## **API Reference**

# ICBC Flex Work, by Team Flex

API Version: 1.0.0

ICBC Flex Work REST Back End, End Points for Employee and Admin Use Cases

## **INDEX**

1. ADMIN	3
1.1 POST /admin/upload-floor-data	3
1.2 POST /admin/upload-floorplan-image	3
1.3 POST /admin/login	3
1.4 GET /admin/locations	4
1.5 POST /admin/locations	4
1.6 DELETE /admin/locations	5
1.7 GET /admin/floors	5
1.8 PUT /admin/floors	5
1.9 POST /admin/floors	6
1.10 DELETE /admin/floors/{id}	6
1.11 GET /admin/workspaces/{floorId}	7
1.12 DELETE /admin/deleteWorkspace/{id}	7
1.13 PUT /admin/workspaces/{id}	7
1.14 POST /admin/workspacefeature/add	8
1.15 POST /admin/workspacefeature/delete	8
1.16 POST /admin/reset-features	8
2. OFFICEBOOKING	10
2.1 GET /floors	10
2.2 GET /features	10
2.3 GET /locations	10
2.4 GET /packages	11
<pre>2.5 GET /availabilities/top/{amount}</pre>	11
2.6 GET /availabilities	12
2.7 POST /lockWorkspace	13
2.8 DELETE /lockWorkspace/{id}	13
2.9 GET /bookings	14
2.10 POST /bookings	15
2.11 DELETE /bookings/{id}	15
3. OFFICELENDING	16
3.1 GET /features	16
3.2 GET /locations	16
3.3 POST /availabilities	16
3.4 GET /availabilities/owner	17
3.5 DELETE /availabilities/{id}	18

## API

## 1. ADMIN

As an ICBC facility admin, manage locations and floor plans, workspace features, and more

## 1.1 POST /admin/upload-floor-data

#### Upload a CSV of a floor's workspaces

Upload a CSV containing information about each workspace on a floor (owner and features)

#### **REQUEST**

#### FORM DATA PARAMETERS

NAME	TYPE	DESCRIPTION
floorId	integer	
floorData	ta string(binary)	

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Something went wrong

RESPONSE MODEL - text/plain

string

## 1.2 POST /admin/upload-floorplan-image

Upload a JPG floor plan for a specific floor

#### **REQUEST**

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION
floorId	integer	
floorplanImage string(binary)		

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Something went wrong

RESPONSE MODEL - text/plain

string

## 1.3 POST /admin/login

Login to admin portal

#### **REQUEST**

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION
password	string	

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation

RESPONSE MODEL - application/json

{
    message string
    token string
}

STATUS CODE - 403: Forbidden

RESPONSE MODEL - text/plain

string
```

#### 1.4 GET /admin/locations

A list of all the location names

#### **REQUEST**

No request parameters

#### **RESPONSE**

**STATUS CODE - 200:** Successful Operation **RESPONSE MODEL - application/json**[string]

#### 1.5 POST /admin/locations

Add a location

#### **REQUEST**

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION
locationName	string	

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Empty String, All Whitespaces, or Duplicate Name

RESPONSE MODEL - text/plain

string

## 1.6 DELETE /admin/locations

#### **Delete a location**

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
*locationName string		Location Name

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Bad Request

RESPONSE MODEL - text/plain

string

## 1.7 GET /admin/floors

#### **Gets list of floors**

## **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
*city	string	City Name

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

**RESPONSE MODEL - application/json** 

[string]

### 1.8 PUT /admin/floors

#### Updates a floor

## **REQUEST**

### FORM DATA PARAMETERS

NAME	TYPE	DESCRIPTION
floorId	integer	
floorNo	integer	
building	string	
city	string	
location	string	

```
STATUS CODE - 200: Successful Operation

RESPONSE MODEL - application/json
{
    floorId integer
}

STATUS CODE - 400: Bad Request

RESPONSE MODEL - text/plain
string
```

## 1.9 POST /admin/floors

Adds a new floor

### **REQUEST**

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION
floorNo	integer	
building	string	
city	string	
location	string	
floorplanImage	e string(binary)	

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation
RESPONSE MODEL - application/json
{
    floorId integer
}
```

## 1.10 DELETE /admin/floors/{id}

**Delete a Floor** 

#### **REQUEST**

#### **PATH PARAMETERS**

NAME	TYPE	DESCRIPTION
*id	integer	Floor Id

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

## 1.11 GET /admin/workspaces/{floorId}

#### Gets list of workspaces

#### **REQUEST**

#### **PATH PARAMETERS**

NAME	TYPE	DESCRIPTION
*floorId	integer	Floor Id

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation
```

```
RESPONSE MODEL - application/json
```

```
[ {
Array of object:
} ]
```

## 1.12 DELETE /admin/deleteWorkspace/{id}

#### Delete a Workspace

## **REQUEST**

#### **PATH PARAMETERS**

NAME TYPE		DESCRIPTION
*id	string	Workspace Id

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

## 1.13 PUT /admin/workspaces/{id}

Updates a workspace

#### **REQUEST**

#### **PATH PARAMETERS**

NAME	TYPE	DESCRIPTION
*id	string	Workspace Id

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION			
email	string				

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

#### RESPONSE MODEL - text/plain

string

## 1.14 POST /admin/workspacefeature/add

#### Add a workspace feature

#### **REQUEST**

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION
workspaceId	string	
featureName	string	

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Bad Request

RESPONSE MODEL - text/plain

string

## 1.15 POST /admin/workspacefeature/delete

#### Delete a workspace feature

#### **REQUEST**

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION
workspaceId	string	
featureName	string	

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Bad Request

RESPONSE MODEL - text/plain

string

#### 1.16 POST /admin/reset-features

#### Resets the list of features to a custom specified list

Sets the list of features in the system. Previous features that do not exist in this list are deleted, and new features are added. Does not affect features that exist both previously and in this list

#### **REQUEST**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Bad Request

## 2. OFFICEBOOKING

As an ICBC employee, make a Booking on an office in any ICBC location

#### 2.1 GET /floors

Get either floor information of all floors, floorId, or by location

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
floorId	number	
location	string	

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

#### 2.2 GET /features

Get features by availabilityId, workspaceId, or all features if no params

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
availabilityId	number	
workspaceId	string	

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

**RESPONSE MODEL - application/json** 

[string]

#### 2.3 GET /locations

A list of all the location names

#### **REQUEST**

No request parameters

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

**RESPONSE MODEL - application/json** 

[string]

### 2.4 GET /packages

#### Finds Availabilities or Booking Suggestion Packages

Finds Availabilities, filtered by start and end dates, optional location (desired floor IDs), and optional required features. will use multiple eligible offices to suggest a booking package if a single desk is not available for the duration.

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
*startDate	date	
*endDate	date	
floorIds	array of number	
features	array of number	

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation
```

STATUS CODE - 400: Bad Request

## 2.5 GET /availabilities/top/{amount}

Finds top availabilities, not filtered

#### **REQUEST**

#### **PATH PARAMETERS**

NAME	TYPE	DESCRIPTION
*amount	number	

#### **RESPONSE**

#### STATUS CODE - 200: Successful Operation

## RESPONSE MODEL - application/json

```
[ {
Array of object:
  availabilityId integer
  startDate
                    string
  endDate
                    string
  workspaceId
                    string
  workspaceName
                    string
  floorId
                    integer
  location
                    string
  bookings [{
  Array of object:
     bookingId
                  integer
     startDate
                  string
     endDate
                  string
```

```
user {
    staffId integer
    email string
    firstName string
    lastName string
    department string
    valid boolean
    }
}]
```

STATUS CODE - 400: Bad Request

## 2.6 GET /availabilities

Finds Availabilities, filtered by various properties, of which startDate and endDate are required

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
*startDate	date	The first date of the search range
*endDate	date	The last date of the search range
location	string	Office building location
floor	string	Floor of building
features	array of string	Features to filter by

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation
```

#### **RESPONSE MODEL - application/json**

```
[{
Array of object:
  availabilityId integer
  startDate
                   string
  endDate
                   string
  workspaceId
                   string
  workspaceName
                   string
  floorId
                   integer
  location
                   string
  bookings [{
  Array of object:
     bookingId
                 integer
     startDate
                 string
     endDate
                 string
     user {
       staffId
                   integer
       email
                   string
       firstName string
       lastName
                   string
       department string
       valid
                   boolean
     }
```

```
}]
```

STATUS CODE - 400: Bad Request

### 2.7 POST /lockWorkspace

Temporarily lock a Booking as the User enters confirmation page

#### **REQUEST**

#### FORM DATA PARAMETERS

NAME	TYPE	DESCRIPTION
availabilityId	integer	
staffId	integer	
startDate	string	
endDate	string	

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation
```

```
RESPONSE MODEL - application/json
  bookingId
              integer
  startDate
              string
  endDate
              string
  user {
    staffId
                integer
    email
                string
    firstName string
    lastName string
    department string
    valid
             boolean
  }
}
```

STATUS CODE - 400: Bad Request

STATUS CODE - 403: Locking of booking unsuccessful

## 2.8 DELETE /lockWorkspace/{id}

#### Unlocks a Booking before the 20 minute automatic unlock

For when the User navigates away from the confirmation page or closes the browser tab.

#### **REQUEST**

#### PATH PARAMETERS

NAME TYPE	DESCRIPTION
*id intege	r ID of the Booking to delete

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Bad Request

## 2.9 GET /bookings

Finds Bookings by User ID

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
*staffId	integer	The ID of the User

#### **RESPONSE**

#### STATUS CODE - 200: Successful Operation

```
RESPONSE MODEL - application/json
```

```
Array of object:
  bookingId
                   integer
  startDate
                   string
  endDate
                   string
  user {
    staffId
                integer
    email
                string
    firstName string
    lastName
                string
    department string
    valid
                boolean
  }
  availabilityId
                  integer
  workspace {
    workspaceId string
    staff {
       staffId
                 integer
       email
                 string
       firstName string
       lastName
                  string
       department string
       valid
                  boolean
    }
    floor {
       floorId
                    integer
       floorName
                    string
       location
                    string
       city
                    string
                    string
       building
       floorPlanUri string
    features
                  [string]
  }
```

## 2.10 POST /bookings

Confirm a temporarily locked Booking

#### **REQUEST**

#### **FORM DATA PARAMETERS**

NAME	TYPE	DESCRIPTION
bookingId integer		

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation
```

```
RESPONSE MODEL - application/json

{
    bookingId integer
    startDate string
    endDate string
    user {
        staffId integer
        email string
        firstName string
        lastName string
        department string
        valid boolean
    }
}
```

STATUS CODE - 400: Bad Request

## 2.11 DELETE /bookings/{id}

Cancel an upcoming Booking

#### **REQUEST**

#### **PATH PARAMETERS**

NAME	TYPE	DESCRIPTION
*id	integer	ID of the Booking to delete

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Bad Request

## 3. OFFICELENDING

As an ICBC office owner, create Availabilities for fellow employees

#### 3.1 GET /features

Get features by availabilityId, workspaceId, or all features if no params

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
availabilityId number		
workspaceId	string	

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

**RESPONSE MODEL - application/json** 

[string]

#### 3.2 GET /locations

A list of all the location names

#### **REQUEST**

No request parameters

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

RESPONSE MODEL - application/json

[string]

#### 3.3 POST /availabilities

Create an Availability (mark a workspace as available)

#### **REQUEST**

## FORM DATA PARAMETERS

NAME	TYPE	DESCRIPTION
startDate	string	
endDate	string	
workspaceId	l string	
comment	string	

```
STATUS CODE - 200: Successful Operation
 RESPONSE MODEL - application/json
    availabilityId integer
    startDate
                      string
    endDate
                      string
    workspaceId
                      string
    workspaceName
                      string
    floorId
                      integer
    location
                      string
    bookings [{
    Array of object:
       bookingId
                    integer
       startDate
                    string
       endDate
                    string
       user {
         staffId
                      integer
         email
                      string
         firstName
                      string
         lastName
                      string
         department string
         valid
                      boolean
       }
    }]
 }
STATUS CODE - 400: Bad Request (Incorrect Request Body)
STATUS CODE - 403: Forbidden (Conflicting Dates)
```

#### 3.4 GET /availabilities/owner

#### Finds Availabilities by the Staff ID of the owner

The Availabilities of the Workspace(s) associated with the Staff ID will be found.

#### **REQUEST**

#### **QUERY PARAMETERS**

NAME	TYPE	DESCRIPTION
*id	integer	the Staff ID of the office owner

#### **RESPONSE**

```
STATUS CODE - 200: Successful Operation

RESPONSE MODEL - application/json

[{
    Array of object:
        availabilityId integer
        startDate string
        endDate string
        workspaceId string
```

```
workspaceName
                   string
  floorId
                   integer
  location
                   string
  bookings [{
  Array of object:
    bookingId
                 integer
    startDate
                 string
    endDate
                 string
    user {
       staffId
                   integer
       email
                   string
       firstName
                   string
       lastName
                   string
       department string
       valid
                   boolean
    }
  }]
}]
```

STATUS CODE - 400: Bad Request

## 3.5 DELETE /availabilities/{id}

**Cancel an Availability** 

## **REQUEST**

#### **PATH PARAMETERS**

NAME	TYPE	DESCRIPTION
*id	integer	ID of the Availability to delete

#### **RESPONSE**

STATUS CODE - 200: Successful Operation

STATUS CODE - 400: Bad Request