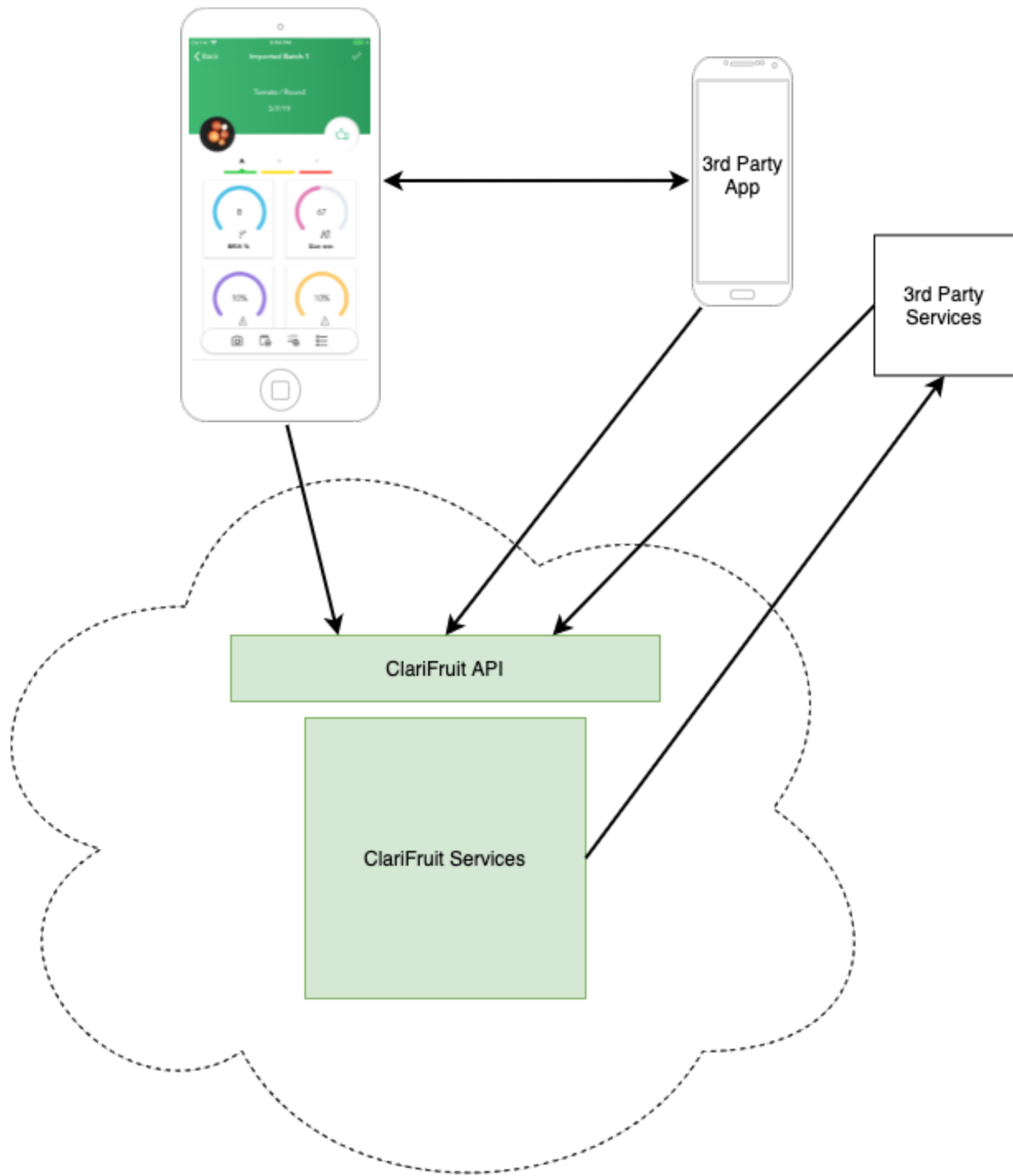


Clarifruit Platform 3rd Party Integrations

- [Integration Types](#)
 - [Inbound integrations](#)
 - [Outbound integrations](#)
- [Common Use Cases](#)
- [Integration Details](#)
 - [Inbound Integration](#)
 - [Outbound Integrations](#)
 - [Inspection Creation Outbound Hook](#)
 - [Inspection Lifecycle Outbound Hook](#)
 - [Mapping of IDs](#)

The ClariFruit platform supports various types of integration, both at the app level and using its API. The following document describes the various integration options at a high level.



Integration Types

The Clarifruit platform supports 2 types of integrations:

Inbound integrations

A 3rd party system can invoke the Clarifruit API to:

- Import inspections (using JSON)
- Import inspection data (photos and measurements)
- Export inspections and their data as CSV or JSON

Outbound integrations

- When creating an inspection, the platform supports scanning a barcode (or entering a value manually) and calling out to a 3rd party HTTP endpoint to retrieve relevant information like: variety, standard, inspection name, process, package, and custom properties (such as grower, packing info, arrival date, etc.). This is done during inspection creation, to save the inspector to type this information and store this information along with the inspection. This data is also shown in the platform's reports
- During inspection lifecycle, creation/completion/approval/archival the platform can send out the inspection information to a 3rd party endpoint

Common Use Cases

The most common use cases we identified for customers are:

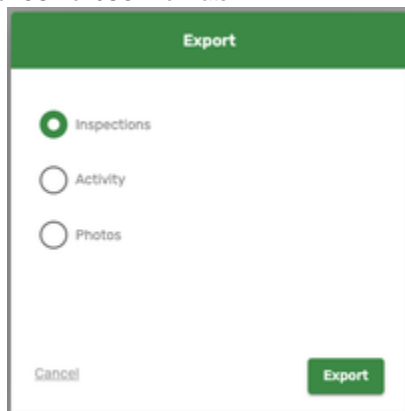
1. During inspection creation, fill out information from an ERP or other backend system. To accomplish this, use the "Barcode Outbound Integration" support, which allows sending one or more identifiers to the ERP system and returning back information to fill out on the inspection. This requires specifying the field to send to the ERP and mapping of the return values to Clarifruit's internal identifiers.
2. When an inspection is approved, send its full information in real-time to the ERP. The inspection information includes any manual and calculated measurements, defects, and grades.

Integration Details

The following describes the flow and technical details of these integrations.

Inbound Integration

1. ClariFruit API (<http://api.clarifruit.com>) exposes import and export actions for inspections. It enables customers to build additional capabilities on top of the platform. For example, the /import API allows the creation of inspections, including pre-populated data (photos /measurements, etc.). The /export API allows a periodic export of inspections using various filters.
2. Both the API and the ClariFruit WebApp (<https://app.clarifruit.com>) support exporting any type of data, including full inspections, detailed activity data and also inspection photos, to either CSV or JSON formats



3. The ClariFruit app supports opening the client app for a specific inspection to add photos/scans/other data. It allows seamless app-to-app integration for extending other apps with ClariFruit's capabilities

Outbound Integrations

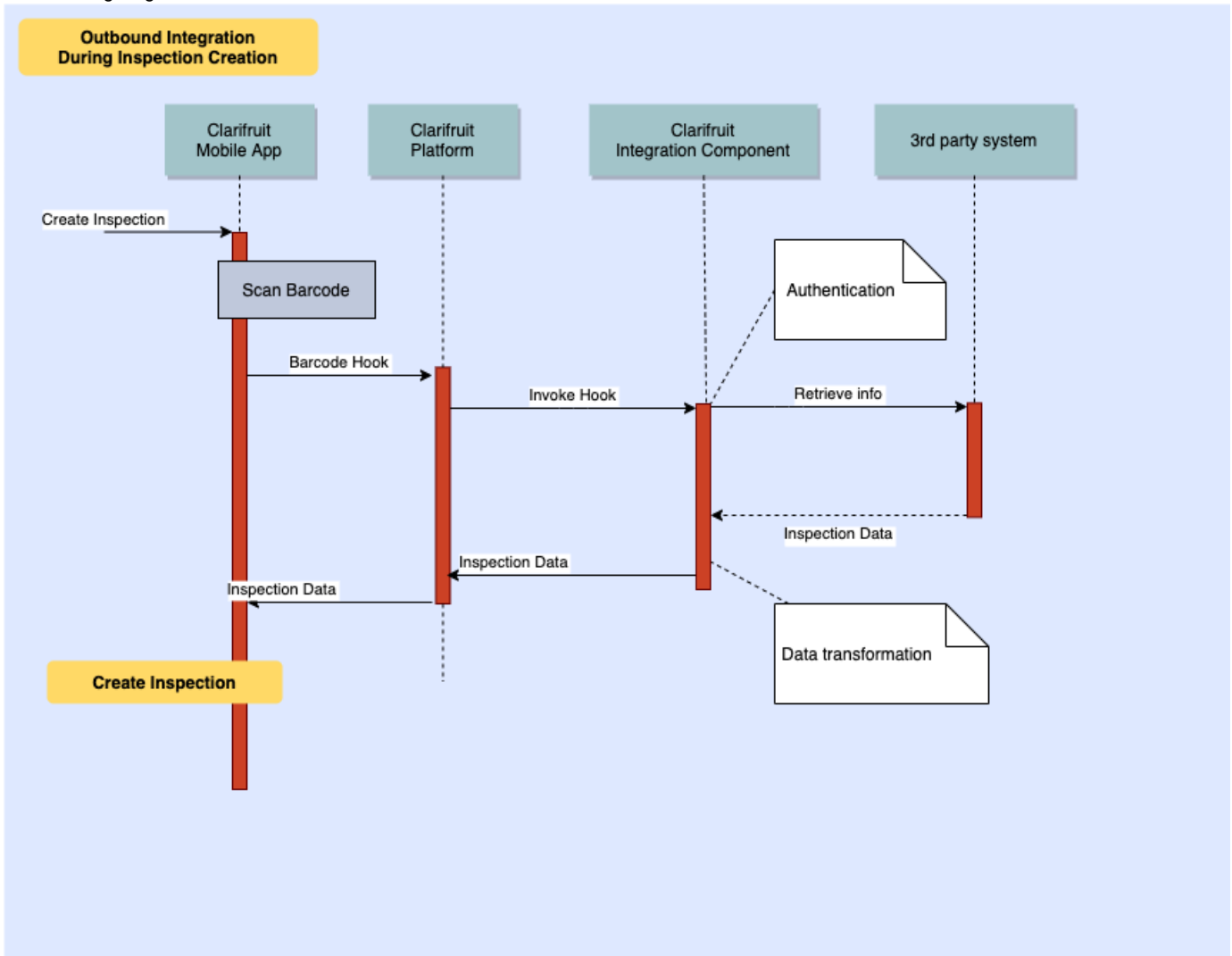
Inspection Creation Outbound Hook

The purpose of this integration is to retrieve inspection information from a 3rd party system. Such as variety, standard, inspection name, package, process, and properties like "Grower", "Arrival time", etc. (any configured custom property). Any information retrieved can be stored in Clarifruit's and presented on the mobile app.

Flow:

- When an inspection is created on Clarifruit's mobile app, it allows scanning a barcode, using the camera or a barcode reader, to identify this inspection. This barcode can also be typed manually
- The app supports multiple barcode fields and any of them, including the inspection name, can be configured to trigger an outbound call to API to retrieve additional data
- Once a barcode is entered, the mobile application can perform an outbound call to a 3rd party HTTP endpoint. This is done via the Clarifruit platform (not directly via the app)

The following diagram illustrates the data retrieval flow.



Inspection Lifecycle Outbound Hook

The platform supports the following lifecycle outbound hooks: creation/import/completion/approval/archival. Any of these can be configured to call out to a 3rd party Http endpoint.

For example, when an inspection is completed, if configured, the platform calls out to a 3rd party HTTP endpoint, to send any inspection details, like final grade, score, and any other measurements calculated for this inspection

Mapping of IDs

All integrations above required mapping of external master data to the internal master data. This means that if Clarifruit's platform is configured to use an internal object, then passing data for this object will use an external identifier and the 3rd party system will only send and receive this external identifier.

The following master data entities can be mapped:

- Produce Varieties
- Attributes (such as BRIX, Diameter, Size Group, Color group, etc.)
- Defects
- Properties