LEAF

DATA SYSTEMS

POWERED BY MJ FREEWAY

Leaf Data Systems

State of Washington

Licensee User Manual v 1.1

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Change Summary

PART	SECTION	SUBSECTION	CHANGE DETAIL	DATE
PART ONE: Table of Data Set Descriptions	Production Facility Data Set Descriptions	Data Set: Adding Batches	Description updated to include "Propagation Material" batches	4/1/2018
PART ONE: Table of Data Set Descriptions	Production Facility Data Set Descriptions	Data Set: Modifying Plants	Description updated to remove ability to move individual plants from area to area.	4/1/2018
PART ONE: Table of Data Set Descriptions	Production Facility Data Set Descriptions	Data Set: Inventory Conversion	Section Added	4/1/2018
PART ONE: Table of Data Set Descriptions	Production Facility Data Set Descriptions	Data Set: Inventory Destruction	Section Added	4/1/2018
PART ONE: Table of Data Set Descriptions	Processing Facility Data Set Descriptions	Data Set: Adding Batches	Description updated to include "Propagation Material" batches	4/1/2018
PART ONE: Table of Data Set Descriptions	Processing Facility Data Set Descriptions	Data Set: Inventory Destruction	Section Added	4/1/2018
PART ONE: Table of Data Set Descriptions	Retailer Facility Data Set Descriptions	Data Set: Adding Batches	Description updated to include "Propagation Material" batches	4/1/2018
PART ONE: Table of Data Set Descriptions	Retailer Facility Data Set Descriptions	Data Set: Inventory Destruction	Section Added	4/1/2018
PART TWO: High Level Workflow Diagrams	Production Facility Workflow	Propagation, Living Plant Processes, Inventory Functions	Updated to include Propagation Inventory and Conversions	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Administrative Setup	Added "Create User Profiles" section	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Administrative Setup	Updated "Viewing and Modifying Users" section	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Understanding Batches	Section Added	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Adding Plants	Section Removed	4/1/2018

PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Adding Propagation Material Inventory	Section Added	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Moving Propagation Inventory to Plants	Section Added	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Living Plant Processes	Updated "Changing Areas"	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Destructions	Updated Section	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Production Facilities	Inventory Transfers	Updated Section to include all procedures related to inventory transfers	4/1/2018
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PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Retailer Facilities	Administrative Setup	Added "Create User Profiles" section	4/1/2018
PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Retailer Facilities	Administrative Setup	Updated "Viewing and Modifying Users" section	4/1/2018

PART THREE: Manual Data Entry Procedures	Procedures for Manual Data Entry at Retailer Facilities	Understanding Batches	Section Added	4/1/2018
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Table of Contents

PART ONE: Table of Data Set Descriptions

Production Facility Data Set Descriptions

DATA SET	DESCRIPTION
Admin Setup	Prior to performing day-to-day operations at a facility, an administrative user of the facility must set up certain information, to include: User Profiles, Areas, Strain, and Inventory Types.
Admin Setup: User Profiles	User Profiles identify individual team members who will have access to Leaf Data Systems. User authorization levels include the following options: • Disabled—users who do not have access to the database • View—users that are able to see the data within the database without being able to perform any functions to change the data • Edit—users that are able to edit the data within the database, excluding the administrative functions • Admin—users that are able to edit the data within the database, including the administrative functions Usernames consist of the individual's email address, which is also used to fulfill password reset requests. Passwords must be at least 12 characters in length and must contain (at least) one of each of the following: uppercase letter, lowercase letter, number, and symbol (!@#$%^&*<>?).
Admin Setup: Areas	Areas within a facility represent the physical locations where plants or inventory lots may be present. Setting up areas at a facility enables physical reconciliation of plants and inventory lots with system counts.
Admin Setup: Strains	Strains that will be present at a facility (in the form of plants or strain-specific inventory lots) must be designated within the database for selection within plant and inventory lot records.
Admin Setup: Inventory Types	Inventory Items represent the concept of the products that will be produced, processed, or sold at a facility. They carry global attributes associated with the product, but do not represent physical inventory.
Adding Batches	There are four types of batches: propagation material, plant, harvest, and intermediate/end product. 'Propagation material' batches represent immature plants (seedlings, clone cuttings, or tissue culture samples) that are all the same strain. 'Plant' batches must be created in order to house groups of plants of the same strain. 'Harvest' batches represent plants of the same strain that have been harvested. Plants from different plant batches may be combined to produce a single harvest batch as long as they are all the same strain.

	'Intermediate/end product' batches represent batches of intermediate or end products that are made up of multiple harvest batches that have been combined. At a Production Facility, all living plants must be associated with either a propagation material or plant batch. All harvested plants must be associated with a harvest batch. Intermediate/end product batches are found at Processing Facilities when harvest batches are combined, for example, small amounts of trim from multiple harvest batches can be combined into a mixed batch which is then processed.
Modifying Batches	The attributes of a batch of plants can be adjusted by modifying the batch record.
Adding Plants	While plants can be created upon the creation of a plant batch, they can also be added to an associated batch after it has been created by adding a plant record.
Modifying Plants	Plant records may be modified to add attributes, such as a mother plant designation.
Destruction of Plants or Batches	Plants or batches can be destroyed using the destruction function. *NOTE: Destroying a plant or batch implies that it once existed and is being destroyed.*
Deleting Records	Plant or batch records can be deleted. *NOTE: Deleting a plant or batch record implies that the record was created in error, and that the plant or batch never existed.*
Harvest Process	Wet weight of a harvest represents the total weight of the harvest batch immediately after the plants are cut down. Dry (cure) weight of a harvest represents the total dried weight of the flower and other material that comprises the harvest batch. Waste weight can be entered for a harvest batch at any step throughout the harvest process.
Creating Inventory Lots	Inventory lots are created from harvest batches, and can either be comprised of 'flower' or 'other material'.
Inventory Lot Functions	Once inventory lots have been created, actions that can be performed from the 'Inventory Lots' listing include splitting the lots, moving the lots from area to area, or creating disposals of all or part of the lot.
Inventory Adjustments	Inventory adjustment records record the reason for an inventory lot to be adjusted, along with the audit history of the transaction.
Inventory Conversion	Inventory conversions at a production facility are performed when "flower" and "other material" are converted into "flower lots" and "other material lots".
Inventory Destruction	Part or all of an inventory lot may be processed for destruction with the destruction function.
Transferring Samples to Testing Lab	Lab samples must be sent for testing, and passing test results associated with the sample (which carries through to the entire batch of product), before any inventory associated with the batch may be transferred to other licensed facilities.

Transferring Inventory to Other Licensees	Creating an inventory transfer record allows for designation of the inventory to be transferred and captures the information necessary to populate the transport manifest. Transport manifest records can be found associated to inventory transfers.

Processing Facility Data Set Descriptions

DATA SET	DESCRIPTION
Admin Setup	Prior to performing day-to-day operations at a facility, an administrative user of the facility must set up certain information, to include: User Profiles, Areas, Strain, and Inventory Types.
Admin Setup: User Profiles	User Profiles identify individual team members who will have access to Leaf Data Systems. User authorization levels include the following options: • Disabled—users who do not have access to the database • View—users that are able to see the data within the database without being able to perform any functions to change the data • Edit—users that are able to edit the data within the database, excluding the administrative functions • Admin—users that are able to edit the data within the database, including the administrative functions Usernames consist of the individual's email address, which is also used to fulfill password reset requests. Passwords must be at least 12 characters in length and must contain (at least) one of each of the following: uppercase letter, lowercase letter, number, and symbol (!@#$%^&*<>?).
Admin Setup: Areas	Areas within a facility represent the physical locations where inventory lots may be present. Setting up areas at a facility enables physical reconciliation of inventory lots with system counts.
Admin Setup: Strains	Strains that will be present at a facility (in the form of plants or strain-specific inventory lots) must be designated within the database for selection within inventory lot records.
Admin Setup: Inventory Types	Inventory Types represent the concept of the products that will be produced, processed, or sold at a facility. They carry global attributes associated with the product, but do not represent physical inventory.
Adding Batches	There are four types of batches: propagation material, plant, harvest, and intermediate/end product. 'Propagation material' batches represent immature plants (seedlings, clone cuttings, or tissue culture samples) that are all the same strain. 'Plant' batches must be created in order to house groups of plants of the same strain. 'Harvest' batches represent plants of the same strain that have been harvested. Plants from different plant batches may be combined to produce a single harvest batch as long as they are all the same strain. 'Intermediate/end product' batches represent batches of intermediate or end products that are made up of multiple harvest batches that have been combined.

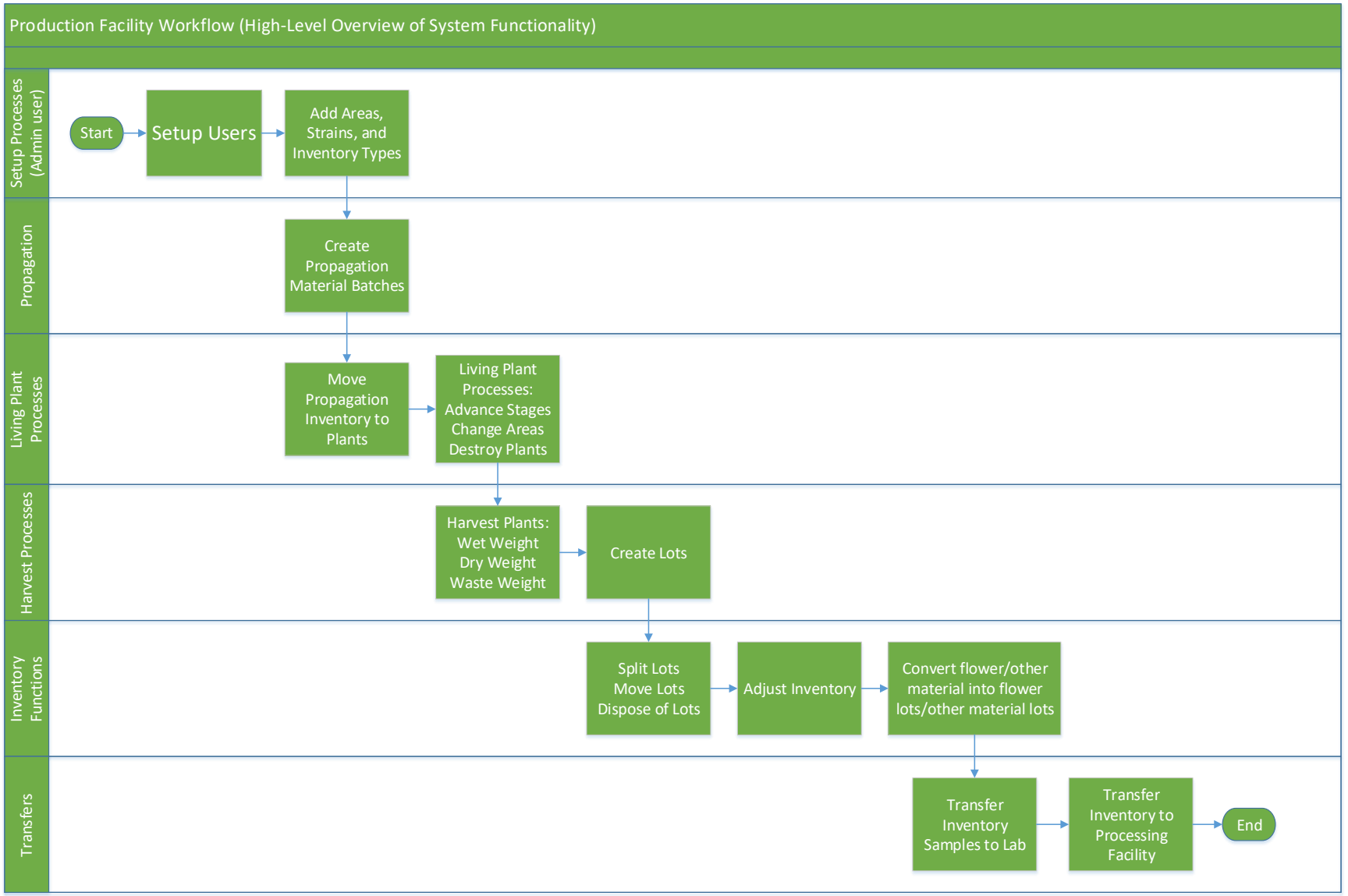
	At a Processing Facility, there are no propagation material or plant batches present. Harvest batches are received from Production Facilities. Any product that is created by combining multiple harvest batches is considered to be an intermediate/end product batch. The only time that a batch would be created manually is when initial inventory is being entered into the database. Once this period has ended, all inventory batches should be received into the facility via inventory transfer.
Modifying Batches	The attributes of a batch can be adjusted by modifying the batch record.
Deleting Records	Batch records can be deleted. *NOTE: Deleting a batch record implies that the record was created in error, and that the batch never existed.*
Creating Inventory Lots	Inventory lot records can be created, however, the only time this would occur is when initial inventory is being entered into the database. Once this period has ended, all inventory lots should be received into the facility via inventory transfer.
Receiving Inventory Transfers	Inventory transfers add inventory lots to the database of the receiving facility. These inventory lots carry the batch attributes that were assigned to them at the licensed facility from which they were transferred.
Inventory Lot Functions	Once inventory lots have been created or received, actions that can be performed from the 'Inventory Lots' listing include splitting the lots, moving the lots from area to area, or creating disposals of all or part of the lot.
Inventory Adjustments	Inventory adjustment records record the reason for an inventory lot to be adjusted, along with the audit history of the transaction.
Inventory Conversion	Inventory conversions at a processing facility are performed when extraction and infusion processes take place. As well, pre-packaging of bulk inventory into measured containers can be performed by utilizing the inventory conversion function.
Inventory Destruction	Part or all of an inventory lot may be processed for destruction with the destruction function.
Transferring Samples to Testing Lab	Lab samples must be sent for testing, and passing test results associated with the sample (which carries through to the entire batch of product), before any inventory associated with the batch may be transferred to other licensed facilities.
Transferring Inventory to Other Licensees	Creating an inventory transfer record allows for designation of the inventory to be transferred and captures the information necessary to populate the transport manifest. Transport manifest records can be found associated to inventory transfers.

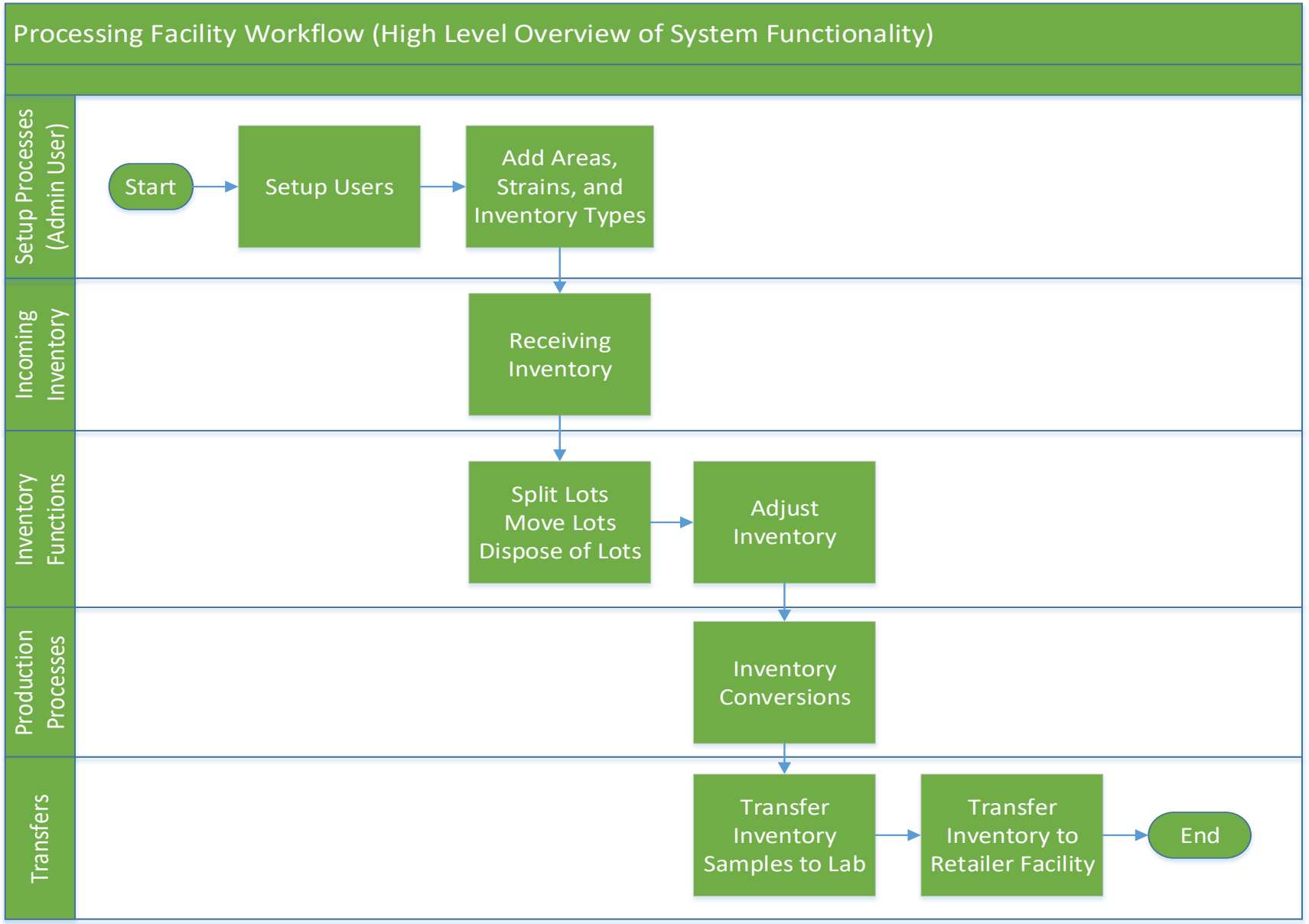
Retailer Facility Data Set Descriptions

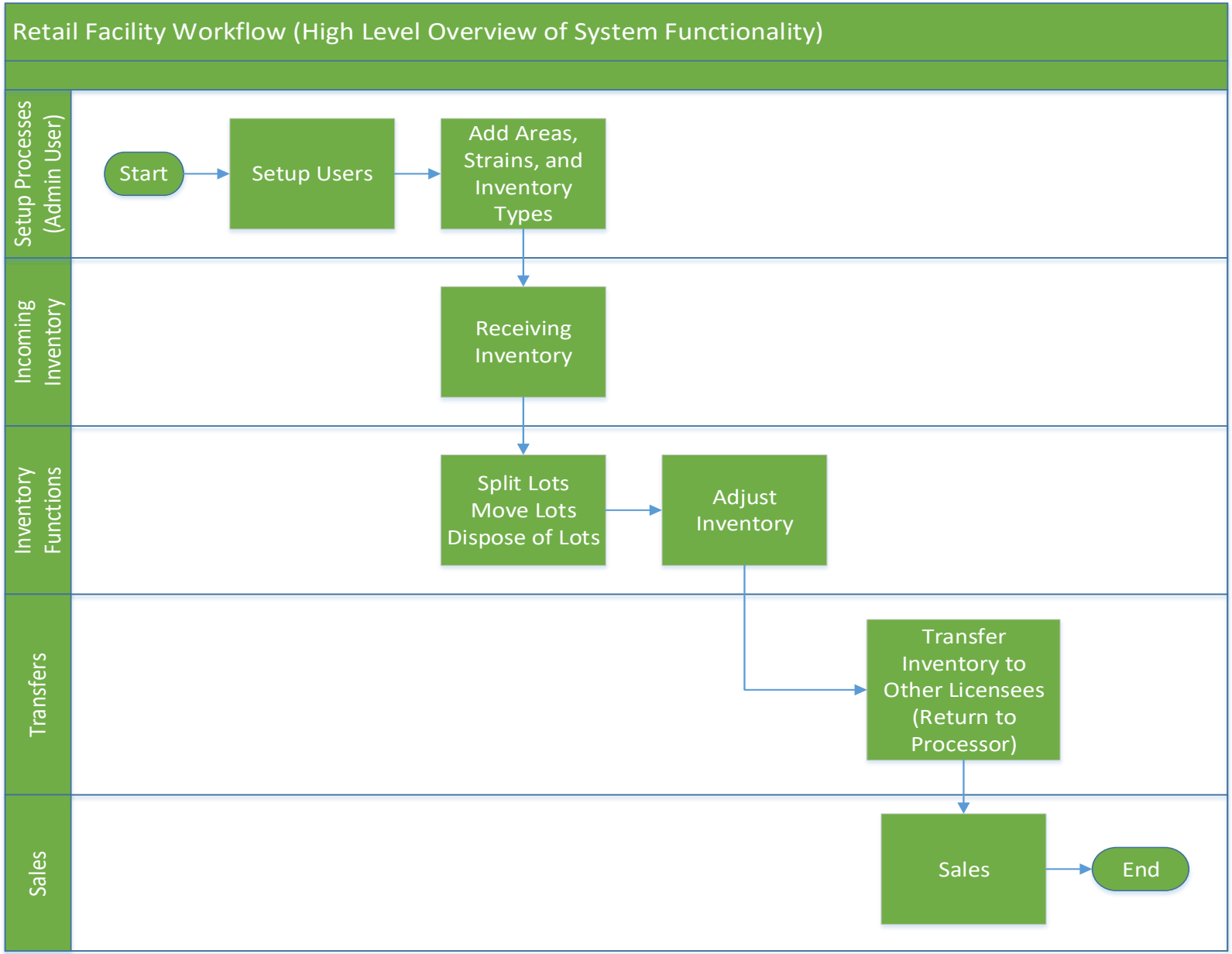
DATA SET	DESCRIPTION
Admin Setup	Prior to performing day-to-day operations at a facility, an administrative user of the facility must set up certain information, to include: User Profiles, Areas, Strain, and Inventory Types.
Admin Setup: User Profiles	User Profiles identify individual team members who will have access to Leaf Data Systems. User authorization levels include the following options: • Disabled—users who do not have access to the database • View—users that are able to see the data within the database without being able to perform any functions to change the data • Edit—users that are able to edit the data within the database, excluding the administrative functions • Admin—users that are able to edit the data within the database, including the administrative functions Usernames consist of the individual's email address, which is also used to fulfill password reset requests. Passwords must be at least 12 characters in length and must contain (at least) one of each of the following: uppercase letter, lowercase letter, number, and symbol (!@#$%^&*<>?).
Admin Setup: Areas	Areas within a facility represent the physical locations where plants or inventory lots may be present. Setting up areas at a facility enables physical reconciliation of plants and inventory lots with system counts.
Admin Setup: Strains	Strains that will be present at a facility (in the form of plants or strain-specific inventory lots) must be designated within the database for selection within plant and inventory lot records.
Admin Setup: Inventory Types	Inventory Types represent the concept of the products that will be produced, processed, or sold at a facility. They carry global attributes associated with the product, but do not represent physical inventory.
Adding Batches	There are four types of batches: propagation material, plant, harvest, and intermediate/end product. 'Propagation material' batches represent immature plants (seedlings, clone cuttings, or tissue culture samples) that are all the same strain. 'Plant' batches must be created in order to house groups of plants of the same strain. 'Harvest' batches represent plants of the same strain that have been harvested. Plants from different plant batches may be combined to produce a single harvest batch as long as they are all the same strain. 'Intermediate/end product' batches represent batches of intermediate or end products that are made up of multiple harvest batches that have been combined.

	At a Retailer Facility, there are no propagation material, plant, or harvest batches present. Harvest batches are received by Processing Facilities from Production Facilities and used to create intermediate/end product batches. Any intermediate or end product that is created from one or more harvest batches is considered to be an intermediate/end product batch. The only time that a batch would be created manually is when initial inventory is being entered into the database. Once this period has ended, all inventory batches should be received into the facility via inventory transfer.
Modifying Batches	The attributes of a batch can be adjusted by modifying the batch record.
Deleting Records	Batch records can be deleted. *NOTE: Deleting a batch record implies that the record was created in error, and that the batch never existed.*
Creating Inventory Lots	Inventory lot records can be created, however, the only time this would occur is when initial inventory is being entered into the database. Once this period has ended, all inventory lots should be received into the facility via inventory transfer.
Receiving Inventory Transfers	Inventory transfers add inventory lots to the database of the receiving facility. These inventory lots carry the batch attributes that were assigned to them at the licensed facility from which they were transferred.
Inventory Lot Functions	Once inventory lots have been created or received, actions that can be performed from the 'Inventory Lots' listing include splitting the lots, moving the lots from area to area, or creating disposals of all or part of the lot.
Inventory Adjustments	Inventory adjustment records record the reason for an inventory lot to be adjusted, along with the audit history of the transaction.
Inventory Destruction	Part or all of an inventory lot may be processed for destruction with the destruction function.
Sales Transactions	Inventory sold to customers within the retail facility is recorded as sales transactions. Sales transaction types include sale, return, and void.
Transferring Inventory to Other Licensees	Creating an inventory transfer record allows for designation of the inventory to be transferred and captures the information necessary to populate the transport manifest. Transport manifest records can be found associated to inventory transfers.

PART TWO: High Level Workflow Diagrams


Production Facility Workflow (High-Level Overview of System Functionality)
Setup Processes (Admin user)
Start
Setup Users
Add Areas, Strains, and Inventory Types
Propagation
Create Propagation Material Batches
Living Plant Processes
Move Propagation Inventory to Plants
Living Plant Processes: Advance Stages Change Areas Destroy Plants
Harvest Processes
Harvest Plants: Wet Weight Dry Weight Waste Weight
Create Lots
Inventory Functions
Split Lots Move Lots Dispose of Lots
Adjust Inventory
Convert flower/other material into flower lots/other material lots
Transfers
Transfer Inventory Samples to Lab
Transfer Inventory to Processing Facility
End


Processing Facility Workflow (High Level Overview of System Functionality)
Setup Processes (Admin User)
Start
Setup Users
Add Areas, Strains, and Inventory Types
Incoming Inventory
Receiving Inventory
Inventory Functions
Split Lots
Move Lots
Dispose of Lots
Adjust Inventory
Production Processes
Inventory Conversions
Transfers
Transfer Inventory Samples to Lab
Transfer Inventory to Retailer Facility
End


Retail Facility Workflow (High Level Overview of System Functionality)
Setup Processes (Admin User)
Start
Setup Users
Add Areas, Strains, and Inventory Types
Incoming Inventory
Receiving Inventory
Inventory Functions
Split Lots
Move Lots
Dispose of Lots
Adjust Inventory
Transfers
Transfer Inventory to Other Licensees (Return to Processor)
Sales
Sales
End

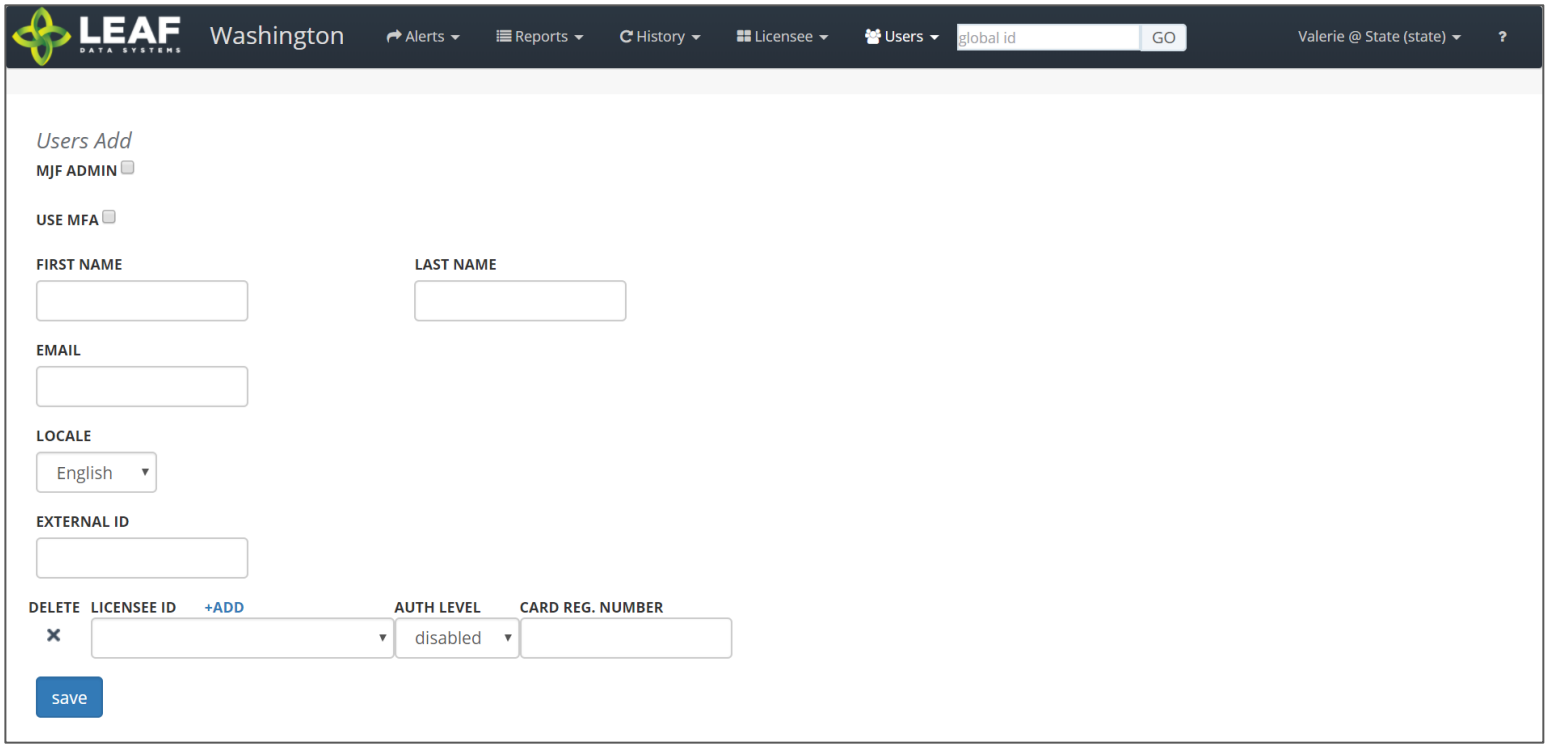
PART THREE: Manual Data Entry Procedures

Data Entry—User Interface: Procedures for Manual Data Entry at Production Facilities

Administrative Setup

Create User Profiles

To create a new user profile, navigate to 'Users→Add'.

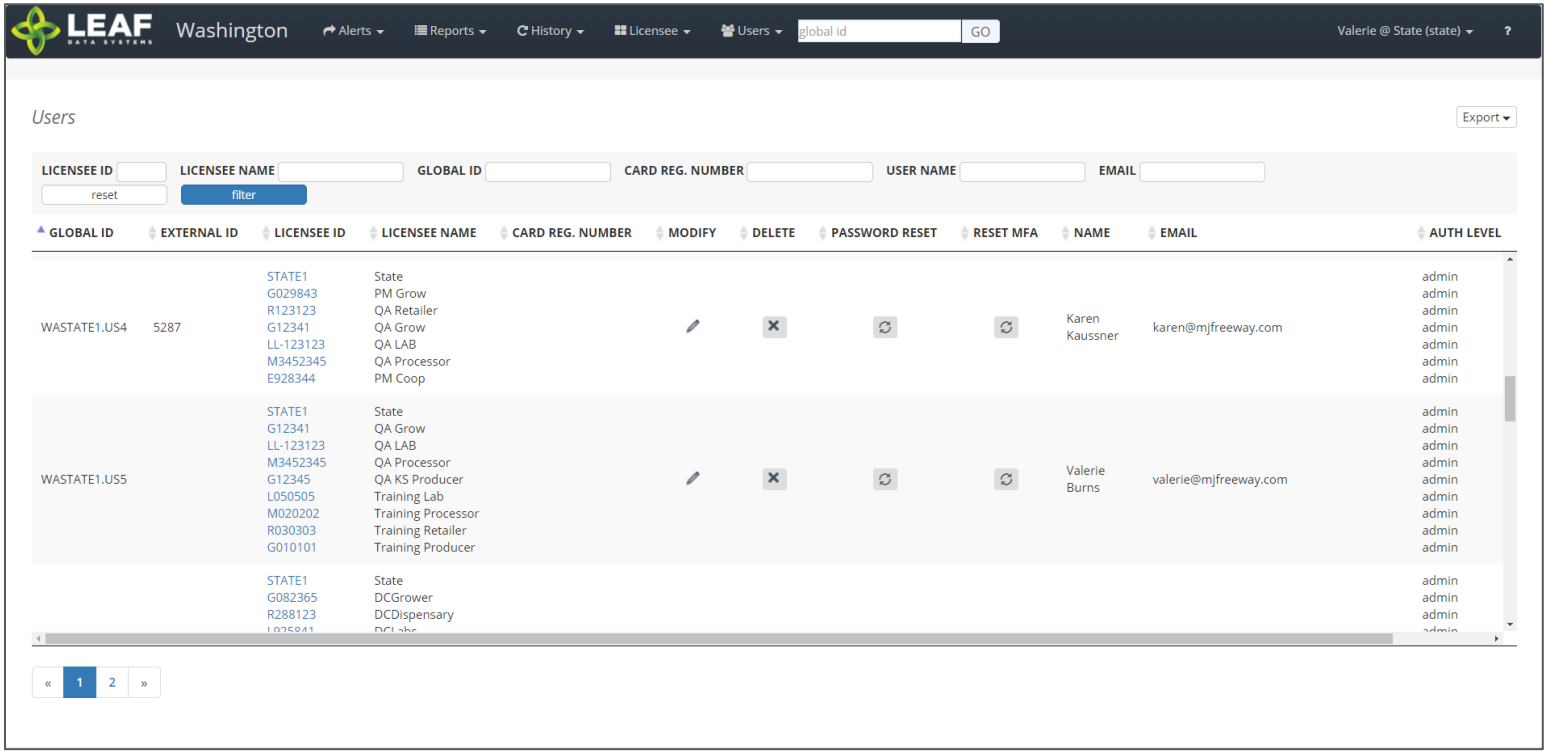


1. **Use MFA:** ***Do not check this box because SAW is being used to authenticate into Leaf Data Systems.*** This feature has been deprecated and will be removed in a later release.
2. **First Name:** Type the first name of the user.
3. **Last Name:** Type the last name of the user.
4. **Email:** Enter the email address of the user.
5. **Locale:** Select the primary language of the user.
6. **External ID:** (optional field) Provides the ability to enter a secondary reference name/number for this record.
7. **Licensee ID:** From the drop-down menu, select the licensee(s) that the user should have access to.

8. **Delete:** Click the 'X' to delete a licensee row that has been added.
9. **Add:** Click the '+ADD' link to add more rows of licensees.
10. **Auth Level:** For each licensee that the user is assigned to, select an 'Authorization Level' from the drop-down menu.
    a. 'View' allows a user to see information present in Leaf Data without the ability to perform data functions.
    b. 'Edit' allows a user to view information in Leaf Data, as well as perform functions pertaining to day-to-day operations of the facility. The administrative setup functions described in this procedure are NOT able to be performed by a user with an 'edit' authorization level.
    c. 'Admin' allows a user access to all information and all functionality within Leaf Data that may be viewed or performed by the associated Licensee ID.
    d. 'Disabled' maintains a users profile in Leaf Data Systems while prohibiting the user from accessing the database.
11. **Card Reg. Number:** (optional field) Provides the ability to enter further identification of a user (for example, an employee number).
12. **Save:** Click the 'save' button to create the new user.

Viewing and Modifying Users

To view users that have been created within Leaf Data Systems, navigate to 'Users→View'. Use the filters and column headers to sort the data to find a specfic record. To modify the record, click the 'pen' icon in the 'Modify' column of the line item you wish to modify. Update the information that has changed, and click the 'Save' button to update the record.



Create Areas

1. Navigate to 'Data Entry→Areas'.
2. To create a new area, click the 'add' button in the upper-right corner of the screen.
3. Enter a name for the area, then select the corresponding area type.
4. Click the 'save' button to create the area.
5. Repeat steps 2-4 until all physical locations where plants and product may exist are represented within Leaf Data.

Create Strains

1. Navigate to 'Data Entry→Strains'.
2. To create a new strain, click the 'add' button in the upper-right corner of the screen.
3. Enter the strain name in the name field, then click the 'save' button to create the strain.
4. Repeat steps 3-4 until all strains that will be present at the facility are represented within Leaf Data.

Create Inventory Types

1. Navigate to 'Data Entry→Inventory Types'.
2. Click the 'add' button in the upper-right corner of the screen.
3. In the 'Name' field, enter a name for the new inventory type, for example, the strain name followed by descriptive wording, such as 'flower' or 'other material'.
4. Select the 'category' and 'subcategory' that represent the inventory type being created.
5. Optionally, you may enter a description of the inventory type.
6. Select the unit of measure that corresponds to the inventory type being created: if the product is measured by its weight, select grams (gm) and if the product is measured by a piece count, select each (ea).
7. Once the form is complete, click the 'save' button to create the inventory type.

Understanding Batches

The purpose of using batches to group together plant and inventory records is two-fold. Batches assist with creating the traceability that the system is designed to offer. As well, batches allow producers to manage plants in any phase in groups, which enables mass actions to be applied to numerous records simultaneously. Batches are not intended to constrain activities involving plant movement, as plants can be shifted from one batch to another and do not have exclusive relationships with batches they are added to.

Batch types include propagation material, plant, harvest, and intermediate/end product.

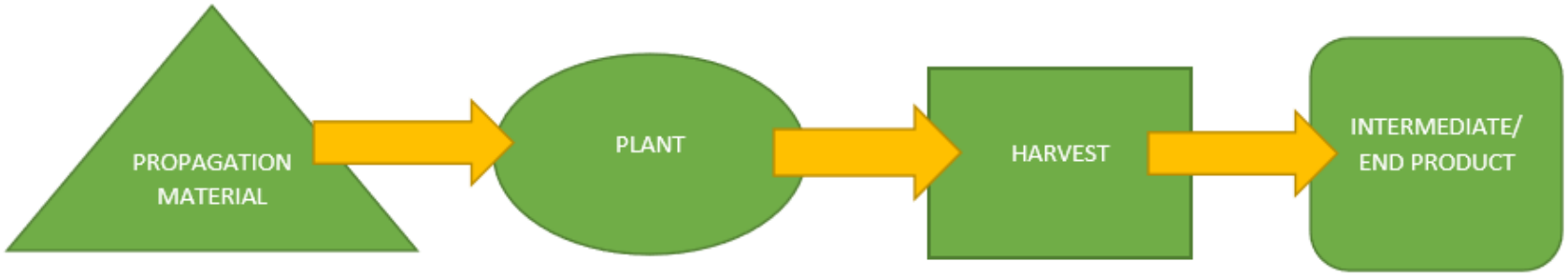
'Propagation Material' batches are used to create inventory lots of seeds, clones, and plant tissue so that these plants can be tracked as inventory throughout their propagation phase. As plants shift from their propagation to vegetative phase, they are moved to plants at which point the plant records are associated with a 'plant' type batch.

'Plant' batches are a group of plants from the same strain, that are growing together within their vegetative and flowering phases. Attributes of all of the plants within a batch can be modified at the batch level, which will apply changes across all of the plant records.

'Harvest' batches represent a group of harvested material that is all the same strain. These types of batches are used to denote both 'wet' and 'dry' weight of 'flower' and 'other material' produced during the harvest. Resultant dry weight from a harvest batch is separated into 'inventory lots'.

'Intermediate/end product' batches are batches that consist of multiple harvest batches being combined, for example, combining two different strains to make a blended concentrate product. They can also be comprised of a single harvest batch that has been converted into an intermediate or end product.

Visualization of the Batch Life Cycle



Adding Propagation Material Inventory

1. Navigate to 'Data Entry→Batches' to create a batch that will represent the propagation material being created.
2. Click the 'add' button in the upper-right corner of the screen.
3. From the 'Type' drop-down menu, select 'propagation material'.
4. In the 'Area' field, begin typing the name of the area where the propagation material will be located, and then select it from the list that appears.
5. From the 'Strain' drop-down menu, select the strain of the plants being created. *NOTE: This process must be repeated for each strain of plants being created, as batches are strain-specific.*
6. From the 'Propagation Source' drop-down menu, select the appropriate propagation source for the plant batch being added.
7. The 'Mother Plant ID' field is an optional field designed to relate the propagation material to the "mother plant" that it came from.
8. In the 'Quantity' field, type the number of immature plants being created with this batch.
9. Click the 'save' button to create the new batch.

Moving Propagation Inventory to Plants

1. Navigate to 'Data Entry→Lots'.
2. Locate the inventory lot that represents the immature plants that are being advanced from propagation to their vegetative phase.
3. In the 'Move to Plants' column, click the tree icon on the line item of the propagation inventory to be shifted to plants.
4. In the 'Qty' field, enter the number of immature plants that are being moved to the plant batch.
5. From the 'Batch ID' drop-down menu, select the plant batch to add the plants to, or leave this selection blank for a new plant batch to be created.
6. Click the 'move back to plants' button.

Living Plant Processes

Living plant processes may be performed to either batches of plants. To modify the attributes of an individual plant, shift the plant to a different batch with the desired attributes.

Changing Areas

1. Navigate to 'Data Entry→Batches' to advance the stage of a batch of plants.
2. Locate the batch that must be shifted to a new location, and click the 'Modify' icon within the line item.
3. Update the area using the 'Area' field.
4. Click the 'save' button.

Destroying a Plant

1. Navigate to 'Data Entry→Plants'.
2. Within the line item of the plant to be disposed of, click the dispose icon.
3. In the 'Source' drop-down menu, 'Plant' will be automatically selected.
4. From the 'Plant' drop-down menu, confirm the global ID of the plant being destroyed.
5. Click the 'Actual Date of Destruction' field to select the date that the batch of plants was destroyed.
6. From the 'Reason' drop-down menu, select the appropriate reason for destruction.
7. Click the 'save' button to dispose of the batch of plants.

Harvest Process

Within the 'Harvest Process', a 'Wet Weight' is defined as the total wet weight of the flower and other material at the time of harvest. The 'Cure Weight' is defined as the total dry weight of the flower and other material produced from a batch prior to distribution. The waste weights may be entered repeatedly as waste is generated throughout the harvest process.

Wet Weight

1. Navigate to 'Data Entry→Batches'.
2. Within the line item of the batch to be harvested, click the 'Harvest' icon in the 'Action' column.
3. From the 'Area' drop-down menu, select the area where the harvest material will be stored.
4. From the 'Harvest Batch' drop-down menu, select 'new' to create a new harvest batch, or select the harvest batch where the plants being harvested should be added.
5. Enter any waste weight generated into the 'Waste (gm)' field.
6. Enter the wet weight of the plants upon harvest into the 'Flower Wet Weight (gm)' and 'Other Material Wet Weight (gm) fields.
7. Click the 'Harvested Date Begin' field and select the date/time that the harvest was initiated for this harvest batch.
8. Upon completion of the harvest process, the 'Harvested Date End' field can be completed.
9. From the active plant records listed, click the checkbox next to each plant being harvested to select it, or click the 'check all' checkbox at the top of this section to select all of the plants listed.
10. Click the 'save' button.

Cure Weight

1. Navigate to 'Data Entry→Batches'.
2. Within the line item of the batch that the cure weight is being collected for, click the 'Cure' icon in the 'Action' column.
3. Enter the cured dry weight of the flower and other material into the 'Flower Dry Weight (gm)' and 'Other Material Dry Weight (gm)' fields.
4. Click the 'cure batch' button.

Waste Weight(s)

1. Navigate to 'Data Entry→Batches'.
2. Within the line item of the batch that the waste weight is being documented for, click the 'Waste' icon in the 'Action' column.
3. Enter the waste weight into the 'Waste' field.
4. Click the 'save' button.
5. This will create a destruction record, as well as an inventory lot representing the weight of the plant matter to be destroyed.

Creating Lots

1. Once all harvest weights (wet weight, cure weight, and waste weight) have been documented for a batch, navigate to 'Data Entry→Batches' to create lots of finished product.
2. Within the line item of the batch being packaged into lots, click the 'Finish' icon in the 'Action' column.
3. From the 'New Lots' drop-down menu, select the inventory item (strain of flower) being packaged.
4. In the 'Qty' field, enter the weight of the lot being created, in grams.
5. To create multiple lots from the same batch, click the '+Add' link next to the 'New Lots' heading, and repeat steps 3-4 until all lots are represented.
6. Click the 'finish lots' button to create the inventory lots.

Inventory Functions

As product is packaged and prepared for sale, there are multiple functions that may be necessary to be performed. Once lots are created, they can be split into multiple lots, moved from area to area, and disposed of (either partially, or in full).

Splitting Lots

1. Navigate to 'Data Entry→Lots' and click the checkbox on the line item of the lot that must be split.
2. In the filter menu of the page, enter the gram weight of the new lot to be created into the 'Qty' field (adjacent to the 'split selected lot' button).
3. Click the 'split selected lot' button.
4. The designated quantity will be shifted into its own lot, and the original lot will contain the remaining weight.

Moving Lots

1. Navigate to 'Data Entry→Lots' and click the checkbox on the line item of the lot that is being moved to a new physical location.
2. In the filter menu of the page, select the new area for the lot from the 'Move to Area' drop-down menu (adjacent to the 'move selected lots' button).
3. Click the 'move selected lots' button.
4. The designated lot will be shifted into the new area that has been selected.

Destructions

1. Navigate to 'Data Entry→Lots'.
2. Within the line item of the lots that is being adjusted due to a disposal, click the 'Dispose' icon at the far-right side of the record.
3. From the 'Source' drop-down menu, confirm that 'Inventory' is selected.
4. From the 'Lot' drop-down menu, confirm the global ID of the lot being destroyed.
5. From the 'Reason' drop-down menu, select the reason that is most appropriate for the destruction record being created.
6. Click the 'Actual Date of Destruction' field to enter the date when the waste was created.
7. In the 'Qty' field, enter the weight of the product that is being disposed of.
8. Click the 'save' button to create the new destruction record.
9. Once the record has been created, a resultant inventory lot representing the waste material will be created which can be found under 'Data Entry→Lots'.
10. Once the quarantine period is over, to document the physical disposal of the waste inventory, navigate to 'Data Entry→Destructions', find the line item of the destruction record, and click the 'Dispose' icon in the 'Dispose' column.

Inventory Adjustments

1. Navigate to 'Data Entry→Inventory Adjustments'.
2. Click the 'add' button in the upper-right corner of the screen to create a new adjustment.
3. From the 'Lot' drop-down menu, select the lot that is to be adjusted.
4. In the 'Qty' field, enter the weight being adjusted from the package (and NOT the new package weight). For example, if 100 grams is being added to the lot, type "100", however, if 100 grams if being decremented from the lot, type "-100".
5. From the 'Reason' drop-down menu, select the reason that the adjustment is being documented.
6. *(Optional)* In the memo field, add any additional notes that better explain the reason for the adjustment.
7. Click the 'save' button.

Inventory Transfers

Inventory Transfers are records that document the movement of inventory from one licensed facility (or testing laboratory) to another.

Three Different Manifest Types

When creating an inventory transfer, it is important to first understand the three types that are available.

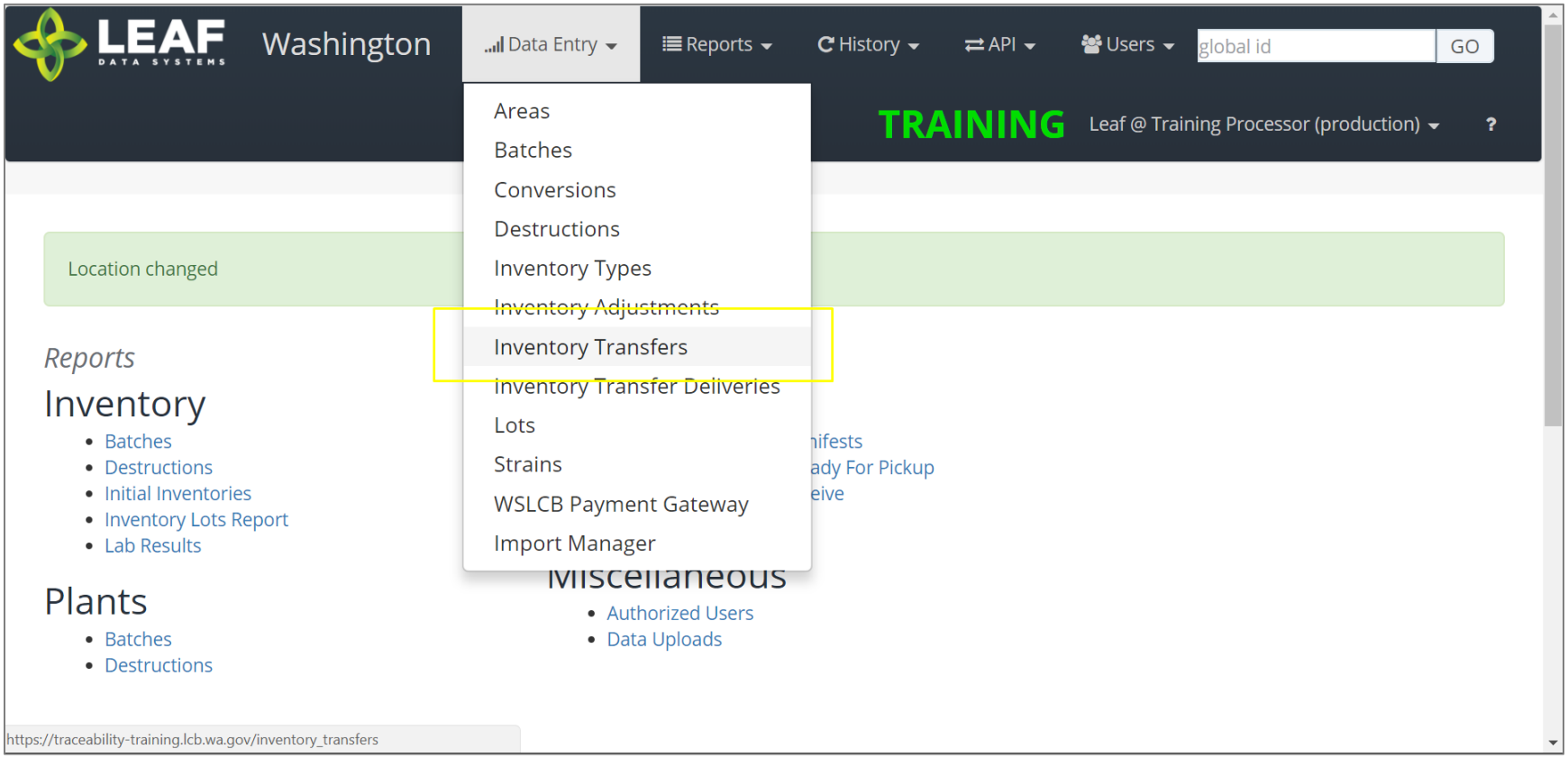
A **Delivery** manifest is a standard transfer where the sender will be responsible for completing all of the transfer information, to include: a. The Recipient b. The Driver Name(s) c. Estimated Departure and Arrival Times d. Vehicle Information (License Plate, Vehicle Description, and Vehicle VIN) e. Inventory to be Transferred f. Price Total per line item The general workflow of a **Delivery** manifest is that the sender is performing the physical transport of the inventory to the receiver. In this workflow, *only* the sending facility can mark the transfer as "in transit".
A **Pickup** manifest allows for the receiver to fill out the driver, trip, and vehicle information (b, c, and d in the list above). This is designed to facilitate a workflow in which the receiver is performing the physical transport of the inventory. With a **Pickup** manifest type, either the sender *or* the receiver is able to mark the inventory transfer as "in transit".
A **Licensed Transporter** manifest allows for the sending facility to select a licensed transporter business to perform the physical transport of the inventory. Upon selection of this manifest type, the driver and vehicle information are not necessary, and those fields are removed from the inventory transfer page.

Now that you understand the different types of inventory transfers/manifests available, let's take a look at inventory transfer creation.

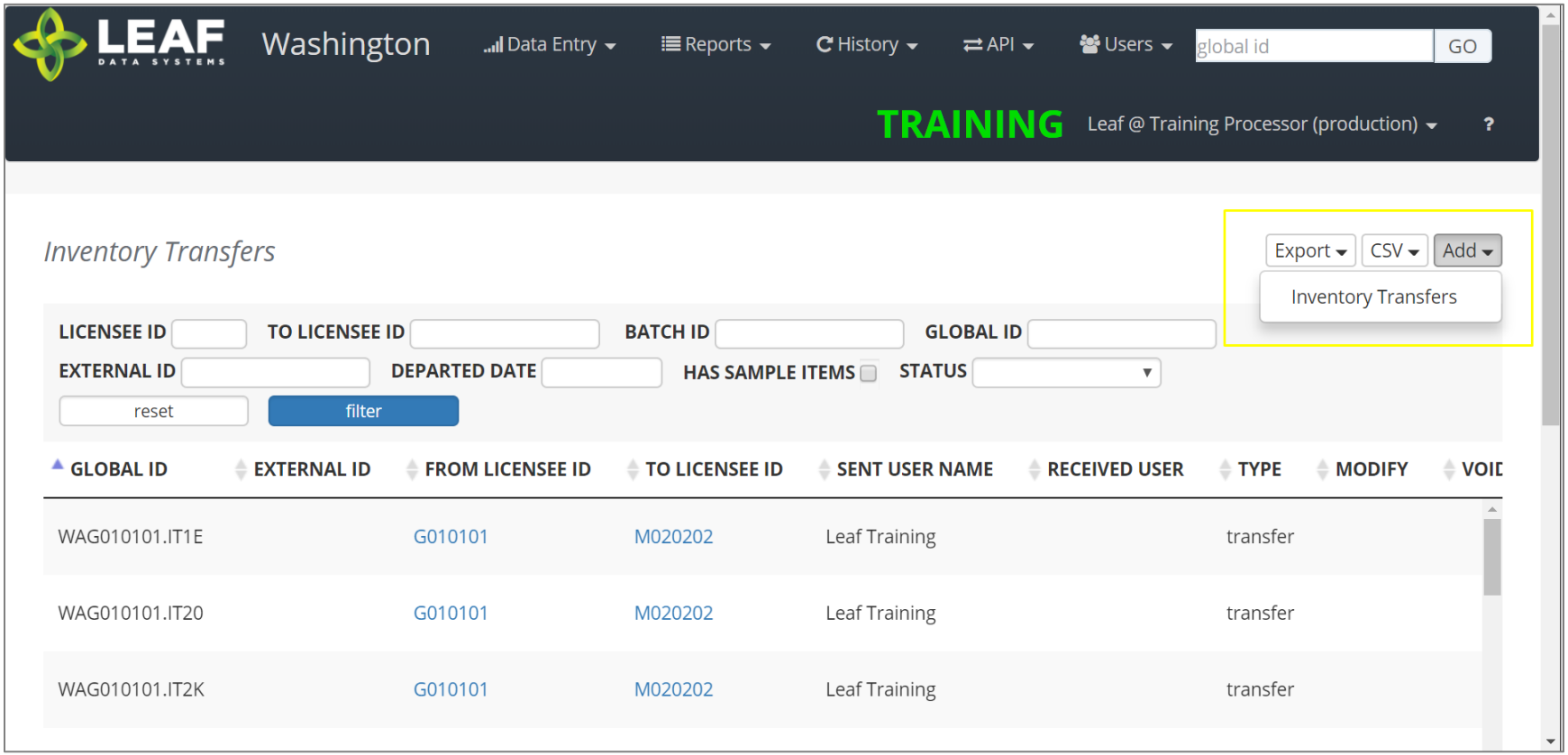
NOTE: "Multi-Stop" functionality is currently not available in Leaf Data Systems. This is being developed for a future release. PLEASE DO NOT SELECT the "Part of Multi-Stop" checkbox visible upon creating an inventory transfer. As well, the "Inventory Transfers/Deliveries" data entry listing and report will not be useable until this functionality has been completed.

How to Create an Inventory Transfer

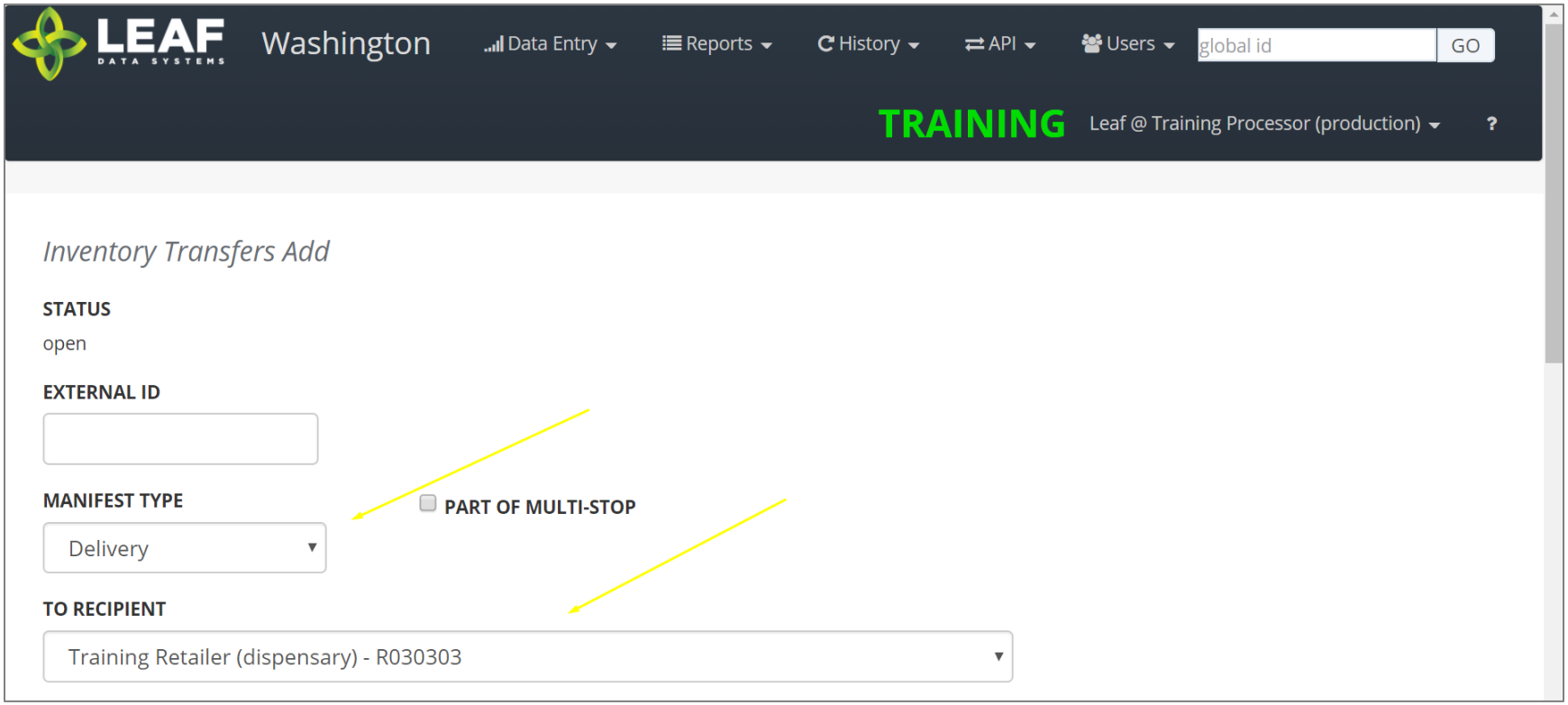
First, navigate to 'Data Entry→Inventory Transfers':



The page displayed will show a listing of all inventory transfers that have been created at the facility. To create a new inventory transfer, click the 'Add' button in the upper-right corner, then click 'Inventory Transfers'.

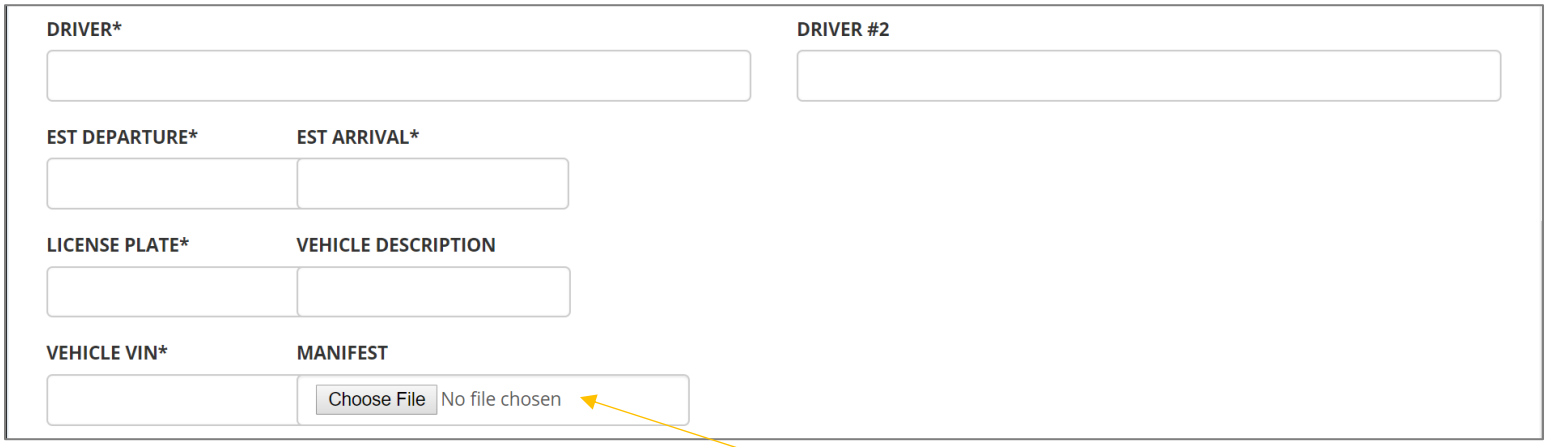


The first section of the inventory transfer allows for selection of the manifest type (discussed in the previous section), and the ability to choose the intended recipient of the transfer.

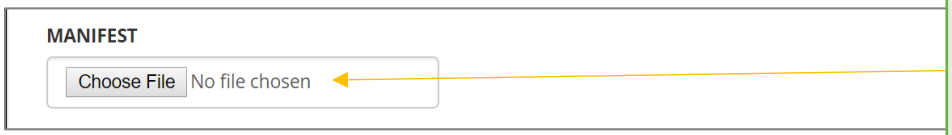


Once you complete these two selections, scroll down to the next section.

For a manifest type of “delivery” the next section will look like this:



For a manifest type of “pickup” the same section will look like this:



NOTE: The “Manifest” field that allows for upload of an external manifest is not necessary if you are using the Leaf Data Systems user interface directly. Leaf will generate a manifest for you upon creation of the inventory transfer.

For a manifest type of “licensed transporter” the same section will look like this:

Complete all of the fields available based on the manifest type selected in the previous step, then scroll down.

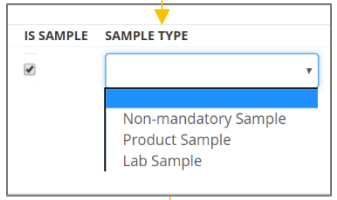
Finally, you will need to select the inventory being transferred. There are a couple of other important designations related to this inventory.

Start typing the global ID or name of the inventory lot to be transferred. To add more lots, click the "+ADD" link above the field.

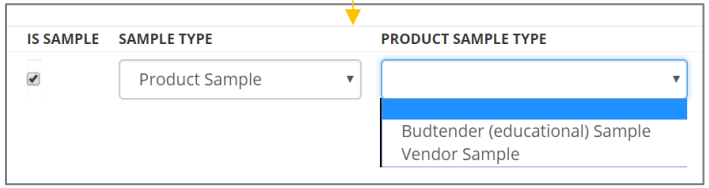
Select the quantity of the lot to be transferred.

The unit of measure is determined by the "inventory type" of the inventory lot.

If inventory being transferred from a Producer to a Processor is designated as being for extraction purposes, check this box



Values entered into this field for each line item will generate a wholesale transaction record upon creation of the inventory transfer. This total represents the total price of the line item (not the unit price).



For Samples, click the "is sample" checkbox to allow for selection of "Sample Type". "Sample Types" include:

Non-Mandatory Sample-used to request non-mandatory testing from a QA lab (results will NOT appear in Leaf)

Product Sample-used to designate educational and vendor samples, causing a secondary drop-down to appear for selection of "Product Sample" type

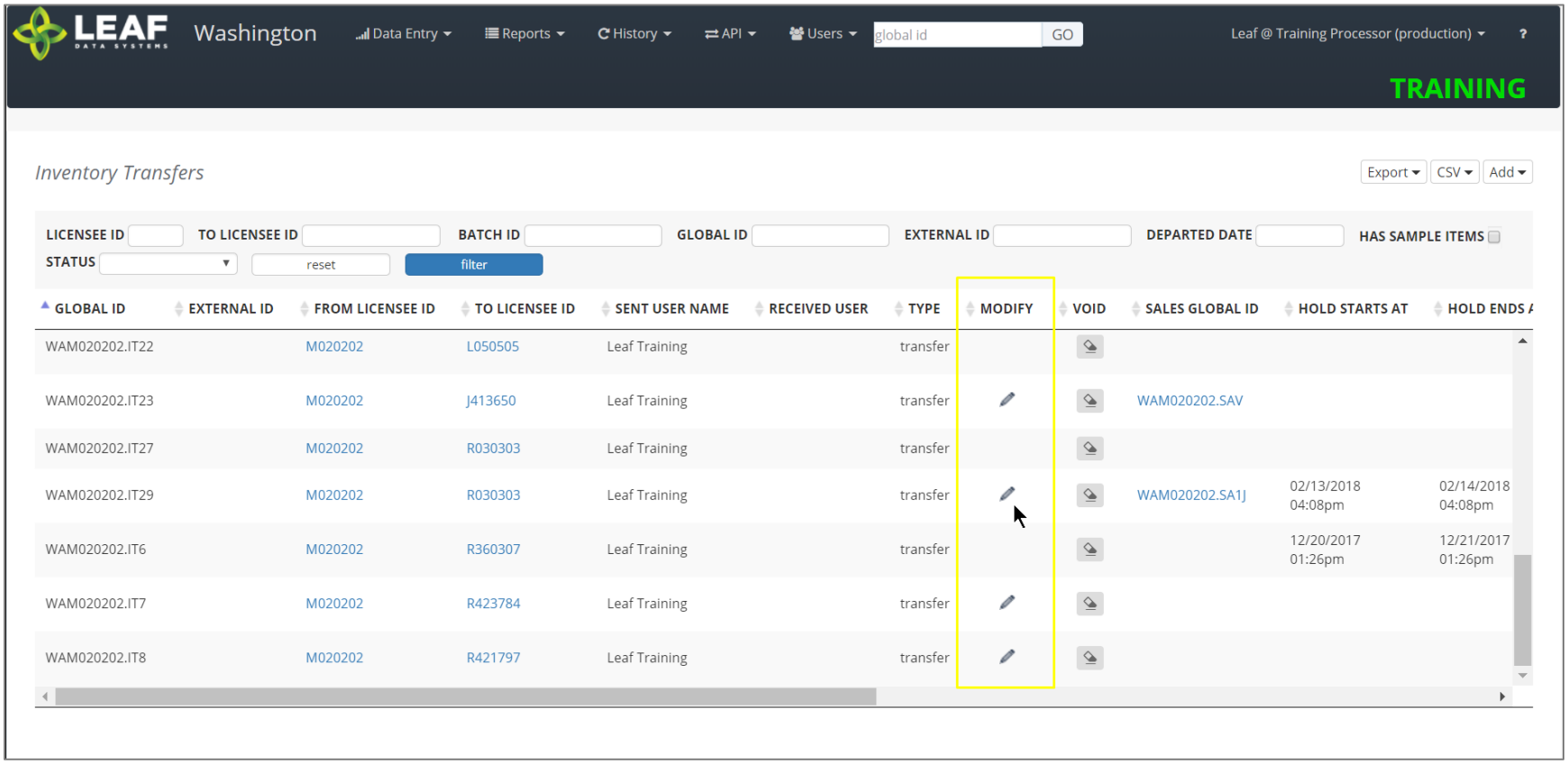
Lab Sample—a sample being sent to a testing lab for required QA testing; selecting this sample type enables selection of the "Retest" checkbox to denote that an inventory lot is being retested

Once all of the applicable forms have been completed,

click the 'Save' button to create the transfer.

Modifying an Inventory Transfer

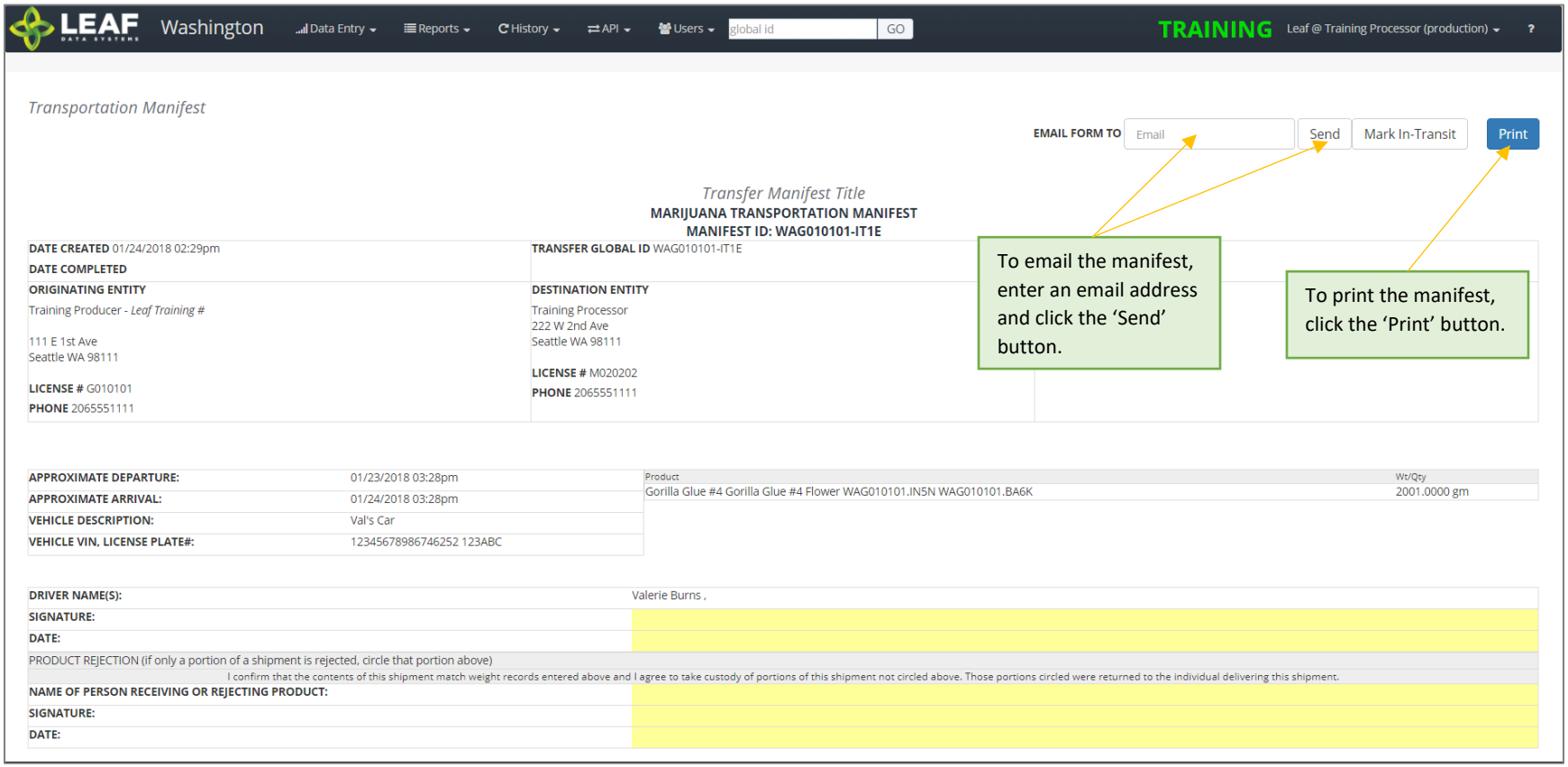
To modify an Inventory Transfer record that has been created, navigate to 'Data Entry→Inventory Transfers'. Search for the transfer you wish to modify and click the pen icon in the "Modify" column.



This will take to back to a page similar to the screen where you created the transfer, and you can modify any information.

Viewing and Printing the Manifest

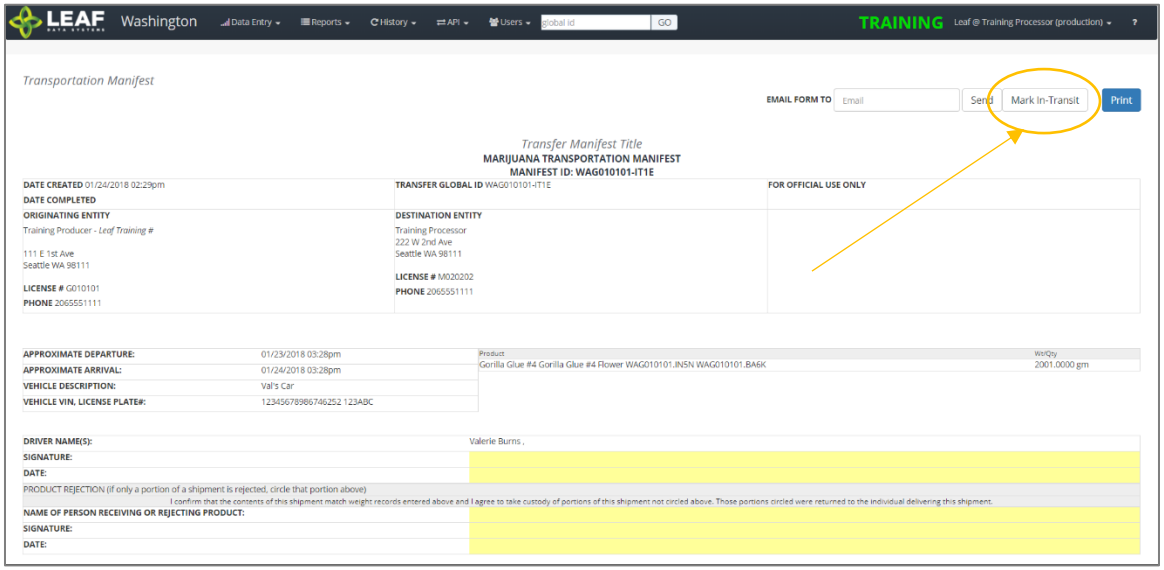
To view and print a manifest, navigate to "Data Entry→Inventory Transfers" (as in the previous step), and search for the inventory transfer record you wish to view the manifest for. Click the gear icon in the "Manifest" column of the line item. This will produce the following:



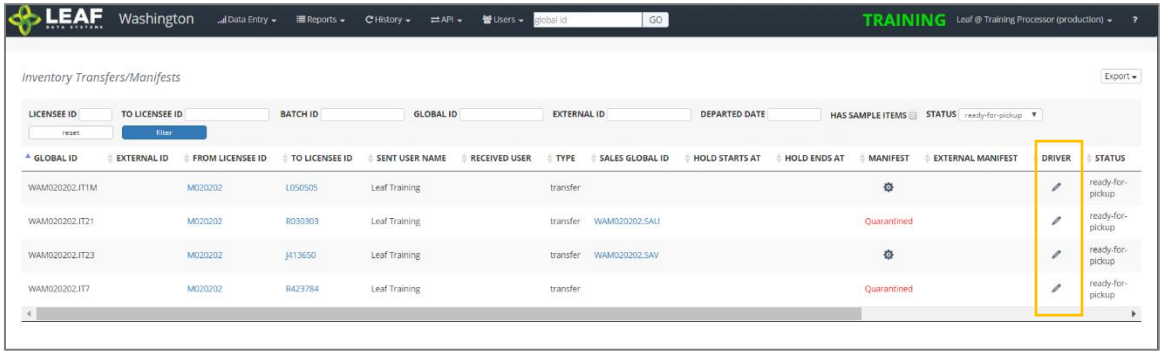
NOTE: If you are unable to see the "gear" icon due to the word "Quarantine" in its place, this means that *AT LEAST ONE* of the inventory lots associated with the transfer does not have the appropriate lab results (or lab result attestation, for initial inventory) associated. Please double-check the lab results or lab results attestation for each lot.

Marking an Inventory Transfer as "In Transit"

From the manifest view (see previous step for navigation to manifest), click the "Mark In-Transit" button in the upper-right corner of the manifest. This will change the status of the manifest from "open" to "in-transit". Once a manifest is designated as "in-transit", it can no longer be modified, only received. If a manifest is marked as "in-transit" in error, the only option is to "Void" the manifest (see final section of this document) and re-create it.

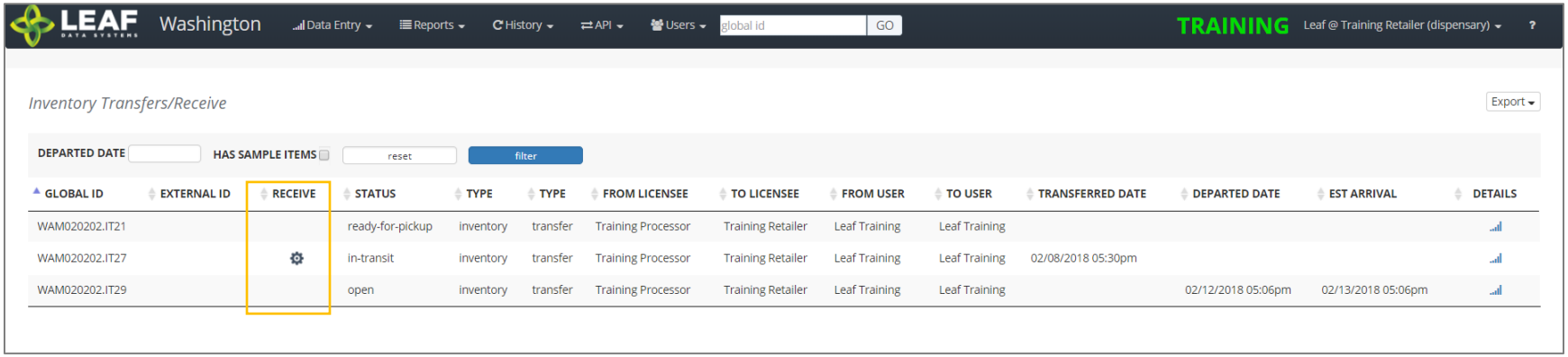


For a "pickup" manifest, once the sender has created the manifest record, the receiver should navigate to "Reports→Inventory Transfers/Ready-for-Pickup". Then, search for the manifest that is ready for pickup, and click the pen icon in the "Driver" column. This will allow the receiver to complete the driver and vehicle information pertaining to the transfer. A receiver would use the same process denoted above to mark the transfer as "in transit".

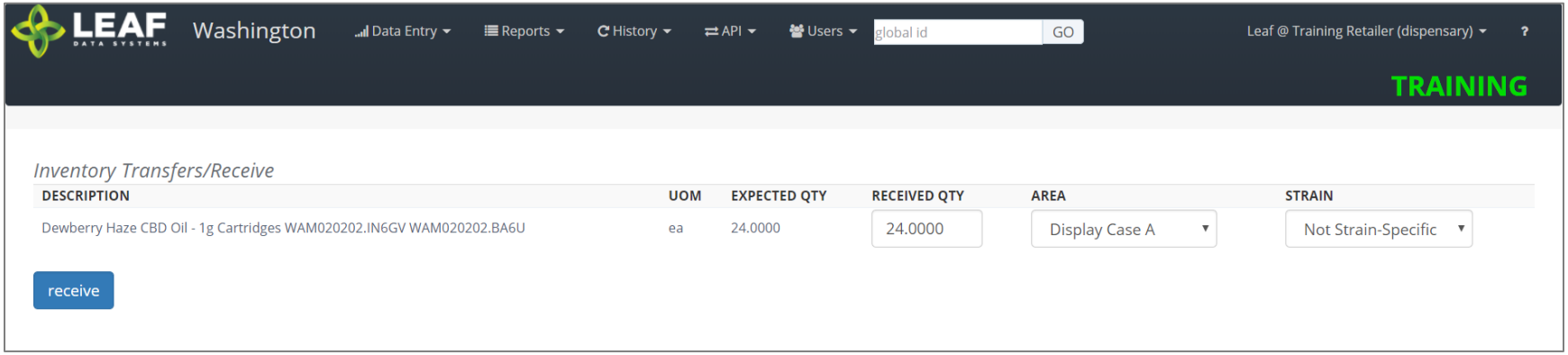


Receiving an Inventory Transfer

Once an inventory transfer has been marked as "in-transit", receiver can accept the inventory into their facility by navigating to "Reports→Inventory Transfers/Receive".



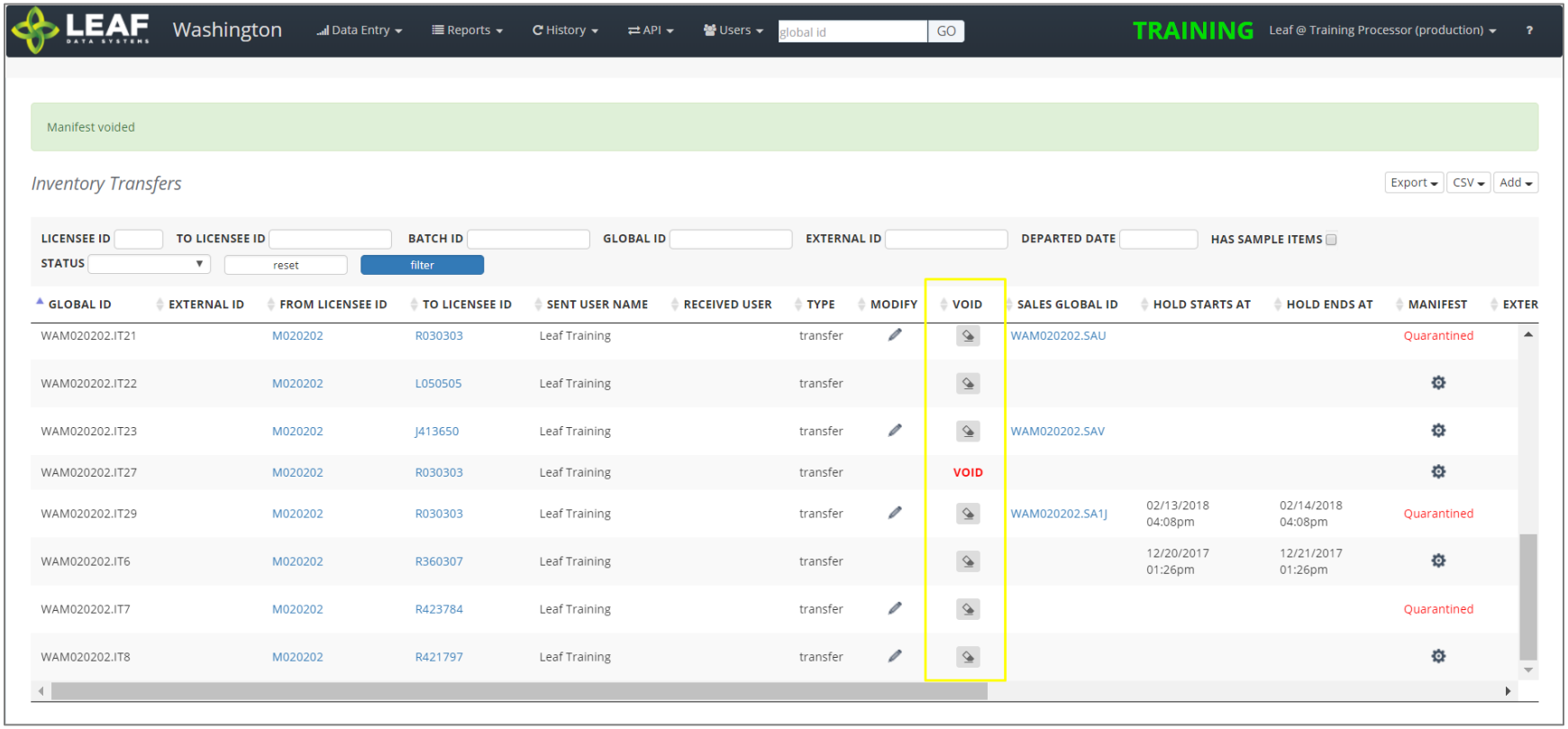
Search for the transfer to be received, then click the gear icon in the "Receive" column. On the screen that appears (below), enter the received quantities for each line item of the transfer. Select an 'Area' from the drop-down menu to receive the inventory into. Finally, if the product is strain-specific, select the local strain associated with it. If it is not strain-specific, the default value in this field will denote this.



Click the 'receive' button once all of the information for each line item has been completed.

Voiding an Inventory Transfer

To void an Inventory Transfer record that has been created, navigate to 'Data Entry→Inventory Transfers'. Search for the transfer you wish to modify and click the eraser icon in the "Void" column. Once a manifest has been voided, it will say "VOID" in red in this column.

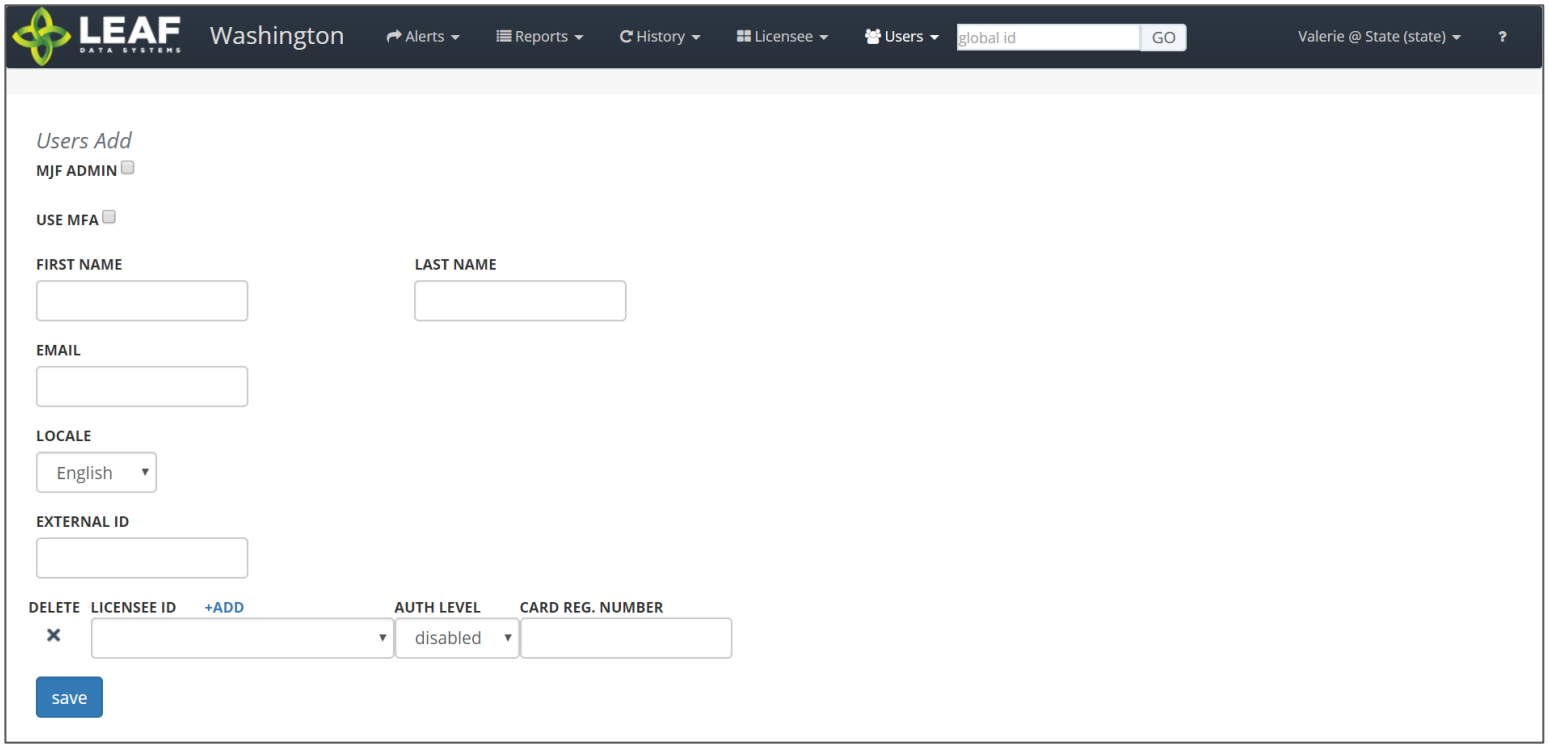


Data Entry—User Interface: Procedures for Manual Data Entry at Processing Facilities

Admin Setup

Create User Profiles

To create a new user profile, navigate to 'Users→Add'.

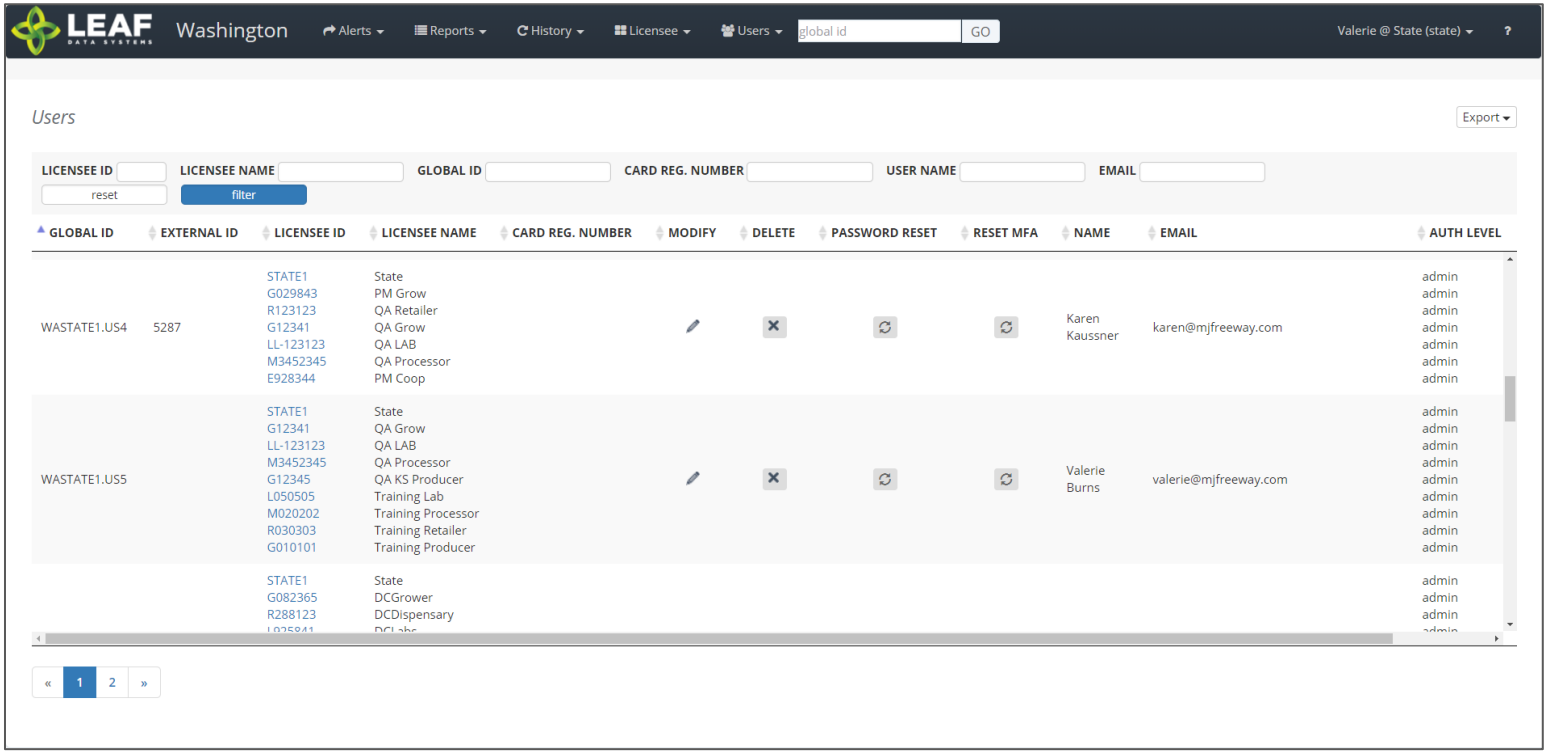


1. **Use MFA:** ***Do not check this box because SAW is being used to authenticate into Leaf Data Systems.*** This feature has been deprecated and will be removed in a later release.
2. **First Name:** Type the first name of the user.
3. **Last Name:** Type the last name of the user.
4. **Email:** Enter the email address of the user.
5. **Locale:** Select the primary language of the user.
6. **External ID:** (optional field) Provides the ability to enter a secondary reference name/number for this record.
7. **Licensee ID:** From the drop-down menu, select the licensee(s) that the user should have access to.

8. **Delete:** Click the 'X' to delete a licensee row that has been added.
9. **Add:** Click the '+ADD' link to add more rows of licensees.
10. **Auth Level:** For each licensee that the user is assigned to, select an 'Authorization Level' from the drop-down menu.
    a. 'View' allows a user to see information present in Leaf Data without the ability to perform data functions.
    b. 'Edit' allows a user to view information in Leaf Data, as well as perform functions pertaining to day-to-day operations of the facility. The administrative setup functions described in this procedure are NOT able to be performed by a user with an 'edit' authorization level.
    c. 'Admin' allows a user access to all information and all functionality within Leaf Data that may be viewed or performed by the associated Licensee ID.
    d. 'Disabled' maintains a users profile in Leaf Data Systems while prohibiting the user from accessing the database.
11. **Card Reg. Number:** (optional field) Provides the ability to enter further identification of a user (for example, an employee number).
12. **Save:** Click the 'save' button to create the new user.

Viewing and Modifying Users

To view users that have been created within Leaf Data Systems, navigate to 'Users→View'. Use the filters and column headers to sort the data to find a specfic record. To modify the record, click the 'pen' icon in the 'Modify' column of the line item you wish to modify. Update the information that has changed, and click the 'Save' button to update the record.



Create Areas

1. Navigate to 'Data Entry→Areas'.
2. To create a new area, click the 'add' button in the upper-right corner of the screen.
3. Enter a name for the area, then select the corresponding area type. *NOTE: Area types that correspond to processing facilities include storage, quarantine, and r&d.*
4. Click the 'save' button to create the area.
5. Repeat steps 2-4 until all physical locations where plants and product may exist are represented within Leaf Data.

Create Strains

1. Navigate to 'Data Entry→Strains'.
2. To create a new strain, click the 'add' button in the upper-right corner of the screen.
3. Enter the strain name in the name field, then click the 'save' button to create the strain.
4. Repeat steps 3-4 until all strains that will be present at the facility are represented within Leaf Data.

Create Inventory Types

1. Navigate to 'Data Entry→Inventory Types'.
2. Click the 'add' button in the upper-right corner of the screen.

3. In the ‘Name’ field, enter a name for the new inventory type, for example, the strain name followed by descriptive wording, such as ‘flower’ or ‘other material’.
4. Select the ‘category’ and ‘subcategory’ that represent the inventory type being created.
5. Optionally, you may enter a description of the inventory type.
6. Select the unit of measure that corresponds to the inventory type being created: if the product is measured by its weight, select grams (gm) and if the product is measured by a piece count, select each (ea).
7. Once the form is complete, click the ‘save’ button to create the inventory type.

Understanding Batches

The purpose of using batches to group together plant and inventory records is two-fold. Batches assist with creating the traceability that the system is designed to offer. As well, batches allow producers to manage plants in any phase in groups, which enables mass actions to be applied to numerous records simultaneously. Batches are not intended to constrain activities involving plant movement, as plants can be shifted from one batch to another and do not have exclusive relationships with batches they are added to.

Batch types include propagation material, plant, harvest, and intermediate/end product.

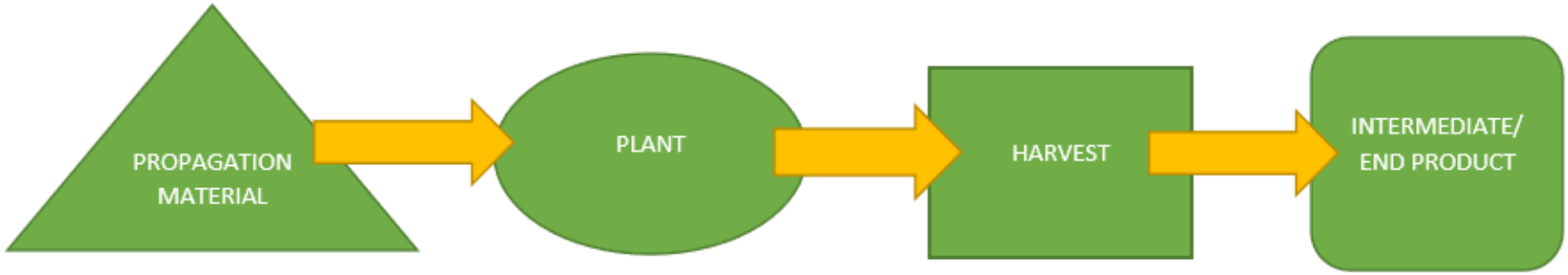
'Propagation Material' batches are used to create inventory lots of seeds, clones, and plant tissue so that these plants can be tracked as inventory throughout their propagation phase. As plants shift from their propagation to vegetative phase, they are moved to plants at which point the plant records are associated with a 'plant' type batch. This batch type is ONLY present at production facilities.

'Plant' batches are a group of plants from the same strain, that are growing together within their vegetative and flowering phases. Attributes of all of the plants within a batch can be modified at the batch level, which will apply changes across all of the plant records. This batch type is ONLY present at production facilities.

'Harvest' batches represent a group of harvested material that is all the same strain. These types of batches are used to denote both 'wet' and 'dry' weight of 'flower' and 'other material' produced during the harvest. Resultant dry weight from a harvest batch is separated into 'inventory lots'.

'Intermediate/end product' batches are batches that consist of multiple harvest batches being combined, for example, combining two different strains to make a blended concentrate product. They can also be comprised of a single harvest batch that has been converted into an intermediate or end product.

Visualization of the Batch Life Cycle



Receiving Inventory Transfers from Other Sources

1. Navigate to 'Reports→Inventory Transfers-Receive'.
2. Within the line item of the transfer to be received, click the gear icon in the 'Receive' column.
3. Verify the weight of each lot of inventory being received, and log appropriate adjustments into the 'Qty Received' field that corresponds to each lot.
4. Click the 'save' button to update the appropriate inventory records and accept the lots into the facility.

Inventory Functions

As product is packaged and prepared for sale, there are multiple functions that may be necessary to be performed. Once lots are created, they can be split into multiple lots, moved from area to area, and disposed of (either partially, or in full).

Splitting Lots

1. Navigate to 'Data Entry→Lots' and click the checkbox on the line item of the lot that must be split.
2. In the filter menu of the page, enter the gram weight of the new lot to be created into the 'Qty' field (adjacent to the 'split selected lot' button).
3. Click the 'split selected lot' button.
4. The designated quantity will be shifted into its own lot, and the original lot will contain the remaining weight.

Moving Lots

1. Navigate to 'Data Entry→Lots' and click the checkbox on the line item of the lot that is being moved to a new physical location.
2. In the filter menu of the page, select the new area for the lot from the 'Move to Area' drop-down menu (adjacent to the 'move selected lots' button).
3. Click the 'move selected lots' button.
4. The designated lot will be shifted into the new area that has been selected.

Destructions

11. Navigate to 'Data Entry→Lots'.
12. Within the line item of the lots that is being adjusted due to a disposal, click the 'Dispose' icon at the far-right side of the record.
13. From the 'Source' drop-down menu, confirm that 'Inventory' is selected.
14. From the 'Lot' drop-down menu, confirm the global ID of the lot being destroyed.
15. From the 'Reason' drop-down menu, select the reason that is most appropriate for the destruction record being created.
16. Click the 'Actual Date of Destruction' field to enter the date when the waste was created.
17. In the 'Qty' field, enter the weight of the product that is being disposed of.
18. Click the 'save' button to create the new destruction record.
19. Once the record has been created, a resultant inventory lot representing the waste material will be created which can be found under 'Data Entry→Lots'.
20. Once the quarantine period is over, to document the physical disposal of the waste inventory, navigate to 'Data Entry→Destructions', find the line item of the destruction record, and click the 'Dispose' icon in the 'Dispose' column.

Inventory Adjustments

8. Navigate to 'Data Entry→Inventory Adjustments'.
9. Click the 'add' button in the upper-right corner of the screen to create a new adjustment.
10. From the 'Lot' drop-down menu, select the lot that is to be adjusted.
11. In the 'Qty' field, enter the weight being adjusted from the package (and NOT the new package weight). For example, if 100 grams is being added to the lot, type "100", however, if 100 grams if being decremented from the lot, type "-100".
12. From the 'Reason' drop-down menu, select the reason that the adjustment is being documented.
13. *(Optional)* In the memo field, add any additional notes that better explain the reason for the adjustment.
14. Click the 'save' button.

Inventory Conversions

1. Navigate to 'Data Entry→Conversions'.
2. From the 'Inputs' drop-down menu, select the lot(s) of inventory that represents the conversion "input". Additional inventory lots may be selected by clicking the '+add' link next to the 'Inputs' heading.
3. In the adjacent 'Qty' field, enter the amount from each original lot that is being converted.
4. Under the 'Conversion Output' section, from the 'Inventory Type' drop-down menu, select the target inventory item. *NOTE: For conversions to pre-packaged items that are priced-by-weight, inventory items for each pricing weight of each strain must be created prior to performing the conversion process.*
5. From the 'Strain' drop-down menu, select the appropriate strain if the conversion output is strain-specific. Otherwise, leave this selection blank.
6. From the 'Area' drop-down menu, select the physical location where the new lots will be stored.

7. From the 'UOM' drop-down menu, select 'ea' to create pre-packaged simple inventory.
8. In the 'Qty' field, enter the weight/quantity of the "output" product being created.
9. In the 'Waste (gm)' field, enter the weight of any waste associated with this conversion.
10. Check the 'Product not Altered' checkbox if the conversion taking place is not changing the product, such that new qa results are required (for example, pre-packaging flower into units as end products).
11. Click the 'save' button to perform the conversion.

Inventory Transfers

Inventory Transfers are records that document the movement of inventory from one licensed facility (or testing laboratory) to another.

Three Different Manifest Types

When creating an inventory transfer, it is important to first understand the three types that are available.

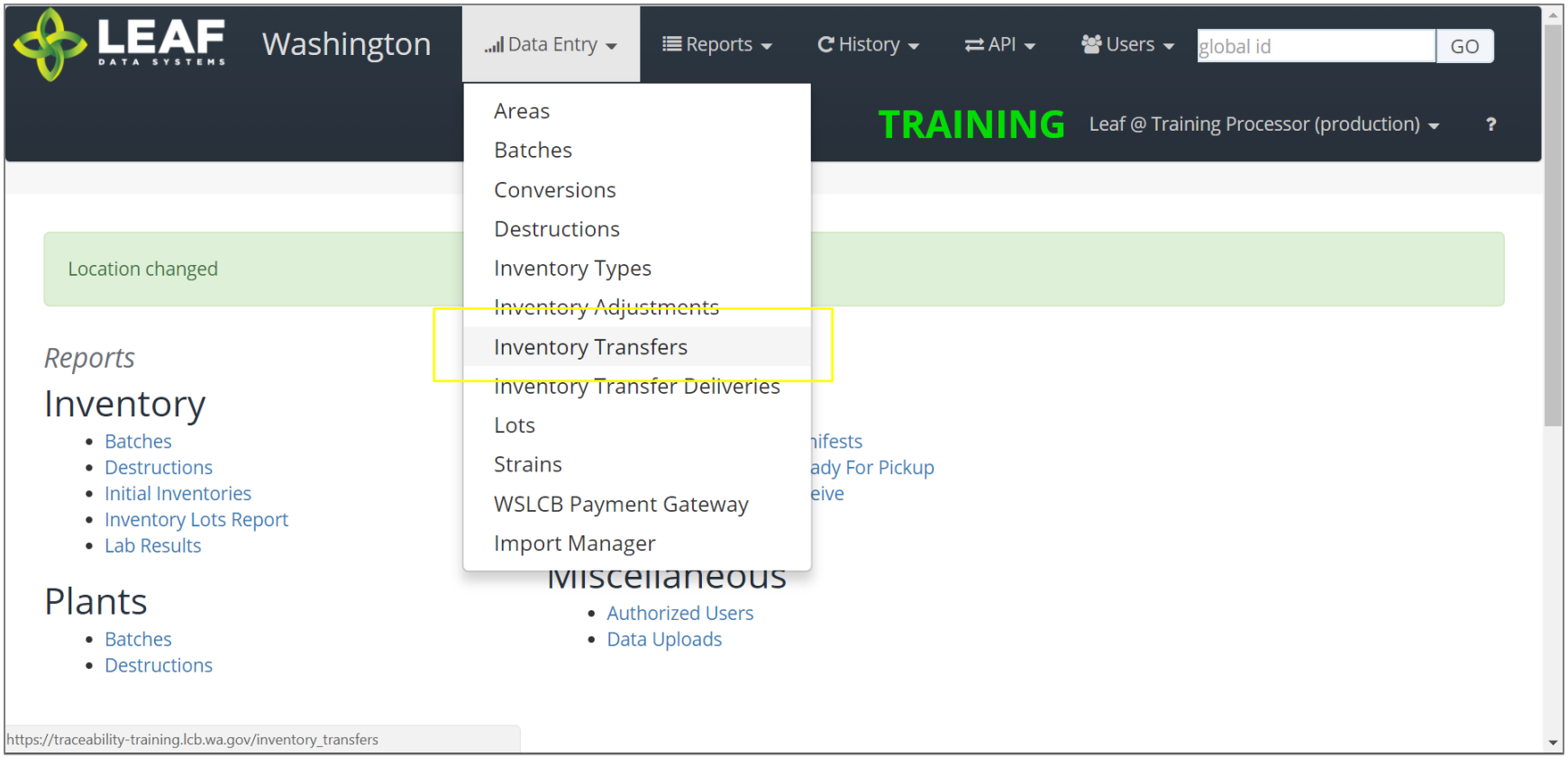
A **Delivery** manifest is a standard transfer where the sender will be responsible for completing all of the transfer information, to include: a. The Recipient b. The Driver Name(s) c. Estimated Departure and Arrival Times d. Vehicle Information (License Plate, Vehicle Description, and Vehicle VIN) e. Inventory to be Transferred f. Price Total per line item The general workflow of a **Delivery** manifest is that the sender is performing the physical transport of the inventory to the receiver. In this workflow, *only* the sending facility can mark the transfer as "in transit".
A **Pickup** manifest allows for the receiver to fill out the driver, trip, and vehicle information (b, c, and d in the list above). This is designed to facilitate a workflow in which the receiver is performing the physical transport of the inventory. With a **Pickup** manifest type, either the sender *or* the receiver is able to mark the inventory transfer as "in transit".
A **Licensed Transporter** manifest allows for the sending facility to select a licensed transporter business to perform the physical transport of the inventory. Upon selection of this manifest type, the driver and vehicle information are not necessary, and those fields are removed from the inventory transfer page.

Now that you understand the different types of inventory transfers/manifests available, let's take a look at inventory transfer creation.

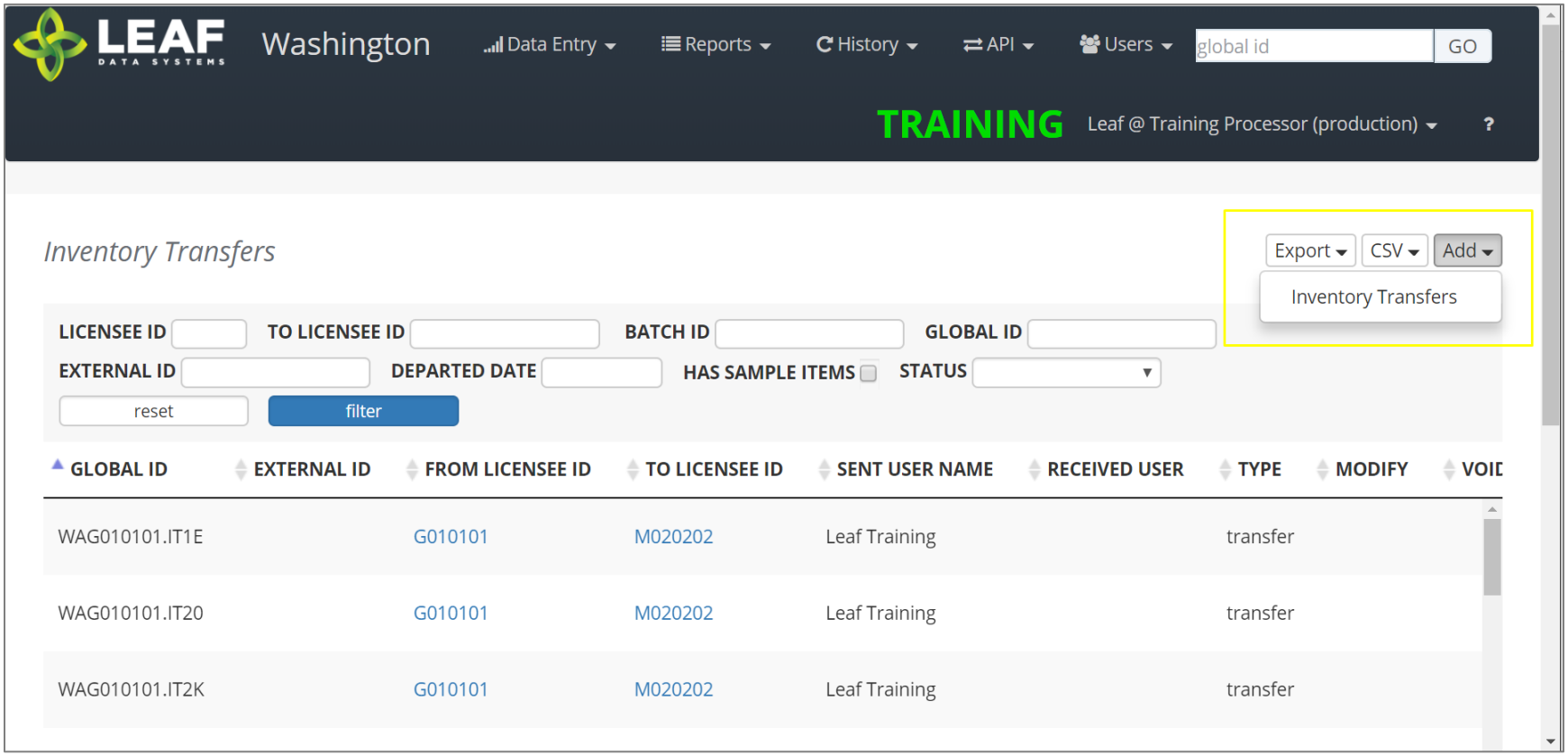
NOTE: "Multi-Stop" functionality is currently not available in Leaf Data Systems. This is being developed for a future release. PLEASE DO NOT SELECT the "Part of Multi-Stop" checkbox visible upon creating an inventory transfer. As well, the "Inventory Transfers/Deliveries" data entry listing and report will not be useable until this functionality has been completed.

How to Create an Inventory Transfer

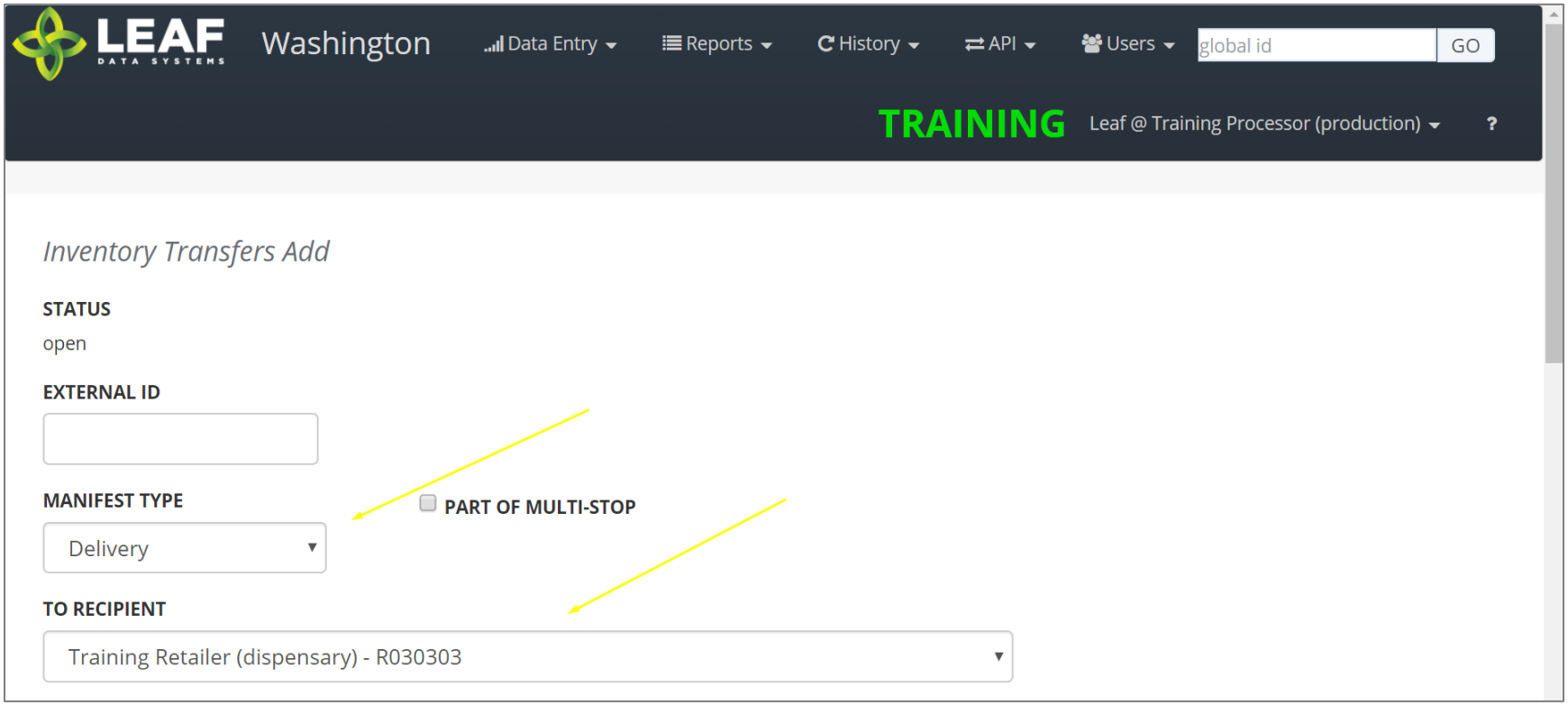
First, navigate to 'Data Entry→Inventory Transfers':



The page displayed will show a listing of all inventory transfers that have been created at the facility. To create a new inventory transfer, click the 'Add' button in the upper-right corner, then click 'Inventory Transfers'.

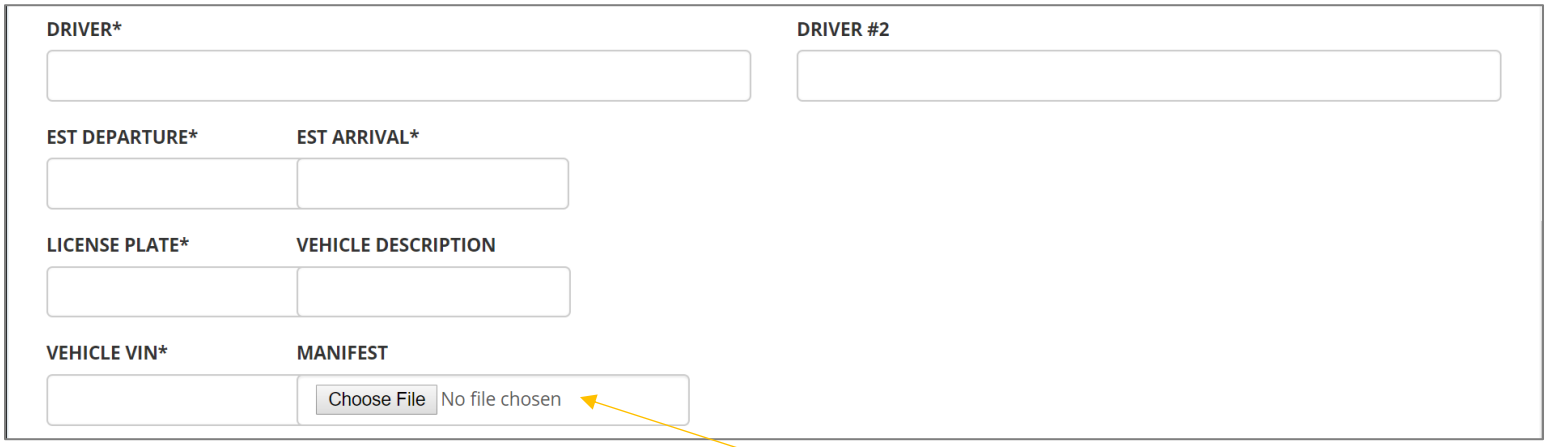


The first section of the inventory transfer allows for selection of the manifest type (discussed in the previous section), and the ability to choose the intended recipient of the transfer.

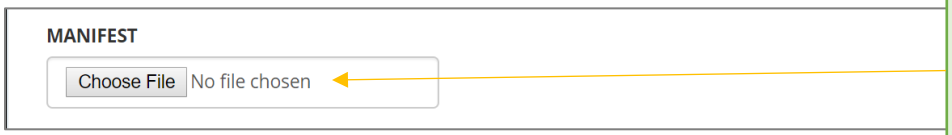


Once you complete these two selections, scroll down to the next section.

For a manifest type of “delivery” the next section will look like this:



For a manifest type of “pickup” the same section will look like this:



NOTE: The “Manifest” field that allows for upload of an external manifest is not necessary if you are using the Leaf Data Systems user interface directly. Leaf will generate a manifest for you upon creation of the inventory transfer.

For a manifest type of “licensed transporter” the same section will look like this:

Complete all of the fields available based on the manifest type selected in the previous step, then scroll down.

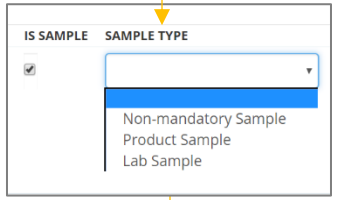
Finally, you will need to select the inventory being transferred. There are a couple of other important designations related to this inventory.

Start typing the global ID or name of the inventory lot to be transferred. To add more lots, click the "+ADD" link above the field.

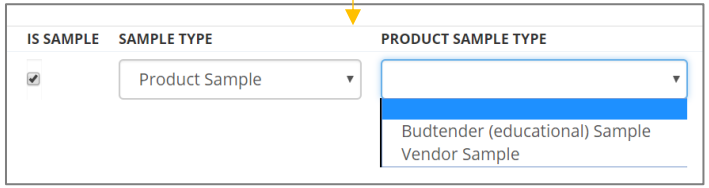
Select the quantity of the lot to be transferred.

The unit of measure is determined by the "inventory type" of the inventory lot.

If inventory being transferred from a Producer to a Processor is designated as being for extraction purposes, check this box



Values entered into this field for each line item will generate a wholesale transaction record upon creation of the inventory transfer. This total represents the total price of the line item (not the unit price).



For Samples, click the "is sample" checkbox to allow for selection of "Sample Type". "Sample Types" include:

Non-Mandatory Sample-used to request non-mandatory testing from a QA lab (results will NOT appear in Leaf)

Product Sample-used to designate educational and vendor samples, causing a secondary drop-down to appear for selection of "Product Sample" type

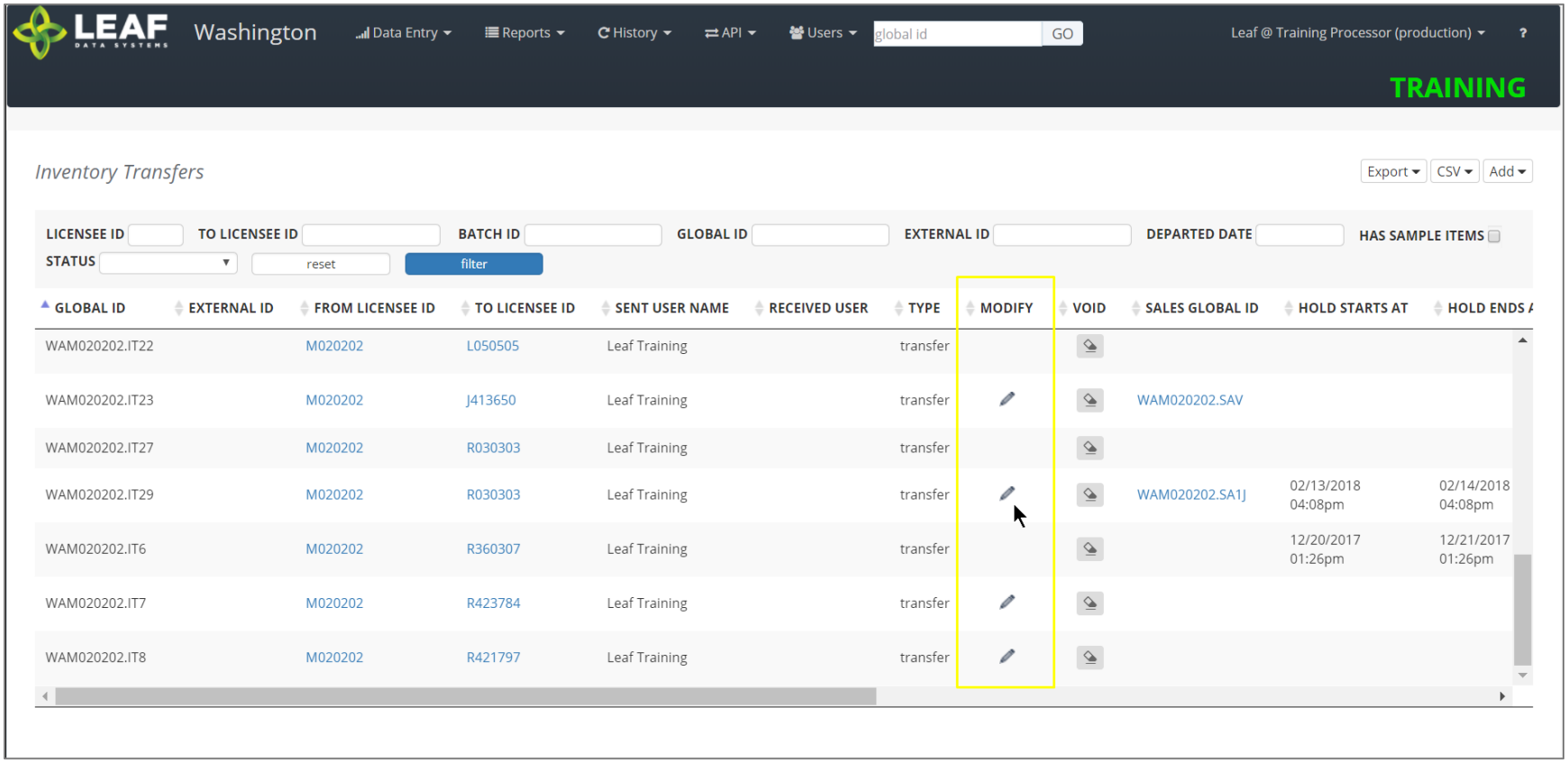
Lab Sample—a sample being sent to a testing lab for required QA testing; selecting this sample type enables selection of the "Retest" checkbox to denote that an inventory lot is being retested

Once all of the applicable forms have been completed,

click the 'Save' button to create the transfer.

Modifying an Inventory Transfer

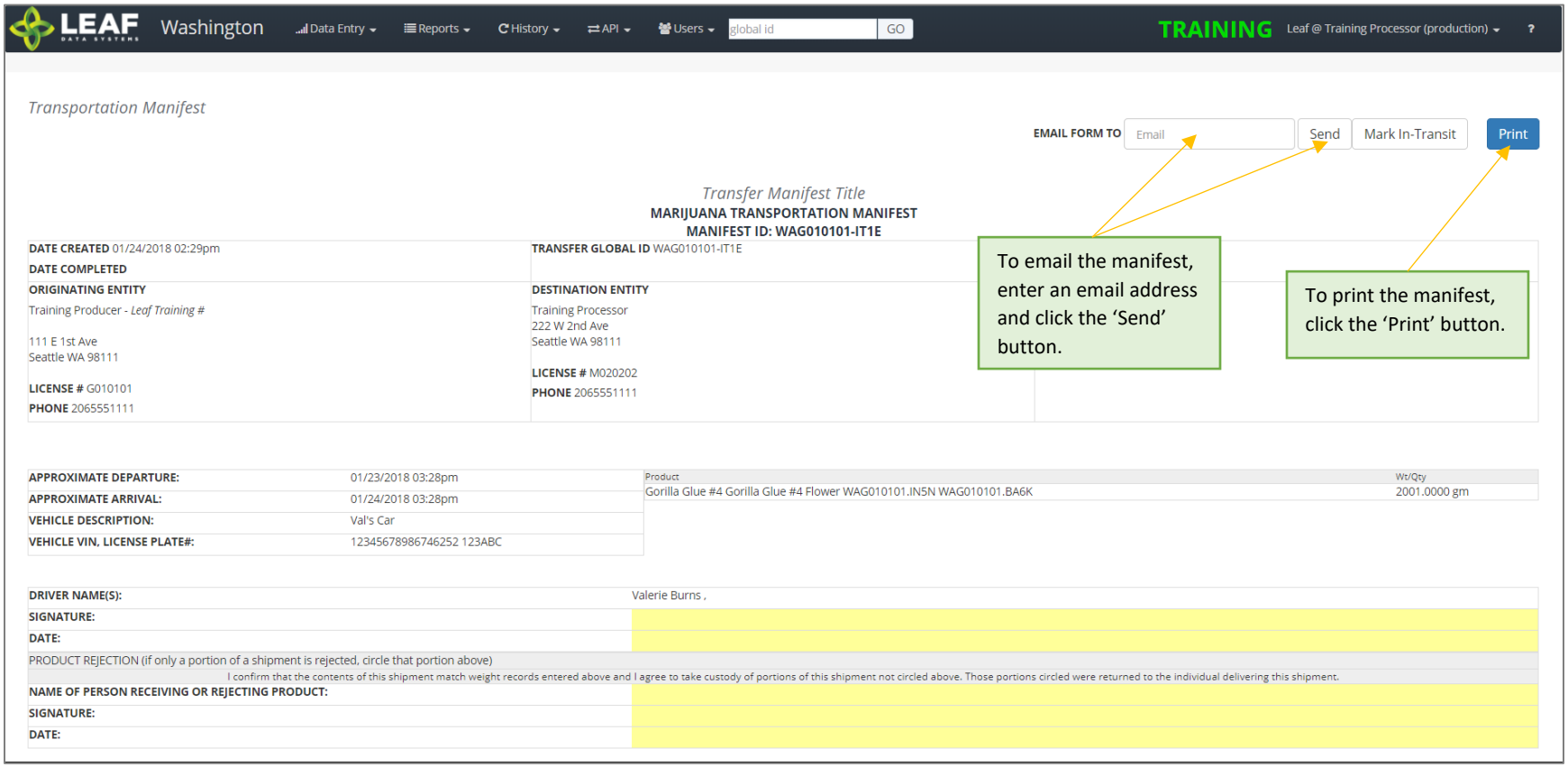
To modify an Inventory Transfer record that has been created, navigate to 'Data Entry→Inventory Transfers'. Search for the transfer you wish to modify, and click the pen icon in the "Modify" column.



This will take to back to a page similar to the screen where you created the transfer, and you can modify any information.

Viewing and Printing the Manifest

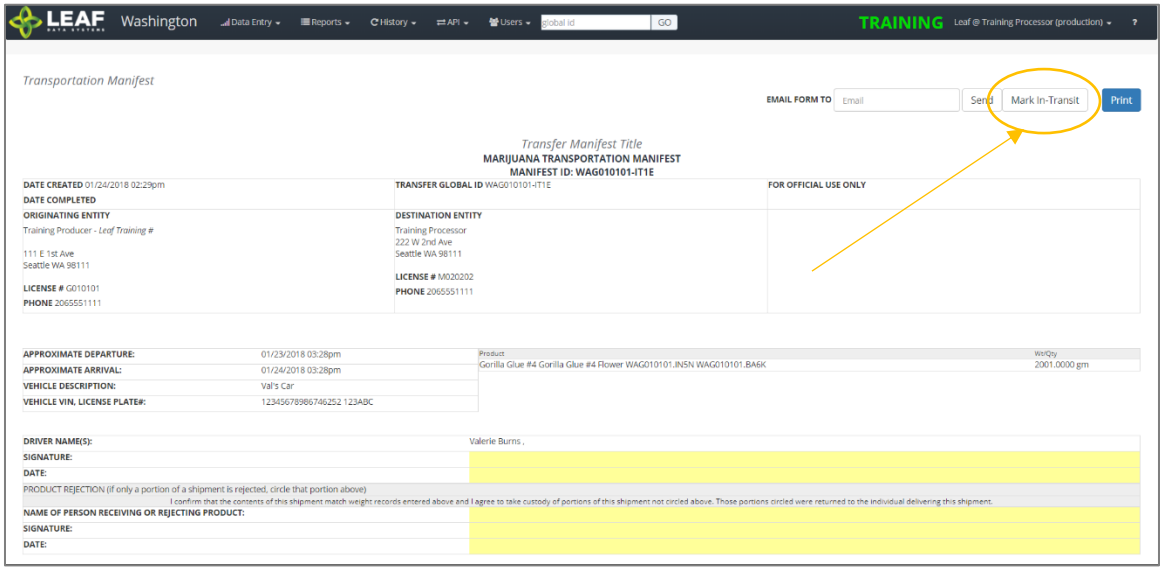
To view and print a manifest, navigate to "Data Entry→Inventory Transfers" (as in the previous step), and search for the inventory transfer record you wish to view the manifest for. Click the gear icon in the "Manifest" column of the line item. This will produce the following:



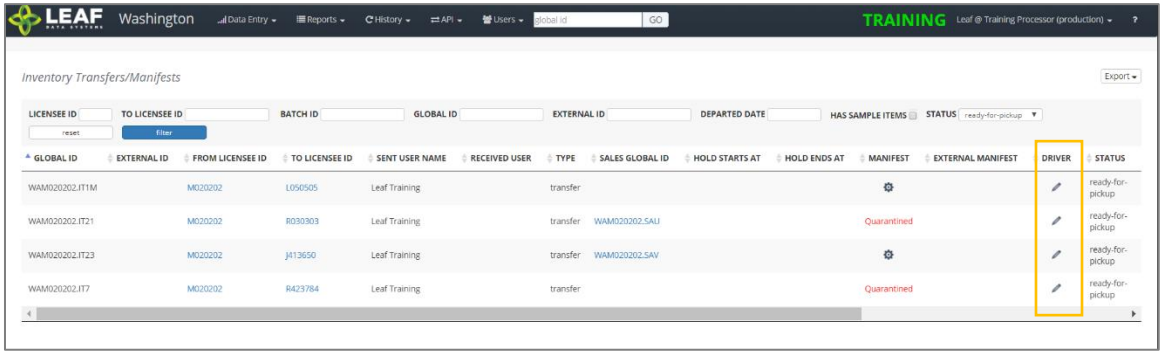
NOTE: If you are unable to see the "gear" icon due to the word "Quarantine" in its place, this means that *AT LEAST ONE* of the inventory lots associated with the transfer does not have the appropriate lab results (or lab result attestation, for initial inventory) associated. Please double-check the lab results or lab results attestation for each lot.

Marking an Inventory Transfer as "In Transit"

From the manifest view (see previous step for navigation to manifest), click the "Mark In-Transit" button in the upper-right corner of the manifest. This will change the status of the manifest from "open" to "in-transit". Once a manifest is designated as "in-transit", it can no longer be modified, only received. If a manifest is marked as "in-transit" in error, the only option is to "Void" the manifest (see final section of this document) and re-create it.

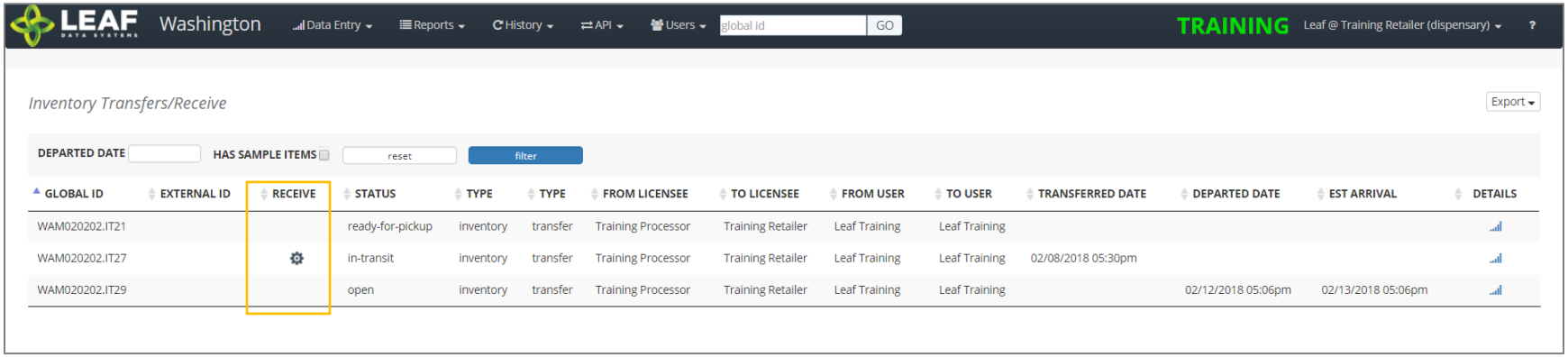


For a "pickup" manifest, once the sender has created the manifest record, the receiver should navigate to "Reports→Inventory Transfers/Ready-for-Pickup". Then, search for the manifest that is ready for pickup, and click the pen icon in the "Driver" column. This will allow the receiver to complete the driver and vehicle information pertaining to the transfer. A receiver would use the same process denoted above to mark the transfer as "in transit".

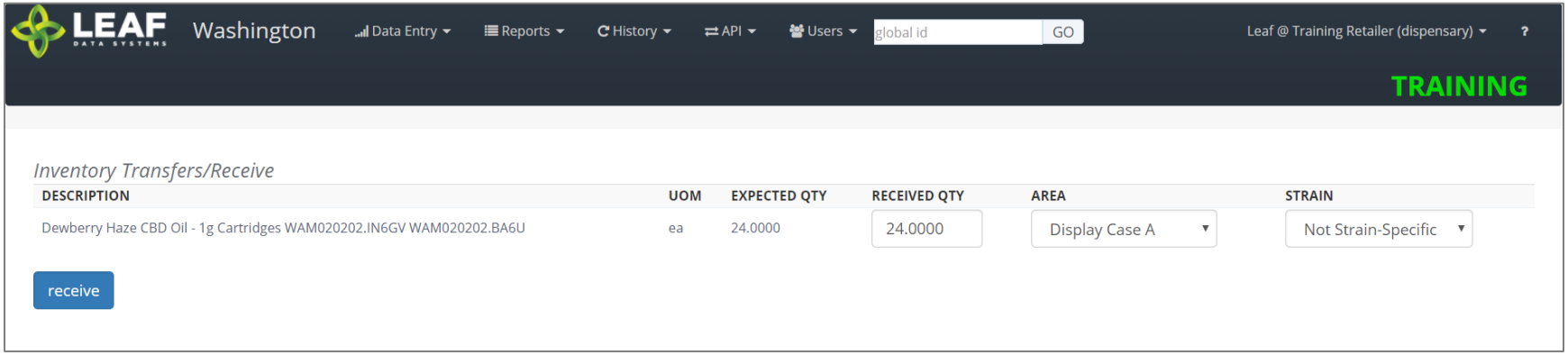


Receiving an Inventory Transfer

Once an inventory transfer has been marked as "in-transit", receiver can accept the inventory into their facility by navigating to "Reports→Inventory Transfers/Receive".



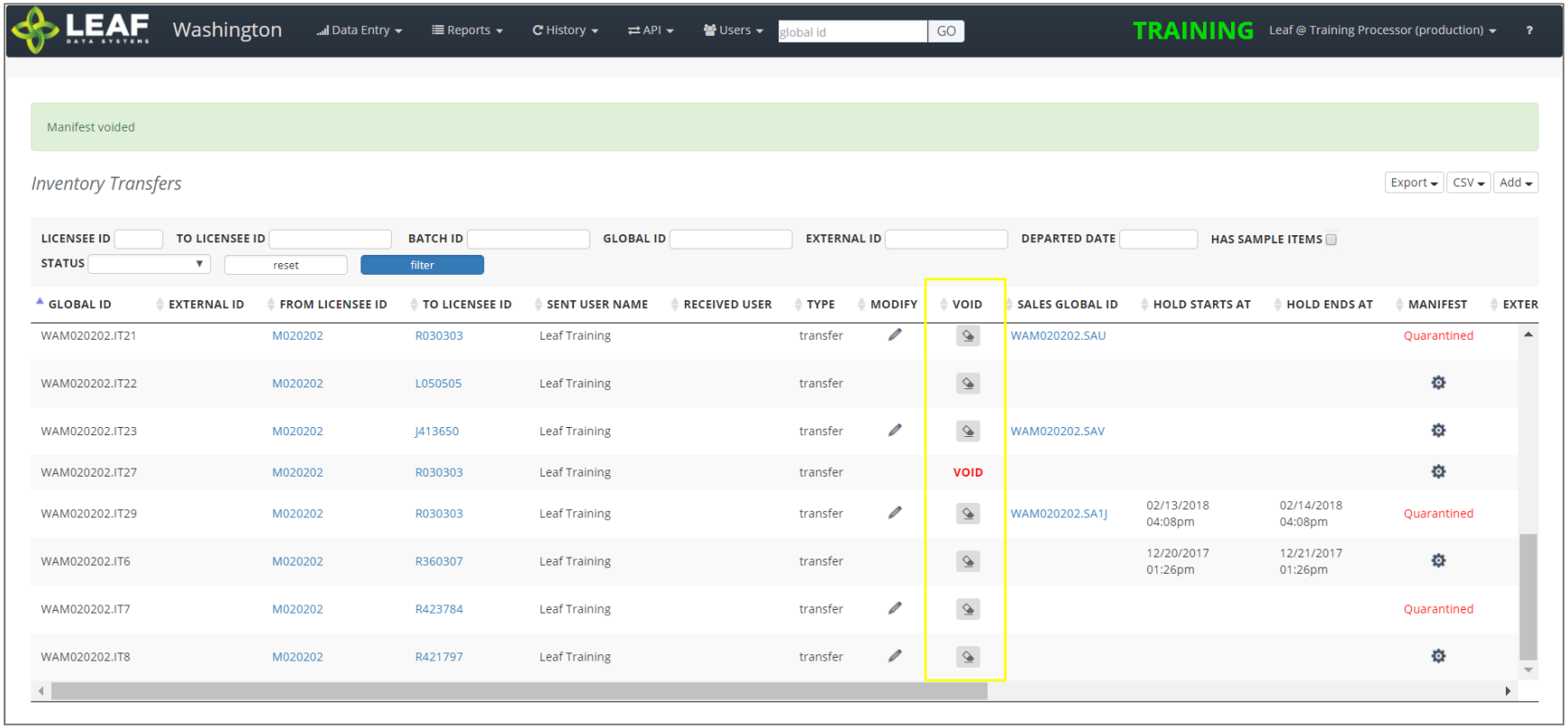
Search for the transfer to be received, then click the gear icon in the "Receive" column. On the screen that appears (below), enter the received quantities for each line item of the transfer. Select an 'Area' from the drop-down menu to receive the inventory into. Finally, if the product is strain-specific, select the local strain associated with it. If it is not strain-specific, the default value in this field will denote this.



Click the 'receive' button once all of the information for each line item has been completed.

Voiding an Inventory Transfer

To void an Inventory Transfer record that has been created, navigate to 'Data Entry→Inventory Transfers'. Search for the transfer you wish to modify, and click the eraser icon in the "Void" column. Once a manifest has been voided, it will say "VOID" in red in this column.

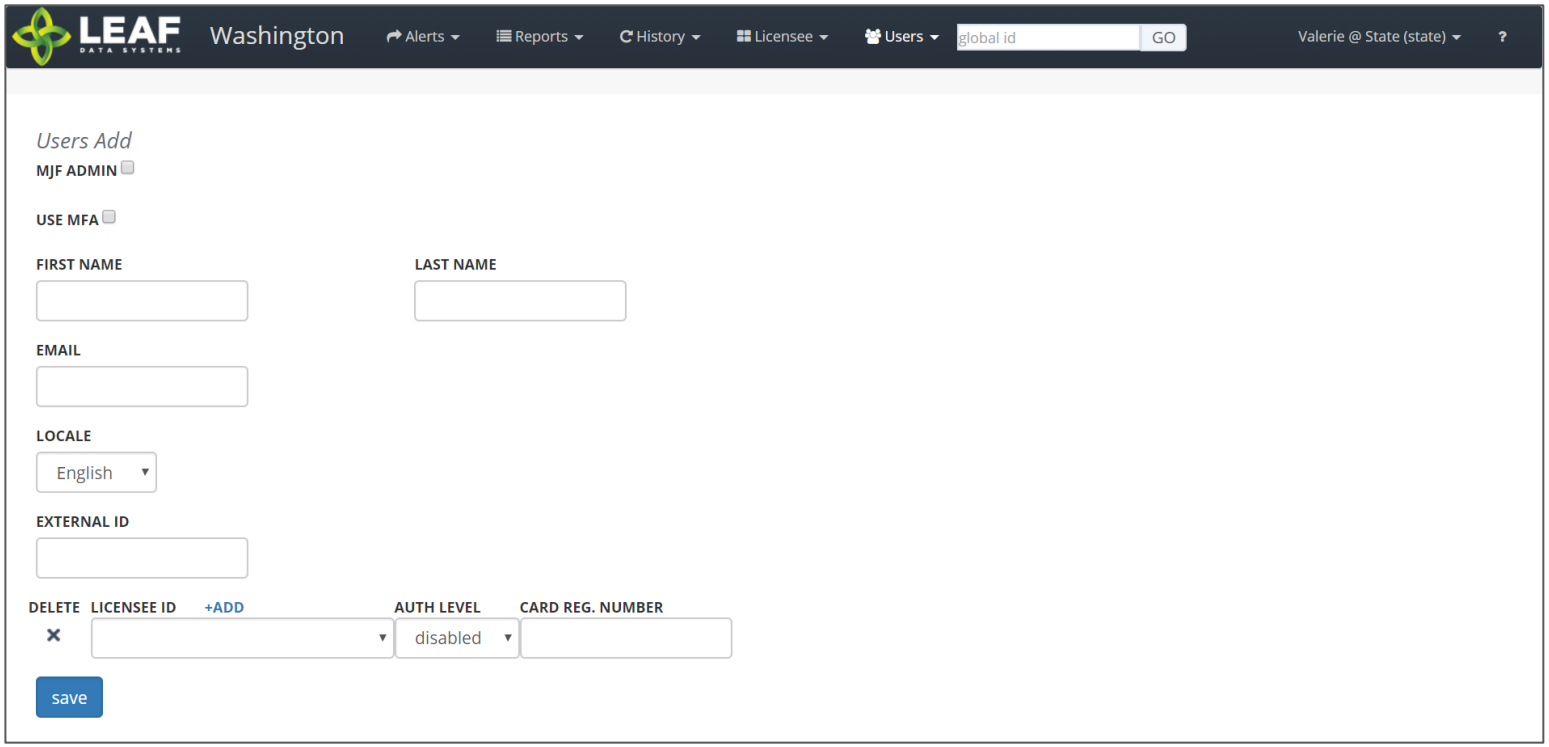

LEAF DATA SYSTEMS
Washington
Data Entry
Reports
History
API
Users
global id
GO
TRAINING
Leaf @ Training Processor (production)
Manifest voided
Inventory Transfers
Export
CSV
Add
LICENSEE ID
TO LICENSEE ID
BATCH ID
GLOBAL ID
EXTERNAL ID
DEPARTED DATE
HAS SAMPLE ITEMS
STATUS
reset
filter
GLOBAL ID
EXTERNAL ID
FROM LICENSEE ID
TO LICENSEE ID
SENT USER NAME
RECEIVED USER
TYPE
MODIFY
VOID
SALES GLOBAL ID
HOLD STARTS AT
HOLD ENDS AT
MANIFEST
EXTER
WAM020202.IT21 M020202 R030303 Leaf Training transfer WAM020202.SAU Quarantined
WAM020202.IT22 M020202 L050505 Leaf Training transfer
WAM020202.IT23 M020202 J413650 Leaf Training transfer WAM020202.SAV
WAM020202.IT27 M020202 R030303 Leaf Training transfer VOID
WAM020202.IT29 M020202 R030303 Leaf Training transfer WAM020202.SA1J 02/13/2018 04:08pm 02/14/2018 04:08pm Quarantined
WAM020202.IT6 M020202 R360307 Leaf Training transfer 12/20/2017 01:26pm 12/21/2017 01:26pm
WAM020202.IT7 M020202 R423784 Leaf Training transfer Quarantined
WAM020202.IT8 M020202 R421797 Leaf Training transfer

Data Entry—User Interface: Procedures for Manual Data Entry at Retail Facilities

Admin Setup

Create User Profiles

To create a new user profile, navigate to 'Users→Add'.

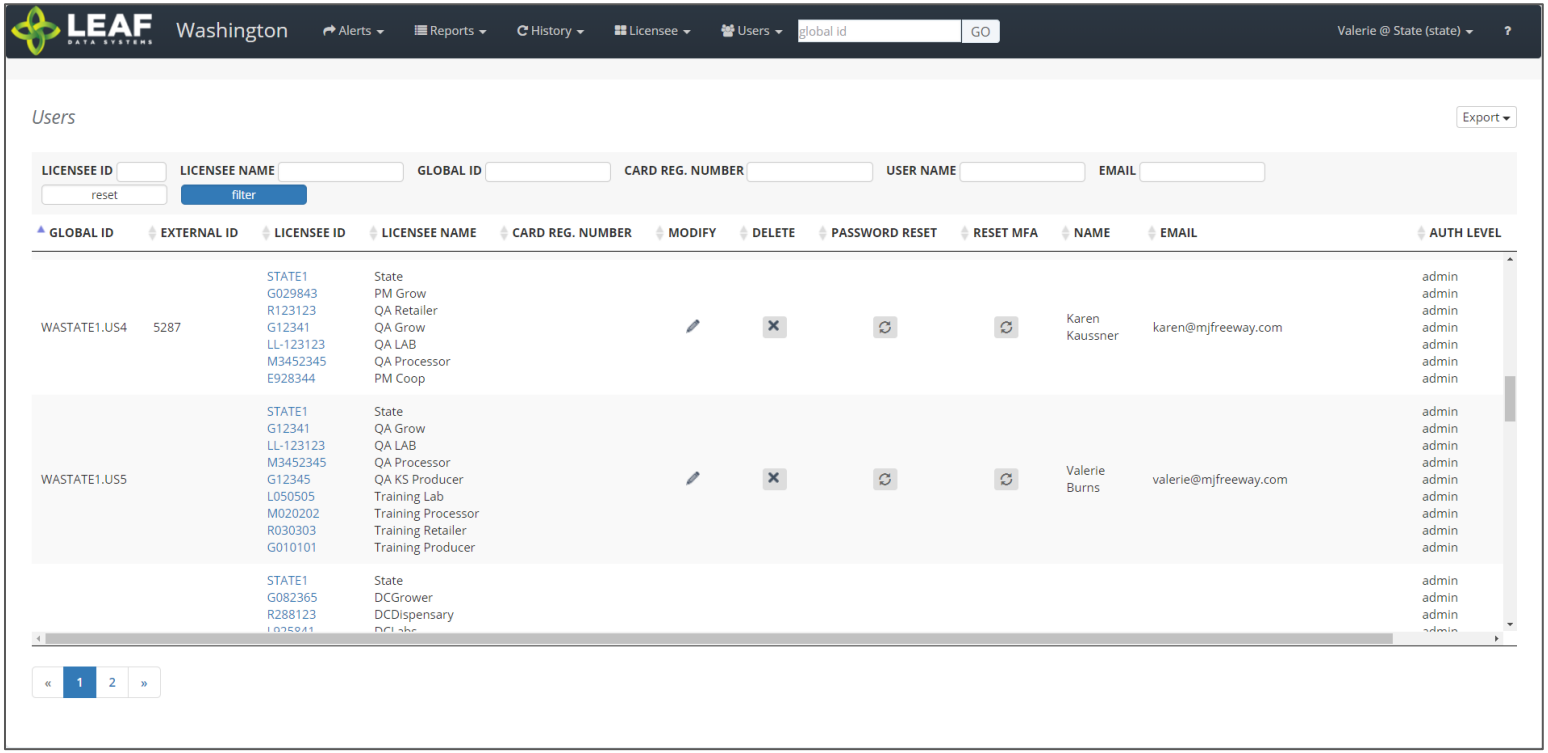


1. **Use MFA:** ***Do not check this box because SAW is being used to authenticate into Leaf Data Systems.*** This feature has been deprecated and will be removed in a later release.
2. **First Name:** Type the first name of the user.
3. **Last Name:** Type the last name of the user.
4. **Email:** Enter the email address of the user.
5. **Locale:** Select the primary language of the user.
6. **External ID:** (optional field) Provides the ability to enter a secondary reference name/number for this record.
7. **Licensee ID:** From the drop-down menu, select the licensee(s) that the user should have access to.

8. **Delete:** Click the 'X' to delete a licensee row that has been added.
9. **Add:** Click the '+ADD' link to add more rows of licensees.
10. **Auth Level:** For each licensee that the user is assigned to, select an 'Authorization Level' from the drop-down menu.
    a. 'View' allows a user to see information present in Leaf Data without the ability to perform data functions.
    b. 'Edit' allows a user to view information in Leaf Data, as well as perform functions pertaining to day-to-day operations of the facility. The administrative setup functions described in this procedure are NOT able to be performed by a user with an 'edit' authorization level.
    c. 'Admin' allows a user access to all information and all functionality within Leaf Data that may be viewed or performed by the associated Licensee ID.
    d. 'Disabled' maintains a users profile in Leaf Data Systems while prohibiting the user from accessing the database.
11. **Card Reg. Number:** (optional field) Provides the ability to enter further identification of a user (for example, an employee number).
12. **Save:** Click the 'save' button to create the new user.

Viewing and Modifying Users

To view users that have been created within Leaf Data Systems, navigate to 'Users→View'. Use the filters and column headers to sort the data to find a specfic record. To modify the record, click the 'pen' icon in the 'Modify' column of the line item you wish to modify. Update the information that has changed, and click the 'Save' button to update the record.



Create Areas

1. Navigate to 'Data Entry→Areas'.
2. To create a new area, click the 'add' button in the upper-right corner of the screen.
3. Enter a name for the area, then select the corresponding area type. *NOTE: Area types that correspond to processing facilities include quarantine and non-quarantine.*
4. Click the 'save' button to create the area.
5. Repeat steps 2-4 until all physical locations where plants and product may exist are represented within Leaf Data.

Create Strains

1. Navigate to 'Data Entry→Strains'.
2. To create a new strain, click the 'add' button in the upper-right corner of the screen.
3. Enter the strain name in the name field, then click the 'save' button to create the strain.
4. Repeat steps 3-4 until all strains that will be present at the facility are represented within Leaf Data.

Create Inventory Types

1. Navigate to 'Data Entry→Inventory Types'.
2. Click the 'add' button in the upper-right corner of the screen.

3. In the 'Name' field, enter a name for the new inventory type, for example, the strain name followed by descriptive wording, such as 'flower' or 'other material'.
4. Select the 'category' and 'subcategory' that represent the inventory type being created.
5. Optionally, you may enter a description of the inventory type.
6. Select the unit of measure that corresponds to the inventory type being created: if the product is measured by its weight, select grams (gm) and if the product is measured by a piece count, select each (ea).
7. Once the form is complete, click the 'save' button to create the inventory type.

Understanding Batches

The purpose of using batches to group together plant and inventory records is two-fold. Batches assist with creating the traceability that the system is designed to offer. As well, batches allow producers to manage plants in any phase in groups, which enables mass actions to be applied to numerous records simultaneously. Batches are not intended to constrain activities involving plant movement, as plants can be shifted from one batch to another and do not have exclusive relationships with batches they are added to.

Batch types include propagation material, plant, harvest, and intermediate/end product.

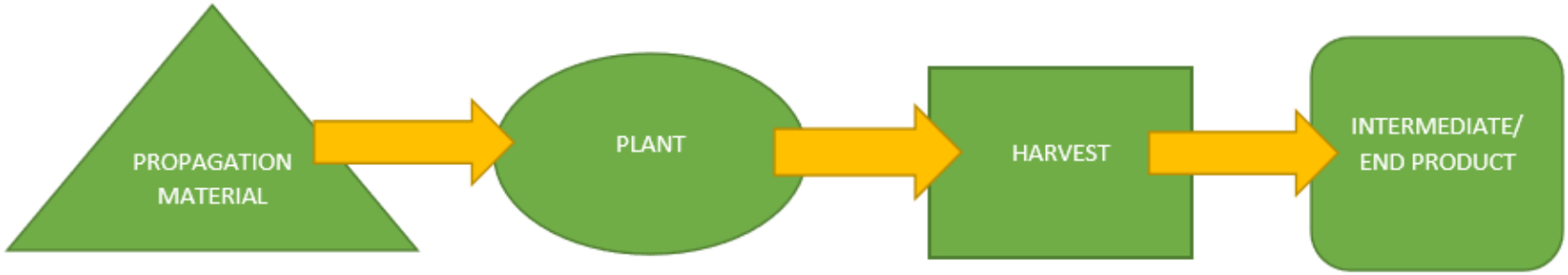
'Propagation Material' batches are used to create inventory lots of seeds, clones, and plant tissue so that these plants can be tracked as inventory throughout their propagation phase. As plants shift from their propagation to vegetative phase, they are moved to plants at which point the plant records are associated with a 'plant' type batch. This batch type is ONLY present at production facilities.

'Plant' batches are a group of plants from the same strain, that are growing together within their vegetative and flowering phases. Attributes of all of the plants within a batch can be modified at the batch level, which will apply changes across all of the plant records. This batch type is ONLY present at production facilities.

'Harvest' batches represent a group of harvested material that is all the same strain. These types of batches are used to denote both 'wet' and 'dry' weight of 'flower' and 'other material' produced during the harvest. Resultant dry weight from a harvest batch is separated into 'inventory lots'. This batch type is ONLY present at production and processing facilities.

'Intermediate/end product' batches are batches that consist of multiple harvest batches being combined, for example, combining two different strains to make a blended concentrate product. They can also be comprised of a single harvest batch that has been converted into an intermediate or end product.

Visualization of the Batch Life Cycle



Receiving Inventory Transfers from Other Sources

1. Navigate to 'Reports→Inventory Transfers-Receive'.
2. Within the line item of the transfer to be received, click the gear icon in the 'Receive' column.
3. Verify the weight of each lot of inventory being received, and log appropriate adjustments into the 'Qty Received' field that corresponds to each lot.
4. Click the 'save' button to update the appropriate inventory records and accept the lots into the facility.

Inventory Functions

As product is packaged and prepared for sale, there are multiple functions that may be necessary to be performed. Once lots are created, they can be split into multiple lots, moved from area to area, and disposed of (either partially, or in full).

Splitting Lots

1. Navigate to 'Data Entry→Lots' and click the checkbox on the line item of the lot that must be split.
2. In the filter menu of the page, enter the gram weight of the new lot to be created into the 'Qty' field (adjacent to the 'split selected lot' button).
3. Click the 'split selected lot' button.
4. The designated quantity will be shifted into its own lot, and the original lot will contain the remaining weight.

Moving Lots

1. Navigate to 'Data Entry→Lots' and click the checkbox on the line item of the lot that is being moved to a new physical location.
2. In the filter menu of the page, select the new area for the lot from the 'Move to Area' drop-down menu (adjacent to the 'move selected lots' button).
3. Click the 'move selected lots' button.
4. The designated lot will be shifted into the new area that has been selected.

Destructions

21. Navigate to 'Data Entry→Lots'.
22. Within the line item of the lots that is being adjusted due to a disposal, click the 'Dispose' icon at the far-right side of the record.
23. From the 'Source' drop-down menu, confirm that 'Inventory' is selected.
24. From the 'Lot' drop-down menu, confirm the global ID of the lot being destroyed.
25. From the 'Reason' drop-down menu, select the reason that is most appropriate for the destruction record being created.
26. Click the 'Actual Date of Destruction' field to enter the date when the waste was created.
27. In the 'Qty' field, enter the weight of the product that is being disposed of.
28. Click the 'save' button to create the new destruction record.
29. Once the record has been created, a resultant inventory lot representing the waste material will be created which can be found under 'Data Entry→Lots'.
30. Once the quarantine period is over, to document the physical disposal of the waste inventory, navigate to 'Data Entry→Destructions', find the line item of the destruction record, and click the 'Dispose' icon in the 'Dispose' column.

Inventory Adjustments

1. Navigate to 'Data Entry→Inventory Adjustments'.
2. Click the 'add' button in the upper-right corner of the screen to create a new adjustment.
3. From the 'Lot' drop-down menu, select the lot that is to be adjusted.
4. In the 'Qty' field, enter the weight being adjusted from the package (and NOT the new package weight). For example, if 100 grams is being added to the lot, type "100", however, if 100 grams if being decremented from the lot, type "-100".
5. From the 'Reason' drop-down menu, select the reason that the adjustment is being documented.
6. *(Optional)* In the memo field, add any additional notes that better explain the reason for the adjustment.
7. Click the 'save' button.

Inventory Transfers

Inventory Transfers are records that document the movement of inventory from one licensed facility (or testing laboratory) to another.

Three Different Manifest Types

When creating an inventory transfer, it is important to first understand the three types that are available.

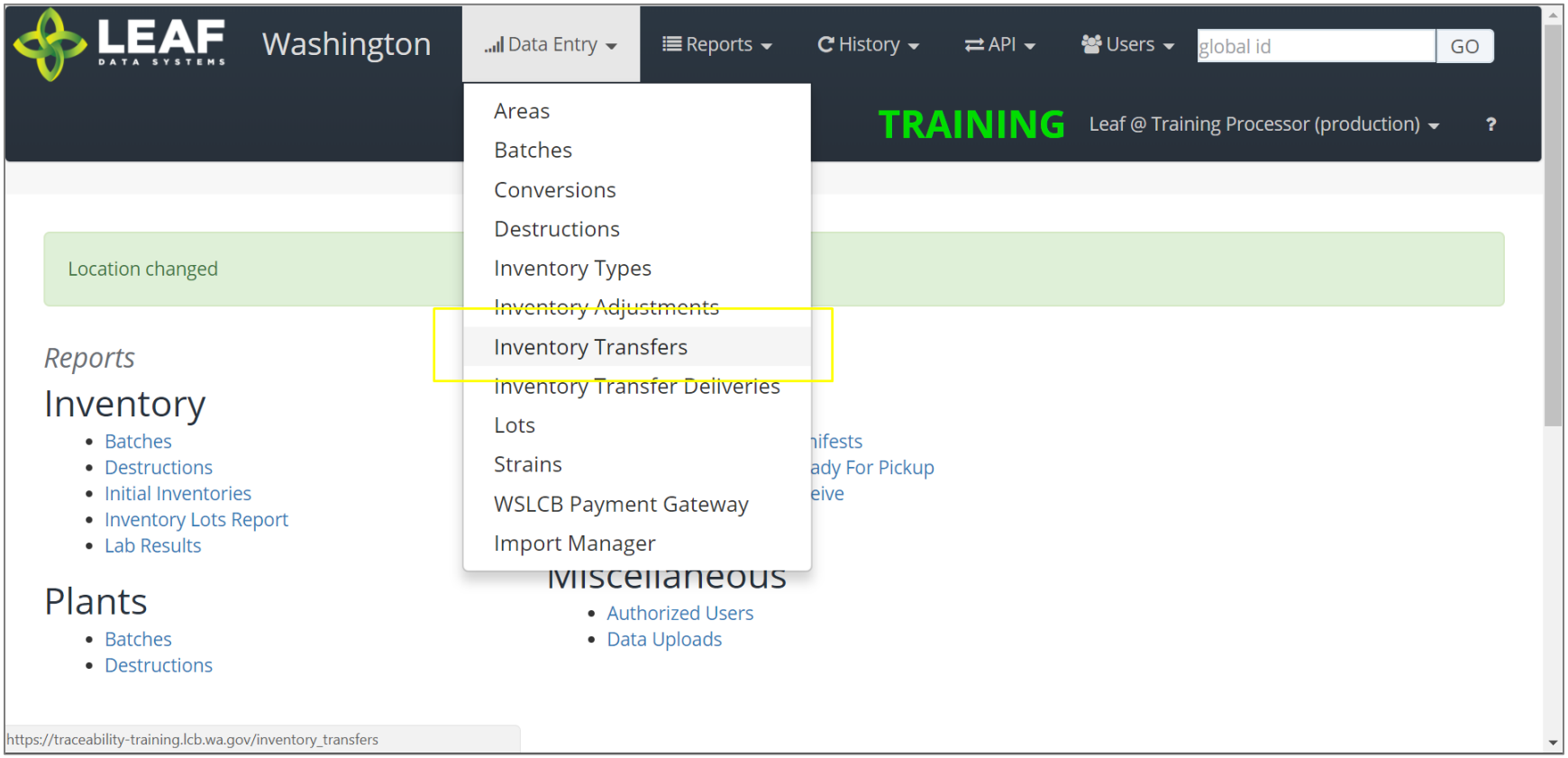
A **Delivery** manifest is a standard transfer where the sender will be responsible for completing all of the transfer information, to include: a. The Recipient b. The Driver Name(s) c. Estimated Departure and Arrival Times d. Vehicle Information (License Plate, Vehicle Description, and Vehicle VIN) e. Inventory to be Transferred f. Price Total per line item The general workflow of a **Delivery** manifest is that the sender is performing the physical transport of the inventory to the receiver. In this workflow, *only* the sending facility can mark the transfer as "in transit".
A **Pickup** manifest allows for the receiver to fill out the driver, trip, and vehicle information (b, c, and d in the list above). This is designed to facilitate a workflow in which the receiver is performing the physical transport of the inventory. With a **Pickup** manifest type, either the sender *or* the receiver is able to mark the inventory transfer as "in transit".
A **Licensed Transporter** manifest allows for the sending facility to select a licensed transporter business to perform the physical transport of the inventory. Upon selection of this manifest type, the driver and vehicle information are not necessary, and those fields are removed from the inventory transfer page.

Now that you understand the different types of inventory transfers/manifests available, let's take a look at inventory transfer creation.

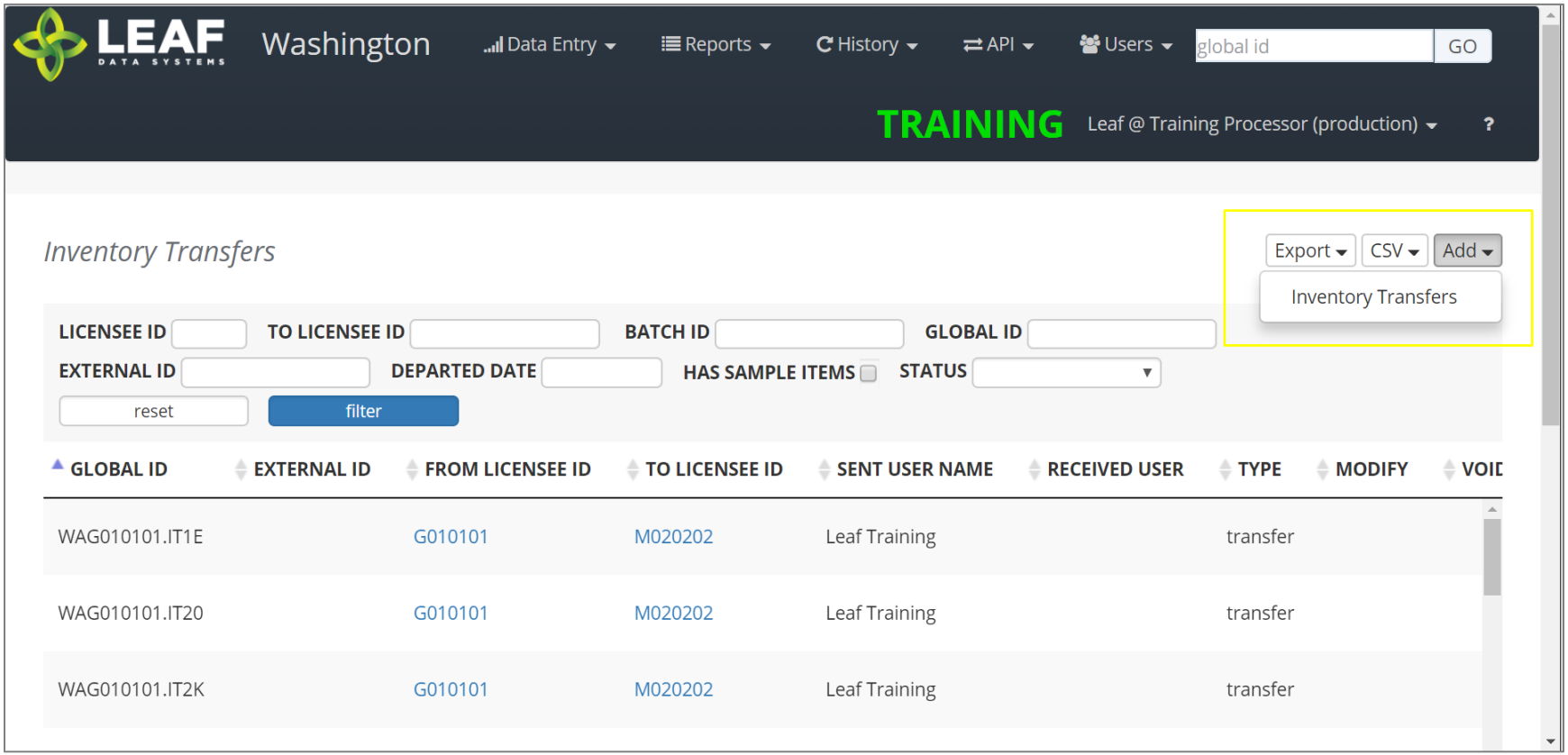
NOTE: "Multi-Stop" functionality is currently not available in Leaf Data Systems. This is being developed for a future release. PLEASE DO NOT SELECT the "Part of Multi-Stop" checkbox visible upon creating an inventory transfer. As well, the "Inventory Transfers/Deliveries" data entry listing and report will not be useable until this functionality has been completed.

How to Create an Inventory Transfer

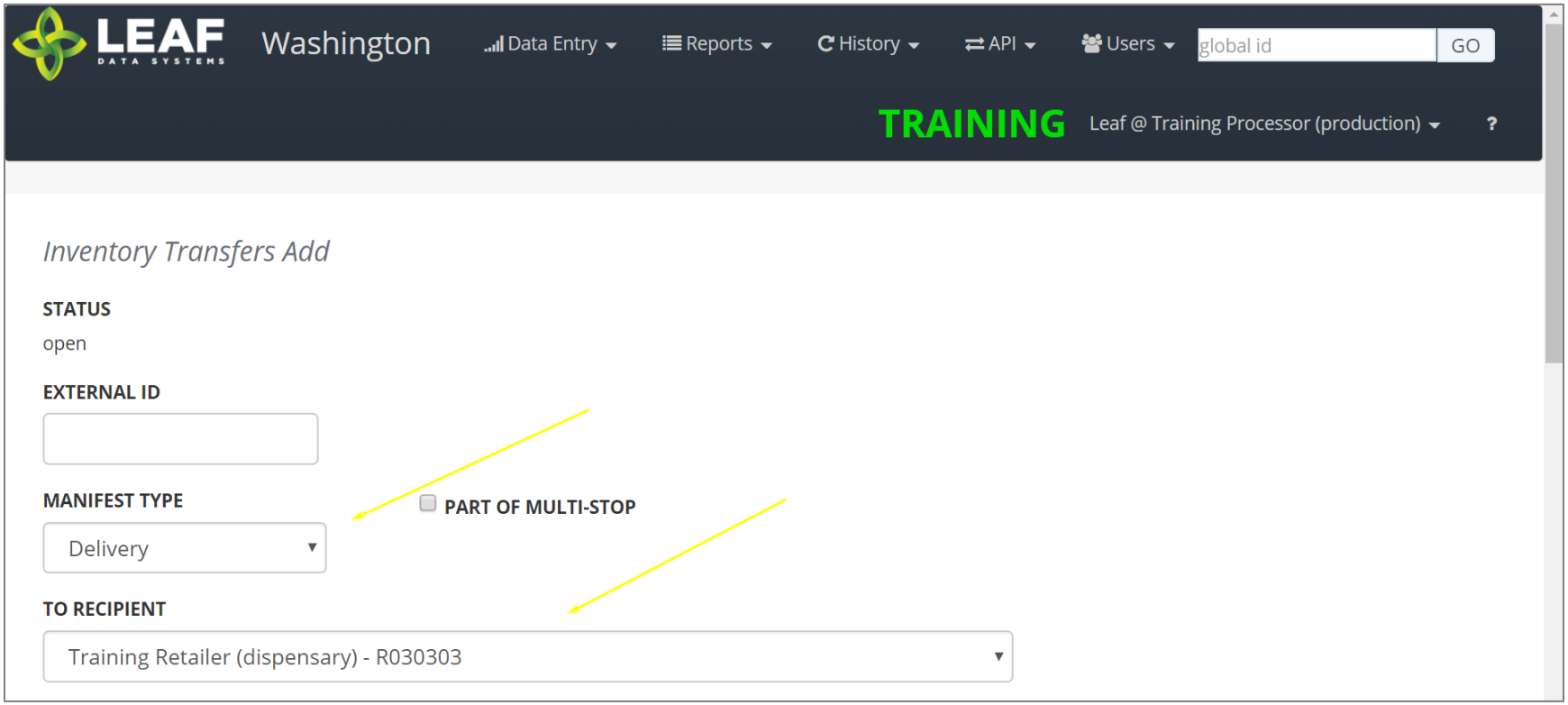
First, navigate to 'Data Entry→Inventory Transfers':



The page displayed will show a listing of all inventory transfers that have been created at the facility. To create a new inventory transfer, click the 'Add' button in the upper-right corner, then click 'Inventory Transfers'.

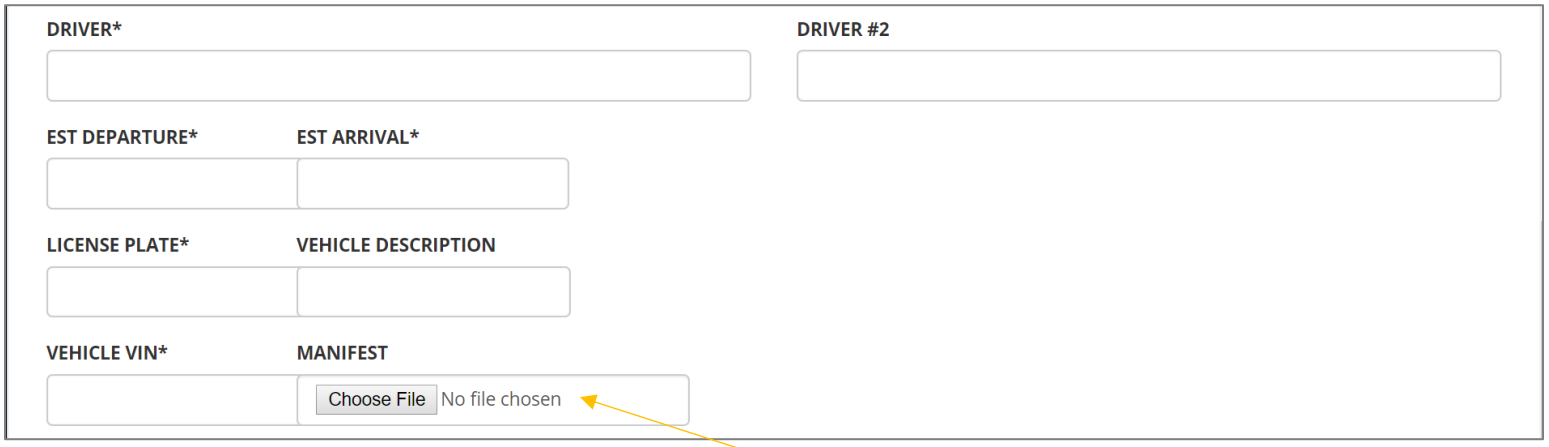


The first section of the inventory transfer allows for selection of the manifest type (discussed in the previous section), and the ability to choose the intended recipient of the transfer.

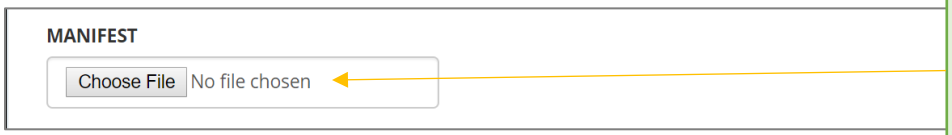


Once you complete these two selections, scroll down to the next section.

For a manifest type of “delivery” the next section will look like this:



For a manifest type of “pickup” the same section will look like this:



NOTE: The “Manifest” field that allows for upload of an external manifest is not necessary if you are using the Leaf Data Systems user interface directly. Leaf will generate a manifest for you upon creation of the inventory transfer.

For a manifest type of “licensed transporter” the same section will look like this:

Complete all of the fields available based on the manifest type selected in the previous step, then scroll down.

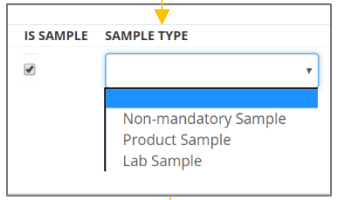
Finally, you will need to select the inventory being transferred. There are a couple of other important designations related to this inventory.

Start typing the global ID or name of the inventory lot to be transferred. To add more lots, click the "+ADD" link above the field.

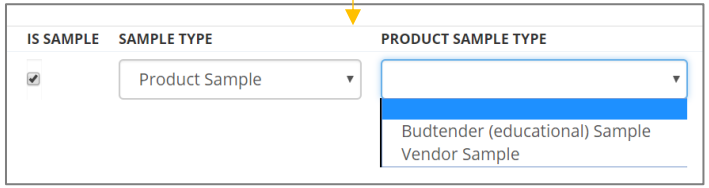
Select the quantity of the lot to be transferred.

The unit of measure is determined by the "inventory type" of the inventory lot.

If inventory being transferred from a Producer to a Processor is designated as being for extraction purposes, check this box



Values entered into this field for each line item will generate a wholesale transaction record upon creation of the inventory transfer. This total represents the total price of the line item (not the unit price).



For Samples, click the "is sample" checkbox to allow for selection of "Sample Type". "Sample Types" include:

Non-Mandatory Sample-used to request non-mandatory testing from a QA lab (results will NOT appear in Leaf)

Product Sample-used to designate educational and vendor samples, causing a secondary drop-down to appear for selection of "Product Sample" type

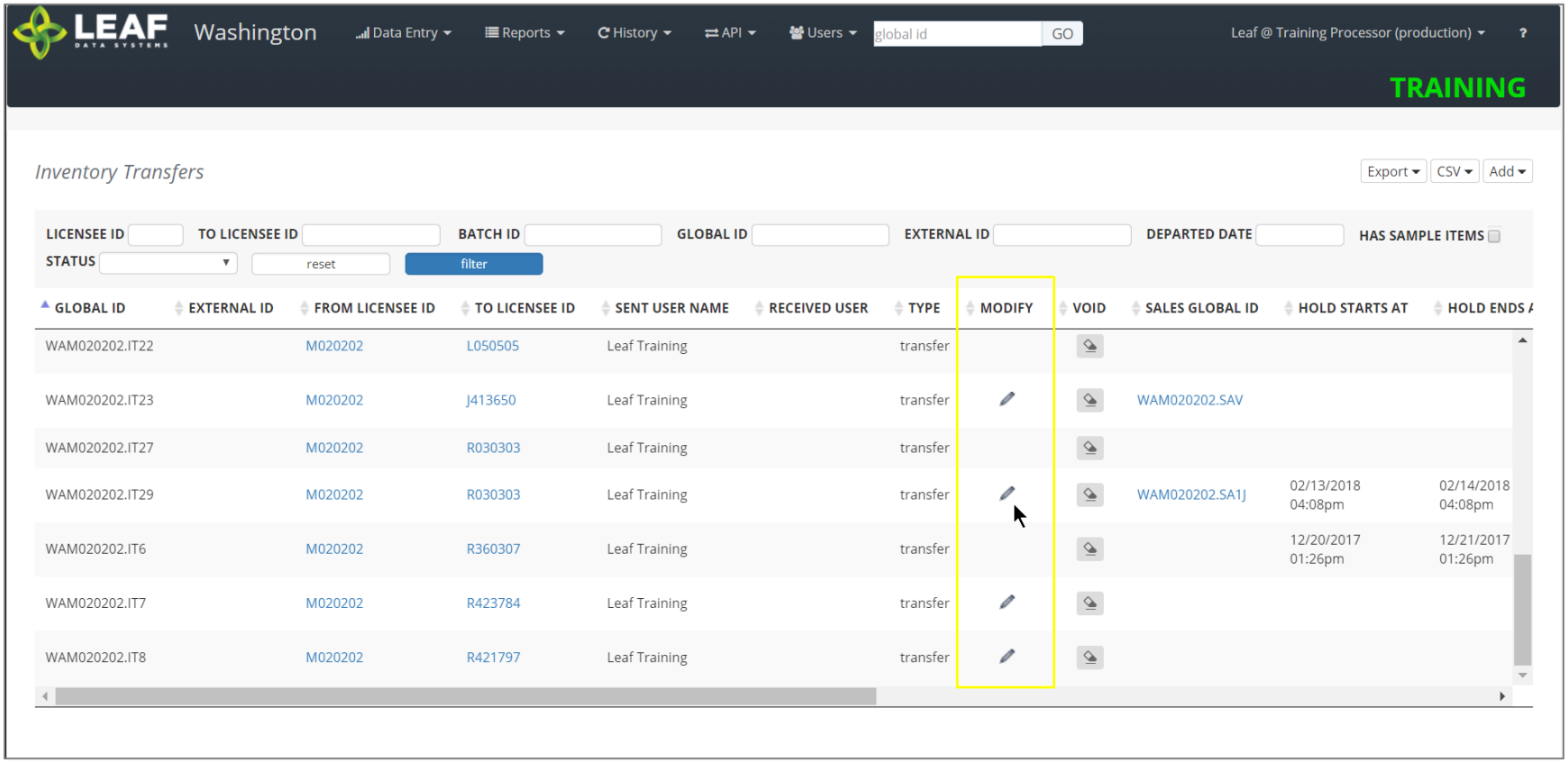
Lab Sample—a sample being sent to a testing lab for required QA testing; selecting this sample type enables selection of the "Retest" checkbox to denote that an inventory lot is being retested

Once all of the applicable forms have been completed,

click the 'Save' button to create the transfer.

Modifying an Inventory Transfer

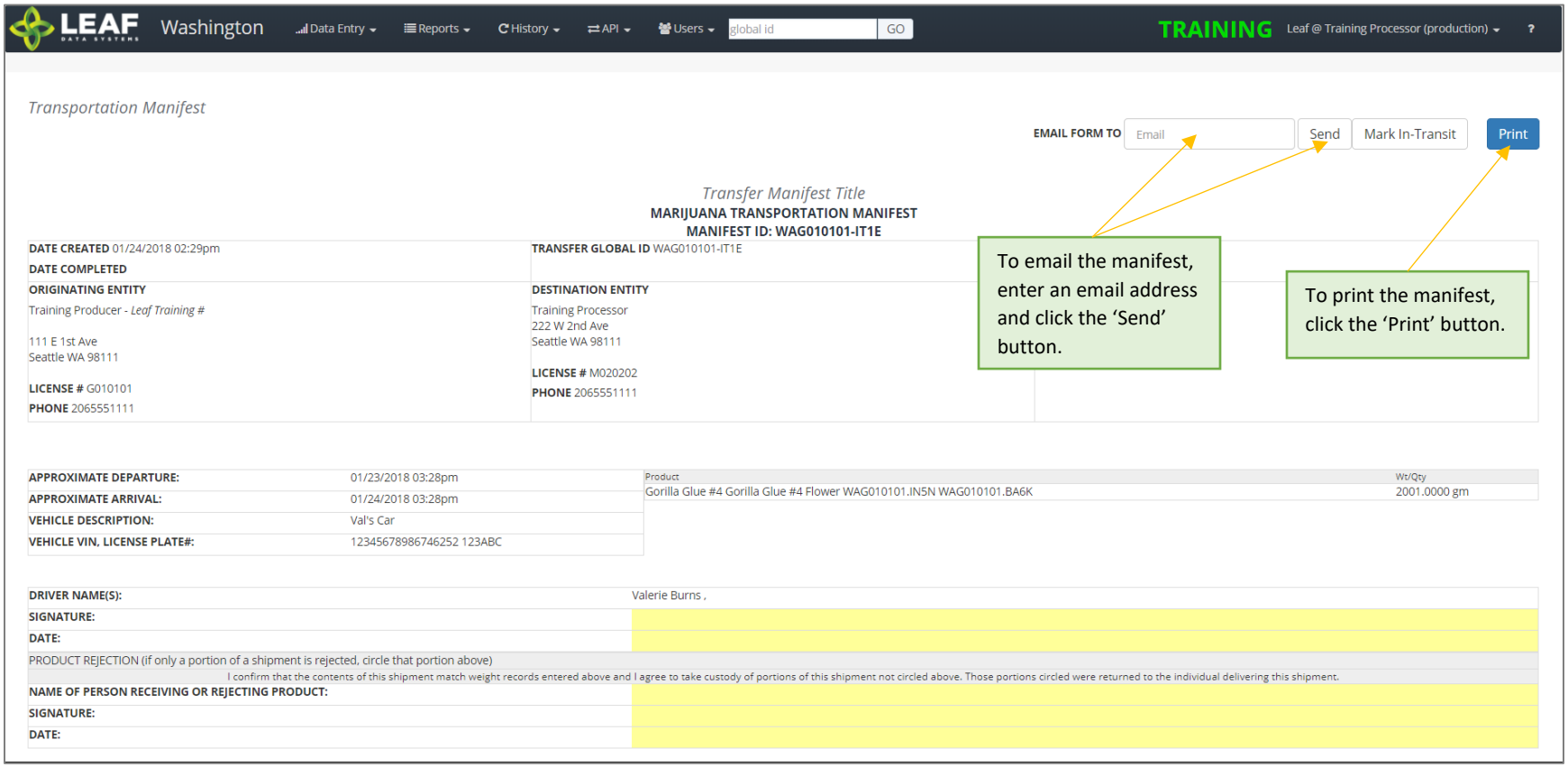
To modify an Inventory Transfer record that has been created, navigate to 'Data Entry→Inventory Transfers'. Search for the transfer you wish to modify, and click the pen icon in the "Modify" column.



This will take to back to a page similar to the screen where you created the transfer, and you can modify any information.

Viewing and Printing the Manifest

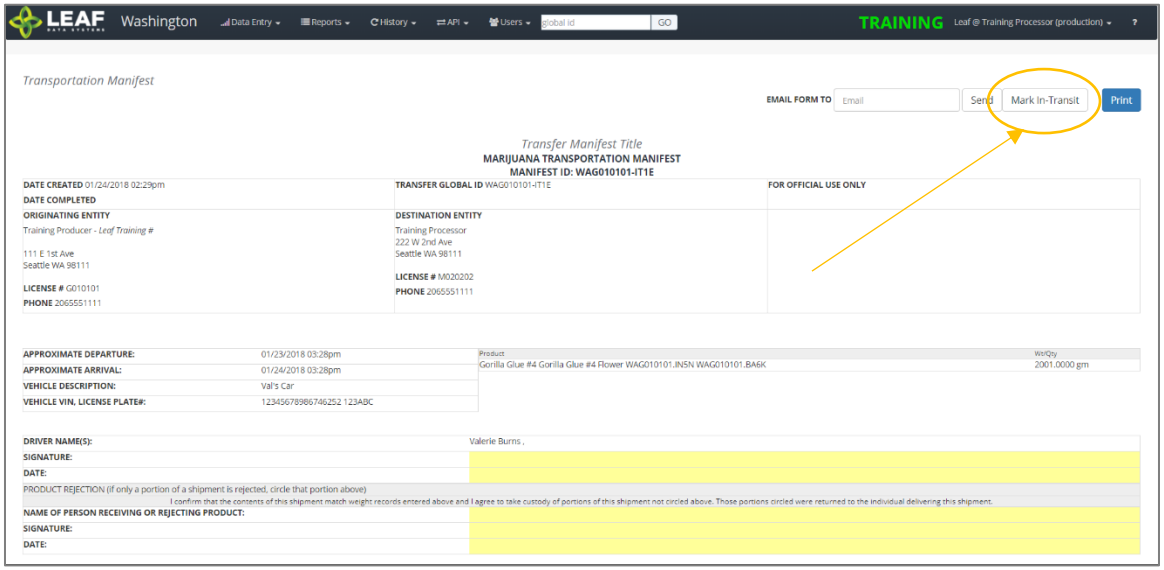
To view and print a manifest, navigate to "Data Entry→Inventory Transfers" (as in the previous step), and search for the inventory transfer record you wish to view the manifest for. Click the gear icon in the "Manifest" column of the line item. This will produce the following:



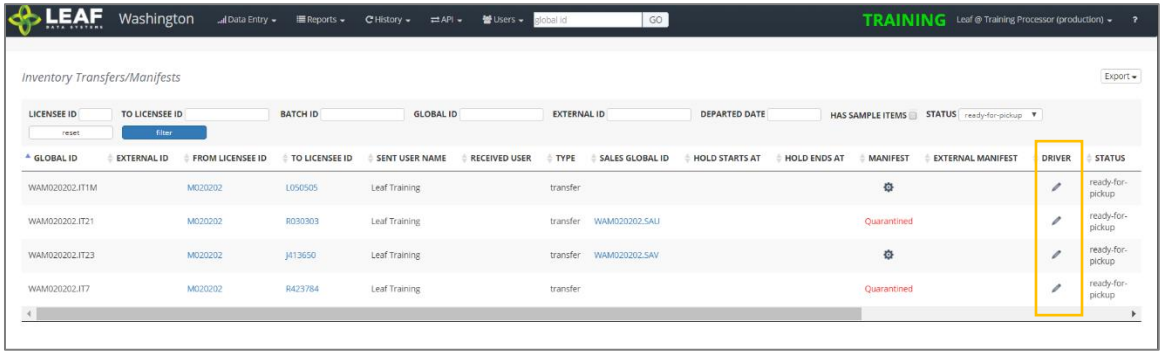
NOTE: If you are unable to see the "gear" icon due to the word "Quarantine" in its place, this means that *AT LEAST ONE* of the inventory lots associated with the transfer does not have the appropriate lab results (or lab result attestation, for initial inventory) associated. Please double-check the lab results or lab results attestation for each lot.

Marking an Inventory Transfer as "In Transit"

From the manifest view (see previous step for navigation to manifest), click the "Mark In-Transit" button in the upper-right corner of the manifest. This will change the status of the manifest from "open" to "in-transit". Once a manifest is designated as "in-transit", it can no longer be modified, only received. If a manifest is marked as "in-transit" in error, the only option is to "Void" the manifest (see final section of this document) and re-create it.

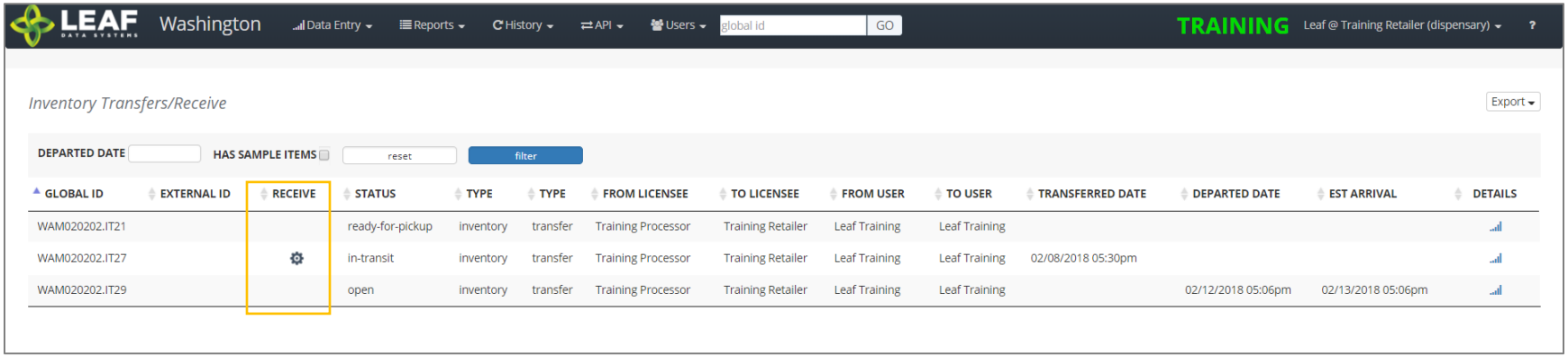


For a "pickup" manifest, once the sender has created the manifest record, the receiver should navigate to "Reports→Inventory Transfers/Ready-for-Pickup". Then, search for the manifest that is ready for pickup, and click the pen icon in the "Driver" column. This will allow the receiver to complete the driver and vehicle information pertaining to the transfer. A receiver would use the same process denoted above to mark the transfer as "in transit".

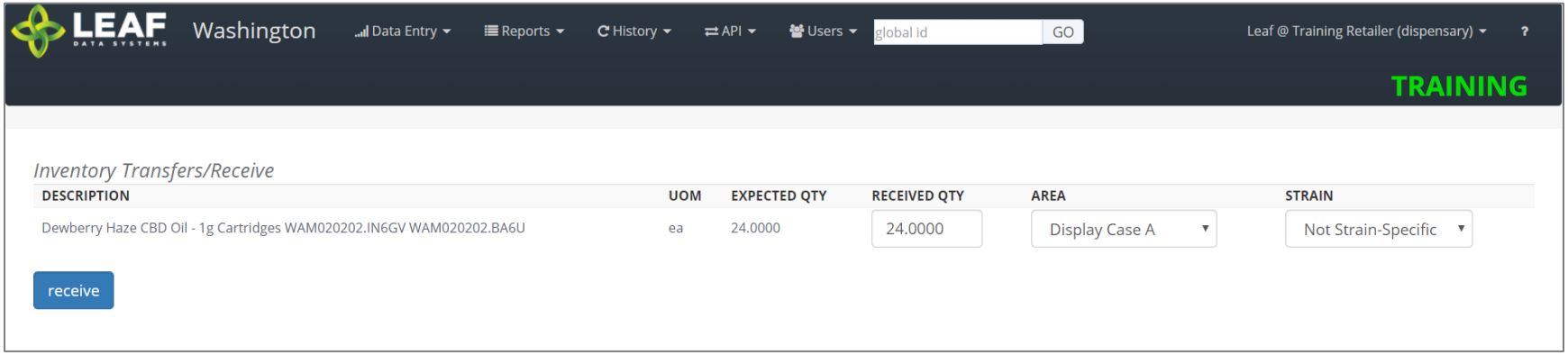


Receiving an Inventory Transfer

Once an inventory transfer has been marked as "in-transit", receiver can accept the inventory into their facility by navigating to "Reports→Inventory Transfers/Receive".



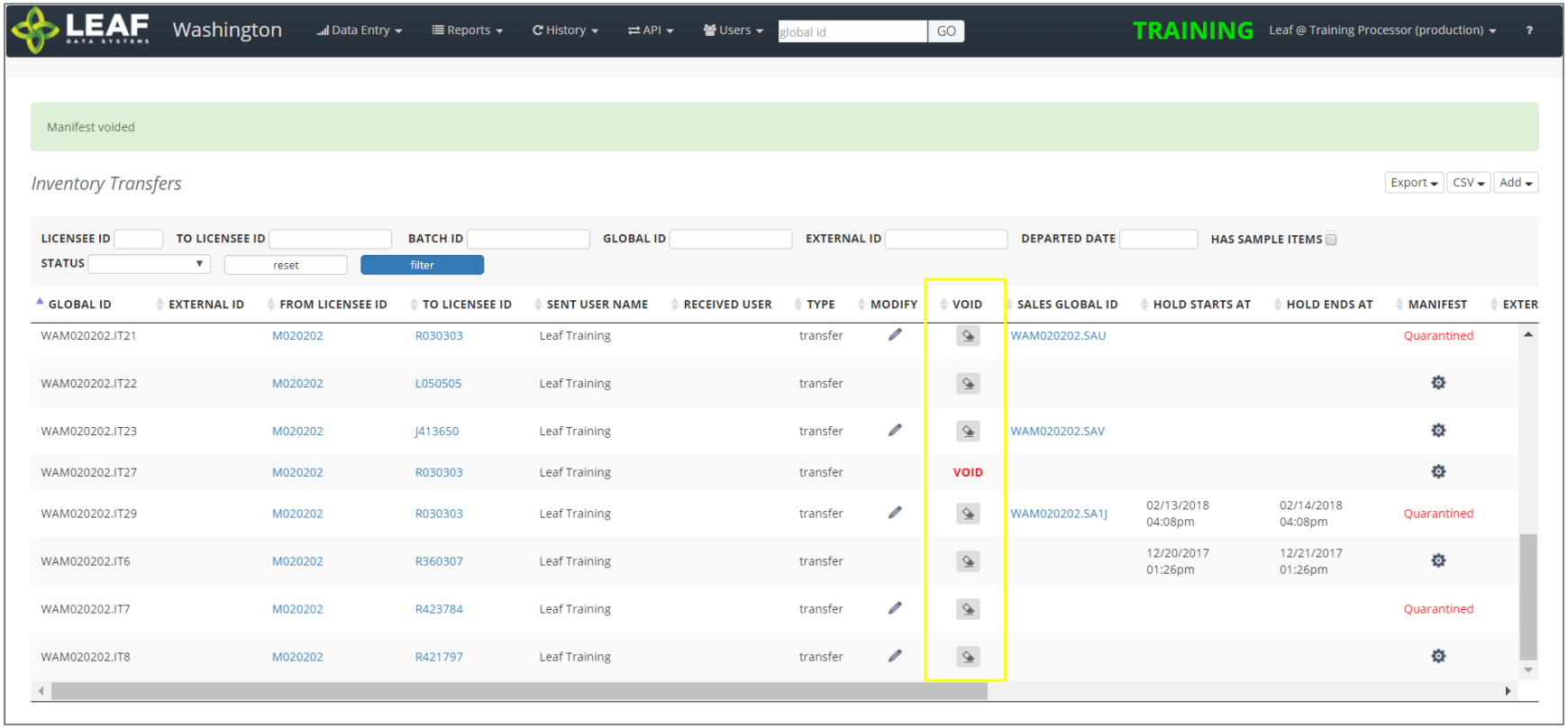
Search for the transfer to be received, then click the gear icon in the "Receive" column. On the screen that appears (below), enter the received quantities for each line item of the transfer. Select an 'Area' from the drop-down menu to receive the inventory into. Finally, if the product is strain-specific, select the local strain associated with it. If it is not strain-specific, the default value in this field will denote this.



Click the 'receive' button once all of the information for each line item has been completed.

Voiding an Inventory Transfer

To void an Inventory Transfer record that has been created, navigate to 'Data Entry→Inventory Transfers'. Search for the transfer you wish to modify, and click the eraser icon in the "Void" column. Once a manifest has been voided, it will say "VOID" in red in this column.


LEAF DATA SYSTEMS
Washington
Data Entry
Reports
History
API
Users
global id
GO
TRAINING
Leaf @ Training Processor (production)
Manifest voided
Inventory Transfers
Export
CSV
Add
LICENSEE ID
TO LICENSEE ID
BATCH ID
GLOBAL ID
EXTERNAL ID
DEPARTED DATE
HAS SAMPLE ITEMS
STATUS
reset
filter
GLOBAL ID
EXTERNAL ID
FROM LICENSEE ID
TO LICENSEE ID
SENT USER NAME
RECEIVED USER
TYPE
MODIFY
VOID
SALES GLOBAL ID
HOLD STARTS AT
HOLD ENDS AT
MANIFEST
EXTER
WAM020202.IT21 M020202 R030303 Leaf Training transfer WAM020202.SAU Quarantined
WAM020202.IT22 M020202 L050505 Leaf Training transfer
WAM020202.IT23 M020202 J413650 Leaf Training transfer WAM020202.SAV
WAM020202.IT27 M020202 R030303 Leaf Training transfer VOID
WAM020202.IT29 M020202 R030303 Leaf Training transfer WAM020202.SA1J 02/13/2018 04:08pm 02/14/2018 04:08pm Quarantined
WAM020202.IT6 M020202 R360307 Leaf Training transfer 12/20/2017 01:26pm 12/21/2017 01:26pm
WAM020202.IT7 M020202 R423784 Leaf Training transfer Quarantined
WAM020202.IT8 M020202 R421797 Leaf Training transfer

Sales

1. Navigate to 'Data Entry→Sales'.
2. Click the 'Add' button in the upper-right corner of the screen.
3. From the 'Status' drop-down menu, select 'sale' or 'return', as appropriate for the transaction being entered.
4. From the 'Type' drop-down menu, select 'retail – medical' or 'retail - recreational
5. From the 'Lot' drop-down menu, select the lot that the product sold came from.
6. In the 'Qty' field, enter the amount of the selected lot that was sold.
7. In the 'Discount' field, enter any discount (in dollars) applied to the sale.
8. To add additional items, click the '+Add' link adjacent to the 'Lot' drop-down menu and repeat steps 6-8.
9. Click the 'save' button to create the sale records.

PART FOUR: Reporting Matrices

Production Facility Reports

Relating to Data Captured Throughout Each Process

PROCESS	CORRESPONDING REPORT(S) AND DATA RETRIEVAL
Admin Setup	Users→View Reports→Authorized Users Data Entry→Areas Data Entry→Strains Data Entry→Inventory Types
Adding Plants	Data Entry→Plants Data Entry→Batches Reports→Plants Reports→Batches History→Plant History History→Batch Log Entries History
Living Plant Processes	Data Entry→Plants Data Entry→Batches Reports→Plants Reports→Batches History→Plant History History→Batch Log Entries History History→Plant Area Changes History
Harvest Process	Data Entry→Batches Reports→Batches Reports→Harvests History→Batch Log Entries History
Creating Lots	Data Entry→Batches Data Entry→Lots Reports→Batches Reports→Inventory Lots Report
Inventory Functions (splitting lots, moving lots, disposals)	Data Entry→Lots Data Entry→ Destructions Reports→Inventory Lots Report Reports→ Destructions History→Inventory Area Changes History
Inventory Adjustments	Data Entry→Inventory Adjustments Reports→Inventory Lots Report

	History→Inventory Adjustments History
Transferring Samples to Testing Labs	Data Entry→Inventory Transfers Reports→Samples Reports→Inventory Transfers/Manifests Reports→Transfer Discrepancies Reports→Lab Results
Transferring Inventory to Other Licensees	Data Entry→Inventory Transfers Reports→Inventory Transfers/Manifests Reports→Transfer Discrepancies

Processing Facility Reports

Relating to Data Captured Throughout Each Process

PROCESS	CORRESPONDING REPORT(S) AND DATA RETRIEVAL
Admin Setup	Users→View Reports→Authorized Users Data Entry→Areas Data Entry→Strains Data Entry→Inventory Types
Receiving Inventory from Other Sources	Data Entry→Inventory Transfers Reports→Inventory Transfers/Receive Reports→Inventory Lots Report Reports→Transfer Discrepancies
Inventory Functions (splitting lots, moving lots, disposals)	Data Entry→Lots Data Entry→ Destructions Reports→Inventory Lots Report Reports→ Destructions History→Inventory Area Changes History
Inventory Adjustments	Data Entry→Inventory Adjustments Reports→Inventory Lots Report History→Inventory Adjustments History
Inventory Conversions	Reports→Conversions Reports→Inventory Lots Report
Transferring Samples to Testing Labs	Data Entry→Inventory Transfers Reports→Samples Reports→Inventory Transfers/Manifests Reports→Transfer Discrepancies Reports→Lab Results
Transferring Inventory to Other Licensees	Data Entry→Inventory Transfers Reports→Inventory Transfers/Manifests Reports→Transfer Discrepancies

Retail Facility Reports

Relating to Data Captured Throughout Each Process

PROCESS	CORRESPONDING REPORT(S) AND DATA RETRIEVAL
Admin Setup	Users→View Reports→Authorized Users Data Entry→Areas Data Entry→Strains Data Entry→Inventory Types
Receiving Inventory from Other Sources	Data Entry→Inventory Transfers Reports→Inventory Transfers/Receive Reports→Inventory Lots Report Reports→Transfer Discrepancies
Inventory Functions (splitting lots, moving lots, disposals)	Data Entry→Lots Data Entry→ Destructions Reports→Inventory Lots Report Reports→Destructions History→Inventory Area Changes History
Inventory Adjustments	Data Entry→Inventory Adjustments Reports→Inventory Lots Report History→Inventory Adjustments History
Transferring Inventory to Other Licensees	Data Entry→Inventory Transfers Reports→Inventory Transfers/Manifests Reports→Transfer Discrepancies
Sales	Data Entry→Sales Reports→Sales Summary Reports→Sales Report Reports→Sales Adjustments