

# Real-Time Inventory Service

The Real-Time Inventory Service (RIS) provides accurate and real-time inventory visibility to your e-commerce site, using a single source of truth to reflect inventory availability. An accurate inventory picture is essential to minimize order cancellations and avoid missed business, increasing revenue and customer satisfaction.

RIS is available on all implementation types (eCommerce+OMS, eComm-Only, and OMS-Only) and is enabled by default upon launch. If you have any questions, please contact .

The key capabilities of RIS for your storefront include:

- Real-time visibility to inventory availability on search and category pages
- Product availability on the product details page in real-time
- Accurate and near real-time inventory quantities on the product details page

## RIS on Search and Category Pages

Visibility to inventory at the beginning of the customer journey is critical in driving customer engagement. Inventory availability can be reflected on search and category pages in real-time, in which in-stock or out-of-stock inventory status for products updates instantaneously.

Inventory levels can be calculated as the total across the entire site or filtered to a location (or locations). In-stock inventory counts across the site provide a clear, single aggregate view of available inventory across all locations and segments. In-stock inventory counts localized to a store inform the customer about in-store pickup availability.

For example:

- If a customer searches for Charcoal Grill, RIS returns a count of available charcoal grills that have at least 1 SKU in stock site-wide.
- If a customer searches for Charcoal Grill at Timber Creek Store, RIS returns a count of available charcoal grills that have at least 1 SKU in stock at Timber Creek Store.
- If a customer searches for Charcoal Grill at multiple locations, RIS returns a count of available charcoal grills that have at least 1 SKU in stock at each of the selected locations.

If you want to display counts on search results or category listing pages, you must set that up in your custom theme. See the [Inventory Data in the Theme](#) section.

When filtering for locations, results will support In Store Pickup (BOPIS) and Direct Ship (STH) locations as well as product bundles. Filtering for bundles supports both "ANY" and "ALL" product search types, in which "ANY" returns locations that have at least one product code in the bundle available while "ALL" returns locations that have every product code in the bundle available. If logic is not provided, then the system will return locations based on "ANY" by default.

You can select whether this filter returns BOPIS or STH availability in your [site settings](#) at **System > Settings > General**. Set the **Location Fulfillment Types** option shown below to either one or both values. If neither are specified, the filter will default to pickup locations.

## RIS on Product Details Pages

A product becoming in-stock or out-of-stock is reflected instantly, providing inventory accuracy as the customer is making the critical decision to purchase the product. This prevents overselling or underselling of products.

The updated quantity of a product in stock is reflected in near real-time (within about 15 minutes). Updated inventory quantity information is available at an aggregate level across the site. At a location level, the quantity available for pickup can be displayed if you [set it up in your custom theme](#). This can be used for urgency messaging such as "Hurry! Only 4 items left in stock!"

For example:

- If a customer navigates to the product details page for a Shirt which is available in multiple colors and sizes, RIS returns an accurate in-stock picture for the product. The page displays only the Shirt's sizes and colors that have at least one SKU in stock. This helps the customer quickly view what is available for purchase.
- If a customer navigates to the product details page for a Shirt which is available in multiple colors and sizes, and then selects Color = Red and Size = XS, RIS returns the SKU availability and quantity site-wide (such as 20 XS Red Shirts). The page enables the "Add to Cart" button based on this inventory information.
- If a customer has selected a store and navigates to the product details page for a Shirt which is available in multiple colors and sizes, and then selects Color = Red and Size = XS, RIS returns SKU availability and quantity at the location (such as 5 XS Red Shirts available at the Timber Creek Store). The customer may select Buy Online Pick-up In Store (BOPIS) or Curbside Delivery as a fulfillment option.

## Inventory Data in the Theme

You can use fields from Kibo's API responses to inject inventory data into your custom theme in a similar manner as to [API variables in email templates](#). This allows you to display additional inventory information on the Search, Category, and Product Details pages.

The Catalog API responses (such as [Get Product](#)) include the below `inventoryInfo` object that indicates how much stock is available, as well as whether the product can be substituted and what the projected available date is for backordered products. However, the Catalog APIs use some caching so their data isn't always exactly real-time.

```
inventoryInfo: {
  manageStock: boolean,
  outOfStockBehavior: "string",
  onlineStockAvailable: int,
  onlineSoftStockAvailable: int,
  onlineLocationCode: "string",
  availableDate: "1970-01-01T00:00:00.000Z",
  isSubstitutable: boolean
},
```

The Real-Time Inventory APIs provide the real-time inventory levels for you to use in your theme. See the [Real-Time Inventory API guide](#) for more details about these APIs and their responses. While you may use the RIS APIs as your main method of retrieving inventory counts, you can supplement that approach with the Catalog APIs. For instance, you could display `inventoryInfo.availableDate` on the details page of an out-of-stock product, such as in "This product will be available again on March 1."