Order Routing Overview

The Order Routing Tool lets clients design order-specific assignment and visibility logic for routes. Order Routing facilitates the creation of groups containing fulfillment locations for order routes. Within these groups, rankings and filters can be applied to locations to narrow results and if no results are found, failover actions can be applied.

This allows clients to deliver superior customer satisfaction, improve in-store efficiencies by sending online orders to the stores best suited to handle their fulfillment, and reduce mark down by leveraging inventory. Other benefits of Order Routing are:

- Finding the best assignment locations for order items
  - Filter groups to retain desired locations based on assignment/visibility preferences
- Customizing routing logic
  - Apply desired rules to specific groups and order states to satisfy the most complex routing requirements
- Scheduling location downtime
  - Temporarily freeze locations based on unique requirements such as order thresholds and date ranges
- Splitting orders by item or quantity
  - Split orders when stock is not available at a single fulfillment location
- Setting item-specific assignment logic
  - Define item-specific rules for goods that require special handling

For the API calls associated with these elements of Order Routing, see the REST API documentation.

Order Routing Logic

The basic structure of Order Routing is that individual locations are assigned to "location groups" that are then assigned to "routes." Configurations at the group and route level determine the logic that allows Order Routing to analyze which locations any given order should be assigned to. Common ways that routing is factored include:

- **Inventory Life to Date (LTD):** Improve product turn and reduce markdowns by assigning orders to the stores with the slowest moving inventory
- **Minimize Shipments:** Order routing attempts to minimize the amount of shipments, minimizing shipping costs
- **Item-specific assignment:** Assign items that require assembly, personalization, or freight delivery to a specific fulfillment group or fulfiller location
- **Daily order assignment threshold:** Set daily assignment limits to ensure sales associates have the capacity to complete order fulfillment
- **Geographic proximity:** Reduce shipping costs and assign orders to stores located within a particular region

Note that Order Routing determines the location's proximity and similar geographic factors based on the latitude and longitude of the fulfillment location and the order's destination. The system usually
retrieves the latitude/longitude based on the order's ZIP code, but if an address does not include a ZIP code then it can still obtain the latitude/longitude by referencing the rest of the provided address.

For more details about how to configure location group assignment logic, see the Order Routing locations documentation.