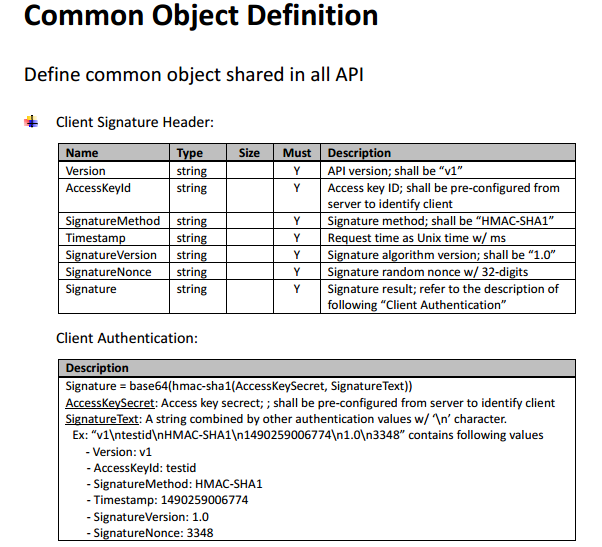
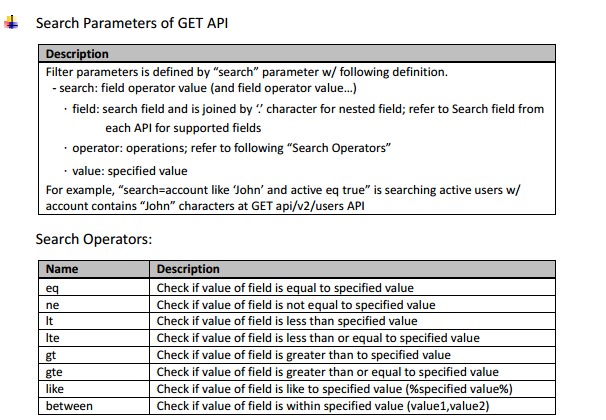


1. 程式名稱: API\_Check.exe
2. API Server IP 一樣保存在 : ServerIP.txt (可動態設定API Server)
3. 第二代API 每個API調用要有Common Header + 認證後取得的Token
   1. 除了呼叫POST api/v1/auth/token本身外,其他API調用除了要帶入Common Header外,還帶入 Auth API 返回的 accessToken , tokenType,另外返回的Refresh Token須保存下來,以防當token過期時,須藉由帶入refresh token並呼叫PUT api/v1/auth/token以取得新的Access token,token type與新的refresh token
   2. Common Header 說明



* 1. 每個API可以帶入過濾條件指令如下



* 1. 以下是硬體商提供的Common Header與調用POST api/v2/auth/token 的C#範例

public class LoginUser

{

public string account { get; set; }

public string password { get; set; }

}

public byte[] encode(string version, string accessKeyId, string signatureMethod, string timeStamp, string signatureVersion, string signatureNonce)

{

string accessKeySecret = "251e2cac71df41c92b68bb469e91565b"; //固定此資料

List<String> items = new List<String> { version, accessKeyId, signatureMethod, timeStamp, signatureVersion, signatureNonce };

string message = string.Join("\n", items);

byte[] accessKeySecretBytes = Encoding.UTF8.GetBytes(accessKeySecret);

HMACSHA1 hmacsha1 = new HMACSHA1(accessKeySecretBytes);

byte[] messageBytes = Encoding.UTF8.GetBytes(message);

byte[] hashmessage = hmacsha1.ComputeHash(messageBytes);

return hashmessage;

}

public async Task<string> Demo()

{

LoginUser loginuser = new LoginUser();

loginuser.account = "admin"; // 固定

loginuser.password = "123&4567"; //固定

string version = "v1"; //固定值

string AccessKeyId = "1513143926"; //使用客戶的AccesskeyID 此為IPS的AccessKeyID

string SignatureMethod = "HMAC-SHA1"; //固定值

string Timestamp = "1490259006774"; //客戶端自行產生 (系統時間轉換值)

string SignatureVersion = "1.0"; //固定值

string SignatureNonce = "3348"; //客戶端自行產生

byte[] Signature = encode(version,AccessKeyId,SignatureMethod,Timestamp,SignatureVersion,SignatureNonce); //呼叫產生Signature Funcion

String s = Convert.ToBase64String(Signature); //將Signature轉換為字串

HttpResponseMessage response;

HttpClient client = new HttpClient();

client.BaseAddress = new Uri(ConfigurationManager.AppSettings["BaseAddress2"]); //BaseAddress2是API網址

client.DefaultRequestHeaders.TryAddWithoutValidation("Version", version);

client.DefaultRequestHeaders.TryAddWithoutValidation("AccessKeyId", AccessKeyId);

client.DefaultRequestHeaders.TryAddWithoutValidation("SignatureMethod", SignatureMethod);

client.DefaultRequestHeaders.TryAddWithoutValidation("Timestamp", Timestamp);

client.DefaultRequestHeaders.TryAddWithoutValidation("SignatureVersion", SignatureVersion);

client.DefaultRequestHeaders.TryAddWithoutValidation("SignatureNonce", SignatureNonce);

client.DefaultRequestHeaders.TryAddWithoutValidation("Signature", s);

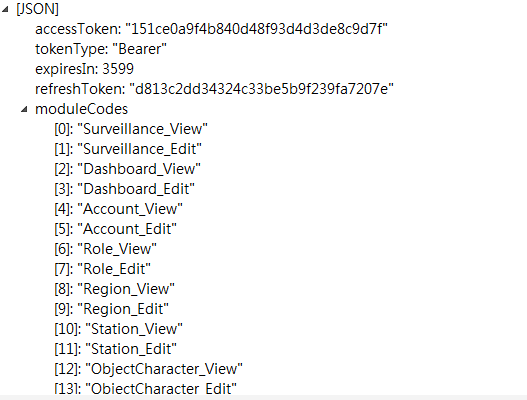
response = await client.PostAsJsonAsync("api/v2/auth/token", loginuser);

var result = await response.Content.ReadAsStringAsync();

client.Dispose();

return result;

} //返回內容參考下面截圖



* 1. 除了POST api/v2/auth/token外其他API 調用都是Common Header加上access Token

Header:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Type** | **Size** | **Must** | **Description** |
| Authorization | string | - | Y | Authorization header w/ access token |
| Accept-Language | string | - | N | Accepted language list |
| X-Request-ID | guid | - | N | Request ID to identify the request |

Refer to “Client Signature Header” defined by common object for other headers

* 1. 緊急呼叫button

API : GET api/v2/tasks

Request

Example:

GET api/v2/tasks?search=id eq 1&inlinecount=true

Authorization: Bearer YotnFZFEjr1zCsicMWpAA

Accept-Language: zh-CN,en

X-Request-ID: f058ebd6-02f7-4d3f-942e-904344e8cde5

<< … ignore client signature headers: refer to example of 1st API >>

Response

Example:

HTTP/1.1 200 OK

Content-Type: application/json; charset=utf-8

X-Request-ID: f058ebd6-02f7-4d3f-942e-904344e8cde5

{

"count": 1,

"results": [

{

"id": 1,

"active": true,

"action": 30,

"eventTemplate": "LowBattery",

"eventPlane": {

"id": 21,

"code": "F01",

"name": "Floor01",

"type": "Floor",

"parents": {

"factory": { "id": 1, "code": "F01", "name": "Factory01" },

} },

"sponsorObjects": [ {

"id": 1,

"code": "O01",

"name": "Object01",

"type": { "id": 1, "code": "OT01", "name": "ObjectType01" },

}],

"description": "Description01",

"startsAt": "2017-01-01 06:00:00",

"finishedAt": "2017-01-01 07:00:00",

"modifiesAt": "2017-01-01 08:00:00"

]}

* 1. Tag定位

API : GET api/v2/objects/position

Request

Example:

GET api/v2/objects/position?search=id eq 1&inlinecount=true

Authorization: Bearer YotnFZFEjr1zCsicMWpAA

Accept-Language: zh-CN,en

X-Request-ID: f058ebd6-02f7-4d3f-942e-904344e8cde5

<< … ignore client signature headers: refer to example of 1st API >>

Response

Example:

{

"count": 1,

"results": [

{

"id": 1,

"active": true,

"code": "O01",

"name": "Object1",

"type": { "id": 1, "code": "OT01", "name": "ObjectType01" },

"role": { "id": 1, "code": "OR01", "name": "ObjectRole01" },

"group": { "id": 1, "code": "OG01", "name": "ObjectGroup01" },

"position": {

"positionX": 1.0, "positionY": 1.0,

"plane": { "id": 41, "code": "SR01", "name": "SubRegion01",

"type": "SubRegion" },

"latestPositionTime": "2017-01-01 00:00:00"

},

"modifiesAt": "2017-01-01 08:00:00"

}

]

}