

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.







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



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

New Button



► 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.

Ad	d a new client		×
	Name: Agtron Enterprises	E-mail Address:	Address:
	Address 2:	Address 3:	City:
	State/Province: Zip Code:	Country: Tax ID:	Phone: Extension:
		🚖 = Required information	Add to List Done Cancel

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



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.

Ado	d a new farm					×
			This farm belongs to the foll	owing client:		
		*	Agtron Enterprises	•		
*	Name: Agtron Farms Ltd.		FSA Farm Number:		Address:	
	Address 2:		Address 3:		City:	
	State/Province:	Zip Code:	Country: T	ax ID:	Phone:	Extension:
			🚖 = Required informatic	on 🧧	Add to List Done	<u>C</u> ancel

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.

Add	a new field			x
	*	This field belongs to th Agtron Farms Ltd. (Clien	ne following farm: t = Agtron Enterp 👻	
1	Name: Field1	Section:	Township:	Range:
	Area: Area Unit: ac Legal Description:	-	FSA Information Tract Number: Area: Area Area Area Area	Field ID:
	Crop Insurance State: County: Policy:	Unit Number:	Type:	Practice:



Editing Map Boundaries

Once a Client, Farm, and Field have been created, the boundaries for the field can be genereated. 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



		mport Image Laye	H.
Import Image Layer	Category * Management Zone Field Boundary Image Layer Elevention Data	Image File Image File Path: F:\sample.tif	
		Georeferencing	
Image File Location		If this image is not i projection, please p additional informati	referenced to the World Geodetic System 1984 (WGS-84) and the Universal Transverse Mercator provide the coordinate system and datum in order for layers to line up. Some systems may require on. This information is often found in the metadata from distributers of the geographic information.
		Coordinate System:	Universal Transverse Mercator (UTM)
		Datum:	World Geodetic System 1984 👻
Assign Image to Field			Additional Coordinate System Information
		Select Field	
		Client:	Agtron Enterprises -
		Farm:	Agtron Farms Ltd.
		Field:	Field1 🗸
"Import" Button		Layer Name	
		Layer Name:	
			Import

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.

Available Ma	aps		▼ ₽
Filter by:			
Field:	All		•
Map:	All		•
Crop Season:	All		•
Clients			
🛓 Agtron	Enterprises		
🛓 Agtron Farms Ltd.			
ė	Field1		
	Background	d 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.

Boundary Flag Guidance Manual Documentation Prescription	Aerial Imagery Soil Map Water Management Ditch Track Drain Design Maps from GSDNet (Depression, Drainage and Digital Elevation Model)
--	---

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

Create		
Pointer Reduce Points	Draw Merge Mo	ve Delete Undo Redo Copy Paste
Boundary Name:	🕅 Polygon	
	📜 Rectangle	2
	😳 Circle	
= Name	Туре	Area
		Save Cancel
🔄 Summary 😵 Create 🥡 I	Edit	

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

vinter Reduce Points Draw	Merge Move Delete U	Indo Redo Copy Paste
undary Name: bundary1	Activate	
I Name	Туре	Area
	Exterior	0.00 ac
	Exterior	50.20 ac
	Exterior	50.20 ac





▶ 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: 🚖 Joe Smith	License:	Tax ID:
	🚖 = Required information Add to List	Done Cancel

Creating New Machine



🐢 Machine

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.

Туре:	Model:	Model Configuration:
Tractor	 Please select one 	Please select one Kestore Configuration
Name: Tractor1	6x20 6x30 6xool 6xoor 7x10	* Indicates default model configuration settings were overriden
Connection Type:	Ma 7x30	
Turn Radius: 22 ft Turn Sensitivity: 70	7 7000R 8x201 8x201 8x201 8x201 8x201 8x00T 9x200 9x201 9x200 9x201 9x200 9x201 9x200 9x201 9x200 9x201 9x20 9x20 9x20 9x20 9x20 9x20 9x20 9x20	
🚖 = Required	information	Add to List Done Can

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"

GSDNet Reference Data			×
GSDNet		Integrating Ag	riculture
Search Filters	Available Varieties:	Select All	
Crop:	CDC Imagine		
Brand:	Journey		Add to List
SASKATCHEWAN WHEAT POOL 👻			Custom
Search			Done
	٠	4	Cancel



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.

Add	Add a new variety ×					
*	Name: This variety belongs to the following cr	Maturity Information Minimum Days: Maximum Day				
×	Please select one Brand: Please select one Trait Description: Treated GMO	Seeding Information Seeds: Unit: Seeds/sack • Weight: Unit: Ib/container •				
	🚖 = Required information	Add to List Done Cancel				

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"

Create			▼ 4
Plan Name: Prescription1 Prescription Type: Seeding by weight Crop Season: 2012 Note: Selecting the Back button and changing details.	Product Type: Wheat (Hrd Rd Spr) Product Name: Journey Units: pounds acre g the creation method will remove all you	Loss of GPS rate: 75.00 lb/ac Out of field rate: 0.00 lb/ac Field Boundary: Boundary1 • r prescription shapes and their rate and color	
			Back Next Cancel
🥞 Legend 🔄 Summary 🖓 Create 🥡 E	dit		



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 selct assign rates.



Assign Rates

► This will bring up the Rate-Colour window.

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

Rate-Color				
Rate:	125	•	lb/ac	
Color:		•	[]	
	ОК	Cance	el	



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

este Rete Color 75.0000 Color 75.0000 Color 100.0000 State of the sect the Assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary are assigned 75 lb/ac (Loss of GP Babe), Marce subtained the field boundary	New Agtron Enter	rprises Agtr	on Farms Ltd. : Agtron Enterpr	ses Boundary1 : Field	11 : Agtron Farms L	td. : Agtron Ent	terprises		
reate Rate Color 75,0000 Image: Color 125,0000 Image: Color 100,0000 Image: Color Note: Unassigned regions within the field boundary are assigned 75 lb/ac (Lots of GP) Rate, Areas outside the field boundary are assigned 15 lb/ac (Out of Field Rate) when saved to the card.					100				
Rate Color 75.0000 Image: Color 125.0000 Image: Color 100.0000 Image: Color Note: Unasigned regions within the field boundary are assigned 0 lb/ac (Out of Field Rate) when saved to the card.									
Rate Color 75.0000 Image: State of the drawing tools to create shapes the may liew. Assign rates/colors by clickin (highlighting) a shape, then select the Assig Rates button. 100.0000 Image: State of the drawing tools to create shapes the may liew. Assign rates/colors by clickin (highlighting) a shape, then select the Assig Rates button. Note: Unassigned regions within the field boundary are assigned 0 lb/ac (Out of Field Rate) when saved to the card.	este								
75.0000 Image: Constraint of the second	eate	> W E #	● • , ₽ ○ ■ ★ 6						
125.0000 Note: Unassigned regions within the field boundary are assigned 75 lb/ac (Loss of GP) Rate). Areas outside the field boundary are assigned 0 lb/ac (Out of Field Rate) when saved to the card.	rate Rate	> W El #	● • ₽ 2 2 2 2	7		Firs	st use the draw map view. Ass	ing tools to cre	ate shapes in s by clicking
100.0000 Note: Unassigned regions within the field boundary are assigned 75 lb/ac (Loss of GP Rate). Areas outside the field boundary are assigned 0 lb/ac (Dut of Field Rate) when saved to the card.	ate	> X H #		7		Firs	st use the draw map view. Ass ghlighting) a sl	ing tools to cre ign rates/color hape, then selec	ate shapes in s by clicking ct the Assign
	ate Rate 75.0000 125.0000	Color	● • • • • • • • • • • • • • • • • • • •	7		First	st use the draw e map view. Ass ghlighting) a sl tes button.	ing tools to cre ign rates/color nape, then selec	ate shapes in s by clicking ct the Assign
Park Save Cons	eate	Color		7		First the (hit) Rat No boo Rata ass sav	st use the draw map view. Ass bilighting) as a tes button. te: Unassigned undary are assi undary are assi are assi assi assi are assi assi assi assi assi ass	ing tools to cre ign rates/color ape, then selec regions within gned 75 lb/ac to de the field box Out of Field Ra	ate shapes in s by clicking ct the Assign the field (Loss of GPS undary are te) when



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.

Save



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

New Profile				
Name	New Task			
		OK Cancel		



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

Iter	ns selected for the data card:
-	Clients - 1 Item(s)
	Agtron Enterprises
-	Farms - 1 Item(s)
	Agtron Farms Ltd.
-	Fields - 1 Item(s)
	Field1
-	Boundary - 1 Item(s)
	Boundary1
-	Prescription - 1 Item(s)
	Prescription1
-	Background Map - 1 Item(s)
	1
-	Tasks - 1 Item(s)
	Seeding
	Implement Type - 1 Item(s)
	Seeder
	Implements - 1 Item(s)
	1890/1990 42ft
-	Machine Type - 1 Item(s)
	Tractor
-	Machines - 1 Item(s)
	Tractor1
-	Crops - 1 Item(s)
	Wheat (Hrd Rd Spr)
	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 <u>www.agtronservice.com</u>

