EXELIS

EXELIS
COMMERCIAL AVIATION SOLUTIONS

PUBLICVUE VERSION 1.1
USER'S GUIDE

Exelis

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EXELIS

INTRODUCTION

Exelis' PublicVue™ *(*PublicVue) was developed to satisfy the needs of the noise and operations monitoring industry to not only display flight tracks, but to allow for additional capabilities as well. PublicVue supports most Internet-accessible browsers including Internet Explorer, Chrome and Mozilla. Additionally, mobile devices such as tablets and smartphones as well as Mac's and PC's interface with PublicVue.

For security purposes, public viewing of the Internet display will be delayed slightly (a minimum of 10 minutes or more depending upon the airport's requirements) with some aircraft filtered or modified by authorized airport personnel or the FAA. Exelis adheres to all federal standards and guidelines as well as industry guidelines on aircraft information security and privacy. Viewers can see what is taking place above a specific geographic area or in relation to a specific physical address, with aircraft models displaying key details such as altitude or groundspeed. Registered/authenticated users may submit reports of noise disturbances via the PublicVue portal.

> Note: Depending on the airport's set up, there may be some differences to the look, feel, and functionality.

Accessing

To log into PublicVue, use your web browser to navigate to your PublicVue URL.

The default PublicVue interface displays.

> If the PublicVue interface does not display, select Flight Tracking from the menu.

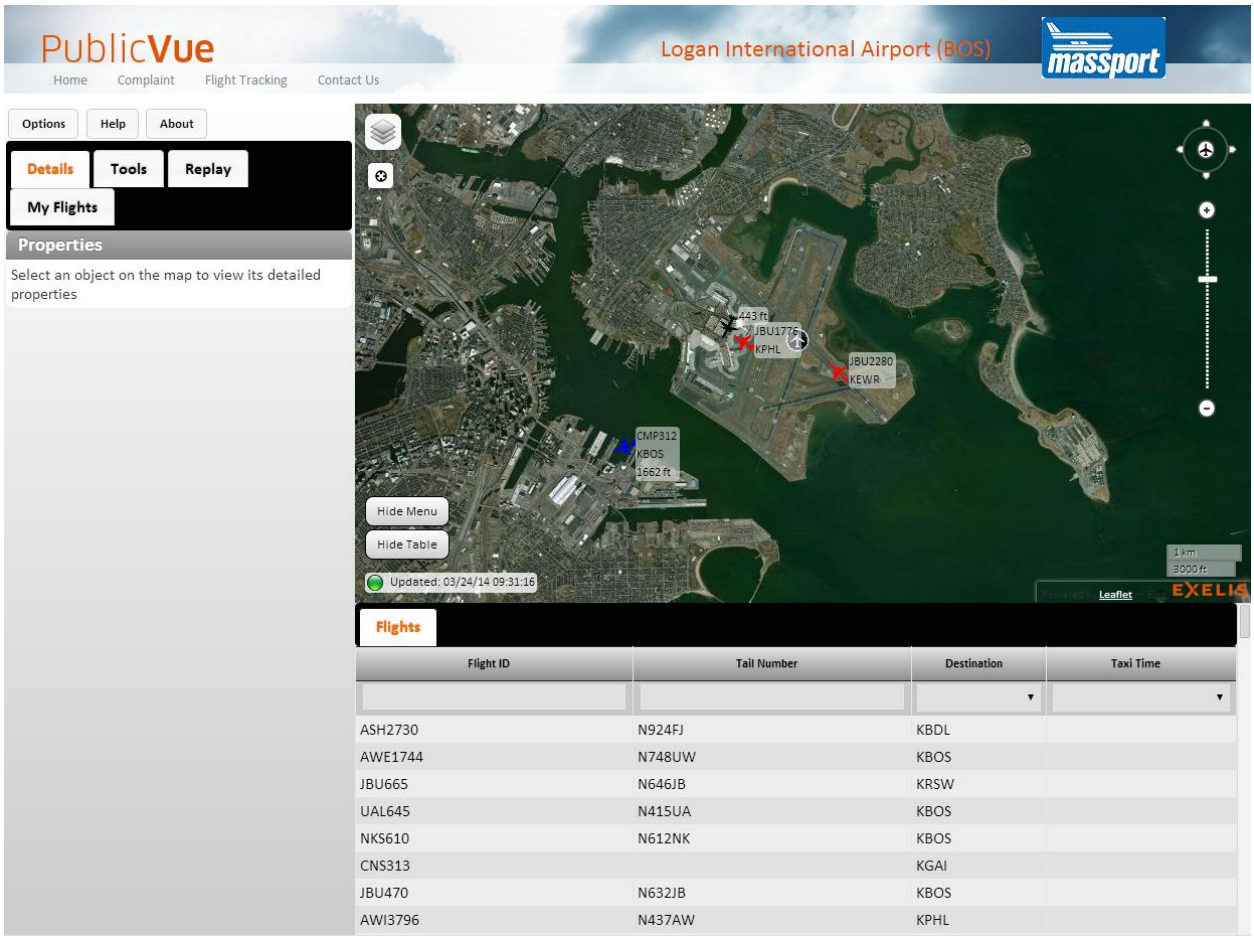


Figure 1: PublicVue

Using the Flight Tracking Interface

The default interface is comprised of three distinct panels. The panel on the left displays several buttons along with three tabs: Details, Tools, and Replay. A map of your airport is the largest of the three panels. By default, the map displays any flights in the system. Below the map is a panel containing the Flights and Noise tabs. These tabs display flight and noise data in tabular format.

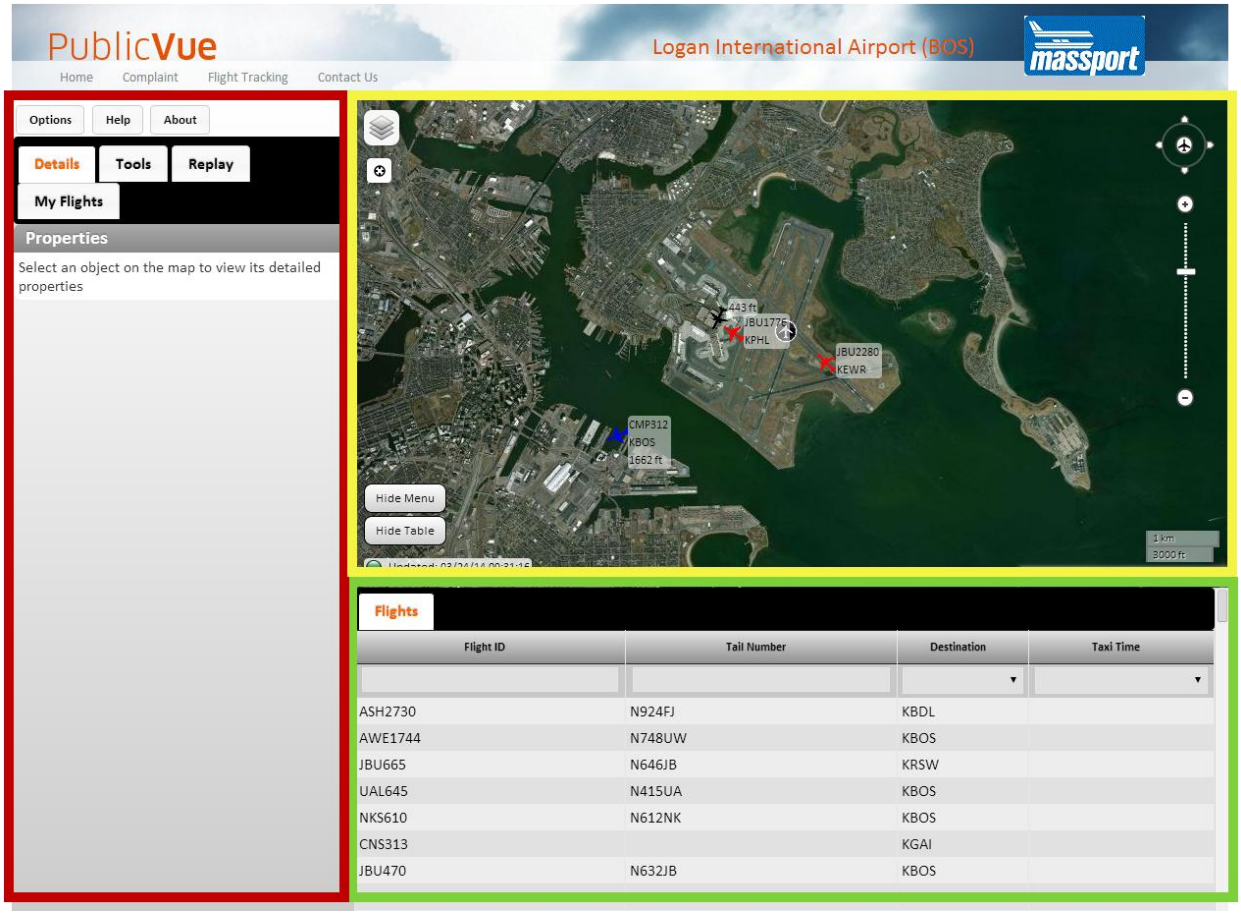


Figure 2: Three Panels

Displaying the PublicVue Version

To view the version number of PublicVue, click the **About** button in the left pane (Figure 3).

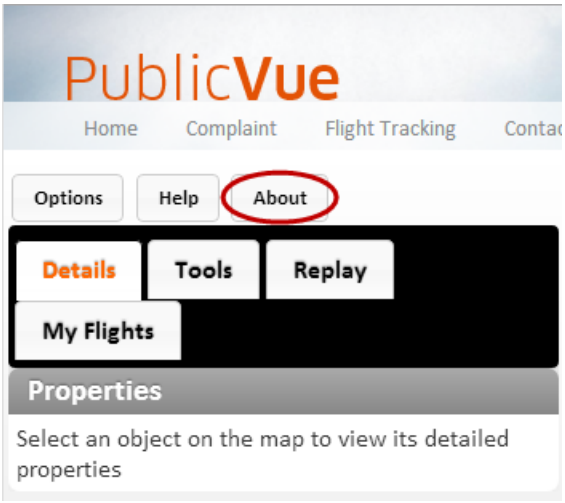


Figure 3: About Button

Note to Mobile Device Users

PublicVue is fully supported on computers and mobile devices. Mobile device users should note that while this manual often uses terminology that may seem specific to computers (e.g., click), the functionality is available to mobile devices by performing the comparable action (e.g., tap).

THE MAP

The map panel is the largest of three panels.

By default, the map displays all flights in the system. Flights are displayed using icons that represent the aircraft type. Surface vehicles are displayed as chevrons ( ) . Different colors are used to distinguish between arrivals, departures, and overflights.

Table 1: Default Icon Colors

TYPE	COLOR
Arrivals	Red
Departures	Blue
Overflights	Green
Unknown	Black

Note that the flight icon colors shown in Table 1 are the defaults. Because these colors are configurable, they may be different for your system.

The various controls displayed on the map are discussed in the following sections.

Figure 4: Map Controls

Expanding the Map Panel

The map panel is always displayed, but you may hide the other two panels by using the Hide Menu and Hide Table buttons located in the map's lower, left. To hide the left panel click the Hide Menu button. To hide the panel containing the data table(s), click the Hide Table button.

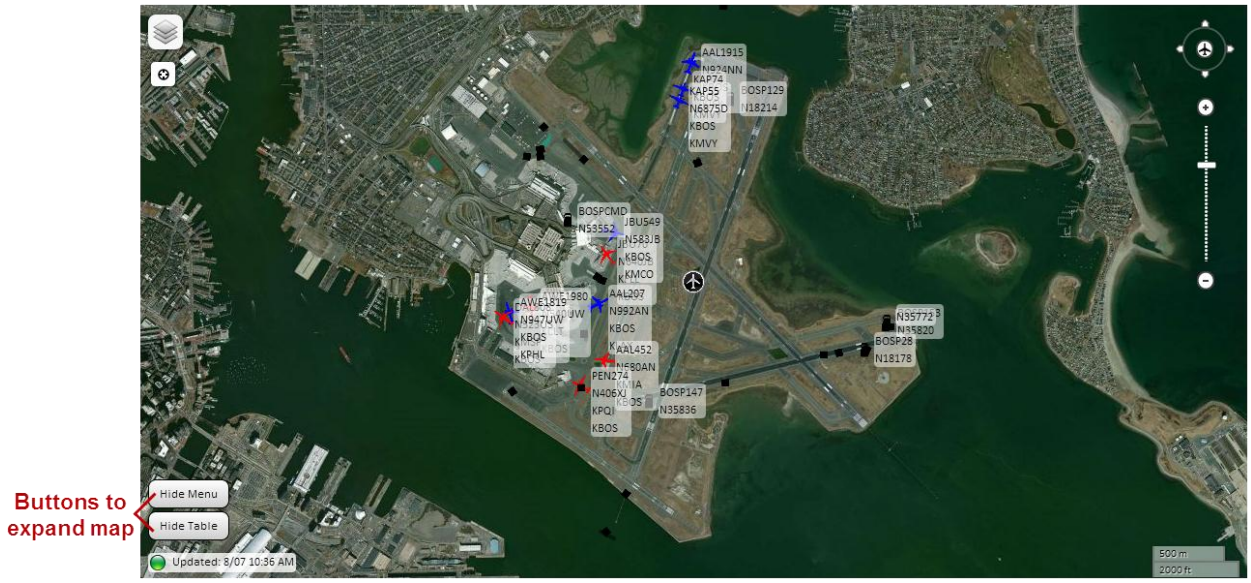


Figure 5: Buttons to Expand Map

Panning the Map

There are two options to pan the map. The first is to click on the map and drag. The second option is to use the compass control in the upper, right corner of the map. Click the four points of the compass to pan the map in that direction. For example, click the bottom point to pan down.

Figure 6: Panning with Compass Control

Mobile users may also tap and drag to pan the map.

Zooming to Airport

To reset the map so that your airport is displayed at the center at the original zoom level, click the center of the compass control.

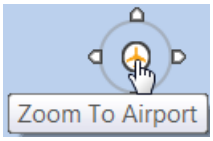


Figure 7: Zoom to Airport

Zooming In/Out

The zoom control enables you to change the scale of the map. The zoom control is located on the right side of the map, below the compass control. Click the buttons to zoom in, or drag the slider up and down.

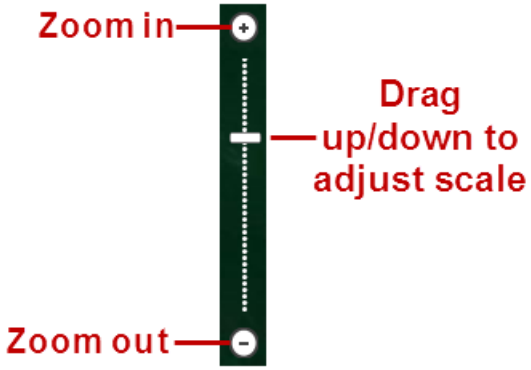


Figure 8: Zoom Controls

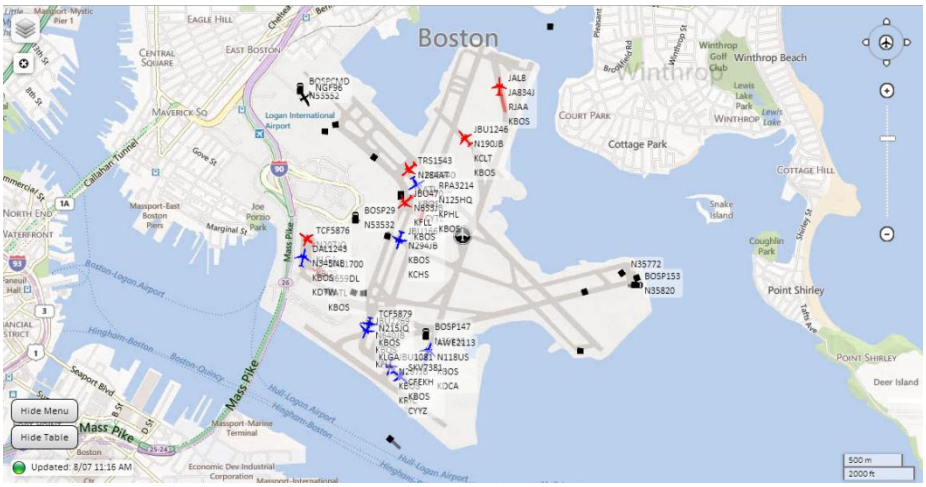
Mobile device users may also use pinch and zoom functionality on their device.

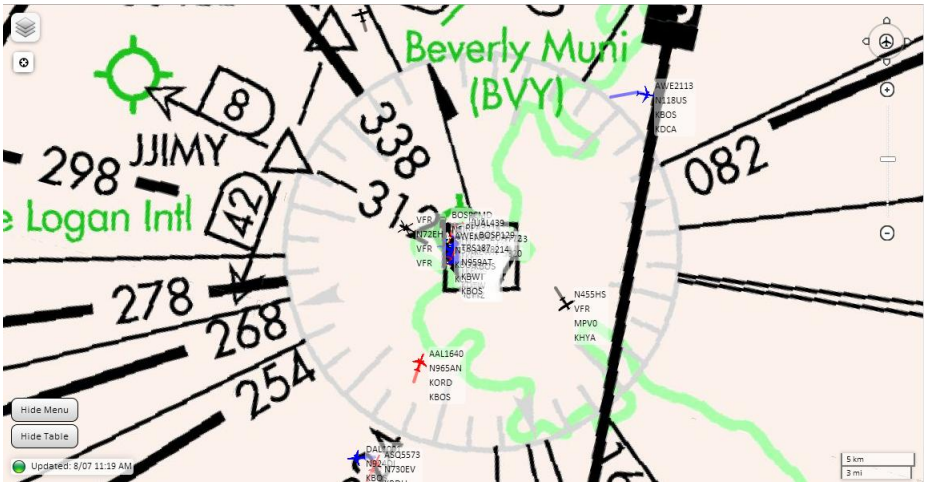
Changing the Map Layer and Icons Displayed

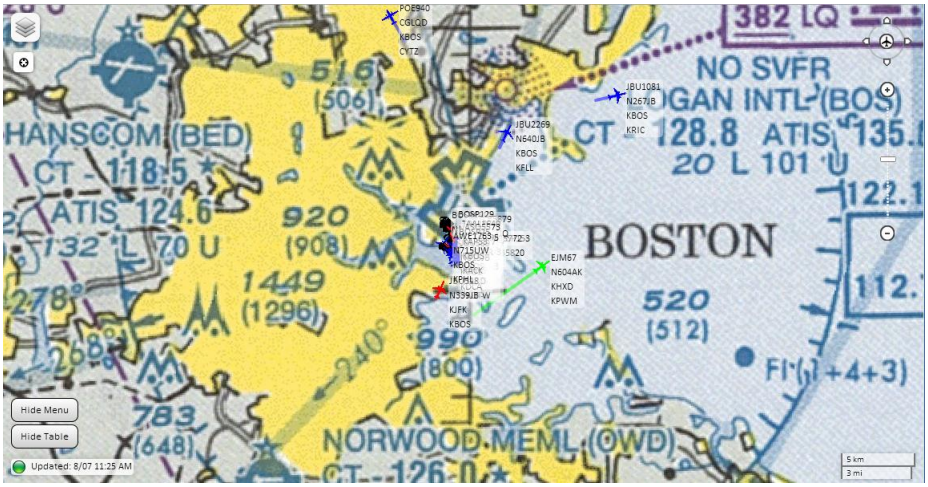
By default, PublicVue displays the Bing Aerial map layer (Figure 9).

Figure 9: Bing Aerial Layer

PublicVue also includes several other layers:

LAYER NAME	EXAMPLE
Bing Map Streets	

LAYER NAME	EXAMPLE
Bing Maps Labeled Aerial	
Open Street Maps	
IFR High (if elected)	

LAYER NAME	EXAMPLE
IFR Low (if elected)	
VFR (if elected)	

The map also displays icons for the following object types by default:

- Arrivals
- Departures
- Overflights
- Unknown
- Surface vehicles (optional/if elected)
- Noise monitoring terminals
- Live weather (not available during replay)

Changing the Map Layer

To change the map layer:

1. Click the layer control located in the upper right of the map.

Figure 10: Layer Control

2. Select the layer you would like to display.

> Maps listed may not be available for all sites.

Figure 11: Available Layers

Changing the Objects Displayed

You may control the objects displayed on the map using the layers control.

To change the objects displayed on the map:

1. Click the layers control.
2. To display an object on the map, ensure the object's checkbox is selected. To hide an object, de-select the object's checkbox.

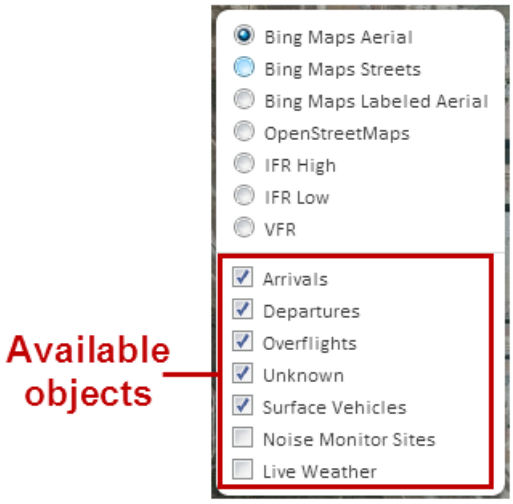


Figure 12: Map Objects

Finding your Location

If your browser or device supports GPS location tracking, the map will include a Locate Me feature that centers your current location on the map. To find your location on the map, click the Locate Me button that is located below the layers control.

Figure 13: Locate Me Control

Your location is centered on the map and displayed with a blue circle.

Viewing a Flight's Properties

To view the properties of a flight, click the flight's icon on the map.

A popup displays basic information about the flight. The Details tab in the left panel displays additional information about the flight.

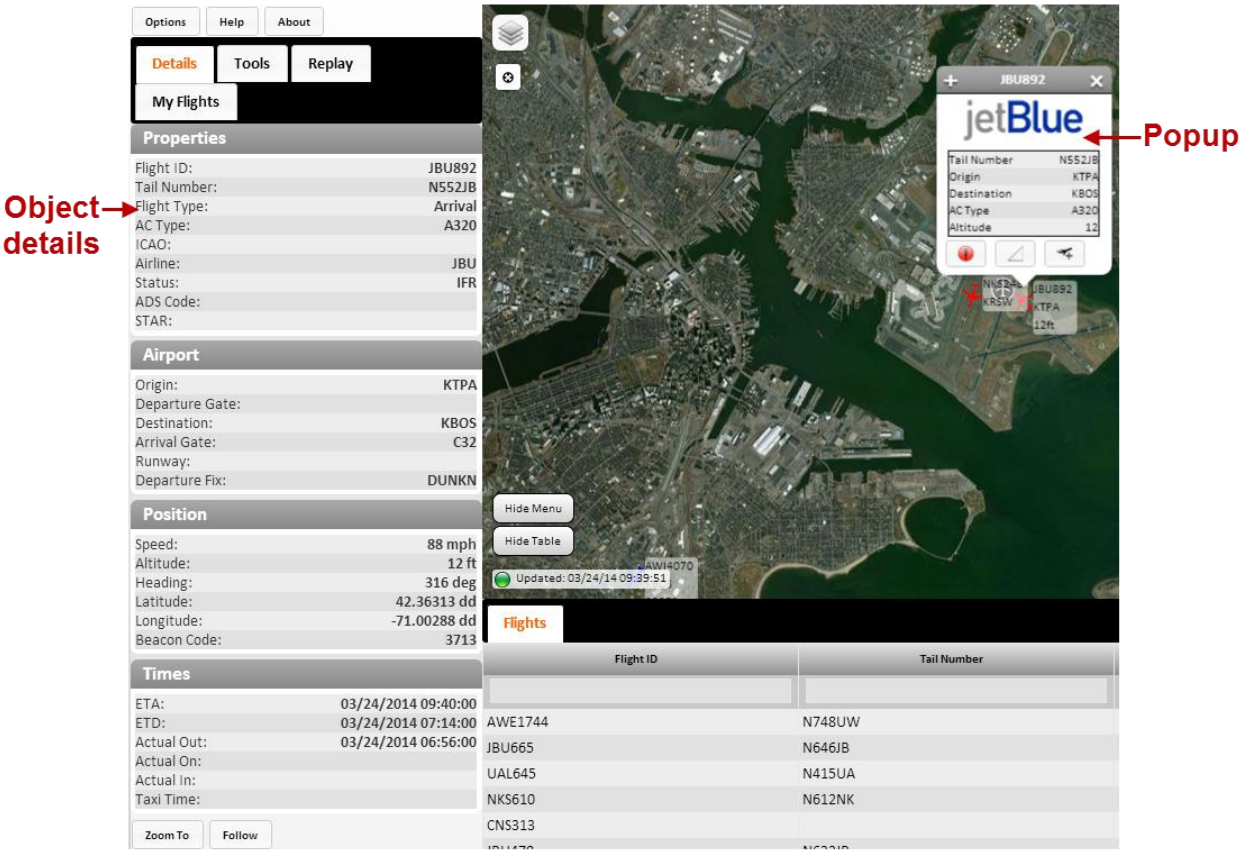


Figure 14: Object Popup and Details

To customize the fields displayed in a flight's popup, refer to page 35 for details.

Centering the Flight on the Map

To zoom in on and center a flight on the map:

1. Click the flight's icon on the map.
2. Click the **Zoom To** button located at the bottom of the left pane's Details tab.

Figure 15: Zoom To Button

Following a Flight

Following a flight automatically pans the map so that the flight displays at the center of the panel until you stop following the flight.

To follow a flight:

1. Click the flight's icon on the map. A popup displays information for the flight.
2. Do one of the following:
   - Click the  button that displays in the upper left of the popup.
   - Click the **Follow** button located at the bottom of the left pane's Details tab.

Figure 16: Follow Button

3. An indicator with the flight's ID displays.

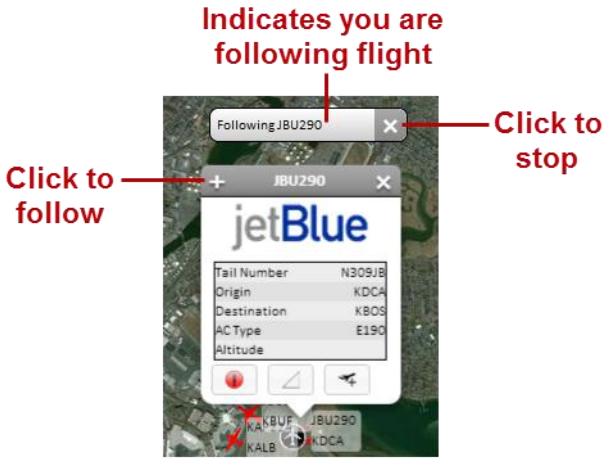


Figure 17: Following a Flight

To stop following the flight, click the ☒ button that displays in the indicator.

My Flights

The My Flights feature enables you to add flights that you are interested in to a list so that you can quickly find them on the map and view their slant range.

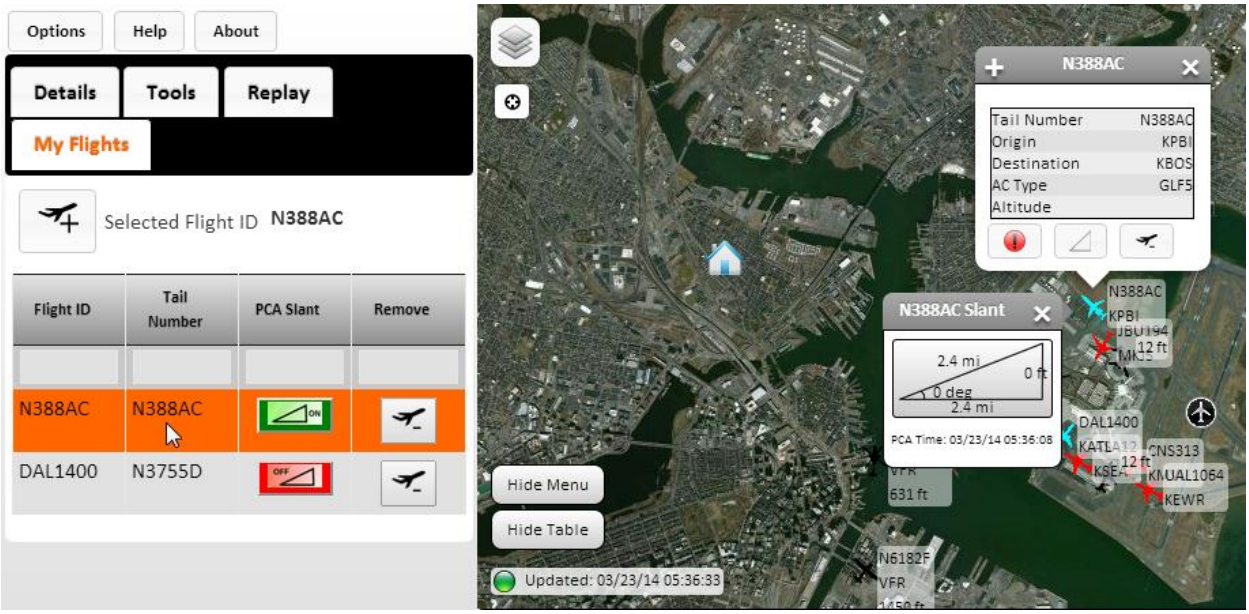


Figure 18: My Flights

Adding Flights to Your List

To add flights to your My Flights list:

1. Select the **My Flights** tab from the left pane.

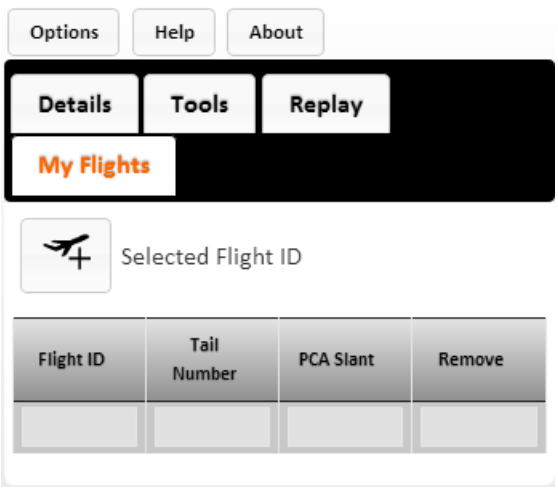


Figure 19: My Flights Tab

2. Select the flight you would like to add to your list from either the map or the Flights data table.
3. Click the  button. The flight displays in your list.

> You may customize the color of flights in your My Flights list. Refer to page 32 for details.

Displaying a Flight's Properties and Slant Range

After a flight is added to your list, you may display its properties by clicking the flight's row. A pop-up displays the flight's information.

The button in the PCA Slant column controls whether the flight's slant range is displayed. Toggle the button in the PCA Slant column to display or hide the flight's slant range. A red button () in the PCA Slant column indicates that the slant range is hidden.

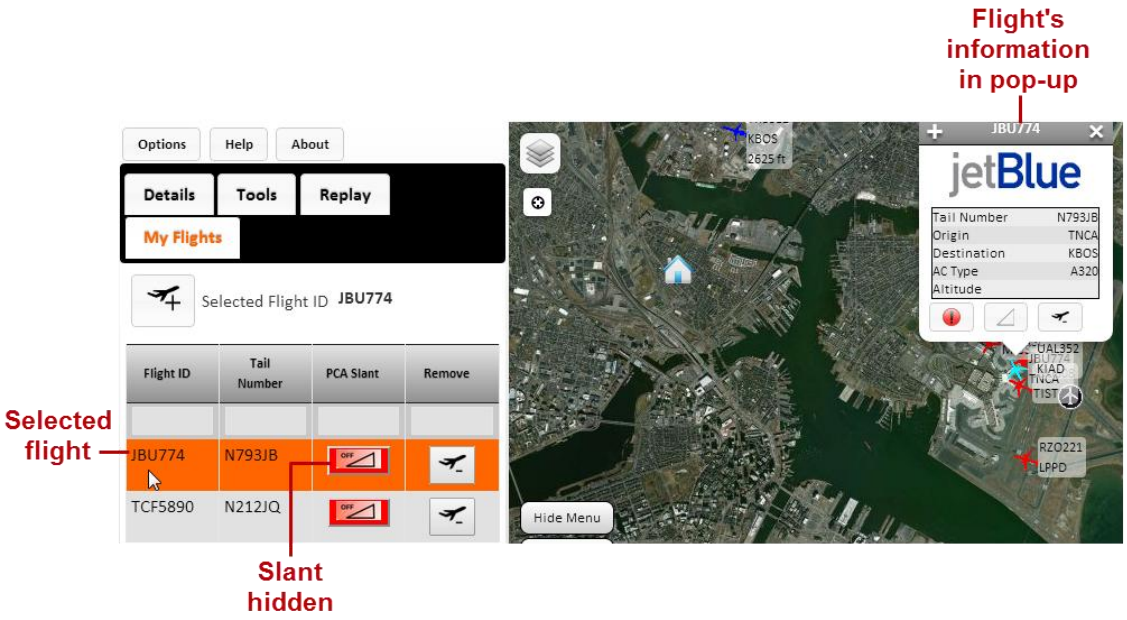


Figure 20: Selected Flight's Slant Hidden

A green button () in the PCA Slant range column indicates that the slant is displayed.

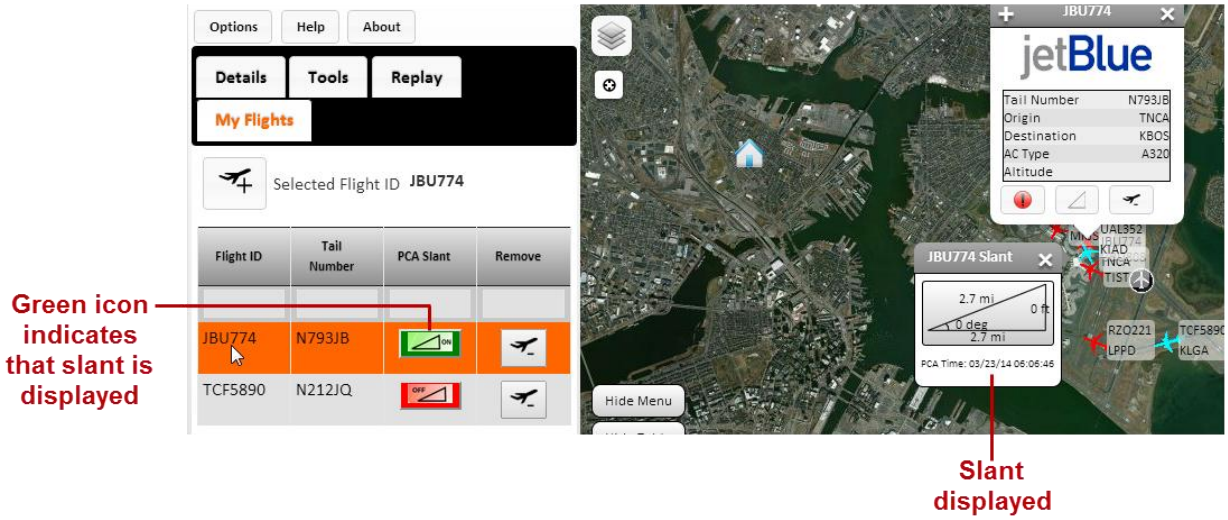


Figure 21: Selected Flight's Slant Displayed

Removing a Flight From Your List

To remove a flight from your list, click the  button beside the flight.

Figure 22: Remove Flight Button

DATA TABLES

This section is only applicable if data tables have been activated for the airport.

The panel below the map displays tables containing flight and noise data.

To change the columns displayed in the Flights table, refer to page 35. To change the columns displayed in the Noise table, refer to page 35.

Sorting

To sort the data in the tables by a particular column, click the column header to sort on. An arrow beside the column header indicates the sort column and order.

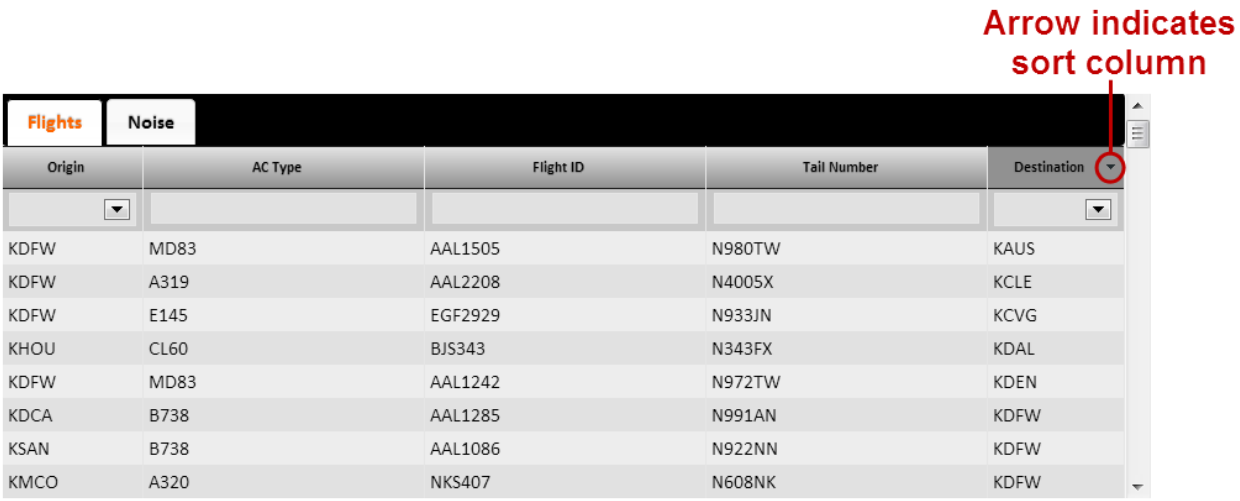


Figure 23: Sort Column

Filtering Data

Below the column headers are fields or list that enable you to filter the data displayed in the table (Figure 24).

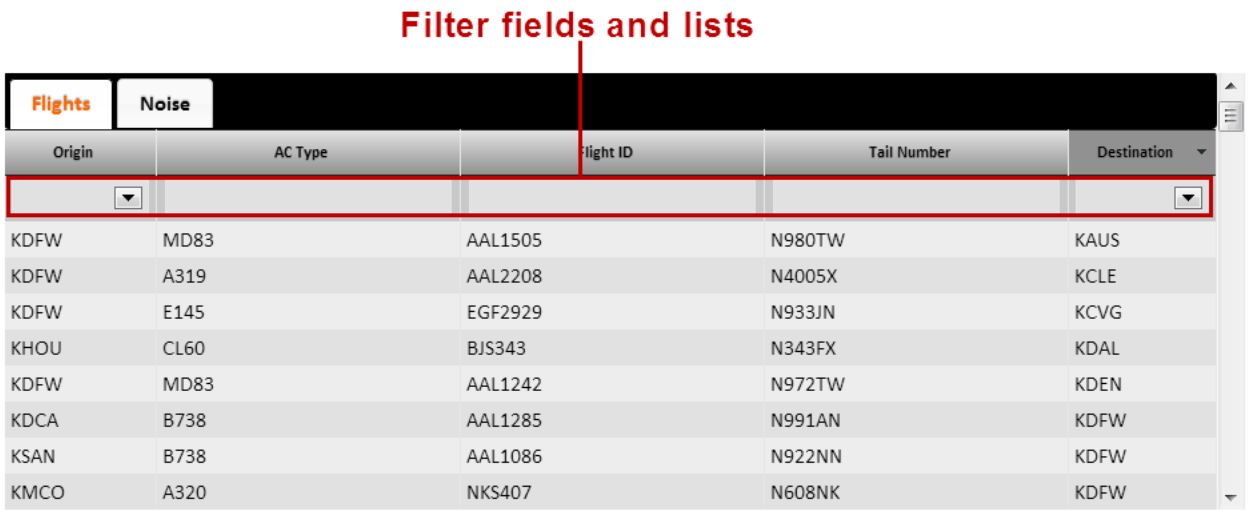


Figure 24: Filter Fields and Lists

To filter the data displayed in the table:

- Specify the characters that data in the column must contain.
- Select the value that the data should equal from the list.

You may specify more than one filter. Note that if you specify multiple filters the row must meet all filters in order to be included (Figure 25).

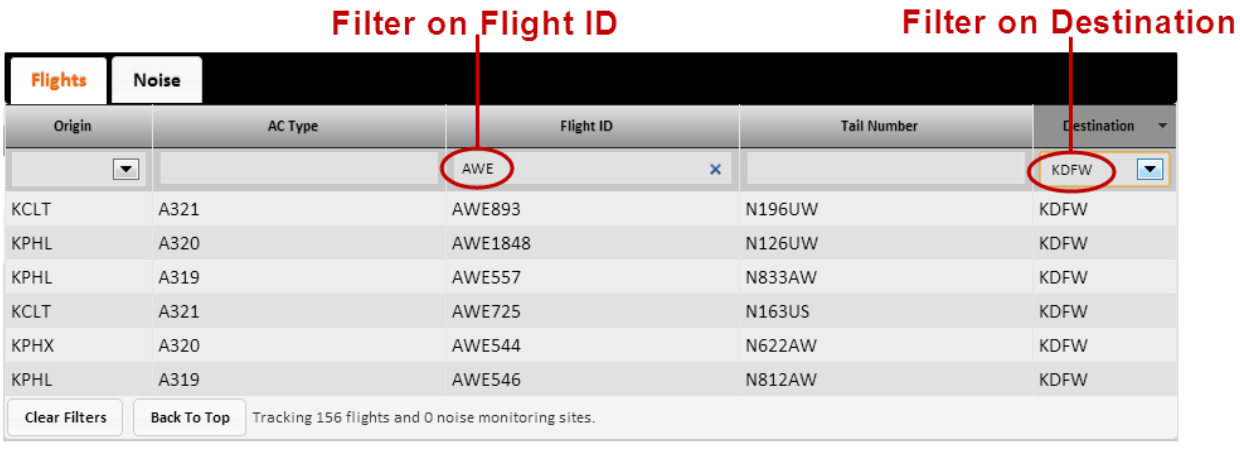


Figure 25: Multiple Flight Filters

Removing Filters

There are several ways to remove filters from the data tables:

- To remove all filters from a data table, click the **Clear Filters** button located below the table.
- To remove a filter on a text entry field, click the X in the field.
- To remove a filter from a list, select the blank entry that is located at the top of the list's values.

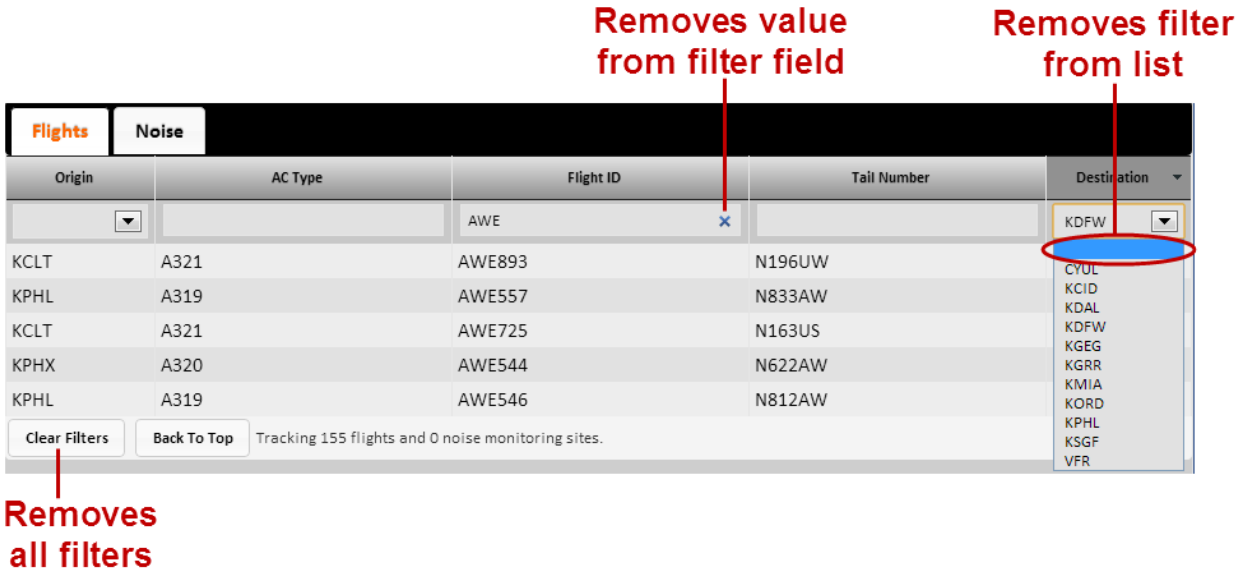


Figure 26: Removing Filters

Centering Object on Map

To center the map on a particular flight or noise monitoring terminal, click the flight's row in the Flights table. The selected flight's details also displays in the left pane's Details tab.

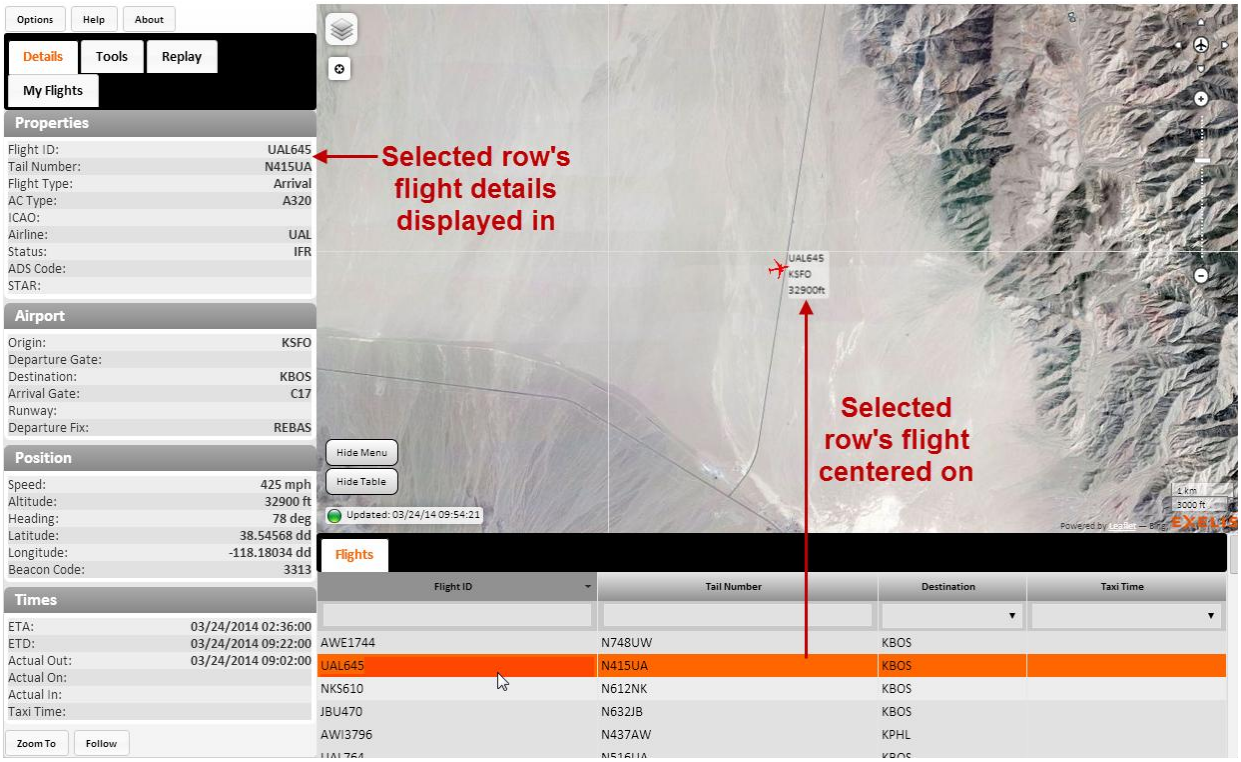


Figure 27: Centering Flight on Map

Clicking the row a second time displays the flight's details in a popup.

Tools

Viewing Weather

If you are in live mode, the weather displays the current weather. If you are in replay mode, the weather displayed is the weather at the replay time.

To view the current weather:

1. Select the **Tools** tab from the left panel.
2. Click **Weather Display**.

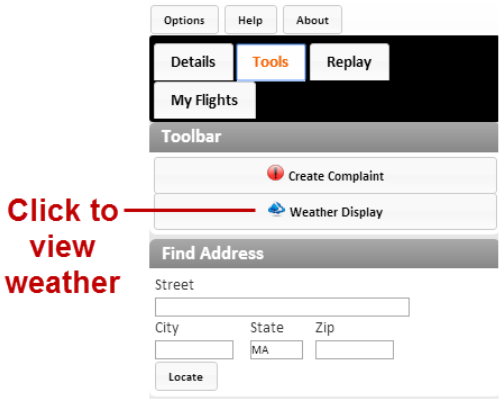


Figure 28: Weather Display

The Weather window displays the current weather.

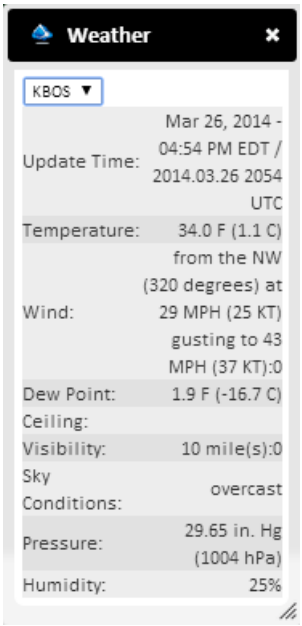


Figure 29: Weather

HISTORICAL REPLAY

Historical flight mode enables you to replay data from previous dates in one hour increments. After specifying the start time, PublicVue replays the events occurring one hour after the specified time.

Replaying Events

To replay events from a previous date:

1. Select the **Replay** tab from the left panel.
2. From the Flight Mode section, select **Historical Flights (Replay)**. The Time Window and Playback Controls sections display.

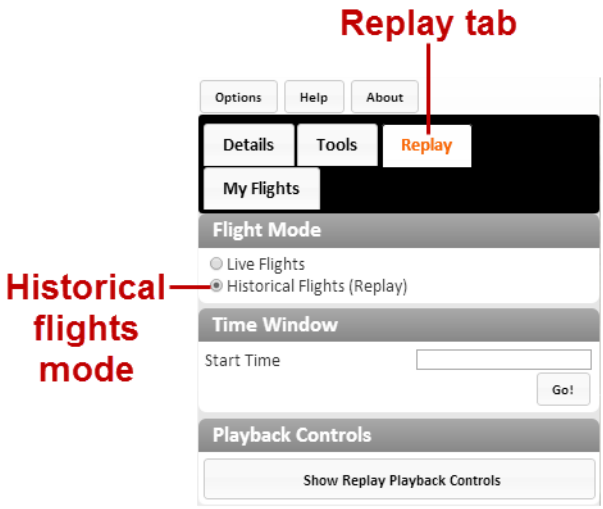


Figure 30: Replay Tab and Historical Mode

3. Click the **Start Time** field. A calendar displays.

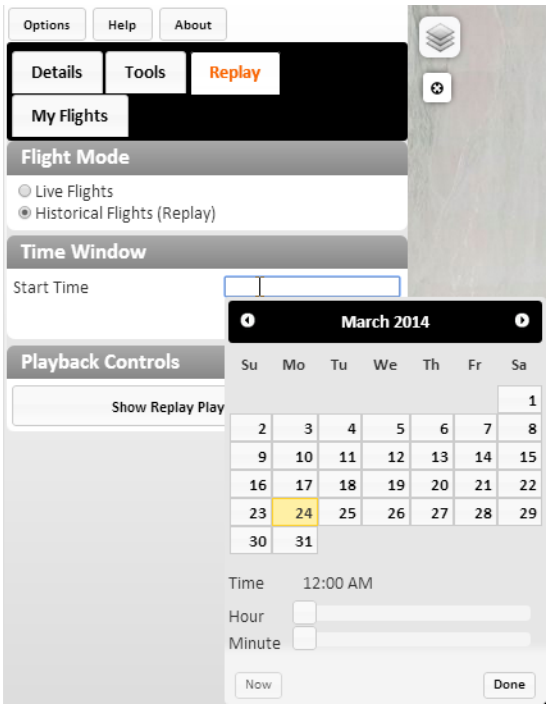


Figure 31: Calendar

4. From the calendar:
    a. Select the date for which you would like to replay events.
    b. Use the **Hour** and **Minute** sliders to specify the time at which to start the replay.
    c. Click **Done**.
5. Click **Go**. The replay data is cached and replayed on the map.

Refer to 30 page for details on displaying and using the playback controls.

6. When the end of the one hour increment is reached, you will be asked if you want to start a new replay starting with the current time. To continue the replay, click **Continue**.

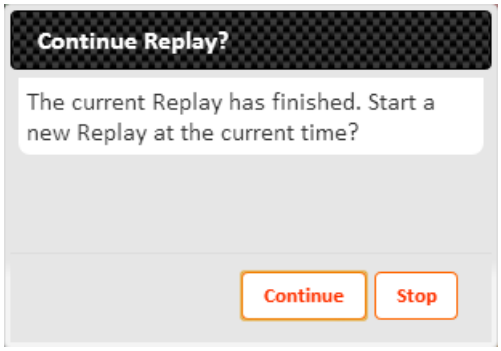


Figure 32: Continue Replay

Playback Controls

To display the playback controls, click the **Show Replay Playback Controls** button on the Replay tab.

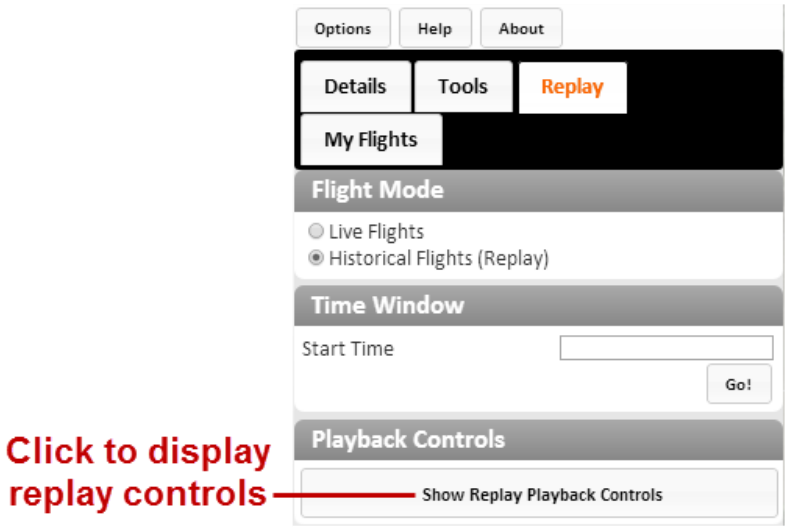


Figure 33: Show Replay Playback Controls Button

The Current Time displays the playback time currently being shown on the map and data tables.

The Replay Speed indicates how fast the playback is occurring. To decrease the playback speed, click the  button. To increase the playback speed, click the  button. Each subsequent click of these buttons decreases or increases the playback speed.

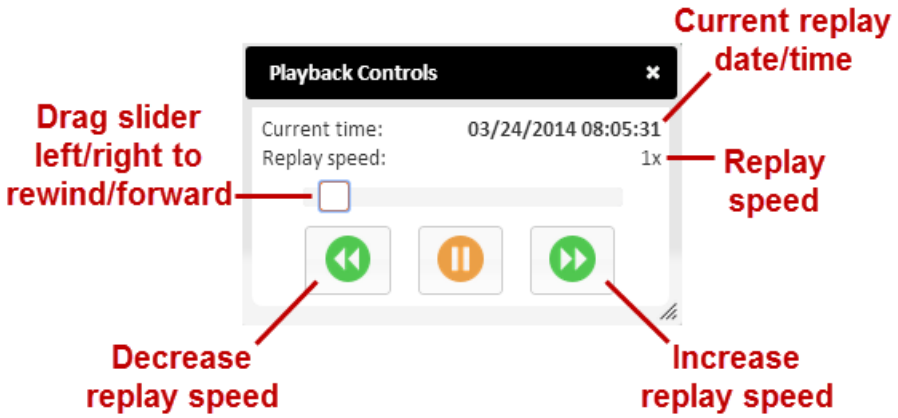


Figure 34: Replay Controls

You may drag the slider control left to rewind the playback, or right to forward the replay.

Viewing a Flight's Track

> This feature is only available in historical replay mode. To enable historical replay, refer to page 28 for details.

To view a flight's track:

1. Ensure you are in historical replay mode.
2. Click the flight on the map. A popup displays information for the flight.
3. Click the  button in the popup.

Figure 35: Flight Track Button

The flight's trail displays in the same color as the flight. For example, if the flight is colored blue, its track also displays in blue.

CUSTOMIZING PUBLICVUE

PublicVue enables you to customize icons, the map display, and the data fields displayed. These options are saved with your user profile so that your configuration settings are used each time you log into PublicVue.

Customizing Flight Icons

To customize the flight icons:

1. From the left panel, click **Options**. The Options window displays.
2. Ensure that the **Flight** tab is selected.
3. To change the size of the icons, drag the **Icon Size** slider. To make the icons smaller, drag the slider to the left. To make the icons larger, drag the slider to the right.
4. To change the colors used for the icons, select the color beside the flight type category.
5. To display flight track trails, check the **Show Flight Track Trails** checkbox. If you enable flight track trails, you will also need to specify length of the trails in the **Flight Track Trail Length** field.

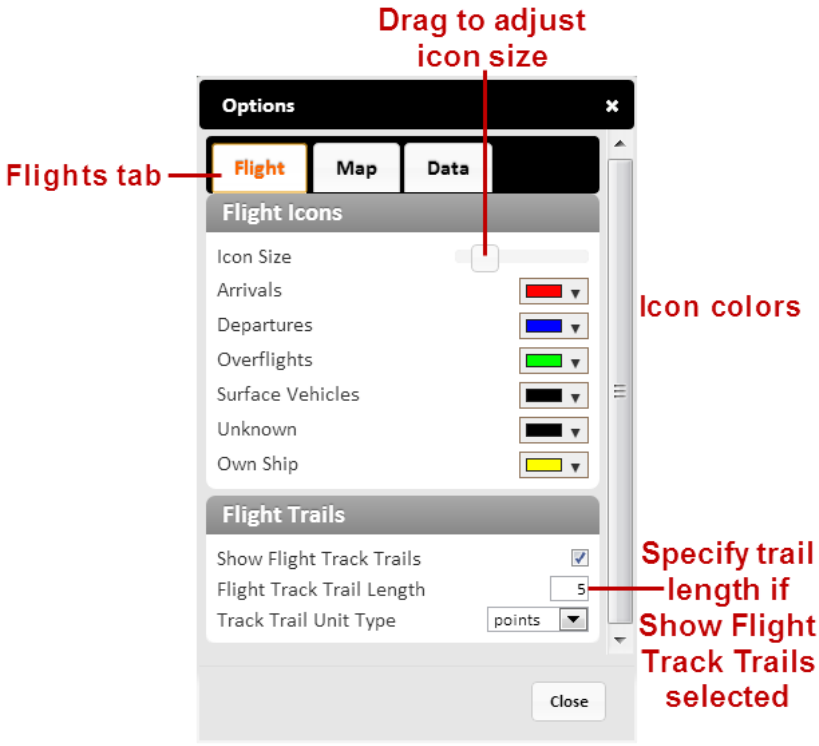


Figure 36: Flight Options

Customizing the Map Display

Various aspects of the map may be customized.

To customize the map display:

1. From the left panel, click **Options**. The Options window displays.
2. Select the **Map** tab (Figure 37).

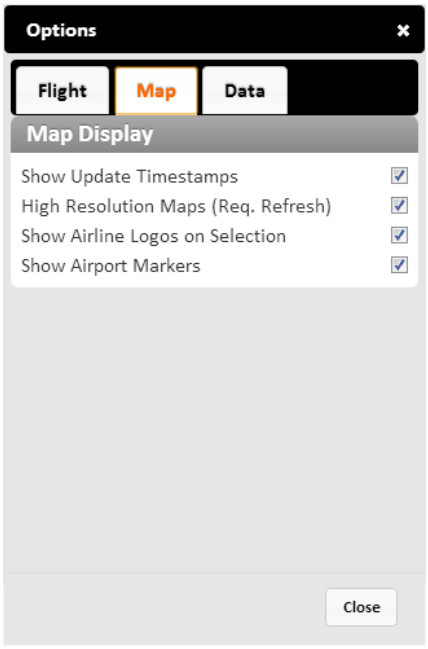


Figure 37: Map Tab

3. To display the update timestamp in the lower, left of the map (Figure 38), check the **Show Update Timestamps** checkbox.

Figure 38: Update Status

4. To display a high resolution map, check the **High Resolution Maps** checkbox. If your device supports higher resolution maps (e.g., the Apple iPad's Retina display), you will want to select this option so that maps are displayed at a higher quality.

5. To display the airline logo in flights' popups (Figure 39), check the **Show Airline Logos on Selection** checkbox.

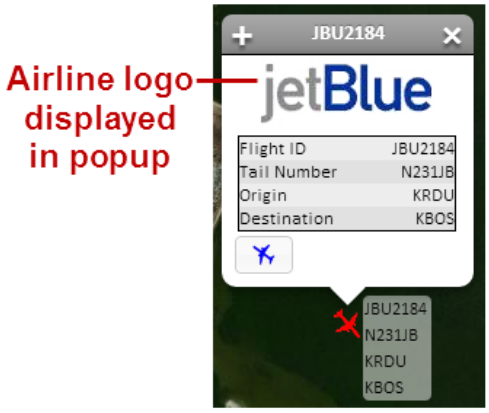


Figure 39: Airline Logo in Popup

6. To display the airport marker at the airport, check the **Show Airport Markers** checkbox.

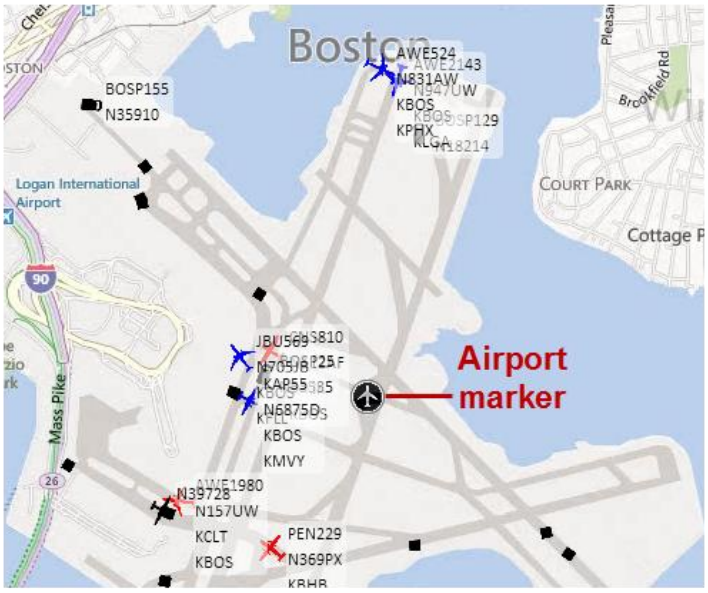


Figure 40: Airport Marker

7. Click **Close**. The Options window closes.

Customizing Data Table Display Fields

The fields displayed in the data tables may be customized.

To customize the fields displayed in a data table:

1. From the left panel, click **Options**. The Options window displays.
2. Select the **Data** tab.

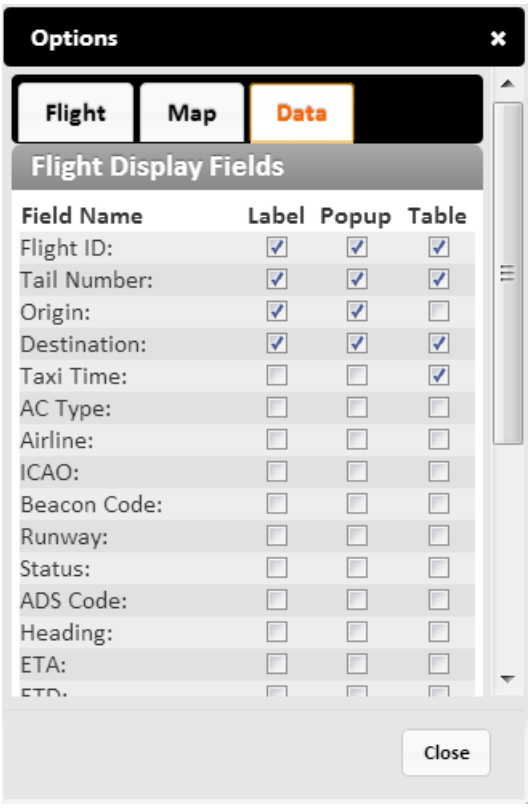


Figure 41: Data Tab

If your system includes multiple data tables, you may need to scroll down to the list to view the fields for the data table you would like to modify.

3. To include a field in the flight labels (Figure 42), check the field name in the **Label** column. The label is the text displayed beside the flight icon on the map.

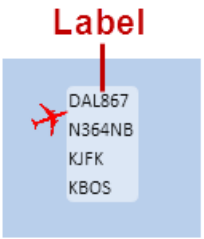


Figure 42: Flight Label

4. To include a field in the flight popups (Figure 43), check the field name in the **Popup** column.

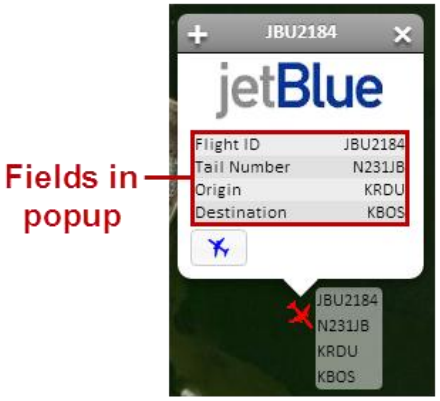


Figure 43: Flight Popup FIelds

5. To include a field in the Flights data table, check the field name in the **Table** column.

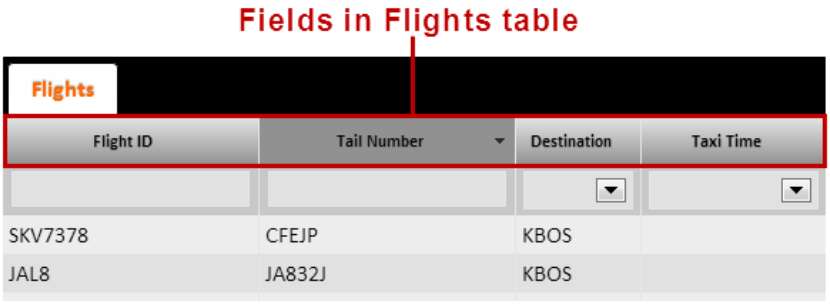


Figure 44: Flights Table Fields

6. Click **Close**. The Options window closes.

NOISE MODULE

> Note that the Noise Module is an optional module.

The Noise module enables you to view data from noise monitoring sites and perform functions such as viewing a flight's slant range in relation to your home address and creating a complaint.

Noise monitoring terminals (NMTs) are displayed as circles on the map. The current noise level detected by the NMT is displayed at the center of the circle.

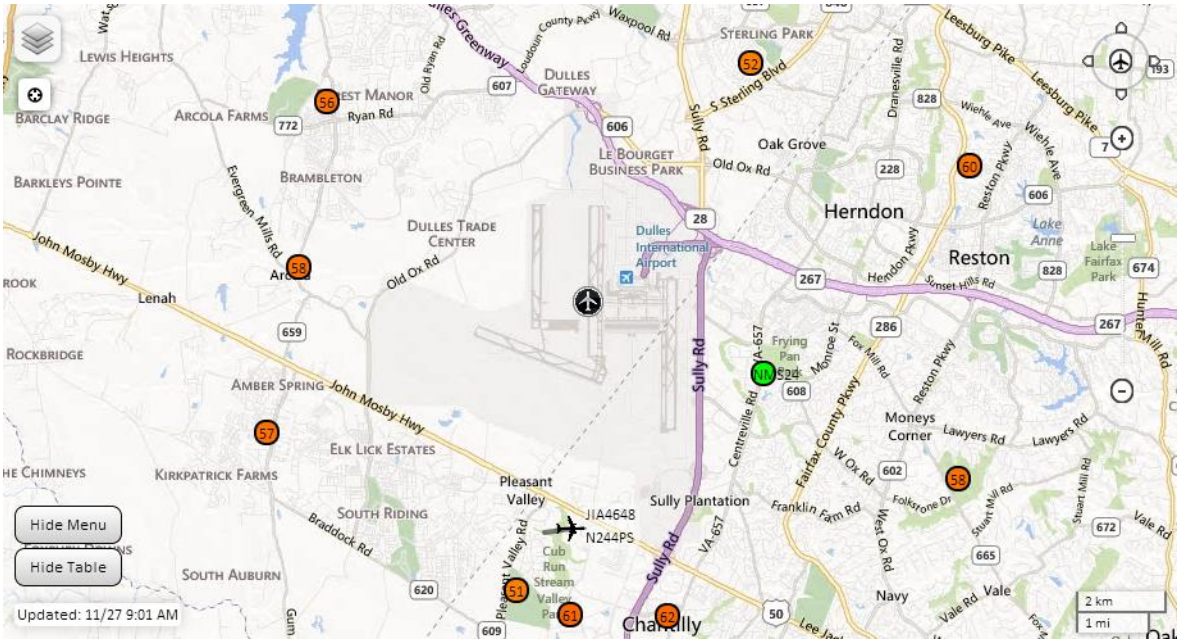


Figure 45: Map with Noise Monitoring Terminals

NMTs are also colored so that you can distinguish the noise level at the NMT.

Table 2: Default NMT Colors

NOISE LEVEL	COLOR
Low	Yellow
Medium	Orange
High	Red

> Note that the NMT icon colors shown in Table 2 are the defaults. Because these colors are configurable, they may be different for your system.

Viewing a Noise Monitoring Terminal's Properties

To view the properties of a noise monitoring terminal (NMT), click the icon of the NMT.

A popup displays a graph of the event time histories.

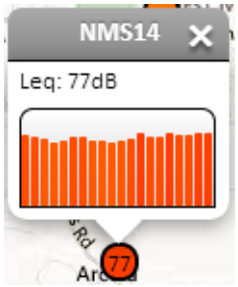


Figure 46: NMT Graph

You may mouse over any bar on the graph to view the noise level.

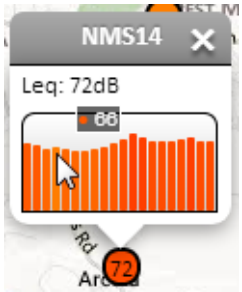


Figure 47: NMT Graph with Mouseover

Centering the Map on an Address

To center the map on a specific address:

1. From the left panel, select the **Tools** tab.
2. In the Find Address section, enter the address that you would like to center the map on.

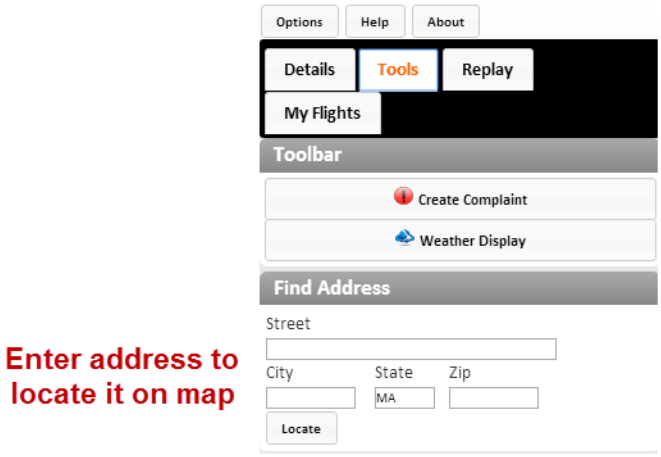


Figure 48: Find Address

The Address Lookup popup displays.

3. From the Address Lookup window, click the  button beside the address to center the map on the address.

Specifying a Home Address

Your home location is used to calculate a flight's slant range from the home location's address.

1. From the left panel, select the Tools tab.
2. In the Find Address section, enter the address that you would like to use as your home location. The Address Lookup popup displays.

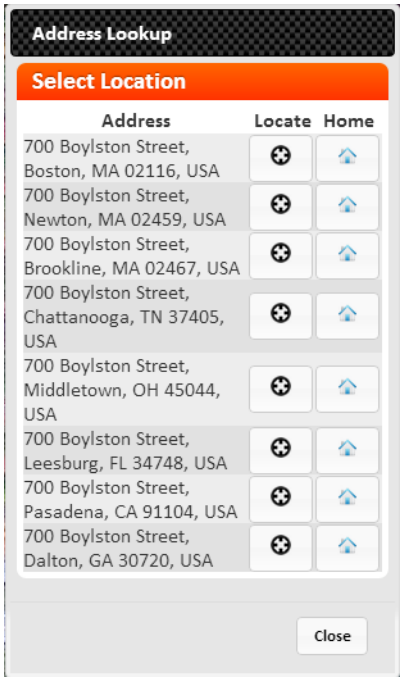


Figure 49: Address Lookup

3. From the Address Lookup window, click the  button beside the address specify it as your home location. The  icon displays on the map at the specified address.

Viewing a Flight's Slant Range

PublicVue enables you to view a flight's slant range from the home location.

> You must have your home location specified in order to view the slant range. For details on specifying your home location, refer to page 40.

To view a flight's slant range:

1. Click the flight's icon on the map. A popup displays information for the flight.
2. Click the  button in the popup. A popup displays the flight's slant range relative to your home location.

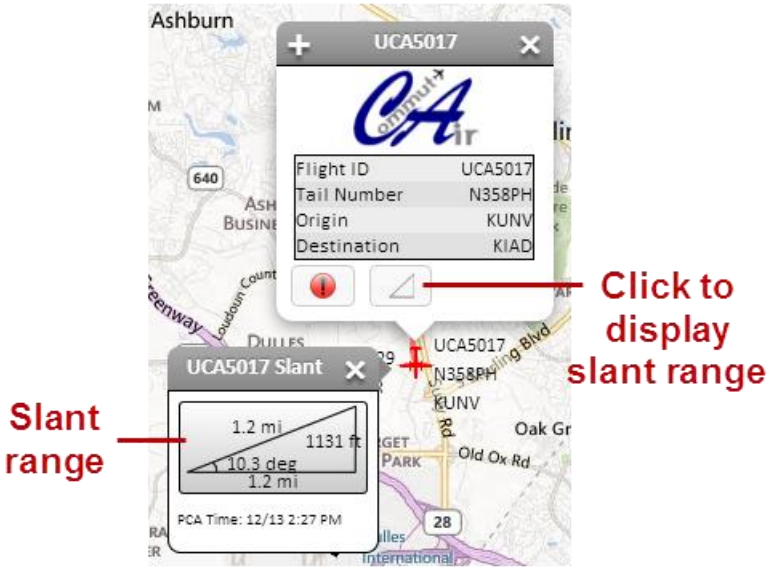


Figure 50: Slant Range

Entering Complaints

There are two methods that can be used to create a complaint. In either method, complainants must be registered/authenticated prior to submitting complaint(s). Complainants may register by either selecting the Complaints menu option, or by selecting a flight (for either near real-time or historical replay).

Creating a Complaint Manually

To create a complaint:

1. Select the **Complaint** menu.

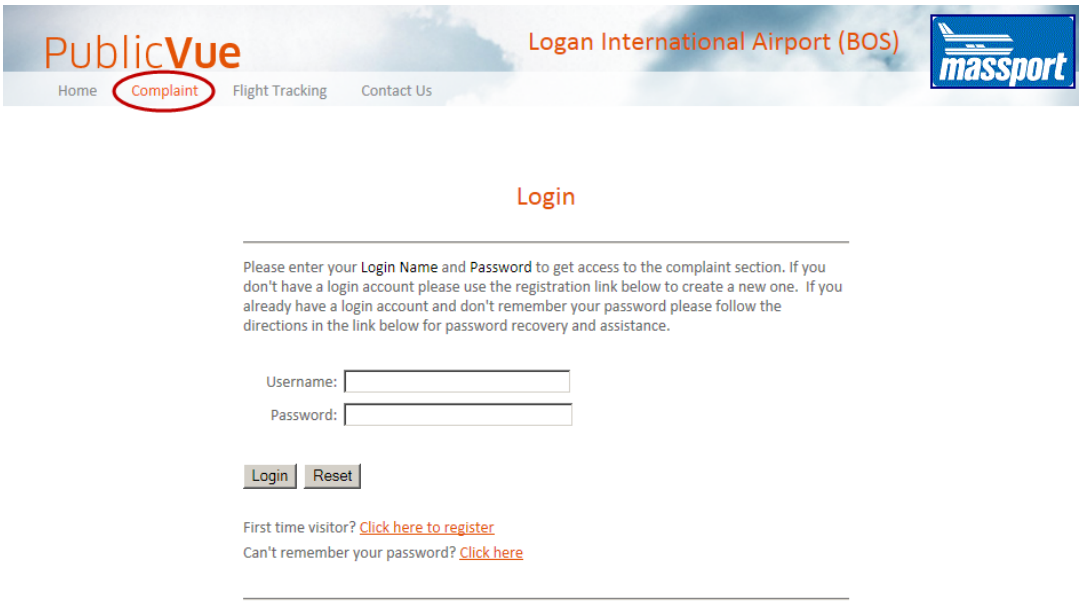


Figure 51: Complaint Menu

> If you are a first time visitor, you will need to register with PublicVue. Refer to page 44.

2. Enter your PublicVue username and password and click **Login**.
3. Click the **Submit New** menu option on the left. The Complaint Entry page displays.

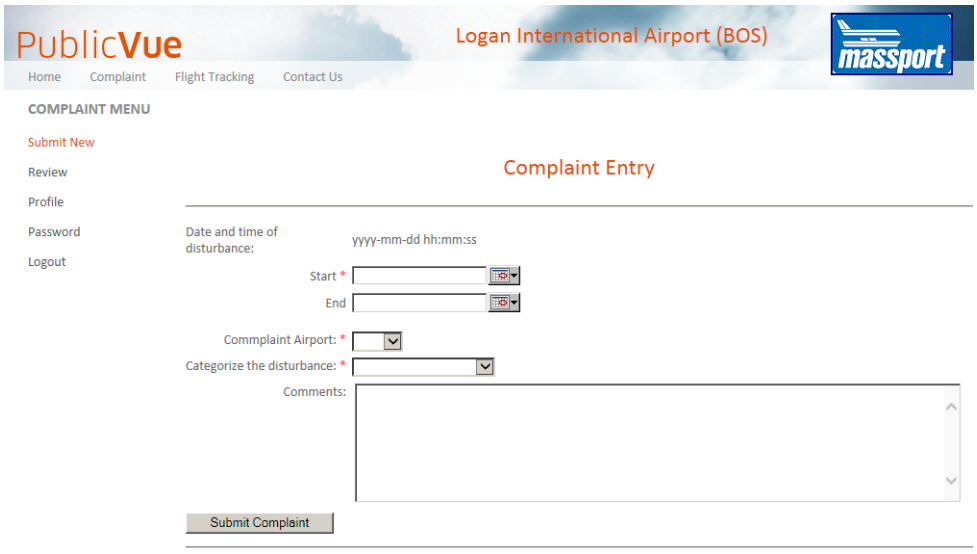


Figure 52: Complaint Entry Page

4. Complete the Complaint Entry form.
5. Click **Submit Complaint**.

You may view all complaints that you have submitted by selecting the **Review** menu option from the left.

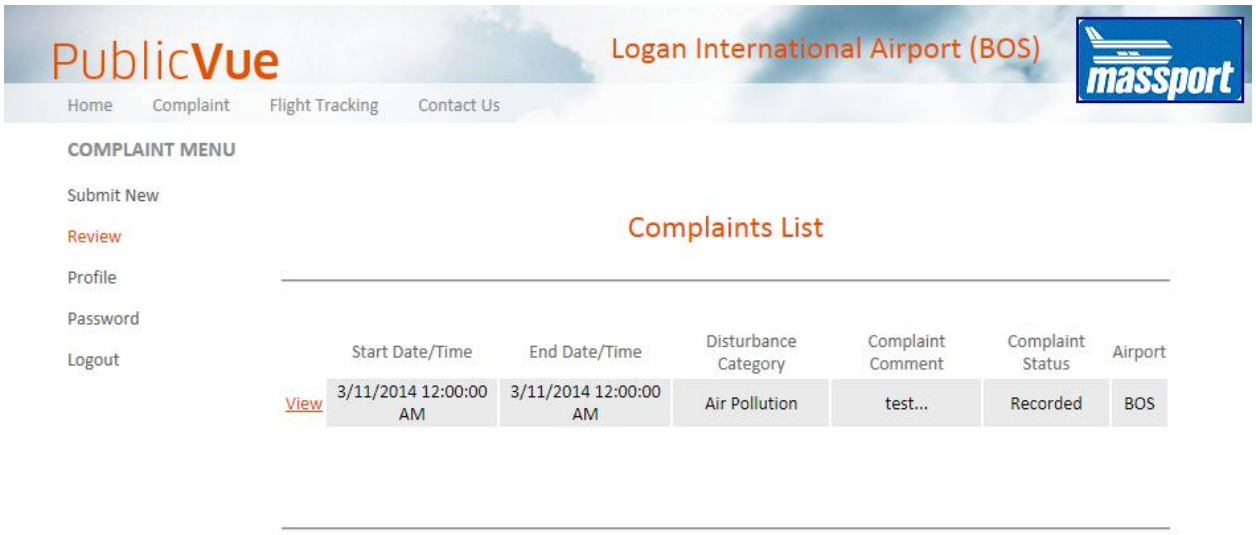


Figure 53: Complaint List

Registering a PublicVue Account

To register with PublicVue:

1. Click the **Click here to register link** located on the Login page of the Complaint menu.

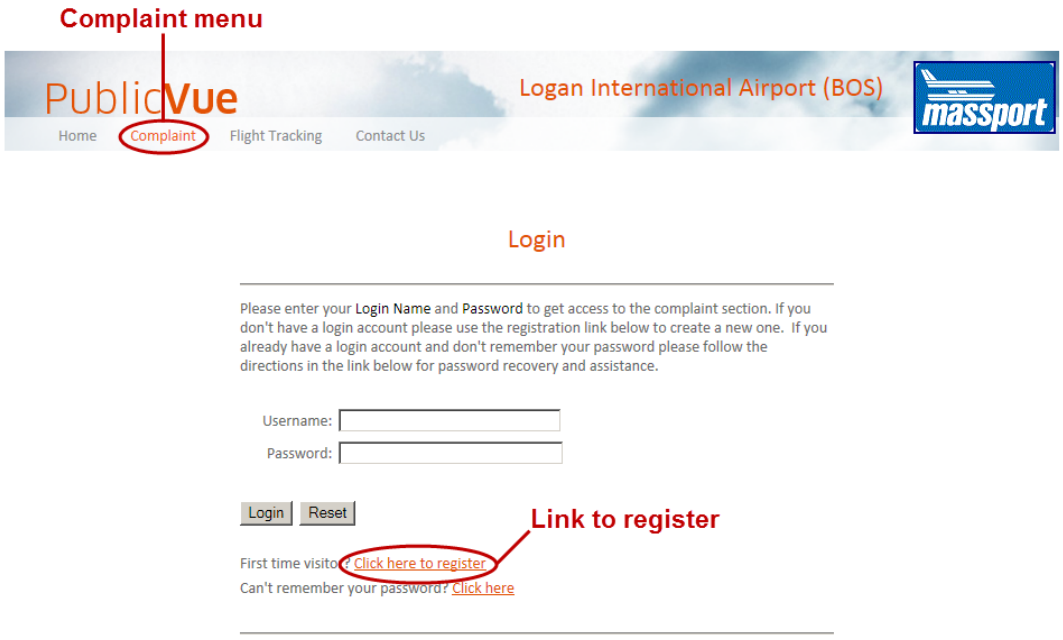


Figure 54: Click Here To Register Link

The Registration page displays.

Figure 55: Registration Page

2. Complete all fields on the page.
3. Click **Submit Registration**.

Creating a Complaint While Tracking Flights

To create a complaint while you are tracking flights:

1. Do one of the following:
   - From the Tools tab, click **Create Complaint**.

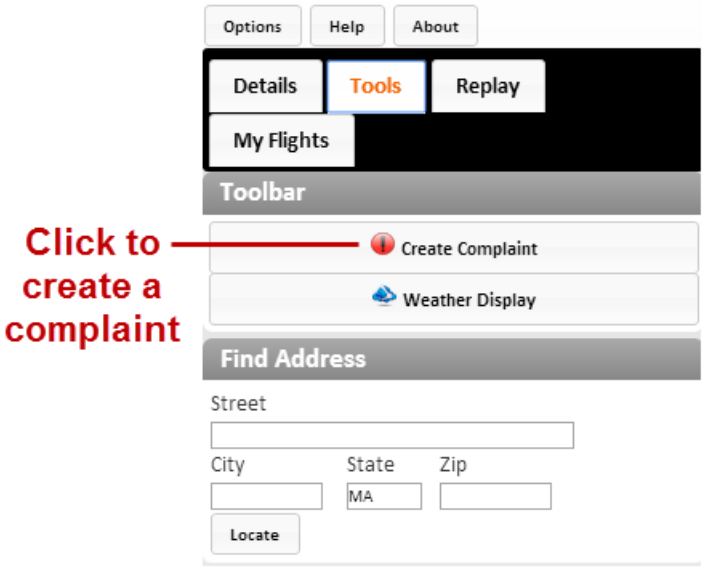


Figure 56: Create Complaint from Tools Tab

   - Display a flight's popup and click the  button. Creating the complaint from the popup automatically populates the complaint window with the flight's ID and tail number.

Figure 57: Create Complaint from Flight Popup

The Create Complaint window displays.

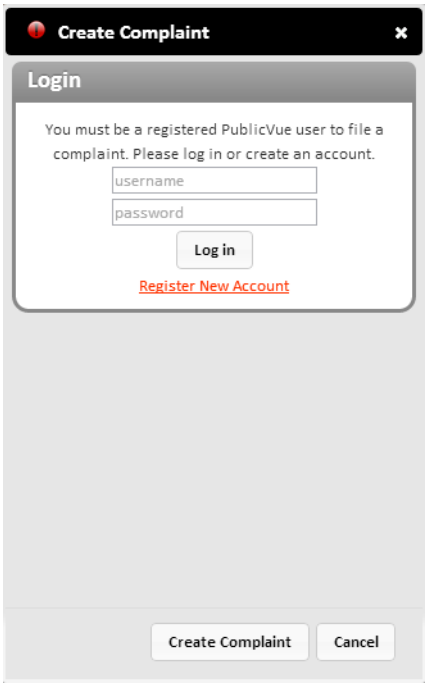


Figure 58: Create Complaint Login

2. Enter your PublicVue username and password and click **Log In**.

> If you do not have a PublicVue Complaint user account, refer to page 49.

The Create Complaint window displays.

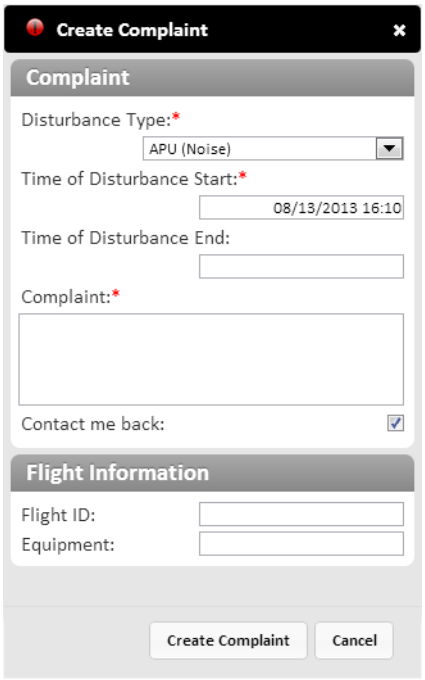


Figure 59: Create Complaint Window

3. Select the type of disturbance from the **Disturbance Type** list.
4. Click the **Start Time** field. A calendar displays.

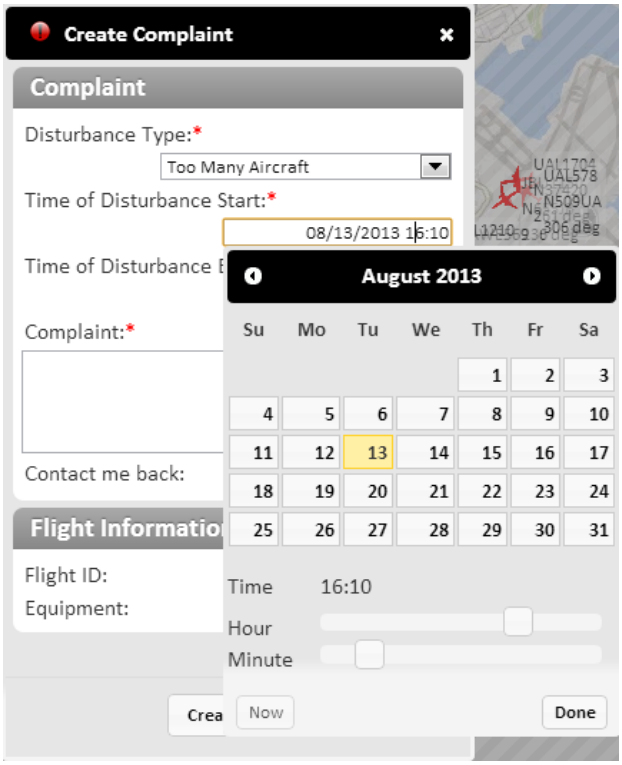


Figure 60: Create Complaint Calendar

5. From the calendar:
    a. Select the date for which you would like to replay events.
    b. Use the **Hour** and **Minute** sliders to specify the time at which to start the replay.
    c. Click **Done**.
6. Click the **End Time** field and specify the end time.
7. Enter any text you want to include with the complaint in the **Complaint** field.
8. If you know the flight information associated with the complaint, enter the flight ID and tail number.
9. Click **Create**.

Creating a PublicVue Complaint Login

To create an account:

1. From the Create Complaint Login window, click **Register New Account**. The Create User window displays.

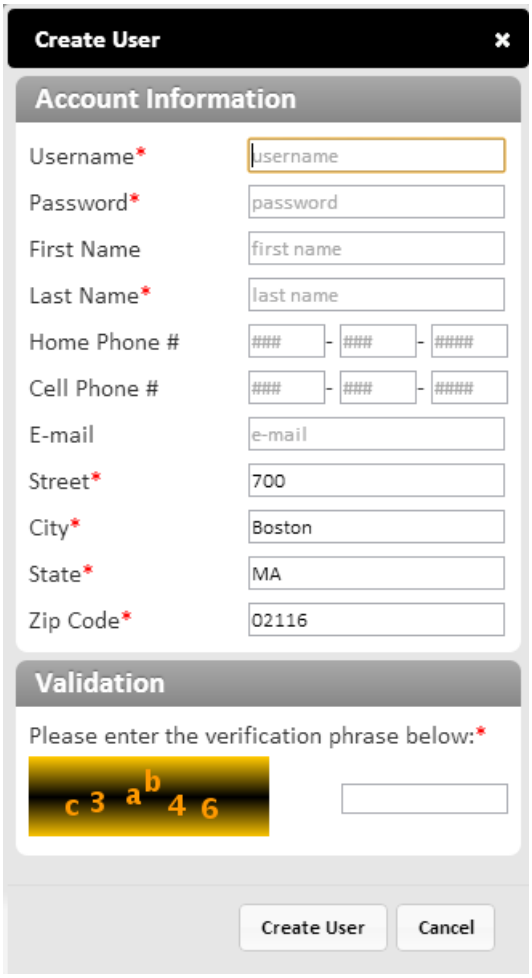


Figure 61: Create User

2. Complete the Account Information section of the form with your information.
3. In the Validation section, enter the characters that you see in the field.
4. Click **Create User**.