HCLSoftware

# HCL Detect v12.1.10 Admin Guide

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# Chapter 1. Introduction

This section helps administrators to configure user roles and permissions, monitor feed applications and system health, and manage subscriber segments. The administrator can access the Administration menu in the Header to navigate to User roles and management, System health and Settings option to manage the application.

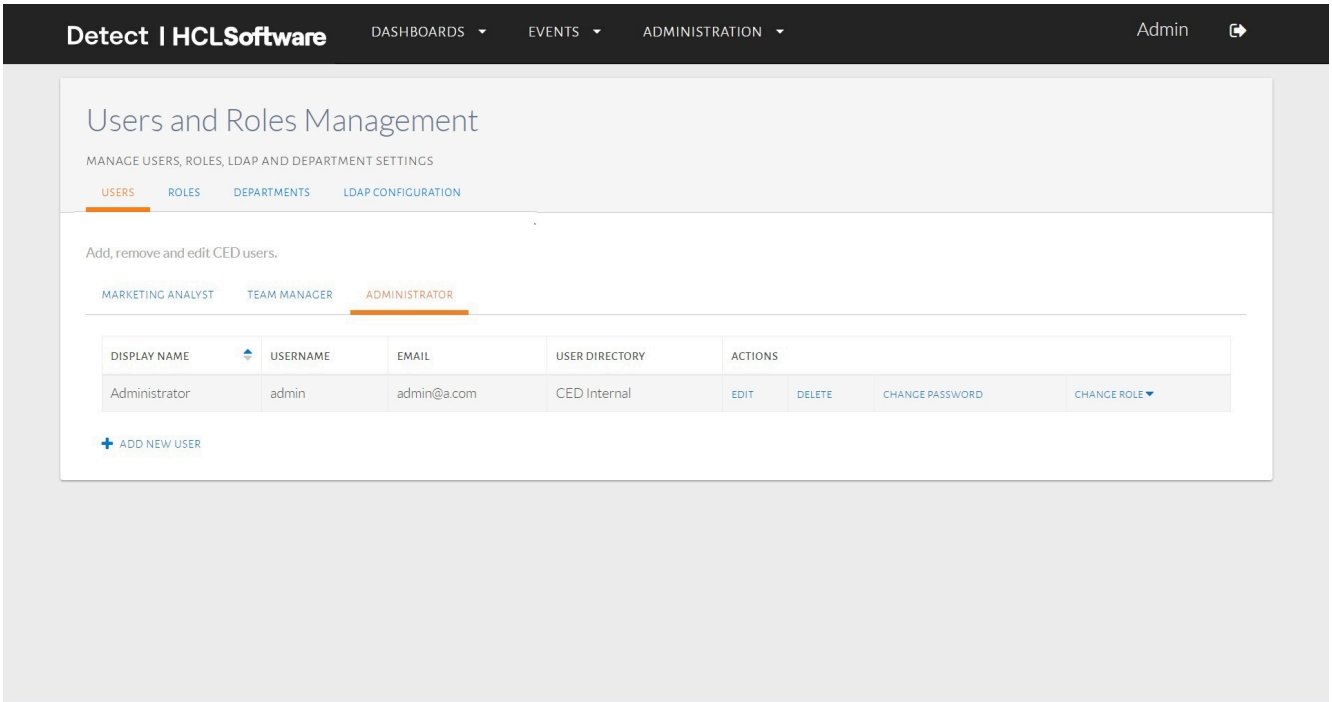
# Chapter 2. User & Role Management

This page explains how to manage users and roles in HCL Detect, including adding new users, creating and assigning roles, organizing departments, and configuring LDAP authentication.

## Managing Users

### Viewing Users and Roles

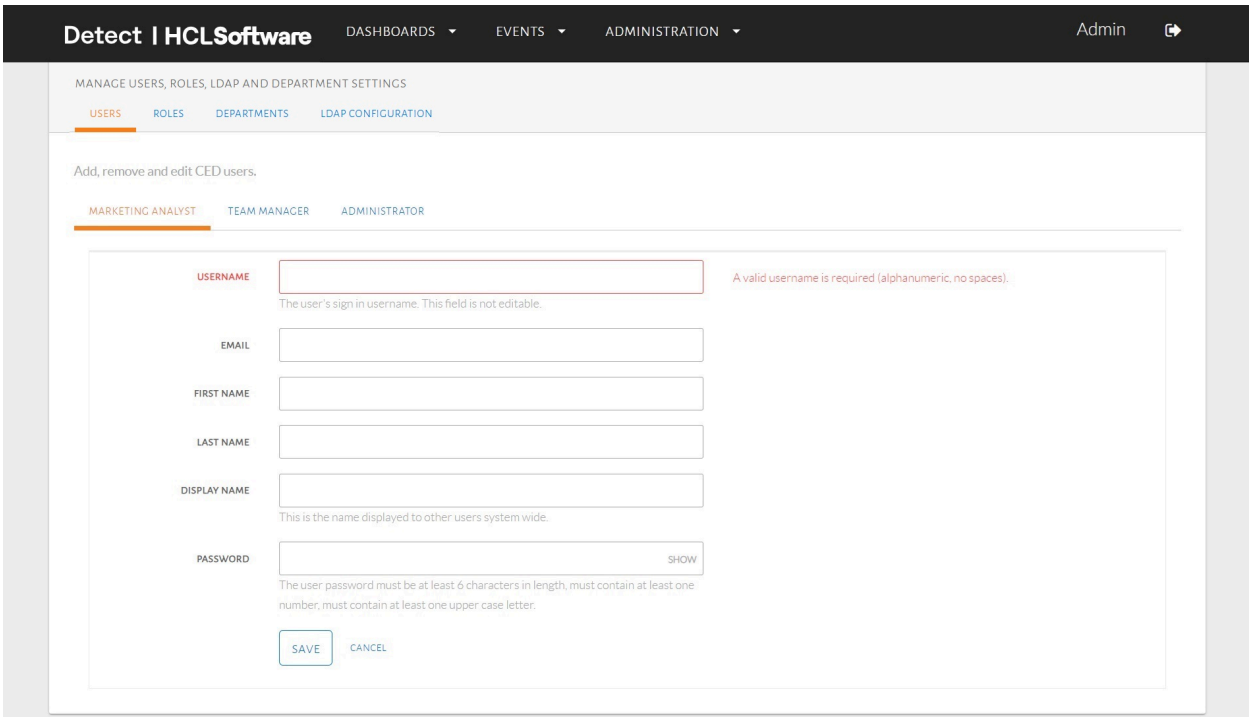
The **Users** tab displays all configured roles and their associated users.




### Adding a New User

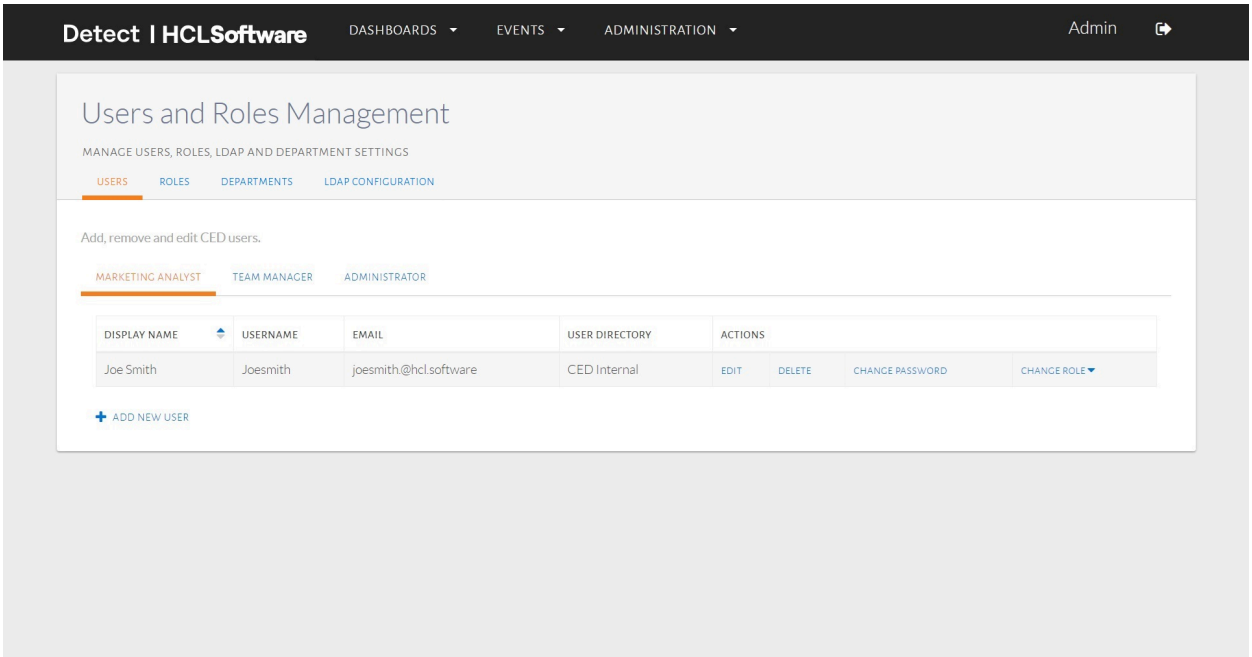
To add a user, follow the steps below:

1. Select the appropriate role, such as **Marketing Analyst**, by clicking the corresponding tab on the **User Management** page.
2. Click **Add New User**.




3. Enter the following details:
    - **Username**
    - **Email**
    - **First Name**
    - **Last Name**
    - **Display Name**
    - **Password**
4. Click **Save** to store the user details.

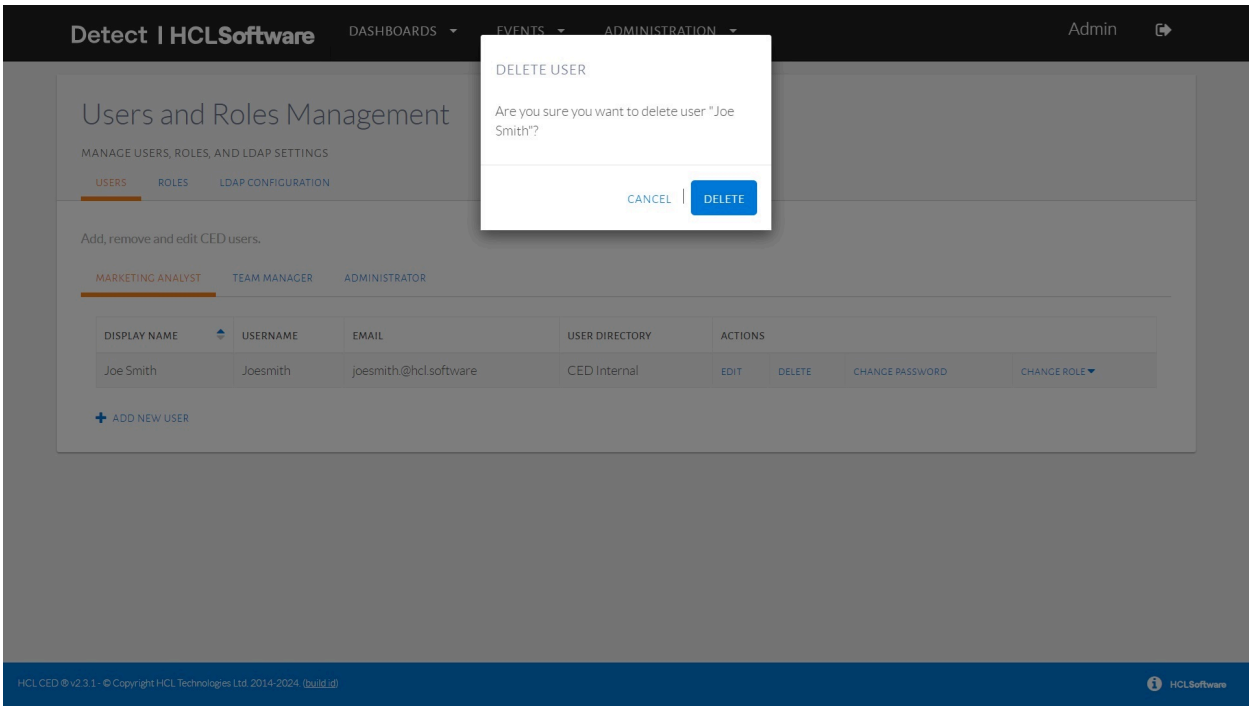
5. The newly added user appears in the interface.




## Editing or Deleting a User

Users with the appropriate permissions can edit or delete existing users:

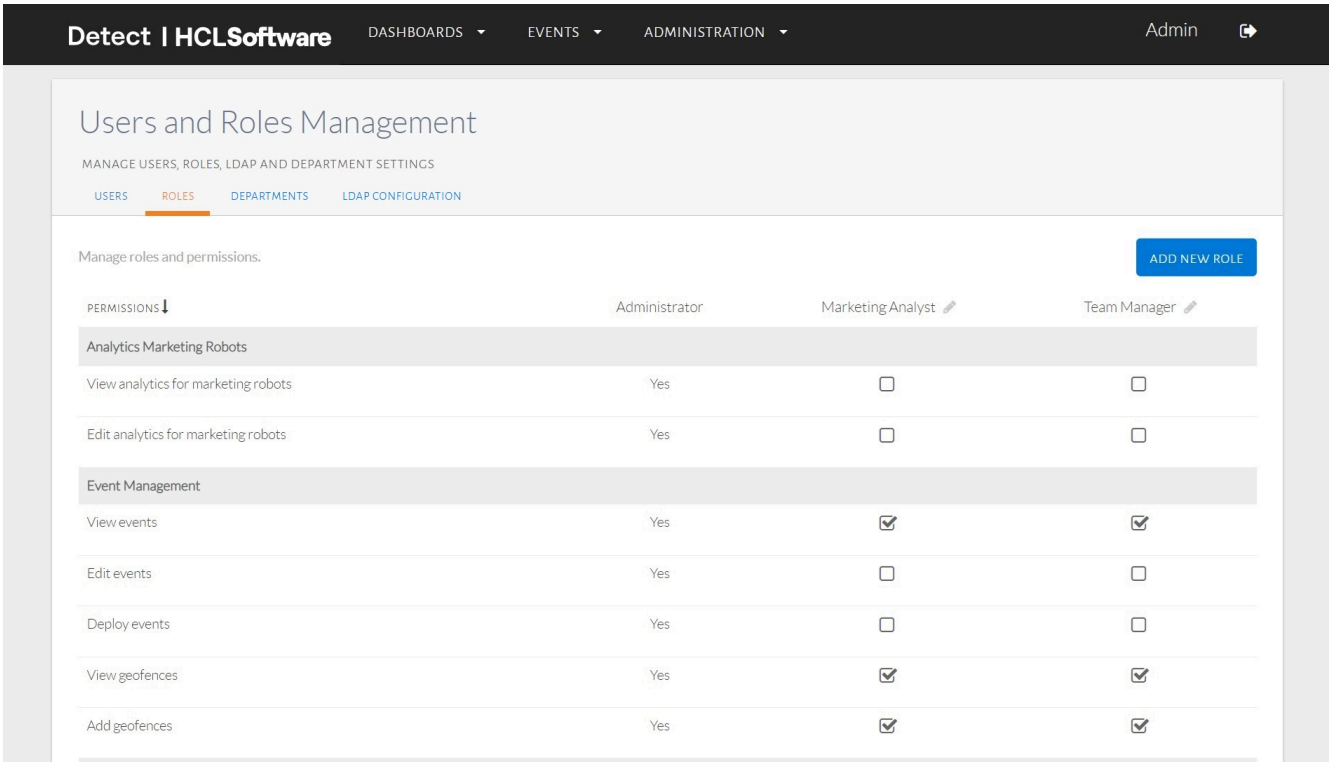
- To **edit** a user, click **Edit** under the **Actions** column.
- To **delete** a user, click **Delete** under the **Actions** column.




# Managing Roles

## Viewing and Managing Roles

Access the **Roles** tab from the navigation bar to manage roles.



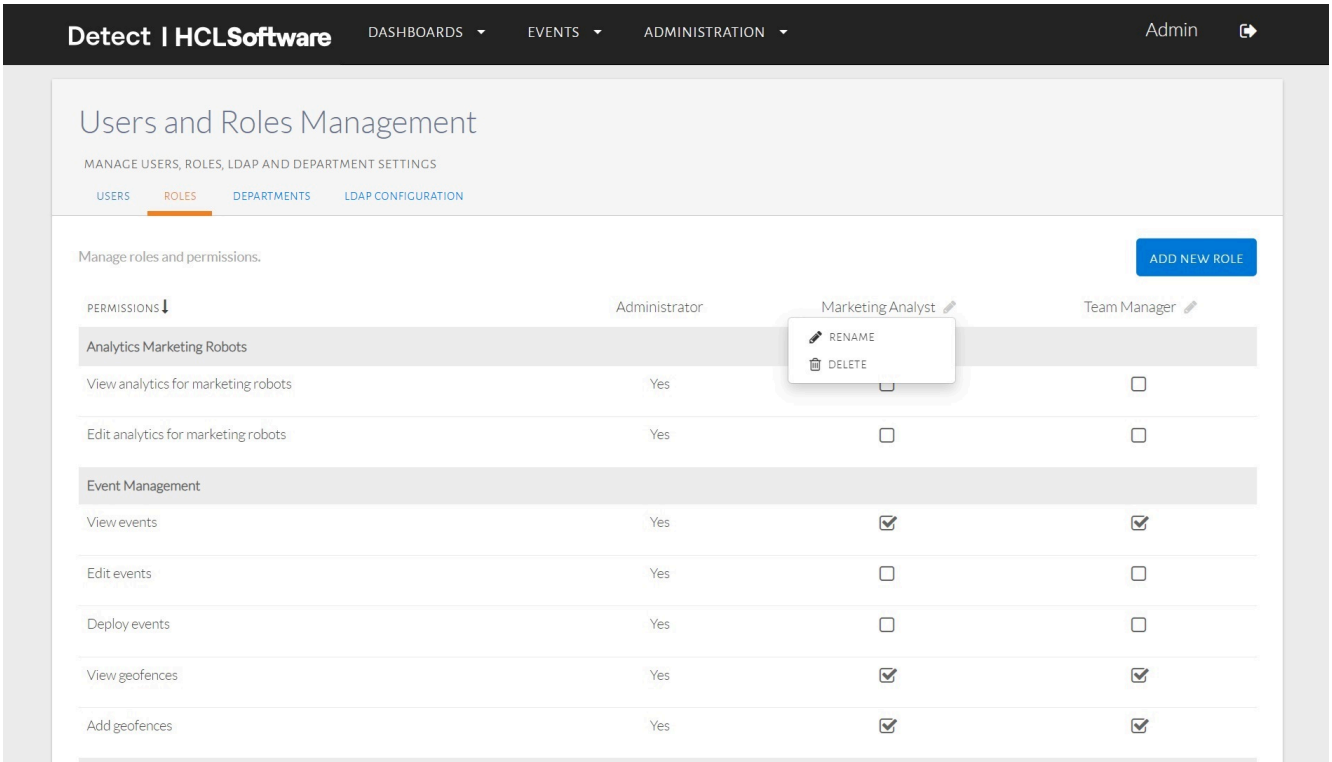

## Default Roles

HCL Detect includes the following default roles:

- **Administrator**: Has unrestricted access.
- **Team Manager**: Has all permissions except user and role management.
- **Marketing Analyst**: Has permissions below those of a Team Manager and cannot edit feeds.

## Renaming or Deleting Roles

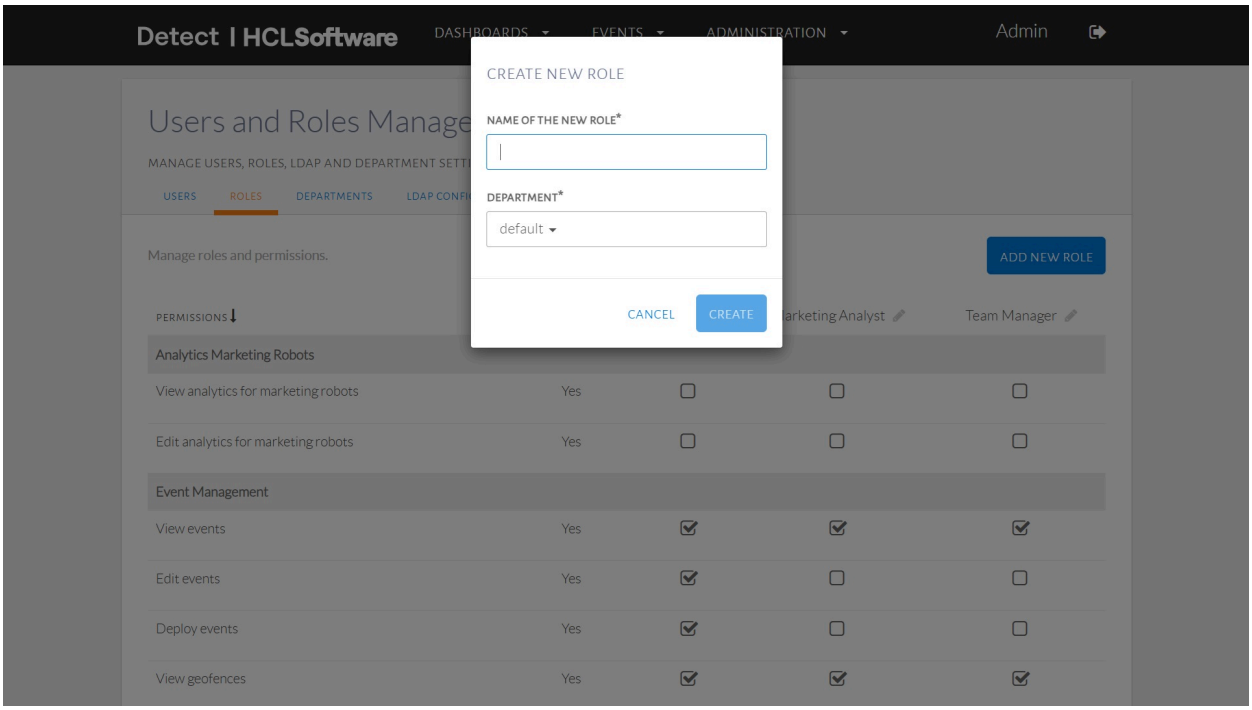
Roles can be renamed or deleted. However, a role cannot be deleted if it has assigned users. If an attempt is made to delete such a role, an error message appears.




## Adding a New Role

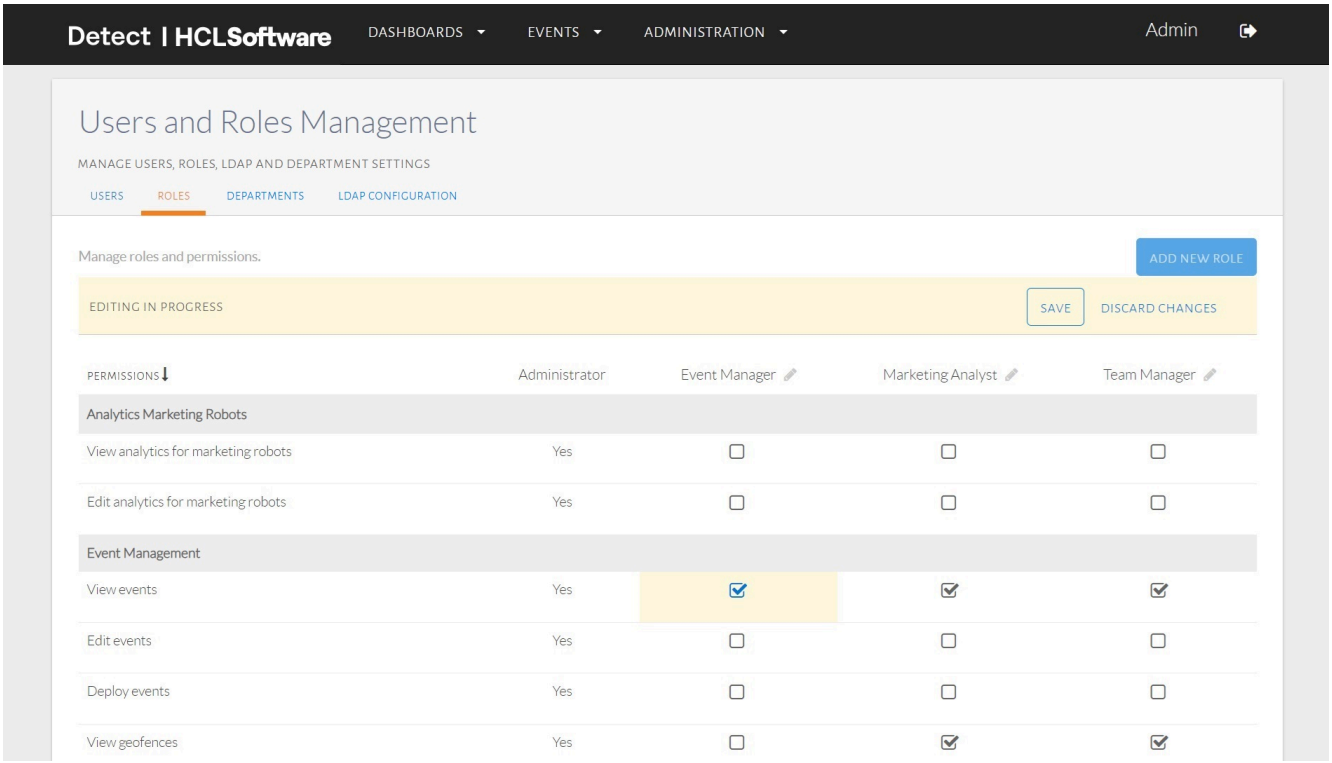
To create a role:

1. Click **Add New Role** (top-right corner).
2. Enter a name for the new role.
3. Click **Create**.



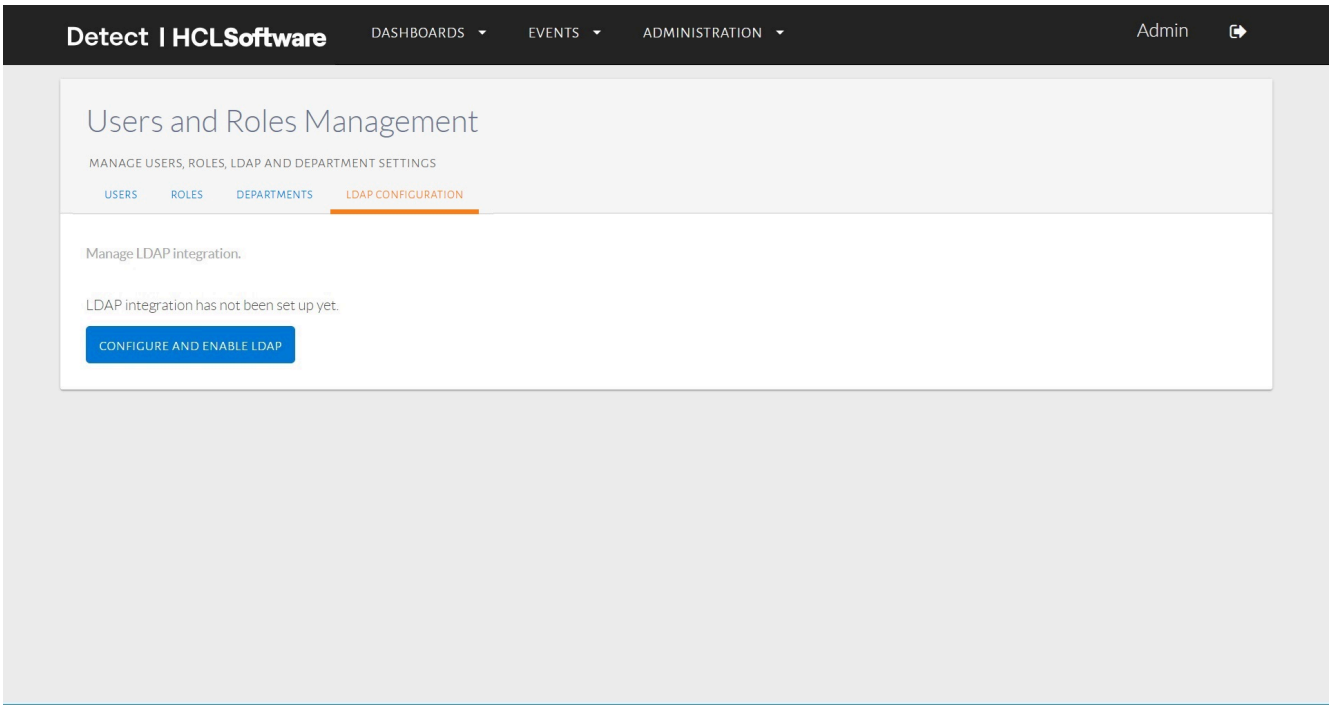

4. Assign permissions by selecting the relevant checkboxes.

For example, a newly created **Event Manager** role may have only **View Events** permissions.



# Configuring LDAP Authentication

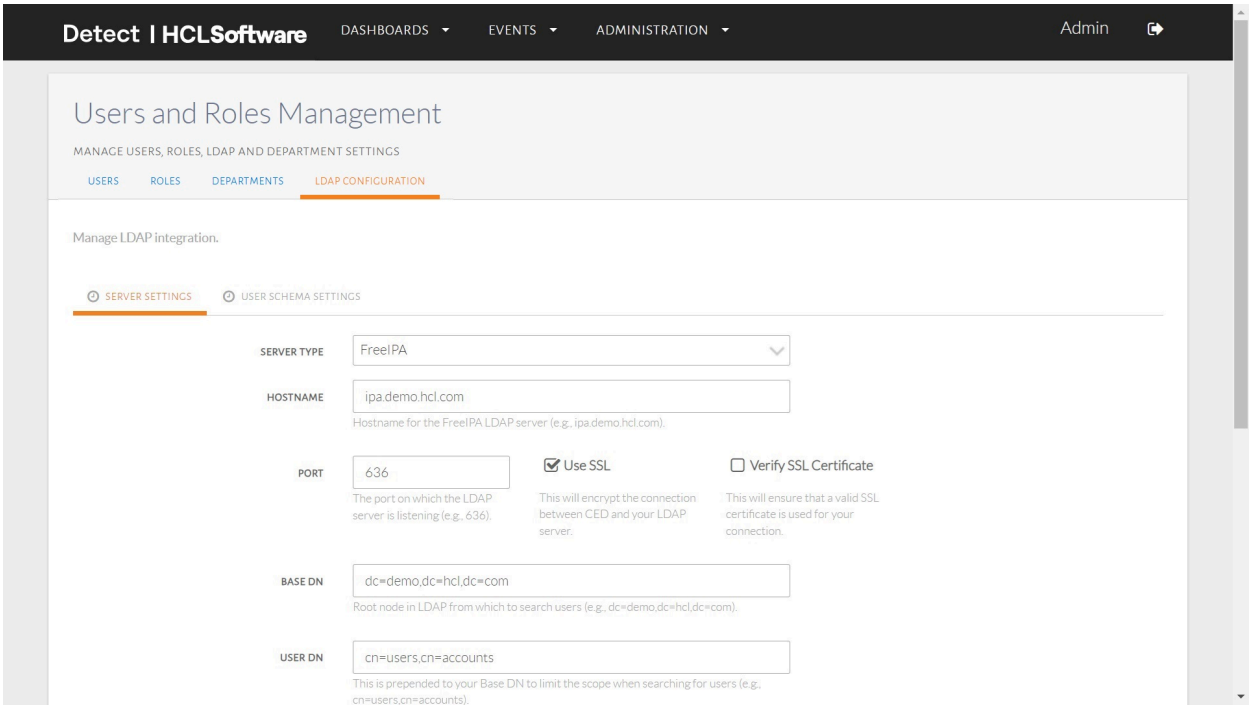
HCL Detect supports optional LDAP-based authentication. Configure LDAP settings through the **LDAP Configuration** tab in the navigation bar.




### Enabling LDAP Authentication

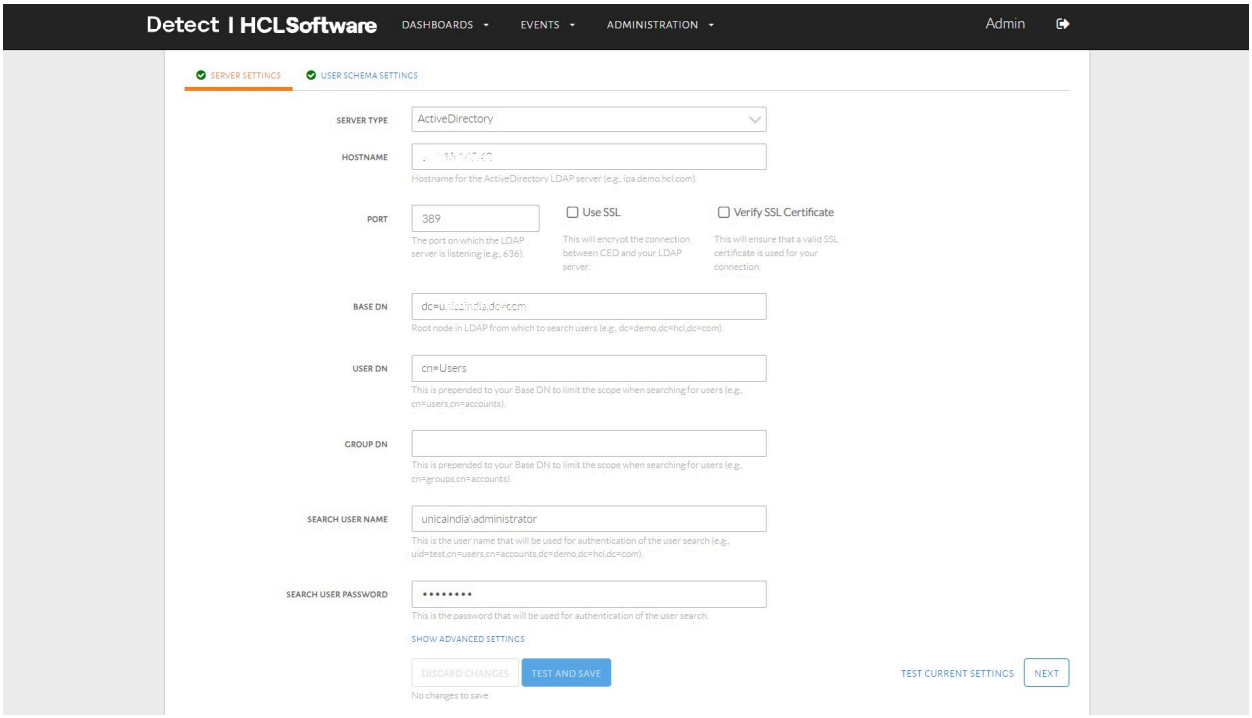
To configure LDAP authentication:

1. Click **Configure and Enable LDAP**.




2. Enter the following details:
    - **Server Type** (Free IPA or Active Directory)
    - **Hostname**
    - **Port**
    - **Base DN**
    - **User DN**
    - **Group DN**
    - **Search Username**
    - **Search User Password**

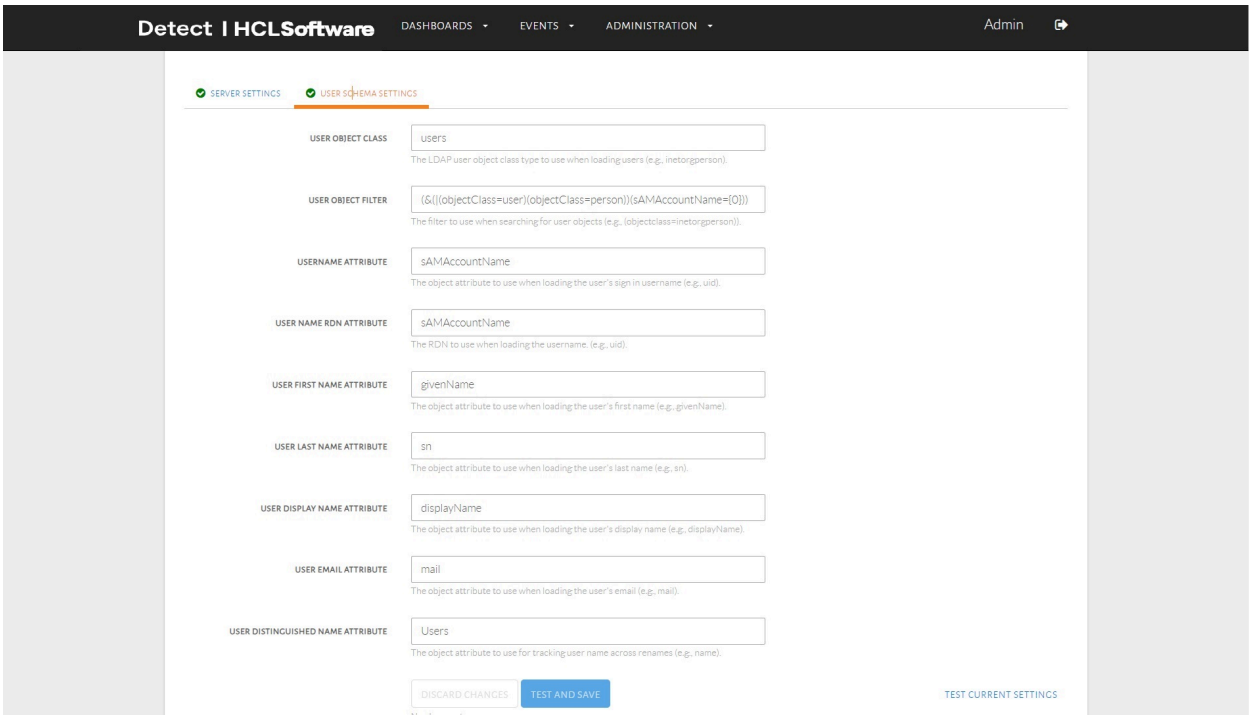
3. Click **Test and Save** to verify and save the configuration.



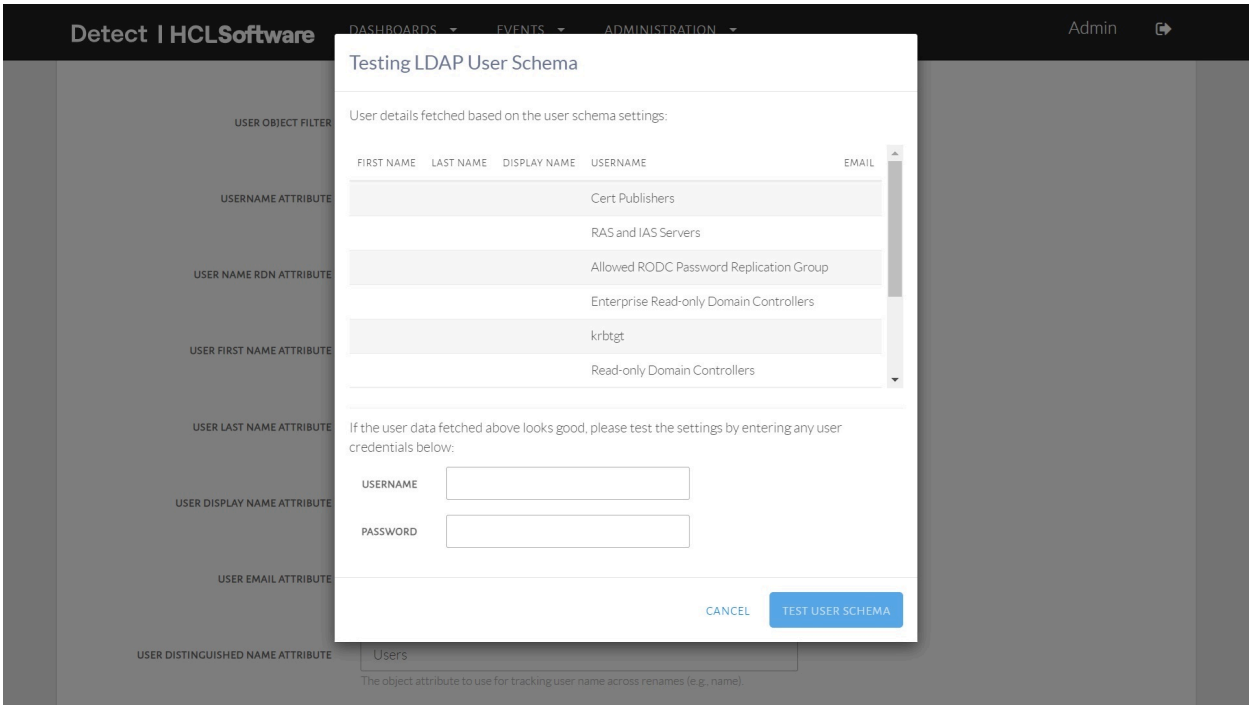

## Configuring User Schema Settings

After enabling LDAP, configure the **User Schema Settings**:

1. Enter the following details based on your organization's LDAP setup:
    - **User Object Class**
    - **User Object Filter**
    - **Username Attribute**
    - **User Name RDN Attribute**
    - **User First Name Attribute**
    - **User Last Name Attribute**
    - **User Display Name Attribute**
    - **User Email Attribute**
    - **User Distinguished Name Attribute**




2. Click **Test and Save**.
3. Verify by entering an LDAP username and password, then click **Test and Save** on the pop-up display.

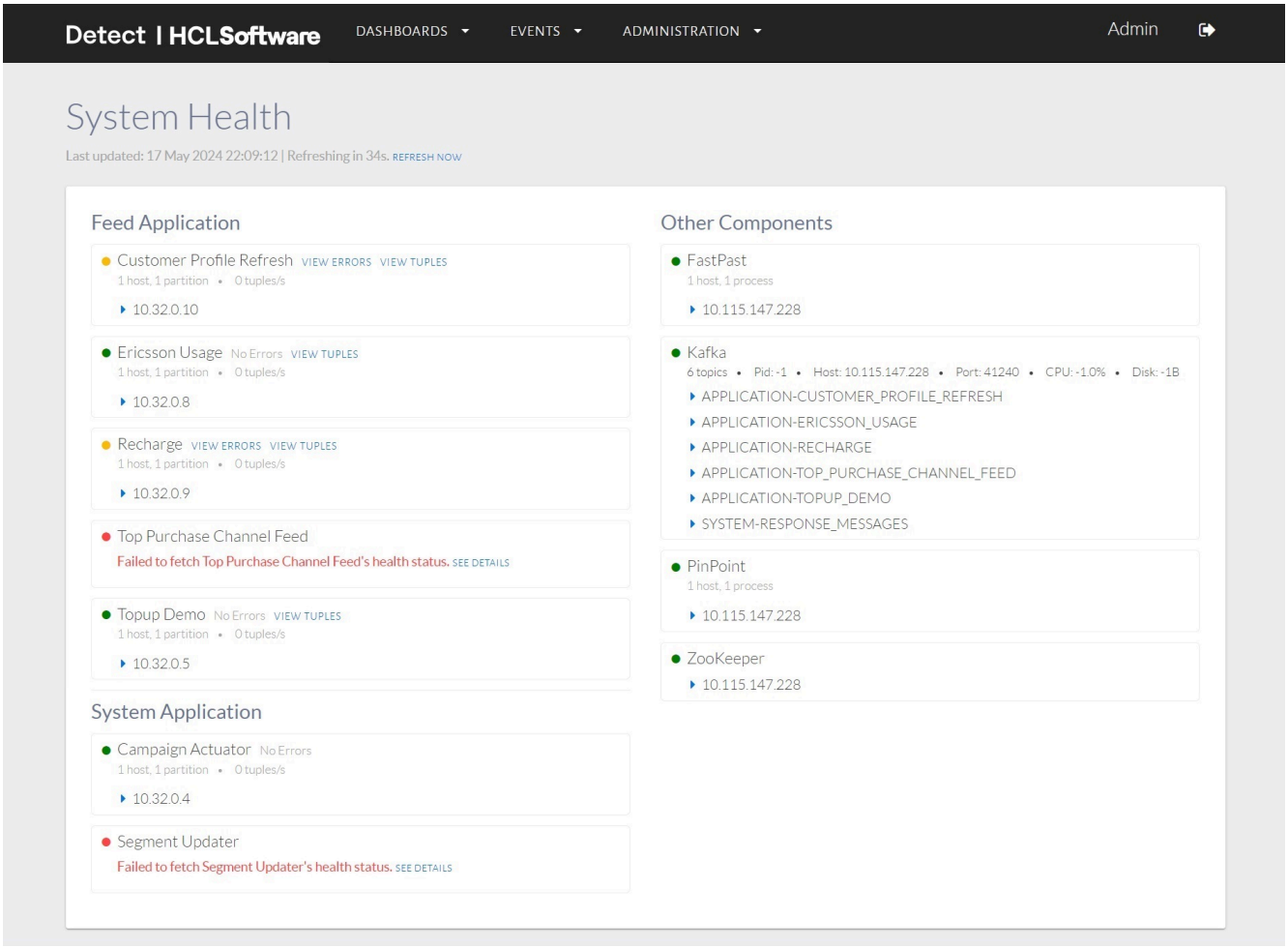


# Chapter 3. System Health

This section explains how **System Health** in **HCL Unica Detect** helps monitor the application's performance, diagnose issues, and ensure optimal system operation through various health checks and metrics.

### Accessing the System Health Dashboard

The **System Health** dashboard can be accessed by clicking **System Health** in the top navigation bar.



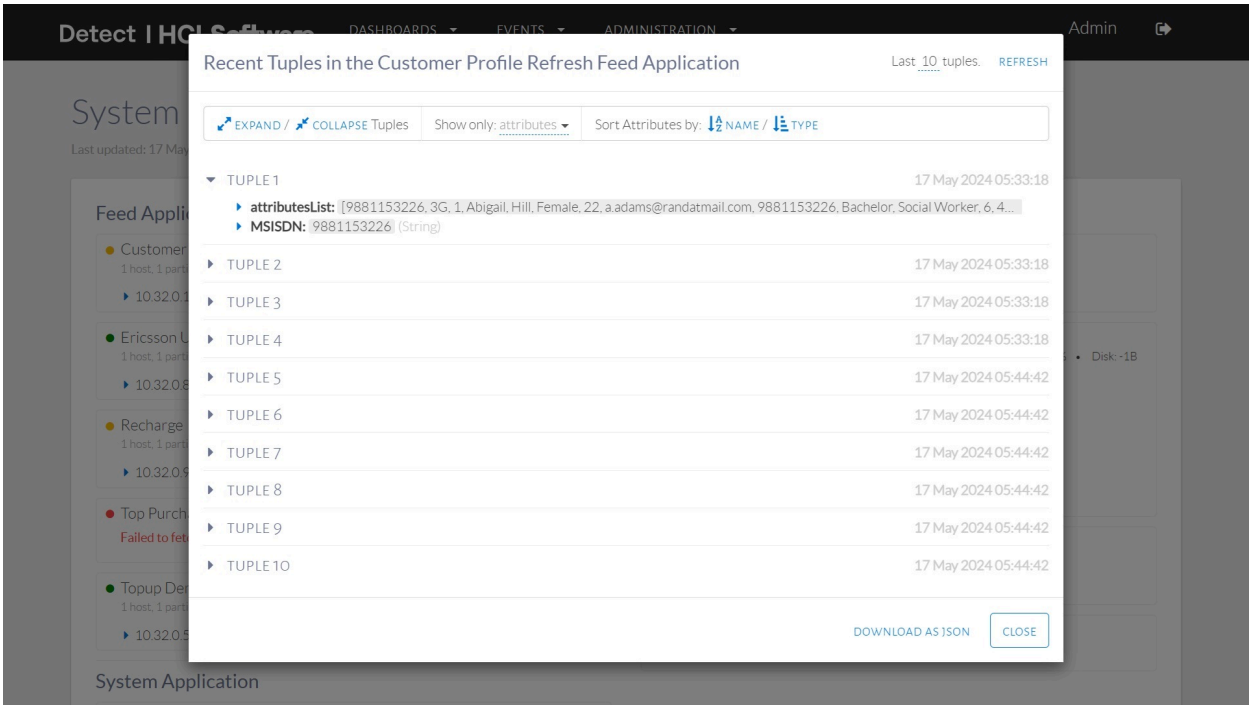

### Dashboard Overview

The dashboard displays the status of the following components:

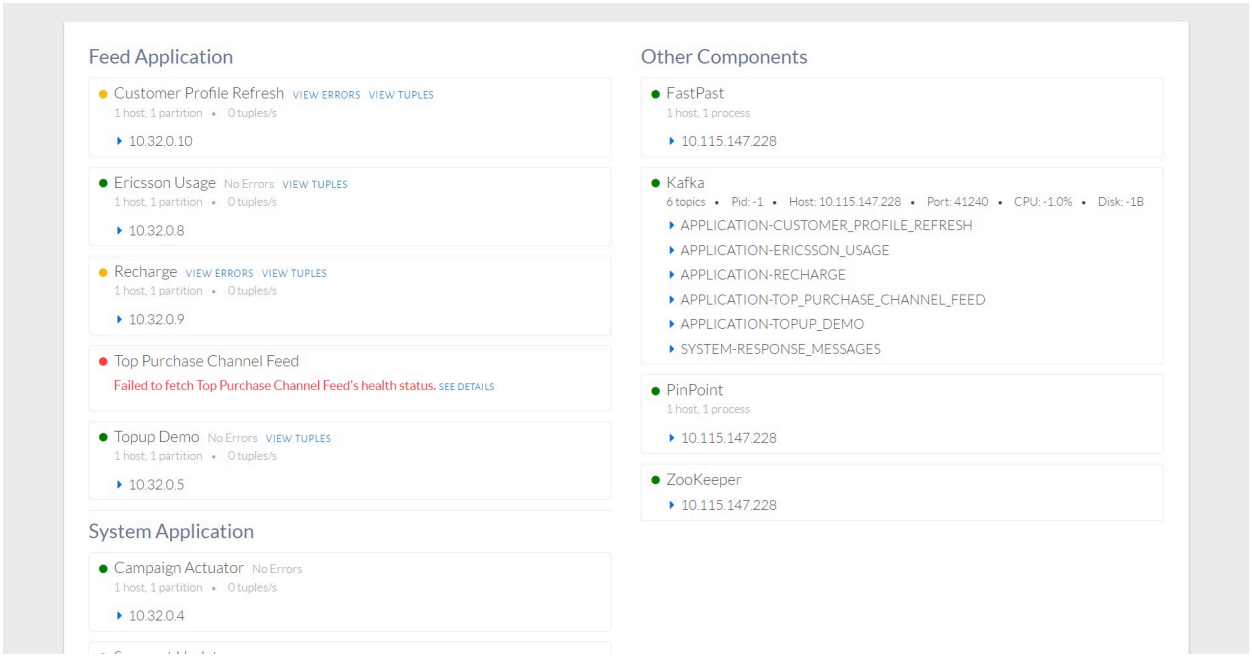
- **Analytics Applications**: Used for stream or batch-based analytics jobs.
- **Feed Applications**: Responsible for ingesting incoming streaming data.
- **System Applications**: Built-in applications used for critical functions such as event detection and batch segment updates.
- **Other Components**: Supporting components of HCL Detect, including FastPast, PinPoint, Kafka, and Zookeeper.

## Monitoring Feed Applications

- Click **View Tuples** to view the most recent data rows (tuples) being processed.




- Monitor resource utilization for feeds.
- Analyze the parallel processing flow of each feed.



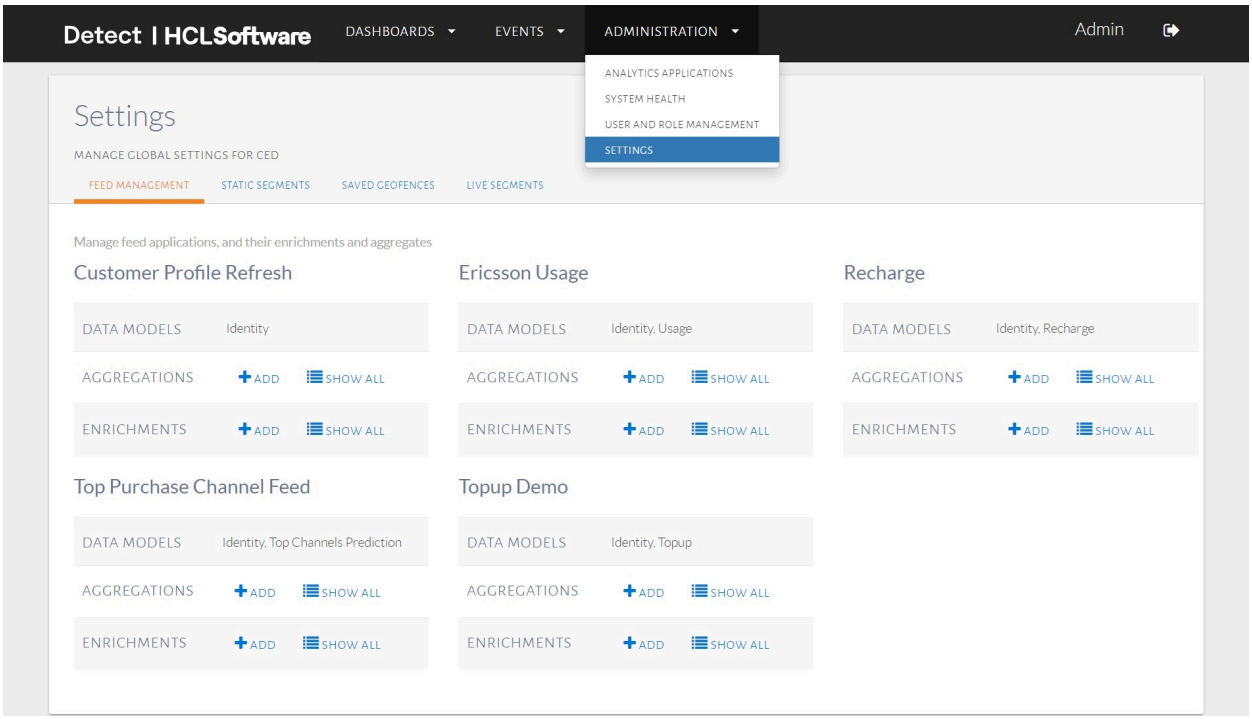
# Chapter 4. Applications, Aggregates & Enrichments

This section explains how **Applications, Aggregates, and Enrichments** in **HCL Unica Detect** work together to define event sources, aggregate data, and enrich event information for improved event processing and decision-making.

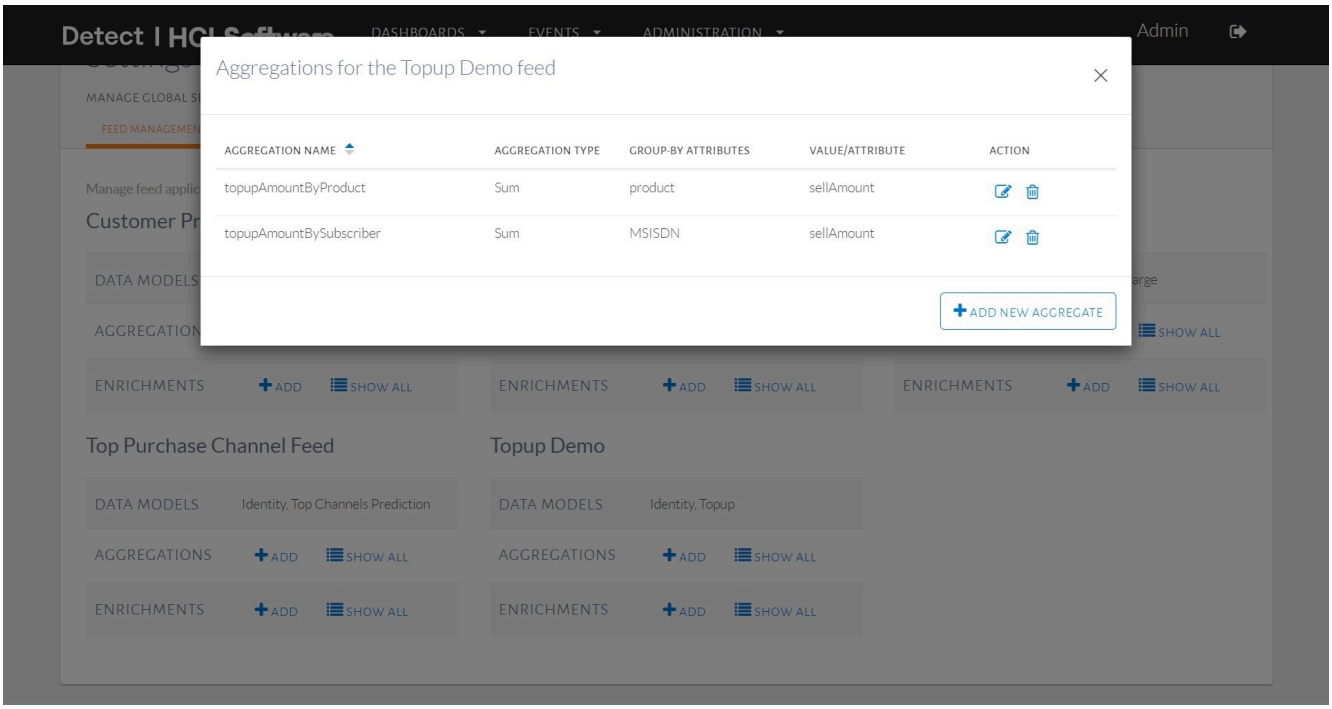
### Viewing Feed Applications

To view all feed applications configured in **HCL Detect**:

1. Click **Administration** in the top navigation bar.
2. Click **Settings**.
3. Select the **Feed Management** tab.




The dashboard displays applications and their associated data models, such as **Topup** and **Usage**.



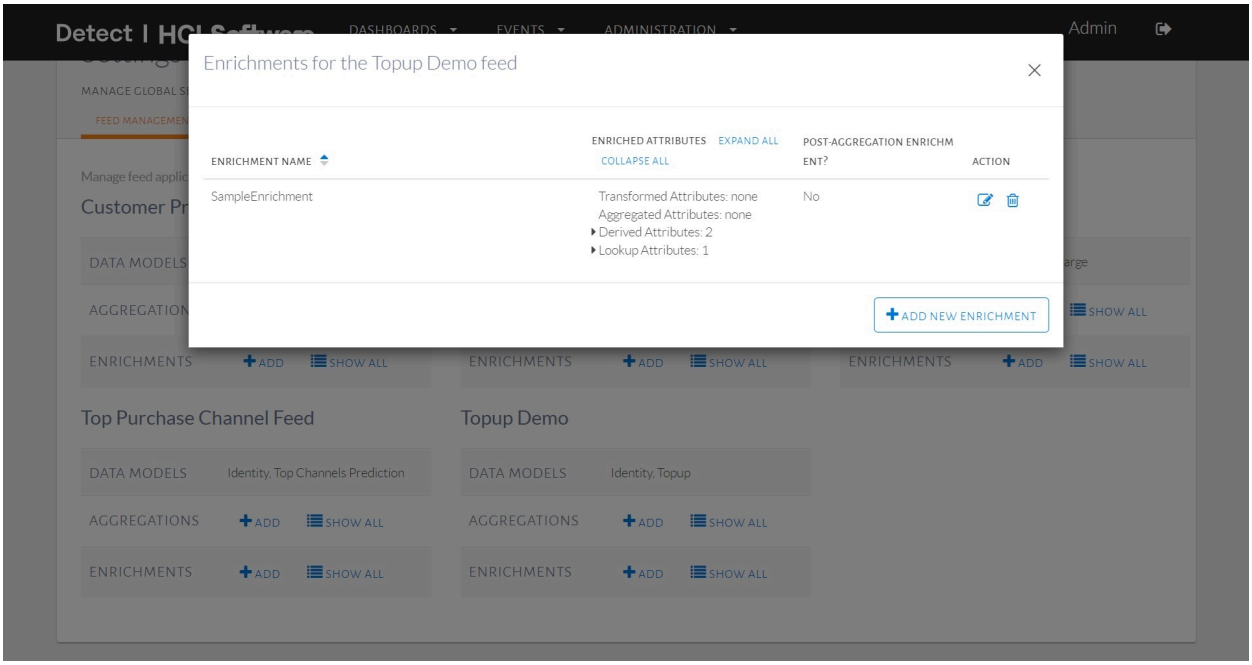

Users with appropriate permissions can view, edit, add, and delete aggregates and enrichments for a given feed application.

# Managing Aggregates

## Viewing Aggregates

To view existing aggregates for a feed application:

1. Click **Show All** in the **Aggregations** row of the selected application.




2. The dialog displays the aggregates associated with the application.

## Editing and Removing Aggregates

Aggregates can be modified or removed. For example, the **topupAmountBySubscriber** aggregate counts calls by a subscriber over various time windows (e.g., **currentDay, lastDay**). The dialog for editing an aggregate includes:

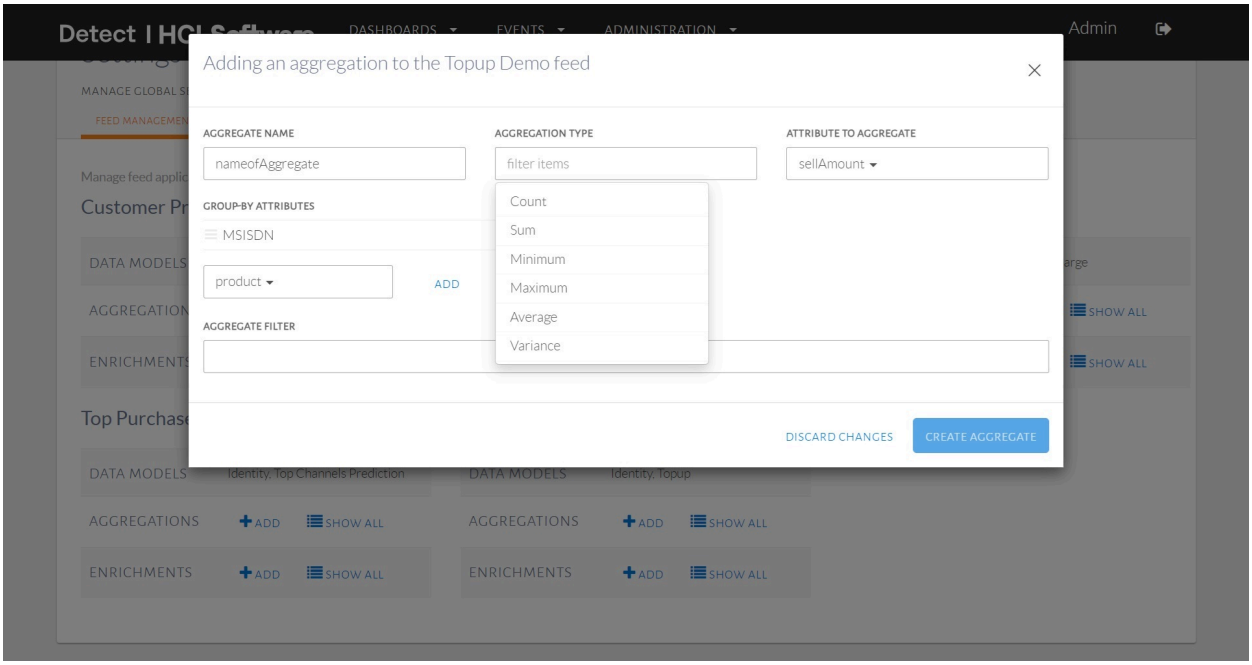
- **Aggregate Name** (e.g., topupAmountBySubscriber)
- **Aggregation Type** (e.g., Sum, Count)
- **Group-by Attribute** (e.g., MSISDN to identify subscribers)
- **Filter Condition** (optional, to process only specific tuples)

For example, to count dropped calls per subscriber, set **isDroppedCall = True** as the filter condition, **MSISDN** as the group-by attribute, and **Count** as the aggregation type.

## Adding a New Aggregate

To create an aggregate:

1. Click **Add** for the respective feed application.



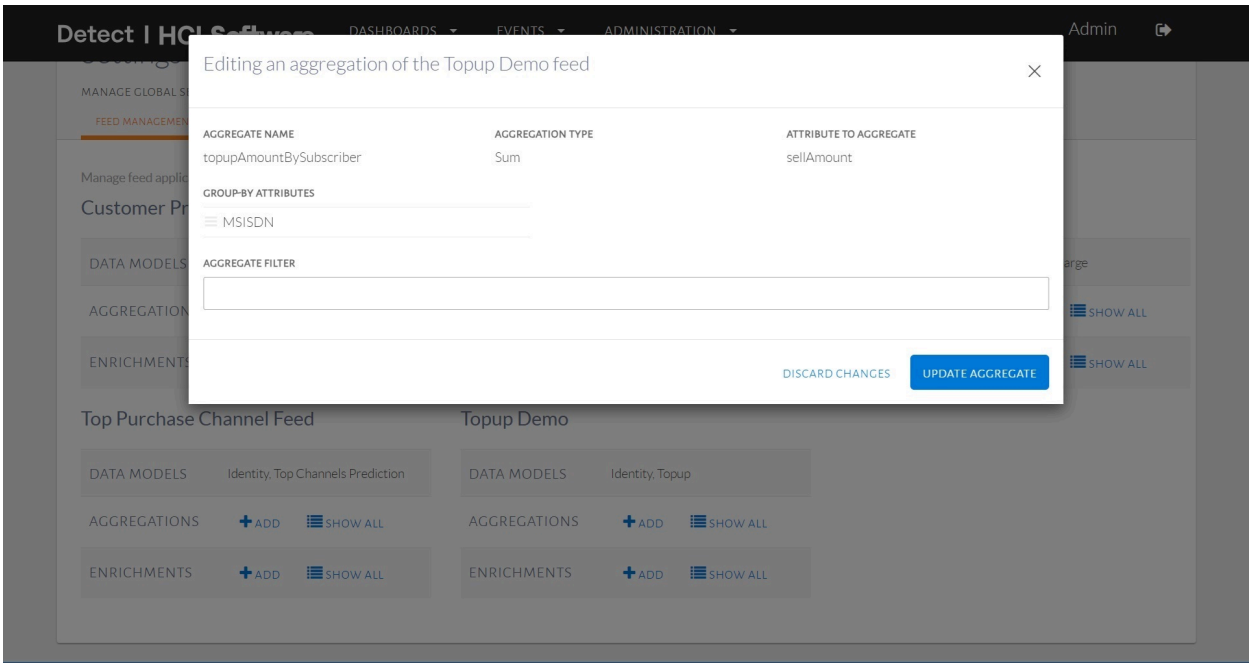

2. Enter the following details:
    - **Aggregate Name**
    - **Aggregation Type**
    - **Attribute to Aggregate**
    - **Group-by Attribute**
    - **Aggregation Filter** (optional)
3. Click **Save**.

# Managing Enrichments

## Viewing Enrichments

To view enrichments for a feed application:

1. Click **Show** in the **Enrichments** row of the selected application.
2. The associated enrichments appear in the interface.




## Types of Enrichments

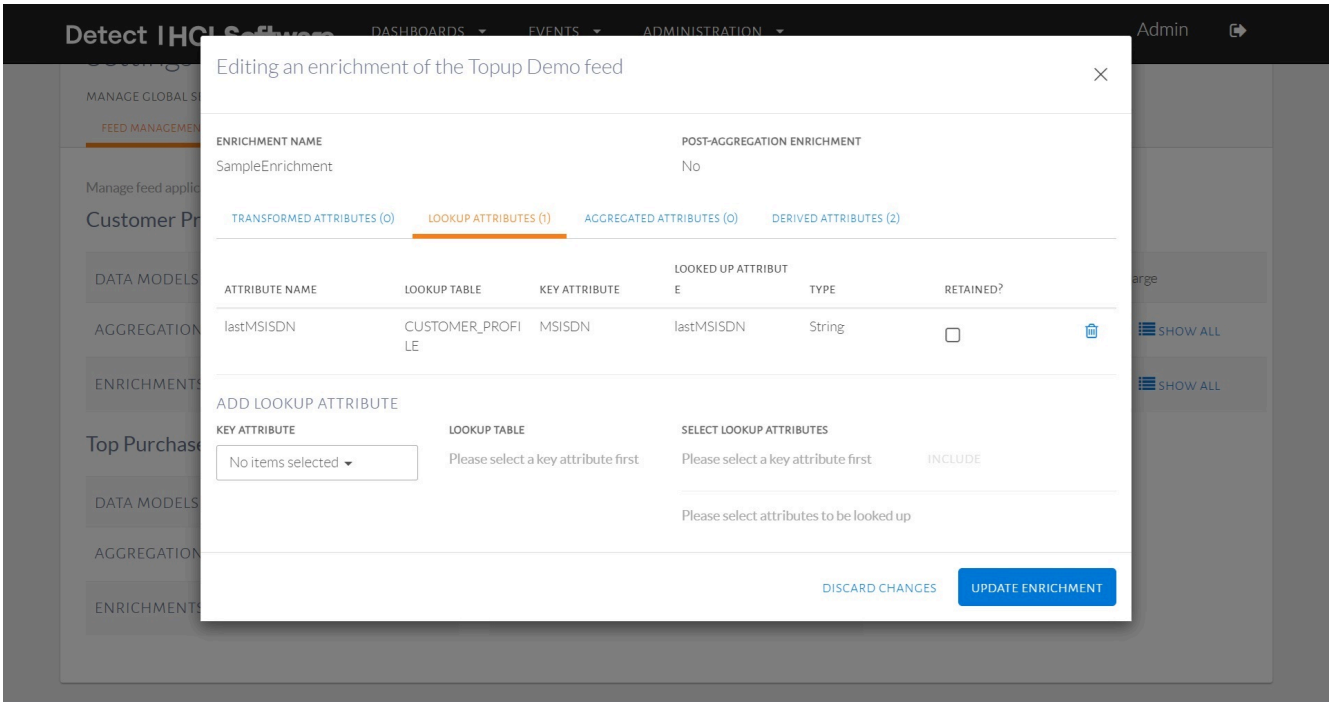
HCL Detect supports four types of enrichments:

1. **Transformed Attributes Enrichment**
   - Adds attributes with constant values or values derived from a **UEL expression**.
   - These attributes can be retained or forwarded in the enriched tuple.
2. **Lookup-Based Enrichment**
   - Retrieves attributes from the **profile store** and adds them to the outgoing tuple.
   - Requires selecting:
     - A **key attribute** from the tuple.
     - A **lookup table** from the associated PinPoint database.
     - The attribute to be retrieved from the lookup table.
3. **Aggregate-Based Enrichment**
   - Fetches data from **FastPast** and adds attributes to the outgoing tuple.
   - Requires selecting:
     - An **aggregate** from the list of available aggregates.
     - A **window length unit** (Minute, Hour, Day, Month, or Year).
     - A **period** (Current or Last).
     - An optional **window length** (e.g., Last 7 days for daily aggregation).
   - Retention of attributes in the output tuple is optional.
4. **Derived Attributes Enrichment**

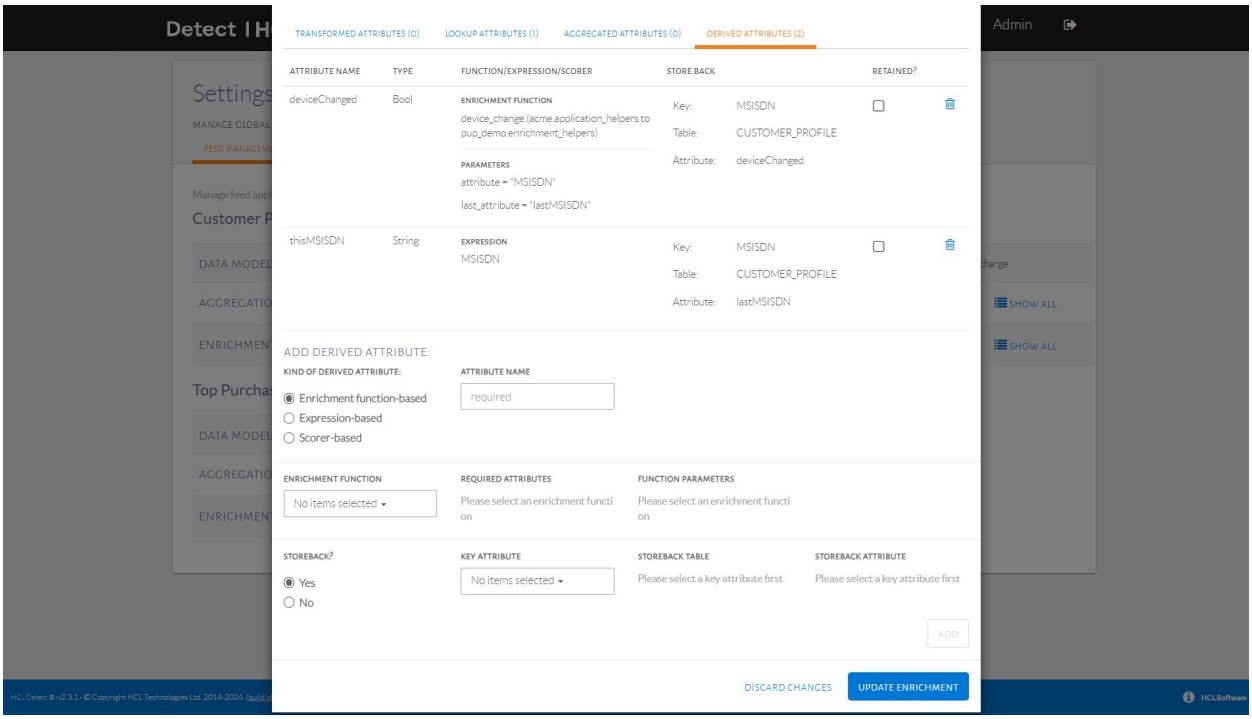
- Executes an **external Python function** to compute and append results to tuples.
- Can be used for:
  - **Scoring functions** (e.g., computing risk scores from historical data).
  - **Expression-based** enrichments (UEL expressions).
  - **Scorer function-based** enrichments.

## Editing Enrichments

The interface for editing enrichments is shown below:



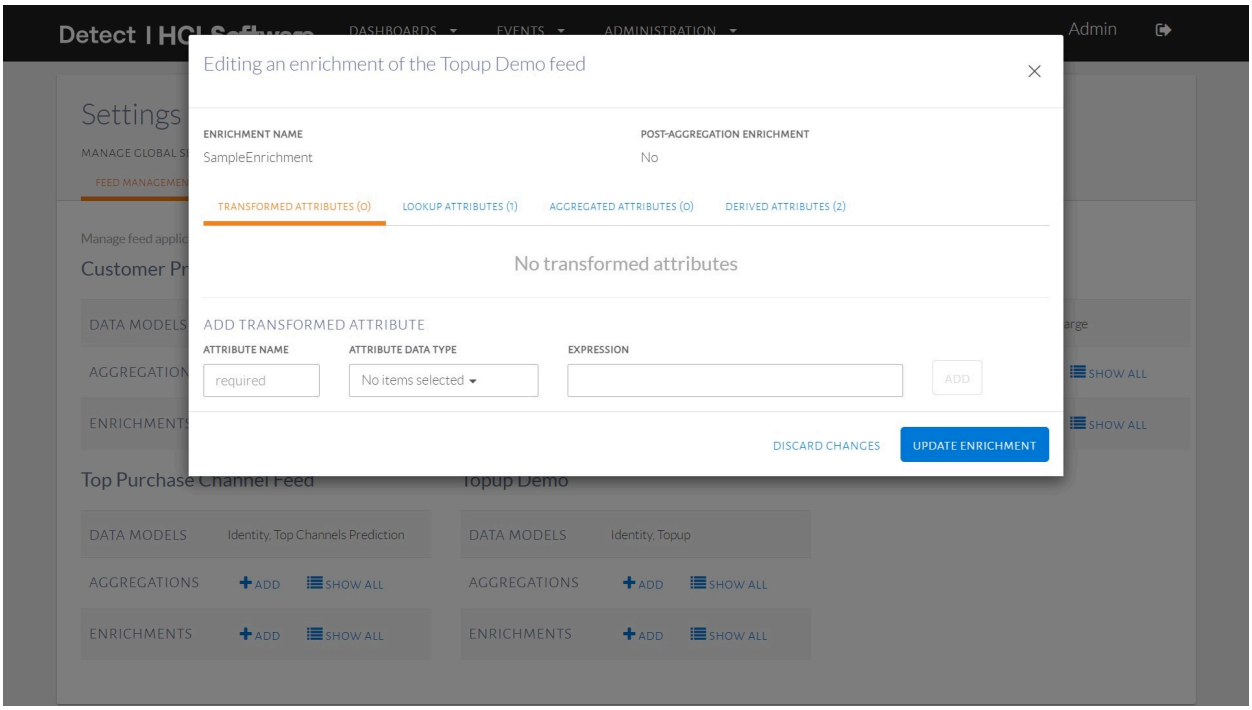
- The interface allows modification of enrichment settings.
- Derived attribute enrichments have a separate editing interface.




## Configuring Enrichment Order

- Enrichment operations can occur **before or after aggregations**.
- This affects the values of enriched attributes.

- To configure post-aggregation enrichment, select the **Post-Aggregation Enrichment** checkbox during enrichment creation.



# Chapter 5. Subscriber Segments

Subscriber segments are groups of customers who share similar characteristics. Segments can be defined based on preset conditions (**Live Segments**) or selected manually (**Static Segments**). Grouping customers into segments enables targeted engagement across events in **HCL Detect**.

HCL Detect supports two types of segments:

1. **Live Segments** – Dynamically updated based on predefined conditions.
2. **Static Segments** – Manually created and managed lists of subscribers.

Segments can be used to **include** or **exclude** subscribers from being considered as subjects for a trigger.

## Static Segments

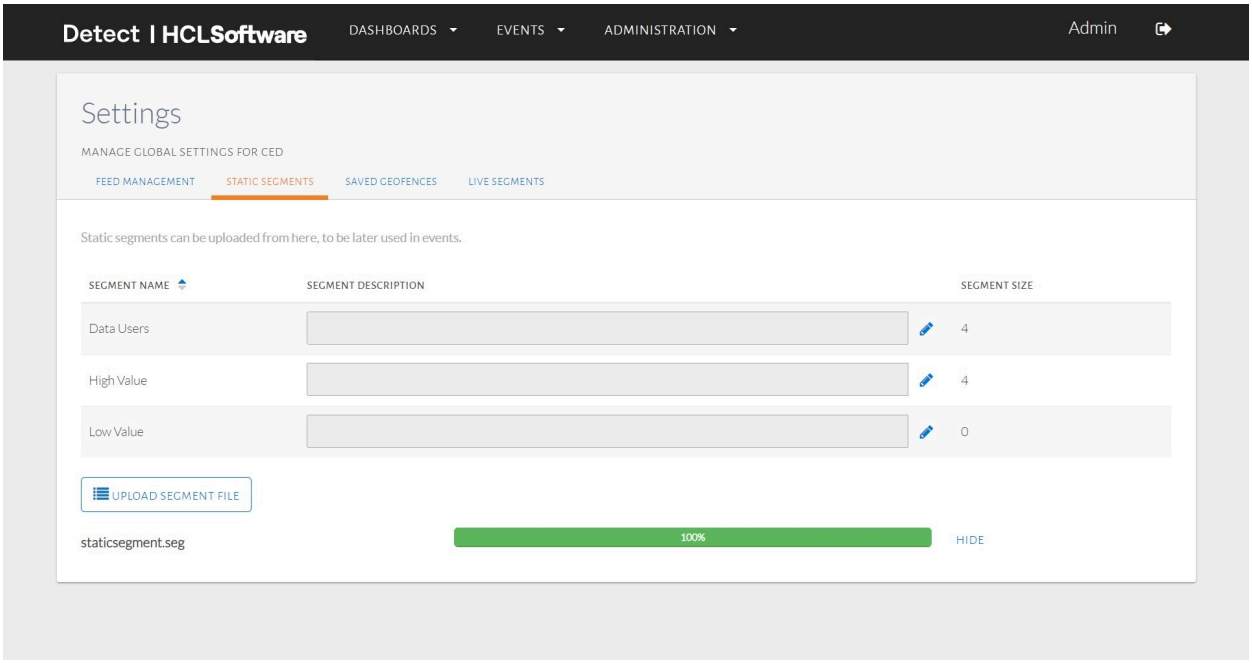
### Viewing Static Segments

To view existing static segments:

1. Navigate to **Administration** > **Settings**.
2. Select the **Static Segments** tab.

The interface displays a list of defined segments. For example:

- **Data Users**
- **High Value Users**



## Managing Static Segments

To add, edit, or delete a segment:

1. Upload a text file containing the segment data using the **Upload Segment File** button.
2. Choose a supported file format: **Plain Text** or **JSON**.

## Supported File Formats

### Plain-Text Format

A plain-text file consists of segment names, operations, and subscriber identifiers:

```
[Data Users]: add
911323232323
918787879988
918787989021
919898990906

[High Value]: add
912323989899
912367367676
912398982337
919828738787

[High Value]: remove
912388728787

[Low Value]: remove_all
```

### JSON Format

Alternatively, a JSON file with a **.json** extension can be used:

```
{
  "segmentUploads": [
    {
      "operation": "Add",
      "segment": "Data Users",
      "users": [
        "911323232323",
        "918787879988",
        "918787989021",
        "919898990906"
      ]
    },
    {
      "operation": "Add",
      "segment": "High Value",
      "users": [
        "912323989899",
        "912367367676",
        "912398982337",
        "919828738787"
      ]
    },
    {
```

```
      "operation": "Remove",
      "segment": "High Value",
      "users": [
        "912388728787"
      ]
    },
    {
      "operation": "RemoveAll",
      "segment": "Low Value"
    }
  ]
}
```

Once uploaded, descriptions can be added to segments.

# Live Segments

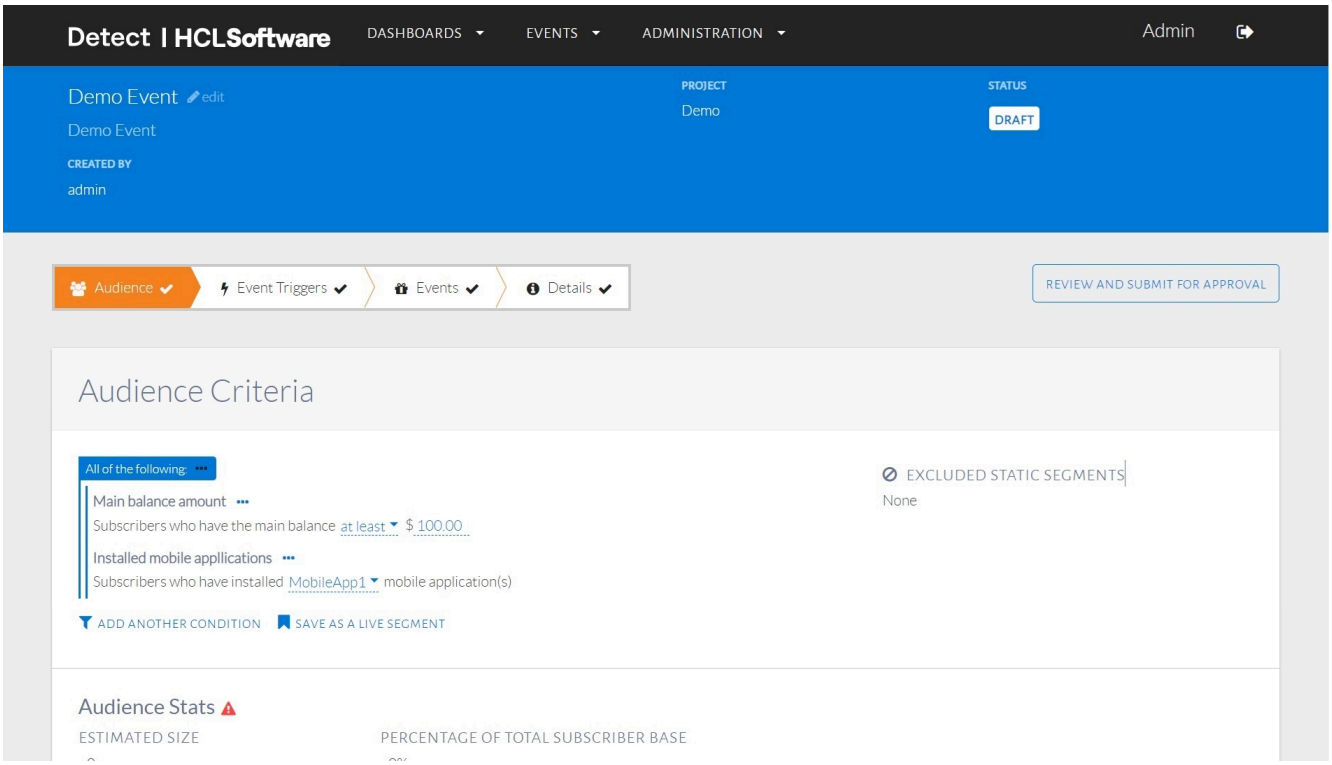
### Defining Live Segments

Live segments are dynamically updated lists of customers who meet predefined conditions. HCL Detect continuously evaluates subscribers and updates the segment accordingly.

For example, a **Live Segment** can be created for:

- Customers with a **main balance of at least $100**.
- Customers who have **installed a specific mobile application** (e.g., Facebook).

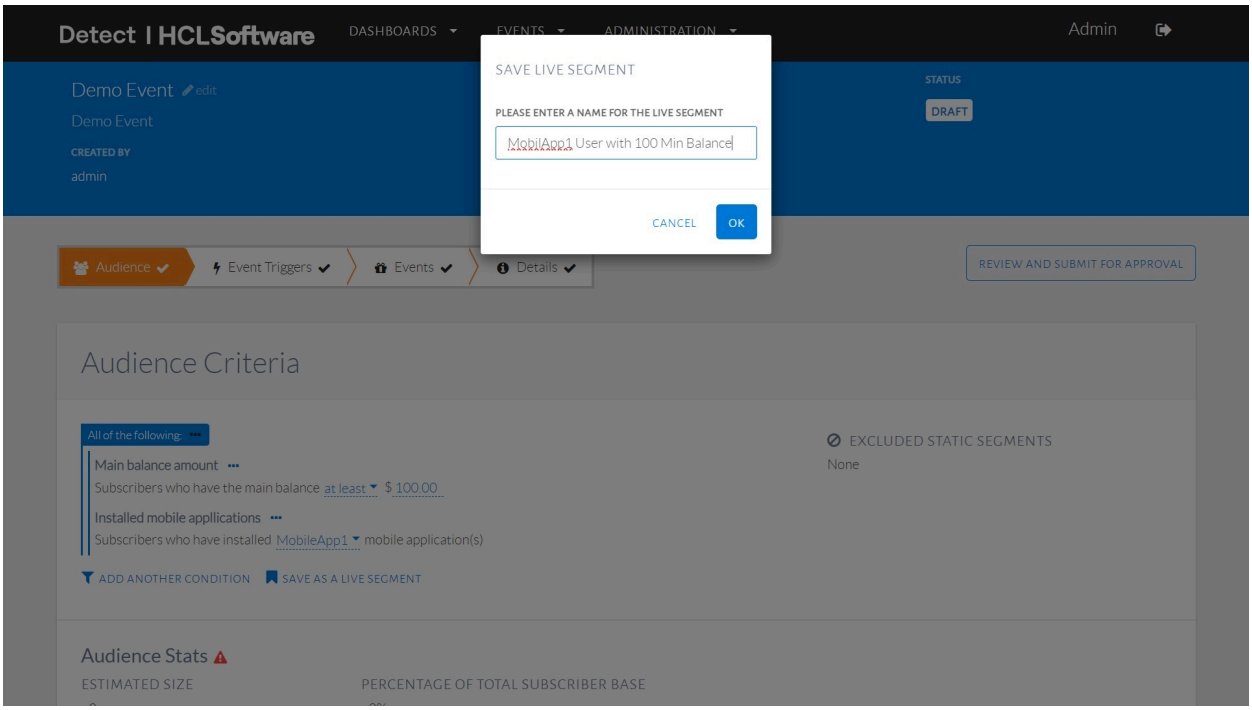
HCL Detect automatically adds or removes customers based on these conditions.




### Creating a Live Segment

To save audience conditions as a reusable Live Segment:

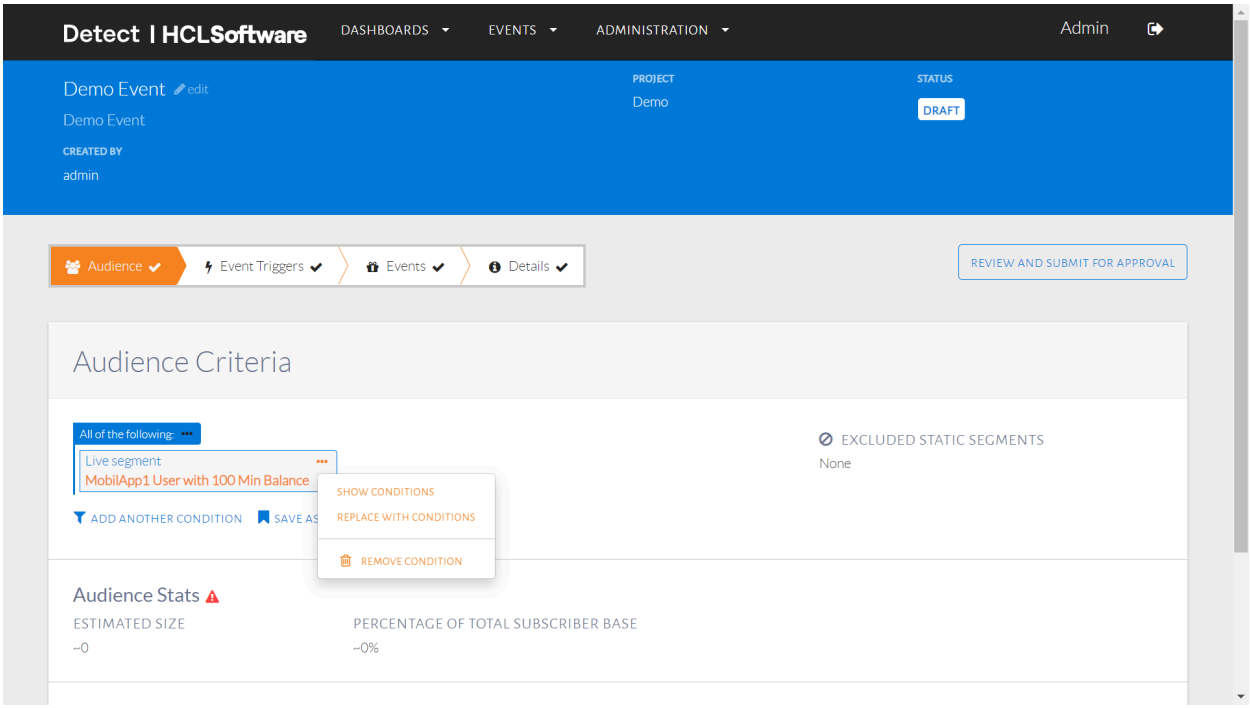
1. Define audience criteria.
2. Click **Save as Live Segment**.




3. Enter a **name** for the segment in the dialog box.
4. Save the segment.

### Managing Live Segments

- To **edit or replace** an existing Live Segment, click the **three-dot menu** next to the segment.




- To view all Live Segments, navigate to **Administration** > **Settings** > **Live Segments** tab.

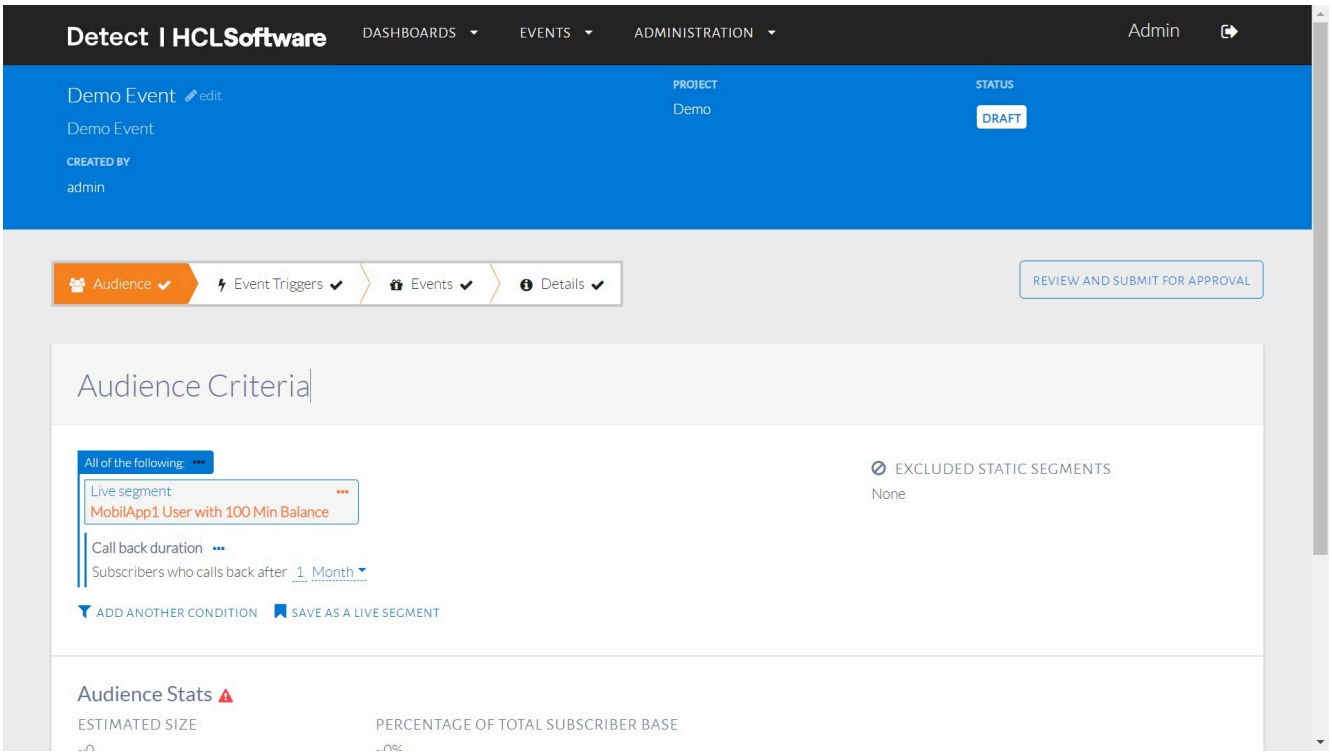
## Using Segments

Both **Live** and **Static Segments** can be used as audience criteria in any event. Segments can also be combined with other audience conditions for more precise targeting.

### Adding a Segment to an Event

Segments can be added as part of audience selection in the event setup process.

HCL Detect ensures that customers are dynamically included or excluded based on the defined segment conditions, allowing for optimized audience targeting and campaign execution.


Detect | HCLSoftware
DASHBOARDS
EVENTS
ADMINISTRATION
Admin
Demo Event edit
Demo Event
CREATED BY
admin
PROJECT
Demo
STATUS
DRAFT
Audience
Event Triggers
Events
Details
REVIEW AND SUBMIT FOR APPROVAL
Audience Criteria
All of the following
Live segment
MobilApp1 User with 100 Min Balance
Call back duration
Subscribers who calls back after 1 Month
ADD ANOTHER CONDITION
SAVE AS A LIVE SEGMENT
EXCLUDED STATIC SEGMENTS
None
Audience Stats
ESTIMATED SIZE
PERCENTAGE OF TOTAL SUBSCRIBER BASE