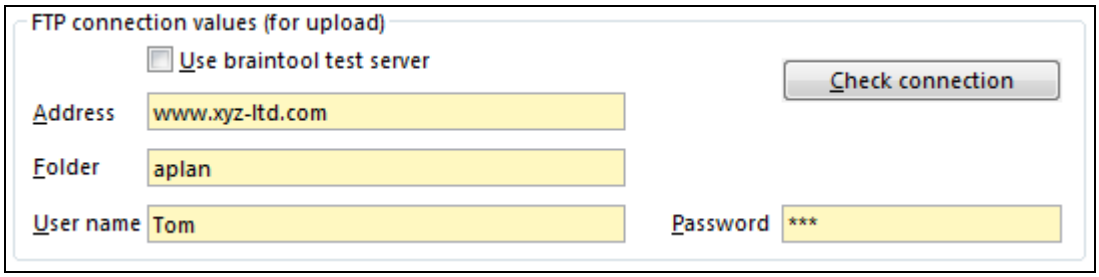

### FTP connection data for upload

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:



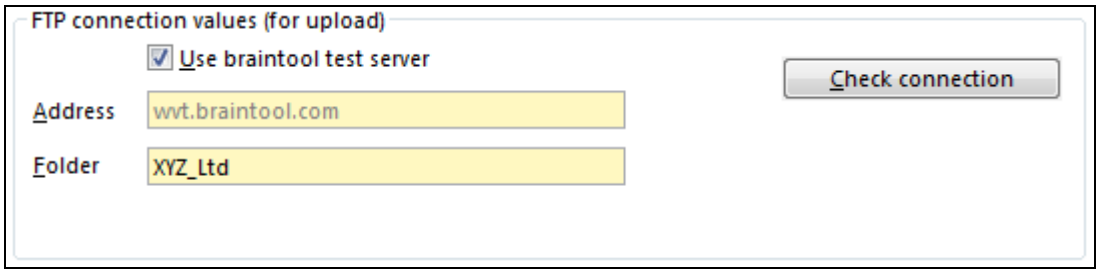

Use the field named Folder to enter the folder in which the subfolders of the WebViewer users are to be created. You may break down the structure even more, as for example to „planning/section1/aplan“ or leave it blank if the user folders are to be created directly in the root.

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** :




You may enter any name in the folder field.

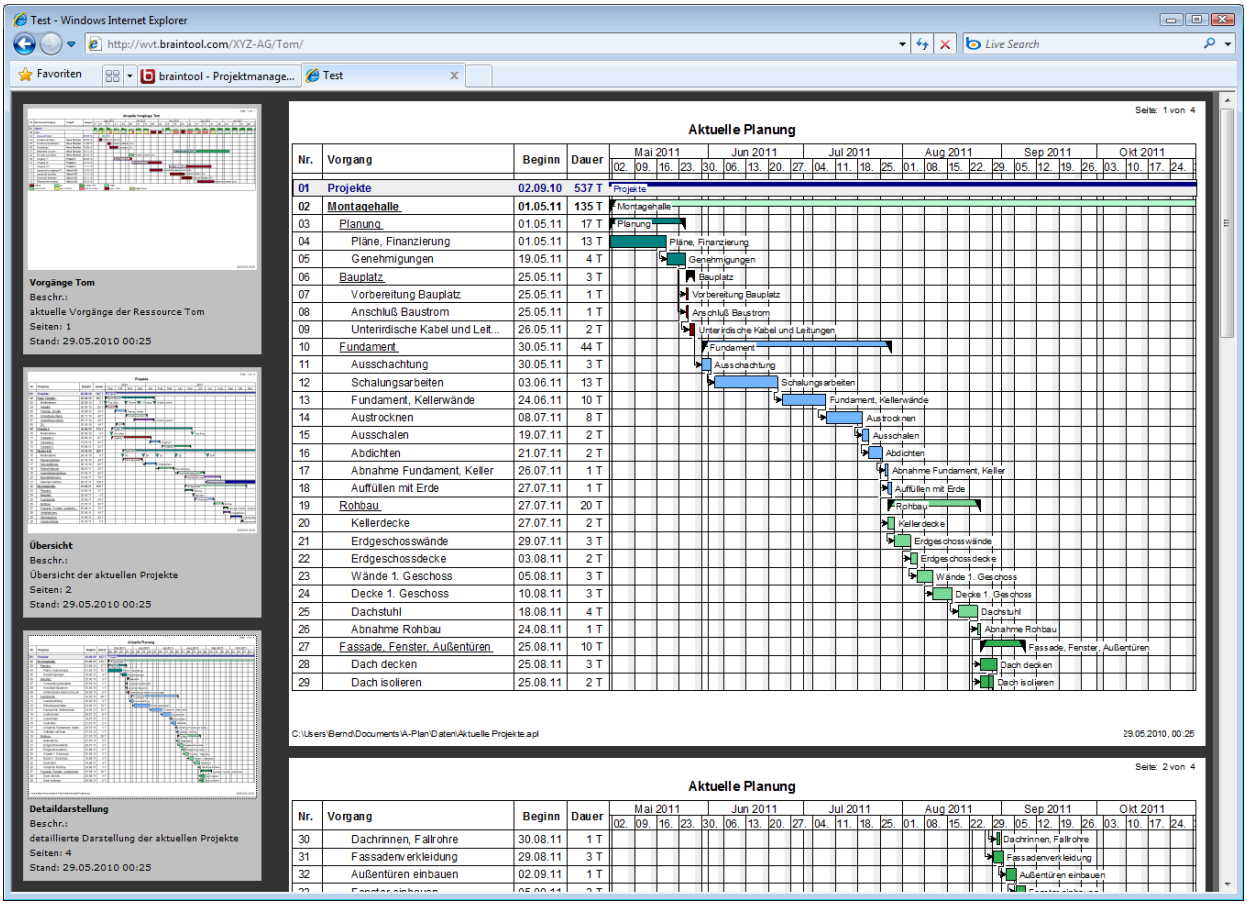
**Important:** Please be aware that views uploaded to the test server will not be saved permanently!

***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!

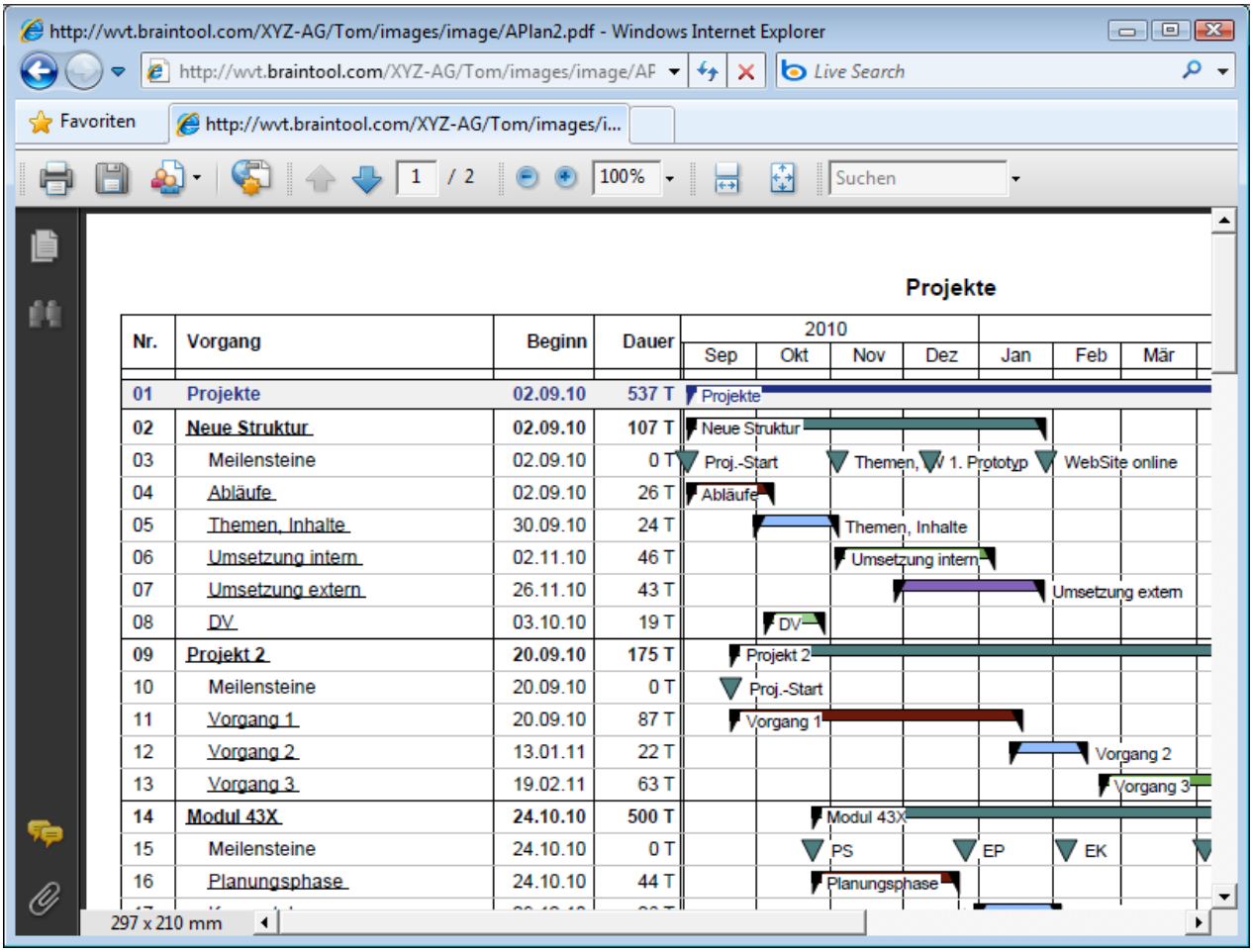
**Format**

The WebViewer shows a navigation bar on the left for each user and the selected graphics on the right-hand side:




Use the format area to make your settings regarding the width of the navigation area and the type of view (landscape or portrait):

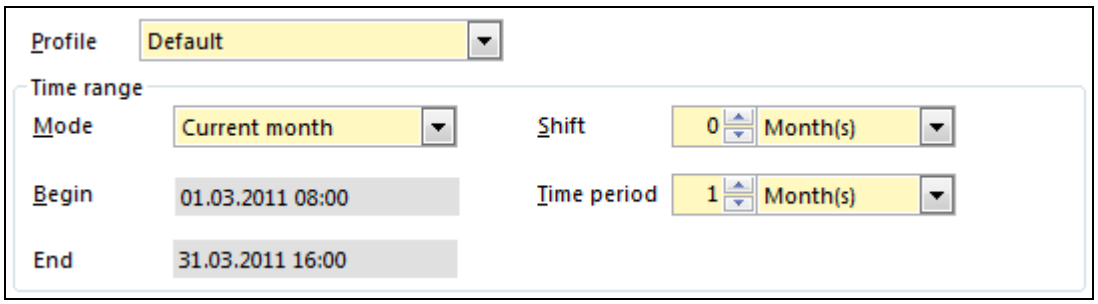
With the box **Create PDF file** being activated, the WebViewer will display the views as PDF files in a separate window after you have clicked on a view:




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 141) as a basis for the creation of views. Regarding the displayed time range and the filter settings (see below), the profiles can be modified:




Only global profiles (see "Global Profiles" on page 142) 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:

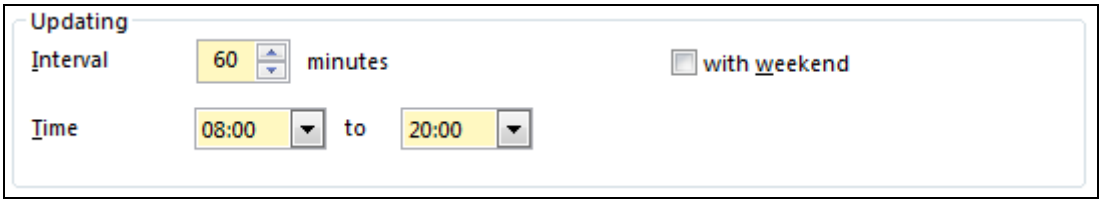
- **As in profile** (takes the setting from the selected profile without changing it)
- **automatically** (selects the time range to have all task bars displayed)
- **fixed date** (begin of time range is set manually)
- **today** (begin of time range = current day)
- **current week** (begin of time range = 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:

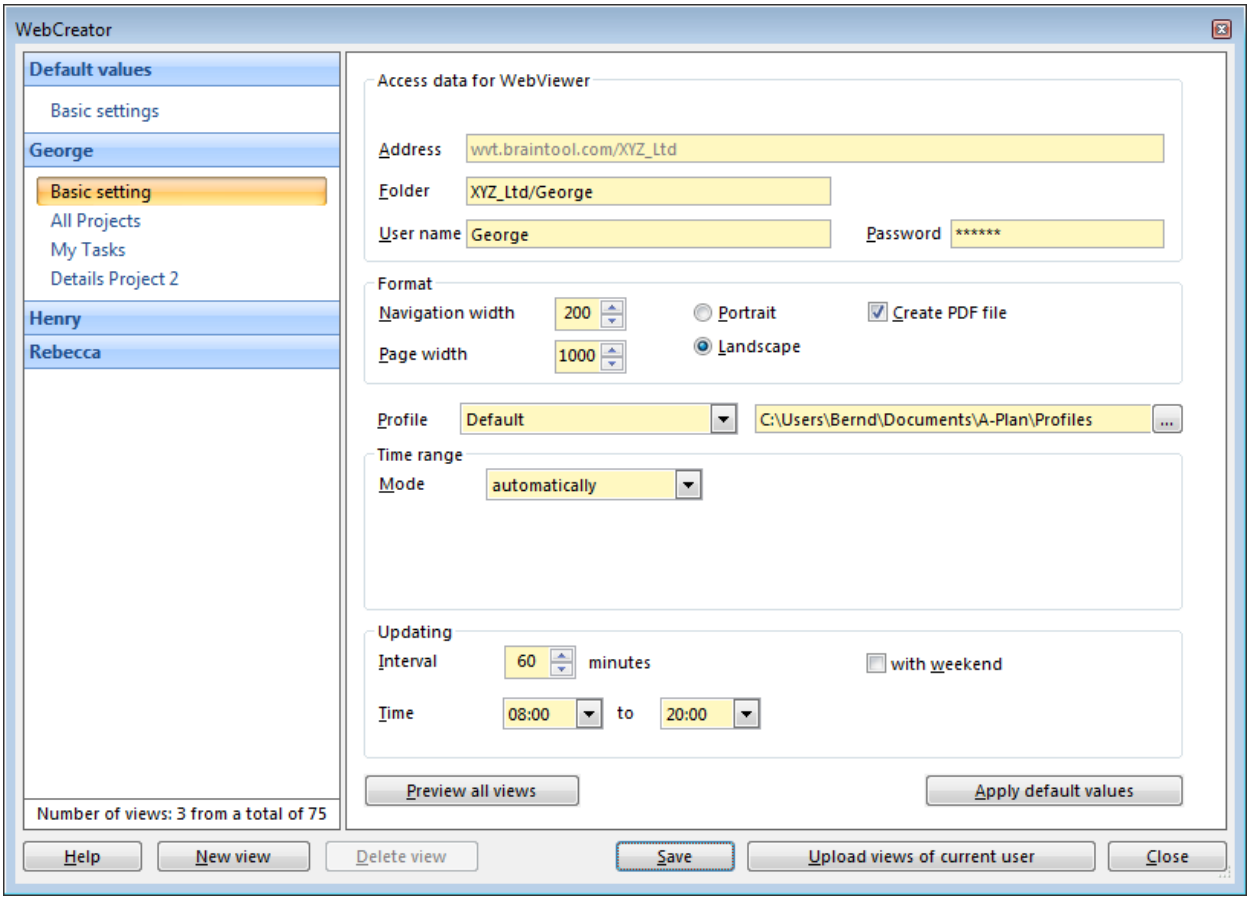



If a large number of users specifies a relatively short interval, it may happen that the system does not comply with the set interval depending on the amount of uploaded data and the speed of the Internet connection. In this case the system will form a queue to ensure that all users will be considered 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 211). This tab allows you to make all the necessary settings:




WebViewer users having a standard A-Plan license as well may make their settings themselves (see "User mode" on page 212).

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 u**ser name** and **password can be entered if a braintool server is used as these are needed to start the W**ebViewer 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.

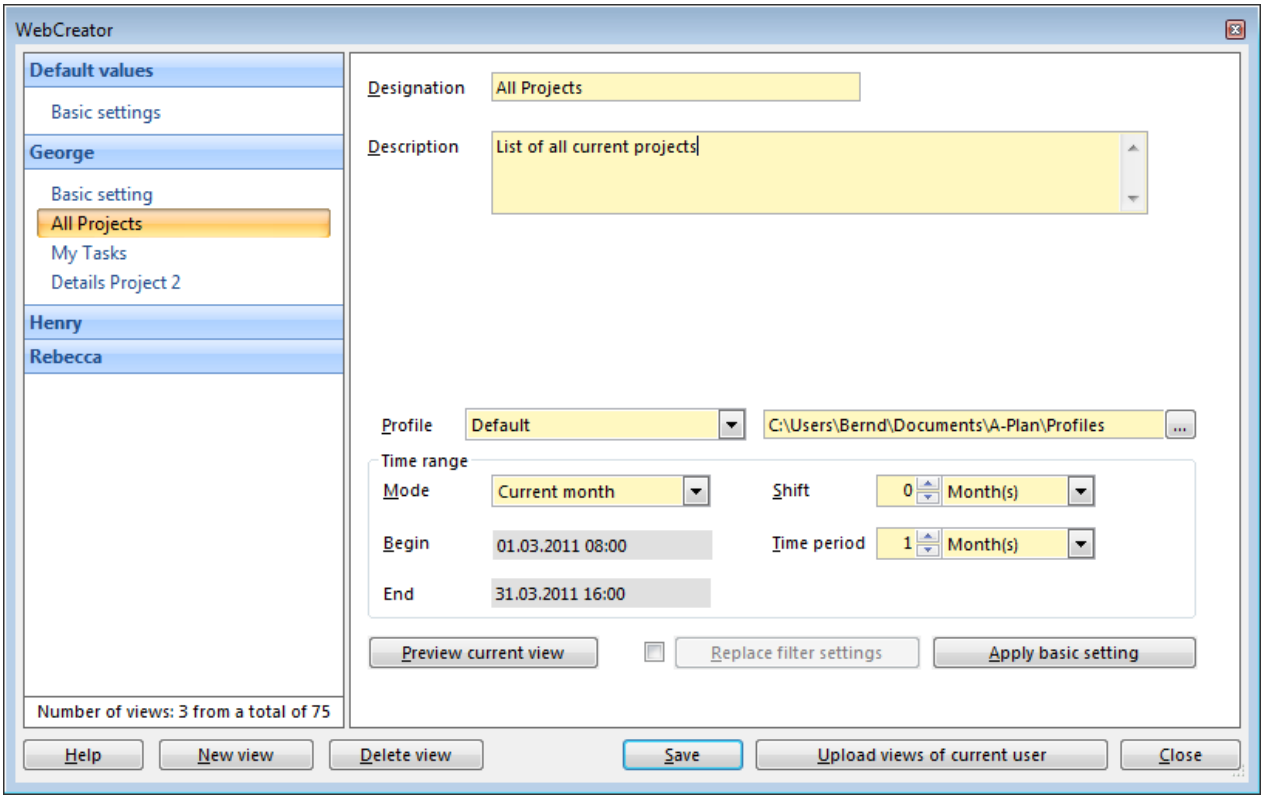
The folder field to the right of the field Profile allows you to set any profile folder (see "Profile folder" on page 141) you like. In addition to global profiles, all profiles included in this folder will then be added to the list of available profiles. Due to the fact that the WebCreator does not 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.

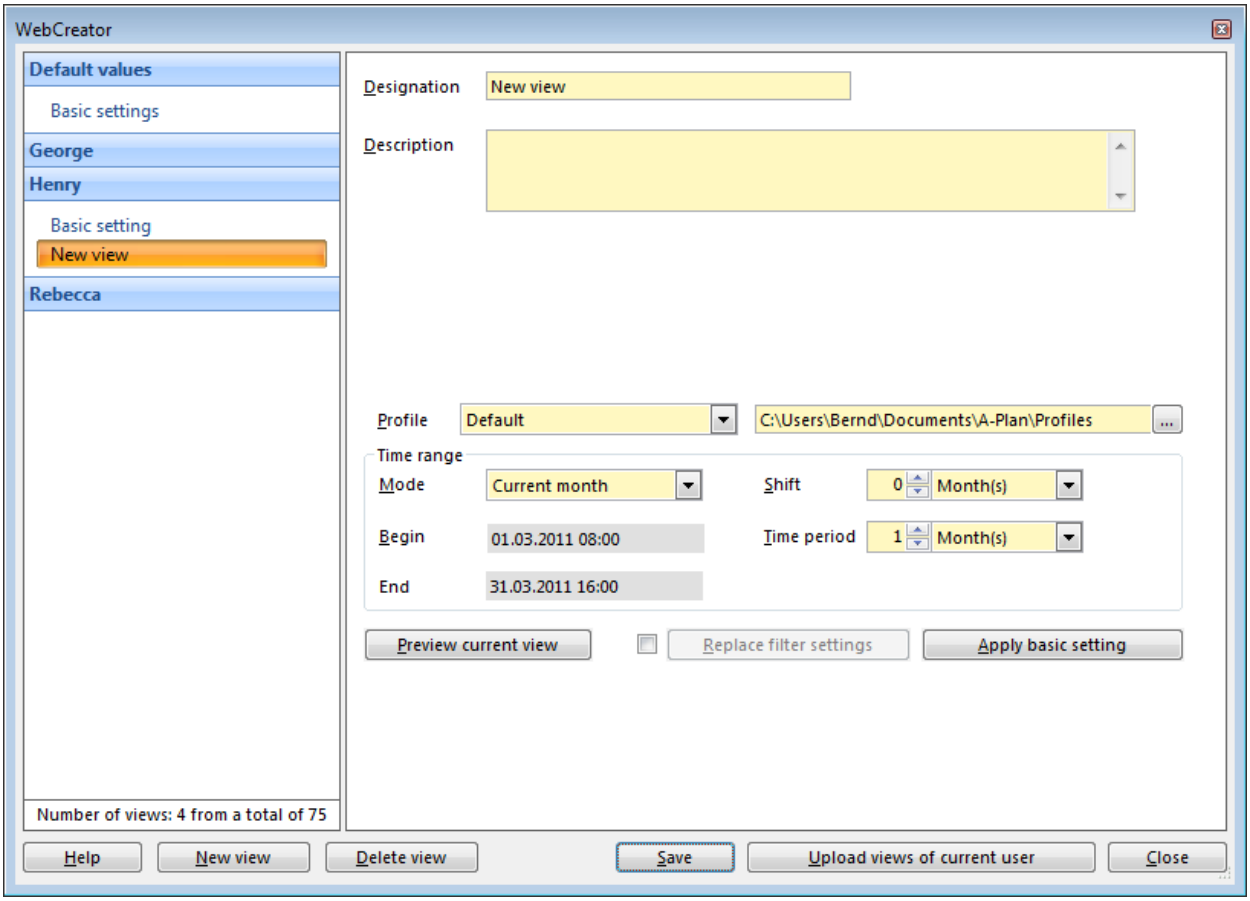
For each view a **profile** and a **time range** can be set which differ from the basic settings of the user.

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 78. 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 212).

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 212).

### Creating new views

A view is created when a user tab is opened for the first time:

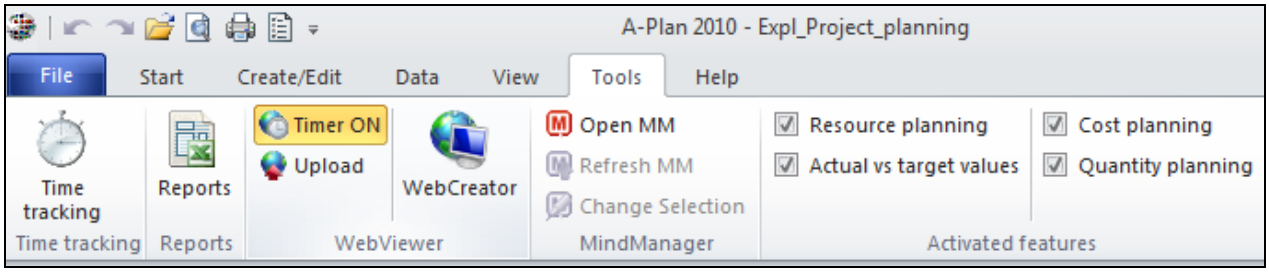



To create more views just click the button **New view**.

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

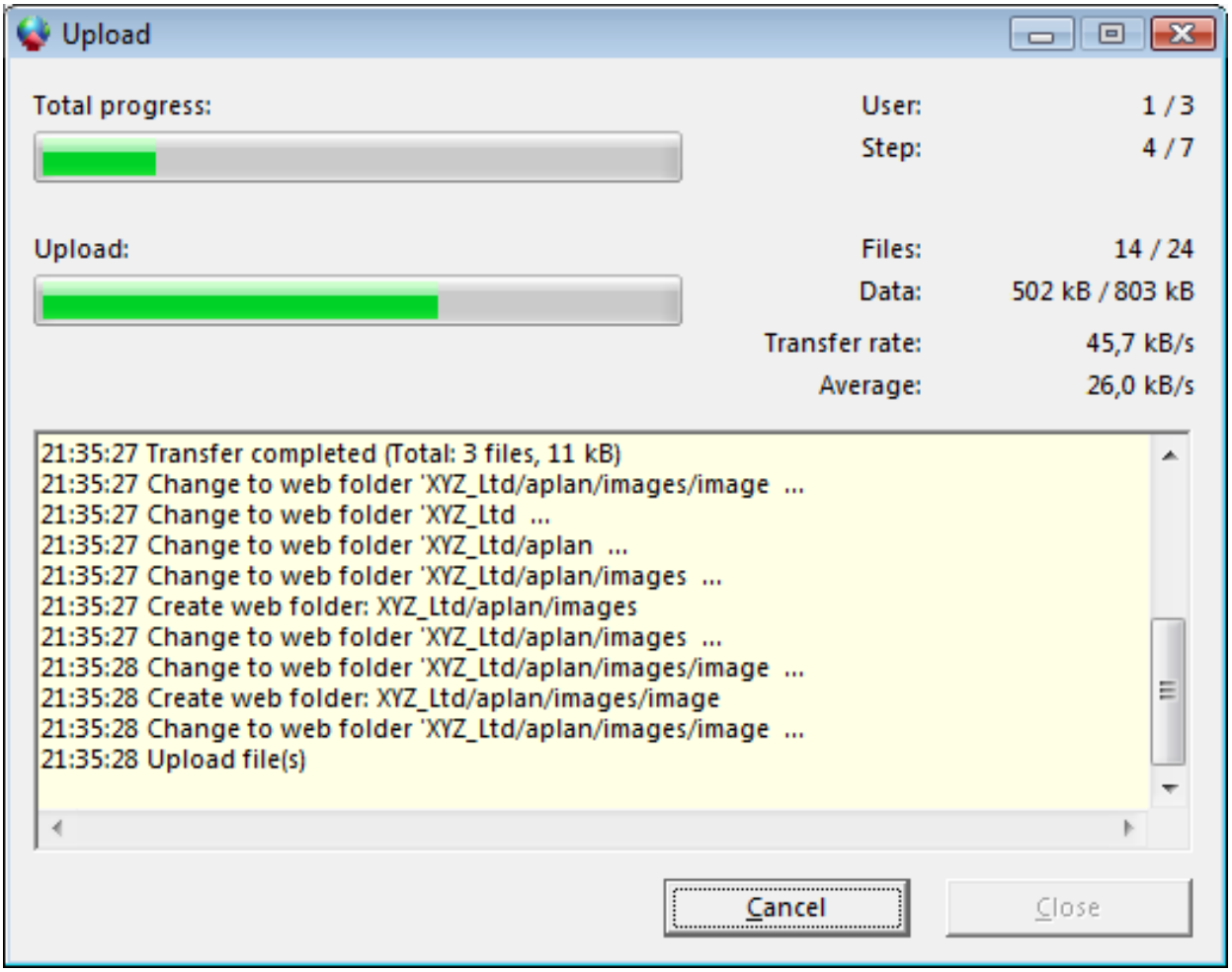
With the **timer** being activated, the views are **uploaded automatically** according to the intervals set for the users:




**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:

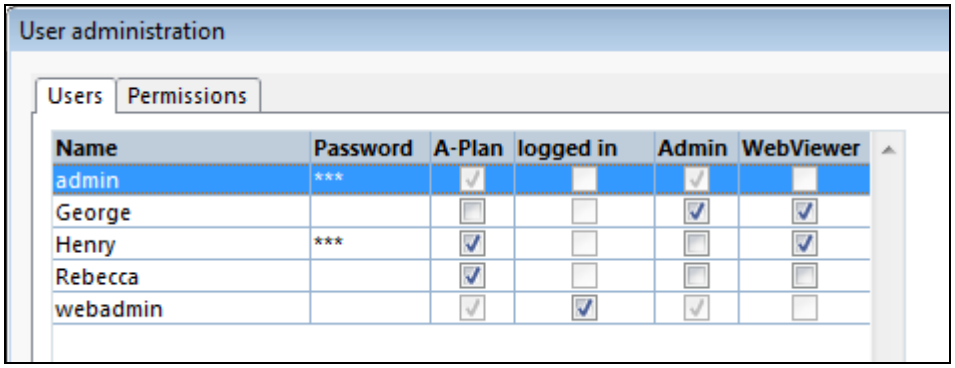



Furthermore, a log file named **WebCreator.log** is created in which all actions are recorded. This log file can be found in the folder **$Web** which is located one level below the folder holding the global profiles (see "Global Profiles" on page 142).

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 209).

## USER ADMINISTRATION

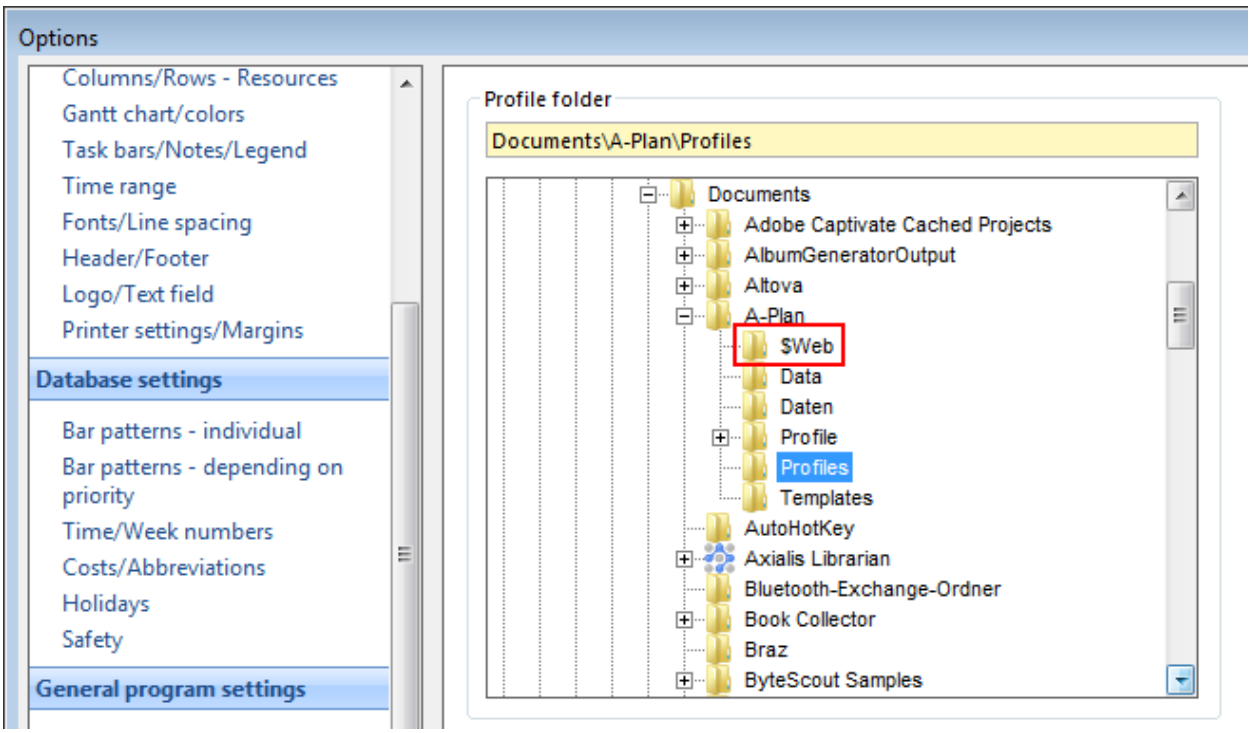
Within the framework of existing licenses the user administration of A-Plan (ribbon tab **Tools**) allows you to determine which users may use A-Plan and which users may use the WebViewer:




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 209). It is 3 times the number of licenses for the WebViewer and is independent of the number of users having permision in the user administration.

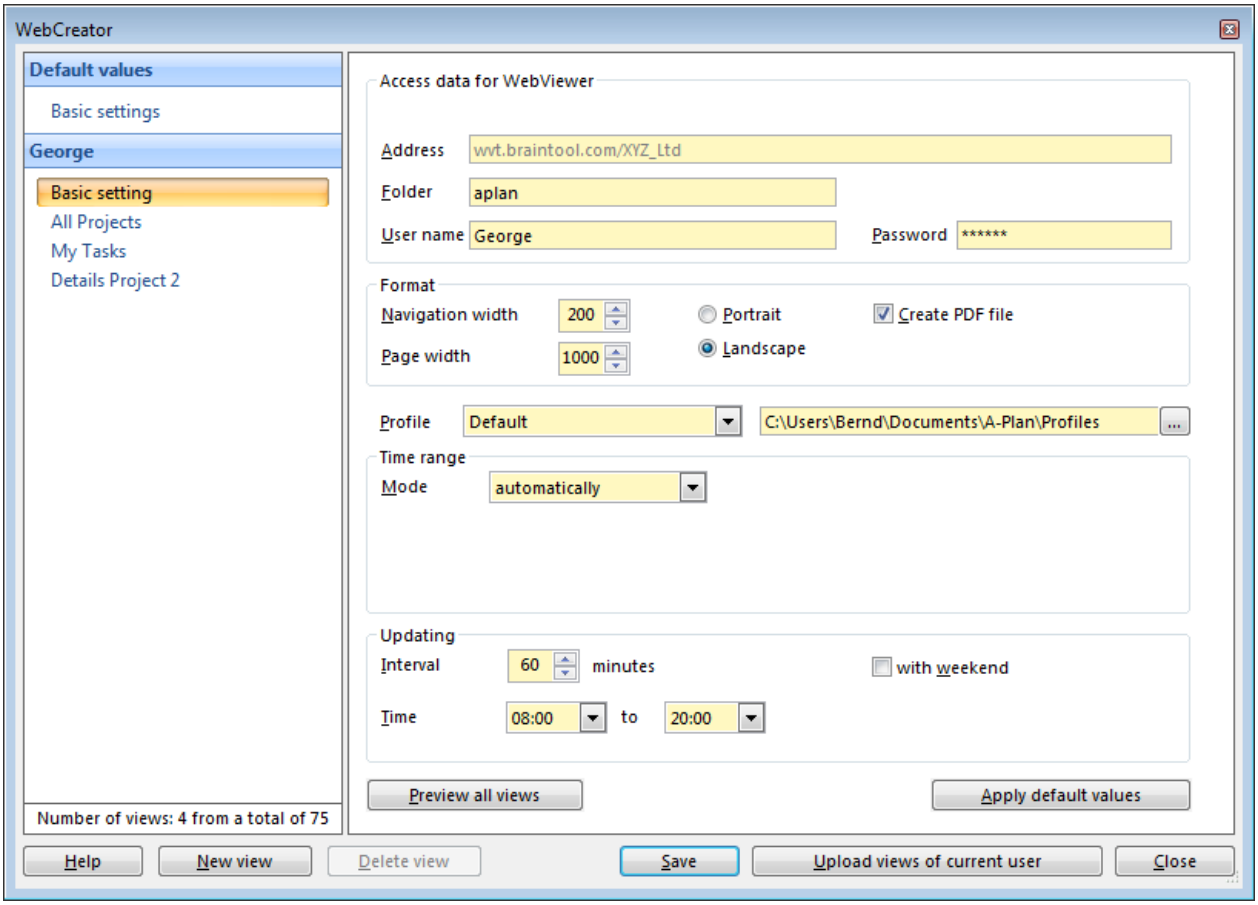
## ADMINISTRATION OF SETTINGS

The settings made in the WebCreator are saved in the folder **$Web**, one level below the global profile folder (see "Global Profiles" on page 142). 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 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:



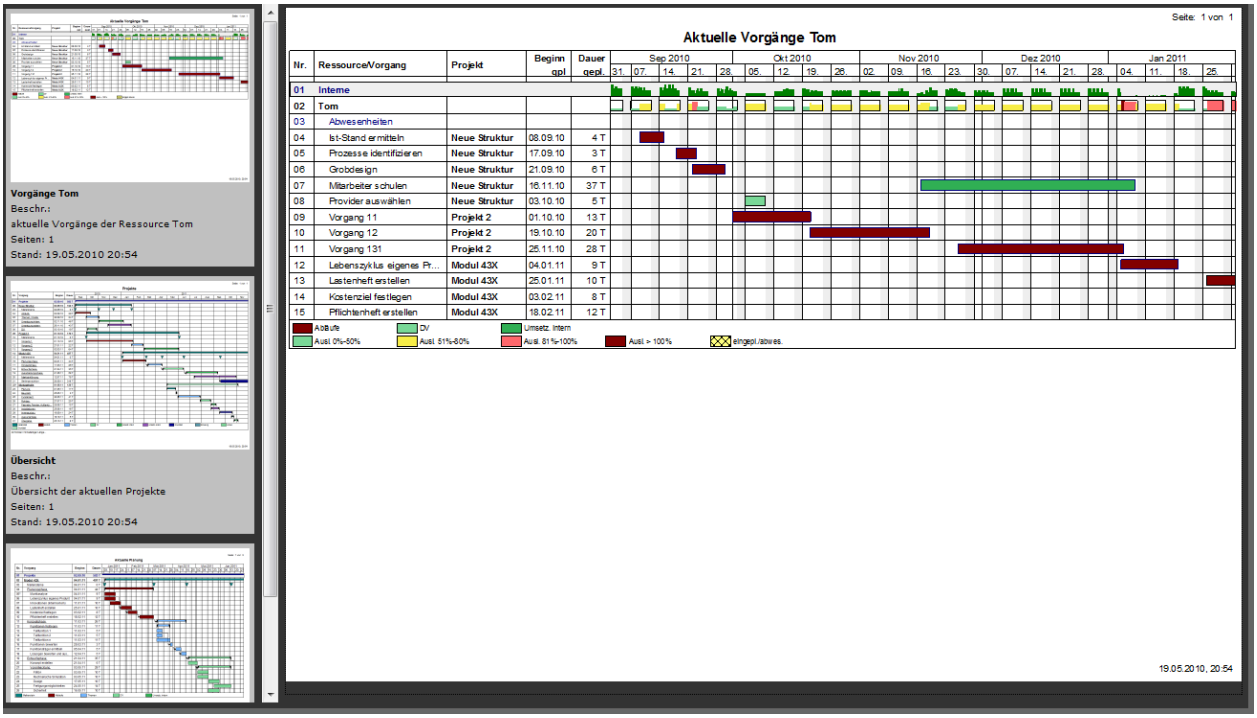

Likewise, the timer-controlled upload is not possible as A-Plan is locked during the upload. The WebCreator license is available for this purpose (see "Uploading views to the Webserver" on page 210).

# WEBVIEWER

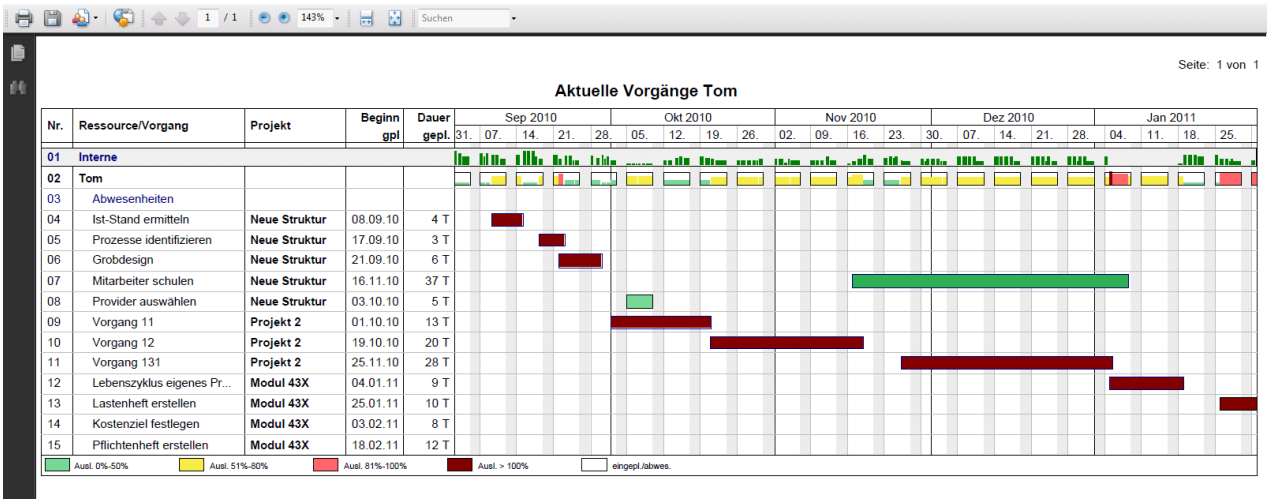
Using the WebViewer requires nothing else but a browser and access to the Internet. It does not matter which browser you use. Likewise, you do not need a specific appliance or operating system or any particular components (such as, for example, a flash player) as the WebViewer is made up of normal HTML pages. The only exception is a PDF reader which is needed for displaying PDF files (see "Views" on page 209). 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 208). 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:



The PDF file is displayed in a separate window after you have clicked on one of the views:



Seite: 1 von 1

**Aktuelle Vorgänge Tom**

| Nr. | Ressource/Vorgang | Projekt | Beginn gpl | Dauer gepl. |
|---|---|---|---|---|
| 01 | Interne | | | |
| 02 | Tom | | | |
| 03 | Abwesenheiten | | | |
| 04 | Ist-Stand ermitteln | Neue Struktur | 08.09.10 | 4 T |
| 05 | Prozesse identifizieren | Neue Struktur | 17.09.10 | 3 T |
| 06 | Grobdesign | Neue Struktur | 21.09.10 | 6 T |
| 07 | Mitarbeiter schulen | Neue Struktur | 16.11.10 | 37 T |
| 08 | Provider auswählen | Neue Struktur | 03.10.10 | 5 T |
| 09 | Vorgang 11 | Projekt 2 | 01.10.10 | 13 T |
| 10 | Vorgang 12 | Projekt 2 | 19.10.10 | 20 T |
| 11 | Vorgang 131 | Projekt 2 | 25.11.10 | 28 T |
| 12 | Lebenszyklus eigenes Pr... | Modul 43X | 04.01.11 | 9 T |
| 13 | Lastenheft erstellen | Modul 43X | 25.01.11 | 10 T |
| 14 | Kostenziel festlegen | Modul 43X | 03.02.11 | 8 T |
| 15 | Pflichtenheft erstellen | Modul 43X | 18.02.11 | 12 T |

Sep 2010: 31. 07. 14. 21. 28.
Okt 2010: 05. 12. 19. 26.
Nov 2010: 02. 09. 16. 23. 30.
Dez 2010: 07. 14. 21. 28.
Jan 2011: 04. 11. 18. 25.

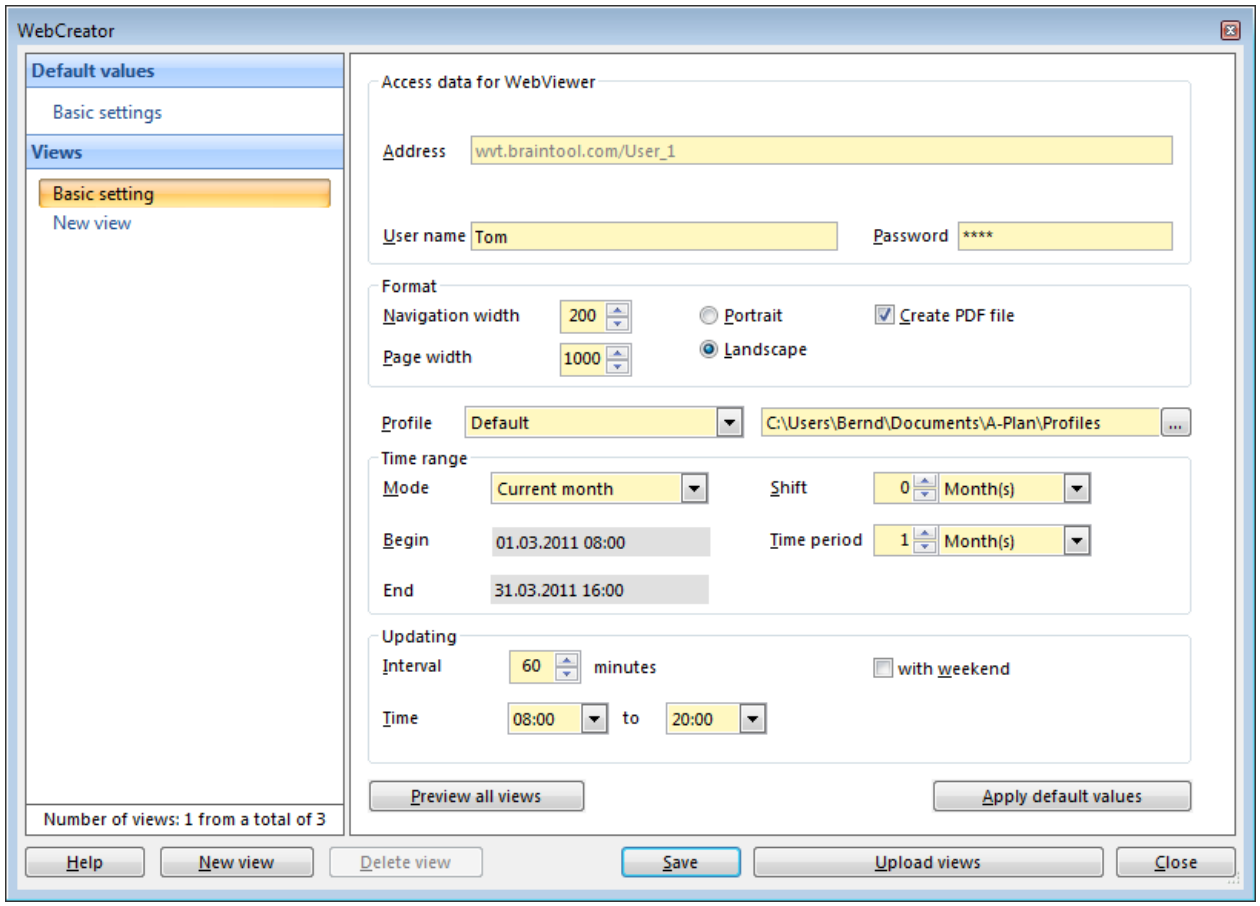
Ausl. 0%-50% | Ausl. 51%-80% | Ausl. 81%-100% | Ausl. > 100% | eingepl./abwes.

You may save or print the PDF file.

# WEBCREATOR – SINGLE USER

If you purchased a single user license of A-Plan, the WebCreator is included in the license. As a consequence, it needs not be activated by the user „webadmin“.

In this case, only **basic settings** and **views** will be available after the WebCreator was started:




Basically, the settings and the handling are the same as with a multiuser license (see "WebCreator – MultiUser operation" on page 202) 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

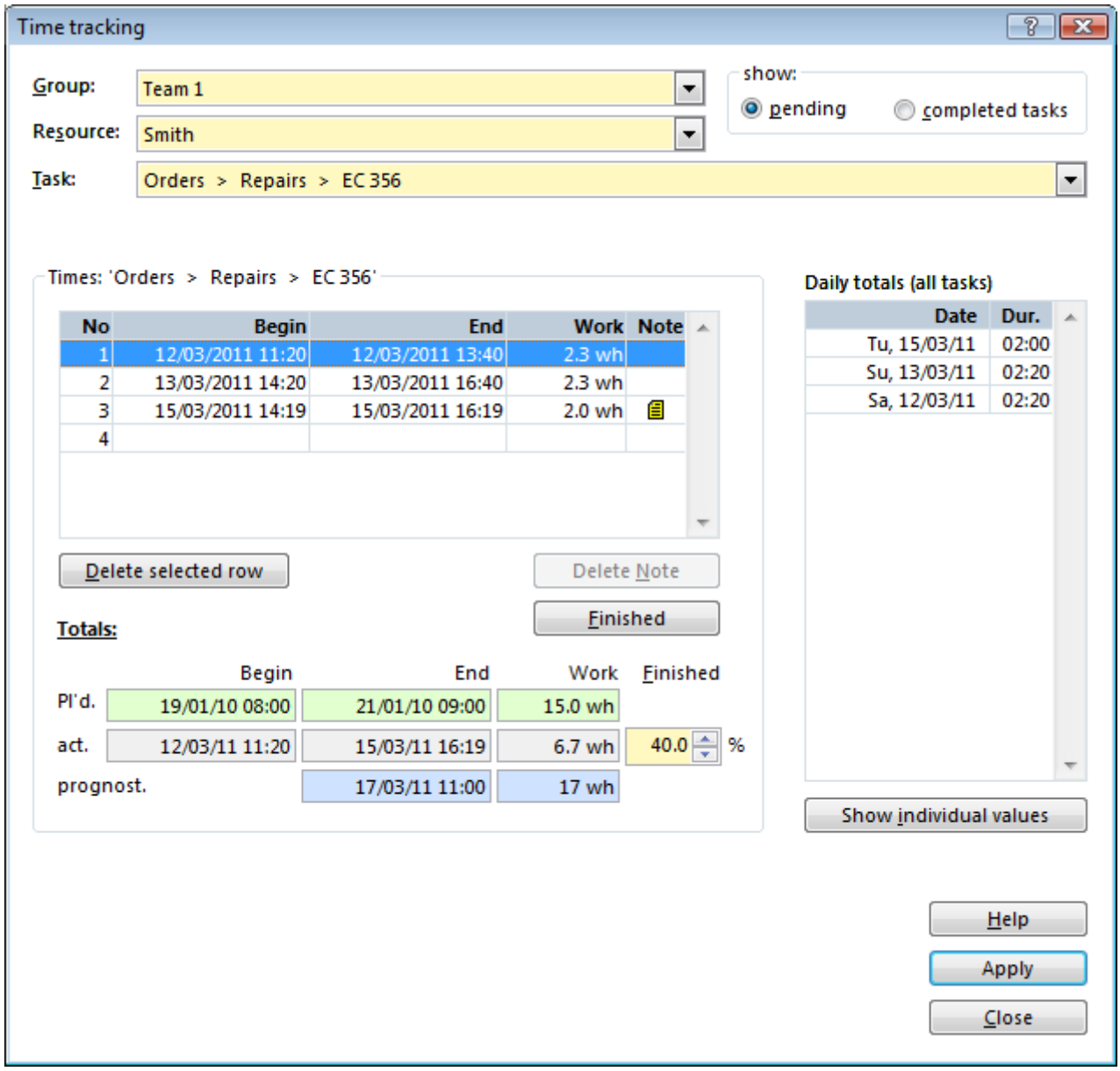
The optional time tracking module for A-Plan allows you to collect and present in detail the work spent on the execution of tasks and the costs resulting from the execution. To do so, resources may either use a special dialogue box of A-Plan for entering actual work or a universal interface to take entered 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

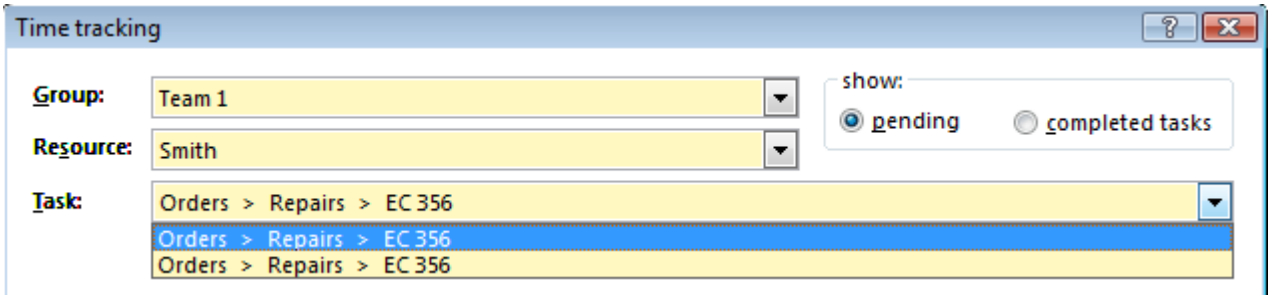
# TIME TRACKING WITH A-PLAN

To open the **Time tracking** dialog box, click on **Time tracking** in the ribbon tab **Tools**. The group and the name of the currently logged-on user are displayed in the upper half of the dialog box:

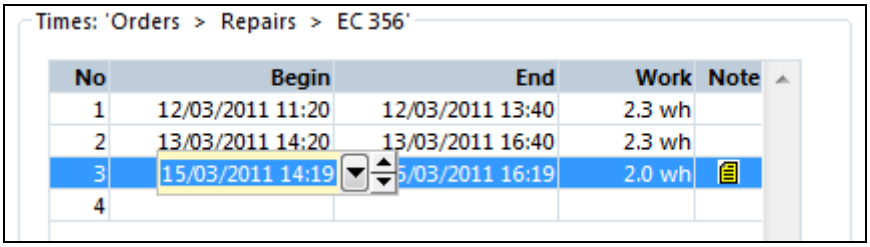



**Note**:
The name entered by a user to log on to the database must be identical to the name of the resource!
All resource names used in the database must be unique. i.e. they must not be used twice or several times, not even in different resource groups!
Users having administrator rights are allowed 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:



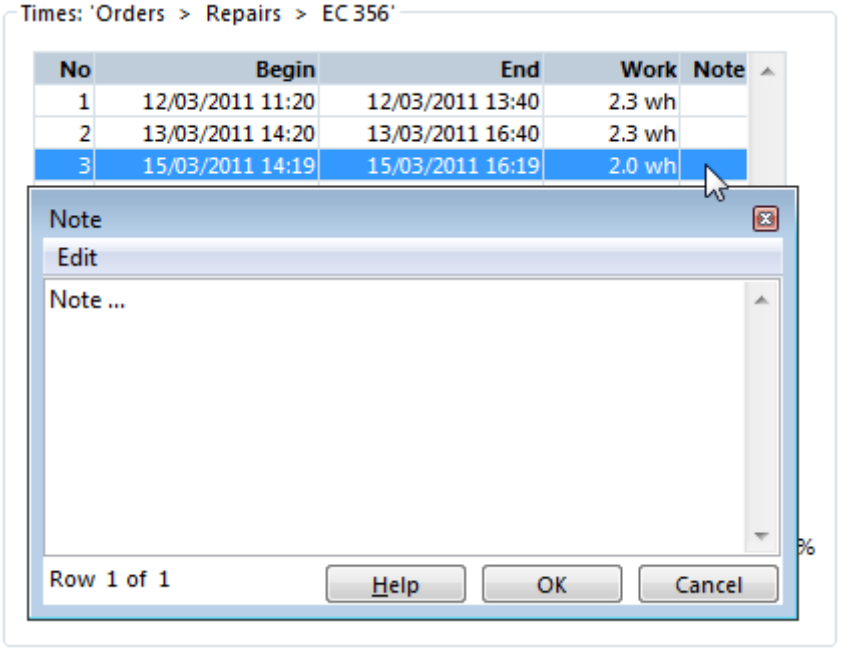

Clicking the field **Begin** when you start work will enter the present time. The same applies if you click the field **End** when you interrupt or finish your work.

If you enter the **performed work** instead of the **end**, A-Plan will calculate the end for you.

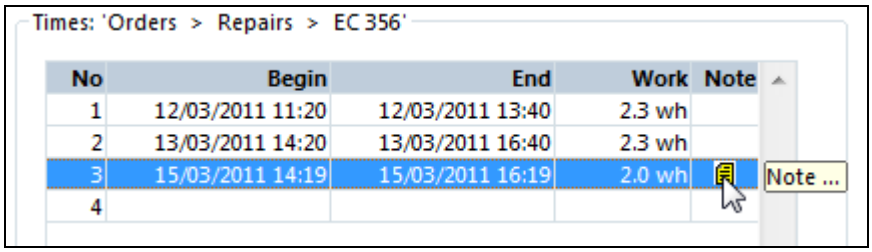
If spent worktime is to be entered without specifying the begin and/or end, it is sufficient to enter the spent time in the column **Work**. A-Plan will then calculate the end assuming that work was started at 6:00.

**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:

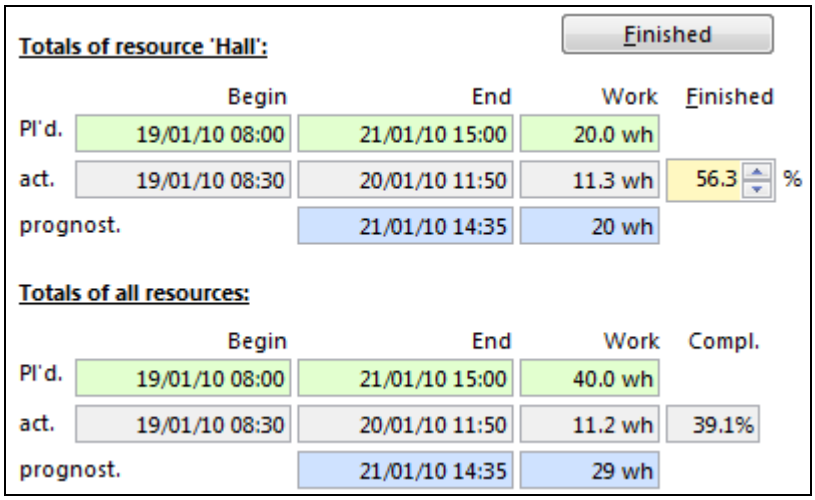



A symbol appears in the column Note as soon as you have closed the edit window. Hovering the mouse pointer over the symbol will display the note:



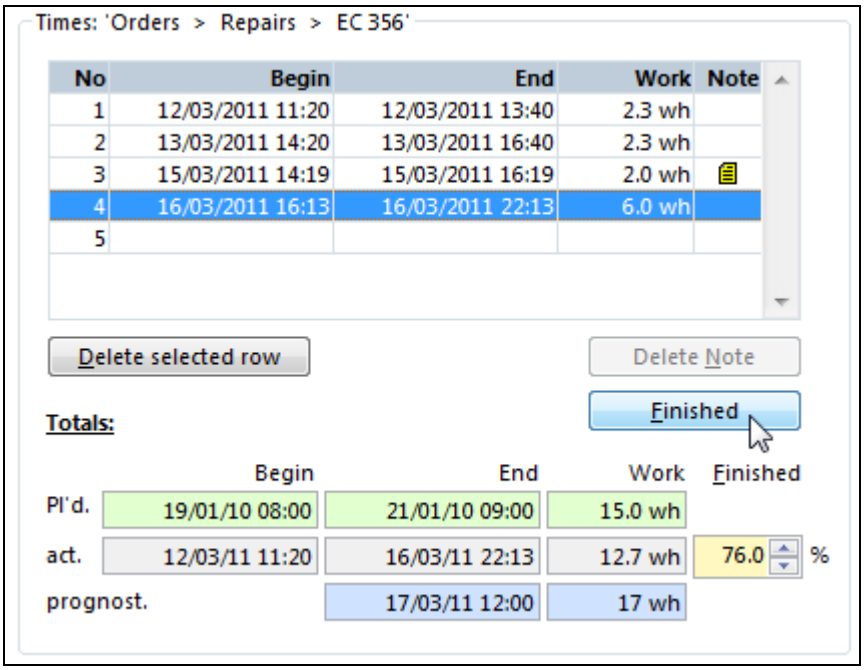

## TOTALS, LEVEL OF COMPLETION

The lower part of the dialog box provides a summary of your **planning**, of currently **collected times** and of **prognosticated values**:




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.

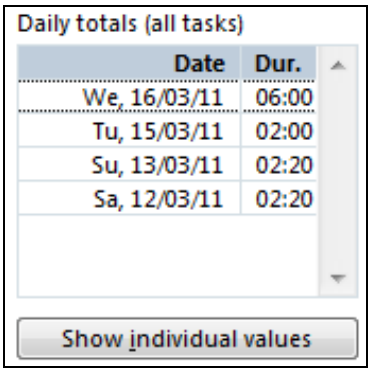
If several resources are assigned to a task, the totals of the values of all resources are displayed below the totals of the involved user.




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

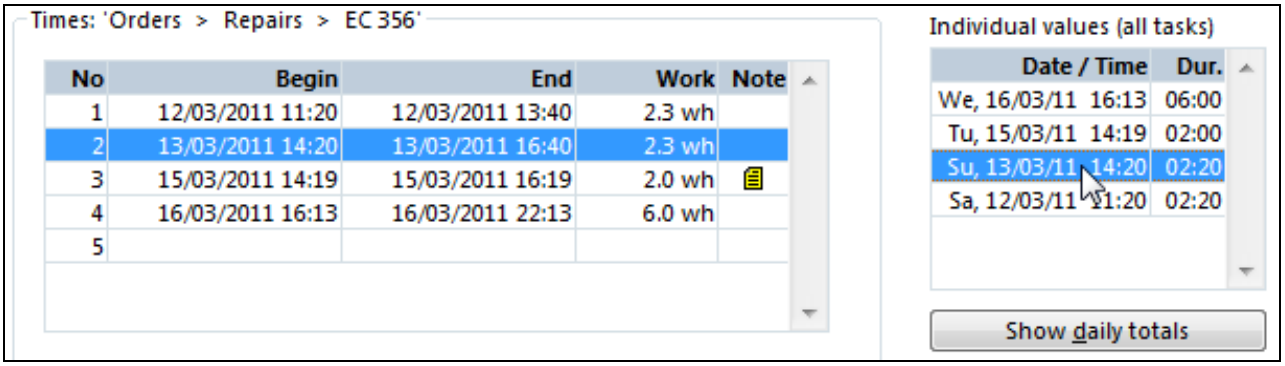



A list on the right of the dialog box displays **all times** entered until now by the current user for **all tasks**. Values can be displayed in two different ways.

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:



# 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 **Istzeiten.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-Plan12“ by default). It specifies the following parameters for the import of actual times:

***Paragraph [Options]***

| Parameter | Values | Explanation |
|---|---|---|
| **Import_File**= | Name of import file(s) incl. path | Import file(s) for collected actual times ("*" can be used as a wildcard, e.g. "...\times*.xlsx" for "...\times1.xlsx", "...\times2.xlsx" etc.) |
| **Interval**= | 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. |
| **CancelAfterError**= | 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“. |
| **DeleteAfterImport**= | 0 or 1 | Choosing „1“ will delete import files after they have been read successfully. |
| **Separator**= | Any character or „tab“ | Separator between fields if a text file is used (tabulator = tab) |
| **FactorCompleted%**= | 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%) |
| **FactorUsage%**= | 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 |
|---|---|---|
| **No**= | 0 - 32 / A - AE | Number of line (if no columns exist, lines are numbered internally by A-Plan) |
| **Date**= | 0 - 32 / A - AE | Date of collected time |
| **TimeIn**= | 0 - 32 / A - AE | Date and/or time of begin |
| **TimeOut**= | 0 - 32 / A - AE | Date and/or time of end |
| **Duration**= | 0 - 32 / A - AE | Duration (any format) |
| **Mo**= | 0 - 32 / A - AE | Duration on Monday (any format) |
| **Tu**= | 0 - 32 / A - AE | Duration on Tuesday (any format) |
| **We**= | 0 - 32 / A - AE | Duration on Wednesday (any format) |
| **Th**= | 0 - 32 / A - AE | Duration on Thursday (any format) |
| **Fr**= | 0 - 32 / A - AE | Duration on Friday (any format) |
| **Sa**= | 0 - 32 / A - AE | Duration on Saturday (any format) |
| **Su**= | 0 - 32 / A - AE | Duration on Sunday (any format) |
| **Completed%**= | 0 - 32 / A - AE | Scope of completion (see also „FactorCompleted%“ in [Options]) |
| **Usage%**= | 0 - 32 / A - AE | Usage (see also „FactorUsage%“ in [Options]) |
| **FolderIdentNo**= | 0 - 32 / A - AE | Ident no of the folder in A-Plan |
| **ProjectIdentNo**= | 0 - 32 / A - AE | Ident no of the project in A-Plan |
| **TaskIdentNo**= | 0 - 32 / A - AE | Ident no of the task in A-Plan |
| **FolderDesignation**= | 0 - 32 / A - AE | Designation of the folder in A-Plan |
| **ProjectDesignation**= | 0 - 32 / A - AE | Designation of the project in A-Plan |
| **TaskDesignation**= | 0 - 32 / A - AE | Designation of the task in A-Plan |
| **FolderIndex**= | 0 - 32 / A - AE | Index of the folder in A-Plan |
| **ProjectIndex**= | 0 - 32 / A - AE | Index of the project in A-Plan |
| **TaskIndex**= | 0 - 32 / A - AE | Index of the task in A-Plan |
| **GroupIdentNo**= | 0 - 32 / A - AE | Ident no of the resource group in A-Plan |

| | | |
|---|---|---|
| **ResourceIdentNo**= | 0 - 32 / A - AE | Ident no of the resource in A-Plan |
| **GroupDesignation**= | 0 - 32 / A - AE | Designation of the resource group in A-Plan |
| **ResourceDesigna-tion**= | 0 - 32 / A - AE | Designation of the resource in A-Plan |
| **GroupIndex**= | 0 - 32 / A - AE | Index of the resource group in A-Plan |
| **ResourceIndex**= | 0 - 32 / A - AE | Index of the resource in A-Plan |
| **Absence**= | 0 - 32 / A - AE | Kind of absence |
| **Remark**= | 0 - 32 / A - AE | Any text |
| **Read**= | 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**

| **Begin** | **Duration** |
|---|---|
| 23.06.2010 08:00 | 3.5 h |

or

| **Date** | **Begin** | **Duration** |
|---|---|---|
| 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**

| **Begin** | **End** |
|---|---|
| 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*

| **Remark** |
| --- |
| Text of any length |

A text of any length can be entered into this column.

### *Absence*

| **Absence** |
| --- |
| 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*

| **Read** |
| --- |
| „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 **TimeTracking.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 **ImportIst.log**:

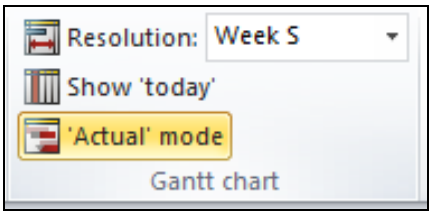
Examples of entries made in the logfile:

```
**********************************************************************
*
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.xlsx'
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 |
|---|---|---|---|---|---|---|---|
| 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 |

2/2 8/8

| Res./Task | Ident-No. | Project | Work Pl'd | Work Act | Finished % |
|---|---|---|---|---|---|
| Hall (2) | 30000200 | | | | |
| EC 345 | R02345 | Repairs | 20 wh | 0 wh | 0 % |
| SR 630 | R02346 | Repairs | 10 wh | 0 wh | 0 % |

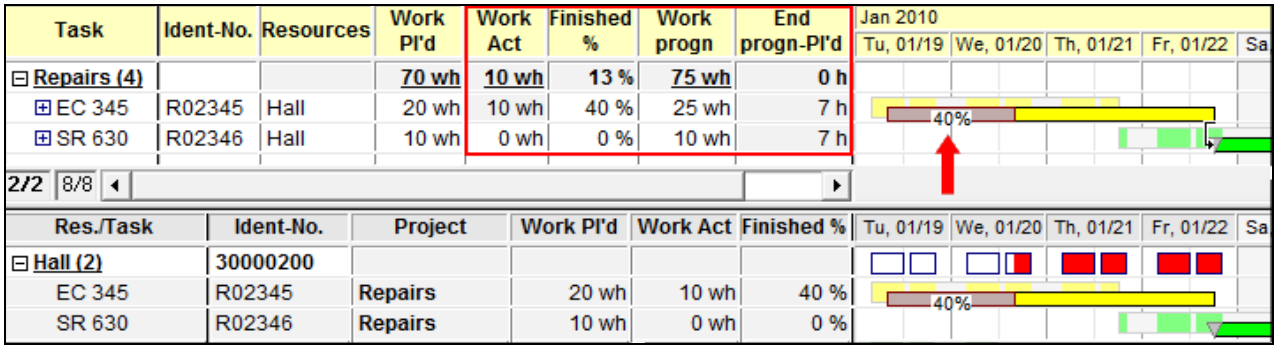
Jan 2010 | Tu, 01/19 | We, 01/20 | Th, 01/21 | Fr, 01/22

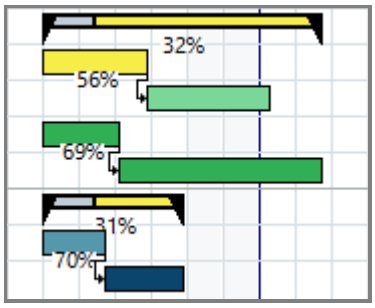
### *Display with existing actual times*

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 |

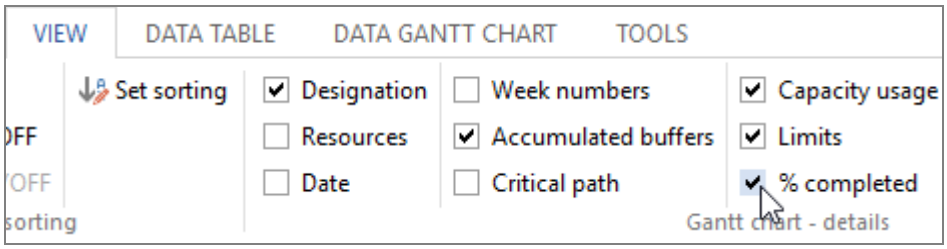
The total of imported times is shown in the column **Work actual**. Both the prognosticated work as well as the prognosticated end are calculated with the help of the current level of completion (**Compl%**). The grey color indicates the part of the actual task bar that has been worked upon. Even the level of completion in % is shown if the respective setting was made (see **Options** / **Screen Setup** / **Task bars**).




Completed in percent can be displayed at the planned task bars even when the **Actual Mode** is disabled.

The corresponding display option is located on the **View** tab at **Gantt chart - Details**:



# 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 reconciliate 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 tranferred 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

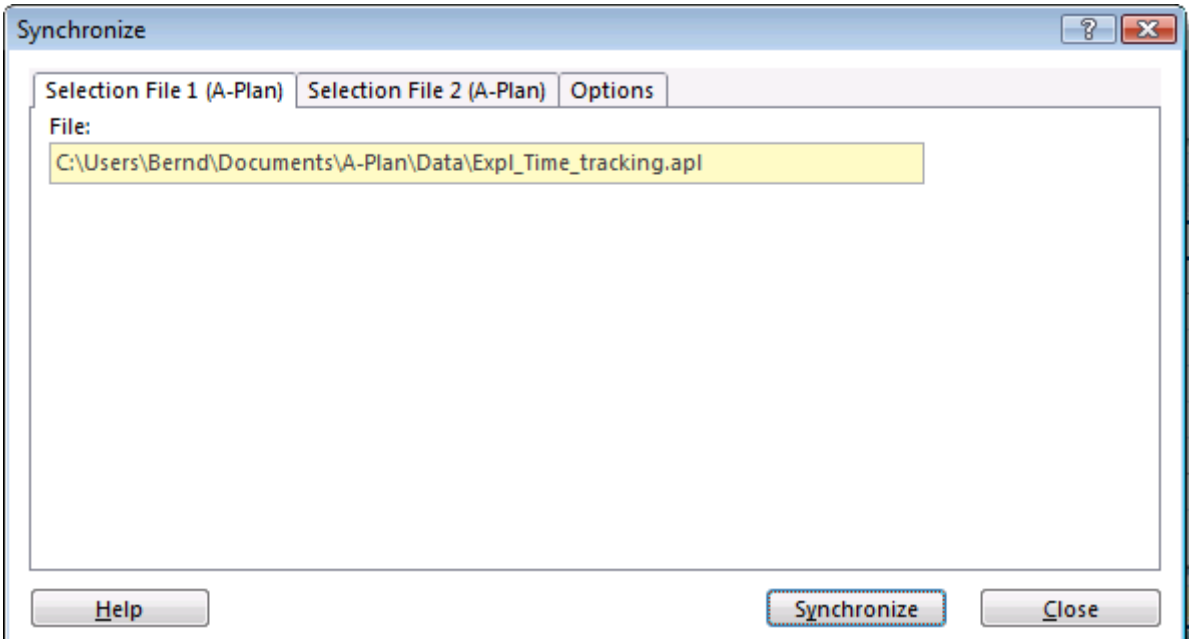
## STARTING THE SYNCHRONIZATION

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 **c**entral 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.

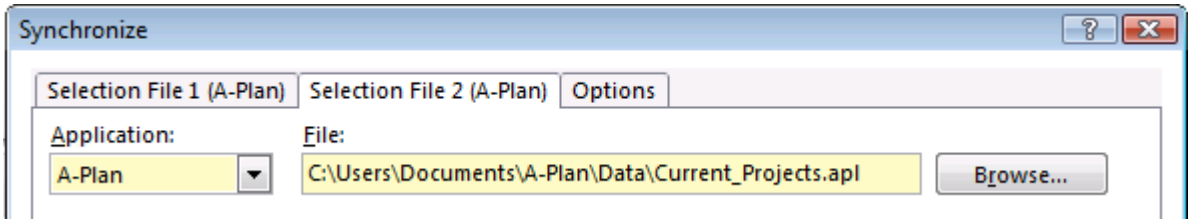
As the synchronization might change a large amount of data within a rather short time, **no other users should have opened the central file** while the synchronization is being run. Otherwise, a message listing the users concerned will come up before the synchronization is started.

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.

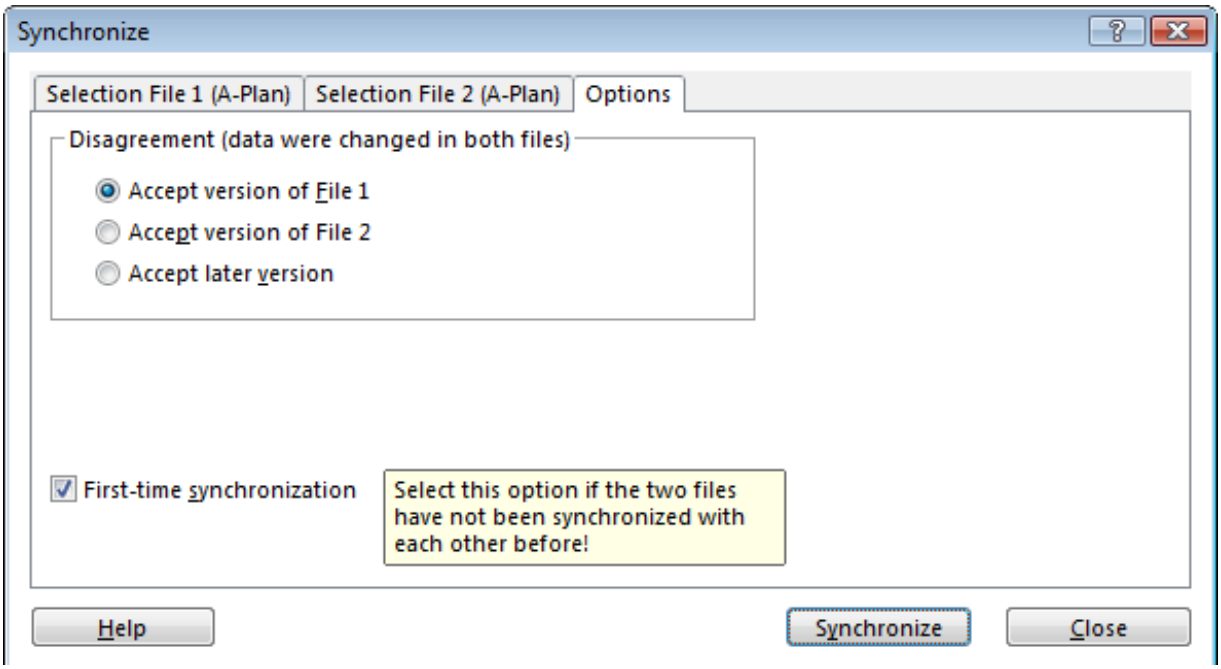
Type the name of the second A-Plan database in the entry field **File** or click on **Browse** to select the file from a folder:




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 136).

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

## 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

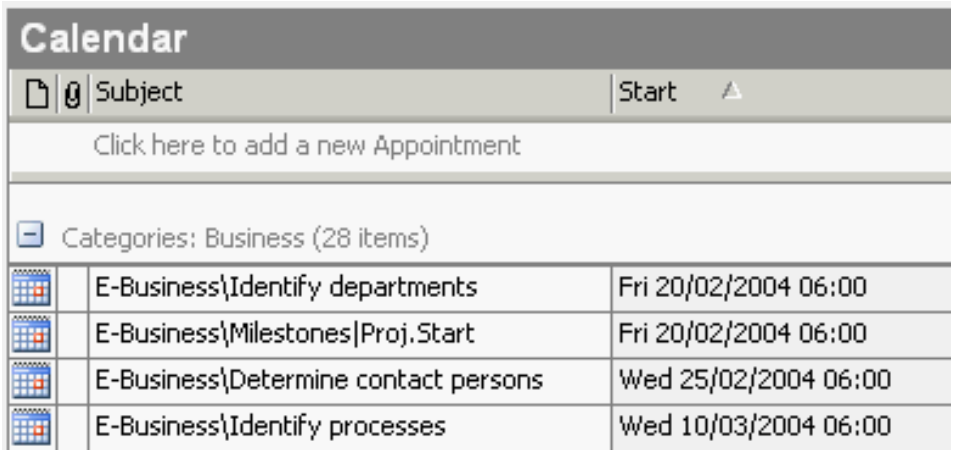
In MS Outlook, series of dates are not organized in the same way as in A-Plan. For this reason, only the first date of a series can be transferred from MS Outlook to A-Plan and if the date concerned is changed in A-Plan, the change cannot be transferred to MS Outlook. Therefore, it is recommended to 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 240):

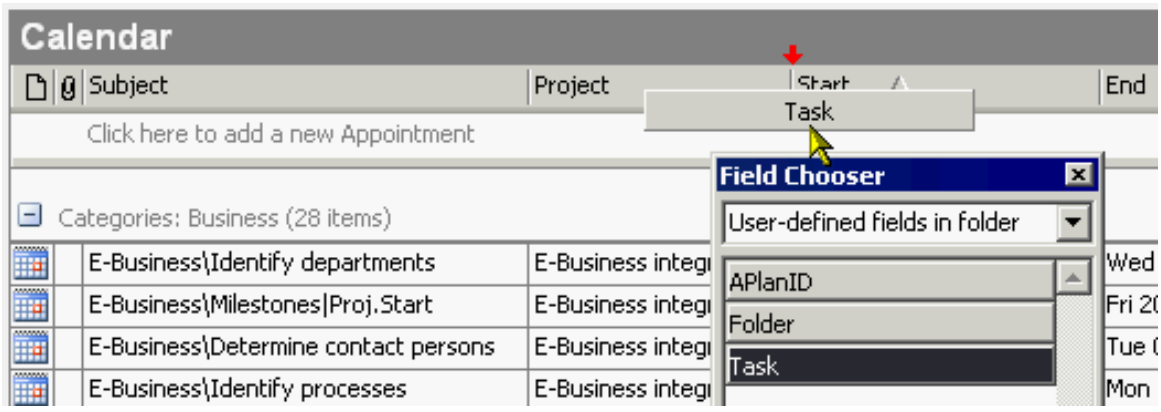



With the options activated, assignments are always visible but designations may become rather long.

**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:




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.

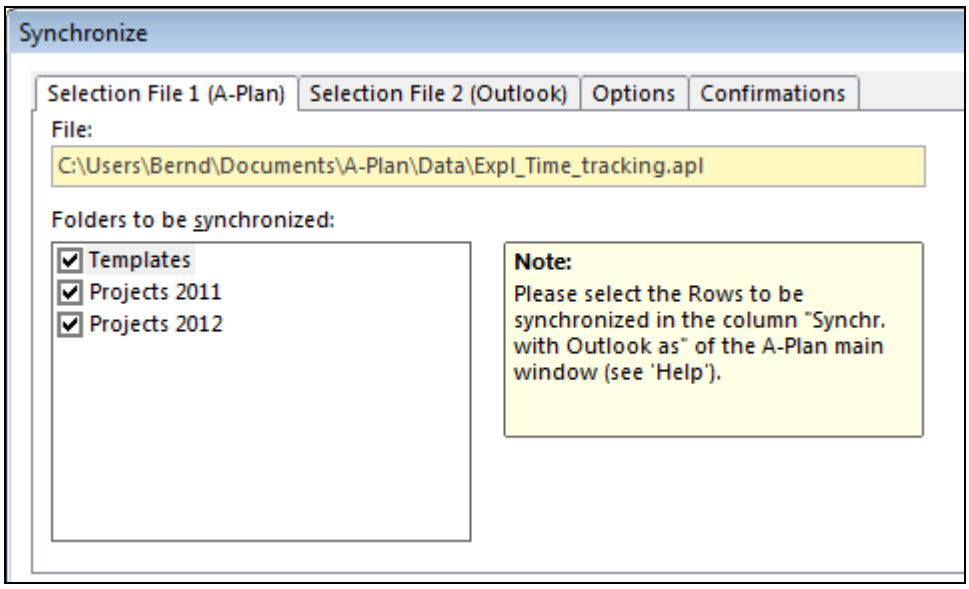
**Note:**
The field **APlanID** is also created during the synchronization to enable a distinct assignment of data records in MS Outlook to data records in A-Plan.

# SELECTION OF DATA TO BE SYNCHRONIZED

## SELECTION FILE 1 (A-PLAN)

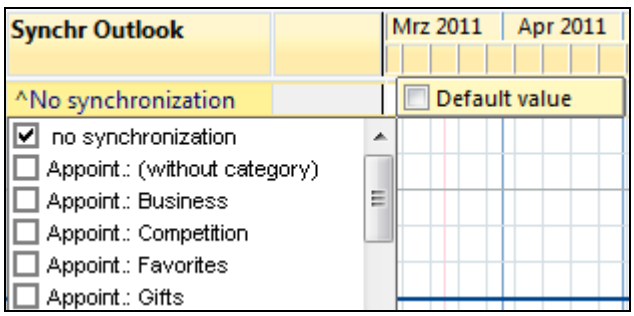
To make additional settings in a dialog box or to start the synchronization, either click **Synchronize** in the tab **File** or use the key combination **SHIFT+F6**.

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.

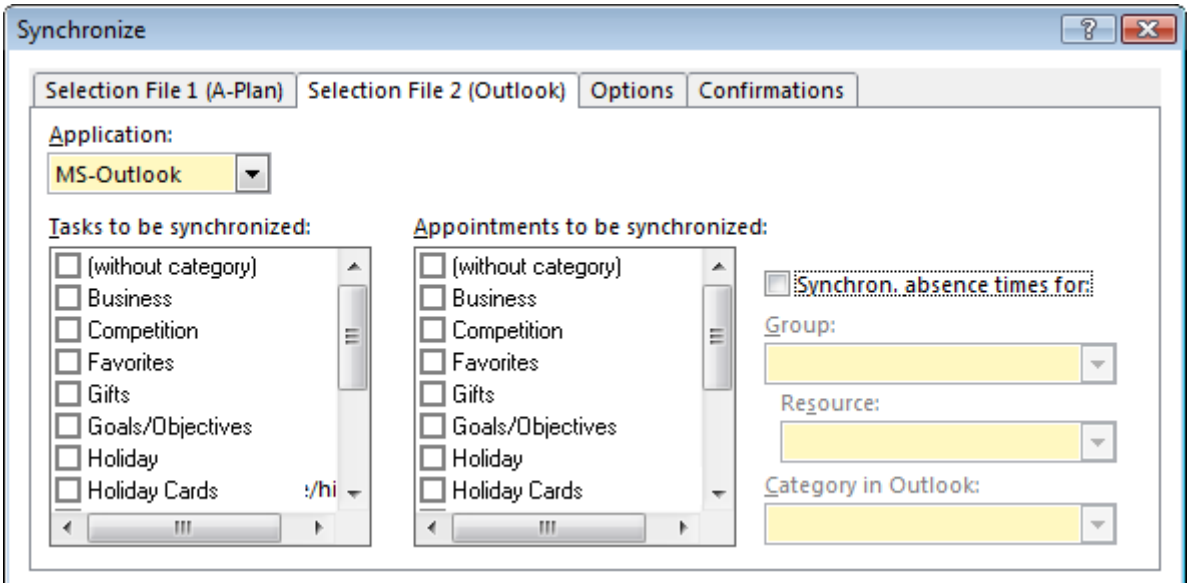
As a general rule, project rows serving as **summaries** (which include one or several tasks) and **folders** are not synchronized. As a consequence, the value entered in the column **Synchr. with Outlook as** of these rows is of no importance apart from being used as a **default value** for the rows 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).

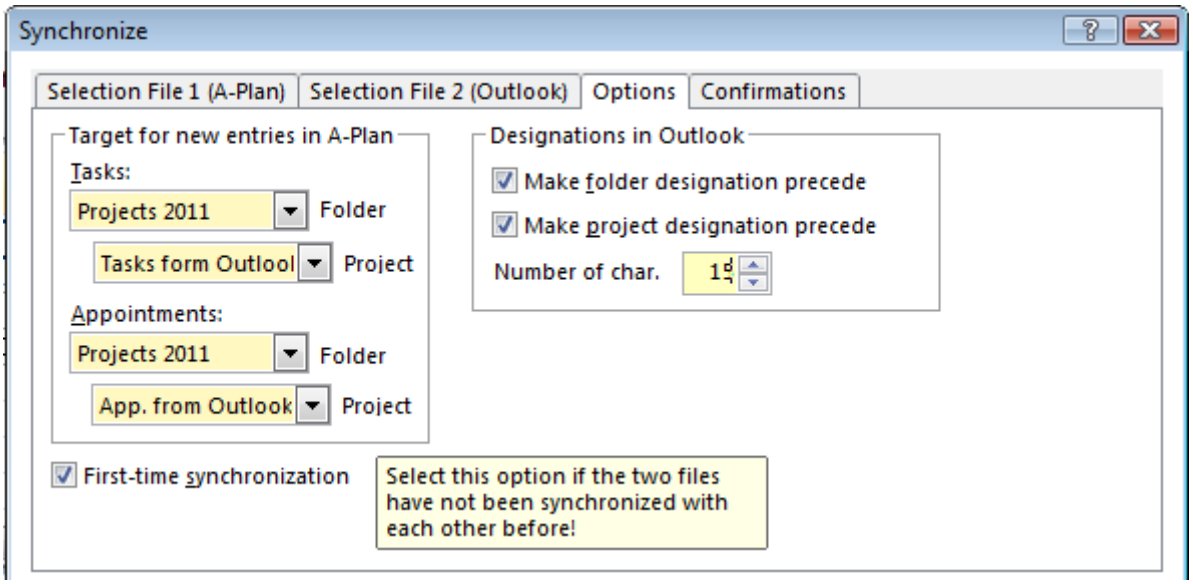
From the two lists you can choose the categories of the **tasks** and **appointments** (= calendar in MS Outlook) that are to be synchronized with A-Plan:




**Absences** (see "Absences" on page 95) 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*

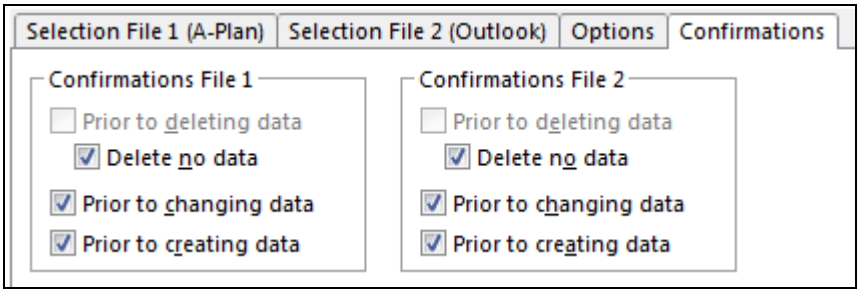
With these options activated, the designations of folders and projects are shown in the reference of MS Outlook (for an example see "Showing "Folders", "Projects" and "Tasks" in MS Outlook" on page 236). To prevent the reference from being too long, the number of used characters can be limited.

### *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.

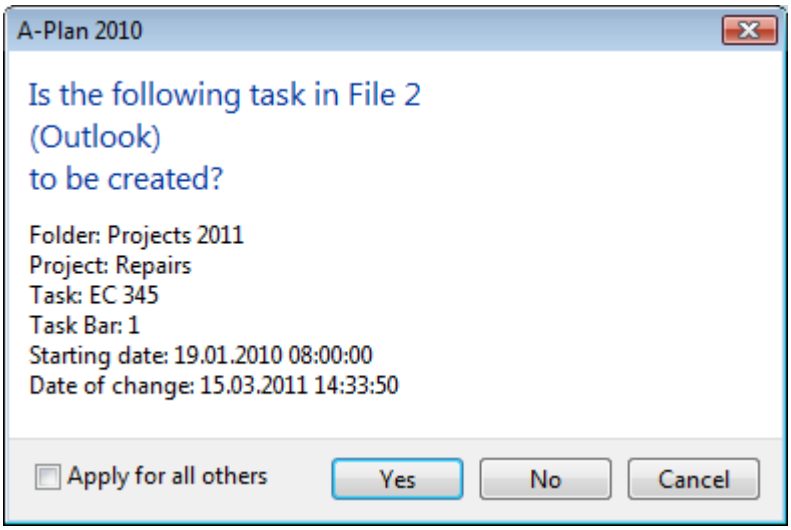
In the case of first-time synchronization, make sure that **data selected for synchronization do not exist in both files already**. Otherwise, these data will exist twice in both files afterwards. Therefore, **delete identical entries** from one of the files prior to starting the synchronization.

## 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..

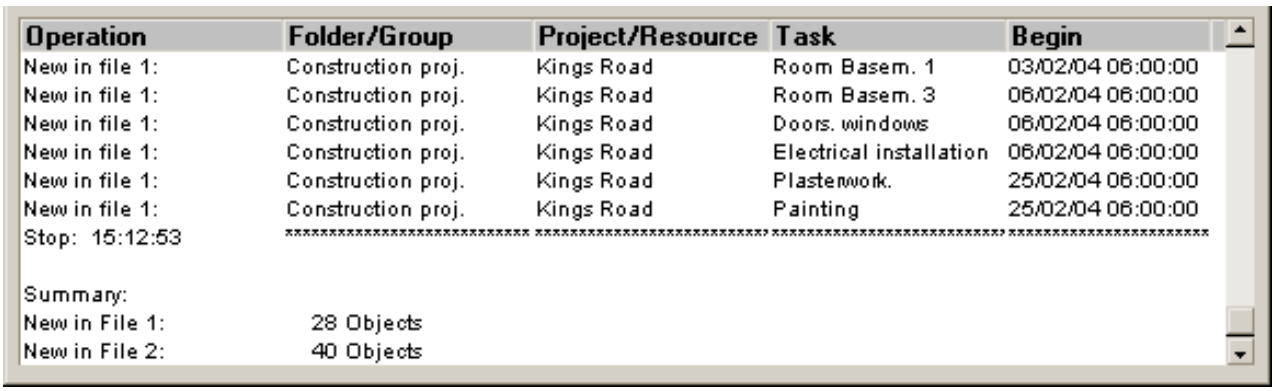
### *Disagreement*

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

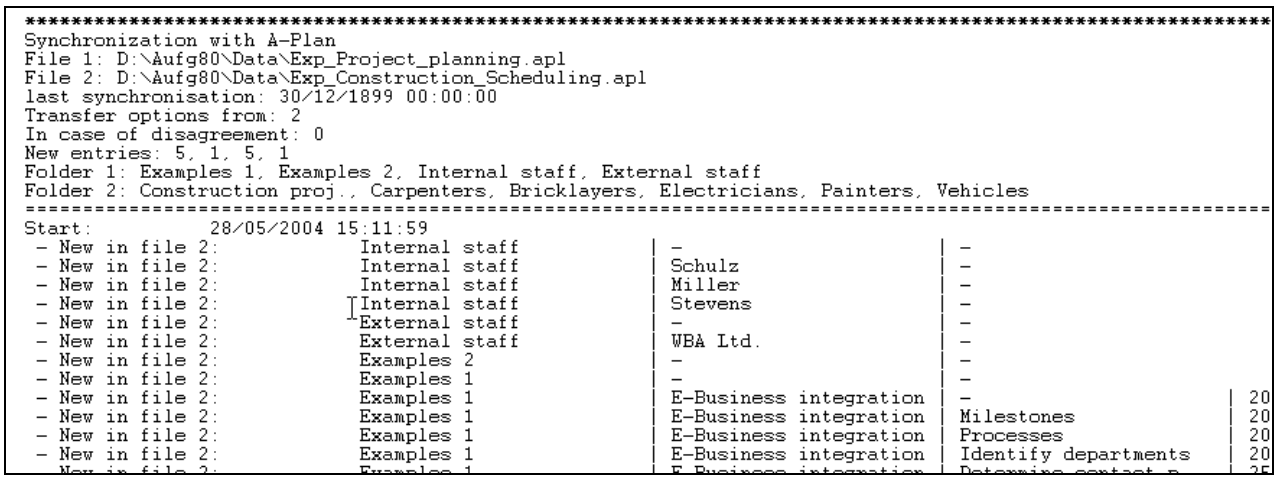
Click on the button **Synchronize** to trigger the synchronization.

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
```

# SYNCHRONIZATION WITH MINDMANAGER

## GENERAL NOTES

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 tranferred easily to an A-Plan database where the detailed scheduling and the assignment of resources can be done.

As soon as the first synchonization was carried out, changes can be updated easily in both programs with the click of a button.

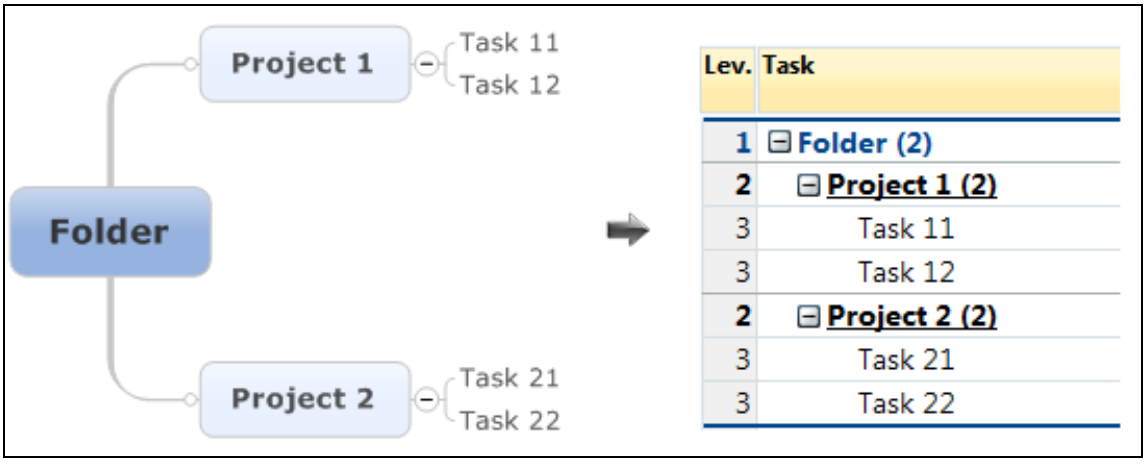
The interface may also be used to display existing A-Plan projects in MindManager as a **Mindmap** or as a work breakdown structure (see "Presentation of A-Plan Projects as Mindmap or WBS" on page 245). With this done, data can be edited on both sides.

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

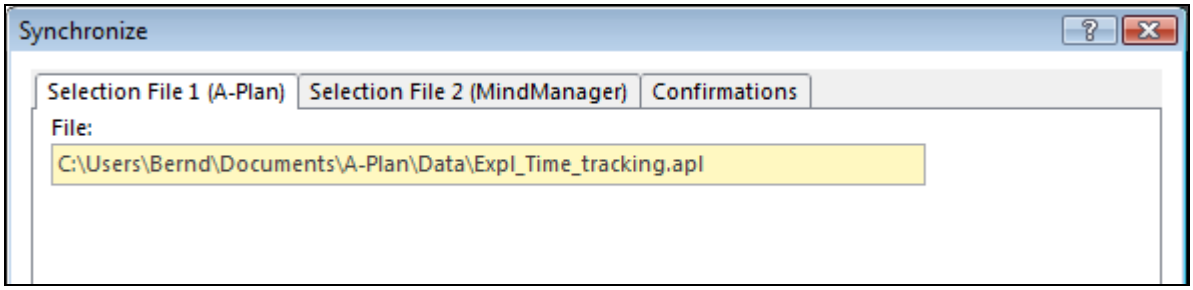
(designations, dates, structure etc.) in one of the two applications, they can be transferred easily to the other application by synchronizing the projects once again.

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 245.

## 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:

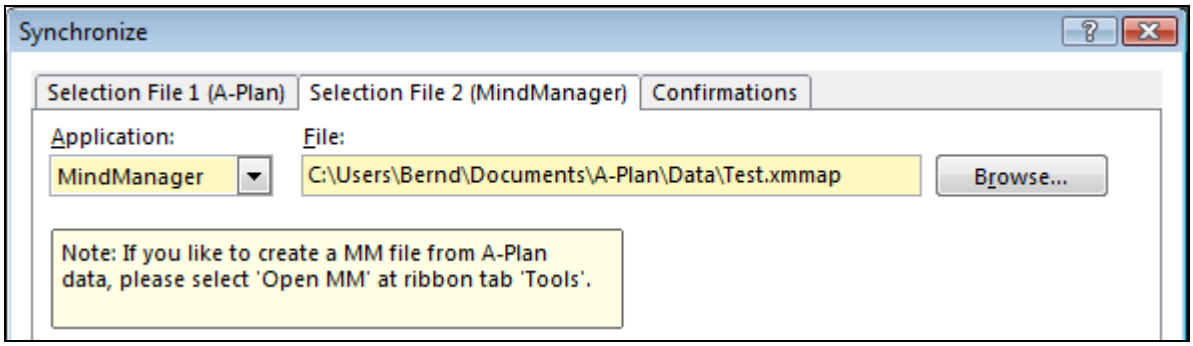



As a relatively large amount of data is changed during the synchronization, the central file should not be opened by other users during this process. A window listing the names of involved users is displayed if the central database is opened by other users.

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.

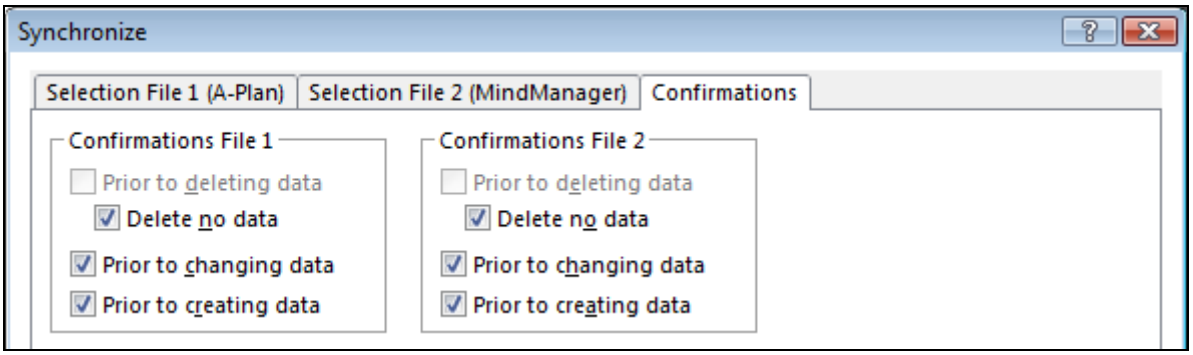
### *Selection File 2 (MindManager)*

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:



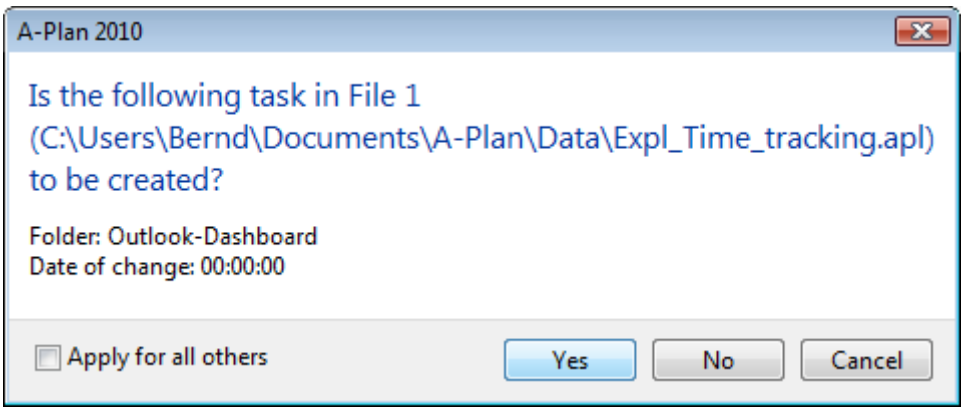

**Important:**
The MindManager file must be saved in **xmmap format.** This can be done with the MindManager version 5 or later versions!

## 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:

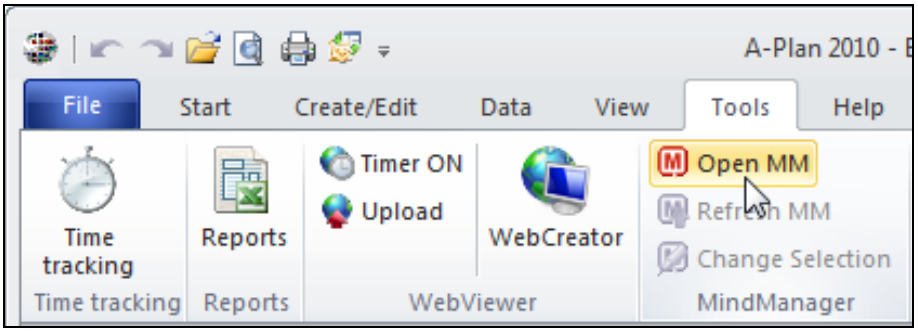



Clicking **Apply for all others** will have the effect that all further changes of this type will be executed without asking for confirmation.

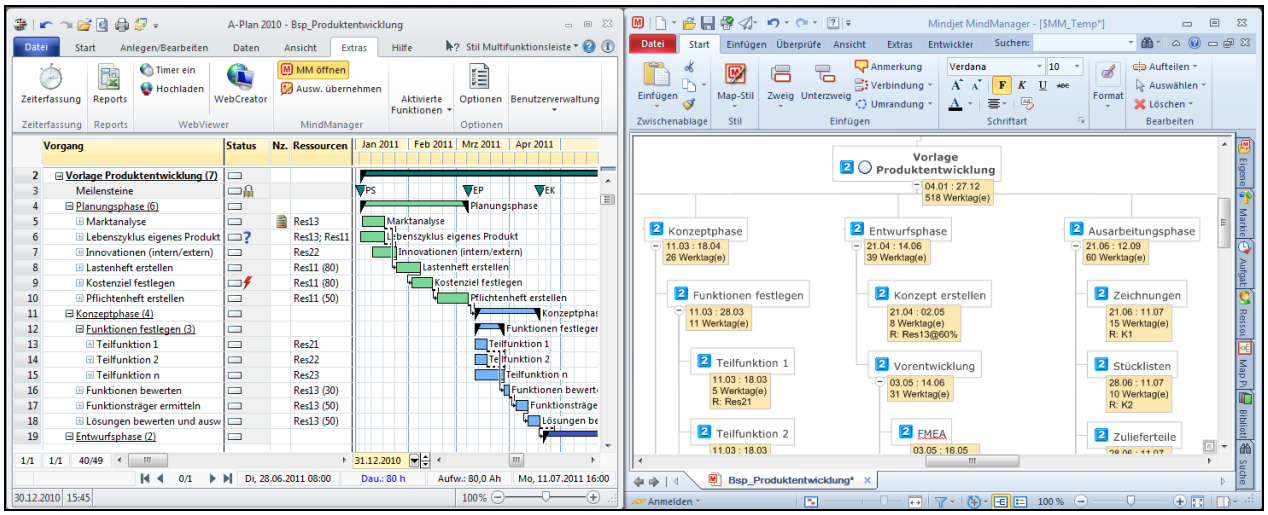
## PRESENTATION OF A-PLAN PROJECTS AS MINDMAP OR WBS

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 clickling the function **Open MM** in the tab **Tools**:



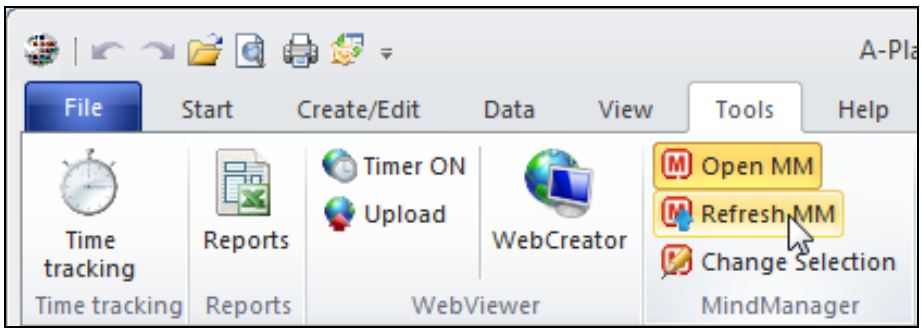

When they are opened for the first time, A-Plan and MindManager are displayed side by side covering the entire screen:



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 **MindManager 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 141) 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!**

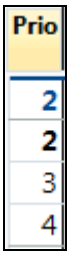
The original file of „Body.xmmap“ is saved in the program folder of A-Plan (by default, this is „c:\Programs\A-Plan2016“).

# APPENDIX

## A. LIST OF DATA FIELDS

### GENERAL DATA FIELDS

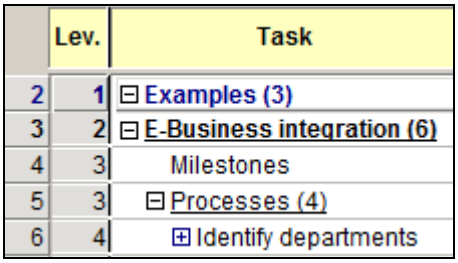
#### PRIORITY




With the respective settings made (see "Sorting orders for viewing" on page 85), the priority (0 - 99) determines the **sequence** 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 128).

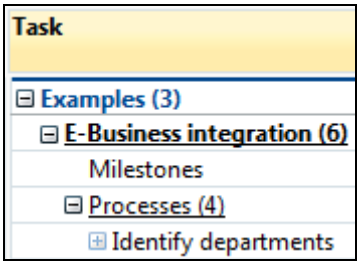
Double-click the current value to either overwrite the **priority** directly or to change it by clicking on the arrow buttons.

#### LEVEL




Level of the row concerned (Folder = 1, Project = 2, Tasks = 3 … 99)

#### DESIGNATIONS OF TASKS



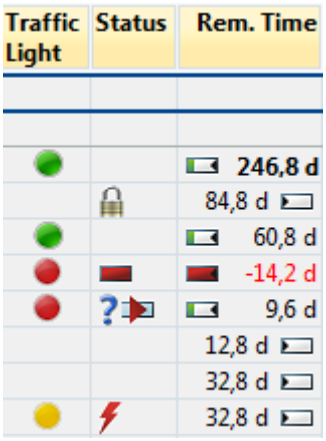

The length of a designation may not exceed **100 characters**.

Clicking on the square in front of the designation will expand a collapsed folder or project or collapse it if was expanded (see "Structuring (Folders, Projects, Tasks)" on page 24).

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.

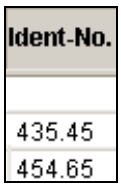
A locked row can be recognized from its designation being enclosed in curly braces (see "Locking of rows" on page 41).

## TRAFFIC LIGHT, STATUS, REM. TIME




The columns **Traffic Light**, **Status** and **Rem. Time** enable you to see at a glance what the status of a project or task is. For a detailed description of the functions see "Traffic Light, Status and rem. Time" on page 25.

## IDENT-NO.




The ident number can be used to mark each record (=row) by assigning a specific number or string of characters to it.

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.

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!

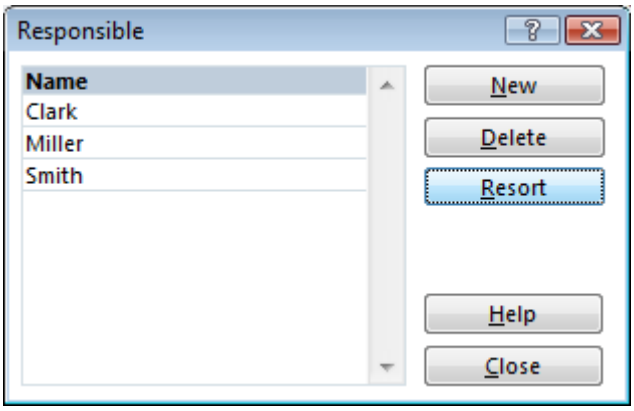
## CLIENT/RESPONSIBLE


The name of a client or a responsible person may not exceed **30 characters** in length.

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.

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.

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)*

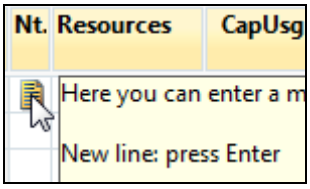
Click on the button **New**, enter the name in the new line and press ENTER.

### *Delete name(s)*

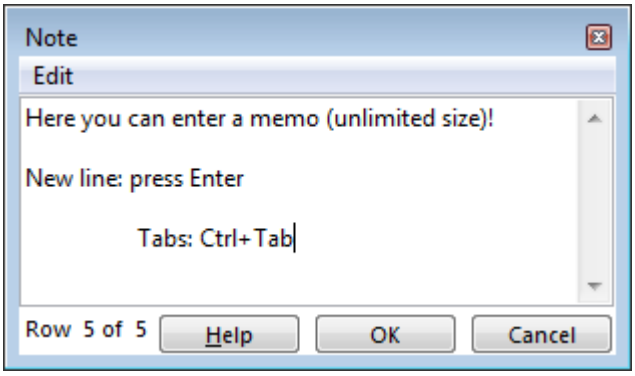
Select the name(s) to be deleted from the list and click on **Delete**.

**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.

## ENTRY DATE


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 overrun.

In the Gantt chart, the reshow date is indicated by means of an exclamation mark (see "The Gantt chart" on page 29).

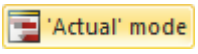
## BEGIN (PLANNED/ACTUAL), END (PLANNED/ACTUAL)

| 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 45).

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.

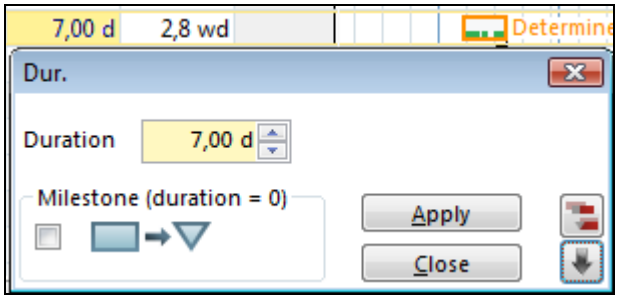
You may perform the changes in the column area of the table as well. In this area, however, the begin and end of the **first pending task bar** are displayed only (see above) so that the values of this task bar can be changed only.

## 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 44)!




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 49).

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: **Duration %** = (**Duration Actual** / **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 115) for calculating the forecast date of completion of a task.

## COMPLETED

| Status |
|---|
| |
| ✔ |

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 **Status**.

Projects used to summarize tasks on lower levels (see "Structuring (Folders, Projects, Tasks)" on page 24) 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):

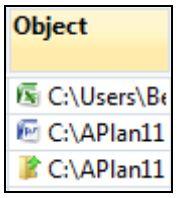
- Click on the column **Status** while holding down the SHIFT key or

- 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.

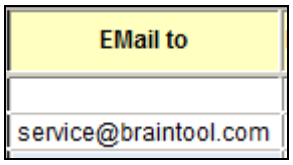
## OBJECT




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 69

## EMAIL




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 71). 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 85), 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 € |

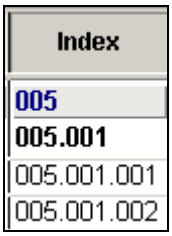
10 columns are provided for entering any numbers.

You may adjust the format of the number columns to your requirements (see "Tasks" on page 119) 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 119 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



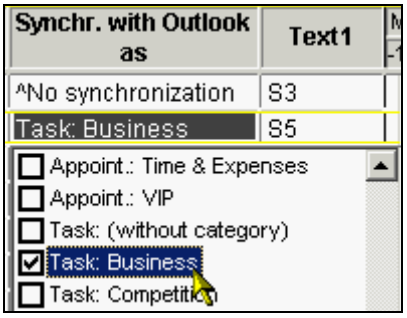

Use this column to have the internal numbering of records displayed. The following formats are used:

| | |
|---|---|
| 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.

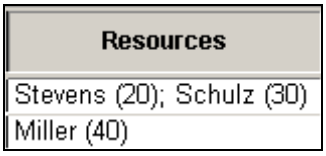
### SYNCHRONIZATION WITH MS OUTLOOK




MS Outlook category to be used when synchronizing the current row with MS Outlook (see "Selection of data to be synchronized" on page 238).

## DATA FIELDS FOR RESOURCE PLANNING/COST CALCULATION

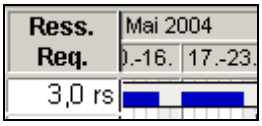
### RESOURCES




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 108

### RESOURCES REQUIRED




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 111.

## 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 101

## 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 115

## 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 112

## FIXED COST (PLANNED/ACTUAL)

| Fix. Cost Pl'd | Fix. Cost Act. |
|---|---|
| 2.495€ | 1.985,00€ |
| | |
| 150€ | <150,00€ |
| 2.345€ | 1.835,00€ |

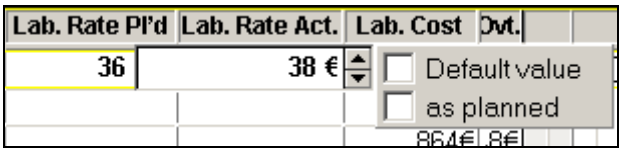
Fixed costs (or lump sums) planned or actually incurred in the execution of a task.

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 110.

## LABOUR RATE (PLANNED/ACTUAL)




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 110.

**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 110.

## 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 112.

## 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 110.

## 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 110.

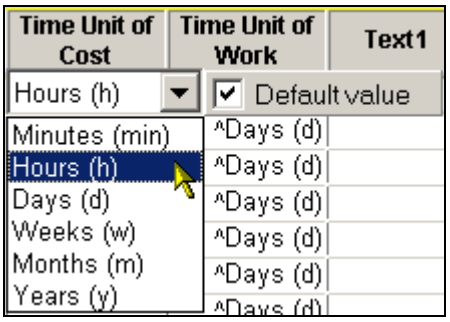
## QUANTITY PLANNED/ACTUAL

| 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 110.

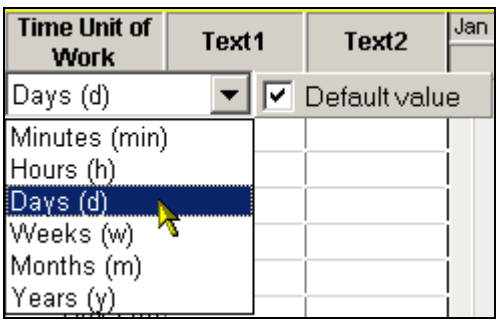
## TIME UNIT OF COST




Time unit to which the labour rate (see "Fixed costs, Labour rate of resources" on page 110) 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 / Abbreviations / Timetracking" on page 132).

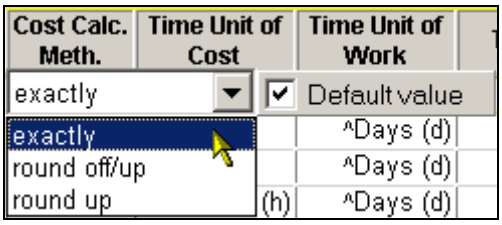
## TIME UNIT OF WORK




Time unit to which the work (see "Fixed costs, Labour rate of resources" on page 110) 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 / Abbreviations / Timetracking" on page 132).

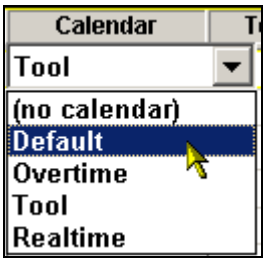
## COST CALCULATION METHOD




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 / Abbreviations / Timetracking" on page 132).

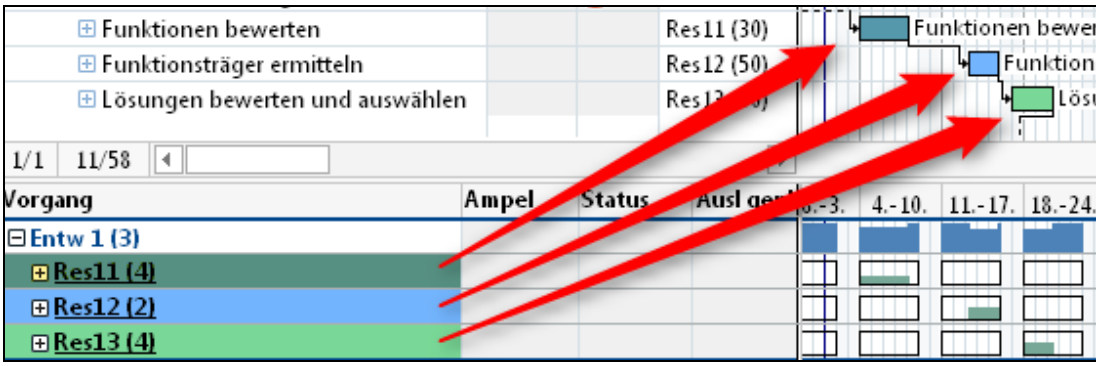
## CALENDAR




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 "Individual colors for Resources

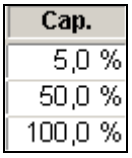
Resources can be provided with colors. The task bars of the tasks to which the resources have been allocated, are then displayed in the respective colors:




The corresponding dialog box can be opened by right clicking on a resource name.

Determine working hours (Resource calendar)" on page 89).

## CAPACITY USAGE




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 97).

## 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 115.

### 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

## STANDARD OR BASIC-VERSION OF A-PLAN

A-Plan can be started with the following parameters appended

| | |
|---|---|
| *File name* | The specified file will be opened automatically when A-Plan is started. |
| /excl | The file loaded with A-Plan is opened "exclusively. |
| /read | The file loaded with A-Plan is opened "read only". |
| /noSync | No synchronization of the settings stored on the server profiles to the local computer (see "Folder structure of profiles" on page 143). |
| /u:*user:password* | All files are opened with the user name "*user*" and the password "*password*". If no password was assigned, the second colon must nevertheless be entered (e.g. "/u:Miller:") |
| /p:f*older name* | 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-Plan2016.exe".

**Example:**
...A-Plan2016.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").

## SQL VERSION OF A-PLAN

A SQL database can be started with the following parameters:

| | |
|---|---|
| *Servername:Database:*MSSQL | A-Plan is opened with the specified database of a MS SQL server. |
| /u:*user:password* | All files are opened with the user name "*user*" and the password "*password*". If no password was assigned, the second colon must still be typed (e.g. "/u:Smith:") |
| /u:*$winauth* | Connection to the MS SQL serveris made with Windows authentication. |
| /p:*Foldername* | The specified folder is used as profile folder. |
| *Servername:Database:*MSSQL | A-Plan is opened with the specified database of a MS SQL server. |

To enter the parameters, please proceed in this way:

Click the A-Plan icon with the right mouse key. Then click "Properties" and finally "Link". Type the requested parameters in the field "Target" behind "...A-Plan2016.exe".

**Example:**
...A-Plan2016.exe 123.456.78.90:Test:MSSQL /u:User1:PW /p:f:\profile\User1

(A-Plan is opened with the database "Test" of the Microsoft SQL server „123.456.78.90“, the user name is „User1“, the password is „PW“ and the profile folder to be used is the folder "f:\profile\User1").

# 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 142) 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/en/pm-software-questions-answers/

Patches are located at:

http://www.braintool.com/en/patch-a-plan-2016-en/

# 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 119).

| **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). |
| ddddd | 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 immedi- |

| | |
|---|---|
| | ately 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")

| | |
|---|---|
| aplan2016.lic | Licensing file |

## FILES IN THE DATA FOLDER ("MY DOCUMENTS\A-PLAN\DATA")

| | |
|---|---|
| Import.xlsx | Exemplary import file in MS Excel format |
| *.apl | A-Plan database |
| *.$$$ | temporary backup copy |
| *.hol | Public holiday file |
| *.bc*n* | Backup copy (if an MS-Access database is used) |
| *.bs*n* | 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*.p*nn* | Profile file no. *nn* of the database *name* |
| Calendar_Profile | Current settings for view "Resource Calendar" |

# INDEX