



Apex Farm Management Software Map Creation

For use with Apex software version 3.4.0.538





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Introduction

Note

*This manual is written using
Apex Farm Management
Software version 3.4.0.538.*

This manual provides a basic description of creating a map for variable rate applications using Apex Farm Management Software. It includes details of all requirements that must be met to create a working map.

To begin, update Apex to the latest version as follows:

- ▶ Select Help
- ▶ Click Check for Apex Updates

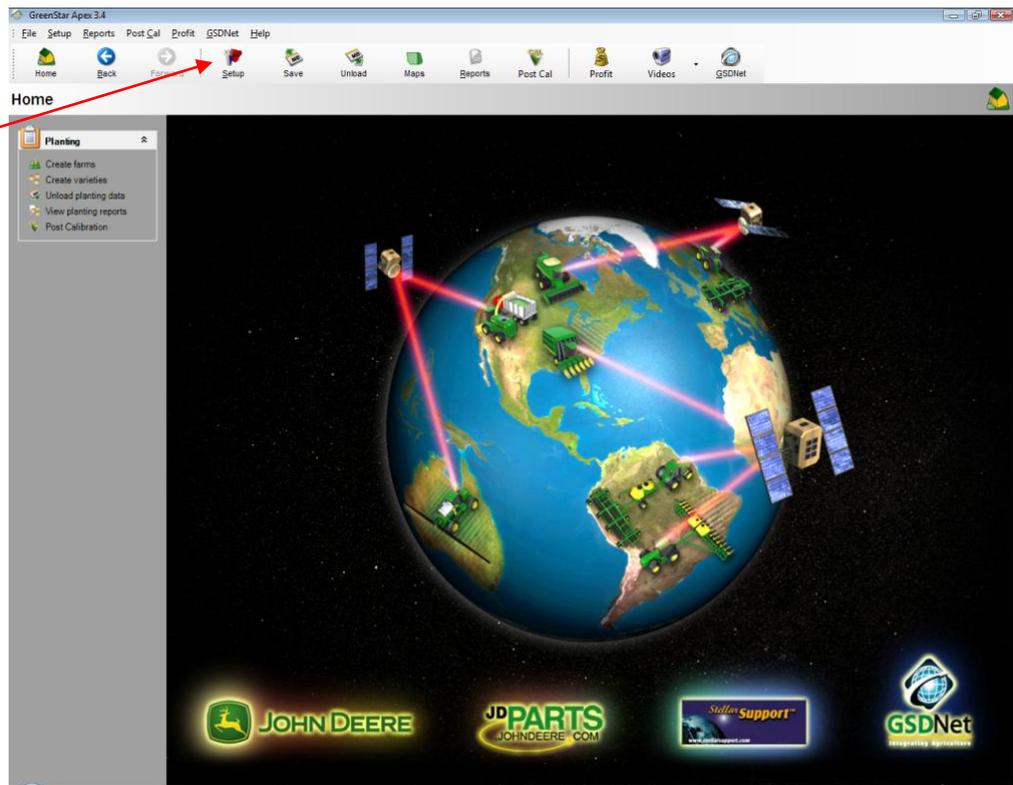
Part 1: Creating The Map

To begin map creation, Client, Farm and Field information must be entered into the software. For the purposes of this example a client called “Agtron Enterprises” has been created. This client farms Field1 on Agtron Farms Ltd.

As shown in the following screen shots; new clients, farms and fields can be created by clicking on the setup icon.



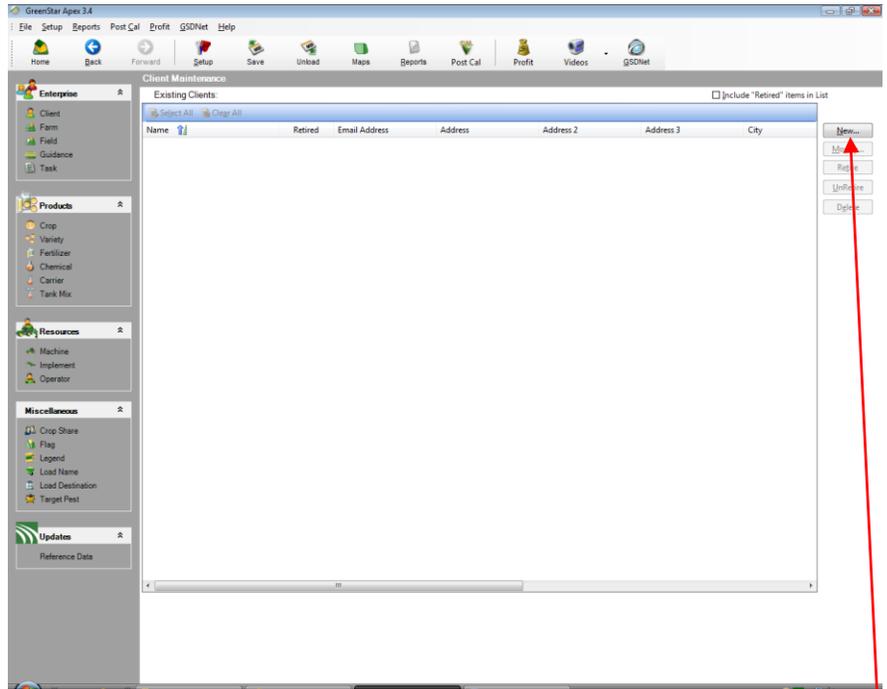
Setup Icon





Once you have clicked on the setup icon the following screen appears.

Setup Enterprise (Client, Farm), Products (Crop, Fertilizer), Resources (Machine, Operator), and Miscellaneous (Crop Share, Legend).



In the setup screen you can setup up multiple resources for your farm which we will discuss in this manual.

New Button

Creating a New Client

► To create a new client, click on the Client icon.



The Existing Clients Screen will appear. Press the “New...” button in the top right corner.

The Add a New Client window appears.

► Type your information into the appropriate boxes. Press “Done” when finished.



Creating a New Farm



► To create a new farm, click the Farm icon.

The Existing Farms Screen will appear. Press the “New...” button in the top right corner.

The Add a New Farm window appears.

► Type your information into the appropriate boxes. Press “Done” when finished.

Creating a New Field



► To create a new field, click the Field icon.

The Existing Fields Screen will appear. Press the “New...” button in the top right corner.

The Add a New Field window appears.

► Type your information into the appropriate boxes. Press “Done” when finished.



Editing Map Boundaries

Once a Client, Farm, and Field have been created, the boundaries for the field can be generated. This can be done as follows:

Notes:

Aerial Images can be in multiple file formats including .tif, and .bmp. Images can be found on multiple internet sites. Consult your local John Deere dealer to find the best site for you.

- ▶ Loading recorded data from your console using the unload icon.

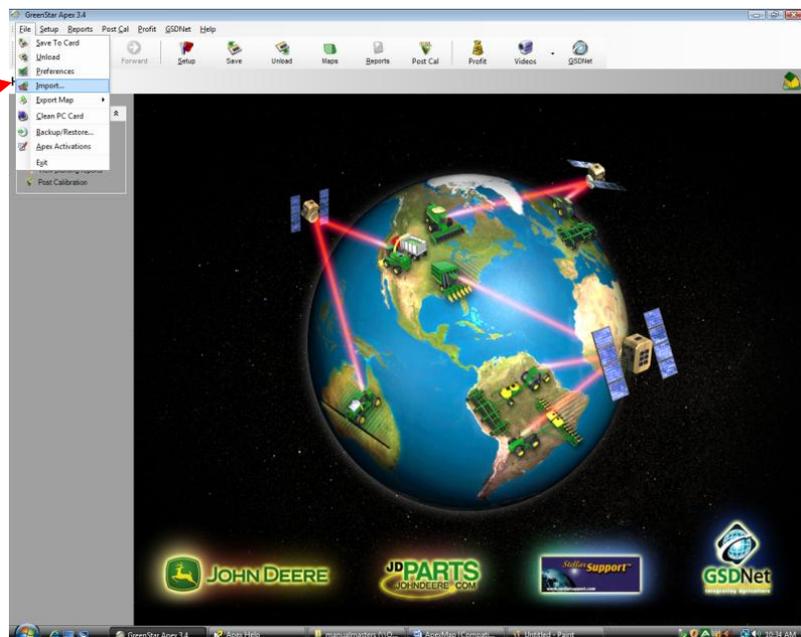


- ▶ Importing an aerial view photograph and drawing the outline.
For this example we will be importing an aerial photograph and drawing the boundary.

Importing an Aerial Image:

- ▶ Select File, then Import
- ▶ From the Import Screen, select Image Layer from the menu on the left
- ▶ Choose the Image File Path. In this case F:\sample.tif
- ▶ Assign image to the Client, Farm, and Field you are working on.
- ▶ Select Import

Import





The screenshot shows the 'Import Image Layer' dialog box. On the left, a 'Category' dropdown menu is open, showing options: Management Zone, Field Boundary, Image Layer, and Elevation Data. A red arrow points from the 'Image Layer' option to the 'Image File Path' field. Another red arrow points from the 'Image File Path' field to the 'Image File Location' label. A third red arrow points from the 'Select Field' section to the 'Assign Image to Field' label. A fourth red arrow points from the 'Layer Name' field to the 'Import' button. The 'Image File Path' field contains 'F:\sample.tif'. The 'Georeferencing' section includes 'Coordinate System' (Universal Transverse Mercator (UTM)) and 'Datum' (World Geodetic System 1984). The 'Select Field' section has 'Client' (Agtron Enterprises), 'Farm' (Agtron Farms Ltd.), and 'Field' (Field1). The 'Layer Name' field is empty.

Once the image has been imported continue to the Maps screen by clicking on the maps icon.



1. Choose the field you want to work on from the Available Maps on the left side of screen.

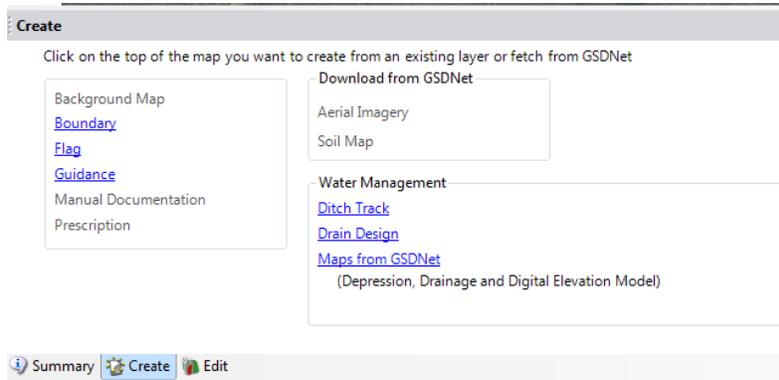
The screenshot shows the 'Available Maps' screen. At the top, there is a 'Filter by:' section with three dropdown menus: 'Field' (All), 'Map' (All), and 'Season' (All). Below this is a tree view of map layers. The tree is titled 'Clients' and contains the following structure:

- Agtron Enterprises
 - Agtron Farms Ltd.
 - Field1
 - Background Map
 - 1

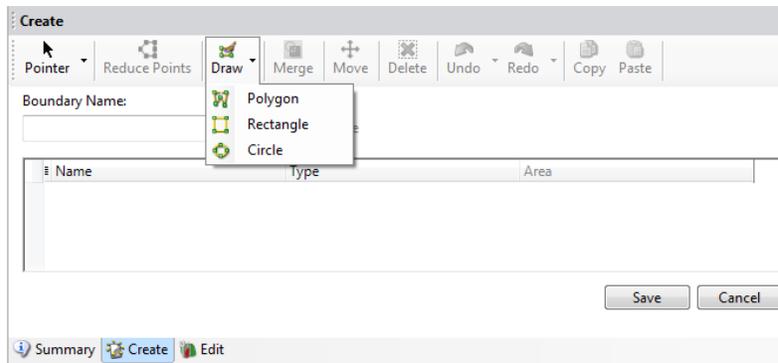


Once you have chosen the appropriate field. Select the create tab found at the bottom of the screen. 

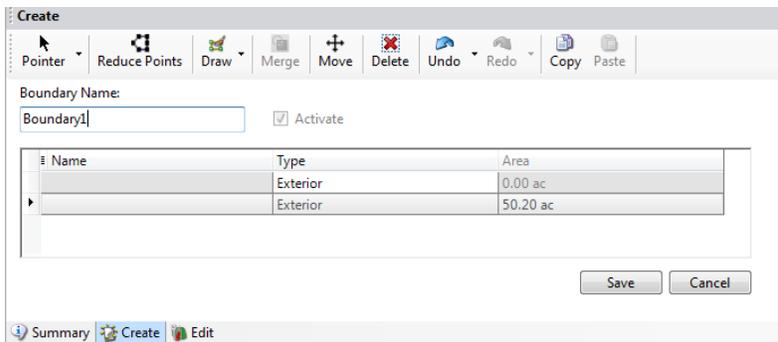
2. Select Boundary to begin creating your field boundary.



3. Select Draw, then Polygon to begin drawing your Boundary.



4. Once your boundary has been created, give the Boundary a name, then press save.





► Pictured below is a finished boundary.



Once the boundary has been created, you can begin making your prescription map.



Part 2: Creating the Task

A working group must be created to create the task data for variable rate application. A working group consists of a Machine, Implement, Operator and Crop.

As shown in the following screen shots, new machines, implements, operators and crops can be created by selecting the setup icon.



Creating New Operator

- ▶ From the Setup screen click on the Operator icon.  Operator

The Existing Operators screen appears. Click “New” in the top right hand corner.

The Add a New Operator Screen appears.

- ▶ Type your information into the appropriate boxes. Click “Done” when finished.

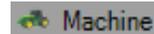
Add a new operator

Name: License: Tax ID:

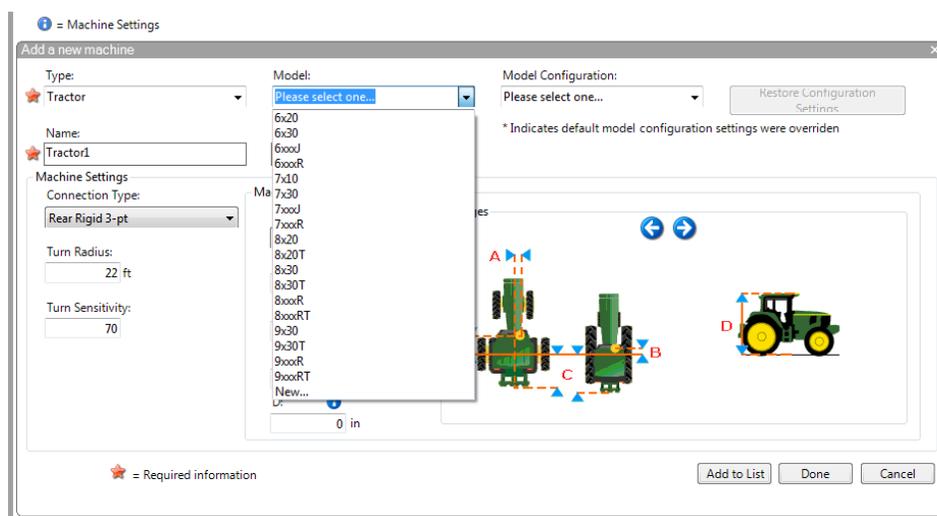
 = Required information



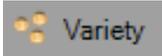
Creating New Machine



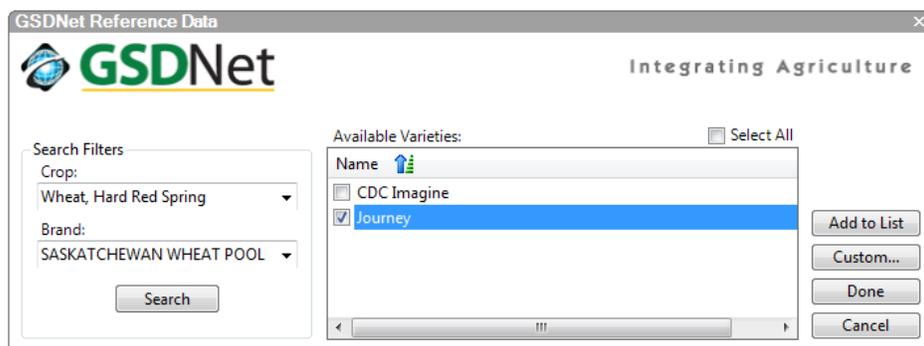
- ▶ From the Setup screen, click on the Machine icon.
 - The Existing Machines screen appears. Click “New” in the top right hand corner.
 - The Add a New Machine Screen appears.
- ▶ Type your information into the appropriate boxes. Click “Done” when finished.



Creating New Crop Variety

- ▶ Crops are preloaded in the Apex software. But in order to use the Greenstar function on your console a crop variety is needed. From the setup screen choose the Variety icon. 

A GSDNet Reference Data screen appears. Select the appropriate information from the drop-down menus and click “Add to List” then select “Done”

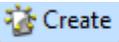




If your variety doesn't show up in the GSDNet Reference Data screen you will have to select "Custom." The Add a New Variety window appears.

- ▶ Type your information into the appropriate boxes.

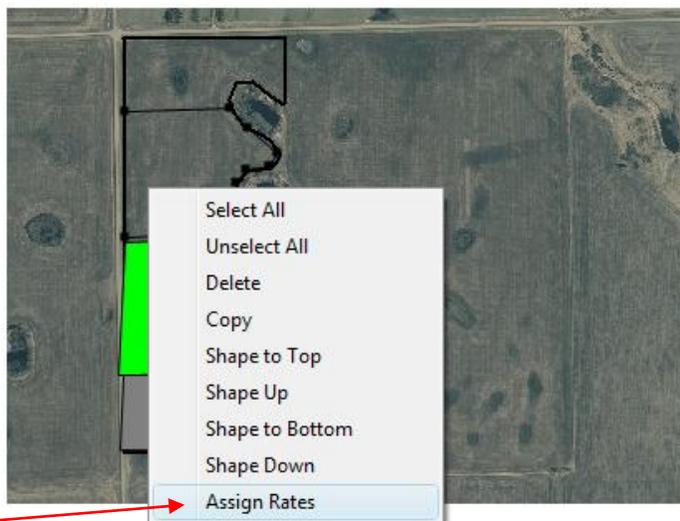
Creating Variable Rate Prescription

1. From the maps screen, select the Create icon  Create
2. When in the create screen you will notice more choices have become available. Choose Prescription.
3. You can create a prescription by drawing zones manually or by using an existing management zone. (For this example we will be drawing zones manually) Click "Next"

This screen is where you enter in all the information for your prescription. Type your information into the appropriate boxes and click "Next"



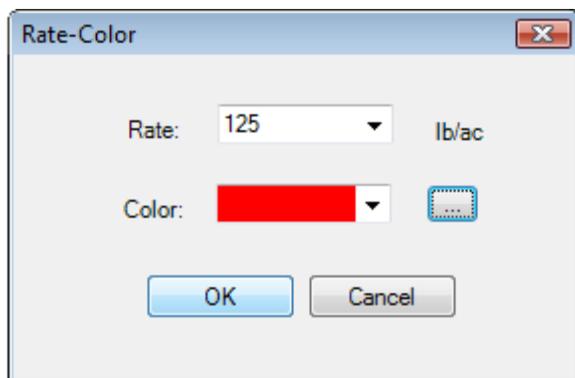
4. We are now ready to start drawing our zones and assigning rates. Using the Polygon tool, draw a zone. When the zone is finished right-click and select assign rates.



Assign Rates

- This will bring up the Rate-Colour window.

Select rate and colour accordingly. Repeat for each zone in prescription map.





Once you have finished drawing zones, and assigning rates press the “Save” button.

The screenshot shows the Apex software interface. At the top, there are tabs for 'New', 'Agtron Enterprises', 'Agtron Farms Ltd. : Agtron Enterprises', and 'Boundary1 : Field1 : Agtron Farms Ltd. : Agtron Enterprises'. The main map area displays an aerial view of a field with several colored zones: a red zone at the top, a green zone below it, and grey zones on the left and right sides. Below the map is a 'Create' panel with a toolbar and a table for assigning rates and colors to the zones.

Rate	Color
75.0000	Grey
125.0000	Red
100.0000	Green

First use the drawing tools to create shapes in the map view. Assign rates/colors by clicking (highlighting) a shape, then select the Assign Rates button.

Note: Unassigned regions within the field boundary are assigned 75 lb/ac (Loss of GPS Rate). Areas outside the field boundary are assigned 0 lb/ac (Out of Field Rate) when saved to the card.

Buttons: Back, Save, Cancel

Bottom navigation: Legend, Summary, Create, Edit



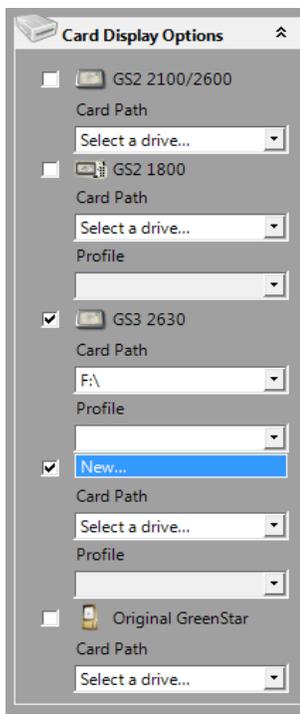
Exporting the Task to the Console

To Transfer the task to the console:

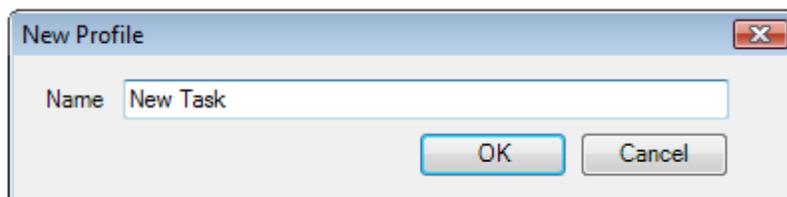
1. Select the Save icon.



2. Select the appropriate console from the list. Choose the file location where you want the task to be saved, and choose a new profile.



3. The New Profile window appears. Type name into box and click OK.





- ▶ The following are the minimum requirements needed to export a variable rate prescription map from Apex

Items selected for the data card:

<input type="checkbox"/> Clients - 1 Item(s)	Agtron Enterprises
<input type="checkbox"/> Farms - 1 Item(s)	Agtron Farms Ltd.
<input type="checkbox"/> Fields - 1 Item(s)	Field1
<input type="checkbox"/> Boundary - 1 Item(s)	Boundary1
<input type="checkbox"/> Prescription - 1 Item(s)	Prescription1
<input type="checkbox"/> Background Map - 1 Item(s)	1
<input type="checkbox"/> Tasks - 1 Item(s)	Seeding
<input type="checkbox"/> Implement Type - 1 Item(s)	Seeder
<input type="checkbox"/> Implements - 1 Item(s)	1890/1990 42ft
<input type="checkbox"/> Machine Type - 1 Item(s)	Tractor
<input type="checkbox"/> Machines - 1 Item(s)	Tractor1
<input type="checkbox"/> Crops - 1 Item(s)	Wheat (Hrd Rd Spr)
<input type="checkbox"/> Crop Variety - 1 Item(s)	Journey

- ▶ This concludes the process of creating a working map using Apex Farm Management Software.

Load the task data into the console, and start seeding.

Refer to GS3 Map Loading manual for help loading task data into John Deere GS3 2630 console.



Related Manuals

▶ This manual was created with help from John Deere Apex Farm Management software online help. This manual is available by clicking on Help, then selecting Help Topics.

▶ If you require assistance using Case IH AFS/Farm Works Software for creating a variable rate map, please refer to the Case IH AFS/Farm Works Map Creation manual.

▶ If you require assistance loading your completed task onto a John Deere GS3 2630 console for use with Agtron's ISO ECU, please refer to the Greenstar Map Loading manual.

▶ If you require assistance loading your completed task onto a Agco C1000 console for use with Agtron's ISO ECU, please refer to the Agco C1000 Map Loading manual.

▶ If you require assistance loading your completed task onto a Agco C2000 console for use with Agtron's ISO ECU, please refer to the Agco C2000 Map Loading manual.

▶ If you require assistance loading your completed task onto a Pro 700 console for use with Agtron's ISO ECU, please refer to the Case Pro 700 Map Loading manual.

▶ Map Loading manual for the TopCon X30 is currently in progress.

▶ All of these manuals are located online at www.agtronservice.com



