Understanding Window Strategies

Window strategies determine how deliveries are estimated and scheduled by selecting the calculation method used for each system. The window strategy is configured in the system edit dialog and determines which approach is used to trigger deliveries.

What are window strategies?

A window strategy defines the **method** used to calculate when a delivery is needed:

- **Degree Day**: Temperature-based consumption estimation using heating degree days
- **Monitored**: Real-time tank level readings from IoT monitoring devices
- **Calendar**: Time-based recurring delivery schedules based on intervals

The window strategy determines which calculation approach takes priority for triggering deliveries for all equipment within that system.

Window strategy types

Degree Day Window

Uses outdoor temperature data to estimate fuel consumption and predict when refills are needed based on accumulated heating degree days.

Best for:

- Heating oil customers
- Predictable seasonal consumption patterns
- Locations without tank monitors

How it works:

- Accumulates heating degree days since last delivery
- Applies usage rates (winter/summer) to estimate gallons consumed
- Triggers delivery when estimated remaining fuel drops below threshold
- Uses visual degree day windows to determine delivery timing

See: Understanding Degree Days

Monitored Window

Uses real-time tank level data from IoT monitoring devices to trigger deliveries based on actual fuel levels.

Best for:

- Customers with installed tank monitors
- Critical accounts requiring precise tracking
- Unpredictable consumption patterns

How it works:

- Reads current tank level from monitor device via serial number
- Triggers delivery when level drops below configured threshold
- Provides ground truth vs. estimated consumption

See: Understanding Fuel Monitoring

Calendar Window

Uses recurring time-based schedules to plan deliveries at regular intervals regardless of consumption.

Best for:

- Commercial accounts with predictable usage
- Will-call customers preferring set schedules
- Service contracts with fixed delivery frequencies

How it works:

- Schedules deliveries at configured intervals (days, weeks, months, years)
- Triggers on specific calendar dates or days of the week
- Can have seasonal start/end dates
- Only one schedule can be active at a time

See: Understanding Calendar Schedules

Configuring window strategies

Window strategies are configured when adding or editing a system through the Add/Edit System dialog.

Basic system settings

At the top of the dialog:

- **System Name**: Text field for the system identifier
- **Active toggle**: Enable/disable the entire system
- **Auto Delivery toggle**: Enable automatic delivery scheduling based on the selected window strategy
- **Fuel selector**: Choose between Propane, Oil, etc.
- **Window Strategy selector**: Choose **Degree Day**, **Monitored**, or **Calendar**
- **Usage multi-select**: Select applicable usage types

Strategy-specific configuration tabs

Degree Day Settings Tab

Configuration fields:

- **Winter Usage Rate**: Gallons per degree day during winter (up to 4 decimal places)
- **Summer Usage Rate**: Gallons per degree day during summer (up to 4 decimal places)
- **Window Start (Visual DD)**: Lower boundary of the delivery window
- **Target DD**: Target degree day for delivery trigger
- **Window End (Visual DD)**: Upper boundary of the delivery window

Action buttons:

- **Force Degree Day** (thumbtack icon): Manually forces the current degree day target

- **Reset DD**: Resets the degree day accumulation
- **Reset Window**: Resets the delivery window boundaries

Tank Monitor Tab

Configuration fields:

- **Monitor Serial Number**: Required field for the tank monitor identifier such as OTOData's DeviceId.
- **Monitor Barcode**: Optional field

Validation:

- Submit button is disabled until serial number is provided for monitored systems

Calendar Schedules Tab

Schedule configuration:

- **Frequency**: Numeric value (minimum 1)
- **Units**: Days, Weeks, Months, Years
- **Preferred Day of Week**: Monday-Sunday or "Any day"
- **Season Starts/Ends**: Date pickers
- **Requested Volume (gal)**: Delivery amount
- **Active toggle**: Activate/deactivate schedule

Schedule actions:

- **Set Active**: Activates schedule (deactivates others)
- **Deactivate**: Pauses schedule
- **Edit**: Modify schedule
- **Delete**: Remove schedule

Auto Delivery toggle

Controls whether the system should appear on the routing map & automatically generates delivery requests for calendar scheduling:

- **Enabled**: System actively triggers deliveries based on strategy
- **Disabled**: System tracks data but doesn't create automatic requests

Related guides

- Degree Day System
- Monitoring
- Calendar Scheduling
- Add System
- Editing a System

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