Untis
GRUBER & PETTERS

Untis

MultiUser

untis.com

Contents

I Introduction 5

II Technical background 6

III Installation 7

1 Installation of Untis application ... 7

2 Setting up ODBC connections ... 7

Microsoft Access database ... 8

MySQL database ... 13

MS SQL database ... 15

64-bit operating systems ... 15

Setting up ODBC via command line ... 16

IV Untis MultiUser - first-time launch 17

1 Importing data from a .gpn file ... 17

2 Verwendung älterer Versionen verhindern ... 19

3 Logfile ... 21

4 The login dialogue ... 21

V User administration 24

1 Changing passwords ... 25

2 User groups and user rights ... 27

Levels of rights ... 27

Rights ... 32

Limitations to school, school year 36

3 Creating users ... 37

4 'Active users' dialogue ... 40

Logging out other users ... 40

5 Working simultaneously ... 41

Changing the same data simultaneously ... 41

Data consistency ... 42

VI Private / public views 43

1 Private copies of public views ... 44

2 Marking views "Public" ... 45

3 Saving to .gpn files ... 46

VII Shared resources 47

1 Creating external elements ... 47

2 Working simultaneously ... 49

3 Clashes with external elements ... 52
4 Cover planning ... 54
5 General settings for external elements ... 55
6 External elements: Owner ... 57

VIII Working with departments 58

1 Simultaneous optimisation of departments ... 58
2 Departmental generation of timetables ... 58
3 Affiliation with departments ... 60

IX Cover planning 62

1 Working simultaneously in cover planning ... 62
2 Cover planning across departments ... 62
3 Cover planning and timetable planning ... 62
4 Room planning and cover planning ... 63
5 Last change of substitution ... 65

X Data security 65

1 Protection against unauthorised access ... 65
2 Backups ... 67

XI Message system 68

1 Sending messages ... 68
2 Managing messages ... 70
3 Deleting messages ... 71
4 Refresh ... 71

XII Other functions 71

1 Automatic log out when inactive ... 71
2 Window arrangement ... 72
3 Untis in info mode ... 72
4 Automatic login ... 73
5 Creating a new school year ... 74
6 Simultaneous login ... 75
7 Variable name of the ODBC connection ... 75
8 My SQL database ... 75
9 Support ... 77

XIII Database and .gpn file 78

1 Export data to a .gpn file ... 78
2 Transfer of .gpn files into the database ... 78

3 Merging data from .gpn files 79
Merging timetables 81
Merging cover planning data 83
Changing terms 83

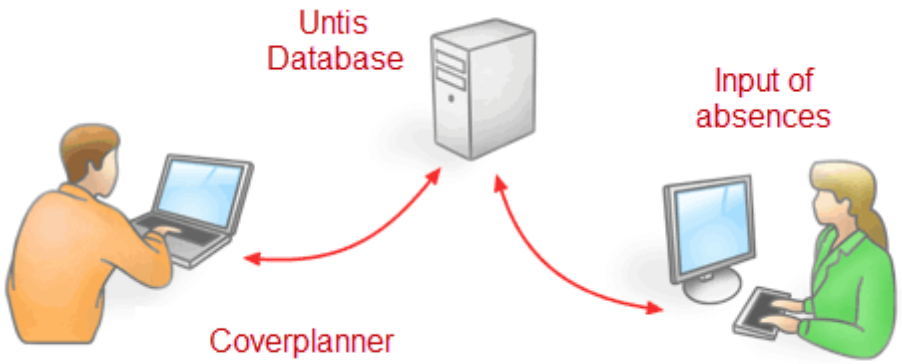
Index 84

1 Introduction

In larger schools it is common for more than one person to work on the timetable and on the cover plan.. Moreover, some schools, especially vocational schools or higher vocational schools, are divided into departments with the timetable of each department being prepared by one or more persons.

It is not possible for more than one person to work simultaneously using .gpn files as only one user at a time is allowed write-access. This results in the risk of unnecessary delays or even errors while exchanging .gpn files when the latest .gpn file is not passed on.

This type of error cannot occur with Untis MultiUser since it allows several users to work on the same data simultaneously. This is made possible as the data are stored in a single database.



This results in a number of advantages:

- Data input (master data, lessons etc.) can be carried out by more than one person at the same time.
- Master data can be administered in the school office – for example e-mail addresses can be added or phone numbers corrected – while the scheduler(s) work(s) on the timetable.
- Untis MultiUser has a hierarchical system of authorisation. This can be set up in such a way that e.g. users in the school office are only authorised to view timetables but never to change them, minimising accidental errors. You decide which users groups have which rights.
- Departments can create their own timetables independently of each other while departmental data remain fully integrated within the date of the entire school data. This makes it easier to schedule resources that are used in more than one department (e.g. teachers or rooms), and statistics relating to the whole school can be generate without any difficulty.
- If neighbouring schools share common resources such as shared rooms or teachers, this data can be linked in such a way via so-called *external elements* that all schedulers can always see the current scheduling status of these shared resources and include them accordingly in their scheduling.
- Work with the Cover planning module is made significantly more flexible. for example, reasons of absence can be entered by the school office independent of the scheduler planning substitutions.
- Furthermore, the scheduler can change the timetable in a new term while the substitution scheduler deals with daily substitutions in the same database. It is not necessary to import the substitution data into the new timetable any more.

2 Technical background

Untis MultiUser can run with any of the following databases: MySQL -, MS_SQL- or Microsoft Access . Access to the data takes place via ODBC, with data updates being performed asynchronously. Untis checks automatically every 10 seconds to see whether other users have made any modifications, in which case data will be updated. When a Microsoft Access database is used, the application itself does not need to be installed since the installation of an ODBC driver is sufficient to connect to the database.

The use of Untis MultiUser does not exclude working with .gpn files. You can store Untis MultiUser data records in a .gpn file, import from an existing .gpn file and optionally store them in the database. Please refer to chapter " Database and .gpn file " for more details.

Operation via the Internet

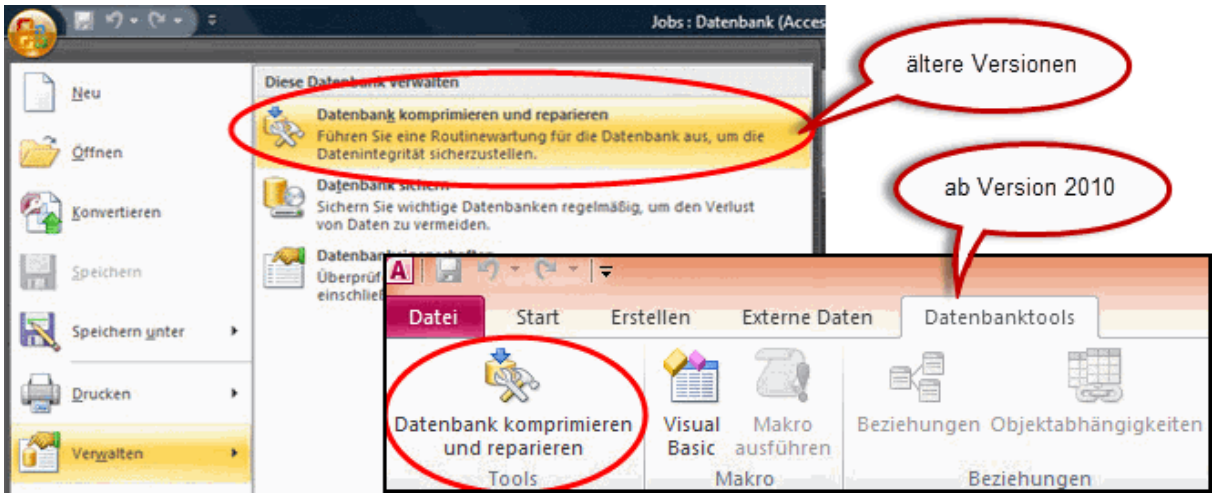
Untis MultiUser can be operated easily via the Internet when a MySQL database used. This allows several departments that are located far apart to work on the timetable at the same time. Each department has up-to-date information about the current scheduling status of resources shared with other departments.

Multi-client capability

Untis MultiUser is multi-client capable, i.e. you can use a single database to store several schools, per school several school years and per school year up to 255 different (timetable) versions.
One version of one given school year of one given school corresponds to the amount of data of one .gpn file.

Database reorganisation

Database reorganisation is recommended if you are working with Microsoft Access and the speed of Untis MultiUser decreases or if the .mdb file is getting too large. This requires Microsoft Access to be installed on your computer. With Microsoft Access 2007, open your Untis database (by default 'Untis.mdb' or Untis.accdb', respectively) and click on the 'Database tools' tab and then click on the option 'Compact and repair database'.
If you use an earlier version than Access 2010 then it this process will be a little bit different.



3 Installation

The installation of Untis MultiUser takes place in two steps:

1. Installation of the Untis application (omitted if you are already working with the single-user version)
2. Installation of the database connection (MS Access, MySQL or MS SQL) as desired

These two steps are explained in detail on the following pages.

3.1 Installation of Untis application

There is no difference in the installation procedure of the single-user or multi-user version.

You can install Untis either centrally on a (Windows) server or individually on all workstations where the program is to be used. Please make sure that the central installation on a server is carried out with administrator rights. After installation start the program on the server and on all clients (PCs) - again with administrator rights - to allow the required entries to be written into the system registry.

Note:
In some cases Untis must be started once by right-clicking on Untis.exe (or on a shortcut on your desktop) and then with the command "Execute as administrator".

3.2 Setting up ODBC connections

An ODBC connection must be set up on every PC (irrespective of whether single-user or server installation) where Untis MultiUser is deployed according to the description in the following chapter. The basic steps, however, are the same.

As a first step, an empty database (i.e. a database in which no tables have been created) must be copied to a central location on a network server. You find this on our homepage: https://www.untis.at/HTML/updates.php . f you want to use a different database, you will have to create this empty database yourself.

You will then have to make the appropriate entries in the ODBC Data Source Administrator in the control panel.

Note regarding ODBC Connector
Depending on the operating system and database version in use it is possible that the ODBC connection to the 32-bit connector needs to be set up. For further information please go to 64-bit operating system .

Important information for users already working with Untis MultiUser:
The default name for the database and for the ODBC connection was 'gpUntis' up until Untis MultiUser version 2012. From Untis MultiUser version 2013 onwards, this name was changed to 'Untis', which is why all explanations and screenshots refer to this new name. You do **not** need to change this name in versions from Untis 2013 onwards if you already have an existing (and working) database with an ODBC connection.

3.2.1 Microsoft Access database

Note:
We recommend that all users who have little or no experience of administering databases to run Untis MultiUser with Microsoft Access.

Perform the following steps to use Untis MultiUser with a Microsoft Access database.

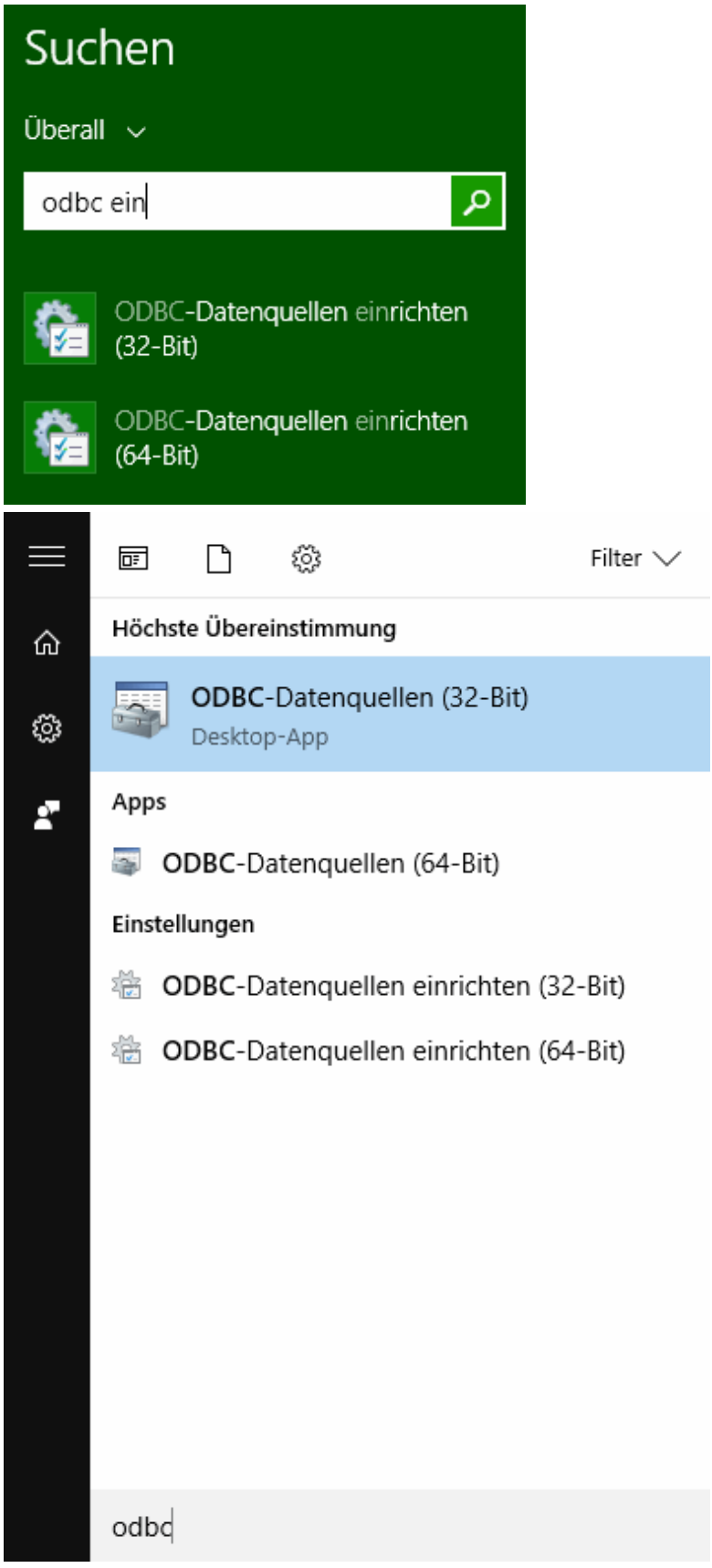
Please visit our homepage for the Untis.mdb file: https://www.untis.at/HTML/updates.php . Copy this file to a folder on the server to which all users have read and write access.

In the following steps we assume that Untis MultiUser has been properly installed using administrator rights on each computer where the program is to be used.

The following steps must now be performed on each of these computers:

Windows 8 and Windows 10:

1. Search via the start screen the appropriate ODBC Connector.

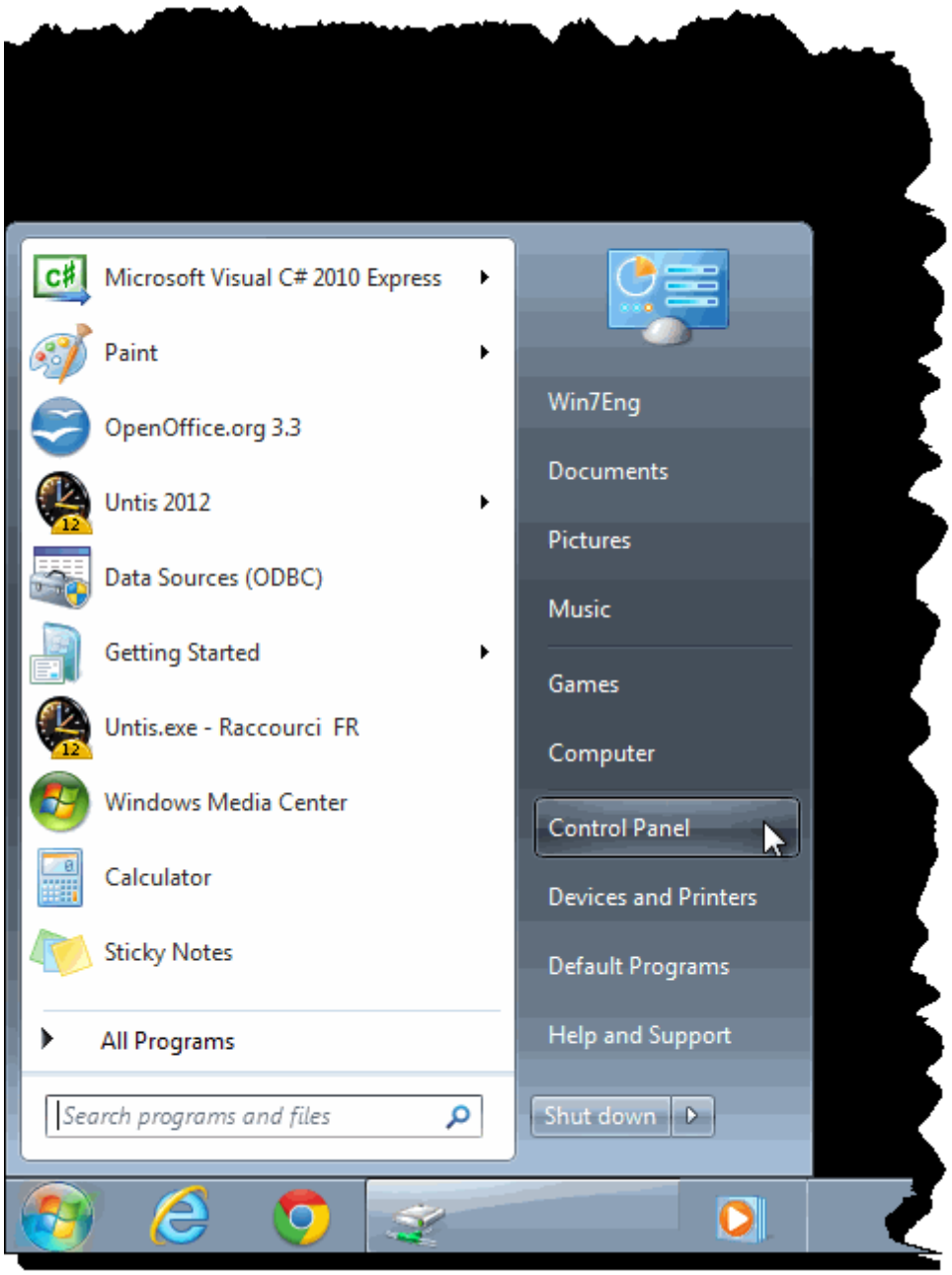

Suchen
Überall
odbc ein
ODBC-Datenquellen einrichten (32-Bit)
ODBC-Datenquellen einrichten (64-Bit)
Filter
Höchste Übereinstimmung
ODBC-Datenquellen (32-Bit)
Desktop-App
Apps
ODBC-Datenquellen (64-Bit)
Einstellungen
ODBC-Datenquellen einrichten (32-Bit)
ODBC-Datenquellen einrichten (64-Bit)
odbc

2. Select the required ODBC Connector.

3. Now continue with item 4 of older Windows versions.

older Windows versions:

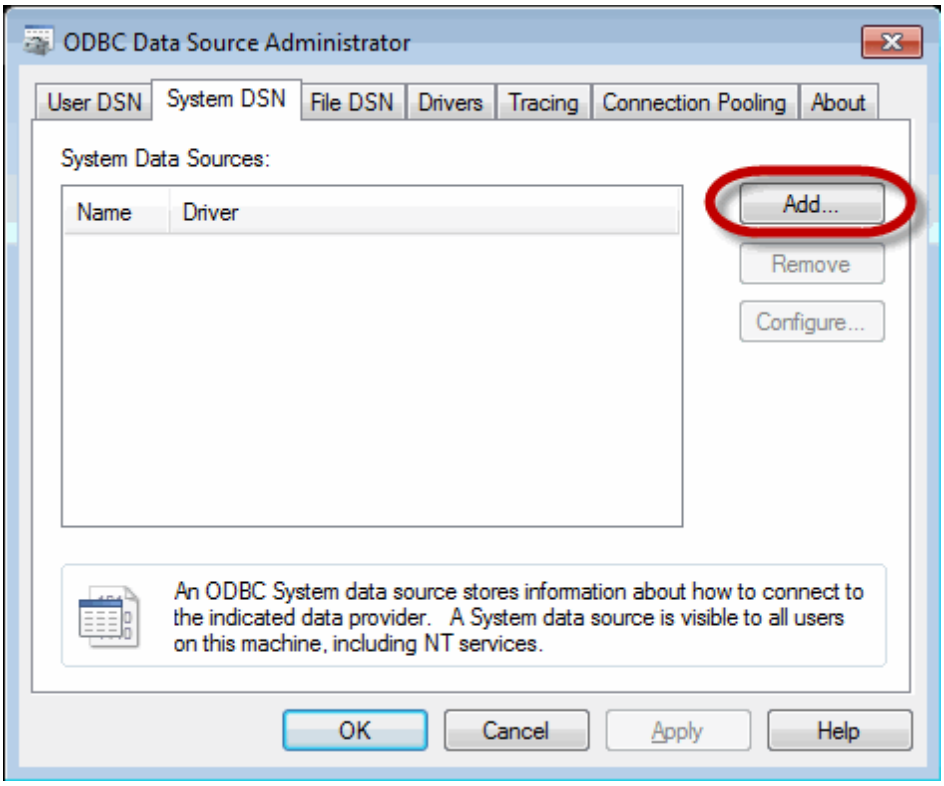
1. Open the control panel of the computer.



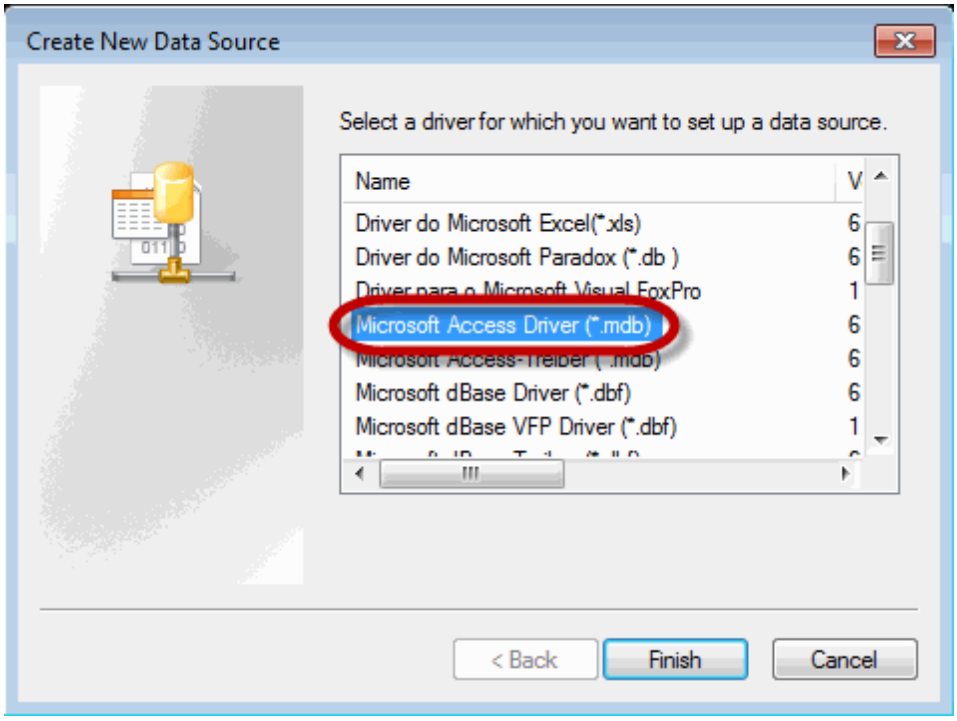
2. Double-click on item 'Administration' to open it. Depending on your Windows settings, you may also find this item under system and maintenance.

3. Double-click on item "Data Source (ODBC)".
4. A dialogue appears in which all created data sources are listed. We now want to add the data source for Untis. To this end, click on the <Add> button.

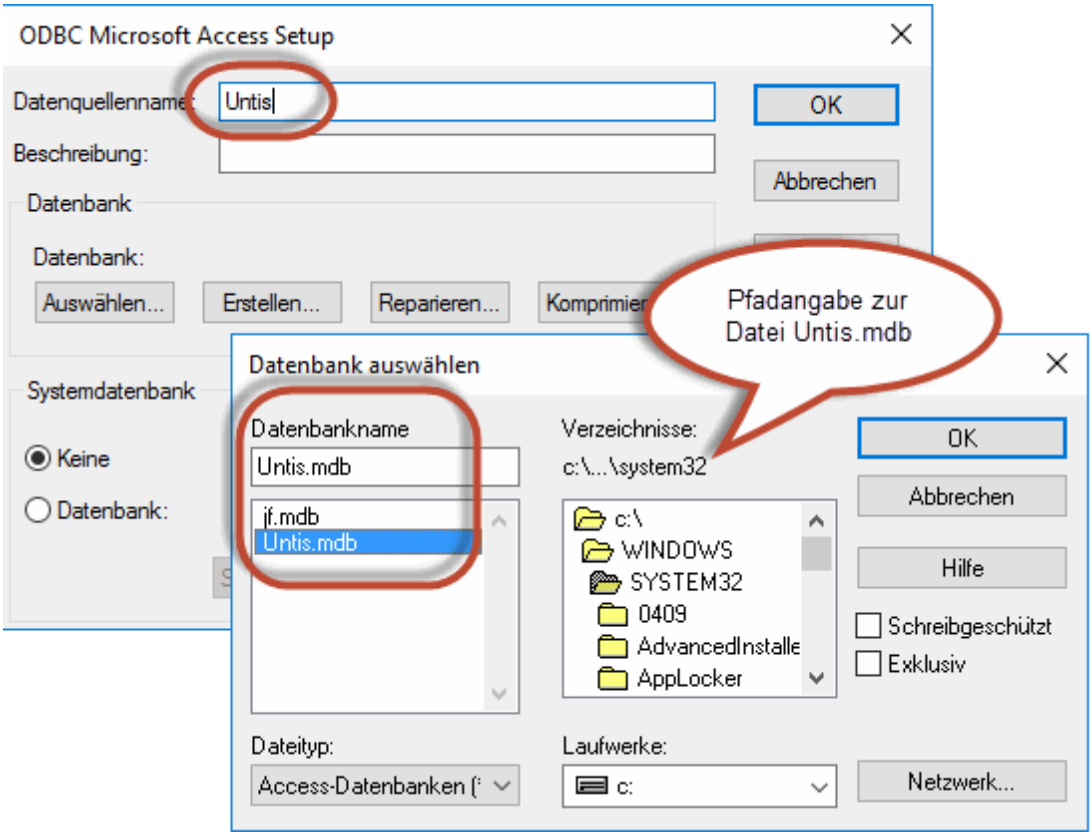
   If the ODBC connection is to be created only for the currently active Windows user, use the "User DSN" tab. If you wish to create the ODBC connection for all users, use the "System DSN" tab.



5. Select "Microsoft Access driver (*.mdb)" from the list of drivers presented and click on <Finish>. In case the driver is not listed, you can download it from the Microsoft website (search for "MDAC").



6. A dialogue appears in which you can specify the database to which it is to be connected to and which name it should have. The data source name must be "Untis" unless defined otherwise in the corresponding settings in Untis. If you want to read more about the ODBC names go to chapter Variable name of the ODBC connection . You can use the <Select> button to specify the path that leads to the Untis.mdb file on the server.



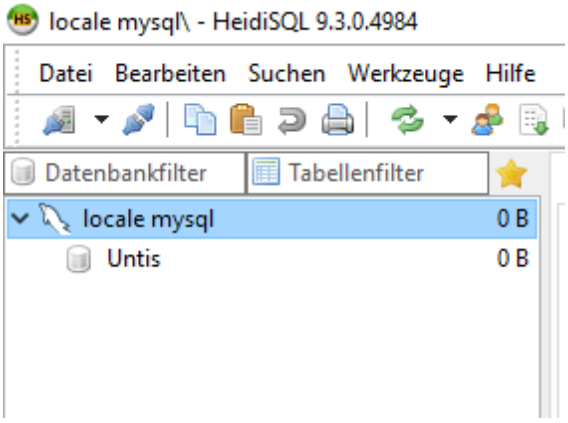
7. Confirm all dialogues with <OK>. Installation is now completed.

Warning:
If you are working with a 64-bit operating system, please read the chapter of the same name.

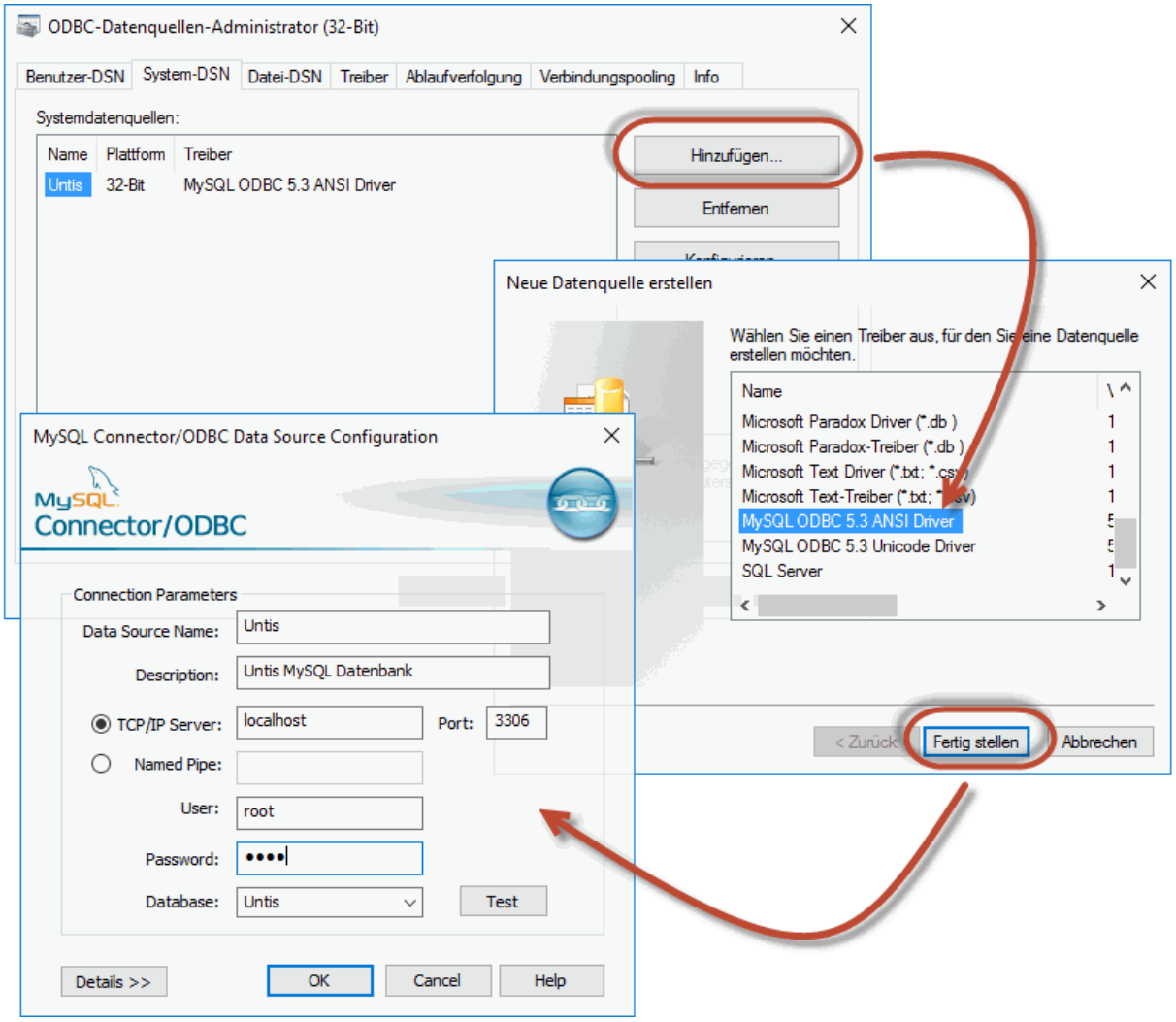
You can now skip to item Launching Untis MultiUser for the first time.

3.2.2 MySQL database

If you wish to run Untis MultiUser with a MySQL database, you must first create an empty database (without tables) called *Untis* using a suitable database administration tool.



Now create a new ODBC data source called 'Untis' via 'Control panel | Administration | Data Sources (ODBC)'. (See chapter Microsoft Access database .)



If no MySQL driver is listed in the control panel, you must first download it from the Internet (from e.g.

www.mysql.com).

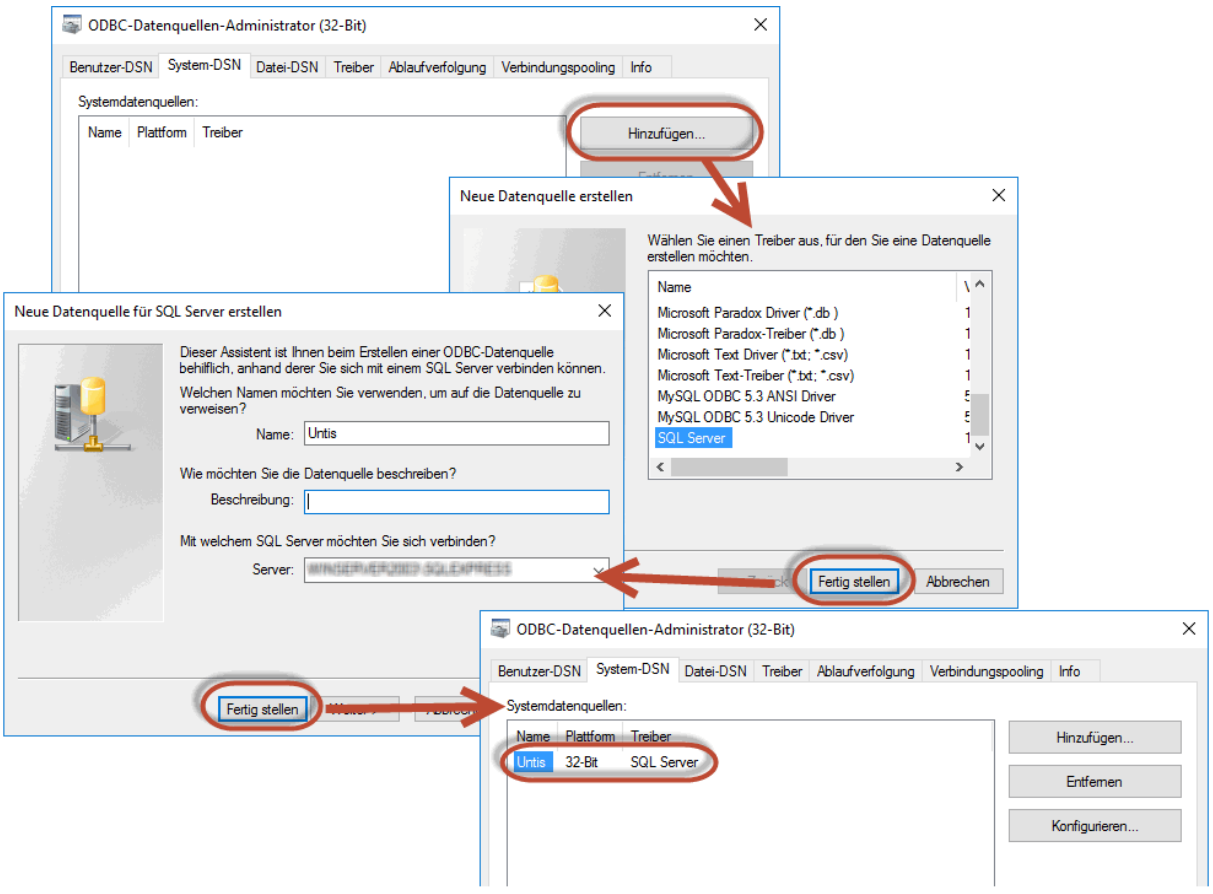
Warning:
Untis MultiUser requires MySQL driver version 5.1.8 or higher.

You can now skip to item Launching Untis MultiUser for the first time.

3.2.3 MS SQL database

In addition to the databases already described, Untis MultiUser also offers the possibility to work with MS SQL. The sequence of installation is in principle the same as for Microsoft Access and MySQL.

1. First create an empty MS SQL database (without any tables) called, for instance, *Untis* using a suitable database administration tool.
2. Now create a new ODBC data source called 'Untis' via 'Control panel | Administration | Data sources (ODBC)'. (See chapter Microsoft Access database .)



3.2.4 64-bit operating systems

64-bit operating systems

Important information for users with 64-bit operating systems
You can install the 32-bit versions of the required drivers via the 32-bit ODBC data source administrator.

To this end, execute the file ' **odbcad32.exe** ' in directory %SystemRoot%\SysWOW64 (for example under Windows 7 **'C:\Windows\SysWOW64** '). If you cannot find the driver you are looking for in the ODBC source administration application opened via the control panel, execute the 32-bit version as described above.

3.2.5 Setting up ODBC via command line

When installing software on several clients, automatic configuration steps are usually preferred. From the 2016 version onwards, you can also specify additional parameters such as destination directory, silent mode and data for setting up the ODBC connections when the installation is done via command line.

Target directory

The switch for the target directory reads /D. The installation file must always be the last parameter and must not stand between inverted commas, not even if there are spaces.

Example: **SetupUntis2019.exe /D=C:\Untis**

Silent Installation

The installation can be performed via the command line in silent mode. Use option /S.

Example: **SetupUntis2019.exe /S**

Automatic set-up of ODBC connection

You can initiate the automatic set-up of the ODBC connection (user DSN) via the command line. You can choose between three parameters.

- /odbcdriver

Name of the ODBC driver (obligatory). This is the name which is visible in the column 'driver' in the ODBC Data Source Administrator (e.g. 'Microsoft Access Driver (*.mdb, *.accdb)'. Please note that (e.g. for MySQL) the driver needs to already be installed and that the 32-bit version is required in most cases (see chapter *64-bit operating system) .

- /odbcparams:

Additional parameters for the ODBC connection such as path of the mdb file or unser name, password, server or database for MySQL/MS-SQL. These parameters are specified the following 'key1=value1;key2=value2;...' , whereby keys and values depend on the producer of the database. In the following we list examples for the most widely used parameters.

- /odbcname:

Optional name for die ODBC connection. If no name has been specified, then an ODBC connection called 'Untis' will be created.

Examples

- Access: **SetupUntis2109.exe /S /odbcdriver='Microsoft Access Driver (*.mdb, *.accdb)' / odbcparams='DBQ=C:\DB\Untis.mdb'**

Creates an ODBC connection which directs to the file C:\DB\Untis.mdb

- MySQL: **SetupUntis2019.exe /S /odbcdriver='MySQL ODBC 5.1 Driver' / odbcparams='SERVER=127.0.0.1;DATABASE=Untis;UID=dbuser;PWD=passwd;PORT=3306'**

Creates an ODBC connection accessing the server 127.0.0.1 via the port 3306, database name 'Untis', user 'dbuser' and password 'passwd'.

- MSSQL:< **SetupUntis2019.exe /S /odbcdriver='SQL Server' / odbcparams='SERVER=SERVERNAME\MSSQL;DATABASE=Untis;UID=dbuser;PWD=passwd'**

Creates and ODBC connection accessing the server 'SERVERNAME\MSSQL', database name 'Untis', user 'dbuser' and password 'passwd'.

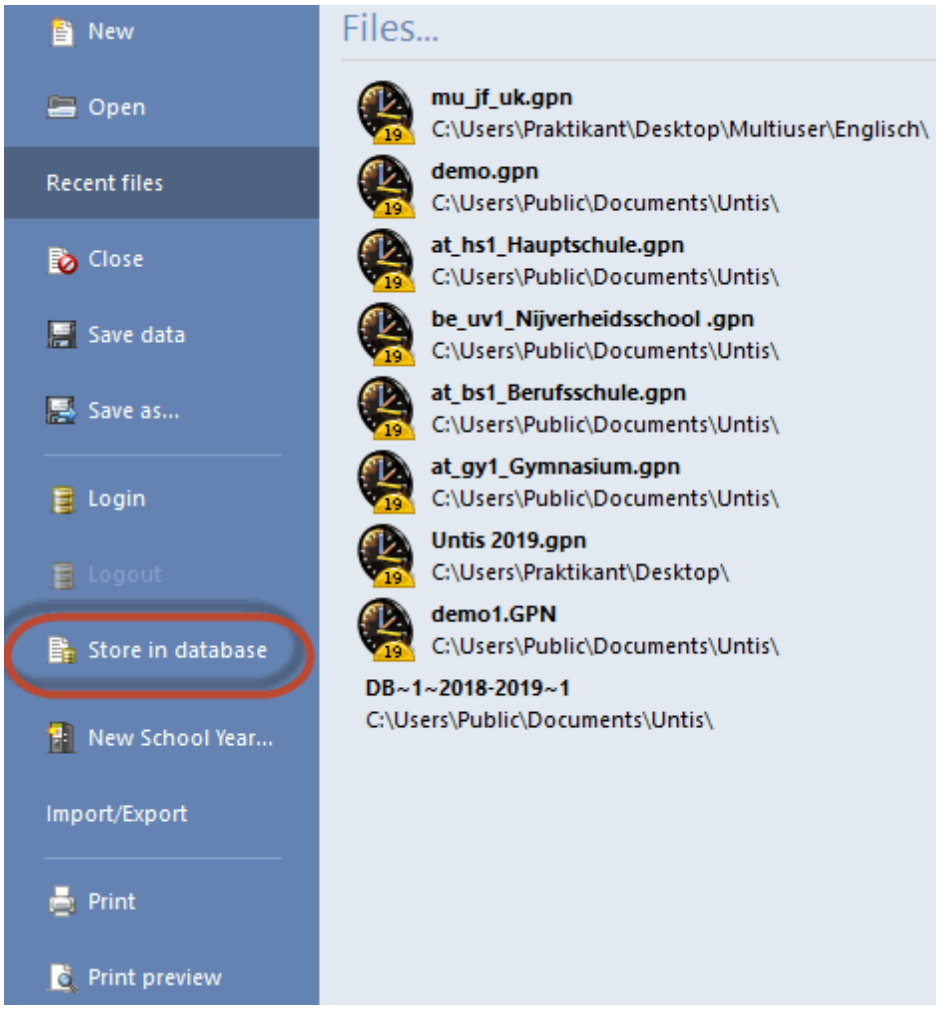
4 Untis MultiUser - first-time launch

There are basically two possibilities when launching Untis MultiUser for the first time:
1. You have not previously worked with Untis and are thus starting with an empty data set. In this case, skip to chapter The login dialogue .
2. You already have an Untis data set as a .gpn file and now wish to transfer this into your (empty) database. In this case, continue with the following chapter Importing data from a .gpn file .

4.1 Importing data from a .gpn file

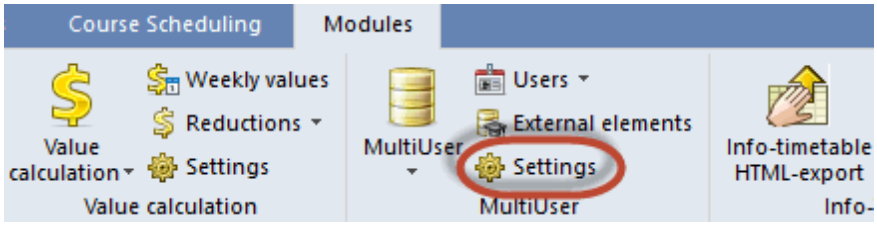
If you already have data in a .gpn file that you wish to transfer to an Untis MultiUser database, launch Untis MultiUser and load your .gpn file as usual. (In general, this file will even load automatically.)

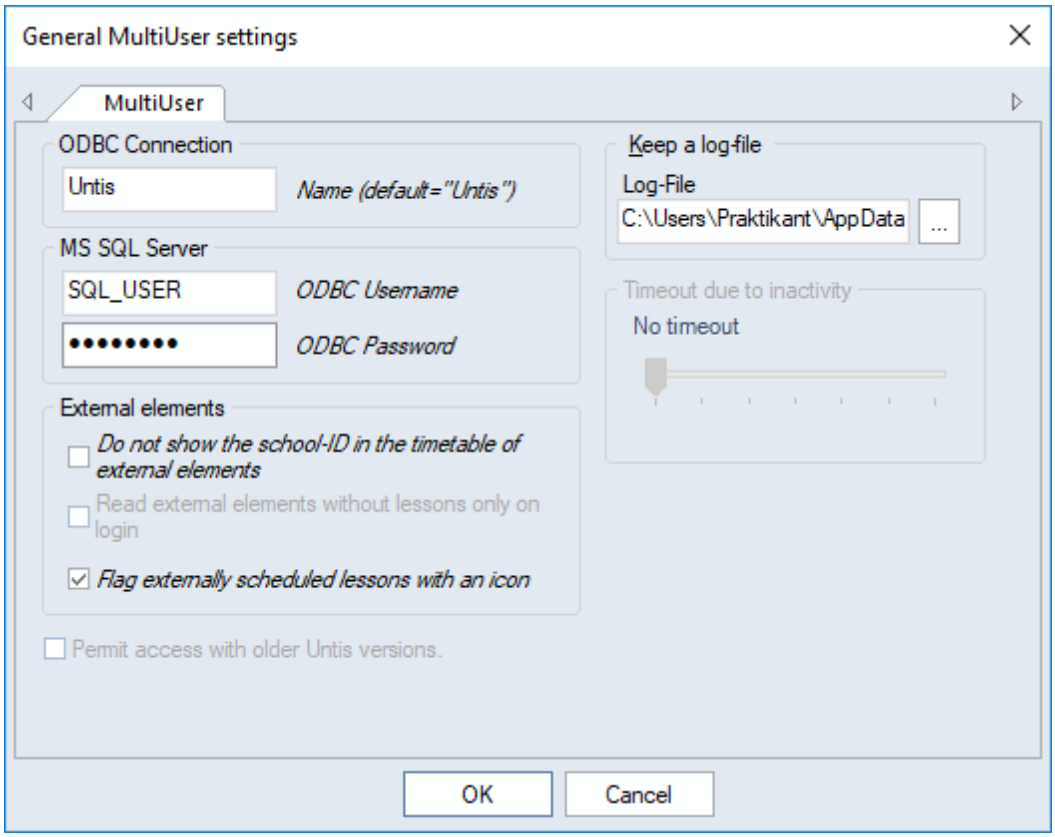
Now enter your new Untis MultiUser licence data. Save the .gpn file and select 'File | Store in database'.



Now the login dialogue is shown which is described in the following chapter.

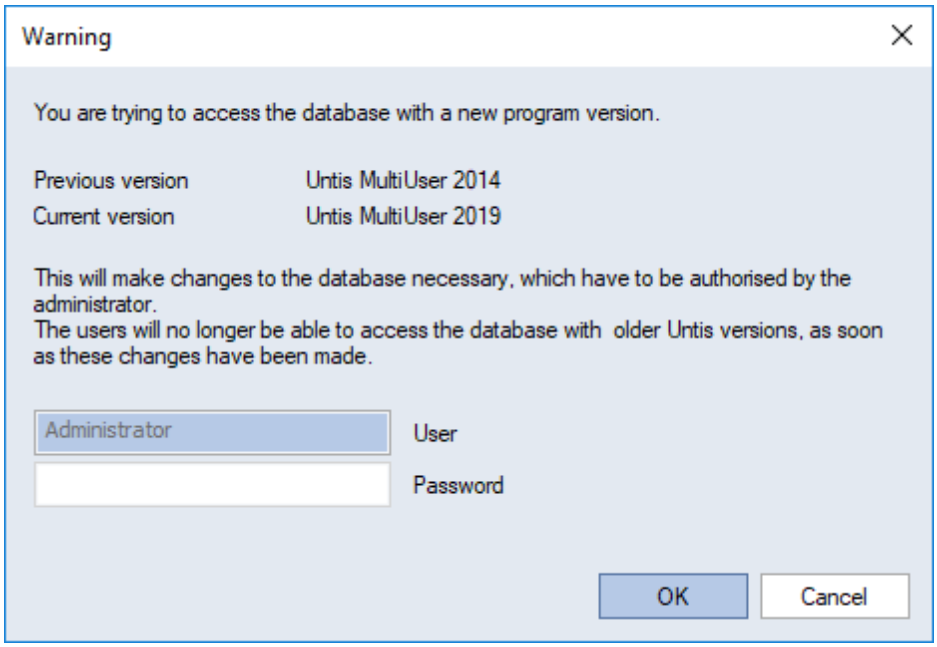
Note:
If you are using an MS SQL database with a DB user that does not match an NT profile and thus requires authentication, you will first have to enter this in the settings ('Modules | MultiUser | Settings'). This entry is safed locally per user per PC.



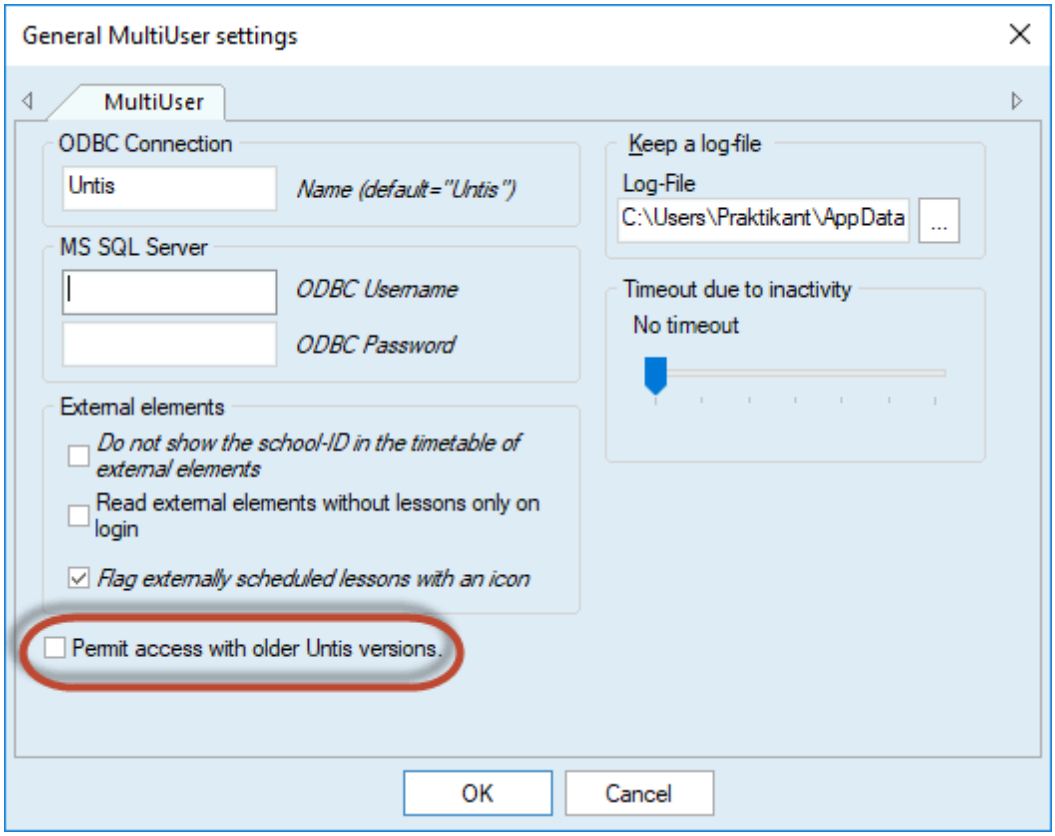


4.2 Verwendung älterer Versionen verhindern

Prevent use of older versionsWhen you login to the new Untis version into the existing MultiUser database for the first time, the tables will be converted to the new version. So far this has been done automatically. As of Untis MultiUser 2018 you will explicitly be informed that you need a confirmation of the administrator.



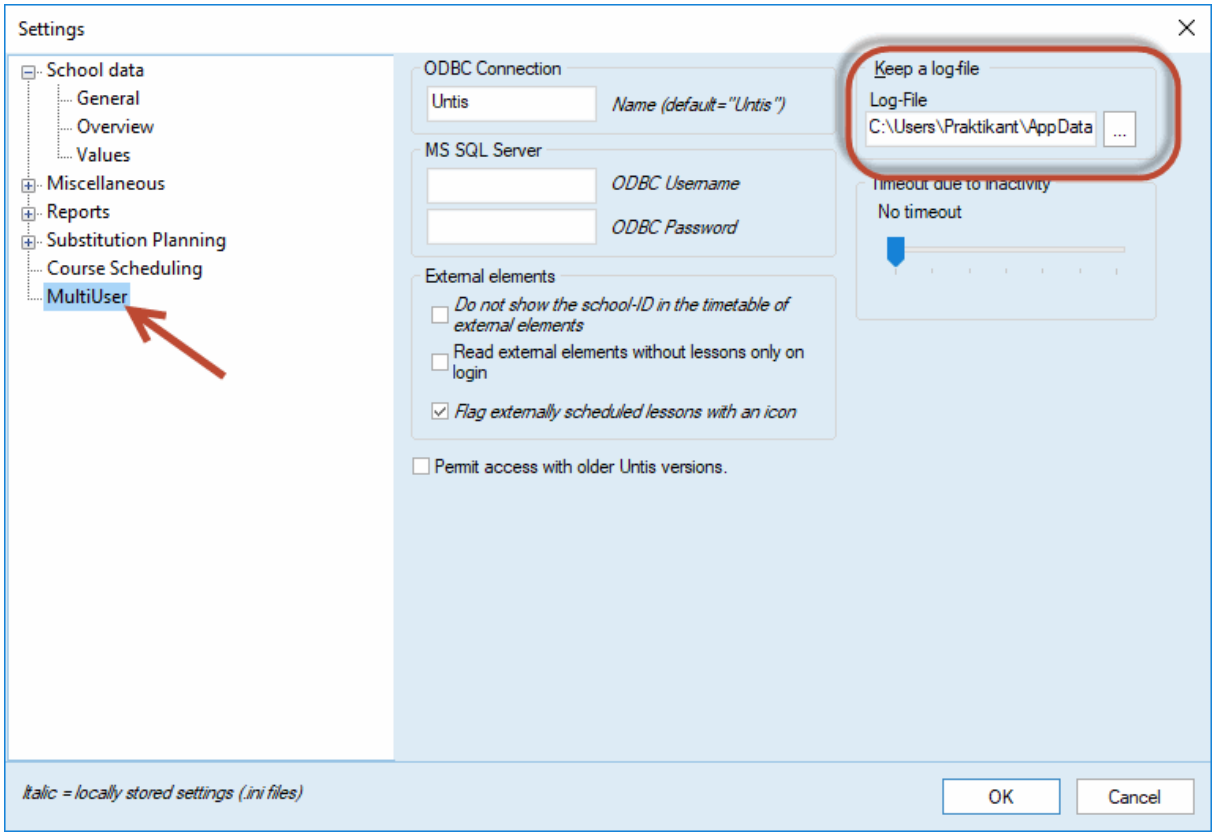
This message informs you that access to older program versions will not be possible any more by default. If nevertheless you want to permit access to older versions, please check the box: 'Permit access to older Untis versions' in the MultiUser settings.



Note:
We recommend, though, to **not** activate this function. If you use different Untis versions in the same database, data can be lost.

4.3 Logfile

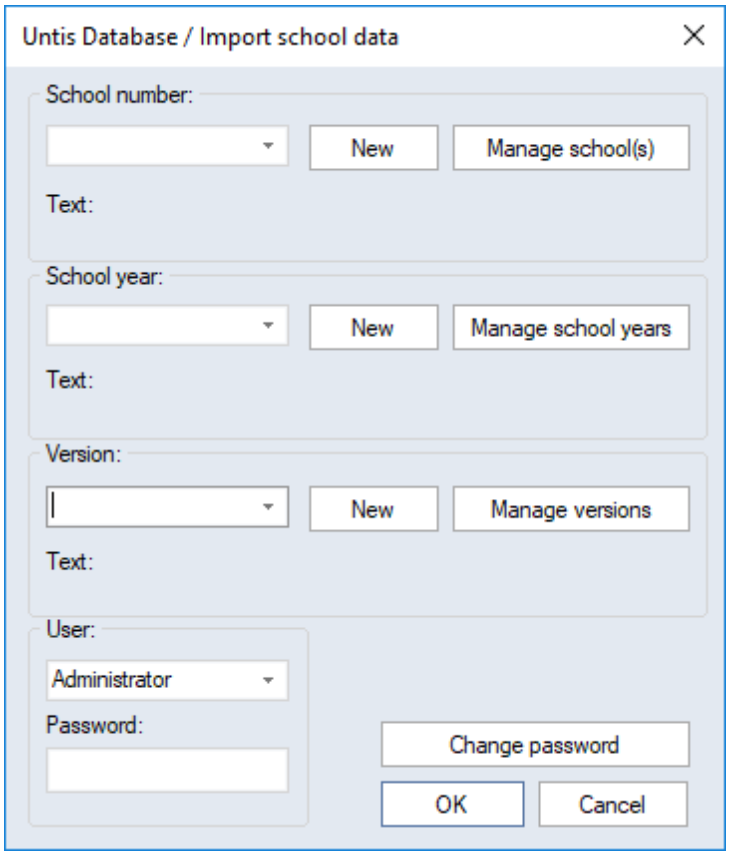
If error messages may occur while operating the database of the 2019 version, they are written in a log file. Go to 'Settings | MultiUser' to define the path of this log file.



4.4 The login dialogue

When you launch Untis MultiUser for the first time and have not transferred any data from a .gpn file, you can access the Login dialogue via menu item "File |Login". (If you wish to import data from an existing .gpn file, you will have opened this dialogue as described in the previous chapter via 'Modules | MultiUser | Store in database'.)

When you start the login dialogue for the first time it will look as follows:

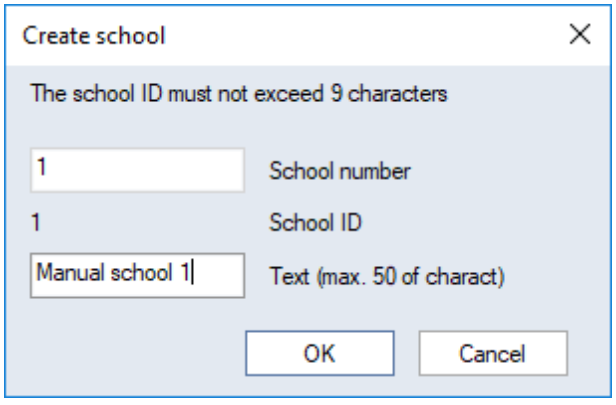


Since logging in is only possible if you have chosen a school, a school year and a version, the first step is to define this basic data.

The default setting is user "Administrator" of the user group of the same name (no password set). This user group has all rights that can be assigned.

Creating a new school

To create a new school, click on the <New> button in section "School number" in the login dialogue.

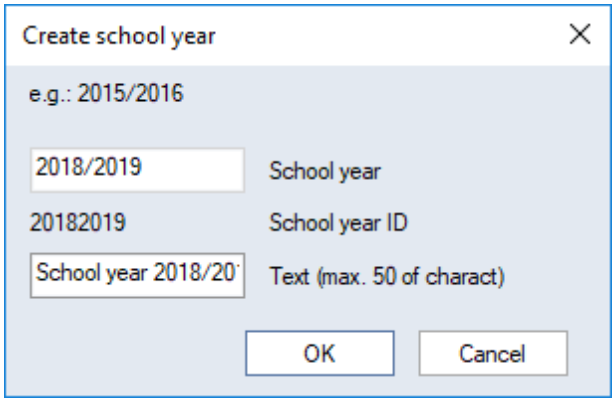


The school number in the database must be unique, i.e. it is not possible to give two schools the number

1. You can also enter text in the input field "School number" as long as it contains a unique combination of numbers and does not exceed 50 characters (e.g. Hogwarts1). You can enter any text in the input field "Text".

Creating a new school year

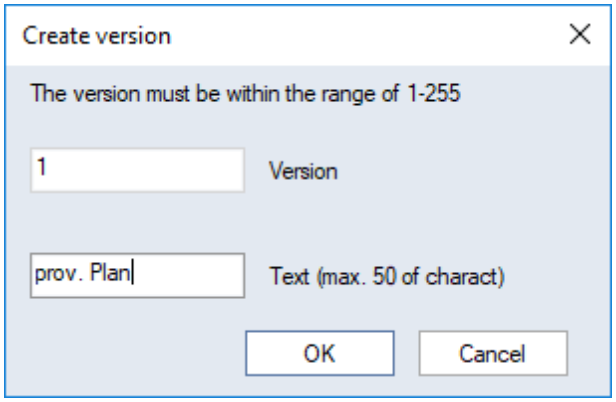
You can save as many school years per created school as you wish. To create a new school year click on the <New> button in section "School year" in the login dialogue. You can add supplemental text in the *Text* field here as well.



The format of the school year should be [year1]/[year2]. Untis makes a suggestion depending on the school year of the .gpn file that you are currently working with. If there is no .gpn file loaded, the suggestion will be based on the system date

Creating a new version

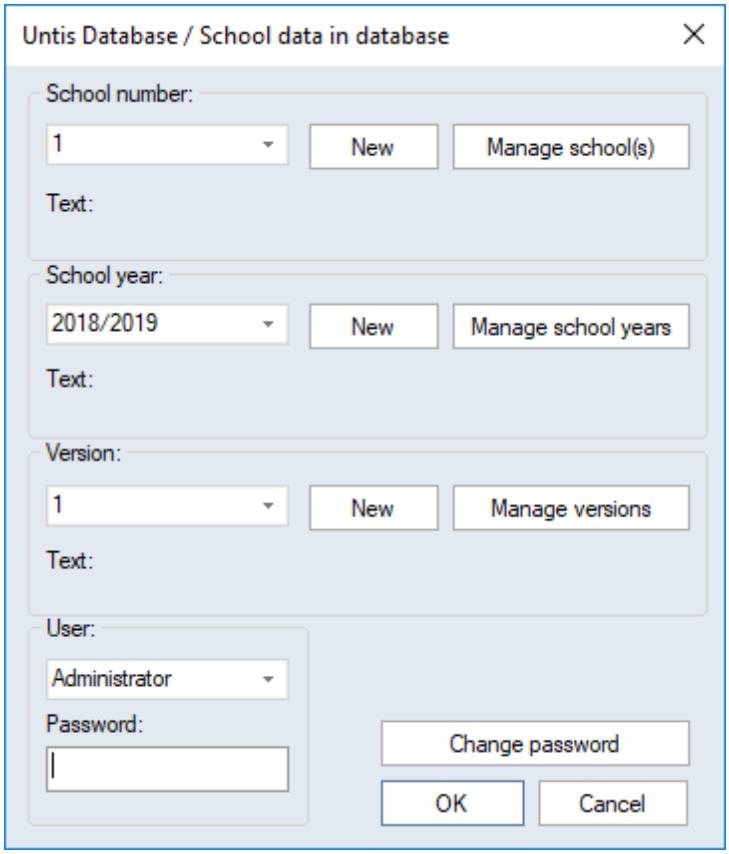
You can store up to 255 different timetable versions per defined school year in your database. One version corresponds to one .gpn file.



To create a new version click on the <New> button in input box "Version". Assign your new version a unique number within the school year. You may also choose to add a descriptive text.

Logging in

Once at least one school, a school year and a version have been created you can log in to the data set.



The default user setting in the empty database provided by Gruber&Petters is "Administrator" (no password set). This user ID has all user rights and cannot be deleted.

When you first log in to the database of a newly created school, the window with the licence data will open up automatically. Enter your licence data and confirm your input with <OK>. This step will not be required if you have imported data from a .gpn file following the instructions of the previous chapter. You can now work with Untis as usual.

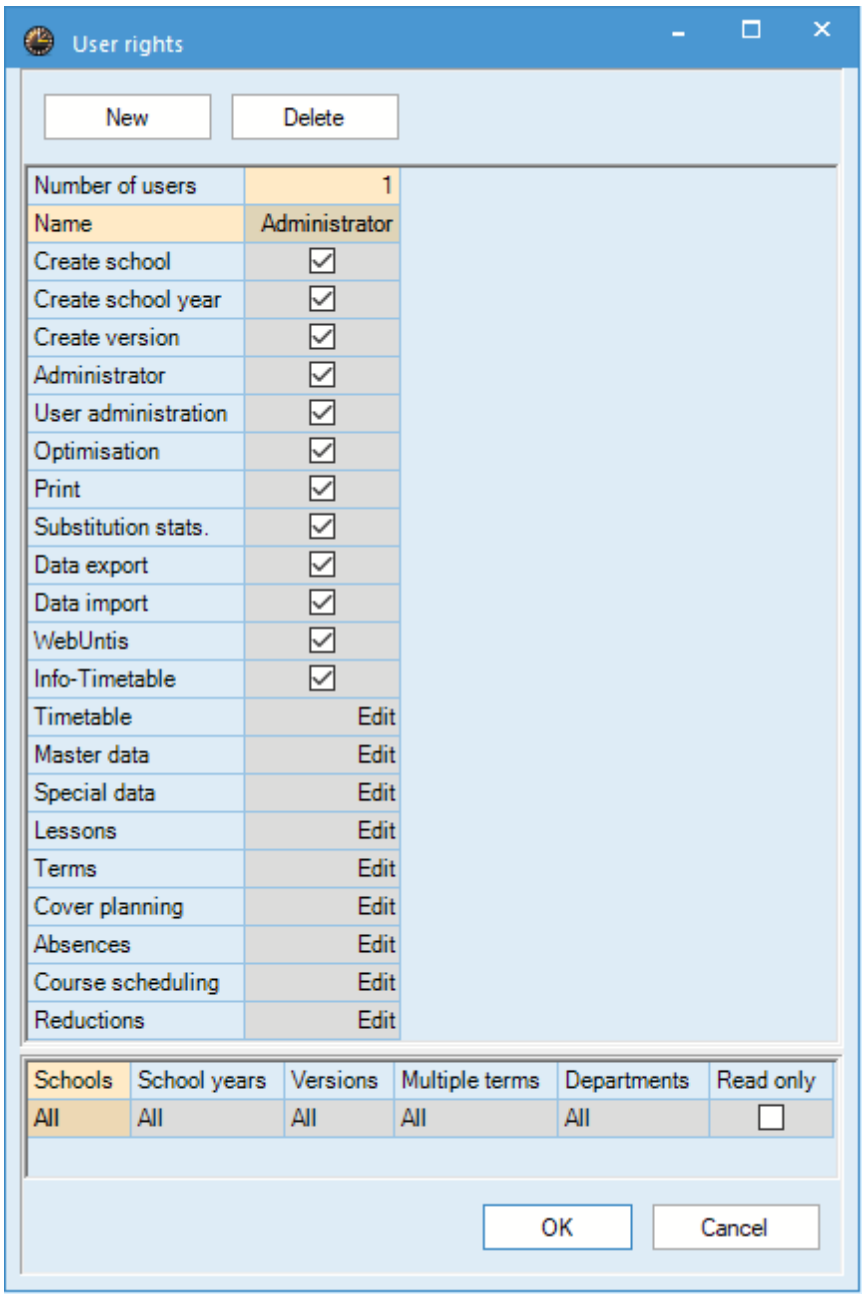
5 User administration

Untis MultiUser has a hierarchic user rights system which is structured as follows

- **User groups**
  Every user grouphas explicitly defined rights. You can assign as many users to one user group as you wish.
- **Users**
  Every user is assigned to exactly one user group.

When you start Untis for the first time with an empty database in the database mode, the user group "Administrator" - which is furnished with all user rights - is created automatically. At the same time, a user "Administrator" will be created who is part of this group. Neither user nor user group can be deleted

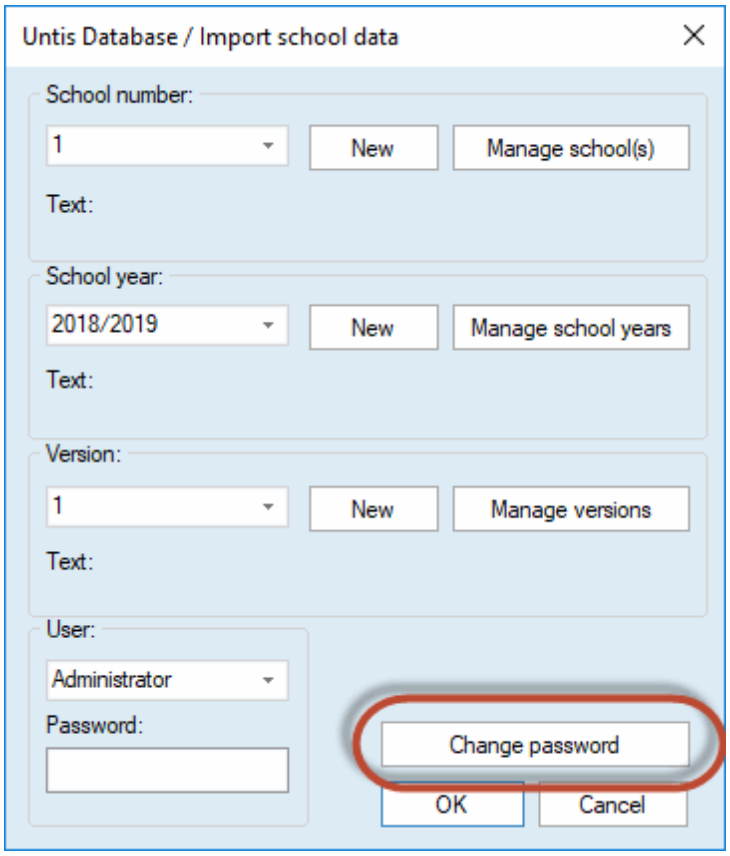
or changed.



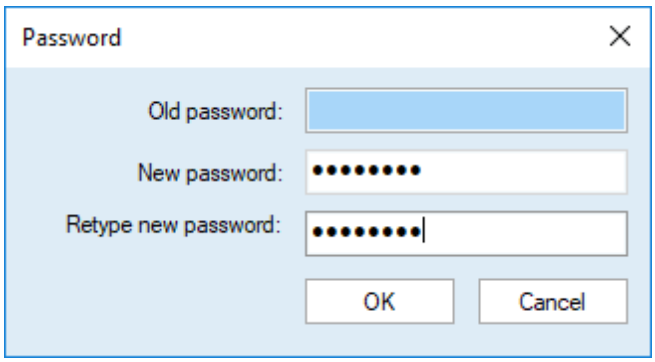
Note:
The automatically created user "Administrator" does initially not have a password. You need to assign one to him.

5.1 Changing passwords

The button <Change password> is located in the login dialogue.



When you activate this button a dialogue appears in which you can enter a new password for the currently selected user.

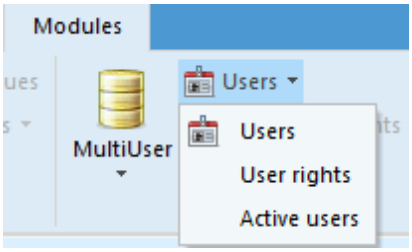


Enter the user's old password in the top field. If no password has yet been assigned, it will not be possible to enter the old password. You have to enter the new password twice to avoid typing errors.

When you are done confirm with <OK>.

5.2 User groups and user rights

You can administer all user groups and all the associated user rights via the menu item "Modules | MultiUser | User administration | User rights".

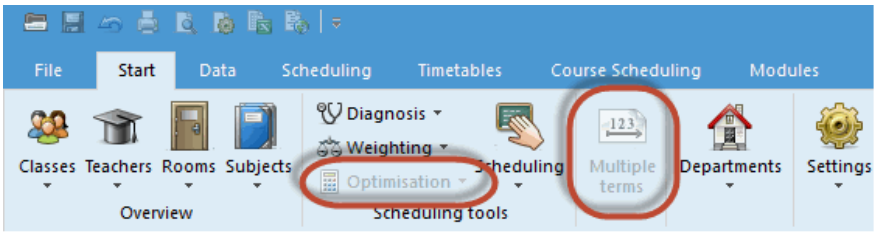


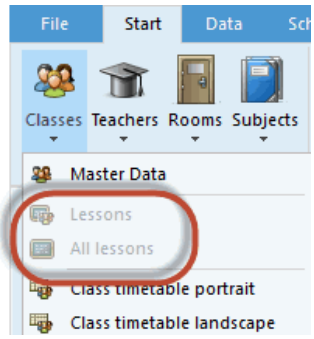
Users who do *not* have the right "User administration" can open the dialogue to inform themselves about their rights. They will only be able to see their own user group and they will not be able to make any changes

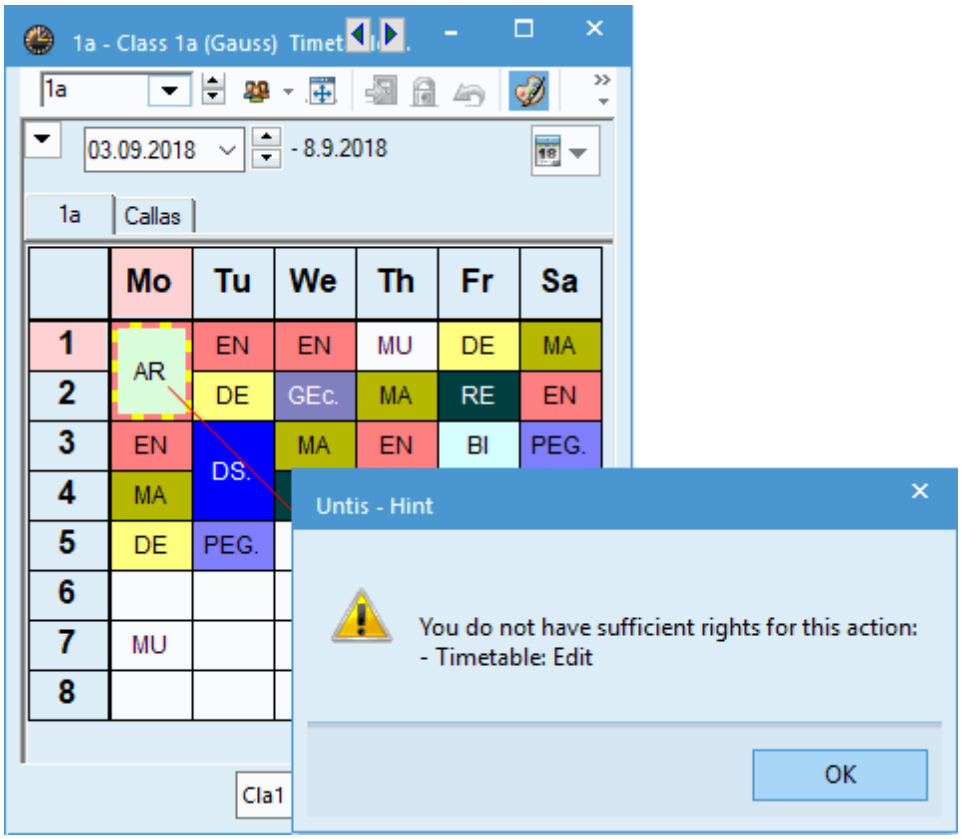
5.2.1 Levels of rights

Several rights have four levels:

1. **No rights**
   Functions may not be executed and data not displayed. The corresponding menu items are deactivated or an appropriate message will be displayed when an attempt is made to perform a function.



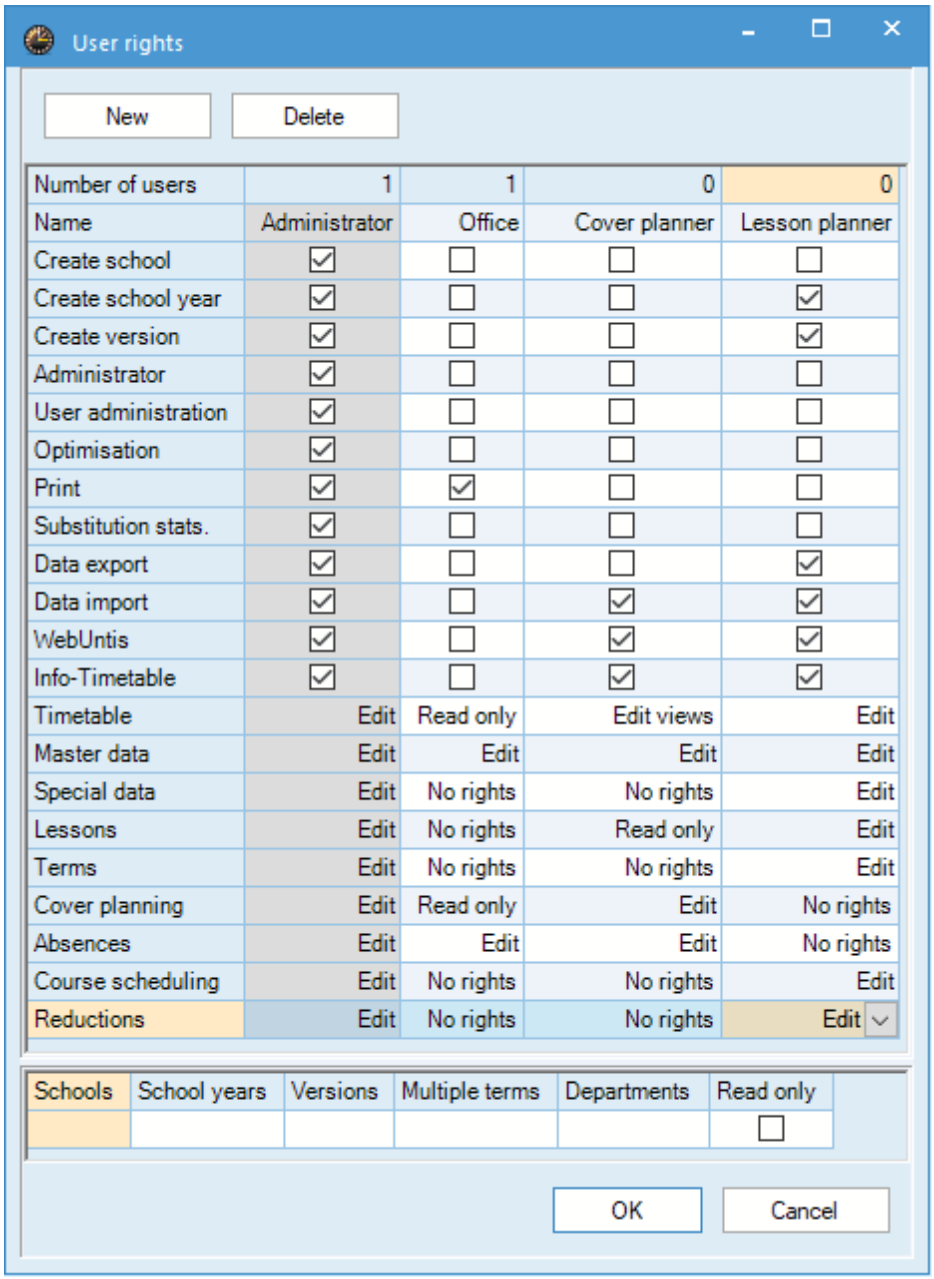


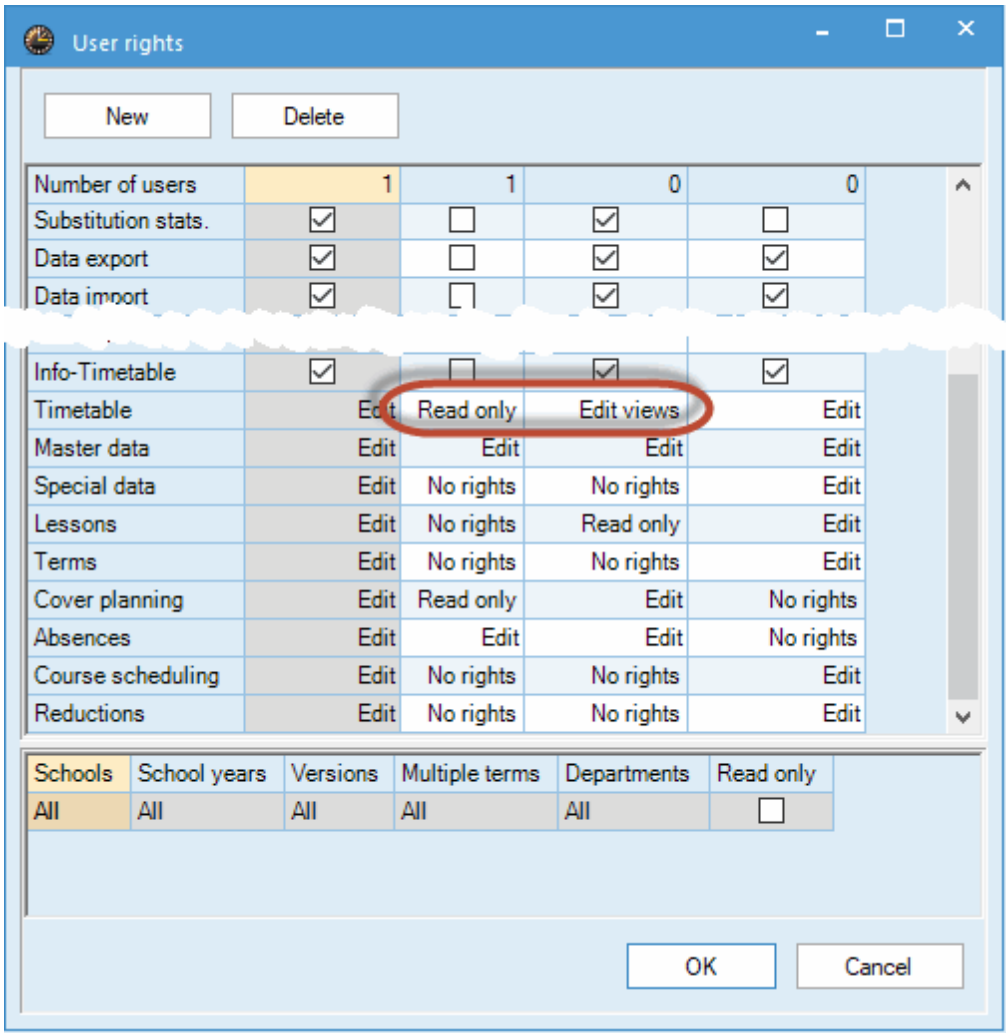


2. **Read only**
   Dialogues and windows can be opened and data will be displayed; however, changes will not be allowed (e. g. view the timetable).

3. **Edit views**
   This right is an add-on to "Read only". It also allows new views to be created and existing ones to be modified. However, data cannot be changed.

4. **Edit**
   Data can be modified as desired.

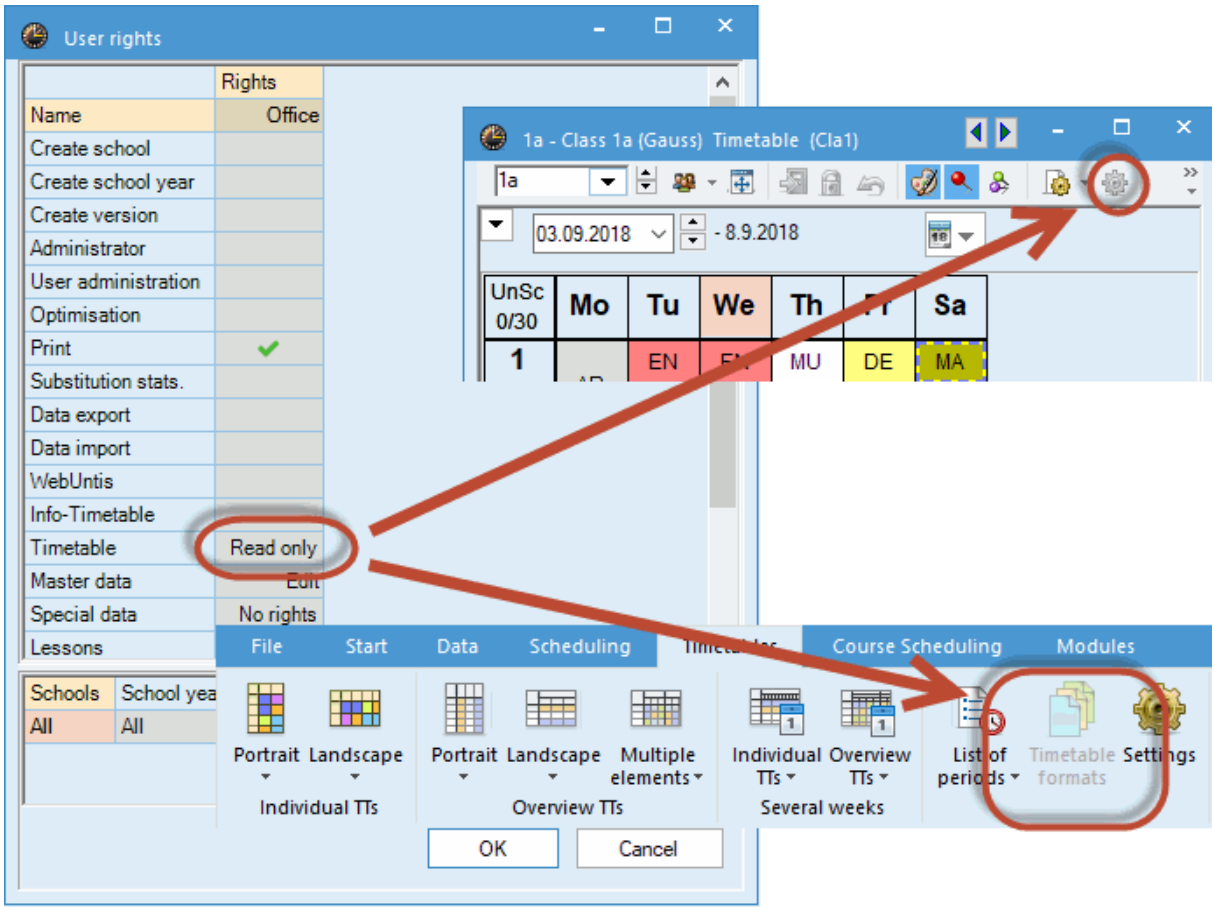

User rights
New
Delete
Number of users 1 1 0 0
Name Administrator Office Cover planner Lesson planner
Create school
Create school year
Create version
Administrator
User administration
Optimisation
Print
Substitution stats.
Data export
Data import
WebUntis
Info-Timetable
Timetable Edit Read only Edit views Edit
Master data Edit Edit Edit Edit
Special data Edit No rights No rights Edit
Lessons Edit No rights Read only Edit
Terms Edit No rights No rights Edit
Cover planning Edit Read only Edit No rights
Absences Edit Edit Edit No rights
Course scheduling Edit No rights No rights Edit
Reductions Edit No rights No rights Edit
Schools
School years
Versions
Multiple terms
Departments
Read only
OK
Cancel



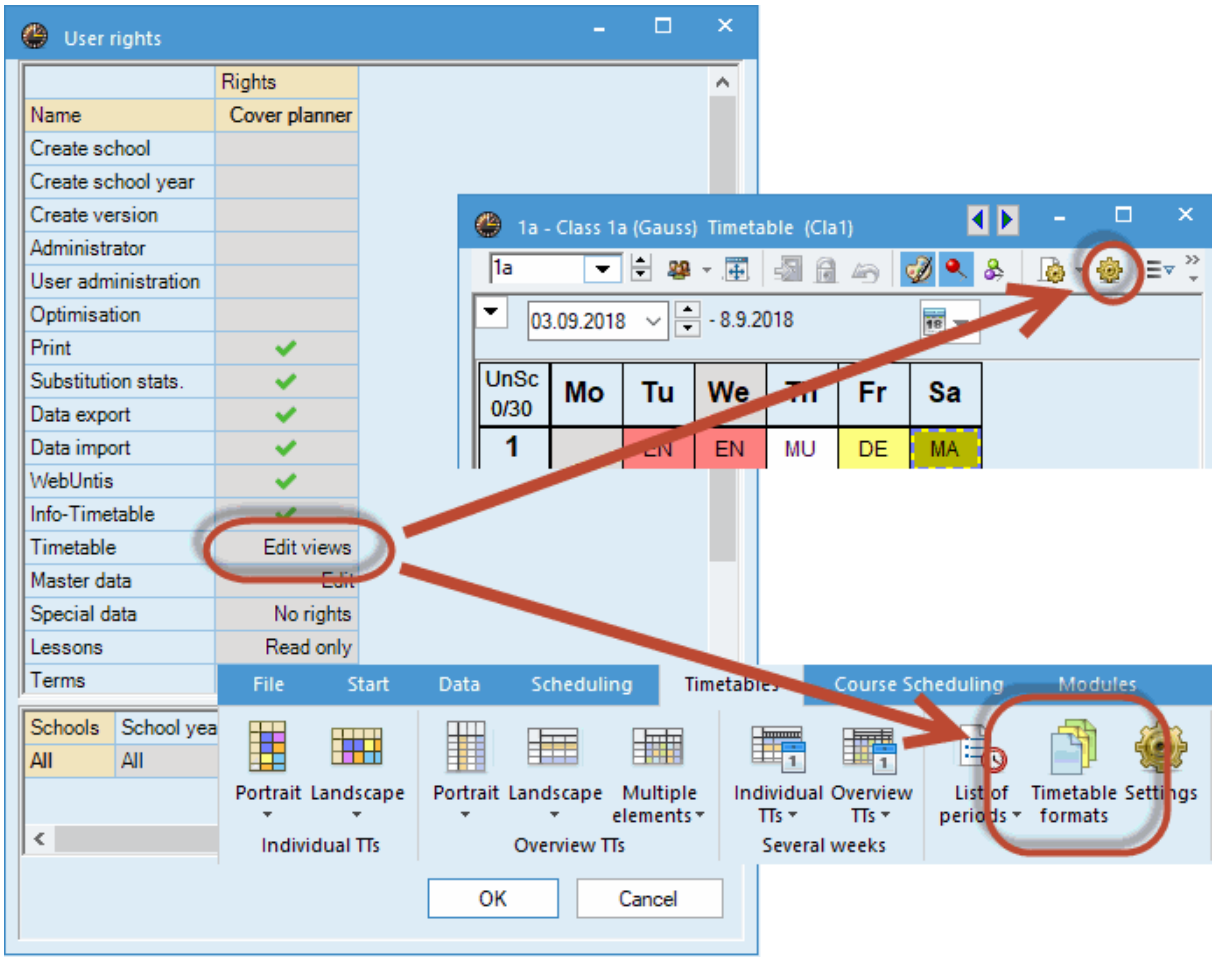
In our example you can see the user group "Administrator" - which cannot be changed - and another three user groups, one for the head office, one for the timetable scheduler and one for the substitutions planner.

The difference between 'Read only' and 'Edit views'

The difference between the two levels "Read only" and "Edit views" should become clearer with the following example. Please pay close attention to the different settings for the *Timetable* right for the different user groups.



The head office has 'Read only' rights, but the substitution planners may also edit views.



As you can see in the figure, "Read only" allows no change to the data whatsoever. The level "Edit views" permits opening timetable settings, as well as selecting adjustments to timetable formats, in order to create new views, for instance.

In neither case is it possible to change, shift or unschedule existing lessons (in the timetable mode).

Warning:
This rule applies only to private views. As soon as a view is made "public" and can thus be accessed by all users, only users with the user right "Administration" can make changes. Read more about private and public views in the corresponding chapter .

It is therefore possible for e.g. people in the head office to create new views and modify existing ones but not to change the data. However, this should not be allowed at publicly accessible teacher terminals.

5.2.2 Rights

You can assign the rights described below to the user groups by checking the boxes.

- **Create school / create school year / create version**

These three user rights are required to create new data records in the login dialogue (school, school year and version).

You will also need the right "create version" if you wish to transfer a .gpn file to the database (via menu item "File | Store in database") or if you wish to transfer data from one version to another.

- **Administrator**

A group with the *Administrator* right always has the *User administration* right (see next item). However, not every group with the user administration right is necessarily an administrator.

The right allows the following actions to be performed:

- Assign the administrator right
- Assign the **Create school / school year** or **create version** right
- These rights are automatically assigned with the **Administrator** right but can be removed on request.
- Edit licence data
- Edit public views
- Create / edit external elements
- Merge data

- **User administration**

This right relates to the creation and administration of users and user groups

A user administrator cannot assign the following rights: administrator, create school, create school year and create version.

- **Optimisation**

This right allows the following activities:

- Timetable optimisation
- Timetable optimisation in more than one term (provided you have the right to work in the selected terms)
- Room optimisation
- Weighting settings
- Diagnosis
- Overall diagnosis
- CCC analysis
- Delete timetable
- Edit break supervisions

- **Print**

This right allows statistics and reports to be viewed and printed.

- **Substitution statistics**

This right allows substitution statistics in cover planning to be viewed and printed.

- **WebUntis**

This right allows the export of data from Untis to WebUntis and vice versa.

- **Data import/export**

This right allows all imports and exports to be performed, including export to a .gpn file

- **Info-timetable**

This right allows functions related to the module Info-timetable to be performed.

The following rights can be used together with the levels "No rights", "Read only", "Edit views" and "Edit"

- **Timetable**

Read only	*Edit*
- View timetables	- Edit timetables
- Diagnosis	- Scheduling dialogue
- CCC analysis	- Scheduling timetable:
- Overall diagnosis	- Unschedule all periods
- View break supervisions	- Edit break supervisions

Edit views (in addition to 'Read only')

- Modify timetable views (button <Timetable settings>)
- Define timetable formats

- **Master data**

Read only	*Edit*
- View master data	- Edit master data -Auxiliary function "Subject group to alias" (File / Auxiliary functions) -Auxiliary function "Enumerate teachers" (File / Auxiliary functions)

Edit views (in addition to 'Read only')

- Create master data views
- Modify master data views (button <Grid adjustment>)

- **Special data**

This right allows the user to view and edit the following data

- Departments
- School holidays
- 'File | Auxiliary functions |Ext.elements: Repair TT data'

- Items in the "Settings" menu

The "Settings | Miscellaneous" menu item includes some items that are not stored in the database but in the file "Untis.ini" on the local hard drive (e.g. the path to backup files)

These items are always available irrespective of a user's rights.

- **Lessons**

Read only	*Edit*
- Lessons	- The right includes all functions of the module "Lesson planning and value calculation" such as:
- Lesson groups	- Team optimisation
- Lesson sequences	- Teacher assignment
- Lesson table	- Create lessons from the lesson table
- Subject bottlenecks	- etc.
	and the auxiliary functions
	-Coupl. to less.-sequ.
	- Stud.-totals to lessons
	- Split multi-period lessons
	In the module cover planning
	- Transfer standbys to lessons
	- Lessons for class conferences

Edit views (in addition to 'Read only')

- Create new lesson views
- Modify existing lesson views (buttons <Grid adjustment> and <Settings>)

- **Terms**

This right enables you to view and edit or to create new terms.

- Multiple terms
- Finnish term planning
- Year's planning in terms
- Term calendar
- Term summary

- **Cover planning**

- View / edit all data of the module cover planning (except absences)

- **Absences**

- View / edit absences

- **Course scheduling**

- This right allows to view / edit data in the modules "Student timetable" and "Course scheduling".

- **Reductions**

View / edit reductions and reduction reasons

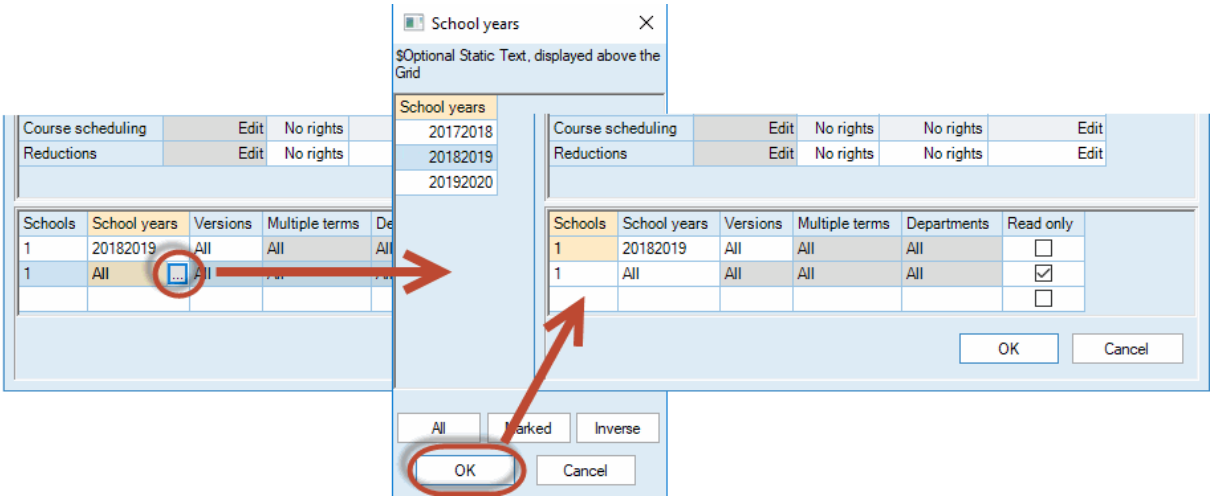
5.2.3 Limitations to school, school year...

You can limit the user rights to certain schools, school years, versions, terms and departments in the lower section of the "User groups" dialogue. However, the fields have to be activated from left to right. This means that you only apply limitations to a school year after you have applied limitations to a school.

Furthermore you have the possibility to check "Read only" at the end of the lines when desired. You can thus ensure that e.g. in some school years the data may be changed whereas in others it can be read only.

Clicking on the button in the relevant cell displays possible elements for selection. Multiple elements can be selected.

The figure shows the rights of user group "Demo group". This group has in school no. 2 access to all data in the school years 2016/2017 and 2017/2018, but access to data for the school year 2018/2019 is limited to "Read only".



Please note the following 'priority rules':

Rule 1: the "Read only" code only applies within the row, both for the term as a whole as well as for the department as a whole.

Term	Department	Read only
P1	A1	x
P2	All	

In the example above, all rights are limited to 'Read only' as soon as *either* P1 *or* A1 is selected.

Rule 2: Naming an element 'trumps' 'All'

Term	Department	Read only
xxx	All	x
xxx	A1	

All departments with the exception of A1 have "Read only" rights.

Rule 3: When several elements are named, 'Read only' trumps

Term	Department	Read only
xxx	A1,A2,A3	x
xxx	A2,A3,A4	

With this input, departments A1, A2 and A3 have "Read only" rights. A4 alone has 'normal' rights.

Please also note that a user administrator can only assign rights to a user group for those schools for which he/she is also authorised.

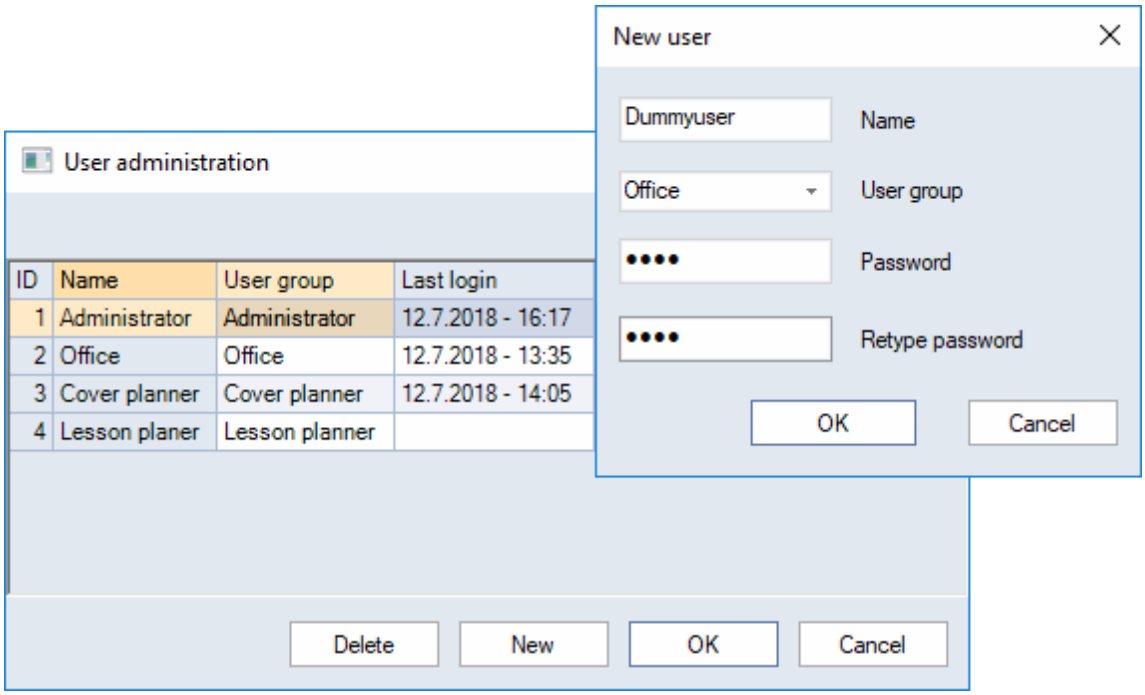
All entries made in the "User groups" dialogue will only be written to the database when <OK> is clicked. If you click on <Cancel> all current input will be rejected.

5.3 Creating users

Users with the right **User administration** can administer existing users and create new ones via "Modules | MultiUser | User administration | Users". Every user is assigned to exactly one user group.

There are several possibilities to make entries for existing users:

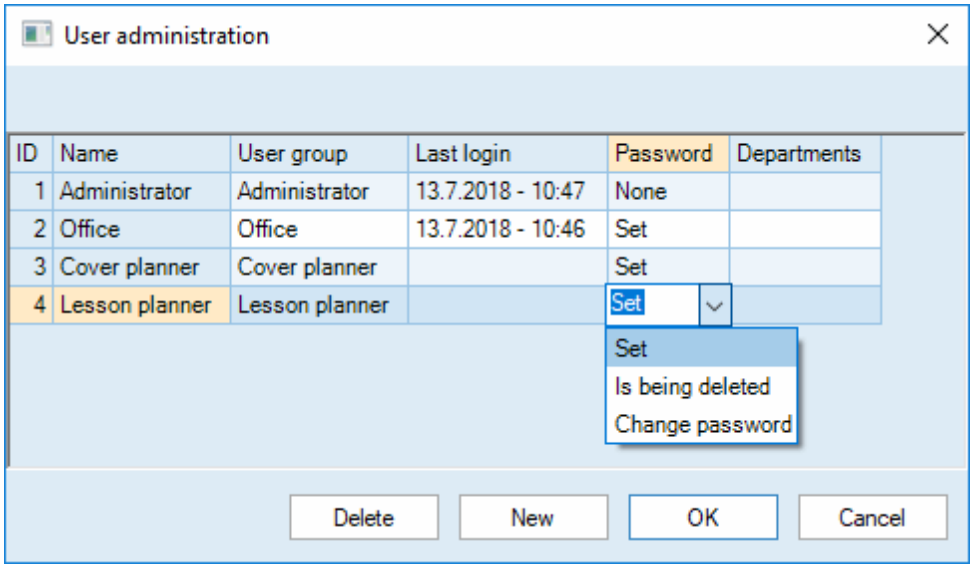
- You can assign a user to any user group by using a combo box that appears when you click on the relevant field in the table.

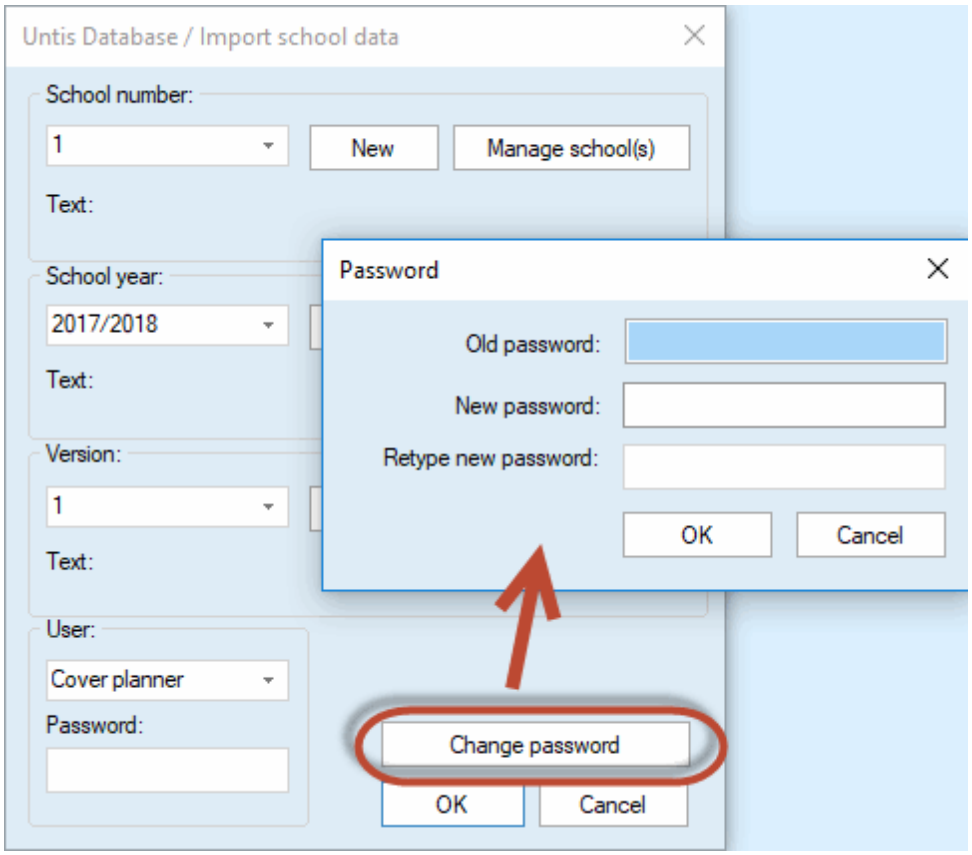


Please note that the "Last login" field contains information about when a user last logged in.

- If a user has forgotten the password, the administrator can delete or change it in the "User

administration" window. The user should then enter a new password using the <Change password> button in the login dialogue. (See the following figure.)





Warning:

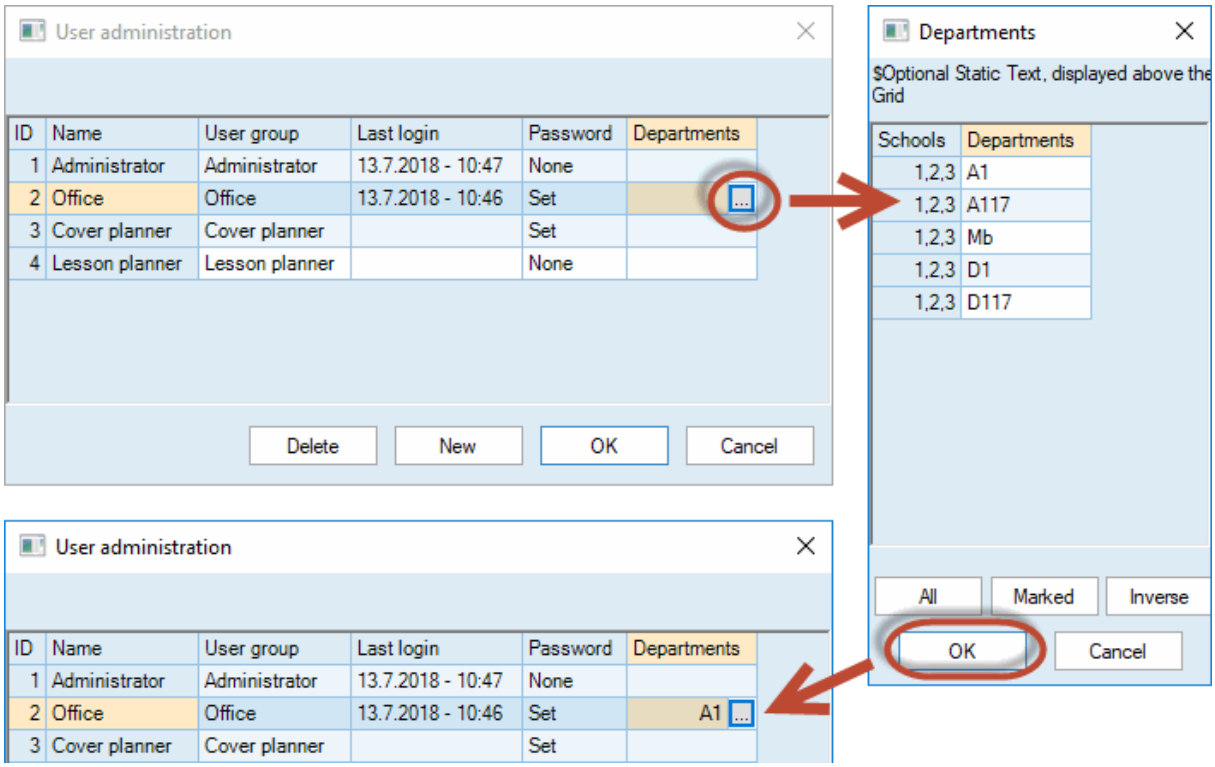
Only users who have the "Administrator" right can assign the "Administrator " right to user groups.

If more than one school is held in the same database, an administrator can assign user groups only to his/her own school.

As with user groups, all entries are temporary and are only written to the database after you have confirmed with <OK>. An exception is creating new users, which are written to the database immediately.

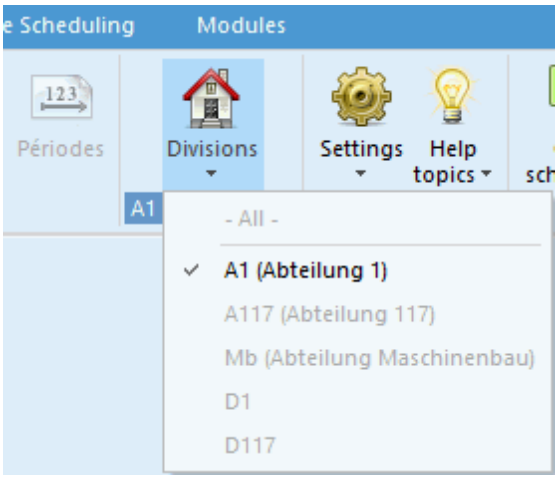
Departments at user level

If you are working with the *Department timetables* module, it is possible to define rights to departments at user level. In the "User" dialogue you can assign any user to his/her department via the corresponding field. To delete entries, press the <Delete> key.



If there are departments defined at user level, all entries that were made in the field "Department" for user groups will be ignored.

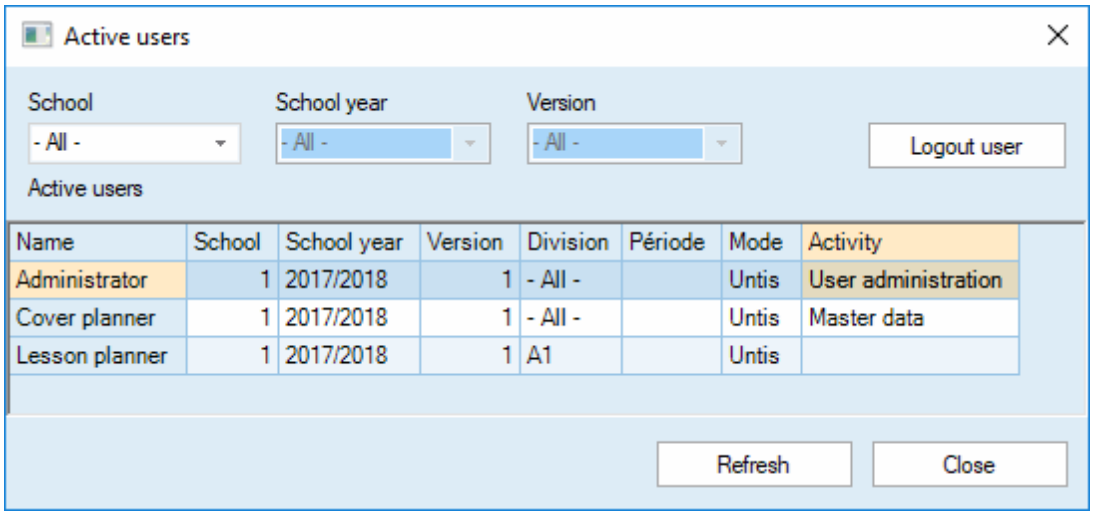
Via the "Departments" combo box at the main tool bar the user can only switch to those departments for which he/she has rights



5.4 'Active users' dialogue

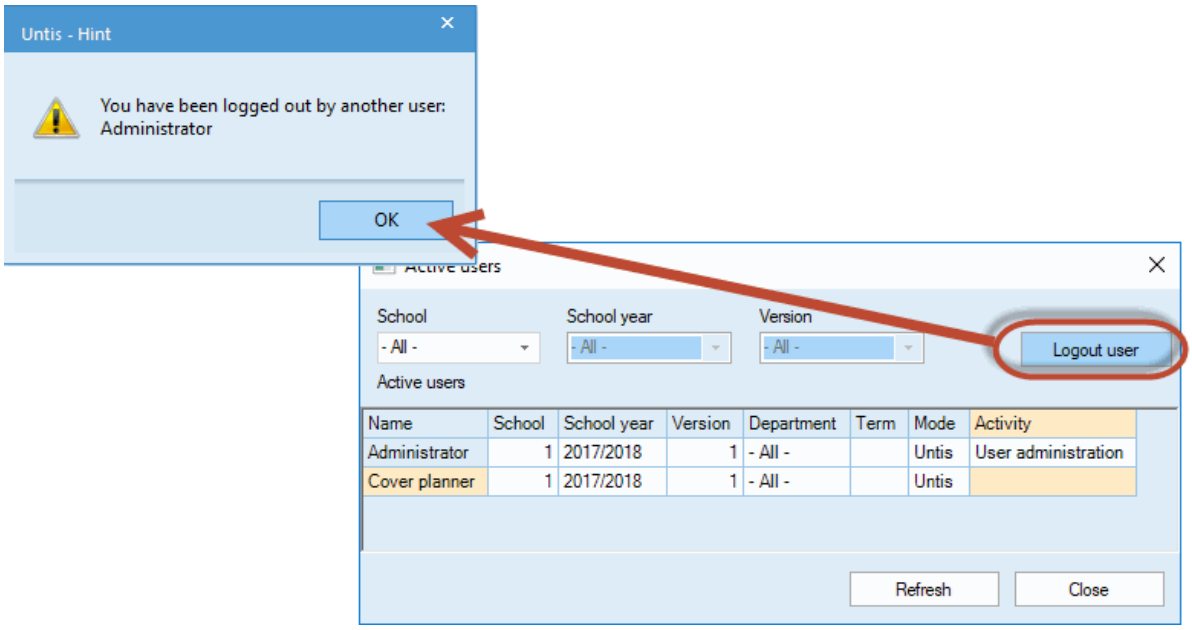
All users can see which users are currently logged in and which activity they are performing at the moment. No special rights are necessary for this.

The list of active users can be accessed via "Modules | MultiUser | User | Active users".



5.4.1 Logging out other users

Provided you have **user administration rights** , you can log out users with the corresponding button in the "Active users" dialogue. In this case a user who was forcibly logged out will receive a message.



Please note that you have the possibility to send an internal message to all active users before you log them out. Read more about this feature in chapter Information system.

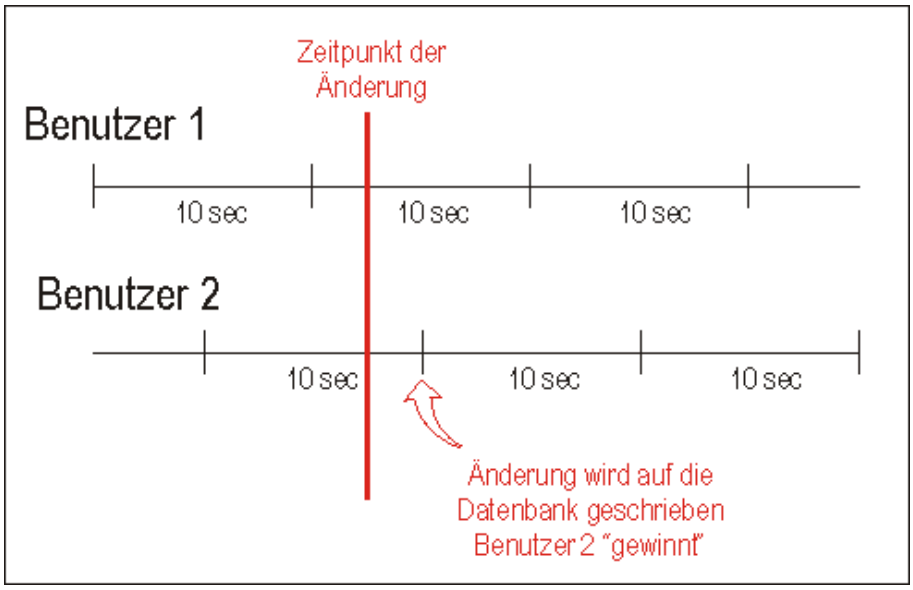
5.5 Working simultaneously

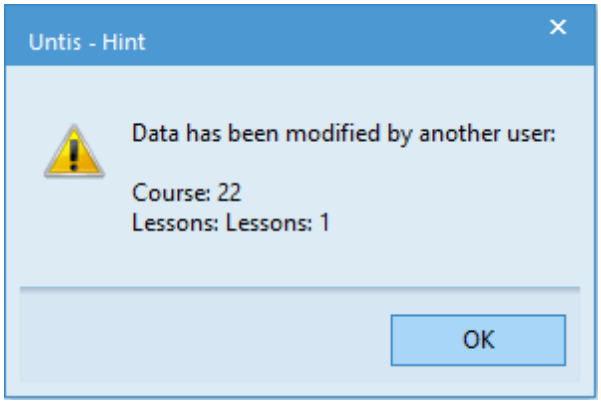
The following section refers only to users who are logged in the same version, i.e. they have chosen the same school number, the same school year and the same version in the login dialogue.

5.5.1 Changing the same data simultaneously

Many activities of several users can be performed simultaneously. It is no problem when e.g. two users work on master data and lessons at the same time. Untis checks about every 10 seconds to see whether changes have been made to the data set, and, if necessary, updates the information.

If two (or more) users modify the same record (e.g. change a full name or schedule a period at two different places) then the user whose data was written to the database first "wins". The other user receives a message that the change could not be carried out. The following figure demonstrates this process:





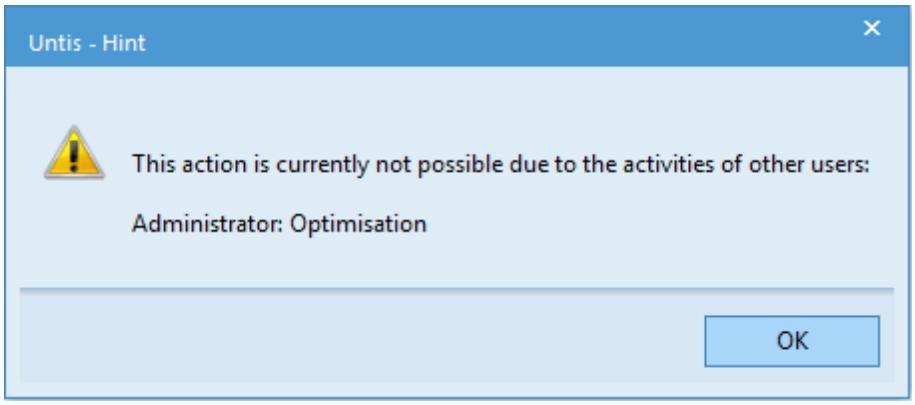
Entries of user 2 are read and displayed to user 1 with a delay of approx. 10 seconds.
There are, however, actions that cannot be performed simultaneously with specific other actions. They are called "critical actions" below. For some of these actions, the user has to use the system exclusively, i.e. no other user may be logged in the version that is being modified.

Cover planning has a special status because of the highly sensitive data that is administered there (see chapter "Cover planning and timetable planning").

5.5.2 Data consistency

Several safety mechanisms are implemented in Untis MultiUser to ensure the consistency of the data.

For example, it is not possible to change master data and lessons during an optimisation of the timetable in the same term. The user whose processing is not possible will receive a message to that effect.



For the following actions the user has to be the only one logged into the system:

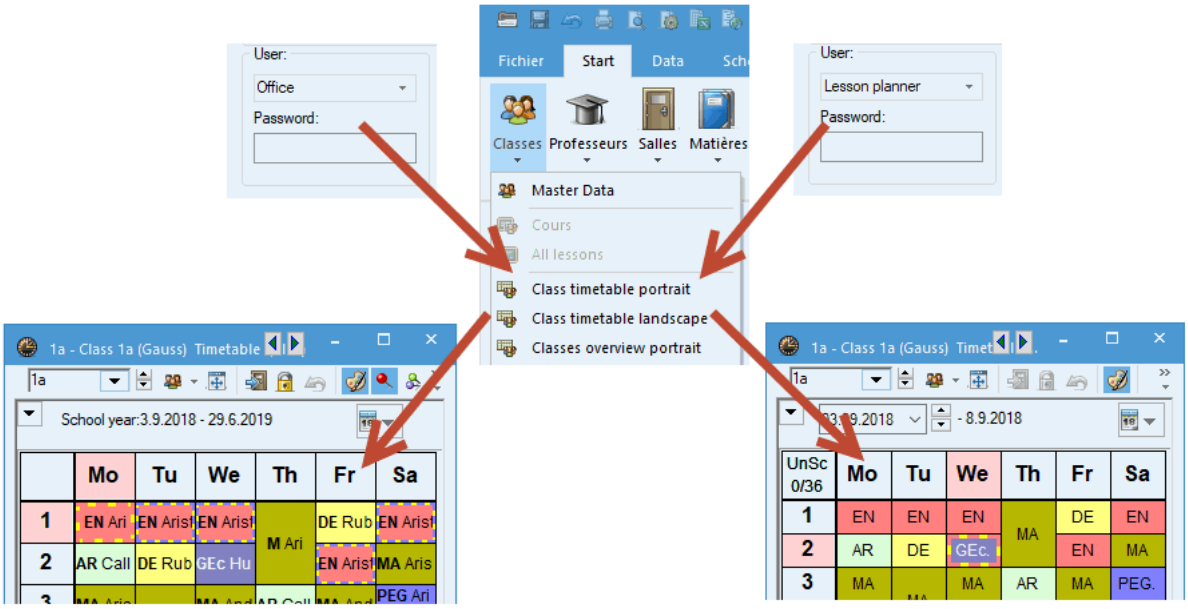
- Import of data
- Import of departments
- Editing of licence data
- Specific settings (school data, time grid, etc)
- "File | New School Year..."
- Creating or editing of terms
- Optimisation of more than one term
- Entry and editing of holidays

In some cases (e.g. holidays) it is possible to open the windows and dialogues concerned if the user is not the only one in the system. However, it is not possible to change data

You can log out active users to gain exclusive access to the database (see chapter " Logging out other users".

6 Private / public views

All definable views and all window groups in Untis MultiUser are saved independently for each user, i.e. if the scheduler (in our example user StP) changes the standard view for class timetables, then the same view remains unchanged in the head office (user Sek).

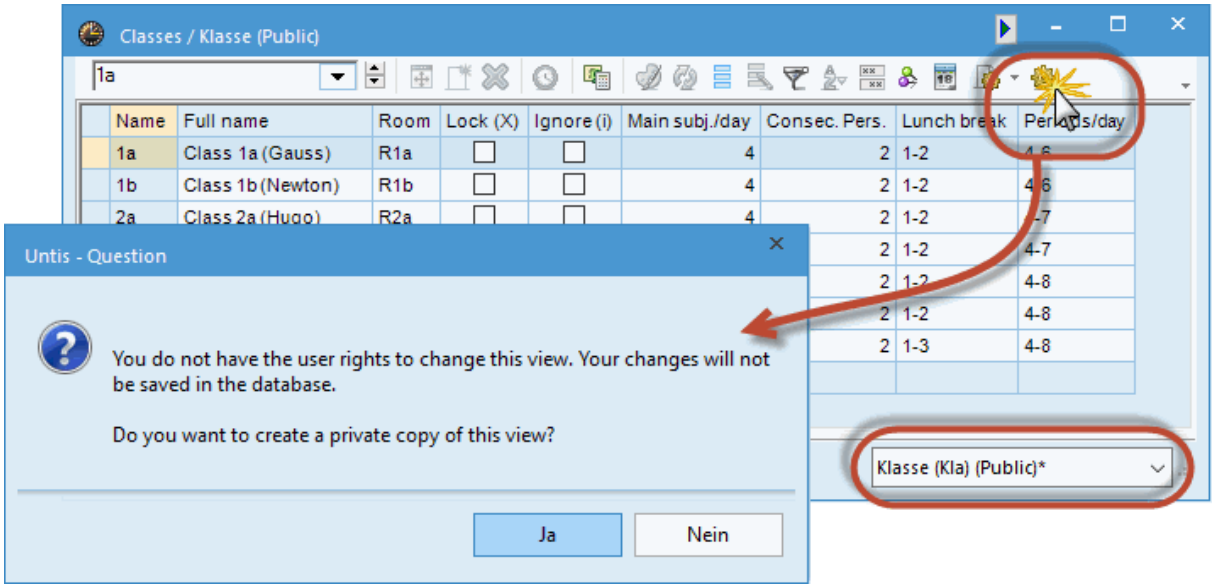


This feature is not limited to the modification of views. Every user can create and delete any views (provided he/she has the right "Edit views" for the respective type). All other users keep their own views and are not affected by these changes.

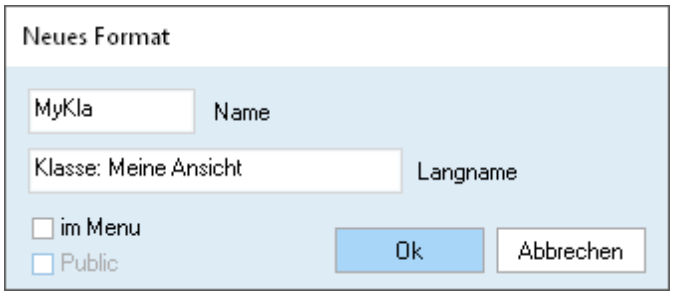
6.1 Private copies of public views

Public views are available for all MultiUser users, even for those who do not have the right to change public views.

If such a user tries to modify a public view, e.g. in order to change the font size, Untis 2019 provides you now with the possibility to automatically create a private copy of the public view:



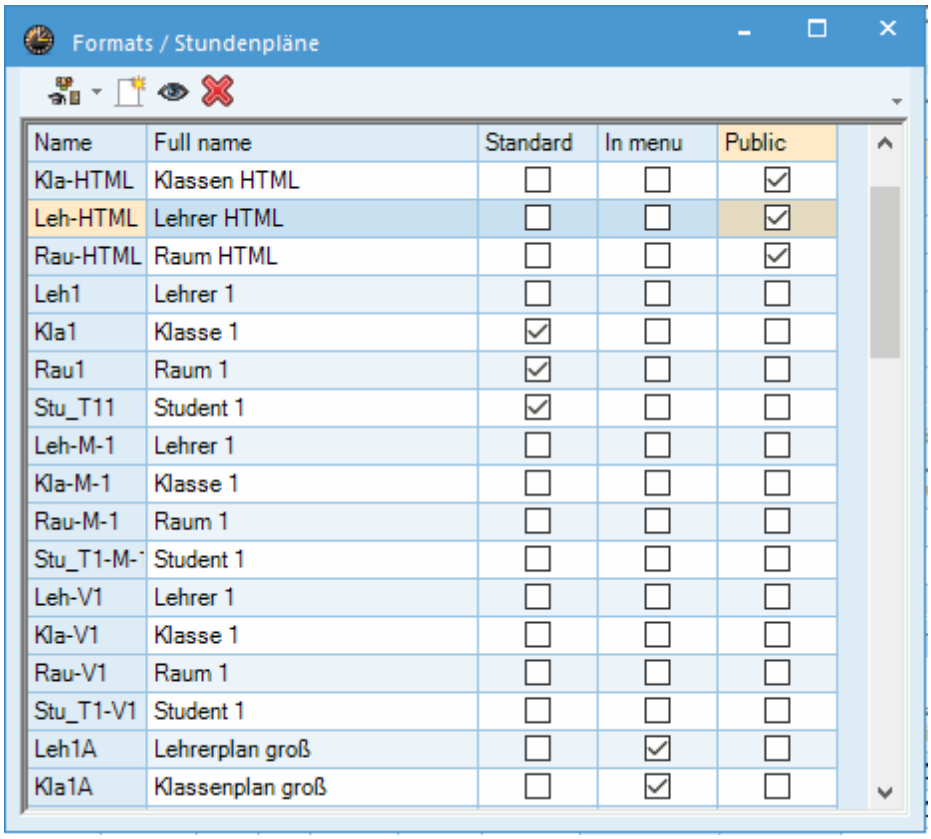
Additionally, the user can give this new view a new name and long name.



6.2 Marking views "Public"

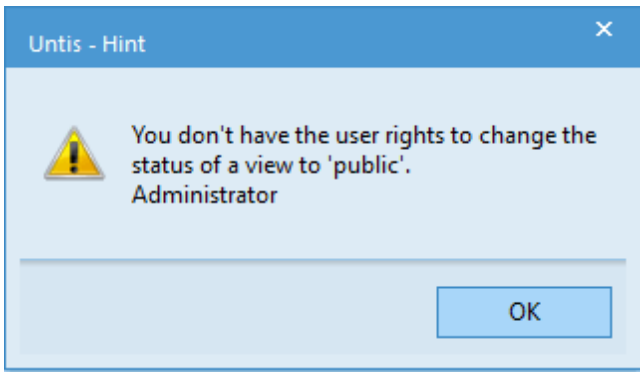
Sometimes the feature described above is not desired, e.g. when Untis provides views at several terminals which should be centrally controlled by the administrator.

In this case Untis offers the possibility to check specific views with the flag "Public". In this way, the view is made available to all users, and alterations are displayed to all users, as well.



Name	Full name	Standard	In menu	Public
Kla-HTML	Klassen HTML	☐	☐	☑
Leh-HTML	Lehrer HTML	☐	☐	☑
Rau-HTML	Raum HTML	☐	☐	☑
Leh1	Lehrer 1	☐	☐	☐
Kla1	Klasse 1	☑	☐	☐
Rau1	Raum 1	☑	☐	☐
Stu_T11	Student 1	☑	☐	☐
Leh-M-1	Lehrer 1	☐	☐	☐
Kla-M-1	Klasse 1	☐	☐	☐
Rau-M-1	Raum 1	☐	☐	☐
Stu_T1-M-	Student 1	☐	☐	☐
Leh-V1	Lehrer 1	☐	☐	☐
Kla-V1	Klasse 1	☐	☐	☐
Rau-V1	Raum 1	☐	☐	☐
Stu_T1-V1	Student 1	☐	☐	☐
Leh1A	Lehrerplan groß	☐	☑	☐
Kla1A	Klassenplan groß	☐	☑	☐

Only users with the "Administrator" right can set or remove the "Public" flag.



Only the setting defining which view is the default view and which view is to be displayed in the menu is saved for each user, i.e. each user can choose which view is opened by default by activating e.g. "Timetable | Classes".

Warning:
As soon as a view is marked "Public", all views of other users which bear the same short name will be overwritten without the system prompting for confirmation.

When a user creates a new view and marks it "Public" it is available to all users. As soon as the check is removed the view is available for private use to the user who has created this view as well as to the user who has removed the check. The view will no longer be displayed in the list of all views to all other users

Please also note that the 'Public' flag and the 'Standard' flag are completely independent. It is up to each user as to whether a 'Public' view is used as 'Standard'.

6.3 Saving to .gpn files

It is sometimes useful to save data stored in the database to a .gpn file. For example, a scheduler may wish to work at home at the weekend and does not have a connection to the network.

The following rules apply with regard to views:

- During the export of data to a .gpn file all private views of the active user as well as all public views will be written to the .gpn file.
- If you subsequently create new views in the .gpn file and you transfer the file back to the database then the new views will be stored as'private' views.

Warning:
Public views are flagged as such internally in the .gpn file, too If you flag views as public in the database after export to the .gpn file then you will lose the changes when you transfer the .gpn file back to the database.

Changes to views are not taken into account when you merge data from a .gpn file into the database.

7 Shared resources

Many schools share certain resources such as gymnasia or teachers who work at different schools. It is necessary to arrange in the planning phase which resource will be available to which school at what time in order to prevent clashes between the elements in question.

With MultiUser it is possible to define these shared resources in the database as such. You can access the state of the scheduling of the shared resources in the other school at any time is a similar way to resources that are shared between departments

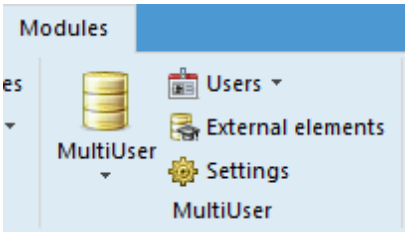
Tip: External resources in the department timetable
At very large schools the loading of a .gpn file or the login to the database can take a long time because of the huge amount of data. When you create schools instead of departments and you define resources shared by these schools (instead of shared by departments) you can break up the data into smaller amounts without losing track of the shared elements. Performance will improve dramatically as only the data of one department has to be loaded at a time.

7.1 Creating external elements

Let us consider the following example:

Teacher Gauss teaches at two schools: "Manual School 1" and "Manual School 2". Both schools use Untis MultiUser and they have a common data source directing to the relevant ODBC connection.

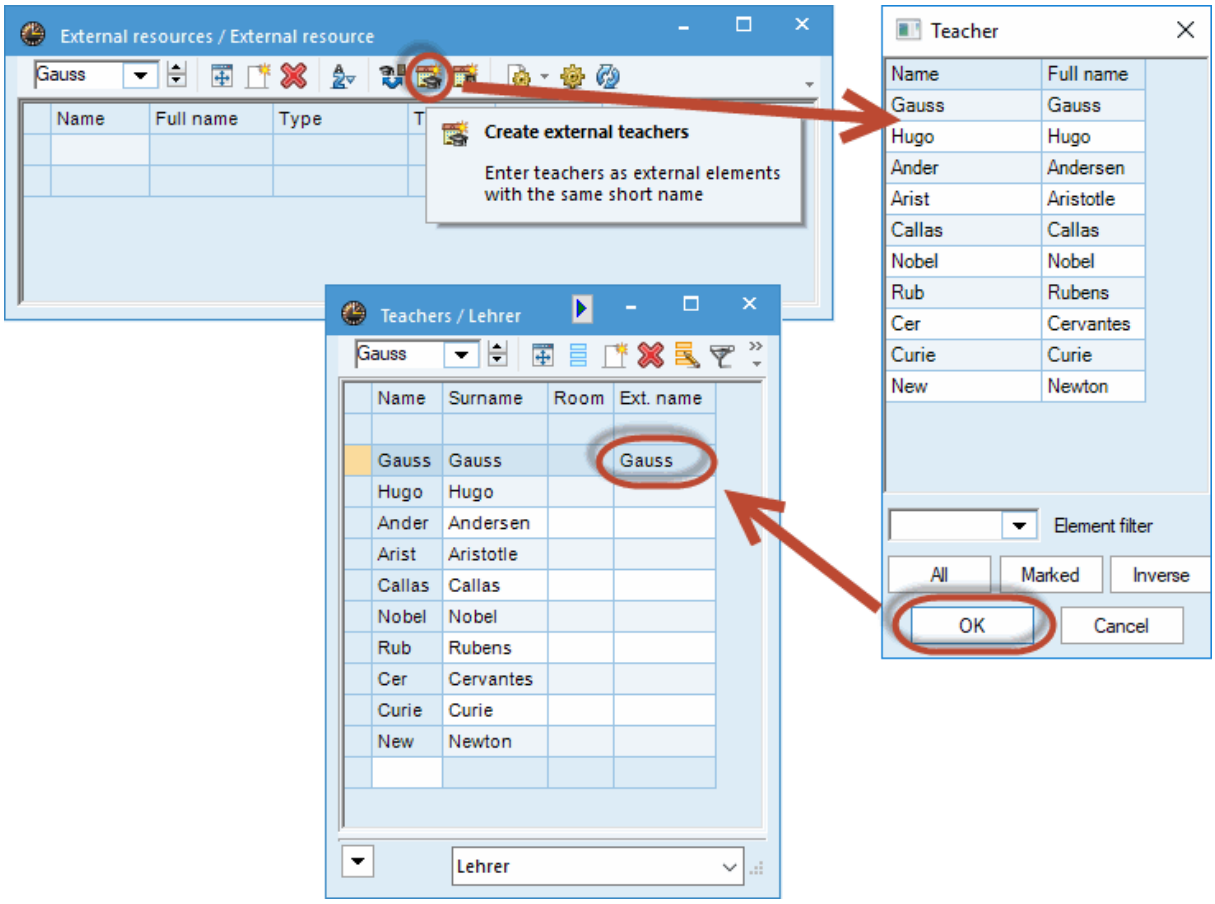
To define Gauss as shared resource you have to select the menu item "Modules | MultiUser | External elements" in one of the sets of data.



A dialogue opens in which you can create external elements. These then have to be connected to the corresponding elements in the master data.

Tip: Short name of external elements
The short names of external elements do not necessarily have to match the short names of the master data. However, we recommend that you use the same short name for shared resources in all schools. First, this makes it easier to maintain an overview and , second, Untis auxiliary functions can be used.

If the shared teachers or rooms have already been defined in the master data, you can quickly add them to the list of external elements using the <Create external teachers> or <Create external rooms> buttons.

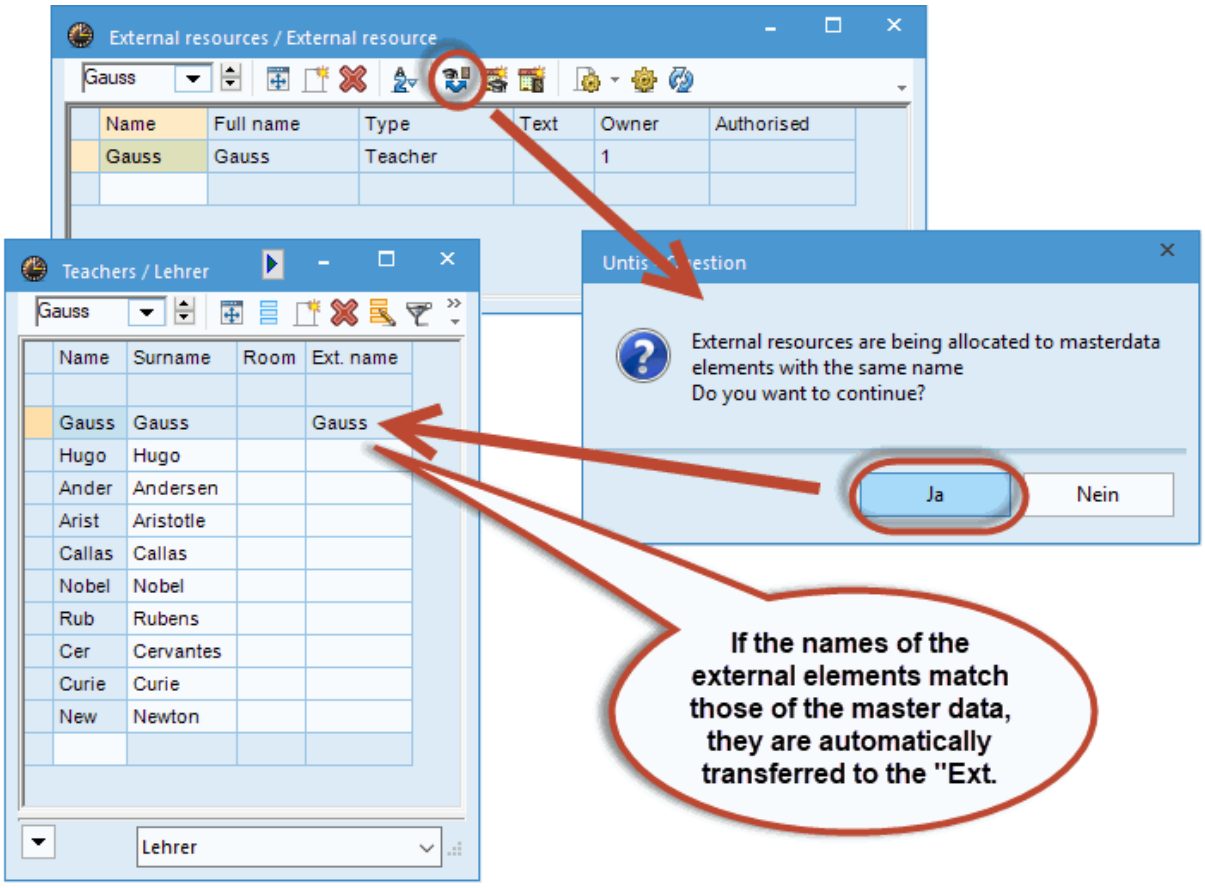


As you can see in the figure, this function performs two steps. First, a new element with the short name of the selected teacher is created in the window "External elements" and, second, the newly created element is connected to the corresponding element in "Master Data | Teacher" of the active school. This is effected via the "Ext. name" field, where the short name of the external element is added.

In our example, teacher Gauss was defined as an external element in the school Manual School 1. Work is now finished in this school's data. The timetable scheduler of the school Manual School 2 now has to log in and open the window "External elements".

As there is already a data record for teacher Gauss in the window "External elements" in the school "Manual School 1", this record will appear in the school "Manual School 2", too. Now Gauss has to be linked to the corresponding entry in "Master Data | Teachers". This is effected either by making an entry manually in the field "Ext. name" in "Master Data | Teachers" or – in case the short name of the external element is the same as the short name of the teacher – via the <Transfer to master data> button.

If external elements are created (manually) with the short name is not the same as the respective master data short name, the field "Ext. name" needs to be fille in manually, as well.

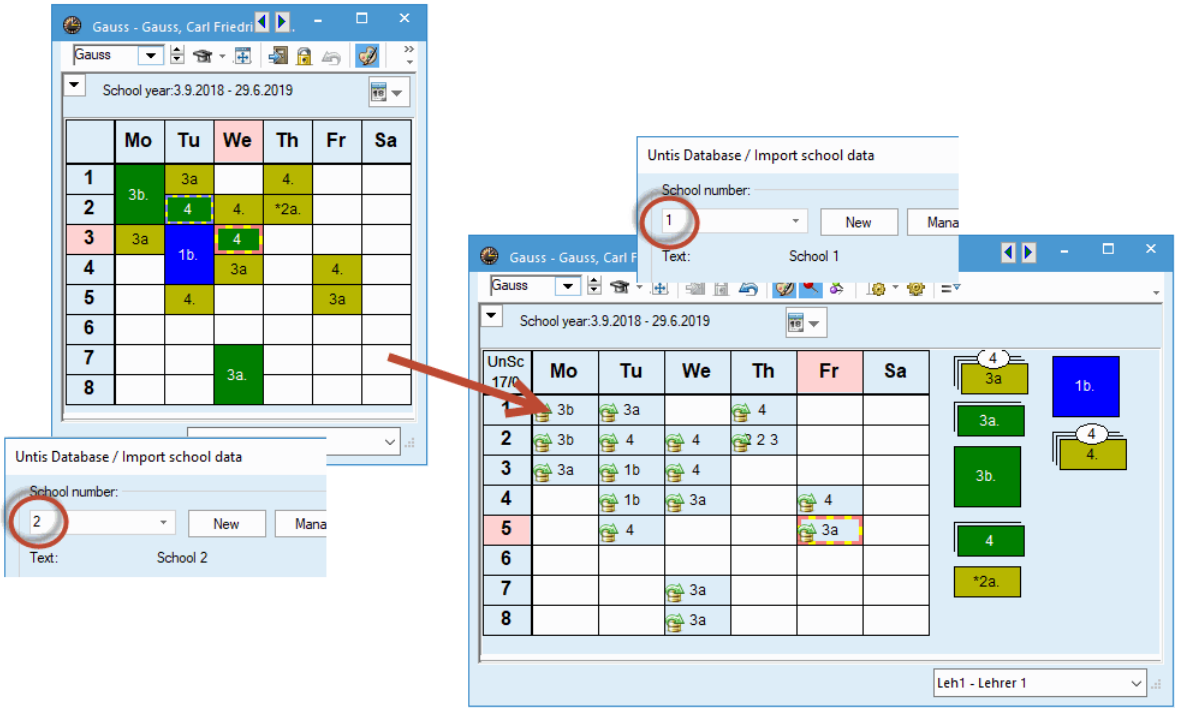


All entries and input of data to define shared resources have now been completed. The next section describes how Untis will notify you when an external element is used by the other school.

7.2 Working simultaneously

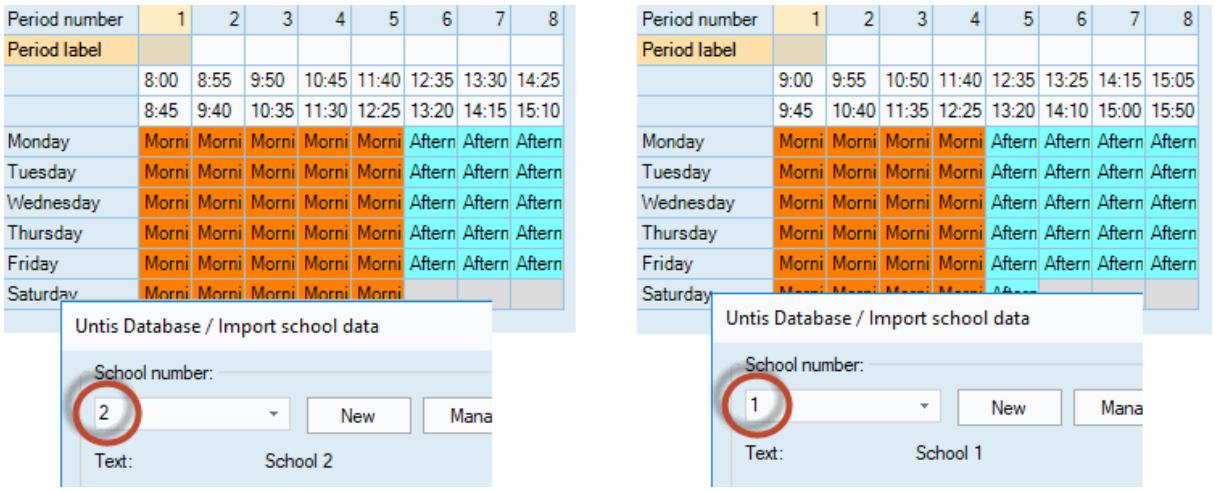
We assume that teacher Gauss is defined as a shared element of the two schools, "Manual School 1" and "Manual School 2", as described in the example used in the previous chapter.

If either of the two schools now schedules lessons for teacher Gauss then this information will be displayed in Gauss' teacher timetable in the other school. The icon shwos that this is the lesson of another school.



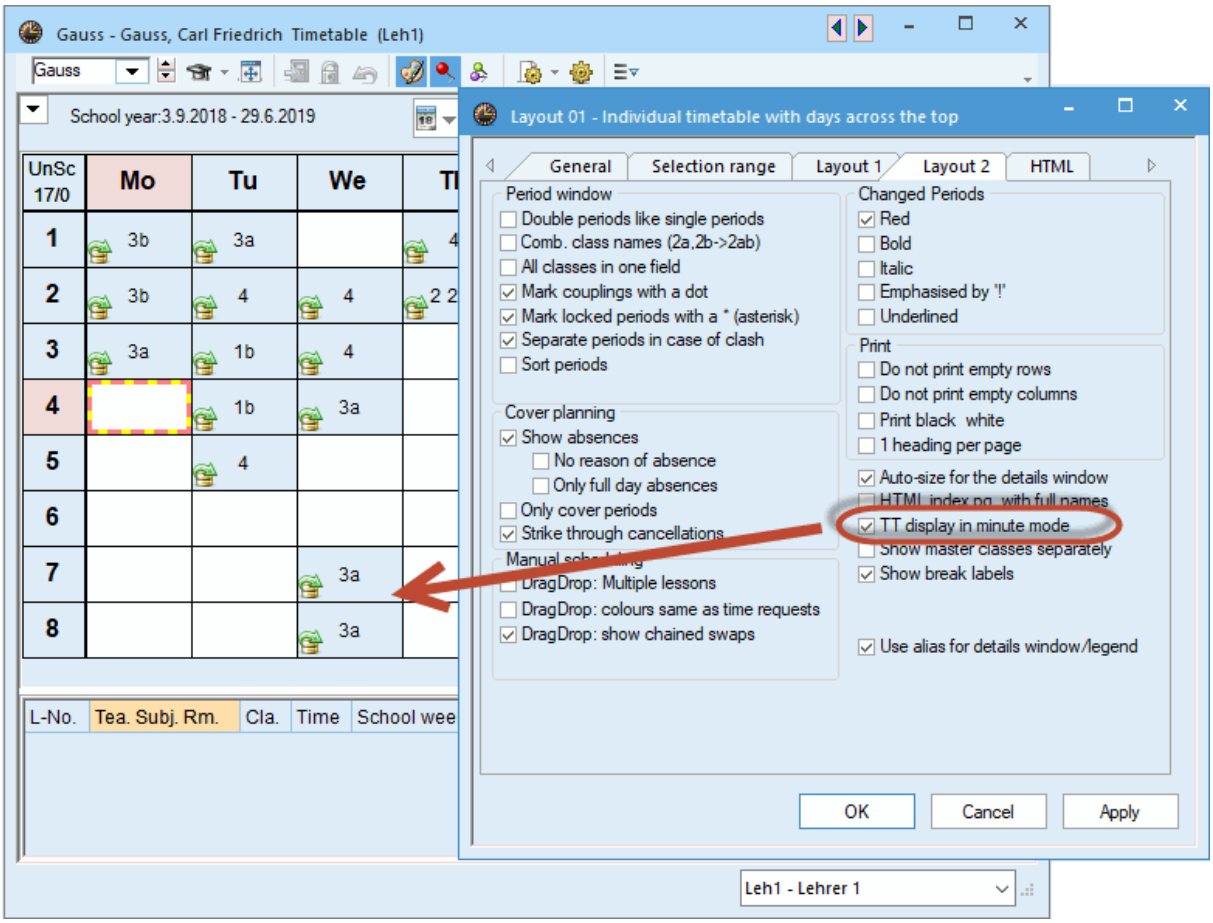
Please note that in the school "Manual School 2" lessons have been scheduled for Monday, periods four and five, whereas in Manual School 1" periods 3 and 4 are displayed as occupied.

The reason for this are the different time grids used by the two schools

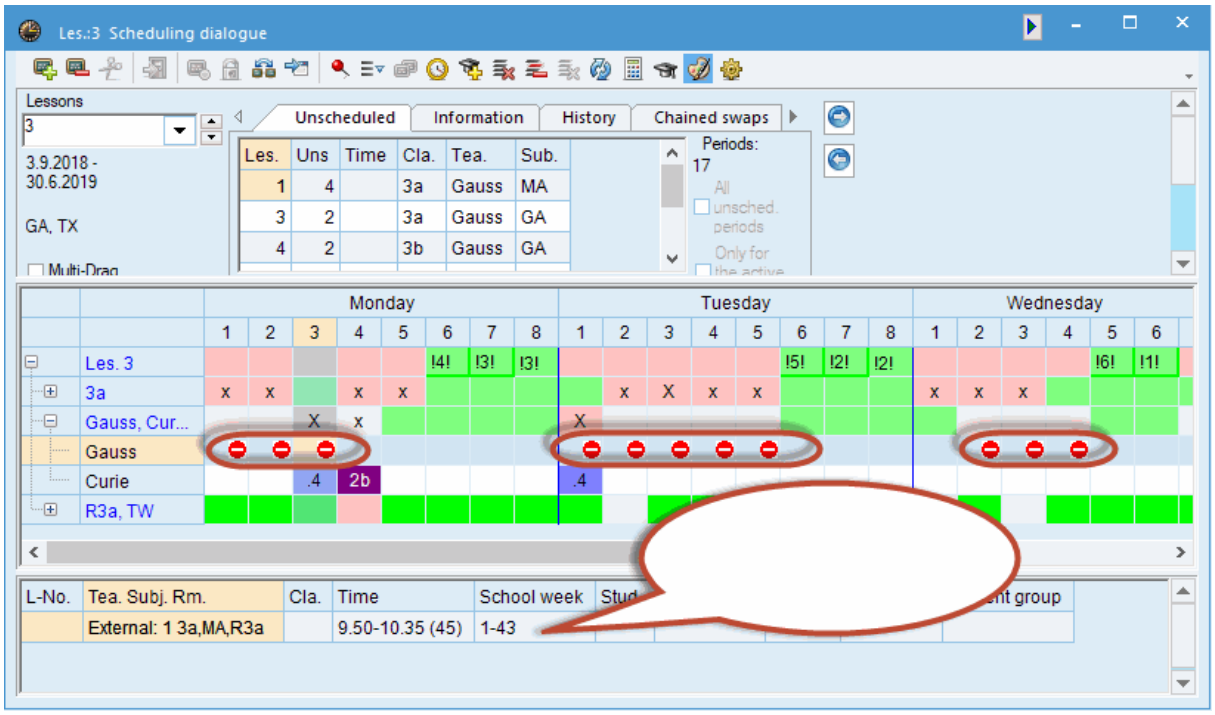


As you can see in the figure, the third period in the school "Manual School 2" lasts from 9.50 to 10.35. Since "Manual School 1" starts one hour later, the second period is overlapped. Due to the distribution of breaks, there is a bigger offset only later in the afternoon, which means that the lessons on Tuesday in periods 7 and 8 in "Manual School 2" are blocking the periods 6 to 8 in "Manual School 1".

If you activate "TT display in minute mode" on the "Layout 2" tab in timetable settings, "Manual School 1" can see precisely when teacher Gauss is scheduled in "Manual School 2".



The availabilities of external elements are also visualised in the scheduling dialogue.



In the details window of the timetables and the scheduling dialouge you see in which week external elements are not available.

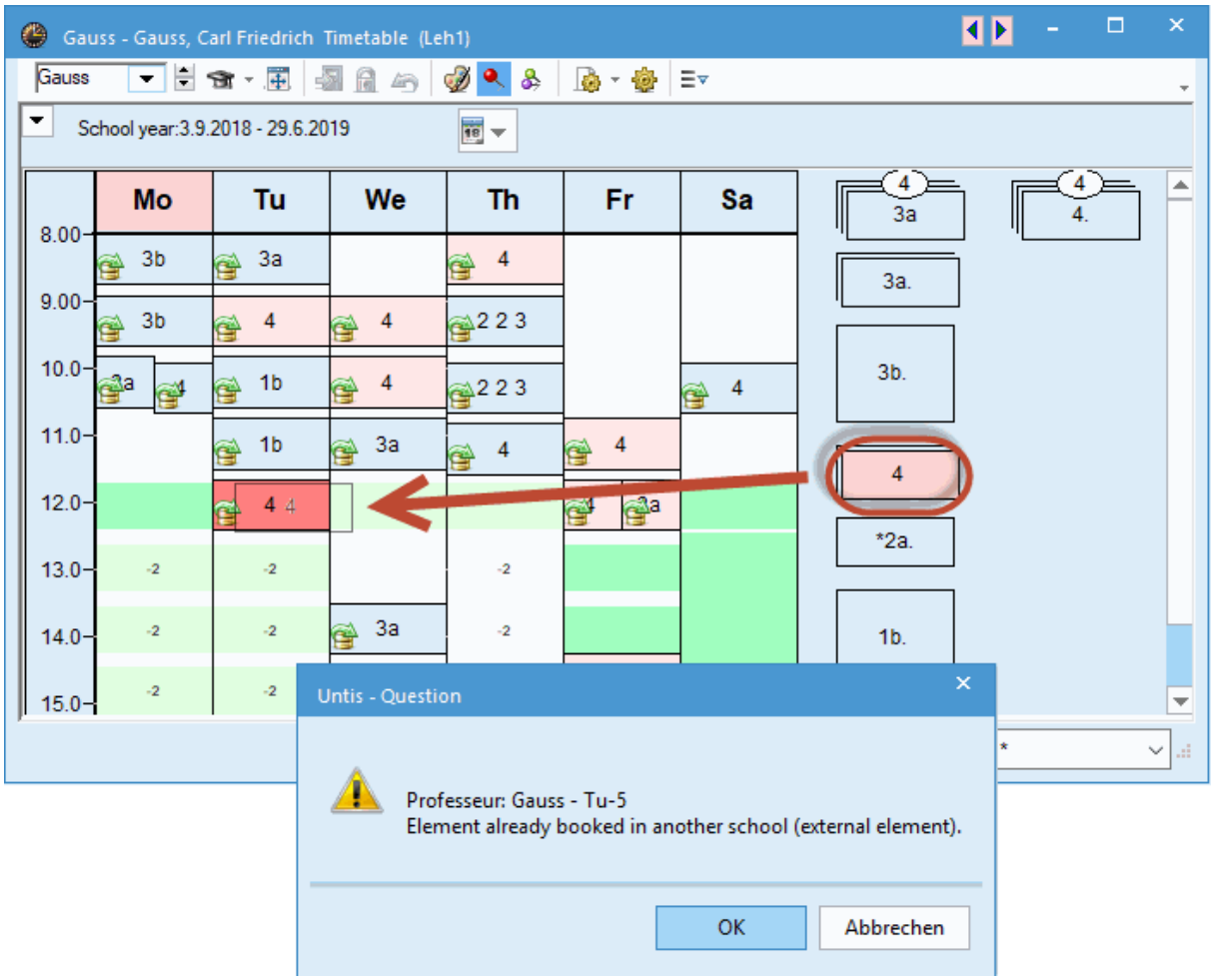
Warning:
You can create as many schools and school years as you wish and up to 255 versions in the database. If "Manual School 1" logs in to version 1 then the information regarding the external elements of the school "Manual School 2" will also be retrieved from version 1. All schools must work with the same version in order to ensure that the display is correct. **We recommend that you always work with version 1** .

7.3 Clashes with external elements

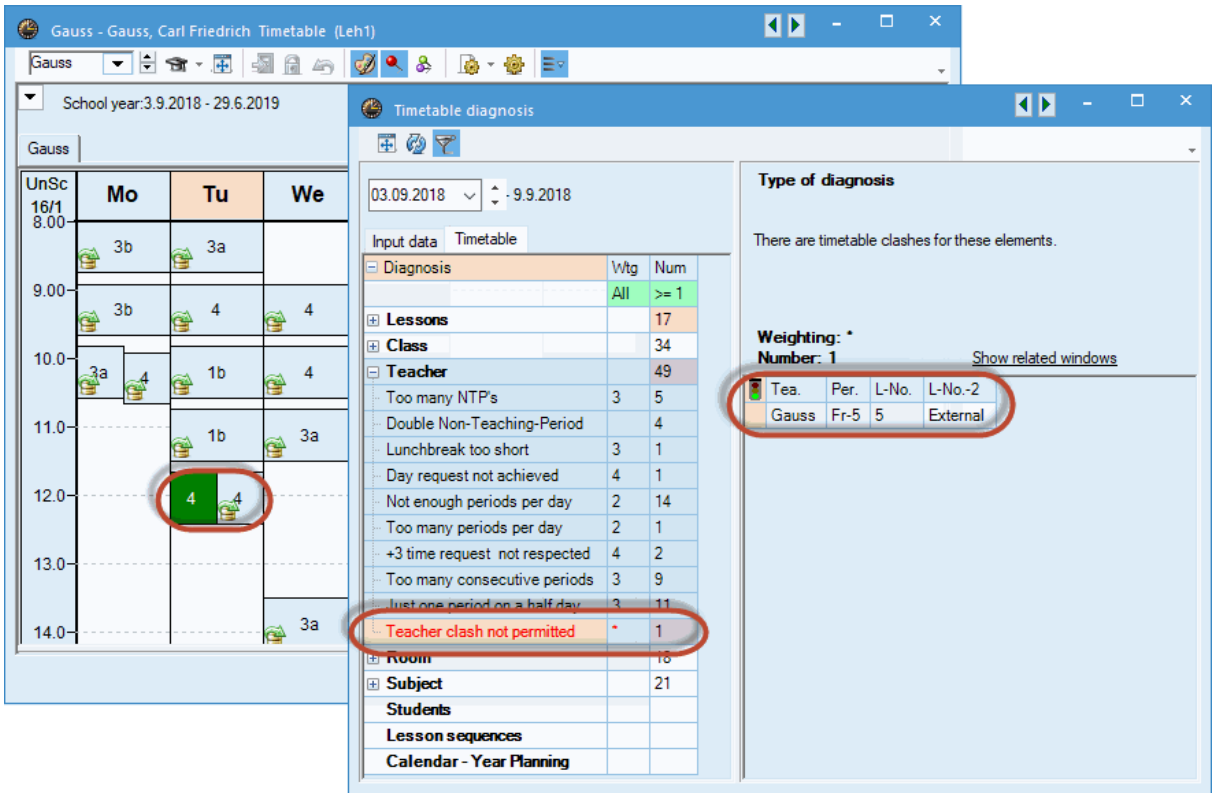
As already described in previous chapters, a school's timetable shows when the external elements are used by other schools.

For the Untis algorithm these externally scheduled periods are blocked and this blocking cannot be breached. Sometimes, during the phase of manual planning, you might wish to create clashes that will only be resolved at a later point in time.

You can create collisions with external elements just like any other clash.



The collisions are displayed in the timetable and listed in the diagnosis.

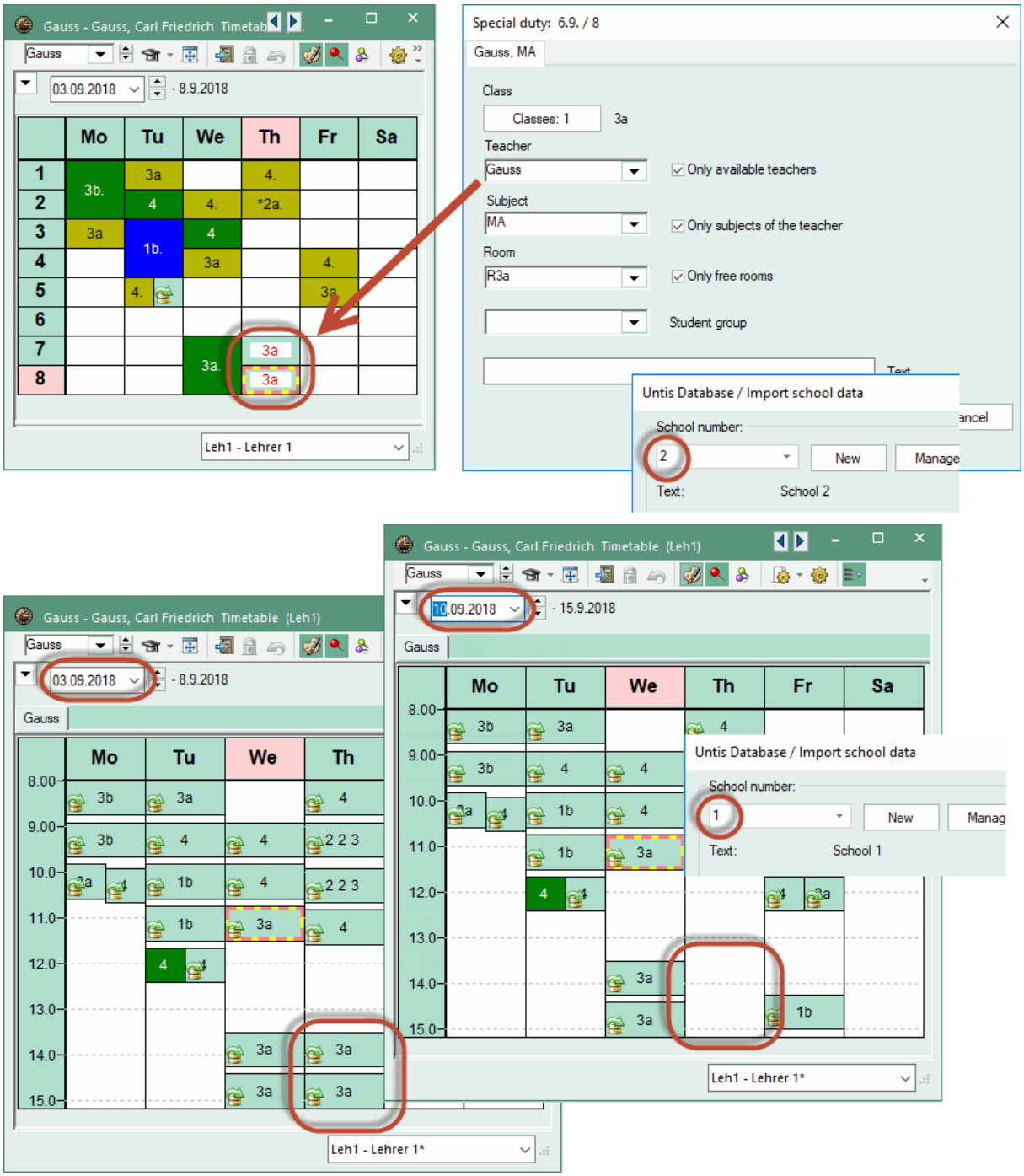


7.4 Cover planning

The availabilities of external elements are stored and displayed in the cover planning module, too.

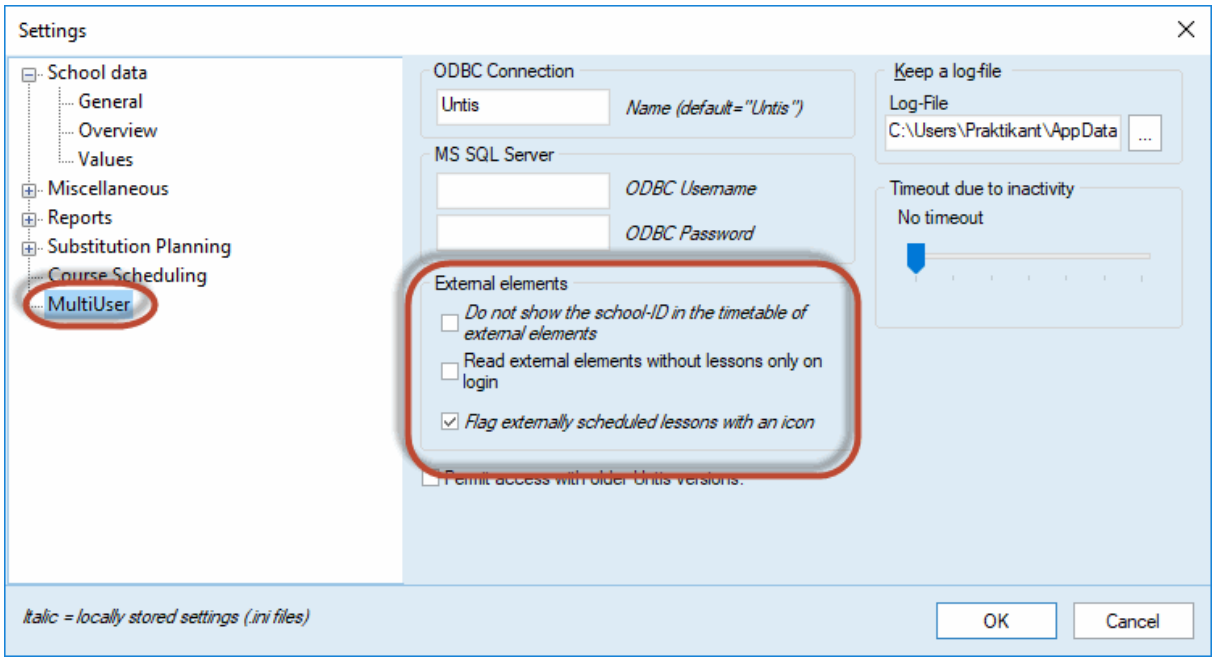
As you can see in the figure below, the shared resource teacher Gauss has been scheduled in the school "MS2" for special duties on Wednesday, 19 September in periods 7 and 8. He is thus not available for "MS1", which is displayed accordingly in the timetable.

The time of period 8 in "MS2" coincides with periods 7 and 8 in "MS1". Please note that teacher Gauss is not available for "MS1" for scheduling in the afternoon on Wednesday, 5 September, however on the Wednesday of the following week, i.e. on 12 September he is available.



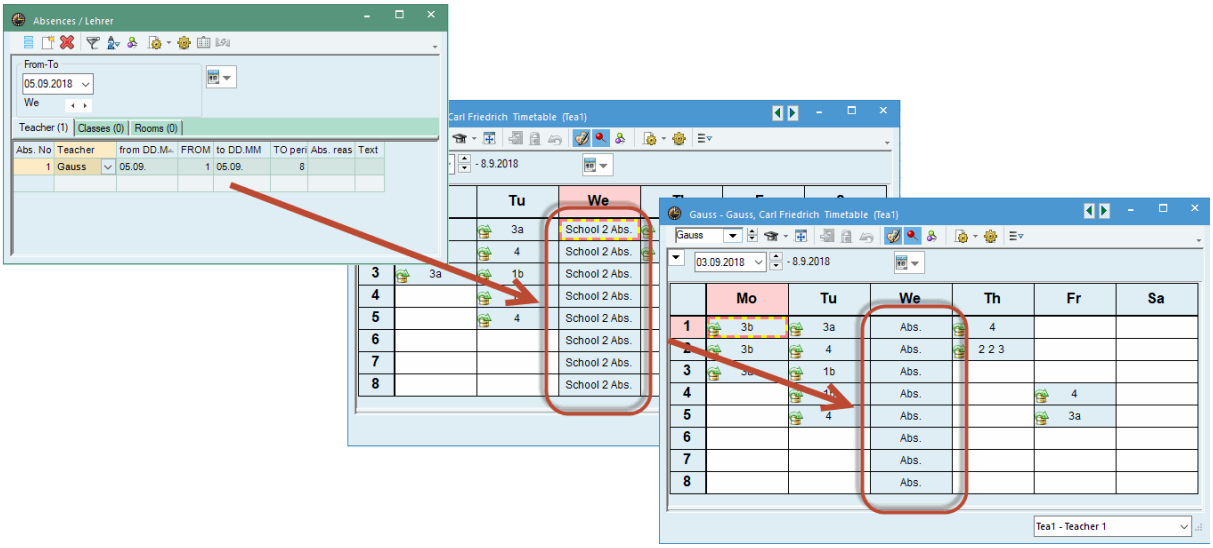
7.5 General settings for external elements

The following possibilities of settings for external elements can be chosen in the Untis settings dialogue:



Do not show the school-ID in the timetable of external elements

If you tick this checkbox then the school-ID of external lessons is not shown additionally to the lesson data.

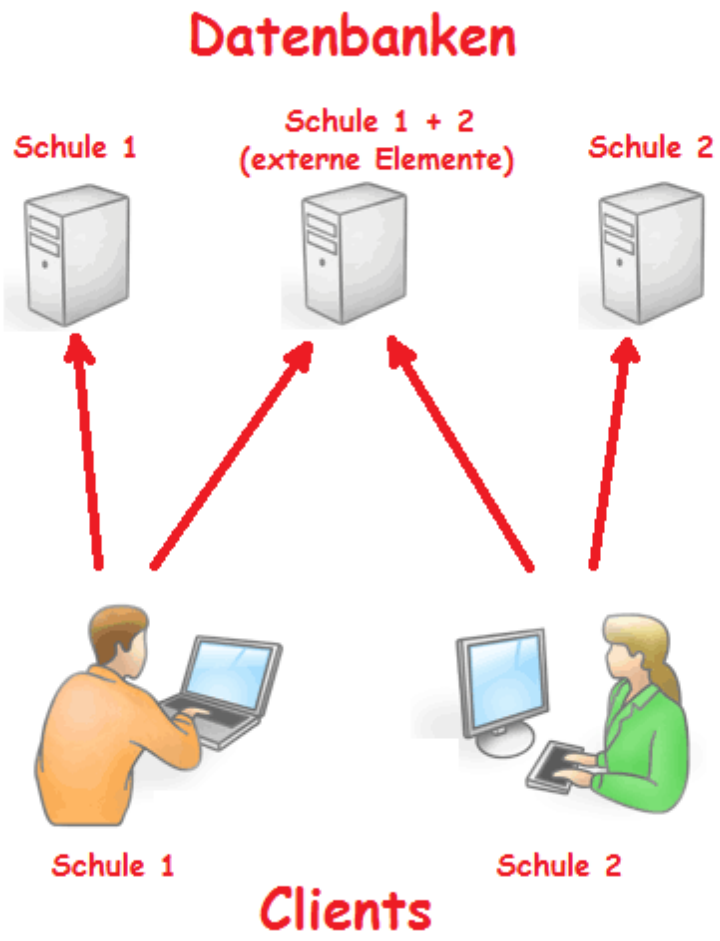


Read external elements without lessons only at login

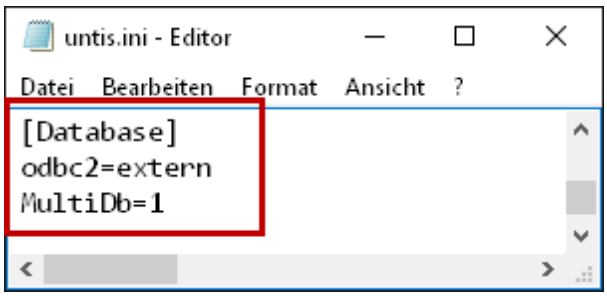
If a master data element in my school does not yet have any scheduled lesson, then ticking this checkbox would prevent the external times of this element to be loaded while working with Untis. The respective data are only loaded at every login. This can positively influence the performance of Untis MultiUser. Please note, however, that changes of this element of any other school(s) are not up-dated during the scheduling process.

7.6 External elements: Owner

So far, it has always been necessary to have all data of all schools involved in one single database if external elements were used. As of the 2017 version, this is not necessary anymore. Every school can have its own database and all external elements are saved in a central database.



Go to the 'Start' tab and open via 'Settings | Open Untis.ini...' Untis.ini and enter in the section 'Database' the following lines 'odbc2=[name of external database]' and 'MultiDb=1'.



When the databases are set up the schools can start with creating external resources.

Note!
Which schools potentially have access to external resources is regulated via the database of external elements. Every school having access to this database can be selected.

8 Working with departments

There are basically two possibilities to display departments with Untis MultiUser:

- **External resources** : Each department is represented as an individual school, and elements that are shared by departments are treated as elements that are shared by schools. This method is interesting for very large schools as only the data of one department is loaded.
- **Pooled data management** : All data is stored centrally in the database.

Whereas working with *external resources* allows processing of data only within the department (such as optimisation or cover planning), pooled data management makes it possible to apply all functions to the data of the entire school

Pooled data management is therefore the preferred approach for those schools whose volume of data does not affect the speed of Untis too much

Read more about external resources in chapter Shared resources .

The following chapters describe the possibilities of department planning in Untis with pooled data management.

8.1 Simultaneous optimisation of departments

If the timetable of a school is generated for all departments at the same time (optimisation of all departments) then Untis MultiUser offers the possibility for heads of departments to make entries to one set of data simultaneously. The export and import of departmental data is therefore not required.

In addition, you can view the current use of resources shared by departments at any time (e.g. the loading statistics of rooms).

You can use the user rights system to regulate which user is allowed to work on which department. You can view this in the combo box in the Ribbon where only the respective departments are available (see also section "Departments at user level" in chapter Creating users).

8.2 Departmental generation of timetables

If you generate timetables at department level Untis MultiUser has the following advantages compared to the usual procedure in the single-user version in combination with the *Department timetables* module:

With resources shared by departments (e.g. rooms), up to now it was necessary to agree in advance who may use which resource at what time in advance. This is no longer mandatory with Untis MultiUser, since every department is informed about the general state of planning at all times, and one resource cannot be scheduled twice at the same time accidentally as in this case a clash would occur and be reported.

There are many more possibilities for individual departments in terms of generating timetables since time

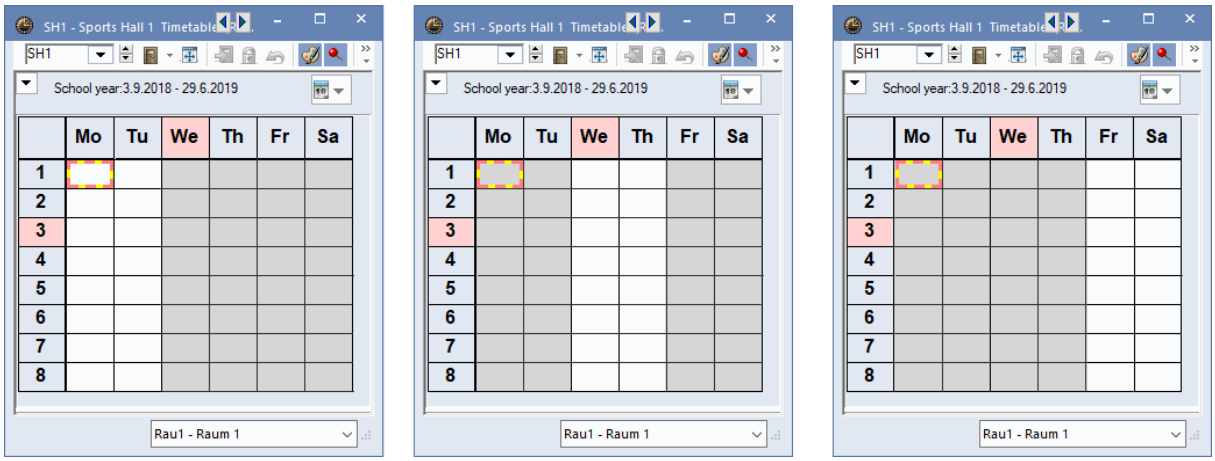
restrictions on the arrangements might create unnecessary limitations on scheduling.

Example: Gymnasium 1 (Gym1) is available to three departments. The departments agree that gymnasium 1 is available for department one on Monday and Tuesdays, for department two on Wednesdays and Thursdays and for department three on Fridays and Saturdays.

The availability of this room looks like this:

Availability of Gym1 as agreed:

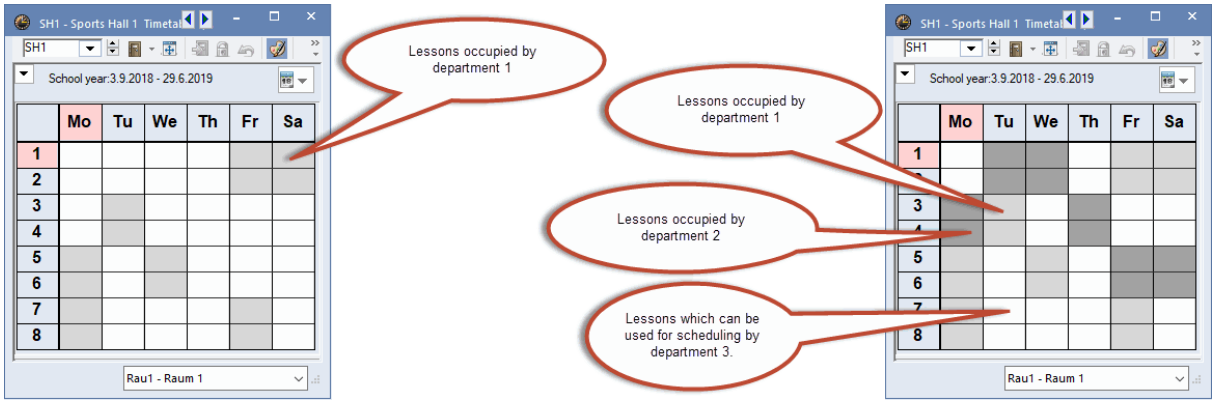
Gym 1 is available to every department for 16 periods.



Untis MultiUser makes agreements in advance unnecessary, since department one starts scheduling, then department two follows and finally department three starts scheduling.

Availability of this room therefore looks like this:

Department one schedules 14 of 48 available periiods. Then department 2 schedules 12 periods of the remaining 34. Thus 22 periods are still available for department 3.

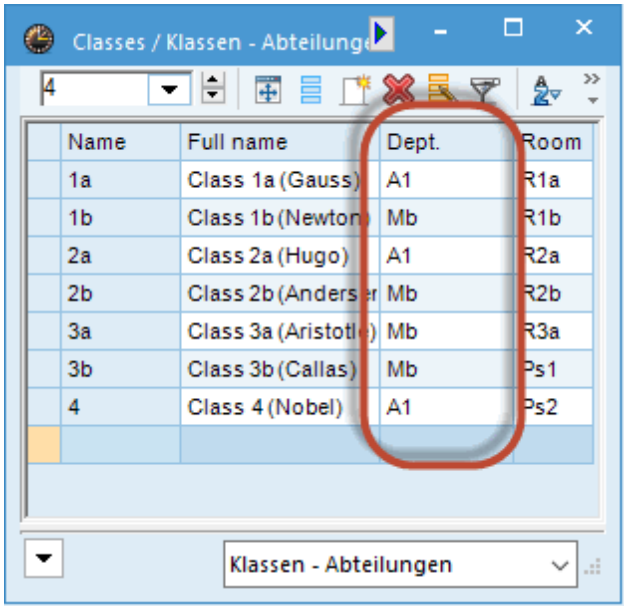


All three departments benefit from this arrangement, even department three which is the last to schedule.

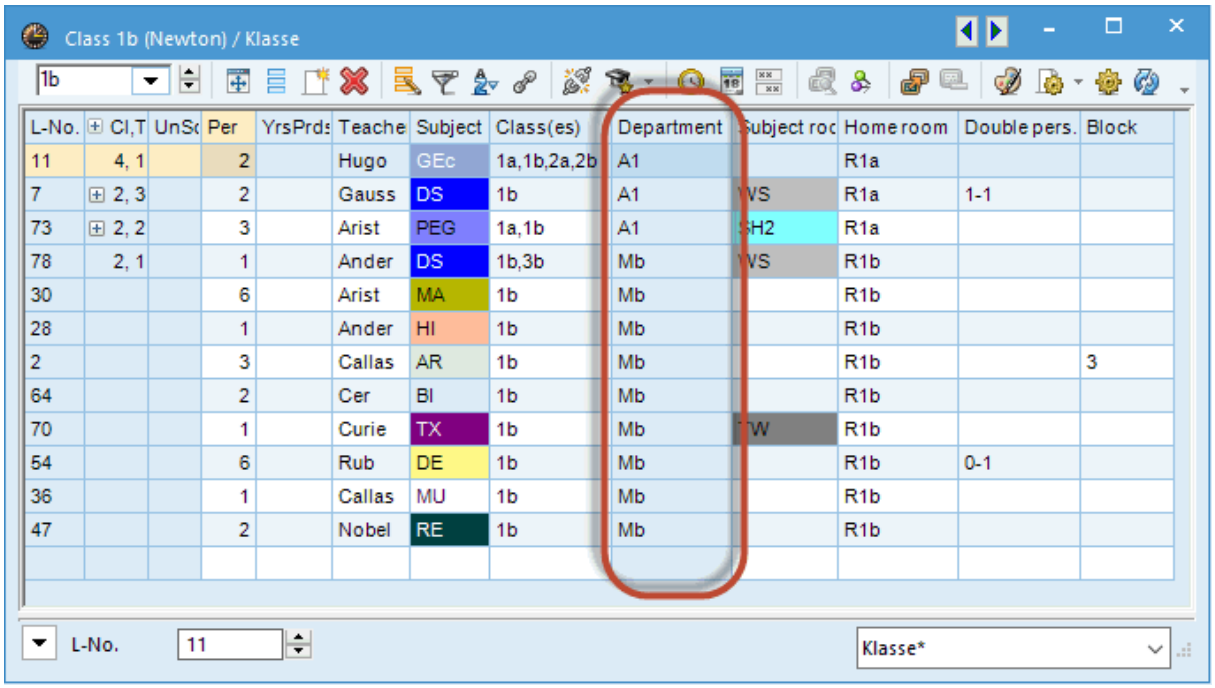
Simultaneous optimisation of different departments in the same term is not possible.

8.3 Affiliation with departments

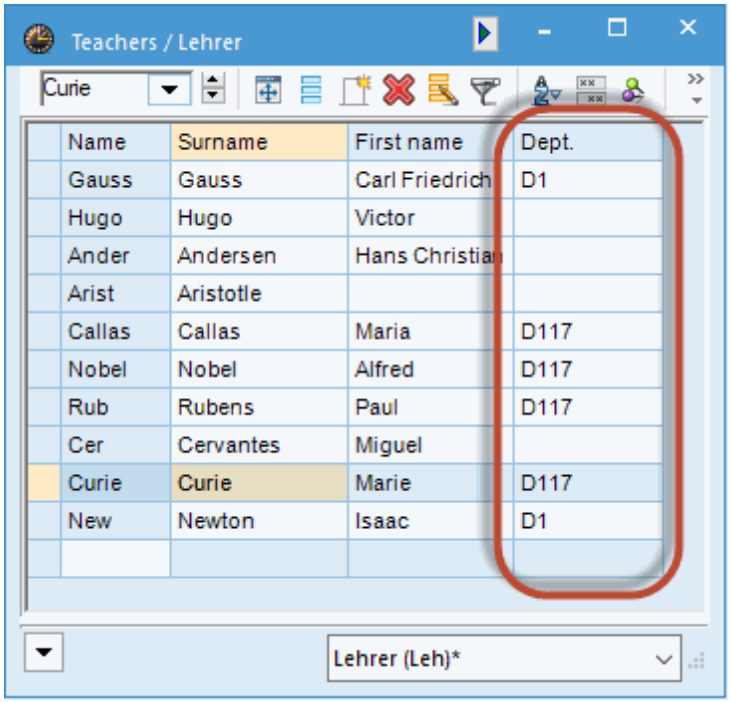
Since all departments are collected in one set of data, it must clearly be defined which lesson belongs to which department. This is specified in the master data of the classes.



If several classes are coupled in one lesson then the class which was entered first in the coupling defines the affiliation with the department. The "Department" column in the lessons window shows which department the lesson belongs to.



A teacher can be assigned to several departments so that he/she can be deployed in all these departments. Rooms and subjects can also be assigned to any number of departments.
If no deparment is entered, then this means 'affiliated to all departments'.



9 Cover planning

With Untis MultiUser it is possible for more than one person to work simultaneously on cover planning. In addition to this, it is possible to work simultaneously on cover planning and on the timetable provided that the work is carried out in different terms. From the 2016 version onwards, room planning in the timetable mode can simultaneously be done with cover planning within the same time frame.

9.1 Working simultaneously in cover planning

As with data entry or timetable planning, it is possible for more than one person to work on the same set of data of cover planning, e.g. one person can enter absences while another processes open substitutions.

9.2 Cover planning across departments

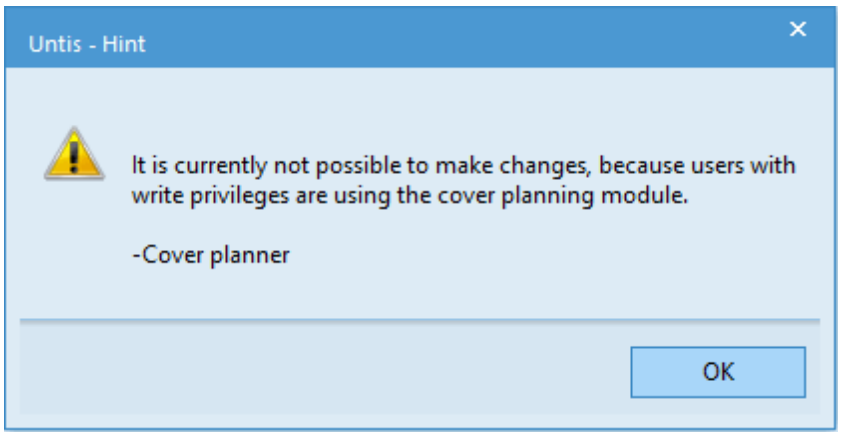
Cover planning across departments is easily possible, too, since every department can see the current state of planning at all times. The risk that a shared resource is accidentally scheduled twice is thus eliminated.

Moreover, each department can only access its own resources provided rights have been set accordingly in user administration.

In this case, substitutions are visible in all departments they affect. For example, if a class belongs to department 1 and the teacher to department 2, any substitution will be visible in departments 1 and 2.

9.3 Cover planning and timetable planning

When a user with editing rights works in the cover planning module it is not possible for other users to change the timetable in the same term. After all, cover planning requires a fixed timetable as a basis. The scheduler will receive the following message:

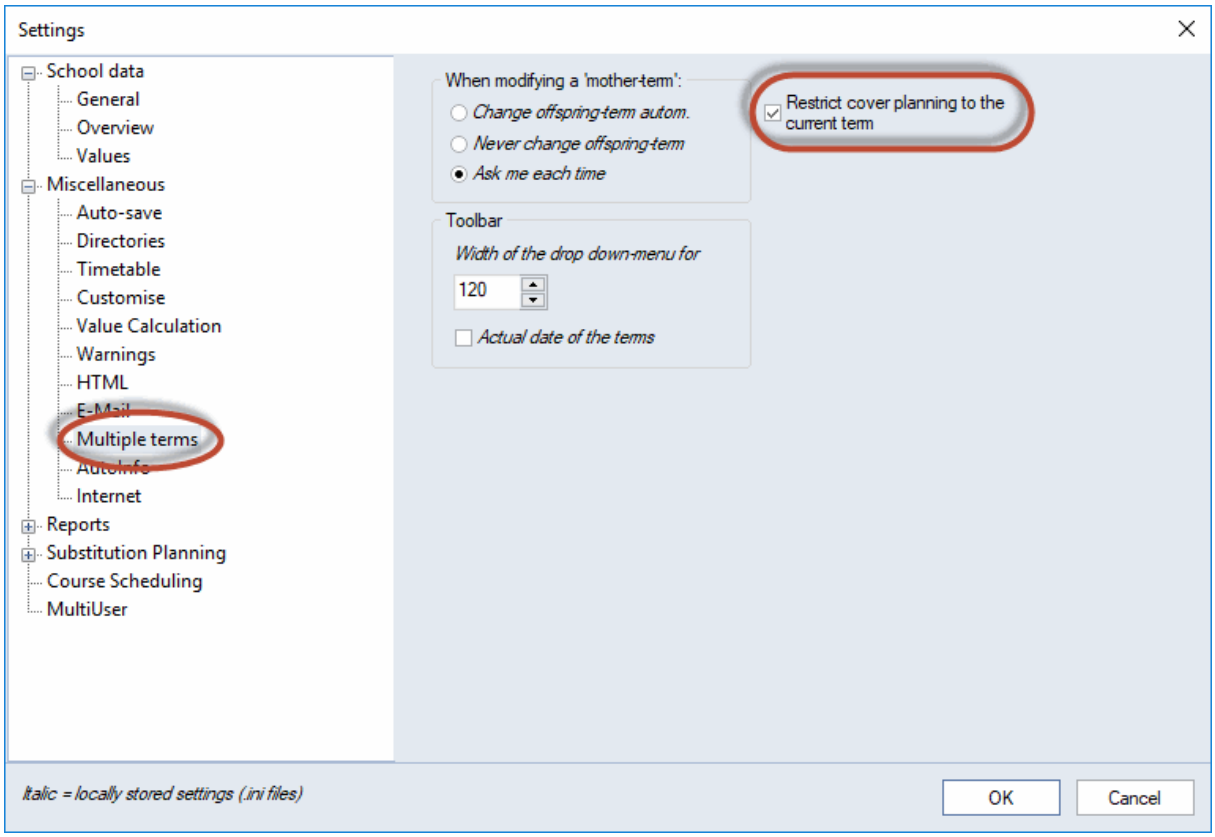


However, it is possible for the substitution planner to perform cover planning in the current timetable while at the same time the scheduler works on changes to a subsequent term in the timetable. Changes which are not relevant to the timetable (e.g. text fields in master data) are also possible.

From the 2016 version onwards room planning is exempted from this. While one or more users work on cover planning, it is possible to make room changes in the timetable planning. See chapter Room

planning and cover planning .

You can restrict cover planning to the currently selected term by ticking the checkbox "Restrict cover planning to current term" under "Settings | Miscellaneous | Multiple Terms". Now user of the Untis mode are no longer blocked by cover planners in other terms.



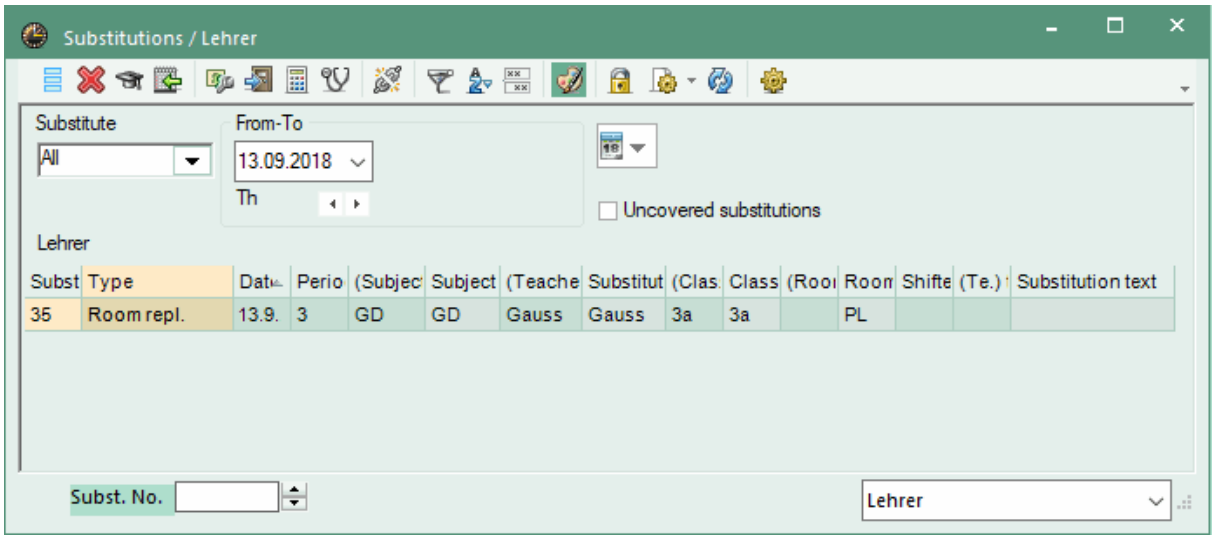
9.4 Room planning and cover planning

From the Untis MultiUser 2016 verion onwards there is the possibility to change room allocations in the timetable mode simultaneously to cover planning.

The following rule applies:
Scheduling information (room allocations) in already existing cover data are not changed!

Initial situation:

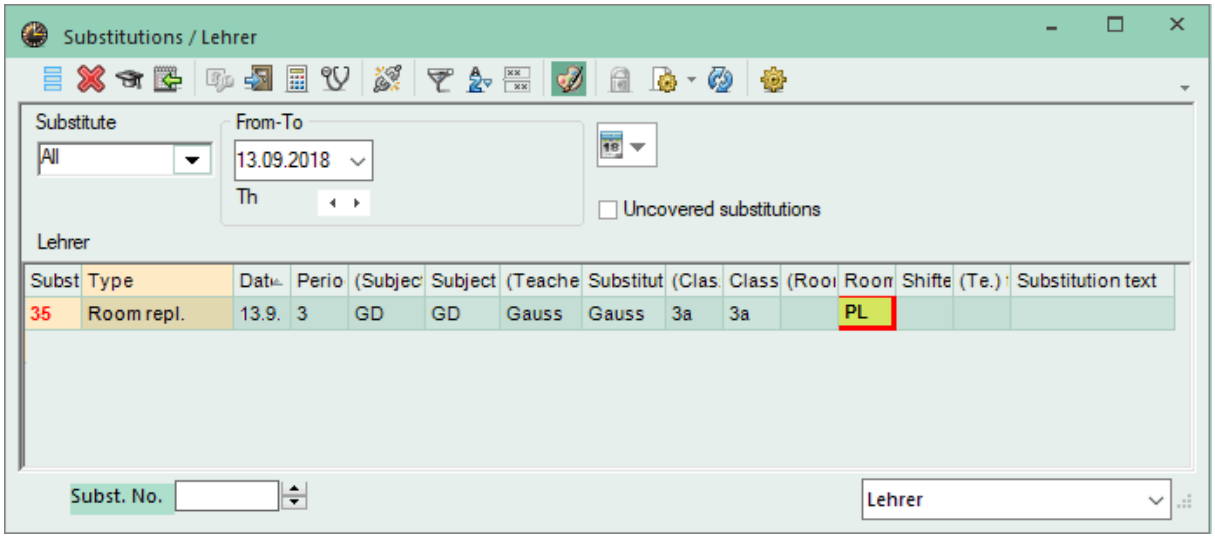
- class 3a usually had GD (geometric drawing) on Thursdays in period 3 in room R3a
- On 13 September GD will take place in the physics lab as an exception. The room change was executed in cover planning



At the same time the following changes are made in the timetable mode:

- Regular GD lessons of class 3a should from now on take place in room R2a
- Physics lessons of class 2a on Thursdays in period three should from now on take place in the physics lab

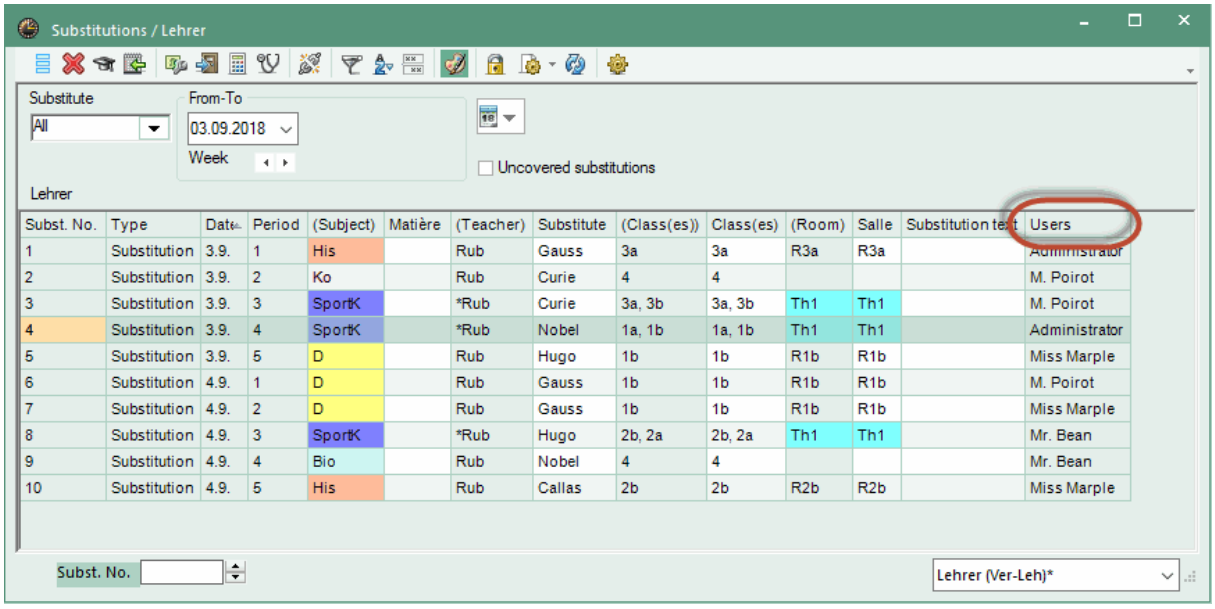
Result:



Scheduling information in the field 'Room' is not touched, in the column '(Room)', however, the new room 'R2a' has been entered. When working parallel in both modes, clashes can occur. These are highlighted in a different colour in the cover list. If the physics lab is scheduled in the timetable mode like in the example, the clash of the respective cell is highlighted. Furthermore, the substitution number is coloured in red.

9.5 Last change of substitution

As of the 2019 version there is a new column called 'User' in the substitution views. This column shows the user who made changes last in a substitution line.



Subst. No.	Type	Date	Period	(Subject)	Matière	(Teacher)	Substitute	(Class(es))	Class(es)	(Room)	Salle	Substitution text	Users
1	Substitution	3.9.	1	His		Rub	Gauss	3a	3a	R3a	R3a		Administrator
2	Substitution	3.9.	2	Ko		Rub	Curie	4	4				M. Poirot
3	Substitution	3.9.	3	SportK		*Rub	Curie	3a, 3b	3a, 3b	Th1	Th1		M. Poirot
4	Substitution	3.9.	4	SportK		*Rub	Nobel	1a, 1b	1a, 1b	Th1	Th1		Administrator
5	Substitution	3.9.	5	D		Rub	Hugo	1b	1b	R1b	R1b		Miss Marple
6	Substitution	4.9.	1	D		Rub	Gauss	1b	1b	R1b	R1b		M. Poirot
7	Substitution	4.9.	2	D		Rub	Gauss	1b	1b	R1b	R1b		Miss Marple
8	Substitution	4.9.	3	SportK		*Rub	Hugo	2b, 2a	2b, 2a	Th1	Th1		Mr. Bean
9	Substitution	4.9.	4	Bio		Rub	Nobel	4	4				Mr. Bean
10	Substitution	4.9.	5	His		Rub	Callas	2b	2b	R2b	R2b		Miss Marple

10 Data security

Data security is concerned with protection against unauthorised access as well as the creation of backups in case of a system crash or damage to the database

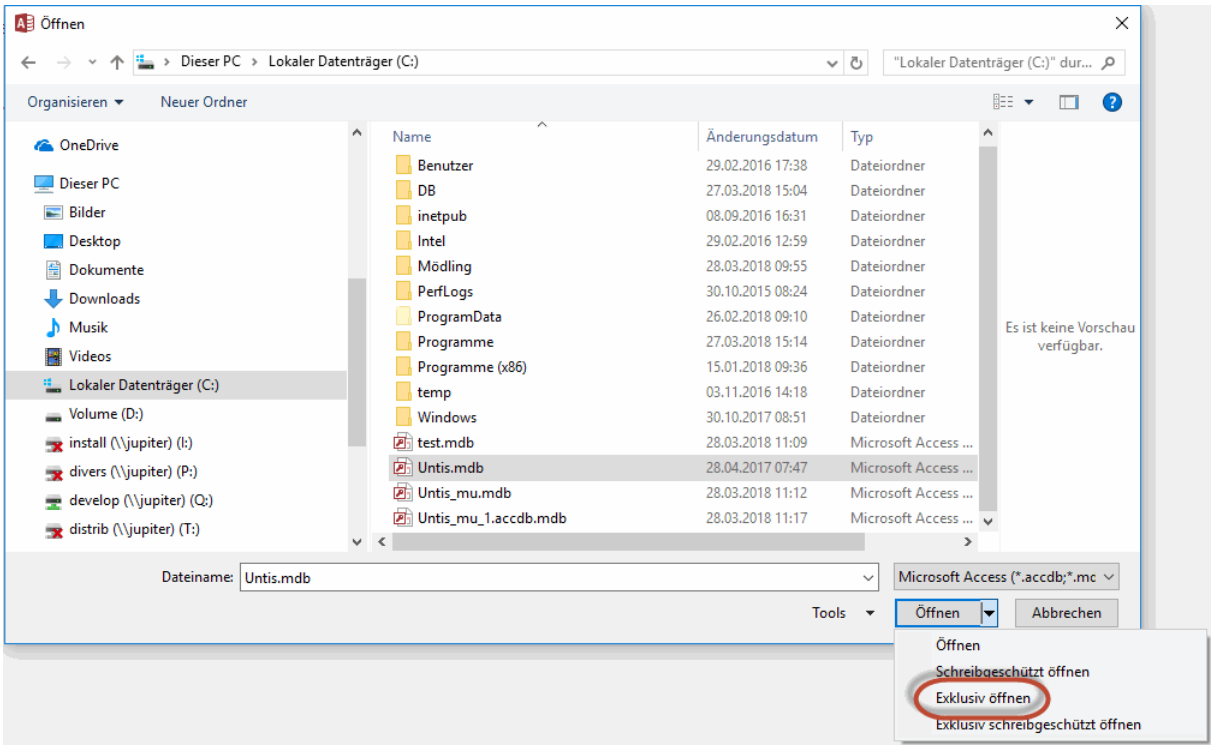
10.1 Protection against unauthorised access

MySQL and MS SQL provide many possibilities to protect access to the database. Visit the vendors' websites to find out more about these.

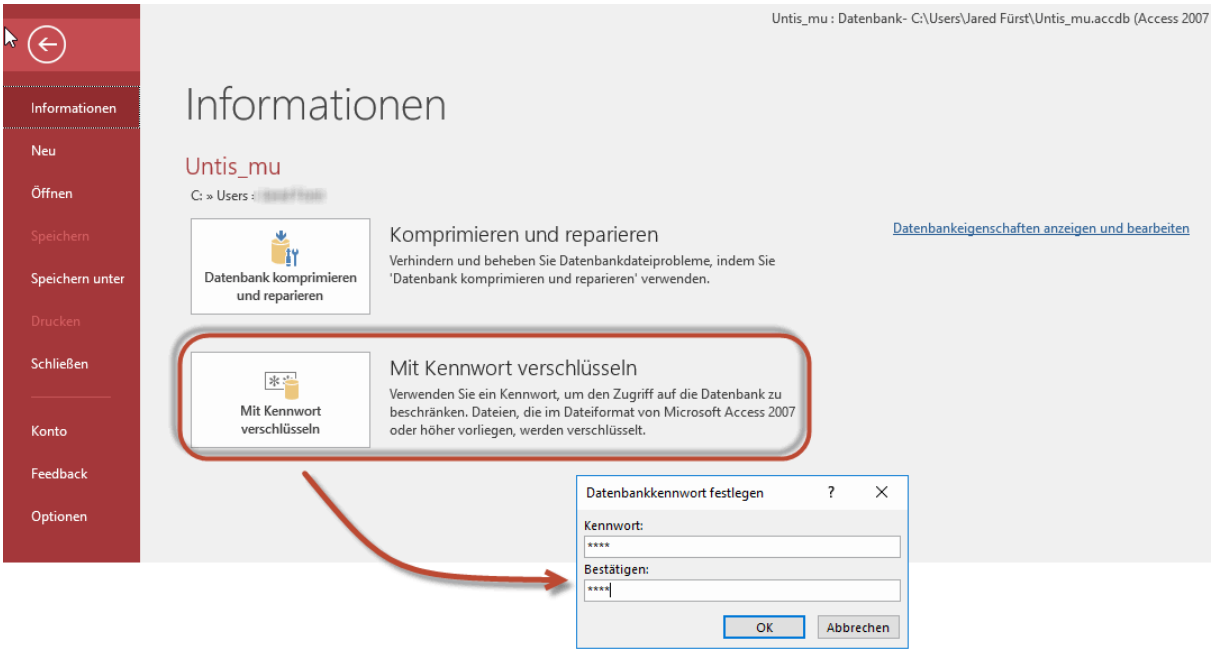
Microsoft Access databases can also be protected against unauthorised access.

Note:
The explanation below describes the procedure when using Microsoft Office Access 2007. The procedure may differ a great deal from the one described below if you use a different version of Access. Please consult the Microsoft Access help feature in this event.

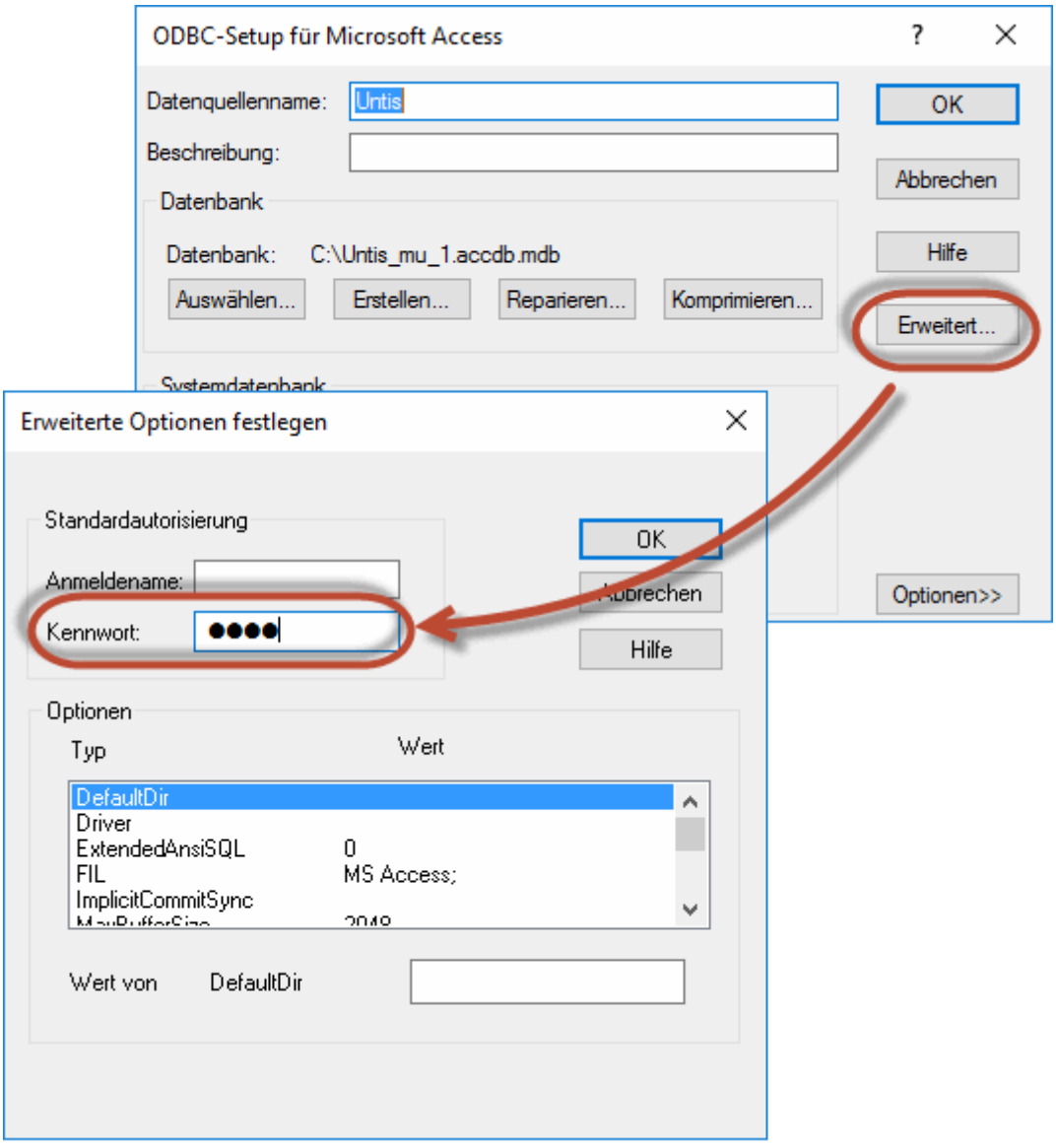
Launch the Access application and click on "File | Open". From the different possibilities to open the file "Untis.mdb" select option "Open Exclusive" (see figure below).



On the "Database tools" tab and select the <Encrypt with password> option and define a password.



You must now enter this password in the ODBC connection, as well. To do this, click on <Advanced> in the Untis ODBC connection and enter the password you defined in Access in the "Password" field. You can leave the "Login name" field empty.



10.2 Backups

As when working with .gpn files, we recommend that you make backups on a regular basis when you work with Untis MultiUser. There are various possibilities for this:

Save the data of the database to a .gpn file (see chapter Database and .gpn file) and store the .gpn file in a safe place (local hard drive, CD-ROM etc.).

If you are working with MS Access then compress the database (.mdb file) in Access via "File | Manage | Compress and repair database" and maybe additionally with WinZip and store the .mdb file in a safe place (local hard drive, CD-ROM etc.).

MySQL and MS SQL provide their own tools for backing up the database. Please consult the relevant documentation to find out more.

Backup via command line

As of the 2016 version you can use the command line to safe data in a .gpn file.

The following example will explain the syntax:

Untis.exe DB~1~2016-2017~1 /user=Administrator /pw=abcd /backup=C:\temp\backup.gpn

This will create the file backup.gpn in the directory C:\temp - for this backup the administrator access is used (password: abcd).

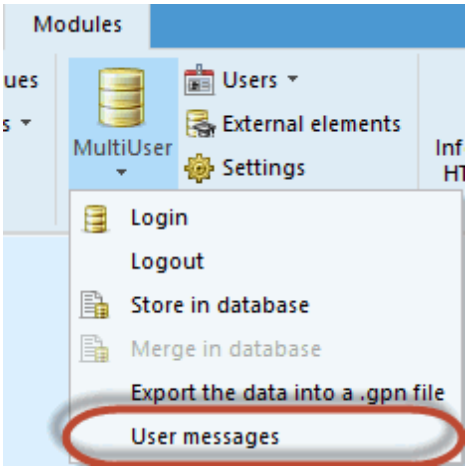
Warning:
This type of backup only saves the school data, the formats (master data, lessons, timetables) of the respective user. Private formats of all users (= formats which are not public) can only be saved via a database dump.

11 Message system

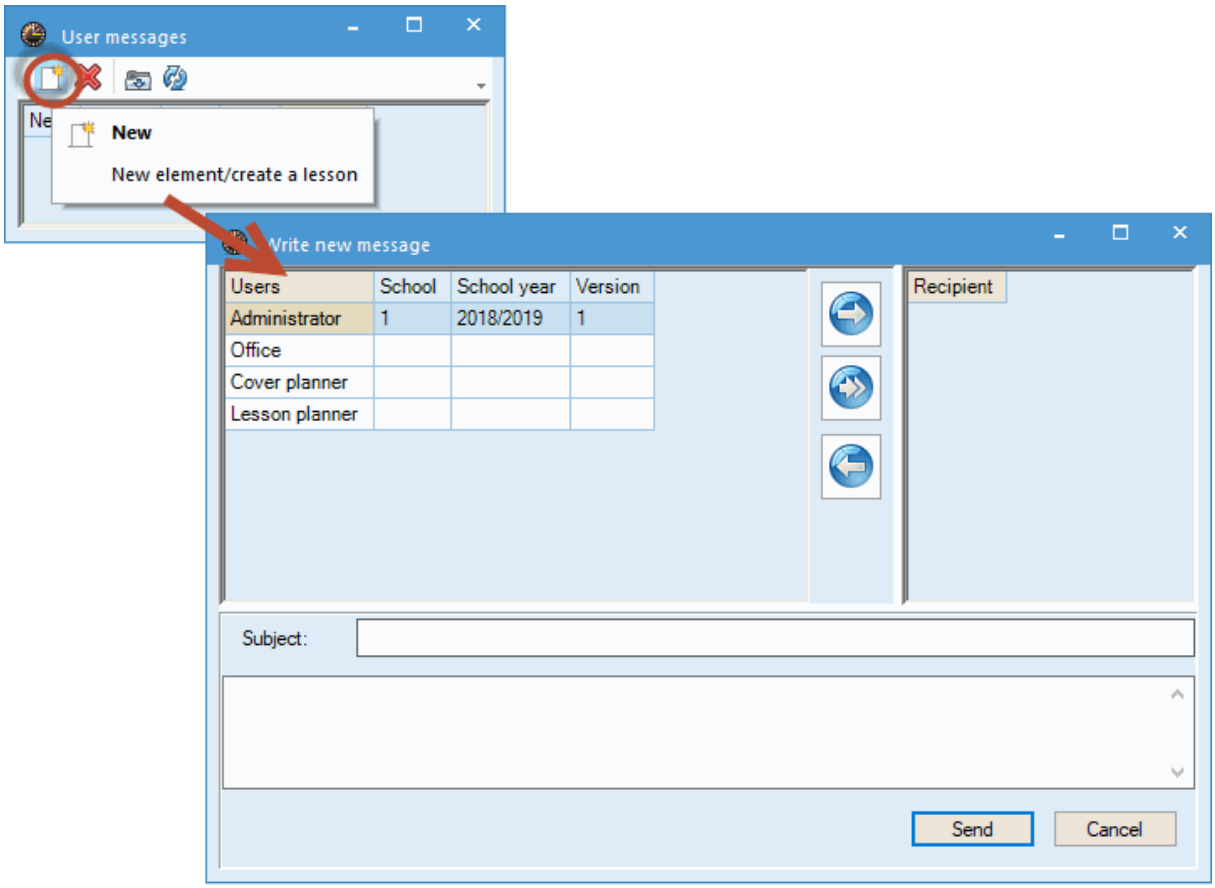
Untis MultiUser provides users with an internal message system which can be used to send messages to other users.

11.1 Sending messages

To send a message to one or more users first go to "Modules | MultiUser | User messages".



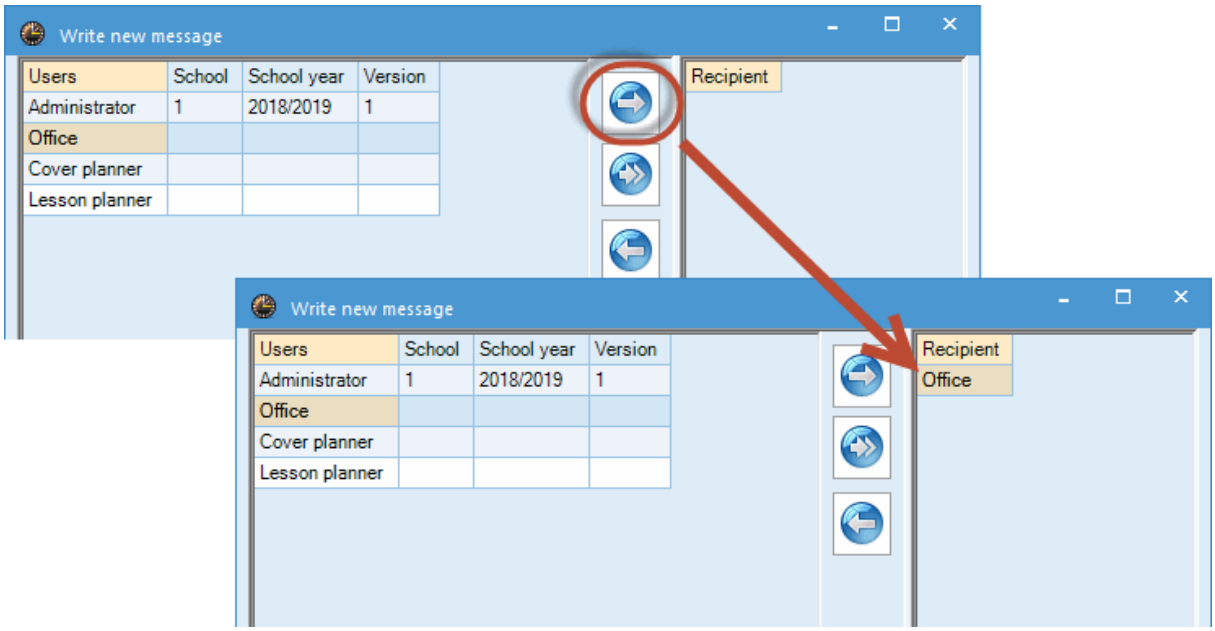
In the "User messages" dialogue click on the <New> button and enter the text that you wish to send in the lower section of the dialogue.



All users registered in the database are displayed in the upper left section of the dialogue. Via the columns "School", "School year" and "Version" you can see in which set of data a user is working, if one of these users is currently logged in.

Select the users who are to receive your message and click on the <Add recipient> button. Alternatively, you can add users with a double click in the list of recipients

Tip:
You can select more than one user if you hold the <CTRL> key down.

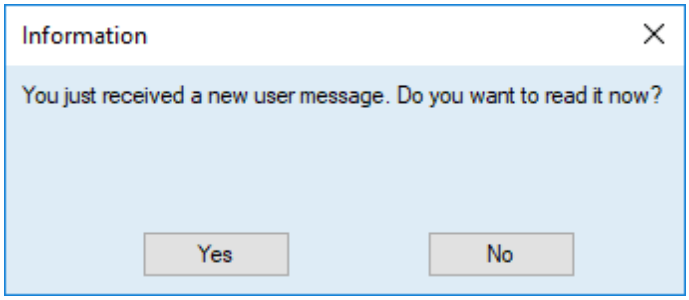


If the message is to be sent to all users who are currently logged in then click on the button <Active users>. This adds all users to the list of recipients who are currently working in the set of data that you are logged in to.

Click on the <Send> button to start the process of sending the message.

11.2 Managing messages

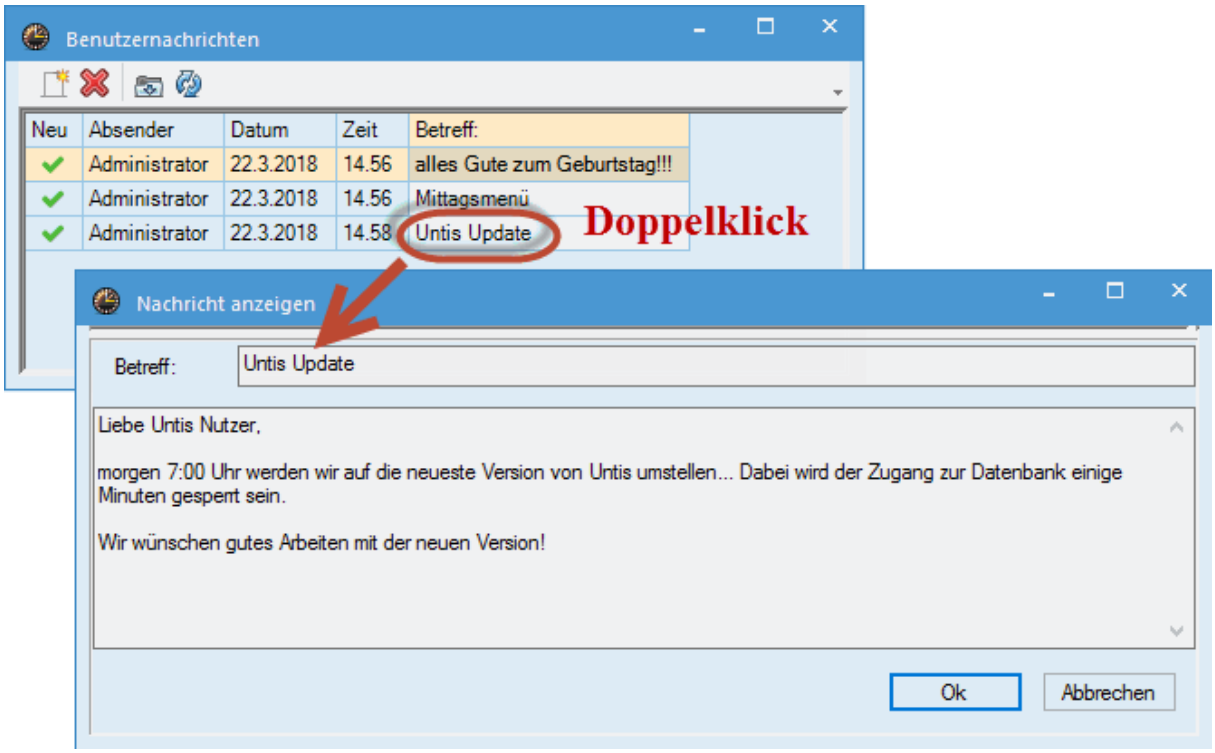
As soon as a user sends a message, all recipients who are currently logged in see a notification that they have received a new message. All other users will receive this information when they log in the next time.



A confirmation with <Yes> opens the dialogue "User messages" with all received messages.

Note:
If you wish to read the message later then click on <No>. You can select the dialogue "User messages" at any time via 'Modules | MultiUser | User messages'.

Double-click on the subject of the message, or click on the <Show message> button to display the message.



11.3 Deleting messages

If you wish to delete a message irrevocably from the database, mark the message with a click on the subject and then click on the <Delete> button.

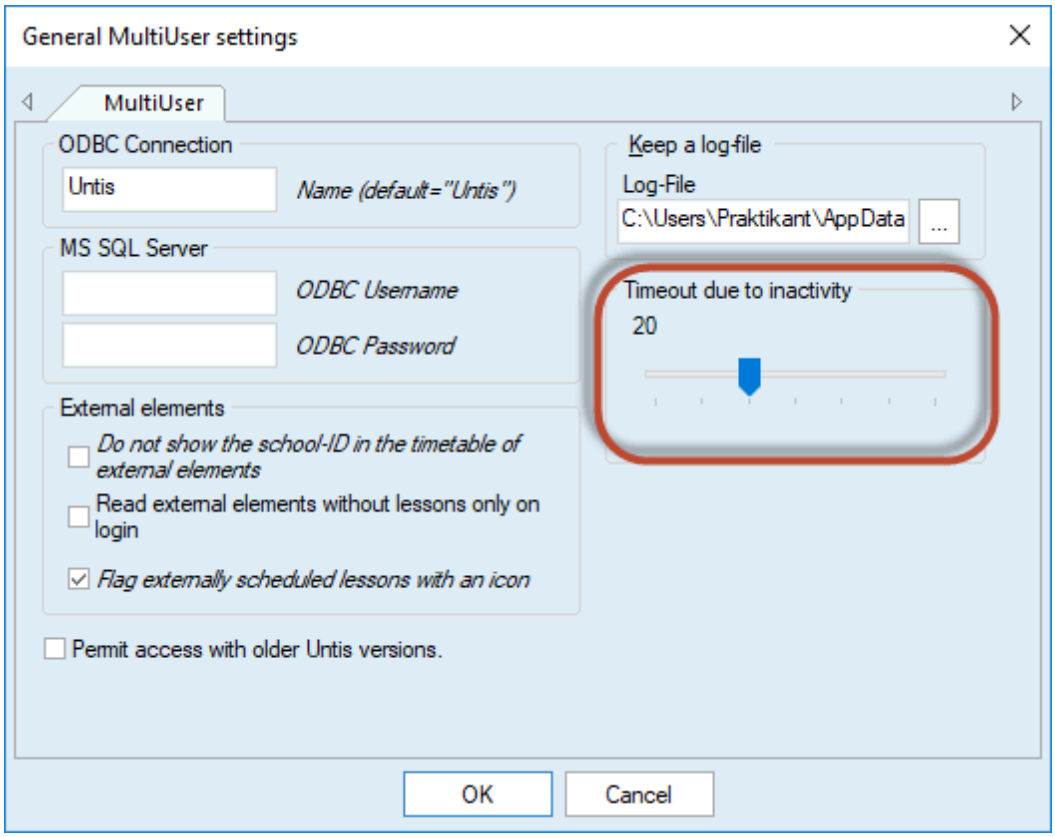
11.4 Refresh

If the dialogue "User messages" is kept open for a long time, it might be useful to refresh the window in order to see changes made by other users or (as with the user messages window) to display new incoming messages. To do this, click on the <Refresh> button.

12 Other functions

12.1 Automatic log out when inactive

You now have the possibility to automatically log out users when they have not changed any data in the program for a set amount of minutes. Go to 'Modules | MultiUser | Settings' to set the timeout.



12.2 Window arrangement

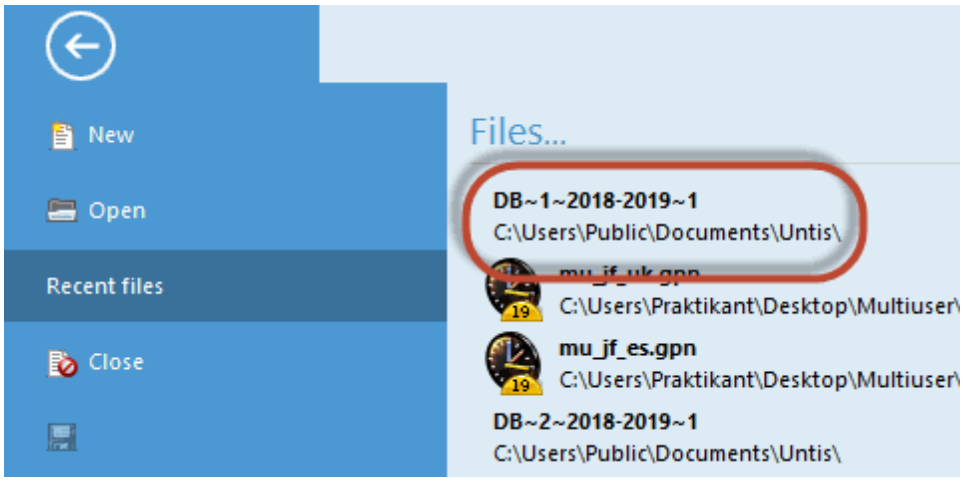
After logging in each user obtains the window arrangement that was effective when he/she closed the program, i.e. each user can start with a familiar, individual window arrangement.

12.3 Untis in info mode

The info mode is a function of the info timetable module. It shows prior defined views. This mode is for information purposes only, it is not possible to perform any changes.
This mode can be used with Untis MultiUser, too. Whereas the single-user version requires the path to the file in the command line, the multi-user version requires the school, school year and version, separated by a tilde ~ and preceded by "DB".

Instead of
C:\Untis\Demo_Info.gpn,Info1
you would enter
DB~<schoolnumber>~2018-2019~1,Info1

This is the same name that can be found in the list of most recently opened files (see figure).



Warning:
Certain special characters, e.g. the slash in school year must be replaced by a hyphen for technical reasons. We recommend that you refer to the list of recently opened files.

When Untis MultiUser first starts in info mode, the system checks whether there is a user or user group with the name “Info”. If not, the user and group are automatically created (without password). This user is then used to log in from all info terminals.

Both the user and user group can be edited just like any other user (group).

Note:
If the info mode is used by the same user at more than one terminal, the user logging out at one terminal will **not** affect the other terminals. To start info-mode without the login dialogue please refer to chapterAutomatic login.

12.4 Automatic login

Untis MultiUser offers the possibility for users to log in to the set of data of their school automatically when they start Untis. The procedure is similar to setting up a link for Info mode:

1. Right-click on an empty space on your Windows desktop and choose "New | Link" from the context menu .
2. The target of this link has to be the Untis program. The link for the 2019 version could look like this:

C:\Program Files\Untis\2019\Untis.exe

To be logged in automatically you also have to enter school, school year and version separated by a tilde ~ and a preceded by "DB" as well as user name and password. This could look as follows:

DB~myschool1~2018-2019~1 /user=admin /pw=admin

Hence the complete path looks like this:

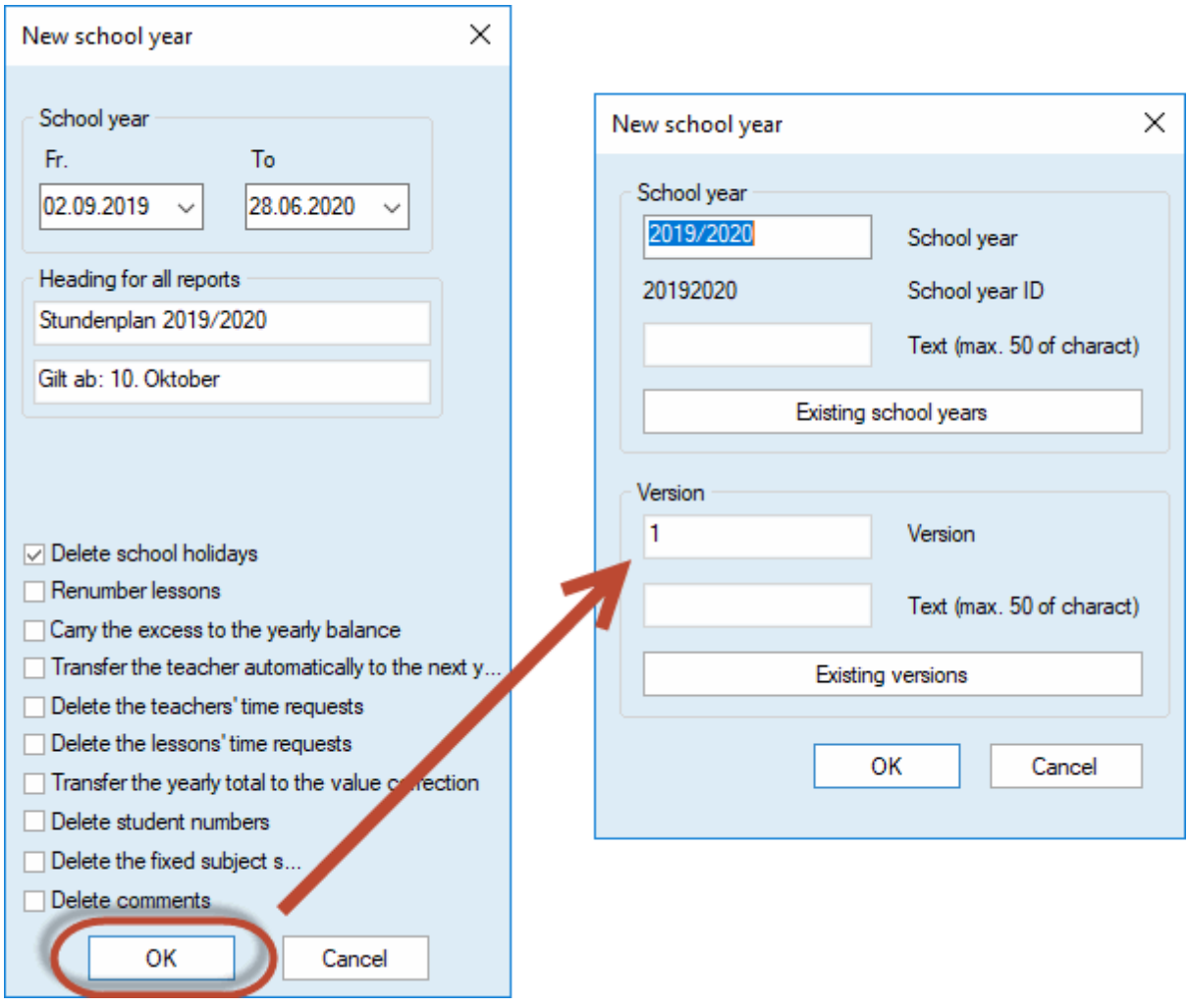
C:\Programs\Untis\2019\Untis.exe DB~myschool1~2018-2019~1 /user=admin /pw=admin

Please note that if you launch the program in this way then the password is displayed in plain text in the information about the link.

12.5 Creating a new school year

At the end of a school year Untis offers many possibilities to perform numerous functions for the creation of a new school year automatically. Needless to say, you can use these functions with MultiUser as well. As in the single-user version, go to "File | New school year" and first define the dates for the beginning and end of the school year to come.

After clicking <OK>, a dialogue will appear where you can define to which school year and version of the database the data are to be transferred.



By default Untis suggests as the new school year the dates that are entered in the dialogue "New school year". If this school year does not yet exist in the database it will be created.

Note:

Especially with Untis MultiUser we recommend to create the new school year with this function since the data are automatically cleared (e.g. substitution data), as well as window groups and formats for all users are imported. If you create a new school year manually, you need to do these tasks by yourself.

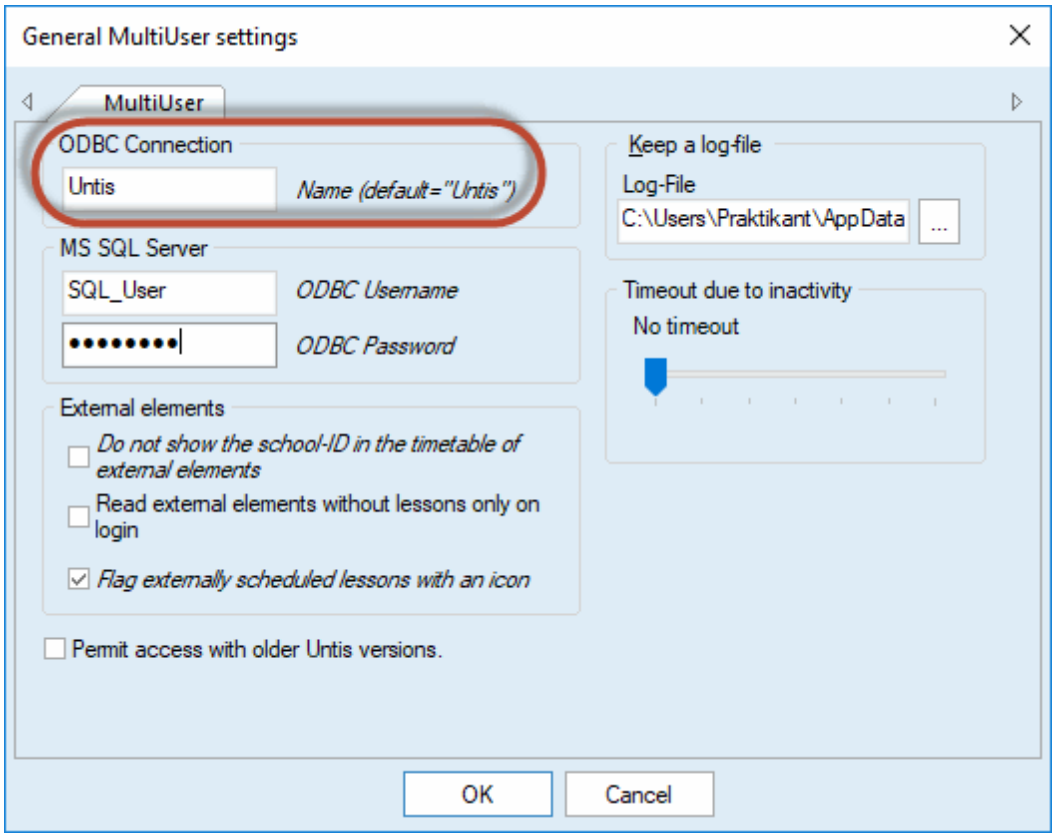
12.6 Simultaneous login

If two users log in simultaneously, it can happen that they attempt to obtain write access to the same data record at the same time from two different workplaces. In this case a dialogue will appear informing you that synchronisation is not possible at the moment and prompting you to click the button <OK> again. When you do this, the same action will be repeated. No data will be lost.

12.7 Variable name of the ODBC connection

You can change the name of the ODBC connection used for communication with the database. This makes sense for example if you wish to log in to several different sets of data without always changing the name of the ODBC connection in the data source administrator dialogue of the control panel.

You can enter the name of the connection in the section "ODBC Connection" in the dialogue that opens via "Modules | MultiUser | Settings" .



12.8 My SQL database

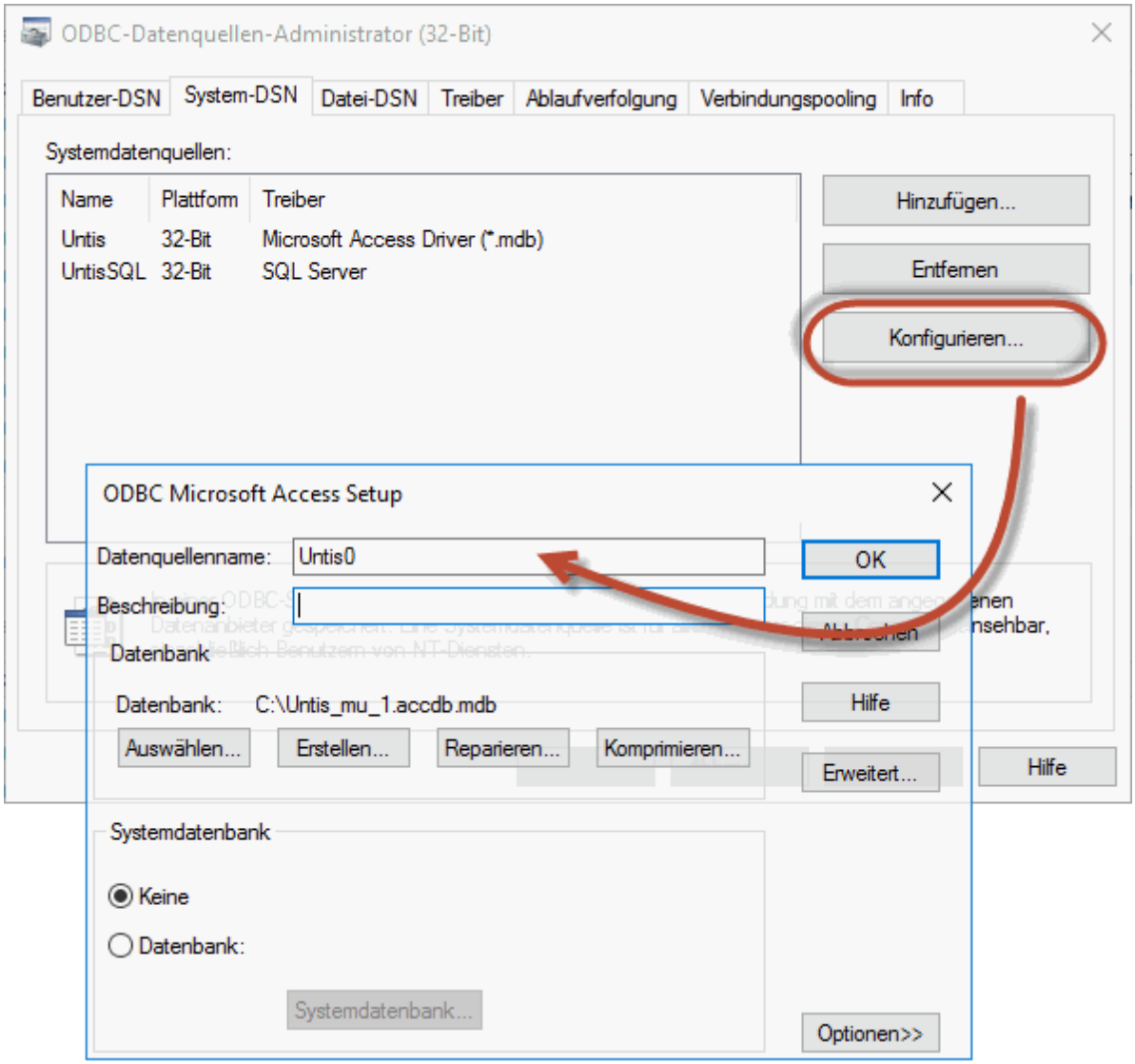
In some cases it may be necessary to migrate the Untis data set from one particular type of database to another database, e.g. MS Access to MySQL or from MySQL for Windows to MySQL for Linux.

The following migration paths are possible:

Source database	Target database
MS Access	MySQL
MS Access	MS SQL
MySQL	MS SQL
MS SQL	MySQL

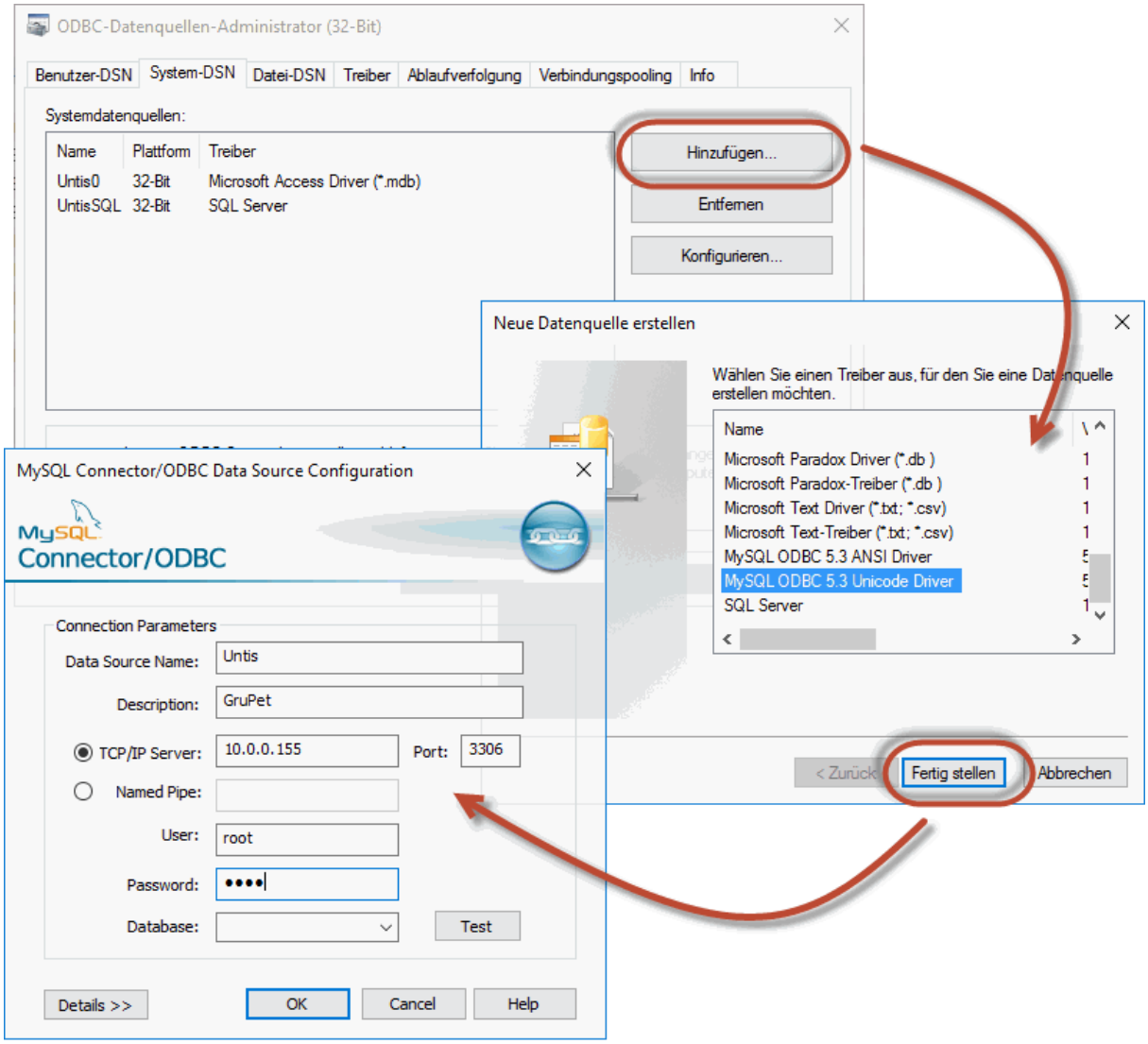
In the following we describe how to convert MS Access to MySQL. The other conversions are performed similarly.

1. First download the latest version of Untis from www.grupet.at , install it and log into the data set. Then log out and go to the 'File' tab. Click on 'Auxiliary functions' and go to 'Repair database'. This ensures that the data structure of your database is up-to-date. Then rename the ODBC connection to "Untis0".



2. Next, create a new ODBC data source called 'Untis' pointing to an empty database (i.e. one without any tables created) of the type to which you wish to migrate your data. If the ODBC application does

not list any driver you must first download it from an appropriate website (e.g. www.mysql.com).



3. Now launch Untis and select "File | Login". Processing will start after you confirm the prompt asking whether the conversion to MySQL should be performed. This may take several minutes depending on the size of the database.

If the transfer is aborted while it is running, any tables must be deleted from the database and the process needs to be started from the beginning.

12.9 Support

As Microsoft Access databases are stored in a single file (.mdb) we can maintain existing support structures without any problems.

A zipped *.mdb database is approximately as big as a comparable .gpn file and is therefore not too big to be sent by e-mail. The same applies to the backups of other supported databases.

Before you zip the .mdb file you can compress the database to reduce the size of the file. In order to do this, open the Untis.mdb file and go to menu item "File | Manage | Database utilities | Compact and repair database" (please also refer to chapter 'Database reorganisation') .

To transmit support data when using a MySQL or a MS SQL database, please make a backup with a database administration program and send this to your Untis partner.

13 Database and .gpn file

There are several possibilities to transfer data between the database and .gpn files. You can transfer the complete .gpn file into the database via the function " Store in database ". Any changes that were made in the meantime will be overwritten.

Sometimes the scheduler wishes to work "offline" while colleagues are still working on the database. In this case he/she only wants to write the specific data records that he/she has changed back to the database. The function required in this case is provided by " Merge in database ".

Of course it is possible to export data from the database to a .gpn fileat all times.

13.1 Export data to a .gpn file

You can store the data of the version that you are currently working with in a .gpn file via "File | Export the data to a .gpn file..." This allows you to work on a computer which does not have a database connection (e.g. a notebook) and transfer the data back to the database. The instructions of this transfer are described on the following pages.

You can also transfer data to a .gpn file to make a backup (see chapter " Data backup ").

You need the authorisation "Data import/export" to perform this export. Please refer to chapter " User administration" for more information on authorisations.

13.2 Transfer of .gpn files into the database

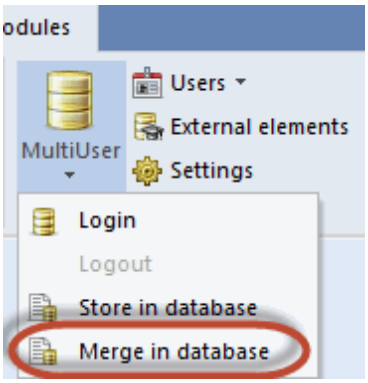
Transfer of .gpn files to the database To transfer a particular .gpn file to the database first enter the licence data that you used to activate Untis MultiUser via "Settings | Licence data" then save the file and proceed as follows:

1. Open the file and go to the menu item "File | Store in database".
2. Select a school, a school year and a version to which the file is to be transferred. You can create a new version as described in chapter The login dialogue . If you select a version that already contains data, you will overwrite data in the database.
3. Select user ID and password. Confirm with <OK>. The set of data will be transferred and you will be logged in automatically.

Tip: Backing up versions
This process transfers the data that is currently in memory to the database. If you are working with a particular version and you wish to save the current state as backup in the database then transfer the data to a new version and continue working there.

13.3 Merging data from .gpn files

As mentioned in the previous chapter, it is often necessary to transfer data from the database to a .gpn file in order to be able to work offline. Untis MultiUser offers a convenient tool to transfer data that has been changed offline back to the database without overwriting all the changes in the database that have been made by other users in the meantime.



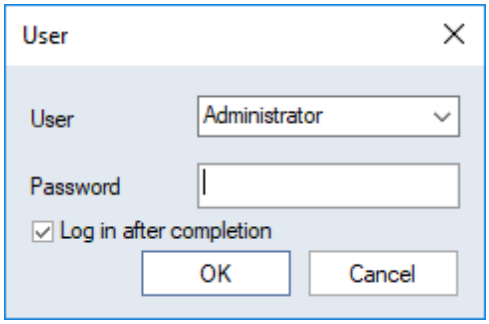
Warning:
Merging data from a .gpn file with a database works only if the .gpn file was exported from MultiUser mode. If the .gpn file was not created this way then the respective menu item will be greyed out and inactive. When merging, the system will automatically take the data record in the database that was previously exported. An error message will be displayed if this no longer exists.

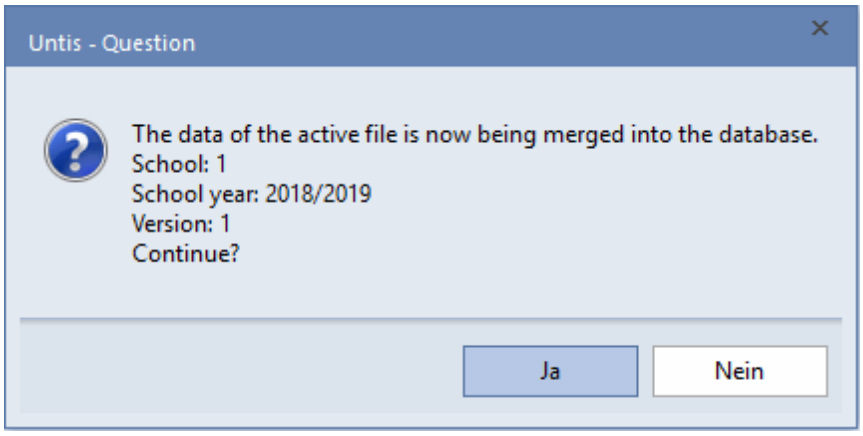
A complete work cycle looks like this:

1. Export the data from the database to a .gpn file.
2. You can now work separately in both sets of data.

Warning:
You must not change the terms at this point in time, otherwise the merging of data cannot be performed. Please make sure that any changes to terms are made before you start exporting to the .gpn file.

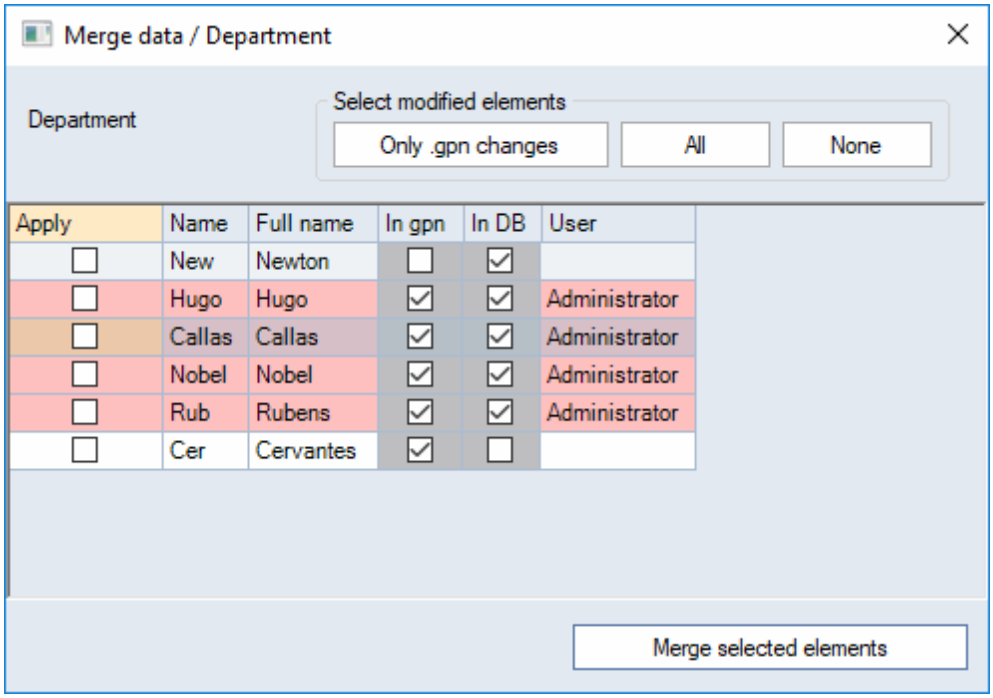
3. When the two sets of data are to be combined, open your .gpn file and choose the menu item "Modules | MultiUser | Merge in database".
4. A dialogue appears in which you have to enter your user name and your password. If the function "Log in after completion" is activated, you will be logged in automatically after the merge.





5. Now Untis examines every table in the database to see if there are changes with regard to the data in the .gpn file. For each table where changes are encountered (master data, lessons, holidays, etc.) a dialogue will be shown in which you can choose whether the change should be carried out or not.

Let us consider the following example:



In the columns "in gpn" and "in DB" you can see whether this element exists in the .gpn file or in the database. Teachers Hugo, Callas, Nobel and Rubens thus exist in both sets of data. They all have been changed in the database (last by the user "Administrator", see column "User"), which is indicated by the red background. The data of the teachers Cervantes and Newton, however, have only been changed in the .gpn file, which is why there is no red background.

In the example above the teacher Cervantes was newly created in the .gpn file (or deleted in the data base) and thus only has the checkbox "in .gpn" ticked. Newton, however, was deleted in the .gpn file or was newly created in the database and thus only has the checkbox "in DB" ticked. Use the column "Apply" to select the changes that you wish to transfer to the database. After that click on the button <Merge selected elements>.

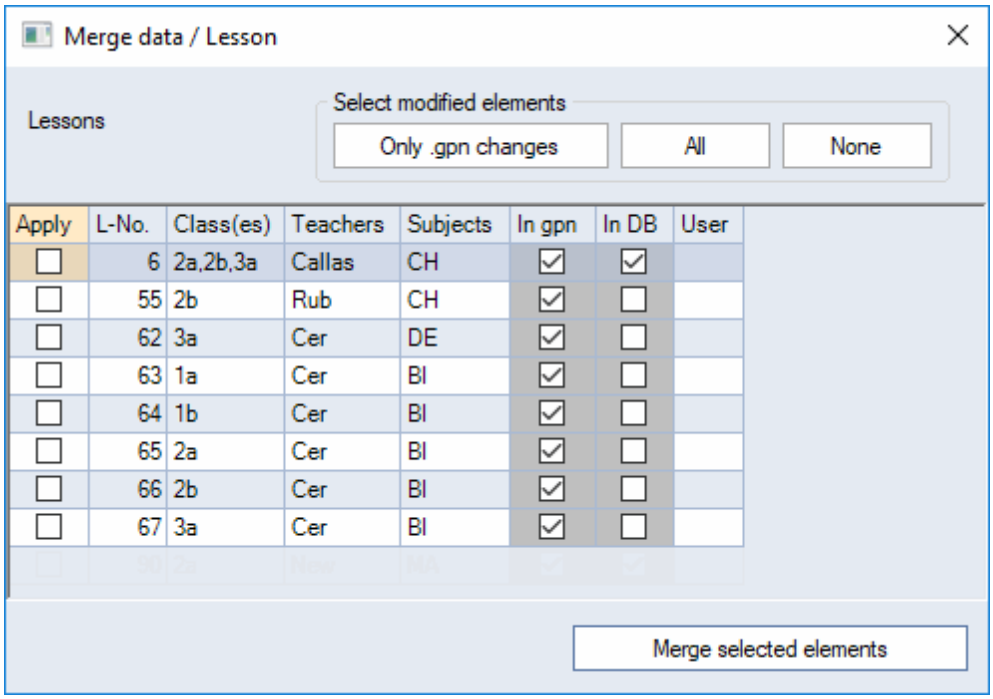
Warning:
The checkbox "Apply" always refers to the .gpn file. If you check all elements then all the changes that were made in the meantime in the database will be deleted. In this case you would erase teacher Newton from the database.

Merely those elements that have been changed are displayed. No indication is given of the data that has been changed (time requests, codes, etc.).

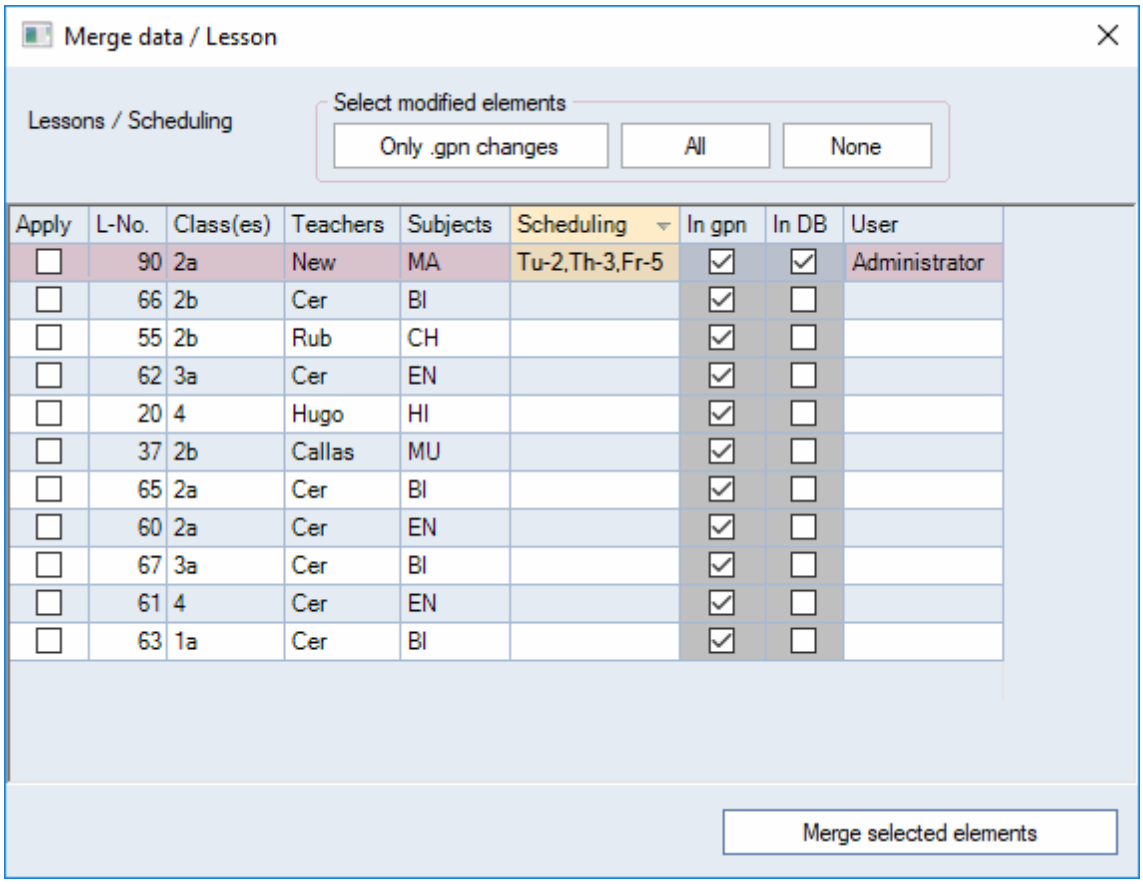
Changes to the views in Untis or cover planning will not be transferred.

13.3.1 Merging timetables

Changes in the definition of lessons and the scheduling of lessons are displayed in two different dialogues. In the figure below you can see that there has been only one change (L-No. 96) in the database and a few changes in the .gpn file. The columns "Classes", "Teachers" and "Subjects" refer only to the definition in the .gpn file.



If there have been changes in the timetable they are displayed in a separate dialogue.



Apply	L-No.	Class(es)	Teachers	Subjects	Scheduling	In gpn	In DB	User
☐	90	2a	New	MA	Tu-2,Th-3,Fr-5	☑	☑	Administrator
☐	66	2b	Cer	BI		☑	☐	
☐	55	2b	Rub	CH		☑	☐	
☐	62	3a	Cer	EN		☑	☐	
☐	20	4	Hugo	HI		☑	☐	
☐	37	2b	Callas	MU		☑	☐	
☐	65	2a	Cer	BI		☑	☐	
☐	60	2a	Cer	EN		☑	☐	
☐	67	3a	Cer	BI		☑	☐	
☐	61	4	Cer	EN		☑	☐	
☐	63	1a	Cer	BI		☑	☐	

As you can see in the figure, the scheduling of one lesson has been changed in the database (No. 90). In the .gpn file, however, a few lessons have been changed.

The elements indicated in the grid in the "schedule" column refer to scheduling in the .gpn file.

13.3.2 Merging cover planning data

All changes that have been made in cover planning can be transferred only as a whole set of data - or not at all. The same applies for changes that have been made via "Settings | Calendar".

13.3.3 Changing terms

If you create, change or delete terms in either the .gpn file or the database, the data cannot be merged. Make sure that you have created any new term before you start the export to the .gpn file.

Index

- E -

exclusive access to the database 42

- I -

Internet 6
Access 6
'Active users' dialogue 40
Automatic login 73
Backing up versions 78
backup 78
Backups 67
Changing passwords 25
Changing terms 83
Changing the same data simultaneously 41
Clashes with external elements 52
Cover planning 62
Cover planning across departments 62
Cover planning and timetable planning 62
Creating a new school 21
Creating a new school year 21, 74
Creating external elements 47
Creating users 37
Data consistency 42
Data security 65
Database and .gpn file 78
Database reorganisation 6
Deleting messages 71
Edit 27
Edit views 27
Export data to a .gpn file 78
File | Export the data to a .gpn file 78
Installation 7
Installation of Untis application 7

- L -

Levels of rights 27
Limitations to school, school year... 36
logging in 21
Logging out other users 40
Login dialogue 21

- M -

Marking views "Public" 45
Merging cover planning data 83
Merging data from .gpn files 79
Merging timetables 81
Message system 68
Microsoft Access database 8
MS SQL 6
MS SQL database 15
Multi-client capability 6
My SQL database 75
MySQL 6
MySQL for Linux 75
MySQL for Windows 75

- N -

No rights 27

- O -

ODBC 8
Operation via the Internet 6

- P -

possibilities to transfer data 78
Private / public views 43
Protection against unauthorised access 65

- R -

Read only 27
Rights 32

- S -

Saving to .gpn files 46
Sending messages 68
Shared resources 47
Simultaneous login 75
Support 77

- T -

Technical background 6
The login dialogue 21
Transfer of .gpn files into the database 78

- U -

Untis in info mode 72
user "Administrator" 24
User administration 24
user group 24
User groups 24
User groups and user rights 27

- V -

Variable name of the ODBC connection 75

- W -

Window arrangement 72
work offline 79
Working simultaneously 41
Working with departments 58