

RDT Use Cases

Use Case: Upload RDT

Precondition: User must be authenticated with a token

1. User navigates to the RDT Manager page from the left side bar
2. The user highlights the RDT files and selects upload at bottom of page
3. System copies files to the server to be used with one or more devices

Exceptions:

2.1 [User excludes one or more required files belonging to the RDT]

2.1.1 System advises user of incorrect files necessary for RDT use

2.1.2 User can go back to upload page and re-select required files for upload

Postconditions:

Successful upload:

All proper files necessary for RDT are copied to the server for use within an application bundle on one or more devices

Unsuccessful upload:

No files copied to server

Use Case: Manipulate RDT

Precondition: User must be authenticated with a token

1. User navigates to the Application Page and clicks on the RDT button
2. The RDT handler for the application is triggered by the event and sends a request to the server to manipulate the RDT and the given function to call
3. The device is fetched on the server
4. The device's rdt is accessed on the server
5. The particular function specified in the Application is called on the RDT
6. The RDT returns the new value of that RDT to the calling application

Exceptions:

4.1 [User is manipulating an RDT that is not available in the simulation]

4.1.1 The RDT cannot be accessed on the server because it does not exist

4.1.2 The value to be returned by the server is set to 'Not available'

Postconditions:

Successful upload:

All proper files necessary for RDT are copied to the server for use within an application bundle on one or more devices

Unsuccessful upload:

No files copied to server

Application Use Cases

Use Case: Upload Application

Precondition: User must be authenticated with a token

1. User navigates to the Application Manager page from the left side bar
2. The user highlights the application bundle files and selects upload at bottom of page
3. The system checks the RDTs required for the application
4. System copies files to the server to be run on one or more devices

Exceptions:

2.1 [User excludes one or more required files belonging to the application bundle]

2.1.1 System advises user of incorrect files necessary for application deployment

2.1.2 User can go back to upload page and re-select files for upload

3.1 [RDT that application requires is not yet imported into the simulation]

3.1.1 The system informs the user of which RDTs have not yet been imported and tells them to import the RDTs manually using the RDT Manager

3.1.2 The user can go into the RDT manager to manually import the required RDT

Postconditions:

Successful upload:

All files necessary for the application are copied to the server for use on one or more devices

Unsuccessful upload:

No files copied to server

Use Case: Deploy Application

Preconditions: User must be authenticated and have uploaded at least one application bundle

The user clicks the Application Manager link on the left hand side

A list of application bundles will show on the top of the page. A list of devices is shown with each bundle with the option to deploy an application to a device.

The user notes which device they want to deploy the application and click the deploy button next the device name

The application is deployed onto the device on the server

Postconditions:

Successful deployment:

The desired application is deployed and ready for use within the simulation

Unsuccessful deployment:

No application is deployed for use within the simulation

Use Case: Reverse Deployment of an Application

Preconditions: User must be authenticated and have uploaded at least one application bundle

1. The user clicks the Application Manager link on the left hand side
2. A list of application bundles will show on the top of the page. If the application is deployed to the device the user has the option to Reverse the Deployment
3. The user notes which device they want to reverse the deploy of the application and click the "Reverse Deployment" button next the device name
4. The application is removed from the the device on the server

Postconditions:

Successful reverse deployment:

The desired application is removed from the particular device. They no longer have access to that application

Unsuccessful deployment:

No application is removed

Use Case: Run Application

preconditions: User must be authenticated, and have already uploaded and deployed application

1. The user clicks on the “My Device” link on the left hand side bar.
2. The user clicks on the “My Apps” Link on the next page shown on the sidebar
3. A list of applications that have been uploaded and deployed will be listed. The user can then click the “launch” button next to the desired application to run it.
4. The user is brought to the application landing page

Exceptions:

- 4.1 The user does not have permission to view that particular application
 - 4.1.1 The user is taken to an error page indicating that they do not have permission to view the application
 - 4.1.2 The user must go back the the application list and either wait to be given permission to the application.
 - 4.1.3 The user must go back and use another application that they have access to

Postconditions:

Successful launch:

The desired application is ran and ready for use

Unsuccessful launch:

No application is ran for use