News letter

Marts 2021

HortiAdvice

This is an accumulated description of changes made to GreenPlan recently, which are all contained in version 2021-1, Marts 2021.

The new functions and facilities are mostly developed on basis of whishes from current users.

HortiAdvice has January 1, 2021 taken over all programs in the GreenPlan-series from NB-data. At the same time Nikolaj Bøggild has been employed by HortiAdvice.

This means that all inquiries in the future should be made to the following in HortiAdvice:

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Nikolaj's previous email(nikolaj@NB-data.dk) does not exist anymore.

At the same time, we would like to ask that you from now on in connection with support inquiries or new idea's to the program development, send them to: GreenPlan@hortiadvice.dk

Changed calculation rule

In the recipe file the number of plants per container now is a whole number. In previous version the column was equipped with 2 decimals, which now is obsolete.

The "Number pl./container" column is a calculated column based on plants/m² and the container size. Previously the number was a decimal value, but now the value is a whole figure, which is rounded down when calculated. The latter is important, as that is a change in calculation.

In the below example the final spacing of plants (6 cm. pots) is done with 977 plants per container. Assume that the exact calculation actually is 977.78 plants. That value would end up as 978 plants when rounded to a whole figure. That would leave one pot dangling on the edge of the container and **the calculation therefore is altered to always round down**. This might have an impact on existing data in the planning file where a planning line with e.g. 4 containers now may have a spillover of 4 plants to a 5'th container. Do examine your plan in order to catch such spillover.

Depart-ment		Number Pl./m²	Number Pl./container	Waste (%)
1	Prop. H1-3	387,960	7.209	3,0
2	Pro. H1-3	218,000	4.264	
2	Pro. H1-3	50,000	977	
2	Pro. H1-3	50,000	977	1,5

Area cost per department

In the Basic data files, there is a group where you can specify different costs applied to the crops, dependent of the amount of space that they are occupying. This is not new, but until now the costs have been applied regardless of placing.

Basic data files

Transfer | Plans | Help

Nursery | Setup | Container types | Phases | Product groups | Pots | Varieties | Color groups | Area costs
Fixed costs types | Material suppl. | Anniversaries | Note groups | Outdoor temperatures

	No.	Description	Short desciption	€/week·m²	Department # ref.
	1	Fertilizer	Fertilizer	0,150	4
	2	Overhead costs	Overhead costs	0,080	4
▶	3	Maintenance	Maintenance	0,050	2

Only departments referring to a specific area cost charges the crops located there with the cost. It is possible to differentiate/scale the costs per department. The table has a "Transfer" function that makes applying of a new area cost simple. Also controlling the use of existing area costs is simple. In the below example the "Overhead cost is not applied to the departments 2 and 3. By selecting these and then clicking the "OK" button the cost is applied/transferred to these two departments with the default factor: "1". What also can be seen in the below, is that the current cost is scaled down in two of the departments.

In the below example the costs are scaled down in an open field used for growing e.g. perennials. In this case the need for fertilizer is half of what is used in the greenhouses, and maintenance costs and overhead costs are also considered to be much lower.

In the table "Area costs" in the production department file you can upscale or downscale the global costs defined under "Basic data files". This new table is situated beside the heating plan and is therefore placed in a tab sheet.
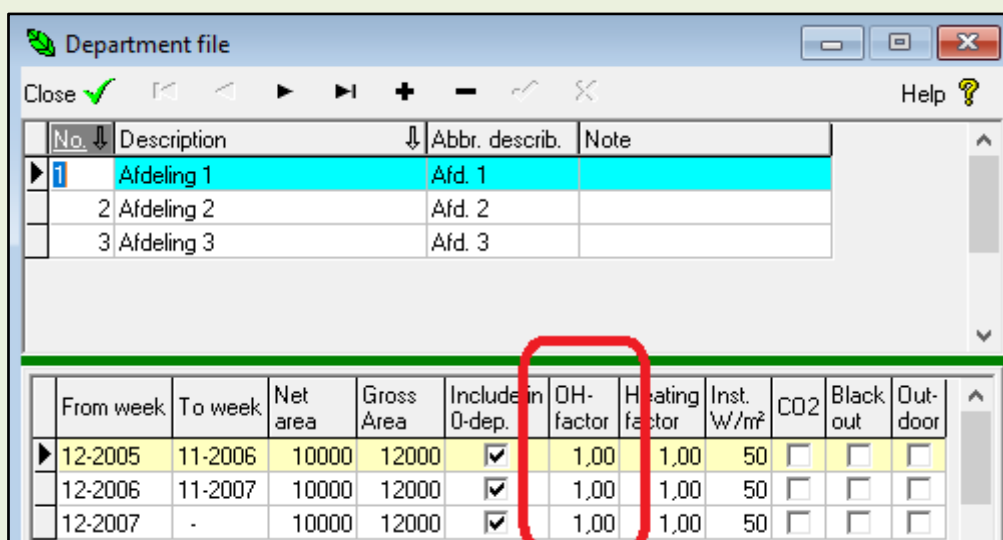
For previous GartPlan users:

The above replaces the "Overhead" costs defines in the GartPlans Greenhouse file.

Here the overhead costs consist of a single figure whereas in GreenPlan you can define several single costs comprising the figure in GartPlan.
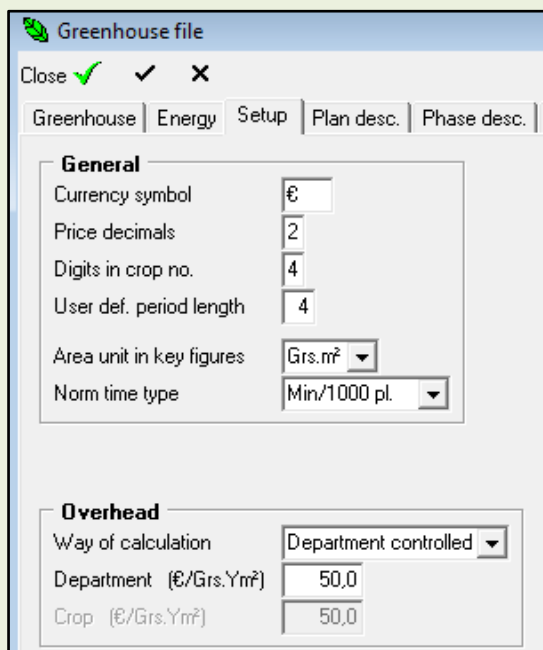
Each of the individual new "Overhead" costs can now be scaled, as the single figure could be scaled in GartPlan.

Be aware that the GartPlan figure in the greenhouse file is the cost per grs.-year-m².

In GreenPlan the figures are the costs per net week-m². If you want to achieve the exact figures that you had in GartPlan, you will have to apply the ratio between net and gross m² and divide the result with 52.
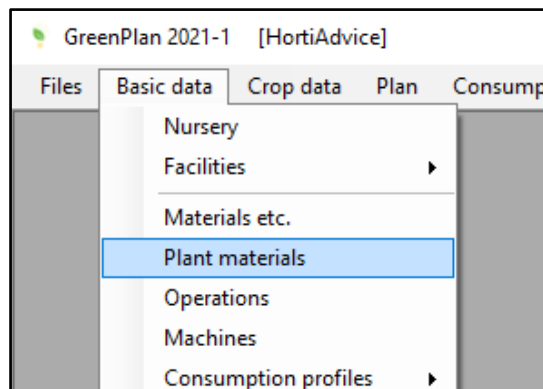
Plant material

A new category of costs is introduced in this version: Plant materials. Plant material differs from other consumables in that the plant material can occur as in-house production in the company, where other material consumption is mainly characterized by purchases from other suppliers.

For certain crops, plant material has both a consumption side and a production side from own production (e.g. cuttings). To deal with this, plant material is taken out of the material file and collected for all crops in a file for plant material.

The notion was in previous versions partly covered by the material file, where you could define a material of the type "Cutting". However, "cuttings" only cover some of the batch starts, as plants may be started on basis of seeds, young plants, half finished goods, stems, meristem, etc.

As shown in the below snapshot of the main menu, Plant materials now are defined distinct, as are materials, operations and machines.

The plant material file is very similar to the actual material file. So, there is nothing new - as such - in the basic handling of plant materials. The Plant material file is populated during the conversion to version 2021-1. All materials of type "Cutting" are moved to the new file.

During the conversion to version 2021-1, all materials of type "Cutting" - found in either used material profiles or directly as phase materials - are moved to the plant material table. After the conversion, the plant materials will have the same numbers/identifiers as they had as ordinary materials. As consideration regarding the numbers of other materials is no longer necessary, you may want to use another number sequence for plant materials. A renumbering can be made following this path in the main menu: "Files" + "Data maintenance" + "Renumbering" + "Plant materials".

The consumption of plant materials has been moved to the recipe file where it is defined in a new table. This table is located next to the "Materials" tab in the phase defining area of the recipe file. The table is a non-typical table as it is common to all the phase periods, whereas the other tables in the area are linked to a specific period. This functionality is highlighted to the right of the table with the text: "all periods"

In the above example only one type of plant material is needed for starting one plant/pot. Here the quantity from the plant material file is overruled, so 2 pieces per plant are needed when starting a plant/pot.

As part of the consumption definition phase and day in phase is defined. This makes it possible to define products that are not just "straight away". Assume you are growing a mixed product consisting of a flowering crop and some ornamental green in the bottom. In the starting phase the cuttings for the blooming crop are consumed. Later e.g. in phase 50 - a plug of Selaginella is added needing only 5 weeks to cover the bottom of the product. A line for the Selaginalla plug must be defined with phase 50, and the point of consumption will be calculated right. This is a hypothetical example, but it shows the possibilities of the plant material concept.
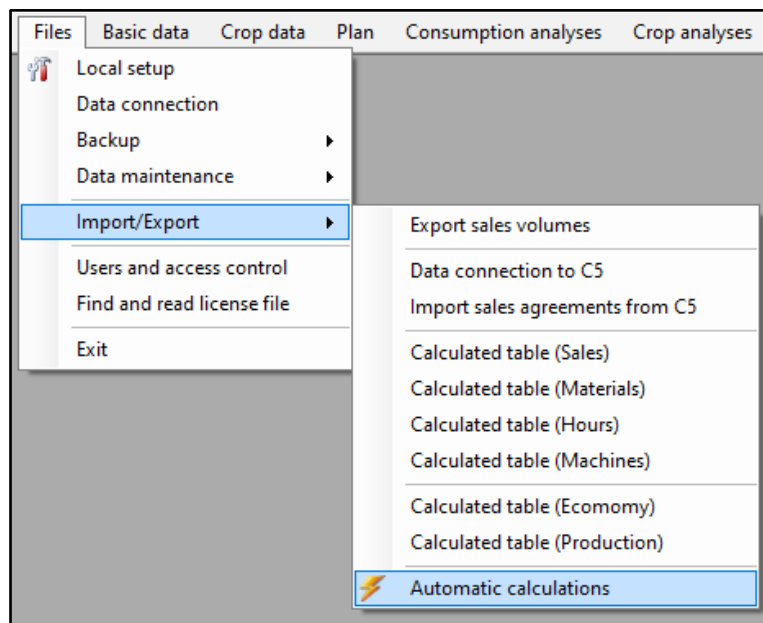
Everywhere in the program previously mentioning "Cuttings" this is now changed to "Plant materials". "Crop Cuttings consumption" has changed to "Crop Plant material consumption" and "Cuttings account" has changed to "Plant material account". By the way, the latter has moved to the "Production" column of the main menu.

One of the goals of extracting plant materials from the general material file is future development. The path of this future development hasn't been decided yet, but keywords are internal/own consumption, propagation, genetics, meristem-laboratories etc.

Automatic calculations of table (export)

In the "Files" menu under "Import/Export" a new menu item has been introduced: Automatic calculations.
This is a feature that makes it possible to refresh one or more of the calculated tables on a regular basis automatically.

The automatic calculations are defined in the form below:

The columns in the form have the following functionality:
- **Calculation**: Here one of the 6 predefined calculations are selected. A calculation can be selected on one line only.

- **Executing workstation**: In this column it is specified which workstation is responsible for the selected calculation. If the workstation does not exist or if it is turned off, then the automation will not work.
- **Calc. no.**: As different calculations may need different setups it will be necessary to define multiple delimitations for each calculation. Calculations sharing the same number will calculate e.g. the same period in the plan. Assume that the "Economy" calculation needs a large interval, as the result is part of long term forecasts, and that the "Hour" calculation is used operational for planning manpower the next 2 weeks. These two calculations will definitely need two different setups as is the case in the above example. If the field is yellow, then the calculation number does not exist and no calculation will take place.
- **Interval**: Definition of the time between each recalculation. The minimum allowed interval is 10 minutes.
- **Previous calculation**: This column shows the date and time for the start of the most recent successful calculation.

The top panel of the form has 2 buttons to the right for functions that might come in handy.
- **Open [F10]**: This function is a shortcut for opening the dialog for the calculation defined on the current row.
- **Execute calculation [F12]**: This function forces an immediate calculation for the current line. The time stamp on the line will be refreshed.

Changes in the definitions for automatic calculation will be reflected immediately on the workstation on which you are seated. GreenPlan will have to be restarted on other workstations in order for the change to have an effect.

Copy of database (for a local SQL Server installation only)

The function is available for users having the additional "Plan control" module.

To make it possible to evaluate data, as they looked previously, a function for making a copy of the database has been introduced.
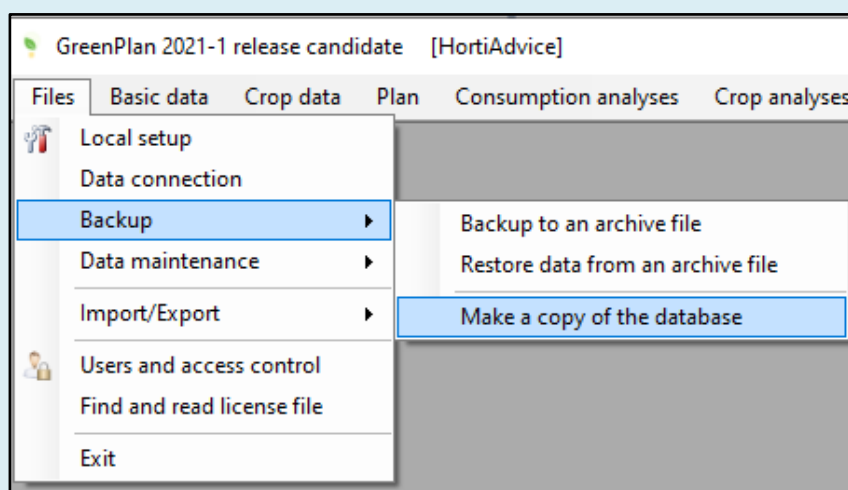
As is the case with the other backup/restore functions, the function is only available if the SQL Server is running locally on the workstation. SQL Server security prevents that the function can be used using a remote sever.

The function defaults as shown in the below:
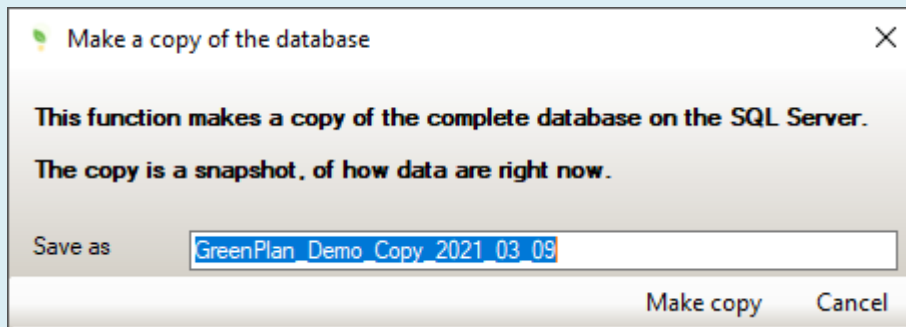
Here it is proposed that the copy of the database "GreenPlan_Demo" should be named "Name of database" + "_Copy_" + "Today". The copy can be named anything you want, as long as "GreenPlan" is part of the name.

The copy is a snapshot, of how the entire database looks in the moment of making the copy. Changes made to data afterwards are <u>not</u> reflected in the copy.

When you later want to review how data previously were, then connect to the copy using the "Data connection" function in the "Files" menu. Having opened the copy be careful not to change any data unless this is done intentionally. The opened copy acts exactly like the original database regarding any editing.
Remember to go back to the original database afterwards on the same way as described above.
It is always possible to see which database, you are in, by looking in the bottom left corner.

More options in planning graphics

The planning graphics have been extended with the possibility to show the number of plants occupying the space. The "plant count" option is similar to the "Area" option but showing the number of plants present instead of space occupied.
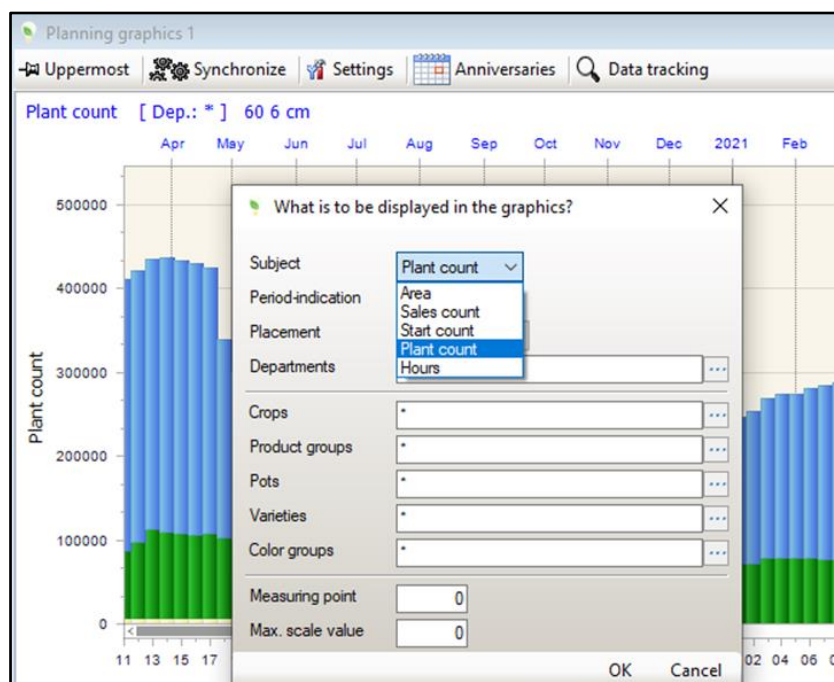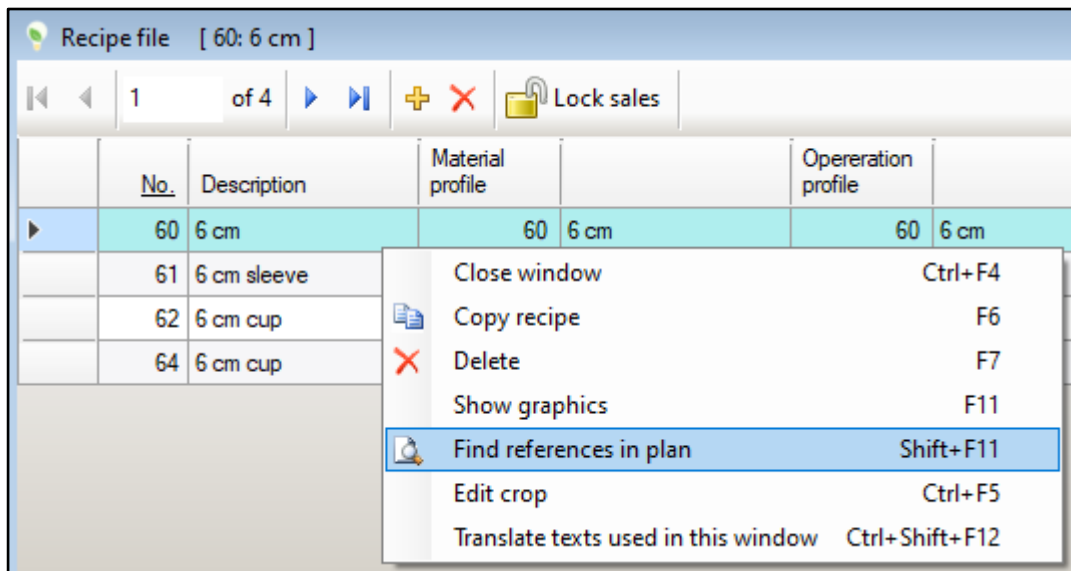
Find recipe references in plan

In the recipe file you may at some point or another end up with recipes that are old and obsolete. To delete an obsolete recipe, all references in the plan must be removed first. If not, you are not allowed to delete the recipe.

It can be very tricky to find such references, as they probably do not show in the planning file, because they are used on planning lines older than the period shown. The recipe may also be referenced in alternative plans making it even more difficult to tidy up.

A function for listing all existing references has therefore been introduced. The context menu in the recipe file now has an item: "Find references in plan"

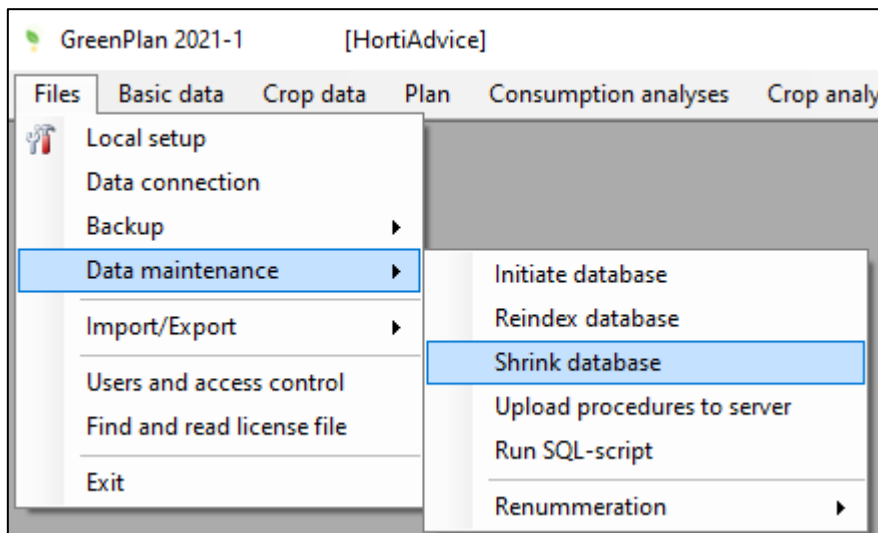Invoking this function results in a list looking like this:

Be aware that tidying up planning lines referring to obsolete recipes will change the resulting output, if you recalculate any analysis for a period containing one or more of these lines.
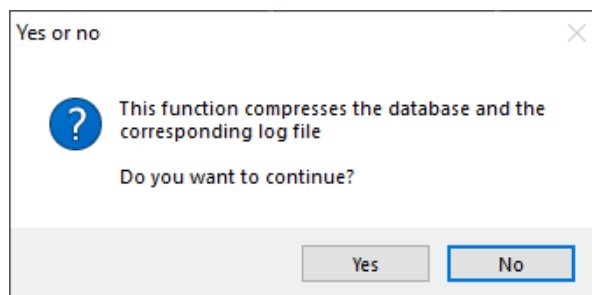
Shrink database

In the main menu under "files" and "Data maintenance" the function "Shrink database" has changed.

In previous versions it was a choice between everything or nothing. Both the data file and the log file were shrunk.

Old Version:

This has now been made optional. In the SQL Server documentation, it is mentioned that shrinking the data file may have a negative impact regarding performance in large databases. In the below example the size of the data file is about 1.500 MB. In a GreenPlan context that is a very large data file, but in an SQL Server context it is not. Nevertheless, the way of shrinking is now optional.

The options are:

- Shrink log file only (recommended)
- Shrink the entire database

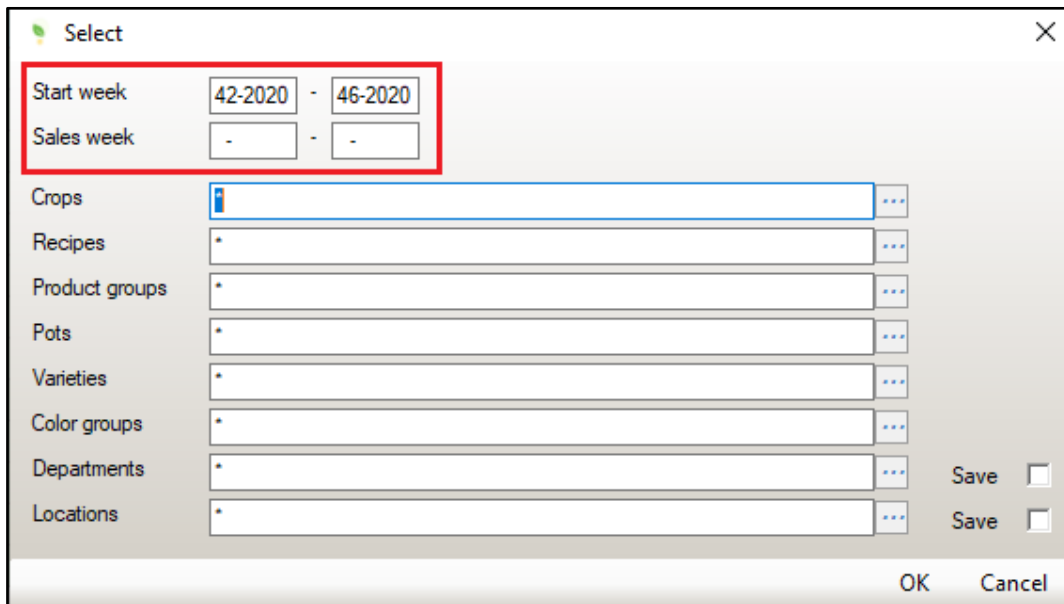Shrinking the entire database means that both the log file and the data file is shrunk.
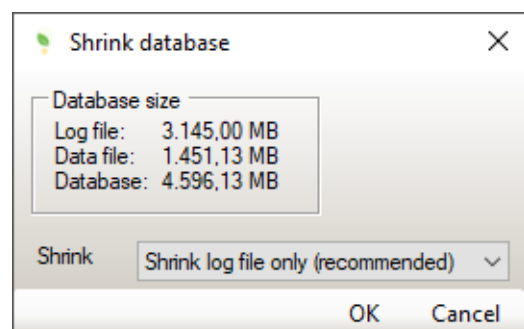
New shortcuts

New shortcuts have been introduced in the plan file regarding filtering.

If you have filtered on any of the week fields marked in the below, then this can be manipulated without having to reopen the filter dialog.

The functions "Shift filter one week forward/backwards" will be available in the context menu, if a filter is applied and any of the four weeks fields is defined.

In the example above a 5 week window into the plan will be visible. Using [Ctrl]+[Shift]+[Down] or [Ctrl]+[Shift]+[Up] you can shift the filtering period both ways as a "sliding window"