Optimizer Lists in X25 Analytics Modeling

Security Tip

Access to X25 Analytics Modeling features is limited to institutions that license X25 Analytics.

In Optimizer modeling, a "list" is a group of events (or classes) that need to be placed or a group of locations to place them in. Lists are subsets of the overall snapshot, which contain events and locations from searches performed in 25Live. Lists can also optionally have transformations applied to them, representing hypothetical changes that are not reflected in the snapshot data.

The most straightforward lists consist of all events or all locations in a snapshot, with no transformations. If you create a new snapshot and make simple lists without transformations, you can start running an Optimizer simulation within minutes. With a little more finesse, however, you can make smaller lists with more specific data and targeted transformations.

In This Article:

Why Make Multiple Lists?

There are two reasons to make multiple event or location lists for use with the Optimizer: tiered priority runs and data transformations.

Tiered Priority Runs

A common use case for Optimizer simulations is to give certain classes priority placement. For example, you might want to ensure that all classes with standard meeting patterns get placed first before those with nonstandard meeting patterns, or you might want to find locations for all classes with more than 40 students before placing smaller classes. Alternatively, you might want to give priority to certain locations, trying to fill some buildings before others. When you divide your classes and/or locations into separate groups and create individual lists for each, you can set up multiple Optimizer runs and choose which list(s) to apply to each run. Since the runs in each simulation are performed in sequence, any classes or locations in an earlier run have priority over the classes or locations in later runs.

Data Transformations

The Optimizer can perform its placement runs based on hypothetical changes to your data, such as "what if class size was 10% bigger?" or "what if locations were remodeled to add new AV equipment?" These transformations are applied to individual lists. By dividing your events and locations into groups, you can apply different

transformations to different lists as desired.

Read the Common Optimizer Simulation Scenarios article for more examples of how you might use multiple lists, and Managing Overlapping Optimizer Lists for how to track conflicting transformations.

Create or Edit an Optimizer List

Tip: Auto-Generating Lists

If you need to make multiple lists based on similar characteristics, such as a list of locations in each building or lists of classes based on their enrollment, consider auto-generating some lists so X25 Analytics will automatically create them for you.

Auto-generation also has an option to make a single list with all events or all locations. This is much quicker than selecting everything in the snapshot by hand.

1. In X25 Analytics, Open the Optimizer Lists

- With the Projects tab selected, use the **Lists** link in the **Model** section on the left sidebar.

2.Edit, Copy, or Create a List

- Choose **Event List** or **Location List** from the **List Mode** dropdown, depending on the kind of list you want to create, copy, or edit.
- On the right, choose an existing list from the **Select List** dropdown to edit or **Copy**.
  OR
  Start a brand new list by clicking **Create**.

3. Choose Your Criteria

- Enter a full or partial event or location name in the keyword **search** field to find the events or locations in the snapshot that you want to include in the list and **select** them. You can use your standard methods for scrolling the list vertically and selecting multiples, scrolling horizontally to see additional column headers, and sorting the list by column header.

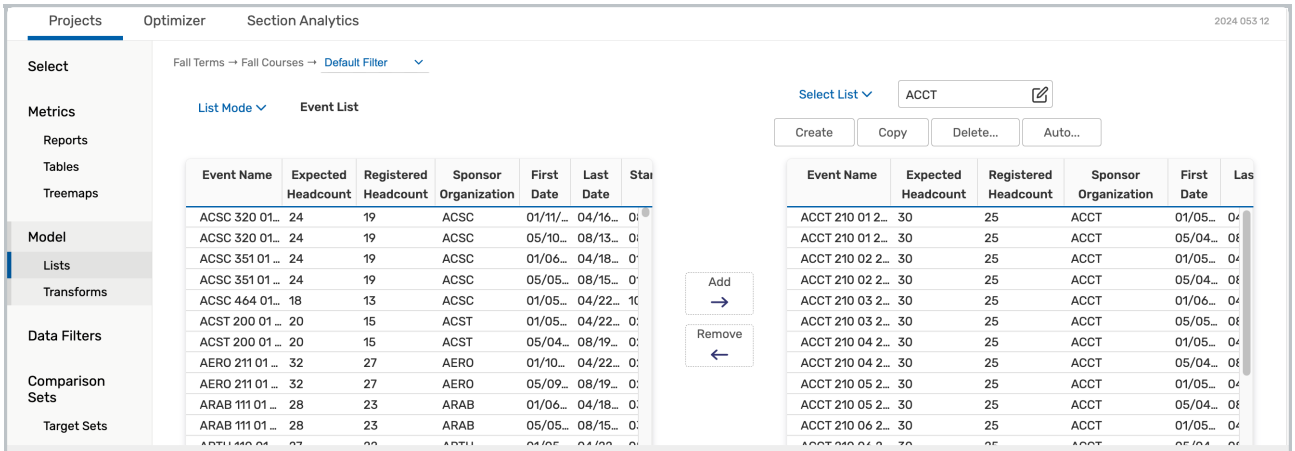

Image: Event List example

4. Tap Add or Remove

- Click **Add** or **Remove** to move events or locations between the selected snapshot data on the left and the list on the right. (It is possible to add the same event or location to multiple lists.)
- The lists are automatically saved when changes are made. Lists are sorted alphabetically by default.

> **Note: How Lists Handle the Addition and Removal of Bound Sections**
>
> In Modeling, users can create lists that have only one member of a bound set. Because bindings are meant to enforce the same location assignment across sections, Modeling handles these sections using the following steps:
>
> - First, Modeling automatically removes the location assignments for every bound event in the list. This is to prevent pre-assigned bound events from being omitted from the list and to prevent the bound events that *are* in the list from not getting placed.
> - Then, for any event in the list, Modeling will automatically feed all of its bound events to the optimizer for location assignments—even if they are not in the list. This is to ensure the bound events all get the same location assignment.

Delete One or Multiple Optimizer Lists

1. Navigate to Your Lists

- In X25 Analytics, navigate to **Projects** > **Models** > **Lists.**
- From the **List Mode** dropdown, choose **Event List** OR **Location List.**

2. Tap the Delete Button

- Above the second column, select the **Delete...** button.
- This will open a panel with all of your event/location lists.

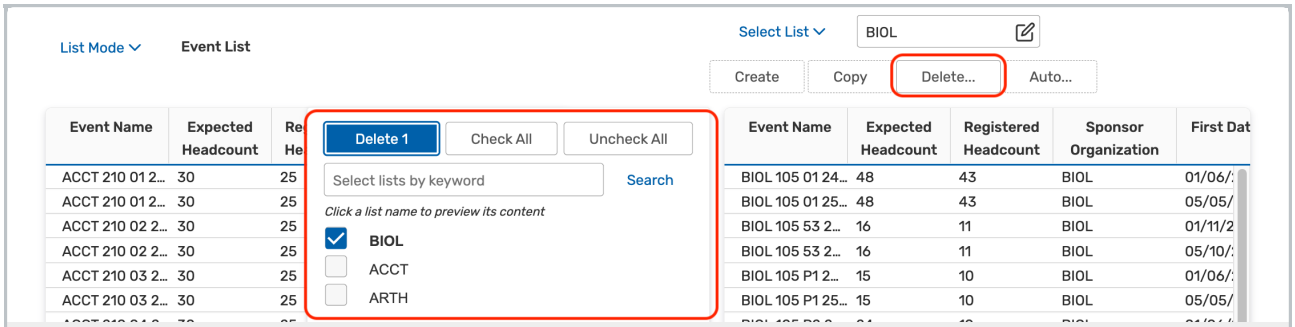

Image: Selecting the Delete... button will open a panel of your event/location lists where you can then select which list(s) to delete.

3. Select the Lists You'd Like to Delete

- *(Optional)* Use the search field to search for lists using keywords.
- Add a checkmark to any list(s) you'd like to delete. You can also use the **Check All** or **Uncheck All** buttons to make mass selections/deselections.

4. Confirm the Deletion

- Tap **Delete X** (where X is the number of lists your will be deleting.)
- Click **Confirm**.