# API Documentation



API Documentation

# THIS ONBOARDING DOCUMENT CONTAINS1. AUTHENTICATION AND AUTHORIZATION1

	1.1.	Login (POST /login)1
	1.2.	Refresh token (POST /getCredentialsWithRefreshToken)2
	1.3.	Forgot Password (POST user/{userName}/forgotPassword)2
	1.4.	Confirm Forgot Password (POST /user/confirmForgotPassword)
2.	TAC	S SPECIFIC OPERATIONS:
	2.1.	Create Tag (POST /tag) 4
	2.2.	Get Tag Details (GET /tag/{TagID})5
	2.3.	Edit Tag (PUT /tag)6
	2.4.	Delete Tag (DELETE /tag/{TagID})7
	2.5.	Search Tags (POST /tagsAurora)8
	2.6.	List Unassigned Tags (GET /allUnassignedTags)10
3.	ASS	ET SPECIFIC OPERATIONS:
	3.1.	Create Asset (POST /asset)
	3.2.	Get Asset Details (GET /assetDetails/{AssetID})12
	3.3.	Edit Asset (PUT /asset)13
	3.4.	Delete Asset (DELETE /asset/{AssetId})14
	3.5.	Search Assets (POST /assets)15
	3.6.	List Unassigned Assets (GET /allUnassignedAssets)17
	3.7.	Get Asset History (POST /getAssetHistory)18
4.	LOC	CATION SPECIFIC OPERATIONS:19
	4.1.	Create Location (POST /location)

	4.2.	Get Location Details (GET /location/{LocationID})	21
	4.3.	Edit Location (PUT /location)	22
	4.4.	Delete Location (DELETE /location/{LocationId})	24
	4.5.	Search Locations (POST /locationsAurora)	25
	4.6.	List all Locations (GET /listAllLocations)	27
5.	LO	CATOR SPECIFIC OPERATIONS:	28
	5.1.	Create Locator (POST /locators)	28
	5.2.	Edit Locators (PUT /locator)	31
	5.3.	Delete Locator (DELETE /locator/{LocatorId})	33
	5.4.	Search Locators (POST /locatorsAurora)	34
6.	ACO	CESS LEVEL SPECIFIC OPERATIONS:	36
	6.1.	Create Access Level (POST /accessLevel)	36
	6.2.	Get Access Level Details (GET /accessLevel/{accessLevelID})	37
	6.3.	Edit Access Level (POST /accessLevel/{AccessLevelID})	38
	6.4.	Delete Access Level (DELETE /accessLevel/{AccessLevelID})	39
	6.5.	Search Access Levels (POST /accessLevels)	40
	6.6.	List all Access Levels (GET /allAccessLevels)	41
7.	ASS	SET TYPES SPECIFIC OPERATIONS:	42
	7.1.	Create ASSET TYPE (POST /assetType)	42
	7.2.	Get Asset Types Details (GET /assetType/{AssetTypeID})	43
	7.3.	Edit Asset Type (PUT /assetType)	44
	7.4.	Delete Asset Type (DELETE /assetType/{AssetTypeID})	45
	7.5.	Search Asset Types (POST /assetTypes)	46
	7.6.	List all Asset Types (GET /allAssetTypes)	48
8.	ZOI	NES SPECIFIC OPERATIONS:	49

	8.1.	Create ZONE (POST /zone)	49
	8.2.	Get Zone Details (GET /zone/{ZoneID})	50
	8.3.	Edit Zone (PUT /zone)	51
	8.4.	Delete Zone (DELETE /zone/{ZoneID})	52
	8.5.	Search Zones (POST /zones)	53
	8.6.	List all Zones (GET /allZones)	55
9.	USE	ER SPECIFIC OPERATIONS:	56
	9.1.	Create User (POST /user)	56
	9.2.	Get User Details (GET /user/{UserID})	57
	9.3.	Edit User (PUT /user)	58
	9.4.	Delete User (DELETE /user/{UserID})	59
	9.5.	Search Users (POST /users)	60
	9.6.	Resend Invite (POST /user/{UserID}/resendInvitation)	62
1(	). L	AYOUT BUILDER OPERATIONS:	63
	10.1.	Create dynamic property (POST /layoutBuilder/{entityName})	63
	10.2.	Get dynamic property (GET /layoutBuilder/{entityName})	64
	10.3.	Edit dynamic property (PUT /layoutBuilder/{entityName})	65
	10.4.	Archive dynamic property (PUT /layoutBuilder/{entityName}/archive)	66
	10.5.	Restore dynamic property (PUT /layoutBuilder/{entityName}/restore)	67
	10.6.	Delete dynamic property (PUT /layoutBuilder/{entityName})	68
1:	1. A	DDITIONAL INFORMATION:	69
	11.1.	List of Tag Hardware Models (GET /hardware/0)	69
	11.2.	List of Locator Hardware Models (GET /hardware/1)	69
	11.3.	Activity Values	69
12	2. C	COMMON USAGE SCENARIOS:	70

12.1.	Link Tag scenarios:70
12.2.	Unlink Tag scenarios:71
12.3.	View Assets's Location71
13. FIN	NGERPRINTING:
13.1.	Start Fingerprinting (POST /startFingerprinting)72
13.2.	End Fingerprinting (POST /endFingerprinting)72
13.3.	Create Fingerprint (POST /fingerprint)73
13.4.	Status of Fingerprinting Tags (GET /fingerprintings)74
13.5.	List of Fingerprinting Sessions Per Location (GET/fingerprintings/{LocationId})75
13.6.	Delete Fingerprintings from Location (POST /deleteFingerprintings)76
14. WO	DRKFLOW SPECIFIC OPERATIONS:77
14.1.	Create Workflow (POST /addWorkflow)77
14.2.	Get Workflow Details (GET /workflow/{WorkflowID})79
14.3.	Edit Workflow (PUT /editWorkflow)80
14.4.	Search Workflow (POST /workflows)82
15. US	ER PROFILE SPECIFIC OPERATIONS:84
15.1.	Create User Profile (POST /userProfile)84
15.2.	Get User Profile (GET /userProfile)85
15.3.	Edit User Profile (PUT /userProfile)86
15.4.	Delete User Profile (DELETE /userProfile)87

# 1. AUTHENTICATION AND AUTHORIZATION

Authentication is performed via Login API call (see Login details) through which access credentials (provided by the Blyott) are exchanged for an Access Token and Refresh Token. Provided Access Token needs to be present in all subsequent HTTP API calls as a HTTP header named token. Access Token obtained is a JWT token which when decoded has a role property indicating either User or Administrator role alongside its expiration time.

#### 1.1.LOGIN (POST /login)

Credentials are exchanged for an Access Token by doing a Post request against /login endpoint. Response will contain the AccessToken and RefreshToken. AccessToken should then be provided in all subsequent API calls as a HTTP header "token". Further curl examples indicate the presence of a token with **{token}**.

#### **Curl Example:**

Curl

'https://api.blyott.com/login' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/login' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"username":"username","password":"password"}' |

# 1.2. REFRESH TOKEN (POST /getCredentialsWithRefreshToken)

Refresh token is used to get a new access token.

#### **Curl Example:**

Curl

'https://api.blyott.com/getCredentialsWithRefreshToken' |
-H 'authority: api.blyott.com' |
-H 'accept: application/json, text/plain, \*/\*' |
-H 'token: {token}' |
-H 'content-type: application/json' |
-H 'origin: https://portal.blyott.com' |
-H 'sec-fetch-site: same-site' |
-H 'sec-fetch-dest: empty' |
-H 'referer: https://portal.blyott.com/' |
-H 'accept-language: en-US,en;q=0.9' |
--data-binary '{"username":"", "refreshToken":"{refreshToken}"}' |

# 1.3. FORGOT PASSWORD (POST user/{userName}/forgotPassword)

If the user exists, reset password code with a link will be sent to the user's email.

# **Curl Example:**

Curl

'https://api.blyott.com/user/test/forgotPassword' |
-H 'authority: api.blyott.com' |
-H 'accept: application/json, text/plain, \*/\*' |
-H 'content-type: application/json' |
-H 'origin: https://portal.blyott.com' |
-H 'sec-fetch-site: same-site' |
-H 'sec-fetch-dest: empty' |
-H 'referer: https://portal.blyott.com/' |
-H 'accept-language: en-US,en;q=0.9' |
--data-binary '{}' |

#### 1.4. CONFIRM FORGOT PASSWORD (POST /user/confirmForgotPassword)

When the user requests the password reset, a new password needs to be confirmed with the confirmation code which is sent to the user's email. Confirmation is done by issuing a POST request to the platform against the */user/confirmForgotPassword* endpoint with of JSON payload consisting of following parameters:

- 1. **Username** username of user which requests new password.
- 2. **NewPassword** new password.
- 3. Code code received by the email after user called Forgot Password.

#### **Curl Example:**

Curl

'https://api.blyott.com/user/confirmForgotPassword' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"Username":"test", "NewPassword":"newPassword", "Code":"111111"}' |

# 2. TAG SPECIFIC OPERATIONS:

# 2.1.CREATE TAG (POST /tag)

Tag is created by issuing a POST request to the platform against the */tag* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. **TagId** BLE MAC address of the Tag
- 2. **NFCId** Tag's NFC identifier, usually the same as BLE MAC
- 3. TagType:
  - a. 1 Mobile Tags assigned to assets expected to move.
  - b. 2 Fixed Tags assigned to assets not expected to move.
  - c. 3 Machine Learning tag

4. **FixedLocation** - only applicable if TagType is 2, then the value should be the set to the internal Id of the Location (see Locations) otherwise null.

**5. TagHardwareId** - Tag's Manufacturer and model information, should be set to Id of the HardwareModel (see Hardware)

**6. AssetId** - Asset to which the Tag is linked to, can be null if the Tag is unassigned. Id should be of an unassigned Asset (see Unassigned Assets)

7. TempCalibrationOffset – Calibration offset for the temperature sensor

**8. Dynamic properties** - any custom dynamic property added through Layout Builder.

#### **Curl example:**

```
Curl
```

'https://api.blyott.com/tag' |

```
-H 'authority: api.blyott.com' |
```

-H 'accept: application/json, text/plain, \*/\*' |

- -H 'token: {token}' |
- -H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

```
-H 'sec-fetch-site: same-site' |
```

```
-H 'sec-fetch-mode: cors' |
```

```
-H 'sec-fetch-dest: empty' |
```

-H 'referer: https://portal.blyott.com/admin-panel/tags/new' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"TagId":"123456ABCDEF","NFCId":"123456ABCDEF","TagType":2,"FixedLocationId":285," Tag HardwareId":1,"AssetId":null,

"TempCalibrationOffset":2, "CustomFields":[{"Id":22, "Value":"123"}]}' |

# 2.2.GET TAG DETAILS (GET /tag/{TagID})

Tag details can be easily retrieved by issuing a GET request against the */tag/{TagId}* endpoint where the TagId is Tag's MAC address identifier.

#### **Curl example:**

Curl

'https://api.blyott.com/tag/0CF3EEB88D9B' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/tags' |

-H 'accept-language: en-US,en;q=0.9' |

# 2.3. EDIT TAG (PUT /tag)

Tag properties can be edited by issuing a PUT request against the */tag* endpoint with the body consisting of with a body of JSON payload consisting of at least the following parameters:

- 1. TagId BLE MAC address of the Tag
- 2. NFCId Tag's NFC identifier, usually the same as BLE MAC
- 3. TagType:
- a. 1 Mobile Tags assigned to assets expected to move.
- b. 2 Fixed Tags assigned to assets not expected to move.
- 4. **FixedLocation** only applicable if TagType is 2, then the value should be the set to the internal Id of the Location (see Locations) otherwise null.

**5. TagHardwareId** - Tag's Manufacturer and model information, should be set to Id of the HardwareModel (see Hardware).

**6. AssetId** - Asset to which the Tag is linked to, can be null if the Tag is unassigned. Id should be of an unassigned Asset (see Unassigned Assets).

7. **TempCalibrationOffset** – Calibration offset for the temperature sensor

**8. Dynamic properties** - any custom dynamic property added through Layout Builder.

#### **Curl example:**

#### Curl

'https://api.blyott.com/tag' |

-X 'PUT' |

```
-H 'authority: api.blyott.com' |
```

```
-H 'accept: application/json, text/plain, */*' |
```

- -H 'token: {token}' |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |

```
-H 'sec-fetch-mode: cors' |
```

```
-H 'sec-fetch-dest: empty' |
```

-H 'referer: https://portal.blyott.com/admin-panel/tags/123456ABCDEF/edit' | -H 'acceptlanguage: en-US,en;q=0.9' |

--data-binary

'{"TagId":"123456ABCDEF","NFCId":"123456ABCDEF","TagType":2,"FixedLocationId":285," Tag HardwareId":1,"AssetId":null, "TempCalibrationOffset":-

1, "CustomFields":[{"Id":22, "Value":"123"}]}' |

# 2.4. DELETE TAG (DELETE /tag/{TagID})

Tag can be easily removed from the system by issuing a DELETE request against the */tag/{TagId}* endpoint where the TagId is Tag's MAC address identifier.

#### **Curl example:**

Curl

'https://api.blyott.com/tag/123456ABCDEF' |

-X 'DELETE' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/tags/123456ABCDEF/edit' |

-H 'accept-language: en-US,en;q=0.9' |

2.5. SEARCH TAGS (POST /tagsAurora)

To search for specific Tag a post request to the */tagsAurora or /tags* endpoint should be issued with following Filtering properties in the JSON body payload:

**1. Page** - Since results are paginated by 20 items, the page of the required result set should be provided. If field not provided all results will be returned **2. PageSize** - If there are more than 20 results, specify this filter value.

- a. if not specified, number of items per page is 20.
- b. if number is less than 20, it is interpreted as 20.
- c. if number is greater than 1000, it is interpreted as 1000.
- 3. **GlobalSearch** Searches the content in almost all grid columns.
- 4. **SortBy** By which Tag property should the results be sorted.
- 5. **SortOrder** Sorting direction can be:
  - a. Asc Ascending order
  - b. Desc Descending order
- 6. Filters Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### **Possible Filter properties:**

- **7.** TagId filter by Tag MAC Address.
- 8. NFCId filter by Tag NFC Identifier.
- **9.** TagType filter by Tag Type.
- **10.** FixedLocationName filter by Location Name Asset should be located.
- 11. HardwareModel filter by Tag's Hardware Model value.
- **12.** AssetName filter by Assigned Asset's Name.
- **13.** Activity filter by Activity (see Activity).
- **14.** Dynamic properties filter by any custom dynamic property.

<u>Take note</u> that alongside the standard Tag properties, this endpoint will return **Rssi** and **LastSeen** properties as well.

# **Curl Example:**

#### Curl

'https://api.blyott.com/tagsAurora' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/tags' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"Page":1,"GlobalSearch":"0CF","SortBy":"TagId","SortOrder":"Asc","Filters":[{"FilterBy":"T agId","

*FilterContent":["MAC"]},{"FilterBy":"NFCId","FilterContent":["NFC"]},{"FilterBy":"TagType", "Filter C* 

ontent":[2]},{"FilterBy":"FixedLocationName","FilterContent":["FixedLoc"]},{"FilterBy":"Har dware

*Model", "FilterContent":["Hard"]}, {"FilterBy": "AssetName", "FilterContent":["assetAssigend"] },{"Fi It erBy": "Activity", "FilterContent":["1"]}]}"* 

# 2.6. LIST UNASSIGNED TAGS (GET /allUnassignedTags)

List of all unassigned Tag MAC addresses i.e., Tags not linked to an Asset can be retrieved by issuing a GET request against the */allUnassignedTags* endpoint.

#### **Curl Example:**

Curl

'https://api.blyott.com/allUnassignedTags' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/assets/new' |

-H 'accept-language: en-US,en;q=0.9' |

# 3. ASSET SPECIFIC OPERATIONS:

# 3.1.CREATE ASSET (POST /asset)

Asset is created by issuing a POST request to the platform against the */asset* endpoint with a body of JSON payload consisting of at least the following parameters:

1. AssetName - Name of the Asset.

2. AssetCode - Asset's unique serial identifier.

3. TagId - Tag to which the Asset is linked to, can be null if the Asset is

unassigned. Id should be of an unassigned Asset (see Unassigned Tags).

4. **AllUsers** - If true, Asset is visible to all users, i.e., to users with any access level assigned.

5. AccessLevels - If AllUsers parameter is false, this one needs to be specified and it should exist in AccessLevel list (see <u>Access Levels/Permissions</u>).

6. **Workflows** – Array of Workflows identifiers that will be linked to this Asset. (optional field).

**7. CustomFields** - any custom dynamic property added through Layout Builder (optional field).

**8. AssetTypes -** Array of Asset Types identifiers that will be linked to this Asset. It can be blank or multiple types [1,2] (optional field).

**9. Zones -** Array of Asset Zones identifiers that will be linked to this Asset. It can be blank or multiple types [1,2] ( (optional field).

#### **Curl Example:**

```
Curl
```

'https://api.blyott.com/asset' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |

```
-H 'referer: https://portal.blyott.com/admin-panel/assets/new' |
```

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"AssetName":"Example asset name", "AssetCode":"00001", "Zones": [],

"AssetTypes": [], "TagId":null, "AllUsers":false, "AccessLevels":[29,8], "Workflows":[13, 24, 43], "CustomFields":[{"Id":1

4, "Value": "123"}, {"Id": 15, "Value": "456"}]}' |

# 3.2.GET ASSET DETAILS (GET /assetDetails/{AssetID})

Asset details can be easily retrieved by issuing a GET request against the

*/assetDetails/{AssetID}* endpoint where the AssetID is AssetCode.

#### **Curl Example:**

Curl

'https://api.blyott.com/assetDetails/test300' |

- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/admin-panel/assets' |
- -H 'accept-language: en-US,en;q=0.9' |

#### 3.3. EDIT ASSET (PUT /asset)

Asset properties can be edited by issuing a PUT request against the */asset* endpoint with the body consisting of with a body of JSON payload consisting of at least the following parameters:

- 1. AssetId Unique internal SHP Asset identifier.
- 2. AssetName Name of the Asset.
- 3. AssetCode Asset's unique serial identifier.

**4. TagId** - Tag to which the Asset is linked to, can be null if the Asset is unassigned. Id should be of an unassigned Asset (see Unassigned Tags).

5. **AllUsers** - If true, Asset is visible to all users, i.e., to users with any access level assigned.

6. AccessLevels - If AllUsers parameter is false, this one needs to be specified and it should exist in AccessLevel list (see Access Levels/Permissions).

**7. Workflows** – Array of Workflows identifiers that will be linked to this Asset. Take note that this will override any existing Workflows linked to this Asset if their identifiers are not included in the array (optional field).

**8. CustomFields** - any custom dynamic property added through Layout Builder (optional field).

**9. AssetTypes -** Array of Asset Types identifiers that will be linked to this Asset. It can be blank or multiple types [1,2] (optional field).

**10. Zones -** Array of Asset Zones identifiers that will be linked to this Asset. It can be blank or multiple types [1,2] ( (optional field).

# **Curl Example:**

#### Curl

```
'https://api.blyott.com/asset' |
```

-X 'PUT' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

```
-H 'token: {token}' |
```

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/assets/test300/edit' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"AssetId":4368, "AssetName":"asset300", "AssetCode":"test300", "Zones": [], "AssetTypes": [], "TagId":"test300", "AllUsers":t rue, "AccessLevels":null, "Workflows": [2, 7, 14], "CustomFields":[{"Id":14, "Value":"note"}, {"Id":15, "Value":"desc"}]}' |

# 3.4. DELETE ASSET (DELETE /asset/{AssetID})

Asset can be easily removed from the system by issuing a DELETE request against the /asset/{AssetId} endpoint where the AssetId is Asset's Blyott internal identifier.

#### **Curl example:**

Curl

'https://api.blyott.com/asset/3762' |

-X 'DELETE' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}" |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/assets' |

-H 'accept-language: en-US,en;q=0.9' |

3.5. SEARCH ASSETS (POST /assets)

To search for specific Asset a POST request to the */assets* endpoint should be issued with following Filtering properties in the JSON body payload:

1. **Page** - Since results are paginated by 20 items, the page of the required result set should be provided. If the field is not provided all results will be returned.

- 2. **SortBy** By which Asset property should the results be sorted.
- 3. **PageSize -** If there are more than 20 results, specify this filter value.
  - a. if not specified, number of items per page is 20.
  - b. if number is less than 20, it is interpreted as 20.
  - c. if number is greater than 1000, it is interpreted as 1000.
- 4. **GlobalSearch** Searches the content in almost all grid columns.
  - **SortOrder** Sorting direction can be:
    - a. Asc Ascending order.
    - b. Desc Descending order.
- 6. **Filters** Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### Possible Filter properties:

5.

- 1. **AssetName** filter by Asset Name.
- 2. **AssetCode** fiter by Asset Code.
- 3. AccessLevel filter by Access Level (see Access Levels/Permissions).
- 4. **TagId** filter by Mac address of assigned Tag.
- 5. **Activity** filter by Activity (see Activity).

6. **LocationName** - filter by Location Name where Asset is seen (only if assigned to Tag).

7. **LocationCode** - filter by Location Code where Asset is seen (only if assigned to Tag).

- 8. **FixedLocationName** filter by Location Name where Asset should be located.
- 9. **Dynamic properties** filter by any custom dynamic property.
- 10. **Zones** filter by Zones
- 11. **AssetTypes** filter by Asset Types

<u>Take note</u> that alongside the standard Asset properties, this endpoint will return **Rssi** and **TimeLastSeen** properties as well.

# **Curl Example:**

#### Curl

```
'https://api.blyott.com/assets' |
-H 'authority: api.blyott.com' |
-H 'accept: application/json, text/plain, */*' |
```

```
-H 'token: {token}' |
```

```
-H 'content-type: application/json' |
```

- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/assets' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"Page":1,"GlobalSearch":"","SortBy":"AssetName","SortOrder":"Asc","Filters":[{"FilterBy":" Asset

*Name", "FilterContent":["name"]}, {"FilterBy": "AssetCode", "FilterContent":["code"]}, {"FilterBy": "Ass etTypes", "FilterContent": [ "TYPE\_01" ] }, {"FilterBy": "Zones", "FilterContent": [ "ZONE\_01" ] }, {"Fil* 

terBy":"TagId","FilterContent":["assigned"]},{"FilterBy":"Activity","FilterContent":["2"]},{"FilterBy":"L

ocationName", "FilterContent":["locname"]}, {"FilterBy": "LocationCode", "FilterContent":["loc Code"

]},{"Filter By":"FixedLocationName","FilterContent":["FixedLoc"]}]}'|

# 3.6. LIST UNASSIGNED ASSETS (GET /allUnassignedAssets)

List of all unassigned Assets i.e., Assets not linked to an Tag can be retrieved by issuing a GET request against the */allUnassignedAssets* endpoint.

#### **Curl Example:**

Curl

'https://api.blyott.com/allUnassignedTags' |

- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/admin-panel/assets/new' |
- -H 'accept-language: en-US,en;q=0.9' |

3.7. GET ASSET HISTORY (POST /getAssetHistory)

To retrieve specific Assets historical locations on a given time range a POST request to the

*/getAssetHistory* endpoint should be issued with following request properties in the JSON body payload:

1. **AssetIds** - Array of Assets to be searched for. Assets are represented by their internal Asset identifiers (See Assets).

- 2. From Date and time representing the beginning of a search range.
- **3. To -** Date and time representing the end of a search range.

For each of the Asset provided an array of HistoryRecord will be provided with the times representing:

1. **LocationId** - Location Asset was present for this record, represented by Location internal identifier (See Location).

**2. StartTime** - Date and time representing the start of Assets' occurrence on this Location.

**3. EndTime** - Date and time representing the end of Assets' occurrence on this Location.

#### **Curl Example:**

Curl

'https://api.blyott.com/getAssetHistory | -H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

```
-H 'sec-fetch-dest: empty' |
```

```
-H 'referer: https://portal.blyott.com/admin-panel/assets/new' |
```

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{ "AssetIds":

[1,2,3,4,5,6],

"From": "2021-01-1T00:00:00.000Z",

"To": "2021-01-2T00:00:00.000Z"}'|

# 4. LOCATION SPECIFIC OPERATIONS:

#### 4.1. CREATE LOCATION (POST /location)

Location is created by issuing a POST request to the platform against the */location* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. LocationName Name of the Location.
- 2. LocationCode Unique Location identifier such as room number etc.
- 3. LocationType:
  - a. 0 -"**In Use**" Active Location meaning assets are utilized on this Location.

b. 1 -**`Available**" - Passive Location meaning Storage, assets are not utilized here.

c. 2 – "**Maintenance**" – Inactive Location that is under maintenance, meaning devices on this location are being configured.

**4. Dynamic properties** - any custom dynamic property added through Layout Builder.

**5. SurfaceArea** – Custom field to mark the surface area on the Location (optional field)..

- 6. Site Custom field to mark the site on the Location (optional field)..
- 7. Building Custom field to mark the building on the Location (optional field)..
- 8. Wing Custom field to mark the building wing on the Location (optional field)..
- **9. Zones -** Array of Asset Zones identifiers that will be linked to this Location. It can be blank or multiple types *[1,2]* (optional field).

# **Curl Example:**

#### Curl

'https://api.blyott.com/location' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/locations/new' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"LocationName":"Test", "LocationCode":"Test", "LocationType":0, "SurfaceArea": "surface",

" Site": "site", "Building": "building", "Wing": "wing", "Floor": "floor", "Zones":

[2], "CustomFields" :[{"Id":1, "Value ":""}]}' |

# 4.2. GET LOCATION DETAILS (GET /location/{LocationID})

Location details can be easily retrieved by issuing a GET request against the /location/{LocationID} endpoint where the LocationID is Location's Blyott internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/location/3186' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}'|

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/locations' |

-H 'accept-language: en-US,en;q=0.9' |

# 4.3. EDIT LOCATION (PUT /location)

Location properties can be edited by issuing a PUT request against the */location* endpoint with the body consisting of with a body of JSON payload consisting of at least the following parameters:

- 1. LocationId Unique internal Blyott Location identifier.
- 2. LocationName Name of the Location.
- 3. LocationCode Unique Location identifier such as room number etc.

#### 4. LocationType:

a. 0 -"**In Use**" - Active Location meaning assets are utilized on this Location.

b. 1 -**`Available**" - Passive Location meaning Storage, assets are not utilized here.

c. 2 – "**Maintenance**" – Inactive Location that is under maintenance, meaning devices on this location are being configured.

5. **Dynamic properties** - any custom dynamic property added through Layout Builder.

6. **SurfaceArea** – Custom field to mark the surface area on the Location (optional field)..

- 7. Site Custom field to mark the site on the Location (optional field)...
- 8. Building Custom field to mark the building on the Location (optional field)...
- 9. Wing Custom field to mark the building wing on the Location (optional field)..
- **10. Zones -** Array of Asset Zones identifiers that will be linked to this Location. It can be blank or multiple types [1,2] (optional field).

# **Curl Example:**

#### Curl

'https://api.blyott.com/location' |

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/locations/3186/edit' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"LocationId":"3186","LocationName":"Ground floor -

North2", "LocationCode": "TQN2", "LocationType":0, "SurfaceArea": "surface", "Site": "site", "Buildi ng": "building", "Wing": "wing", "Floor": "floor", "Zones":

[2], ""CustomFields":[{"Id":1, "Value": "Room 12"}]}' |

# 4.4. DELETE LOCATION (DELETE /location/{LocationID})

Location can be easily removed from the system by issuing a DELETE request against the

*/location/{LocationId}* endpoint where the LocationId is Location's Blyott internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/location/27484' |

-X 'DELETE' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/locations' |

-H 'accept-language: en-US,en;q=0.9' |

#### 4.5. SEARCH LOCATIONS (POST /locationsAurora)

To search for specific Location a post request to the */locationsAurora* endpoint should be issued with following Filtering properties in the JSON body payload:

1. **Page** - Since results are paginated by 20 items, the page of the required result set should be provided. If the field is not provided all results will be returned.

- 2. SortBy By which Asset property should the results be sorted.
- 3. **PageSize -** If there are more than 20 results, specify this filter value.
  - a. if not specified, number of items per page is 20.
  - b. if number is less than 20, it is interpreted as 20.
  - c. if number is greater than 1000, it is interpreted as 1000.
- 4. GlobalSearch Searches the content in almost all grid columns.
- 5. SortOrder Sorting direction can be:
  - a. Asc Ascending order
  - b. Desc Descending order
- 6. Filters Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### Possible Filter properties:

- 1. LocationName Name of the Location.
- 2. LocationCode Unique Location identifier such as room number etc.
- 3. LocationType:
  - a. 0 -"**In Use**" Active Location meaning assets are utilized on this Location.

b. 1 – "**Available**" - Passive Location meaning Storage, assets are not utilized here.

- c. 2 "**Maintenance**" Inactive Location that is under maintenance, meaning devices on this location are being configured.
- 4. Dynamic properties filter by any custom dynamic property.
- 5. **SurfaceArea** filter by custom field to mark the surface area on the Location.
- 6. **Site** filter by custom field to mark the site on the Location.
- 7. **Building** filter by custom field to mark the building on the Location.
- 8. **Wing** filter by custom field to mark the building wing on the Location.
- 9. **Zones** filter by Zones

# **Curl Example:**

#### Curl

*'https://api.blyott.com/locationsAurora'* | *-H 'authority: api.blyott.com'* | *-H 'accept: application/json, text/plain, \*/\*'* | *-H 'token: {token}' | <i>-H 'content-type: application/json'* |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

```
-H 'accept-language: en-US,en;q=0.9' |
```

--data-binary

'{"Page":1, "PageSize":50, "GlobalSearch":"", "SortBy":"LocationName", "SortOrder":"Asc", "Filt ers"

:[[{"FilterBy":"LocationName","FilterContent":["name"]}, {"FilterBy": "SurfaceArea", "FilterContent ": ["area"]},{"FilterBy": "Site", "FilterContent ": ["site"]},{"FilterBy": "building", "FilterContent ":

["building"]},{"FilterBy": "Wing", "FilterContent ": ["wing" ] },{ "FilterBy": "Zones", "FilterContent ":

["zone"]}, "FilterBy":"LocationCode", "FilterContent:["code"]}, {"FilterBy":"LocationType", "FilterCont ent":["0"]}]}' |

# 4.6. LIST ALL LOCATIONS (GET /listAllLocations)

Issuing a GET request to */listAllLocations* will retrieve a list of all existing Location values and their associated entries that can be used to create/edit a Tag or a Locator.

#### **Curl Example:**

Curl

'https://api.blyott.com/listAllLocations' |
-H 'authority: api.blyott.com' |
-H 'accept: application/json, text/plain, \*/\*' |
-H 'token: {token}' |
-H 'origin: https://portal.blyott.com' |
-H 'sec-fetch-site: same-site' |
-H 'sec-fetch-dest: empty' |
-H 'referer: https://portal.blyott.com/' |
-H 'accept-language: en-US,en;g=0.9' |

Take note, result will be less than "/locationsAurora":

{
 "LocationId": 57310,
 "LocationName": "Test",
 "LocationCode": "15",
 "SurfaceArea": null,
 "Site": null,
 "Building": null,
 "Wing": null,
 "Floor": null
}

}

# 5. LOCATOR SPECIFIC OPERATIONS:

# 5.1. CREATE LOCATOR (POST /locators)

Locator is created by issuing a POST request to the platform against the */locators* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. LocatorId MAC address of the Locator device.
- 2. LocatorName Name of the Locator device.
- 3. LocationId Internal Blyott Location identifier (see Locations).
- 4. LocatorType Type of Locator used, one of following:
  - a. 1 Mobile Locator, Locator that is expected to change location.
  - b. 2 Fixed Locator, Locator provided by Blyott that is fixed to a Location.
  - c. 3 Wi-Fi Locator, Internal Wi-Fi Locators used by on-premises clients.

5. **LocatorSerialNumber** - Internal serial number of the Locator device, optional and can be blank.

**6. LocatorImsi** - Imsi value of the Locator, optional if applicable needs to be unique.

7. LocatorImei - Imei value of Locator, optional.

**8. LocatorHardwareId** - Locator's Manufacturer and Model information, should be set to Id of the Locator HardwareModel (see Hardware).

**9. Dynamic properties** - any custom dynamic property added through Layout Builder.

#### **Curl Example:**

Curl

'https://api.blyott.com/locator' |

-H 'authority: api.blyott.com'

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/admin-panel/locators/new' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"LocatorName": "Test", "LocatorId": "Test", "LocatorType":2, "LocationId": 285, "LocatorHard ware

Id":16, "LocatorSerialNumber": "Test", "LocatorImsi": "Test", "LocatorImei": "Test", "CustomFiel ds":[{ "Id":12, "Value": "1"}]}' |

API Documentation

1 Get Locator Details (GET /locator/{LocatorID})

Location details can be easily retrieved by issuing a GET request against the

*/location/{LocatorID}* endpoint where the LocatorID is Locator's Mac internal identifier.

#### **Curl Example:**

Curl

- 'https://api.blyott.com/locator/A4CF12152728' |
- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}'|
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/admin-panel/locator/A4CF12152728 |
- -H 'accept-language: en-US,en;q=0.9' |

5.2. EDIT LOCATORS (PUT /locator)

Locator is edited by issuing a PUT request to the platform against the */locators* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. **LocatorId** MAC address of the Locator device.
- 2. LocatorName Name of the Locator device.
- 3. LocationId Internal Blyott Location identifier (see Locations).
- 4. LocatorType Type of Locator used, one of following:
  - a. 1 Mobile Locator, Locator that is expected to change location.
  - b. 2 Fixed Locator, Locator provided by Blyott that is fixed to a Location.
  - c. 3 Wi-Fi Locator, Internal Wi-Fi Locators used by on-premises clients.

5. **LocatorSerialNumber** - Internal serial number of the Locator device, optional can be blank.

6. **LocatorImsi** - Imsi value of the Locator, optional if applicable needs to be unique.

7. LocatorImei - Imei value of Locator, optional.

8. **LocatorHardwareId** - Locator's Manufacturer and Model information, should be set to Id of the Locator HardwareModel (see Hardware).

9. **Dynamic properties** - any custom dynamic property added through Layout Builder.

#### **Curl Example:**

Curl

'https://api.blyott.com/locator' |

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"LocatorName":"Locator
*3", "LocatorId": "A4CF12152728", "LocatorType":2, "LocationId": 3187, "LocatorHardwareId": 1 6, "Lo* 

catorSerialNumber":"sfsfsfsf","LocatorImsi":"sfsfsdhedagsdfgs","LocatorImei":null,"Custom Fie I ds":[{"Id":12,"Value":"sd"}]}' |

## 5.3. DELETE LOCATOR (DELETE /locator/{LocatorID})

Locator can be easily removed from the system by issuing a DELETE request against the

*/locator/{LocatorId}* endpoint where the LocatorId is Locator's Mac internal identifier.

## **Curl Example:**

Curl

'https://api.blyott.com/locator/S21' |
-X 'DELETE' |
-H 'authority: api.blyott.com' |
-H 'accept: application/json, text/plain, \*/\*' |
-H 'token: {token}' |
-H 'origin: https://portal.blyott.com' |
-H 'sec-fetch-site: same-site' |
-H 'sec-fetch-dest: empty' |
-H 'referer: https://portal.blyott.com/' |
-H 'accept-language: en-US,en;q=0.9' |

#### 5.4. SEARCH LOCATORS (POST /locatorsAurora)

To search for specific Locator a POST request to the */locatorsAurora* endpoint should be issued with following Filtering properties in the JSON body payload:

- 1. **Page** Since results are paginated by 20 items, the page of the required result set should be provided. If field is not provided all results will be returned.
- 2. SortBy By which Locator property should the results be sorted.
- 3. **PageSize** If there are more than 20 results, specify this filter value.
  - a. if not specified, number of items per page is 20.
  - b. if number is less than 20, it is interpreted as 20.
  - c. if number is greater than 1000, it is interpreted as 1000.
- 4. **GlobalSearch** Searches the content in almost all grid columns.
- 5. **SortOrder** Sorting direction can be:
  - a. Asc Ascending order.
  - b. Desc Descending order.
- 6. Filters Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### **Possible Filter properties:**

- 1. LocatorName filter by name of the Locator.
- 2. LocationName filter by name of the Location.
- 3. LocationCode filter by unique Location identifier such as room number etc.
- 4. LocatorId filter by MAC address of the Locator.
- 5. Activity filter by Activity (see Activity).
- 6. LocatorSerialNumber filter by Internal serial number of the Locator device.

7. LocatorImsi - filter by Locator Imsi values. 8. LocatorImei - filter by Locator Imei values.

- 9. LocatorType filter by Locator type values.
- 10. LocatorHardwareModel filter by Locator's Hardware Model value.
- 11. Dynamic properties filter by any custom dynamic property.

## **Curl Example:**

#### Curl

'https://api.blyott.com/locatorsAurora' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"Page":1, "PageSize":50, "GlobalSearch":"", "SortBy":"LocatorName", "SortOrder":"Asc", "Filt ers":[

{"FilterBy":"LocatorName","FilterContent":["name"]},{"FilterBy":"LocationName","FilterCont ent":[

"locName"]},{"FilterBy":"LocationCode","FilterContent":["locCode"]},{"FilterBy":"LocatorId" ,"Filter

Content":["MAC"]},{"FilterBy":"Activity","FilterContent":["1"]},{"FilterBy":"LocatorSerialNu mber","Fi

*lterContent":["Serial"]},{"FilterBy":"LocatorImsi","FilterContent":["imsi"]},{"FilterBy":"LocatorImsi","FilterContent":["model"]}]}'* 

# 6. ACCESS LEVEL SPECIFIC OPERATIONS:

#### 6.1. CREATE ACCESS LEVEL (POST /accessLevel)

Access Level is created by issuing a POST request to the platform against the */accessLevel* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. AccessLevelName name of the Access Level.
- 2. AccessLevelDescription additional description of the Access Level, optional.

#### **Curl Example:**

Curl

'https://api.blyott.com/accessLevel' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

- -H 'token: {token}' |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"AccessLevelName": "Dermatology", "AccessLevelDescription": "DERM"}' |

6.2.GET ACCESS LEVEL DETAILS (GET /accessLevel/{AccessLevelID})

Access Level details can be easily retrieved by issuing a GET request against the

/accessLevel/{accessLevelID} endpoint where the AccessLevelID is an internal identifier.

#### **Curl Example:**

Curl

```
'https://api.blyott.com/accessLevel/36' | -H 'authority: api.blyott.com' |
```

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

#### 6.3. EDIT ACCESS LEVEL (POST /accessLevel/{AccessLevelID})

Access Level is edited by issuing a PUT request to the platform against the */accessLevel* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. AccessLevelId unique internal Blyott Access Level identifier.
- 2. AccessLevelName name of the Access Level.

3. AccessLevelDescription - additional description of the Access Level, optional.

#### **Curl Example:**

Curl

'https://api.blyott.com/accessLevel' |

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' | -H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"AccessLevelId":"36", "AccessLevelName":"Cardiology", "AccessLevelDescription":"CARD"}'

L

6.4. DELETE ACCESS LEVEL (DELETE /accessLevel/{AccessLevelID})

Access Level can be easily removed from the system by issuing a DELETE request against the */accessLevel/{AccessLevelId}* endpoint where the Access Level ID is Blyott internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/accessLevel/36' |

-X 'DELETE' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

#### 6.5. SEARCH ACCESS LEVELS (POST /accessLevels)

To search for specific Access Level a POST request to the */accessLevels* endpoint should be issued with following Filtering properties in the JSON body payload:

- 1. **Page** Since results are paginated by 20 items, the page of the required result set should be provided. If field is not provided all results will be returned.
- 2. SortBy By which Locator property should the results be sorted.
- 3. **PageSize** If there are more than 20 results, specify this filter value.
  - a. if not specified, number of items per page is 20.
  - b. if number is less than 20, it is interpreted as 20.
  - c. if number is greater than 1000, it is interpreted as 1000.
- 4. GlobalSearch Searches the content in almost all grid columns.
- 5. **SortOrder** Sorting direction can be:
  - a. Asc Ascending order.
  - b. Desc Descending order.
- 6. **Filters** Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### **Possible Filter properties:**

- 1. AccessLevelName filter by name of the Access Level.
- 2. AccessLevelDescription filter by additional description of the Access Level.

#### **Curl Example:**

Curl

'https://api.blyott.com/accessLevels' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

- -H 'token: {token}' |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |

```
-H 'sec-fetch-dest: empty' |

-H 'sec-fetch-dest: empty' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"Page":1,"PageSize":50,"GlobalSearch":"","SortBy":"AccessLevelName","SortOrder":"Asc",

"Filt ers":[{"FilterBy":"AccessLevelName","FilterName":"Access

Levels", "FilterContent":["DERM"]}, {"FilterBy":"AccessLevelDescription", "FilterName":"Descri

ptio n", "FilterContent":["D"]}]}' |
```

## 6.6. LIST ALL ACCESS LEVELS (GET /allAccessLevels)

Issuing a GET request to */allAccessLevels* will retrieve a list of all existing Access Level values and their associated entries that can be used to create/edit a User or an Asset.

## **Curl Example:**

Curl

- 'https://api.blyott.com/allAccessLevels' |
- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9' |

# 7. ASSET TYPES SPECIFIC OPERATIONS:

#### 7.1.CREATE ASSET TYPE (POST /assetType)

Asset Type is created by issuing a POST request to the platform against the */assetType* endpoint with a body of JSON payload consisting of at least the following parameters:

1. **Name** - name of the asset type.

#### **Curl Example:**

Curl

'https://api.blyott.com/assetType' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin:\_https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer:\_https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-raw '{"Name":"test"}' |

7.2.GET ASSET TYPES DETAILS (GET /assetType/{AssetTypeID})

Asset Type details can be easily retrieved by issuing a GET request against the

/assetType/{AssetTypeID} endpoint where the AssetTypeID is an internal identifier.

## **Curl Example:**

Curl

*'https://api.blyott.com/assetType/36'* | *-H 'authority: api.blyott.com'* | *-H 'accept: application/json, text/plain, \*/\*'* | *-H 'token: {token}'* | *-H 'origin: https://portal.blyott.com'* | *-H 'sec-fetch-site: same-site'* | *-H 'sec-fetch-mode: cors'* | *-H 'sec-fetch-dest: empty'* | *-H 'referer: https://portal.blyott.com/'* | *-H 'accept-language: en-US,en;q=0.9'* |

## 7.3. EDIT ASSET TYPE (PUT /assetType)

Access Level is edited by issuing a PUT request to the platform against the */assetType* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. Id unique internal Blyott asset type identifier.
- 2. **Name** name of the asset type.

#### **Curl Example:**

Curl

```
'https://api.blyott.com/assetType' |
```

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' | -H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"Id":"36","Name":"GandalfHat"}' |

## 7.4. DELETE ASSET TYPE (DELETE /assetType/{AssetTypeID})

Asset Type can be easily removed from the system by issuing a DELETE request against the /assetType/{AssetTypeId} endpoint where the Asset Type ID is Blyott internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/assetType/36' |

- -X 'DELETE' |
- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9' |

#### 7.5. SEARCH ASSET TYPES (POST /assetTypes)

To search for specific Asset Types a POST request to the */assetTypes* endpoint should be issued with following Filtering properties in the JSON body payload:

- 7. **Page** Since results are paginated by 20 items, the page of the required result set should be provided. If field is not provided all results will be returned.
- 8. **SortBy** By which Locator property should the results be sorted.
- 9. **PageSize** If there are more than 20 results, specify this filter value.
  - a. if not specified, number of items per page is 20.
  - b. if number is less than 20, it is interpreted as 20.
  - c. if number is greater than 1000, it is interpreted as 1000.
- 10. GlobalSearch Searches the content in almost all grid columns.
- 11. **SortOrder** Sorting direction can be:
  - a. Asc Ascending order.
  - b. Desc Descending order.
- 12. **Filters** Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### **Possible Filter properties:**

1. Name - filter by name of the Asset Type.

#### Curl Example:

Curl

'https://api.blyott.com/assetTypes' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin:\_https://portal.blyott.com' |

- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |

-H 'referer:\_https://portal.blyott.com/' |

--data-binary '{"Page":1,"PageSize":50,"GlobalSearch":"","SortBy":"Name","SortOrder":"Asc","Filters":[{" FilterBy": "Name","FilterName":"Asset Type","FilterContent":["DERM"]}]}'

## 7.6. LIST ALL ASSET TYPES (GET /allAssetTypes)

Issuing a GET request to */allAssetTypes* will retrieve a list of all existing Asset Type values and their associated entries that can be used to create/edit a Asset.

#### **Curl Example:**

Curl

'https://api.blyott.com/allAssetTypes' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

# 8. ZONES SPECIFIC OPERATIONS:

#### 8.1. CREATE ZONE (POST /zone)

Zone is created by issuing a POST request to the platform against the */zone* endpoint with a body of JSON payload consisting of at least the following parameters:

2. Name - name of the zone.

#### **Curl Example:**

Curl

'https://api.blyott.com/zone' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin:\_https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer:\_https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-raw '{"Name":"test"}' |

## 8.2.GET ZONE DETAILS (GET /zone/{ZoneID})

Zone details can be easily retrieved by issuing a GET request against the

/zone/{ZoneID} endpoint where the ZoneID is an internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/zone/2' | -H 'authority: api.blyott.com' | -H 'accept: application/json, text/plain, \*/\*' | -H 'token: {token}' | -H 'origin: https://portal.blyott.com' | -H 'sec-fetch-site: same-site' | -H 'sec-fetch-mode: cors' | -H 'sec-fetch-dest: empty' | -H 'referer: https://portal.blyott.com/' | -H 'accept-language: en-US,en;q=0.9' |

## 8.3. EDIT ZONE (PUT /zone)

Zone is edited by issuing a PUT request to the platform against the */zone* endpoint with a body of JSON payload consisting of at least the following parameters:

- 3. **Id** unique internal Blyott zone identifier.
- 4. **Name** name of the zone.

#### **Curl Example:**

Curl

'https://api.blyott.com/zone' |

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*'

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' | -H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"Id":"36","Name":"GandalfHat"}' |

## 8.4. DELETE ZONE (DELETE /zone/{ZoneID})

Asset Type can be easily removed from the system by issuing a DELETE request against the */zone/{ZoneId}* endpoint where the Asset Type ID is Blyott internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/zone/2' |

-X 'DELETE' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

8.5. SEARCH ZONES (POST /zones)

To search for specific Zone a POST request to the */zones* endpoint should be issued with following Filtering properties in the JSON body payload:

- 13. **Page** Since results are paginated by 20 items, the page of the required result set should be provided. If field is not provided all results will be returned.
- 14. **SortBy** By which Locator property should the results be sorted.
- 15. **PageSize** If there are more than 20 results, specify this filter value.
  - a. if not specified, number of items per page is 20.
  - b. if number is less than 20, it is interpreted as 20.
  - c. if number is greater than 1000, it is interpreted as 1000.
- 16. GlobalSearch Searches the content in almost all grid columns.
- 17. **SortOrder** Sorting direction can be:
  - a. Asc Ascending order.
  - b. Desc Descending order.
- 18. **Filters** Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### **Possible Filter properties:**

1. Name - filter by name of the Zone.

#### **Curl Example:**

Curl

'https://api.blyott.com/zones' |

- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}' |
- -H 'content-type: application/json' |
- -H 'origin:\_https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer:\_https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"Page":1, "PageSize":50, "GlobalSearch": "", "SortBy": "Name", "SortOrder": "Asc", "Filters": [{"FilterBy":

"Name", "FilterName": "Zone", "FilterContent":["DERM"]}]}' |

8.6. LIST ALL ZONES (GET /allZones)

Issuing a GET request to */allZones* will retrieve a list of all existing Zone values and their associated entries.

#### **Curl Example:**

Curl

'https://api.blyott.com/allZones' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

# 9. USER SPECIFIC OPERATIONS:

#### 9.1.CREATE USER (POST /user)

User is created by issuing a POST request to the platform against the

/user endpoint with a body of JSON payload consisting of the following parameters:

1. FirstName - user's first name. 2. Last name - user's last name.

- 3. **username** uniquely identifies user, required for users to login.
- 4. email user's email address.
- 5. role defines access control, can be one of the following:
  - a. Administrator
  - b. User

6. **totalAccess** - if true, the user can access all current levels and the ones that will be added in the future.

**7. accessLevels** - if Total Access parameter is false (limited access), this one needs to be specified and it should exist in AccessLevel list (see Access Levels/Permissions).

## **Curl Example:**

Curl

```
'https://api.blyott.com/user' |
```

```
-H 'authority: api.blyott.com' |
```

```
-H 'accept: application/json, text/plain, */*' |
```

```
-H 'token: {token}' |
```

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"FirstName":"Test", "LastName":"Test", "username":"test123", "email":"test@test.com", "rol e":"Ad ministrator", "totalAccess":true, "accessLevels":null}' |

## 9.2.GET USER DETAILS (GET /user/{UserID})

User details can be easily retrieved by issuing a GET request against the

*/user/{UserID}* endpoint where the userID is an internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/user/test123' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

#### 9.3. EDIT USER (PUT /user)

User is edited by issuing a PUT request to the platform against the

*/user* endpoint with a body of JSON payload consisting of the following parameters:

- 1. FirstName user's first name.
- 2. Last name user's last name.
- 3. **username** uniquely identifies user, required for users to login.
- 4. email user's email address.
- 5. **role** defines access control, can be one of the following:
  - a. Administrator
  - b. User

6. **totalAccess** - if true, the user can access all current levels and the ones that will be added in the future.

**7. accessLevels** - if Total Access parameter is false (limited access), this one needs to be specified and it should exist in AccessLevel list (see Access Levels/Permissions).

## **Curl Example:**

Curl

'https://api.blyott.com/user' |

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"FirstName":"Test", "LastName":"Test", "Username":"test123", "Email":"test@test.com", "Ro le":"A dministrator", "AccessLevels":null, "TotalAccess":true}' |

## 9.4. DELETE USER (DELETE /user/{UserID})

User can be easily removed from the system by issuing a DELETE request against the

*/user/{UserId}* endpoint where the User ID is Blyott internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/user/test123' |

-X 'DELETE' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

#### 9.5. SEARCH USERS (POST /users)

To search for specific User a POST request to the */users* endpoint should be issued with following Filtering properties in the JSON body payload:

- 1. **Page** Since results are paginated by 20 items, the page of the required result set should be provided. If field is not provided all results will be returned.
- 2. **SortBy** By which Locator property should the results be sorted.
- 3. **PageSize** If there are more than 20 results, specify this filter value.
  - a. if not specified, number of items per page is 20.
  - b. if number is less than 20, it is interpreted as 20.
  - c. if number is greater than 1000, it is interpreted as 1000.
- 4. **GlobalSearch** Searches the content in almost all grid columns.
- 5. **SortOrder** Sorting direction can be:
  - a. Asc Ascending order.
  - b. Desc Descending order.
- 6. **Filters** Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.

b. FilterContent - Array of values to search the value requested property against based on the contains type of logic.

#### **Possible Filter properties:**

- 1. FirstName filter by First Name.
- 2. LastName filter by Last Name.
- 3. Username filter by Username.
- 4. Email filter by Email.
- 5. Role filter by Role.
- 6. AccessLevel filter by Access Level (see Access Levels/Permissions).

#### **Curl Example:**

#### Curl

'https://api.blyott.com/users' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

- -H 'token: {token} |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |

API Documentation

-H 'sec-fetch-mode: cors' | -H 'sec-fetch-dest: empty' | -H 'referer: https://portal.blyott.com/' | -H 'accept-language: en-US,en;g=0.9' |

--data-binary

'{"Page":1, "PageSize":50, "GlobalSearch": "test", "SortBy": "FirstName", "SortOrder": "Asc", "Filt ers":[

{"FilterBy":"FirstName","FilterName":"First

Name", "FilterContent":[""]}, {"FilterBy": "LastName", "FilterName": "Last

*Name", "FilterContent":[""]}, {"FilterBy": "Username", "FilterName": "Username", "FilterContent ":[""]},* 

{"FilterBy":"Email","FilterName":"Email","FilterContent":[""]},{"FilterBy":"Role","FilterName" :"Role"

,"FilterContent":[""]},{"FilterBy":"AccessLevel","FilterName":"Access Levels","FilterContent":[""]}]}' |

## 9.6. RESEND INVITE (POST /user/{UserID}/resendInvitation)

Resend invitation can be easily triggered by issuing a PUT request against the

*/user/{UserID}}/resendInvitation* endpoint where the userID is an internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/user/{UserID}/resendInvitation' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token} |

-H 'content-type: application/json' | -H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

# 10. LAYOUT BUILDER OPERATIONS:

In order to add customized information for each entity (Tag, Asset, Locator and Location), dynamic properties are implemented.

## 10.1. CREATE DYNAMIC PROPERTY (POST /layoutBuilder/{entityName})

Dynamic property is created by issuing a POST request to the platform against the */layoutBuilder/{entityName}* endpoint where Entity Name is name of one of the following items:

- tag
- locator
- asset
- location

A body of JSON payload consists of the parameter:

**1. Name** - name of the Dynamic Property.

## Curl Example:

Curl

'https://api.blyott.com/layoutBuilder/asset' |

- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token} |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9' |

--data-binary '{"Name":"New dynamic property"}' |

## 10.2. GET DYNAMIC PROPERTY (GET /layoutBuilder/{entityName})

Dynamic properties can be easily retrieved by issuing a GET request to the platform against the */layoutBuilder/{entityName}* endpoint where Entity Name is name of one of the following items:

- tag
- locator
- asset
- location

## **Curl Example:**

#### Curl

'https://api.blyott.com/layoutBuilder/asset' |

- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token} |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9' |

## 10.3. EDIT DYNAMIC PROPERTY (PUT /layoutBuilder/{entityName})

Dynamic property is edited by issuing a PUT request to the platform against the /layoutBuilder/{entityName} endpoint where Entity Name is name of one of the following items:

- tag
- locator
- asset
- location

A body of JSON payload consists of the following parameters:

- 1. Id unique internal Blyott Dynamic Property identifier.
- 2. Name name of the Dynamic Property.

## **Curl Example:**

Curl

- 'https://api.blyott.com/layoutBuilder/asset' |
- -X 'PUT' |
- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token} |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9'
- --data-binary '{"Id":33, "Name": "New dynamic property"}' |

## 10.4. ARCHIVE DYNAMIC PROPERTY (PUT /layoutBuilder/{entityName}/archive)

Dynamic property is archived by issuing a PUT request to the platform against the /layoutBuilder/{entityName}/archive endpoint where Entity Name is name of one of the following items:

- tag
- locator
- asset
- location

A body of JSON payload consists of the parameter:

1. CustomFieldIDs - unique internal Blyott Dynamic Property identifiers.

#### **Curl Example:**

Curl

'https://api.blyott.com/layoutBuilder/asset/archive' |

-H 'authority: api.blyott.com'

- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token} |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- --data-binary '{"CustomFieldIds":[33]}' |

# 10.5. RESTORE DYNAMIC PROPERTY (PUT /layoutBuilder/{entityName}/restore)

Dynamic property is archived by issuing a PUT request to the platform against the

*/layoutBuilder/{entityName}/restore* endpoint where Entity Name is name of one of the following items:

- tag
- locator
- asset
- location

A body of JSON payload consists of the parameter:

#### 1. CustomFieldIDs - unique internal Blyott Dynamic Property identifiers

#### **Curl Example:**

#### Curl

'https://api.blyott.com/layoutBuilder/asset/restore |

- -H 'authority: api.blyott.com'
- -H 'accept: application/json, text/plain, \*/\*'
- -H 'token: {token} |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- --data-binary '{"CustomFieldIds":[33,34]}' |
## 10.6. DELETE DYNAMIC PROPERTY (PUT /layoutBuilder/{entityName})

Dynamic property is archived by issuing a PUT request to the platform against the */layoutBuilder/{entityName}/restore* endpoint where Entity Name is name of one of the following items:

- tag
- locator
- asset
- location

A body of JSON payload consists of the parameter:

1. CustomFieldIDs - unique internal Blyott Dynamic Property identifiers.

## **Curl Example:**

Curl

'https://api.blyott.com/layoutBuilder/asset/delete' |

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*'

-H 'token: **{token}**' |

-H 'content-type: application/json' | -H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

```
-H 'accept-language: en-US,en;q=0.9' |
```

--data-binary '{"CustomFieldIds":[17,20]}' |

# 11. ADDITIONAL INFORMATION:

#### 11.1. LIST OF TAG HARDWARE MODELS (GET /hardware/0)

Issuing a GET request to */hardware/0* will retrieve a list of all possible HardwareModel values and their associated HardwareId entries that can be used to create/edit a Tag.

## 11.2. LIST OF LOCATOR HARDWARE MODELS (GET /hardware/1)

Issuing a GET request to */hardware/1* will retrieve a list of all possible HardwareModel values and their associated HardwareId entries that can be used to create/edit a Locator.

## 11.3. ACTIVITY VALUES

Values returned when searching and filtering for Assets/Tags/Locators can be any of the following values:

- **1** seen 5 min ago & moving.
- **2** seen 5 min ago.
- **3** seen somewhere between 5 min to 2 hours ago.
- **4** seen more than 2 hours ago. **5** never seen.

# 12. COMMON USAGE SCENARIOS:

#### 12.1. LINK TAG SCENARIOS:

Link unassigned Asset to unassigned Tag

1. Retrieve the list of all unassigned Assets.

2. Edit a Tag's AssetId field to one of the AssetId from the list of unassigned Tags in previous step.

Link unassigned Tag to a new Asset

1. Retrieve the list of all unassigned Tags.

2. Create a new Asset and set Asset's TagId field to one of the Tag Ids from the list of unassigned Tags in previous step.

Link new Asset to a new Tag

1. Create a new Tag and set AssetId field as null, thus creating a new unassigned Tag.

2. Create a new Asset and set Asset's TagId field to a Tag set in previous steps.

## 12.2. UNLINK TAG SCENARIOS:

Unlink Asset from Tag

1. Edit a Tag and set AssetId to null, thus creating an unassigned Tag.

Unlink Tag from Asset

Edit an Asset and set TagId to null, thus creating an unassigned Asset.

# 12.3. VIEW ASSETS'S LOCATION

Issue a Search Assets call and set filtering property of AssetCode to desired value. Result will display Asset's current LocationName and LocationCode (implying Asset was assigned to a Tag and was seen by a Locator).

# 13. FINGERPRINTING:

# 13.1. START FINGERPRINTING (POST /startFingerprinting)

Fingerprinting is started by issuing a POST request to the platform against the */startFingerprinting* endpoint with a body of JSON payload consisting of the following parameters:

1. **TagId** - BLE MAC address of the Tag.

**2.** LocationId - value should be the set to the internal Id of the Location (see Locations).

**3. HardwareId** - Tag's Manufacturer and model information, should be set to Id of the HardwareModel (see Hardware).

After the request is sent, Tag Type is set to 'Machine Learning' to avoid the possibility of user error. It is not possible to start fingerprinting for Tag which is already in the system. In that case, Tag needs to be deleted and added again using this endpoint.

## Example:



## 13.2. END FINGERPRINTING (POST /endFingerprinting)

Fingerprinting is stopped and removed from the system by issuing a POST request to the platform against the */endFingerprinting* endpoint with a body of JSON payload consisting of only one parameter:

API Documentation

**1. TagId** - BLE MAC address of the Tag

#### **Example:**



# 13.3. CREATE FINGERPRINT (POST /fingerprint)

Fingerprint is created by issuing a POST request to the platform against the */fingerprint* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. TagId
- 2. LocationCode
- 3. Timestamp

## **Curl Example:**

#### Curl

```
'https://api.blyott.com/fingerprint |
```

- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}' |
- -H 'content-type: application/json' |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |

```
-H 'referer: https://portal.blyott.com/' | -H 'accept-language: en-US,en;q=0.9' |
```

```
--data-raw '{"TagId":"60C0BF208422", "LocationCode":"CE",
```

```
"Timestamp":"1642273637995"}' |
```

## 13.4. STATUS OF FINGERPRINTING TAGS (GET / fingerprintings)

Fingerprinting status (list of all tags that are currently fingerprinting) can be easily retrieved by issuing a GET request to the platform against the */fingerprintings* endpoint.

For each tag that is actively fingerprinting following data will be returned:

- Tag Id
- Location Id
- Hardware Id
- Start
- End

• Fingerprinting Duration (calculates the duration between Start and the current timestamp)

• Received Broadcasts (number of broadcasts during the fingerprinting session)

#### **Example:**



# 13.5. LIST OF FINGERPRINTING SESSIONS PER LOCATION (GET/fingerprintings/{LocationID})

List of fingerprinting sessions per location (list of all tags that were fingerprinting in the past and are now) can be easily retrieved by issuing a GET request to the platform against the /fingerprintings/{LocationId} endpoint, where the LocationID is Location's Blyott internal identifier (see Locations).

For each tag following data will be returned:

- Tag Id
- Hardware Id
- Start
- End
- Received Broadcasts (number of broadcasts during the fingerprinting session)

#### **Example:**



# 13.6. DELETE FINGERPRINTINGS FROM LOCATION (POST /deleteFingerprintings)

Fingerprintings are deleted from a location by issuing a POST request to the platform against the /deleteFingerprintings endpoint with a body of JSON payload consisting of only one parameter.

Parameter:

1. LocationId - Internal Blyott Location identifier

## Example:



# 14. WORKFLOW SPECIFIC OPERATIONS:

## 14.1. CREATE WORKFLOW (POST /addWorkflow)

Workflow is created by issuing a POST request to the platform against the */addWorkflow* endpoint with a body of JSON payload consisting of at least the following parameters:

- 1. Name Name of the Workflow.
- 2. URL URL where information will be forwarded to.
- **3. AuthenticationType** the authentication type specifies the security protocol. Currently, only 0 (*secret*) is possible.
- 4. Secret used for accessing the URL.
- 5. **ForwardType** defines when the trigger will be triggered:
  - 0 instantly
    - 1 every *x* Seconds
    - 2 on location changed
    - 3 alert offline
    - 4 button pressed
    - 5 movement detected
    - 6 outside asset zone
    - 7 floor changed
    - 8 zone changed
    - 9 inside specific zone
    - 10 outside specific zone

6. **ForwardEvery** – Based on the ForwardType this filed should be populated accordingly:

• ForwardType: 0 - Field is not applicable

• **ForwardType**: 1 - populate with the number of seconds that determines how often this workflow should be triggered (value should be larger than 1). This field is mandatory.

• ForwardType: 2 – a payload whenever the location is changed from the

LocationOfInterest. field is not mandatory.

• **ForwardType**: 3 - populate with the number of seconds that determines how long should the Asset be offline before the Alert is sent. This is also the frequency of how often the Alert will be sent while the Asset is offline (value should be larger than 1). This field is mandatory.

• **ForwardType**: 4 - payload whenever the Asset/Tag button has been pressed. This field is mandatory.

• **ForwardType**: 5 - payload whenever Asset has been moved. This field is mandatory.

• **ForwardType**: 6 - payload whenever Asset has been moved outside designated Zone. This field is mandatory.

• **ForwardType**: 7 - payload whenever Asset has been moved to a different Floor - FloorOfInterest. Not applicable.

• **ForwardType**: 8 - payload whenever the zone is changed from the FloorOfInterest. Not applicable.

• **ForwardType:** 9 – payload whenever Asset moves to specified zone. This filed is mandatory.

• **ForwardType:** 10 – payload whenever Asset moves out of specified zone. This filed is mandatory.

- 7. FloorOfInterest Applicable on ForwardType: 7
- 8. **ZoneOfInterestId** Applicable on ForwardType: 8
- 9. LocationOfInterest Applicable on ForwardType: 2
- 10. IsActive false/true, defines is workflow currently active or not.

## **Curl Example:**

Curl

'https://api.blyott.com/addWorkflow' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary \$'{"Name":"Workflow

1", "URL": "https://test.com", "AuthenticationType":0, "Secret": "Test123\u0021", "ForwardTyp e":1,"

F orwardEvery":160, "IsActive":true}' |

# 14.2. GET WORKFLOW DETAILS (GET /workflow/{WorkflowID})

Workflow details can be easily retrieved by issuing a GET request against the

*/workflow/{WorkflowID}* endpoint where the WorkflowID is Workflow Blyott internal identifier.

#### **Curl Example:**

Curl

'https://api.blyott.com/workflow/4' |

- -H 'authority: api.blyott.com' |
- -H 'accept: application/json, text/plain, \*/\*' |
- -H 'token: {token}" |
- -H 'origin: https://portal.blyott.com' |
- -H 'sec-fetch-site: same-site' |
- -H 'sec-fetch-mode: cors' |
- -H 'sec-fetch-dest: empty' |
- -H 'referer: https://portal.blyott.com/' |
- -H 'accept-language: en-US,en;q=0.9' |

## 14.3. EDIT WORKFLOW (PUT /editWorkflow)

Workflow properties can be edited by issuing a PUT request against the */editWorkflow* endpoint with the body consisting of with a body of JSON payload consisting of at least the following parameters:

- 1. **Name** Name of the Workflow.
- 2. URL URL where information will be forwarded to.

**3. AuthenticationType** - the authentication type specifies the security protocol.

Currently, only 0 (*secret*) is possible.

- 4. Secret used for accessing the URL.
- 5. **ForwardType** defines when the trigger will be triggered:
  - 0 instantly
  - 1 every *x* Seconds
  - 2 on location changed
  - 3 alert offline
  - 4 button pressed
  - 5 movement detected
  - 6 outside asset zone
  - 7 floor changed
  - 8 zone changed
  - 9 inside specific zone
  - 10 outside specific zone

**6. ForwardEvery** – Based on the ForwardType this filed should be populated accordingly:

• ForwardType: 0 - Field is not applicable

• **ForwardType**: 1 - populate with the number of seconds that determines how often this workflow should be triggered (value should be larger than 1). This field is mandatory.

• **ForwardType**: 2 – a payload whenever the location is changed from the LocationOfInterest. field is not mandatory.

• **ForwardType**: 3 - populate with the number of seconds that determines how long should the Asset be offline before the Alert is sent. This is also the frequency of how often the Alert will be sent while the Asset is offline (value should be larger than 1). This field is mandatory.

• **ForwardType**: 4 - payload whenever the Asset/Tag button has been pressed. This field is mandatory.

• **ForwardType**: 5 - payload whenever Asset has been moved. This field is mandatory.

• **ForwardType**: 6 - payload whenever Asset has been moved outside designated asset Zone. This field is mandatory.

API Documentation

• **ForwardType**: 7 - payload whenever Asset has been moved to a different Floor - FloorOfInterest. Not applicable.

• **ForwardType**: 8 - payload whenever the zone is changed from the ZoneOfInterest. Not applicable.

• **ForwardType:** 9 – payload whenever Asset moves to specified zone. This filed is mandatory.

• **ForwardType:** 10 – payload whenever Asset moves out of specified zone. This filed is mandatory.

- 1. FloorOfInterest Applicable on ForwardType: 7
- 2. **ZoneOfInterestId** Applicable on ForwardType: 8
- 3. LocationOfInterest Applicable on ForwardType: 2
- **4. IncludePayload** Include payload flag (true/false)
- 5. IsActive false/true, defines is workflow currently active or not.

## **Curl Example:**

Curl

"https://api.blyott.com/editWorkflow" ^

-X "PUT" ^

-H "authority: api.blyott.com" ^

-H "accept: application/json, text/plain, \*/\*" ^

-H "token: {token}" ^

-H "content-type: application/json" ^

-H "origin: https://portal.blyott.com" ^

-H "sec-fetch-site: same-site" ^

-H "sec-fetch-mode: cors" ^

-H "sec-fetch-dest: empty" ^

-H "referer: https://portal.blyott.com/" ^

-H "accept-language: en-US,en;q=0.9" ^

--data-binary \$'{"Id":4, "Name": "Workflow"

2", "URL": "https://test.com", "AuthenticationType":0, "Secret": "Test123\u0021", "ForwardTyp e":1, "

ForwardEvery":180,"IsActive":true}'|

# 14.4. SEARCH WORKFLOW (POST /workflows)

To search for specific Workflow POST request to the */workflows* endpoint should be issued with following Filtering properties in the JSON body payload:

1. **Page** - Since results are paginated by 20 items, the page of the required result set should be provided. If the field is not provided all results will be returned.

- 2. **SortBy** By which Workflow property should the results be sorted.
- 3. **PageSize -** If there are more than 20 results, specify this filter value.
  - d. if not specified, number of items per page is 20.
  - e. if number is less than 20, it is interpreted as 20.
  - f. if number is greater than 1000, it is interpreted as 1000.
- 4. **GlobalSearch** Searches the content in almost all grid columns.
  - SortOrder Sorting direction can be:
    - a. Asc Ascending order.
    - b. Desc Descending order.
- **6. Filters** Arrays of applied filter, contains the list of following elements:
  - a. FilterBy Property by which to filter on.
  - b. FilterContent Array of values to search the value requested property against based on the contains type of logic.

#### **Possible Filter properties:**

5.

- 1. **Name** filter by Workflow Name.
- 2. **URL** filter by URL.
- 3. **AuthenticationType** filter by Authentication Type.
- 4. **Secret** filter by secret.
- 5. **ForwardType** filter by Forward Type.
- 6. ForwardEvery filter by Forward Every.
- 7. **IsActive** filter by Is Active (*false*| *true*).

# **Curl Example:**

## Curl

'https://api.blyott.com/workflows' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-binary

'{"Page":1,"PageSize":25,"GlobalSearch":"","SortBy":"Name","SortOrder":"Asc","Filters":[{" FilterB

y":"Name","FilterName":"Workflow","FilterContent":["W"]},{"FilterBy":"URL","FilterName":" URL","

*FilterContent":["https"]},{"FilterBy":"AuthenticationMethod","FilterName":"Authentication Method","FilterContent":["Secret"]},{"FilterBy":"Secret","FilterName":"Secret","FilterConten t":["T* 

est"]},{"FilterBy":"ForwardInfo","FilterName":"ForwardInfo","FilterContent":["Every"]},{"FilterBy":" Active", "FilterName":"Active", "FilterContent":["Yes"]}]}' |

# 15. USER PROFILE SPECIFIC OPERATIONS:

## 15.1. CREATE USER PROFILE (POST /userProfile)

User profile is created by issuing a POST request to the platform against the */userProfile* endpoint with a body of JSON payload consisting of at least the following parameters:

#### 1. SavedSearchData – User saved searches data

#### **Curl Example:**

Curl

'https://api.blyott.com/userProfile' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-raw '{"SavedSearchData":"{}"}' |

# 15.2. GET USER PROFILE (GET /UserProfile)

User profile details can be easily retrieved by issuing a GET request against the

/userProfile.

## **Curl Example:**

Curl

'https://api.blyott.com/userProfile' |
-H 'authority: api.blyott.com' |
-H 'accept: application/json, text/plain, \*/\*' |
-H 'token: {token}' |
-H 'origin: https://portal.blyott.com' |
-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;g=0.9'

## 15.3. EDIT USER PROFILE (PUT /UserProfile)

User profile is edited by issuing a PUT request to the platform against the */userProfile* endpoint with a body of JSON payload consisting of at least the following parameters:

1. SavedSearchData – User saved searches data

## **Curl Example:**

#### Curl

*'https://api.blyott.com/userProfile*|

*-X 'PUT'* |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'content-type: application/json' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |

--data-raw '{"SavedSearchData":"{}"}' |

## 15.4. DELETE USER PROFILE (DELETE /UseRProfile)

User profile can be easily removed from the system by issuing a DELETE request against the */userProfile* endpoint.

#### **Curl Example:**

Curl

'https://api.blyott.com/userProfile' |

-X 'DELETE' |

-H 'authority: api.blyott.com' |

-H 'accept: application/json, text/plain, \*/\*' |

-H 'token: {token}' |

-H 'origin: https://portal.blyott.com' |

-H 'sec-fetch-site: same-site' |

-H 'sec-fetch-mode: cors' |

-H 'sec-fetch-dest: empty' |

-H 'referer: https://portal.blyott.com/' |

-H 'accept-language: en-US,en;q=0.9' |