# **OptimizerPlus+ Maintenance Tables**

Last Modified on 04/15/2025 3:54 pm EDT

# Yard and Remote Tanks GPS



- 1. Each Yard/Storage or non-filling location (drivers home) needs listed by Division with a description.
- 2. X1 and Y1 coordinates both need to display a negative sign (-) in front of the coordinate.
- 3. The coordinate needs to be 9 characters long except where longitude has 3 digits to the left of the decimal; then it requires 10 characters.
- 4. *Setup Mins* indicate the time required by drivers to hook/unhook the hose from the truck. For a non-filling location (drivers home) this will be 0.
- 5. *Pumping Glns/Min* are the pumping speeds from the storage tank into the truck. For a non-filling location (drivers home) this will be 0.
- 6. The table to the right will list the Division and Routes that will utilize the storage facility with a Y (Yard) indicating the start and end of a shift, an N (non-filling) to indicate the start of the first run (usually a drivers home) or a T (Tank) to indicate a filling option during the shift.
- 7. Each route must have one Yard but can have multiple refilling locations (*T*).

## Customer/Delivery Type Matrix



- Load from Tank File is only run during the implementation of the OptimizerPlus+ and should NOT be selected. When this program is run, it will populate all combinations of customer and delivery type that exist in the tank table for active tanks. However, the Optigistics Tank Type and SummerFill Tank Type will not be populated.
- 2. The Optigistics Tank Type will be one of the following:
  - **C** Call-In
  - A Auto Fill
  - J Julian Schedule
- 3. The assignment of these tank types will let the OptimizerPlus+ know which scheduling parameters to follow when building route schedules.
- 4. To add a new combination, use **Ctrl+M**, arrow down to a new line, and add the new information.
- 5. SummerFill Tank Type is used for Summer Fill scheduling. The letter S will need entered for all auto schedule combinations that would receive a Summer Fill. If using a Customer Type that gets a Summer Fill paired with a Delivery Type of Will Call (Call-In), enter an S for that Call-In entry.

**Note:** All other Will Call and Julian Delivery Types will export for a delivery when an active call-in order is entered, or a Julian Schedule is due.

## Weather Predictions



- 1. This table is populated automatically when the Software Degree Day runs during the Automated Task process.
- 2. Seven days of predictions are required for each active Division/Region. This count is including the current date.

### **Climate Parameters**

Customer/Delivery Type Matrix	E Browse Climate Pa	arameters	;		
	Division Number	Route	Peak Capacity - Gallons	Max Days per Wee	k Scheduled Avg Days per Week Scheduled
Weather Predictions	1	1	9500	6	5
	1	2	10000	6	5
Climate Parameters	1	3	9600	6	5
	1	4	8000	6	5
Evolute Taulo from Evolution	1	5	10000	6	5
Exclude Tanks from Export	<				
Optigistics Parameters					

- 1. This information is provided by Optigistics during the OptimizerPlus+ implementation and will not be modified unless at the time of a rebalance.
- 2. These values are specified by Division/Route and will indicate the gallon volume that the Optimizer is told can handle during an average day/week.
- 3. When the value is exceeded, there is a notification on the daily Route Stats email.

## **Optigistics Parameters**

	Description	Development of the state	Description of the second seco	Description
Maathan Dradiationa	Parameterivame	ParameterShortChar	ParameterLongChar	Parameterivum
Weather Predictions	ClearSchedule	YES		0.000000
	CustTankFillFract	N		0.800000
Climate Parameters	DaysJulianAfter			2.000000
	DaysJulianBefore			3.000000
Evoludo Tanks from Export	DaysWillCallAfter			4.000000
Exclude failes from Export	DaysWillCallBefore			1.000000
	DefaultJulianTankLevel			0.200000
Optigistics Parameters	DefaultWillCallMaxFillLevel			0.800000
	DegreeDayBeginDate	10/05/2005		0.000000
Routes to Schedule	DemoLowTankLimitFract	N		0.075000
	DemoMode	1		0.00000
DegreeDay Region Conversion	EmailTo		OptimizerGroup@EnergyForce.net	0.000000

- 1. The values in this table should not be touched except for the *EmailTo* line.
- The EmailTo line will list the email address(es) that will be sent the daily Route Stats email. To edit this entry, use Ctrl+M, select in the ParameterLongChar field in the EmailTo line and add or delete email addresses accordingly.

### **Routes to Schedule**

Division	Route	Div	Truck Assigned		0	)iv/Driver Assigned	Max Truck Refills	Target Threshhold	Limit Threshhold	Schedule This Route		Start Loc
1 SOFTWARE SOLUTIONS INTEGRATED	10 EAST AVON	10 / 1122	2012 FREIGHTLIN	1/	14	BRANDY WILLIAMS	3	0.3000	0.2000	2	h	John Driver - home
1 SOFTWARE SOLUTIONS INTEGRATED	11 SOUTH INDY	20 / 1123	2012 KENWORTH	1/	19	CURT MALICOAT	3	0.3000	0.2000		0	
1 SOFTWARE SOLUTIONS INTEGRATED	12 WEST DANVILLE	55 / 1211	2021 KENWORTH	1/	24	SHANNON FLAHERTY	3	0.3000	0.2000		0	

- 1. All optimized routes must be in this table for the OptimizerPlus+ to build tank schedules.
- 2. To make an entry or modification, use Ctrl+M.
- 3. When entering the Truck and Driver, it is recommended to use F5 and select from the maintenance box.
- 4. *Max Truck Refills* defines the maximum number of Runs the OptimizerPlus+ can schedule for that truck. This value must be greater than the Target Refill value for the truck in the *Browse Truck Extensions*.
- 5. *Target* and *Limit Thresholds* are in decimal form. For a delivery window of 20% 30%, the *Target Threshold* is .30 and the *Limit Threshold* is .20.
- 6. Schedule This Route is checked for each active route in the table.
- 7. *Start Loc* is used if the route is starting at a non-filling location such as a driver's home. It is recommended to use **F5** and select from the *Maintenance* box. If the *Start Loc* is not a non-filling location then leave as 0.

### Setting OptimizerPlus+ to use a Non-Filling Location as Starting Location

OptimizerPlus+ can be set to start at a non-filling location such as a driver's home on the first run of the day.

- 1. Navigate to Supervisor Menu / Maintenance Menu / Optimizer Maintenance / Yard and Remote Tanks GPS.
- 2. Select **Create** to add an entry for the non-filling location.
  - **Example**: Description Driver's home.
- 3. Tab to enter the coordinates of the driver's home.

- 4. The Setup Mins and Pumping Glns/Min should be set as 0.
- 5. Tab to enter the Div and Route this entry is for and set the Location Type to Non-filling.
- 6. Save and close the Yard and Remote Tanks GPS window.

Div	Description	X1	Y1	Setup Mins	Pumping Glns/Min	^	-	-	
220	PAUCEKVIEW	-103727222	-481365402	5	150.00		Div	Route	Location Type
220	DUDLEYBURY	-103643879	-483429540	5	125.00		1	6	Non-Filling
225	FLATLEYBURY	-103181584	-486279033	10	125.00				
1	DRIVER JOHN	-103185555	-485555555	0	0.00		-		

- 7. Next, select Routes to Schedule.
- 8. Hold Ctrl + M to change to Modify mode and double click or use F5 to select the Non-Filling Start Location

Name. If the Start Location for a route is the yard, the Start Loc field should remain set to 0.

Division	Route		DivTruck Assigned			DivDriver Assigned	Max Truck Refills	Target Threshhold	Limit Threshhold	Schedule This Route		Start Loc
h WILLMSVEW	1 GISSELLEFURT	220/58	2014 kenworth	1/	6	CHRISTINE BAUMBACH	3	0.3000	0.2000	2	1	DRIVER JOHN
1 WILLMSVIEW	2 PORT THORA	220 / 602	2024 freight	1/	3	CALE HILL	3	0.3000	0.2000		0	
1 WILLMSVIEW	3 BAHRINGERFORT	220 / 603	2024 Kenworth	1/	5	DUSTY BOGAN	3	0.3000	0.2000	Ø	0	
1 WILLMSVIEW	6 GREGORYTON	220/59	2016 kenworth	1/	9	JOHN MERRICK	3	2.0000	1.0000		1	DRIVER JOHN
1 WILLMSVIEW	8 EAST SALVADOR	225 / 53	2012 Freight	15	7	STEPHAN WALSH	3	0.3000	0.2000	R	0	

### **Browse Driver Extensions**

Division Numbe	er Driver	Driver Type	Pay Rate	Target Hours	Max Hours	Truck	Truck Division	RRN	
1	14	hourly	24.0000	8.00	10.00	1122	10		16
1	19	hourly	24.0000	8.00	10.00	1123	20		751
1	24	hourly	24.0000	8.00	10.00	1211	55		14

- 1. There must be an entry for each driver and truck assigned to an active OptimizerPlus+ route listed in the *Routes to Schedule* table.
- 2. The table can be modified using Ctrl+M.
- 3. For location-based data setup, the drivers can be entered in Division 1.
- 4. The Driver Type is hourly with all lower-case characters.
- 5. *Pay Rate* is not a value that is in use but an entry must exist. It is recommended to use a standard default value across all drivers.
- 6. Target and Max Hours indicate to the OptimizerPlus+ the desired duration of the schedule while also indicating the maximum limit that it can schedule. The OptimizerPlus+ will not build a schedule surpassing the Max Hours limit. The time includes drive time leaving the Yard, setup and pump time at the customer tanks, setup and refill time at the Storage Tanks, and all drive time in between.
- 7. Truck and Truck Division must match what is listed in the Routes to Schedule table.
- 8. No action is needed for the RRN field.

## **Browse Truck Extensions**

Truck	Starting Fill Perc	Gallons Per Minute	Max Fill Perc	Number of Drivers	Target Refills	Dollars Per Mile	Truck Tank Size	Division	Truck Tank Type	Average Speed	RRN
1122	0.00	39.00	0.80	1	3	4.50	3200	10	Р	45.00	504
1123	0.00	50.00	0.80	1	3	4.50	3200	20	P	45.00	362
1211	0.00	50.00	0.80	1	3	4.50	3200	55	P	45.00	0

- 1. There must be an entry for each truck assigned to an active OptimizerPlus+ route listed in the *Routes to Schedule* table.
- 2. The table can be modified using **Ctrl+M**.
- 3. Starting Fill Perc will be 0.00.
- 4. Gallons Per Minute is the pumping speed of gallons from the truck to customer tanks.
- 5. *Max Fill Per* is the level the truck is loaded to at each fill in decimal form. For example, if the truck is filled to 80%, the value set on the truck will be .80.
- 6. The Number of Drivers is 1.
- 7. *Target Refills* defines the number of Runs the OptimizerPlus+ will consider ideal for that truck. This value must be lower than the value in the *Routes to Schedule* table which defines the *Max Truck Refills* limit.
- 8. Dollars Per Mile, Truck Tank Size, and Average Speed values are entered per truck.
- 9. The Posting Division for the truck is the Division.
- 10. Truck Tank Type is P.
- 11. No action is needed for the RRN field.

## Schedule Log

Customer#	Name	Schedule Date	Driver	Truck	Run	Sequence	Tank RRN	EstGal2Del	Tk Stat	Elapsed Distance	Elapsed Time	Ticket#	Gal	Del
_	100 00 0	06/27/2022	14	1122	1	1	18,029	45.00	dt+	33.70	2.30		0	0.00
	Discount of Sec. A.	06/27/2022	14	1122	1	2	20,670	90.00	dt+	34.30	2.60		0	0.00
		06/27/2022	14	1122	1	3	11,952	150.00	dt+	38.10	2.90		0	0.00
		06/27/2022	14	1122	1	4	14,126	83.00	kf+ _	41.40	3.10		0	0.00
		06/27/2022	14	1122	1	5	29,207	72.00	dt+	47.00	3.40		0	0.00
		06/27/2022	14	1122	2	1	6,679	600.00	dt+	84.90	4.60	1	0	0.00
		06/27/2022	14	1122	2	2	28,341	40.00	dt+	96.70	5.10		0	0.00
		06/27/2022	14	1122	2	3	9,197	150.00	dt+	109.90	5.60		0	0.00
		06/27/2022	14	1122	2	4	29,332	71.40	kf+	138.30	6.40		0	0.00
		06/27/2022	14	1122	2	5	17,388	61.10	kf+	151.70	6.90	1	0	0.00
		06/27/2022	14	1122	2	6	26,767	62.30	kf+	157.90	7.20		0	0.00
		06/27/2022	14	1122	2	7	9,150	50.00	dt+	159.40	7.40		0	0.00
		06/27/2022	14	1122	2	8	23,080	200.00	kf+	170.70	7.90		0	0.00
		06/27/2022	14	1122	2	9	22,900	60.00	dt+	181.00	8.30		0	0.00
Impor Beginning	t Seq 20539 Import I 9 YRT AVON LP	Date 06/27/2022	nding Yf	Import T	ime 03 ESVILL	8:37:42 E LP	Fractio	n Full Before	Delivery	0.2000				

This table will show schedule information for current and historical schedules.

## Modifications to Driver/Truck Settings

### **Driver Changes**

Update Driver Hours

- 1. Table Browse Driver Extensions
- 2. Ctrl+M to modify Target and Max Hours fields

#### Move Driver Route Assignment

- 1. Table Driver Maintenance
- 2. Verify/Add driver to Energy Force Driver Maintenance
- 3. Table Browse Driver Extensions
- 4. Verify/Add driver with all fields completed
- 5. Table Routes to Schedule
- 6. Ctrl+M to modify the Div/Driver Assigned fields

### **Truck Changes**

### Update Truck Division

- Table Browse Truck Extensions
  - Modify the Division field for the truck entry
- Table Browse Driver Extensions
  - Modify the Truck Division for the Truck
- Table Routes to Schedule
  - Modify the Div/Truck Assigned field

### Move Truck to New Route/New Driver

- Table Routes to Schedule
- Table Driver Extensions

### Modify Truck Refill Limit

- Table Browse Truck Extensions
- Table Routes to Schedule

### Modify Truck Information

- **Table** Browse Truck Extensions
  - Gallons Per Minute
  - Max Fill Perc
  - Dollars Per Mile
  - Average Speed

### **Route Changes**

### Modify Route Yard

• Table – Yard and Remote Tanks GPS

### Important Considerations

1. The Route/Driver/Truck relationship must match between the Routes to Schedule, Browse Driver Extensions,

and Browse Truck Extensions tables.

						Rout	es to	Sched	ule							
	Division	Route	e Truc	k Division	Truck As	signed	Driver D	ivision	1	Driver Assigne	ed	Max Truck F	Refills T	arget Th	nreshhold	Limit Threshhold
1 SOF	TWARE SOLUTIONS INTEGRATED	1 EAST A	VON	10 445	6 2021 FF	REIGHTLIN	1		14	BRANDY WILL	IAMS	3		0	0.3	0.2
				В	row	se Di	ive	r Ex	ct	ensio	ns					
Div	ision Num	ber D	river	Driver	Туре	Pay R	ate	Targ	et	Hours	Ma	x Hour	's Tr	uck	Truck	Division
		1	14	hourly			20			8		1	.0 4	456		10
						Browse	Truck	k Exte	nsie	ons						
Truck	Starting Fill Perc	Gallons Pe	r Minute	Max Fill Perc	Number	of Drivers	Target	Refills	Dol	lars Per Mile	Truck	Tank Size	Divisior	Truck	Tank Type	Average Speed
4456	0		45	0.8		1		3		4.5		3200	1	P		40

- 2. There can only be one Yard assigned to a Route and there must be a Yard assigned to a Route.
- 3. Customer/Delivery Type Matrix must have the Optigistics Tank Type of A, J, or C populated.
- 4. A driver's hours must be between 4 18.
- 5. All percentages are entered in decimal form in every OptimizerPlus+ Maintenance table.