API สำหรับจัดการข้อมูลทรัพย์สิน (Asset Management)

1. การลงทะเบียนทรัพย์สินใหม่

```
Endpoint: https://thing-api.nexpie.io/thing/register
Method: POST
Request Header:
  Content-Type: application/json
  Authorization: Bearer < ... ONEID-Token ... >
Request Body:
  {
          "info": {
                  "name": "<THING NAME ex. MSI-GL6QF>",
                  "description": "<DESCRIPTION ex. personal computer>",
                  "tag": "<TAG THING ex. 6815-4-48-546846>",
                  "active": <BOOLEAN for tag status ex. true>
          },
          "location": {
                  "place": "<LOCATION NAME ex. OAI>",
                  "la": <LATITUDE ex. -32.653346>,
                  "lo": <LONGTITUDE ex. 54.239034>
          }
  }
Response:
  {
          "id": "... Thing ID ...",
          "info": {
                  "name": "<THING NAME ex. MSI-GL6QF>",
                  "description": "<DESCRIPTION ex. personal computer>",
                  "tag": "<TAG THING ex. 6815-4-48-546846>",
                  "active": <BOOLEAN for tag status ex. true>
          },
          "location": {
```

```
"place": "<LOCATION NAME ex. OAI>",
"la": <LATITUDE ex. -32.653346>,
"lo": <LONGTITUDE ex. 54.239034>
}
```

Field Description

Field Name	Field Type	Require	Description
id	UUID	-	Unique ID ของทรัพย์สินที่ระบบสร้างให้เมื่อลงทะเบียนสำเร็จ
info	Json	Yes	ข้อมูลของทรัพย์สิน ประกอบด้วย
name	Text	Yes	ชื่อทรัพย์สิน
description	Text	No	รายละเอียดของทรัพย์สิน
tag	Text	No	ID ของทรัพย์สินจากระบบของ GA
active	Boolean	No	สถานะการใช้งานของทรัพย์ (true = ยังใช้งานอยู่ [default],
			false = เลิกใช้งาน, ตัดจำหน่าย , ไม่อยู่แล้ว)
location	Json	Yes	ข้อมูลตำแหน่งที่อยู่ของทรัพย์สิน ประกอบด้วย
place	Text	No	ที่อยู่ของทรัพย์สิน เช่น ชื่อสถานที่ อาคาร ชั้น ห้อง เป็นต้น
la	Double	No	ค่าละติจูดของตำแหน่งที่อยู่ของทรัพย์สิน
lo	Double	No	ค่าลองจิจูดของตำแหน่งที่อยู่ของทรัพย์สิน

<u>ตัวอย่างการใช้งาน : NodeJs</u>

```
var axios = require('axios');
var data = JSON.stringify({"info":{"name":"Asset Name","description":"personal
computer","tag":"GA-Asset-
ID","active":"true"},"location":{"place":"OAI","la":13.74810074098931,"lo":100.56771
585504721}});

var config = {
  method: 'post',
  url: 'https://thing-api.nexpie.io/thing/register',
  headers: {
    'Authorization': 'Bearer one-id-token',
```

```
'Content-Type': 'application/json'
},
data : data
};

axios(config)
.then(function (response) {
   console.log(JSON.stringify(response.data));
})
.catch(function (error) {
   console.log(error);
});
```

```
import http.client
conn = http.client.HTTPSConnection("thing-api.nexpie.io")
payload = "{\"info\": {\n \"name\": \"Asset Name\",\n \"description\":
\"personal computer\",\n
                         \"tag\": \"GA-Asset-ID\",\n
                                                             \"active\":
\"true\"\n
           },\n \"location\": {\n
                                           \"place\": \"0AI\",\n
                                                                       \"la\":
13.74810074098931.\n
                        \"lo\": 100.56771585504721\n }\n}"
headers = {
  'Authorization': 'Bearer one-id-token',
  'Content-Type': 'application/json'
}
conn.request("POST", "/thing/register", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

ผลลัพธ์ที่ได้

```
{
    "id": "a76a1709-7562-4ee4-acbe-3b6b77fe6e06",
    "info": {
        "name": "Asset Name",
        "description": "personal computer",
        "tag": "GA-Asset-ID",
        "active": true
    },
    "localtion": {
        "place": "OAI",
        "la": 13.7481007409893,
        "lo": 100.567715855047
    }
}
```

2. ขอข้อมูลทรัพย์สินด้วย Thing ID

```
Endpoint: https://thing-api.nexpie.io/thing/info
Method: POST
Request Header:
   Content-Type: application/json
  Authorization: Bearer < ... ONEID-Token...>
Request Body:
  {
          "id": "<THING ID ex. 12a3b4cd-0ef1-4ab4-1234-a123456e81ef>"
Response:
  {
          "id": "12a3b4cd-0ef1-4ab4-1234-a123456e81ef",
          "info": {
                 "name": "<THING NAME ex. MSI-GL6QF>",
                 "description": "<DESCRIPTION ex. personal computer>",
                 "tag": "<TAG THING ex. 6815-4-48-546846>",
                 "active": <BOOLEAN for tag status ex. true>
          },
          "location": {
                 "place": "<LOCATION NAME ex. OAI>",
                 "la": <LATITUDE ex. -32.653346>,
                 "lo": <LONGTITUDE ex. 54.239034>
```

```
var axios = require('axios');
var data = JSON.stringify({"id":"a76a1709-7562-4ee4-acbe-3b6b77fe6e06"});
var config = {
 method: 'post',
 url: 'https://thing-api.nexpie.io/thing/info',
 headers: {
    'Authorization': 'Bearer one-id-token',
```

```
'Content-Type': 'application/json'
},
data : data
};

axios(config)
.then(function (response) {
   console.log(JSON.stringify(response.data));
})
.catch(function (error) {
   console.log(error);
});
```

```
import http.client

conn = http.client.HTTPSConnection("thing-api.nexpie.io")
payload = "{\"id\": \"a76a1709-7562-4ee4-acbe-3b6b77fe6e06\"}"
headers = {
   'Authorization': 'Bearer one-id-token',
   'Content-Type': 'application/json'
}
conn.request("POST", "/thing/info", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

ผลลัพธ์ที่ได้

```
{
    "id": "a76a1709-7562-4ee4-acbe-3b6b77fe6e06",
    "info": {
        "name": "Asset Name",
        "description": "personal computer",
        "tag": "GA-Asset-ID",
        "active": true
    },
    "localtion": {
        "place": "OAI",
        "la": 13.7481007409893,
        "lo": 100.567715855047
    }
}
```

3. ขอข้อมูลรายการทรัพย์สินด้วยตัวกรองที่กำหนด

Endpoint: https://thing-api.nexpie.io/thing/list

Method: POST

Request Header:

Content-Type: application/json

Authorization: Bearer <...ONEID-Token...>

```
Request Body:
```

```
"filter": {
          "name": "<Thing Name>",
          "tag": "<Asset ID from GA>",
          "active": <BOOLEAN for tag status ex. true>,
          "place": "<Place of Thing>"
}
```

Field Name	Field Type	Require	Description
filter	Json	Yes	ข้อมูลตัวกรอง ประกอบด้วย
name	Text	No	ชื่อทรัพย์สิน (ก้นหาแบบบางส่วน)
tag	Text	No	ID ของทรัพย์สินจากระบบของ GA
active	Boolean	No	สถานะการใช้งานของทรัพย์ (true = ยังใช้งานอยู่, false = เลิกใช้ งาน, ตัดจำหน่าย, ไม่อยู่แล้ว)
place	Text	No	ที่อยู่ของทรัพย์สิน เช่น ชื่อสถานที่ อาคาร ชั้น ห้อง เป็นต้น (ค้นหาแบบบางส่วน)

```
Response: Json Array of Thing List
```

```
"id": "... Thing ID 1 ...",
```

```
"info": {
              "name": "... Thing Name 1 ...",
              "description": "... Thing Description 1 ...",
              "tag": "... Thing Tag 1 ...",
              "active": ... Thing Status 1 ...
     },
     "location": {
              "place": "... Thing Place 1 ...",
              "la": "... Thing Latitude 1 ...",
              "lo": "... Thing Longtitude 1 ..."
     }
 },
     "id": "... Thing ID 2 ...",
     "info": {
              "name": "... Thing Name 2 ...",
              "description": "... Thing Description 2 ...",
              "tag": "... Thing Tag 2 ...",
              "active": ... Thing Status 2 ...
     },
     "location": {
              "place": "... Thing Place 2 ...",
              "la": "... Thing Latitude 2 ...",
              "lo": "... Thing Longtitude 2 ..."
     }
 },...
1
```

```
var axios = require('axios');
var data =
   JSON.stringify({"filter":{"name":"Card_NP","place":"OAI","active":true}});

var config = {
   method: 'post',
   url: 'https://thing-api.nexpie.io/thing/list',
   headers: {
        'Authorization': 'Bearer one-id-token',
```

```
'Content-Type': 'application/json'
},
data : data
};

axios(config)
.then(function (response) {
   console.log(JSON.stringify(response.data));
})
.catch(function (error) {
   console.log(error);
});
```

```
import http.client

conn = http.client.HTTPSConnection("thing-api.nexpie.io")
payload = "{\n \"filter\": {\n \"name\":\"Card_NP\",\n
\"place\":\"OAI\",\n \"active\": true\n }\n}"
headers = {
   'Authorization': 'Bearer one-id-token',
   'Content-Type': 'application/json'
}
conn.request("POST", "/thing/list", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

<u>ผลลัพธ์ที่ได้</u>

```
[
    {
        "id": "00c53ee3-8531-4b85-a94b-543d307e82e5",
        "info": {
            "name": "Card_NP961003",
            "description": "บัตรพนักงาน ",
            "tag": "Card_NP961003",
            "active": true
        },
        "localtion": {
            "place": "OAI",
            "la": null,
            "lo": null
        }
    },
        "id": "05069483-cd56-4971-81e4-1664a8c82958",
```

```
"info": {
        "name": "Card_NP961123",
        "description": "บัตรพนักงาน ",
        "tag": "Card_NP961123",
        "active": true
    },
    "localtion": {
        "place": "OAI",
        "la": null,
        "lo": null
    }
},
    "id": "0735ec22-63fa-419d-a742-1bba411ebfd4",
    "info": {
        "name": "Card_NP961201",
        "description": "บัตรพนักงาน ",
        "tag": "Card NP961201",
        "active": true
    },
    "localtion": {
        "place": "OAI",
        "la": null,
        "lo": null
    }
},
    "id": "66ff72db-10f8-4b67-a148-e89bc42053fe",
    "info": {
        "name": "Card_NP961001",
        "description": "บัตรพนักงาน ",
        "tag": "Card_NP961001",
        "active": true
    },
    "localtion": {
        "place": "OAI",
        "la": null,
        "lo": null
    }
},
    "id": "10ae6ca7-49ef-49f3-b26c-f393c142f763",
    "info": {
        "name": "Card_NP961002",
        "description": "บัตรพนักงาน ",
        "tag": "Card_NP961002",
        "active": true
```

```
},
    "localtion": {
        "place": "OAI",
        "la": null,
        "lo": null
    }
},
{
    "id": "92f4f8da-0bd1-4ca8-9280-a519455e81ef",
    "info": {
        "name": "Card_NP961004",
        "description": "บัตรพนักงาน ",
        "tag": "Card_NP961004",
        "active": true
    },
    "localtion": {
        "place": "OAI",
        "la": null,
        "lo": null
    }
},
    "id": "e4b825c6-64b7-4d62-8a30-d204716f7aba",
    "info": {
        "name": "Card_NP961115",
        "description": "บัตรพนักงาน ",
        "tag": "Card_NP961115",
        "active": true
    },
    "localtion": {
        "place": "OAI",
        "la": null,
        "lo": null
    }
}
```

4. อัพเดทข้อมูลทรัพย์สิน

```
Endpoint: https://thing-api.nexpie.io/thing/info/update

Method: POST

Request Header:

Content-Type: application/json
Authorization: Bearer <...ONEID-Token...>

Request Body:

{
    "id": "<THING ID ที่ต้องการ UPDATE>",
    "info": {
        "name": "<THING NAME UPDATE>",
        "description": "<DESCRIPTION UPDATE>",
        "tag": "<THING TAG UPDATE>",
        "active": <THING STATUS (true or false)>
    }
}
Response:
```

```
var axios = require('axios');
var data = JSON.stringify({"id":"98adc8b2-3c0f-4173-9e82-
e77a115c3479","info":{"name":"Test-A-Update","description":"DESCRIPTION
UPDATE","tag":"TAG UPDATE","active":false}});

var config = {
    method: 'post',
    url: 'https://thing-api.nexpie.io/thing/info/update',
    headers: {
        'Authorization': 'Bearer one-id-token',
        'Content-Type': 'application/json'
    },
    data: data
};

axios(config)
.then(function (response) {
```

```
console.log(JSON.stringify(response.data));
})
.catch(function (error) {
  console.log(error);
});
```

```
import http.client
conn = http.client.HTTPSConnection("thing-api.nexpie.io")
payload = "{\n \t\\"id\\": \"98adc8b2-3c0f-4173-9e82-e77a115c3479\",\n
\t\t\"info\": {\n
                        \t\t\t\"name\": \"Test-A-Update\",\n
\t\t\"description\": \"DESCRIPTION UPDATE\",\n \t\t\"tag\": \"TAG
UPDATE\",\n
                  \t\t\\"active\": false\n \t\t\\n}"
headers = {
  'Authorization': 'Bearer one-id-token',
  'Content-Type': 'application/json'
}
conn.request("POST", "/thing/info/update", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

<u>ผลลัพธ์ที่ได้</u>

```
{
    "id": "98adc8b2-3c0f-4173-9e82-e77a115c3479",
    "info": {
        "name": "Test-A-Update",
        "description": "DESCRIPTION UPDATE",
        "tag": "TAG UPDATE",
        "active": false
    },
    "localtion": {
        "place": "home",
        "la": null,
        "lo": null
    }
}
```

5. อัพเดทข้อมูลสถานที่อยู่ของทรัพย์สิน

```
Endpoint: https://thing-api.nexpie.io/thing/location/update

Method: POST

Request Header:

Content-Type: application/json
Authorization: Bearer <...ONEID-Token...>

Request Body:

{
    "id": "<THING ID ที่ต้องการ UPDATE>",
    "location": {
        "place": "<LOCATION UPDATE>",
        "la": <LATITUDE UPDATE>,
        "lo": <LONGTITUDE UPDATE>
}
}
Response:
```

```
var axios = require('axios');
var data = JSON.stringify({"id":"98adc8b2-3c0f-4173-9e82-
e77a115c3479","location":{"place":"office"}});

var config = {
  method: 'post',
  url: 'https://thing-api.nexpie.io/thing/location/update',
  headers: {
    'Authorization': 'Bearer one-id-token',
    'Content-Type': 'application/json'
    },
  data : data
};

axios(config)
.then(function (response) {
  console.log(JSON.stringify(response.data));
})
```

```
.catch(function (error) {
  console.log(error);
});
```

```
import http.client

conn = http.client.HTTPSConnection("thing-api.nexpie.io")
payload = "{\n \"id\": \"98adc8b2-3c0f-4173-9e82-e77a115c3479\",\n
\"location\": {\n \"place\": \"office\"\n }\n}"
headers = {
    'Authorization': 'Bearer one-id-token',
    'Content-Type': 'application/json'
}
conn.request("POST", "/thing/location/update", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

ผลลัพธ์ที่ได้

```
{
    "id": "98adc8b2-3c0f-4173-9e82-e77a115c3479",
    "info": {
        "name": "Test-A-Update",
        "description": "DESCRIPTION UPDATE",
        "tag": "TAG UPDATE",
        "active": false
    },
    "localtion": {
        "place": "office",
        "la": null,
        "lo": null
    }
}
```