Reporting in Gatekeeper

A guide to printing grids, accessing module reports, and using the analysis module across Gatekeeper.

Contents

Reporting in Gatekeeper

There are three levels of reporting available for Gatekeeper users, depending on the level of information and detail required.

Reporting level	Information
Print or save grid	Available any time information is presented as a 'grid' in Gatekeeper (table format). Data can be saved or printed exactly as displayed. This option is useful when the required data is already visible in a table format, and the user wishes to simply print or save the data.
Module reports	Each module in Gatekeeper has a pre-defined report library. Users select which records should be displayed in the report, and there will generally be additional options available controlling the level of detail included in the report. This option is useful to report on many records (fields, transactions, etc) at the same time, and the results may be saved, printed, or emailed as required.
Analysis module reports	The analysis module is a specific reporting centre, designed with maximum reporting flexibility to allow the user to create bespoke reports as required. This option is the most editable report type, and is ideal for creating custom reports. It is the best reporting option for complex or detailed reporting. Results may be saved, printed, or emailed as required.

This guide will outline the different reporting types and the options available with each.

Using Gatekeeper publishing to send reports

After a report has been created in Gatekeeper, the user may decide to:

- Save the report
- Print the report
- Send the report as an attachment to an existing Gatekeeper contact

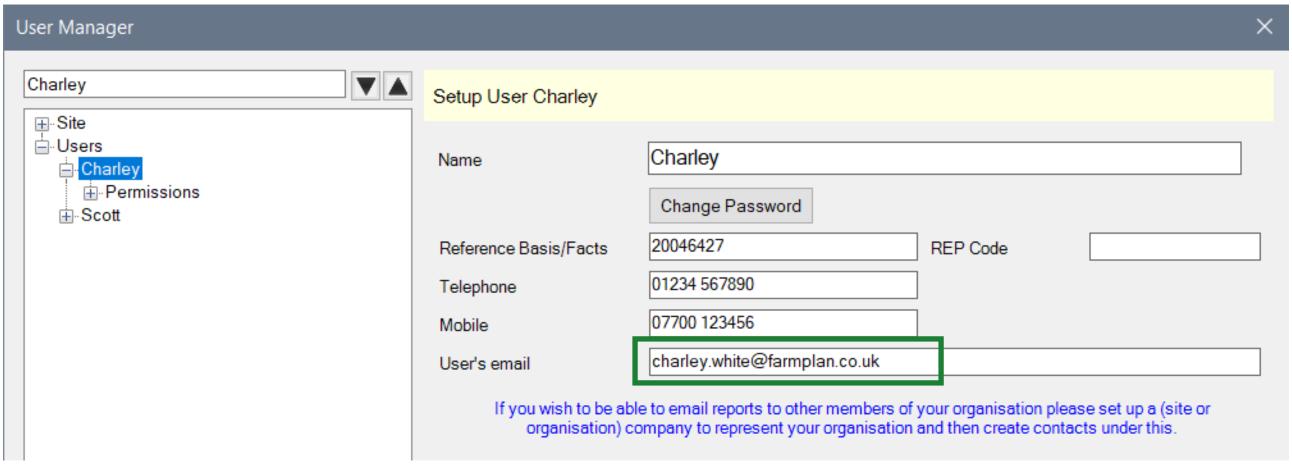
If a report is sent to a Gatekeeper contact, it will be attached to an email which is then sent through the Gatekeeper publishing system. This option can be a very useful way of quickly sending reports to many people at the same time.

In order to send a report directly from Gatekeeper, the site user's email address must have been entered, and any contacts must have been added with an email address.

Enter user's details

To enter your own email address to enable publication from Gatekeeper, from the main Gatekeeper screen:

1. Go to *Tools > User Manager*
2. You will automatically be shown the user details of the user that is currently logged in. Ensure there is an email address in 'User's email':



3. Click 'OK' to save and close.

Setup a contact

To setup a contact so that reports may be emailed via the Gatekeeper publishing system, from the main Gatekeeper screen:

1. Go to *Setup > Businesses*
2. *Optional*: if more than one business exists in Gatekeeper, ensure the correct business is selected from the list on the left hand side
3. Click 'Setup contacts'
4. Either:
   a. To add an email to an existing contact:
      i. Select the contact from the list on the left hand side
      ii. Click on the 'Details' subtab
      iii. Enter email address
      iv. Click 'OK' to save and close, or
   b. To add a new contact:
      i. Click 'Add'
      ii. Enter a contact name
      iii. Click on the 'Details' subtab
      iv. Enter email address
      v. Click 'OK' to save and close

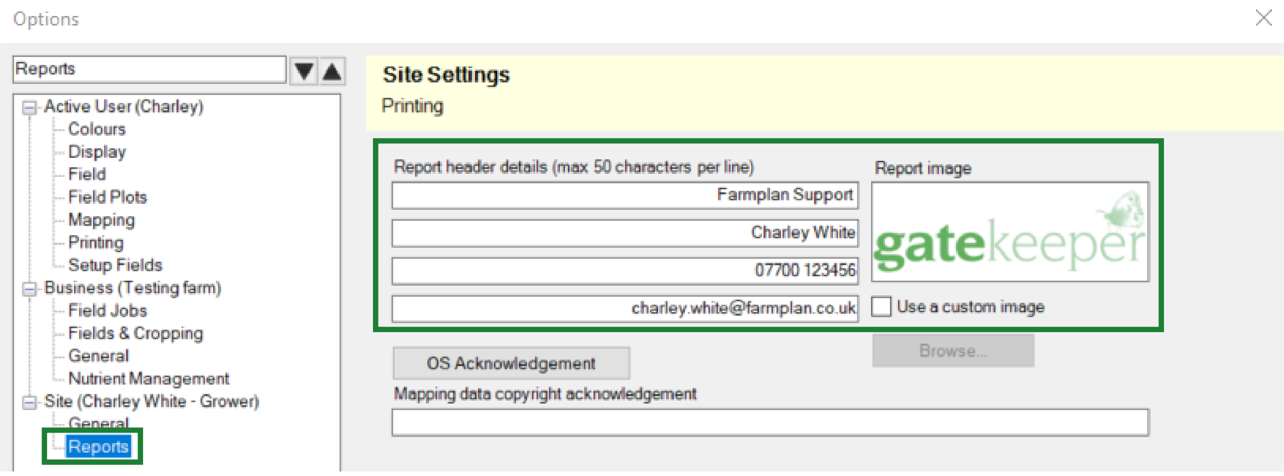
Users with multiple businesses may wish to add certain contacts to the site catalogue rather than individual business, so that the contact can be accessed through any business. To add contacts to the site catalogue, begin the process above by going to *Setup > Companies > Site* instead.

Contact details and logos on a report

A site user's details will appear on any report that is run after they have been entered into the programme options.

To enter details for report headers, from the main Gatekeeper screen:

1. Go to *Tools > Options*
2. From the list on the left hand side, select 'Reports'
3. Enter required contact details in the appropriate lines
4. If you wish to use a custom logo:
    a. Tick 'Use a custom image'
    b. Click 'Browse'
    c. Locate image file to be used
    d. Click 'Open'
5. 'OK' to save and close



File formats and save or send options

When a report is generated, there are a number of different file formats available to save in (depending on the report type).

File format	Availability	Information
PDF document (.pdf)	Print grid Print report Publish analysis report	Creates a standard PDF document, with the option to alter the page orientation if required. There is an ability to preview before the file is created. Ideal for reports which do not require further data handling in other software.
Comma-separated file (.csv)	Print grid Publish analysis report	Creates a .CSV file, which can be opened by software including spreadsheet software (e.g., Excel).

		Ideal for data which will be handled after export, especially for financial reports which are being sent to an accountant.
Tab-separated file (.tsv)	Print grid Publish analysis report	Similar to a .CSV file but less widely used.
XML file (.xml)	Print grid Publish analysis report	Creates an .XML file, which may be useful for transferring data to other programs.
Excel sheet (.xls)	Print report	Creates an Excel file with the exported data. Layout is more similar to the PDF report rather than a .CSV type export of rows and columns.
HTML file (.html)	Print report	Exports an HTML file for the report, plus any included icons as image files.

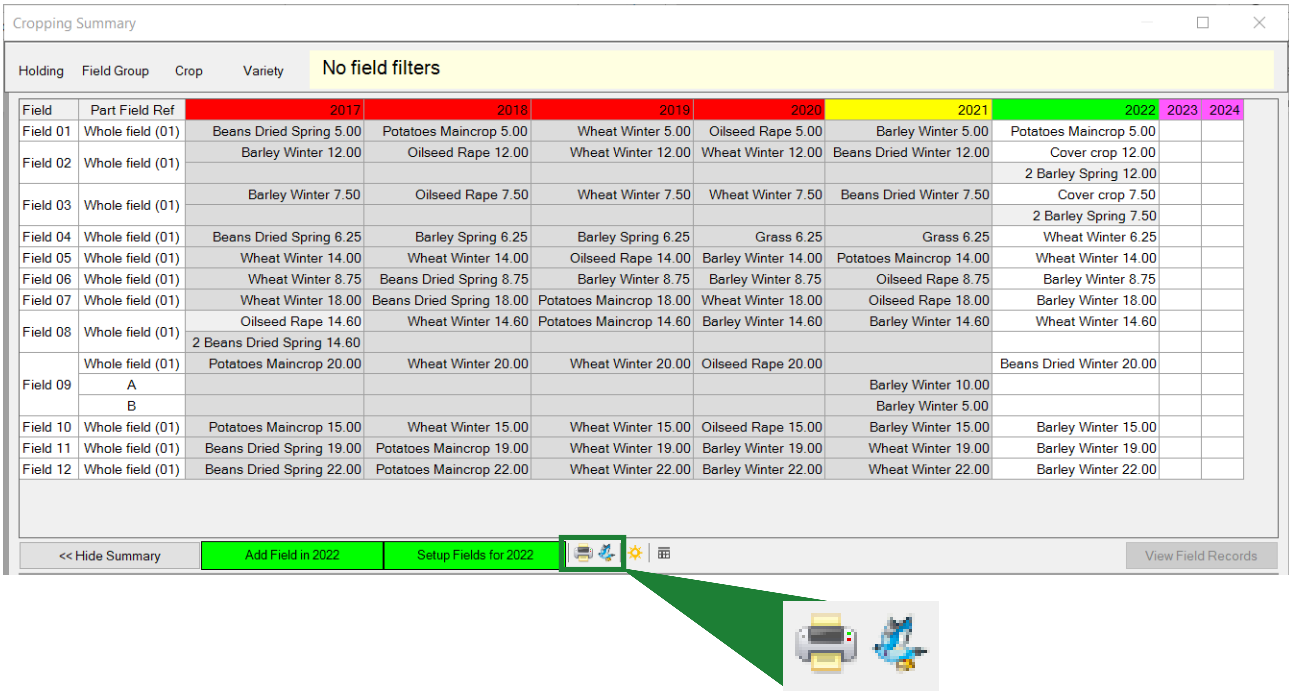
To save or send the generated file, the following options will be available:

Publish Options	Information
Publish via email	Sends the selected file format as an email attachment. The email is sent via the Gatekeeper publishing system to the selected recipient.
Save to file	Saves the selected file format to the specified location.

Printing grids

This is the most basic level of reporting in Gatekeeper – but that's not to say it isn't a very useful option!

Any information which is presented as a 'grid' (i.e., a series of rows and columns) can be printed or saved in the exact same layout as it appears. Underneath any grid, the print and publish icons will be visible:



Field	Part Field Ref	2017	2018	2019	2020	2021	2022	2023	2024
Field 01	Whole field (01)	Beans Dried Spring 5.00	Potatoes Maincrop 5.00	Wheat Winter 5.00	Oilseed Rape 5.00	Barley Winter 5.00	Potatoes Maincrop 5.00		
Field 02	Whole field (01)	Barley Winter 12.00	Oilseed Rape 12.00	Wheat Winter 12.00	Wheat Winter 12.00	Beans Dried Winter 12.00	Cover crop 12.00		
							2 Barley Spring 12.00		
Field 03	Whole field (01)	Barley Winter 7.50	Oilseed Rape 7.50	Wheat Winter 7.50	Wheat Winter 7.50	Beans Dried Winter 7.50	Cover crop 7.50		
							2 Barley Spring 7.50		
Field 04	Whole field (01)	Beans Dried Spring 6.25	Barley Spring 6.25	Barley Spring 6.25	Grass 6.25	Grass 6.25	Wheat Winter 6.25		
Field 05	Whole field (01)	Wheat Winter 14.00	Wheat Winter 14.00	Oilseed Rape 14.00	Barley Winter 14.00	Potatoes Maincrop 14.00	Wheat Winter 14.00		
Field 06	Whole field (01)	Wheat Winter 8.75	Beans Dried Spring 8.75	Barley Winter 8.75	Barley Winter 8.75	Oilseed Rape 8.75	Barley Winter 8.75		
Field 07	Whole field (01)	Wheat Winter 18.00	Beans Dried Spring 18.00	Potatoes Maincrop 18.00	Wheat Winter 18.00	Oilseed Rape 18.00	Barley Winter 18.00		
Field 08	Whole field (01)	Oilseed Rape 14.60	Wheat Winter 14.60	Potatoes Maincrop 14.60	Barley Winter 14.60	Barley Winter 14.60	Wheat Winter 14.60		
		2 Beans Dried Spring 14.60							
Field 09	Whole field (01)	Potatoes Maincrop 20.00	Wheat Winter 20.00	Wheat Winter 20.00	Oilseed Rape 20.00		Beans Dried Winter 20.00		
	A					Barley Winter 10.00			
	B					Barley Winter 5.00			
Field 10	Whole field (01)	Potatoes Maincrop 15.00	Wheat Winter 15.00	Wheat Winter 15.00	Oilseed Rape 15.00	Barley Winter 15.00	Barley Winter 15.00		
Field 11	Whole field (01)	Beans Dried Spring 19.00	Potatoes Maincrop 19.00	Wheat Winter 19.00	Barley Winter 19.00	Wheat Winter 19.00	Barley Winter 19.00		
Field 12	Whole field (01)	Beans Dried Spring 22.00	Potatoes Maincrop 22.00	Wheat Winter 22.00	Barley Winter 22.00	Wheat Winter 22.00	Barley Winter 22.00		

To print a grid:

1. Click the printer icon
2. A preview will be generated; click the printer icon again
3. Ensure printer details are correct, and then click 'OK'

To save a grid:

1. Click the publishing icon (blue bird)
2. Select the required format
    a. If selecting a PDF, you may wish to adjust the page orientation
3. Select the required publish option:
    a. If you wish to send via Gatekeeper publishing:
        i. Select 'Publish via email'
        ii. Click 'OK'
        iii. Select recipient(s) and use tick boxes as required
        iv. *Optional*: add a message for the email body
        v. Click 'OK'
    b. If you wish to save a file:
        i. Select 'Save to file'
        ii. *Optional*: edit default file name
        iii. Select required file location
        iv. Click 'OK'

If you sent your file using Gatekeeper publishing, the publication(s) will be in your outbox, ready to send the next time you synchronise or do a send/receive.

If you saved your file, it will be available in the specified location. Be cautious of using the default file name if you will be running the same report for a number of different selections. This is because if you try to save more than one file with the same name, Gatekeeper will overwrite the previous file in the same location.

For example, if a user saved the cropping summary for one field group, the default file name would be 'Cropping Summary'. If the user then adjusted the grid to see the information for the next field group, and then saved, the file name of the second export will still be 'Cropping Summary'. The first file would be replaced by the second. In this case, it would be recommended to adjust the file name while saving – for example, 'Cropping Summary – Church Farm' then 'Cropping Summary – Home Farm'.

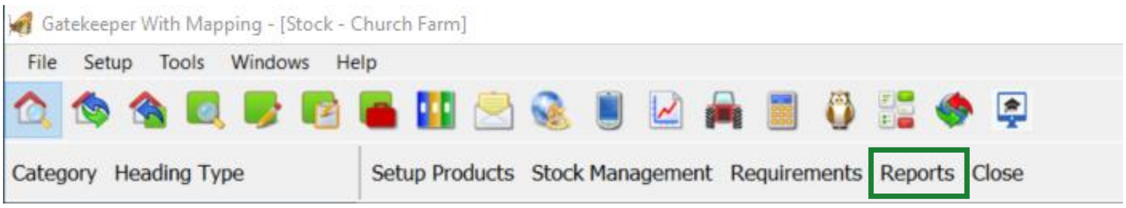
Module reports

Each module in Gatekeeper has a number of default reports available. These reports will often have different selection or filtering options available to control which data should be displayed in the report, and how it should be displayed.

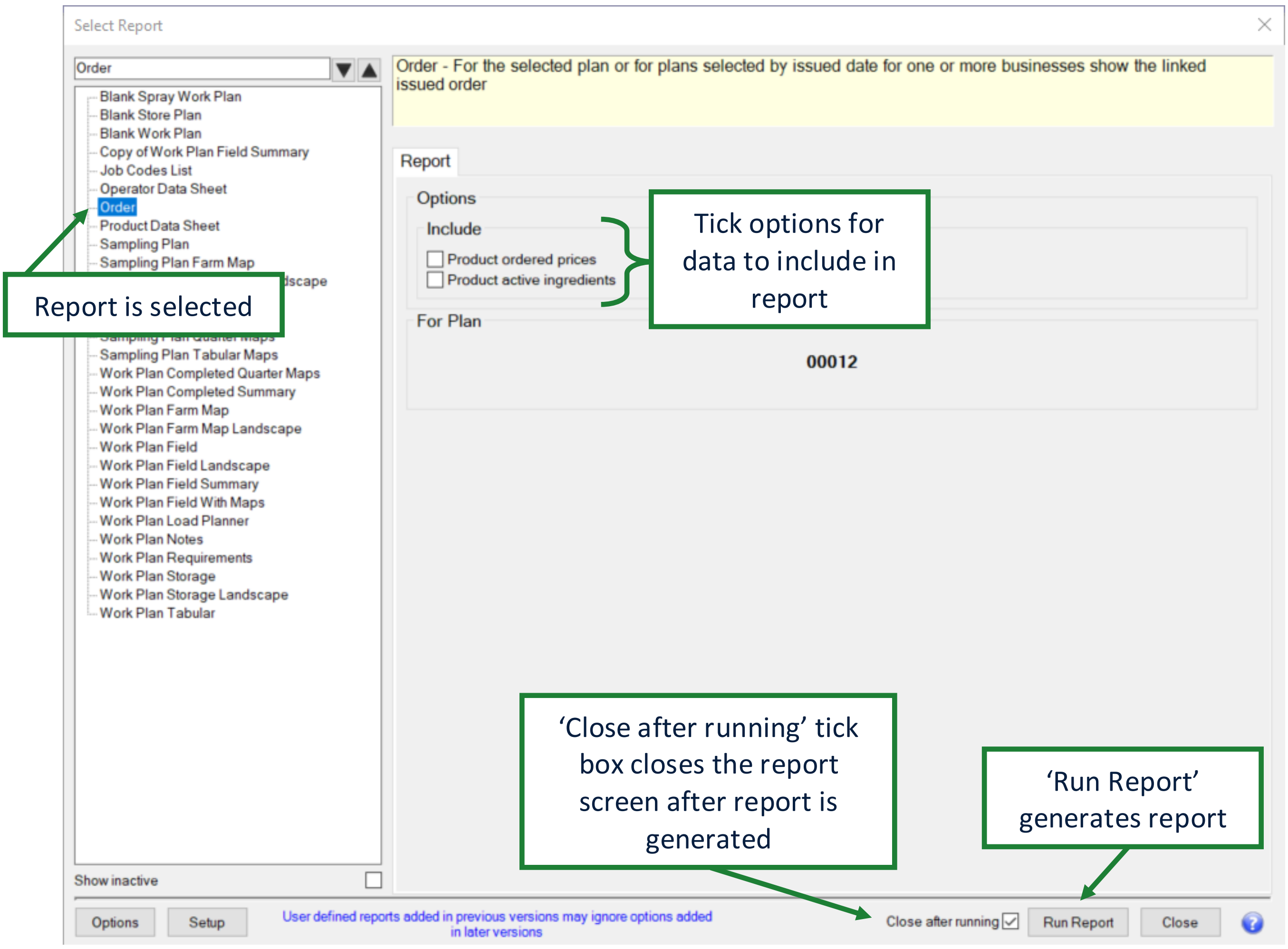
There is a limited scope to edit the default reports if required.

Running a module report

The report button will be visible underneath the icon line in most Gatekeeper modules:



When selected, the reports window will open. The reports available for that module will be visible down the left hand side; when a report is selected, any relevant options will be displayed for the user to select from.

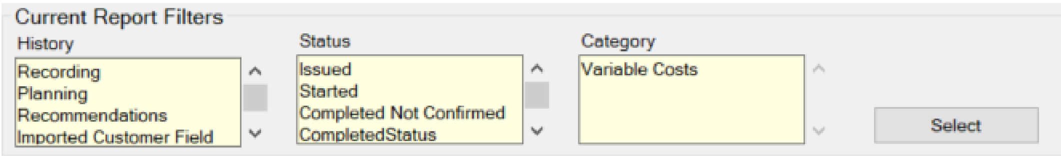


To run a module report, from within the module itself:

1. Click 'Reports'
2. Select the require report from the left hand side
3. Adjust any options required for what should be included in the report
4. Click 'Run Report'
5. Save, print, or export as required – see Saving or sending a module report (p.12) for more information.

Report filters

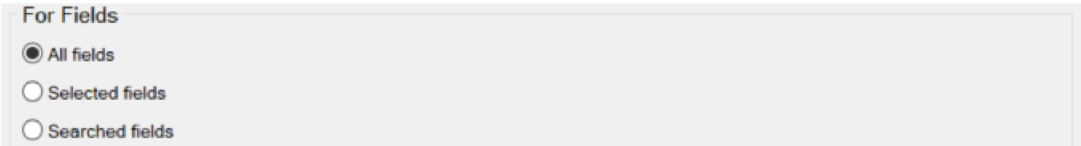
Some reports will display a set of report filters when selected; these can be used to limit the data feeding into the report if required.



To adjust filters, click 'Select' and select or de-select the available filters as required.

Selecting fields

Field module reports can be run for a single field, selected fields, or all fields, as required. Field searches may be used to select fields based on specific parameters.

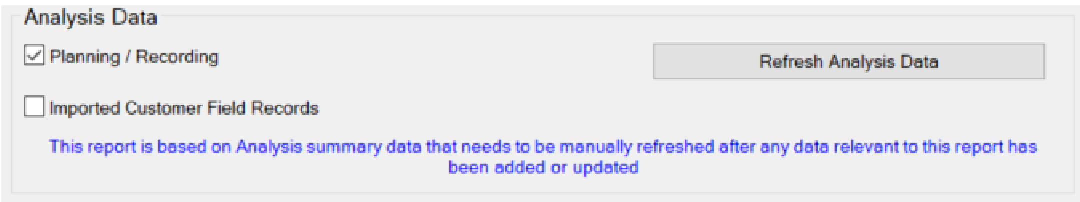


To select fields for the report:

1. Click 'Selected fields'
2. In the field selector window that opens, select the fields from the list on the left hand side, using the pre-defined filters if required, and use the single right facing arrow to move them across.
3. Click 'OK'

Reports based on analysis tables

Certain reports are based on the analysis module tables, rather than referencing module data directly. Where this is the case, it will be necessary to refresh analysis data before running any reports if any changes have been made to data since the last refresh.



To refresh the analysis database from a screen as above:

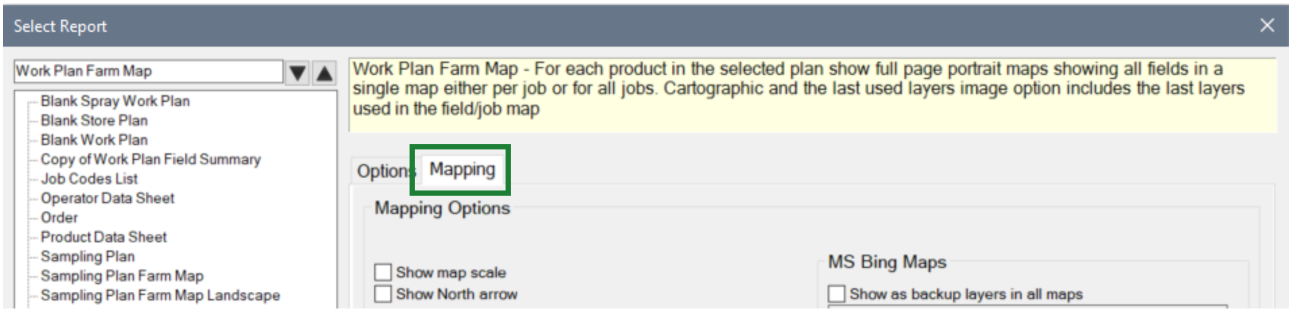
1. Click 'Refresh Analysis Data'

2. Select the year(s) to refresh
3. Click ‘Refresh Data’

For more information on refreshing the analysis tables, please see [Refreshing the analysis database](#) (p.16).

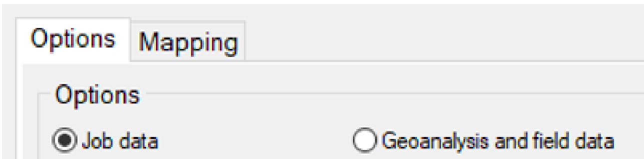
Mapping options

Planning module reports which include a map will have a separate ‘Mapping’ tab, which controls the map display options:



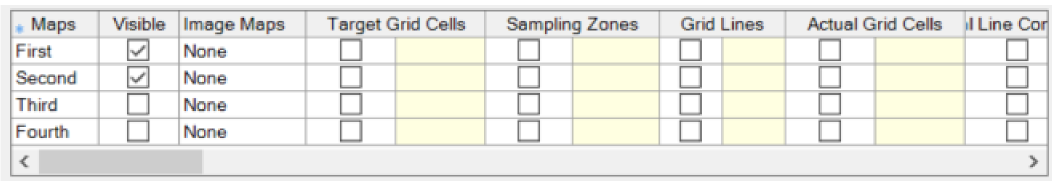
The mapping keys and gridding methods used for any maps run are controlled by the heading settings (*Setup > Headings*). For more information on map keys and gridding methods, please see the [precision modules handbook](#).

Field module reports which include a map will also have the mapping tab as shown above. In addition, they have a selector on the ‘Options’ tab to control whether the data to display should be sourced from job data or geoanalysis and field data:

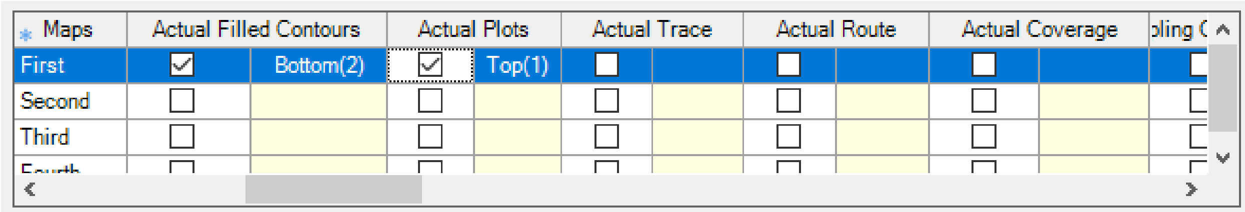


Common examples of maps which are stored as job data include yield, variable rate application, or soil sampling maps which have been imported as a sampling job. Common examples of maps which are stored as geoanalysis or field data include soil scanning or sampling maps which have been imported directly into the farm map

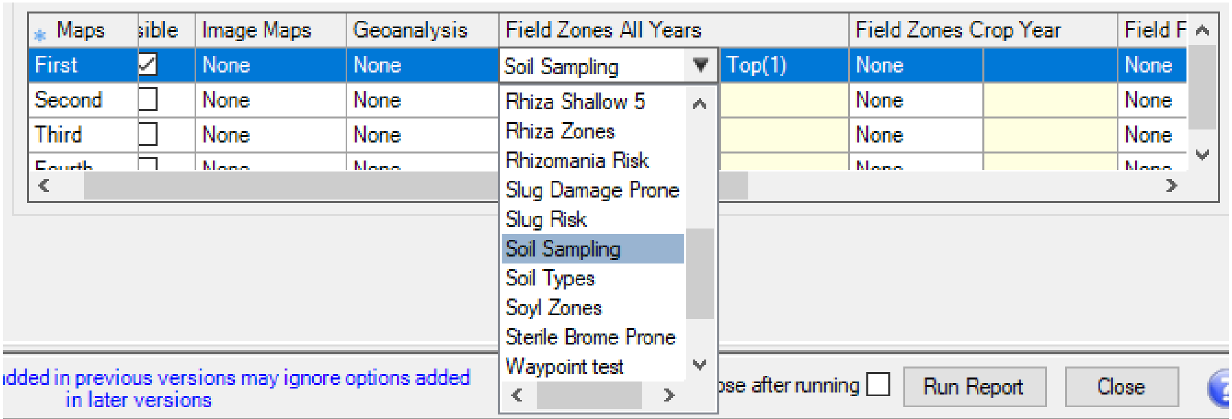
Changing this selection will alter the available data layers to be displayed in the report, which can be selected through the mapping tab:



When running a job data report, use the tick boxes to select which data type(s) should be displayed. If more than one data type is selected, the yellow column allows you to adjust layer order:



When running a geoanalysis data report, double click in a white column to select which layer of data should be surfaced.

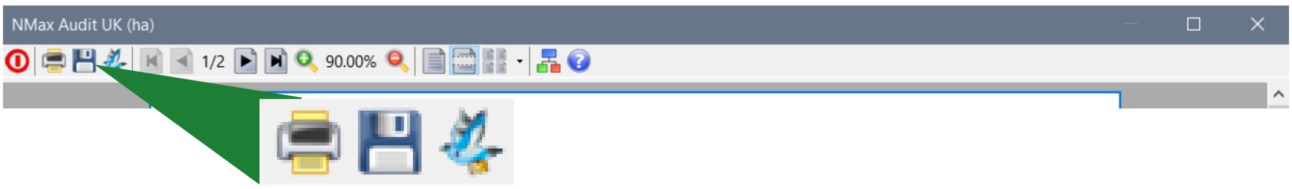


To run a report which includes a map for the first time:

1. Select the required report
2. Ensure the options selector is on ‘Job data’
3. Click on the mapping tab and:
    a. Use any tick box options in ‘Mapping options’ as required
    b. Select how data should be displayed using the options grid
4. Click on the options tab
5. *Job data maps only:* Select the data heading(s) to be displayed in the report map(s) from the headings expandable tree
6. Select the field(s) to be run
7. Click ‘Run Report’
8. Save, print, or export as required.

Saving or sending a module report

Once a report has been run, it can be printed, saved, or published as required.



To print a module report:

1. Click the printer icon
2. Check printer settings as required
3. Click ‘Print’

To save a module report:

1. Click the save icon
2. Select the required location
3. Click ‘Save’

To publish a module report:

1. Click the publishing icon (blue bird)
2. Select recipient(s) and use tick boxes as required
3. *Optional*: add a message for the email body
4. Click ‘OK’

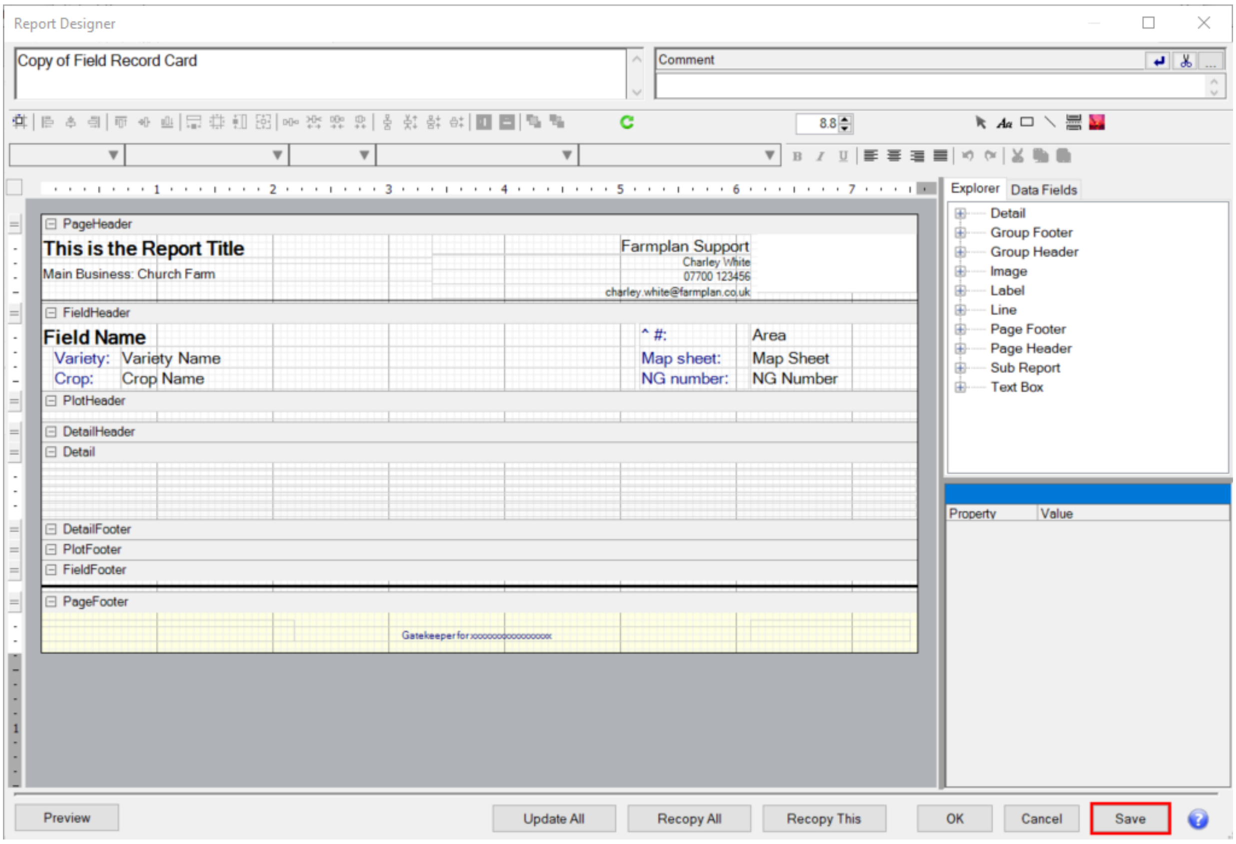
Editing a module report

It is possible to make certain edits to the pre-defined module reports. Broadly speaking, possible edits are either cosmetic (e.g., to make a certain piece of information more visible, or a different colour), or structural (e.g., to change or add a piece of information into the report).

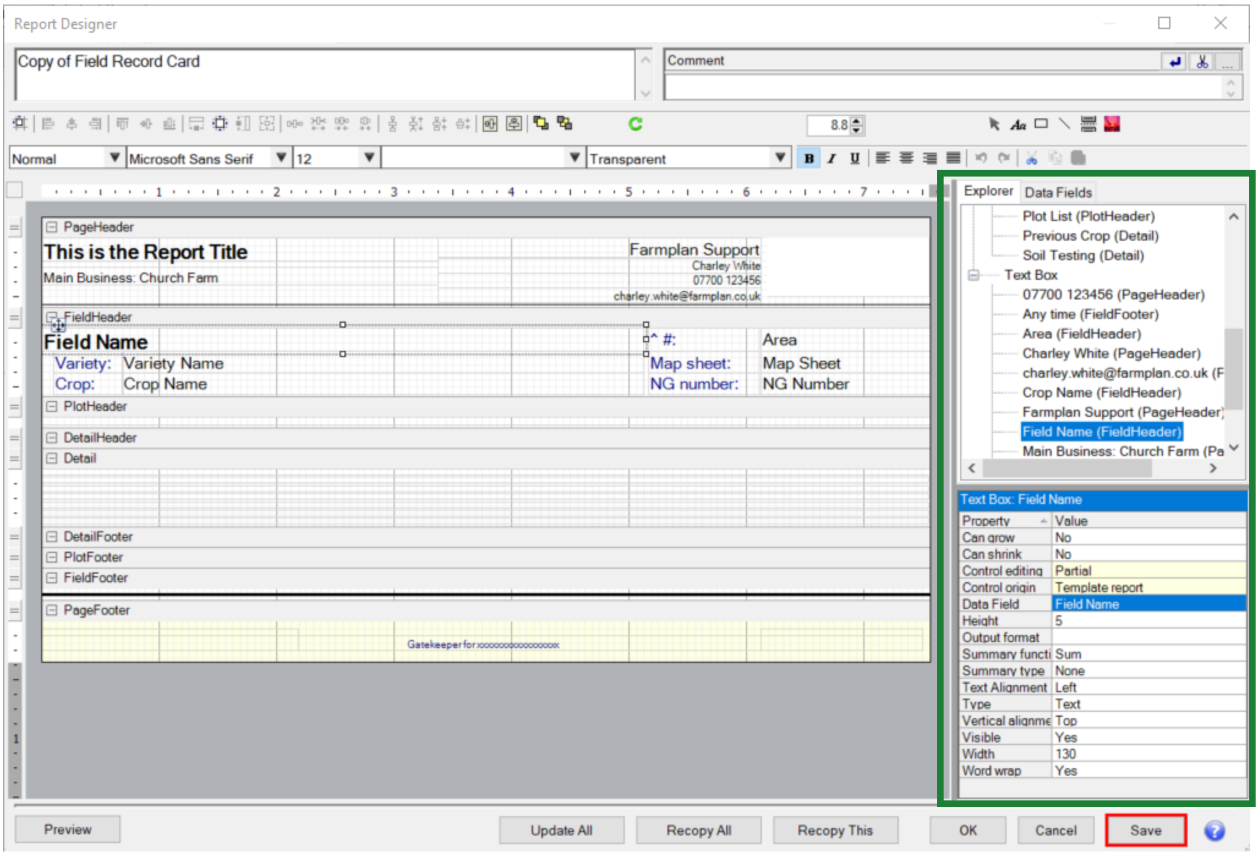
Due to forward compatibility concerns, we would strongly advise you to contact the support team before attempting to make any structural edits to a module report.

To make any edits to predefined reports, it is necessary to create a copy of the report you wish to edit. Your edits will then be made on a separate copy, rather than the original report.

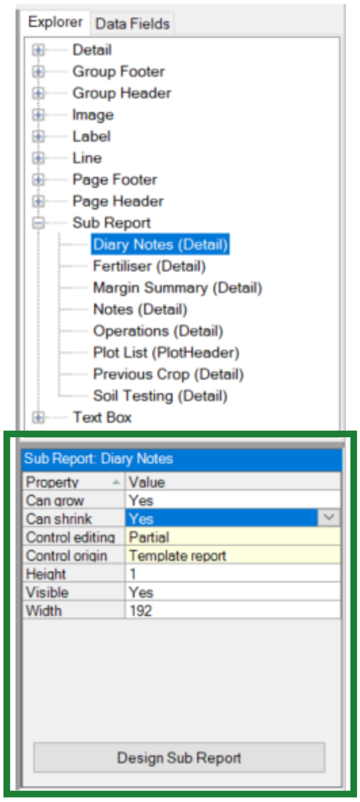
When editing reports, you will see the different components that make up the final report document. Each individual component can be clicked on to see its details. The screenshot below shows the report designer window with no element selected:



When an element of the report is selected, its details are shown in the right hand pane. For example here, the data element ‘Field Name’ has been selected. You can see that the relevant text box has been highlighted in the ‘Explorer’ tab, and the parameters for that text box are displayed underneath:



Some elements of a report may be included as a ‘Sub Report’. To see any data fields which are a sub report, expand the ‘Sub Report’ section of the explorer tab (shown right).



Sub reports cannot be edited directly from the main report designer screen – instead, you will need to select the sub report section, and then click ‘Design Sub Report’.

To copy and then edit a module report, from the module in question:

1. Click ‘Reports’
2. Select the base report from the list on the left hand side
3. Click ‘Setup’ in the bottom left corner of the screen
4. Click ‘Copy’ in the bottom left corner of the screen and accept the message
5. You will be taken into the report designer:
    a. Select the data field to edit (remembering if it is a sub report you will need to use the ‘Design Sub Report’ option
    b. Edit as required using report design controls
    c. *Recommended:* preview the report after each edit to check progress, before changing any other element
6. ‘OK’ to save and close.

For a worked example of editing a default report, please see Appendix 1 – Editing a module report (p.28).

Analysis module reports

The analysis module is a reporting centre within Gatekeeper. Users can create reports for all data in their Gatekeeper, and are able to report across multiple years and/or businesses. Combined with the ability to customise reports, the analysis module is a very powerful and flexible reporting tool for the user.

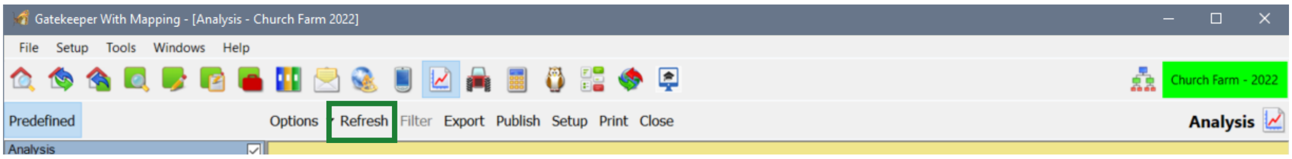
Reports can be saved from analysis reports as .PDF for easy presentation, or in spreadsheet compatible formats if further data handling will be required.

The analysis module is opened from the main Gatekeeper screen with the icon shown below:

Refreshing the analysis database

Analysis module reports are always drawn from a separate analysis database, which allows the module to work on a summary of all data within the software.

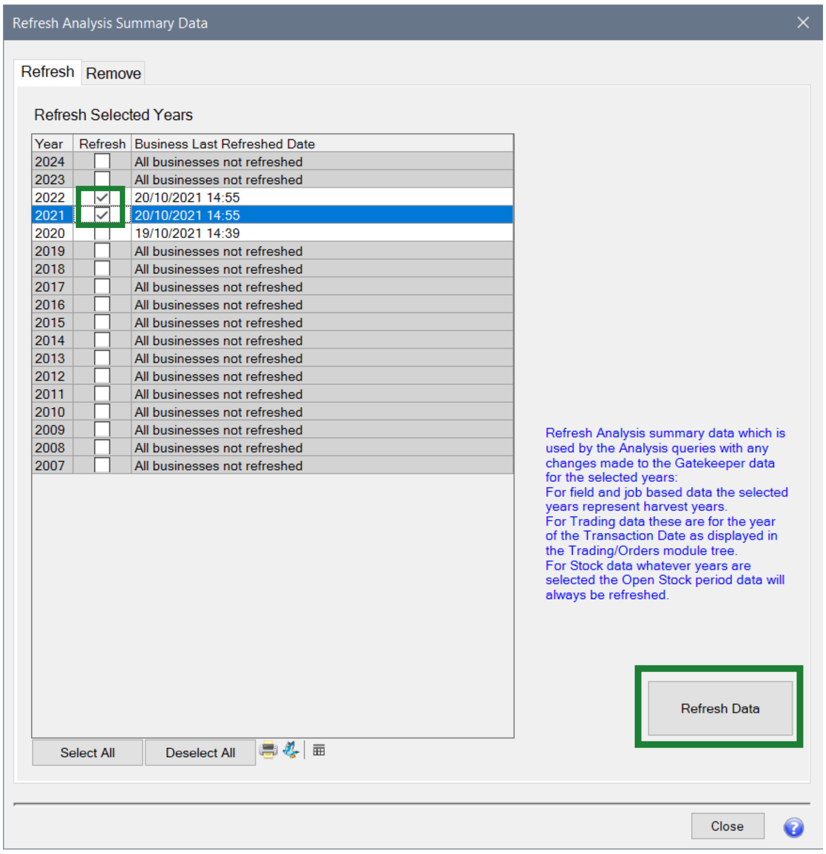
For this reason, it is essential to refresh the database before running any reports if any Gatekeeper data has been changed. The refresh screen will automatically be shown if you select an analysis report without a recent refresh. Otherwise, you can refresh manually by clicking ‘Refresh’



You can choose to update the analysis tables by year (and business if you have more than one). When updating, bear in mind that cropping records are updated by cropping year (e.g., refreshing 2022 will update all field data for the 2021-2022 cropping season), but trading records are updated by the calendar year. It may therefore be necessary to update two years in the analysis database to have accurate figures.

To refresh the analysis database:

1. Click ‘Refresh’
2. Select the year(s) to refresh
3. Click ‘Refresh Data’
4. When refresh has finished, click ‘Close’



Removing data from the analysis database

Data may be removed from the analysis database if required; this would generally be due to extended use over many years resulting in the summary tables being too large. Data can be cleared by year or by business as necessary.

To remove data from the analysis tables:

1. Click ‘Refresh’
2. Select the ‘Remove’ tab
3. Either:
    a. Use the selector ‘For year’, and select the year you wish to remove data for
    b. Use the selector ‘For business’, and select the business you wish to remove data for
4. Click ‘Remove Data’.

Running analysis module reports

Running a pre-defined analysis report is a matter of:

- Ensuring the analysis database has been updated
- Selecting the required report
- Using the filters to determine which data should feed into the report
- Saving, printing, or publishing as required.

To run an analysis report, from the analysis main screen:

1. Select the report from the list on the left hand side

2. Use the filters as required to define which information should be fed into the report. For more information, please see Using filters, (below).
3. *Optional:* if the report being run is a budget report, use the 'Advanced' tab to make additional selections as required.
4. Click 'OK' (if 'OK' is greyed out, then one or more filters still require a selection)
5. The report will be displayed. The data may now be compared, saved, printed, or exported as required.

Further details on each of the steps above may be found below.

Choosing reports

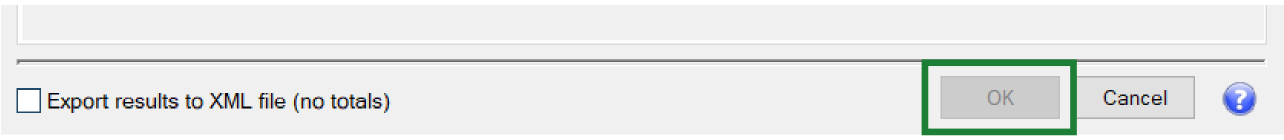
The pre-defined reports are split into sections, which group the reports based on their content. The report groups are:

- Cropping
- Diary notes
- Fertiliser
- Field Operations
- Sampling
- Stock
- Trading
- Budgets (Budget module users only)
- Agronomist Orders (Agronomy users only)

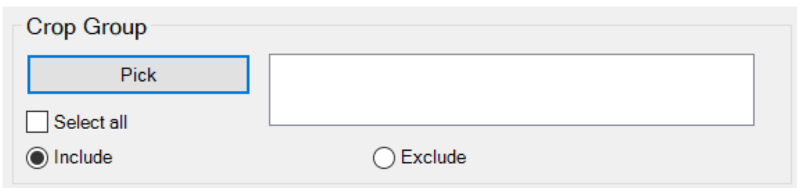
Using filters

Filters control which information is fed into the analysis report. Each of the filters available on an analysis report must be selected before the report can be run. For some reports, filters will have a default setting; for others, a selection must be made before the report can be generated.

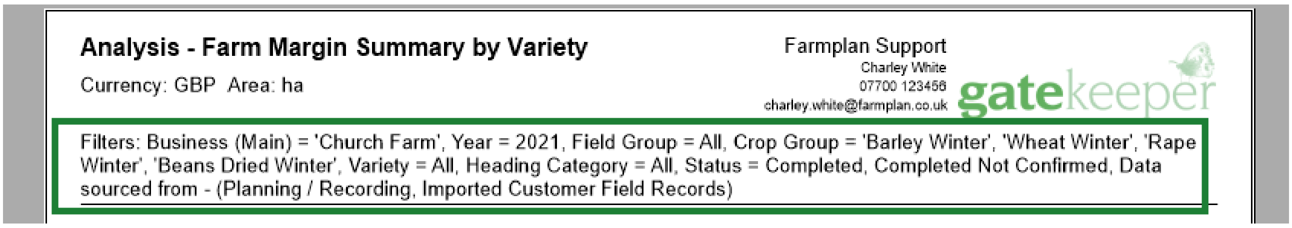
If the 'OK' button of the filter screen is greyed out, one or more filter must be selected before the report can be run:



When selecting filter parameters, users may either use the 'Select all' tick box, or use the 'Pick' button to select the required parameters, and then either the 'Include' or 'Exclude' dot selectors.



By default, the selected filters will be displayed in the header of any report which is saved from the analysis module:



If required, this information can be hidden before the report is run by going to the 'Print' tab of the filter screen and unticking 'Include filters on report':

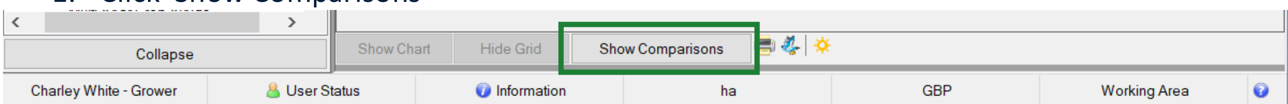
Users with the Budgeting module will have an additional 'Advanced' tab on the filters screen for any budgeting reports. For more information, please refer to Appendix 4 – Budgets in the analysis module (p.39).

Comparison

After a report has been run, the comparison functionality can be used to run the same report with a different filter selection. For example, a report might be run for the same fields but different cropping years; or for two separate field groups.

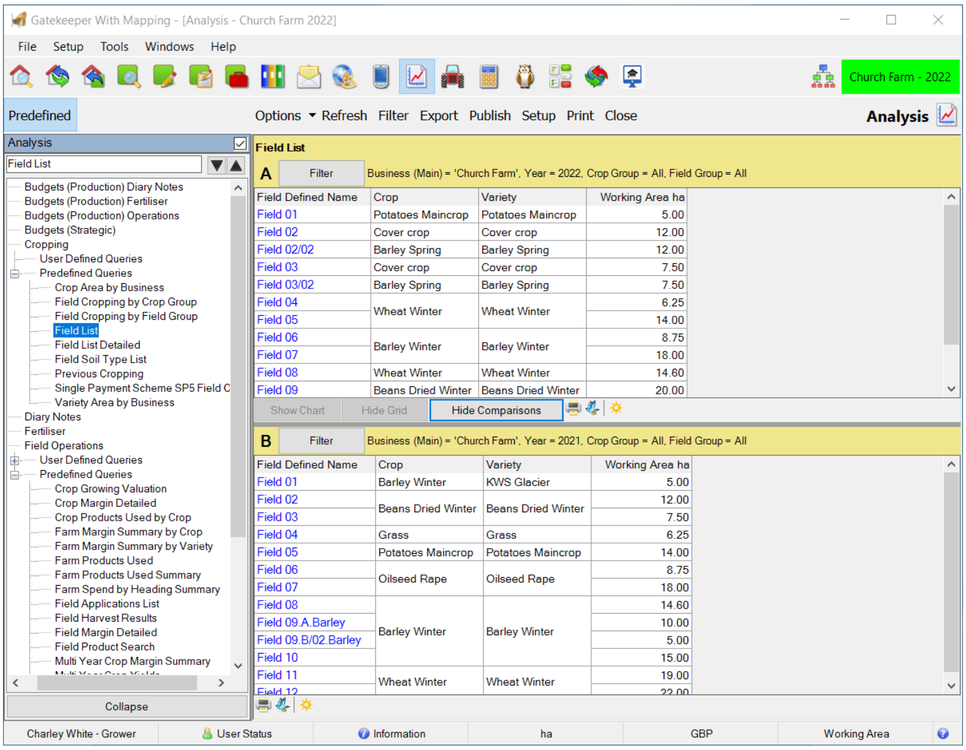
To run a comparison report:

1. Click 'Show Comparisons'



2. A second filters screen will appear. Select the filters as required for the comparison report

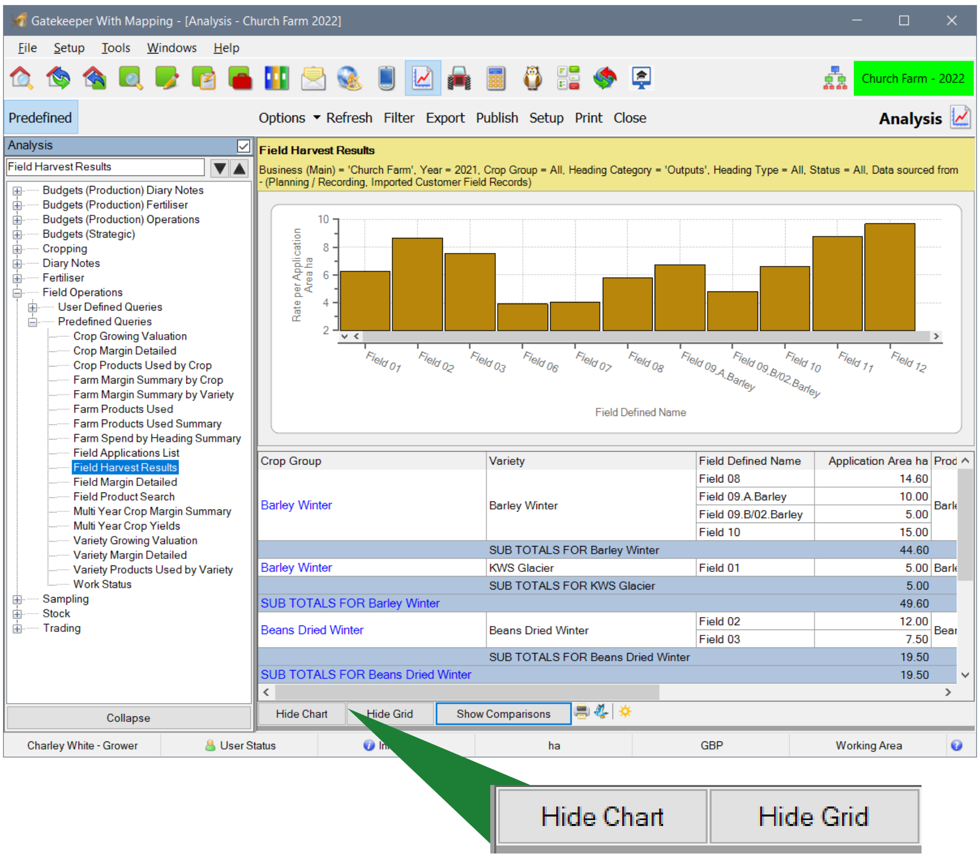
The report screen will now be split into 'A' report (first filter selection) and 'B' report (second filter selection). This option can be used on both grid and chart displayed data (see Charts, p.20)



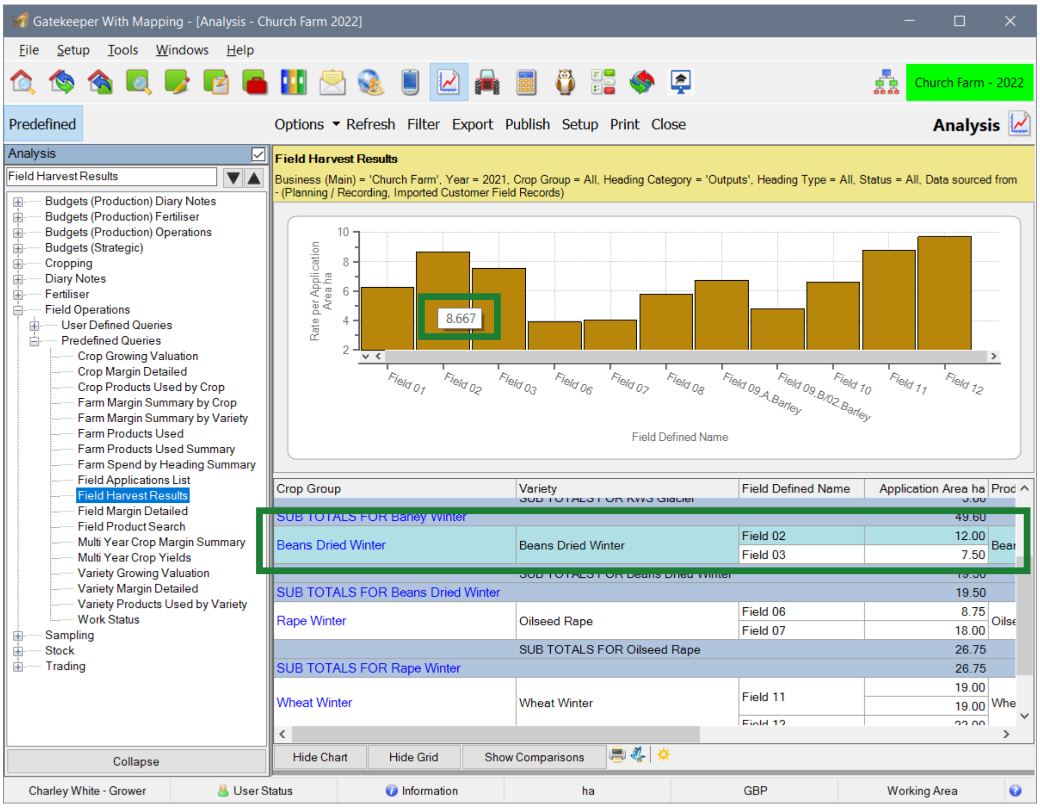
The comparison option is only effective when viewing data inside the analysis module. Save, print, or export will only use the data from report A.

Charts

Certain analysis reports include a chart (graph) as well as the grid (report data). Both the chart and the grid will be shown when the report is first run, but either can be hidden for better visibility if required:



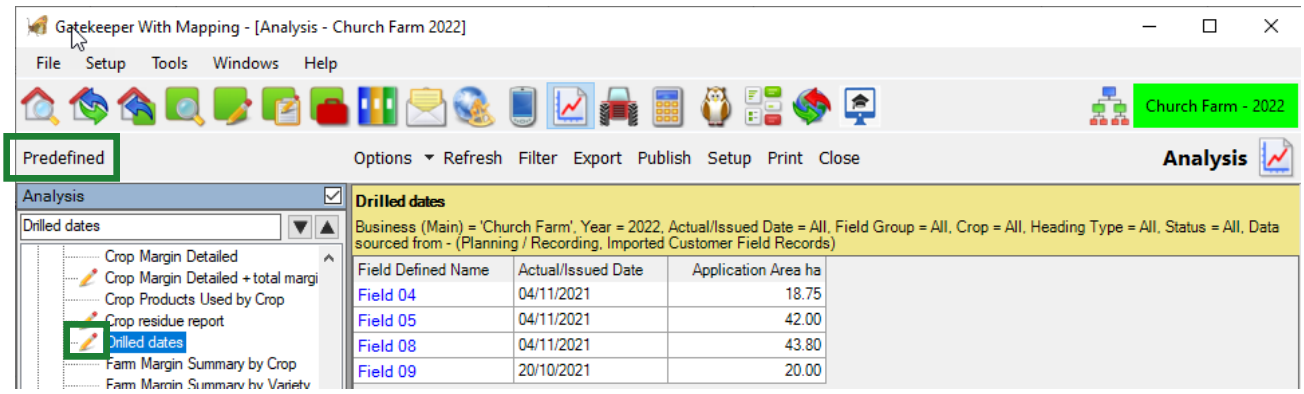
When data is displayed in a chart format, hovering the mouse over a specific bar (or other chart component) will display the data for that bar, while a single click will highlight the related data in the grid view:



Customising analysis module reports

Analysis module reports can be highly customised to give a bespoke report as required.

When customised reports have been created, they can be identified in the list with a pencil icon. Using the 'Predefined' filter will also separate the default and customised reports:



The process of editing analysis reports can seem daunting at first, but it's not as bad as it looks! The following pages cover the different customising options, but remember that the support team will also be happy to guide you through creating a custom report.

The process of creating a custom report is:

- Decide what is required in the report
- Find the closest pre-defined report
- Edit the pre-defined report by:
    - Including or excluding data fields
    - Adjusting the column order if required
    - Adjusting report filters if required
    - Adding sub-total requirements
    - Adding or removing graph displays

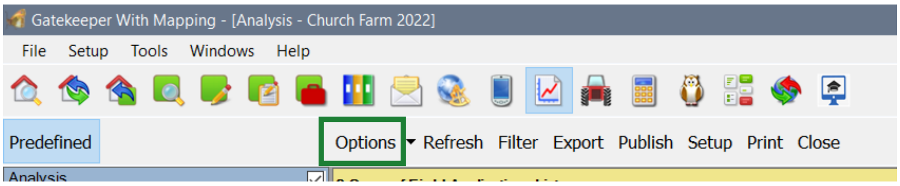
It is generally best to edit a report in many small steps, rather than trying to make all changes at once.

In order to edit a report, you will first need to make a copy of a pre-existing analysis report. To copy a report, from the main analysis screen:

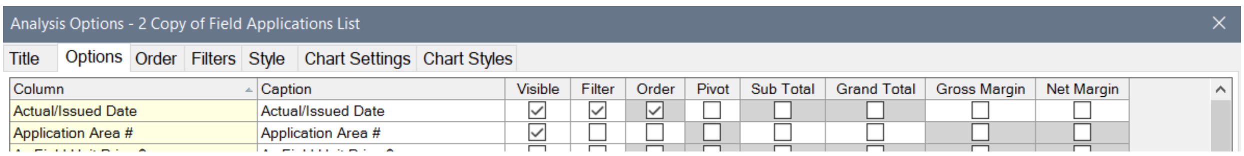
1. Select the starting report from the list on the left
2. Click ‘Setup’
3. Click ‘Copy’
4. *Optional*: rename the copied report
5. Click ‘OK’

The new report has been created. You will be shown the filters screen, and should select as required.

Once the report is visible, click ‘Options’ to view the editing options:



The options window contains a number of tabs, with a large number of options. The following subsections will go through the contents of each section. Worked examples of the process to edit analysis module reports may be found in Appendix 3 – Worked examples of editing analysis reports (p.35).



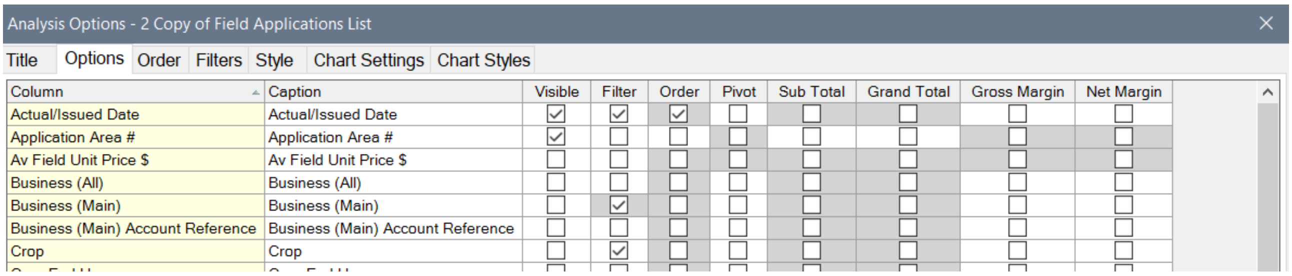
Title

The title tab controls the title of the report, and allows you to add any comments as needed. If there are a number of customised reports for different circumstances, it may be useful to add a description of the intended use of the report in the comments box.

Options

The options tab contains each different piece of data that could be included in the report, and columns of tick boxes which control how that data should be used and displayed.

The options available to include in the report will depend on the type of report that is being used (for example, a 'Fertiliser' type analysis report will have different data options than a 'Field Operations' type report).



The tick columns then control how that piece of information is utilised in the report. Where the cell surrounding the tick box is white, the box may be ticked if required. Where the cell is grey, that selection may not be made.

The yellow 'Column' data shows the different data points that may be selected. The 'Caption' column controls how this data is labelled the resulting report, and may be edited as required.

Tip: when editing an analysis report, the columns can be sorted by clicking on a column header. So to see all the active data fields in a report, clicking on the 'Visible' column header will cause all visible data fields to be sorted together.

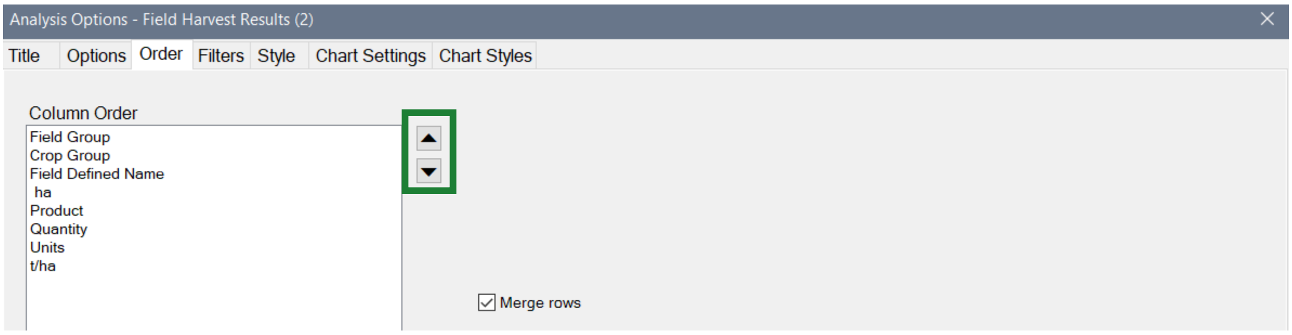
For a full breakdown of the 'Options' tab, please see Appendix 2 – The 'Options' grid – p.31.

Order

The order tab controls the order of the data columns from left to right across the page. Column order is important in report construction because it affects the breakdown of data, and the possibilities for column subtotals.

To change the order of report columns, from within the Options screen:

1. Click on the 'Order' tab
2. Click on the column to move
3. Use the up or down arrows to adjust column order (columns cannot be clicked and dragged)
4. Click 'OK' to save and close



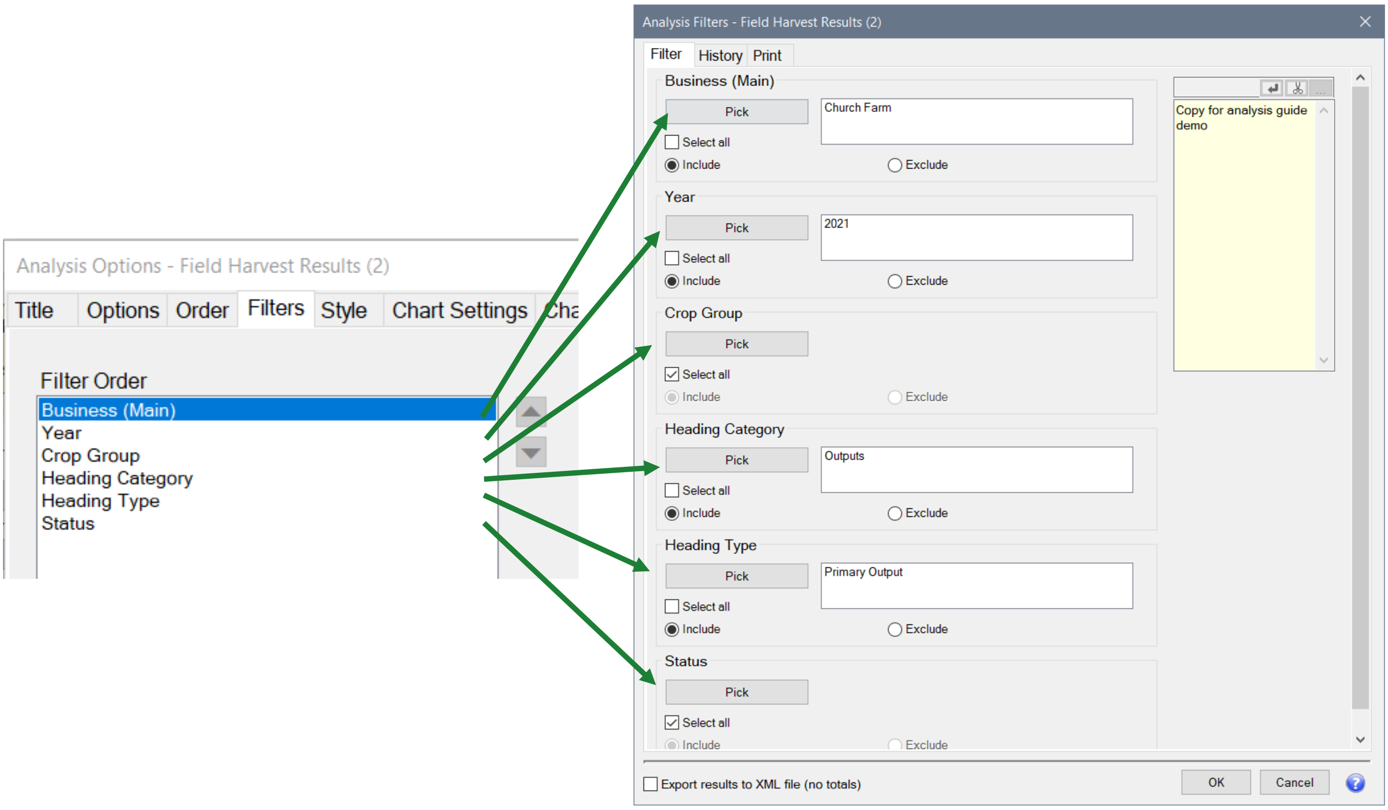
The ‘Merge rows’ tickbox controls whether adjacent rows with the same data should be merged. If unticked, each row will contain the data field result.

Any data type which had the ‘Order’ box ticked on the options tab will have additional options shown:

The ‘Sort Order’ controls alpha-numerical ordering of report results in each column, but column result ordering is subsequent to column order ordering.

Filters

Any data type that is marked as a filter will appear on this tab. Adjusting the filter order will change the order that the data types appear on the filter screen:



To change the order of filters, from within the Options screen:

1. Click on the 'Filters' tab
2. Click on the filter to move
3. Use the up or down arrows to adjust filter order (filters cannot be clicked and dragged)
4. Click 'OK' to save and close

For each filter, it is possible to set the default selection for the first time the report is run. To set a filter default, from within the Options screen:

1. Click on the 'Filters' tab
2. Click on the filter to adjust
3. Select the required default from the available options on the right hand side
4. Click 'Save' and repeat, or click 'OK' to save and close

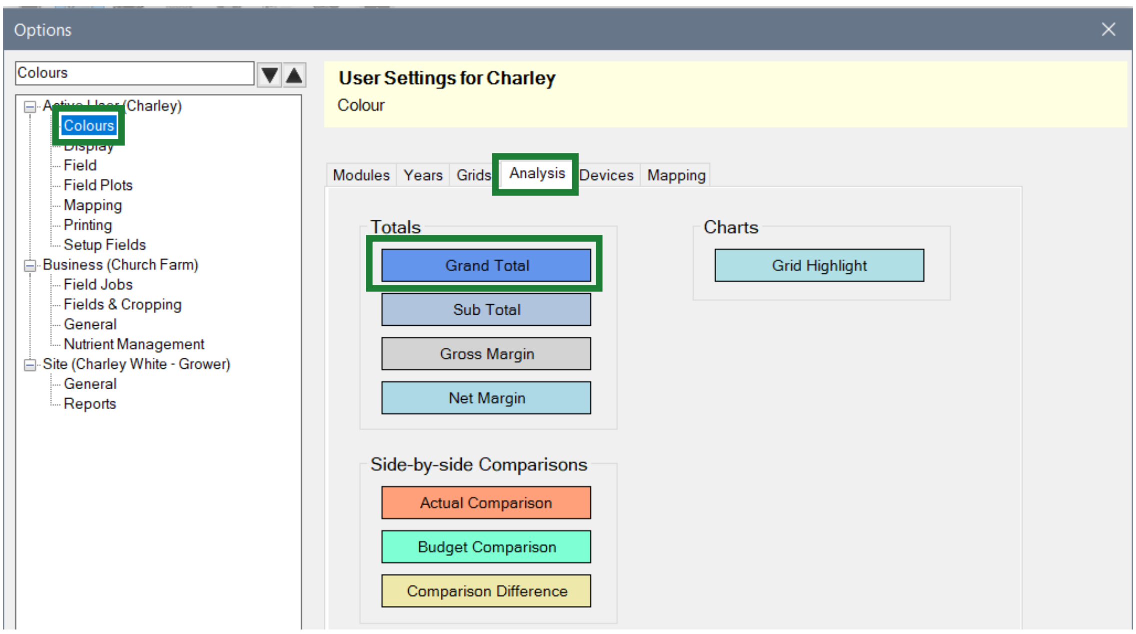
Style

The style tab allows the user to edit the font, size, and style of each column's results. To edit the display of a column, from within the Options screen:

1. Click on the 'Style' tab
2. Click on the column to adjust
3. Click the '…' selector next to font name
4. Change parameters as required
5. Click 'OK' to close font screen
6. Click 'Save' and repeat, or click 'OK' to save and close.

The style tab allows for the editing of columns. To change the colours of summary rows, from the main Gatekeeper screen:

1. Go to *Tools > Options*
2. Select 'Colours' from the list on the left hand side
3. Select the 'Analysis' tab
4. Click on the row type to change
5. Select the colour required
6. Click 'OK' to save and close



Charts

A graphical representation of the report's results can be added by turning on the chart option for a report. Charts may be bar, line, or pie graphs.

To add a chart to a report, from the Options screen:
1. Click on the 'Chart Settings' tab
2. Tick 'Include a graphical representation (chart) of the grid data
3. Select the required chart type
4. Select which data fields are required for display on the graph
5. *Optional*: control whether the chart or grid should automatically display when the report is run using the 'Visibility when first loaded' settings
6. Click 'OK' to save and close

Additional options for chart presentation may be found on the 'Chart Styles' tab.

Publishing

Customised reports are specific to the site they have been built in, but can be shared between sites by publishing.

To publish an analysis report, from the main analysis screen:
1. Select the analysis report from the list on the left hand side
2. Click 'Setup'
3. Click 'Publish Analysis Query'
4. Select required contact
5. *Optional*: add message to accompany publication
6. Click 'OK'

The report will be in your Gatekeeper outbox and ready to send next time you synchronise or do a send/receive.

Save/print/export

After running, an analysis module report can be saved, exported, or printed as required.

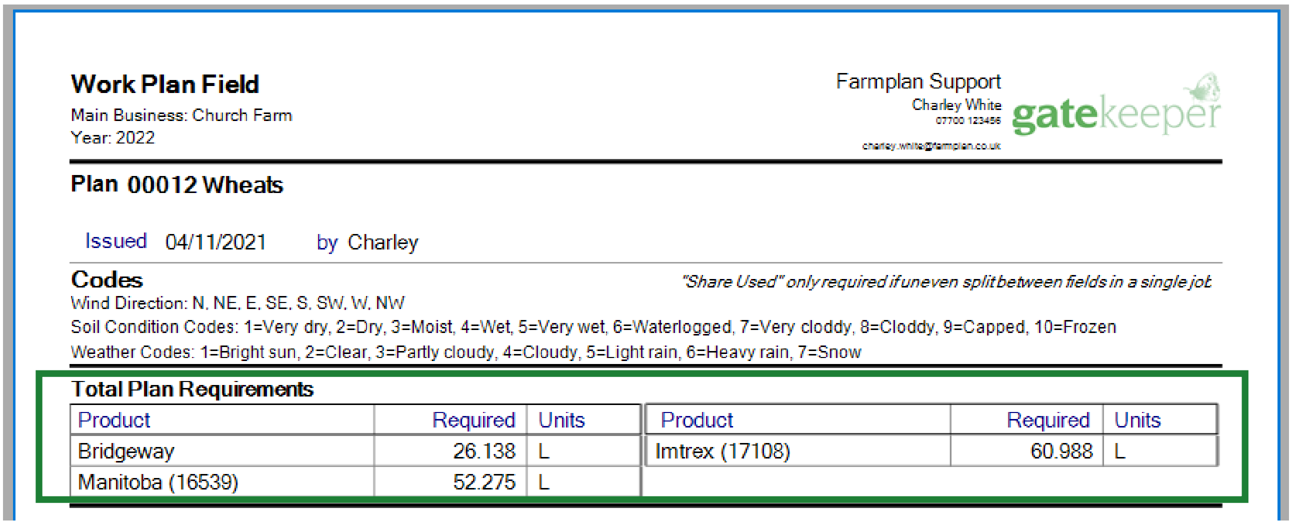
To print an analysis report:
1. Click 'Print'
2. Check page layout and settings as required
3. Click the printer icon
4. Check printer selection and settings, and click 'OK'

To save or publish an analysis report:
1. Click 'Publish'
2. Select file format as required
3. Select publishing option as required
4. 'OK' to proceed.

If you elected to use the Gatekeeper publishing system, your publication will be sent the next time you synchronise or do a send/receive.

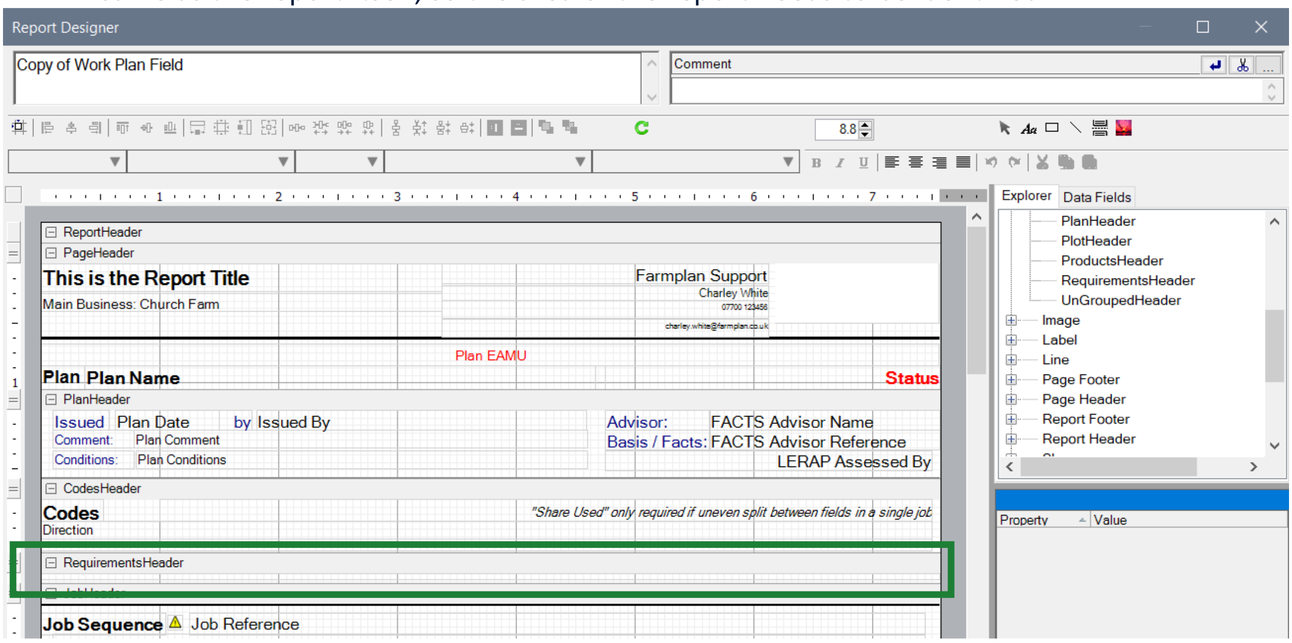
Appendix 1 – Editing a module report

In this worked example, the default planning report 'Work Plan Field' will be edited so that the product names and total amounts required for the job are more prominently displayed for the operator.



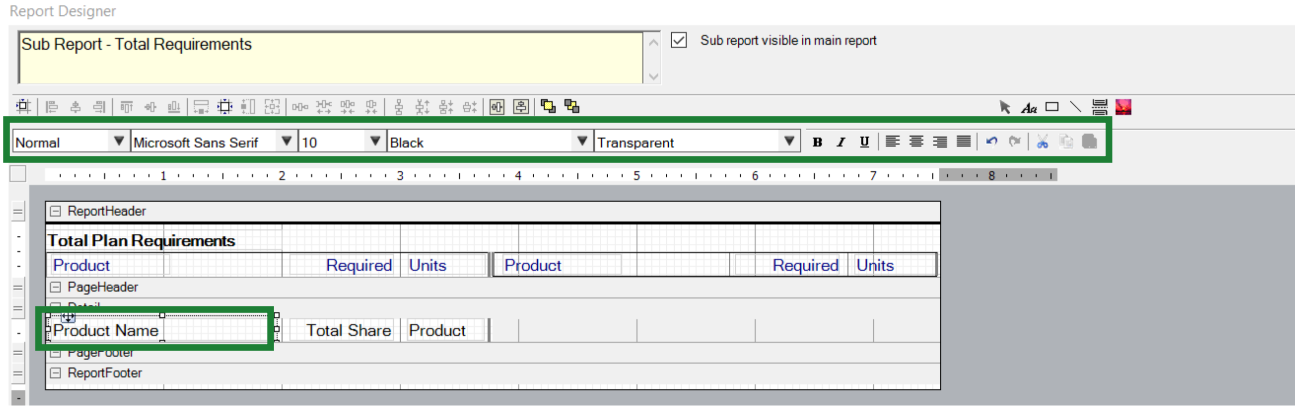
From the planning module:

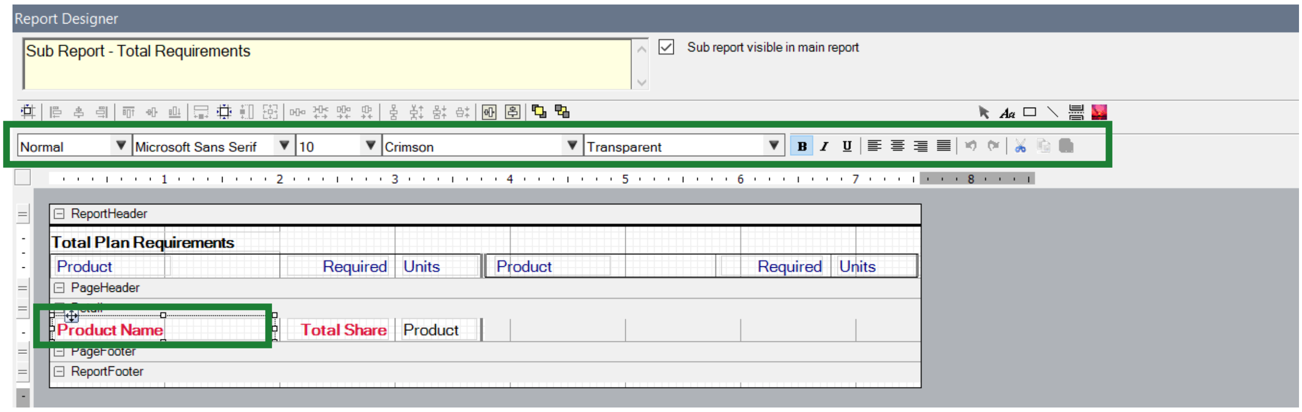
1. Click 'Reports'
2. Select 'Work Plan Field' from the list on the left hand side
3. Click 'Setup'
4. Click 'Copy' and then 'Yes' when the query message appears
5. The report designer will open automatically. The layout of the report components is the same as the report itself, so the area of the report needs to be identified:



In this case, the next section underneath 'Codes' doesn't have any visible content, but it is titled 'Requirements Header'. This suggests a sub-report; a single click into the section will cause the sub-report editing window to appear in the bottom right corner.

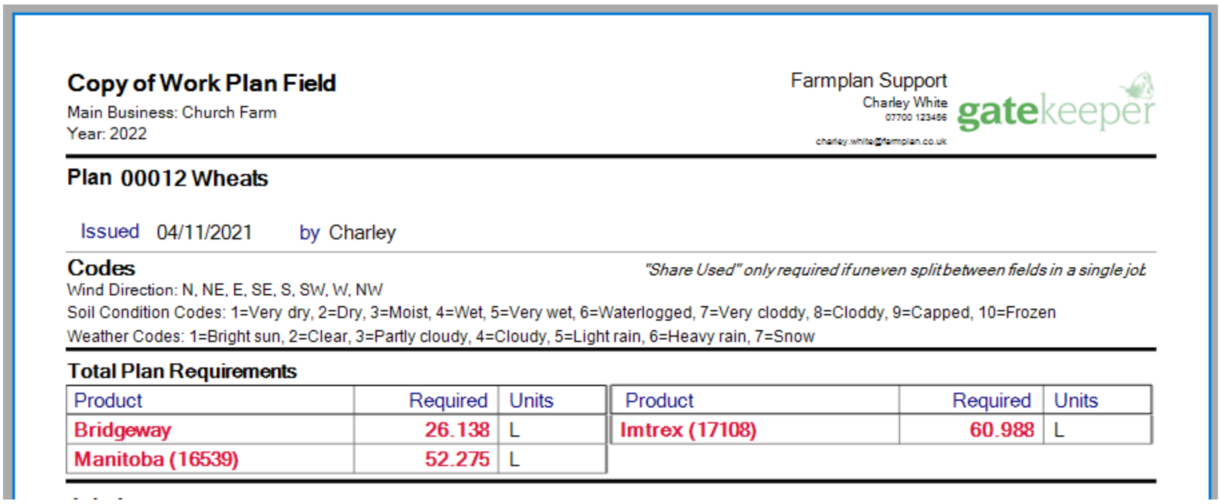
6. Click ‘Design Sub Report’. Inside the sub report designer, the data field to be edited can be identified and edited;
7. Click on the first data field to edit – in this case, the ‘Product Name’
8. Edit appearance using colour, font, and text options as needed:





9. Repeat for the second data field.
10. Click ‘OK’ to save out of the sub-report report designer
11. Click ‘OK’ to save out of the report designer

The report can now be run with edited appearance:



Copy of Work Plan Field
Main Business: Church Farm
Year: 2022

Farmplan Support
Charley White
07700 123456
charley.white@farmplan.co.uk
gatekeeper

Plan 00012 Wheats

Issued 04/11/2021 by Charley

Codes
"Share Used" only required if uneven split between fields in a single job
Wind Direction: N, NE, E, SE, S, SW, W, NW
Soil Condition Codes: 1=Very dry, 2=Dry, 3=Moist, 4=Wet, 5=Very wet, 6=Waterlogged, 7=Very cloddy, 8=Cloddy, 9=Capped, 10=Frozen
Weather Codes: 1=Bright sun, 2=Clear, 3=Partly cloudy, 4=Cloudy, 5=Light rain, 6=Heavy rain, 7=Snow

Total Plan Requirements

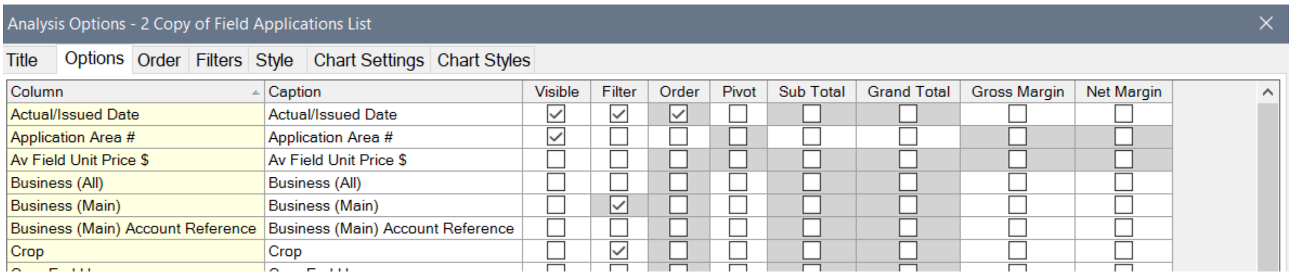
Product	Required	Units	Product	Required	Units
Bridgeway	26.138	L	Imtrex (17108)	60.988	L
Manitoba (16539)	52.275	L			

To return to the report designer window to make further edits:
1. Click ‘Reports’
2. Click ‘Setup’ (bottom left)

3. Select the report to edit
4. Click ‘Design’

Appendix 2 – The ‘Options’ grid

The options tab controls which pieces of information should be displayed in an analysis report. It also controls how they interact.



This appendix will work through each column available and explain how they can be used for editing analysis reports. Appendix 3 – Worked examples of editing analysis reports (p.35) then goes through the process of editing an analysis report step by step.

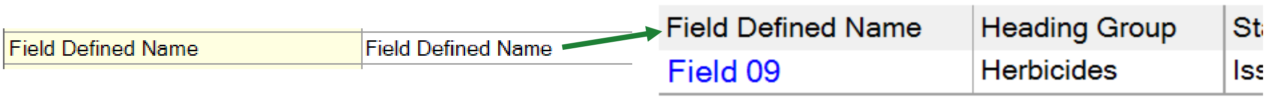
Column

The first column, shown in yellow and titled ‘Column’, shows each different data type available for the report category. The options shown will vary depending on the report type (for example, a ‘Fertiliser’ type report will have different options than a ‘Stock’ type).

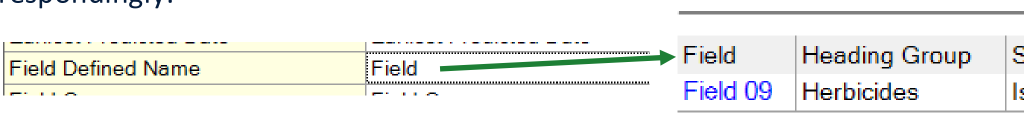
Data types cannot be edited or moved between groups, so an analysis report can only be composed from the options visible in this column.

Caption

The contents of this column is what will be displayed on any reports generated for the selected data type. For example, the default label for a field name is ‘Field Defined’ Name, and so any field column in the report is headed with the same:



If the ‘Caption’ column is changed to ‘Field’, then the column heading on reports is changed correspondingly:



The data itself isn’t changed, but the text at the top of the column is controlled by the caption. This can be useful to ensure a report doesn’t spread too widely across a page.

Visible

If a data type is ticked as ‘Visible’, it will be displayed in the report. Most data types will be visible but, for example, you might wish to be able to use a data type as a filter (e.g., job status), but not display in the final report. In that case, the data type in question should not be ticked to be visible.

Filter

If a data type is selected as a filter, it will become an additional filter for that report. Information can then be included or excluded based on that data type. Default settings can be set for each filter – please see Filters (p.24).

Order

To include a data type in the order sorting (see Order, p.23) tick the ‘Order’ column.

Pivot, sub total, and grand total

The pivot option works hand in hand with both the sub total and grand total options.

When viewing the sub or grand total columns, they will only be white (selectable) for data types that are numerical. This is because only numerical data can be summed.

The pivot column is what allows the user to choose the point at which the sub or grand total should be applied.

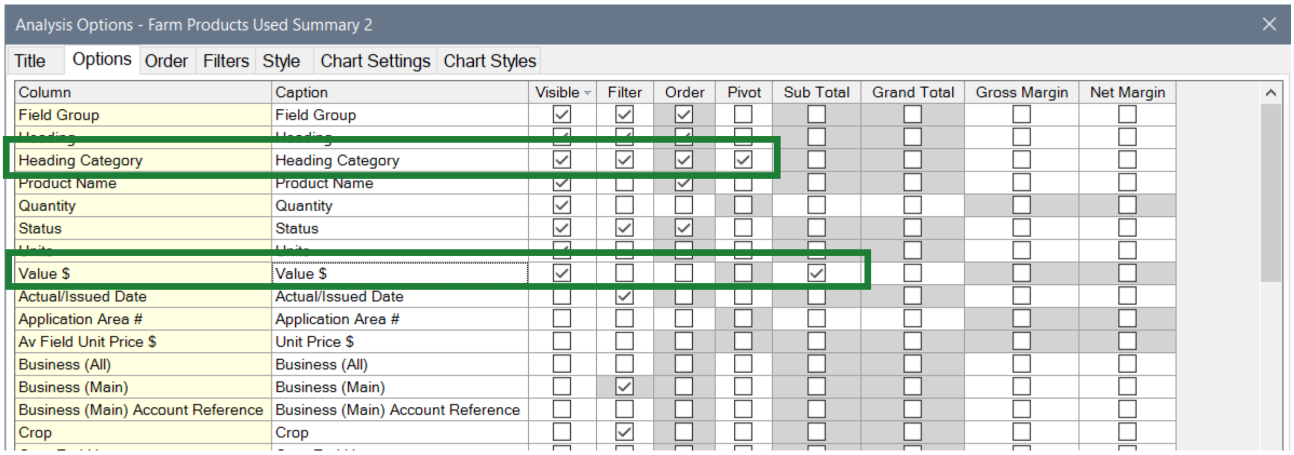
For example, the standard report ‘Farm Products Used Summary’ includes a sub total at the field group level by default:

Field Group	Heading Category	Heading	Status	Product Name	Quantity	Units	Value GBP
Far Farm	Variable Costs	Adjuvants	Started	C-Cure	1.700	L	15.15
			Completed Not Confirmed	Biopower	2.000		14.48
				C-Cure	4.800		42.77
		Fertiliser		20-10-10	500.000	kg	140000.00
				20-8-12+7	2100.000		619500.00
				N35	410.000		134070.00
			Completed		5000.000		0.00
		Fungicides	Started	Manitoba (16539)	12.750	L	224.40
			Completed Not Confirmed	Fandango (17318)	32.500		958.75
				Manitoba (16539)	28.500		501.60
			Completed	Fandango (17318)	60.000		0.00
		Herbicides	Completed Not Confirmed	Conan 360 (19531)	5.000		25.95
		Organic Manure	Completed	Cow muck	500.000	t	1000.00
		Seed / Plants		Laureate	3300.000	kg	1122.00
				Shabras	7500.000		2962.50
				Tundra	1538.462		424.62
	SUB TOTALS FOR Variable Costs						900862.21

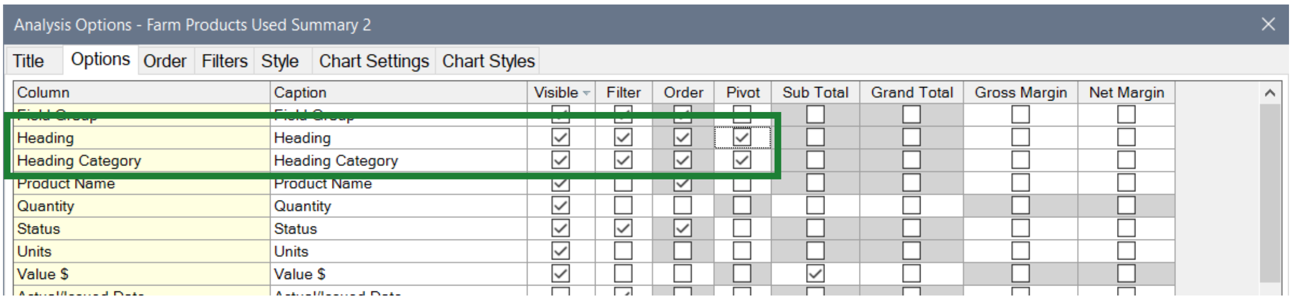
If the requirement is to add a subtotal for spend of each product heading (i.e., a sub-total for adjuvants, fertiliser, etc) to this report, there are two settings to be checked.

Requiring a subtotal by product heading has two parts: the value which should be added up (so value is the **sub-total** data field) and the point at which it should be added up is the product heading (so heading is the **pivot** point).

When the options screen for this report is opened, there is already a tick in the sub total column for value. This is because the default report includes a subtotal by heading category (the 'Sub total for variable cost' line shown above. This is instigated by the tick in the Pivot column for the Heading Category line.



Therefore, to add a subtotal by product heading, we also need a tick in pivot for the heading data field line.



This means that we want a sub total of value at both the heading and the heading category level, and the report is edited as such:

Field Group	Heading Category	Heading	Status	Product Name	Quantity	Units	Value GBP
Far Farm	Variable Costs	Adjuvants	Completed Not Confirmed	Biopower	2.000	L	14.48
				C-Cure	4.800		42.77
		SUB TOTALS FOR Adjuvants					57.25
Far Farm	Variable Costs	Fertiliser	Completed Not Confirmed	20-10-10	500.000	kg	140000.00
				20-8-12+7	2100.000		619500.00
				N35	410.000		134070.00
			Completed		5000.000		0.00
		SUB TOTALS FOR Fertiliser					893570.00
Far Farm	Variable Costs	Fungicides	Completed Not Confirmed	Fandango (17318)	32.500	L	958.75
				Manitoba (16539)	28.500		501.60
			Completed	Fandango (17318)	60.000		0.00
		SUB TOTALS FOR Fungicides					1460.35
Far Farm	Variable Costs	Herbicides	Completed Not Confirmed	Conan 360 (19531)	5.000	L	25.95
		SUB TOTALS FOR Herbicides					25.95
Far Farm	Variable Costs	Organic Manure	Completed	Cow muck	500.000	t	1000.00
		SUB TOTALS FOR Organic Manure					1000.00
Far Farm	Variable Costs	Seed / Plants	Completed	Laureate	3300.000	kg	1122.00
				Shabras	7500.000		2962.50
				Tundra	1538.462		424.62
		SUB TOTALS FOR Seed / Plants					4509.12
	SUB TOTALS FOR Variable Costs						900622.66

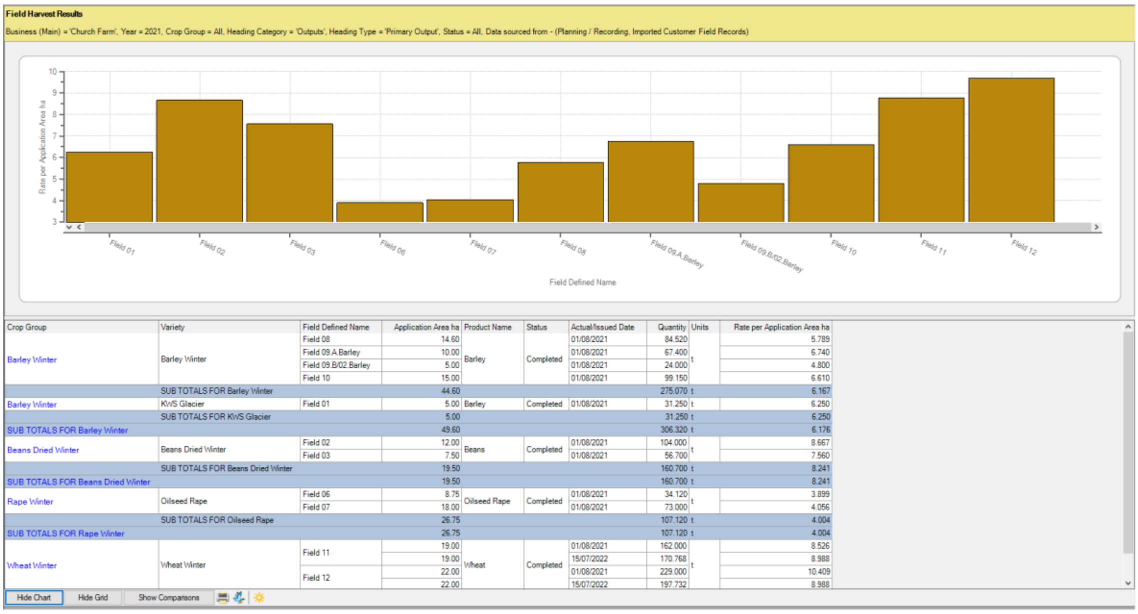
In summary: the sub total or grand total columns are for the number column that you want to be added up – sub or grand totals are applied to columns. The pivot is the point at which you want that adding calculation to take place – the pivot is applied to rows. The two come together to give you a sub or grand total in a specific place in the report.

Gross margin and net margin

For gross or net margin to be calculated in a report, there must be one data field in the report with a sub total designated.

Appendix 3 – Worked examples of editing analysis reports

This example will use the default Field Operations report 'Field Harvest Results' as an example. When the default report is run, after selecting the Heading Category and Heading Type as prompted, the result is a chart and a grid both displayed in the analysis pane:



To make any edits, it is necessary to first copy the default report (see Customising analysis module reports, p.22). If the report is needed for figures rather than the graph, the initial display of the graph can be prevented by:

- Clicking 'Options'
- Selecting the 'Chart Settings' tab
- Selecting the preferred setting in the 'Visibility when first loaded' section

Changing report contents

The default report looks like this:

Crop Group	Variety	Field Defined Name	Application Area ha	Product Name	Status	Actual/Issued Date	Quantity	Units	Quantity per Application Area ha
Barley Winter	Barley Winter	Field 08	14.60	Barley	Completed	01/08/2021	84.520	t	5.789
		Field 09.A Barley	10.00			01/08/2021	67.400		6.740
		Field 09.B/02.Barley	5.00			01/08/2021	24.000		4.800
		Field 10	15.00			01/08/2021	99.150		6.610
	SUB TOTALS FOR Barley Winter		44.60				275.070	t	6.167
Barley Winter	KWS Glacier	Field 01	5.00	Barley	Completed	01/08/2021	31.250	t	6.250
	SUB TOTALS FOR KWS Glacier		5.00				31.250	t	6.250
SUB TOTALS FOR Barley Winter			49.60				306.320	t	6.176
Beans Dried Winter	Beans Dried Winter	Field 02	12.00	Beans	Completed	01/08/2021	104.000	t	8.667
		Field 03	7.50			01/08/2021	56.700		7.560
	SUB TOTALS FOR Beans Dried Winter		19.50				160.700	t	8.241
SUB TOTALS FOR Beans Dried Winter			19.50				160.700	t	8.241
Rape Winter	Oilseed Rape	Field 06	8.75	Oilseed Rape	Completed	01/08/2021	34.120	t	3.899
		Field 07	18.00			01/08/2021	73.000		4.056
	SUB TOTALS FOR Oilseed Rape		26.75				107.120	t	4.004
SUB TOTALS FOR Rape Winter			26.75				107.120	t	4.004
Wheat Winter	Wheat Winter	Field 11	19.00	Wheat	Completed	01/08/2021	162.000	t	8.526
			19.00			15/07/2022	170.768		8.988
		Field 12	22.00			01/08/2021	229.000		10.409
			22.00			15/07/2022	197.732		8.988
	SUB TOTALS FOR Wheat Winter		82.00				759.500	t	9.262
SUB TOTALS FOR Wheat Winter			82.00				759.500	t	9.262

A good place to start with editing reports is to decide what information is displayed but not required. Based on the screenshot above, to remove variety, status, and harvest date from the data above, the user would:

- Click 'Options'
- Untick 'Visible' for each of the data types not required
- Click 'OK'

Crop Group	Field Defined Name	Application Area ha	Product Name	Quantity	Units	Quantity per Application Area ha
Barley Winter	Field 01	5.00	Barley	31.250	t	6.250
	Field 08	14.60		84.520		5.789
	Field 09.A.Barley	10.00		67.400		6.740
	Field 09.B/02.Barley	5.00		24.000		4.800
	Field 10	15.00		99.150		6.610
SUB TOTALS FOR Barley Winter		49.60		306.320	t	6.176
Beans Dried Winter	Field 02	12.00	Beans	104.000	t	8.667
	Field 03	7.50		56.700		7.560
SUB TOTALS FOR Beans Dried Winter		19.50		160.700	t	8.241
Rape Winter	Field 06	8.75	Oilseed Rape	34.120	t	3.899
	Field 07	18.00		73.000		4.056
SUB TOTALS FOR Rape Winter		26.75		107.120	t	4.004
Wheat Winter	Field 11	38.00	Wheat	332.768	t	8.757
	Field 12	44.00		426.732		9.698
SUB TOTALS FOR Wheat Winter		82.00		759.500	t	9.262

The report is now 'cleaner', in that unnecessary information has been removed, but the area columns are disproportionately wide, due to their captions. To edit these captions:

- Click 'Options'
- Edit the appropriate captions. In this example 'Application Area ha' is replaced with 'ha', and 'Quantity per Application Area ha' is replaced with 't/ha'
- Click 'OK'

The report now looks like this:

Crop Group	Field Defined Name	ha	Product	Quantity	Units	t/ha
Barley Winter	Field 01	5.00	Barley	31.250	t	6.250
	Field 08	14.60		84.520		5.789
	Field 09.A.Barley	10.00		67.400		6.740
	Field 09.B/02.Barley	5.00		24.000		4.800
	Field 10	15.00		99.150		6.610
SUB TOTALS FOR Barley Winter		49.60		306.320	t	6.176
Beans Dried Winter	Field 02	12.00	Beans	104.000	t	8.667
	Field 03	7.50		56.700		7.560
SUB TOTALS FOR Beans Dried Winter		19.50		160.700	t	8.241
Rape Winter	Field 06	8.75	Oilseed Rape	34.120	t	3.899
	Field 07	18.00		73.000		4.056
SUB TOTALS FOR Rape Winter		26.75		107.120	t	4.004
Wheat Winter	Field 11	38.00	Wheat	332.768	t	8.757
	Field 12	44.00		426.732		9.698
SUB TOTALS FOR Wheat Winter		82.00		759.500	t	9.262

In this example, we want to see the field groups in the report. To add field groups as a visible data type:

- Click ‘Options’
- Tick ‘Visible’ for the line ‘Field Group’
- Click ‘OK’

If field group is added as a data type, but the order is not changed, it will appear as the last column in the report:

Crop Group	Field Defined Name	ha	Product	Quantity	Units	t/ha	Field Group
	Field 01	5.00		31.250		6.250	Far Farm
	Field 08	14.60		84.520		5.789	
Barley Winter	Field 09.A.Barley	10.00	Barley	67.400	t	6.740	Main Field Group
	Field 09.B/02.Barley	5.00		24.000		4.800	
	Field 10	15.00		99.150		6.610	Far Farm
SUB TOTALS FOR Barley Winter		49.60		306.320	t	6.176	
Beans Dried Winter	Field 02	12.00	Beans	104.000	t	8.667	Main Field Group
	Field 03	7.50		56.700		7.560	Far Farm
SUB TOTALS FOR Beans Dried Winter		19.50		160.700	t	8.241	
Rape Winter	Field 06	8.75	Oilseed Rape	34.120	t	3.899	Main Field Group
	Field 07	18.00		73.000		4.056	
SUB TOTALS FOR Rape Winter		26.75		107.120	t	4.004	
Wheat Winter	Field 11	38.00	Wheat	332.768	t	8.757	Far Farm
	Field 12	44.00		426.732		9.698	
SUB TOTALS FOR Wheat Winter		82.00		759.500	t	9.262	

In the example above, the field group is simply visible as an additional piece of information, tacked onto the end of the existing columns. However, if the order is adjusted so that ‘Field Group’ sits after the crop group, the results for each crop are split into each field group:

Crop Group	Field Group	Field Defined Name	ha	Product	Quantity	Units	t/ha
	Far Farm	Field 01	5.00		31.250		6.250
		Field 10	15.00		99.150		6.610
Barley Winter		Field 08	14.60	Barley	84.520	t	5.789
	Main Field Group	Field 09.A.Barley	10.00		67.400		6.740
		Field 09.B/02.Barley	5.00		24.000		4.800
SUB TOTALS FOR Barley Winter			49.60		306.320	t	6.176
Beans Dried Winter	Far Farm	Field 03	7.50	Beans	56.700	t	7.560
	Main Field Group	Field 02	12.00		104.000		8.667
SUB TOTALS FOR Beans Dried Winter			19.50		160.700	t	8.241
Rape Winter	Main Field Group	Field 06	8.75	Oilseed Rape	34.120	t	3.899
		Field 07	18.00		73.000		4.056
SUB TOTALS FOR Rape Winter			26.75		107.120	t	4.004
Wheat Winter	Far Farm	Field 11	38.00	Wheat	332.768	t	8.757
		Field 12	44.00		426.732		9.698
SUB TOTALS FOR Wheat Winter			82.00		759.500	t	9.262

To adjust the order of report columns:

- Click ‘Options’
- Select the ‘Order’ tab
- Click on the column to move
- Use the up or down arrows to adjust column order (columns cannot be clicked and dragged)
- Click ‘OK’

Adding the field group in like this has meant that the field group is displayed on the report, but has not affected how the numbers are calculated and displayed. For a subtotal of harvest product by each field group, field group should be selected as a pivot point:

Crop Group	Field Group	Field Defined Name	ha	Product Name	Quantity	Units	t/ha
Barley Winter	Far Farm	Field 01	5.00	Barley	31.250	t	6.250
		Field 10	15.00		99.150		6.610
	SUB TOTALS FOR Far Farm		20.00		130.400	t	6.520
Barley Winter	Main Field Group	Field 08	14.60	Barley	84.520	t	5.789
		Field 09.A.Barley	10.00		67.400		6.740
		Field 09.B/02.Barley	5.00		24.000		4.800
	SUB TOTALS FOR Main Field Group		29.60		175.920	t	5.943
SUB TOTALS FOR Barley Winter			49.60		306.320	t	6.176
Beans Dried Winter	Far Farm	Field 03	7.50	Beans	56.700	t	7.560
	SUB TOTALS FOR Far Farm		7.50		56.700	t	7.560
Beans Dried Winter	Main Field Group	Field 02	12.00	Beans	104.000	t	8.667
	SUB TOTALS FOR Main Field Group		12.00		104.000	t	8.667
SUB TOTALS FOR Beans Dried Winter			19.50		160.700	t	8.241
Rape Winter	Main Field Group	Field 06	8.75	Oilseed Rape	34.120	t	3.899
		Field 07	18.00		73.000		4.056
	SUB TOTALS FOR Main Field Group		26.75		107.120	t	4.004
SUB TOTALS FOR Rape Winter			26.75		107.120	t	4.004
Wheat Winter	Far Farm	Field 11	38.00	Wheat	332.768	t	8.757
		Field 12	44.00		426.732		9.698
	SUB TOTALS FOR Far Farm		82.00		759.500	t	9.262
SUB TOTALS FOR Wheat Winter			82.00		759.500	t	9.262

The report above shows the totals for each crop at the field group level, and then as a whole.

However, if the order is adjusted again so that 'Field Group' is the first column, this time the field group provides the first division, and crop groups are secondary:

Field Group	Crop Group	Field Defined Name	ha	Product	Quantity	Units	t/ha
Far Farm	Barley Winter	Field 01	5.00	Barley	31.250	t	6.250
		Field 10	15.00		99.150		6.610
	SUB TOTALS FOR Barley Winter		20.00		130.400	t	6.520
Far Farm	Beans Dried Winter	Field 03	7.50	Beans	56.700	t	7.560
	SUB TOTALS FOR Beans Dried Winter		7.50		56.700	t	7.560
Far Farm	Wheat Winter	Field 11	38.00	Wheat	332.768	t	8.757
		Field 12	44.00		426.732		9.698
	SUB TOTALS FOR Wheat Winter		82.00		759.500	t	9.262
Main Field Group	Barley Winter	Field 08	14.60	Barley	84.520	t	5.789
		Field 09.A.Barley	10.00		67.400		6.740
		Field 09.B/02.Barley	5.00		24.000		4.800
	SUB TOTALS FOR Barley Winter		29.60		175.920	t	5.943
Main Field Group	Beans Dried Winter	Field 02	12.00	Beans	104.000	t	8.667
	SUB TOTALS FOR Beans Dried Winter		12.00		104.000	t	8.667
Main Field Group	Rape Winter	Field 06	8.75	Oilseed Rape	34.120	t	3.899
		Field 07	18.00		73.000		4.056
	SUB TOTALS FOR Rape Winter		26.75		107.120	t	4.004

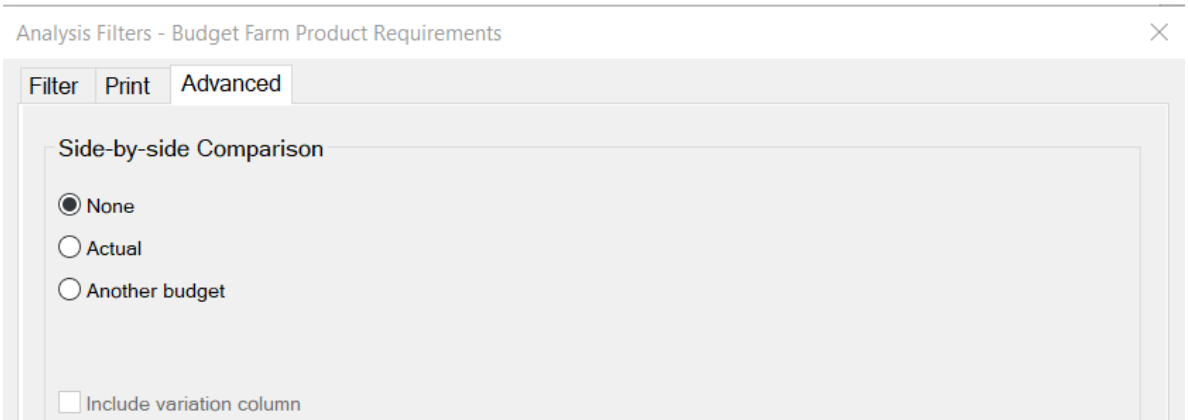
In this final version of the same report, you can see that the combination of the order of the columns and the sub-total options means that the subtotal lines are now displaying the totals for each field group and crop, whereas in all other reports they have just been for each crop. The data displayed is the same, but the combination of sub-totals selected and column order affects its final presentation.

Appendix 4 – Budgets in the analysis module

Where the budgets module is in use, additional default reports are available, and an extra tab is found on the filters screen.

When the budgeting module is activated, a third tab is added to the filters screen of the analysis module. The 'Advanced' tab contains addition report filters which only apply to budget module specific reports.

The 'Side by Side Comparison' section contains the options available for comparing a second data set against the selected budget:



Where 'Actual' is selected, the report will show the selected budget against actual figures of the current cropping year. You will be given the option to select which field jobs should be included into the actual figures based on status.

Where 'Another budget' is selected, the report will show the selected budget against a second selected budget. If using this option, ensure there is only one budget selected on the 'Filter' tab of the screen.

There is also a tick box option 'Include variation column'. When this option is used, an additional column showing the variation between selected budget and the comparison source will be displayed.

The 'Time Line' section controls the increments into which the report results are split. Once an increment has been selected, you will be prompted to select the start and end dates of the report. Once dates have been selected, the 'Time Increments' section will automatically calculate how many columns the report will include, based on your selected time increments and from/to dates. The maximum number of columns for a report is 100, so if your selection results in more than 100 column, you will need to change either your increment or the from/to date range.

If a time increment is selected, there is also the option under 'Budget Date to Use' to select whether it is job dates or payment dates that should inform the report.