



farmpilot – User manual



i

Arvato Systems is an international IT specialist that supports major companies in Digital Transformation. We stand for strong industry knowledge, in-depth technology expertise and a clear focus on customer requirements. Working as a team, we develop innovative IT solutions, transition our clients into the Cloud, integrate digital processes, and take on IT systems operation and support. As part of Bertelsmann, we are built on the solid foundations of a German global corporation. At the same time, we rely on our strong strategic partner network with top international players such as AWS, Google, Microsoft and SAP. We make the digital world easier, more efficient and more secure and our customers more successful. We Empower Digital Leaders.

Table of Contents

1	Over	view1				
2	farmp	armpilot Access				
	2.1	Registration and Log-in				
	2.2	Login		2		
	2.3	Reset Password				
3	The F	Portal Dashboard				
4	The N	Machine Overview4				
5	Create Customers					
	5.1	.1 Creating a link for contact release				
6	Create Fields					
	6.1 Create Fields manually					
	6.2	Import Fields				
	6.3	6.3 Activating and deactivating fields				
	6.4	Receivin	g field data via contact sharing	9		
7	Machine Configuration					
	7.1	Create App User9				
	7.2	Installing farmpilot on your device10				
	7.3	Log in to the farmpilot app10				
	7.4	Reinstalling the app				
	7.5	Configure your mobile device in the portal				
	7.6	Notes on the use of terminal devices in multiple farmpilot accounts		12		
		7.6.1	Application example for the "terminal guest" function	13		
		7.6.2	Application example for enabling a machine using the vehicle radar	13		
8	Reporting of Working Times			14		
	8.1	Define Activities		14		
	8.2	Define Activity Groups		14		
	8.3	Define Night Shifts				
	8.4	Create E	mployees	14		
9	Measures & Forms			15		
	9.1	Create M	Measures	15		
	9.2	Create F	orms	15		
	9.3	Assign m	neasures to forms	17		
10	Task Management - Create Task			17		
	10.1	Import Tasks1				
	10.2	0.2 Create Tasks on the App				
11	Camp	mpaign				

Create Keywords and Crop types1						
11.2 Create campaign	19					
11.3 Create Task Sets from campaign	19					
12 Group Vehicles	20					
12.1 Fleet	20					
12.2 Parallel Process Chain	21					
12.3 Combination of both Groups	21					
13 Resources	21					
14 Points of Interest	22					
14.1 Collection of Points of Interest	22					
14.2 Allocation of Tasks and Points of Interest	23					
15 Delivery Notes						
15.1 Create delivery addresses	23					
15.2 Create delivery notes	23					
16 Geofencing24						
17 Reporting and Export2						
17.1 Reporting of Tasks	25					
17.2 Autologging	25					
17.3 Reporting of forms	26					
17.4 Reporting of working hours	26					
17.5 Reporting of delivery notes	27					
17.6 Invoices	27					
17.6.1 Invoicing process	27					
17.6.2 Invoice export	28					
17.6.3 Creating a partner link with VR Smart Guide	29					
17.6.4 Transmitting invoices to VR Smart Guide	29					
18 Final remark						

1 Overview

farmpilot consists of a web portal for computer/laptop/tablet and an app running on mobile devices. The following pages will lead you step by step through the basic functionalities of the farmpilot web portal and explain the configuration of mobile devices.

For the farmpilot web portal we recommend using Firefox or Google Chrome as a browser.

Google Chrome: https://www.google.com/chrome/browser/desktop/index.html

Mozilla Firefox: https://www.mozilla.org/en-US/firefox/

2 farmpilot Access

If you do not have a farmpilot account yet, you need to register and activate your account (2.1). With your access data you can directly log in (2.2) or change your password if needed (2.3).

2.1 Registration and Log-in

- 1. Enter the following address in your browser: https://portal.farmpilot.de
- 2. Select your language.
- 3. Click "Register" and enter your credentials and choose a password.



Please note: the minimal requirements for your password. It has to have at least 8 characters, at least 1 lowercase and uppercase letter, one number and one of the following special characters -_?%&!\$.

- 4. Please take care that you fill all the spaces marked with *, accept our terms and conditions.
- 5. After your successful registration you receive an e-mail with a link to activate your account.
- 6. By opening the link, you activate your farmpilot account (Please read the instructions in the email carefully.
- 7. After you have activated your account, you can log on with the username and password you have chosen.

Please note: It is not possible to use your farmpilot account without prior activation.

2.2 Login

- 1. If you have a farmpilot account, you can log in using your username and password.
- 2. If you don't remember your password, please follow the instructions in (2.3) "Reset password".

2.3 Reset Password

1. If you don't remember your password or if you want to change it, click "Reset password".



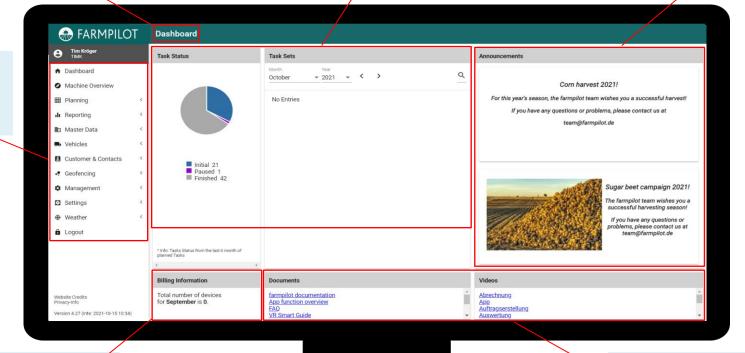
- 2. Enter your username and click "OK". You receive an e-mail with a link to reset your password.
- 3. Click on the link and enter a new password. It has have at least 8 characters, at least 1 lowercase and uppercase letter, 1 number and one of the following special characters -_?%&!\$.

3 The Portal Dashboard

In the respective items of the menu, the information can be divided into different tabs, to make it easier for you to get an overview.

On the Dashboard you will find an overview of the status of your orders, which have been scheduled in the last 6 months. You will also get an overview of your current order sets. In the announcement section, notifications and informations will be provided and published by the farmpilot team.

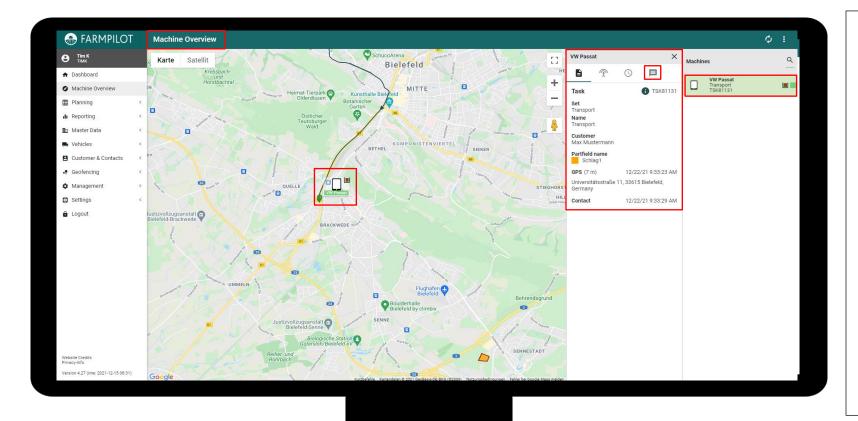
In the left column you find the main menu.



Under "Billing Information", you can see how many devices were charged/billed last month.

If you have any questions or if you want to learn more about the functions of farmpilot, you will find helpful support under Documents and Videos.

4 The Machine Overview



The vehicle overview gives you as a dispatcher an overview of the GPS history as well as information about the current positions of your vehicles.

In the right column you can see a list of all your machines that were online in the last 24 hours. Below the vehicle name the loaded task set is displayed. On the side you will see an icon for the loading status of the vehicle, as well as a green/red box that indicates whether the vehicle is currently online or offline.

When you click on a vehicle, more information appears to the left of the vehicle list. Here you have the possibility to see more information about the status of the task or to send a message to the driver.

5 Create Customers

If you complete tasks for your customers, you can create customer profiles to create customer-specific tasks.

- 1. Click "Customer & Contacts"
- 2. Under 'Customer' you can enter your clientele.
- 3. Click "+ NEW" for entering the customer data manually.
- 4. After entering the customer's contact data click "SAVE".
- 5. You can edit the customer data at any time or delete them completely.
- 6. You can also import customer data: Click "IMPORT" and read in the data using an CSV-file.

Under customers you also have the possibility to send a link, so that the person who receives the link has the option to enter or import his fields in your farmpilot account

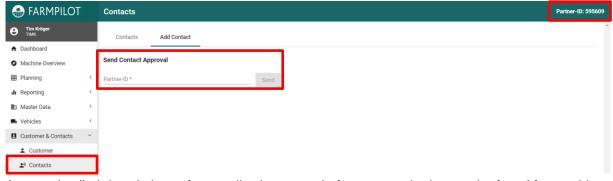
To do this, press Options on the top right of your page and activate the view "E-Mail-Transmission field management" then tick the e-mail address and the checkbox "Send 1 e-mail(s) for field management to selected customers".



- 7. The customer receives a Link to with access to your Portal, but only to the field management section
- → As soon as the field data has been entered, the customer and you as the dispatcher receive an e-mail with the relevant information on the fields that have been added.

5.1 Creating a link for contact release

With the help of contact sharing, you have the possibility to make your fields and machines available for other farmpilot accounts. To do this, you must first add a contact. This is done in the "Customers & Contacts" tab under "Contacts". If you want to make a machine available to another dispatcher, you will need his partner ID, which he will find at the top right of the contact page. Enter his number in the field "Send Contact Approval" and the account will be displayed under the tab "Contacts" -> "Access for". Now you have the possibility to release fields or machines for the other user.



A more detailed descriptions of an application example for contact sharing can be found for machines (7.3.2) and impact data (6.3).

6 Create Fields

You can either enter your field data manually (5.1) or import them (5.2).

6.1 Create Fields manually

- 1. Click "Master data" and then "Field management".
- 2. Select the desired customer under "Farmer" and click "+New" in the right corner to draw their fields manually.

Please note Under this symbol in upper right-hand corner you can switch between the guided mode and the expert mode. The difference in the expert mode is a more compact presentation of the content, where the "guided mode" proceeds in a more small-step manner. In the following pictures, the guided mode is used except under point 7.

3. In the tab "Master Data" you can enter the field name as well as additional information like field size, comments or crop type.



4. After entering the data click "FIELD BOUNDARIES" to draw in your field.

Karte Satellit

City search

City search

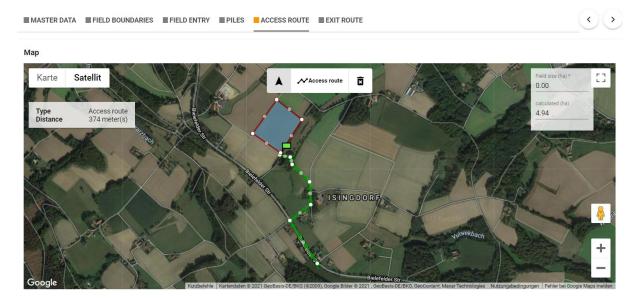
City search

Kurzbefinie Kartendaten 9 2021 GeoBasis DE/BKG, GeoContent, Maxer Technologies Nutzungsbedingungen Felikti bei Google Mapp melden.

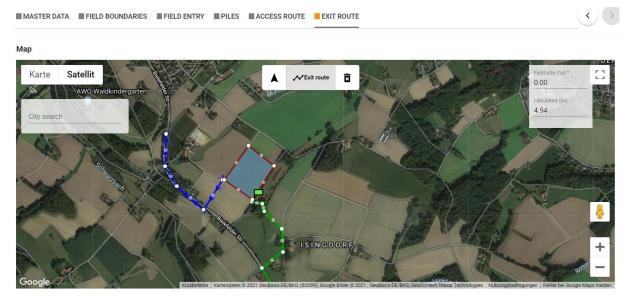
5. Click on "FIELD ENTRY" to set your Field entry mark. You select the marker symbol and click on the right spot on the map. The field entry is now marked with a green flag.



6. Click "ACCESS ROUTE" to draw in the Access route to the field.



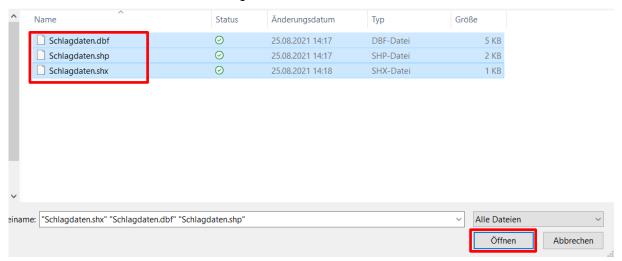
7. Lastly click "EXIT ROUTE" on the last column and draw in the blue exit route



→ If you want to delete an item, press the trash can-icon. To save your field press "Save" on the bottom of your page.

6.2 Import Fields

- 1. You select your customer in the field "Farmer".
- 2. Click "IMPORT" in the upper right-hand corner and select the data format you wish to use.
- 3. Click "UPLOAD" to select the right file.



Please note: Shape files consist of the files SHP, SHX and DBF. All of them must be selected simultaneously.

- 4. Confirm your selection.
- 5. Tick the checkboxes next to the fields you would like to import.
- 6. Click "IMPORT".

6.3 6.3 Activating and deactivating fields

For a better overview you have the possibility to deactivate not used fields.

For individual fields, click on the box next to the field and select "Deactivate field" in the orange bar. If you want to deactivate all the grower's fields, you can click on the three dots at the top right of the grower's page and then click "Deactivate".



To reactivate, you have to display the deactivated fields in a first step. You can do this by clicking on the gear icon. A bar appears on which you have to switch on "Show disabled fields". Then click on the box next to the grayed-out deactivated fields and activate them by confirming in the orange bar.

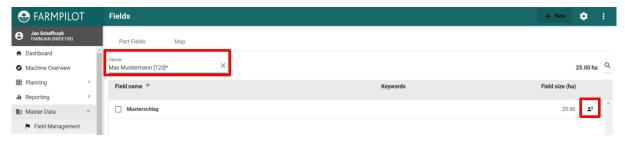
6.4 Receiving field data via contact sharing

The contact sharing described in (5.1) can help you to release fields to another dispatcher or to access his fields. This saves you from having to redraw the fields.

Application example: Grower A uses farmpilot and maintains his fields in the field data. He now wants user B to work on his field and therefore shares his field to him via the contact sharing by entering user B's partner ID in the contact release. This is now displayed under "Contacts" -> "Access for".

- 1. Click on User B under "Access for".
- 2. Select the customer (in this example, grower A selects himself).
- 3. Place a check mark next to the field you want to share and click save.

In user B's profile, the released customer (grower A) is now displayed with an asterisk under his field data. The fields are marked with a contact sharing symbol and can now be scheduled for work.



7 Machine Configuration

To enable the data transfer between web portal and app you must configure your machines/mobile devices in farmpilot. You first need to create a mobile user in the web portal and then configure the farmpilot App on your mobile device.

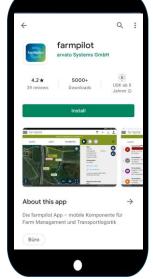
To enable the data exchange between the web portal and the app, your device must be configured in the farmpilot web portal first. To do this, you need to set up a user in the web portal. Then set up the farmpilot app on your mobile device and connect it to the web portal.

7.1 Create App User

- 1. Click "Management" and the "User".
- 2. Click "+ NEW" to create an account for your mobile devices.
- 3. Enter a username and password, select the Role "Terminal" and "Full" permission.
- 4. Click "SAVE".
- 5. You will use this information for the app later.

7.2 Installing farmpilot on your device

- 1. Open the Google Play Store and search for the farmpilot app.
- 2. Click "Install".
- Android automatically creates an icon with the Arvato logo on your desktop.



7.3 Log in to the farmpilot app

- 1. Open the farmpilot app
- 2. Enter the credentials you selected in 6.1.
- 3. By saving the access data the farmpilot app will connect automatically to the web portal.

Please note: If the tablet has connected successfully, the bar on top which displays the IMEI (International Mobile Equipment Identity) turns green. If the bar is red the tablet might not be connected to the internet, or the credentials are incorrect.

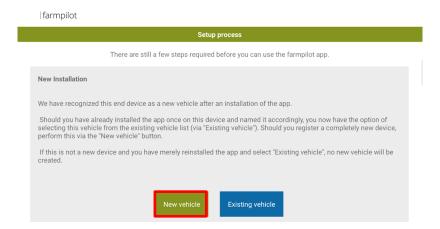
7.4 Reinstalling the app

When reinstalling the farmpilot app, you will go through the setup procedure for your vehicle. Here farmpilot distinguishes between setting up a new vehicle if farmpilot has not yet been used on the tablet or setting up an existing vehicle in the event that a vehicle was already assigned to the tablet and must be reselected during the new installation.

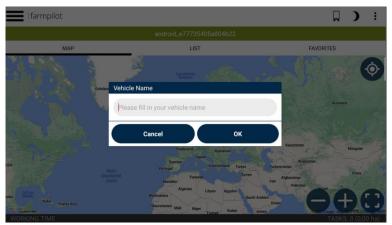
This function is available for Android from version 5.7.7 and for iOS from version 2.7.0.

App reinstallation for a new vehicle

When setting up a vehicle from scratch, "New vehicle" is selected in the setup menu. This process is therefore selected if this tablet has not yet been in use and is to be fundamentally set up.

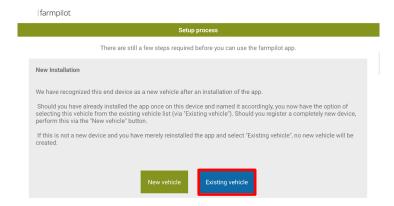


Then log in with the terminal user data you created in 7.1 and assign a name to your new vehicle. The vehicle will now be displayed in the Farmpilot portal under the assigned name and can be changed there as desired.



App reinstallation for an existing vehicle

In the event that the farmpilot app already existed and was used on the tablet and is now being reinstalled (e.g. performing a reinstallation on the instructions of farmpilot support), "existing vehicle" is selected in the setup menu.



You will then be asked to enter your user data.

Once this has been done, a vehicle list appears, select the vehicle that was already assigned to this tablet before the new installation.



Finally, confirm your vehicle selection to ensure that no vehicle is selected that is already assigned to another tablet. The vehicle on this tablet should represent the vehicle that was previously operated on this tablet.



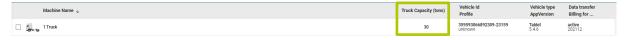
7.5 Configure your mobile device in the portal

1.	Now switch back to the web portal. The vehicle will be displayed under "Vehicles" with its IMEI number and a grey tractor. Click on the machine to personalize the information.	Vehicle Venor armo BIFP 123 Applierann 5.3.1 Venice loon * Tractor Venice lope * Tablet fouck Capacity (tens) 0
2.	Delete the IMEI number as machine name and choose a new name, e.g., harvester, leader or the number plate.	Reference machine Comment Data transfer Bettern faces * Data booon affects*
3.	You can enable or disable the data transfer between the web portal and the app.	Settlement transi* 30 sec. Enable data transfer Settlement Something transi* monthly
4.	You can choose a settlement interval – monthly or annual.	Booked on 17.08.2021 Save Cancel

5. Click "SAVE".

Recommendation: Set the Refresh interval on 30 sec. and the Data logging interval on 5 sec. to ensure that the report maps the location and route accurately.

Tip: For an improved and clearer planning of your machines, you can add the truck capacities, which will then be displayed in the machine list.



7.6 Notes on the use of terminal devices in multiple farmpilot accounts

It is possible for a terminal device to log into multiple farmpilot accounts during a billing period. This is referred to as multiple use in farmpilot. In the past, this resulted in a special problem when creating the invoice. The question had to be clarified: Who pays for the use of a terminal device if it was used in several accounts of different owners in one calendar month? Until now, it was not possible to clarify this clearly without consultation, which meant that billing was time-consuming.

By using a farmpilot user in the so-called "terminal guest" role, multiple billing of a terminal device can be avoided in the case of multiple use.

The following rules apply here:

- 1. A terminal device is billed in each account in which it logs in with a farmpilot user in the terminal or the dispatcher role (see GTC 4.4.2).
- 2. Arvato Systems offers you the possibility to avoid multiple usage fees for a terminal within one billing period. This is done by logging in with a farmpilot user in the "Terminal Guest" role.

It is your responsibility as a farmpilot customer and user to ensure that the multiple-use terminal is logged into the terminal or dispatcher role in the farmpilot account in which it is to be billed and the "Terminal Guest" role in all other farmpilot accounts used.

Please note that a terminal device always needs an account in which it is logged into the terminal or dispatcher role, otherwise we will not be able to bill it. Therefore, logins from terminal devices where this condition is not met will be rejected. The system responds with an error message.

7.6.1 Application example for the "terminal guest" function

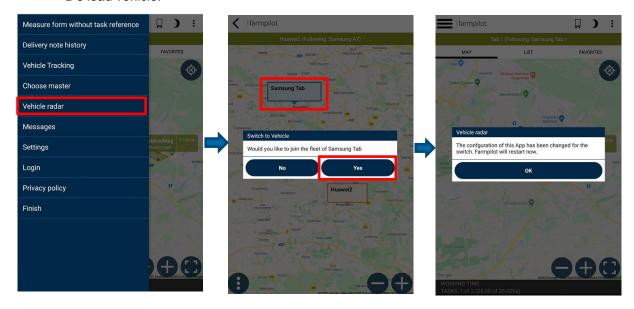
In sugar beet harvesting, it is common for loading syndicates to work together with independent forwarders in a farmpilot account as a fleet or parallel process chain (PPK). If it is desired that the forwarder bears the costs for the farmpilot user fees himself, it is necessary,

- a. That the forwarder opens his own farmpilot account in which he registers the terminal device he uses. He must perform this login with a farmpilot user in the terminal role. This is how the farmpilot system identifies the invoice holder.
- b. That the account holder, in whose account the forwarder registers his terminal device because he works there, forwards the farmpilot user in the "terminal guest" role to the forwarder for registration.

7.6.2 Application example for enabling a machine using the vehicle radar

Transporter A would like to join the fleet of Loader B with his machine. This is done via the contact sharing (see also 5.1 Create link).

- 1. Transporter A gives his partner ID to loader B who then "adds the contact".
- 2. Shipper B then selects transporter A under "Contacts" -> "Access for" and releases the lead vehicle of his fleet.
- 3. Now transporter A can see loader B's lead vehicle in the farmpilot app under "Vehicle radar".
- 4. By clicking on the vehicle, he has the option of joining the fleet and working on the task of loader B's lead vehicle.



8 Reporting of Working Times

Don't waste time evaluating your drivers time sheets. Every employee can record their working hours using the farmpilot app. You can evaluate this information using the farmpilot portal. For tracking your drivers' working hours it is necessary to do the following configurations in the portal.

8.1 Define Activities

- 1. Click "Settings" and then "Activities".
- 2. Click "+ NEW" to define activities. You simply need to give a name to the activity, for example driving or maintenance. You can create as many activities as you like, depending on which activities your employees conduct.
- 3. Click "SAVE".

8.2 Define Activity Groups

Please note: An activity group comprises one or more activities. Therefore, you do not have to assign every single activity to your employees, but you can bundle the activities, for instance as activities for drivers, managers, mechanics, etc.

- 1. Click "Settings" and then "Activity Groups".
- 2. Click "+ NEW" and define an activity group.
- 3. Then you can add activities to the group by ticking the checkboxes.
- 4. "SAVE" your entries.

8.3 Define Night Shifts

Note: The definition of a night shift interval is relevant for the monthly overview of your employees. You have the possibility to map your complete working time recording with our tool and we even calculate night shift supplements for you via our multiplication factor. These values are displayed in the tabular summary and do not change any entries.

- 1. Click on "settings" and then on "working times
- 2. Define an interval for your night shifts.
- 3. Lastly, enter a multiplication factor with which the night shift hours will be calculated more.

8.4 Create Employees

- 1. Click "Master data" and the "Employees"
- 2. Click "+ NEW" to enter the employee data manually.

Please note: Your employees are going to use the "Personnel No." to start recording their working hours in our app.

- 3. Switch to the tab "Billing data" to attach your employee to an activity group. Like that, you can decide, which activities the employee may select while recording the working hours.
- 4. Click "SAVE".
- 5. You can edit your employees' data at any time or delete them completely.

6. You can also import employee data: Click "IMPORT" and read in the data using an CSV-file.

9 Measures & Forms

Measures describe the activities performed in your business. Your employees can fill out an electronic form on the farmpilot app and send it to the portal when completing their task.

9.1 Create Measures

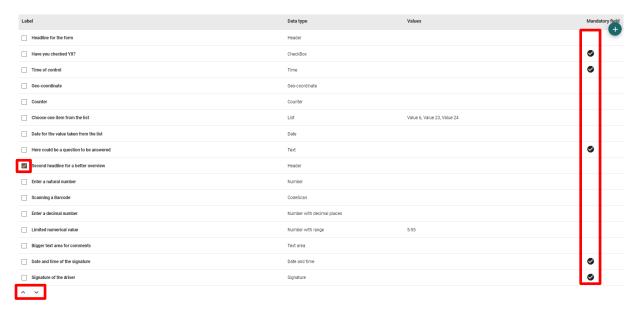
- 1. Click on "Settings" and "Measures".
- 2. Click on the "NEW" Button (on the top right) to create new measures.
- 3. Enter a description (e.g., Loading potatoes).
- 4. If desired, add prices for your measures, which will later be included in the invoice.
- 5. Click on "Save".

9.2 Create Forms

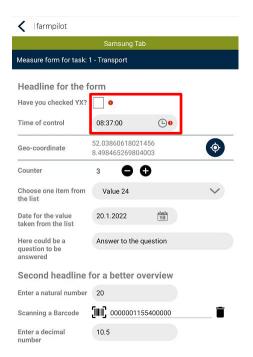
- 1. To create forms, click on "Settings" and "Forms".
- 2. Click on the "NEW" Button
- 3. Enter a name and a description.
- 4. Click the + button to add new fields to the form.
- 5. Enter a description for the data field and assign a data type to the field.
- 6. If the field is a mandatory field, then tick the appropriate checkbox. The driver can then submit a form only when the mandatory fields are filled.
- 7. Click on "Save"
- 8. If you have added all fields that are relevant to the form, then click on "Save" again.

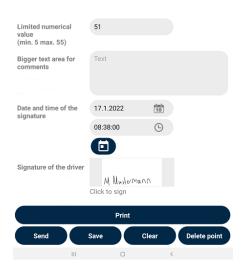
Example:

In this example you see a sample form with all possible data types. Here you still have the option of moving the positions of your individual fields. You do this by placing a tick next to the field to be moved and then using the arrows at the end of the list to move the position up and down. Furthermore, you can see in the example that all mandatory fields are marked with a tick in the right-hand column.



The example form shown will be displayed in the app as follows. Mandatory fields are displayed with a red exclamation mark.





9.3 Assign measures to forms

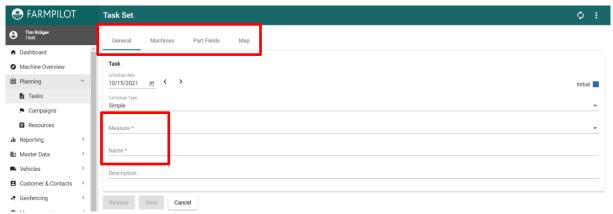
The forms can be assigned to measures, so in the app is no longer displayed all created forms from the portal, but only the forms selected for the measure.

Example: You have the measures "Harvest corn" and "fertilization" maintained in your account. Now you can assign the corresponding form for the respective measures. This will prevent the driver from opening a wrong form on the app or not finding the right form.

- 1. Click on "Settings" and on "Measures"
- 2. Click on the measure where you want to define the form
- 3. Tick the forms relevant to the measure.
- 4. Click on "Save"

10 Task Management - Create Task

- 1. Click "Planning" and then "Task".
- 2. Click "+ NEW" to create tasks manually.
- 3. In the tab "General" you select the measure you have defined before.
- 4. In the tab "Machines" you choose the vehicles to work on the task.



- a. Choose a vehicle under "Single vehicles" if this one should work alone.
- b. Choose a fleet so that the leader receives the information for the task first and passes it on to its followers. (see 12.1 Fleet)
- c. You can also have multiple vehicles working on a set (parallel process chain). Choose two leader vehicles from "Fleet" to create the parallel process chain. (see 12.2 Parallel Process Chain)



- 5. In the tab PART FIELDS you can define on which fields the measure should be done.
- 6. Click first on the "+" Symbol and choose a customer.
- 7. Tick the boxes from the fields you want to assign to the measure. Alternatively, you can directly select the fields in the tab "MAP". Confirm your selection by clicking on the tick "Assign".
- 8. Click "SAVE" or "RELEASE" to directly transfer the data to the tablets.

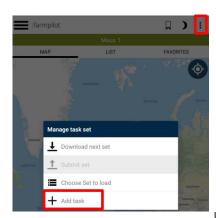
10.1 Import Tasks

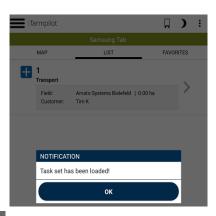
- 1. Click "Planning" and "Tasks".
- 2. Choose "IMPORT" in the upper right-hand corner and click "UPLOAD".
- 3. Select an XML-file to import Task Sets.
- 4. Add a measure and vehicles.
- 5. Click "SAVE" or "RELEASE" to directly transfer the data to the tablets.

10.2 Create Tasks on the App

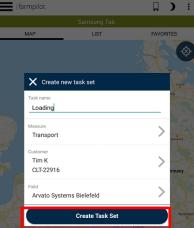
You also got the option to create a new order on your mobile dives.

- 1. Click the three dots on the top right of the app.
- 2. After that click on + Add task
- 3. In the app you can select the required measures, customers, and the field to be processed.
- 4. Finally, click on "Create Task Set". This is then transmitted to the portal and is ready for download and processing after a short time.











11 Campaign

Campaign planning can summarize all the fields you want to work on throughout the campaign. So, you have an overview of the fields that needed to be processed and not just the day view.

11.1 Create Keywords and Crop types

- 1. Click on "Settings" and "Keywords"
- 2. Enter a keyword, e.g., Cultan, Biogas or even a location. Under Master data you can now select a keyword from your list when editing a field.
- 3. Click on Settings and then on Crop types. Select the crop groups that are relevant for your field.

You then have the option of entering keywords, crop types and the subtype under Master Data -> Field data. This information is also displayed on the app.

Defining Keywords and crop types can help you create a campaign, as farmers' fields can be filtered by these attributes.





11.2 Create campaign

- 1. Click in the menu first on "Planning", after that click on "Campaign"
- 2. Click at the "NEW" Button on the right side
- 3. Choose a Month, a Year and a name for the campaign
- 4. After that change to the tab "Part Fields"
- 5. Click on the + Button to choose the fields which should be add to the campaign
- 6. Choose a farmer and hook the fields

Please note: Fields of a grower can be filtered if you have maintained crop types and keywords.

- 7. After that click on "Assign"
- 8. The fields can also be assigned to the desired rounds by clicking on the corresponding field and assigning a round under "Attributes". Fruit types and keywords can also be added at this point.
- 9. To save the campaign, click on "Save"

11.3 Create Task Sets from campaign

An order set can be created directly from campaign planning. A prerequisite for this is a previously created campaign. Selecting the campaign during order creation displays only the fields that you really want to edit. To create a job set directly from campaign planning:

- 1. Click in the menu on "Planning" and then on "Tasks"
- 2. Choose a measure and a description

- 3. Click on the tab "vehicles" and choose a fleet or vehicles who should receive the order set
- 4. Click on the tab "part fields"
- 5. Click on the + button on the right side
- Farmer Campaign
- 6. Click on campaign under the + button
- 7. Now you can select the created campaign and see all the fields that have been scheduled in this campaign
- 8. Hook the fields which should be in the order set
- 9. Click "Assign"
- 10. After all fields have been added, click on "release" if you want the order set directly on the vehicles or click on "save" if the order set is not yet to go to the vehicles

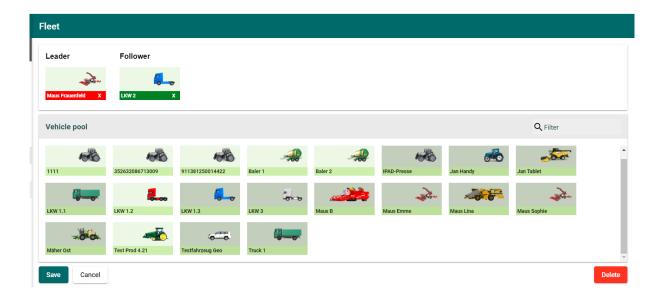
12 Group Vehicles

Improve the productivity of your employees and machines by consolidating your vehicles into vehicle groups. Whether in the fleet or parallel process chain – the members of vehicle group recognize each other in their current locations, driving directions as well as the working process of their orders.

12.1 Fleet

A fleet is understood to be a form of work organization in which a leader cooperates with one or more followers (for example a forage harvester with its loading and transport vehicles). The machine chain operates on a common order set, but the followers carry out different activities from the leading vehicle.

- 1. Click on the left on "Machine" and after that on "Fleets".
- 2. Click "+ NEW".
- 3. At first choose a vehicle as Leader and after that at least one vehicle as follower.
- 4. Click "SAVE" to complete the process.



12.2 Parallel Process Chain

A parallel process chain is a form of work organization in which several vehicles work together on the same order set. In contrast to the fleet, all the machines perform the same operation, e.g. CULTAN fertilization:

- 1. While creating an order, simply select multiple vehicles that shall work on the order together.
- 2. A detailed description of how to create tasks can be found in chapter 10.

12.3 Combination of both Groups

During the sugar beet campaign, a combination of fleet and parallel process chain is frequently used. There can be multiple loaders working in a parallel process chain on the same order set. These loaders typically have several trucks attached to them as a fleet.

- 1. First, create a fleet as described in Chapter 12.1.
- 2. While creating orders you simply attach multiple fleets to the same task set.
- 3. A detailed description of how to create tasks can be found in chapter 10.

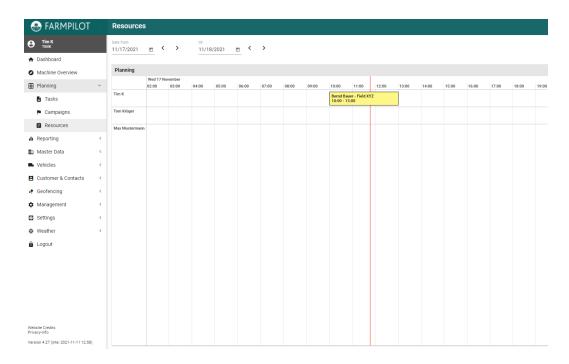
13 Resources

Among Planning you have the option "Resources". Here you can plan a timetable for your employees to get a better overview about your workers.

To plan for an employee, click double on the table from the employee where you want to plan something. A new window opens. Now you can add some information about the date and the time and also about the name, customer and the location.

After that click Ok and you can see a new entry on the timetable.

You can also filter by date, and you can use the tolls on the right to move in the timetable and to zoom in and out.



14 Points of Interest

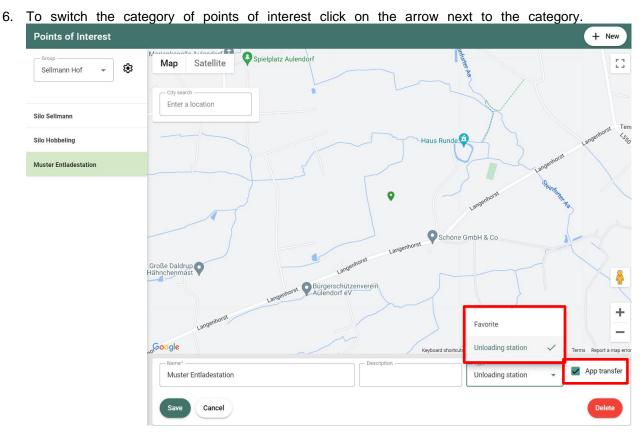
Points of interest are markers on the map that can be attached to fields during the creation of orders and, thus, transferred to the App. The drivers can then start a navigation to these points of interest. These markers shall facilitate the drivers' travel to frequent points such as silos, potato stores or factories.

14.1 Collection of Points of Interest

- 1. Click "Master data" and then "Points of Interest".
- 2. Click on the settings button and after that on "+ NEW" to to enter a name and select a symbol for a category of points of interest.



- 3. Click "SAVE".
- 4. Now click "+ NEW" to place a point of interest on the map and choose a name for that point.
- 5. You have the option of defining a point of interest as an unloading station or favourite. To do this, you must first authorise the app transfer to add the point of interest to the app. Cick therefore on the box in the bottom corner.

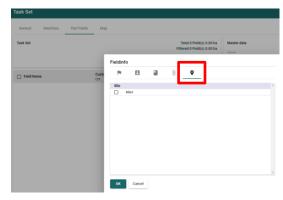


7. Click "SAVE".

14.2 Allocation of Tasks and Points of Interest

When creating a task set (see Chapter 10) you can attach points of interest to an order or field.

- 1. Click on the tab "PART FIELDS" in your order set.
- 2. Click on one of the fields. A new window appears in which you can add information to the field and see information your driver entered.
- Click on the marked tab to attach points to the field.
- 4. Click "OK".



15 Delivery Notes

You have the option of creating an order-related delivery note directly via the app. To do this, you must first enter delivery addresses in the portal. You can then create delivery notes on the app, which you can then evaluate in the portal (see 17.5).

15.1 Create delivery addresses

- 1. Click on Master data -> Delivery addresses.
- 2. Enter the address data.
- 3. Click on "Save"

15.2 Create delivery notes

- 1. Go to the farmpilot app with a task set loaded.
- 2. Click on a task for which you want to create a delivery not.
- 3. Click on the "delivery note icon".
- 4. Select the delivery address.
- 5. Add further information (see screenshot).
- 6. save your delivery note.

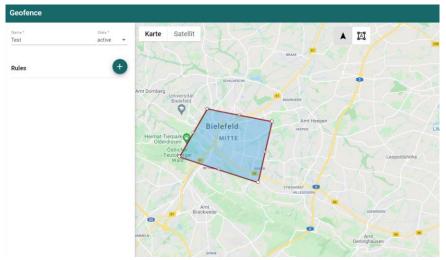




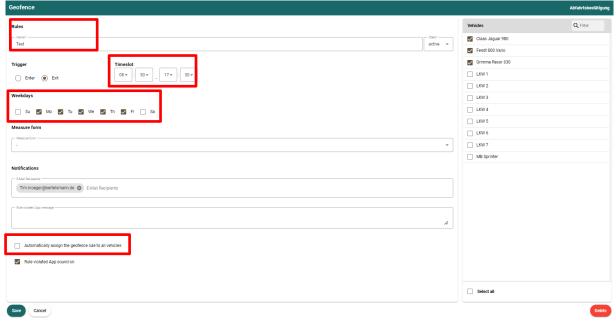
16 Geofencing

Under "Geofencing – Fences" you can create zones with rule that trigger a message or measure form in case of violation. You can e.g., draw a zone around the scale and when a machine drives the scale or the zone, a measure form automatically opens in the form of a weighing ticket.

- 1. Click on "Geofencing" and "Fences"
- 2. Click on NEW
- 3. Fill in the name and enter the zone on the right side of the map.



- 4. After having drawn the zone, click on the + button.
- 5. Define the name, the trigger (in the case of the example with the scale here "entry"), the time window, the days of the week as well as the machines that are to determine the rule. You can also automatically assign the geofence to all vehicles and all in the future created vehicles by ticking the "Automatically assign" box.
- 6. Select the measure form that should automatically open when you enter or leave the zone.



7. Enter an e-mail address if you also want to have a notification that a machine has entered or left the zone.

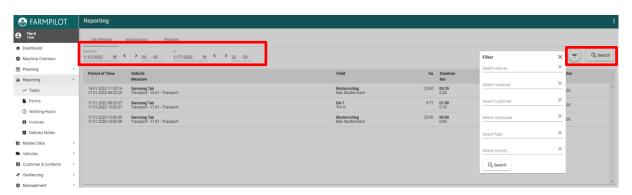
- 8. You also have the option to play a sound on the app when a rule is broken and create a pop up message to your driver.
- 9. Click on "Save"

17 Reporting and Export

In the menu reporting, documented order, forms and working times can be viewed.

17.1 Reporting of Tasks

- Choose the period
- 2. For overview you can filter according to certain criteria like machine
- 3. Click on "Search" to see the results



- 4. Click on a list entry to see more details about a job.
- 5. Click on the top right in the menu in , to trigger the CSV export.

If a list entry has been selected, further data appears below the list. In the job details, the exact task data is listed again, and, in the map, you can see the lane of the machine. The lane is red if the machine didn't start a task and green if the task has been started. In addition to the map, a time chart is displayed, where you can look at the exact time periods, when the task was started and when it was finished. Below the map various statistics can be displayed, for example distance per customer or total area per customer. In addition, sensor values of the machine are still displayed if the machine terminal is linked to farmpilot.

17.2 Autologging

In the Autologging, the data of the machine can be displayed independently of the orders.

- 1. Choose the period of time
- 2. Under the point vehicle you can filter according to the desired machine.
- 3. Click on "Search" to see the results

The map shows the lane of the machine. In red if the machine did not start a job while it was driving and in green when it started a job. In the diagram next to it the times oft he started orders (start and end) are displayed. When you click in the diagram, the map automatically jumps to the position that the machine had at the time. If photos were taken, these are also represented by a small photo icon in the map.

17.3 Reporting of forms

- 1. Define the period of time and select the measure form to be evaluated.
- 2. Use filter to limit the results.
- 3. Click in the top right in the menu to trigger the CSV export.
- 4. Click on a list entry and view the details of the completed measure form.
- 5. Click on the PDF Button in the upper right corner to download a single measure form.



17.4 Reporting of working hours

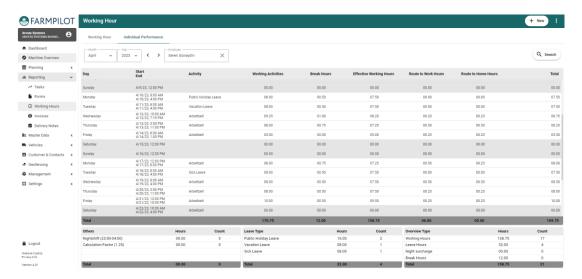
Working Hours:

- 1. Choose the month.
- 2. The display of the listed working times can be restricted to employees.
- 3. Click on the top right in the menu i, to trigger the CSV export.
- 4. Click on a working time to see the details and possibly edit them.

Individual Performance:

For transparent monthly performance data of your employees, you can use our Individual Performance tab, which shows you all employee data briefly and allows an easy export, which you can provide to your employees.

- 1. Select month, year and employee
- 2. Click on the menu items in the upper right corner to export a CSV file.
- 3. Click on a working time to view the details and possibly edit it.



17.5 Reporting of delivery notes

- 1. You can click on a delivery note to view the details and edit them.
- 2. Click on the menu items at the top right to export a CSV file.



17.6 Invoices

In farmpilot, you have the option of creating your own invoices directly for your services. You can process these directly with the Volksbank's "VR Smart Guide" service or receive a customized export that you can send directly to your customers. To create personalized invoices, the following conditions must be met.

- Master data maintenance in the portal: customers, measures and fields
- You need a called task set, which you want to invoice.
- To personalize your invoice export, you can upload your company logo under Management -> My data.





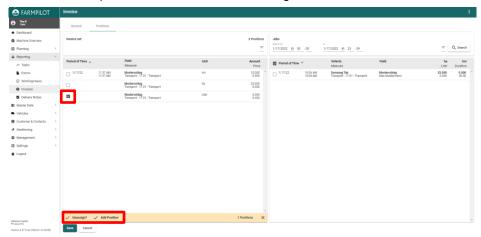
Note: Accepted data formats for the photo are .png and .jpeg. Recommended resolution 200 x 120 px with a maximum file size of 500KB.

- If you want to use the VR Smart Guide connection, you can create an Account on https://www.vr-smart-guide.de/

17.6.1 Invoicing process

- 1. Click on "Reporting" -> "Invoicing" -> "+New"
- 2. Select the customer and add information about the name, invoice number and an optional description.
- 3. Switch the tab from "General" to "Positions".
- 4. Select a time period and click on search.

5. Select the respective tasks and click on "assign".



In the left column, the task name and the measures of the task set are visible. The default units are km, ha and liters. These can be adjusted in advance according to your wishes (see measures 9.1). Otherwise, you can also change them manually.

- 6. Click on the measures and change the "Unit, Amount and Price" manually.
- 7. If you need more positions or want to remove positions, click on the tick next to a/the position and select "Unassign" or "Add position" on the yellow bar.
- 8. Lastly "Save" your entries.

17.6.2 Invoice export

- 1. Click on the invoice you have created
- 2. Click on the three dots at the top right of the page and select "Export".



The invoice will be downloaded as a Word docx. -File and looks like this with the maintenance of your company logo:

17.6.3 Creating a partner link with VR Smart Guide

In order to establish the connection with the VR Smart Guide, a link in the farmpilot portal is necessary.

- 1. Click on "Administration" -> "Partner
- 2. Click on +NEW
- 3. Select partner: VR Smart Guide
- 4. Enter PKI token (Note: you can obtain the PKI token in your VR Smart Guide account under "Settings").

VR SMART GUIDE

5. Click on Save

Note: The use of the VR Smart Guide costs 10 euros per month for Volksbank customers or 18 euros per month for non-Volksbank customers.

17.6.4 Transmitting invoices to VR Smart Guide

After you have created the invoice as described in 16.5.1, you can send it directly to your VR Smart guide.

You have two options to do this.

- 1. Click on the VR Smart Guide logo when creating the invoice.
- After you have created the invoice, click on the tick, and select "Transmit to VR Smart Guider?"
 on the yellow bar.

 Transfer to VR Smart Guide?

Submitted invoices are indicated by a tick with a grey background.



18 Final remark

Thank you for your interest in farmpilot. We hope that this user manual has given you a good insight and explanation of the functions of farmpilot. However, if you have any further questions or if anything is still unclear, please do not hesitate to contact us by e-mail at Team@farmpilot.de.

