

# Air Route Planner

The screenshot shows a web application titled "Route Planner". It features a sidebar on the left with navigation links: "File", "Routes", and "Airports". The main content area is divided into two sections. The top section contains input fields for "Origin Airport" (set to "ATL") and "Destination Airport" (set to "ATL"), each with a "More Info" button. Below these are "Filters", "Categories", and "Subcategories" dropdown menus, and a "Find" button. The bottom section displays a table of flight routes. The table has columns: "Route #", "Origin", "Destination", "Dept. Time", "Arrival Time", "Airline", and "Cost". The table lists 14 routes, including flights from ATL to JFK, ORL to ATL, and DCA to JFK, among others. A second, empty table structure is visible below the first one.

Route #	Origin	Destination	Dept. Time	Arrival Time	Airline	Cost
1	ATL	JFK	800	1100	DELTA	\$184.0
2	ATL	JFK	1430	1800	UNITED	\$230.0
3	ORL	JFK	830	1230	DELTA	\$325.0
4	ORL	ATL	1000	1100	UNITED	\$150.0
5	ORL	ATL	820	930	DELTA	\$125.0
6	ORL	DCA	730	1100	UNITED	\$230.0
7	ORL	DCA	900	1120	DELTA	\$240.0
8	DCA	JFK	1200	1330	UNITED	\$140.0
9	JFK	ATL	800	1100	DELTA	\$184.0
10	JFK	ATL	1430	1800	UNITED	\$230.0
11	JFK	ORL	830	1230	DELTA	\$325.0
12	ATL	ORL	1000	1100	UNITED	\$150.0
13	ATL	ORL	820	930	DELTA	\$125.0
14	DCA	ORL	730	1100	UNITED	\$230.0

## Operations Manual

- The Filter information and errors are displayed in the “Additional Filtered Information” section of the Home screen.



Highest cost between ATL and ORL filter applied.

By selecting the “More Info” Button, Route and Airline information will populate the “Input File Data” and “Filtered Data” section of the Home screen.

# Filtering Parameters

The “Filtering Parameters” section of the Home screen is the main control for the application.

Origin Airport: DCA [More Info]

Destination Airport: YES [More Info]

Filters

Categories: Cost

Subcategories: Lowest

[Find]

From here we can select the arrival and destination airport and apply a filter based on a selected search criteria. Once selected and the “Find” button is clicked the following occur:

- The optimal search criteria information is displayed in the “Input File Data” section of the Home screen.

Directly reachable Airports:  
BWI DCA  
Routes that depart from YES :  
18 20 24  
Routes that arrive at YES :  
17

- The resultant filtered results are returned in the “Filtered Data” section of the Home screen.

Route #	Origin	Destination	Dept. Time	Arrival Time	Airline	Cost
Departing						
18	YES	DCA	1500	1600	AIR TRAN	\$190.0
20	YES	BWI	1150	1300	DELTA	\$190.0
24	YES	BWI	301	401	DELTA	\$180.0
Arriving						
17	DCA	YES	1300	1340	UNITED	\$120.0

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# Introduction

This Operations Manual is applicable for the Air Route Planner system. This manual will show a step by step process on how to properly navigate and use the Air Route.

## Who Should Use the Air Route Planner Operations Manual?

The Air Route Planner Operations Manual is designed for use by those who download the Air Route Planner system. This manual shall give those operating the program a better understanding of the function and versatility of the program. The Air Route Planner Operations Manual is created to provide a pleasurable, facilitative experience for those who intend to utilize the full potential of the Air Route Planner program.

## Organization

**Installation:** This section is intended to assist users in installing and setting up the program for first-time use.

**Home Screen:** The purpose of this sections is to explain to the user the functionality of the main screen.

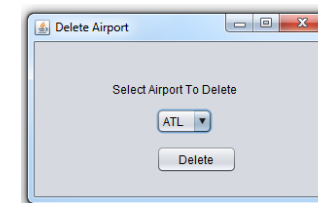
**Menu Bar:** This section is explains the options given in the menu bar portion of the Home screen.

**Filtering Parameters:** This section explains how to apply filters and explains information in the Home screen main user interface.

The user can add airports from this dialog box by entering the airport code into the text boss. Upon clicking “Add”, the new airport information will be added to the input database file.

## Deleting an existing Airport

In order to remove an airport, click on the “Delete Airport” under the airports menu option. A new window should pop up with information needed to develop a new route:



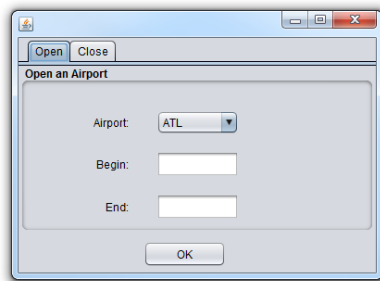
The user can remove existing airports from this dialog box by selecting the appropriate airport from the dropdown menu and selecting “Delete”. Upon clicking, the selected airport will be removed from the input database.

## Airports

The Airports menu allows the user to Open or Close an airport, Create a new airport and Delete existing airports.

### Open or Closing an Airport

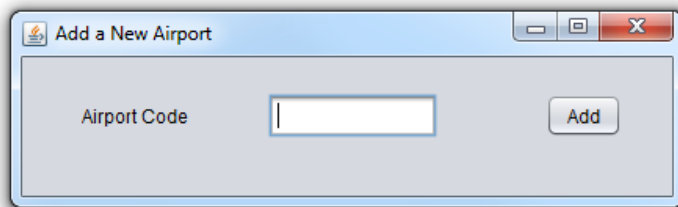
In order to Open or Close an airport, click on the “Open/Close Airport” under the airports menu option. A new window should pop up with information needed to develop a new route:



The user can open or close airports from this dialog box by selecting the appropriate tab and updating the airport information. Upon clicking “OK”, the new airport information will be added to the input database file.

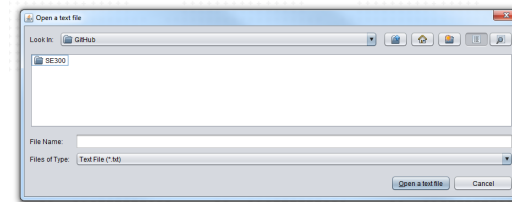
### Creating a New Airport

In order to Create a new Airport, click on the “Create New Airport” under the airports menu option. A new window should pop up with information needed add a new airport:

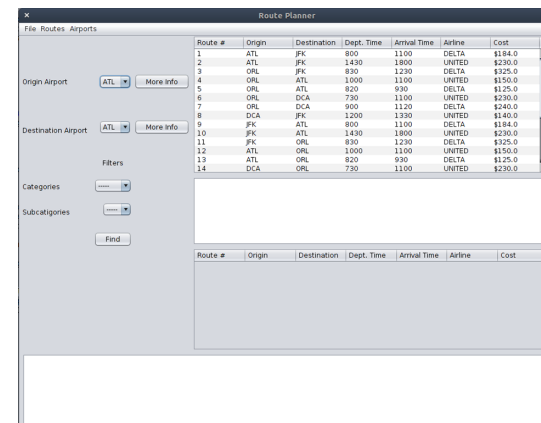


# Installation

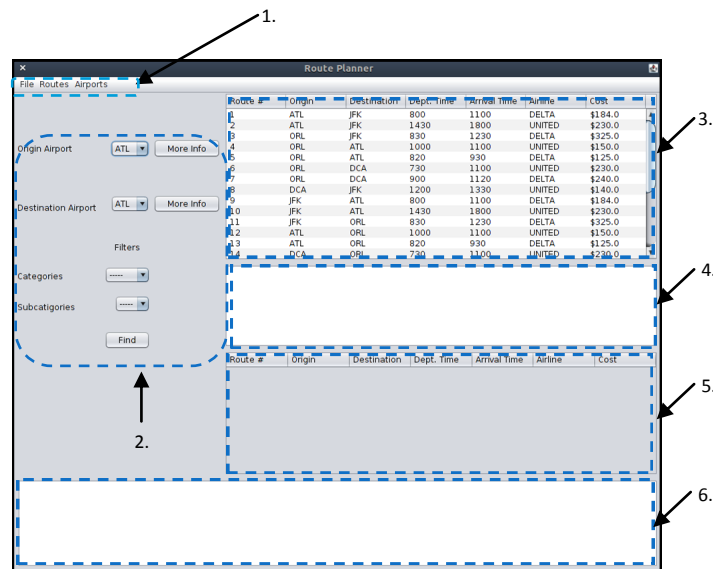
In order to start up the Air Route Planner find and execute the application icon located in the corresponding installation folder. The next screen asks the user for an input file that contains the Airport and Route information.



You will find yourself at the programs home screen after the application has loaded the input file. From here you can access the application’s route and airport planning and management functionality. This home screen will be the main screen used to view air route information.



# Home Screen

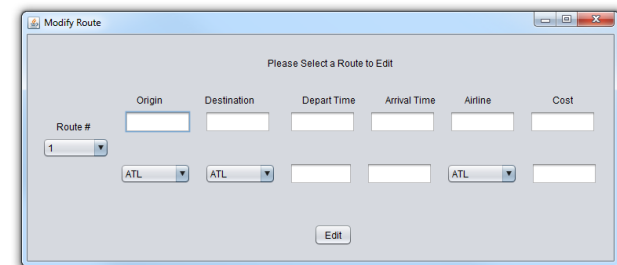


1. Menu Bar:
2. Filtering Parameters
3. Input File Data
4. Airport/Route Information
5. Filtered Data
6. Additional Filtered Information

Select the corresponding route you want to remove and click on “Delete”. The selected route will be removed from the input data-base file and the route #'s will be automatically updated.

## Edit Route

In order to Edit a route, click on the “Edit Route” under the “Routes” menu option. A new window should pop up with information needed to modify an exiting route:



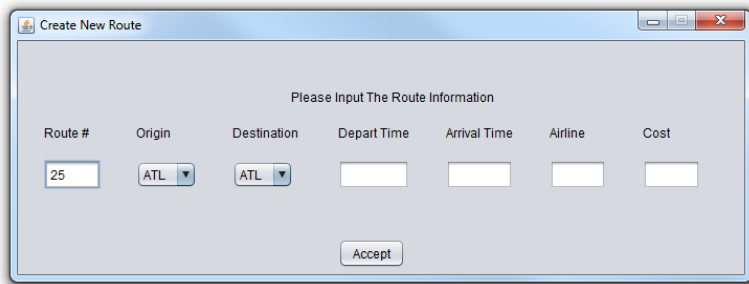
The user can edit existing route information in this dialog box. Upon clicking “Edit”, the new route information will overwrite the existing route information and the input database file will be updated.

## Routes

The Routes menu allows the user to Create, Delete or Edit pre-existing routes.

### Creating a New Route

In order to Create a new route, click on the “Create New Route” under the “Routes” menu option. A new window should pop up with information needed to develop a new route:

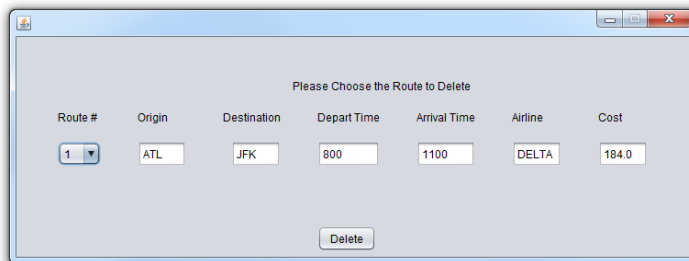


A dialog box titled "Create New Route" with a close button in the top right corner. The main area contains the text "Please Input The Route Information". Below this is a form with seven fields: "Route #" (text box with "25"), "Origin" (dropdown menu with "ATL"), "Destination" (dropdown menu with "ATL"), "Depart Time" (text box), "Arrival Time" (text box), "Airline" (text box), and "Cost" (text box). An "Accept" button is located at the bottom center.

The user can input route information into this dialog box. Upon clicking “Accept”, the new route information will be added to the input database file and the route # will be automatically updated.

### Deleting a Route

In order to Delete a route, click on the “Delete Route” under the “Routes” menu option. A new window should pop up with information needed to remove an existing route:



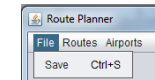
A dialog box titled "Please Choose the Route to Delete". It contains a table with the following data:

Route #	Origin	Destination	Depart Time	Arrival Time	Airline	Cost
1	ATL	JFK	800	1100	DELTA	184.0

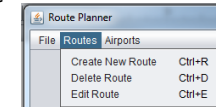
Below the table is a "Delete" button.

## Menu Bar

The menu bar has 3 options with their respective subcategories:



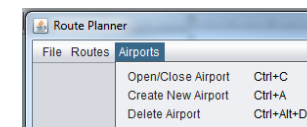
Save – Offers the user the ability to save any modifications made to the input file.



Create New Route—Allows the user to amend the input file by adding a new route.

Delete Route—Allows the user to delete a route from the input file.

Edit Route—Allows the user to modify pre-existing route information in the input file.



Open/Close Airport—Allows the user to update Airport status.

Create New Airport—Allows the user to add an airport to the input file.

Delete Airport—Allows the user to remove an airport from the input file.