Using Prime Timetable

1. GET STARTED

Overview

Prime Timetable is a school scheduling software designed for both automatic and manual timetabling on any device. The software is used in 100+ countries for scheduling primary or elementary, junior/middle/high or secondary schools, international schools, universities and other educational organizations (art and language schools), as well as for scheduling various events: school camps and courses.

Video tutorial: Introduction

Video tutorials

It's recommended to watch getting started tutorials before using the app. Videos are only a couple of minutes long but packed with tons of helpful info to boost your productivity. Subscribe to our YouTube channel to watch the latest tutorials for free.

⌄ Can I download user guide in PDF?

User guide is also available in PDF format.

⌄ What are the basic timetabling terms?

Interpret terms as best suits your organization, e.g. use *grade* instead of *class* or *course* instead of *subject*.

SCHOOL
Institution designed to allow and encourage student groups to attend school activities under the supervision of teachers

SUBJECT / COURSE
For instance, Math, English, Biology, but also school recess, lunch, some non-class activities like teacher meetings

ROOM
Place where school activity occurs, e.g. biology room, history room, but also dining room, reception hall...

TEACHER / EDUCATOR / PROFESSOR / INSTRUCTOR
Person who teaches, guides, instructs, trains or helps another in the process of learning knowledge

STUDENT
Learner, or someone who attends an educational institution

CLASS / GRADE
Group of students, e.g. "Grade 5", "Year 8", etc.

GROUP
Class group attending a specific activity, e.g. "English", "French" or "Italian" groups

RESOURCE
Class, Teacher or Room

PERIOD / TIME SLOT
Block of time used for activities

ACTIVITY
Structured period of time where a school activity is intended to occur, e.g. lesson, prep-time, lunch, recess, etc.

CARD
Visual representation of an activity, e.g. a teacher has 5 lessons of Math which equals to 5 cards

TIMETABLE / SCHEDULE
Table which displays cards

UNSCHEDULED CARD
Card waiting to be scheduled and therefore placed outside the timetable

PINNED CARD
Card locked on a specific period, meaning it won't be rescheduled while improving the timetable

TIMETABLE VIEW
Master or individual view that displays activities, e.g. class, teacher, room master view, Grade 8 view, etc.

TIMETABLER
Person who creates a school timetable

CONFLICT / CLASH
Group of cards on the same position or overlapping each other

GAP / PAUSE / WINDOW
Empty period between school activities

CONSTRAINT
Requirement that should be met in the final timetable, e.g. gaps should be forbidden for all classes

TIME CONSTRAINT
Specifying whether a particular school resource or activity is forbidden, unwanted or mandatory in a certain period

MANUAL TIMETABLING
Working on timetable by manually dragging the cards

AUTOMATIC TIMETABLE GENERATOR
Algorithm that improves a school timetable based on entered data and constraints

TIMETABLE VALIDATION
Showing errors and warnings if the timetable is not valid

SCHOOL SCHEDULING/TIMETABLING SOFTWARE
Software designed to simplify and automate scheduling/timetabling process

System requirements

Software requires a modern browser such as Chrome, Firefox, Edge or Safari. Go to https://primetimetable.com and create a free account or log in to start the app on any device.

⌄ What's new in the latest releases?

Visit our blog to find out more about the latest releases.

⌄ Where can I find a full features list?

Full features list is available here.

2. ACCOUNT

Free sign up

To evaluate the software you need to sign up first:

* Click *Sign up* on the home page
* Choose *Free plan*
* Type your email and password and optionally provide more info about the school
* Click Start my free month

Support team will contact you to offer help and answer any questions you might have.

Log in

To start the app you need to log in:

* Click *Log in* in the header of the home page
* Enter your email and password
* Click Log In

After successful login, the last opened timetable will be displayed.

⯆ How to leave the app?

* Click 👤 in the top right corner
* Click Log out

Your session will end and home page will show up.

Forgot password

* Go to forgot password page
* Type your email and click Send code
* An email containing a code (random alphanumeric string) will be sent to you
* Copy and paste the code from the email and enter the new password
* Click Change password

A window will open where you can log in using the new password.

Profile

* Click 👤 in the top right corner and then My profile
* Set your email and password used for login, and your first and last name
* Click Edit

⯆ How to extend subscription?

If your subscription is about to expire or evaluation period is over:

* Go to plans and pricing
* Select *Basic* (up to 40 teachers) or *Premium plan* (up to 100 teachers)
* If you want to take advantage of special discounts, choose billing term by dragging year slider
* If you are not logged in enter your email and password

- Click [Buy from 2Checkout]

You will be redirected to 2Checkout form where you can purchase the software online. Check sales questions for more info.

⌄ How to provide more info about the school?

- Click 👤 in the top right corner
- Click [Purchase] and then select Free plan
- Click *Add more info* in "Step 2. School account"
- Enter your school name, address, contact name, phone and other info
- Click [Continue evaluation] to save changes

  > If there is more than one account for your school, contact us to merge them.

⌄ How to download all your data?

One of GDPR (General Data Protection Regulations) rights is *Right to Data Portability*:

- Click 👤 in the top right corner, [My profile] and ⌄ More
- Click [Create archive]
- Click [Download now]

Created archive will be available for download within the next 24 hours and contains your school info, timetables and users.

⌄ How to delete your account?

Right to be Forgotten (one of GDPR rights) is available for the **Owner** who can delete a school account:

- Click 👤 in the top right corner, [My profile] and ⌄ More
- Click [Delete school account] and confirm

The whole account including timetables, users and all related school data will be deleted in the next two weeks.

3. TIMETABLE
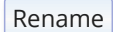
Create new timetable

- Choose *Open > New Timetable*
- Enter the name of the timetable and description
- Click Ok

Open timetable

- Click 📂 or choose *Open > Open Timetable*
- Select a timetable from the list
- Click Open

⌄ How to rename timetable?

- Click 📂 or choose *Open > Open Timetable*
- Select a timetable from the list
- Click Rename , change name and click Ok

⌄ How to open example?

- Choose *Open > Open Examples*
- Select example from the list
- Click Open

Open from file

To open timetable from previously saved file on the disc:

- Choose *Open > Open from File*
- Click *Choose File* to locate the file on your disc
- Click Open

The app will convert older timetable formats and import other recognized file formats.

Save changes

- Click 💾 to save changes

All changes will be synchronized and merged across any device you or your colleagues might be using.

Create a copy of timetable

- Choose *Save as > Copy of Timetable*
- Enter the name of the timetable and description
- Click Ok

Delete/restore timetable

- Click 📂
- Select a timetable from the list

- Click [Delete]

If you delete a timetable by accident, it is possible to restore it. Please contact us for more info.

Merge timetables

- Open base timetable
- Choose *Open > Merge timetables*
- Select timetable that you want to merge with the base timetable and click [Merge]

If there is already a day, subject, room, teacher, class, group or view with the same name in the base timetable, it will be used as it is; otherwise, it will be added. Periods are going to be merged based on entered start and end times. Activities, clips and marks from selected timetable will be added to the base timetable.

⩔ When should I use merge?

Merge enables working on separate timetables which can be merged later, useful in the following cases:

- separate timetable for lower and upper schools; merge to find any conflicts for shared teachers and rooms
- separate timetable for morning and afternoon shifts; merge to create all-in-one timetable
- work on n-week timetables separately; merge to create the final e.g. month timetable
- any other case with too many days/periods, e.g. too many 5 or 10 minutes periods, where you would want to split a large timetable into several smaller once and later merge them

4. IMPORT

Import resources

Data can be imported from other software using copy/paste:

- Open Excel/Word, Sheets/Docs, Notepad or similar app where you have a list of resources
- Make a selection of resources you want to import, right mouse click selection and choose *Copy*
- Choose *Import > Days, Periods, Subjects, Rooms, Teachers or Classes*
- Right mouse click on the text field and choose Paste
- Click Import

Video tutorial: How to import data

In import Sheets document each sheet shows an example of importing days, periods, subjects, rooms, teachers, classes/groups, students and activities. Items should be on separate lines or rows and short names should be in the separate columns or separated by TAB character. A resource with an existing name is not going to be imported.

⩔ How to import/merge days and periods?

Imported days will be inserted at the last selected position. In order to overwrite the existing day names and short names with imported ones:

- Select the day you want to start merging with
- Choose *Import > Days*
- Confirm merging when asked

Similarly, imported periods will be properly inserted/merged based on period intervals.

Import activities

The whole timetable can be imported in a single copy/paste action by following the example in the "Activities" sheet and video tutorial How to import data. Resources with non-existing names will be added while importing. Comma can be used as a delimiter when there are more teachers, classes/groups or rooms.

Subject	Teacher(s)	Class(es)	Group(s)	Count	Length	Desired room(s)	Alternative room(s)
Math	Roberta	7A		3	1	Room 1	Room 2, Room 3
English {Eng}	Maya,Dan	8A	G1	1	2	Room 4	Room 1, Room 2

Columns when importing activities

⩔ How to specify a short name while importing activities?

The short name is autogenerated based on imported name. Otherwise, you can specify it the first time that item appears, e.g. "English {Eng}" will add a new subject called "English" and a short name will be set to "Eng".

5. DATA

Basics

Resources are displayed in grids allowing you to quickly select, sort, reorder and manage (add, edit and delete) data.

⩔ How to sort items in the grid?

You can sort days, periods, subjects, rooms, teachers, classes, activities and other items by clicking desired column name. For instance, in order to sort teachers by their names:

- Choose *Manage > Teachers*
- Click *Name* column in the grid header
- Click it once again to sort in the reverse order

⩔ How to reorder items in the grid?

- Select item(s) in the grid
- Use up and down arrows in the bottom right corner of the grid to reorder selected items

⩔ How to select multiple items in the grid?

- Hold down `Ctrl` key and click the items
- Click the first item, hold down `Shift` key, and then click the last item to select a consecutive group of items
- Hold down `Ctrl` key and press A to select all items in the grid

Timetable info

Click timetable name or choose *Open > Timetable Info* to change:

- Timetable name
- Timetable description
- School name
- School year - usually academic year, e.g. 2019/2020

School name and *school year* are displayed on the published page and while printing.

Click ⩔ More options to customize timetable to match your school branding and to find out unique timetable identifier.

Days

- Choose *Manage > Days* or click day name in the view

Set the number of days in the timetable cycle by selecting a desired value in the combo above the displayed grid. For instance, set 5 days for 1-week, or set 6 days if you are scheduling Saturdays, or set 10 days for 2-week timetable and so on. Another option is to create a separate timetable for each week or month and later merge them into one. You can also set only one or two days, e.g. "Day A" and "Day B" for rotating schedules. Each day has name and short name.

⩔ How to handle lots of days/periods?

- Use horizontal zoom to focus on specific day(s) or
- Separate timetable into smaller once and later merge them into all-in-one timetable
- Create a view where some days/periods are excluded

⩔ How to copy one day to another?

- Right mouse click day name in the view and choose *Copy*
- Right mouse click target day and choose *Paste*

Check copying cards for more info.

⩔ How to switch days?

Use arrows in the bottom right corner of the grid to reorder days. Related cards will be moved accordingly.

⩔ Can I use dates instead of day names?

Yes, you can rename a day to e.g. "9/5/2020" instead of "Monday". Also you can import/merge all days.

⩔ Can I schedule semester or monthly schedules?

Instead of creating all-in-one timetable it might be more practical to create one timetable for each month/week and then create a copy to modify it for the next month/week.

Periods

- Choose *Manage > Periods* or click period name in the view

Set the number of periods in a day by selecting a desired value in the combo above the displayed grid. In case you are scheduling breaks, lunch, after school activities or similar, increase the number accordingly. For each period set start/end time (use 24-hour clock) and optionally name.

⩔ How to adjust period format?

Choose *Help > Options > Period format* to adjust how periods will be displayed in the view, e.g. 12 or 24-hour clock or use names instead.

⩔ What if the number of periods varies from day to day?

- Set the maximum number of periods and then use 🖍 to forbid positions that are not allowed.

⩔ How to handle different period intervals across days or activities?

In case lower and higher grades have different period intervals:

- The recommended approach is to find the least common denominator. For instance, if some activities last 45 minutes while others are 15 minutes, add periods with 15-minute intervals and while adding activities choose Triple length for 45-minute activities and Single length for 15-minute activities.
- Otherwise, consider creating a separate timetable for each school (and optionally merge them later), or
- Use custom periods or
- Add all kinds of periods and then create separate views for lower and higher grades with adequate periods excluded, use the red marker to forbid periods for specific grades

⩔ How to quickly add lots of e.g. 15-minute period intervals?

- Multi-select all periods except one and click Delete
- Click Edit and set start time to e.g. 08:00 and end time to 08:15
- From the list above periods grid select the number of periods you need

Custom periods

Period intervals might vary across classes, e.g. when scheduling both lower and higher grades in one timetable. If you don't want to work with a load of 15, 10 or even 5 minute period intervals to accomodate for differences you might consider using custom periods. In order to add a custom period:

- Choose *Manage > Periods* and select a default period to link a custom interval with and then click Add
- Set start/end time and click ⩔ More to choose class, subject, room or teacher custom period
- Select 'Drag related cards to specified interval' action
- Choose resources/days that custom interval applies to and click Add

Video tutorial: How to use custom periods

When custom period(s) are added, related cards will be resized and repositioned based on the specified custom interval and its default period. Choose *Help > Options > Period format > 12-hour or 24-hour clock* to display the custom interval in the desired format.

When you drag a card, the card's shadow changes its length and position according to default and custom periods below. Thus, you will know exactly where to drop the card. Also, filters will appear above the periods grid if a timetable has custom periods. Choose a specific resource/day to filter custom periods.

⩔ How to handle a custom interval valid on all days for specific class(es)?

It's easiest to just replace default periods with custom periods only in specified classes and their related individual views:

- Choose *Manage > Periods* and select a default period to link a custom interval with and then click Add
- Set start/end time, click ⩔ More , and choose class custom period
- Select 'Show custom period instead of default in the related individual views' action
- Choose classes that custom interval applies to and click Add

For instance, the first period in Grade 6A starts at 08:25, whereas the first period in Grade 12 IB starts at 08:15 in the same timetable.

⩔ Will notifications show conflicts for custom periods?

Notifications "understand" only default periods, so if you place two or more cards on custom periods which are linked to the same default period, these cards will be listed as conflicts. Pin such cards to resolve conflicts. Also, pin "custom" cards if you don't want them to be moved by the generator.

⩔ How to change a default period that custom period is linked to?

- Select custom period(s)
- Use up and down arrows in the bottom right corner of the grid

⩔ How to display custom text instead of custom intervals?

- Set custom period name in the following format: "!9:15-9:45" (without quotes)

⩔ Where can I find more info about custom periods?

For more information about custom periods please refer to these blog posts or take a look at K-5 example with lots of custom periods for specific grades on different days, e.g. for the same subjects, Kindergarten has different intervals compared to lower grades.

Subjects

- Choose *Manage > Subjects*

For each subject you can specify name (e.g. "Math"), short name (e.g. "Ma"), color and optionally other constraint properties.

⩔ How to forbid positions for specific subjects?

- Switch to subject master view
- Pick the red marker 🖍 to draw forbidden positions

If you want to forbid positions only for a specific subject and class, create a new "combined" subject e.g. "7A Math" and then switch to the subject master view and forbid positions for this subject. After that you will want to use the newly created subject when adding/editing related activities.

⩔ How to set difficulty?

Difficulty can be set to *Low*, *Medium* or *High* and the generator will try to avoid scheduling too many difficult or too many easy subjects per day. Otherwise, notifications will show adequate warnings.

⩗ How to (dis)allow scheduling subject more than once per day?

If *Allow subject to be taught more than once per day* is unchecked, placing two or more subject cards a day for one class will be reported as an error, for instance, 2 cards of English on Monday for 5A class will show an error. If there are 10 English cards for 5A in 1-week timetable, errors are not going to be displayed, because there are more cards than days in a cycle and it's impossible to fix these errors. Otherwise, if this option is checked, placing a subject's card more than once in a day will never be reported as an error.

If *Insert day off if subjects is taught 2 times per week* is checked, that subject will not be scheduled on subsequent days, e.g. having that subject on Monday and Tuesday will show an error notification.

In case that *Insert day off if subjects is taught 3 times per week* is checked, having subject on Monday, Tuesday and Wednesday will cause error notification for a specific class, whereas Monday, Tuesday, Thursday will be valid.

⩗ When to add e.g. only English instead of English 5, English 6, etc.?

If you need to add English activities that include different grades then you can add only one subject called "English" or create combined subject, e.g. "English 5 + 6".

Rooms

- Choose *Manage > Rooms*

For each room you can specify name (e.g. "Physics lab", "Bio lab", "Playground", "Meeting room", etc.), short name, color and optionally tags (e.g. "1st floor, lab"), capacity, building name and other constraints.

⩗ How to forbid positions for specific rooms?

- Switch to room **master view**
- Pick the red marker to draw **forbidden positions**

⩗ How to tag rooms?

In order to group rooms, specify their room tag, e.g. "1st floor". That way, it will be easier to select them when adding or editing activities, e.g. you can select alternative rooms by "1st floor" tag. Multiple tags should be separated with comma.

⩗ What is room capacity?

Room capacity represents the maximum student seat number and can be used for optimizing room usage for students. When adding/editing activities you can filter rooms with desired capacity.

⩗ How to use building name?

Building name can be used to filter rooms by building when adding/editing activities or to optimize teacher's daily moves between buildings.

Teachers

- Choose *Manage > Teachers*

For each teacher you can specify name, short name, color and constraints related to teacher's positions, load, gaps and moves.

⩗ How to specify that part-time teacher is not available at certain times?

- Switch to teacher **master view**
- Pick the red marker to draw **forbidden positions**

⩗ How to set maximum activities in a row?

Maximum activities in a row assures that the teacher doesn't have more than specified number of subsequent activities.

⩗ How to control teacher gaps?

Maximum gaps per cycle/day can minimize the number of teacher gaps (pauses/windows) per cycle/day.

Minimum activities to allow gaps assures the teacher has a specified number of subsequent activities before gaps (pauses/windows) are allowed.

⩔ How to optimize teacher load?

Maximum deviation from average daily load is used to evenly distribute teacher's activities across the cycle. For instance, let's say a teacher has a 5-day cycle with total of 20 activities. Average daily load is 20 / 5 = 4. If the value is set to 1 that means that allowed daily load can be 3, 4 or 5 activities, while 2 or 6 activities in a day will be reported as an error because the deviation is greater than 1.

Minimum and maximum activities per day is used to make sure the teacher doesn't have too few or too many activities per day.

⩔ How to reduce teacher moves between building?

Maximum moves between buildings reduces unnecessary teacher moves. If required, teacher moves after the gaps can be ignored.

Classes

- Choose *Manage > Classes*

For each class you can specify name (e.g. "7A", "Grade 8", "Year 9"), short name, color and constraints related to positions, load and gaps. When a new class is added, the following set of groups are created: Boys and Girls and Group 1 and Group 2.

⩔ How to forbid positions for specific classes?

- Switch to class master view
- Pick the red marker 🖊 to draw forbidden positions

⩔ How to forbid gaps?

When *Forbid gaps* is checked, the class will have no gaps (pauses/windows), meaning there will be no empty periods between activities. Otherwise, each gap will be reported as an error.

When *Start on 1st period* is checked, the class activities starts from the first period. Otherwise, gap will be reported as an error.

⩔ How to optimize daily load?

Allowed difference between maximum and minimum daily activities assures that the class has nearly the same or equal number of activities per day. For instance, if the value is set to 1 and class has 4 activities on Monday and 6 on Tuesday, this difference of 2 activities between days will be reported as an error as it is greater than the set value (1).

Groups

A class can be divided into one or more sets of groups:

- Choose *Manage > Classes*
- Select a class on the list
- Click Groups
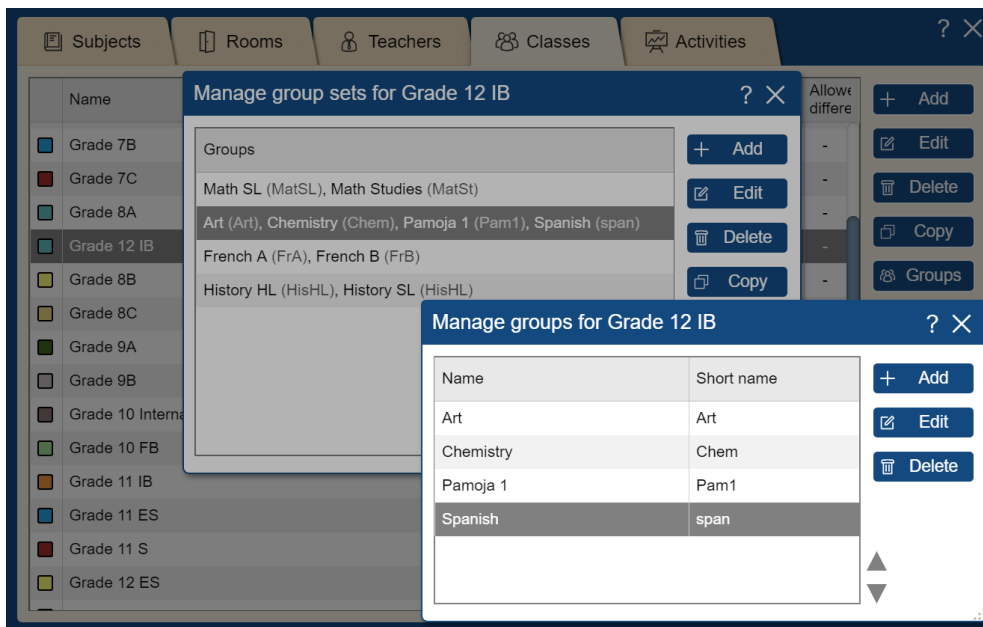
Manage group sets and groups for Grade 12 IB in United States International example

A window with group sets for the selected class is displayed. Add will add a new group set with 2 predefined groups and Edit opens a window to manage groups for the selected group set. For each group you can specify name and short name.

⌄ How to copy group sets to other classes?

Copy will copy selected group set(s) to other classes.

⌄ Where to find examples using groups?

In Example 3 5-A class is divided into French and German groups, and related cards are clipped so they will always be scheduled on the same position. In Egypt example 11A class is divided into Art, Cooking and Music groups. Also, Grade 12 IB in United States International example have lots of groups.

Students

- Choose *Manage > Classes*
- Select a class on the list
- Click Students

Each student has name, short name and groups it belongs to. By adding activities for groups, students belonging to these groups will be assigned to these activities as well.

Students can be imported, sorted, reordered, printed and you can view their statistics.

⌄ How to get direct link for individual student timetable?

Individual class view can be filtered by specific student and the browser's URL is updated accordingly, so each student gets a link to their timetable.

Also, while publishing timetable you can get the links to all student timetables.

⌄ Can I add students instead of classes?

Alternatively, students can be managed as classes or groups. For instance, students are managed as classes in English College Example as there are fewer students.

Activities

Choose *Manage > Activities* to manage and filter activities or view statistics. When adding, editing or copying activities the following information can be specified:

- Teacher(s)
- Subject
- Class(es) and/or group(s)
- *Number of activities per cycle* represents the total number of recurring activities in one cycle (5 days for 1-week, 10 days for 2-week schedule, etc.), for instance, a class can have 5 English lessons in a cycle
- *Activity length* can be *Single*, *Double*, *Triple* and so on depending on default period interval, for instance, if default period interval is 30 minutes and activity lasts 1 hour, length should be set to *Double*
- Desired and alternative room(s)

More... buttons allow you to add activities with more teachers, classes, groups and rooms. For instance, more teachers are needed for teacher meeting and more classes are needed for lunch.

By adding activities you are creating cards in the related views that you can freely drag to the desired time slot or let the generator create the schedule for you.

⌄ How to add new activities more quickly?

You can import activities via Excel/Sheets. Alternatively, add activities for one class and then copy and edit cards for other related classes or leave the desired room empty and assign teachers to their homeroom later.

⌄ How to add e.g. 4 Single and 2 Double activities for a teacher?

With a couple of adds you can add any combination of activities and their length. Let's say Math teacher John has 4 Single and 2 Double activities in Grade 5:

- Choose *Manage > Activities > Add* and select Math, Teacher John, Grade 5, 4 times per cycle, Single length and click Add
- Repeat the above, add another activity and again select Math, Teacher John, Grade 5, but this time choose 2 times per cycle and Double length

⌄ How to assign more rooms?

The majority of activities require only one desired room. If the desired room is unavailable, the generator will try to allocate the activity in alternative rooms.

Otherwise, click More... to add more desired rooms, e.g. Physical education might require Sports Hall and Gym.

⌄ How to display short names in activities grid?

Click "Total: " above the activities grid to switch between full and short names.

Lunch

In order to manage lunch, snack, recess, break or similar, add a new period e.g. "Lunch" and place pinned cards there or forbid the whole period.

⌄ How to add lunch as pinned cards?

- Add lunch as a subject
- Add lunch activities and select related resources, click More... to add more classes and/or teachers
- Drag lunch cards to the lunch periods, note that all cards go together
- Pin lunch cards so they won't be moved by automatic generator

Kindergarten through 5th grade example shows lunch as pinned cards

How to add lunch as forbidden positions?

- Use 🖍 to forbid lunch periods for all days and automatic generator will try to avoid lunch periods while rearranging cards

United States International example shows lunch as forbidden periods

Teacher meeting

There are two common ways to manage meetings: add one activity for several teachers or add meeting activity for each teacher separately and then clip related cards.

How to add a meeting as one activity?

- Add "Teacher meeting" as a subject
- Add new activity
  - Set Teacher meeting as a subject
  - Assign related teachers by clicking More...
  - Leave classes/groups empty
  - Optionally add desired room
- Switch to teacher master view and drag meeting cards to desired position and optionally pin them

How to add a meeting as clipped cards?

- Add teacher meeting as a new activity for each teacher separately
- Switch to teacher master view and drag meeting cards to desired position
- Clip related meeting cards so they are scheduled/dragged together

History

The state(s) of timetables can be controlled by using the Undo/Redo commands and the History panel. To undo the latest action click ⬅. To redo the latest undone action click ➡. To display or hide the History panel click 🕐.

Use History panel to jump to any recent state of the timetable created during the current working session. Each time you apply a change to timetable, the new state is added to the panel. For example, if you drag a card, draw constraints, improve timetable, each of those states is listed separately in the panel. When you select one of the states, the timetable reverts to how it was when that change was first applied. You can then work from that state. Once you reopen or save the document, all states from the working session are cleared from the panel. If needed, History panel can be resized and dragged elsewhere.
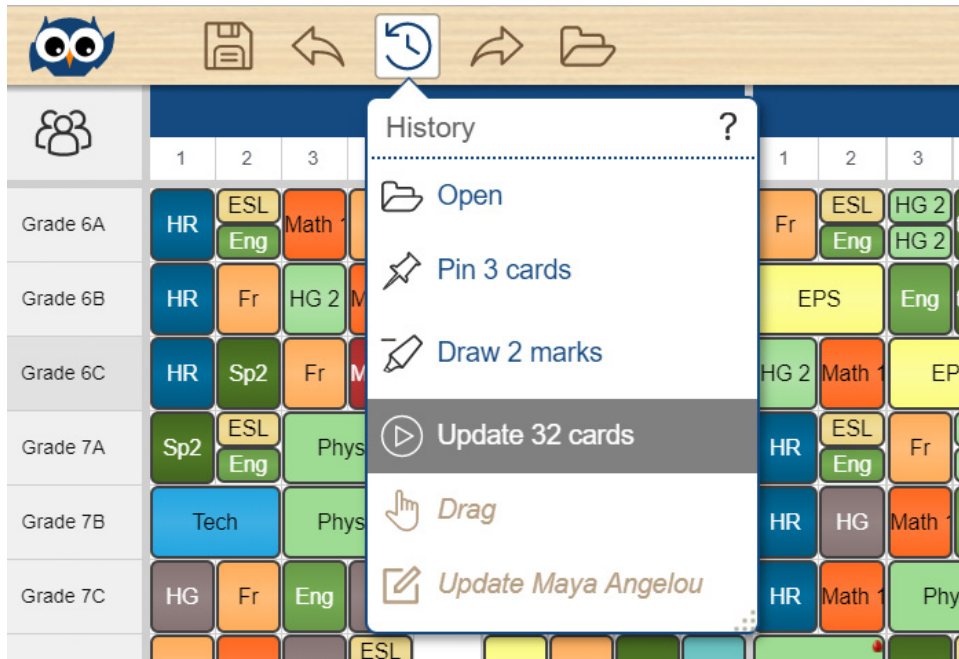
Use History panel to undo/redo several actions at once

⌄ How many states does History remember?

History remembers the previous 100 states. Adjust the number in the options.

⌄ What actions are going to be remembered?

Any action that causes a change to data will be listed in the History panel. Instantly saved actions, such as publishing timetable, changing school name and choosing a different skin will not be listed.

⌄ What is the order of states listed in the History panel?

The oldest state is displayed at the top of the list, while the most recent one is at the bottom. When you select a state, the states below it are dimmed. This way you can see which changes will be discarded if you continue working from the selected state.

Statistics

- Choose *Manage > Activities*
- Total number of resources, activities and hours is displayed above the activities grid
- Click the class icon above the grid to cycle through classes, teachers, rooms and subjects statistics

⌄ How to filter activities by specific class, group or student?

- Open class combo to filter activities by specific class and group/student and see their total activities count and total hours

How to filter activities by specific teacher?

- Click the class icon above activities grid to filter activities by teacher
- Select a teacher from the combo to filter their activities and see the total activities count and total working hours

Teacher's activities can be filtered by specific subject in case they teach two or more subjects.

How to export statistics?

- Choose *Manage > Activities*
- Set desired filter above the grid
- Click TXT icon to export report in tab separated values file which you can copy/paste or open with spreadsheet app to customize and print

Based on selected filters you can export statistics for classes, teachers, rooms or subjects, as well as individual class, group, student, teacher, room or subject statistics. Individual statistics provide more details, e.g. if a teacher teaches two or more subjects, the statistics will be displayed for each subject separately. If some activities are not scheduled, total hours will be approximated based on the average period length.

7. VIEWS

Timetable views

Each view consists of:

- View type icon
- Timetable with related cards and
- Area with unscheduled cards

The view type icon is placed in the top left corner, below the owl, and opens the view picker. The timetable displays cards for the currently selected view. Timetable width can be adjusted by dragging the vertical splitter which divides scheduled from unscheduled cards.

Views are highly interactive, for instance:

- When you select a card in one view, the app will select and scroll to that card in any opened view and the selected card will blink so you can easily spot it. You can also select more cards at once to perform bulk actions.
- Any change in one view, e.g. dragging a card or improving the timetable, instantly updates all other views and notifications
- Markers, pin and sponge can be used in any view
- The shadow of the dragged card appears in all extra views helping you avoid conflicts
- The details of the last selected or mouse overed card are displayed in the bottom left corner
- Use horizontal and vertical scrollbar to navigate across larger or zoomed in timetables
- As you move the mouse cursor over the timetable, the related day, period and resource names will be shaded to show you the exact position
- Right mouse click any card or day/period/resource name to open the context menu with more options
- When the view is changed, the browser's URL is updated accordingly, so you can share URL of a specific master/individual view and Back/Forward buttons can be used to switch to previously opened views

Master views

By default, there are 4 predefined views showing classes, teachers, rooms and subjects but you can also add your own views. Each master view displays the list of related resources in the first column along with cards in the respective rows. Unscheduled cards are placed outside of the timetable in the same row where the resource is.

Open the view picker and choose 🙉, 🖊️, ⬒ or 📑 to switch to the related master view.

Individual views

In order to switch to individual class, teacher, room or subject view, click the first column (resource name) in the related master view. Individual class view can be filtered by specific student or group(s) (if you have added them). Click student or group to view their individual timetable and click again to remove the filter.
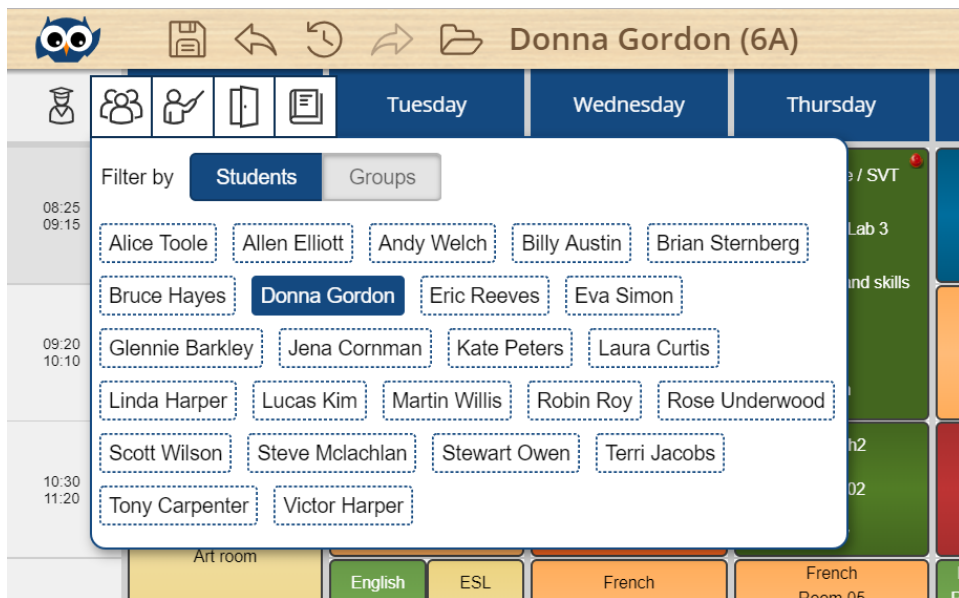
Filtering 6A view to get individual student timetable for Donna Gordon

⌄ Can I share a link to individual view?

When the view is changed, the browser's URL is updated accordingly, so you can share a specific student/class/teacher's URL to others provided they have access or the timetable is published online.

⌄ How to navigate through other individual views?

- Hold `Ctrl` + `↑`, `↓`, `Home`, `End` to navigate through other individual views

To revert to master view:

- Click the first column again or
- Select the desired view in the view picker or
- Press `Esc`

Extra views

Extra views can help avoid conflicts, as they provide additional master and individual views all in one screen. Moreover, there is no need to constantly switch between the views, as you get a clear overview of the whole timetable. The shadow of the dragged card appears in all opened views, so you can avoid conflicts while manually dragging the card.

To show or hide extra view:

- Click any card so that card details are displayed in the bottom left corner
- Click the class, teacher, room or subject icon in the card details

Video tutorial: How to use extra views

⌄ How to open extra view in the new window?

- Click 🗗 in the top right corner of the docked extra view

Floated extra view can be freely dragged and resized.

⌄ How to adjust the height of extra views?

The height of the main and extra views can be adjusted by dragging the horizontal splitters up and down.

Manage views

In order to create your own view, e.g. to display 5th graders or English teachers only:

- Choose ⚙ from the **view picker** and click `Add`
- Type name and short name
- Choose view type: classes, teachers, rooms or subjects
- Select resources you want displayed
- Optionally exclude days/periods and click `Add`

Now you can **schedule**, **publish**, **export**, **customize** or **print** created view.

⌄ How to switch to a newly created view?

- Choose the desired icon in the view picker

The icon contains the first 3 letters of its short name. For instance:

- Choose *Open > Open Examples*
- Select **United States International example** and click `Open`
- Open the **view picker** and select '7th' to view 7th graders or select 'Eng' to view English teachers

⌄ Can I hide or reorder views?

- Choose ⚙ from the **view picker**
- Use up/down arrows to reorder views
- Select view and click `Edit`
- Change visibility
- Click `Edit`

Hidden on the web means that the view won't be displayed on the **published page**. For instance, subjects view is often used to mark forbidden positions for difficult subjects, etc. However, it's of no interest to others and therefore can be hidden on the published page. *Hidden in the app* is the opposite option.

If a view is not needed, e.g. there are no rooms, you can simply hide rooms view by setting its *Visibility* to *Hidden*.

⌄ How to open a newly created view as an extra view?

- Open the **view picker**
- Hold `Ctrl` key while clicking the desired view

Zoom

- Click ⊕ in the bottom right corner
- Use vertical slider to adjust row height (master and individual views are adjusted separately)
- Use horizontal slider to adjust column width which helps when there are lots of days and periods

⌄ How to use browser's zoom?

Browser also comes with built-in **zoom**:

- Hold `Ctrl` and press `+` or `-` to zoom in or zoom out
- Hold `Ctrl` and press `0` to reset zoom to default value

8. CARDS

Drag and drop

- Select card by clicking it with the left mouse button
- While keeping the left mouse button pressed, drag card to a new position
- Drop card by releasing the left mouse button

On touch devices use a finger to drag cards.

≫ What happens if there are two or more cards on the same position?

Two or more cards on the same position will be slightly rotated and a conflict notification will appear. Clicking a card below will bring it on top.

≫ Can I drag cards vertically?

Cards can only be dragged horizontally across the class, teacher and subject master views to prevent changing the resource by mistake. Only the room master view allows dragging cards vertically to change the scheduled, desired or alternative room. In the individual view cards can be dragged in both ways because only day/period will be changed.

Select multiple cards

Select multiple cards in order to perform actions on more than one card. For instance, drag and drop cards, or edit multiple cards, clip, copy, pin/unpin, merge/split, etc. via card's context menu. There are many ways to select multiple cards:

- Click and drag the cursor across timetable. A rectangular marquee will appear, with one corner where you started dragging and the opposite corner where you stopped and all cards inside the marquee will be selected.
- Hold Ctrl while clicking cards to add or remove cards from the selection
- Hold Ctrl while clicking day, period or resource name to (de)select the whole day, period or resource cards
- Hold Shift while you click the last card that you want to include in the new selection. The rectangular range between the active card and the card that you click becomes the new selection.

Selecting multiple cards using rectangular marquee

Card details

The details of the last selected card (or the currently mouse overed card if there is no selection) are displayed in the bottom left corner. Icons show/hide related extra views. The text selects a resource in the related grid. Click 📊 to edit activity

represented by the selected card.

Showing details of the last selected card: subject, teachers, classes and scheduled + [desired] + (alternative) rooms

Edit cards

- Select one or multiple cards
- Right mouse click any selected card and choose *Edit cards*
- Change subject, teacher(s), class(es)/group(s), length, desired or alternative rooms
- Click Edit

⩔ How to substitute a teacher?

- Switch to teacher master view and hold Ctrl while clicking teacher name to select all teacher's cards
- Right mouse click any selected card and choose *Edit cards*
- Choose different teacher
- Click Edit

⩔ How to assign a homeroom to a teacher?

- Switch to teacher master view and hold Ctrl while clicking teacher name to select all teacher's cards
- Right mouse click any selected card and choose *Edit cards*
- Choose desired room
- Click Edit

⩔ How to add teacher assistant(s)?

- Select one or multiple cards where teacher assistant(s) are needed
- Right mouse click any selected card and choose *Edit cards*
- Click More... next to selected teacher. Note that current selected teachers are displayed as "Current"
- Select teacher assistant(s), click Ok and then Edit

Copy/paste cards

Cards can be copied from one resource/day/period to another:

- Select one or multiple cards
- Right mouse click any selected card/day/period and choose *Copy*
- Right mouse click resource name, desired day or period
- Choose *Paste* from the context menu
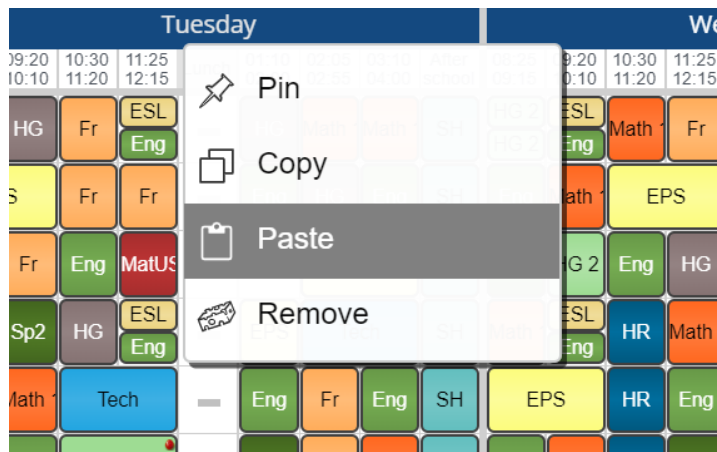
Right mouse click day to open context menu

Clear/delete cards

- Click the 🧽 and then click card, day, period or resource name, or
- Right mouse click any card, day, period or resource name and choose *Clear* from the context menu

Cleared cards will be placed outside the timetable, along with other unscheduled cards.

⩗ How to clear all cards?

- Click the 🧽 and then click the top right corner, or
- Hold Shift key while clicking the sponge tool

⩗ How to delete cards?

- Right mouse click unscheduled card(s) and choose *Delete* from the context menu or
- Select one or multiple unscheduled cards and then press Ctrl + Backspace or
- Choose *Manage > Activities* and click Delete

Merge/split cards

Merge allows combining two or more cards into one, thus avoiding conflicts:

- Right mouse click any conflicted/rotated card to open the context menu
- Choose *Merge*

Two or more cards can be merged into one if they are on the same position, have the same subject, length and rooms, but different teacher(s) and/or class(es)/group(s).

Video tutorial: How to merge cards

⩗ How to split cards?

Split is the opposite of merge as it creates more cards out of the one when there is more than one group or teacher. For instance, if card has 2 teachers and 3 groups, 6 new cards will be created after split all with only one teacher and one group. In order to split card:

- Select card(s) which have more than one teacher or group
- Right mouse click selected card(s) to open context menu
- Choose *Split*

Customize cards

To change the text, background color and border in any master or individual view:

- Right mouse click the card and choose *Customize* from the context menu or
- Choose *Print > Customize Cards*

The opened customization panel shows the related card enlarged. Changing the text, background color or border will update cards in the related view.

Video tutorial: How to customize cards

The text inside the cards can be any combination of class, teacher, room or subject names, their short names or even custom text. Selecting the text options from the list will add the related text to the cards, while clicking a row in the enlarged card will remove it.

Background card color can be picked from the current class, teacher, room or subject, or you can choose no background color.

Card border can be set to: round, square, round (no border) and square (no border).

⩒ How to set custom text inside cards?

- Right mouse click the selected card and choose *Customize*
- Choose *Set custom text* option from the list
- Enter text that will be displayed in individual views
- Enter short text that will be displayed in master views

Click "Use default" button to remove custom text and use default instead.

⩒ Do I need to customize every time I create a new timetable?

Customization changes are saved in the timetable. Creating a new timetable will copy the customization from the previously opened one.

9. CONSTRAINTS

Markers

Marker draws or erases forbidden, unwanted or mandatory positions for classes, teachers, rooms and subjects. When a marker is selected, previously drawn marks will color (red, yellow and blue) while the cards fade away. To draw or erase marks click on any position in the timetable view or any day/period/resource with a selected marker. To drop the marker press Esc or click outside of the timetable.

> Markers can be used in any master, individual or extra view and notifications will be updated upon any change.

Forbidden (red minus), unwanted (yellow exclamation mark) and mandatory (blue plus) marks in the teacher master view

⌄ How to erase marks?

- Pick the eraser ◇ to erase already drawn marks

⌄ How to copy marks to other resources?

- Mouse over the first column in the timetable while using the marker for forbidden, unwanted or mandatory positions
- Click Copy to
- Select resources and click Ok

Red marker

In order to draw forbidden positions for specific resources:

- Switch to the desired view
- Pick the red marker 🖍 to draw/erase minus signs

Forbidden positions are useful when you want to specify when a part-time teacher is not available, or to avoid students having the last period on Friday, or to mark already booked room, or to avoid having difficult subjects on the last period and similar.

Video tutorial: How to draw forbidden positions

Yellow marker

Drawing unwated positions is used to avoid or completely miss certain positions for specific subject or resource:

- Switch to the desired view and pick the yellow marker ✏️ to draw/erase unwanted positions which are displayed as yellow exclamation marks
- Mouse over the first column (resource name) to open unwanted settings
- Set allowed number of unwanted activities per week/day

> If allowed number of unwanted activities per week/day is set to *Arbitrary* which is a default value, unwanted positions will be completely ignored by the generator.

⌄ How to avoid all lessons of Physics to be placed on the last period for all classes

- Choose *Open > Open Examples* and open Example 3 where all classes have 2 lessons of Physics per week
- Switch to the subject master view and pick the yellow marker
- Note that there are 5 drawn unwanted marks displayed as exclamation marks for Physics at the end of every day
- Mouse over Physics subject to note that *Allowed number of unwanted activities per week* is set to 1

This means that only one lesson of Physics per class is allowed at the last period. Otherwise, there will be a warning when clicking the bell icon and the automatic generator will try to fix this constraint for you.

Blue marker

Drawing mandatory positions is used to favor or mandate certain positions for specific subject or resource:

- Switch to the desired view and pick the blue marker ✏️ to draw/erase mandatory positions which are displayed as blue plus signs
- Mouse over the first column (resource name) to open mandatory settings
- Set allowed number of missed mandatory activities per week/day

> If allowed number of missed mandatory activities is set to *Arbitrary* which is a default value, mandatory positions will be completely ignored by the generator.

Marker settings when mandatory marker is selected

⌄ How to ensure at least one lesson of Physics is placed within the first three periods for each class

- Choose *Open > Open Examples* and open Example 3 where all classes have 2 lessons of Physics per week
- Switch to the subject master view and pick the blue marker
- Note that there are 15 drawn mandatory marks (plus signs) for Physics (3 first periods x 5 days)
- Mouse over Physics subject to note that 'Allowed number of missed mandatory activities per week' is set to 14

This means that one lesson (15 mandatory - 14 allowed to be missed = 1 mandatory) of Physics per class must be placed within the first three periods. Otherwise, there will be a warning when clicking the bell icon and the automatic generator will try to fix

this constraint for you.

Pin

- Click 📌 and then click card(s), day(s), period(s) or resource(s) you want to pin/unpin, or
- Right mouse click any card, day, period, resource and choose Pin/Unpin from the context menu

The pin is useful when you are satisfied with the position of card(s) and want to make sure that these cards won't be moved while improving the timetable. Additionally, by pinning conflicted (rotated) cards related error notifications will be removed. Also, pinned unscheduled cards will be ignored by the generator. To drop the pin press Esc or click an empty cell.

Video tutorial: How to pin cards

Clip

Clipped cards have a little clip icon in the top left corner and will be scheduled, selected, dragged and removed all together. Clipping can be useful for electives, e.g. when one class group has French and the other German language (see Example 3) or when two or more activities from different classes needs to be scheduled at the same time. In order to clip two or more cards:

- Select multiple cards
- Right mouse click any selected card
- Choose *Clip*

Video tutorial: How to clip cards

Only non-conflicted cards with the same length and which are on the same day and period but have different set of teachers and classes can be clipped. Otherwise, the clip won't be visible in the context menu.

⟱ How to unclip cards?

- Right mouse click any already clipped card
- Choose *Unclip*

⟱ How to add cards to existing clip?

- Click any already clipped card
- Hold Ctrl to add additional cards to selection
- Right mouse click any selected card
- Choose *Clip*

10. GENERATE

Improve timetable

Click ⓟ to start improving the timetable. The automatic generator will try to find the best solution by rearranging cards in order to solve all constraints and avoid any conflicts.

Video tutorial: How to automatically generate a school timetable

⌄ How to generate timetable from scratch?

- Hold `Shift` key while clicking ⓟ
- Use keyboard shortcut: `Ctrl` + `Shift` + `Space`
- Clear all cards and then click ⓟ

⌄ How to prevent moving specific cards by the generator?

- pin cards or
- ignore resources related to cards

Best practices

- First generate a timetable with no constraints at all and then gradually add them. If the timetable can't be generated even without constraints revise your entered data by checking statistics.
- The generator will always try to find a better solution no matter how hard the constraints. If there is no progress for a couple of seconds or so, stop the generator and revise constraints or data.
- Always follow basic timetabling rule: **One school resource during one period can be scheduled in only one activity, otherwise, there is a conflict**. If you need more resources click `More...` to add activities with more than one group, class, teacher or room.
- As long as there are cards scheduled on forbidden positions, card conflicts or class gaps, the generator will not be working on improving the rest of the timetable because of priorities
- Click 🔔 to open notifications and start resolving them, e.g. pin or merge conflicted/rotated cards, or mark gap position as forbidden, or clip elective cards
- Keep in mind that all changes can be reverted using history

Improvement priorities

Automatic generator is supposed to solve about thirty highly complex requirements. Since these are commonly conflicted and it is usually impossible to solve them all, priority levels have been introduced, which the generator manages in the following way: **lower priority requirements will not be solved as long as there are unsolved higher priority requirements.**

The problem is that the generator is not always capable of detecting that some requirements cannot be satisfied and will keep trying to solve them at all costs, perpetually working without progress, leaving the rest of the timetable in poor state. That's why it is necessary to prepare quality data in order to help the generator do its best. Notifications are an irreplaceable tool for this task. However, some of the oversights made while entering data cannot be seen even in the notifications. The problem can be solved only if you abide by the following rules:

- Do not expect an instantly perfect timetable, because it is impossible to know beforehand whether such timetable is even possible
- At first, set moderate requirements and let the generator automatically create the timetable
- Only when you manage to get a valid timetable should you gradually increase the requirements and start the automatic improvement again

The generator recognizes three levels of priority, each consisting of a number of individual requirements:

1. Fatal error level

This group includes:

- card conflicts
- cards scheduled on forbidden positions
- class gaps

As long as any of these errors exist, the generator will not be working on improving the rest of the timetable. Here are some typical beginner mistakes that should be avoided at all costs:

- A teacher/class has so many forbidden positions that some cards must be placed on a forbidden time slot
- There are more activities you want to put in a room or assign to a teacher than the total number of periods in the timetable
- Too many forbidden positions for a specific activity and related resources

2. Difficult warning level

Difficult warning level includes only one item: a subject appears in some class timetables more than once a day. You should make sure to enter as many subjects as really taught in the school and choose the right subject for each activity.

3. Warning level

There are over twenty different warnings that will often appear in notifications. The generator will solve them only when all other errors and warnings have been solved.

11. VALIDATE

Notifications

Notification number in the bell icon 🔔 shows the total number of errors or warnings. The number is instantly updated along with notifications upon any change. The bell icon shows or hides the notification panel. The panel can be dragged and resized to best suit your device screen.

Video tutorial: How to validate a timetable

The timetable is valid if there are no notifications, which means that all entered requirements and constraints have been resolved. The red notification indicates that the timetable has a fatal error which needs to be fixed, whereas the blue one represents a warning. When red or blue notifications are clicked, related cells will blink in the view, making it easy to spot the problem. To stop blinking click the category title or click the bell icon to hide notification panel.

Resolve notifications

In some cases there might be exceptions to the rules, e.g. two or more cards might be purposely scheduled at the same position causing a conflict, or a class gap should be allowed only for lunch (otherwise gaps are forbidden), or unscheduled card(s) should be ignored, etc. These exceptions will appear in notifications and must be resolved first at all costs, before the automatic generator can move towards solving other constraints and conflicts.

⩔ How to resolve conflicts?

Conflicts should be resolved by merging cards. If merging is not possible or desired (e.g. conflicted cards have different subject, room(s) or length), pin conflicted/rotated cards using the 📌 and related notifications will be removed.

⩔ How to resolve gaps?

Mark a gap as forbidden using the 🖍 and related notifications will be removed. Additionally, uncheck *Manage > Classes > Edit > Forbid gaps for specific classes*.

⩔ How to resolve subject warnings?

The notification "subject appears more than once in a day" can be resolved by pinning these cards or by checking *Manage > Subjects > Select specific subject > Edit > Allow subject to be taught more than once per day*.

⩔ How to resolve missing groups?

The notification "missing groups in the class" can be resolved by unchecking *Manage > Classes > Select specific class > Edit > Forbid gaps*.

⩔ How to resolve unscheduled cards?

If you pin unscheduled cards the generator will ignore them and the related notifications will be removed.

⩔ How to exclude resources/cards from notifications & generator?

To exclude specific subject, room, teacher or class from notifications and improvement process:

- Set "-" (minus without quotes) as a short name for the item you want to exclude
- Check *Help > Options > More options > Exclude items with short name set to "-"*

For instance, set short name to "-" for Lunch (subject) and Gym (room) and all errors and warnings related to Lunch and Gym will be completely ignored and won't be automatically improved.

12. EXPORT

Save as local file

- Choose *Save as > Local File*

Timetable will be downloaded to your disc as an JSON file which can be opened later.

⌄ Where can I find more information about timetable format?

More details about our JSON timetable format can be found in this document.

⌄ Can I consume your API and parse the data?

The app consumes RESTful API and any software can access published timetables and parse the data. For instance, here is a direct link for Example 3 in JSON. You can also consider parsing CSV/TSV outputs.

Save as custom file

- Choose *Save as > Custom File*
- Select *PowerSchool*, *iSAMS*, *SmartSchool* or *Siged* format
- Optionally exclude column names and/or group short name
- Click Download

Use downloaded file to import timetable to other software such as SIS, MIS or similar.

⌄ How to import timetable into PowerSchool?

- Open tab-separated values file you have previously downloaded using Notepad or similar software
- Select the content (e.g. hold down Ctrl key and press A), right mouse click and choose *Copy*
- Switch to Excel/Sheets, e.g. here is a spreadsheet for PowerSchool Import Data Template Instructions
- Right mouse click cell (e.g. B4 in the above spreadsheet) and choose *Paste*

The columns in the PowerSchool file are:

School ID	Course Number	Course Name	Section Number	Term ID	Teacher Number	Teacher Name	Room	Expression
Specified before exporting	Subject short name	Subject name	Class short name	Specified before exporting	Teacher short name	Teacher name	Room short name(s)	Period and day short names

⌄ What are the columns in iSAMS file?

The columns in the iSAMS file are:

PeriodId	Set Code	Year	Group (optional)	Subject	Teacher	Room
= periodCount * (day - 1) + period	Class short name + group short name	Class name	Group short name	Subject short name	Teacher short name	Room short name

⌄ What are the columns in SmartSchool file?

The columns in the SmartSchool file are:

Activity number	Class	Group (optional)	Teacher	Subject	Room	Day	Period

Activity ID	Class short name	Group short name	Teacher short name	Subject short name	Room short name	Day position	Period position

⌄ What are the columns in Siged file?

The columns in the Siged file are:

Activity number	Class	Group (optional)	Teacher	Subject	Room	Day	Start period	End period
Activity ID	Class short name	Group short name	Teacher short name	Subject short name	Room short name	Day position	Start period position	End period position

Hold `Ctrl` and click `Download` to include period start and end time columns (useful for **custom periods**).

Save as spreadsheet(s)

In order to export timetable(s) to the spreadsheet app:

- Choose *Save as > Spreadsheet(s)*
- Choose *current timetable view* or *all related individual timetables* and click `Download`
- Open downloaded html document and select the desired timetable(s) by making a rectangular marquee around them
- Right mouse click selection and choose Copy
- Switch to Excel or Sheets, right mouse click cell and choose Paste

⌄ How to export e.g. 5th graders/only English teachers/specific days and periods?

- **Create a view** which displays only 5th graders or only English teachers or only some days/periods
- Choose *Save as > Spreadsheet(s)*

Export grid data

In order to export activities:

- Choose *Manage > Activities*
- Select all activities by making a rectangular marquee around the activities grid: click outside the grid (top-left corner), hold the left mouse button while moving the cursor to the bottom-right corner of the grid
- Right mouse click inside the grid and choose *Copy* from the context menu
- Switch to Excel or Sheets, right mouse click the desired cell and choose *Paste*

In a similar way you can export teachers, subjects, rooms, classes/groups, days, periods or any other data displayed in the grid.

13. SHARE

Share with others

Choose *Share > Share with others* to manage people who have access to school timetables. The following roles are available:

* Owner
* Creator
* Viewer

The owner is a person who created the school account and has the highest privileges. The owner can add or delete other owners, creators or viewers. The creator can create and change timetables but can't manage, add or delete other people who have access. The viewer can only view timetables and is not allowed to move cards or save changes.

Timetablers can collaborate on the same timetable and at the same time. All saved changes will be seamlessly synced and merged across any device you or your colleagues might be using. For instance, one timetabler can change a teacher's name and the other one their short name, but there will be no overwrites after saving changes.

⋙ What happens in edge cases?

In the rarest edge case when merging is not possible (e.g. timetablers have both changed the same teacher's name), the app uses "last save wins" model: the name saved by the latter timetabler will overwrite the name saved by the former, while all other changes will be properly merged. Changes made to previously deleted resources will be ignored.

In some cases merging on property level is not desired, e.g. when timetablers change the position of the same card. Merging could cause picking day from one, period from the second and room from the third timetabler. The app takes care of this with "linked properties" so that the card's position (day, period and room) set by the last timetabler is respected.

Publish to the Web

A teacher, class/group or student can have direct access to their timetable simply by bookmarking the web page which shows it. Note that individual class view can be filtered by specific student or group. The published web page is accessible from any device, including phones and tablets, and is automatically updated when the timetable is saved. Furthermore, the page will automatically refresh within minutes to make sure the latest timetable changes have been delivered to all. In order to publish a timetable:

* Choose *Share > Publish to the Web*
* Click Publish to the Web
* Copy and share the provided link
* Click "View published timetable" to visit the published web page

⋙ How to customize published timetable?

* Choose initially displayed view
* Choose a skin
* Choose period format: period number or name, 12-hour or 24-hour clock
* Check whether switching view is allowed

The size of cards can be adjusted by adding e.g. zy=150&zy1=150 to URL which represents 150% vertical zoom in both master and individual view like in this published page for Example 3.

Rotation of conflicts in the published page can be disabled by adding rotate=0 to the URL.

⋙ How to publish only some classes, teachers and/or days?

* Create a view for specific resources, days and periods
* Choose *Share > Publish to the Web*

⋙ How to download links for all individual timetables?

If you need the list of links to all individual class, student, teacher and room timetables, click ⌄ More options and then "Download links for individual timetables".

⌄ How to share on social networks?

- Choose *Share > Social Networks*
- If timetable is not published, click Publish to the Web and customize it by choosing skin, period format, etc.
- Click f or 🐦 to share timetable on Facebook or Twitter

⌄ How to embed timetable in the web page?

- Choose *Share > Embed Timetable*
- If timetable is not published, click Publish to the Web and customize it by choosing skin, period format, etc.
- Copy generated Html code and paste it into your website
- Optionally, adjust Html code to suit your website, e.g. change background color, size and similar

⌄ How to unpublish?

- Choose *Share > Publish to the Web*
- Click Unpublish

A previously published timetable will no longer be accessible to everyone.

Advanced customization

Timetables can be completely customized to match your school branding. With a bit of HTML and CSS knowledge you can:

- Add custom school logo
- Set custom font family, size and colors, e.g. to match styles in your school website
- Make any other HTML or CSS changes

United States International and United States examples are already customized with the most common changes:

- Choose *Open > Open Examples*
- Open "United States International" or "United States" example
- Choose *Open > Timetable Info* and click ⌄ More options
- Examine *Custom HTML* and *Custom CSS*, read the comments and copy/paste the relevant parts in your timetable but change url to your school logo, font styles and colors

⌄ How to customize the display of only one day, period, subject, room, teacher or class?

All textual fields in the app support html tags so you can set teacher name to e.g.:

Mr. John Cleese

That will display only **Mr. John Cleese** in red, with bold letters and larger font.

14. PRINT

Print timetable

In order to print the current master or individual timetable:

- Choose *Print > Print Timetable*
- Click title or year to edit
- Choose paper size, orientation, color and margins
- Click Print

Paper size, orientation, color and margins should match adequate printer settings. Timetable will be stretched to fit paper width. If the master timetable doesn't fit paper height it will be automatically split into several pages. Use vertical zoom in/out to increase or decrease row height.

> Color printers don't print card's background color by default. Here is how to set printing web page background colors and images.

> Chrome and Edge have built-in print preview so you can make sure that everything is fine before printing.

⌄ How to print e.g. 5th graders/only English teachers/specific days and periods?

- Create a view which displays only 5th graders or only English teachers or only some days/periods
- Choose *Print > Print Timetable*

⌄ How to choose landscape paper orientation?

The recommended approach is to choose landscape paper orientation while printing master timetable. Read how to set landscape orientation on Mac OS or Windows.

⌄ How to save timetable as PDF?

Any master or individual view can be saved as PDF. Export to PDF is built-in on Mac when printing. On Windows you need to install a PDF printer. You can also export the published web page to PDF using online tools like https://pdfcrowd.com.

Print individual timetables

In order to print all individual timetables, e.g. timetables for all classes, teachers, rooms or subjects:

- Switch to desired class, teacher, room or subject master view
- Choose *Print > Print Individuals*
- Click title or year to edit
- Choose paper size, orientation, color and margins
- Click Print

Software will go through all individual timetables in the current master view and print them on separate pages. Paper size, orientation, color and margins should match adequate printer settings. The recommended approach is to choose portrait paper orientation when printing. If there are many periods use zoom out to decrease row height in order to fit the printed page. Otherwise, if there are too few periods, use zoom in to increase row height.

⌄ How to print e.g. 5th graders/only English teachers/specific days and periods?

- Create a view which displays only 5th graders or only English teachers or only some days/periods
- Choose *Print > Print Individuals*

Print students

In order to print student timetables from the specific class:

- Switch to desired class view
- Choose *Print > Print Individuals*
- Choose paper size, orientation, color and margins
- Click Print

Software will go through all students in the current class and print them on separate pages.

15. HELP

Options

Choose *Help > Options* to customize the following:

Skin

Choose blue (default), green, red, violet, orange, pink, cyan, brown, gray or dark skin.

Period format

Choose period name or number, 12-hour or 24-hour clock for displaying period intervals in the views. For instance, if you choose 'Name or 12-hour clock', you can customize a specific period by setting period name to e.g. "Lunch" thus overriding the default 12-hour clock display.

Default view

Set master view that will be displayed when application starts.

Save reminder

Set save reminder interval. Default is 20 minutes.

History states

Set the number of history states that you can undo/redo.

⌄ How to customize advanced options?

Choose *Help > Options > More options* to customize the following:

Rotate conflicted cards

Set whether or not conflicted cards should be rotated (checked by default).

Show notification number

Set whether notification number in the top right corner should be shown or hidden.

Show tips & tricks

The owl will hoot useful info related to the current context if this option is checked. Experienced timetablers might want to hide tips & tricks and uncheck this option.

Exclude items with short name set to "-"

Any subject, room, teacher or class with short name set to "-" will be completely excluded from notifications and timetable improvement process if this option is checked. For instance, set short name to "-" (minus without quotes) to Lunch subject or Gym room and all related notifications will be instantly removed.

Troubleshooting

⌄ Why am I not allowed to save changes?

- Click 👤 in the top right corner:
  - Click My profile to make sure that you are logged in and that you are assigned Creator or Owner role
  - Check your expiration date because your account might have expired and you need to extend subscription

⌄ Why is my account locked?

- In case you have entered a wrong email you need to provide a valid email to continue working
- Your account has expired so you need to extend subscription
- You are abusing our terms of service, e.g. creating more than one free account

⌄ How to resolve software issue?

- Save your schedule as a local file to create a backup on your device and optionally save changes on our server
- Force refresh in your browser, e.g. ⌈Ctrl⌉ + ⌈F5⌉ so the app can load properly
- Try installing any other modern browser (Chrome, Firefox, Safari, Edge or Opera) and try again
- If the issue persists, contact us and we will get back to you as soon as possible

Tips & tricks

⌄ How to prevent data loss?

- Save the timetable on your disc
- Create a copy of the existing timetable
- Download the archive of your data
- Backup is run every 24h, so even if you delete timetable by mistake we can restore it for you

⌄ How to start the app from desktop or homescreen?

Desktop icon enables fast and easy access to Prime Timetable. In the latest Chrome browser choose *Menu > More tools > Create shortcut... > Create*, and the owl icon will be added to your desktop. Shortcut can be customized so the app starts in full screen just like other desktop apps. For other browsers check how to create a desktop shortcut to a website and for tablets and phones use a feature called add to the homescreen.

⌄ What keyboard shortcuts are available?

Keyboard shortcuts

Key combination	Action	Key combination	Action
Ctrl + O	Open timetable	Ctrl + S	Save changes
Ctrl + Z , Y	Undo/redo	Esc	Drop marker/pin/sponge, close window, cancel...
Ctrl + 1 ... 9	Switch to related view	Ctrl + Alt + 1 ... 9	Toggle related extra view
Ctrl + ↑ , ↓ , Home , End	Navigate through individual views	F11	Toggle full-screen
Ctrl + + , - , 0	Zoom in/out/reset, hold Shift for vertical, Alt for horizontal zoom	Ctrl + D	Opens data window
Ctrl + Alt + D	Manage days	Ctrl + Alt + P	Manage periods
← →	Switch to left/right tab	Ctrl + Alt + H	Show or hide history panel
↑ ↓ Home End	Select up, down, the first or the last item	Type first letters	Find item in the grid
+	Add new item	Enter	Edit selected item
Backspace or Delete	Delete selected items	Ctrl + click	Multi-select
Shift + click	Range selection	Ctrl + A	Select all items
Ctrl + C	Copy selected cards to clipboard	Ctrl + V	Paste items into grid
Ctrl + M	Toggle marker	Ctrl + .	Toggle pin
Ctrl + Backspace	Clear/delete selected cards	Ctrl + Alt + N	Toggle notifications
Ctrl + Space	Improve timetable	Ctrl + Shift + Space	Generate from scratch
Ctrl + P	Print timetable	Ctrl + Shift + P	Print individual timetables
Ctrl + Alt + Shift + P	Publish to the Web	Ctrl + U	My profile
Ctrl + Alt + I	Timetable info	Ctrl + Alt + M	Merge timetable
Ctrl + Alt + O	Application options	F1	User guide

Frequently asked questions

General questions

⌄ How do I start?

Watch getting started video tutorials, first. Inspect automatically generated examples and search user guide for any topic you are interested in, e.g. search for "part-time teacher", "lunch", "clip" and similar. Contact us if you have any question.

⌄ Are there any limitations during my 30-day free trial?

In order to evaluate some printing/exporting options you need to open one of our examples. Other than that, no limits.

⌄ Can I create more than one account, e.g. to share timetable with staff?

There is no need to create more than one account. Instead, choose *Share > Share with others* to manage people who have access to school timetables. The following roles are available: Owner, Creator and Viewer.

Data questions

⌄ Can I schedule lower, middle and high schools?

Yes. Check this example for all-in-one timetable. If there are different period intervals for specific grades then use custom periods and take a look at K-5 example. Also, consider creating separate schedules for lower, middle and high schools if it's too bulky for one document. There is also an option to merge timetables later.

⌄ Our periods vary from day to day. What do I do?

Set number of periods per day to the maximum number of periods for all days and then use 🖍 to forbid positions that are not needed. Read more about periods.

⌄ How do I deal with period intervals that are different for specific day/grade?

Custom periods let you create flexible schedules where activity interval depends on specific day/class/subject/teacher. Read more about custom periods.

⌄ Some activities last 15 minutes and others 45 minutes. What do I do?

Check 15-minute interval example. Basically, add periods with 15-minute intervals and while adding activities choose triple length for activities that last 45 minutes (3 * 15min = 45min). Use horizontal zoom if there are lots of days/periods.

With a couple of adds you can add any combination of activities and their length, e.g. choose *Manage > Activities > Add* and select Math, Teacher John, Grade 5, 3 times per week, single for length and click *Add* button, then repeat it, add another activity and again select Math, Teacher John, Grade 5, but this time choose 2 times per week and double length.

⌄ How to add activities with a number of classes/groups/teachers?

Choose *Manage > Activities > Add*. More… buttons allow you to add activities with more than one teacher/class/group/room. Read more about activities.

⌄ Will I lose the data if I collaborate with others?

No. Timetablers can collaborate on the same timetable and at the same time. All saved changes will be synchronized and merged across any device you or your colleagues might be using.

Generator questions

⌄ How do I deal with part-time teachers not available at certain times?

Switch to teacher master view and use 🖍 to forbid positions that are not allowed. Read more about markers.

⩔ How to ensure that cards related to student's options go together?

If you use the clip, the cards will be scheduled/dragged all together.

⩔ How to resolve errors displayed when I click the bell icon?

The goal is to generate an error-free timetable. Some errors and warnings can be easily resolved, e.g. conflicts can be resolved by pinning conflicted/rotated cards or by ignoring specific resources, class gaps can be resolved by marking gap as forbidden using 🖍. Read more about notifications and how to resolve them.

⩔ It looks like the generator isn't making any progress. What should I do?

The generator will always try to find a better solution no matter how hard the constraints. If there is no progress for a couple of seconds or so, stop the generator and revise constraints or data. We strongly advise to learn more about the generator and its priorities.

Sales questions

⩔ What happens after evaluation period expires?

Saving changes is disabled, your account might be locked and after some time your data might be deleted. If you want to continue using it, purchase the software.

⩔ Basic plan is up to 40 teachers. Are teacher assistants included?

Yes. Plans are related to the total number of unique teacher names in all created timetables.

⩔ Premium plan is up to 100 teachers but we have 150. What is the price for our school?

Please do contact us. In general, the price is proportionally higher, e.g. for 150 teachers it is 1.5 * the price of Premium plan, for 200 teachers it is 2 * the price of Premium plan and similar discounts are applied for multi-year purchase.

⩔ Is the price related to the country? What about international schools?

The price is related to the country where the school is located. International schools fall under the curriculum-based pricing. For instance, if the school follows British curriculum, the prices will be the same as in the United Kingdom.

⩔ Are there any discounts?

Yes, for multi-year purchase. If you want to take advantage of special discounts (up to 40%), select Basic or Premium plan and then choose billing term by dragging the year slider below.

⩔ What are alternative payment methods as my credit card has just been declined?

2Checkout supports various payment methods such as Visa, MasterCard, Discover, American Express, Diners, JCB, PayPal and many more. In some cases an 'authorization failed' error message pops up during payment process. Here are some alternatives to consider:

- Try another credit card or check with your bank why they stopped the transaction. The reason might be that the purchase is marked as suspicious. Mark the purchase as regular if you have that option in your e-banking app.
- Pay via PayPal: instead of entering the credit card information choose to pay via PayPal.
- Pay via credit card using Payoneer service. Send us your full name, email, country and state (if applicable) and we will send you the request for payment via Payoneer.
- Wire transfer of money, we will send you the invoice with SWIFT code and other bank and company details.
- Check is another option, 'Pay to the order of' should be the name of the company: "Danijel Stulic PR Micria".
- Contact us for more alternative payment methods.