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Serenity Services and APIs: Overview

There are many services that expose APIs across the Serenity IoT Platform. This section describes the services, APIs, and how to use them.

Platform Services

This section provides reference information for the Serenity APIs. They conform to the OpenAPI Specification. These services are exposed and can be used for system integration.

Identity Gateway	Authorization gateway service
IoTHub Manager	Manage Azure IoT Hub and devices
Tenant Manager	Tenant management and alerting services
Device Telemetry	Manage Alarms, Rules, Messages and Device Files
Config	Manage Packages, Device groups, Configuration types and Settings
Diagnostics	Logs the information

To learn how to use the Swagger UI to interact with these services. click here. To learn how to work with these services using other techniques, click here.

Application Services

These services are are only accessible from within the platform. It's possible to contribute to directly to the platform and use these services from within. But these services are not available for external consumption and don't have swagger references.

ASA Manager	Data formatting service
Storage Adapter	Storage service

Azure Services

The Serenity IoT Platform uses several Azure Services. Here is documentation about the services and their APIs.

API DOCUMENTATION	PRODUCT DOCUMENTATION
IoT Hub API	IoT Hub Docs
IoT Hub Device Provisioning	DPS Docs
Data Lake Storage API	Data Lake Docs
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API DOCUMENTATION	PRODUCT DOCUMENTATION
Cosmos DB API	Cosmos DB Docs
Key Vault API	Key Vault API
Stream Analytics API	Stream Analytics Docs
Time Series Insights API	Time Series Insights Docs
Identity Management (B2C) API	B2C Docs
Blob Storage API	Blob Storage Docs
Table Storage API	Table Storage Docs



Serenity Authorization Flow

Request Headers

All API calls must include the following request headers

HEADER	VALUE
Authorization	Bearer (token).
Content-Type	application/json



Serenity and Swagger UI

Each Serenity web service has a Swagger UI that allows you to visualize and interact with the Serenity APIs.

Swagger Paths

Each Serenity web service has a specific path that exposes an interactive Swagger UI to the APIs as follows:

SERVICE	PATH
Identity Gateway	auth/index.html
Config	config/index.html
Device Telemetry	telemetry/index.html
Diagnostics	diagnostics/index.html
IoTHub Manager	iothubmanager/index.html
Tenant Manager	tenantmanager/index.html

Using Swagger UI

To access the Swagger UI, append the path to the platform-url using the following syntax:

https://{platform-url}/{Swagger Path}

For example, the following will take you to the Identity Gateway in CRSL's Development environment:

https://crsliot-aks-dev.centralus.cloudapp.azure.com/iothubmanager/index.html

Additional Details

For additional information on Swagger UI, check out the Swagger UI Documentation



Prerequisites for working with APIs



How to call Serenity REST with Postman

Check out: https://docs.microsoft.com/en-us/rest/api/azure/#how-to-call-azure-rest-apis-with-postman



Identity Gateway Service REST API

The Identity Gateway service is used to authenticate and manage users.

Within each Serenity Instance an interactive Swagger UI is available at the following path https://{platform-url}/auth/index.html For more information about Swagger UI, click here.

REST operation groups

The Identity Gateway service REST API provides operations for working with the following:

OPERATION GROUP	DESCRIPTION
Authorize	Log in or out and context operations.
Configuration	Deals with OpenId configurations.
SystemAdmin	CRUD operations of System Admin feature.
UserSettings	CRUD Operations of user settings.
UserTenant	CRUD operations of user data and associated Tenant.
Status	Health Status operations of the Service.



Authorize

Service: Identity Gateway

Operations

Authorize	Authorizes user and redirects to callback
Logout	Returns to the redirect url passed on successful logout
Token	Returns JWT token matching claim
Tenant	Used to switch tenants
Callback	Called by B2C to redirect



Authorize - Authorize

Service: Identity Gateway

Authorizes user through configured Authorization Provider and redirects to B2c Uri.

GET https://{platform-url}/connect/authorize

URI Parameters

NAME	REQUIRED	TYPE	DESCRIPTION
redirect_uri	Yes	string	callback url from B2C
state	Yes	string	Current State of auth
client_id	Yes	string	client ID GUID
nonce	Yes	string	nonce
tenant	Yes	string	tenant
invite	Yes	string	invitation string

Responses

NAME	ТУРЕ	DESCRIPTION
200 OK		



Authorize - Token

Service: Identity Gateway

Returns JWT token matching claim. Used by user registration to convert and invited user to a enrolled user.

POST https://{platform-url}/connect/token

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

In the request body, supply a JSON representation of ClientCredentialInput object:

NAME	REQUIRED	Т ҮРЕ	DESCRIPTION
client_id	true	string	ClientId of B2C
client_secret	true	string	Client secret AAD
scope	true	string	Tenant Id for which token need to be generated

Responses

NAME	ТУРЕ	DESCRIPTION
200 OK	string	Returns JWT token

Sample Request

POST https://{platform-url}/connect/token

Sample Body

{"client_id": "95d3c562-23eb-4e2d-8d3d-ea2448706934", "client_secret": "SH90ZgTR-MT0bGLb0/u[7qIc-MP0vtAs"}

Sample Response

eyJhbDciOiJSUzI1NiIsInR5cCI6IkpXVCJ9.eyJjbGllbnRdaWQiOiI5NWQzYzY2Mi0yM2VhLTRlMmQtOGQzZC1lYTI0NDg3MDY5MzQiLCJz
dWIiOiI5NWQzYzY2Mi0yM2VhLTRlNmQtOGQzZC1lYTI0NDg3MDY5MzQiLCJuYW1lIjoiOTVkM2M2NjItMjNlYS00ZTJkLThkM2QtZWEyNDQ4N
zA2OTM0IiwidHlwZSI6IkNsaWVudCBDcmVkZW50aWFscyIsImlhdCI6MTYwNDMwNTc00CwidGVuYW50IjoiMjMzYTFjYTItNjg1NS00M2M1LT
hiOWMtYzdmODVhMWRkNTIwIiwicm9sZSI6ImFkbWluIiwiaXNfc3lzdGVtQWRtaW4iOmZhbHNlLCJhdmFpbGFibGVfdGVuYW50cyI6IjIzM2E
xY2EyLTY4NTUtNDNjNS04YjljLWM3Zjg1YTFkZDUyMCIsImV4cCI6MTYwNjg5Nzc00CwiaXNzIjoiaHR0cHM6Ly9jcnNsaW90LWFrcy1kZXYu
Y2VudHJhbHVzLmNsb3VkYXBwLmF6dXJlLmNvbS9hdXRoIiwiYXVkIjoiSW9UUGxhdGZvcm0ifQ.oGTvV4NH5qL4qf8xtWChzn4GCWeaBV8Z9R
wXmInK6V9mE3kSk2LqPJg9x70VPZwHOaQkUcEh2_e9IZKOtwF9JXgz9ZLeFedpBSoLQPAtshMj1YBIXw64MGnuxViB7NoETjxMYsS3cD63_xS
SIq2NgjAixHXeT5yONi5SNKIlScRVv3fytLbWCZou2oWoThTIHUYb-A-plaBWjyLfzhCnSJboolFXWw5QbMZcIUNUvg8yJ1oR7M3OWtHnKdo7vjkSnl5ASe0 dWXaX0LrYBmNUaPek9xG3xTYekhc8rNvf5hL1k7F9VwRVBysPEnaZcnbXrsOvsQ MmAk4hcuYaDtA



Authorize - Logout

Service: Identity Gateway

Returns to the redirect url passed on successful logout.

Http Request

GET https://{platform-url}/connect/logout?post_logout_redirect_uri={redirectUrl}

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

In the request body, supply a JSON representation of ClientCredentialInput object:

NAME	REQUIRED	TYPE	DESCRIPTION
post_logout_redirect_uri	true	string	URI to redirect to on logout.

Responses

NAME	ТҮРЕ	DESCRIPTION
200 OK	Success	

Examples

Log out of CRSL Dev

GET https://{platform-url}/connect/logout?post_logout_redirect_uri=https://crsliot-aks-dev.centralus.cloudapp.azure.com/



Authorize - Tenant

Service: Identity Gateway

Used to switch tenants from one tenant to other available tenant of logged in user

POST https://{platform-url}/connect/switch/{tenantId}

Request Headers

HEADER	VALUE
Content-Type	application/json

Responses

NAME	ТҮРЕ	DESCRIPTION
200 OK	string	Sends back the update token with the latest tenant.

Examples

Tenant Switch Example

POST https://{platform-url}/connect/switch/233a1ca2-6855-43c5-8b9c-c7f85a1dd520

Response

eyJhbGciOiJSUzIINiIssssInR5cCI6IkpasasassXVCJ9.eyJzdWIiOiIzZTMwZjMwMS00ZjU3LTRiM2UtOTQ5YS0zZmY4ZTkzODcwYjUiLC
JuYW1lIjoiVmlzd2FuYWROIEtvdGhhIENXIiwiaWF0IjoxNjA0Mjk2ODIyLCJ0ZW5hbnQiOiIyMzNhMwNhhi02ODU1LTQzYzUtOGI5Yy1jN2Y
4NWExZGQ1MjAiLCJyb2xlIjoiYWRtaW4iLCJpc19zeXN0ZW1BZG1pbiI6dHJ1ZSwiYXZhaWxhYmxlX3RlbmFudHMiOlsiMjA5ZDdmNzktMzlh
YS00ZTJhLThlOWMtNTZmMDRmNzYzM2Y5IiwiMjMzYTFjYTItNjg1NS00M2M1LThiOWMtYzdmODVhMWRkNTIwIiwiYTk0MDM1YTktZTFjNS00Y
mIxLWI3MzktM2I2OTQ5ZTU4NjY0IiwiZjI4NDM0NTEtNWEzNS00NTg5LTk4YmItMGE5YTVmZmUyOGN1Il0sImV4cCI6MTYwNjYzMTEzMSwiaX
NzIjoiaHR0cHM6Ly9jcnNsaW90LWFrcy1kZXYuY2VudHJhbHVzLmNsb3VkYXBwLmF6dXJlLmNvbS9hdXRoIiwiYXVkIjoiSW9UUGxhdGZvcm0
ifQ.jUCYmOuHYM4fkNObCQ6ObAvQ--H9uDrNcgcsojuwhEChPXz1anlaGzPuRZpfK7rhSJzwuC-

 $jrBLf23nL7pxkQA2mUV7oahKVf6WVh0ea7012HnWIk3mqr_l3lDydsuofoisjdijahsduiahzofdjaljfk/szo/hafdnlozhjkfhduszhfauszuofhcjaCNjQp9WH2Wz-$

tqG2LZjh7zutzCmBBAvXd8gyBMqqOwXAVU6yxveMxhmPhyk6LwJSc2fGxsprxNTACHNq89KETQo742peRMo95Xj3dobjRBiKbmglvwuEy2FkzsNjq25ikj6JOsQsgtraFABa35mdGqhLrikVuhyuihjzmsFMDK0U6-l_-ot_c4FSPN9Dc_0oLSL5sB6tRW-zg6rPhhUu_ISLyHh0J51lw



POST Connect Callback

This Method executes the callback method and redirects to call back url

Http Request

POST https://{platform-url}/connect/callback

Request Headers

HEADER	VALUE
Content-Type	application/json

Responses

NAME	ТУРЕ	DESCRIPTION
200 OK	Success	

Sample Request

Request Body

Below are the details to be sent as part of form body. state id_token error error_description

Response

200 OK Response



Configuration

Service: Identity Gateway

Operations

openid configuration	Fetches the Open Id configurations such as issuer, redirectUri, clientId, scope etc., of the environment.
openid configuration jwks	Returns the Json web key of the environment's public key.



Configuration - OpenID Configuration

Service: Identity Gateway

This Method returns the open ID Provider Configuration such as issuer, redirectUri, clientld, scope etc., based on the requested environment from the App Configuration.

GET https://{platform-url}/.well-known/openid-configuration

Permissions

ReadAll permission is required to call this api.

Request Headers

HEADER	VALUE
Content-Type	application/json

Responses

NAME	ТУРЕ	DESCRIPTION
200 OK		

Response Object 1

```
"issuer": "https://{platform-url}/auth",
"jwks_uri": "https://{platform-url}/auth/.well-known/openid-configuration/jwks",
"authorization_endpoint": "{platform-url}/auth/connect/authorize",
"end_session_endpoint": "https://{platform-url}/auth/connect/logout",
"scopes_supported": [
    "openid",
    "profile"
"claims_supported": [
    "sub",
    "name",
    "tenant",
    "role"
"grant_types_supported": [
    "implicit"
"response_types_supported": [
    "token",
    "id_token"
"response_modes_supported": [
    "query"
```



System Admin

Service: Identity Gateway

Operations

OPERATION	DESCRIPTION
Non System Admins	Returns all the non system admins of tenant
System Admins	Returns all the system admins of tenant
Delete System Admin	Delete the selected system admin
Create System Admin	Creates system admin



Non System Admins

This Method returns all the non system admins in the system.

Permissions

SystemAdmin is only allowed to call this api.

Http Request

GET /auth/v1/systemAdmin/getAllNonSystemAdmins

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

Response

Security

Flow: implicit



System Admins

This Method returns all system admins in the system.

Permissions

SystemAdmin is only allowed to call this api.

Http Request

GET /auth/v1/systemAdmin/getAllSystemAdmins

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
  "Method": "string",
  "Models": [
      {
            "userId": "string",
            "name": "string"
      }
    ]
}
```

Response

Security

Flow: implicit



Delete System Admin

This Method deletes system admins in the system.

Permissions

SystemAdmin is only allowed to call this api.

Http Request

DELETE /auth/v1/systemAdmin/{userId}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
  "name": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:43:52.165Z",
  "eTag": "string"
}
```

Response

```
{
    "name": "UserName",
    "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "timestamp": "2020-07-21T02:18:37.1441911+00:00",
    "eTag": "W/\"datetime'2020-07-21T02%3A18%3A37.1441911Z'\""
}
```

Security

Type: OpenID Connect

Flow: implicit



Create System Admin

This Method is used to create system admins in the system.

Permissions

SystemAdmin is only allowed to call this api.

Http Request

POST /auth/v1/systemAdmin

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

```
{
    "UserId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "Name": "userName"
}
```

Response Schema

```
"name": "string",
"partitionKey": "string",
"rowKey": "string",
"timestamp": "2020-11-03T06:36:46.566Z",
"eTag": "string"
```

Response

```
{
    "name": "userName",
   "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "timestamp": "2020-10-30T11:19:50.7436302+00:00",
    "eTag": "W/\"datetime'2020-10-30T11%3A19%3A50.7436302Z'\""
}
```

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Security

Type: OpenID Connect

Flow: implicit



User Settings

Service: Identity Gateway

Operations

OPERATION	DESCRIPTION
User Settings of Loggedin User	Returns user settings of loggedIn UserId
User Settings of input User	Returns user settings of input UserId
User Settings by setting Name	Returns user settings based on settings name
User Settings by UserId and Setting Name	Returns user settings based on userId and settings name
User Settings by ActiveDeviceGroup	Returns user settings of loggedIn UserId and ActiveDevice group
Create UserSettings by Claims UserId	Create User Setting with loggedIn UserId
Create UserSettings	Create User Settings
Update UserSettings of Claims User	Update Settings for loggedIn User
Update UserSettings	Updates user settings
Update UserSetting of ActiveDevicegroup	Update setting value of active device group setting
Delete Usersetting	Delete User settings
Delete Usersetting by inputs	Delete User settings by matching the input
GET LatestBuildNumber	Returns the latest build number of that particular environment



Get User Settings of loggedin User

This Method returns all the user settings of loggedIn userId

Permissions

```
**ReadAll** permission is required to call this api.
```

Http Request

```
GET /auth/v1/settings/all
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

Response

```
{
    "Method": "Get",
    "Models": [
       {
            "value": "2ceeeccf-f775-4ea3-b84e-5ea26b125ab6",
            "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "settingKey": "209d7f79-39aa-4e2a-8e9c-56f04f7633f9-ActiveDeviceGroup",
            "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "209d7f79-39aa-4e2a-8e9c-56f04f7633f9-ActiveDeviceGroup",
            "timestamp": "2020-09-22T05:42:01.4720202+00:00",
            "eTag": "W/\"datetime'2020-09-22T05%3A42%3A01.4720202Z'\""
       },
            "value": "233a1ca2-6855-43c5-8b9c-c7f85a1dd520",
            "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "settingKey": "LastUsedTenant",
            "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "LastUsedTenant",
            "timestamp": "2020-10-14T05:43:26.3297439+00:00",
            "eTag": "W/\"datetime'2020-10-14T05%3A43%3A26.3297439Z'\""
       }
   ]
}
```

Security

Type: OpenID Connect

Flow: implicit



User Settings of input User

This Method returns the settings of input userId

Permissions

```
**ReadAll** permission is required to call this api.
```

Http Request

GET /auth/v1/settings/{userId}/all

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/3e30f301-4f57-4b3e-949a-3ff8e93870b5/all

Response Schema

Response

```
{
    "Method": "Get",
    "Models": [
       {
            "value": "2ceeeccf-f775-4ea3-b84e-5ea26b125ab6",
            "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "settingKey": "209d7f79-39aa-4e2a-8e9c-56f04f7633f9-ActiveDeviceGroup",
            "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "209d7f79-39aa-4e2a-8e9c-56f04f7633f9-ActiveDeviceGroup",
            "timestamp": "2020-09-22T05:42:01.4720202+00:00",
            "eTag": "W/\"datetime'2020-09-22T05%3A42%3A01.4720202Z'\""
       },
            "value": "233a1ca2-6855-43c5-8b9c-c7f85a1dd520",
            "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "settingKey": "LastUsedTenant",
            "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "LastUsedTenant",
            "timestamp": "2020-10-14T05:43:26.3297439+00:00",
            "eTag": "W/\"datetime'2020-10-14T05%3A43%3A26.3297439Z'\""
       }
   ]
}
```

Security

Type: OpenID Connect

Flow: implicit



User Settings by setting Name

This Method returns the settings based on the loggedIn userId and Setting Name

Permissions

```
**ReadAll** permission is required to call this api.
```

Http Request

GET /auth/v1/settings/{setting}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/LastUsedTenant

Response Schema

```
{
  "value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

Response

```
{
    "value": "233a1ca2-6855-43c5-8b9c-c7f85a1dd520",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "LastUsedTenant",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "LastUsedTenant",
    "timestamp": "2020-10-14T05:43:26.3297439+00:00",
    "eTag": "W/\"datetime'2020-10-14T05%3A43%3A26.3297439Z'\""
}
```

Security

Type: OpenID Connect

Flow: implicit



Get User Settings by Userld and Setting Name

This Method returns the settings based on UserId and Setting Name

Permissions

```
**ReadAll** permission is required to call this api.
```

Http Request

GET /auth/v1/settings/{userId}/{setting}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/3e30f301-4f57-4b3e-949a-3ff8e93870b5/LastUsedTenant

Response Schema

```
{
  "value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

Response

```
{
    "value": "233a1ca2-6855-43c5-8b9c-c7f85a1dd520",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "LastUsedTenant",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "LastUsedTenant",
    "timestamp": "2020-10-14T05:43:26.3297439+00:00",
    "eTag": "W/\"datetime'2020-10-14T05%3A43%3A26.3297439Z'\""
}
```

Security

Type: OpenID Connect

Flow: implicit



Get User Settings by ActiveDeviceGroup

This Method returns the settings with the settingName **ActiveDeviceGroup**

Permissions

```
**ReadAll** permission is required to call this api.
```

Http Request

GET /auth/v1/settings/ActiveDeviceGroup

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/ActiveDeviceGroup

Response Schema

```
"value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

Response

```
{
    "value": "cd9bba84-274a-4d69-8e49-81f4933d3a36",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "233a1ca2-6855-43c5-8b9c-c7f85a1dd520-ActiveDeviceGroup",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "233a1ca2-6855-43c5-8b9c-c7f85a1dd520-ActiveDeviceGroup",
    "timestamp": "2020-09-04T05:58:21.4502607+00:00",
    "eTag": "W/\"datetime'2020-09-04T05%3A58%3A21.4502607Z'\""
}
```

Type: OpenID Connect

Flow: implicit



Create UserSettings Using Claims User

This Method is used to save the user settings based on claims userId $\,$

Permissions

```
**UserManage** permission is required to call this api.
```

Http Request

POST /auth/v1/settings/{setting}/{value}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/test/test

Response Schema

```
"value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

```
{
    "value": "test",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "test",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "test",
    "timestamp": "2020-10-29T10:18:17.9415023+00:00",
    "eTag": "W/\"datetime'2020-10-29T10%3A18%3A17.9415023Z'\""
}
```

Type: OpenID Connect

Flow: implicit



Create UserSettings

This Method is used to save the user settings based on input userId

Permissions

```
**UserManage** permission is required to call this api.
```

Http Request

POST /auth/v1/settings/{userId}/{setting}/{value}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/3e30f301-4f57-4b3e-949a-3ff8e93870b5/ test/test

Response Schema

```
{
  "value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

```
{
    "value": "test",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "test",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "test",
    "timestamp": "2020-10-29T10:18:17.9415023+00:00",
    "eTag": "W/\"datetime'2020-10-29T10%3A18%3A17.9415023Z'\""
}
```

Type: OpenID Connect

Flow: implicit



Update UserSettings Using Claims User

This Method is used to save the user settings based on claims userId

Permissions

```
**UserManage** permission is required to call this api.
```

Http Request

POST /auth/v1/settings/{setting}/{value}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/test/UpdatedValue

Response Schema

```
"value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

```
{
    "value": "updatedValue",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "test",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "test",
    "timestamp": "0001-01-01T00:00:00+00:00",
    "eTag": "W/\"datetime'2020-10-29T10%3A34%3A48.4352166Z'\""
}
```

Type: OpenID Connect

Flow: implicit



Update UserSettings

This Method is used to save the user settings based on inputs passed $% \left(1\right) =\left(1\right) \left(1\right$

Permissions

```
**UserManage** permission is required to call this api.
```

Http Request

POST /auth/v1/settings/{userId}/{setting}/{value}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/3e30f301-4f57-4b3e-949a-3ff8e93870b5/test/UpdatedValue

Response Schema

```
"value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

```
{
    "value": "updatedValue",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "test",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "test",
    "timestamp": "0001-01-01T00:00:00+00:00",
    "eTag": "W/\"datetime'2020-10-29T10%3A34%3A48.4352166Z'\""
}
```

Type: OpenID Connect

Flow: implicit



Update UserSetting of ActiveDevicegroup

This Method is used to save the user settings based on claims userId and ActiveDeviceGroup Setting value

Permissions

```
**UserManage** permission is required to call this api.
```

Http Request

POST /auth/v1/settings/ActiveDeviceGroup/{value}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/ActiveDeviceGroup/UpdatedValue

Response Schema

```
{
  "value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

```
{
    "value": "updatedValue",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "ActiveDeviceGroup",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "test",
    "timestamp": "0001-01-01T00:00:00+00:00",
    "eTag": "W/\"datetime'2020-10-29T10%3A34%3A48.4352166Z'\""
}
```

Type: OpenID Connect

Flow: implicit



DELETE Usersetting

This Method is used to delete the user settings based on claims userId and Setting value

Permissions

```
**UserManage** permission is required to call this api.
```

Http Request

POST /auth/v1/settings/test

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/test

Response Schema

```
{
  "value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

```
{
    "value": "updatedValue",
    "userId": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "settingKey": "test",
    "partitionKey": "3e30f301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "test",
    "timestamp": "2020-10-29T10:34:48.4352166+00:00",
    "eTag": "*"
}
```

Type: OpenID Connect

Flow: implicit



GET LatestBuildNumber

This Method is used to fetch the latest build number deployed

Permissions

```
**ReadAll** permission is required to call this api.
```

Http Request

GET /auth/v1/settings/LatestBuildNumber

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Request

/auth/v1/settings/LatestBuildNumber

Response Schema

```
{
  "value": "string",
  "userId": "string",
  "settingKey": "string",
  "partitionKey": "string",
  "rowKey": "string",
  "timestamp": "2020-11-03T06:45:21.739Z",
  "eTag": "string"
}
```

```
{
    "value": "72086",
    "userId": null,
    "settingKey": null,
    "partitionKey": null,
    "rowKey": null,
    "timestamp": "0001-01-01T00:00:00+00:00",
    "eTag": null
}
```

Type: OpenID Connect

Flow: implicit



User Tenant Controller

Service: Identity Gateway

User Tenant Controller is used to maintain and manage the user and tenant related details.

Operations

OPERATION	DESCRIPTION
Users	Returns all the users of logged in users tenant
Tenants	Returns all the tenants of logged in user
User Tenants	Returns all tenants of selected user
User Details	Returns the user details of selected user
Create UserTenant from claim User	Creates UserTenant from logged in user
Create UserTenant from input User	Creates UserTenant from input user
Update UserTenant of claim User	Updates user with the logged in user
Update UserTenant of input User	Updates user with input user details
Delete claim user	Delete the logged in user
Delete user	Delete the selected user
Delete all users	Deletes all users of logged in users tenant
Invite user	Added user will be invited to users email



Users

This Method returns all the user of the loggedIn user's tenant

Permissions

ReadAll permission is required to call this api.

Http Request

GET /auth/v1/tenants/users

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
    "Method": "GetUsers",
    "Models": [
       {
            "roles": "[\"admin\"]",
            "name": "Test User",
            "type": "Member",
            "userId": "0568617a-0a2e-49be-9591-c59163ce2e7f",
            "tenantId": "233a1ca1-6855-43c5-8b9c-c7f85a1dd520",
            "roleList": [
                "admin"
            ],
            "partitionKey": "0568617a-0a2e-49be-9591-c59163ce2e7f",
            "rowKey": "233a1ca1-6855-43c5-8b9c-c7f85a1dd520",
            "timestamp": "2020-08-17T18:30:24.5966896+00:00",
            "eTag": "W/\"datetime'2020-08-17T18%3A30%3A24.5966896Z'\""
   ]
}
```

Type: OpenID Connect

Flow: implicit



Tenants

This Method returns all the tenants of the loggedIn user

Permissions

ReadAll permission is required to call this api.

Http Request

GET /auth/v1/tenants/all

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
    "Method": "GetTenants",
    "Models": [
       {
            "roles": "[\"admin\"]",
            "name": "test",
            "type": "Member",
            "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "tenantId": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
            "roleList": [
                "admin"
            ],
            "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
            "timestamp": "2020-07-17T08:49:06.5977473+00:00",
            "eTag": "W/\"datetime'2020-07-17T08%3A49%3A06.5977473Z'\""
       },
            "roles": "[\"admin\"]",
            "name": "test",
            "type": "Member",
            "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "tenantId": "233a1ca3-6855-43c5-8b9c-c7f85a1dd520",
            "roleList": [
                "admin"
            "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "233a1ca3-6855-43c5-8b9c-c7f85a1dd520",
            "timestamp": "2020-07-17T06:14:46.3943858+00:00",
            "eTag": "W/\"datetime'2020-07-17T06%3A14%3A46.3943858Z'\""
   ]
}
```

Type: OpenID Connect

Flow: implicit



User Tenants

This Method returns all the tenants of the user

Permissions

ReadAll permission is required to call this api.

Http Request

GET /auth/v1/tenants/{userId}/all

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Response

/auth/v1/tenants/3e30fq301-4f57-4b3e-949a-3ff8e93870b5/all

Response Schema

```
"Method": "string",
  "Models": [
    {
      "roles": "string",
      "name": "string",
      "type": "string",
      "userId": "string",
      "tenantId": "string",
      "roleList": [
        "string"
      "partitionKey": "string",
      "rowKey": "string",
      "timestamp": "2020-11-03T07:08:21.814Z",
      "eTag": "string"
  ]
}
```

Response

```
{
    "Method": "GetTenants",
    "Models": [
        {
            "roles": "[\"admin\"]",
            "name": "test",
            "type": "Member",
            "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "tenantId": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
            "roleList": [
                "admin"
            ],
            "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
            "timestamp": "2020-07-17T08:49:06.5977473+00:00",
            "eTag": "W/\"datetime'2020-07-17T08%3A49%3A06.5977473Z'\""
        },
        {
            "roles": "[\"admin\"]",
            "name": "test",
            "type": "Member",
            "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "tenantId": "233a1ca3-6855-43c5-8b9c-c7f85a1dd520",
            "roleList": [
                "admin"
            1,
            "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
            "rowKey": "233a1ca3-6855-43c5-8b9c-c7f85a1dd520",
            "timestamp": "2020-07-17T06:14:46.3943858+00:00",
            "eTag": "W/\"datetime'2020-07-17T06%3A14%3A46.3943858Z'\""
        }
   ]
}
```

Security

Type: OpenID Connect

Flow: implicit



User details

This Method returns the details of the input user

Permissions

ReadAll permission is required to call this api.

Http Request

GET /auth/v1/tenants/{userId}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Sample Response

/auth/v1/tenants/3e30fq301-4f57-4b3e-949a-3ff8e93870b5

Response Schema

```
"Method": "string",
  "Models": [
    {
      "roles": "string",
      "name": "string",
      "type": "string",
      "userId": "string",
      "tenantId": "string",
      "roleList": [
        "string"
      "partitionKey": "string",
      "rowKey": "string",
      "timestamp": "2020-11-03T07:08:21.814Z",
      "eTag": "string"
  ]
}
```

Response

Security

Type: OpenID Connect

Flow: implicit



Create User from Claim User

Creates a new user with the userId, tenantId present in the claims.

Permissions

UserManage permission is required to call this api.

Http Request

POST /auth/v1/tenants

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

In the request body, supply a JSON representation of UserTenantModel object.

Following are the fields which are required for the user to be created successfully.

PROPERTY	VALUE	REQUIRED
Name	Name of the user	Required
Туре	Current status of the user ie., Invited or Member	Required
Roles	Role of the user i.e., admin, readonly, contributor	Required
Userld	Determines the identity of each user	Required
TenantId	Tenant to which user maps	Required

Sample Request

```
{
    "roles": "[\"admin\"]",
    "name": "UserName",
    "type": "Member"
}
```

Response Schema

```
{
    "Method": "string",
    "Models": [
    {
        "roles": "string",
        "type": "string",
        "userId": "string",
        "tenantId": "string",
        "roleList": [
            "string"
        ],
        "partitionKey": "string",
        "rowKey": "string",
        "timestamp": "2020-11-03T07:08:21.814Z",
        "eTag": "string"
    }
}
```

Sample Response

```
{
    "roles": "[\"admin\"]",
    "name": "UserName",
    "type": "Member",
    "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "tenantId": "tenantId",
    "roleList": [
        "admin"
],
    "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
    "timestamp": "2020-10-30T07:52:52.4919217+00:00",
    "eTag": "W/\"datetime'2020-10-30T07%3A52%3A52.4919217Z'\""
}
```

Security

Type: OpenID Connect

Flow: implicit



Create User from input User

Creates a new user with the userId and tenantId present in the claims.

Permissions

UserManage permission is required to call this api.

Http Request

POST /auth/v1/tenants/{userId}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

In the request body, supply a JSON representation of UserTenantModel object.

Following are the fields which are required for the user to be created successfully.

PROPERTY	VALUE	REQUIRED
Name	Name of the user	Required
Туре	Current status of the user ie., Invited or Member	Required
Roles	Role of the user i.e., admin, readonly, contributor	Required
UserId	Determines the identity of each user	Required
TenantId	Tenant to which user maps	Required

Sample Request

```
{
    "roles": "[\"admin\"]",
    "name": "UserName",
    "type": "Member",
    "userId": "UserId"
}
```

Response Schema

```
{
    "Method": "string",
    "Models": [
    {
        "roles": "string",
        "type": "string",
        "userId": "string",
        "tenantId": "string",
        "roleList": [
            "string"
        ],
        "partitionKey": "string",
        "rowKey": "string",
        "timestamp": "2020-11-03T07:08:21.814Z",
        "eTag": "string"
    }
}
```

Sample Response

```
{
    "roles": "[\"admin\"]",
    "name": "UserName",
    "type": "Member",
    "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "tenantId": "tenantId",
    "roleList": [
        "admin"
],
    "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
    "timestamp": "2020-10-30T07:52:52.4919217+00:00",
    "eTag": "W/\"datetime'2020-10-30T07%3A52%3A52.4919217Z'\""
}
```

Security

Type: OpenID Connect

Flow: implicit



Update UserTenant of Claim User

Updates user with the userId, tenantId present in the claims.

Permissions

UserManage permission is required to call this api.

Http Request

PUT /auth/v1/tenants

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

In the request body, supply a JSON representation of UserTenantModel object.

Following are the fields which are required for the user to be created successfully.

PROPERTY	VALUE	REQUIRED
Name	Name of the user	Required
Туре	Current status of the user ie., Invited or Member	Required
Roles	Role of the user i.e., admin, readonly, contributor	Required
UserId	Determines the identity of each user	Required
TenantId	Tenant to which user maps	Required

Sample Request

```
{
    "roles": "[\"admin\"]",
    "name": "UserName",
    "type": "Member"
}
```

Response Schema

```
{
    "Method": "string",
    "Models": [
    {
        "roles": "string",
        "type": "string",
        "userId": "string",
        "roleList": [
        "string"
        ],
        "partitionKey": "string",
        "rowKey": "string",
        "timestamp": "2020-11-03T07:08:21.814Z",
        "eTag": "string"
     }
    ]
}
```

Sample Response

```
{
    "roles": "[\"admin\"]",
    "name": null,
    "type": null,
    "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "tenantId": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
    "roleList": [
        "admin"
],
    "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
    "timestamp": "0001-01-01T00:00:00+00:00",
    "eTag": "W/\"datetime'2020-10-30T08%3A02%3A23.691717Z'\""
```

Security

}

Type: OpenID Connect

Flow: implicit



Update UserTenant of input User

Updates user with the input userld and tenantld present in the claims.

Permissions

UserManage permission is required to call this api.

Http Request

PUT /auth/v1/tenants/{userId}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

In the request body, supply a JSON representation of UserTenantModel object.

Following are the fields which are required for the user to be created successfully.

PROPERTY	VALUE	REQUIRED
Name	Name of the user	Required
Туре	Current status of the user ie., Invited or Member	Required
Roles	Role of the user i.e., admin, readonly, contributor	Required
UserId	Determines the identity of each user	Required
Tenantld	Tenant to which user maps	Required

Sample Request

```
{
    "roles": "[\"admin\"]",
    "name": "UserName",
    "type": "Member",
    "userId": "UserId"
}
```

Response Schema

```
{
    "Method": "string",
    "Models": [
    {
        "roles": "string",
        "type": "string",
        "userId": "string",
        "tenantId": "string",
        "roleList": [
            "string"
        ],
        "partitionKey": "string",
        "rowKey": "string",
        "timestamp": "2020-11-03T07:08:21.814Z",
        "eTag": "string"
    }
}
```

Sample Response

```
{
    "roles": "[\"admin\"]",
    "name": "UserName",
    "type": "Member",
    "userId": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "tenantId": "tenantId",
    "roleList": [
        "admin"
],
    "partitionKey": "3e30fq301-4f57-4b3e-949a-3ff8e93870b5",
    "rowKey": "209d7f77-39aa-4e2a-8e9c-56f04f7633f9",
    "timestamp": "2020-10-30T07:52:52.4919217+00:00",
    "eTag": "W/\"datetime'2020-10-30T07%3A52%3A52.4919217Z'\""
}
```

Security

Type: OpenID Connect

Flow: implicit



Delete claim user

This Method deletes the user based on userId and tenantId present in claim

Permissions

UserManage permission is required to call this api.

Http Request

DELETE /auth/v1/tenants

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

Type: OpenID Connect

Flow: implicit



Delete user

This Method deletes the user based on input userId and tenantId present in claim

Permissions

UserManage permission is required to call this api.

Http Request

DELETE /auth/v1/tenants/{userId}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

Type: OpenID Connect

Flow: implicit



Delete all users

This Method deletes all the user of the loggedIn user's tenant

Permissions

UserManage permission is required to call this api.

Http Request

DELETE /auth/v1/tenants/all

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

Response

```
{
    "Method": "GetUsers",
    "Models": [
       {
            "roles": "[\"admin\"]",
            "name": "Test User",
            "type": "Member",
            "userId": "0568617a-0a2e-49be-9591-c59163ce2e7f",
            "tenantId": "233a1ca3-6855-43c5-8b9c-c7f85a1dd520",
            "roleList": [
                "admin"
            ],
            "partitionKey": "0568617a-0a2e-49be-9591-c59163ce2e7f",
            "rowKey": "233a1ca3-6855-43c5-8b9c-c7f85a1dd520",
            "timestamp": "2020-08-17T18:30:24.5966896+00:00",
            "eTag": "W/\"datetime'2020-08-17T18%3A30%3A24.5966896Z'\""
   ]
}
```

Security

Type: OpenID Connect

Flow: implicit



Invite user

Creates a new user when user gets invites to the system.

Permissions

UserManage permission is required to call this api.

Http Request

POST /auth/v1/tenants/invite

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

In the request body, supply a JSON representation of Invitation object.

Following are the fields which are required for the user to be created successfully.

PROPERTY	VALUE	REQUIRED
EmailAddress	Email address of the user to be invited	Required
Role	Role of user to which needs to be associated	Required
EmailSubject	Email subject	Not Required
InviteUri	Uri with the invitation details	Not Required
FromEmail	From Email to send the mail	Not Required
FromMessage	Message to be sent	Not Required
InviteUserMetaData	User metadata of user	Not Required
MessageBody	Messagebody to be sent as part of email	Not Required

Sample Request

{"email_address":"invitedEmailAddress","role":"admin"}

Response Schema

Sample Response

```
{
    eTag: "W/"datetime'2020-10-30T08%3A35%3A46.9315262Z'""
    name: "invitedEmailAddress"
    partitionKey: "465a5197-f412-4548-9180-d7f3e1331cda"
    roleList: ["admin"]
    roles: "["admin"]"
    rowKey: "209d7f77-39aa-4e2a-8e9c-56f04f7633f9"
    tenantId: "209d7f77-39aa-4e2a-8e9c-56f04f7633f9"
    timestamp: "2020-10-30T08:35:46.9315262+00:00"
    type: "Invited"
    userId: "465a5197-f412-4548-9180-d7f3e1331cda"
}
```

Security

Type: OpenID Connect

Flow: implicit



Status

Service: Identity Gateway

Operations

OPERATION	DESCRIPTION
Get Status	Gets status of the Service and its dependencies
Ping Status	Provides the health status of the service.



Get Status

API that fetches the status of Identity Gateway Service.

Permissions

N/A

Http Request

GET /auth/v1/status

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response Schema

```
"Name": "string",
  "Status": {
    "IsHealthy": true,
    "Message": "string"
  },
  "CurrentTime": "string",
  "StartTime": "string",
  "UpTime": 0,
  "UID": "string",
  "Properties": {
    "authRequired": true,
    "endpoint": "string"
  },
  "Dependencies": {
    "additionalProp1": {
      "IsHealthy": true,
      "Message": "string"
    },
    "additionalProp2": {
      "IsHealthy": true,
      "Message": "string"
    "additionalProp3": {
     "IsHealthy": true,
      "Message": "string"
   }
 },
  "$metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
  }
}
```

Response

```
"Name": "Identity Gateway",
    "Status": {
        "IsHealthy": true,
        "Message": "Alive and well!"
    "CurrentTime": "2020-10-29T06:56:26+00:00",
    "StartTime": "2020-10-26T22:59:39+00:00",
    "UpTime": 201407,
    "UID": "WebService.4b725a62-1126-413d-8a53-30371955e6e1",
    "Properties": {
        "authRequired": true,
        "endpoint": "http://+:80"
    },
    "Dependencies": {
        "Table Storage": {
            "IsHealthy": true,
            "Message": "Alive and well!"
        }
    },
    "$metadata": {
        "$type": "Status;0",
        "$uri": "/status"
}
```



Ping Status

API that pings the Identity Gateway Service and responds the status code.

Permissions

N/A

Http Request

GET /auth/v1/status/ping

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response

Responds 200 Status code



Config

Config service is used to deal with Packages, Device groups, Configuration types, Solution Settings and User Settings

Within each Serenity Instance an interactive Swagger UI is available at the following path https://{platform-url}/config/index.html For more information, click here.

REST operation groups

The Config service REST API provides operations for working with the following:

OPERATION GROUP	DESCRIPTION
Config Types	Operations to manage Config types
Devicegroup	Manage Device groups
Packages	Manage Packages
Seed	Deals with device simulation and templates
Solution Settings	Manages Solution settings like Logo, theme etc.,
Status	Health Status operations of the service
User Settings	Manage User Settings



Config Types

Service: Config

Operations

OPERATION	DESCRIPTION
Get All Config Types	Fetches all Config types



Get All Config Types

API that fetches all the config types.

Permissions

```
- ReadAll
```

Http Request

```
GET /config/v1/configtypes
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

```
N/A
```

Response Schema

```
"configTypes": [
   "string"
],
   "metadata": {
     "additionalProp1": "string",
     "additionalProp2": "string",
     "additionalProp3": "string"
}
```

Sample Response

```
{
   "Items": [
        "Firmware",
        "Custom - 1"
],
   "$metadata": {
        "$type": "DevicePropertyList;1",
        "$url": "/v1/deviceproperties"
}
```

Security

Type: OpenID Connect

Flow: implicit



Device Group

Service: Config

Operations

OPERATION	DESCRIPTION
Get All Device Groups	Fetches all Device groups
Get Device Group	Fetches Device group by ID
Create Device Group	Creates Device group
Update Device Group	Updates Device group
Delete Device Group	Deletes Device group



Get All Device Groups

API that fetches all the Device groups.

Permissions

- ReadAll

Http Request

GET /config/v1/devicegroups

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
  "items": [
    {
      "id": "string",
      "displayName": "string",
      "conditions": [
          "key": "string",
          "operator": 0,
          "value": {}
        }
      ],
      "supportedMethods": [
          "method": "string"
      ],
      "telemetryFormat": [
          "key": "string",
          "displayName": {}
        }
      ],
      "isPinned": true,
      "sortOrder": 0,
      "eTag": "string",
      "metadata": {
        "additionalProp1": "string",
        "additionalProp2": "string",
        "additionalProp3": "string"
    }
  ],
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
 }
}
```

Sample Response

```
{
    "items": [
        {
            "Id": "34b35ac5-837d-4fa4-9ab7-3cdf036a5145",
            "DisplayName": "Default",
            "Conditions": [],
            "SupportedMethods": [],
            "TelemetryFormat": [],
            "IsPinned": false,
            "SortOrder": 0,
            "ETag": "\"3f01ad78-0000-0300-0000-5f902b010000\"",
            "$metadata": {
                "$type": "DeviceGroup;1",
                "$url": "/v1/devicegroups/34b35ac5-837d-4fa4-9ab7-3cdf036a5145"
            }
        },
            "Id": "2f411a20-7632-45f0-bf43-5ae449b8727a",
            "DisplayName": "TestDeviceGroup",
            "Conditions": [
                    "Key": "Tags.TestDevice",
                    "Operator": "EQ",
```

```
"Value": "Yes"
                }
            ],
            "SupportedMethods": [],
            "TelemetryFormat": [],
            "IsPinned": false,
            "SortOrder": 0,
            "ETag": "\"3f01ae78-0000-0300-0000-5f902b010000\"",
            "$metadata": {
                "$type": "DeviceGroup;1",
                "$url": "/v1/devicegroups/2f411a20-7632-45f0-bf43-5ae449b8727a"
            }
        },
            "Id": "2ceeeccf-f775-4ea3-b84e-5ea26b125ab6",
            "DisplayName": "EdgeDeviceGroup",
            "Conditions": [
                    "Key": "Tags.EdgeDevice",
                    "Operator": "EQ",
                    "Value": "Yes"
                }
            ],
            "SupportedMethods": [],
            "TelemetryFormat": [],
            "IsPinned": false,
            "SortOrder": 0,
            "ETag": "\"3f01c078-0000-0300-0000-5f902b010000\"",
            "$metadata": {
                "$type": "DeviceGroup;1",
                "$url": "/v1/devicegroups/2ceeeccf-f775-4ea3-b84e-5ea26b125ab6"
            }
        },
            "Id": "85402f9f-3de2-4b55-bfd4-f7f3ce229270",
            "DisplayName": "SimulationGroup",
            "Conditions": [
                    "Key": "Tags.Org",
                    "Operator": "EQ",
                    "Value": "GGK"
                }
            ],
            "SupportedMethods": [],
            "TelemetryFormat": [],
            "IsPinned": false,
            "SortOrder": 0,
            "ETag": "\"3f01bd78-0000-0300-0000-5f902b010000\"",
            "$metadata": {
                "$type": "DeviceGroup;1",
                "$url": "/v1/devicegroups/85402f9f-3de2-4b55-bfd4-f7f3ce229270"
            }
        }
    ],
    "$metadata": {
        "$type": "DeviceGroupList;1",
        "$url": "/v1/devicegroups"
    }
}
```

Security

Type: OpenID Connect

Flow: implicit





Get Device Group

API that fetches a Device group by ID.

Permissions

- ReadAll

Http Request

GET /config/v1/devicegroups/{id}

Query Params

HEADER	VALUE
id	Device Group ID

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
"id": "string",
"displayName": "string",
  "conditions": [
      "key": "string",
      "operator": 0,
      "value": {}
    }
  ],
  "supportedMethods": [
      "method": "string"
    }
  ],
  "telemetryFormat": [
      "key": "string",
      "displayName": {}
    }
  ],
  "isPinned": true,
  "sortOrder": 0,
  "eTag": "string",
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
 }
}
```

Sample Response

```
{
    "Id": "2f411a20-7632-45f0-bf43-5ae449b8727a",
    "DisplayName": "TestDeviceGroup",
    "Conditions": [
            "Key": "Tags.TestDevice",
            "Operator": "EQ",
            "Value": "Yes"
    ],
    "SupportedMethods": [],
    "TelemetryFormat": [],
    "IsPinned": false,
    "SortOrder": 0,
    "ETag": "\"3f01ae78-0000-0300-0000-5f902b010000\"",
    "$metadata": {
        "$type": "DeviceGroup;1",
        "$url": "/v1/devicegroups/2f411a20-7632-45f0-bf43-5ae449b8727a"
    }
}
```

Security

Type: OpenID Connect

Flow: implicit



Create Device Group

API that creates a Device Group.

Permissions

```
- CreateDeviceGroups
```

Http Request

```
POST /config/v1/devicegroups
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Schema

```
"id": "string",
"displayName": "string",
  "conditions": [
      "key": "string",
      "operator": 0,
      "value": {}
    }
  ],
  "supportedMethods": [
      "method": "string"
    }
  ],
  "telemetryFormat": [
      "key": "string",
      "displayName": {}
    }
  "isPinned": true,
  "sortOrder": 0,
  "eTag": "string",
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
  }
}
```

Sample Request Body

```
"DisplayName": "New Device Group",
  "Conditions": [
      "key": "Tags.Org",
      "operator": "EQ",
     "value": "Test"
   }
  ],
  "TelemetryFormat": [
     "key": "min-temp",
      "displayName": "Min Temperature"
  ],
  "IsPinned": false,
  "SortOrder": 0,
  "SupportedMethods": [
      "method": "Test Method"
  ]
}
```

Response Schema

```
"id": "string",
"displayName": "string",
  "conditions": [
      "key": "string",
      "operator": 0,
      "value": {}
    }
  ],
  "supportedMethods": [
      "method": "string"
  ],
  "telemetryFormat": [
      "key": "string",
      "displayName": {}
    }
  ],
  "isPinned": true,
  "sortOrder": 0,
  "eTag": "string",
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
 }
}
```

Sample Response

```
{
  "Id": "b50858b6-58a9-44df-a1d1-999f02368999",
  "DisplayName": "New Device Group",
  "Conditions": [
      "Key": "Tags.Org",
      "Operator": "EQ",
     "Value": "Test"
   }
  ],
  "SupportedMethods": [
     "Method": "Test Method"
   }
  ],
  "TelemetryFormat": [
      "Key": "min-temp",
      "DisplayName": "Min Temperature"
   }
 ],
  "IsPinned": false,
  "SortOrder": 0,
  "ETag": "\"12006005-0000-0300-0000-5f9bcc640000\"",
  "$metadata": {
   "$type": "DeviceGroup;1",
    "$url": "/v1/devicegroups/b50858b6-58a9-44df-a1d1-999f02368999"
 }
}
```

Security

Type: OpenID Connect

Flow: implicit



Update Device Group

API that updates a Device Group.

Permissions

- UpdateDeviceGroups

Http Request

PUT /config/v1/devicegroups/{id}

Query Params

HEADER	VALUE
id	Device Group ID

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Schema

```
"id": "string",
"displayName": "string",
  "conditions": [
      "key": "string",
      "operator": 0,
      "value": {}
    }
  ],
  "supportedMethods": [
      "method": "string"
  ],
  "telemetryFormat": [
      "key": "string",
      "displayName": {}
  ],
  "isPinned": true,
  "sortOrder": 0,
  "eTag": "string",
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
 }
}
```

Sample Request Body

```
{
  "Id": "b50858b6-58a9-44df-a1d1-999f02368999",
  "ETag": "\"12006005-0000-0300-0000-5f9bcc640000\"",
  "DisplayName": "New Device Group",
  "Conditions": [
     "key": "Tags.Org",
      "operator": "EQ",
      "value": "Test MMM"
   }
  ],
  "TelemetryFormat": [
      "key": "min-temp",
      "displayName": "Min Temperature"
    }
  ],
  "IsPinned": false,
  "SortOrder": 0,
  "SupportedMethods": [
      "method": "Test Method"
  ]
}
```

```
"id": "string",
"displayName": "string",
  "conditions": [
      "key": "string",
      "operator": 0,
      "value": {}
  ],
  "supportedMethods": [
      "method": "string"
  ],
  "telemetryFormat": [
      "key": "string",
      "displayName": {}
  ],
  "isPinned": true,
  "sortOrder": 0,
  "eTag": "string",
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
 }
}
```

Sample Response

```
"Id": "b50858b6-58a9-44df-a1d1-999f02368999",
  "DisplayName": "New Device Group",
  "Conditions": [
     "Key": "Tags.Org",
      "Operator": "EQ",
      "Value": "Test MMM"
   }
  ],
  "SupportedMethods": [
      "Method": "Test Method"
  ],
  "TelemetryFormat": [
     "Key": "min-temp",
      "DisplayName": "Min Temperature"
   }
  ],
  "IsPinned": false,
  "SortOrder": 0,
  "ETag": "\"1200ba11-0000-0300-0000-5f9bcef80000\"",
  "$metadata": {
    "$type": "DeviceGroup;1",
    "$url": "/v1/devicegroups/b50858b6-58a9-44df-a1d1-999f02368999"
  }
}
```

Type: OpenID Connect

Flow: implicit



Delete Device Group

API that deletes a Device Group.

Permissions

- DeleteDeviceGroups

Http Request

DELETE /config/v1/devicegroups/{id}

Query Params

HEADER	VALUE
id	Device Group ID

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

Responds 200 Status code

Security

Type: OpenID Connect

Flow: implicit



Seed

Service: Config

Operations

OPERATION	DESCRIPTION
Seed	Seeds single template for Device Simulation solution or Remote Monitoring solution



Seed

API that seeds single template for Device Simulation solution or Remote Monitoring solution

Permissions

ReallAll

Http Request

POST /config/v1/seed

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

Responds 200 Status code

Security

Type: OpenID Connect

Flow: implicit



Solution Settings

Service: Config

Operations

OPERATION	DESCRIPTION
Get Theme	Fetches the theme of the solution
Set Theme	Sets the theme of the solution
Get Logo	Fetches the logo of the solution
Set Logo	Sets the logo of the solution
Get Actions Settings	Fetches the action settings
Get Default Firmware Setting	Fetches the default firmware
Set Default Firmware Setting	Updates the default firmware



Get Theme

API that fetches the theme of the solution.

Permissions

```
- ReadAll
```

Http Request

```
GET /config/v1/solution-settings/theme
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
  "name": "string",
  "description": "string",
  "azureMapsKey": "string"
}
```

Sample Response

```
"name": "My Solution",
   "description": "My Solution Description",
   "azureMapsKey": "qgZ70Qi8XryD6py8L-ZId8DNuaWtCbdrQ996mY3aQ18"
}
```

Security

Type: OpenID Connect

Flow: implicit



Set Theme

API that sets the theme of the solution.

Permissions

```
- ReadAll
```

Http Request

```
PUT /config/v1/solution-settings/theme
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Schema

```
{
  "name": "string",
  "description": "string",
  "azureMapsKey": "string"
}
```

Sample Request Body

```
{
    "name": "My Solution",
    "description": "My Solution Description",
    "azureMapsKey": "qgZ70Qi8XryD6py8L-ZId8DNuaWtCbdrQ996mY3aQ18"
}
```

Response Schema

```
{
  "name": "string",
  "description": "string",
  "azureMapsKey": "string"
}
```

Sample Response

```
{
    "name": "My Solution",
    "description": "My Solution Description",
    "azureMapsKey": "qgZ70Qi8XryD6py8L-ZId8DNuaWtCbdrQ996mY3aQ18"
}
```

Security

Type: OpenID Connect

Flow: implicit



Get Logo

API that fetches the logo of the solution.

Permissions

- ReadAll

Http Request

GET /config/v1/solution-settings/logo

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	image/svg+xml or image/png or image/jpeg

Request Body

N/A

Response Headers

HEADER	VALUE
Content-Type	image/svg+xml or image/png or image/jpeg
Name	{Name}
IsDefault	true/false
Access-Control-Expose-Headers	Name, Is Default

Sample Response Body

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:cc="http://creativecommons.org/ns#"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:svg="http://www.w3.org/2000/svg"
  xmlns="http://www.w3.org/2000/svg"
  version="1.1"
  id="svg3400"
  viewBox="0 0 300 157.69046"
  height="157.69046"
  width="300">
   <defs
      id="defs3402">
       <clinPath
           id="clipPath3350"
           clipPathUnits="userSpaceOnUse">
               id="path3352"
               d="M 0,0 603,0 603,783 0,783 0,0 Z" />
        </clipPath>
    </defs>
    <metadata
       id="metadata3405">
        <rdf:RDF>
            <cc:Work
               rdf:about="">
                <dc:format>image/svg+xml</dc:format>
                   rdf:resource="http://purl.org/dc/dcmitype/StillImage" />
                <dc:title></dc:title>
            </cc:Work>
        </rdf:RDF>
    </metadata>
       transform="translate(-322.94143,-762.82546)"
       id="layer1">
        <g
           id="g3346"
           transform="matrix(7.5619164,0,0,-7.5619164,48.401073,1766.4504)">
               clip-path="url(#clipPath3350)"
               id="g3348">
                   transform="translate(67.5289,132.1326)"
                   id="g3354">
                    <path
                       id="path3356"
                       style="fill:#ee1b2d;fill-opacity:1;fill-rule:nonzero;stroke:none"
                       d="M 0,0 -2.83,-11.512 -5.668,0 l -8.197,0 0,-4.251 c -0.996,3.72 -4.65,4.653 -
7.915,4.706 -3.981,0.052 -8.392,-1.673 -8.545,-6.937 l 5.506,0 c 0,1.589 1.455,2.499 2.829,2.476 1.687,0.014
2.463, -0.706 2.502, -1.827 -0.058, -0.973 -0.632, -1.65 -2.488, -1.65 1 -1.852, 0 0, -3.82 1.681, 0 c 0.955, 0 0.963, -1.85
2.284,-0.52 2.336,-1.88 0.064,-1.621 -1.063,-2.333 -2.45,-2.347 -2.476,0.092 -3.115,1.994 -3.115,3.63 1 -
5.715,0 c 0.024,-1.102 -0.012,-8.285 8.945,-8.232 4.291,-0.039 7.414,1.765 8.295,4.252 l 0,-3.812 5.512,0
0,12.42 3.048,-12.42 4.925,0 3.059,12.406 0,-12.417 5.624,0 L 8.317,0 0,0 Z m -13.847,-11.485 c -0.702,1.452
-1.69,2.087 -2.246,2.288 1.167,0.519 1.778,1.223 2.246,2.626 1 0,-4.914 z" />
                </g>
            </g>
        </g>
    </g>
</svg>
```

Flow: implicit



Set Logo

API that sets the logo and name of the solution.

Permissions

- ReadAll

Http Request

PUT /config/v1/solution-settings/logo

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	image/svg+xml or image/png or image/jpeg
Name	{Name}

Request Body

Binary: SVG/PNG/JPEG/JPG

Response Headers

HEADER	VALUE
Content-Type	image/svg+xml or image/png or image/jpeg
Name	{Name}
Is Default	true/false
Access-Control-Expose-Headers	Name, Is Default

Sample Response

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:cc="http://creativecommons.org/ns#"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:svg="http://www.w3.org/2000/svg"
  xmlns="http://www.w3.org/2000/svg"
  version="1.1"
  id="svg3400"
  viewBox="0 0 300 157.69046"
  height="157.69046"
  width="300">
   <defs
      id="defs3402">
       <clinPath
           id="clipPath3350"
           clipPathUnits="userSpaceOnUse">
               id="path3352"
               d="M 0,0 603,0 603,783 0,783 0,0 Z" />
        </clipPath>
    </defs>
    <metadata
       id="metadata3405">
        <rdf:RDF>
            <cc:Work
               rdf:about="">
                <dc:format>image/svg+xml</dc:format>
                   rdf:resource="http://purl.org/dc/dcmitype/StillImage" />
                <dc:title></dc:title>
            </cc:Work>
        </rdf:RDF>
    </metadata>
       transform="translate(-322.94143,-762.82546)"
       id="layer1">
        <g
           id="g3346"
           transform="matrix(7.5619164,0,0,-7.5619164,48.401073,1766.4504)">
               clip-path="url(#clipPath3350)"
               id="g3348">
                   transform="translate(67.5289,132.1326)"
                   id="g3354">
                    <path
                       id="path3356"
                       style="fill:#ee1b2d;fill-opacity:1;fill-rule:nonzero;stroke:none"
                       d="M 0,0 -2.83,-11.512 -5.668,0 l -8.197,0 0,-4.251 c -0.996,3.72 -4.65,4.653 -
7.915,4.706 -3.981,0.052 -8.392,-1.673 -8.545,-6.937 l 5.506,0 c 0,1.589 1.455,2.499 2.829,2.476 1.687,0.014
2.463, -0.706 2.502, -1.827 -0.058, -0.973 -0.632, -1.65 -2.488, -1.65 1 -1.852, 0 0, -3.82 1.681, 0 c 0.955, 0 0.963, -1.85
2.284,-0.52 2.336,-1.88 0.064,-1.621 -1.063,-2.333 -2.45,-2.347 -2.476,0.092 -3.115,1.994 -3.115,3.63 1 -
5.715,0 c 0.024,-1.102 -0.012,-8.285 8.945,-8.232 4.291,-0.039 7.414,1.765 8.295,4.252 l 0,-3.812 5.512,0
0,12.42 3.048,-12.42 4.925,0 3.059,12.406 0,-12.417 5.624,0 L 8.317,0 0,0 Z m -13.847,-11.485 c -0.702,1.452
-1.69,2.087 -2.246,2.288 1.167,0.519 1.778,1.223 2.246,2.626 1 0,-4.914 z" />
                </g>
            </g>
        </g>
    </g>
</svg>
```

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Α



Get Action Settings

API that fetches the action settings.

Http Request

```
GET /config/v1/solution-settings/actions
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
  "items": [
     {
        "type": "string",
        "settings": {
            "additionalProp1": {},
            "additionalProp2": {},
            "additionalProp3": {}
      }
  }
}

metadata": {
  "additionalProp1": "string",
  "additionalProp2": "string",
  "additionalProp3": "string"
}
```

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Get Default Firmware Setting

API that fetches the default firmware settings.

Permissions

```
- ReadAll
```

Http Request

```
GET /config/v1/solution-settings/defaultFirmware
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response Schema

```
{
  "jsObject": {},
  "metadata": {
    "version": "string"
  }
}
```

Sample Response

```
{
  "jsObject": {
    "content": {
      "deviceContent": {
        "properties.desired.softwareConfig": {
          "softwareName": "Firmware",
          "version": "${version}",
          "softwareURL": "${blobData.FileUri}",
          "fileName": "${packageFile.name}",
          "serialNumber": "",
          "checkSum": "${blobData.CheckSum}"
       }
     }
   },
    "metrics": {
      "queries": {
        "current": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status = 'Applied'
AND properties.reported.softwareConfig.version = properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'",
        "applying": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status =
'Applied' AND ( properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')",
        "rebooting": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status =
'Applied' AND properties.reported.softwareConfig.version = properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'",
        "error": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}}]].status = 'Applied'
AND properties.reported.softwareConfig.status='Error'",
        "rolledback": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status =
'Applied' AND properties.reported.softwareConfig.status='RolledBack'"
   },
    "targetCondition": "",
    "priority": 20
  },
  "metadata": {
    "version": "content//deviceContent//properties.desired.softwareConfig//version"
}
```

Security

Type: OpenID Connect

Flow: implicit

 $Authorization\ URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com$



Set Default Firmware Setting

API that updates the default firmware settings.

Permissions

```
- CreatePackages
```

Http Request

```
POST /config/v1/solution-settings/defaultFirmware
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Schema

```
{
  "jsObject": {},
  "metadata": {
    "version": "string"
  }
}
```

Sample Request Body

```
{
  "jsObject": {
    "content": {
      "deviceContent": {
        "properties.desired.softwareConfig": {
          "softwareName": "Firmware",
          "version": "${version}",
          "softwareURL": "${blobData.FileUri}",
          "fileName": "${packageFile.name}",
          "serialNumber": "",
          "checkSum": "${blobData.CheckSum}"
       }
     }
   },
    "metrics": {
      "queries": {
        "current": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status = 'Applied'
AND properties.reported.softwareConfig.version = properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'",
        "applying": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status =
'Applied' AND ( properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')",
        "rebooting": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status =
'Applied' AND properties.reported.softwareConfig.version = properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'",
        "error": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status = 'Applied'
AND properties.reported.softwareConfig.status='Error'",
        "rolledback": "SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status =
'Applied' AND properties.reported.softwareConfig.status='RolledBack'"
   },
    "targetCondition": "",
    "priority": 20
  },
  "metadata": {
    "version": "content//deviceContent//properties.desired.softwareConfig//version"
}
```

Response Schema

```
"metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
},
    "key": "string",
    "data": "string",
    "eTag": "string"
}
```

Sample Response

```
{
  "$metadata": {
   "$modified": "11/02/2020 14:07:39 +00:00",
   "$uri": "/v1/collections/solution-settings/values/defaultFirmware"
  "Key": "defaultFirmware",
 "Data": "{\"JsObject\":{\"content\":{\"deviceContent\":{\"properties.desired.softwareConfig\":
":\"${packageFile.name}\",\"serialNumber\":\"\",\"checkSum\":\"${blobData.CheckSum}\"}}},\"metrics\":
{\"queries\":{\"current\":\"SELECT deviceId FROM devices WHERE configurations.[[${deployment.id}]].status =
'Applied' AND properties.reported.softwareConfig.version = properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'\",\"applying\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND (
properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')\",\"rebooting\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'\",\"error\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='Error'\",\"rolledback\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='RolledBack'\"}},\"targetCondition\":\"\",\"priority\":20},\"Metada
ta\":{\"Version\":\"content//deviceContent//properties.desired.softwareConfig//version\"}}",
 "ETag": "\"010050d8-0000-0300-0000-5fa012ab0000\""
}
```

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Status

Service: Config

Operations

OPERATION	DESCRIPTION
Get Status	Gets status of the Service and its dependencies
Ping Status	Provides the health status of the service.



Get Status

API that fetches the status of Config Service.

Permissions

```
N/A
```

Http Request

```
GET /config/v1/status
```

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response Schema

```
"name": "string",
  "status": {
    "isHealthy": true,
    "message": "string"
 },
  "currentTime": "string",
  "startTime": "string",
  "upTime": 0,
  "uid": "string",
  "properties": {
    "authRequired": true,
    "endpoint": "string"
 },
  "dependencies": {
    "additionalProp1": {
      "isHealthy": true,
      "message": "string"
    },
    "additionalProp2": {
      "isHealthy": true,
      "message": "string"
    "additionalProp3": {
      "isHealthy": true,
      "message": "string"
    }
 },
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
  }
}
```

Sample Response

```
{
   "Name": "Config",
    "Status": {
       "IsHealthy": true,
        "Message": "Alive and well!"
   },
   "CurrentTime": "2020-10-29T10:00:57+00:00",
   "StartTime": "2020-10-27T16:19:42+00:00",
    "UpTime": 150075,
    "UID": "WebService.d1d03c23-0548-42b8-9b58-cfe2ba2843e2",
    "Properties": {
       "authRequired": true,
       "endpoint": "http://+:80"
    "Dependencies": {
        "Storage Adapter": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       },
        "Device Telemetry": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       },
        "Asa Manager": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       }
   },
    "$metadata": {
       "$type": "Status;0",
       "$uri": "/status"
}
```

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Ping Status

API that pings the Config Service and responds with status code.

Permissions

N/A

Http Request

GET /config/v1/status/ping

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

Responds 200 Status code

Security

Type: OpenID Connect

Flow: implicit

 $\textbf{Authorization URL:} \ https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com$



User Settings

Service: Config

Operations

OPERATION	DESCRIPTION	
Get User Settings	Fetches user settings	
Set User Settings	Sets/Updates user settings	



Get User Settings

API that fetches the settings of a user.

Permissions

- ReadAll

Http Request

GET /config/v1/user-settings/{id}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

Object

Security

Type: OpenID Connect

Flow: implicit

 $\textbf{Authorization URL:} \ https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com$



Set User Settings

API that sets the settings of a user.

Permissions

- ReadAll

Http Request

PUT /config/v1/user-settings/{id}

Request Headers

HEADER	VALUE
Authorization	Bearer {token}. Required.
Content-Type	application/json

Request Body

Object

Response

Object

Security

Type: OpenID Connect

Flow: implicit

 $\textbf{Authorization URL:} \ https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com$



Namespace Mmm.lot.Config.WebService.Controllers

Classes

Config Types Controller

 ${\sf DeviceGroupController}$

PackagesController

SeedController

 ${\bf Solution Settings Controller}$

StatusController

UserSettingsController



Class ConfigTypesController

Inheritance

System.Object

ConfigTypesController

Inherited Members

System.Object.ToString()

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

Namespace: Mmm.lot.Config.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public class ConfigTypesController

Constructors

ConfigTypesController(IStorage)

Declaration

public ConfigTypesController(IStorage storage)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStorage	storage	

Methods

GetAllConfigTypesAsync()

Declaration

public Task<ConfigTypeListApiModel> GetAllConfigTypesAsync()

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Config Type List Api Model >	



Class DeviceGroupController

Inheritance

System.Object

DeviceGroupController

Name space: Mmm. Iot. Config. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class DeviceGroupController : Controller

Constructors

DeviceGroupController(IStorage)

Declaration

public DeviceGroupController(IStorage storage)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStorage	storage	

Methods

CreateAsync(DeviceGroupApiModel)

Declaration

public Task<DeviceGroupApiModel> CreateAsync(DeviceGroupApiModel input)

Parameters

ТҮРЕ	NAME	DESCRIPTION
DeviceGroupApiModel	input	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Group Api Model >	

DeleteAsync(String)

Declaration

public Task DeleteAsync(string id)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task	

GetAllAsync()

Declaration

public Task<DeviceGroupListApiModel> GetAllAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Group List Api Model >	

GetAsync(String)

Declaration

public Task<DeviceGroupApiModel> GetAsync(string id)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Group Api Model >	

UpdateAsync(String, DeviceGroupApiModel)

Declaration

public Task<DeviceGroupApiModel> UpdateAsync(string id, DeviceGroupApiModel input)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	
DeviceGroupApiModel	input	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Group Api Model >	



Class PackagesController

Inheritance

System.Object

PackagesController

 $Name space: {\color{red}Mmm.lot.Config.WebService.Controllers}$

Assembly: cs.temp.dll.dll

Syntax

public class PackagesController : Controller

Constructors

PackagesController(IStorage)

Declaration

public PackagesController(IStorage storage)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStorage	storage	

Fields

InactivePackageTag

Declaration

public const string InactivePackageTag = "reserved.inactive"

Field Value

ТУРЕ	DESCRIPTION
System.String	

Methods

ActivatePackageAsync(String)

Declaration

public Task<ActionResult<PackageApiModel>> ActivatePackageAsync(string id)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Action Result < Package Api Model > >	

AddTagAsync(String, String)

Declaration

public Task<ActionResult<PackageApiModel>> AddTagAsync(string id, string tag)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	
System.String	tag	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Action Result < Package Api Model > >	

DeactivatePackageAsync(String)

Declaration

public Task<ActionResult<PackageApiModel>> DeactivatePackageAsync(string id)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task < ActionResult < PackageApiModel > >	

DeleteAsync(String)

Declaration

public Task DeleteAsync(string id)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task	

GetAsync(String)

Declaration

public Task<PackageApiModel> GetAsync(string id)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Package Api Model >	

GetFilteredAsync(String, String, List<String>, String)

Declaration

public Task<PackageListApiModel> GetFilteredAsync(string packageType, string configType, List<string> tags, string tagOperator = "AND")

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	packageType	
System.String	configType	
List < System. String >	tags	
System.String	tagOperator	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Package List Api Model >	

PostAsync(String, String, String, List<String>, IFormFile)

Declaration

public Task<PackageApiModel> PostAsync(string packageName, string packageType, string configType, string
version, List<string> tags, IFormFile package)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	packageName	
System.String	packageType	
System.String	configType	

ТҮРЕ	NAME	DESCRIPTION
System.String	version	
List < System. String >	tags	
IFormFile	package	

Returns

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Package Api Model >	

RemoveTagAsync(String, String)

Declaration

public Task<ActionResult<PackageApiModel>> RemoveTagAsync(string id, string tag)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	
System.String	tag	

Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task < ActionResult < Package Api Model > >	

RemoveTagsAsync(String)

Declaration

public Task<ActionResult<PackageApiModel>> RemoveTagsAsync(string id)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Action Result < Package Api Model > >	

UploadFileAsync(IFormFile)

Declaration

public Task<UploadFileServiceModel> UploadFileAsync(IFormFile uploadedFile)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IFormFile	uploadedFile	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <uploadfileservicemodel></uploadfileservicemodel>	



Class SeedController

Inheritance

System.Object

SeedController

 $Name space: {\color{red}Mmm.lot.Config.WebService.Controllers}$

Assembly: cs.temp.dll.dll

Syntax

public class SeedController : Controller

Constructors

SeedController(ISeed)

Declaration

public SeedController(ISeed seed)

Parameters

ТҮРЕ	NAME	DESCRIPTION
ISeed	seed	

Methods

PostAsync()

Declaration

public Task PostAsync()

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task	



Class SolutionSettingsController

Inheritance

System.Object

SolutionSettingsController

 $Namespace: \\Mmm.lot.Config.WebService.Controllers$

Assembly: cs.temp.dll.dll

Syntax

public class SolutionSettingsController : Controller

Constructors

SolutionSettingsController(IStorage, IActions)

Declaration

public SolutionSettingsController(IStorage storage, IActions actions)

Parameters

ТУРЕ	NAME	DESCRIPTION
IStorage	storage	
IActions	actions	

Methods

GetActionsSettingsAsync()

Declaration

public Task<ActionSettingsListApiModel> GetActionsSettingsAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Action Settings List Api Model >	

GetDefaultFirmwareSettingAsync()

Declaration

public Task<DefaultFirmwareSettingApiModel> GetDefaultFirmwareSettingAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Default Firmware Setting Api Model >	

GetLogoAsync()

Declaration

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task	

GetThemeAsync()

Declaration

public Task<Theme> GetThemeAsync()

Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <theme></theme>	

SetDefault Firmware Setting A sync (Default Firmware Setting Api Model)

Declaration

public Task<ValueApiModel> SetDefaultFirmwareSettingAsync(DefaultFirmwareSettingApiModel settingModel)

Parameters

ТУРЕ	NAME	DESCRIPTION
Default Firmware Setting Api Model	setting Model	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Value Api Model >	

SetLogoAsync()

Declaration

public Task SetLogoAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task	

SetThemeAsync(Theme)

Declaration

public Task<Theme> SetThemeAsync(Theme theme)

Parameters

ТҮРЕ	NAME	DESCRIPTION
Theme	theme	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <theme></theme>	



Class StatusController

Inheritance

System.Object

StatusController

 $Name space: {\color{red}Mmm.lot.Config.WebService.Controllers}$

Assembly: cs.temp.dll.dll

Syntax

public sealed class StatusController : ControllerBase

Constructors

StatusController(IStatusService)

Declaration

public StatusController(IStatusService statusService)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStatusService	statusService	

Methods

GetAsync()

Declaration

public Task<StatusApiModel> GetAsync()

Returns

ТУРЕ	DESCRIPTION
System.Threading.Tasks.Task <statusapimodel></statusapimodel>	

Ping()

Declaration

public IActionResult Ping()

ТУРЕ	DESCRIPTION
IActionResult	



Class UserSettingsController

Inheritance

System.Object

UserSettingsController

Name space: Mmm. Iot. Config. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class UserSettingsController : Controller

Constructors

UserSettingsController(IStorage)

Declaration

public UserSettingsController(IStorage storage)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStorage	storage	

Methods

GetUserSettingAsync(String)

Declaration

public Task<object> GetUserSettingAsync(string id)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task < System.Object >	

SetUserSettingAsync(String, Object)

Declaration

public Task<object> SetUserSettingAsync(string id, object setting)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String i	id	

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ТУРЕ	NAME	DESCRIPTION
System.Object	setting	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.object></system.object>	



Device Telemetry

Device Telemetry service is used to manage Alarms, Rules, AlarmsByRules, Message and Device Files.

Within each Serenity Instance an interactive Swagger UI is available at the following path https://{platform-url}/telemetry/index.html For more information, click here.

REST operation groups

The Device Telemetry service REST API provides operations for working with the following:

Alarms	Manage Alarms
AlarmsByRule	Fetch paginated details of Rules with Alarms count and Alarms for specific rule
DeviceFiles	Fetch device files and download
Messages	Manage Messages
Rules	Manage Rules
Status	Health status operations



Alarms

Service: Device Telemetry

Operations

List	Get list of alarms
Details	Get alarm details
Delete	Delete alarms



List Alarms

Service: Device Telemetry

GET https://{platform-url}/telemetry /v1 /Alarms

URI Parameters

NAME	REQUIRED	ТҮРЕ	DESCRIPTION
from		string	Start time as ISO8601 or "NOW-{ISO 8601 duration}"
to		string	End time as ISO8601 or "NOW-{ISO 8601 duration}"
order		string	Set sort order: oldest ("asc"), newest ("desc")
skip		string	Alarms to skip. Used for pagination.
limit		string	Return count. Default 100.
devices		string	Filter used to request specific devices

Responses

NAME	ТҮРЕ
200 OK	[NameOfResponse]

Definitions

NameOfResponse Schema

```
{
  "items": [
    {
      "metadata": {
        "additionalProp1": "string",
        "additionalProp2": "string",
        "additionalProp3": "string"
     },
      "eTag": "string",
      "id": "string",
      "dateCreated": "string",
      "dateModified": "string",
      "description": "string",
      "groupId": "string",
      "deviceId": "string",
      "status": "string",
      "rule": {
        "metadata": {
         "additionalProp1": "string",
         "additionalProp2": "string",
         "additionalProp3": "string"
        },
        "id": "string",
        "severity": "string",
        "description": "string"
     }
    }
  ],
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
  }
}
```

Required Permissions

ReadAll

Examples

Get Alarms by Condition

Example Request Body

```
{
   "from": "NOW-PT24H",
   "to": "NOW",
   "order": "desc",
   "skip": 0,
   "limit": 5,
   "devices": [
     "deviceId1",
     "deviceId2",
   ]
}
```

Example Response

```
```json
{
 "Items": [
 "ETag": "\"0100e67a-0000-0300-0000-5f8833120000\"",
 "Id": "84cd95cd-c5ee-2095-495a-3f47a9d3476f",
 "DateCreated": "2020-10-15T11:31:00+00:00",
 "DateModified": "2020-10-15T11:31:00+00:00",
 "Description": null,
 "GroupId": null,
 "DeviceId": "sah_test_device",
 "Status": "open",
 "Rule": {
 "Id": "40550ad4-d830-4e69-8ba3-cd0b9ef7eec8",
 "Severity": "Critical",
 "Description": "TestDesc",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/ 40550ad4-d830-4e69-8ba3-cd0b9ef7eec8"
 }
 },
 "$metadata": {
 "$type": "Alarm;1",
 "$uri": "/v1/alarms/ 84cd95cd-c5ee-2095-495a-3f47a9d3476f"
 }
 }
],
 "$metadata": {
 "$type": "Alarms;1",
 "$uri": "/v1/alarms"
 }
}
```

### Get Alarm by Id

## Request Format

```
GET /telemetry /v1/Alarms/{guid}
```

## **Example Request**

```
GET /telemetry /v1/Alarms/84cd95cd-c5ee-2095-495a-3f47a9d3476f
```

## **Example Response**

• Status Code 200

```
"ETag": "\"0100e67a-0000-0300-0000-5f8833120000\"",
 "Id": "84cd95cd-c5ee-2095-495a-3f47a9d3476f",
 "DateCreated": "2020-10-15T11:31:00+00:00",
 "DateModified": "2020-10-15T11:31:00+00:00",
 "Description": null,
 "GroupId": null,
 "DeviceId": "sah_test_device",
 "Status": "open",
 "Rule": {
 "Id": "40550ad4-d830-4e69-8ba3-cd0b9ef7eec8",
 "Severity": "Critical",
 "Description": "TestDesc",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/ 40550ad4-d830-4e69-8ba3-cd0b9ef7eec8"
 },
 "$metadata": {
 "$type": "Alarm;1",
 "$uri": "/v1/alarms/ 84cd95cd-c5ee-2095-495a-3f47a9d3476f"
 }
}
```



# Alarm Details

Service: Device Telemetry

Get

GET https://{platform-url}/connect/authorize



# **Delete Alarms**

Service: Device Telemetry

Get

GET https://{platform-url}/connect/authorize



# Alarms By Rule

Service: Device Telemetry

# **Operations**

OPERATION	DESCRIPTION
Get rules with alarms count	Fetches the list of rules with recorded alarms count
Get rules with alarms count - Alternative	Fetches the list of rules with recorded alarms count-Alternate way
Get alarms for rule	Fetches the alarms for a rule
Get alarms for rule-Alternative	Fetches the alarms for a rule-Alternate way



# **Get rules with alarms count**

API that fetches the rules details with a count of recorded alarms.

#### **Permissions**

ReadAll

## Http Request

GET /telemetry/v1/AlarmsByRule

## Query parameters

QUERY PARAMETER	TYPE	EXAMPLE	DESCRIPTION
from	string	NOW- PT24H	The start of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
to	string	NOW	The end of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
order	string	desc	Whether to sort the result from the oldest (asc) or the most recent (desc)
skip	int	0	How many records to skip, used to paginate through the global list of rules
limit	int	50	How many records to return, used to paginate through the global list of rules
devices	string	id1,id6,xyz	A filter used to request rules for specific devices

## **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

## Request Body

N/A

#### Response

• Status Code 200:

```
{
 "Items": [
 {
 "Count": 17,
 "Status": "open",
 "Created": "2020-10-15T12:12:00+00:00",
 "Id": "54d0f242-c7e0-402d-9e39-f8d1e01a28a4",
 "Severity": "Critical",
 "Description": "TestDesc",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/ 54d0f242-c7e0-402d-9e39-f8d1e01a28a4"
 }
 },
 "$metadata": {
 "$type": "AlarmByRule;1",
 "$uri": "/v1/alarmsbyrule/ 54d0f242-c7e0-402d-9e39-f8d1e01a28a4"
 }
 }
],
 "$metadata": {
 "$type": "AlarmByRuleList;1",
 "$uri": "/v1/alarmsbyrule"
 }
}
```

Type: OpenID Connect

Flow: implicit



# **Get rules with alarms count - Alternate way**

API that fetches the rules details with a count of recorded alarms that are related to rules.

#### **Permissions**

ReadAll

## Http Request

POST /telemetry/v1/AlarmsByRule

#### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

## Request Body

```
{
 "from": "NOW-PT24H",
 "to": "NOW",
 "order": "desc",
 "skip": 0,
 "limit": 50,
 "devices": [
 "xyx"
]
}
```

NAME	TYPE	EXAMPLE	DESCRIPTION
from	string	NOW-PT24H	The start of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
to	string	NOW	The end of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
order	string	desc	Whether to sort the result from the oldest (asc) or the most recent (desc)
skip	int	0	How many records to skip, used to paginate through the global list of rules
limit	int	50	How many records to return, used to paginate through the global list of rules
devices	list	[ "id1","id6", "xyz" ]	A filter used to request rules for specific devices

# Response

• Status Code 200:

```
{
 "Items": [
 {
 "Count": 17,
 "Status": "open",
 "Created": "2020-10-15T12:12:00+00:00",
 "Rule": {
 "Id": "54d0f242-c7e0-402d-9e39-f8d1e01a28a4",
 "Severity": "Critical",
 "Description": "TestDesc",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/ 54d0f242-c7e0-402d-9e39-f8d1e01a28a4"
 }
 },
 "$metadata": {
 "$type": "AlarmByRule;1",
 "$uri": "/v1/alarmsbyrule/ 54d0f242-c7e0-402d-9e39-f8d1e01a28a4"
 }
 }
],
 "$metadata": {
 "$type": "AlarmByRuleList;1",
 "$uri": "/v1/alarmsbyrule"
 }
}
```

Type: OpenID Connect

Flow: implicit



# **Get alarms for rule**

API that fetches the alarms details for specified rule.

#### **Permissions**

ReadAll

## Http Request

GET /telemetry/v1/AlarmsByRule/{id}

#### **Parameters**

PARAMETER	TYPE	DESCRIPTION
Id	guid	It represents RuleId

## Query parameters

QUERY PARAMETER	ТҮРЕ	EXAMPLE	DESCRIPTION
from	string	NOW- PT24H	The start of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
to	string	NOW	The end of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
order	string	desc	Whether to sort the result from the oldest (asc) or the most recent (desc)
skip	int	0	How many records to skip, used to paginate through the global list of alarms
limit	int	50	How many records to return, used to paginate through the global list of alarms
devices	string	id1,id6,xyz	A filter used to request alarms for specific devices

# **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# Request Body

N/A

# Response

• Status Code 200:

```
{
 "Items": [
 {
 "ETag": "\"0100ab90-0000-0300-0000-5f883c960000\"",
 "Id": "c0b8c7e9-cf10-a270-e318-94e625bdacc2",
 "DateCreated": "2020-10-15T12:12:00+00:00",
 "DateModified": "2020-10-15T12:12:00+00:00",
 "Description": null,
 "GroupId": null,
 "DeviceId": "test-telemetry",
 "Status": "open",
 "Rule": {
 "Id": "54d0f242-c7e0-402d-9e39-f8d1e01a28a4",
 "Severity": "Critical",
 "Description": "TestDesc",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/ 54d0f242-c7e0-402d-9e39-f8d1e01a28a4"
 }
 },
 "$metadata": {
 "$type": "Alarm;1",
 "$uri": "/v1/alarms/ c0b8c7e9-cf10-a270-e318-94e625bdacc2"
 }
 }
],
 "$metadata": {
 "$type": "AlarmsByRule;1",
 "$uri": "/v1/alarmsbyrule"
 }
}
```

Type: OpenID Connect

Flow: implicit



# **Get alarms for rule - Alternate way**

API that fetches the alarms details for specified rule.

#### **Permissions**

ReadAll

## Http Request

POST /telemetry/v1/AlarmsByRule/{id}

#### **Parameters**

PARAMETER	ТҮРЕ	DESCRIPTION
Id	guid	It represents RuleId

#### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# **Request Body**

```
{
 "from": "NOW-PT24H",
 "to": "NOW",
 "order": "desc",
 "skip": 0,
 "limit": 50,
 "devices": [
 "xyx"
]
}
```

NAME	TYPE	EXAMPLE	DESCRIPTION
from	string	NOW-PT24H	The start of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
to	string	NOW	The end of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
order	string	desc	Whether to sort the result from the oldest (asc) or the most recent (desc)
skip	int	0	How many records to skip, used to paginate through the global list of alarms
limit	int	50	How many records to return, used to paginate through the global list of alarms
devices	list	[ "id1","id6", "xyz" ]	A filter used to request alarms for specific devices

• Status Code 200:

```
"Items": [
 "ETag": "\"0100ab90-0000-0300-0000-5f883c960000\"",
 "Id": "c0b8c7e9-cf10-a270-e318-94e625bdacc2",
 "DateCreated": "2020-10-15T12:12:00+00:00",
 "DateModified": "2020-10-15T12:12:00+00:00",
 "Description": null,
 "GroupId": null,
 "DeviceId": "test-telemetry",
 "Status": "open",
 "Rule": {
 "Id": "54d0f242-c7e0-402d-9e39-f8d1e01a28a4",
 "Severity": "Critical",
 "Description": "TestDesc",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/ 54d0f242-c7e0-402d-9e39-f8d1e01a28a4"
 }
 },
 "$metadata": {
 "$type": "Alarm;1",
 "$uri": "/v1/alarms/ c0b8c7e9-cf10-a270-e318-94e625bdacc2"
 }
 }
],
 "$metadata": {
 "$type": "AlarmsByRule;1",
 "$uri": "/v1/alarmsbyrule"
 }
}
```

#### Security

Type: OpenID Connect

Flow: implicit



# **Device Files**

Service: Device Telemetry

# **Operations**

Get files uploaded by device	Fetches details of files uploaded by a device
Download a device file	Download a device file



# Get files uploaded by device

API that fetches device uploaded files details for a specific device.

#### **Permissions**

ReadAll

## Http Request

GET /telemetry/v1/DeviceFiles/{deviceId}

#### **Parameters**

QUERY PARAMETER	ТҮРЕ	DESCRIPTION
deviceId	guid	Device Id

#### Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

#### **Request Body**

N/A

## Response Schema

```
{
 "items": [
 {
 "name": "string",
 "blobName": "string",
 "uploadedBy": "string",
 "uploadedOn": "string",
 "size": 0
 }
]
}
```

#### Response

• Status Code 200

Type: OpenID Connect

Flow: implicit



# Download a device file

API that downloads a device file for given blob name.

#### **Permissions**

ReadAll

## Http Request

POST /v1/DeviceFiles/Download

## **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# Request Body

```
{
 "blobName": "string"
}
```

# Response

Status Code 200.

## Security

Type: OpenID Connect

Flow: implicit



# Messages

Service: Device Telemetry

# **Operations**

OPERATION	DESCRIPTION
Get messages	Fetches list of messages
Get messages - Alternate way	Fetches list of messages - Alternate way
Get recent messages for device	Fetches most recent list of messages of device



# **Get messages**

API that fetches list of messages.

**Permissions** 

ReadAll

# Http Request

GET /telemetry/v1/Messages

# Query parameters

QUERY PARAMETER	ТҮРЕ	EXAMPLE	DESCRIPTION
from	string	NOW- PT24H	The start of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
to	string	NOW	The end of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
order	string	desc	Whether to sort the result from the oldest (asc) or the most recent (desc)
skip	int	0	How many records to skip, used to paginate through the global list of messages
limit	int	50	How many records to return, used to paginate through the global list of messages
devices	string	id1,id6,xyz	A filter used to request messages for specific devices

## **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# Request Body

N/A

# Response Schema

```
{
 "items": [
 {
 "deviceId": "string",
 "time": "string",
 "data": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
],
 "additionalProp3": [
 null
]
 }
],
 "properties": [
 "string"
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 }
}
```

• Status Code 200

```
{
 "Items": [
 {
 "DeviceId": "Elevator1",
 "Time": "2017-01-14T05:39:45+00:00",
 "Data": {
 "current_floor": 7
 }
],
 "Properties": [
 "current_floor",
 "temperature",
 "t_unit",
 "humidity",
 "latitude",
 "longitude"
],
 "$metadata": {
 "$type": "MessageList;v1",
 "$uri": "/v1/messages"
 }
}
```

Security

Type: OpenID Connect

Flow: implicit



# **Get messages - Alternate way**

API that fetches list of messages.

#### **Permissions**

ReadAll

## Http Request

POST /telemetry/v1/Messages

## **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

## Request Body

```
{
 "from": "string",
 "to": "string",
 "order": "string",
 "skip": 0,
 "limit": 0,
 "devices": [
 "string"
]
}
```

NAME	TYPE	EXAMPLE	DESCRIPTION
from	string	NOW-PT24H	The start of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
to	string	NOW	The end of the time window for the query. ISO8601 format or "NOW-{ISO 8601 duration}"
order	string	desc	Whether to sort the result from the oldest (asc) or the most recent (desc)
skip	int	0	How many records to skip, used to paginate through the global list of messages
limit	int	50	How many records to return, used to paginate through the global list of messages
devices	list	[ "id1","id6", "xyz" ]	A filter used to request messages for specific devices

# Response Schema

```
{
 "items": [
 {
 "deviceId": "string",
 "time": "string",
 "data": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
],
 "additionalProp3": [
 null
]
 }
],
 "properties": [
 "string"
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 }
}
```

• Status Code 200

```
{
 "Items": [
 {
 "DeviceId": "Elevator1",
 "Time": "2017-01-14T05:39:45+00:00",
 "Data": {
 "current_floor": 7
 }
],
 "Properties": [
 "current_floor",
 "temperature",
 "t_unit",
 "humidity",
 "latitude",
 "longitude"
],
 "$metadata": {
 "$type": "MessageList;v1",
 "$uri": "/v1/messages"
 }
}
```

Security

Type: OpenID Connect

Flow: implicit



# Get recent messages for device

API that fetches recent list of messages for specific device.

#### **Permissions**

ReadAll

## Http Request

GET /telemetry/v1/Messages/RecentMessages

## Query parameters

QUERY PARAMETER	TYPE	EXAMPLE	DESCRIPTION	
limit	Int	50	How many records to return.	
deviceId	string	xyz	A filter used to request message for specific device	

# **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# Request Body

N/A

Response Schema

```
{
 "items": [
 {
 "deviceId": "string",
 "time": "string",
 "data": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
],
 "additionalProp3": [
 null
]
 }
],
 "properties": [
 "string"
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 }
}
```

• Status Code 200

```
{
 "Items": [
 {
 "DeviceId": "Elevator1",
 "Time": "2017-01-14T05:39:45+00:00",
 "Data": {
 "current_floor": 7
 }
],
 "Properties": [
 "current_floor",
 "temperature",
 "t_unit",
 "humidity",
 "latitude",
 "longitude"
],
 "$metadata": {
 "$type": "MessageList;v1",
 "$uri": "/v1/messages"
 }
}
```

# Security

Type: OpenID Connect

Flow: implicit



# Rules

Service: Device Telemetry

# **Operations**

OPERATION	DESCRIPTION
Get Rule	Fetches a Rule
Update Rule	Updates a Rule
Delete Rule	Deletes a Rule
Get list of Rules	Fetches list of Rules
Create Rule	Creates a Rule



# **Get Rule**

API that fetches specifie rule details.

**Permissions** 

ReadAll

# Http Request

GET /telemetry/v1/Rules/{id}

## parameters

QUERY PARAMETER	TYPE	DESCRIPTION
id	string	Rule Id

# **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# Request Body

N/A

Response Schema

```
"eTag": "string",
 "id": "string",
 "name": "string",
 "dateCreated": "string",
 "dateModified": "string",
 "enabled": true,
 "description": "string",
 "groupId": "string",
"severity": "string",
 "conditions": [
 "field": "string",
 "operator": "string",
 "value": "string"
 }
],
 "calculation": "string",
 "timePeriod": "string",
 "actions": [
 {
 "type": "string",
 "parameters": {
 "additionalProp1": {},
 "additionalProp2": {},
 "additionalProp3": {}
 }
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 },
 "deleted": true,
 "lastTrigger": "string"
}
```

• Status Code 200

```
"ETag": "\"0100bd80-0000-0300-0000-5fa15d400000\"",
 "Id": "2b32322d-8414-469b-9724-b873577b61b4",
 "Name": "New rule",
 "DateCreated": "2020-09-24T11:17:06+00:00",
 "DateModified": "2020-11-03T13:38:08+00:00",
 "Enabled": true,
 "Description": "Sample rule to test",
 "GroupId": "67c56894-b4c9-4ad1-8dd6-1373177060dd",
 "Severity": "Info",
 "Conditions": [
 "Field": "temperature",
 "Operator": "GreaterThan",
 "Value": "0"
 }
],
 "Calculation": "Average",
 "TimePeriod": "600000",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/2b32322d-8414-469b-9724-b873577b61b4"
 }
}
```

Type: OpenID Connect

Flow: implicit



# **Update Rule**

API that updates rule.

#### **Permissions**

```
UpdateRules
```

#### Http Request

```
PUT /telemetry/v1/Rules/{id}
```

#### parameters

QUERY PARAMETER	ТҮРЕ	DESCRIPTION
id	string	Rule Id

#### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

#### **Request Body**

```
"eTag": "string",
"id": "string",
"name": "string",
"dateCreated": "string",
"dateModified": "string",
"enabled": true,
"description": "string",
"groupId": "string",
"severity": "string",
"conditions": [
 {
 "field": "string",
 "operator": "string",
 "value": "string"
],
"calculation": "string",
"timePeriod": "string",
"actions": [
 {}
"deleted": true,
"lastTrigger": "string"
```

#### Response Schema

```
"eTag": "string",
 "id": "string",
 "name": "string",
 "dateCreated": "string",
 "dateModified": "string",
 "enabled": true,
 "description": "string",
 "groupId": "string",
"severity": "string",
 "conditions": [
 "field": "string",
 "operator": "string",
 "value": "string"
 }
],
 "calculation": "string",
 "timePeriod": "string",
 "actions": [
 {
 "type": "string",
 "parameters": {
 "additionalProp1": {},
 "additionalProp2": {},
 "additionalProp3": {}
 }
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 },
 "deleted": true,
 "lastTrigger": "string"
}
```

• Status Code 200

```
"ETag": "\"0100bd80-0000-0300-0000-5fa15d400000\"",
 "Id": "2b32322d-8414-469b-9724-b873577b61b4",
 "Name": "New rule",
 "DateCreated": "2020-09-24T11:17:06+00:00",
 "DateModified": "2020-11-03T13:38:08+00:00",
 "Enabled": true,
 "Description": "Sample rule to test",
 "GroupId": "67c56894-b4c9-4ad1-8dd6-1373177060dd",
 "Severity": "Info",
 "Conditions": [
 "Field": "temperature",
 "Operator": "GreaterThan",
 "Value": "0"
 }
],
 "Calculation": "Average",
 "TimePeriod": "600000",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/2b32322d-8414-469b-9724-b873577b61b4"
 }
}
```

Type: OpenID Connect

Flow: implicit



# **Delete Rule**

API that deletes a rule.

**Permissions** 

DeleteRules

Http Request

DELETE /telemetry/v1/Rules/{id}

#### parameters

QUERY PARAMETER	ТҮРЕ	DESCRIPTION
id	string	Rule Id

#### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# Request Body

N/A

Response

Status Code 200

Security

Type: OpenID Connect

Flow: implicit



# **Get Rules**

API that fetches list of rules.

**Permissions** 

ReadAll

# Http Request

Get /telemetry/v1/Rules

# Query parameters

QUERY PARAMETER	ТҮРЕ	EXAMPLE	DESCRIPTION
order	string	desc	Whether to sort the result from the oldest (asc) or the most recent (desc)
skip	int	0	How many records to skip, used to paginate through the global list of rules
limit	int	50	How many records to return, used to paginate through the global list of rules
groupld	string	"cd9bba84-274a-4d69-8e49- 81f4933d3a36"	groupId for a specific group of devices the rule applies to
includeDeleted	bool	true	A filter used to request rules along with deleted rules

# Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

# Request Body

N/A

# Response Schema

```
{
 "items": [
 "eTag": "string",
 "id": "string",
 "name": "string",
 "dateCreated": "string",
 "dateModified": "string",
 "enabled": true,
 "description": "string",
 "groupId": "string",
 "severity": "string",
 "conditions": [
 "field": "string",
 "operator": "string",
 "value": "string"
 }
],
 "calculation": "string",
 "timePeriod": "string",
 "actions": [
 "type": "string",
 "parameters": {
 "additionalProp1": {},
 "additionalProp2": {},
 "additionalProp3": {}
 }
 }
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 },
 "deleted": true,
 "lastTrigger": "string"
 }
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 }
}
```

• Status Code 200:

```
{
 "Items": [
 {
 "ETag": "\"0100bd80-0000-0300-0000-5fa15d400000\"",
 "Id": "2b32322d-8414-469b-9724-b873577b61b4",
 "Name": "New rule",
 "DateCreated": "2020-09-24T11:17:06+00:00",
 "DateModified": "2020-11-03T13:38:08+00:00",
 "Enabled": true,
 "Description": "Sample rule to test",
 "GroupId": "67c56894-b4c9-4ad1-8dd6-1373177060dd",
 "Severity": "Info",
 "Conditions": [
 "Field": "temperature",
 "Operator": "GreaterThan",
 "Value": "0"
 }
],
 "Calculation": "Average",
 "TimePeriod": "600000",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/ 2b32322d-8414-469b-9724-b873577b61b4"
 }
 }
],
 "$metadata": {
 "$type": "RuleList;1",
 "$uri": "/v1/rules"
 }
}
```

Type: OpenID Connect

Flow: implicit



# **Create Rule**

API that Create rule.

#### **Permissions**

```
CreateRules
```

#### Http Request

```
POST /telemetry/v1/Rules
```

#### Query parameters

QUERY PARAMETER	ТҮРЕ	EXAMPLE	DESCRIPTION
template	string	N/A	N/A

#### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

#### **Request Body**

```
"eTag": "string",
 "id": "string",
 "name": "string",
 "dateCreated": "string",
 "dateModified": "string",
 "enabled": true,
 "description": "string",
 "groupId": "string",
 "severity": "string",
 "conditions": [
 "field": "string",
 "operator": "string",
 "value": "string"
 }
],
 "calculation": "string",
 "timePeriod": "string",
 "actions": [
 {}
 "deleted": true,
 "lastTrigger": "string"
}
```

#### Response Schema

```
"eTag": "string",
 "id": "string",
 "name": "string",
 "dateCreated": "string",
 "dateModified": "string",
 "enabled": true,
 "description": "string",
 "groupId": "string",
"severity": "string",
 "conditions": [
 "field": "string",
 "operator": "string",
 "value": "string"
 }
],
 "calculation": "string",
 "timePeriod": "string",
 "actions": [
 {
 "type": "string",
 "parameters": {
 "additionalProp1": {},
 "additionalProp2": {},
 "additionalProp3": {}
 }
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 },
 "deleted": true,
 "lastTrigger": "string"
}
```

• Status Code 200:

```
"ETag": "\"0100bd80-0000-0300-0000-5fa15d400000\"",
 "Id": "2b32322d-8414-469b-9724-b873577b61b4",
 "Name": "New rule",
 "DateCreated": "2020-09-24T11:17:06+00:00",
 "DateModified": "2020-11-03T13:38:08+00:00",
 "Enabled": true,
 "Description": "Sample rule to test",
 "GroupId": "67c56894-b4c9-4ad1-8dd6-1373177060dd",
 "Severity": "Info",
 "Conditions": [
 "Field": "temperature",
 "Operator": "GreaterThan",
 "Value": "0"
 }
],
 "Calculation": "Average",
 "TimePeriod": "600000",
 "$metadata": {
 "$type": "Rule;1",
 "$uri": "/v1/rules/2b32322d-8414-469b-9724-b873577b61b4"
 }
}
```

Type: OpenID Connect

Flow: implicit



# Status

Service: Device Telemetry

## **Operations**

OPERATION	DESCRIPTION	
Get Status	Gets status of the Service and its dependencies	
Ping Status	Provides the health status of the service.	



### **Get Status**

API that fetches the status of the Device Telemetry Service.

#### **Permissions**

N/A

#### Http Request

GET /telemetry/v1/status

#### **Request Headers**

HEADER	VALUE
Content-Type	application/json

#### Request Body

N/A

#### Response

• Responds 200 Status code

```
"Name": "Device Telemetry",
 "Status": {
 "IsHealthy": true,
 "Message": "Alive and well!"
 },
 "CurrentTime": "2020-11-02T10:33:29+00:00",
 "StartTime": "2020-10-26T22:59:53+00:00",
 "UpTime": 560015,
 "UID": "WebService.6d23f2fb-a074-481b-b7e4-1ac24880d7dd",
 "Properties": {
 "authRequired": true,
 "endpoint": "http://+:80"
 "Dependencies": {
 "Storage Adapter": {
 "IsHealthy": true,
 "Message": "Alive and well!"
 },
 "Storage": {
 "IsHealthy": true,
 "Message": "Alive and Well!"
 "Asa Manager": {
 "IsHealthy": true,
 "Message": "Alive and well!"
 "Time Series": {
 "IsHealthy": true,
 "Message": "Service disabled not in use"
 "App Config": {
 "IsHealthy": true,
 "Message": "Alive and well!"
 }
 },
 "$metadata": {
 "$type": "Status;0",
 "$uri": "/status"
 }
}
```



## **Ping Status**

API that pings the Device Telemetry Service and responds to the status code.

#### **Permissions**

N/A

#### Http Request

GET /telemetry/v1/status/ping

#### **Request Headers**

HEADER	VALUE
Content-Type	application/json

#### Request Body

N/A

#### Response

Responds 200 Status code



# Namespace Mmm.lot.DeviceTelemetry.WebService.Controllers

Classes

AlarmsByRuleController

AlarmsController

DeviceFilesController

MessagesController

RulesController

StatusController



# Class AlarmsByRuleController

Inheritance

System.Object

AlarmsByRuleController

Namespace: Mmm. Iot. Device Telemetry. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class AlarmsByRuleController : Controller

#### Constructors

AlarmsByRuleController(IAlarms, IRules, ILogger<AlarmsByRuleController>)

Declaration

public AlarmsByRuleController(IAlarms alarmService, IRules ruleService, ILogger<AlarmsByRuleController>
logger)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
IAlarms	alarmService	
IRules	ruleService	
ILogger < Alarms By Rule Controller >	logger	

#### Methods

GetAsync(String, String, String, Nullable<Int32>, Nullable<Int32>, String)

Declaration

public Task<AlarmByRuleListApiModel> GetAsync(string from, string to, string order, int? skip, int? limit, string devices)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	from	
System.String	to	
System.String	order	
System.Nullable < System.Int32 >	skip	
System.Nullable < System.Int32 >	limit	
System.String	devices	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Alarm By Rule List Api Model >	

#### GetAsync(String, String, String, Nullable<Int32>, Nullable<Int32>, String)

#### Declaration

public Task<AlarmListByRuleApiModel> GetAsync(string id, string from, string to, string order, int? skip, int? limit, string devices)

#### Parameters

Turum eters				
ТҮРЕ	NAME	DESCRIPTION		
System.String	id			
System.String	from			
System.String	to			
System.String	order			
System.Nullable < System.Int32 >	skip			
System.Nullable < System.Int32 >	limit			
System.String	devices			

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Alarm List By Rule Api Model >	

### PostAsync (Query Api Model)

#### Declaration

public Task<AlarmByRuleListApiModel> PostAsync(QueryApiModel body)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
QueryApiModel	body	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Alarm By Rule List Api Model >	

### $PostAsync (String,\ Query Api Model)$

Declaration

nuhlic	Task <alarmlistb< th=""><th>/RuleAniModels</th><th>PostAsync/</th><th>'string</th><th>id</th><th>OuervAniModel</th><th>hody)</th></alarmlistb<>	/RuleAniModels	PostAsync/	'string	id	OuervAniModel	hody)
PUDITC	I a 2 K / A T a I III L T 2 C D	VUUTEADTIIOUET	PUS LAS VIIC	SULTING	Tu,	Quei AMPTIJOUET	DOUY)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	
QueryApiModel	body	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Alarm List By Rule Api Model >	



## Class AlarmsController

Inheritance

System.Object

AlarmsController

Namespace: Mmm. Iot. Device Telemetry. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class AlarmsController : Controller

#### Constructors

#### AlarmsController(IAlarms, ILogger<AlarmsController>)

Declaration

public AlarmsController(IAlarms alarmService, ILogger<AlarmsController> logger)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
IAlarms	alarmService	
ILogger <alarmscontroller></alarmscontroller>	logger	

#### Methods

#### Delete(AlarmIdListApiModel)

Declaration

public void Delete(AlarmIdListApiModel alarmList)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
AlarmIdListApiModel	alarmList	

#### DeleteAsync(String)

Declaration

public Task DeleteAsync(string id)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task	

#### GetAsync(String)

Declaration

public Task<AlarmApiModel> GetAsync(string id)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Alarm Api Model >	

#### ListAsync(String, String, Nullable<Int32>, Nullable<Int32>, String)

Declaration

public Task<AlarmListApiModel> ListAsync(string from, string to, string order, int? skip, int? limit, string devices)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	from	
System.String	to	
System.String	order	
System.Nullable < System.Int32 >	skip	
System.Nullable < System.Int32 >	limit	
System.String	devices	

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <alarmlistapimodel></alarmlistapimodel>	

#### PatchAsync(String, AlarmStatusApiModel)

Declaration

public Task<AlarmApiModel> PatchAsync(string id, AlarmStatusApiModel body)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	
AlarmStatusApiModel	body	

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <alarmapimodel></alarmapimodel>	

### PostAsync (Query Api Model)

Declaration

public Task<AlarmListApiModel> PostAsync(QueryApiModel body)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
QueryApiModel	body	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Alarm List Api Model >	



## Class DeviceFilesController

Inheritance

System.Object

DeviceFilesController

Namespace: Mmm. Iot. Device Telemetry. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class DeviceFilesController : Controller

#### Constructors

#### DeviceFilesController(IDeviceFileUploads)

Declaration

public DeviceFilesController(IDeviceFileUploads deviceFileUploads)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
IDevice File Uploads	deviceFileUploads	

#### Methods

#### GetDeviceUploads(String)

Declaration

public Task<DeviceFileListApiModel> GetDeviceUploads(string deviceId)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	deviceId	

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task < DeviceFileListApiModel >	

#### GetFileContents(DownloadRequest)

Declaration

public Task<IActionResult> GetFileContents(DownloadRequest downloadRequest)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
DownloadRequest	download Request	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <iactionresult></iactionresult>	



# Class MessagesController

Inheritance

System.Object

MessagesController

Namespace: Mmm. Iot. Device Telemetry. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public sealed class MessagesController : Controller

#### Constructors

MessagesController(IMessages, ILogger<MessagesController>, AppConfig)

Declaration

public MessagesController(IMessages messageService, ILogger<MessagesController> logger, AppConfig config)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
IMessages	messageService	
ILogger <messagescontroller></messagescontroller>	logger	
AppConfig	config	

#### Methods

GetAsync(String, String, String, Nullable<Int32>, Nullable<Int32>, String)

Declaration

public Task<MessageListApiModel> GetAsync(string from, string to, string order, int? skip, int? limit, string
devices)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	from	
System.String	to	
System.String	order	
System.Nullable < System.Int32 >	skip	
System.Nullable < System.Int32 >	limit	
System.String	devices	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Message List Api Model >	

### GetTopDeviceMessagesAsync(Nullable<Int32>, String)

#### Declaration

public Task<MessageListApiModel> GetTopDeviceMessagesAsync(int? limit, string deviceId)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.Nullable < System.Int32 >	limit	
System.String	deviceId	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Message List Api Model >	

#### PostAsync(QueryApiModel)

#### Declaration

public Task<MessageListApiModel> PostAsync(QueryApiModel body)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
QueryApiModel	body	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Message List Api Model >	



## Class RulesController

Inheritance

System.Object

RulesController

 $Name space: \ Mmm.lot. Device Telemetry. Web Service. Controllers$ 

Assembly: cs.temp.dll.dll

Syntax

public sealed class RulesController : Controller

#### Constructors

#### RulesController(IRules)

Declaration

public RulesController(IRules ruleService)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
IRules	ruleService	

#### Methods

#### DeleteAsync(String)

Declaration

public Task DeleteAsync(string id)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task	

#### GetAsync(String)

Declaration

public Task<RuleApiModel> GetAsync(string id)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Rule Api Model >	

#### ListAsync(String, Nullable<Int32>, Nullable<Int32>, String, Nullable<Boolean>)

#### Declaration

public Task<RuleListApiModel> ListAsync(string order, int? skip, int? limit, string groupId, bool? includeDeleted)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	order	
System.Nullable < System.Int32 >	skip	
System.Nullable < System.Int32 >	limit	
System.String	groupId	
System.Nullable < System.Boolean >	includeDeleted	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Rule List Api Model >	

#### PostAsync(String, RuleApiModel)

Declaration

public Task<RuleApiModel> PostAsync(string template, RuleApiModel rule)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	template	
RuleApiModel	rule	

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Rule Api Model >	

#### PutAsync(String, RuleApiModel)

Declaration

public Task<RuleApiModel> PutAsync(string id, RuleApiModel rule)

ТУРЕ	NAME	DESCRIPTION
System.String	id	
RuleApiModel	rule	

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Rule Api Model >	



## Class StatusController

Inheritance

System.Object

StatusController

 $Name space: \ Mmm.lot. Device Telemetry. Web Service. Controllers$ 

Assembly: cs.temp.dll.dll

Syntax

public sealed class StatusController : ControllerBase

#### Constructors

#### StatusController(IStatusService)

Declaration

public StatusController(IStatusService statusService)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
IStatusService	statusService	

#### Methods

#### GetAsync()

Declaration

public Task<StatusApiModel> GetAsync()

#### Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Status Api Model >	

#### Ping()

Declaration

public IActionResult Ping()

ТУРЕ	DESCRIPTION
IActionResult	



# Diagnostic Service

This document gives the overview of diagnostic service which will log the info.

Within each Serenity Instance an interactive Swagger UI is available at the following path <a href="https://{platform-url}/diagnostics/index.html">https://{platform-url}/diagnostics/index.html</a> For more information, click here.

### **REST operation groups**

The Diagnostics Service REST API provides operations for working with the following:

OPERATION GROUP	DESCRIPTION
Diagnostics Events	Logs the events info passed.
Status	Health Status operations of the Service.



# **Diagnostics Events Controller**

Service: Diagnostics

## **Operations**

OPERATION	DESCRIPTION
Post Log Diagnostics	Save the logs with respective event type



## Post Log Diagnostics

This Method is used to save the logs with respective event type.

### **Permissions**

**ReadAll** permission is required to call this api.

### **Http Request**

POST /diagnostics/v1/diagnosticsevents

### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### **Request Body**

In the request body, supply a JSON representation of DiagnosticsEventModel object.

Following are the fields which are required for the user to be created successfully.

PROPERTY	VALUE	REQUIRED
EventType	Name of the user	Required
SessionId	Current status of the user ie., Invited or Member	Not Required
EventProperties	Role of the user i.e., admin, readonly, contributor	Not Required

### **Sample Request**

/diagnostics/v1/diagnosticsevents

## **Sample Request Body**

```
{
 "EventType":"TestEventDiagnosticLog",
 "SessionId":"TestSession"
}
```

### Response

201 Created

## **Security**

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



## Status

Service: Diagnostics

Status Contoller provides Health status of the Service and its dependencies.

## **Operations**

OPERATION	DESCRIPTION
Get Status	Gets status of the Service and its dependencies
Ping Status	Provides the health status of the service.



### **Get Status**

API that fetches the status of Diagnostic Service.

### **Permissions**

N/A

### **Http Request**

GET /diagnostics/v1/Status

## **Request Headers**

HEADER	VALUE
Content-Type	application/json

## **Request Body**

N/A

### Response

```
"Name": "Diagnostics",
 "Status": {
 "IsHealthy": true,
 "Message": "Alive and well!"
 "CurrentTime": "2020-11-02T09:35:38+00:00",
 "StartTime": "2020-10-26T22:59:44+00:00",
 "UpTime": 556554,
 "UID": "WebService.28f7b6d9-21dc-4ad0-b850-d82839f907d0",
 "Properties": {
 "authRequired": true,
 "endpoint": "http://+:80"
 "Dependencies": {},
 "$metadata": {
 "$type": "Status;0",
 "$uri": "/status"
 }
}
```



# **Ping Status**

API that pings the Diagnostic Service and responds the status code.

### **Permissions**

N/A

### **Http Request**

GET /diagnostics/v1/status/ping

### **Request Headers**

HEADER	VALUE
Content-Type	application/json

## **Request Body**

N/A

### Response

Responds 200 Status code



# Namespace Mmm.lot.Diagnostics.WebService.Controllers

Classes

 ${\bf Diagnostics Events Controller}$ 

StatusController



# Class DiagnosticsEventsController

Inheritance

System.Object

DiagnosticsEventsController

Namespace: Mmm.lot.Diagnostics.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public class DiagnosticsEventsController : Controller

#### Constructors

#### Diagnostics Events Controller (IDiagnostics Client)

Declaration

public DiagnosticsEventsController(IDiagnosticsClient diagnosticsClient)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
IDiagnosticsClient	diagnosticsClient	

#### Methods

#### Post(DiagnosticsEventModel)

Declaration

public StatusCodeResult Post(DiagnosticsEventModel diagnosticsEvent)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
Diagnostics Event Model	diagnosticsEvent	

ТҮРЕ	DESCRIPTION
StatusCodeResult	



## Class StatusController

Inheritance

System.Object

StatusController

Namespace: Mmm.lot.Diagnostics.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public sealed class StatusController : ControllerBase

#### Constructors

#### StatusController(IStatusService)

Declaration

public StatusController(IStatusService statusService)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
l Status Service	statusService	

#### Methods

#### GetAsync()

Declaration

public Task<StatusApiModel> GetAsync()

#### Returns

ТУРЕ	DESCRIPTION
Task <statusapimodel></statusapimodel>	

#### Ping()

Declaration

public IActionResult Ping()

ТҮРЕ	DESCRIPTION
IActionResult	



# IoTHub Manager Service REST API

The IoTHub Manager service is used to manage Azure IoT Hub and devices.

Within each Serenity Instance an interactive Swagger UI is available at the following path <a href="https://{platform-url}/iothubmanager/index.html">https://{platform-url}/iothubmanager/index.html</a> For more information, click here.

### **REST operation groups**

The IoTHub Manager service REST API provides operations for working with the following:

OPERATION GROUP	DESCRIPTION
Deployments	Device Configuration operations to manage the Device Firmware.
DeviceProperties	Device Properties operation to get the Properties data from Devices.
Devices	CRUD operations, Invoke method operations for Devices.
Jobs	Create, Details for IoT Hub jobs to manage the tags, properties of devices.
Modules	Details operations of the Edge Modules.
Status	Health status operations for the Service.



# Deployments

Service: IoTHub Manager

## **Operations**

OPERATION	DESCRIPTION	
Create Deployment	Creates a Device Configuration for Firmware or custom updates.	
Get Deployments	Lists the deployments from the storage.	
Get Deployment	Gets the details of specifed deployment from the storage or from IoTHub based on the state.	
Inactivate/Delete Deployment	Removes the Device Configuration from IoTHub and marks the deployment as either inactivated or deleted.	
Reactivate Deployment	Creates a Device Configuration using the data from the Inactivated deployment targetting the same conditions.	
Get Deployment Impacted Devices	Lists the devices which are affected by the Deployment.	
Get Deployment Impacted Modules	Lists the modules which are affected by the Deployment.	
Get Deployment Report	rovides the report of the devices which are impacted by deployment in byte format.	



## **Create Deployment**

Creates a new IoTHub Configurations for IoTDevices or Edge Devices.

#### Http Request

POST /iothub-manager/v1/deployments

#### **Permissions**

**CreateDeployments** permission is required to call this api.

#### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### Request Body

In the request body, supply a JSON representation of DeploymentApiModel object.

Following are the fields which are required for the deployment to create successfully.

PROPERTY	VALUE	REQUIRED
DeviceGroupId	Device Group Id that is being targetted by Configuration	Yes
DeviceGroupName	DeviceGroupName	Yes
DeviceGroupQuery	JSON Serialized string of Conditions of DeviceGroup	No, If DeviceGroupId is provided, DeviceGroupQuery will be populated by fetching details of DeviceGroup using DeviceGroupId
Name	Deployment Name	Yes
Packageld	Packageld that is used for content to be used for configuration	Yes, If PackageContent is not provided.
PackageName	Name of the Package with Version Number	No
PackageContent	Configuration Content	Yes. If PackageContent is not provided but PackageId is provided, package content will be filled using package details.
Priority	Priority for Configuration	Yes, Should be a postive number
PackageType	Type which specifies the type of devices targetted	Yes

PROPERTY	VALUE	REQUIRED
ConfigType	Type which specifies the type of configuration	Yes, If PackageType is DeviceConfiguration
Devicelds	List of Devicelds to be targetted by Configuration	No, Can be provided if configuration needs to target specific deviceids

#### Request Schema

```
"deploymentId": "string",
 "name": "string",
 "createdDateTimeUtc": "2020-10-29T15:57:07.671Z",
 "deviceGroupId": "string",
 "deviceGroupName": "string",
 "deviceGroupQuery": "string",
 "packageContent": "string",
 "packageName": "string",
 "packageId": "string",
 "priority": 0,
 "packageType": 0,
 "configType": "string",
 "metrics": {
 "systemMetrics": {
 "additionalProp1": 0,
 "additionalProp2": 0,
 "additionalProp3": 0
 "customMetrics": {
 "additionalProp1": 0,
 "additionalProp2": 0,
 "additionalProp3": 0
 },
 "deviceStatuses": {
 "additionalProp1": 0,
 "additionalProp2": 0,
 "additionalProp3": 0
 }
 },
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 },
 "deviceIds": [
 "string"
],
 "isActive": true,
 "isLatest": true,
 "createdDate": "string",
 "modifiedDate": "string",
 "createdBy": "string",
 "modifiedBy": "string"
}
```

### Sample Request

```
{
 "DeviceGroupId": "2f411a20-7632-45f0-bf43-5ae449b8727a",
 "DeviceGroupName": "TestDeviceGroup",
 "DeviceGroupQuery":"[{\"key\":\"Tags.TestDevice\",\"operator\":\"EQ\",\"value\":\"Yes\"}]",
 "Name": "TestDeviceGroupDeployment",
 "PackageId": "c5e6e9ab-1567-4f99-a026-b558f473afd1",
 "PackageName": "Package1 (1.0.0)",
 "Package Content": "{\tt \content}": {\tt \content}":
{\"softwareName\":\"Firmware\",\"version\":\"1.0.0\",\"softwareURL\":\"https://TestPackageUrl\",\"fileName\":
ics\":{\"queries\":{\"current\":\"SELECT deviceId FROM devices WHERE configurations.
[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'\",\"applying\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND (
properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')\",\"rebooting\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'\",\"error\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='Error'\",\"rolledback\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='RolledBack'\"}},\"targetCondition\":\"\",\"priority\":20,\"id\":\"
sw1package json-e406e3ff-3d21-4e37-b45c-d1d40ca5e7fa\"}",
 "Priority":"4",
 "PackageType": "DeviceConfiguration",
 "ConfigType":"Firmware"
}
```

#### Response

If successful, this method returns 200 Created response code and DeploymentApiModel object in the response body.

#### Response Schema

```
"deploymentId": "string",
 "name": "string",
 "createdDateTimeUtc": "2020-10-29T15:57:07.672Z",
 "deviceGroupId": "string",
 "deviceGroupName": "string",
 "deviceGroupQuery": "string",
 "packageContent": "string",
 "packageName": "string",
 "packageId": "string",
 "priority": 0,
 "packageType": 0,
 "configType": "string",
 "metrics": {
 "systemMetrics": {
 "additionalProp1": 0,
 "additionalProp2": 0,
 "additionalProp3": 0
 },
 "customMetrics": {
 "additionalProp1": 0,
 "additionalProp2": 0,
 "additionalProp3": 0
 "deviceStatuses": {
 "additionalProp1": 0,
 "additionalProp2": 0,
 "additionalProp3": 0
 }
 },
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 },
 "deviceIds": [
 "string"
 "isActive": true,
 "isLatest": true,
 "createdDate": "string",
 "modifiedDate": "string",
 "createdBy": "string",
 "modifiedBy": "string"
}
```

Sample Response

```
{
 "Id": "cb5a32d0-57dd-4ec2-ab64-1c20efbd8b02",
 "Name": "TestDeviceGroupDeployment",
 "CreatedDateTimeUtc": "2020-10-29T09:11:57.8832701Z",
 "DeviceGroupId": "2f411a20-7632-45f0-bf43-5ae449b8727a",
 "DeviceGroupName": "TestDeviceGroup",
 "DeviceGroupQuery":"[{\"key\":\"Tags.TestDevice\",\"operator\":\"EQ\",\"value\":\"Yes\"}]",
 "PackageContent":"{\"content\":{\"deviceContent\":{\"properties.desired.softwareConfig\":
\label{thm:continuous} $$ {\softwareName\":\"Firmware\",\"version\":\"1.0.0\",\"softwareURL\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"https://TestPackageUrl\",\"fileName\":\"https://TestPackageUrl\",\"https://TestPackageUrl
\label{thm:condition} $$ \SM1Package.json\,'serialNumber\:'\",'checkSum\":\"16b557cb7b4828cefe71b9a9fdadb534bdce6089\"}}}, \end{The property of the condition of the condition
ics\":{\"queries\":{\"current\":\"SELECT deviceId FROM devices WHERE configurations.
[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'\",\"applying\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND (
properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')\",\"rebooting\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'\",\"error\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='Error'\",\"rolledback\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='RolledBack'\"}},\"targetCondition\":\"\",\"priority\":20,\"id\":\"
sw1package json-e406e3ff-3d21-4e37-b45c-d1d40ca5e7fa\"}",
 "PackageName": "Package1 (1.0.0)",
 "PackageId": "c5e6e9ab-1567-4f99-a026-b558f473afd1",
 "Priority":4,
 "PackageType": "DeviceConfiguration",
 "ConfigType":"Firmware",
 "Metrics":{
 "SystemMetrics":{
 "appliedCount":0,
 "targetedCount":0
 },
 "CustomMetrics":null,
 "DeviceStatuses":null
 },
 "$metadata":{
 "$type":"DevicePropertyList;1",
 "$url":"/v1/deviceproperties"
 },
 "DeviceIds":null,
 "IsActive":true,
 "IsLatest":true,
 "CreatedDate": "2020-10-29T09:11:57+00:00",
 "ModifiedDate":null,
 "CreatedBy":"TestUser",
 "ModifiedBy":null
}
```

#### Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

#### Examples

1. Request for Creating Deployment for Devices using DeviceGroup.

```
{
 "DeviceGroupId": "2f411a20-7632-45f0-bf43-5ae449b8727a",
 "DeviceGroupName": "TestDeviceGroup",
 "DeviceGroupQuery":"[{\"key\":\"Tags.TestDevice\",\"operator\":\"EQ\",\"value\":\"Yes\"}]",
 "Name": "TestDeviceGroupDeployment",
 "PackageId": "c5e6e9ab-1567-4f99-a026-b558f473afd1",
 "PackageName": "Package1 (1.0.0)",
 "PackageContent":"{\"content\":{\"deviceContent\":{\"properties.desired.softwareConfig\":
{\"softwareName\":\"Firmware\",\"version\":\"1.0.0\",\"softwareURL\":\"https://TestPackageUrl\",\"fileName\":
ics\":{\"queries\":{\"current\":\"SELECT deviceId FROM devices WHERE configurations.
[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'\",\"applying\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND (
properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')\",\"rebooting\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'\",\"error\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='Error'\",\"rolledback\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='RolledBack'\"}},\"targetCondition\":\"\",\"priority\":20,\"id\":\"
sw1package json-e406e3ff-3d21-4e37-b45c-d1d40ca5e7fa\"}",
 "Priority":"4",
 "PackageType": "DeviceConfiguration",
 "ConfigType":"Firmware"
}
```

1. Request for Creating Deployment for Devices using Devicelds.

```
{
 "DeviceGroupId": "34b35ac5-837d-4fa4-9ab7-3cdf036a5145",
 "DeviceGroupName": "Default",
 "DeviceGroupQuery": "[]",
 "Name": "TestDeployment",
 "PackageId": "c5e6e9ab-1567-4f99-a026-b558f473afd1",
 "PackageName": "Package1 (1.0.0)",
 "PackageContent": "{\"content\":{\"deviceContent\":{\"properties.desired.softwareConfig\":
{\"softwareName\":\"Firmware\",\"version\":\"1.0.0\",\"softwareURL\":\"https://TestPackageUrl\",\"fileName\":
ics\":{\"queries\":{\"current\":\"SELECT deviceId FROM devices WHERE configurations.
[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'\",\"applying\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND (
properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')\",\"rebooting\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'\",\"error\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='Error'\",\"rolledback\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='RolledBack'\"}},\"targetCondition\":\"\",\"priority\":20,\"id\":\"
sw1package json-e406e3ff-3d21-4e37-b45c-d1d40ca5e7fa\"}",
 "Priority": "4",
 "PackageType": "DeviceConfiguration",
 "ConfigType": "Firmware",
 "DeviceIds":["TestDevice"]
}
```

1. Request for Creating Deployment for Devices using Devicelds and no packageContent

```
{
 "DeviceGroupId": "34b35ac5-837d-4fa4-9ab7-3cdf036a5145",
 "DeviceGroupName": "Default",
 "DeviceGroupQuery": "[]",
 "Name": "TestDeployment",
 "PackageId": "c5e6e9ab-1567-4f99-a026-b558f473afd1",
 "Priority": "4",
 "PackageType": "DeviceConfiguration",
 "ConfigType": "Firmware",
 "DeviceIds":["TestDevice"]
}
```



### **Get Deployments**

Lists the deployments from the storage.

**Permissions** 

**ReadAll** permission is required to call this api.

Http Request

```
GET /iothub-manager/v1/deployments
```

### Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### Request Body

NΑ

#### Response

If successful, this method returns DeploymentListApiModel object in the response body.

```
"Items": [
 "Id": "cb5a32d0-57dd-4ec2-ab64-1c20efbd8b02",
 "Name": "TestDeviceGroupDeployment",
 "CreatedDateTimeUtc": "2020-10-29T09:11:57.8832701Z",
 "DeviceGroupId": "2f411a20-7632-45f0-bf43-5ae449b8727a",
 "DeviceGroupName": "TestDeviceGroup",
 "DeviceGroupQuery": "[{\"key\":\"Tags.TestDevice\",\"operator\":\"EQ\",\"value\":\"Yes\"}]",
 "PackageContent": "{\"content\":{\"deviceContent\":{\"properties.desired.softwareConfig\":
\label{thm:continuous} $$ {\scription '':\scription'':\
\"SW1Package.json\",\"serialNumber\":\"\",\"checkSum\":\"16b557cb7b4828cefe71b9a9fdadb534bdce6089\"}}},\"metr
ics\":{\"queries\":{\"current\":\"SELECT deviceId FROM devices WHERE configurations.
[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'\",\"applying\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND (
properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')\",\"rebooting\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'\",\"error\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='Error'\",\"rolledback\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='RolledBack'\"}},\"targetCondition\":\"\",\"priority\":20,\"id\":\"
sw1package_json-e406e3ff-3d21-4e37-b45c-d1d40ca5e7fa\"}",
 "PackageName": "Package1 (1.0.0)",
 "PackageId": "c5e6e9ab-1567-4f99-a026-b558f473afd1",
 "Priority": 4,
 3M IoT Platform on Azure - © 3M 2020
```

```
rackage type : "bevicecontiguration";
 "ConfigType": "Firmware",
 "Metrics": {
 "SystemMetrics": {
 "targetedCount": 1,
 "appliedCount": 1
 },
 "CustomMetrics": {},
 "DeviceStatuses": null
 "$metadata": {
 "$type": "DevicePropertyList;1",
 "$url": "/v1/deviceproperties"
 },
 "DeviceIds": null,
 "IsActive": true,
 "IsLatest": true,
 "CreatedDate": "2020-10-29T09:11:57+00:00",
 "ModifiedDate": null,
 "CreatedBy": "TestUser",
 "ModifiedBy": null
 },
 "Id": "5819a276-372c-4b15-a9a9-2d9c8c1053c4",
 "Name": "DeploymentSimulation",
 "CreatedDateTimeUtc": "2020-10-16T09:00:26.2705406Z",
 "DeviceGroupId": "85402f9f-3de2-4b55-bfd4-f7f3ce229270",
 "DeviceGroupName": "SimulationGroup",
 "DeviceGroupQuery": "[{\"key\":\"Tags.Org\",\"operator\":\"EQ\",\"value\":\"3M\"}]",
 "PackageContent": "{\"content\":{\"deviceContent\":{\"properties.desired.softwareConfig\":
{\"softwareName\":\"Firmware\",\"version\":\"1.0.0\",\"softwareURL\":\"https://TestPackageUrl\",\"fileName\":
\"SW1Package.json\",\"serialNumber\":\"\",\"checkSum\":\"16b557cb7b4828cefe71b9a9fdadb534bdce6089\"}}},\"metr
ics\":{\"queries\":{\"current\":\"SELECT deviceId FROM devices WHERE configurations.
[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Success'\",\"applying\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND (
properties.reported.softwareConfig.status='Downloading' OR
properties.reported.softwareConfig.status='Verifying' OR
properties.reported.softwareConfig.status='Applying')\",\"rebooting\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND properties.reported.softwareConfig.version =
properties.desired.softwareConfig.version AND
properties.reported.softwareConfig.status='Rebooting'\",\"error\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='Error'\",\"rolledback\":\"SELECT deviceId FROM devices WHERE
configurations.[[${deployment.id}]].status = 'Applied' AND
properties.reported.softwareConfig.status='RolledBack'\"}},\"targetCondition\":\"\",\"priority\":20,\"id\":\"
sw1package_json-e406e3ff-3d21-4e37-b45c-d1d40ca5e7fa\"}",
 "PackageName": "Package1 (1.0.0)",
 "PackageId": "c5e6e9ab-1567-4f99-a026-b558f473afd1",
 "Priority": 4,
 "PackageType": "DeviceConfiguration",
 "ConfigType": "Firmware",
 "Metrics": {
 "SystemMetrics": {
 "targetedCount": 1,
 "appliedCount": 1,
 "reportedSuccessfulCount": 1,
 "reportedFailedCount": 0,
 "pendingCount": 0
 },
 "CustomMetrics": {
 "current": 1
 },
 "DeviceStatuses": {
 "SimulatedDevice": "Succeeded"
```

```
}
 },
 "$metadata": {
 "$type": "DevicePropertyList;1",
 "$url": "/v1/deviceproperties"
 "DeviceIds": null,
 "IsActive": false,
 "IsLatest": false,
 "CreatedDate": "2020-10-16T08:49:03+00:00",
 "ModifiedDate": "2020-10-16T11:14:03+00:00",
 "CreatedBy": "TestUser",
 "ModifiedBy": "TestUser"
 }
],
 "$metadata": {
 "$type": "DevicePropertyList;1",
 "$url": "/v1/deviceproperties"
 }
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



### **Inactivate Deployment**

Removes the Device Configuration from IoTHub and marks the deployment as either inactivated or deleted.

Note:

Inactivated Deployments are available for **Reactivating** Deleted Deployments are stored for audit.

#### **Permissions**

**DeleteDeployments** permission is required to call this api.

### Http Request

DELETE /iothub-manager/v1/deployments/{id}?isDelete={isDelete}

### Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### **Query Params**

NAME	VALUE
id	Deployment Id
isDelete	Default value is <b>true</b> , which will delete the deployment.  If value id <b>false</b> , which will result in Inactivating a deployment.

### Request Body

NA

### Response

If successful, this method returns HTTP response code 200.

### Examples

1. Inactivating a Deployment.

DELETE /iothub-manager/v1/deployments/a603893d-3ffd-46c4-ab8c-5d8147d1cfa4?isDelete=false

Deleting a Deployment. HTTP DELETE /iothub-manager/v1/deployments/a603893d-3ffd-46c4-ab8c-5d8147d1cfa4 ###
 Security Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



## **Reactivate Deployment**

Creates a Device Configuration using the data from the Inactivated deployment targetting the same device group.

Note:

Inactivated Deployments are available for Reactivating

**Permissions** 

**CreateDeployments** permission is required to call this api.

Http Request

PUT /iothub-manager/v1/deployments/{id}

### Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### **Query Params**

NAME	VALUE
id	Inactivated Deployment Id

### Request Body

NA

Response

If successful, this method returns HTTP response code 200.

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

### Examples

1. Reactivating a Deployment.

PUT /iothub-manager/v1/deployments/a603893d-3ffd-46c4-ab8c-5d8147d1cfa4



### **Get Deployment Impacted Devices**

Lists the devices which are affected by the Deployment.

**Permissions** 

**ReadAll** permission is required to call this api.

Http Request

```
POST /iothub-manager/v1/deployments/{id}?isLatest={isLatest}
```

### Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### **Query Params**

NAME	VALUE
id	Deployment Id
isLatest	<b>true</b> will retrieve the data of Devices using the query from request body <b>false</b> will retrieve the data from devices from storage, since the deployment is not currently impacting the device group.

### Request Body

string representing the query to fetch the devices.

### Response

If successful, this method returns DeviceListApiModel in response body

```
"metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
"continuationToken": "string",
"items": [
 "eTag": "string",
 "id": "string",
 "c2DMessageCount": 0,
 "lastActivity": "2020-10-30T02:56:45.592Z",
 "connected": true,
 "enabled": true,
 "lastStatusUpdated": "2020-10-30T02:56:45.592Z",
 "ioTHubHostName": "string",
 "metadata": {
 "additionalProp1": "string",
 3M IoT Platform on Azure - © 3M 2020
```

```
"additionalProp2": "string",
 "additionalProp3": "string"
 },
 "properties": {
 "reported": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 "desired": {
 "additionalProp1": [
 null
],
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 },
 "deviceId": "string",
 "moduleId": "string"
 },
 "tags": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 },
 "isEdgeDevice": true,
 "isSimulated": true,
 "authentication": {
 "primaryKey": "string",
 "secondaryKey": "string",
 "primaryThumbprint": "string",
 "secondaryThumbprint": "string",
 "authenticationType": 0
 }
 }
]
}
```

Sample Response

```
{
 "$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
 "ContinuationToken": null,
 "Items": [
 {
 "ETag": "AAAAAAAAAC=|AAAAAAAAAAC=",
 "Id": "TestDevice",
 "C2DMessageCount": 0,
 "LastActivity": "0001-01-01T00:00:00Z",
 "Connected": false,
 "Enabled": true,
 "LastStatusUpdated": "0001-01-01T00:00:00Z",
 "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
 "$metadata": {
 "$type": "Device;1",
 "$uri": "/v1/devices/TestDevice",
 "$twin_uri": "/v1/devices/TestDevice/twin"
 },
 "Properties": {
 "Reported": {},
 "Desired": {
 "softwareConfig": {
 "softwareName": "Firmware",
 "version": "1.0.0",
 "softwareURL": "https://TestPackageUrl",
 "fileName": "SW1Package.json",
 "serialNumber": "",
 "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
 }
 },
 "DeviceId": "",
 "ModuleId": ""
 },
 "Tags": {
 "TestDevice": "Yes"
 },
 "IsEdgeDevice": true,
 "IsSimulated": false,
 "Authentication": {
 "AuthenticationType": 0
 }
]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

### Examples

1. Get Impacted devices for the current active deployment.

POST iothubmanager/v1/deployments/devices/cb5a32d0-57dd-4ec2-ab64-1c20efbd8b02?isLatest=true

### Request Body

```
"deviceId IN ['TestDevice']"
```

```
{
 "$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
 },
 "ContinuationToken": null,
 "Items": [
 {
 "ETag": "AAAAAAAAAAc=|\"0000b5a5-0000-0300-0000-5f9a875d0000\"",
 "Id": "TestDevice",
 "C2DMessageCount": 0,
 "LastActivity": "0001-01-01T00:00:00Z",
 "Connected": false,
 "Enabled": true,
 "LastStatusUpdated": "0001-01-01T00:00:00Z",
 "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
 "$metadata": {
 "$type": "Device;1",
 "$uri": "/v1/devices/TestDevice",
 "$twin_uri": "/v1/devices/TestDevice/twin"
 },
 "Properties": {
 "Reported": {},
 "Desired": {
 "softwareConfig": {
 "softwareName": "Firmware",
 "version": "1.0.0",
 "softwareURL": "https://TestPackageUrl",
 "fileName": "SW1Package.json",
 "serialNumber": "",
 "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
 }
 },
 "DeviceId": "",
 "ModuleId": ""
 },
 "Tags": {
 "TestDevice": "Yes"
 "IsEdgeDevice": true,
 "IsSimulated": false,
 "Authentication": {
 "AuthenticationType": 0
 }
 }
]
}
```

1. Get Impacted devices for the previously active deployment.

iothubmanager/v1/deployments/devices/a603893d-3ffd-46c4-ab8c-5d8147d1cfa4?isLatest=false

### Request Body

```
"deviceId IN ['TestDevice']"
```

```
{
 "$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
 "ContinuationToken": null,
 "Items": [
 {
 "ETag": "AAAAAAAAAAc=|\"0000b5a5-0000-0300-0000-5f9a875d0000\"",
 "Id": "TestDevice",
 "C2DMessageCount": 0,
 "LastActivity": "0001-01-01T00:00:00Z",
 "Connected": false,
 "Enabled": true,
 "LastStatusUpdated": "0001-01-01T00:00:00Z",
 "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
 "$metadata": {
 "$type": "Device;1",
 "$uri": "/v1/devices/TestDevice",
 "$twin_uri": "/v1/devices/TestDevice/twin"
 },
 "Properties": {
 "Reported": {},
 "Desired": {
 "softwareConfig": {
 "softwareName": "Firmware",
 "version": "1.0.0",
 "softwareURL": "https://TestPackageUrl",
 "fileName": "SW1Package.json",
 "serialNumber": "",
 "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
 }
 },
 "DeviceId": "",
 "ModuleId": ""
 },
 "Tags": {
 "TestDevice": "Yes"
 "IsEdgeDevice": true,
 "IsSimulated": false,
 "Authentication": {
 "AuthenticationType": 0
 }
]
}
```



## **Get Deployment Impacted Modules**

Lists the Modules which are affected by the Deployment.

**Permissions** 

**ReadAll** permission is required to call this api.

Http Request

POST /iothub-manager/v1/deployments/Modules/{id}?isLatest={isLatest}

### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### **Query Params**

NAME	VALUE
id	Deployment Id
isLatest	<b>true</b> will retrieve the data of Modules using the query from request body <b>false</b> will retrieve the data from Modules from storage, since the deployment is not currently impacting the device group.

### Request Body

string representing the query to fetch the devices.

Response

If successful, this method returns TwinPropertiesListApiModel in response body

```
{
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 },
 "continuationToken": "string",
 "items": [
 "reported": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 },
 "desired": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 "deviceId": "string",
 "moduleId": "string"
]
}
```

Sample Response

```
{
 "$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
 "ContinuationToken": null,
 "Items": [
 {
 "Reported": {},
 "Desired": {
 "schemaVersion": "2.0",
 "runtime": {
 "type": "docker",
 "settings": {
 "loggingOptions": "",
 "minDockerVersion": "v1.25"
 }
 },
 "systemModules": {
 "edgeAgent": {
 "type": "docker",
 "settings": {
 "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
 "createOptions": "{}"
 }
 },
 "edgeHub": {
 "type": "docker",
 "settings": {
 "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
 "createOptions": "{}"
 },
 "status": "running",
 "restartPolicy": "always"
 }
 },
 "modules": {}
 },
 "DeviceId": "Test0903",
 "ModuleId": "$edgeAgent"
 }
]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

#### Examples

1. Get Impacted Modules for the current active deployment.

POST iothubmanager/v1/deployments/modules/5253c096-b56b-49d2-b230-61b7fcd0f0aa?isLatest=true

### Request Body

```
"deviceId IN ['TestDevice'] AND moduleId = '$edgeAgent'"
```

```
{
 "$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
 "ContinuationToken": null,
 "Items": [
 {
 "Reported": {},
 "Desired": {
 "schemaVersion": "2.0",
 "runtime": {
 "type": "docker",
 "settings": {
 "loggingOptions": "",
 "minDockerVersion": "v1.25"
 }
 },
 "systemModules": {
 "edgeAgent": {
 "type": "docker",
 "settings": {
 "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
 "createOptions": "{}"
 }
 },
 "edgeHub": {
 "type": "docker",
 "settings": {
 "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
 "createOptions": "{}"
 },
 "status": "running",
 "restartPolicy": "always"
 }
 },
 "modules": {}
 },
 "DeviceId": "TestDevice",
 "ModuleId": "$edgeAgent"
]
}
```

1. Get Impacted devices for the previously active deployment.

POST iothubmanager/v1/deployments/modules/5253c096-b56b-49d2-b230-61b7fcd0f0aa?isLatest=false

### **Request Body**

```
"deviceId IN ['TestDevice'] AND moduleId = '$edgeAgent'"
```

```
{
 "$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
 "ContinuationToken": null,
 "Items": [
 "Reported": {},
 "Desired": {
 "schemaVersion": "2.0",
 "runtime": {
 "type": "docker",
 "settings": {
 "loggingOptions": "",
 "minDockerVersion": "v1.25"
 }
 },
 "systemModules": {
 "edgeAgent": {
 "type": "docker",
 "settings": {
 "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
 "createOptions": "{}"
 }
 },
 "edgeHub": {
 "type": "docker",
 "settings": {
 "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
 "createOptions": "{}"
 },
 "status": "running",
 "restartPolicy": "always"
 }
 },
 "modules": {}
 "DeviceId": "TestDevice",
 "ModuleId": "$edgeAgent"
 }
]
}
```



## **Get Deployment Report**

Provides the report of the devices which are impacted by deployment in byte array.

**Permissions** 

**ReadAll** permission is required to call this api.

Http Request

POST /iothub-manager/v1/deployments/Report/{id}?isLatest={isLatest}

### **Request Headers**

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

### **Query Params**

NAME	VALUE
id	Deployment Id
isLatest	<b>true</b> will retrieve the deployment data from IoTHub <b>false</b> will retrieve the data from storage, since the deployment is not currently impacting the device group.

### **Request Body**

NA

Response

If successful, this method returns byte array data.

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



# **Device Properties**

Service: IoTHub Manager

# **Operations**

OPERATION	DESCRIPTION
Get Device Properties	lists the device properties from DeviceProperties Cache which contains the data from Tags and Reported Properties of the Devices.



## **Get Device Properties**

API Method that lists the device properties from DeviceProperties Cache which contains the data from Tags and Reported Properties of the Devices.

### **Permissions**

ReadAll

### Http Request

GET /iothubmanager/v1/status

### Request Headers

HEADER	VALUE
Content-Type	application/json

### Request Body

N/A

### Response

If successful, this method returns **DevicePropertiesApiModel** object in the response body.

### Response Schema

```
{
 "items": [
 "string"
],
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
}
}
```

### Sample Response

```
{
 "Items": [
 "Tags.TestDevice",
 "Tags.Org",
 "Properties.Reported.Protocol",
 "Properties.Reported.SupportedMethods",
 "Properties.Reported.DeviceMethodStatus",
 "Properties.Reported.FirmwareUpdateStatus",
 "Properties.Reported.firmware.current FwVersion",\\
 "Properties.Reported.firmware.status",
 "Properties.Reported.firmware.lastFwUpdateStartTime",
 "Properties.Reported.firmware.lastFwUpdateEndTime",
 "Properties.Reported.softwareConfig.version",
 "Properties.Reported.softwareConfig.status"
],
 "$metadata": {
 "$type": "DevicePropertyList;1",
 "$url": "/v1/deviceproperties"
 }
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



# **Devices**

Service: IoTHub Manager

# **Operations**

OPERATION	DESCRIPTION
Get Devices.	Lists the Devices based on the query conditions.
Query Devices.	Lists the Devices based on the query conditions from request body.
Get Device.	Retrives the Device data based on the Deviceld.
Get Device Deployment History.	Retrieves the DeviceTwins properties from the Deployment Impacted Devices collection for the device.
Create Device.	Creates an IoT or Edge Device in IoTHub.
Update Device.	Updates the device data.
Delete Device	Deletes the device.
Invoke Device Method.	Invokes a direct method on Device using a payload
Send CloudToDevice Message.	Sends messages to Device from IoTHub to trigger actions.
Get Device Files.	Lists the file urls uploaded by the Device.



### **Get Devices**

Lists the Devices based on the query conditions.

Permissions

**ReadAll** permission is required to call this api.

Http Request

GET /iothub-manager/v1/devices?query={query}

### Request Headers

HEADER	VALUE	
Authorization	Bearer (token). Required.	
Content-Type	application/json	
x-ms-continuation	Continuation Token from response of previous request, if request is called to get next dataset.	

### Query Params

NAME	VALUE
query	URL encoded string from Conditions to query devices.

### Request Body

NA

### Response

If successful, this method returns DeviceListApiModel object in the response body.

```
"metadata": {
 "additionalProp1": "string",
"additionalProp2": "string",
"additionalProp3": "string"
"continuationToken": "string",
"items": [
 {
 "eTag": "string",
"id": "string",
 "c2DMessageCount": 0,
 "lastActivity": "2020-10-30T04:20:41.681Z",
 "connected": true,
 "enabled": true,
 "lastStatusUpdated": "2020-10-30T04:20:41.681Z",
 "ioTHubHostName": "string",
 "metadata": {
 "additionalProp1": "string",
"additionalProp2": "string",
 "additionalProp3": "string"
 "properties": {
 "reported": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
 "desired": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 "deviceId": "string",
 "moduleId": "string"
 "tags": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 "isEdgeDevice": true,
 "isSimulated": true,
 "authentication": {
 "primaryKey": "string",
 "secondaryKey": "string",
 "primaryThumbprint": "string",
 "secondaryThumbprint": "string",
 "authenticationType": 0
]
```

Sample Response

```
"$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
 "ContinuationToken": null,
 "Items": [
 {
 "ETag": "AAAAAAAAAAC=|AAAAAAAAAAC=",
 "Id": "TestDevice",
 "C2DMessageCount": 1,
 "LastActivity": "0001-01-01T00:00:00Z",
 "Connected": false,
 "Enabled": true,
 "LastStatusUpdated": "0001-01-01T00:00:00Z",
 "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
 "$metadata": {
 "$type": "Device;1",
"$uri": "/v1/devices/TestDevice",
 "$twin_uri": "/v1/devices/TestDevice/twin"
 "Properties": {
 "Reported": {},
 "Desired": {
 "softwareConfig": {
 "softwareName": "Firmware",
 "version": "1.0.0",
 "softwareURL": "https://TestPackageUrl",
 "fileName": "SW1Package.json",
"serialNumber": "",
 "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
 }
 "DeviceId": "",
"ModuleId": ""
 "Tags": {
 "TestDevice": "Yes"
 "IsEdgeDevice": true,
 "IsSimulated": false,
 "Authentication": {
 "AuthenticationType": 0
]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

### Examples

1. Get Devices for a Device Group

GET /iothubmanager/v1/devices?query=%5B%7B%22key%22%3A%22Tags.TestDevice%22%2C%22operator%22%3A%22EQ%22%2C%22value%22%3A%22Yes%22%7D%5D

### Query String Data

CONDITIONS	ENCODED STRING	
[{"key":"Tags.TestDevice","operator":"EQ","value":"Yes"}]	%5B%7B%22key%22%3A%22Tags.TestDevice%22%2C%22operator%22%3A%22EQ%22%2C%22value%22%3A%22Yes%22%7D%5D	

```
"$metadata": {
 "$type": "DeviceList;1",
 "$uri": "/v1/devices"
"ContinuationToken": null,
"Items": [
 "ETag": "AAAAAAAAAC=|AAAAAAAAAAC=",
"Id": "TestDevice",
 "C2DMessageCount": 1,
"LastActivity": "0001-01-01T00:00:00Z",
 "Connected": false,
 "Enabled": true,
 "LastStatusUpdated": "0001-01-01T00:00:00Z",
 "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
 "$metadata": {
 "$type": "Device;1",
"$uri": "/v1/devices/TestDevice",
 "$twin_uri": "/v1/devices/TestDevice/twin"
 "Properties": {
 "Reported": {},
 "Desired": {
 "softwareConfig": {
 "softwareName": "Firmware",
 "version": "1.0.0",
 "softwareURL": "https://TestPackageUrl",
 "fileName": "SW1Package.json",
"serialNumber": "",
 "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
 "DeviceId": "",
"ModuleId": ""
 "Tags": {
 "TestDevice": "Yes"
 },
"IsEdgeDevice": true,
 "IsSimulated": false,
 "Authentication": {
 "AuthenticationType": 0
 }
```



### **Query Devices**

Lists the Devices based on the query conditions from request body.

Permissions

**ReadAll** permission is required to call this api.

Http Request

POST /iothub-manager/v1/devices/query

### Request Headers

HEADER	VALUE	
Authorization	Bearer (token). Required.	
Content-Type	application/json	
x-ms-continuation	Continuation Token from response of previous request,if request is called to get next dataset.	

### Request Body

JSON serialized string representing the conditions to fetch the devices.

### Response

If successful, this method returns DeviceListApiModel object in the response body.

```
"metadata": {
 "additionalProp1": "string",
"additionalProp2": "string",
 "additionalProp3": "string"
 "continuationToken": "string",
 "items": [
 "eTag": "string",
 "id": "string",
 "c2DMessageCount": 0,
 "lastActivity": "2020-10-30T04:20:41.681Z",
 "connected": true,
 "enabled": true,
 "lastStatusUpdated": "2020-10-30T04:20:41.681Z",
 "ioTHubHostName": "string",
 "metadata": {
 "additionalProp1": "string",
 "additionalProp2": "string",
 "additionalProp3": "string"
 "properties": {
 "reported": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 "desired": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
]
 "deviceId": "string",
 "moduleId": "string"
 "tags": {
 "additionalProp1": [
 null
 "additionalProp2": [
 null
 "additionalProp3": [
 null
 "isEdgeDevice": true,
 "isSimulated": true,
 "authentication": {
 "primaryKey": "string",
 "secondaryKey": "string",
 "primaryThumbprint": "string",
 "secondaryThumbprint": "string",
 "authenticationType": 0
 }
]
}
```

```
"$metadata": {
 "$type": "DeviceList;1",
"$uri": "/v1/devices"
 },
"ContinuationToken": null,
 "Items": [
 "ETag": "AAAAAAAAAAC=|AAAAAAAAAAAC=",
 "Id": "TestDevice",
 "C2DMessageCount": 1,
 "LastActivity": "0001-01-01T00:00:00Z",
 "Connected": false,
 "Enabled": true,
 "LastStatusUpdated": "0001-01-01T00:00:00Z",
 "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
 "$metadata": {
 "$type": "Device;1",
 "$uri": "/v1/devices/TestDevice",
 "$twin_uri": "/v1/devices/TestDevice/twin"
 "Properties": {
 "Reported": {},
 "Desired": {
 "softwareConfig": {
 "softwareName": "Firmware",
 "version": "1.0.0",
 "softwareURL": "https://TestPackageUrl",
 "fileName": "SW1Package.json",
 "serialNumber": ""
 "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
 }
 "DeviceId": "",
 "ModuleId": ""
 "Tags": {
 "TestDevice": "Yes"
 "IsEdgeDevice": true,
 "IsSimulated": false,
 "Authentication": {
 "AuthenticationType": 0
 }
 }
]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

#### Examples

1. Get Devices based on Device Group Conditions

```
POST /iothub-manager/v1/devices/query
```

### Request Body

```
"[{\"key\":\"Tags.TestDevice\",\"operator\":\"EQ\",\"value\":\"Yes\"}]"
```

Reference: Device Group Conditions as Request body.

CONDITIONS	JSON SERIALIZED DATA
[{"key":"Tags.TestDevice","operator":"EQ","value":"Yes"}]	[{\"key\":\"Tags.TestDevice\",\"operator\":\"EQ\",\"value\":\"Yes\"}]

```
Response
```json
{
    "$metadata": {
        "$type": "DeviceList;1",
"$uri": "/v1/devices"
    "ContinuationToken": null,
    "Items": [
       {
            "ETag": "AAAAAAAAAC=|AAAAAAAAAAC=",
            "Id": "TestDevice",
            "C2DMessageCount": 0,
            "LastActivity": "0001-01-01T00:00:00Z",
            "Connected": false,
            "Enabled": true,
            "LastStatusUpdated": "0001-01-01T00:00:00Z",
            "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
            "$metadata": {
                "$type": "Device;1",
                "$uri": "/v1/devices/TestDevice",
                "$twin_uri": "/v1/devices/TestDevice/twin"
            "Properties": {
                "Reported": {},
                "Desired": {
                    "softwareConfig": {
                        "softwareName": "Firmware",
                        "version": "1.0.0",
                        "softwareURL": "https://testpackageurl",
                        "fileName": "SW1Package.json",
                        "serialNumber": "",
                        "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
                    }
                "DeviceId": "",
"ModuleId": ""
            "Tags": {
                "TestDevice": "Yes"
            "IsEdgeDevice": true,
            "IsSimulated": false,
            "Authentication": {
                "AuthenticationType": 0
       }
   ]
```

1. Get Devices based on Devicelds

POST /iothub-manager/v1/devices/query

Request Body

```
"deviceId IN ['TestDevice']"
```

```
"$metadata": {
    "$type": "DeviceList;1",
    "$uri": "/v1/devices"
   },
"ContinuationToken": null,
    "Items": [
       {
             "ETag": "AAAAAAAAAI=|AAAAAAAAAI=",
            "Id": "TestDevice",
             "C2DMessageCount": 0,
            "LastActivity": "0001-01-01T00:00:00Z",
            "Connected": false,
            "Enabled": true,
             "LastStatusUpdated": "0001-01-01T00:00:00Z",
             "IoTHubHostName": "iothub-233a1ca2.azure-devices.net",
             "$metadata": {
                 "$type": "Device;1",
"$uri": "/v1/devices/TestDevice",
                 "$twin_uri": "/v1/devices/TestDevice/twin"
             "Properties": {
                 "Reported": {},
                 "Desired": {
                     "softwareConfig": {
                         "softwareName": "Firmware",
                         "version": "1.0.0",
                          "softwareURL": "https://testpackageurl",
                         "fileName": "SW1Package.json",
                         "serialNumber": "",
                          "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
                     }
                 "DeviceId": "",
"ModuleId": ""
             },
             "Tags": {},
             "IsEdgeDevice": false,
             "IsSimulated": false,
            "Authentication": {
                "AuthenticationType": 0
       }
   ]
}
```



Get Device

Retrives the Device data based on the Deviceld.

Permissions

ReadAll permission is required to call this api.

Http Request

GET /iothub-manager/v1/devices/{id}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
id	Device Id

Request Body

NA

Response

If successful, this method returns **DeviceRegistryApiModel** object in the response body.

```
"eTag": "string",
  "id": "string",
  "c2DMessageCount": 0,
  "lastActivity": "2020-10-30T05:16:15.047Z",
  "connected": true,
  "enabled": true,
  "lastStatusUpdated": "2020-10-30T05:16:15.047Z",
  "ioTHubHostName": "string",
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
 },
  "properties": {
    "reported": {
      "additionalProp1": [
        null
     ],
      "additionalProp2": [
      null
      "additionalProp3": [
        null
    },
    "desired": {
      "additionalProp1": [
       null
      "additionalProp2": [
       null
      "additionalProp3": [
        null
      1
    "deviceId": "string",
    "moduleId": "string"
  },
  "tags": {
    "additionalProp1": [
     null
    "additionalProp2": [
     null
    ],
    "additionalProp3": [
     null
    1
  },
  "isEdgeDevice": true,
  "isSimulated": true,
  "authentication": {
    "primaryKey": "string",
    "secondaryKey": "string",
    "primaryThumbprint": "string",
    "secondaryThumbprint": "string",
    "authenticationType": 0
  }
}
```

```
{
    "ETag": "\"NTU4MTc1Mjcw\"|AAAAAAAAAAc=",
    "Id": "TestDevice",
    "C2DMessageCount": 0,
    "LastActivity": "0001-01-01T00:00:00Z",
    "Connected": false,
    "Enabled": true,
    "LastStatusUpdated": "0001-01-01T00:00:00Z",
    "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
    "$metadata": {
        "$type": "Device;1",
        "$uri": "/v1/devices/TestDevice",
        "$twin_uri": "/v1/devices/TestDevice/twin"
    "Properties": {
        "Reported": {},
        "Desired": {
            "softwareConfig": {
                "softwareName": "Firmware",
                "version": "1.0.0",
                "softwareURL": "https://testpackageurl",
                "fileName": "SW1Package.json",
                "serialNumber": "",
                "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
            }
        },
        "DeviceId": "",
        "ModuleId": ""
    "Tags": {
        "TestDevice": "Yes"
    },
    "IsEdgeDevice": true,
    "IsSimulated": false,
    "Authentication": {
        "PrimaryKey": "raNhoHDRAWE9w7VwiSEitlc2CBNJUwhN/d/96AIJB84=",
        "SecondaryKey": "50WFNATIvex9vTIbBuSQm99QNZ+jWwkIGEjQrajFIK0=",
        "AuthenticationType": 0
    }
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Example

1. Get Device Details using Deviceld

GET iothubmanager/v1/Devices/TestDevice

```
{
   "ETag": "\"NTU4MTc1Mjcw\"|AAAAAAAAAAc=",
   "Id": "TestDevice",
    "C2DMessageCount": 0,
    "LastActivity": "0001-01-01T00:00:00Z",
    "Connected": false,
    "Enabled": true,
    "LastStatusUpdated": "0001-01-01T00:00:00Z",
    "IoTHubHostName": "iothub-209d7f79.azure-devices.net",
    "$metadata": {
       "$type": "Device;1",
        "$uri": "/v1/devices/TestDevice",
       "$twin_uri": "/v1/devices/TestDevice/twin"
    "Properties": {
        "Reported": {},
        "Desired": {
            "softwareConfig": {
                "softwareName": "Firmware",
                "version": "1.0.0",
                "softwareURL": "https://testpackageurl",
                "fileName": "SW1Package.json",
                "serialNumber": "",
                "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
            }
        },
        "DeviceId": "",
       "ModuleId": ""
    "Tags": {
       "TestDevice": "Yes"
    },
    "IsEdgeDevice": true,
    "IsSimulated": false,
    "Authentication": {
        "PrimaryKey": "raNhoHDRAWE9w7VwiSEitlc2CBNJUwhN/d/96AIJB84=",
        "SecondaryKey": "50WFNATIvex9vTIbBuSQm99QNZ+jWwkIGEjQrajFIK0=",
        "AuthenticationType": 0
   }
}
```



Get Device Deployment History

Retrieves the DeviceTwins properties from the Deployment Impacted Devices collection for the device.

Permissions

ReadAll permission is required to call this api.

Http Request

GET /iothub-manager/v1/devices/deploymentHistory/{id}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
id	Device Id

Request Body

NA

Response

If successful, this method returns **TwinPropertiesListApiModel** object in the response body.

```
{
  "metadata": {
   "additionalProp1": "string",
   "additionalProp2": "string",
   "additionalProp3": "string"
 },
  "continuationToken": "string",
  "items": [
     "reported": {
       "additionalProp1": [
        null
       "additionalProp2": [
        null
       "additionalProp3": [
         null
       ]
     },
      "desired": {
       "additionalProp1": [
         null
       "additionalProp2": [
        null
       "additionalProp3": [
         null
       ]
      "deviceId": "string",
      "moduleId": "string"
  ]
}
```

Sample Response

```
{
    "$metadata": {
        "$type": "DeviceList;1",
        "$uri": "/v1/devices"
    "ContinuationToken": null,
    "Items": [
        {
            "Reported": {
                "firmware": {
                    "currentFwVersion": "3.0.2",
                    "status": "Current",
                    "lastFwUpdateStartTime": "2020-09-16T16:30:21.5586691Z",
                    "lastFwUpdateEndTime": "2020-09-16T16:30:22.5586691Z"
                }
            },
            "Desired": {
                "softwareConfig": {
                    "softwareName": "Firmware",
                    "version": "3.0.0",
                    "softwareURL": "https://testpackageurl",
                    "fileName": "SW2Package.json",
                    "serialNumber": "",
                    "checkSum": "b01e454d79de5b07a3fe41ae30f77193f02e0e47"
                }
            },
            "DeviceId": "TestDevice"
        },
            "Reported": {
                "firmware": {
                    "currentFwVersion": "3.0.0",
                    "status": "Current",
                    "lastFwUpdateStartTime": "2020-09-16T15:20:21.5586691Z",
                    "lastFwUpdateEndTime": "2020-09-16T15:20:22.5586691Z"
                }
            },
            "Desired": {
                "softwareConfig": {
                    "softwareName": "Firmware",
                    "version": "3.0.0",
                    "softwareURL": "https://testpackageurl",
                    "fileName": "SW2Package.json",
                    "serialNumber": "",
                    "checkSum": "b01e454d79de5b07a3fe41ae30f77193f02e0e47"
            },
            "DeviceId": "TestDevice"
        }
    ]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Example

1. Get Deployment History for a Deviceld

GET iothubmanager/v1/Devices/deploymenthistory/TestDevice

```
{
    "$metadata": {
       "$type": "DeviceList;1",
        "$uri": "/v1/devices"
    "ContinuationToken": null,
    "Items": [
       {
            "Reported": {
                "firmware": {
                    "currentFwVersion": "3.0.2",
                    "status": "Current",
                    "lastFwUpdateStartTime": "2020-09-16T16:30:21.5586691Z",
                    "lastFwUpdateEndTime": "2020-09-16T16:30:22.5586691Z"
                }
            },
            "Desired": {
                "softwareConfig": {
                    "softwareName": "Firmware",
                    "version": "3.0.0",
                    "softwareURL": "https://testpackageurl",
                    "fileName": "SW2Package.json",
                    "serialNumber": "",
                    "checkSum": "b01e454d79de5b07a3fe41ae30f77193f02e0e47"
                }
            "DeviceId": "TestDevice"
       },
            "Reported": {
                "firmware": {
                    "currentFwVersion": "3.0.0",
                    "status": "Current",
                    "lastFwUpdateStartTime": "2020-09-16T15:20:21.5586691Z",
                    "lastFwUpdateEndTime": "2020-09-16T15:20:22.5586691Z"
                }
            },
            "Desired": {
                "softwareConfig": {
                    "softwareName": "Firmware",
                    "version": "3.0.0",
                    "softwareURL": "https://testpackageurl",
                    "fileName": "SW2Package.json",
                    "serialNumber": "",
                    "checkSum": "b01e454d79de5b07a3fe41ae30f77193f02e0e47"
            },
            "DeviceId": "TestDevice"
       }
   ]
}
```



Create Device

Creates an IoT or Edge Device in IoTHub.

Permissions

CreateDevices permission is required to call this api.

Http Request

POST /iothub-manager/v1/devices

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Schema

```
"eTag": "string",
  "id": "string",
  "c2DMessageCount": 0,
  "lastActivity": "2020-10-30T05:41:54.391Z",
  "connected": true,
  "enabled": true,
  "lastStatusUpdated": "2020-10-30T05:41:54.391Z",
  "ioTHubHostName": "string",
  "properties": {
    "reported": {
      "additionalProp1": [
       null
      ],
      "additionalProp2": [
       null
      "additionalProp3": [
       null
     ]
    },
    "desired": {
      "additionalProp1": [
       null
      "additionalProp2": [
       null
      ],
      "additionalProp3": [
        null
    },
    "deviceId": "string",
    "moduleId": "string"
  },
  "tags": {
    "additionalProp1": [
     null
    "additionalProp2": [
     null
    "additionalProp3": [
     null
    ]
  },
  "isEdgeDevice": true,
  "isSimulated": true,
  "authentication": {
    "primaryKey": "string",
    "secondaryKey": "string",
    "primaryThumbprint": "string",
    "secondaryThumbprint": "string",
    "authenticationType": 0
 }
}
```

Request Body

In the request body, supply a JSON representation of DeviceRegistryApiModel object.

Response

If successful, this method returns **DeviceRegistryApiModel** object in the response body.

```
{
  "eTag": "string",
  "id": "string",
  "c2DMessageCount": 0,
  "lastActivity": "2020-10-30T05:41:54.391Z",
  "connected": true,
  "enabled": true,
  "lastStatusUpdated": "2020-10-30T05:41:54.391Z",
  "ioTHubHostName": "string",
  "properties": {
    "reported": {
      "additionalProp1": [
        null
      "additionalProp2": [
       null
      "additionalProp3": [
       null
      ]
    },
    "desired": {
      "additionalProp1": [
       null
      "additionalProp2": [
       null
      "additionalProp3": [
       null
    },
    "deviceId": "string",
    "moduleId": "string"
  },
  "tags": {
    "additionalProp1": [
     null
    "additionalProp2": [
     null
    "additionalProp3": [
     null
    ]
  "isEdgeDevice": true,
  "isSimulated": true,
  "authentication": {
    "primaryKey": "string",
    "secondaryKey": "string",
    "primaryThumbprint": "string",
    "secondaryThumbprint": "string",
    "authenticationType": 0
 }
}
```

```
{
  "$metadata": {
    "$type": "DeviceList;1",
    "$uri": "/v1/devices"
  "ContinuationToken": null,
  "Items": [
    {
      "ETag": "AAAAAAAAYc=|AAAAAAAAAYc=",
      "Id": "TestDevice",
      "C2DMessageCount": 0,
      "LastActivity": "0001-01-01T00:00:00Z",
      "Connected": false,
      "Enabled": true,
      "LastStatusUpdated": "0001-01-01T00:00:00Z",
      "IoTHubHostName": "iothub-233a1ca2.azure-devices.net",
      "$metadata": {
        "$type": "Device;1",
        "$uri": "/v1/devices/TestDevice",
        "$twin_uri": "/v1/devices/TestDevice/twin"
      },
      "Properties": {
        "Reported": {},
        "Desired": {
          "softwareConfig": {
            "softwareName": "Firmware",
            "version": "1.0.0",
            "softwareURL": "https://testpackageurl",
            "fileName": "SW1Package.json",
            "serialNumber": "",
            "checkSum": "16b557cb7b4828cefe71b9a9fdadb534bdce6089"
          }
        },
        "DeviceId": "",
        "ModuleId": ""
      },
      "Tags": {
        "TestDevice": "Yes"
     },
      "IsEdgeDevice": true,
      "IsSimulated": false,
      "Authentication": {
        "AuthenticationType": 0
      }
  ]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Example

1. Create Device with auto generated authentication keys.

POST /iothubmanager/v1/devices

Request

```
"Id": "TestDevice",
    "IsEdgeDevice": false,
    "IsSimulated": false,
    "Enabled": true,
    "Authentication": {}
}
```

Response

```
{
    "ETag": "\"Mjk1MTYxMjc5\"|AAAAAAAAAE=",
    "Id": "TestDevice",
    "C2DMessageCount": 0,
    "LastActivity": "0001-01-01T00:00:00",
    "Connected": false,
    "Enabled": true,
    "LastStatusUpdated": "0001-01-01T00:00:00",
    "IoTHubHostName": "iothub-233a1ca2.azure-devices.net",
    "$metadata": {
        "$type": "Device;1",
        "$uri": "/v1/devices/TestDevice",
        "$twin_uri": "/v1/devices/TestDevice/twin"
    "Properties": {
        "Reported": {},
        "Desired": {},
        "DeviceId": ""
        "ModuleId": ""
   },
    "Tags": {},
    "IsEdgeDevice": false,
    "IsSimulated": false,
    "Authentication": {
        "PrimaryKey": "hTN/qqE3aTCOCy8yTV4GroI9gjTwXMM05vpAtPA/D7Y=",
        "SecondaryKey": "nUe22sk90wW+IDgkrIewLU4iEmWnOwJhNxxlYx+W06U=",
        "AuthenticationType": 0
   }
}
```

2. Create Device with authentication keys.

```
POST /iothubmanager/v1/devices
```

Request

```
"Id": "TestDevice",
    "IsEdgeDevice": false,
    "IsSimulated": false,
    "Enabled": true,
    "Authentication": {
        "AuthenticationType": 0,
        "PrimaryKey": "wpVpDAwhmLmL27+MbO9T3AVTmFv69D28LEP+xN7vTKA=",
        "SecondaryKey": "xzCw4ZfP6dig/NDUzeNxeHvpmYU4ydpkqyDnFeG2SEI=",
        "PrimaryThumbprint": null,
        "SecondaryThumbprint": null
}
```

```
{
   "ETag": "\"NDE1MjQ3OTMx\"|AAAAAAAAAE=",
   "Id": "TestDevice",
    "C2DMessageCount": 0,
    "LastActivity": "0001-01-01T00:00:00",
    "Connected": false,
    "Enabled": true,
    "LastStatusUpdated": "0001-01-01T00:00:00",
    "IoTHubHostName": "iothub-233a1ca2.azure-devices.net",
    "$metadata": {
       "$type": "Device;1",
        "$uri": "/v1/devices/TestDevice",
       "$twin_uri": "/v1/devices/TestDevice/twin"
    "Properties": {
       "Reported": {},
        "Desired": {},
        "DeviceId": "",
        "ModuleId": ""
   "Tags": {},
   "IsEdgeDevice": false,
    "IsSimulated": false,
    "Authentication": {
       "PrimaryKey": "wpVpDAwhmLmL27+MbO9T3AVTmFv69D28LEP+xN7vTKA=",
        "SecondaryKey": "xzCw4ZfP6dig/NDUzeNxeHvpmYU4ydpkqyDnFeG2SEI=",
        "AuthenticationType": 0
   }
}
```



Update Device

Updates the device data.

Permissions

UpdateDevices permission is required to call this api.

Http Request

PUT /iothub-manager/v1/devices/{id}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
id	Device Id

Request Schema

```
"eTag": "string",
  "id": "string",
  "c2DMessageCount": 0,
  "lastActivity": "2020-10-30T05:41:54.391Z",
  "connected": true,
  "enabled": true,
  "lastStatusUpdated": "2020-10-30T05:41:54.391Z",
  "ioTHubHostName": "string",
  "properties": {
    "reported": {
      "additionalProp1": [
       null
      ],
      "additionalProp2": [
       null
      "additionalProp3": [
       null
     ]
    },
    "desired": {
      "additionalProp1": [
       null
      "additionalProp2": [
       null
      ],
      "additionalProp3": [
        null
    },
    "deviceId": "string",
    "moduleId": "string"
  },
  "tags": {
    "additionalProp1": [
     null
    "additionalProp2": [
     null
    "additionalProp3": [
     null
    ]
  },
  "isEdgeDevice": true,
  "isSimulated": true,
  "authentication": {
    "primaryKey": "string",
    "secondaryKey": "string",
    "primaryThumbprint": "string",
    "secondaryThumbprint": "string",
    "authenticationType": 0
 }
}
```

Request Body

In the request body, supply a JSON representation of **DeviceRegistryApiModel** object.

Response

If successful, this method returns **DeviceRegistryApiModel** object in the response body.

```
"eTag": "string",
  "id": "string",
  "c2DMessageCount": 0,
  "lastActivity": "2020-10-30T05:41:54.391Z",
  "connected": true,
  "enabled": true,
  "lastStatusUpdated": "2020-10-30T05:41:54.391Z",
  "ioTHubHostName": "string",
  "properties": {
    "reported": {
      "additionalProp1": [
       null
      "additionalProp2": [
       null
      "additionalProp3": [
       null
     ]
    },
    "desired": {
      "additionalProp1": [
       null
      "additionalProp2": [
       null
      "additionalProp3": [
       null
    "deviceId": "string",
    "moduleId": "string"
  },
  "tags": {
    "additionalProp1": [
     null
    "additionalProp2": [
     null
    "additionalProp3": [
     null
    ]
  "isEdgeDevice": true,
  "isSimulated": true,
  "authentication": {
    "primaryKey": "string",
    "secondaryKey": "string",
    "primaryThumbprint": "string",
    "secondaryThumbprint": "string",
    "authenticationType": 0
 }
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Delete Device

Used to delete device.

Permissions

DeleteDevices permission is required to call this api.

Http Request

DELETE /iothub-manager/v1/devices/{id}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
id	Device Id

Request Body

NA

Response

If successful, this method returns 200 success reponse.

Security

Type: OpenID Connect

Flow: implicit

 $Authorization\ URL:\ https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com$

Examples

1. Delete a device using deviceid

DELETE /iothub-manager/v1/devices/TestDevice

Response

200



Invoke Device Method

Used to invoke a direct method on Device using a payload.

Permissions

CreateJobs permission is required to call this api.

Http Request

```
POST /iothub-manager/v1/devices/{id}/methods
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
id	Device Id

Request Schema

```
{
  "name": "string",
  "responseTimeout": {},
  "connectionTimeout": {},
  "jsonPayload": "string"
}
```

Request Body

In the request body, supply a JSON representation of **MethodParameterApiModel** object.

Sample Request

```
{
    "Name":"methodName1",
    "JsonPayload":"{TestPayLoad}"
}
```

Response

If successful, this method returns **MethodResultApiModel** object in the response body.

Response Schema

```
{
  "status": "int",
  "jsonPayload": "string"
}
```

```
{
    "status":"200",
    "JsonPayload":"{TestAcknowledgement}"
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Send CloudToDevice Message

Used to send messages to Device from IoTHub.

Permissions

SendC2DMessages permission is required to call this api.

Http Request

POST /iothub-manager/v1/devices/{id}/c2dmessage

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
id	Device Id

Request Body

Any message as string.

Response

If successful, this method returns 200 response code.

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Examples

1. Send message to device.

POST iothubmanager/v1/devices/SimulatedDevice/c2dmessage

Request Body

{"message":"Message to send to device"}

Response

200



Get Device Files

Lists the files uploaded by the Device.

Permissions

ReadAll permission is required to call this api.

Http Request

```
GET /iothub-manager/v1/devices/files/{id}
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
id	Device Id

Request Body

NA

Response

If successful, this method returns List of URLs of files in the response body.

Response Schema

```
[
"string"
]
```

Sample Response

```
[
    "https://testacct.blob.core.windows.net/209d7f79-39aa-4e2a-8e9c-56f04f7633f9-iot-file-
upload/TestDevice/myimage1.png?sv=2018-03-
28&sr=b&sig=wrCCy%2B22yNf9xeP5hnIgCi2LB3L5tdrx4HbrPhP5L6Q%3D&st=2020-10-30T07%3A05%3A10Z&se=2020-10-
31T07%3A10%3A10Z&sp=rw",
    "https://testacct.blob.core.windows.net/209d7f79-39aa-4e2a-8e9c-56f04f7633f9-iot-file-
upload/TestDevice/myimage2.png?sv=2018-03-28&sr=b&sig=OHzEu5EUmCUTjbygcVH0W6yASOPTpGgBMVcZIUkSMfE%3D&st=2020-
10-30T07%3A05%3A10Z&se=2020-10-31T07%3A10%3A10Z&sp=rw"
]
```

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Jobs

Service: IoTHub Manager

Operations

OPERATION	DESCRIPTION
Get Jobs.	Lists the jobs from IoTHub based on timeframe, job type and job status.
Get Job.	Gets the details of an jon from IoTHub based on jobid, job status.
Create Job.	Creates a Job to add tags, modify properties or invoke methods on selected devices.



Get Jobs

Lists the jobs from IoTHub based on timeframe, job type and job status.

Permissions

ReadAll permission is required to call this api.

Http Request

 $\label{lem:GET in the decomposition} $$\operatorname{GET /iothubmanager/v1/jobs?from=\{from}\&to=\{to\}\&jobType=\{jobType\}\&jobStatus=\{jobStatus\}\&pageSize=\{pageSize\}\}. $$$

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
from	Start Timeframe to consider
to	End Timeframe to consider
jobType	Unknown = 0 ScheduleDeviceMethod = 3 ScheduleUpdateTwin = 4,
jobStatus	Unknown = 0 Enqueued = 1 Running = 2 Completed = 3 Failed = 4 Cancelled = 5 Scheduled = 6 Queued = 7
pageSize	Indicates the no of jobs that page should contains when queried from IoTHub. Will not impact the end result.

Request Body

NA

Response

If successful, this method returns **List of JobApiModel** object in the response body.

Response Schema

```
[
{
    "jobId": "string",
    "queryCondition": "string",
    3M loT Platform on Azure - © 3M 2020
```

```
"createdTimeUtc": "2020-10-30T09:24:26.223Z",
"startTimeUtc": "2020-10-30T09:24:26.223Z",
"endTimeUtc": "2020-10-30T09:24:26.223Z",
"maxExecutionTimeInSeconds": 0,
"type": 0,
"status": 0,
"methodParameter": {
  "name": "string",
  "responseTimeout": {
   "ticks": 0,
   "days": 0,
    "hours": 0,
   "milliseconds": 0,
   "minutes": 0,
   "seconds": 0,
   "totalDays": 0,
   "totalHours": 0,
    "totalMilliseconds": 0,
    "totalMinutes": 0,
    "totalSeconds": 0
 },
  "connectionTimeout": {
   "ticks": 0,
   "days": 0,
   "hours": 0,
    "milliseconds": 0,
   "minutes": 0,
   "seconds": 0,
   "totalDays": 0,
   "totalHours": 0,
   "totalMilliseconds": 0,
    "totalMinutes": 0,
    "totalSeconds": 0
 },
 "jsonPayload": "string"
},
"updateTwin": {
 "eTag": "string",
  "deviceId": "string",
  "properties": {
    "reported": {
     "additionalProp1": [
       null
     ],
     "additionalProp2": [
       null
     ],
     "additionalProp3": [
      null
     ]
   },
    "desired": {
     "additionalProp1": [
       null
     ],
     "additionalProp2": [
      null
     ],
     "additionalProp3": [
       null
   },
    "deviceId": "string",
    "moduleId": "string"
 },
```

```
"tags": {
       "additionalProp1": [
         null
       "additionalProp2": [
        null
       "additionalProp3": [
         null
       ]
     },
      "isSimulated": true
    "failureReason": "string",
    "statusMessage": "string",
    "resultStatistics": {
     "deviceCount": 0,
      "failedCount": 0,
     "succeededCount": 0,
     "runningCount": 0,
      "pendingCount": 0
    "devices": [
     {
       "deviceId": "string",
       "status": 0,
       "startTimeUtc": "2020-10-30T09:24:26.223Z",
       "endTimeUtc": "2020-10-30T09:24:26.223Z",
       "createdDateTimeUtc": "2020-10-30T09:24:26.223Z",
       "lastUpdatedDateTimeUtc": "2020-10-30T09:24:26.223Z",
       "outcome": {
         "status": 0,
         "jsonPayload": "string"
       },
       "error": {
         "code": "string",
         "description": "string"
      }
   ]
 }
]
```

Sample Response

```
[
    "JobId": "TestDeviceTag-093931a9-3dd0-477f-bce8-e7ebbefde73d",
    "QueryCondition": "deviceId in ['TestDevice']",
    "CreatedTimeUtc": "2020-10-16T08:22:16.2455974Z",
    "StartTimeUtc": "2020-10-16T08:22:16.1110507Z",
    "EndTimeUtc": "2020-10-16T08:22:21.0180671Z",
    "MaxExecutionTimeInSeconds": 3600,
    "Type": 4,
    "Status": 3,
    "UpdateTwin": {
      "ETag": "*",
      "DeviceId": null,
      "Properties": {
        "Reported": {},
        "Desired": {},
        "DeviceId": ""
        "ModuleId": ""
      },
      "Tags": {
       "TestDevice": "Yes"
      "IsSimulated": false
    },
    "ResultStatistics": {
      "DeviceCount": 1,
      "FailedCount": 0,
      "SucceededCount": 1,
      "RunningCount": 0,
      "PendingCount": 0
    }
 },
    "JobId": "SimulatedDeviceTag-627073e2-5c71-4907-8b51-294439e11e0a",
    "QueryCondition": "deviceId in ['SimulatedDevice']",
    "CreatedTimeUtc": "2020-10-16T08:45:59.7788363Z",
    "StartTimeUtc": "2020-10-16T08:45:59.630406Z",
    "EndTimeUtc": "2020-10-16T08:46:05.3843691Z",
    "MaxExecutionTimeInSeconds": 3600,
    "Type": 4,
    "Status": 3,
    "UpdateTwin": {
      "ETag": "*",
      "DeviceId": null,
      "Properties": {
        "Reported": {},
        "Desired": {},
        "DeviceId": "",
        "ModuleId": ""
      },
      "Tags": {
        "Org": "Test"
      "IsSimulated": false
    "ResultStatistics": {
      "DeviceCount": 1,
      "FailedCount": 0,
      "SucceededCount": 1,
      "RunningCount": 0,
      "PendingCount": 0
    }
 }
]
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Examples

1. Get Jobs based on TimeFrame

GET iothubmanager/v1/jobs?from=NOW-P1M&to=NOW

2. Get Jobs based on TimeFrame and Job Status

GET iothubmanager/v1/jobs?from=NOW-P1M&to=NOW&jobStatus=2

3. Get Jobs based on TimeFrame and Job Type

GET iothubmanager/v1/jobs?from=NOW-P1M&to=NOW&jobType=4

4. Get Jobs based on TimeFrame and Job Status and JobType

GET iothubmanager/v1/jobs?from=NOW-P1M&to=NOW&jobStatus=2&jobType=4



Create Job

Create a Job to add tags, modify properties or invoke methods on selected devices.

Permissions

CreateJobs permission is required to call this api.

Http Request

```
POST /iothubmanager/v1/jobs
```

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Schema

```
"jobId": "string",
"queryCondition": "string",
"createdTimeUtc": "2020-10-30T10:21:05.675Z",
"startTimeUtc": "2020-10-30T10:21:05.675Z",
"endTimeUtc": "2020-10-30T10:21:05.676Z",
"maxExecutionTimeInSeconds": 0,
"type": 0,
"status": 0,
"methodParameter": {
  "name": "string",
  "responseTimeout": {},
  "connectionTimeout": {},
  "jsonPayload": "string"
},
"updateTwin": {
  "eTag": "string",
  "deviceId": "string",
  "properties": {
    "reported": {
      "additionalProp1": [
        null
      ],
      "additionalProp2": [
       null
      ],
      "additionalProp3": [
        null
    },
    "desired": {
      "additionalProp1": [
        null
      "additionalProp2": [
      ],
                                                                           3M IoT Platform on Azure - © 3M 2020
```

```
"additionalProp3": [
          null
        ]
      },
      "deviceId": "string",
      "moduleId": "string"
    "tags": {
      "additionalProp1": [
        null
      ],
      "additionalProp2": [
        null
      ],
      "additionalProp3": [
        null
      ]
    },
    "isSimulated": true
  },
  "failureReason": "string",
  "statusMessage": "string",
  "resultStatistics": {
    "deviceCount": 0,
    "failedCount": 0,
    "succeededCount": 0,
    "runningCount": 0,
    "pendingCount": 0
  },
  "devices": [
    {
      "deviceId": "string",
      "status": 0,
      "startTimeUtc": "2020-10-30T10:21:05.676Z",
      "endTimeUtc": "2020-10-30T10:21:05.676Z",
      "createdDateTimeUtc": "2020-10-30T10:21:05.676Z",
      "lastUpdatedDateTimeUtc": "2020-10-30T10:21:05.676Z",
      "outcome": {
        "status": 0,
        "jsonPayload": "string"
      },
      "error": {
        "code": "string",
        "description": "string"
      }
  ]
}
```

Request Body

In the request body, supply a JSON representation of JobApiModel object.

Response

If successful, this method returns **JobApiModel** object in the response body.

Response Schema

```
{
  "jobId": "string",
  "queryCondition": "string",
  "createdTimeUtc": "2020-10-30T10:21:05.675Z",
  "startTimeUtc": "2020-10-30T10:21:05.675Z",
  "endTimeUtc": "2020-10-30T10:21:05.676Z",
  "maxExecutionTimeInSeconds": 0,
```

```
"type": 0,
"status": 0,
"methodParameter": {
  "name": "string",
  "responseTimeout": {},
  "connectionTimeout": {},
  "jsonPayload": "string"
},
"updateTwin": {
  "eTag": "string",
  "deviceId": "string",
  "properties": {
    "reported": {
      "additionalProp1": [
        null
      ],
      "additionalProp2": [
        null
      ],
      "additionalProp3": [
       null
      ]
    },
    "desired": {
      "additionalProp1": [
        null
      ],
      "additionalProp2": [
      ],
      "additionalProp3": [
        null
    },
    "deviceId": "string",
    "moduleId": "string"
  },
  "tags": {
    "additionalProp1": [
    ],
    "additionalProp2": [
     null
    "additionalProp3": [
      null
    1
  },
  "isSimulated": true
"failureReason": "string",
"statusMessage": "string",
"resultStatistics": {
  "deviceCount": 0,
  "failedCount": 0,
  "succeededCount": 0,
  "runningCount": 0,
  "pendingCount": 0
},
"devices": [
  {
    "deviceId": "string",
    "status": 0,
    "startTimeUtc": "2020-10-30T10:21:05.676Z",
    "endTimeUtc": "2020-10-30T10:21:05.676Z",
```

```
"createdDateTimeUtc": "2020-10-30T10:21:05.676Z",
    "lastUpdatedDateTimeUtc": "2020-10-30T10:21:05.676Z",
    "outcome": {
        "status": 0,
        "jsonPayload": "string"
     },
     "error": {
        "code": "string",
        "description": "string"
     }
   }
}
```

Sample Response

```
{
"JobId": "Test-c372b74f-0d92-4b5c-9148-524fbaaf4e58",
"MaxExecutionTimeInSeconds": 0,
"Type": 4,
"Status": 7
}
```

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Examples

1. Job to update tags of a Device.

Http Request

```
POST /iothubmanager/v1/jobs
```

RequestBody

```
{
"JobId": "Test-c372b74f-0d92-4b5c-9148-524fbaaf4e58",

"QueryCondition": "deviceId in ['DemoDevice']",

"MaxExecutionTimeInSeconds": 0,

"UpdateTwin": {
    "Tags": {
    "TestTag": "Test"
    }
}
```

Response

```
{
"JobId": "Test-c372b74f-0d92-4b5c-9148-524fbaaf4e58",
"MaxExecutionTimeInSeconds": 0,
"Type": 4,
"Status": 7
}
```

2. Job to execute direct on devices.

Request

```
{
"JobId": "Test-c372b74f-0d92-4b5c-9148-524fbaaf4e58",

"QueryCondition": "deviceId in ['DemoDevice']",

"MaxExecutionTimeInSeconds": 0,

"MethodParameter": {
    "Name":"methodName1",
    "JsonPayload":"{TestPayLoad}"
}
```

Response

```
{
"JobId": "Test-c372b74f-0d92-4b5c-9148-524fbaaf4e58",
"MaxExecutionTimeInSeconds": 0,
"Type": 3,
"Status": 7
}
```



Modules

Service: IoTHub Manager

Operations

OPERATION	DESCRIPTION
Get Modules.	Lists the Modules based on the query conditions.
Query Modules.	Lists the Modules based on the query conditions from request body.
Get Module.	Gets the Module data based on the DeviceId and ModuleId.



Get Modules

Lists the Modules based on the query conditions.

Permissions

ReadAll permission is required to call this api.

Http Request

GET /iothub-manager/v1/modules?query={query}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json
x-ms-continuation	Continuation Token from response of previous request, if request is called to get next dataset.

Query Params

NAME	VALUE
query	URL encoded string from Conditions to query devices.

Request Body

NA

Response

If successful, this method returns **TwinPropertiesListApiModel** object in the response body.

Response Schema

```
{
  "metadata": {
   "additionalProp1": "string",
   "additionalProp2": "string",
   "additionalProp3": "string"
 },
  "continuationToken": "string",
  "items": [
     "reported": {
       "additionalProp1": [
        null
       "additionalProp2": [
        null
       "additionalProp3": [
         null
       ]
     },
      "desired": {
       "additionalProp1": [
         null
       "additionalProp2": [
        null
       "additionalProp3": [
         null
       ]
      "deviceId": "string",
      "moduleId": "string"
  ]
}
```

Sample Response

```
{
    "$metadata": {
        "$type": "DeviceList;1",
        "$uri": "/v1/devices"
    "ContinuationToken": null,
    "Items": [
        {
            "Reported": {},
            "Desired": {
                "schemaVersion": "1.0",
                "runtime": {
                    "type": "docker",
                    "settings": {
                        "loggingOptions": "",
                        "minDockerVersion": "v1.25"
                },
                "systemModules": {
                    "edgeAgent": {
                        "type": "docker",
                        "settings": {
                            "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
                             "createOptions": "{}"
                        }
                    },
                    "edgeHub": {
                        "type": "docker",
                        "settings": {
                             "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
                             "createOptions": "{}"
                        },
                        "status": "running",
                        "restartPolicy": "always"
                    }
                },
                "modules": {}
            "DeviceId": "TestDevice",
            "ModuleId": "$edgeAgent"
        }
   ]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Examples

1. Get Modules based on query

Http Request

```
GET /iothub-manager/v1/modules? query=deviceId+IN+%5B%27Test0903%27%5D+AND+moduleId+%3D+%27%24edgeAgent%27
```

Reference: Conditions in Encoded format

CONDITIONS	URL ENCODED DATA
<pre>deviceId IN ['TestDevice'] AND moduleId = '\$edgeAgent'</pre>	deviceId+IN+%5B%27TestDevice%27%5D+AND+moduleId+%3D+%27%24edgeAgent%27

Response

```
{
    "$metadata": {
       "$type": "DeviceList;1",
       "$uri": "/v1/devices"
    "ContinuationToken": null,
    "Items": [
       {
            "Reported": {},
            "Desired": {
                "schemaVersion": "1.0",
                "runtime": {
                    "type": "docker",
                    "settings": \{
                        "loggingOptions": "",
                        "minDockerVersion": "v1.25"
                    }
                },
                "systemModules": {
                    "edgeAgent": {
                        "type": "docker",
                        "settings": {
                            "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
                            "createOptions": "{}"
                    },
                    "edgeHub": {
                        "type": "docker",
                        "settings": {
                            "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
                            "createOptions": "{}"
                        "status": "running",
                        "restartPolicy": "always"
                    }
                },
                "modules": {}
            "DeviceId": "TestDevice",
            "ModuleId": "$edgeAgent"
       }
   ]
}
```



Query Modules

Lists the Modules based on the query conditions from request body.

Permissions

ReadAll permission is required to call this api.

Http Request

POST /iothub-manager/v1/modules/query

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json
x-ms-continuation	Continuation Token from response of previous request, if request is called to get next dataset.

Request Body

String representing conditions to get the modules.

Response

If successful, this method returns **TwinPropertiesListApiModel** object in the response body.

Response Schema

```
{
  "metadata": {
   "additionalProp1": "string",
   "additionalProp2": "string",
   "additionalProp3": "string"
 },
  "continuationToken": "string",
  "items": [
     "reported": {
       "additionalProp1": [
        null
       "additionalProp2": [
        null
       "additionalProp3": [
         null
       ]
     },
      "desired": {
       "additionalProp1": [
         null
       "additionalProp2": [
        null
       "additionalProp3": [
         null
       ]
      "deviceId": "string",
      "moduleId": "string"
  ]
}
```

Sample Response

```
{
    "$metadata": {
        "$type": "DeviceList;1",
        "$uri": "/v1/devices"
    "ContinuationToken": null,
    "Items": [
        {
            "Reported": {},
            "Desired": {
                "schemaVersion": "1.0",
                "runtime": {
                    "type": "docker",
                    "settings": {
                        "loggingOptions": "",
                        "minDockerVersion": "v1.25"
                },
                "systemModules": {
                    "edgeAgent": {
                        "type": "docker",
                        "settings": {
                            "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
                             "createOptions": "{}"
                        }
                    },
                    "edgeHub": {
                        "type": "docker",
                        "settings": {
                             "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
                             "createOptions": "{}"
                        },
                        "status": "running",
                        "restartPolicy": "always"
                    }
                },
                "modules": {}
            "DeviceId": "TestDevice",
            "ModuleId": "$edgeAgent"
        }
   ]
}
```

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Examples

1. Get Modules based on query from Request body.

Http Request

```
POST /iothub-manager/v1/modules/query
```

Request Body

```
"deviceId IN ['Test0903'] AND moduleId = '$edgeAgent'"
```

```
{
    "$metadata": {
        "$type": "DeviceList;1",
        "$uri": "/v1/devices"
    "ContinuationToken": null,
    "Items": [
        {
            "Reported": {},
            "Desired": {
                "schemaVersion": "1.0",
                "runtime": {
                    "type": "docker",
                    "settings": {
                        "loggingOptions": "",
                        "minDockerVersion": "v1.25"
                    }
                },
                "systemModules": {
                    "edgeAgent": {
                        "type": "docker",
                        "settings": {
                            "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
                            "createOptions": "{}"
                        }
                    },
                    "edgeHub": {
                        "type": "docker",
                        "settings": {
                            "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
                            "createOptions": "{}"
                        },
                        "status": "running",
                        "restartPolicy": "always"
                    }
                },
                "modules": {}
            "DeviceId": "TestDevice",
            "ModuleId": "$edgeAgent"
        }
   ]
}
```



Get Module

Gets the Module data based on the Deviceld and Moduleld.

Permissions

ReadAll permission is required to call this api.

Http Request

GET /iothub-manager/v1/modules/{deviceId}/{moduleId}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	VALUE
deviceld	Deviceld of Edge Device
moduleId	Moduleid

Request Body

NA

Response

If successful, this method returns ${\bf TwinPropertiesApiModel}$ object in the response body.

Response Schema

```
{
  "reported": {
    "additionalProp1": [
      null
    "additionalProp2": [
     null
    "additionalProp3": [
      null
   ]
  },
  "desired": {
    "additionalProp1": [
      null
    "additionalProp2": [
      null
    "additionalProp3": [
    ]
  },
  "deviceId": "string",
  "moduleId": "string"
}
```

Sample Response

```
{
    "Reported": {},
    "Desired": {
        "schemaVersion": "1.0",
        "runtime": {
            "type": "docker",
            "settings": {
                "loggingOptions": "",
                "minDockerVersion": "v1.25"
        },
        "systemModules": {
            "edgeAgent": {
                "type": "docker",
                "settings": {
                    "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
                    "createOptions": "{}"
                }
            },
            "edgeHub": {
                "type": "docker",
                "settings": {
                    "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
                    "createOptions": "{}"
                },
                "status": "running",
                "restartPolicy": "always"
        },
        "modules": {}
    "DeviceId": "TestDevice",
    "ModuleId": "$edgeAgent"
}
```

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com

Examples

1. Get Module Data based on Deviceld and Moduleld

```
GET /iothub-manager/v1/modules/TestDevice/$edgeAgent
```

Response

```
{
    "Reported": {},
    "Desired": {
        "schemaVersion": "1.0",
        "runtime": {
            "type": "docker",
            "settings": {
                "loggingOptions": "",
                "minDockerVersion": "v1.25"
            }
        },
        "systemModules": {
            "edgeAgent": {
                "type": "docker",
                "settings": {
                    "image": "mcr.microsoft.com/azureiotedge-agent:1.0",
                    "createOptions": "{}"
                }
            },
            "edgeHub": {
                "type": "docker",
                "settings": {
                    "image": "mcr.microsoft.com/azureiotedge-hub:1.0",
                    "createOptions": "{}"
                },
                "status": "running",
                "restartPolicy": "always"
            }
        },
        "modules": {}
    "DeviceId": "TestDevice",
    "ModuleId": "$edgeAgent"
}
```



Status

Service: IoTHub Manager

Status Contoller provides Health status of the Service and its dependencies.

Operations

OPERATION	DESCRIPTION
Get Status	Gets status of the Service and its dependencies
Ping Status	Provides the health status of the service.



Get Status

Provides the status of the IoTHub Manager Service and its dependencies

Permissions

```
N/A
```

Http Request

```
GET /iothubmanager/v1/status
```

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

```
N/A
```

Response Schema

```
"name": "string",
  "status": {
    "isHealthy": true,
    "message": "string"
 },
  "currentTime": "string",
  "startTime": "string",
  "upTime": 0,
  "uid": "string",
  "properties": {
    "authRequired": true,
    "endpoint": "string"
 },
  "dependencies": {
    "additionalProp1": {
      "isHealthy": true,
      "message": "string"
    },
    "additionalProp2": {
      "isHealthy": true,
      "message": "string"
    "additionalProp3": {
      "isHealthy": true,
      "message": "string"
    }
  },
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
  }
}
```

```
"Name": "IoTHub Manager",
    "Status": {
       "IsHealthy": true,
        "Message": "Alive and well!"
   },
   "CurrentTime": "2020-10-29T15:48:25+00:00",
   "StartTime": "2020-10-26T23:00:48+00:00",
    "UpTime": 233256,
    "UID": "WebService.c477e657-a941-4a01-82fd-ecc2d6cfaba4",
    "Properties": {
       "authRequired": true,
       "endpoint": "http://+:80"
    "Dependencies": {
        "Storage Adapter": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       },
        "User Management": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       },
        "App Config": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       }
    "$metadata": {
       "$type": "Status;0",
       "$uri": "/status"
}
```



Ping Status

Provides the health status of the service.

Permissions

N/A

Http Request

GET /iothubmanager/v1/status/ping

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response

Respond with 200 Status code if service is up.



Namespace Mmm.lot.loTHubManager.WebService.Controllers

Classes

DeploymentsController

Device Properties Controller

DevicesController

JobsController

ModulesController

StatusController



Class DeploymentsController

Inheritance

System.Object

DeploymentsController

Namespace: Mmm.lot.loTHubManager.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public class DeploymentsController : Controller

Constructors

DeploymentsController(IDeployments)

Declaration

public DeploymentsController(IDeployments deployments)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IDeployments	deployments	

Methods

DeleteAsync(String, Boolean)

Declaration

public Task DeleteAsync(string id, bool isDelete = true)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	
System.Boolean	is Delete	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task	

ExportDeploymentReport(String, Boolean)

Declaration

public Task<IActionResult> ExportDeploymentReport(string id, bool isLatest = true)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	
System.Boolean	isLatest	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < I Action Result >	

GetAsync()

Declaration

public Task<DeploymentListApiModel> GetAsync()

Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task < DeploymentListApiModel >	

GetAsync(String, Boolean, Boolean)

Declaration

public Task<DeploymentApiModel> GetAsync(string id, bool includeDeviceStatus = false, bool isLatest = true)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	
System.Boolean	include Device Status	
System.Boolean	isLatest	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Deployment Api Model >	

GetDeploymentImpactedDevices(String, String, Boolean)

Declaration

public Task<DeviceListApiModel> GetDeploymentImpactedDevices(string id, string query, bool isLatest = false)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String i	id	

ТҮРЕ	NAME	DESCRIPTION
System.String	query	
System.Boolean	isLatest	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < DeviceList Api Model >	

$GetDeploymentImpactedEdgeModules (String, \ String, \ Boolean)$

Declaration

public Task<TwinPropertiesListApiModel> GetDeploymentImpactedEdgeModules(string id, string query, bool isLatest = false)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	
System.String	query	
System.Boolean	isLatest	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Twin Properties List Api Model >	

PostAsync(DeploymentApiModel)

Declaration

public Task<DeploymentApiModel> PostAsync(DeploymentApiModel deployment)

Parameters

ТУРЕ	NAME	DESCRIPTION
DeploymentApiModel	deployment	

Returns

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Deployment Api Model >	

ReactivateAsync(String)

Declaration

public Task ReactivateAsync(string id)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task	



Class DevicePropertiesController

Inheritance

System.Object

DevicePropertiesController

Name space: Mmm. Iot. Io T HubManager. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class DevicePropertiesController : Controller

Constructors

DevicePropertiesController(IDeviceProperties)

Declaration

public DevicePropertiesController(IDeviceProperties deviceProperties)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IDeviceProperties	deviceProperties	

Methods

GetAsync()

Declaration

public Task<DevicePropertiesApiModel> GetAsync()

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Properties Api Model >	



Class DevicesController

Inheritance

System.Object

DevicesController

Namespace: Mmm.lot.loTHubManager.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public class DevicesController : Controller

Constructors

DevicesController(IDevices, IDeviceService, IDeviceProperties)

Declaration

public DevicesController(IDevices devices, IDeviceService deviceService, IDeviceProperties deviceProperties)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IDevices	devices	
IDeviceService	deviceService	
IDeviceProperties	deviceProperties	

Methods

DeleteAsync(String)

Declaration

public Task DeleteAsync(string id)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task	

GetDeviceAsync(String)

Declaration

public Task<DeviceRegistryApiModel> GetDeviceAsync(string id)

ТҮРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Registry Api Model >	

GetDeviceDeploymentAsync(String)

Declaration

public Task<TwinPropertiesListApiModel> GetDeviceDeploymentAsync(string id)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Twin Properties List Api Model >	

${\sf GetDeviceFilesAsync(String)}$

Declaration

public Task<List<string>> GetDeviceFilesAsync(string id)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	

Returns

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < System. Collections. Generic. List < System. String > >	

GetDevicesAsync(String)

Declaration

public Task<DeviceListApiModel> GetDevicesAsync(string query)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	query	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device List Api Model >	

$Invoke Device Method A sync (String,\ Method Parameter Api Model)$

Declaration

public Task<MethodResultApiModel> InvokeDeviceMethodAsync(string id, MethodParameterApiModel parameter)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	
MethodParameterApiModel	parameter	

Returns

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Method Result Api Model >	

PostAsync(DeviceRegistryApiModel)

Declaration

public Task<DeviceRegistryApiModel> PostAsync(DeviceRegistryApiModel device)

Parameters

ТҮРЕ	NAME	DESCRIPTION
DeviceRegistryApiModel	device	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Registry Api Model >	

PutAsync(String, DeviceRegistryApiModel)

Declaration

public Task<DeviceRegistryApiModel> PutAsync(string id, DeviceRegistryApiModel device)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	id	
DeviceRegistryApiModel	device	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Device Registry Api Model >	

QueryDevicesAsync(String)

Declaration

public Task<DeviceListApiModel> QueryDevicesAsync(string query)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	query	

Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task < DeviceListApiModel >	

SendCloudToDeviceAsync(String, String)

Declaration

public Task SendCloudToDeviceAsync(string id, string message)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	id	
System.String	message	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task	



Class JobsController

Inheritance

System.Object

JobsController

Namespace: Mmm. I ot. I o T HubManager. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class JobsController : Controller

Constructors

JobsController(IJobs)

Declaration

public JobsController(IJobs jobs)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IJobs	jobs	

Methods

GetAsync(Nullable<JobType>, Nullable<JobStatus>, Nullable<Int32>, String, String)

Declaration

public Task<IEnumerable<JobApiModel>> GetAsync(JobType? jobType, JobStatus? jobStatus, int? pageSize, string from, string to)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.Nullable < JobType >	jobType	
System.Nullable < JobStatus >	jobStatus	
System.Nullable < System.Int32 >	pageSize	
System.String	from	
System.String	to	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.collections.generic.ienumerable<jobapimodel>></system.collections.generic.ienumerable<jobapimodel>	

Declaration

public Task<JobApiModel> GetJobAsync(string jobId, bool? includeDeviceDetails, DeviceJobStatus?
deviceJobStatus)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	jobld	
System.Nullable < System.Boolean >	include Device Details	
System.Nullable < DeviceJobStatus >	deviceJobStatus	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Job Api Model >	

Schedule A sync (Job Api Model)

Declaration

public Task<JobApiModel> ScheduleAsync(JobApiModel parameter)

Parameters

ТУРЕ	NAME	DESCRIPTION
JobApiModel	parameter	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Job Api Model >	



Class ModulesController

Inheritance

System.Object

ModulesController

Namespace: Mmm.lot.loTHubManager.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public class ModulesController : Controller

Constructors

ModulesController(IDevices)

Declaration

public ModulesController(IDevices devices)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IDevices	devices	

Methods

GetModuleTwinAsync(String, String)

Declaration

public Task<TwinPropertiesApiModel> GetModuleTwinAsync(string deviceId, string moduleId)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	deviceld	
System.String	moduleld	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Twin Properties Api Model >	

GetModuleTwinsAsync(String)

Declaration

public Task<TwinPropertiesListApiModel> GetModuleTwinsAsync(string query)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	query	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Twin Properties List Api Model >	

Query Module Twins A sync (String)

Declaration

public Task<TwinPropertiesListApiModel> QueryModuleTwinsAsync(string query)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	query	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <twinpropertieslistapimodel></twinpropertieslistapimodel>	



Class StatusController

Inheritance

System.Object

StatusController

Name space: Mmm. Iot. Io T HubManager. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public sealed class StatusController : ControllerBase

Constructors

StatusController(IStatusService)

Declaration

public StatusController(IStatusService statusService)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStatusService	statusService	

Methods

GetAsync()

Declaration

public Task<StatusApiModel> GetAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Status Api Model >	

Ping()

Declaration

public IActionResult Ping()

ТУРЕ	DESCRIPTION
IActionResult	



Tenant Manager

Tenant Manager offers APIs to maintains tenants, Alerting, tenants' readiness status, and health status of service.

Within each Serenity instance an interactive Swagger UI is available at the following path https://{platform-url}/auth/index.html For more information about Swagger UI, click here.

REST operation groups

The Device Telemetry REST API provides operations for working with the following:

OPERATION GROUP	DESCRIPTION
Tenant	Manage Tenant
Tenant Ready	Tenant readiness status
Alerting	Manage stream analytics job
Status	Health status operations for the Service



Tenant

Service: Tenant Manager

Operations

OPERATION	DESCRIPTION
Get Tenant details	Fetches tenant details
Get All Tenants details registred to a user	Fetches all tenant details regisitred to a user
Create Tenant	Create a tenant
Rename the Tenant	Rename a tenant
Delete Tenant	Delete tenant



Get Tenant details

API that Gets information about a tenant that is stored in table storage

Permissions

ReadAll

Http Request

GET /tenantmanager/api/Tenant

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Returns 200 OK and Tenant info:



Get All Tenants details registred to a user

API that fetches the All Tenant details which are registered to the user.

Permissions

ReadAll

Http Request

GET /tenantmanager/api/Tenant/All

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Returns 200 OK:



Create Tenant

API that creates a new tenant to the user.

Other Attributes

SystemAdminAuthorize

Http Request

POST /tenantmanager/api/Tenant

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Returns 200 OK and the new tenant info:

• Status Code 401 - Invalid auth token



Rename the Tenant

API that renames the tenant name.

Other Attributes

 ${\bf SystemAdminAuthorize}$

Http Request

PUT /tenantmanager/api/Tenant/{tenantId}

Parameters

PARAMETER	ТУРЕ	DESCRIPTION
tenantId	guid	Tenant Id

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

"New Tenant Name"

Response

• Returns 200 OK and Tenant info:



Delete Tenant

API that deletes the specified tenant.

Other Attributes

 ${\tt SystemAdminAuthorize}$

Http Request

DELETE /tenantmanager/api/Tenant

Query parameters

QUERY PARAMETER	ТҮРЕ	DESCRIPTION
ensure Fully Deployed	boolean	Default value is true

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Returns 200 OK



Tenant Ready

Service: Tenant Manager

Operations

OPERATION	DESCRIPTION
Check specified tenant is ready or not	Fetches tenant readiness status



Check specified tenant is ready or not

API that returns true or false depending on if the tenant is ready or not.

Permissions

N/A

Http Request

GET /tenantmanager/api/TenantReady/{tenantId}

Parameters

PARAMETER	ТҮРЕ	DESCRIPTION
tenantId	guid	Tenant Id

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200:

true

OR

false

• Status Code 404 - Invalid tenant id



Alerting

Service: Tenant Manager

Operations

OPERATION	DESCRIPTION
Get stream analytics job details	Fetches stream analytics job details
Create stream analytics job	Create stream analytics job
Remove stream analytics job	Remove stream analytics job
Start stream analytics job	Start stream analytics job
Stop stream analytics job	Stop stream analytics job



Get stream analytics job details

API that fetches the details of stream analytics job assigned to tenant.

Permissions

ReadAll

Http Request

GET /tenantmanager /api /Alerting

Query parameters

QUERY PARAMETER	TYPE	DESCRIPTION
createlfNotExists	boolean	If true it creates a stream analytics job to a tenant. Default value is false

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200:

json { "tenantId": "string", "streamAnalyticsJobName": "string", "jobState": "string", "isActive": true }



Create stream analytics job

API that creates a stream analytics job to tenant.

Permissions

EnableAlerting

Http Request

POST /tenantmanager /api /Alerting

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200:

json { "tenantId": "string", "streamAnalyticsJobName": "string", "jobState": "string", "isActive": true }



Remove stream analytics job

API that removes a stream analytics job to the tenant.

Permissions

DisableAlerting

Http Request

DELETE /tenantmanager /api /Alerting

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200:

json { "tenantId": "string", "streamAnalyticsJobName": "string", "jobState": "string", "isActive": true }



Start stream analytics job

API that starts the stream analytics job assigned to the tenant.

Permissions

EnableAlerting

Http Request

POST /tenantmanager /api /Alerting

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200:

json { "tenantId": "string", "streamAnalyticsJobName": "string", "jobState": "string", "isActive": true }



Stop stream analytics job

API that stops the stream analytics job assigned to the tenant.

Permissions

DisableAlerting

Http Request

POST /tenantmanager /api /Alerting/stop

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200.



Status

Service: Tenant Manager

Operations

OPERATION	DESCRIPTION
Get Status	Gets status of the Service and its dependencies
Ping Status	Provides the health status of the service.



Get Status

API that fetches the status of the Tenant Manager Service.

Permissions

N/A

Http Request

GET /tenantmanager/v1/status

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response

```
"Name": "Tenant Manager",
  "Status": {
   "IsHealthy": true,
   "Message": "Alive and well!"
 },
  "CurrentTime": "2020-10-29T08:39:47+00:00",
  "StartTime": "2020-10-26T23:01:14+00:00",
  "UpTime": 207513,
  "UID": "WebService.a43f99da-a107-446a-a1cb-c2cbad7eaea9",
  "Properties": {
   "authRequired": true,
   "endpoint": "http://+:80"
  "Dependencies": {
    "CosmosDb": {
      "IsHealthy": true,
      "Message": "Alive and Well!"
   },
    "Tenant Runbooks": {
     "IsHealthy": true,
     "Message": "Alive and well!"
    "Table Storage": {
     "IsHealthy": true,
     "Message": "Alive and well!"
   "Identity Gateway": {
     "IsHealthy": true,
      "Message": "Alive and well!"
   },
    "Config": {
     "IsHealthy": true,
     "Message": "Alive and well!"
   },
    "App Config": {
     "IsHealthy": true,
      "Message": "Alive and well!"
   }
 },
  "$metadata": {
   "$type": "Status;0",
   "$uri": "/status"
 }
}
```



Ping Status

API that pings the Tenant Manager Service and responds to the status code.

Permissions

N/A

Http Request

GET /tenantmanager/v1/status/ping

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response

Responds 200 Status code



Namespace Mmm.lot.TenantManager.WebService.Controllers

Classes

AlertingController

StatusController

TenantController

TenantReadyController



Class AlertingController

Inheritance

System.Object

AlertingController

 $Namespace: \ Mmm.lot. Tenant Manager. Web Service. Controllers$

Assembly: cs.temp.dll.dll

Syntax

public class AlertingController : Controller

Constructors

AlertingController(IAlertingContainer, ILogger<AlertingController>)

Declaration

public AlertingController(IAlertingContainer alertingContainer, ILogger<AlertingController> logger)

Parameters

ТУРЕ	NAME	DESCRIPTION
IAlertingContainer	alerting Container	
ILogger <alertingcontroller></alertingcontroller>	logger	

Methods

AddAlertingAsync()

Declaration

public Task<StreamAnalyticsJobModel> AddAlertingAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Stream Analytics Job Model >	

GetAlertingAsync(Boolean)

Declaration

public Task<StreamAnalyticsJobModel> GetAlertingAsync(bool createIfNotExists = false)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.Boolean	createlfNotExists	

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Stream Analytics Job Model >	

RemoveAlertingAsync()

Declaration

public Task<StreamAnalyticsJobModel> RemoveAlertingAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Stream Analytics Job Model >	

StartAsync()

Declaration

public Task<StreamAnalyticsJobModel> StartAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Stream Analytics Job Model >	

StopAsync()

Declaration

public Task<StreamAnalyticsJobModel> StopAsync()

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Stream Analytics Job Model >	



Class StatusController

Inheritance

System.Object

StatusController

Name space: Mmm. I ot. Tenant Manager. Web Service. Controllers

Assembly: cs.temp.dll.dll

Syntax

public sealed class StatusController : ControllerBase

Constructors

StatusController(IStatusService)

Declaration

public StatusController(IStatusService statusService)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStatusService	statusService	

Methods

GetAsync()

Declaration

public Task<StatusApiModel> GetAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Status Api Model >	

Ping()

Declaration

public IActionResult Ping()

ТУРЕ	DESCRIPTION
IActionResult	



Class TenantController

Inheritance

System.Object

TenantController

Namespace: Mmm.lot.TenantManager.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public class TenantController : Controller

Constructors

TenantController(ITenantContainer, ILogger<TenantController>)

Declaration

public TenantController(ITenantContainer tenantContainer, ILogger<TenantController> logger)

Parameters

ТУРЕ	NAME	DESCRIPTION
ITenantContainer	tenantContainer	
ILogger <tenantcontroller></tenantcontroller>	logger	

Methods

DeleteAsync(Boolean)

Declaration

public Task<DeleteTenantModel> DeleteAsync(bool ensureFullyDeployed = true)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.Boolean	ensureFullyDeployed	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Delete Tenant Model >	

GetAsync()

Declaration

public Task<TenantModel> GetAsync()

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Tenant Model >	

GetTenantsAsync()

Declaration

public Task<UserTenantListModel> GetTenantsAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < User Tenant List Model >	

PostAsync()

Declaration

public Task<CreateTenantModel> PostAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Create Tenant Model >	

UpdateAsync(String, String)

Declaration

public Task<TenantModel> UpdateAsync(string tenantId, string tenantName)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	tenantId	
System.String	tenantName	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <tenantmodel></tenantmodel>	



Class TenantReadyController

Inheritance

System.Object

TenantReadyController

Namespace: Mmm. Iot. Tenant Manager.WebService.Controllers

Assembly: cs.temp.dll.dll

Syntax

public class TenantReadyController : Controller

Constructors

TenantReadyController(ITenantContainer, ILogger<TenantReadyController>)

Declaration

public TenantReadyController(ITenantContainer tenantContainer, ILogger<TenantReadyController> logger)

Parameters

ТУРЕ	NAME	DESCRIPTION
ITenantContainer	tenantContainer	
ILogger <tenantreadycontroller></tenantreadycontroller>	logger	

Methods

GetAsync(String)

Declaration

public Task<bool> GetAsync(string tenantId)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	tenantId	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task < System.Boolean >	



ASA Manager

ASA Manager Service offers methods to asynchronously convert data related to tenants into formats suitable for Azure Stream Analytics Job inputs.

REST operation groups

The ASA Manager Service REST API provides operations for working with the following:

OPERATION GROUP	DESCRIPTION
DeviceGroups	Conversion Operations for DeviceGroups.
Rules	Conversion Operations for Rules.
Status	Health status operations for the Service.



Device Groups

Service: Asa Manager

Operations

OPERATION	DESCRIPTION
Begin Device Group Conversion	Converts DeviceGroup data into CSV format for ASA Job.
Begin IotHub Job Delay Device Group Conversion	Converts DeviceGroup data into CSV format for ASA Job based on status of IoTHub Job.



Begin Device Group Conversion

API that begins the conversion of devicegroups data from cosmos collection into csv format for Azure Stream Analytics job.

Permissions

NA

Http Request

GET /v1/devicegroups

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

If successful, this method returns **BeginConversionApiModel** object in the response body.

Respone Schema

```
{
  "tenantId": "string",
  "operationId": "string"
}
```

Sample Response

```
{
  "tenantId": "ac1037c4-386e-4402-9209-f9602ce90afe",
  "operationId": "c2412f4c-a397-4b7a-81a1-0d175a9b69c6"
}
```



Begin IotHub Job Delay Device Group Conversion

API that begins the conversion of devicegroups data from cosmos collection into csv format for Azure Stream Analytics job based on completion status of an IoT Hub Job.

Permissions

NA

Http Request

GET /v1/devicegroups/iothubjobdelay/{jobId}

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Query Params

NAME	DESCRIPTION
jobld	Jobld from IoT Hub

Request Body

N/A

Response

If successful, this method returns **BeginConversionApiModel** object in the response body.

Respone Schema

```
{
  "tenantId": "string",
  "operationId": "string"
}
```

Sample Response

```
{
  "tenantId": "ac1037c4-386e-4402-9209-f9602ce90afe",
  "operationId": "c2412f4c-a397-4b7a-81a1-0d175a9b69c6"
}
```



Rules

Service: ASA Manager

Operations

OPERATION	DESCRIPTION
Begin Rule Conversion	Converts Rules data into CSV format for ASA Job.



Begin Rule Conversion

API that begins the conversion of rules data from cosmos collection into csv format for Azure Stream Analytics job.

Permissions

NA

Http Request

GET /v1/rules

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

If successful, this method returns **BeginConversionApiModel** object in the response body.

Respone Schema

```
{
  "tenantId": "string",
  "operationId": "string"
}
```

Sample Response

```
{
  "tenantId": "ac1037c4-386e-4402-9209-f9602ce90afe",
  "operationId": "c2412f4c-a397-4b7a-81a1-0d175a9b69c6"
}
```



Status

Service: ASA Manager

Operations

OPERATION	DESCRIPTION
Get Status	Gets status of the Service and its dependencies
Ping Status	Provides the health status of the service.



Get Status

API Method that provides the status of the ASA Manager Service and its dependencies

Permissions

```
N/A
```

Http Request

```
GET /v1/status
```

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

```
N/A
```

Response Schema

```
"name": "string",
  "status": {
    "isHealthy": true,
    "message": "string"
 },
  "currentTime": "string",
  "startTime": "string",
  "upTime": 0,
  "uid": "string",
  "properties": {
    "authRequired": true,
    "endpoint": "string"
 },
  "dependencies": {
    "additionalProp1": {
      "isHealthy": true,
      "message": "string"
    },
    "additionalProp2": {
      "isHealthy": true,
      "message": "string"
    "additionalProp3": {
      "isHealthy": true,
      "message": "string"
    }
  },
  "metadata": {
    "additionalProp1": "string",
    "additionalProp2": "string",
    "additionalProp3": "string"
  }
}
```

Sample Response

```
"Name": "ASA Manager",
    "Status": {
       "IsHealthy": true,
        "Message": "Alive and well!"
   },
   "CurrentTime": "2020-10-29T15:48:25+00:00",
   "StartTime": "2020-10-26T23:00:48+00:00",
    "UpTime": 233256,
    "UID": "WebService.c477e657-a941-4a01-82fd-ecc2d6cfaba4",
    "Properties": {
       "authRequired": true,
       "endpoint": "http://+:80"
    "Dependencies": {
        "Storage Adapter": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       },
        "IoTHub Manager": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       },
        "Blob Storage": {
            "IsHealthy": true,
            "Message": "Alive and well!"
       }
   },
    "$metadata": {
       "$type": "Status;0",
       "$uri": "/status"
}
```

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Ping Status

API method to provide the health status of the service.

Permissions

N/A

Http Request

GET /v1/status/ping

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response

Respond with 200 Status code if service is up.

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Storage Adapter Manager

Storage Adapter Manager offers APIs to maintains data in DB storage and health status of service.

REST operation groups

The Device Telemetry REST API provides operations for working with the following:

OPERATION GROUP	DESCRIPTION
Values	Manage data in storage
Status	Health status operations for the Service



Values

Service: Storage Adapter

Operations

OPERATION	DESCRIPTION
Get value for given collectionId and key	Fetches the stored data
Get all values in collectionId	Fetaches list of stored data related to collectionId
Save value by collectionId and randomly generated key	Save data in storage
Update value by collectionId and key	Update data in storage
Delete value from storage	Delete data from storage



Get value for given collectionId and key

API that fetches the data for a given collection and key.

Permissions

N/A

Http Request

GET /v1/collections/{collectionId}/values/{key}

Parameters

PARAMETER	TYPE	DESCRIPTION
collectionId	string	Represents the collection of data or file stored in storage
key	string	It is a unique ID that represents a data or file, it also known as fileName

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200:

```
"$metadata": {
    "$type": "Value;1",
    "$modified": "...",
    "$uri": "/v1/collections/test/values/filename"
},
    "Key": "filename",
    "Data": "data to store",
    "ETag": "\"...\""
}
```

• Status Code 400 - Empty or invalid collection id or key. Valid characters are a-Z,A-Z,0-9,_ and -.

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Get all values in collectionId

API that fetches all of the values under a given collection.

Permissions

N/A

Http Request

GET /v1/collections/{collectionId}/values

Parameters

PARAMETER	ТҮРЕ	DESCRIPTION
collectionId	string	Represents the collection of data or file stored in storage

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

• Status Code 200 - Returns list of values :

 $\bullet \quad \text{Status Code 400 - Empty or invalid collection id or key. Valid characters are a-Z,A-Z,0-9,_ and -.}\\$

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Save value by collectionId and randomly generated key

API that saves a value by collectionId and assigned a randomly generated key.

Permissions

N/A

Http Request

POST /v1/collections/{collectionId}/values

Parameters

PARAMETER	ТҮРЕ	DESCRIPTION
collectionId	string	Represents the collection of data or file stored in storage

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

```
{
   "data": "data to store"
}
```

Response

• Status Code 200:

```
json { "$metadata": { "$type": "Value;1", "$modified": "...", "$uri":
"/v1/collections/test/values/filename" }, "Key": "filename", "Data": "data to store", "ETag": "\"...\"" }
```

• Status Code 400 - Empty or invalid collection id or key. Valid characters are a-Z,A-Z,0-9,_ and -.

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Update value by collectionId and key

API that saves a value by collectionId and Key.

Permissions

N/A

Http Request

PUT /v1/collections/{collectionId}/values/{key}

Parameters

PARAMETER	TYPE	DESCRIPTION
collectionId	string	Represents the collection of data or file stored in storage
key	string	It is a unique ID that represents a data or file, it also known as fileName

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

```
{
    "data":"data to store"
}
```

Response

• Status Code 200:

```
{
    "$metadata": {
        "$type": "Value;1",
        "$modified": "...",
        "$uri": "/v1/collections/test/values/filename"
},
    "Key": "filename",
    "Data": "data to store",
    "ETag": "\"...\""
}
```

• Status Code 400 - Empty or invalid collection id or key. Valid characters are a-Z,A-Z,0-9,_ and -.

Security

Type: OpenID Connect

Flow: implicit

 $Authorization \ URL: \ https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com$



Delete value from storage

API that deletes value by collectiondId and values.

Permissions

N/A

Http Request

DELETE /v1/collections/{collectionId}/values/{key}

Parameters

PARAMETER	TYPE	DESCRIPTION
collectionId	string	Represents the collection of data or file stored in storage
key	string	It is a unique ID that represents a data or file, it also known as fileName

Request Headers

HEADER	VALUE
Authorization	Bearer (token). Required.
Content-Type	application/json

Request Body

N/A

Response

- Status Code 200 Value has been deleted or didn't exist
- Status Code 400 Empty or invalid collection id or key. Valid characters are a-Z,A-Z,0-9,_ and -.

Security

Type: OpenID Connect

Flow: implicit

Authorization URL: https://login.microsoftonline.com/crsltestab2c.onmicrosoft.com



Status

Service: Storage Adapter

Operations

OPERATION	DESCRIPTION
Get Status	Gets status of the Service and its dependencies
Ping Status	Provides the health status of the service.



Get Status

API that fetches the status of the Storage Adapter Service.

Permissions

```
N/A
```

Http Request

```
GET /v1/status
```

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response

```
"Name": "Storage Adapter",
  "Status": {
    "IsHealthy": true,
    "Message": "Alive and well!"
 },
  "CurrentTime": "2020-10-30T10:22:44+00:00",
  "StartTime": "2020-10-30T10:22:44+00:00",
  "UpTime": 0,
  "UID": "WebService.fb371dfd-bf89-4ca4-bd05-d44b6d6a712a",
  "Properties": {
    "authRequired": true,
    "endpoint": "https://localhost:5001;http://localhost:5000"
 },
  "Dependencies": {
    "CosmosDb": {
      "IsHealthy": true,
      "Message": "Alive and Well!"
    },
    "App Config": {
      "IsHealthy": true,
      "Message": "Alive and well!"
    }
  },
  "$metadata": {
    "$type": "Status;0",
    "$uri": "/status"
  }
}
```



Ping Status

API that pings the Storage Adapter Service and responds to the status code.

Permissions

N/A

Http Request

GET /v1/status/ping

Request Headers

HEADER	VALUE
Content-Type	application/json

Request Body

N/A

Response

Responds 200 Status code



Namespace Mmm.lot.StorageAdapter.WebService.Controllers

Classes

StatusController

ValuesController



Class StatusController

Inheritance

System.Object

StatusController

Name space: Mmm. Iot. Storage Adapter. WebService. Controllers

Assembly: cs.temp.dll.dll

Syntax

public sealed class StatusController : ControllerBase

Constructors

StatusController(IStatusService)

Declaration

public StatusController(IStatusService statusService)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IStatusService	statusService	

Methods

GetAsync()

Declaration

public Task<StatusApiModel> GetAsync()

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Status Api Model >	

Ping()

Declaration

public IActionResult Ping()

ТҮРЕ	DESCRIPTION
IActionResult	



Class ValuesController

Inheritance

System.Object

ValuesController

Name space: Mmm.lot. Storage Adapter. Web Service. Controllers

Assembly: cs.temp.dll.dll

Syntax

public class ValuesController : Controller

Constructors

ValuesController(IKeyValueContainer, IKeyGenerator, ILogger<ValuesController>)

Declaration

public ValuesController(IKeyValueContainer container, IKeyGenerator keyGenerator, ILogger<ValuesController>
logger)

Parameters

ТҮРЕ	NAME	DESCRIPTION
IKeyValueContainer	container	
lKeyGenerator	keyGenerator	
ILogger <valuescontroller></valuescontroller>	logger	

Methods

Delete(String, String)

Declaration

public Task Delete(string collectionId, string key)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	collectionId	
System.String	key	

Returns

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task	

Get(String)

Declaration

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	collectionId	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Value List Api Model >	

Get(String, String)

Declaration

public Task<ValueApiModel> Get(string collectionId, string key)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	collectionId	
System.String	key	

Returns

ТҮРЕ	DESCRIPTION
System. Threading. Tasks. Task < Value Api Model >	

Post(String, ValueServiceModel)

Declaration

public Task<ValueApiModel> Post(string collectionId, ValueServiceModel model)

Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	collectionId	
ValueServiceModel	model	

Returns

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Value Api Model >	

Put(String, String, ValueServiceModel)

Declaration

public Task<ValueApiModel> Put(string collectionId, string key, ValueServiceModel model)

ТҮРЕ	NAME	DESCRIPTION
System.String	collectionId	
System.String	key	
ValueServiceModel	model	

ТУРЕ	DESCRIPTION
System. Threading. Tasks. Task < Value Api Model >	