

### 

[**1.0 Amazon API Gateway**](#_ienm4jalnxes) **3**

[**2.0 Data related to Beacon**](#_l9h2ou3mpofa) **3**

[**3.0 Data related to Facility**](#_f87swg4z75j8) **6**

[**4.0 Data related to Unit**](#_sr2bz6qijlqe) **8**

[**5.0 Data related to BeaconDirection**](#_49ofny6fwvaj) **10**

[**6.0 Data related to BeaconRelation**](#_rh1zinggj3px) **12**

[**7.0 Data related to BeaconUnit**](#_pf3dp0niw1hx) **14**

[**8.0 Data related to FacilityUnit**](#_w343q0c7apu6) **16**

[**9.0 Data related to Image**](#_8a9klhfeskxe) **18**

### 

### **1.0 Amazon API Gateway**

It is used for connecting to our mobile and web applications to APIs that run on AWS Lambda and retrieve data from the Relational Database Service. We will be using POST method API call which has a request paths called ‘type’ and URL Query String Parameters called ‘action’.

Here’s an example how they will be used. When our mobile and web application requires all Beacon data, they will pass in the request paths ‘type’ as ‘Beacon’ and ‘action’ as ‘getBeacon’.

### **2.0 Data related to Beacon**

All Request Paths: “type” = “Beacon”

**GET** all Beacon data:

Request: /Beacon?action=getBeacon

Query Strings: “action” = “getBeacon”

Request Body: {}

**GET** the data of the Beacons to map the route:

Request: /Beacon?action=getBRoute

Query Strings: “action” = “getBRoute”

Request Body: {}

**GET** a specific Beacon data:

Request: /Beacon?action=getBeaconById

Query Strings: “action” = “getBeaconById”

Request Body: {

"Beacon": {

"BeaconID": { "type": "integer" }

}

}

**Update** a specific Beacon data:

Request: /Beacon?action=putBeacon

Query Strings: “action” = “putBeacon”

Request Body: {

"Beacon": {

"UUID": { "type": "string" },

"Major": { "type": "integer" },

"Minor": { "type": "integer" },

"TurningPoint": { "type": "integer" },

"BeaconID": { "type": "integer" }

}

}

**Update** the Toggle in a specific Beacon data:

Request: /Beacon?action=putToggle

Query Strings: “action” = “putToggle”

Request Body: {

"Beacon": {

"Toggle": { "type": "integer" },

"BeaconID": { "type": "integer" }

}

}

**Create** a new Beacon data:

Request: /Beacon?action=createBeacon

Query Strings: “action” = “createBeacon”

Request Body: {

"Beacon": {

"BeaconID": { "type": "integer" },

"UUID": { "type": "string" },

"Major": { "type": "integer" },

"Minor": { "type": "integer" },

"TurningPoint": { "type": "integer" },

"Toggle": { "type": "integer" }

}

}

**Delete** a specific Beacon data:

Request: /Beacon?action=deleteBeacon

Query Strings: ”action” = “deleteBeacon”

Request Body: {

"Beacon": {

"BeaconID": { "type": "integer" }

}

}

### **3.0 Data related to Facility**

All Request Paths: “type” = “Facility”

**GET** all Facility data:

Request: /Facility?action=getFacility

Query Strings: “action” = “getFacility”

Request Body: {}

**GET** a specific Facility data:

Request: /Facility?action=getFacilityById

Query Strings: “action” = “getFacilityById”

Request Body: {

"Facility": {

"FacilityID": { "type": "integer" }

}

}

**Update** a specific Facility data:

Request: /Facility?action=putFacility

Query Strings: “action” = “putFacility”

Request Body: {

"Facility": {

"FacilityName": { "type": "string" },

"FacilityInfo": { "type": "string" },

"FacilityID": { "type": "integer" },

"ImageUrl": { "type": "string" },

"Category": { "type": "string" },

"ImageID": { "type": "integer" },

"UnitID": { "type": "array" }

}

}

**Create** a new Facility data:

Request: /Facility?action=createFacility

Query Strings: “action” = “createFacility”

Request Body: {

"Facility": {

"FacilityName": { "type": "string" },

"FacilityInfo": { "type": "string" },

"ImageUrl": { "type": "string" },

"Category": { "type": "string" },

"UnitID": { "type": "array" }

}

}

**Delete** a specific Facility data:

Request: /Facility?action=deleteFacility

Query Strings: ”action” = “deleteFacility”

Request Body: {

"Facility": {

"FacilityID": { "type": "integer" }

}

}

### **4.0 Data related to Unit**

All Request Paths: “type” = “Unit”

**GET** all Unit data:

Request: /Unit?action=getUnit

Query Strings: “action” = “getUnit”

Request Body: {}

**GET** a specific Unit data:

Request: /Unit?action=getUnitById

Query Strings: “action” = “getUnitById”

Request Body: {

"Unit": {

"UnitID": { "type": "integer" }

}

}

**Update** a specific Unit data:

Request: /Unit?action=putUnit

Query Strings: “action” = “putUnit”

Request Body: {

"Unit": {

"UnitNo": { "type": "string" },

"Level": { "type": "integer" },

"Block": { "type": "string" },

"UnitName": { "type": "string" },

"UnitID": { "type": "integer" },

"ImageUrl": { "type": "string" },

"Category": { "type": "string" },

"ImageID": { "type": "integer" },

"BeaconID": { "type": "array" }

}

}

**Create** a new Unit data:

Request: /Unit?action=createUnit

Query Strings: “action” = “createUnit”

Request Body: {

"Unit": {

"UnitNo": { "type": "string" },

"Level": { "type": "integer" },

"Block": { "type": "string" },

"UnitName": { "type": "string" },

"ImageUrl": { "type": "string" },

"Category": { "type": "string" },

"BeaconID": { "type": "array" }

}

}

**Delete** a specific Unit data:

Request: /Unit?action=deleteUnit

Query Strings: ”action” = “deleteUnit”

Request Body: {

"Unit": {

"UnitID": { "type": "integer" }

}

}

### **5.0 Data related to BeaconDirection**

All Request Paths: “type” = “BeaconDirection”

**GET** all BeaconDirection data:

Request: /BeaconDirection?action=getBeaconDirection

Query Strings: “action” = “getBeaconDirection”

Request Body: {}

**GET** a specific BeaconDirection data:

Request: /BeaconDirection?action=getBeaconDirectionById

Query Strings: “action” = “getBeaconDirectionById”

Request Body: {

"BeaconDirection": {

"BDirectionID": { "type": "integer" }

}

}

**Update** a specific BeaconDirection data:

Request: /BeaconDirection?action=putBeaconDirection

Query Strings: “action” = “putBeaconDirection”

Request Body: {

"BeaconDirection": {

"CurrentBID": { "type": "integer" },

"PreviousBID": { "type": "integer" },

"NextBID": { "type": "integer" },

"DirectID": { "type": "integer" },

"Compass": { "type": "integer" },

"Note": { "type": "string" },

"BDirectionID": { "type": "integer" }

}

}

**Create** a new BeaconDirection data:

Request: /BeaconDirection?action=createBeaconDirection

Query Strings: “action” = “createBeaconDirection”

Request Body: {

"BeaconDirection": {

"CurrentBID": { "type": "integer" },

"PreviousBID": { "type": "integer" },

"NextBID": { "type": "integer" },

"DirectID": { "type": "integer" },

"Compass": { "type": "integer" },

"Note": { "type": "string" }

}

}

**Delete** a specific BeaconDirection data:

Request: /BeaconDirection?action=deleteBeaconDirection

Query Strings: ”action” = “deleteBeaconDirection”

Request Body: {

"BeaconDirection": {

"BDirectionID": { "type": "integer" }

}

}

### **6.0 Data related to BeaconRelation**

All Request Paths: “type” = “BeaconRelation”

**GET** all BeaconRelation data:

Request: /BeaconRelation?action=getBeaconRelation

Query Strings: “action” = “getBeaconRelation”

Request Body: {}

**GET** a specific BeaconRelation data:

Request: /BeaconRelation?action=getBeaconRelationById

Query Strings: “action” = “getBeaconRelationById”

Request Body: {

"BeaconRelation": {

"BeaconID": { "type": "integer" }

}

}

**Update** a specific BeaconRelation data:

Request: /BeaconRelation?action=putBeaconRelation

Query Strings: “action” = “putBeaconRelation”

Request Body: {

"BeaconRelation": {

"BeaconID": { "type": "integer" },

"NewBeaconID": { "type": "integer" },

"RelatedBeacon": { "type": "array" }

}

}

**Create** a new BeaconRelation data:

Request: /BeaconRelation?action=createBeaconRelation

Query Strings: “action” = “createBeaconRelation”

Request Body: {

"BeaconRelation": {

"BeaconID": { "type": "integer" },

"RelatedBeacon": { "type": "array" }

}

}

**Delete** a specific BeaconRelation data:

Request: /BeaconRelation?action=deleteBeaconRelation

Query Strings: ”action” = “deleteBeaconRelation”

Request Body: {

"BeaconRelation": {

"BeaconID": { "type": "integer" }

}

}

### **7.0 Data related to BeaconUnit**

All Request Paths: “type” = “BeaconUnit”

**GET** all BeaconUnit data:

Request: /BeaconUnit?action=getBeaconUnit

Query Strings: “action” = “getBeaconUnit”

Request Body: {}

**GET** a specific BeaconUnit data:

Request: /BeaconUnit?action=getBeaconUnitById

Query Strings: “action” = “getBeaconUnitById”

Request Body: {

"BeaconUnit": {

"UnitID": { "type": "integer" }

}

}

**Update** a specific BeaconUnit data:

Request: /BeaconUnit?action=putBeaconUnit

Query Strings: “action” = “putBeaconUnit”

Request Body: {

"BeaconUnit": {

"BeaconID": { "type": "integer" },

"UnitID": { "type": "integer" },

"BUID": { "type": "integer" }

}

}

**Create** a new BeaconUnit data:

Request: /BeaconUnit?action=createBeaconUnit

Query Strings: “action” = “createBeaconUnit”

Request Body: {

"BeaconUnit": {

"BeaconID": { "type": "integer" },

"UnitID": { "type": "integer" }

}

}

**Delete** a specific BeaconUnit data:

Request: /BeaconUnit?action=deleteBeaconUnit

Query Strings: ”action” = “deleteBeaconUnit”

Request Body: {

"BeaconUnit": {

"BUID": { "type": "integer" }

}

}

### **8.0 Data related to FacilityUnit**

All Request Paths: “type” = “FacilityUnit”

**GET** all FacilityUnit data:

Request: /FacilityUnit?action=getFacilityUnit

Query Strings: “action” = “getFacilityUnit”

Request Body: {}

**GET** a specific FacilityUnit data:

Request: /FacilityUnit?action=getFacilityUnitById

Query Strings: “action” = “getFacilityUnitById”

Request Body: {

"FacilityUnit": {

"FUID": { "type": "integer" }

}

}

**Update** a specific FacilityUnit data:

Request: /FacilityUnit?action=putFacilityUnit

Query Strings: “action” = “putFacilityUnit”

Request Body: {

"FacilityUnit": {

"FacilityID": { "type": "integer" },

"UnitID": { "type": "integer" },

"FUID": { "type": "integer" }

}

}

**Create** a new FacilityUnit data:

Request: /FacilityUnit?action=createFacilityUnit

Query Strings: “action” = “createFacilityUnit”

Request Body: {

"FacilityUnit": {

"FacilityID": { "type": "integer" },

"UnitID": { "type": "integer" }

}

}

**Delete** a specific FacilityUnit data:

Request: /FacilityUnit?action=deleteFacilityUnit

Query Strings: ”action” = “deleteFacilityUnit”

Request Body: {

"FacilityUnit": {

"FacilityID": { "type": "integer" }

}

}

### **9.0 Data related to Image**

All Request Paths: “type” = “Image”

Request: /Image?action=getImage

Query Strings: ”action” = “getImage”

Request Body: {}