



Agrisoft Systems NEWSLETTER

Forty-first edition, Apr.— Jun. 2022

Message from the Management

News from Agrisoft Systems

Dear Customers and Friends,

The biggest development milestone of the past few months was the completion and launch of the newest OMP version upgrade, OMP Plantation 10.2. As usual, this upgrade has been rolled out free of charge to our customers with active maintenance and upgrade (MUA) agreements. The biggest addition in this version is a set of new data analysis tools comprising a new report and data analysis form to focus on the best and worst performing blocks. Whereas previous versions of OMP already had tools to view the top and bottom blocks, the new features go into far more detail than before not only on the yield components themselves but also on a variety of other agronomic parameters. I am confident that agronomist users will find this very interesting to be able to get a very quick idea of what might be the most relevant drivers of good or bad performance in the plantation. For example, the new best and worst blocks report shows averaged values of parameters like the leaf nutrient levels (amongst many others) in the subgroups of the best and worst blocks, in addition to the individual block values. This makes it possible to quickly spot both systematic differences between the groups of best and worst blocks, as well as individual outliers that may cause underperformance of individual blocks. Other changes in OMP Plantation 10.2 include the possibility to ignore nutrients from certain fertilizer application methods in nutrient balance calculations and to record the soil total P content. For a more detailed review of the new version, please refer to the previous edition of this newsletter.

Alongside the release, development work has continued as normal. One of the larger changes

that we are working on is a revised system for recording the average bunch weights used in the OMP BBC black bunch count crop forecasting module. In the current system, OMP will calculate the forecast bunch weights based on historical bunch weight data. Several different calculation options and settings are available for users to customize exactly how this bunch weight data should be calculated. However, at the moment there is no direct control over the bunch weights of each individual block. This means that it is difficult to account for or correct individual outliers, where a particular block may not conform to the general calculation logic for one reason or another. To offset this, we are working on a system whereby the forecast bunch weight can be edited and entered manually for each block and forecast month. Of course, we will keep the historical calculation methods available. This means users can simply load forecast bunch weights calculated from historical data as in previous versions of OMP at the click of a button, but if necessary they can also edit individual values manually. It will also be possible to import the forecast bunch weight data from Excel spreadsheets. Therefore, the new system will provide the best of all worlds by adding total flexibility but without making data entry more onerous for those who would like to stick with the historical calculation methods.



Yours sincerely,

Max Kerstan



Feature

User access control in OMP Plantation

In its original form with a back-end database in Microsoft Access, working with OMP data was in many ways similar to working with Word Documents or Excel Spreadsheets. In particular, simultaneous data entry by multiple users was generally not possible. Instead, data entry was typically either handed over to one designated person, or the data files were passed around so that users could carry out data entry/editing in turns. At regular intervals, typically on a monthly basis, the updated data files would be copied or sent to all data analysis users.

With improving network infrastructure and remote working solutions, more and more OMP

customers have moved towards centralized OMP installations in recent years. There are many ways to set up the system in detail, but the recommended option is to use a centralized server that hosts a single OMP database and runs copies of the OMP front-end application. Recent versions of OMP include many changes that make this kind of setup feasible, in particular the move to an SQL Server back-end database and the multi-user launcher introduced in OMP 10.1.

While the new system has many advantages, data security is more of an issue as all users are accessing the same data file. In particular, it is important to prevent unauthorized users such as

GIS	Global protection level settings
User access control	Require user authentication for:
Password protection	<input type="checkbox"/> Application start
User list	<input type="checkbox"/> Export data
User groups	<input checked="" type="checkbox"/> Edit data
	<input checked="" type="checkbox"/> Edit FP recommendations
	<input checked="" type="checkbox"/> Edit crop budget
	<input checked="" type="checkbox"/> Edit FS definitions
	<input checked="" type="checkbox"/> Edit picker definitions
	<input checked="" type="checkbox"/> Import from backup
	<input checked="" type="checkbox"/> Use maintenance tools
	<input checked="" type="checkbox"/> Edit system settings
	<input checked="" type="checkbox"/> Edit UAC settings

Figure 1: Password protection settings.



Agrisoft Systems NEWSLETTER

Apr.— Jun. 2022

Feature

pure data analysis users from editing or even deleting data inadvertently. In the old system, particularly in the case where a single operator was responsible for all data entry in one master copy of the data file, this would be relatively inconsequential. Even if a data analysis user were to edit any data on his or her local copy of the database, these changes would never propagate into the master copy or to other users.

In a well-managed OMP setup, the database will be backed up automatically on a regular basis, often once a day. While this serves as a safeguard against inadvertent data edits, rolling back means that any later data inputs will need to be redone and the process can be onerous. It is clearly far better to reduce the possibility of these kinds of data entry mistakes in the first

place. For this purpose, OMP Plantation includes a built-in user access control system, which can be used to restrict access to various parts of the program to only authorized users.

The relevant configuration for the user access control can be made in the main OMP system settings area. User authentication can be required for different parts of the program, as shown in figure 1. As described above, the most obvious point to restrict is the possibility of editing data. Once this checkbox is activated, only authenticated and authorized users will be able to open any data entry form. Other options give the option of more finely-grained control for certain types of critical data such as fertilizer recommendations, field survey definitions or system settings. This is useful if you want to give some

System settings	User groups and group members																												
General	Defined user groups:	User group permissions:	Members of OMP Operator:																										
Localization	<table border="1"><thead><tr><th>User group</th><th># Users</th></tr></thead><tbody><tr><td>OMP Admin</td><td>1</td></tr><tr><td>OMP Operator</td><td>2</td></tr><tr><td>OMP User</td><td>1</td></tr><tr><td>*</td><td>0</td></tr></tbody></table>	User group	# Users	OMP Admin	1	OMP Operator	2	OMP User	1	*	0	<table border="1"><thead><tr><th>Allow</th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/> Application start</td></tr><tr><td><input checked="" type="checkbox"/> Export data</td></tr><tr><td><input checked="" type="checkbox"/> Edit data</td></tr><tr><td><input checked="" type="checkbox"/> Edit FP recommendations</td></tr><tr><td><input checked="" type="checkbox"/> Edit crop budget</td></tr><tr><td><input checked="" type="checkbox"/> Edit FS definitions</td></tr><tr><td><input checked="" type="checkbox"/> Edit picker definitions</td></tr><tr><td><input checked="" type="checkbox"/> Import from backup</td></tr><tr><td><input checked="" type="checkbox"/> Use maintenance tools</td></tr><tr><td><input checked="" type="checkbox"/> Edit system settings</td></tr><tr><td><input type="checkbox"/> Edit UAC settings</td></tr></tbody></table>	Allow	<input checked="" type="checkbox"/> Application start	<input checked="" type="checkbox"/> Export data	<input checked="" type="checkbox"/> Edit data	<input checked="" type="checkbox"/> Edit FP recommendations	<input checked="" type="checkbox"/> Edit crop budget	<input checked="" type="checkbox"/> Edit FS definitions	<input checked="" type="checkbox"/> Edit picker definitions	<input checked="" type="checkbox"/> Import from backup	<input checked="" type="checkbox"/> Use maintenance tools	<input checked="" type="checkbox"/> Edit system settings	<input type="checkbox"/> Edit UAC settings	<table border="1"><thead><tr><th>User ID</th></tr></thead><tbody><tr><td>User1</td></tr><tr><td>User2</td></tr><tr><td>*</td></tr></tbody></table>	User ID	User1	User2	*
User group	# Users																												
OMP Admin	1																												
OMP Operator	2																												
OMP User	1																												
*	0																												
Allow																													
<input checked="" type="checkbox"/> Application start																													
<input checked="" type="checkbox"/> Export data																													
<input checked="" type="checkbox"/> Edit data																													
<input checked="" type="checkbox"/> Edit FP recommendations																													
<input checked="" type="checkbox"/> Edit crop budget																													
<input checked="" type="checkbox"/> Edit FS definitions																													
<input checked="" type="checkbox"/> Edit picker definitions																													
<input checked="" type="checkbox"/> Import from backup																													
<input checked="" type="checkbox"/> Use maintenance tools																													
<input checked="" type="checkbox"/> Edit system settings																													
<input type="checkbox"/> Edit UAC settings																													
User ID																													
User1																													
User2																													
*																													
Data entry	<input type="button" value="Go to new"/>	<input type="button" value="Go to new"/>	<input type="button" value="Go to new"/>																										
Data analysis																													
GIS																													
User access control																													
Password protection																													
User list																													
User groups																													

Figure 2: User group definitions.



Agrisoft Systems NEWSLETTER

Apr.— Jun. 2022

Feature

data entry users the rights to carry out regular day to day data entry (e.g. regular entry of production or fertilizer data) but without allowing them to edit the more critical system settings or more advanced configurations. In some instances, you may also want to restrict access to the program itself, if you do not want arbitrary people to be able to view OMP data. In this case, it is possible to restrict the application start itself.

Of course, activating password protection for different parts of the program is only meaningful if we also specify which user is allowed to do what. In OMP Plantation this is managed via user groups. By default, the program includes three predefined user groups with typical permission profiles, but these can be edited as required and you are free to define as many or as few distinct user groups as required. In the screenshot shown in figure 2, the group “OMP Operator” is allowed

to do everything except for editing UAC settings. Note that it is only possible to activate password protection for the relevant parts if there is at least one user assigned to a group that has the rights to edit and maintain the UAC settings if required (OMP admin). Note that the same user may be a member of multiple different user groups.

The final piece of the OMP UAC configuration is the definition of the users themselves. Typically, the OMP administrator will create the user accounts and provide an initial password, with an expiry date on the next day. The users will then be asked to change their password when they log on. Various settings are available to apply restrictions to valid passwords, such as minimum lengths or the requirement for alphanumeric passwords.

User ID	User name	Password	Expires on	Active	Must be alphanumeric
User1	User 1	*****	03/08/2022	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
User2	User 2	*****	03/08/2022	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
User3	User 3	*****	03/08/2022	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 3: User definition.



Agrisoft Systems NEWSLETTER

Apr.— Jun. 2022

From the developers desk

A selection of the on-going developments and plans which are part of our constant efforts to continue to improve Agrisoft products.

OMP-BBC

- Option of entering / editing predicted average bunch weight (ABW) values
- Finer control on when forecast average bunch weights are recalculated
- Modernized importing from Excel
- Streamlined data entry form
- Report for 4-month bunches/palm vs actual at division and field level
- On report for 4-month bunches/palm vs actual, show only “complete” months
- Additional report for forecasted vs actual bunches per individual month

Improved installation options for groups

- Single installer for multiple OMP licenses
- Support for installing multiple instances of OMP on one machine
- Integration of Windows users and user groups into OMP UAC system
- Default installation into existing folder path in version upgrades
- Entry of serial numbers at install time, not by each user

Field work module

- Define regular jobs including requirements of labor, equipment, material, fuel and chemicals
- Group blocks into field work groups which require similar field upkeep
- Create a field work schedule by block and job
- Generate a work schedule by specifying number and lengths of rounds per field work group
- Option of manually editing work schedules
- Recording of field work actuals including hectares by job and usage of fuel, materials, equipment, labor and chemicals
- Analysis of actuals vs budget
- Field work schedule reports
- Analysis of usage of physical inputs by job and job category
- Data collection reports
- Integration of existing OMP pesticide recording

