Untis
Basic Data

Contents

1   Preface

Over the course of more than 30 years of development, Untis has become an extremely powerful tool. The large number of functions and possible settings, as well as the size of this manual, may have a daunting effect on newcomers to the application.

For this reason we would recommend that you first study the considerably shorter manual ' Getting Started '. 'Getting Started' uses easy-to-understand examples to guide you through all the steps of timetable creation with Untis, from installation , adding school data to your school's master data and entering lessons to the actual creation of the timetable using Optimisation , the diagnosis of the calculated timetable, possible manual changes and printing finished teacher, class and room schedules.

The structure of this manual is also based around this natural basic structure. However, it is intended to be more of a work of reference than a brief guide.

For this reason, use this manual when in the course of creating your timetable you encounter situations that are not dealt with in 'Getting Started', or when you wish to take the time to get to know Untis in greater detail in order to be able to work more effectively with the system.

2   Master data

This chapter describes the input and maintenance of master data and provides a detailed description of master data properties.

Master data are basic input details essential for the construction of school timetables. They include the particulars of teachers , classes , rooms and subjects which are used to form the lessons in the timetable, but also other important information such as students or departments . You can generally enter new master data or modify existing master data via the menu item "Master Data" in the main tool bar (by clicking on the appropriate submenu).
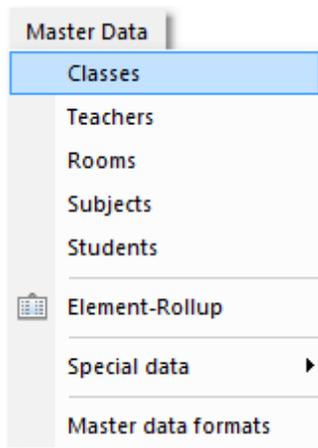
Greyed-out items indicate functions that are currently inactive. This is normally the case when the use of the option requires an additional Untis software module.

The master data categories 'Classes', 'Teachers', 'Rooms' and 'Subjects' are particularly important as they are the main building blocks for the construction of lessons. We will therefore refer to these types of master data s *elements* .

All master data are managed in so-called views. Views are windows designed for the input of new master data and the maintenance (i.e. modification) of existing master data. All master data views are essentially very similar in use and structure. The following chapter describes the similarities between different master data views.

3   Master data views

Each type of master data element classes , teachers , rooms , subjects , students) is managed in its own window.

All master data windows consist of three sections: a toolbar , a grid view and a form view.
 Grid view
The grid view is a table with individual rows. Each row represents one element. The grid view displays all the attributes for the element activated (by the user) in the corresponding view. The activated attributes in the example are the fields name, full name, alternative room, room weighting, off-site code and capacity.

 Form view
The form view concentrates on one element, and displays the one element with its attributes. In the example above, the form view displays the name of the selected room, the (more informative) full name of the room, the room capacity etc.

Note:
You can hide and display the form view using the button at the bottom left of the screen.

The following topics are covered later:

Toolbar
Data entry
Editing views
Managing views
Printing

3.1   Toolbar functions

You will find the following buttons in many Untis windows:

Resize the window
This function adjusts the size of a window to match the table it contains.

Grid adjustment (display fields))
The functions of the grid adjustment dialogue are described in detail in chapter Displaying/hiding columns .

New
This button opens a new element. You will find more information in the chapter Data input .

Delete
This function deletes the active element. You can also mark several elements with the cursor and then use this button to delete them.

Serial change
Use this function to systematically change the contents of a field in all rows of the grid view in a single operation. This function is described in detail in the chapter Serial change .

Sort
This function effects automatic permanent sorting and is explained in chapter Sorting .

Show all fields with content
This a very useful function that is used to temporarily activate all columns which contain at least one entry. Clicking on this button a second time restores the window to its original state

Lock this display
If this function is active (button pressed) the view in question will not be affected by events taking place in other windows. Automatic synchronisation is deactivated.

Time requests
This functions is used to enter time requests. The increments for time requests for elements range from '-3' (total block) to '+3', which indicates a strong desire for the element to be scheduled. Since time requests are of major significance for all elements and for lessons there is a chapter Time requests dedicated to this subject under User tips .

Colour coding
Use this button to assign any desired foreground and background colour to an element or lesson. These colours will be used to for screen element display (but not printing), for standard timetable printing and for the display of planning tools (Scheduling dialogue , Scheduling timetable). Other Untis modules such as the Cover planning module also display elements in colour at the appropriate places.

Tip: Colouring several elements

You can specify the colour coding for several elements in one operation by first marking them (with the cursor) and then clicking on the <Colour coding> button.

Note: Deactivating colours for printing
If you wish to specify colours for screen display but not for printed timetables you can select the setting 'Print black & white' in <Settings> in the relevant timetable window.

Settings
The <Settings> button allows you to change the font type, size and similar settings.

Page layout
This option allows you to make settings for printing and to view the results at the same time. This function is described in greater detail under Printing .

Refresh window
Refreshes the view. Alternatively you can press F5.

3.2   Data input

A new data element is always entered into a master data view in the last line of a grid view, which is marked with a '*' asterisk.

As an alternative, you can click on the <New> button in the window's toolbar, which will then position the cursor in the last line of the grid view.

Warning: Confirming input
Always confirm your input with <ENTER> or <TAB> as otherwise the final entry may in some circumstances not be saved.
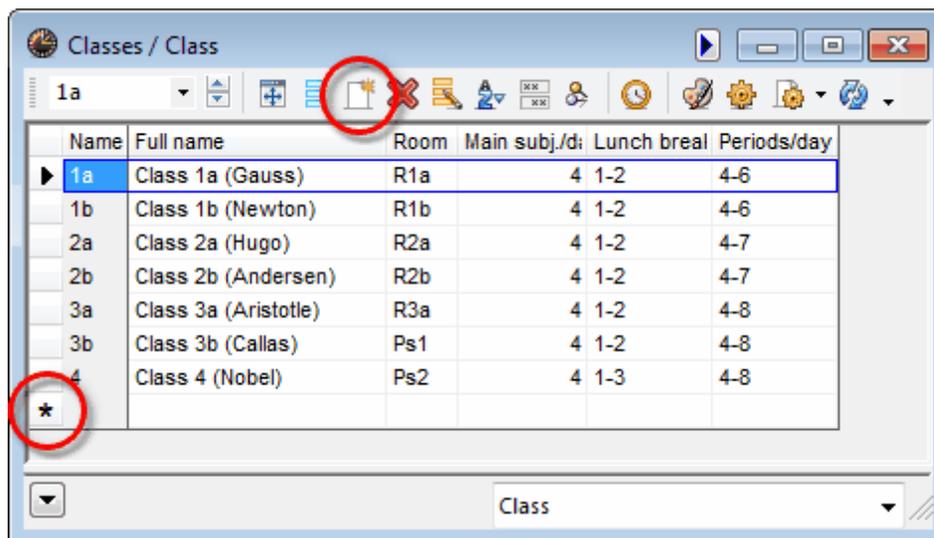
If you wish to make further entries, move the cursor to the relevant field using the mouse or cursor keys

and enter the desired data.

> **Note: Changing the (short) name**
> You can change the (short) name of an element by double-clicking on the 'Name' field of the element concerned.

3.3 Editing views

There is a large number of columns in every master data window. However, no school ever needs all the columns. For this reason you can specify which columns should be displayed and which should not.

You can also determine the sort order of the rows and columns.

3.3.1 Displaying/hiding columns

Basically you have two different ways of influencing how columns are displayed: either using <Grid adjustment> or via the form view .

> **Tip: Show all fields with content**
>
> Clicking on the <Show all fields with content> button displays all columns which contain at least one entry. This function is particularly useful for tracking down any data entry fields.

Grid adjustment

Click on the <Grid adjustment> button and check the columns (under 'Active') that you wish to display.

> **Note: Additional possibilities**
> You can use <Grid adjustment> to determine whether a column should be included in printing and whether the short name or full name of the element in question should be used.
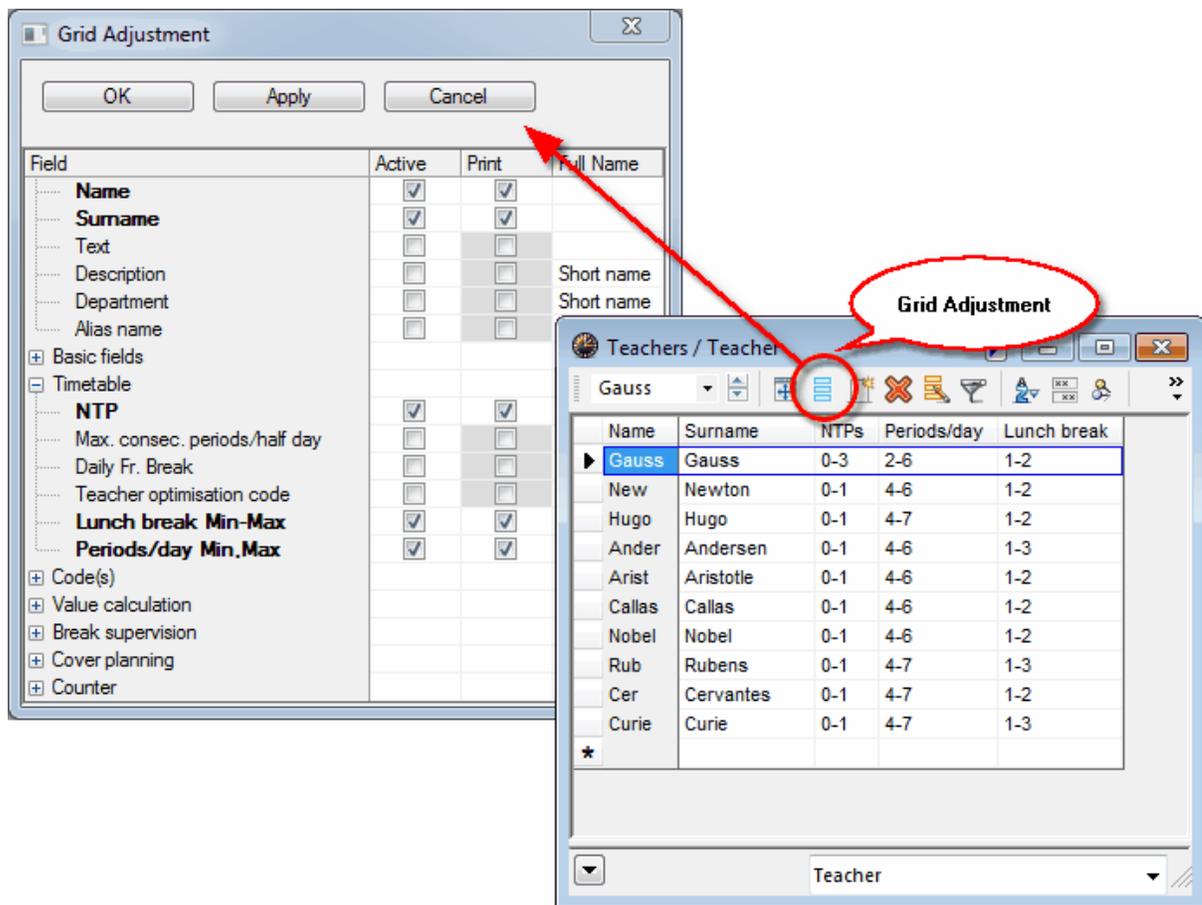
From the form view

Move the cursor in the <u>Form view</u> to the desired item until a four-headed arrow is displayed. You can now use drag&drop to drag this item into the grid view, where it will be displayed as a column.
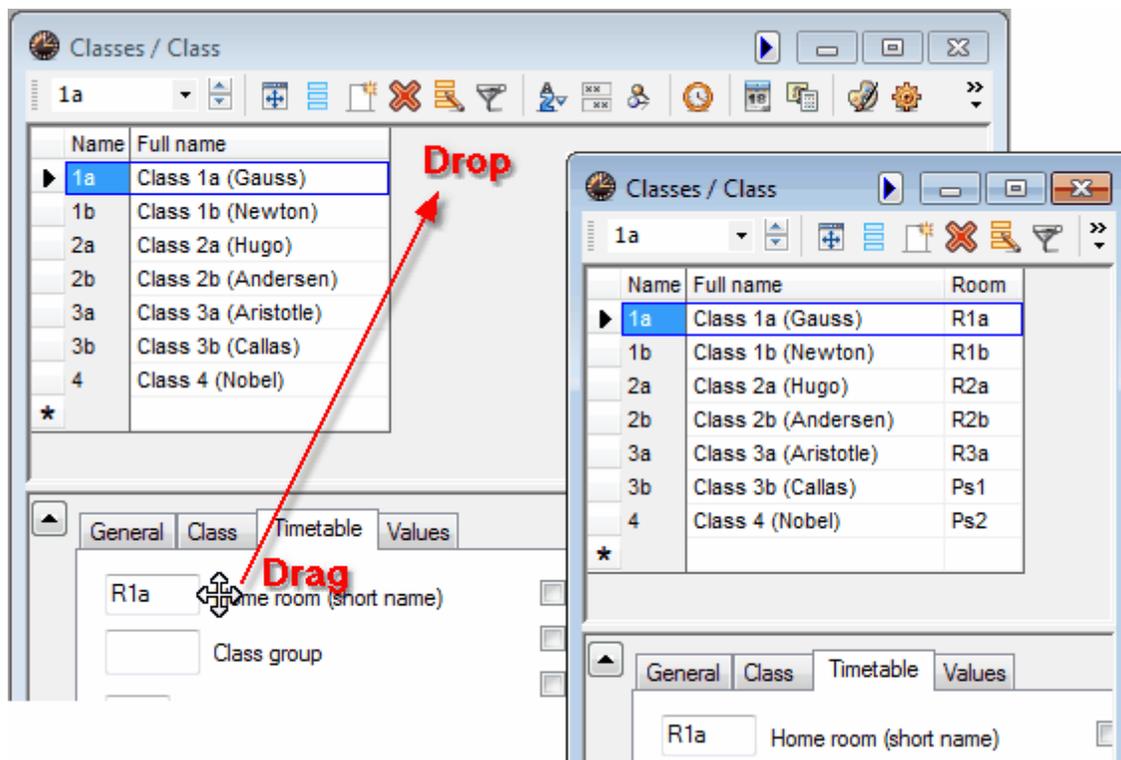
If you wish to hide the column, hold the <CTRL> key pressed and drag it from the grid view at the top to the form view at the bottom.

3.3.2 Sorting

There are three sorting options available to you.

Manual sorting using drag&drop

If you wish to re-order elements, simply click in the first (grey) column of the element that you wish to rearrange and hold the left mouse button pressed. Now drag the element to the desired position in the list.

You can also change the order of the columns using drag&drop.
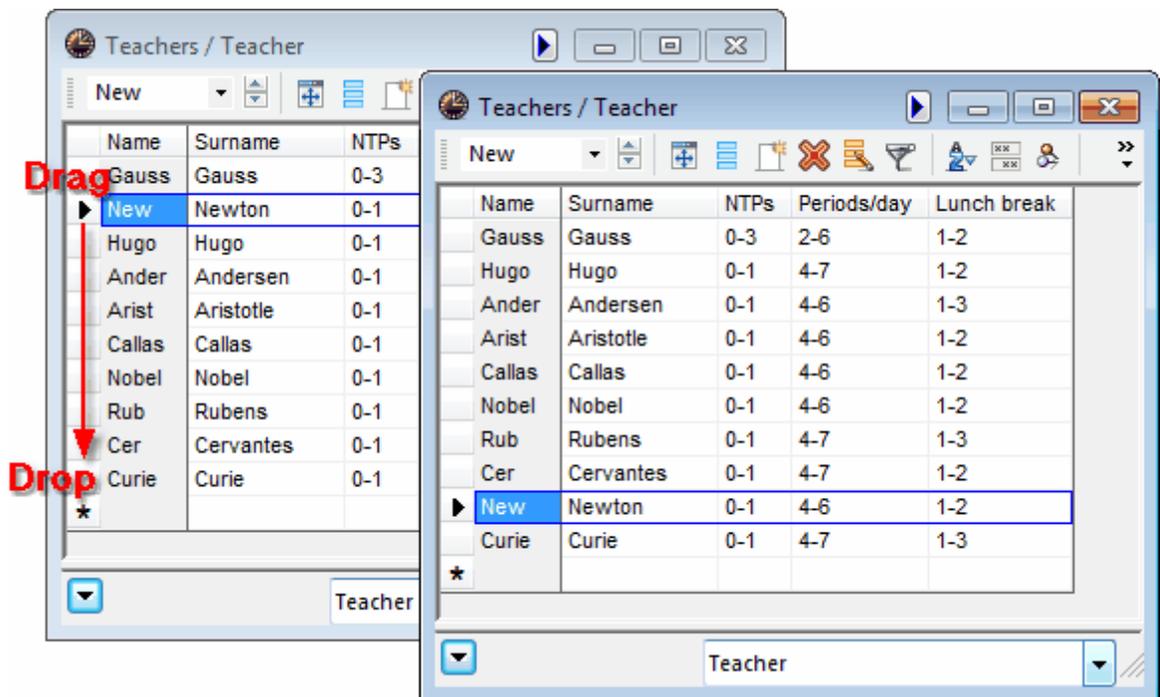
Automatic temporary sorting

Clicking on the column heading will temporarily sort the table by the contents of the column in ascending order. A further click on the column will sort the data by this column in descending order.

> **Warning: Temporary**
> After closing and reopening the window, the original order will be restored.
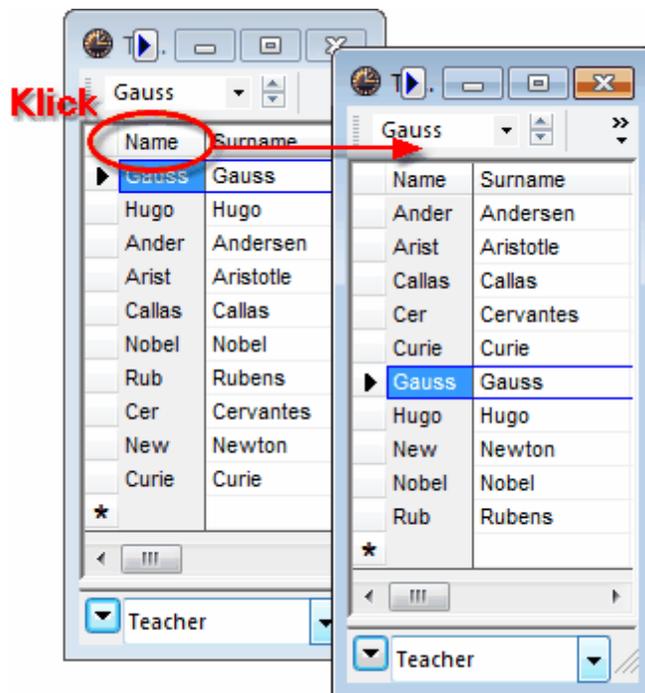
Automatic permanent sorting

Clicking on the <Sort> button opens an additional window where you can specify up to five different sort criteria hierarchically.

Select which fields the view is to be sorted by. When the option 'Use this sorting in all drop-down menus' is checked, the sort setting will be used at all points in the application where these elements are listed.

3.3.3   Filtering

If you wish to filter a specific view according to one or several criteria you can do this easily and quickly using the filter function.

Clicking on the <Filter> button displays a row with the filter icon between the column headings and the table contents. You can enter the filter condition in the corresponding row of this column by which you wish to filter.
You can also define several conditions at the same time (mathematical AND relation).
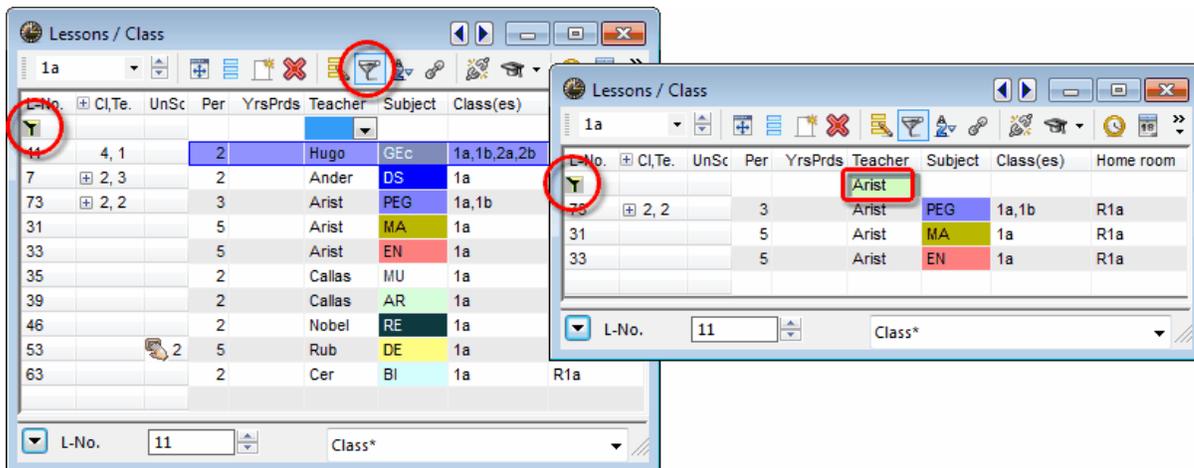
> **Note: Wildcards**
> You can also use the wildcards '?' and '*' to represent any character or any string of characters.
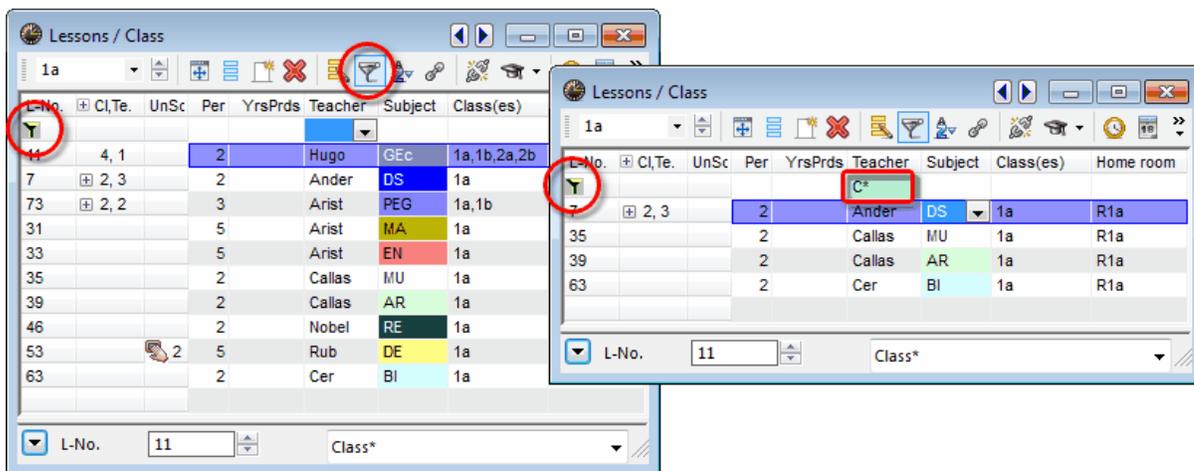
3.3.4 Serial change

Untis provides two ways of making serial changes.

Cursor marking

Move the cursor over (i.e. mark) the desired range so that the fields are highlighted blue. Now enter the desired value without clicking. This will be entered into each marked field.
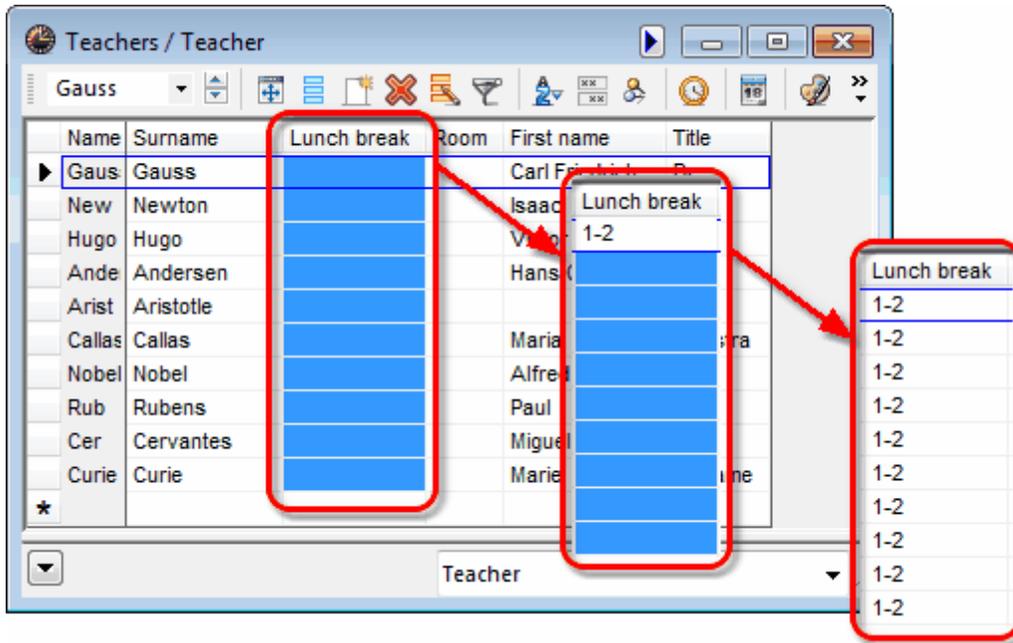
> **Note: Marking**
> You can also mark fields using the keyboard: <SHIFT>+<Down arrow> or <SHIFT> +<Up arrow>.

Serial change function

You will find the <Serial change> button in the toolbar of the window. Clicking on this button opens the serial change dialogue allowing you to enter the value to be changed in the 'Current content' field and the new/desired value in the 'New content' field.
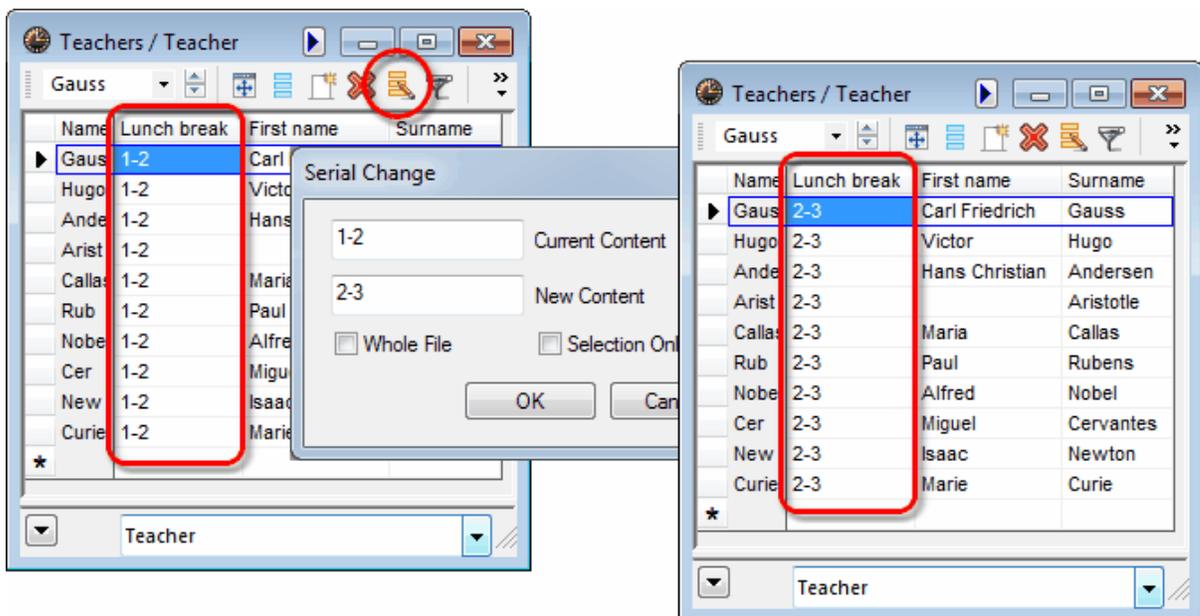
The change is always only effected for elements displayed in the current window. If you wish the change to apply to all elements of this type, check the option 'Whole file'.

If you have flagged elements with the ' Marked (m) ' code, you can limit the changes to those elements only.

> **Note: Setting/removing check marks**
> It is also possible to set or remove check marks. The value 'x' represents a check mark. Leave the field empty if no check mark is to be set.

3.4   Managing views

You can change or delete existing views or create new ones. In addition, you can also define specific views as standard views and add selected views to the menu for master data.

You will find the control elements for managing views in the drop-down list at the bottom right of each window or via the menu item 'Master Data | Master data formats'.

Drop-down list

Use the drop-down list at the bottom right of the window to switch between the existing views for this window or to save, rename or delete changed views.
The 'Save view as…' option creates a new view that is then displayed in the upper section of the list.
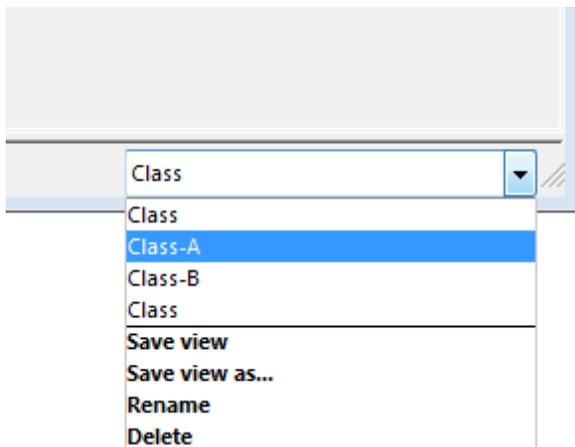
> **Note: Modified view**
> Once you modified a view, a '*' (asterisk) will be displayed next to the name of the view at the bottom right of the window. You can now save this view or create a new view using 'Save view as…'.

Master data formats / Lesson formats

You can display a complete list of all master data views via the menu item 'Master Data | Master data formats' ('Lessons | Overview formats') .
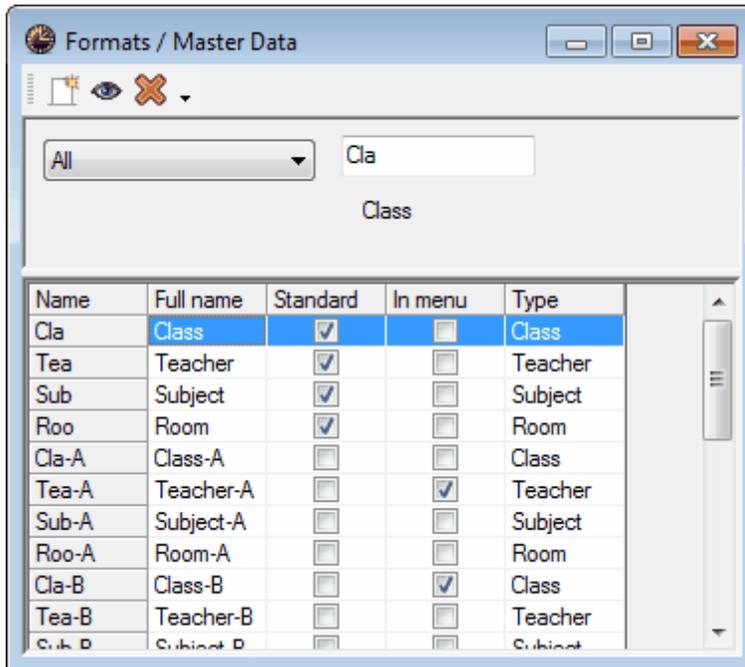
In the 'Standard' column you can select which view should be opened as the default view .

If you wish to add further views to the master data menu, simply check the box for the corresponding view in the 'In menu' column.

You can use the toolbar in this window to create a new view (the active view in the table will be used as a template), or to open or delete an existing view.

3.5   Printing

There are two places where you can make settings for printing.

1. Page layout

Every master data and lessons window contains the <Page layout> button. This is where you can make settings for printing and at the same time view the results.

2. Print selection dialogue

When a view is active (i.e. has been clicked), you can access the print selection dialogue by clicking on the <Print> or <Print preview > buttons in the main toolbar.

Note: Copying via the clipboard
You can mark part of the table or the whole table and use <CTRL>+C and <CTRL>+V to copy it into a word processor or spreadsheet.

3.5.1 Page layout

All views (master data, lessons, cover planning) now provide the <Page layout> ⚙ button with which you can prepare the relevant list for printing. You will find the button in the toolbar of the relevant window or in the main toolbar.
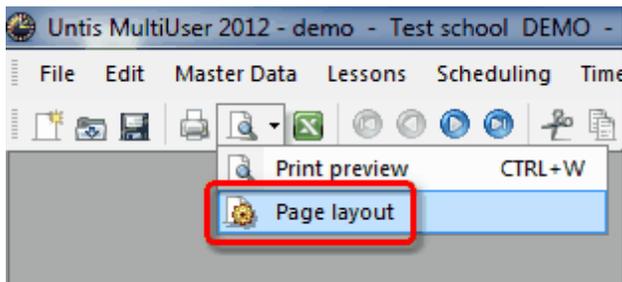
The figure shows a list of lessons for class 1a. The print layout toolbar allows you to make all printing-related settings.
Use the <Selection> button to select the elements that are to be output.
If you wish to print a column in bold, click in the column and then on the <B> button.

L-No.	Cl,Te.	UnSched Prds	Per	YrsPrds	Teacher	Subject	Class(es)	Subject room	Home room	Double pers.	Block
11	4, 1		2		Hugo	GEc	1a,1b,2a,2b		R1a		
7	2, 3		2		Ander	DS	1a	WS	R1a	1-1	
					Gauss	DS	1b	WS	R1a		
					Curie	TX	1a,1b	TW			
73	2, 2		3		Arist	PEG	1a,1b	SH2	R1a		
					Rub	PEB	1a,1b	SH1	R1b		
31			5		Arist	MA	1a		R1a		
33			5		Arist	EN	1a		R1a		
35			2		Callas	MU	1a		R1a		
39			2		Callas	AR	1a		R1a	1-1	
46			2		Nobel	RE	1a		R1a		
53		2	5		Rub	DE	1a		R1a		
63			2		Cer	BI	1a		R1a		

The meaning of the individual buttons is shown in the figure:
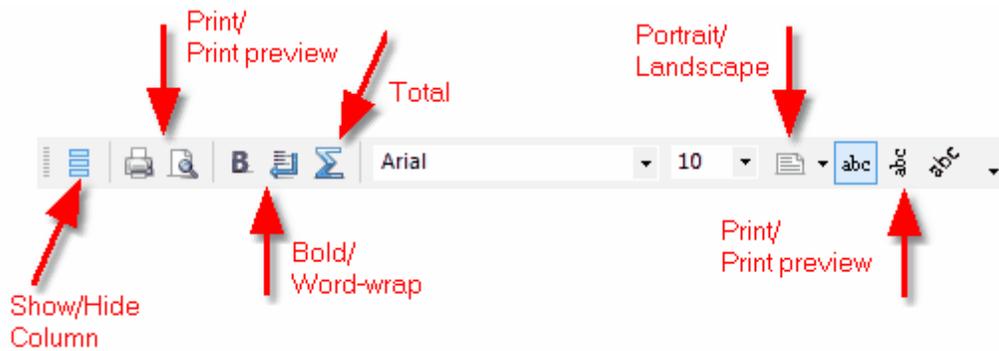
If you wish to change the column heading, click on one of the two heading rows and enter the desired expression.
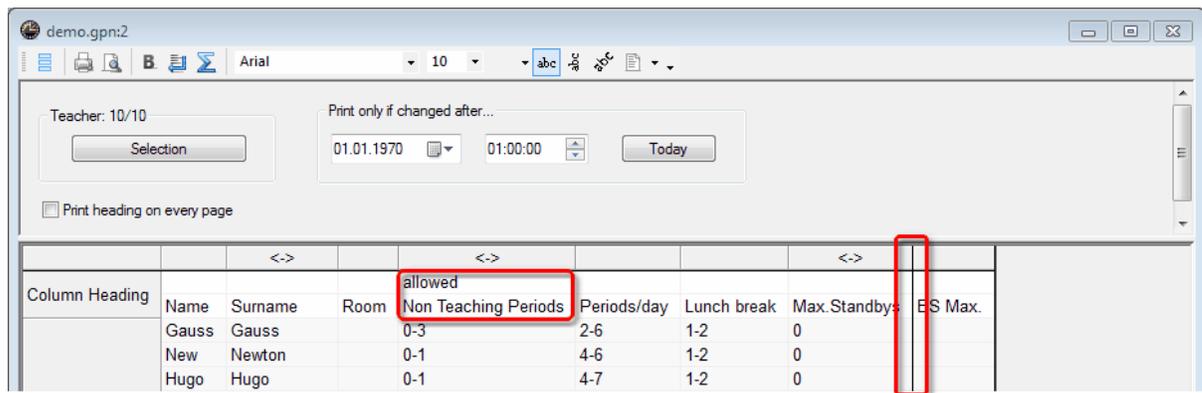
**Note: Pagination**
Please note that the window also displays the pagination. Thus the column PA Max in the figure would be printed on the second page.

3.5.2   Print selection dialog

This window contains settings that can also be found in Page layout (<Selection> and <Layout> buttons).

Please note that further print fnctions are available via the combo boxdepending on the type of view.
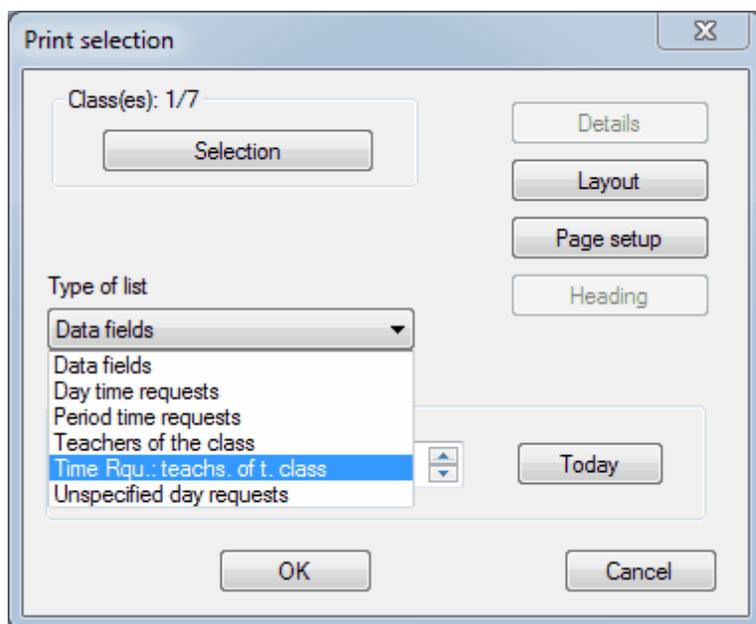
These print functions are described in detail in the relevant chapter.

4 Master data properties

In principle, all you need to do to construct a timetable automatically is to enter a name in the *Name* field. As a general rule, it is always preferable to leave a field empty if its meaning is at all unclear rather than to restrict the optimisation algorithm by entering a large amount of unnecessary data.

Note: Do not enter too much at the beginning
If you are unfamiliar with the application, we would recommend that you only enter master data in the small number of fields displayed in the standard grid view. All other input options should only be used at a later date (after initial optimisation results have been obtained).

There are properties that apply to all types of master data (element-independent properties) as well as properties specific to a particular type element. You will find information on this latter type in the relevant chapters dealing with

Rooms
Classes
Teachers
Subjects

4.1 Input fields for all master data

The following fields are found in all types of master data.

Name	Full name	Text	Description	Stat. code(s)	Marked (m)	Lock (X)	Ignore (i)	Don't print (N)	(T)
1a	Class 1a (Gauss)	Everybody loves		r	☐	☐	☐	☐	☑
1b	Class 1b (Newton)	and everybody knows		r	☑	☐	☑	☐	☑
2a	Class 2a (Hugo)			r	☑	☐	☐	☐	☑
2b	Class 2b (Andersen)	Lorenz Petters		r	☐	☐	☐	☐	☑
3a	Class 3a (Aristotle)	for president!			☐	☑	☐	☐	☑
3b	Class 3b (Callas)				☐	☐	☐	☐	☑
4	Class 4 (Nobel)				☐	☐	☐	☑	☑
*					☐	☐	☐	☐	☐

Name

This is the unique (short) name. The short name is used by the application internally to identify the element concerned. A name must be specified for every element.

> **Note: No duplicate names**
> It is theoretically possible to give elements of different types the same name, e.g. 1a for class 1a and for room 1a. Names are also case-sensitive. It is therefore possible to name one class 1a and another class 1A. We would urge you not to take either of these approaches.

Full name

This is where a (long) informative name can be specified that also appears on your printed reports. This entry is optional but recommended.

Text

Explanatory text can be entered for each element.

Description

Descriptions are master data in their own right with (short) name and full name. They make sense when descriptions apply to several elements. You select to see the short or full name of the relevant descriptions when printing elements and in views.

Statistics codes

You can define any number of statistics codes (separated by commas) for each element. You can for example create well-defined sub-categories for printed reports using these statistics codes. Please refer to chapter Filtering for more information.

Marked (m)

The Marked (m) code can be set for any element. For certain functions such as printing (timetables or master data) or serial changes you can specify whether only the marked elements should be selected for editing.
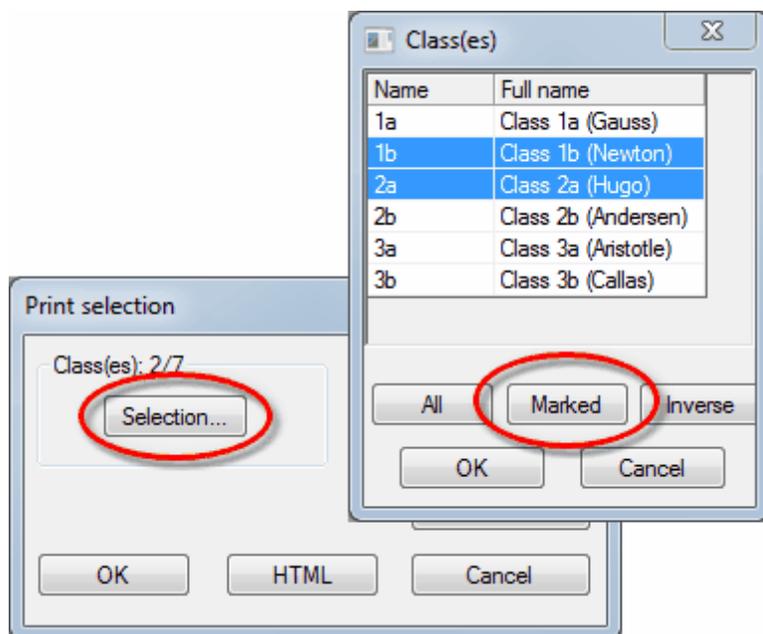
Lock (X)

Lessons containing an element that is locked will be 'frozen' in the timetable. The lesson periods will not be moved during subsequent optimisation.

Ignore (I)

Lessons containing an element for which the 'Ignore' flag has been set will be ignored in the timetable, i.e. it will be neither scheduled nor displayed. The (period) value of the lesson will however be included when calculating totals for teachers and classes.

In addition, elements for which the ignore flag has been set will not be exported via some interfaces.

Don't print (N)

If this flag is set no timetables or lesson overviews will be printed for the element concerned.

Time requests

This field cannot be edited. The box is checked automatically whenever time requestsare entered for an element.

4.2   Rooms

The following input fields relate exclusively to rooms master data.

Alternative room

An alternative room is a room that is functionally equivalent to the specified (desired) room and that Untis can use for scheduling purposes when the desired room is unavailable. Please see the chapter on Room logic for a detailed description of the alternative room function.

Room weighting

Room weighting gives an indication of the importance of a room for a particular lesson scheduled to take place in that room.

- Room weighting 4: a lesson can only be scheduled if the desired room or one of its alternative rooms is available (e.g. PE classes).
- Room weighting 0: Untis can schedule lessons even when neither the desired room nor one of its alternative rooms is available (useful for lessons where no specific teaching aids are required).
- Room weighting 1-3: appropriate intermediate levels.

If no weighting is entered for a room, the weighting will correspond to 2.

> **Note: Room optimisation**
> Please note that the allocation of rooms is affected not only by room weighting, but also to a large degree by the slide control Room optimisation . Please refer to chapter Room logic for more information.

Off-site codes

Off-site rooms are classrooms and specialist subject rooms not located in the main building of the school but at an external site too distant to reach within the space of a normal break. Enter the values 1 to 9 for off-site locations with start-time graduation and the values A to E for off-site locations without start-time graduation Further details on the off-site function can be found in the section Off-site rooms .

Room capacity

This is where you can enter the maximum student capacity for a particular room.

Please read chapter Room capacity if you wish to include room capacity as a factor when assigning rooms for lessons.

Dept.

Department. Rooms can be allocated to a specific department. These details are largely for information purposes only and allow printouts of timetables and/or room lists to be produced for individual departments.

Corridor (Break superv.)

Use this field to enter up to two corridors that the room adjoins. These fields are only useful in connection with the additional module Break Supervision .

External name

The external name is only used when several schools are created in a multi-user database with shared inter-school resources. For more details please refer to chapter Shared resourcesin the MultiUser manual.

4.3   Classes

The input fields for classes are arranged in tabs in the form view . Depending on the number of additional modules you have installed, the number of tabs displayed for master data elements may differ from the examples shown in this manual.

- Class tab
- Timetable tab
- Codes
- Class time grid

4.3.1   'Class' tab

You will find the following input fields on the 'Class' tab.

Male/Female

These fields allow you to enter the number of male and female students (pupils) in a class. The two figures are added up automatically and displayed below the input fields.

These figures are only important for use with the room capacity function. For further details on the room capacity function, please refer to chapter Room capacity .

Time range

The entries for the time range are only displayed if you have licensed the Multi-week timetable module and are described in the relevant manual.

Class teacher

Several class teachers (form teachers) can be entered for a class. This field is used in conjunction with the weighting function Class teacher at least once per day , when printing timetables (for display in the heading) and lists and in Cover planning.

Alias (second name)

For certain purposes it may be desirable to use standardised designations instead of the usual names. Examples include printouts for local authorities and data exports to databases.
Alias names can be entered either for the element in question or under menu item ' Master data | Special data | Alias names '.

Note: One name for a group of classes
An alias can be defined for a group of classes via 'Master data | Special data | Alias names', e.g. '3abc" for '3a+3b+3c".

Lesson table

The Lesson table serves as a useful tool for checking subject distribution in the Lesson planning and Value calculation module and has no other significance outside of it

Previous year's name

The class name from the previous year is required for use with the function< Last year's teacher . The name of the class in the previous year can be entered here to ensure the class teacher accompanies the class into the new school year. This function is available if you have licensed the Lesson planning and Value calculation module.

Dept.
Department. Classes can also be allocated to a particular department. This function is largely for information only and allows timetables and/or class lists to be printed specifically for individual departments. This function is particularly important for use with the e Department timetables module.

Class level
This function is only useful in connection with the modules Lesson planning and Value calculation , Students timetables or Course scheduling .

Regular school
For use with certain import/export interfaces.

External name
The external name is only used when several schools are created in a multi-user database with shared inter-school resources. For more details please refer to chapter Shared resourcesin the MultiUser manual.

4.3.2   'Timetable' tab

This tab allows you to enter parameters and also to set codes .

Home room
This is where you can enter the name of the classroom assigned to a particular class. This subsequently makes the task of Entering lessons easier. Please see chapter Alternative rooms in the User tips for details on classes with no designated classroom.

Class group
This input field is designed specifically for use in Austrian teacher training colleges, British secondary

schools, Belgian Gymnasiums and German Realschulen where students have a choice between several main and minor subject areas (core and differentiation lessons) or several subject areas of equal standing.

> **Warning:**
> Please do not enter any data in this field if you are in any way unsure about the exact meaning of the function. You will find a more detailed explanation of class groups in chapter User tips/ Class groups

Lunch break Min- Max
This function allows you to specify the maximum and minimum duration of the lunch break for individual classes.

For lunch breaks of exactly one hour, enter '1,1'. If you wish Untis to schedule a lunch break of at least zero and at most two hours, enter '0,2'.

Periods/day Min, Max
Specify the minimum and maximum number of periods / lesson units the class may be taught per day.

For example, enter '4,6' for a class that should have at least 4 periods, but no more than 6 periods, per day.

Max main subject pers./day
You can activate the main subject for any desired subject. Use this field to specify how many main subject periods may be taught as a maximum on any one day.

Max. consec. main subj. per/day
This function determines how many main subject periods may be taught consecutively on any one day.

Max. different less. /day
In some countries (in particular those which have all-day schooling) the authorities only allow a certain maximum number of different subjects to be taught to a class on any one day.

You can enter this maximum value in the field 'Max. diff. less./day' for each class.

Master class
Enter the same master class for type-separated class components if you wish to print the timetables together in a single timetable. Please see chapter User tips/ Type-separated class components and chapter Timetable creation / Several classes in one timetable'for further details.

4.3.3   Codes

(P) NTPs allowed
As a rule, NTPs (non-teaching periods) should be avoided at all costs. Possible exceptions are NTPs for pseudo classes and class components.

(F) Lessons not on adjac. days
Use this function for part-time classes that do not have lessons every day of the week if you wish to avoid scheduling lessons on consecutive days. In this case select this code.

(H) Sched. a.m./p.m. not both

This function ensures that lessons can only be scheduled for one half-day of the day, i.e. Untis can allocate lessons either in the morning OR in the afternoon of the same day.

(Y) Keep curr. loading pattern

Tick this option if you wish to block the allocation of lessons before the first and after the last periods already scheduled (for use with a subsequent optimisation run).

Time grid showing permitted scheduling options for use with a subsequent optimisation run where option Y is activated (the last morning lesson is period 5, the first afternoon lessons is period 6).

This means that in a subsequent optimisation already allocated lessons and NTPs may be rescheduled. This code is typically activated when you wish to leave non-teaching time for teachers and classes unchanged when scheduling the timetable. Extracurricular activities are not then affected by the new timetable

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Warning
This function imposes considerable restrictions on subsequent optimisation runs and should not be activated without due consideration.

4.3.4   Class time grid

You will only find the <Class time grid> button in the toolbar under 'Master Data | Classes' (i.e. for no other element).

The class time grid allows you to specify that
- certain periods should be used for scheduling double periods
- certain periods should be used for scheduling single periods and
- certain periods should (not) be the last lesson for that class on a particular day.

1. If you wish to schedule double periods by preference in the first two periods of the day (on every day of the week) as shown in the example, mark the desired range and click on the <Double periods> button in the 'Schedule' block .

2. If you wish to reserve a range of the day(s) for scheduling single periods, use the <Single periods> button accordingly.

Warning: Sufficient double periods
Please note that it is essential to define a suitable minimum and maximum number of double periods in the lessons window of the class in question in order for this setting to work.

3. You can also use the <No> button in the 'Last period' block to specify those periods after which lessons for the class may not end. This is important if you have to take local transport timetables (school buses) into consideration when preparing your school timetables.

Note: Copying
Use the <Copy> button to transfer the settings you have made here to other classes.

The sample timetable corresponds to the settings made in the figure above.

4.4   Teachers

The number of tabs depends upon the modules. Here the following is described in detail:

- 'Teacher' tab
- 'Timetable' tab
- Codes

4.4.1   'Teacher' tab

'Teacher' tab

4.4.2   'Timetable' tab

You can make the following settings on the 'Timetable' tab .

Home room

Use this field to assign a dedicated home room to a teacher. This makes entering lessons easier subsequently.

Lunch break Min-Max

Enter the minimum and maximum duration of lunch breaks for individual teachers.

Periods/day Min,Max

Input in this field determines the minimum and maximum number of periods a teacher should teach each day. Enter '2,5' for a teacher who should teach between 2 and 5 periods per day. Leaving this field empty allows Untis to schedule any number of periods for a teacher.

NTPs Min,Max

Use this field to specify the minimum and maximum number of NTPs (free periods, non-contact periods) per week for an individual teacher. An empty field is equivalent to the entry '0,0'.

Max. consec. periods/half day

This field allows you to specify the maximum number of consecutive periods a teacher should teach before an NTP (break) is scheduled.

Daily Fr. Break

In schools where lessons continue until evening, it is often desirable to specify the length of time between the last period in the evening and the first period in the morning to allow a sufficiently long break between classes.

The time grid of a school shows a total of 11 periods per day. On Monday, teacher X teaches until period 9. A value of "4" entered under "Daily Fr. Break" means that Untis will attempt to keep periods 1 and 2 on Tuesday free for teacher , i.e. a total a total of 4 free periods.

Teacher optimisation code

The teacher optimisation code is important when optimisation is performed using variable teacher assignment.

Permissible entries are either numbers 1 to 9 or letters A-Z.

Entering a number means that during optimisation with variable teacher assignment, the relevant teacher's lessons can only be exchanged with those of another teacher who shares the same optimisation code.

On the other hand, entering a letter results in lessons only being exchanged with teachers with a different (or no) optimisation code.

4.4.3   Codes

(H) Sched. a.m./p.m. not both
Schedule half days only. This function ensures that lessons cannot be scheduled in the morning AND in the afternoon of the same day.

(Y) Keep curr. loading pattern
Activate this option if you want to block the allocation of a teacher before the first and after the last periods already scheduled for the half-day. This means that a subsequent optimisation run ignores the teacher for the periods outside the given range. You will find an example of how to use this field correctly in chapter Master data properties / Classes .

(R) Not in 1st and last period
You can use this code to avoid a teacher being scheduled in the first and last periods of a day (Scheduling | Weighting | Time Requests | Time requests for teachers).

Very important
The input block 'Very important' allows you to specify different timetabling priorities for each individual teacher.

No NTPs (A)
Activate this option to instruct the software to avoid scheduling NTPs for the teacher.

Lunch break (B)
Check this box if you want Untis to pay particular attention to lunch break compliance when creating the timetable.

Max. periods/day (C)
Activating this option ensures a high level of compliance with the specifications entered under 'Periods per day min,max'.

Max. consec. prds. (D)
Activating this option ensures a high level of compliance with the specifications entered under 'Max. consec. periods/half day'.

Note: Do not set for all teachers
Please set codes A-D for individual teachers. If great importance is attached e.g. to avoiding non-teaching periods for all teachers you can achieve this via optimisation.

4.5   Subjects

The entry of subjects is analogous to the other master data. Any subject can be attributes planning parameters like <u>Main subject</u> or <u>Fringe period</u> .

<u>'Subjects' tab</u>
<u>'Timetable' tab</u>
<u>Codes</u>

4.5.1   'Subjects' tab

'Subjects' tab

4.5.2   Codes

(M) Main subject
Check this box to categorise a subject as a main subject. For further details please refer to chapter ' User tips / Main subjects '.

(F) Fringe period
Use this option to categorise a subject as a fringe period subject. The attribute ensures that lessons of this subject are scheduled preferentially at the beginning or the end of a school day or half-day (depending on the grid). For further details please refer to chapter ' User tips / Free periods and fringe periods '

(O) Optional subject
This option allows you to categorise a subject as an optional (non-compulsory) subject. The attribute ensures that lessons of this subject are scheduled preferentially at the beginning or the end of a school day or half-day (depending on the grid). For further details please refer to chapter ' User tips / Free periods and fringe periods '

(2) More than once a day

This option should only be used in special circumstances. If it is active, the optimisation algorithm can schedule the subject at entirely irregular intervals and even several times a day. Checking this box deactivates the weighting settings for ' The same subject cannot be taught more than once on the same day ' and ' Avoid errors with double periods '.

(G) Not a fringe period
Selecting this option causes the software to schedule lessons of this subject by preference in the middle of a half-day, avoiding fringe periods.

D) Respect double periods

Warning: Use with care
This option is only effective when used sparingly and thoughtfully since it imposes considerable restrictions on the optimisation function, especially with regard to subjects with many double periods. Activate this function only when a previous optimisation run was unable to achieve the desired outcome and you have already increased the relevant weighting parameter (" Avoid errors with double periods ") to '5'.

- Please note that the correct treatment of double periods requires an appropriate input under option 'Double periods Min,Max'.
- The use of the code (D) excludes the use of the codes (2) and (C)

(E) Double periods are allowed to span *-breaks
Breaks marked with an asterisk (*) must not be bridged by double periods and will therefore affect the distribution of double periods. If this restriction is not desired for a particular subject, simply uncheck this option.

(P) No break supervision before/after
This code is only relevant in combination with the module Break supervision .

Some subjects like PE require some preparation and follow-up. This code ensures that a teacher teaching this subject is not assigned a break supervision before or after the lesson.

(S) Consultation hour
This code is only relevant in combination with WebUntis.

4.5.3   'Timetable' tab

You can make the following settings on the 'Timetable' tab .

Subject room (short name)

This function allows you to specify the name of a dedicated subject room for a subject. This subsequently makes task of Entering lessons easier. Please see the chapter Room logic under User tips for further details.

Afternoon pers./week (min,max)

The minimum and maximum number of afternoon periods for this subject. Use this field to specify the minimum and maximum number of periods per week that the subject should / must be scheduled in the afternoon.

Periods/week (min,max)

Minimum and maximum number of weekly subject periods. This function is only relevant for use with the Lesson planning module where you can enter the minimum and maximum number of periods the subject should be taught per week (if at all).

Subj. Sequ. - Teachers

The numbers 1-9 direct the software to construct teacher timetables where subjects with the same number are scheduled in consecutive periods. The letters A-F prevent the software from scheduling subjects in consecutive periods. Please also see chapter Subject sequence under User tips .

Subj. Sequ. - Classes

The numbers 1-9 direct the software to construct class timetables where subjects with the same number are scheduled in consecutive periods. The letters A-F prevent the software from scheduling subjects in consecutive periods. Please also see chapter Subject sequence under User tips.

4.6   Students

There is an additional master data element if you use the Students timetables module – students. If you do not use the module, the menu item will be deactivated.

> **Note**
> In some school systems or at some class levels it is not the class that determines the lessons. Instead,

students can select the courses they wish to take depending on their preferences. This results in students having their own individual timetables depending on the courses they choose. Untis provides two modules to help you manage these scheduling tasks: Student timetables and Course scheduling . The use of student timetables is useful when the majority of lessons take place for the class as a whole and a smaller share (up to approx. 25 %) is selected individually. The course scheduling module is used when no class exists in the traditional sense and students are (almost) fully free to choose their courses.

4.7   Departments

Additional master dataYou will find the following master data under menu item 'Master Data | Special data' :

Student groups
Student groups facilitate student assignment in WebUntis . They play no role in lesson scheduling.

Alias names
For some purposes it may be necessary to use different names than the names specified in master data for elements. For example:
- Standardised official specialist designations for authorities
- Standardised names for interfaces to official databases
- Timetable printing

If you wish to use the aliases specified here in timetable printouts, you must check the box 'For the timetable' and also set the appropriate code in the corresponding timetable view. Please refer to chapter Alias under Timetable for more information.

Descriptions
Descriptions are master data elements in their own right with (short) name and full name. They are useful when designations apply to several elements.

You can for example provide somewhat longer text in the full name of a description. It is then sufficient to enter the (short) name of the description in other master data elements in order to choose between the (short) name or full name of the corresponding description for printed reports and views.
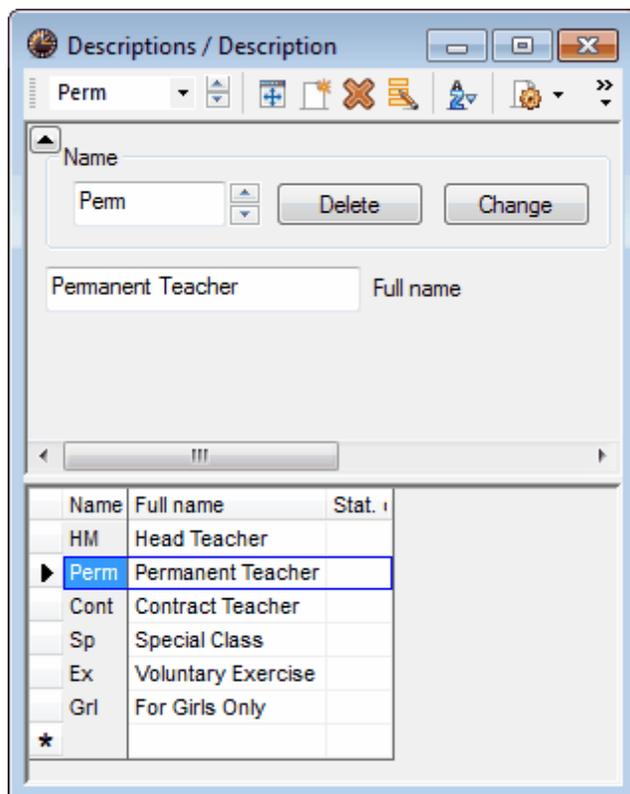
Departments

You can assign each master data element to a department (in the case of teachers, to several departments). This is only of further significance when used with the Department timetables module. If you do not use this particular module, entering a department name is mainly for informational purposes and can, for example, be printed out on timetables. However, some reports can be printed on a departmental basis.

Corridors

Corridors must be specified for scheduling breaks (corridor supervision). These functions require a license for the Break supervisionmodule.

Endnotes 2... (after index)

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