

## Use Cases

### Use Case 1: Login

#### Actors:

- Primary  
Clerk/Manager

#### Preconditions:

- No preconditions apply

#### Postconditions:

- User is now logged in to system

#### Success scenario:

1. Clerk enters log in credentials
2. Client sends credentials to the server to be verified
3. Server returns log in resolution and user details back to client
4. Client displays user information and unlocks GUI for use

#### Exception Scenario (3a):

1. Server returns user input error back to client
2. Client displays error to user
3. Client reopens the log in panel for user

## Use Case 2: Log out

### Actors:

- Primary  
Clerk/Manager

### Preconditions:

- User is logged in to system

### Postconditions:

- User is no longer logged in to system

### Success scenario:

1. User clicks the log out button
2. Client logs user out
3. Client displays the login page to the user

## Use Case 3: Customer Price Update

### Actors:

- Primary  
Clerk/Manager

### Preconditions:

- User is logged into system

### Postconditions:

- No Postconditions

### Success scenario:

1. User selects the customer price update button from the system button tray
2. Client displays customer price update fields to user
3. User inputs relevant data for the update
4. User submits the data
5. Client validates the data being sent
6. Client send the event data to the server to process
7. Server processes event
8. Server return a confirmation to the client
9. Client displays confirmation event to the user
10. Server logs the event in the database

### Exception Scenario (5a):

1. Client finds data to be invalid
2. Client notifies the user of the areas where invalid entries are and prompts re-entry

## Use Case 4: Transport Cost Update

### Actors:

- Primary  
Clerk/Manager

### Preconditions:

- User is logged into the system

### Postconditions:

- No Postconditions

### Success scenario:

1. User selects the transport cost update button from the button tray
2. Client displays transport cost update fields to user
3. User inputs relevant transport cost update data
4. User submits form
5. Client validates the form inputs
6. Client sends the event to the server
7. Server processes the event and updates route map
8. Server returns confirmation to the client
9. Client displays confirmation event to user
10. Server logs the event in database

### Exception Scenario (5a):

1. Client finds data to be invalid
2. Client notifies the user of the areas where invalid entries are and prompts re-entry

## Use Case 5: Mail Delivery Request

### Actors:

- Primary  
Clerk/Manager

### Preconditions:

- User is logged into the system

### Postconditions:

- No Postconditions

### Success scenario:

1. User selects the mail delivery button from the button tray
2. Client displays mail delivery fields to user
3. User inputs relevant mail delivery data
4. User submits form
5. Client validates the form inputs
6. Client sends the event to the server
7. Server calculates cheapest and fastest routes for the delivery
8. Server sends possible cheapest and fastest routes back to client
9. Client asks user to select route to take
10. User selects route
11. Client sends route to server
12. Server returns confirmation message back to the client
13. Client displays confirmation back to user

### Exception Scenario (5a):

1. Client finds data to be invalid
2. Client notifies the user of the areas where invalid entries are and prompts re-entry

### Exception Scenario (7a):

1. Server finds no possible routes for the delivery
2. Server returns error to the client
3. Client displays route error to user and prompts re-entry

## Use Case 6: Transport Route Discontinuation

### Actors:

- Primary  
Clerk/Manager

### Preconditions:

- User is logged into the system

### Postconditions:

- No Postconditions

### Success scenario:

1. User selects the transport discontinuation button from the button tray
2. Clients displays transport discontinuation fields to user
3. User inputs relevant transport discontinuation data
4. User submits data
5. Client validates form inputs
6. Client sends event to the server
7. Server processes the event and updates the route map
8. Server sends confirmation message back to client
9. Client displays confirmation message to user

### Exception Scenario (5a):

1. Client finds data to be invalid inputs
2. Client notifies the user of the invalid areas input and prompts re-entry

## Use Case 7: View Accounting Figures

### Actors:

- Primary  
Clerk/Manager

### Preconditions:

- User is logged into the system

### Postconditions:

- No Postconditions

### Success scenario:

1. User selects the accounting figures button from the button tray
2. Client requests accounting figures from the server
3. Server calculates accounting figures from events
4. Server send accounting figures back to client
5. Client displays business figures to user

## Use Case 8: View Mail Statistics

### Actors:

- Primary  
Clerk/Manager

### Preconditions:

- User is logged into the system

### Postconditions:

- No Postconditions

### Success scenario:

1. User selects the mail statistics button from the button tray
2. Client displays mail statistics inputs to the user
3. User inputs relevant mail statistics options
4. User selects query button
5. Client sends form data to the server
6. Server calculates mail statistics
7. Server sends statistics back to client
8. Client displays statistics to the user



## Use Case 9: View Event Logs

Actors:

- Primary  
Manager

Preconditions:

- Manager is logged into the system

Postconditions:

- No Postconditions

Success scenario:

1. Manager selects event navigation button from the button tray
2. Client requests most recent event data from server
3. Server calculates business figures for most recent event
4. Server returns most recent event data and statistics to client
5. Client displays most recent event and data to user
6. Client displays number of events and navigation option to user

## Use Case 10: View Critical Routes

### Actors:

- Primary Manager

### Preconditions:

- Manager is logged into the system

### Postconditions:

- No Postconditions

### Success scenario:

1. Manager selects critical routes button from button tray
2. Client requests critical event data from server
3. Server calculates list of critical routes
4. Server returns critical route list to client
5. Client displays list of critical routes to user